



TENDER DOCUMENTS

4800 – 4900 GRAHAM AVENUE RECONSTRUCTION

(EBY STREET TO KENNEY STREET)

This package includes the following documents:

- *Instructions to Tenderers*
 - *Contract Special Provisions*
 - *Tender Form*
 - *Agreement Between City of Terrace
And Prime Contractor*
 - *Contract Drawings:*
-

The 2006 edition of the “City of Terrace Standard Construction Specifications and Standard Detail Drawings” is available separately for \$25.00.

CITY OF TERRACE

INSTRUCTIONS TO TENDERERS

**Contract: 4800 – 4900 GRAHAM AVENUE RECONSTRUCTION
(Eby Street to Kenney Street)**

Reference No. PWA-09-2392

1. Introduction

1.1 *These Instructions apply to and govern the preparation for this Contract. The Contract is generally for the following work:*

Road reconstruction, including excavation, installation of sub-base and base gravels, water main replacement, drainage installation, sanitary main replacement, preparation for road & sidewalk paving, and other related works on Graham Avenue between Eby Street and Kenney Street.

1.2 *Direct all inquiries regarding the Contract, to:*

Brett MacArthur, Engineering Supervisor

*Address: Public Works Department
5003 Graham Avenue, Terrace, BC V8G 1B3
Phone: (250) 615-4010
Fax: (250) 635-3467
E-mail: bmacarthur@terrace.ca*

2. Tender Documents

2.1 *The tender documents which a Tenderer should review to prepare a tender consist of all Contract Documents listed in Schedule 1 entitled "Schedule of Contract Documents". Schedule 1 is attached to the Contract Agreement which is included as part of the tender package. The Contract Documents include the Drawings listed in Schedule 2 of the Agreement, entitled "List of Drawings".*

2.2 *Any additional information made available to Tenderers prior to the Tender Closing Time by the City or representative of the City, such as geotechnical reports or as-built plans, which is not expressly included in Schedule 1 or Schedule 2 of the Agreement, is not included in the Contract Documents. Such additional information is made available only for the assistance of Tenderers who must make their own judgment about its reliability, accuracy or completeness and neither the City nor any representative of the City give any guarantee or representation that the additional information is reliable, accurate or complete.*

3. Submission of Tenders

- 3.1 Tenders must be submitted in a sealed envelope, marked on the outside with the above Contract Title and Reference No., and must be received by the office of:

Director of Engineering & Public Works

on or before:

Tender Closing Time: 2:00 pm Local Time

Tender Closing Date: Friday, March 24th, 2023

at: **City of Terrace**

5003 Graham Avenue, Terrace, BC V8G 1B3

Fax: (250) 635-3467

- 3.2 Late tenders will not be accepted or considered and will be returned unopened.

4. Additional Instructions to Tenderers

- 4.1 A site meeting with the Contract Administrator to allow Tenderers the opportunity to review the site and ask questions is scheduled on **Thursday, March 16th, 2023, at 10:00am at the intersection of Graham Avenue and Eby Street**. A site meeting is not mandatory but, failure to attend does not eliminate or reduce the Tenderers obligations to become familiar with the site.
- 4.2 No award will be made to any Contractor who cannot give satisfactory assurance as to his ability to carry out with the Works both from his financial rating, and by reason of his previous experience as a Contractor on Work of a similar nature to that contemplated in the Contract.
- 4.3 Failure to complete any of the Tender Schedules will result in the Tender being considered incomplete. An incomplete Tender may be subject to rejection by the City.
- 4.4 If the unit prices and total amount of the extensions, calculated by the Tenderer in the tender form do not agree, the unit prices will, under no circumstances, be altered and the corrected extensions will be considered as representing the Tenderer's intentions.
- 4.5 Survey layout and as-built survey for the proposed work will be the responsibility of the Contractor. The cost of survey layout is to be included in the unit prices.
- 4.6 Each Tender shall be accompanied by a Bid Bond or a certified cheque made payable to the City, in the amount of ten percent (10%) of the tender price. The Bid Bond or certified cheque shall be returned to the Tenderer upon the signing of the Contract Agreement with the successful Tenderer and the submission of a suitable

Performance Bond. On the failure of the successful Bidder to furnish a satisfactory Performance Bond and to sign the Contract Agreement within fifteen (15) days after being awarded the Contract, the cheque or Bid Bond will be forfeited to the City.

- 4.7 The City may refuse to enter into a Contract Agreement with a Tenderer who has an outstanding dispute on a previous City of Terrace contract, development, subdivision, etc.*
- 4.8 The City may refuse to enter into a contract agreement with a Tenderer who has not obtained the most recent edition (2006) of the City of Terrace Standard Construction Specifications and Standard Detail Drawings.*
- 4.9 The City reserves the right to accept any offer, or reject any or all offers.*
- 4.10 The City reserves the right to waive informalities in or reject any or all tenders or accept the tender deemed most favorable in the interests of the City of Terrace.*
- 4.11 Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderer shall have any claim for any compensation of any kind whatsoever, as a result of participating in the tender, and by submitting a bid each Tenderer shall be deemed to have agreed that it has no claim.*
- 4.12 The City reserves the right to negotiate changes to work scope with the lowest compliant Tenderer prior to an award.*
- 4.13 Special consideration will be given to schedule / work plan during the contractor evaluation process, award may not necessary be to the lowest compliant Tenderer.*

CITY OF TERRACE

CONTRACT SPECIAL PROVISIONS

**Contract: 4800 – 4900 GRAHAM AVENUE RECONSTRUCTION
(Eby Street to Kenney Street)**

Reference No. PWA-09-2392

1. LOCATION OF PROJECT

1. *The project is located on Graham Avenue, between Eby Street and Kenney Street.*

2. SCOPE OF PROJECT

1. *Full reconstruction of Graham Avenue. Works to include excavation, new road base & sub-base gravels, and preparation for paving.*
2. *Road drainage improvements including main, catch basins, manholes, and leads.*
3. *Water main replacement including piping, fire hydrants, valves, fittings, and services.*
4. *Sanitary main, service, and manhole replacement.*
5. *Boulevard restoration including topsoil, hydroseeding, gravel and concrete driveway restoration and asphalt driveway preparation.*
6. *Other related works.*
7. *Asphalt paving will be completed by others.*

3. CONTRACT SCHEDULE

1. *The Contractor shall submit to the City a detailed work plan/schedule showing: phases of construction, and the order in which, and the method by which it is proposed to carry out the works. Adequate details shall be furnished for each of the major activities on the project and the arrangements, methods, materials, equipment and construction plans, and time allotted by the Contractor. The Contractor shall take into account all factors influencing the Contract, including delivery dates of City supplied materials. The work plan/schedule shall be provided to the City as part of the tender package and will be used as part of the City's contractor evaluation.*

The schedule shall require the approval of the City prior to work commencing on site. During construction, the schedule shall be updated bi-weekly and provided to the City for review.

2. *The City anticipates that work on Saturdays may be required to meet the Contract schedule. Time is of the essence.*
3. *The work shall be substantially completed (98% contract complete) not later than fourteen (14) weeks following commencement of the Work. A mutually agreed date will be set for the Substantial Completion date at the time of signing of the contract Agreement. In any case, the agreed Substantial Completion date shall be no later than **Friday, August 25th, 2023.***
4. *If the project requirements are not met according to schedule constraints, any additional time spent for inspection by City staff after the stated substantial completion date shall be charged to the Contractor. Also see section 00700 (General Conditions) Item 28.1 and 28.2 "City's Right to Do Work" of the Contract Specifications.*
5. *If the Contractor is delayed in completion of the work by any act or neglect of the City or any Contractor employed by the City, then the time of completion shall be extended for a period of time equal to the time lost due to such delays. The Contractor shall not be eligible for any additional costs for overhead, living expenses, labour, equipment, lost profits or any other costs whatsoever arising from extension to the contract working period.*

4. LOCAL ACCESS / TRAFFIC

1. *Local access to all properties within and beyond the worksite for both vehicles and pedestrians must be maintained except when temporary loss of access is absolutely necessary. The Contractor shall give advance notice to property owners and the City of such restriction and shall reinstate access as soon as possible. Driveway to be reinstated at the end of each day, unless an agreement is made with the homeowner and the City.*
2. *Barricades, road closed signs, detour and direction signs to be erected and maintained by the Contractor. Certified traffic control personnel to be provided by the Contractor. Pedestrian access through the worksite shall be maintained with clearly identified and delineated pedestrian walkways for the duration of the project. Walkways to be modified as required due to construction.*
3. *The Contractor shall submit a Plan of Traffic Control, Temporary Signage and Detours to the City of Terrace and shall ensure the City has approved the Plan **prior** to commencing construction. The Plan shall include signage, delineation and detours to address safety of pedestrians and travelling public, and shall adhere to the Ministry of Transportation and Infrastructure (MoTI) Traffic Management Manual for Work on Roadways latest edition.*

Plan to indicate: type, colour, size of signs proposed, location of detour signage, and business signs.

*Traffic control to cover various phases (stages) of construction. Should the approved Plan not cover the works to be undertaken on any given day, the Contractor shall, **prior** to commencing the works, review proposed traffic control with the City for approval.*

Radio announcements and signage required to inform public of road closures and detours shall be the responsibility of the Contractor.

Approval of the Plan by the City in no way relieves the Contractor of his responsibility to meet WorkSafeBC and Ministry of Transportation and Infrastructure (MoTI) requirements. Failure of the Contractor to subsequently implement the Plan as approved may result in the signage being erected by others at the Contractor's expense.

5. WATER WORKS

- 1. Construction of waterworks shall not commence until the City has received the approved permit from Northern Health. Expected date to receive the permit is between April 15th and May 15th, 2023.*
- 2. Contractor is to obtain City of Terrace approval to operate existing valves or hydrants. 48 hours notice is required.*
- 3. All connections to active water systems shall be protected with a reduced pressure backflow assembly device. Contractor shall ensure the device has been inspected and tested within the last twelve (12) months.*
- 4. All new or temporary water works must remain isolated from the existing water system until completion and acceptance of all pressure, disinfection and bacteriological testing. Upon acceptance the contractor is to complete connections to the existing system as directed by the City.*
- 5. Prior to construction of any temporary waterworks, the contractor must submit a detailed temporary water works plan to the City for review and approval. City approved plans may require the approval of the Northern Health Regional Public Health Engineer.*
- 6. Contractor may use fire hydrants to obtain water for road compaction, but not for dust control if water restrictions are in effect. Use of hydrant must be arranged with City of Terrace Public Works Department. Contractor to bear all costs related to hydrant use.*

7. *Replacement of existing water services to include but not be limited to: locating of existing services, new Corporation Stop at water main, new water pipe from main to property line, new curb stop and associated fittings required to connect to existing service at property line.*
8. *All water line breaks within the Contract Limits are to be the responsibility of the Contractor. The Contractor shall immediately notify the City Works Department, Fire Hall and affected residents and businesses of loss of water service. The Contractor shall repair the break promptly and bear all associated costs. The method of repair shall be to the satisfaction of the City and shall safeguard the water supply from contamination.*
9. *For a list of City supplied materials, see Contract Special Provisions section 20.*

6. SANITARY WORKS

1. *Care shall be taken when operating equipment around existing sanitary manholes, sewer main, and services to avoid damage to the sewer and introduction of material into the sanitary system that may cause a blockage. Removal of the old bricking from existing manhole tops will be completed promptly after excavation, and the manhole top safely secured and marked for the duration of works.*
2. *Sewer mains have been verified by the City to be clear of obstruction prior to construction. The Contractor is encouraged to conduct their own pre-construction and post construction camera/video of the sewer mains to confirm conditions.*
3. *All sanitary line breaks and/or blockages within the construction limits are to be the responsibility of the Contractor. The Contractor shall immediately notify the City Public Works Department and affected residents of loss of service. The Contractor shall repair/clear the sanitary line promptly and bear all associated costs. For each blockage event, the activities for clearing the main shall include vacuum truck jetting with the use of chains and a vacuum truck in the downstream manhole, with the use of qualified and experienced workers. The Contractor will remove all debris causing the blockage and prevent any debris from getting off-site into the City sewer system. Repeated runs of jetting, chaining, and vactoring will be completed until all debris is removed. Care during jetting shall be taken to prevent damage to home services.*

7. WATER & SANITARY SERVICE INTERRUPTIONS

1. *Service shall be maintained to all affected users during replacement of existing mains and laterals. Temporary water service may be provided to all affected users from active neighbouring hydrants. All temporary piping shall be secure, clean and disinfected prior to use.*

2. *The Contractor is to contact City of Terrace 48 hours in advance to disinfect hydrants. City to bear costs for the first use of City hydrants.*
3. *The Contractor to coordinate directly with the homeowner with regards to all scheduled service disruptions. Contractor to provide written notice to all affected users with a minimum 24 hours in advance of all scheduled disruptions. Planned disruptions shall not exceed 4hrs in duration for sanitary services, and 8hrs in duration for water services.*

8. DUST CONTROL

1. *The Contractor shall be responsible for maintenance and set-up of dust control such as water or calcium and bear all associated costs.*
2. *The Contractor shall control dust at all times for the duration of project. The City may direct the contractor to carry out dust control at specific times.*
3. *If the Contractor fails to maintain dust control the City may carry out dust control as needed and charge the Contractor for costs incurred.*

9. CO-OPERATION OF THE CONTRACTOR

1. *The City reserves their right to perform other work by contract or otherwise, and to permit public utility companies and others to do work on or near the project during the progress of the work. Contractor to co-ordinate with utilities to allow for such work.*

10. UTILITY AND SURFACE FEATURE DAMAGE

1. *All infrastructure, buildings, and existing surface features damaged or broken will be the Contractor's responsibility and shall be restored to their present state or better. Any costs incurred by the City will be charged to the Contractor.*
2. *The Contractor shall conduct with the City a condition survey of the existing buildings, trees, shrubs, plants, lawns, fencing, service wires and poles, signs, survey benchmarks, iron pins, and monuments which may be affected by the work. Failure to do so does not alleviate the Contractor from his obligations or responsibilities.*
3. *The Contractor shall retain a qualified British Columbia Land Surveyor to locate, reference and re-establish all destroyed or damaged property boundary reference points and monuments.*
4. *If natural gas mains or sheathing are damaged during the course of works or pre-existing damage is discovered, contact Pacific Northern Gas immediately and leave gas line exposed to allow for repairs.*

11. CONTRACTOR CONSTRUCTION SURVEY LAYOUT

1. *The Contractor shall provide their own construction survey and shall provide all necessary survey required for paving. The Contractor's surveyor is to be familiar with standard construction survey procedure and is to perform the work accurately and competently. City to provide reference pins and benchmarks.*
2. *The contractor shall furnish and maintain survey staking for stationing and centerline offset at 20m intervals and elevation benchmarks at 50m intervals for the duration of the project. If the City requires staking to be re-established to perform checks, the contractor must provide survey layout within a reasonable timeline as deemed by the City representative.*
3. *The Contractor shall provide monthly progress as-built survey information for the following:*
 - *all pipe inverts at manholes, catch basins, gate valves, hydrant valves & tees, grade changes, and tie-in connections,*
 - *every 50m top-of-pipe for all PVC watermain,*
 - *manhole and catch basin lids & bases.*

This survey data shall be provided to the City accompany with the monthly progress payment certificate. Progress payments will be issued after the City has received and reviewed the monthly survey information.

12. UTILITY WORK PLAN

1. *The Contractor shall contact all utility companies prior to construction to ensure all utility locates are completed. The Contractor is responsible for ensuring that proper procedures are carried out when working around each utility.*
2. *Utility infrastructure locations are shown conceptually based on test pits, any available record drawings, and interpretations. No record drawings were available for Telus, Citywest or underground lighting. The contractor will be responsible to confirm utility locations during construction. Refer to the Supplemental Detail drawing for a photo of a boulevard trench from a past City repair.*

13. USE OF CITY TOOLS / EQUIPMENT

1. *The City will not supply tools and equipment such as pipe snappers, valve and hydrant keys, pressure pumps, hoses, barricades, and signs for use on City of Terrace Contract Projects.*

14. DISPOSAL OF SURPLUS MATERIALS

1. *The Contractor shall be responsible for identifying disposal site(s) for all surplus soil from excavation. The City to review and approve disposal locations.*
2. *The Contractor shall dispose of all old asphalt, concrete, piping, manholes and other non-fill materials off-site and in accordance with the Contract Specifications and WorkSafe B.C. Regulations. Contractor to include disposal costs in unit price bids.*
3. *Where the Contractor has obtained pre-approval from the City, suitable excavated material may be used as native bedding, trench backfill or fill outside of road, etc. It is anticipated that roadway excavation material will be required for trench backfill due to unsuitable existing ground conditions.*
4. *All existing abandoned water valves, hydrants, drainage grates, and manhole covers shall be removed and delivered to City Public Works Yard or disposed of as directed by City representative.*

15. PREPARATION FOR PAVING

1. *Contractor to ensure that all paving preparation activities have been approved by the City by noon of the day prior to paving. "Approved by the City" refers to achieving passing results for all base compaction testing, proof rolling, etc., base elevation and grade approval, saw cutting, sweeping, adjusting infrastructure, supply and placement of barricades/signage. Incurred costs related to delays in obtaining paving approval, shall be borne by the Contractor.*
2. *Contractor to schedule and coordinate works with City's paving contractor. If the Contractor is delayed in completion of the work due to the paving schedule, then the time of completion shall be extended for a period of time equal to the time lost due to such delay. The Contractor shall not be eligible for any additional costs arising from extension to the contract working period.*
3. *A Contractor representative must be present on site during paving days.*

16. HYDRAULIC SEEDING (as per Section 02934)

1. *Hydraulic seeding shall not commence until the City has approved the topsoil works. Hand seeding can be used to start or assist growth, however one application of hydraulic seeding is required.*
2. *The following application rate shall be used:*

Seed	240 kg/hectare
Mulch	1900 kg/hectare
Fertilizer	730 kg/hectare
3. *The following seed mix shall be used or approved equivalent:*

- 10% Kentucky Bluegrass Midnight
- 10% Kentucky Bluegrass Nottingham
- 40% Fescue Creeping Red Shademaster II
- 20% Ryegrass Perennial Seville
- 20% Ryegrass Perennial Brightstar

4. Contractor is responsible for watering, weed control, and maintenance of the hydraulic seeded area until full coverage of grass is achieved. Prior to approval, the contractor shall carry out one full cut of the lawn.
5. Two thousand dollars (\$2,000) may be held back by the City until the growing season of the following year. The Contractor will be responsible to apply additional seed and fertilizer as required for any areas experiencing poor growth.

17. GARBAGE, ORGANICS, YARD WASTE & RECYCLABLES PICK-UP

1. Contractor to move residents' weekly street-side garbage, organics and recyclable containers and yard waste bags, to a location accessible by the City garbage truck by 9am and to return containers to respective properties promptly. If collection is missed due to action or inaction of the contractor, proper disposal to be carried out by contractor by end of the day.

18. SPECIAL WORKING DAYS

1. Construction work shall not be carried out on Sundays except in cases of emergency or special circumstances, and then only with the written permission of the City and to such an extent as the City may judge to be necessary. The Contractor will be required to pay all overtime wages for inspection works on Sundays.
2. If the Contractor desires to work on a City of Terrace Statutory Holiday notice shall be provided to the City at least ten (10) days in advance of such holiday. The Contractor will be required to pay all overtime wages for inspection work on City of Terrace Statutory Holidays.

19. SUBCONTRACTORS

1. A Contractor representative must be present on site while a sub-contractor is working.

20. CITY SUPPLIED MATERIALS

1. The following items will be supplied by the City:

Item	Estimated Delivery Date
200mm DR18 C900 PVC Pipe	

150mm DR18 C900 PVC Pipe	Late May to Early June
All components for Fire Hydrant Assembly <u>except tie rods</u> as per Standard Detail Drawing WAT.2	
Ductile Iron Tees	
All Water Service Lateral Components as per Standard Detail Drawing WAT.6	
All required Pipe Restrainers	
All components for Gate Valve Installation as per Standard Detail Drawing WAT.1	
All required Steel risers for Manholes and Valves	
525mm SDR35 PVC Pipe	
450mm SDR35 PVC Pipe	
375mm SDR35 PVC Pipe	
200mm SDR35 PVC Pipe	
100mm SDR28 PVC Pipe	
200mm Fernco Qwik Seal (QS-8) Couplers	
Dobney B-23 Catchbasin Drainage Grates	
Dobney B-24 Catchbasin Drainage Frames	
Sanitary service clean-out N.C.R. boxes	
Sanitary Manhole Frames	
Sanitary Manhole Covers	
All components for Sanitary Sewer Lateral as per Standard Detail Drawing SAN.4	
525mm X 100mm PVC Sanitary Service Wyes	
100mm Fernco Qwik seals (QS-4)	
100mm SDR 45 degree sweep	
100mm SDR Y	

450mm Ultrarib PVC Pipe	
375mm Ultrarib PVC Pipe	
300mm Ultrarib PVC Pipe	
400mm AC x 450mm SDR Coupler	
350mm AC x 375mm SDR Coupler	

2. *The Contractor is responsible to supply all materials for construction other than what is listed above.*
3. *The Contractor is to arrange for pickup and delivery of City supplied items to site as required from the City of Terrace Public Works yard at 5003 Graham Avenue or directly from the local supplier.*
4. *Exact delivery dates of materials are unknown at this time but are not expected to delay construction.*
5. *The Contractor shall schedule their work accordingly to the City's delivery times as they come available. See above for estimated delivery dates.*
6. *The City will not be responsible for any additional costs due to construction delays arising from delivery dates of City supplied materials.*

21. EXISTING GROUND CONDITIONS/GEOTECHNICAL CONSIDERATIONS

1. *Test pits have shown that existing ground conditions contain high silt content. Construction to be done so that excavations are not exposed to wet weather for long durations and shall be protected to avoid disturbance. If adequate mitigation measures are not utilized and the subgrade is left exposed to rain and becomes soft or disturbed, the contractor, at their expense, to remove and replace soft and/or disturbed material as directed by the City representative.*
2. *City to approve all native material prior to use as backfill, rejected backfill material to be replaced with material specified by the City. Consult City for direction when unsuitable material is encountered. It is anticipated that roadway excavation material will be required for trench backfill.*
3. *City to assess all subgrade prior to placement of sub-base material. If deemed necessary, the City will supply filter cloth and geogrid to be installed by the contractor.*
4. *Contractor to ensure that clay/silt subgrade is not disturbed or driven on by heavy equipment. Including driving on the first lift of subbase, should the subgrade show*

signs of rutting/disturbance, the Contractor, at their expense, to remove and replace the disturbed material, as directed by the City representative.

22. MAINTENANCE PERIOD

1. *Notwithstanding any other provision of this agreement or the termination of this agreement, the Contractor warrants to the City of Terrace for a period of 365 days from the date of Substantial Completion as shown on the Construction Completion Certificate, that all work in connection with this contract is free from any defect resulting from work done or material supplied by the Contractor, and the Contractor shall, to the satisfaction of the City or their representative, rectify any defect that exists within that period. A 50% Performance Bond will be held by the City of Terrace for the length of the maintenance period.*

CITY OF TERRACE

TENDER FORM

**Contract: 4800 – 4900 GRAHAM AVENUE RECONSTRUCTION
(Eby Street to Kenney Street)**

Reference No. PWA-09-2392

TO CITY:

1. WE, THE UNDERSIGNED:

1.1 *have received and carefully reviewed all of the Contract Documents, including Contract Drawings, Instructions to Tenderers, Special Provisions, Standard Construction Specifications and Standard Detail Drawings and the following Addenda:*

1.2 *have full knowledge of the Place of the Work, and the Work required; and*

1.3 *have complied with the Instructions to Tenderers; and*

2. ACCORDINGLY WE HEREBY AGREE:

2.1 *to perform and complete all of the Work and to provide all the labour, equipment and material all as set out in the Contract Documents, in strict compliance with the Contract Documents; and*

2.2 *to mutually agree to a Substantial Completion date at the time of signing the Contract Agreement, and*

2.2.1 *that the agreed Substantial Completion date (98% contract completion) shall be in any case no later than **August 25th, 2023** and*

2.3 *to do the Work for the price, which is the sum of the products of the actual quantities incorporated into the Work and the appropriate unit prices set out in Appendix 1, the "Schedule of Quantities and Prices", plus any lump sums or specific prices and adjustment amounts as provided by the Contract Documents. For the purposes of tender comparison, our offer is to complete the Work for the "Tender Price" as set out on Appendix 1 of this Form of Tender. Our Tender Price is based on the estimated quantities listed in the Schedule of Quantities and Prices, and excludes GST.*

Tender's Initials _____

3. WE CONFIRM:

- 3.1 *that we understand and agree that the quantities as listed in the Schedule of Quantities and Prices are estimated and that the actual quantities will vary.*

4. WE CONFIRM:

- 4.1 *that the following Appendices are attached to and form a part of this tender:*

4.1.1 *Appendices 1-5*

5. WE AGREE:

- 5.1 *that this tender will be irrevocable and open for acceptance by the City for a period of thirty (30) calendar days from the day following the Tender Closing Date and Time, even if the tender of another Tenderer is accepted by the City. If within this period the City delivers a written notice ("Notice of Award") by which the City accepts our tender we will:*

5.1.1 *within 15 Days of receipt of the written Notice of Award deliver to the City:*

- a) *a Performance Bond in the amount of 50% of the Contract Price, issued by a surety licensed to carry on the business of surety ship in the province of British Columbia, and in a form acceptable to the City;*
- b) *a detailed work schedule;*
- c) *a "clearance letter" indicating that the Tenderer is in WorkSafeBC compliance; and*
- d) *a copy of the insurance policies as specified in GC 32.2 indicating that all such insurance coverage is in place and;*

5.1.2 *within 2 Days of receipt of written "Notice to Proceed", or such longer time as may be otherwise specified in the Notice to Proceed, commence the Work; and*

5.1.3 *sign the Contract Documents.*

6. WE AGREE:

- 6.1 *that, if we receive written Notice of Award of this Contract and, contrary to paragraph 5 of this Form of Tender, we:*

- 6.1.1 fail or refuse to deliver the documents as specified by paragraph 5.1.1 of this Form of Tender; or
- 6.1.2 fail or refuse to commence the Work as required by the Notice to Proceed, then such failure or refusal will be deemed to be a refusal by us to enter into the Contract and the City may, on written notice to us award the Contract to another party.
- 6.2 that, in the event of this Tender being accepted within thirty (30) days of the Tender Closing Time and we fail to enter into a contract in accordance with the terms of the Tender, security limited to the lesser of the face value of the Bid Bond or the difference between the amount of this tender and the amount of the tender for which the contract is signed, shall be forfeited to the City, in lieu of any damages to which the City may be entitled by reason of our failure or refusal to enter into such contract.

7. **OUR ADDRESS** is as follows:

Phone: (____) ____ - _____

Fax: (____) ____ - _____

Attention: _____

This Tender is executed this _____ day of _____, 2023.

Prime Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY AND PRINT NAME)

Tenderer's Initials _____

Appendix 1

Schedule of Quantities

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
1.0	ROADWORK				
A)	REMOVALS:				
	Remove and dispose of existing asphalt, concrete, brush, trees, storm infrastructure and accesses within the extent of works as noted by removal boundary on contract drawings.	L.S.	1	\$	\$
B)	EXCAVATION:				
	i) Remove required material to meet design subgrade widths and elevations, including: excavation, hauling and disposal of excess material to 555 Kalum Lake Drive (closed City of Terrace Landfill) and compaction of subgrade to 95% Modified Proctor density.	M ³	8,625	\$	\$
	ii) Excavated material to be used for ditch fill in the boulevard	M ³	575	\$	\$
C)	GRANULAR SUBBASE:				
	Supply, place, grade, compact to specified density 600mm deep granular subbase material (as per City of Terrace Standards) from design subgrade to underside of proposed granular base within road prism (including sidewalks) as per Detail Drawing.	M ³	5,740	\$	\$
D)	GRANULAR BASE:				
	Supply, place, grade, compact to specified density, 150mm deep, granular base material below proposed asphalt roadway and sidewalks (as per City of Terrace Standards) Prepare and maintain surface for paving.	M ³	1,440	\$	\$
E)	PAVING PREPARATION:				
	Prepare, schedule and co-ordinate with the City of Terrace's paving contractor to install asphalt pavement, including asphalt sawcutting and sweeping at all intersections and pavement matches, adjusting infrastructure (including supply and placement of steel riser rings on all valves and manholes), supply and place barricades/signage for traffic control.	L.S.	1	\$	\$

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
F)	DRIVEWAYS:				
	Restore all driveways, walkways and parking areas to design grades from back of curb / sidewalk to property line or as indicated on drawings, including excavation, supply and compaction of granular materials, and grading and finishing. Adjust height of water shut-offs and sewer clean-outs. All restoration to be as outlined in Section 02224, Subsection 3.11 (to include work on private property as required by City).				
	i) Gravel Driveways – includes 300mm of granular sub-base and 100mm of high fines surfacing aggregate compacted to 95% modified proctor density (MPD). Service heights 100mm below surface.	M ²		\$	\$
	ii) Asphalt Driveways – includes asphalt cutting, 300mm of granular sub-base compacted to 95% MPD and 100mm of granular base compacted to 98% MPD, preparation for paving to suit 50mm thick asphalt (paving by others). Service heights 12mm below finished asphalt.	M ²		\$	\$
G)	BOULEVARD AREA:				
	Grassed Areas – includes grading, supply and placement of 100 mm of topsoil, finishing, hydraulic seeding and watering. Includes adjusting water shut-offs, sanitary and storm cleanouts (NCR boxes) to final grade and referencing them with stakes (as per City of Terrace Standards).	M ²	5,880	\$	\$
H)	TRAFFIC SIGNS:				
	Remove and relocate traffic signs as required (to City of Terrace Standards). Existing Telespar anchor and post to be used and installed as per manufacturer's recommendations.	Each	9	\$	\$
I)	TRAFFIC CONTROL:				
	Preparation and execution of Plan of Traffic Control, Temporary Signage and Detours, and installation and maintenance of: road closed signs, temporary detour signage; flagging; construction ahead warnings; pedestrian walkway, radio announcements; etc. To include all signage and barricading required for paving.	L.S.	1	\$	\$
	SUB TOTAL ROADWORKS				\$

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
2.0	DRAINAGE				
A)	PIPE INSTALLATION:				
	<i>Install storm pipe true to line and grade including excavation, backfilling, bedding, compaction and disposal of excess material (off site if necessary). Price to include connection (and grouting) to existing infrastructure. <u>Pipe and fittings supplied by the City.</u></i>				
	i) 200 mm PVC	L.M.	128	\$	\$
	ii) 300 mm PVC	L.M.	42	\$	\$
	iii) 375 mm PVC	L.M.	153	\$	\$
	iv) 450 mm PVC	L.M.	486	\$	\$
	v) 300 mm HDPE Ditch Lead	L.M.	11	\$	\$
B)	CATCHBASINS:				
	<i>Install plumb to proper alignment and grades including excavation, backfilling, compaction, barrels, frames, grates, pre-cast lids, bases, concrete pre-cast riser rings, and mortar. <u>Frames and grates supplied by the City.</u></i>				
	i) Catchbasins – 800 mm I.D. C.S.P. barrel	Each	24	\$	\$
	ii) Drainage Manholes - 1200mm I.D. Concrete Barrel	Each	6	\$	\$
	iii) Lawn Basin - 300mm I.D PVC Barrel	Each	2	\$	\$
	SUB TOTAL DRAINAGE				\$

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
3.0	W A T E R W O R K S				
A)	WATERMAIN REPLACEMENT:				
	<i>Install watermain true to line and grade including excavation, backfilling, bedding, compaction, removal and disposal of existing material (off site if necessary) and all other labour, equipment, temporary water services and materials required to complete the project as per City of Terrace Specifications and Contract Drawings. Pipe and fittings supplied by the City. Price to include thrust blocks and connection to existing infrastructure.</i>				
	i) 150 mm C-900 PVC DR18 Class 235 (DR18)	L.M.	12	\$	\$
	ii) 200 mm C-900 PVC DR18 Class 235 (DR18)	L.M.	828	\$	\$
B)	MAINLINE GATE VALVES:				
	<i>Install resilient wedge gate valves as indicated on the Contract Drawings. Price includes all materials, equipment and labour to complete the work to City of Terrace Standards. Valves, standpipe and nelson boxes supplied by the City.</i>				
	i) 200 mm Mainline Gate Valve	Each	9	\$	\$
C)	WATER SERVICES:				
	<i>Install water service as shown on Contract Drawings. Work to include reconnection at property line including reducer if required. Price to include all labour, equipment and material required to complete the work to City of Terrace Standards. Fittings and service pipe supplied by the City.</i>				
	i) Ford 25 mm service	Each	58	\$	\$
D)	NEW HYDRANT:				
	<i>Install new hydrant assembly including tee, valve, pipe and restraint as indicated on Contract Drawings. Price to include all labour, equipment and material required to complete the work to City of Terrace Standards. City to supply Hydrant, valve and tee. Contractor to supply tie rods.</i>	Each	6	\$	\$
	SUB TOTAL WATERWORKS				\$

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
4.0	SANITARY				
A)	SANITARY MAIN REPLACEMENT				
	<i>Install sanitary main as shown on Contract Drawings. Price to include all labour and equipment required to complete the work to City of Terrace Standards including sanitary sewer bypass. Exclude PVC pipe. PVC pipe supplied by City of Terrace.</i>				
	<i>i) 525 mm PVC</i>	L.M.	805	\$	\$
	<i>ii) 450 mm PVC</i>	L.M.	5	\$	\$
	<i>iii) 375 mm PVC</i>	L.M.	5	\$	\$
	<i>iv) 200 mm PVC</i>	L.M.	32	\$	\$
	<i>v) 150 mm PVC</i>	L.M.	12	\$	\$
B)	ABANDON EXISTING AC SANITARY MAIN IN PLACE				
	<i>Abandon existing sanitary main in place. Fill abandoned main completely with flowable concrete. Fully encase any and all exposed sections of main in concrete.</i>	L.S.	1	\$	\$
C)	SANITARY MANHOLES				
	<i>Supply and install plumb to proper alignment and grades including excavation, backfilling, compaction, bases, barrels, lids, concrete riser rings, grout, frames & grates, and sanitary sewage bypass required for installation.</i>				
	<i>i) 1200 mm I.D. Concrete Barrel</i>	Each	8	\$	\$
	<i>ii) 1500 mm I.D. Concrete Barrel</i>	Each	2	\$	\$
D)	SANITARY SERVICES				
	<i>Install sanitary services as shown on Contract Drawings. Price to include all labour, equipment required to complete the work to City of Terrace Standards. Materials supplied by City of Terrace.</i>	L.S.	1	\$	\$
	<i>i) 100 mm PVC DR28 Service - Connect at PL</i>	Each	39	\$	\$
	<i>ii) 100 mm PVC DR28 Pre-install - Cap to PL</i>	Each	19	\$	\$
E)	EXISTING SANITARY SERVICE REMOVAL				
	<i>Remove and dispose of all existing sanitary services. 11 existing services are PVC, 29 assume AC</i>	Each	39	\$	\$
	SUB TOTAL SANITARY				\$

ITEM #	ITEM DESCRIPTION	Unit of Measure	Tender Quantity	Price per Unit \$	PAYABLE AMOUNT
5.0	PROVISIONAL ITEMS				
A)	STORM SERVICES: Supply and install new 100 mm PVC storm service to property line as directed by City Representative. Price to include all labour, equipment and material required to complete the work to City of Terrace Standards. <u>City to supply pipe and fittings.</u>				
	i) 100mm PVC DR28	Each	1	\$	\$
	SUB TOTAL PROVISIONAL ITEMS				\$
	PROJECT TOTAL				\$
6.0	ALTERNATE ITEMS				
A)	REMOVE EXISTING AC SANITARY MAIN Remove and dispose of all existing AC sanitary main following WorkSafe BC regulations.				
	i) 100mm PVC DR28	Each	1	\$	\$
	SUB TOTAL ALTERNATE ITEMS				\$
	ALTERNATE PROJECT TOTAL				\$

Appendix 2

PRELIMINARY CONSTRUCTION SCHEDULE / WORKPLAN

Please include a detailed Schedule/Workplan including the methodology for each phase of the project. This methodology should include how the contractor intends to complete the works (including how they intend to keep the City's utility infrastructure active), sequencing and any anticipated closures or construction issues.

DATES INCLUDING THE FOLLOWING:

- **READY FOR ROADWAY PAVING:** _____
- **SUBSTANTIAL COMPLETION (98% Contract Completion):** _____

Appendix 3

EXPERIENCE OF SUPERINTENDENT

NAME: _____

EXPERIENCE:

- Dates: _____
Project Name: _____
Responsibility: _____

References: _____

- Dates: _____
Project Name: _____
Responsibility: _____

References: _____

- Dates: _____
Project Name: _____
Responsibility: _____

References: _____

Appendix 4

COMPARABLE WORK EXPERIENCE

PROJECT	OWNER/ CONTRACT NAME	PHONE NUMBER	WORK DESCRIPTION	VALUE (\$)

Appendix 5

SUBCONTRACTORS

TENDER ITEM	TRADE	SUBCONTRACTOR NAME	PHONE NUMBER

Agreement

Between City of Terrace and Prime Contractor

THIS AGREEMENT made in duplicate this _____ day of _____, 2023.

Contract: **4800 – 4900 GRAHAM AVENUE RECONSTRUCTION
(Eby Street to Kenney Street)**

Reference No. **PWA-09-2392**

BETWEEN:

**City of Terrace
3215 Eby Street,
Terrace, BC V8G 1X6
(the "City")**

AND

(the Prime "Contractor")

The City and the Prime Contractor agree as follows:

1 THE WORK - START/COMPLETION DATES

- 1.1 *The Prime Contractor will perform all Work and provide all labour, equipment and material and do all things strictly as required by the Contract Documents.*
- 1.2 *The Prime Contractor will commence the Work in accordance with the Notice to Proceed. The Prime Contractor will proceed with the Work diligently, will perform the Work generally in accordance with the construction schedules as required by the Contract Documents and will achieve Substantial Completion of the Work on or before:*

_____, **2023**

subject to the provisions of the Contract Documents for adjustments to the Contract Time.

- 1.3 *Time shall be of the essence of the Contract.*

2 CONTRACT DOCUMENTS

- 2.1 *The "Contract Documents" consist of the documents listed or referred to in Schedule 1, entitled "Schedule of Contract Documents", which is attached and forms a part of this Agreement, and includes any and all additional and amending documents issued in accordance with the provisions of the Contract Documents. All of the Contract Documents shall constitute the entire Contract between the Owner and the Prime Contractor.*
- 2.2 *The Contract supersedes all prior negotiations, representations or agreements, whether written or oral, and the Contract may be amended only in strict accordance with the provisions of the Contract Documents.*

3 CONTRACT PRICE

- 3.1 *The price for the Work ("Contract Price") shall be the sum in Canadian dollars of the following:*
- 3.1.1 *the product of the actual quantities of the items of Work listed in the Schedule of Quantities and Prices which are incorporated into or made necessary by the Work and the unit prices listed in the Schedule of Quantities and Prices; plus*
- 3.1.2 *all lump sums, if any, as listed in the Schedule of Quantities and Prices, for items relating to or incorporated into the Work; plus*
- 3.1.3 *any adjustments, including any payments owing on account of Changes and agreed to Extra Work, approved in accordance with the provisions of the Contract Documents.*
- 3.2 *The Contract Price shall be the entire compensation owing to the Prime Contractor for the Work and this compensation shall cover and include all profit and all costs of supervision, survey, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the Work.*

4 PAYMENT

- 4.1 *Subject to applicable legislation and the provisions of the Contract Documents, the City shall make payments to the Prime Contractor.*
- 4.2 *If the City fails to make payments to the Prime Contractor as they become due in accordance with the terms of GC 41.0 then interest calculated at 2% per annum over the prime commercial lending rate of the Royal Bank of Canada on such unpaid amounts shall also become*

due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

5 RIGHTS AND REMEDIES

5.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

5.2 Except as specifically set out in the Contract Documents, no action or failure to act by the City, or Prime Contractor shall constitute a waiver of any of the parties' rights or duties afforded under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the Contract.

6 NOTICES

6.1 Communications among the City, and the Prime Contractor, including all written notices required by the Contract Documents, may be delivered by hand, or by fax, or by pre-paid registered mail to the addresses as set out below:

The City:

**City of Terrace
5003 Graham Avenue
Terrace, B. C. V8G 1B3**

Fax: (250) 635-3467

Attention: **Ben Reinbolt, Director of Engineering and Public**

Works

The Prime Contractor:

Attention: _____

Email: _____

Phone: _____ Fax: _____

- 6.2 *A communication or notice that is addressed as above shall be considered to have been received:*
- 6.2.1 *immediately upon delivery, if delivered by hand; or*
- 6.2.2 *immediately upon transmission if sent and received by fax; or*
- 6.2.3 *after 5 Days from date of posting if sent by registered mail.*
- 6.3 *The City or the Prime Contractor may, at any time, change its address for notice by giving written notice to the other at the address then applicable.*
- 6.4 *The sender of a notice by fax assumes all risk that the fax will be received properly. Confirm by telephone that fax has been received.*

7 GENERAL

- 7.1 *This Contract shall be construed according to the laws of British Columbia.*
- 7.2 *The Prime Contractor shall not, without the express written consent of the Owner, assign this Contract, or any portion of this Contract.*
- 7.3 *The headings included in the Contract Documents are for convenience only and do not form part of this Contract and will not be used to interpret, define or limit the scope or intent of this Contract or any of the provisions of the Contract Documents.*
- 7.4 *A word in the Contract Documents in the singular includes the plural and, in each case, vice versa.*
- 7.5 *This agreement shall inure to the benefit of and be binding upon the parties and their successors, executors, administrators and assigns.*

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

Prime Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

PRINT NAME

(AUTHORIZED SIGNATORY)

PRINT NAME

City

CITY OF TERRACE

(AUTHORIZED SIGNATORY)

PRINT NAME

(AUTHORIZED SIGNATORY)

PRINT NAME

Schedule 1

Schedule of Contract Documents

The following is an exact and complete list of the Contract Documents, as referred to in Article 2.1 of the Agreement. In the event of an inconsistency or conflict between the provisions of the contract documents, then the governing documents shall take precedence in the following order:

- 1 Agreement, including all Schedules;
- 2 The following Addenda: _____

- 3 Drawings listed in Schedule 2 to the Agreement - "List of Drawings";
- 4 Contract Special Provisions;
- 5 Executed Form of Tender, including all Appendices;
- 6 Instructions to Tenderers;
- 7 City of Terrace Standard Detail Drawings;
- 8 City of Terrace Standard Construction Specifications;
- 9 City of Terrace General Requirements

Schedule 2

LIST OF DRAWINGS

(COMPLETE LISTING OF ALL DRAWINGS, PLANS AND SKETCHES THAT ARE PART OF THE CONTRACT DOCUMENTS)

TITLE	SHEET NO.	DRAWING DATE	REVISION NO.

Schedule 3

JOB SITE HAZARD IDENTIFICATION – PRIME CONTRACTOR APPOINTED

Date: _____, 20____

Contractor: _____ Phone: _____

Contractor Representative (Print Name) _____ Phone: _____

City of Terrace Representative (Print Name) _____

Contractor Safety Representative (Print Name) _____ Phone: _____

Project Description: RECONSTRUCTION OF GRAHAM AVENUE

Address/Area of Project: 4800 – 4900 GRAHAM AVENUE (EBY STREET TO KENNEY STREET)

Date Start _____ End _____

Type of Project

- Prime Contractor Appointed – Single Employer Workplace**
 Prime Contractor Appointed – Multiple Employer

Name of Person Designated to Supervise Workers:

Checklist of Known Hazards:

Hazard	STATUS – tick box			Comments
	YES	NO	N/A	
Asbestos / Lead				
Bio-Hazardous Materials				
Chemicals				
Confined Spaces				
Dangerous Trees				
De-Energization / Lock-out				
Excavations				
Falling Materials				
Fire Hazards				
Overhead Power Lines				
Personal Property				
Public Property				
Toxic Process Gases				
Underground Utilities Location				
Traffic Control				
Working Alone or in Isolation				
Working at Heights Over 3 m				

Other Items Identified

Specific Recommendations / Special Precautions

Is any additional information or notes attached? If so please describe.

This form is only intended to notify the contractor of the hazards that the City of Terrace is aware of at this site. This form is not intended to instruct the contractor in how to control or eliminate the known hazards identified above. The contractor on site is still responsible for performing a detailed Hazard Identification and Hazard Assessment for the site as per the requirements of WorkSafeBC (WSBC) regulations. The contractor shall at all times comply with all applicable Acts, Regulations, Standards and Bylaws.

All safety related Incidents/Accidents required to be reported to WorkSafeBC need to be reported to the City of Terrace Contract Administrator and Safety Department immediately.

Safety Supervisor – office - 250- _____ or cell 250- _____
Safety Coordinator – office 250- _____ or cell 250- _____

City of Terrace Representative Name _____

City of Terrace Representative Signature _____

Contractor Acknowledgement of Receipt of This Form

Contractor Representative Name _____

Contractor Representative Signature _____

Schedule 4

CONTRACTOR COORDINATION

CONFIRMATION OF CONTRACTOR RESPONSIBILITIES

This form must be completed and signed before work begins

Date _____

Project Description: 4800 – 4900 GRAHAM AVENUE (EBY STREET TO KENNEY STREET)

Tender Ref # PWA-09-2392

Please select one of the following and complete the relevant section(s) of this form

- Type A *Prime Contractor Single Employer Workplace*
- Type B *Prime Contractor – Multiple Employer Workplace / Includes Sub-Contractors*
- Type C *No Prime Contractor Appointed - Municipal Qualified Coordinator*

Contractor _____

Contractor Representative: _____

Job Title _____

Person Designated Responsible for Coordination of Safety _____

Job Title _____ Contact # _____

City of Terrace Representative _____

Job Title _____ Contact # _____

Type A & B - Prime Contractor Appointed – The Contractor

	Yes	No	N/A
Acknowledges the appointment as Prime Contractor			
Attends necessary pre-construction safety meetings (documented)			
Determines the boundaries of the workplace, and ensure that only workers of one employer perform duties with-in those boundaries (Type A only)			
Is responsible for identifying and complying with any and all applicable Acts, Regulations, Standards and Bylaws. The Contractor shall also understand that the WSBC OH&S Regulation and/or any other applicable Acts or Standards shall be adhered to at all times and supersede any direction from the City and it representatives.			
Shall immediately notify The City of Terrace of any conflict between directions given to them and any applicable Acts, Regulations or Standards & Bylaws.			
Accepts that written documentation (e.g. notes, records, inspections, meetings etc.) on all health and safety issues must be made available upon request to the City of Terrace.			
Has (or will before work starts) received a completed Job Site Hazard Identification Form from a representative of the City of Terrace.			

	Yes	No	N/A
<i>Will conduct an inspection of the worksite to identify any hazards before starting any work on site.</i>			
<i>Shall communicate all known hazards to any person who may be affected and ensure that appropriate measures are taken to effectively control or eliminate all hazards</i>			
<i>Must ensure that all workers on site are suitably trained, orientated and competent to perform the duties for which they are assigned.</i>			
<i>Must submit a Notice of Project to WorkSafeBC (WSBC)and submit a copy to the City of Terrace as required</i>			
<i>Shall report any and all injuries or incident required by regulation to WorkSafeBC. The contractor shall also report these incidents to the City of Terrace Contract Administrator.</i>			
<i>The Contractor must be on the City of Terrace approved contractor list and will submit a copy of their formal Occupational Health and Safety program and site specific safe work procedures where required.</i>			
<i>The Contractor has provided a current "WSBC Clearance Letter" stating that their account with WCB is in good standing</i>			
<i>The Contractor has appointed a qualified coordinator responsible for project safety and provided the City of Terrace with their name & contact information in writing</i>			

Type B Only

<i>The Prime Contractor has identified & provided to the City of Terrace the names of all other employers and or sub-contractors working on the project</i>			
<i>The Prime Contractor has or will notify all sub-contractors of all know and foreseeable hazards</i>			
<i>The Prime Contractor will meet all obligations under the WCB Act & Regulations for coordinating a multiple employer workplace.</i>			
<i>The Prime Contractor shall be responsible for regular inspections and ensuring that all sub contractors and their employees comply with any and all applicable Acts, Regulations Standards & Bylaws</i>			

Notes/Follow-up:

Type C – No Prime Contractor Appointed – Municipal Qualified Coordinator

City of Terrace Representative _____ Job Title _____

Contractor _____

Contractor Representative _____ Job Title _____

The Municipal Qualified Coordinator Must

	Yes	No
Acknowledge that the City of Terrace is the Prime Contractor		
Attend and coordinate pre-construction meetings as required		
Determine the boundaries of the workplace, and ensure that all contractors works within those boundaries		
Ensure that the Contractor and/or the Municipal Qualified Coordinator have conducted an inspection of the worksite to identify any hazards		
Identify and communicate all known hazards the contractor and ensure that appropriate measures are taken to effectively control or eliminate the hazards to the health and safety of all persons at the worksite		
Confirm that all workers are suitably trained, orientated and competent to perform the duties for which they are assigned.		
Complete the Job Site Hazard Identification Form with the contractor		
Submit a Notice of Project to WorkSafeBC as required		
Conduct regular inspections and ensure that all sub contractors and their employees comply with any and all applicable Acts, Regulations Standards & Bylaws		
Ensure the contractor is on the City of Terrace Approved Contractor List		
Ensure the contractor has provided a current "Clearance Letter" stating that their account with WorkSafeBC is in good standing		

Type C - The Contractor Must

Identify and Comply with any and all applicable Acts, Regulations, Standards and Bylaws. The contractor shall also understand that the WCB OH&S Regulation and/or any other applicable Acts or standards supersede direction from the City and shall be adhered to at all times.		
Immediately notify The City of Terrace of any conflict between directions given to them and any applicable Acts, Regulations or Standards		
Provide written documentation (e.g. notes, records, inspections, meetings etc.) on all health and safety issues must be made available upon request to the City of Terrace.		
Ensure that all workers are suitably trained, orientated and competent to perform the duties for which they are assigned.		
Report any and all injuries or incident required by regulation to WorkSafeBC and to the City of Terrace		
Perform regular inspections and ensuring that all of their employees comply with any and all applicable Acts, Regulations Standards & Bylaws		

Notes/Follow-up:

Contractor Representative Name (print) _____

Contractor Representative Signature _____

City of Terrace Representative Name (print) _____

City of Terrace Representative Signature _____

DATE: 2023-02-24, 11:08 FILE: X:\232102100\02168-00 Design Services\4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3.1 Sheets\C-001-Title.dwg McElhanney Cover D - 2023-02-14

CITY OF TERRACE

CLIENT

ADDRESS / CONTACT INFO.

5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

PROJECT NAME

4800 - 4900 GRAHAM AVE. RECONSTRUCTION

DESCRIPTION

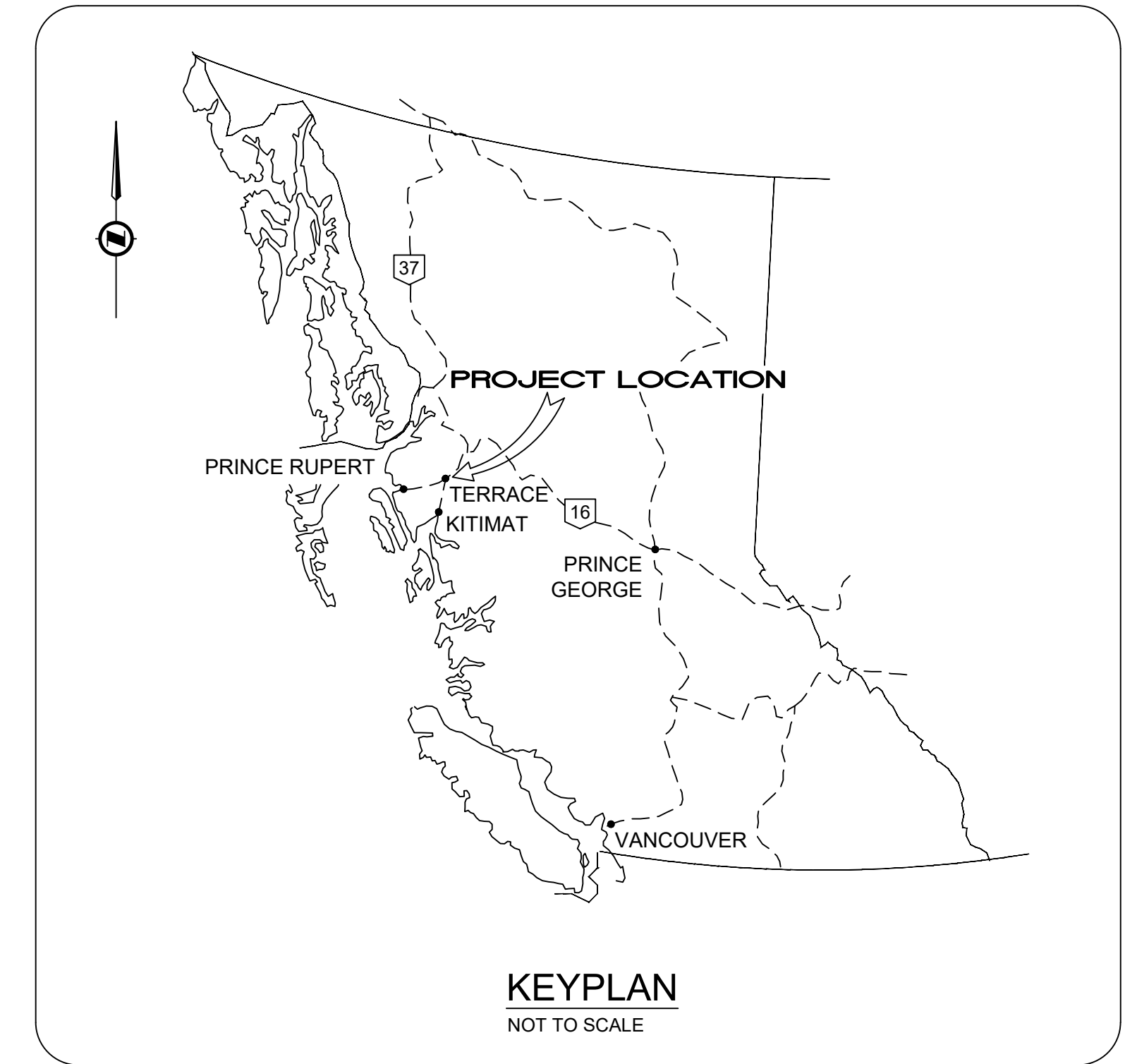
4800 - 4900 GRAHAM AVE.
RECONSTRUCTION

McELHANNEY PROJECT

2321-02168-00

STATUS

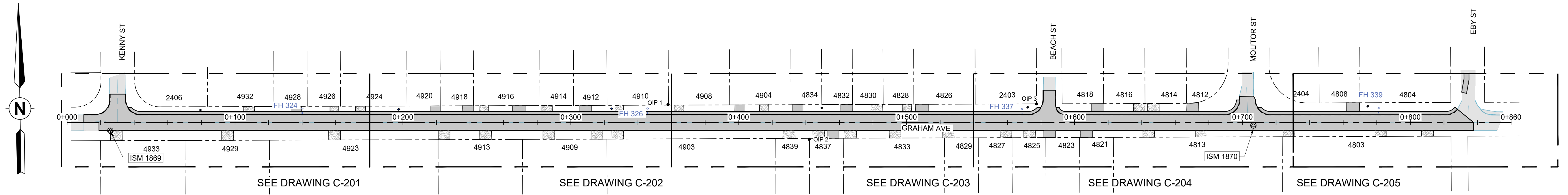
ISSUED FOR TENDER



DRAWING LIST		REVISIONS						
		PA	PB	PC	0	1	2	3
C-000	COVER SHEET							
C-100	OVERVIEW PLAN							
C-111	EXISTING AND REMOVALS - PLAN							
C-112	EXISTING AND REMOVALS - PLAN							
C-113	EXISTING AND REMOVALS - PLAN							
C-201	PLAN AND PROFILE - GRAHAM 0+000 - 0+180							
C-202	PLAN AND PROFILE - GRAHAM 0+180 - 0+360							
C-203	PLAN AND PROFILE - GRAHAM 0+360 - 0+540							
C-204	PLAN AND PROFILE - GRAHAM 0+540 - 0+730							
C-205	PLAN AND PROFILE - GRAHAM 0+730 - 0+860							
C-206	PLAN AND PROFILE - KENNY STREET AND BEACH STREET							
C-207	PLAN AND PROFILE - MOLITOR STREET AND EBY STREET							
C-301	DETAILS							
C-302	DETAILS							
C-401	CURB RETURN - KENNY AND BEACH - PLAN							
C-402	CURB RETURN - KENNY AND BEACH - PLAN							



Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163



GENERAL NOTES:

- LOCATION & ELEVATION OF ALL INFRASTRUCTURE ARE APPROXIMATE AND MAY NOT BE COMPLETE. PRIOR TO INSTALLATION OF WATER/STORM/SANITARY WORKS, CONFIRM THE LOCATION AND ELEVATION OF ALL EXISTING INFRASTRUCTURE AT ALL CROSSING AND TIE-IN LOCATIONS. NOTIFY THE CITY OF TERRACE REPRESENTATIVE OF ANY CONFLICT.
- LOCATION AND COMPLETENESS OF ALL UTILITY COMPANY INFRASTRUCTURE SHOWN CONCEPTUALLY ONLY. CONTACT UTILITY COMPANIES FOR LOCATES AND TO OBTAIN COMPLETE UTILITY INFRASTRUCTURE DRAWINGS.
- IF OTHER INFRASTRUCTURE IS ENCOUNTERED CONSULT THE CITY FOR DIRECTION.
- REMOVE & DISPOSE OF ALL ASPHALT, CONCRETE, & UNSUITABLE MATERIAL WITHIN LIMIT OF CONSTRUCTION UNLESS NOTED OTHERWISE (U.N.O.).
- REMOVE AND DISPOSE OF ALL EXISTING STORM CATCH BASINS/MANHOLES, CSP PIPE, AND DAMAGED PVC PIPE WITHIN REMOVAL BOUNDARY EXCEPT AS NOTED.
- DELIVER THE FOLLOWING REMOVED MATERIALS TO THE CITY PUBLIC WORKS YARD:
 - FIRE HYDRANTS & WATER VALVES
 - SERVICEABLE PVC PIPE
 - MANHOLE & CATCH BASIN FRAMES, GRATES, AND COVERS
- EXISTING ASBESTOS CEMENT (AC) INFRASTRUCTURE PROPOSED FOR REMOVAL TO BE COMPLETED AS PER WORKSAFE B.C. REGULATIONS. THE CONTRACTOR SHALL TAKE INVENTORY OF REMOVED AC INFRASTRUCTURE.
- REMOVE ONLY EXISTING AC WATERMAIN PIPING IN THE VICINITY OF THE PROPOSED CONNECTIONS. ABANDON ALL EXISTING AC WATERMAIN PIPING IN PLACE AND PLUG OPEN ENDS WITH CONCRETE U.N.O.
- ASSUME EXST WATER SERVICES ARE 20mm DIA. & SANITARY SERVICES ARE 100mm DIA. U.N.O.
- BOULEVARD AREAS BEYOND STRUCTURAL FILL MAY BE FILLED WITH NATIVE EXCAVATED MATERIAL APPROVED BY THE CITY.
- REMOVE & DISPOSE OF EXISTING WATER SERVICE CURB STOPS.
- REMOVE & DISPOSE OF ALL EXISTING SANITARY MANHOLES.
- FENCES, TREES, GARDENS, DECORATIONS, ETC. THAT ARE REMOVED FROM PRIVATE PROPERTY MUST BE REINSTATED BY THE CONTRACTOR. CONSULT THE CITY FOR DIRECTION ON THE ITEMS REMOVED FROM THE BOULEVARD OR OTHER CITY PROPERTY.
- ALL CONSTRUCTION MUST CONFORM TO THE LATEST CITY OF TERRACE CONSTRUCTION SPECIFICATIONS AND STANDARD DETAIL DRAWINGS. THE CONTRACTOR SHALL MAINTAIN ONSITE COPIES OF THE ABOVE DOCUMENTS.
- ALL TRAFFIC CONTROL, AND REQUIRED TEMPORARY TRAFFIC CONTROL SIGNAGE IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN WORKING NEAR OR AROUND EXISTING SERVICES. ANY DISTURBANCE TO THESE SERVICES SHALL BE REPLACED OR MADE GOOD TO THE SATISFACTION OF THE CITY REPRESENTATIVE.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL, INCLUDING SET UP AND MAINTENANCE. SHOULD DIRT/DEBRIS BE TRACKED ONTO ADJACENT DRIVEWAYS OR ROADWAYS, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE DAILY CLEANUP USING DUSTLESS METHODS.
- ALL INFRASTRUCTURE, BUILDINGS AND EXISTING SURFACE FEATURES DAMAGED OR BROKEN WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE TO THE ORIGINAL STATE OR BETTER.
- ALL PROPERTY PINS ARE TO BE UNDISTURBED. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY DISTURBED PINS. THE WORK, IF REQUIRED, MUST BE PERFORMED BY A BRITISH COLUMBIA LAND SURVEYOR, APPROVED BY THE CITY OF TERRACE REPRESENTATIVE.
- ANY EXCAVATION BENEATH AN EXISTING ACTIVE AC WATERMAIN OR SEWERMAIN/SERVICE IS TO BE BACKFILLED WITH CONTROLLED DENSITY FILL AS PER C.O.T. STANDARD DETAIL DRAWING WAT.7.
- PROPOSED CROSSING OF WATERMAIN WITH STORM OR SANITARY PIPING SHALL BE INSTALLED WITH THE MIDDLE OF THE PIPE LENGTH POSITIONED AT THE CROSSING LOCATION.
- WHERE VERTICAL SEPARATION IS LESS THAN 0.45m AT ANY PIPE CROSSING, USE CONTROLLED DENSITY FILL FOR PIPE SUPPORT ACROSS THE WIDTH OF THE TRENCH. SEE SUPPLEMENTAL DETAIL ON DRAWING NO. 3 - CONCRETE ENCASEMENT FOR WATERMAIN/SEWER SEPARATION.
- RE-INSTALL EXISTING SIGNS ON NEW TELESPAR BASE.
- SURVEY STAKING FOR STATIONING AND CENTERLINE OFFSETS TO BE FURNISHED ON BOTH SIDES OF THE ROAD AND MAINTAINED BY THE CONTRACTOR AT 20m INTERVALS FOR THE DURATION OF THE PROJECT.
- ANY REQUIRED REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE ENGINEER.

SURVEY NOTES

- SITE SRUVEY PERFORMED BY CITY OF TERRACE.
- COORDINATES AND ELEVATIONS ARE IN METRIC, DERIVED FROM TIES TO INTEGRATED SURVEY MONUMENT ISM 1869 AND ISM 1870, SCALED TO GROUND:
 - ISM 1869 AT INTERSECTION OF KENNEY ST. AND GRAHAM AVE.
N: 6,042,328.828m
E: 525,340.570m
ELEV.: 57.332m
- ISM 1870 AT INTERSECTION OF EB Y ST. AND GRAHAM AVE.
E: 526,021.249
N: 6,042,320.885
ELEV.: 58.982m

ROADWAY STRUCTURE AND PAVING NOTES:

- TWO DAYS PRIOR TO PAVING PROVIDE THE FOLLOWING FOR APPROVAL OF THE FINAL BASE ELEVATION, DRAINAGE GRATE ELEVATIONS, AND GRADES:
 - EMBEDDED NAILS AT EACH CB/CBMH/DMH 1m OFF SET ON EACH SIDE ALONG GUTTERLINE
 - EMBEDDED NAILS AT EACH VPI ALONG GUTTERLINE
- EMBEDDED STAKES AT 5m OFFSET FROM GUTTERLINE AT 20m INTERVALS
- CHANGES OF GRADE ARE TO BE FORMED BY SMOOTH VERTICAL CURVES
- LOSSE, SEGREGATES, OR ORGANIC MATERIAL IS TO BE REMOVED FROM THE ROADWAY.
- SUBGRADE APPROVAL REQUIRED PRIOR TO PLACEMENT OF SUB-BASE.
- SUB-BASE MATERIALS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY IN 300mm THICK COMPACTED LIFTS. APPROVAL REQUIRED FOR EACH LIFT.
- GRANULAR BASE MATERIAL SHALL BE COMPACTED TO 98% MODIFIED PROCTOR DENSITY.
- EXISTING VALVE BOXES, MANHOLES, ETC. ARE TO BE ADJUSTED TO FINISHED GRADE PRIOR TO PAVING.
- BASE GRAVEL PREPARATION TO BE COORDINATED WITH THE CITY PAVING CONTRACTOR.
- TIE-IN TO EXISTING PAVEMENT BY CUTTING TO SOUND MATERIAL WITH A NEAT, VERTICAL FACE IN A LOCATION APPROVED BY THE CITY REPRESENTATIVE.
- SET ALL MANHOLE FRAMES AND VALVE BOXES TO CORRECT TOP OF GRANULAR BASE ELEVATIONS AND SLOPES. PROVIDE ONE 50mm STEEL RISER RING FOR EACH MANHOLE AND WATER VALVE TO SET RIM ELEVATION 12mm BELOW FINISHED ASPHALT GRADE FOR PAVING CONTRACTOR.

SANITARY SEWER NOTES:

- ALL NEW SANITARY CLEANOUTS (NCR BOXES) SHALL BE ADJUSTED TO FINAL GRADE AND MARKED WITH A STAKE AS PER CITY OF TERRACE STANDARDS. PROVIDE NEW NCR BOX FOR ALL SANITARY SERVICES.
- ALL NEW AND EXISTING SANITARY CLEANOUTS (NCR BOXES) SHALL BE SET AT 0.3m OFFSET FROM PROPERTY LINE ON CITY OF TERRACE RIGHT OF WAY AND BE SET 100mm BELOW GRASS OR GRAVEL AND 12mm LOWER THAN FINISHED ASPHALT SURFACE.
- ALL NEW SANITARY SERVICES TO BE 100mm U.N.O. SEAL NEW SANITARY SERVICE JOINTS WITH SHRINK-WRAP OR DENSO TAPE IF INSTALLED WITH LESS THAN 3m HORIZONTAL SEPARATION FROM WATER SERVICE PIPING.
- SANITARY SEWER MATERIAL TO BE SDR35 PVC FOR SEWERS 200mm AND LARGER AND DR 28 FOR UNDER 200mm.
- TIE-INS OF PROPOSED MAINS TO EXISTING SANITARY SEWER MAINS ARE TO BE PERFORMED BY THE CONTRACTOR.
- SANITARY MANHOLES TO BE PER CITY OF TERRACE DRAWING NO. SAN. 1 C/W PREDL SYSTEMS FRP MANHOLE BASE LINER, OR APPROVED EQUIVALENT.
- MANHOLES WITH INVERT ELEVATION DIFFERENCES GREATER THAN 600mm SHALL C/W AN OUTSIDE DROP STRUCTURE.
- SET ALL MANHOLE FRAMES TO DESIGN TOP OF GRANULAR BASE ELEVATIONS AND SLOPES. PROVIDE ONE 50mm STEEL RISER RING FOR EACH MANHOLE TO SET RIM ELEVATION 12mm BELOW FINISHED PAVEMENT GRADE FOR PAVING CONTRACTOR.
- USE PRECAST CONCRETE RISER RINGS TO SET ELEVATIONS. EMBED RINGS IN STRUCTURAL GROUT, GROUT TO BE APPLIED TO THE INSIDE, OUTSIDE, AND BETWEEN RINGS TO PROVIDE A NEAT FINISH.
- SANITARY TESTING AS PER CITY OF TERRACE STANDARDS.
- SMH 9 AND 1 DIAMETERS ARE ESTIMATED. SUBMIT SHOP DRAWINGS FOR ALL SMH BASES FOR APPROVAL PRIOR TO ORDERING.
- NEW PRE INSTALLED SANITARY SERVICE TO BE 1m SEPARATION FROM WATER SERVICE.

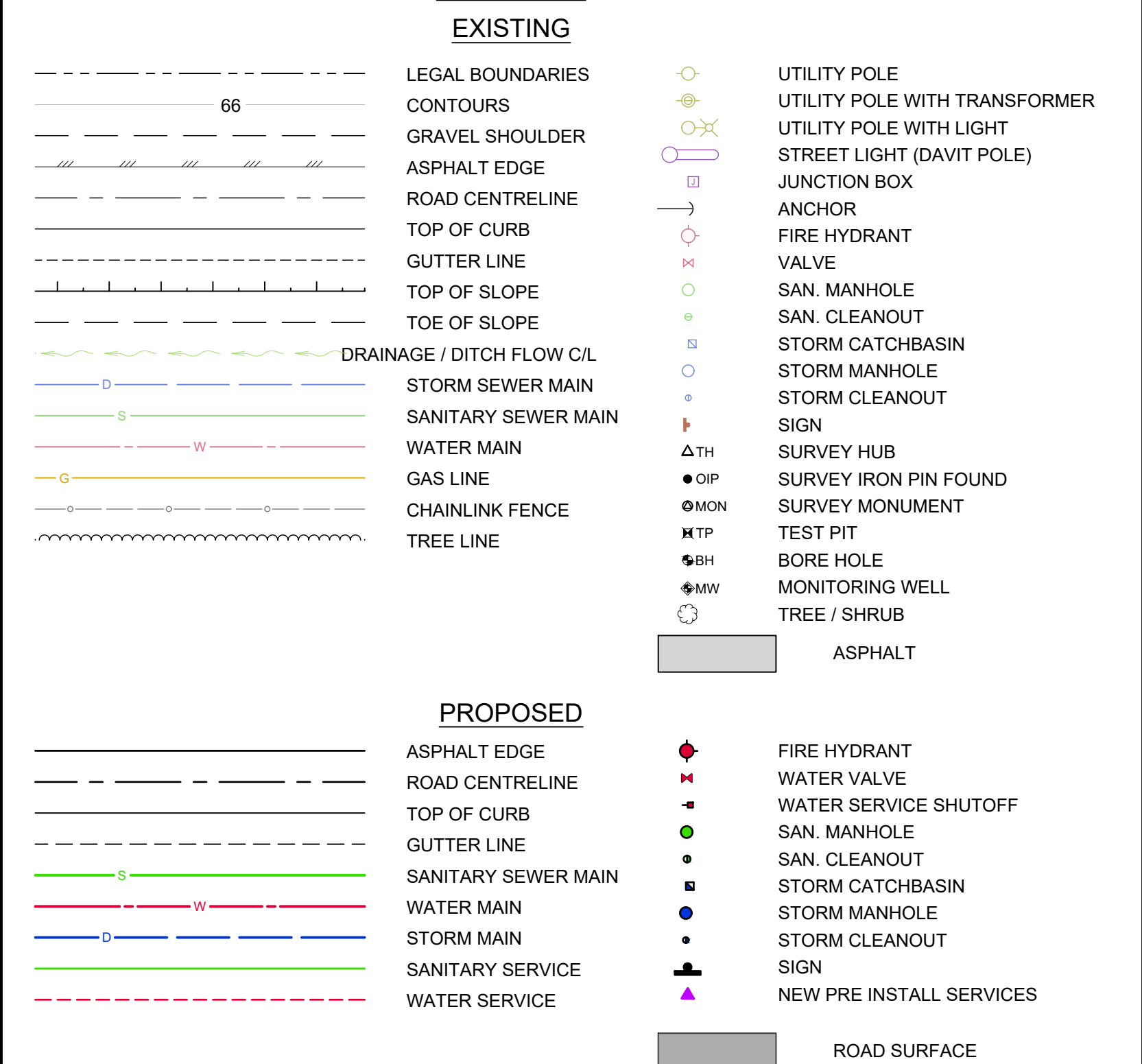
STORM SEWER NOTES:

- NEW STORM SERVICE LOCATIONS (NOT SHOWN) TO BE DETERMINED BY THE CITY. INSTALL AS PER CITY OF TERRACE STANDARDS AND PLACE AT 2% GRADE TO THE PROPERTY LINE.
- ALL PR. CBs TO BE 800mm DIAMETER CSP BARRELS. REFER TO CITY OF TERRACE STANDARD DETAIL DRAWING STM. 1 - STORM SEWER CATCH BASIN. ALL DMHs TO BE 1050mm CONCRETE MANHOLES.
- ALL STORM LATERAL CONNECTIONS TO BE MADE WITH A FENRGO QWIK SEAL INSTALLED TO THE MANUFACTURERS SPECIFICATIONS. CITY REPRESENTATIVE TO CONFIRM AND APPROVE CONNECTION LOCATION PRIOR TO CORING HOLE.
- STORM SEWER MATERIAL TO BE SDR35 PVC FOR 200mm AND LARGER, DR28 FOR UNDER 200mm, AND SHALL CONFORM TO THE CITY OF TERRACE SPECIFICATIONS.
- TESTING IS THE RESPONSIBILITY OF THE CONTRACTOR WITH INSPECTION BY THE CITY REPRESENTATIVE AND/OR ENGINEER.
- SILTATION CONTROLS TO THE ACCEPTANCE OF THE CITY MUST BE USED AT ALL DRAINAGE INLETS/OUTLETS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AS NEEDED.
- USE PRECAST CONCRETE RISER/D-RINGS TO SET THE RIM ELEVATIONS. EMBED RINGS IN STRUCTURAL GROUT, GROUT TO BE APPLIED TO THE INSIDE, OUTSIDE, AND BETWEEN RINGS TO PROVIDE NEAT FINISH.

WATERMAIN NOTES:

- PROPOSED WATER PIPES AND FITTING SHALL BE C900 PVC DR18 CLASS 235 BELL THICKENED U.N.O. CONCRETE THRUST BLOCK AND RESTRAIN ALL BENDS/Tees/CROSSES. REFER TO CITY OF TERRACE STANDARDS DWG WAT. 4.
- ALL PROPOSED WATER SERVICES TO BE 25mm DIAMETER WITH REDUCED AT PROPERTY LINE IF REQUIRED U.N.O.
- ALL SHUT-OFFS SHALL BE SET AT 0.3m OFFSET FROM PROPERTY LINE ON CITY OF TERRACE RIGHT OF WAY, ADJUSTED TO FINAL GRADE, AND MARKED WITH A STAKE AS PER CITY OF TERRACE STANDARDS.
- DISINFECT PROPOSED WATERMAIN TO WITHIN ONE STANDARD PIPE LENGTH OF THE TIE-IN LOCATIONS IN ACCORDANCE WITH SECTION 02666 OF THE STANDARD CONSTRUCTION SPECIFICATIONS. SWAB DISINFECT TIE-IN PIPING AND COUPLING WITH SODIUM HYPOCHLORITE IMMEDIATELY PRIOR TO INSTALLATION.
- PRESSURE TESTING AND CHLORINATION TO BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF TERRACE SPECIFICATIONS, AWWA C651, MMCD SECTION 33 11 01. PRESSURE/LEAKAGE TESTING TO 1380 KPa (200 psi) AT THE LOWEST POINT OF THE TEST SECTION. CONTRACTOR TO SUBMIT WRITTEN PLAN FOR APPROVAL BY THE CITY OF TERRACE REPRESENTATIVE. TESTING SHALL INCLUDE ALL MAINS TO WITHIN 5.5m OF THE TIE-IN LOCATIONS, ALL SERVICE CONNECTIONS TO CURB STOP, AND ALL FIRE HYDRANTS. TIE-IN MAINS ARE TO HAVE TEMPORARY END CAPS, WITH BLOW-OFFS AND ADEQUATE THRUST RESTRAINT. NO PERMANENT CONNECTION TO EXISTING MAINS SHALL BE PERMITTED UNTIL SUCCESSFUL COMPLETION OF TESTING AS AUTHORIZED BY THE CITY. ALL TIE-IN WORKS OR REPAIRS OF EXISTING MAINS TO BE DISINFECTED TO AWWA C651 SECTION 4.6. WATER FOR FOR PRESSURE TESTING AND CHLORINATION MAY BE SUPPLIED FROM EXISTING HYDRANTS. COLLECTION AND TESTING A SET OF BACTERIOLOGICAL SAMPLES WILL BE COLLECTED EVERY 370m OF THE NEW WATER MAIN, PLUS ONE SET FROM THE ENDS OF THE MAIN AND AT LEAST ONE FROM EACH BRANCH GREATER THAN ONE PIPE LENGTH. FIRST SAMPLE SET TO BE TAKEN AND A SECOND SET WILL BE TAKEN 24 HOURS AFTER THE FIRST SET. ALL TESTING AND SAMPLES TO BE WITNESSED BY THE CITY OF TERRACE INSPECTOR.
- ASSURANCE OF PROTECTION OF THE WATERMAIN:
 - MINIMUM 450mm VERTICAL SEPARATION OF THE WATERMAIN FROM ANY STORM AND SANITARY SEWER AT A CROSSING - WITH THE WATERMAIN BEING ABOVE.
 - MINIMUM 3m HORIZONTAL SEPARATION OF THE WATERMAIN FROM ANY STORM, IRRIGATION MAIN, OR SANITARY SEWER.
 - WHEN THE WATERMAIN IS ABOVE, SEPARATION CAN BE REDUCED TO NO LESS THAN 150mm WITH WATERMAIN AND SEWER JOINTS WITHIN 3m OF THE CROSSING WRAPPED WITH DENSO TAPE OR SHRINK WRAP AND CONTROLLED DENSITY FILL USED AS A BARRIER AND FOR STRUCTURAL SUPPORT.
 - WHEN THE WATERMAIN IS BENEATH THE SEWER OR STORM MAIN THERE SHALL BE A MINIMUM 150mm VERTICAL SEPARATION. THE CROSSING SHALL BE MADE MIDWAY ON A FULL LENGTH OF WATERMAIN PIPE. THE WATERMAIN JOINTS WITHIN 3m OF THE CROSSING ARE TO BE WRAPPED WITH DENSO TAPE OR SHRINK WRAP. CONTROL DENSITY FILL TO BE USED FOR SEPARATION AND STRUCTURAL SUPPORT OF THE SEWER PIPE.
 - WHEN THE WATERMAIN IS BENEATH A SANITARY OR STORM SERVICE, THERE SHALL BE A MINIMUM OF 150mm CLEARANCE. BOTH WATER AND SANITARY JOINTS TO BE WRAPPED WITH DENSO TAPE, AND CDF USED FOR SEPARATION.
 - WHEN 3m HORIZONTAL SEPARATION IS UNATTAINABLE, ALL WATERMAIN JOINTS ARE TO BE WRAPPED.
- WHERE IT IS NECESSARY FOR THE WATERMAIN TO CROSS OTHER UNDERGROUND SERVICES, THE CROSSING MUST BE MADE AT AN ANGLE GREATER THAN 45 DEGREES HORIZONTAL.
- CROSSING OF UTILITIES OTHER THAN STORM OR SANITARY TO HAVE A MINIMUM 300mm CLEARANCE.
- EXISTING WATERMAIN BREAKS:
 - REFER TO NORTHERN HEALTH PUBLIC HEALTH ENGINEERING GUIDELINE: SANITARY PROCEDURES WHEN PREPARING EXISTING WATERMAINS.
 - CONTACT THE CITY REPRESENTATIVE IMMEDIATELY.
 - DO NOT CLOSE WATERMAIN VALVES FULLY, MAINTAIN POSITIVE PRESSURE IN THE MAIN.
 - ADD LIBERAL QUANTITIES OF HYPOCHLORITE TABS TO A WET TRENCH AND DE-WATER.
 - SWAB INTERIOR OF THE PIPE AND FITTINGS WITH 1% HYPOCHLORITE SOLUTION (5:1 DILUTED HOUSEHOLD BLEACH) BEFORE INSTALLING WHEN MAKING THE REPAIR.
 - THOROUGHLY FLUSH FROM BOTH DIRECTIONS THROUGH A HYDRANT OR BLOW-OFF UNTIL TURBID WATER IS REMOVED.
 - ADDITIONAL DISINFECTION MAY BE REQUIRED. CONSULT CITY REPRESENTATIVE FOR DIRECTION.
 - BACTERIOLOGICAL SAMPLES MAY BE REQUIRED. CONSULT CITY REPRESENTATIVE FOR DIRECTION.
- ALL TIE-IN WORK TO BE COMPLETED BY THE CONTRACTOR UPON THE APPROVAL OF THE CITY FOLLOWING SUCCESSFUL TESTING.
- SERVICE INTERRUPTIONS TO FOLLOW CITY OF TERRACE REQUIREMENTS. ANY PROPOSED SERVICE INTERRUPTIONS MUST BE APPROVED BY THE CITY OF TERRACE REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE TO NOTIFY ENGINEER, HOMEOWNERS AND/OR BUSINESSES EFFECTED BY THE SERVICE INTERRUPTION WITH 48 HOURS WRITTEN NOTICE, AS PER CITY OF TERRACE STANDARD CONSTRUCTION SPECIFICATIONS.
- SUITABLE NATIVE BACKFILL MAY BE USED BELOW SUBBASE WITH APPROVAL FROM THE CITY OF TERRACE REPRESENTATIVE.
- PIPE JOINTS SHALL NOT BE DEFLECTED MORE THAN 1/2 OF THE MANUFACTURERS RECOMMENDED DEFLECTION.
- NEW PRE INSTALLED WATER SERVICE TO BE 1m SEPARATION FROM SANITARY SERVICE.

LEGEND



Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McElhanney and shall not be used, reused or reproduced without the consent of McElhanney. McElhanney will not be held responsible for the improper or unauthorized use of this drawing and design.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

0 1:1,250 50

ORIGINAL DWG SIZE: ANSI D (22" x 34")

McElhanney

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Suite 1
5008 Pohl Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

Engineers and Geoscientists
of British Columbia

PROFESSIONAL
ENGINEER
PROVINCE OF
BRITISH
COLUMBIA

K. B. SOUSA
#52453

2023-02-24

Approved Sealed

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

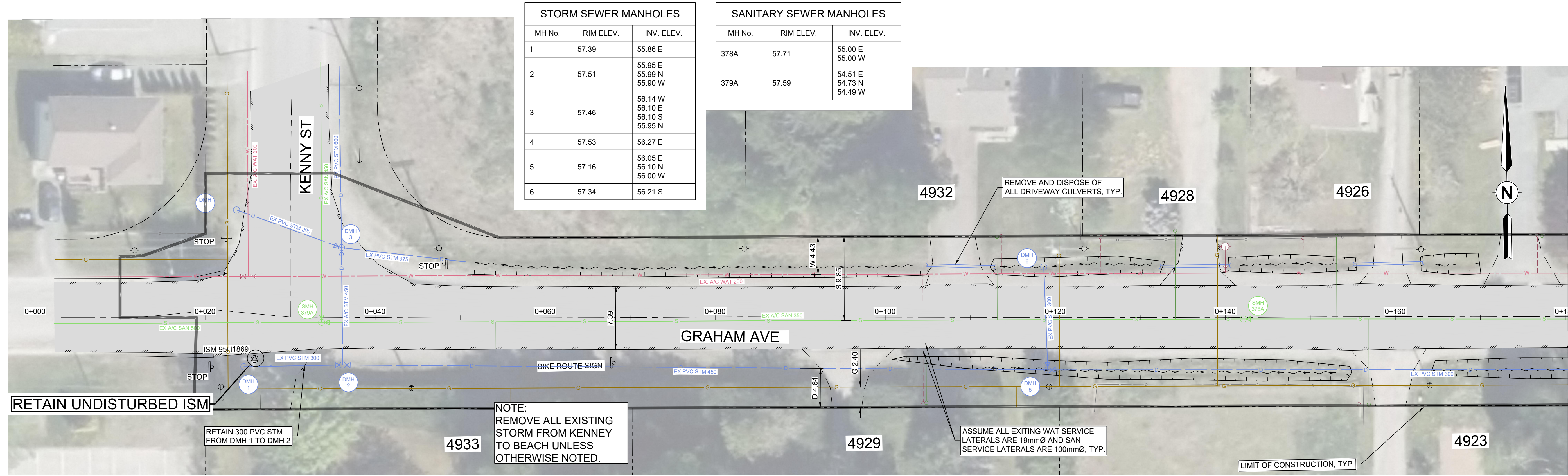
**4800-4900 GRAHAM RECONSTRUCTION
OVERVIEW PLAN**

800-4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-100

Project Number
2321-02168-00

Rev.
0



STORM SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
1	57.39	55.86 E
2	57.51	55.95 E 55.99 N 55.90 W
3	57.46	56.14 W 56.10 E 56.10 S 55.95 N
4	57.53	56.27 E
5	57.16	56.05 E 56.10 N 56.00 W
6	57.34	56.21 S

SANITARY SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
378A	57.71	55.00 E 55.00 W
379A	57.59	54.51 E 54.73 N 54.49 W

RETAIN UNDISTURBED ISM

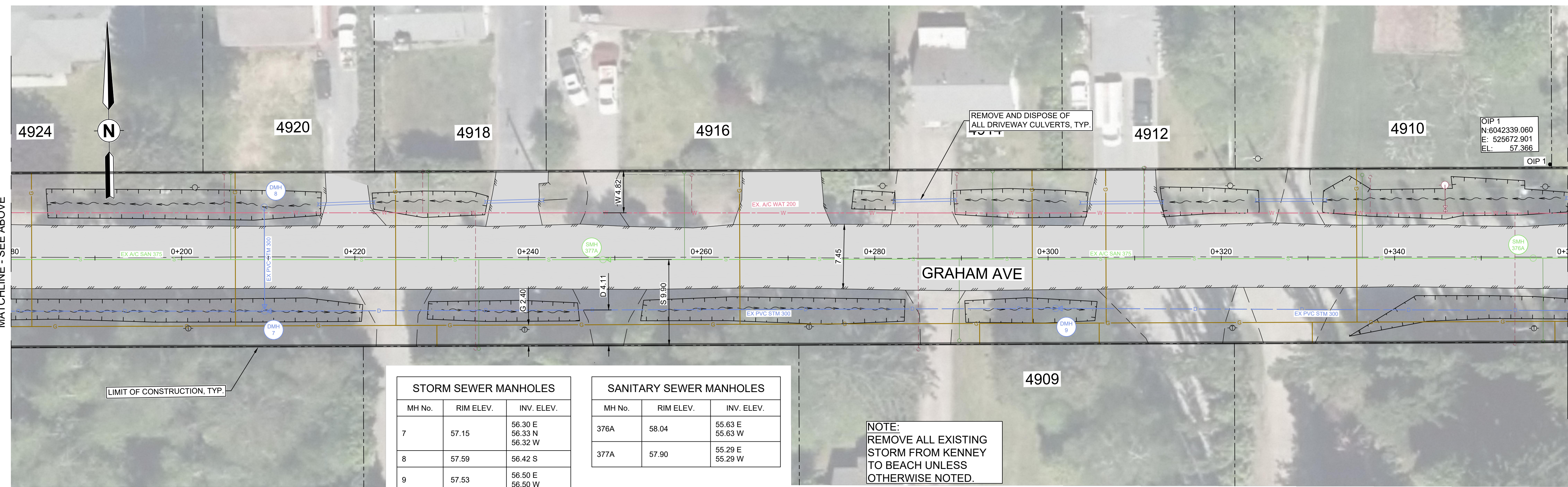
RETAIN 300 PVC STM FROM DMH 1 TO DMH 2

NOTE:
REMOVE ALL EXISTING STORM FROM KENNY TO BEACH UNLESS OTHERWISE NOTED.

ASSUME ALL EXISTING WAT SERVICE LATERALS ARE 19mmØ AND SAN SERVICE LATERALS ARE 100mmØ, TYP.

LIMIT OF CONSTRUCTION, TYP.

MATCHLINE - SEE BELOW



STORM SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
7	57.15	56.30 E 56.33 N 56.32 W
8	57.59	56.42 S
9	57.53	56.50 E 56.50 W

SANITARY SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
376A	58.04	55.63 E 55.63 W
377A	57.90	55.29 E 55.29 W

NOTE:
REMOVE ALL EXISTING STORM FROM KENNY TO BEACH UNLESS OTHERWISE NOTED.

OIP 1
N: 6042339.060
E: 525672.901
EL: 57.386

MATCHLINE - SEE ABOVE

MATCHLINE - SEE DRAWING C-112

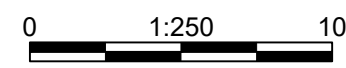
Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")



Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia



2023-02-24
Approved Sealed

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

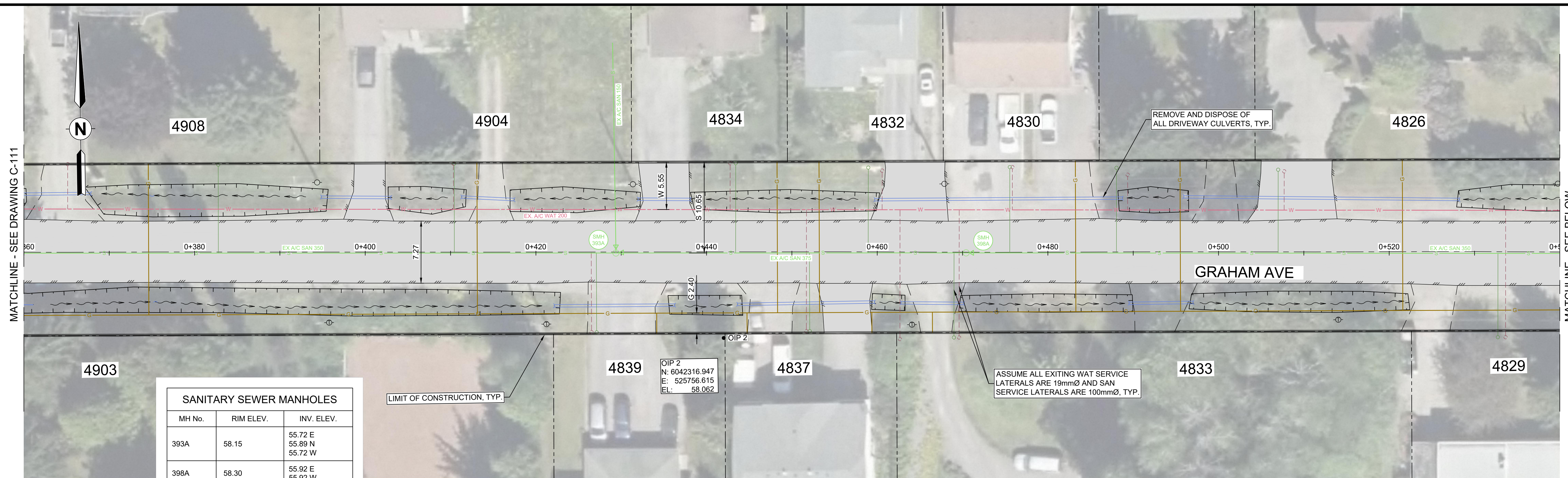
**4800-4900 GRAHAM RECONSTRUCTION
EXISTING AND REMOVALS
PLAN**

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-111

Project Number
2321-02168-00

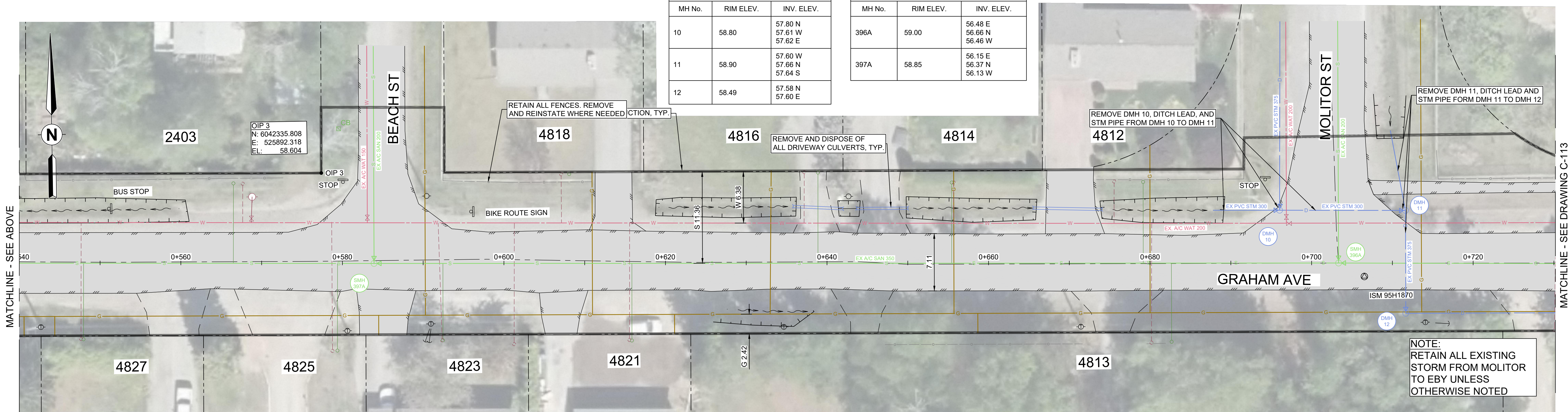
Rev.
0



SANITARY SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
393A	58.15	55.72 E 55.89 N 55.72 W
398A	58.30	55.92 E 55.92 W

STORM SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
10	58.80	57.80 N 57.61 W 57.62 E
11	58.90	57.60 W 57.66 N 57.64 S
12	58.49	57.58 N 57.60 E

SANITARY SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
396A	59.00	56.48 E 56.66 N 56.46 W
397A	58.85	56.15 E 56.37 N 56.13 W



Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

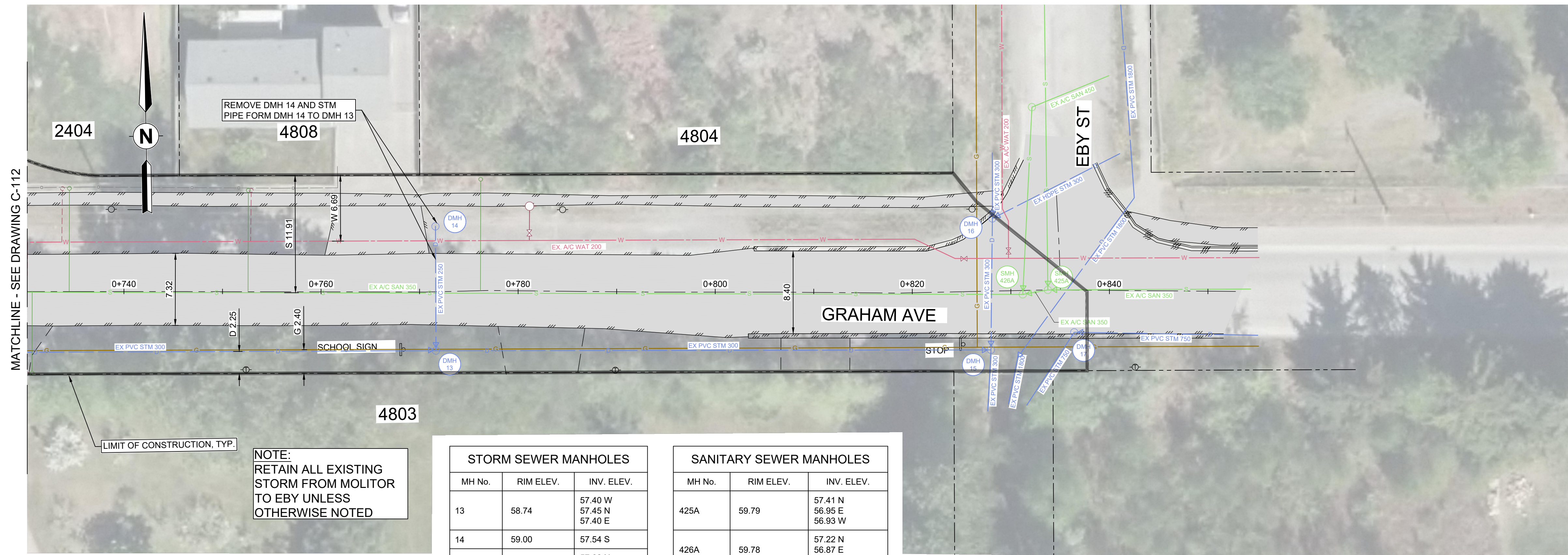


CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

**4800-4900 GRAHAM RECONSTRUCTION
EXISTING AND REMOVALS
PLAN**

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.	C-112
Project Number	2321-02168-00
Rev.	0



STORM SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
13	58.74	57.40 W 57.45 N 57.40 E
14	59.00	57.54 S
15	59.51	57.62 N 57.42 W 57.42 S
16	59.78	58.90 NE 59.10 N 57.73 S
17	59.71	57.68 E 57.67 SW

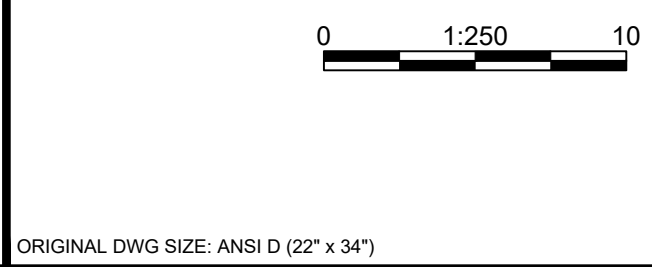
SANITARY SEWER MANHOLES		
MH No.	RIM ELEV.	INV. ELEV.
425A	59.79	57.41 N 56.95 E 56.93 W
426A	59.78	57.22 N 56.87 E 56.87 W

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.
PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

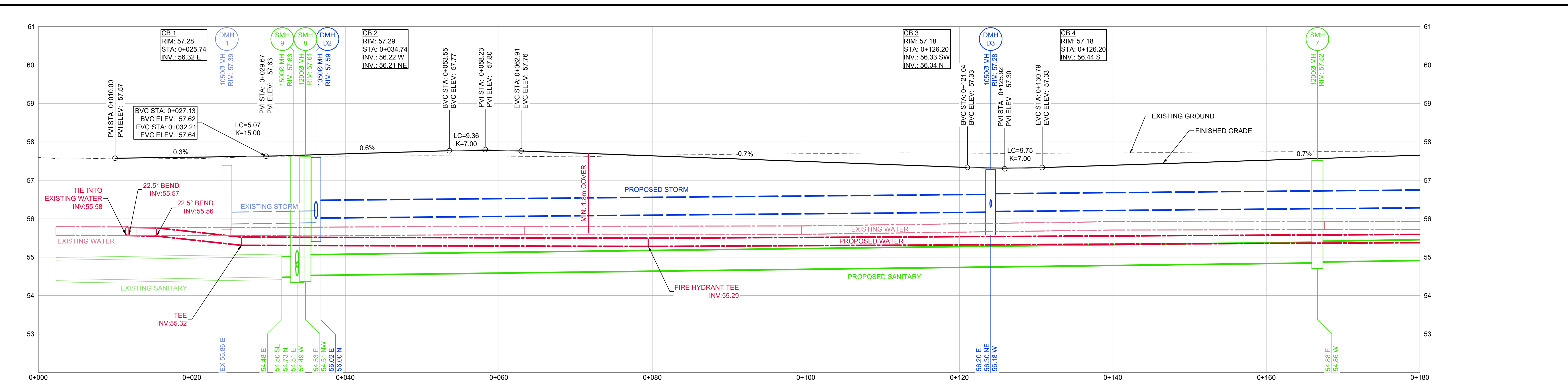
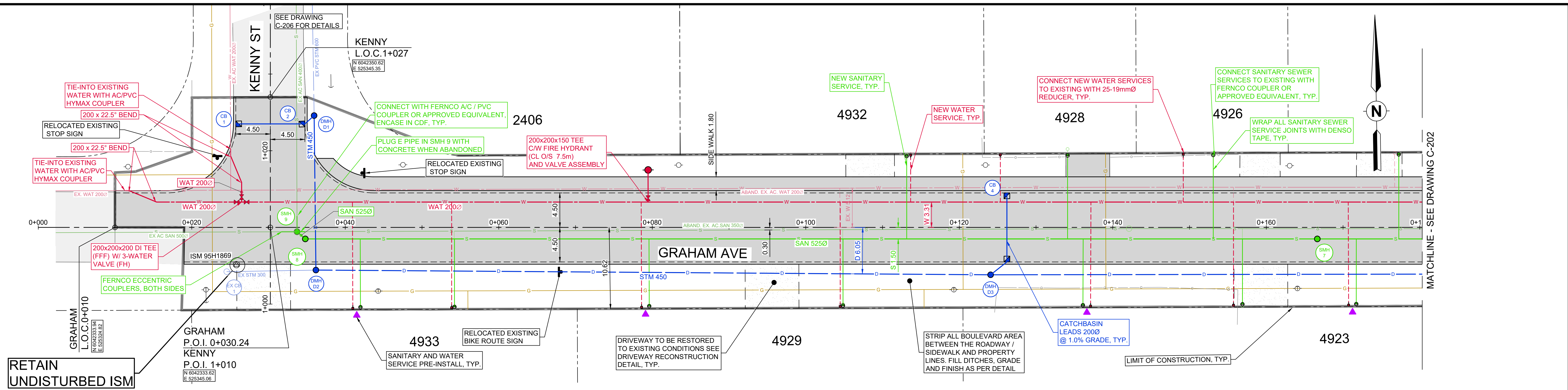


CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

**4800-4900 GRAHAM RECONSTRUCTION
EXISTING AND REMOVALS
PLAN**

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.	
C-113	
Project Number	Rev.
2321-02168-00	0



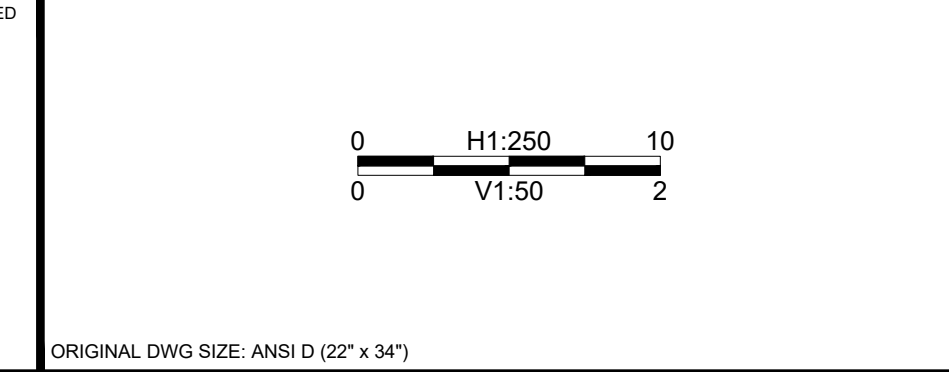
FG 57.59 OG 57.59	FG 57.60 OG 57.56	FG 57.63 OG 57.63	FG 57.76 OG 57.63	FG 57.49 OG 57.69	FG 57.34 OG 57.71	FG 57.39 OG 57.71	FG 57.52 OG 57.74	FG 57.65 OG 57.76
2.00m x 525Ø SAN AT 0.3%		1.43m x 525Ø SAN AT 0.7%		131.86m x 525Ø SAN AT 0.2%		131.86m x 525Ø SAN AT 0.3%		120.53m x 450Ø STM AT 0.2%
0.42m x 200Ø WAT AT -3.1%		3.89m x 200Ø WAT AT -0.3%		87.91m x 450Ø STM AT 0.2%		120.53m x 450Ø STM AT 0.2%		118.09m x 200Ø WAT AT 0.1%
Ex. 200Ø WAT AT -0.0%		11.08m x 200Ø WAT AT -2.2%		52.96m x 200Ø WAT AT -0.1%		118.09m x 200Ø WAT AT 0.1%		118.09m x 200Ø WAT AT 0.1%

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

Suite 1
5008 Pohl Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

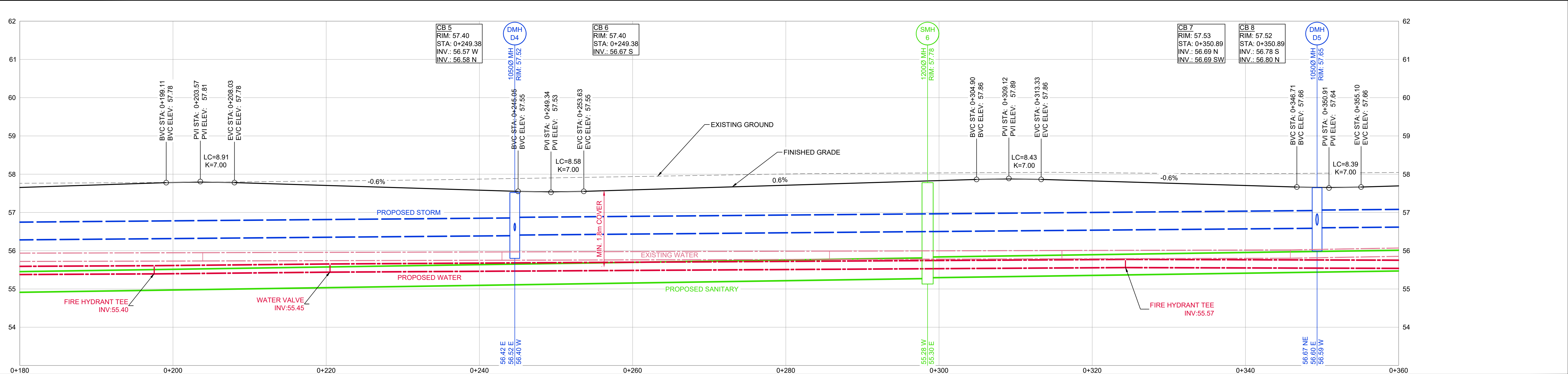
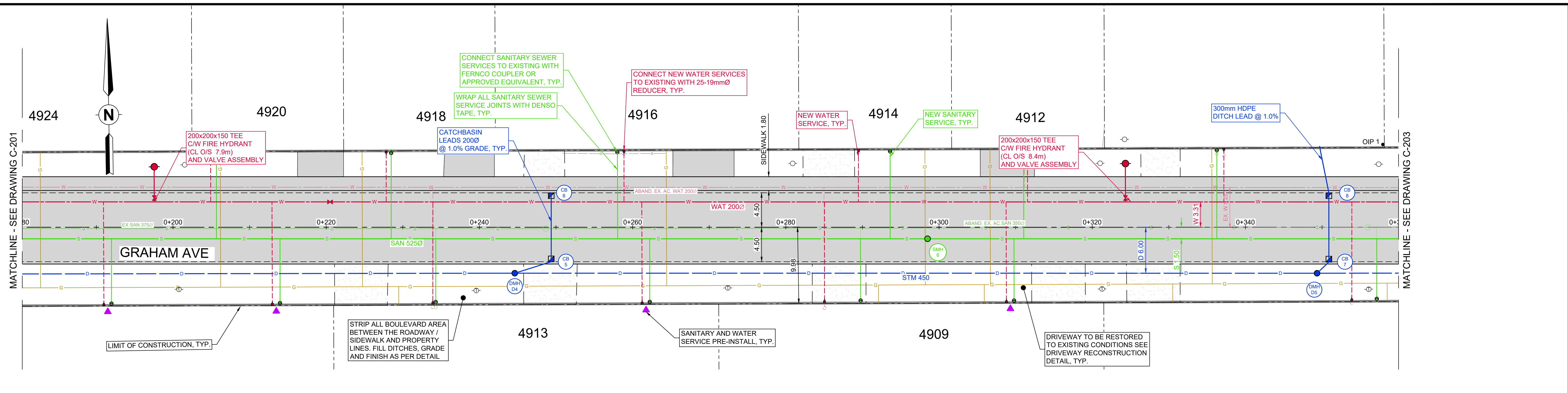
4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
GRAHAM 0+000 - 0+180

800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No. **C-201**

Project Number 2321-02168-00

Rev. 0



PROPOSED AND EXISTING GRADE AT CENTRELINE	
FG 57.65 OG 57.76	FG 57.78 OG 57.79
FG 57.71 OG 57.82	FG 57.58 OG 57.87
FG 57.59 OG 57.94	FG 57.71 OG 58.01
FG 57.83 OG 58.03	FG 57.82 OG 58.04
FG 57.70 OG 58.02	

PROPOSED SANITARY SEWER	
131.86m x 525Ø SAN AT 0.3%	130.91m x 525Ø SAN AT 0.3%

PROPOSED STORM SEWER	
120.53m x 450Ø STM AT 0.2%	104.73m x 450Ø STM AT 0.2%
41.88m x 450Ø STM AT 0.2%	

PROPOSED WATER MAIN	
118.09m x 200Ø WAT AT 0.1%	103.84m x 200Ø WAT AT 0.1%
22.95m x 200Ø WAT AT 0.2%	96.15m x 200Ø WAT AT -0.1%

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")

McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

0 1:250 10
0 1:50 2

PERMIT TO PRACTICE

McElhanney Ltd.
PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
GRAHAM 0+180 - 0+360

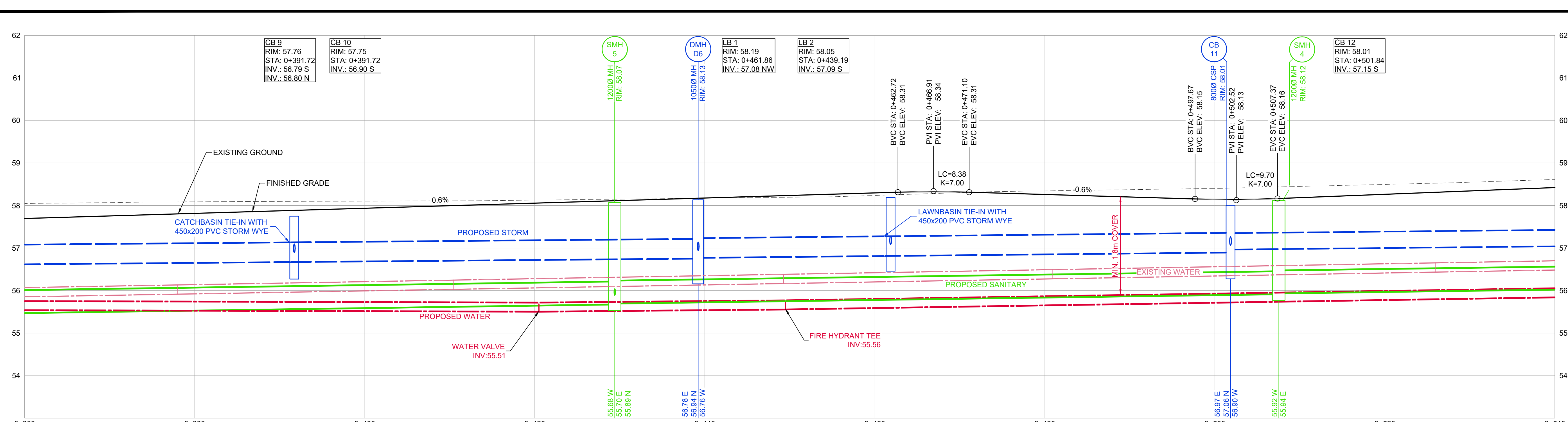
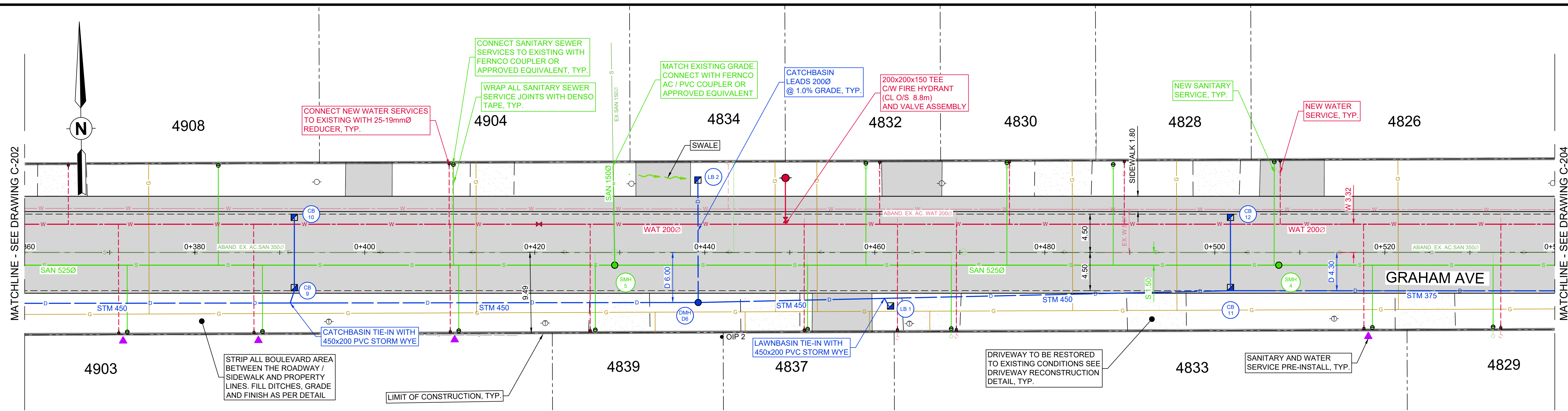
8000 BRITISH COLUMBIA PROFESSIONAL SOCIETY
K. B. SOUSA
52453
2023-02-24
Approved Sealed

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-202

Project Number
2321-02168-00

Rev.
0



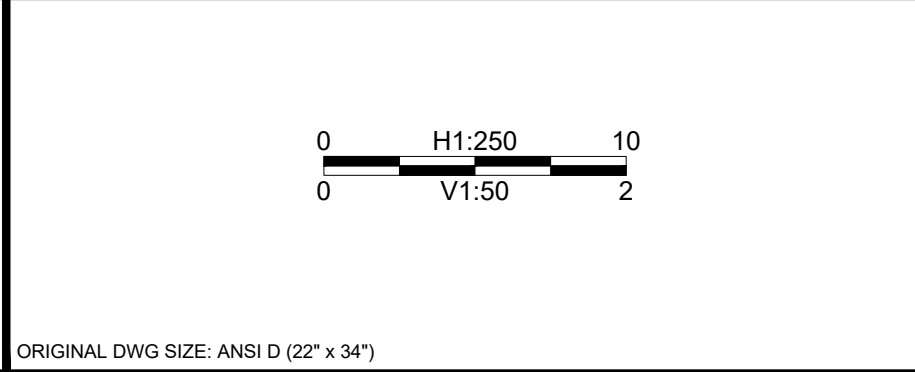
Station	Structure	Proposed Sanitary Sewer	Proposed Storm Sewer	Proposed Water Main
0+360	FG 57.60 / OG 56.05			
0+380	FG 57.81 / OG 56.09	130.91m x 525Ø SAN AT 0.3%	41.88m x 450Ø STM AT 0.2%	96.15m x 200Ø WAT AT -0.1%
0+400	FG 57.93 / OG 56.10			
0+420	FG 58.05 / OG 56.13			
0+440	FG 58.18 / OG 56.17			
0+460	FG 58.30 / OG 56.24	78.12m x 525Ø SAN AT 0.3%	21.91m x 450Ø STM AT 0.2%	29.01m x 200Ø WAT AT 0.2%
0+480	FG 58.26 / OG 56.34			
0+500	FG 58.14 / OG 56.40			
0+520	FG 58.26 / OG 56.50	76.40m x 525Ø SAN AT 0.3%	45.02m x 375Ø STM AT 0.2%	122.64m x 200Ø WAT AT 0.3%
0+540	FG 58.42 / OG 56.61			

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANEY. McELHANEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V6G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V6G 1B3

4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
GRAHAM 0+360 - 0+540

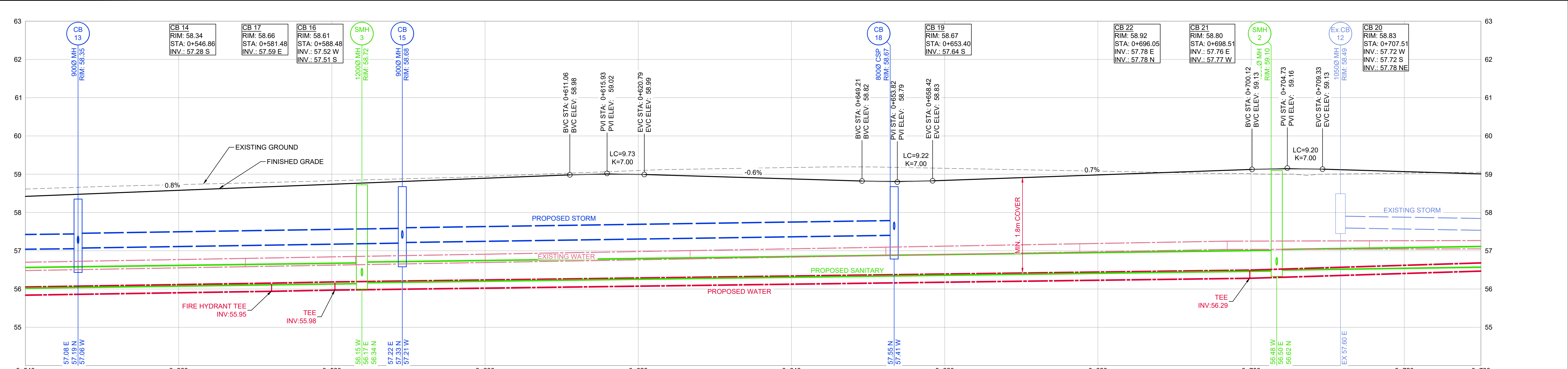
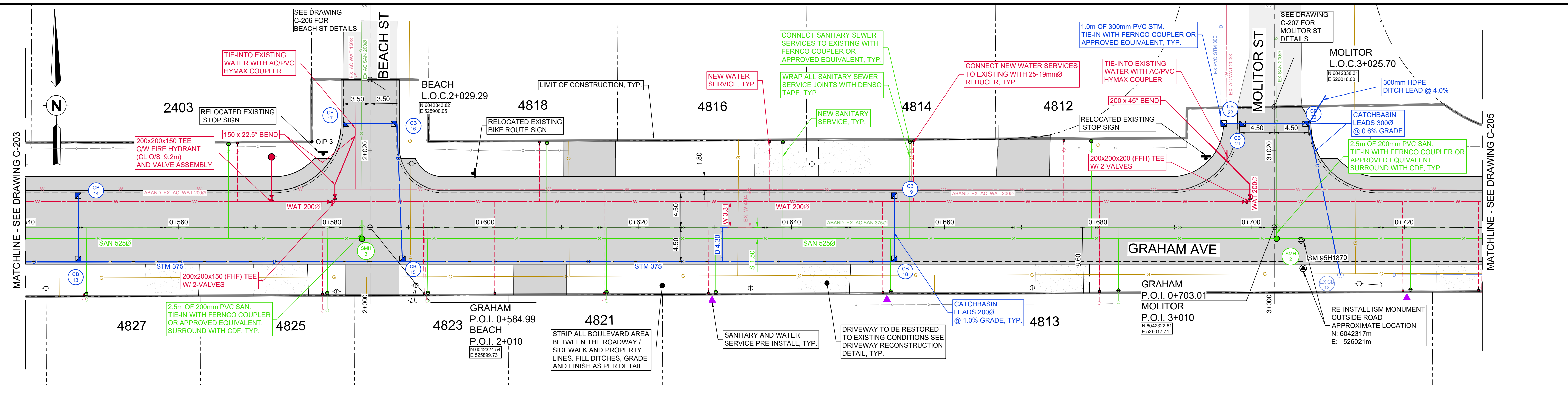
800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No. **C-203**

Project Number 2321-02168-00

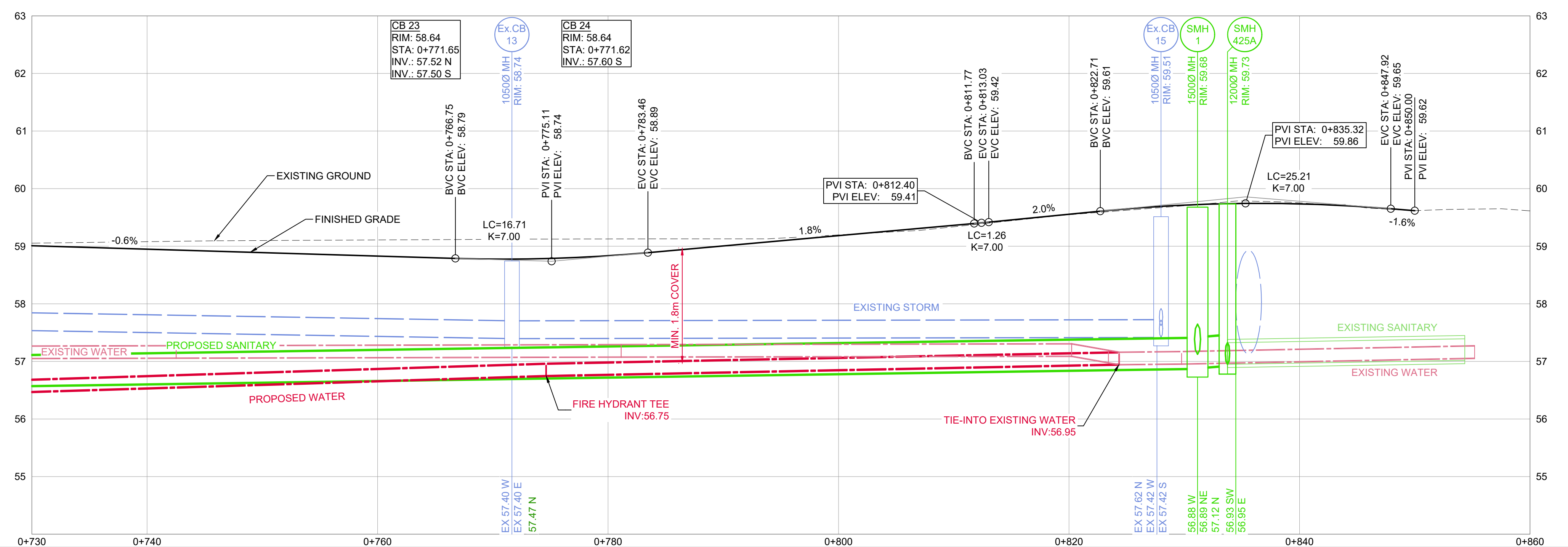
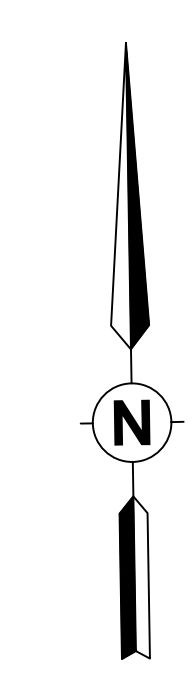
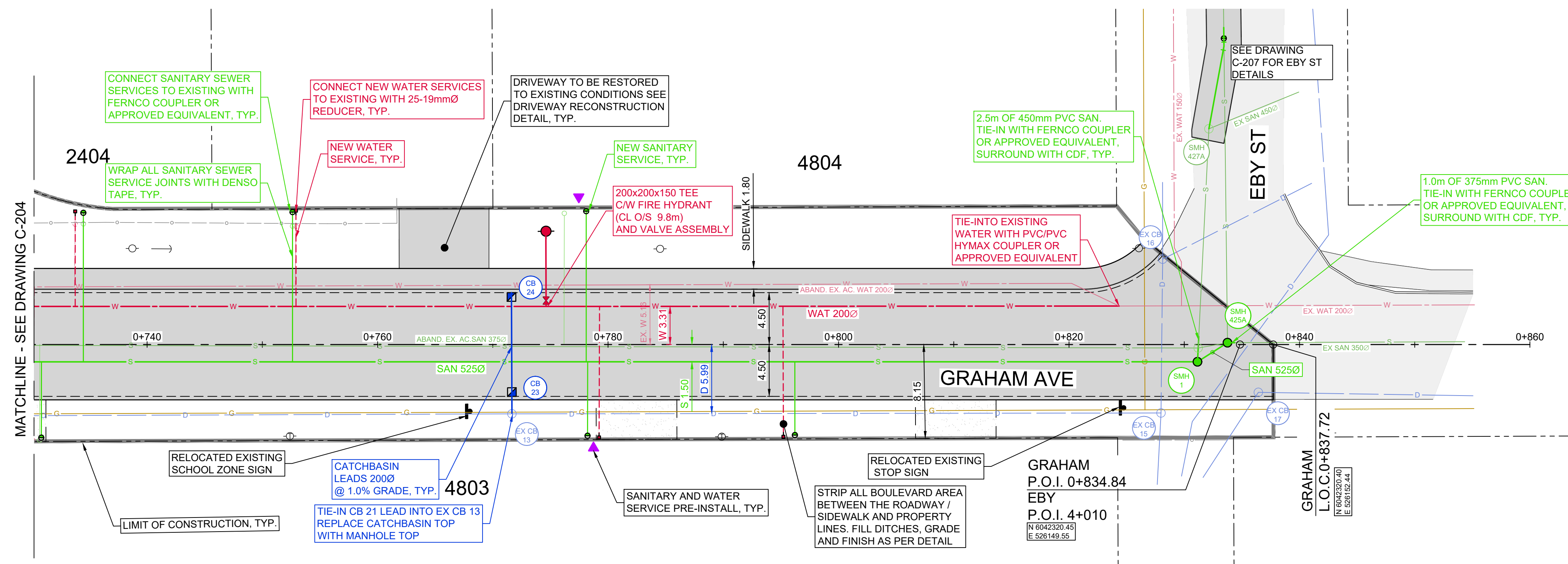
Rev. 0

DATE: 2023-02-24, 11:09 FILE: X:\2321021\00\02 Design Services 4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-200.dwg



Station Range	Proposed Storm Sewer	Proposed Sanitary Sewer	Proposed Water Main
0+540 - 0+560	45.02m x 375Ø STM AT 0.2%	76.40m x 525Ø SAN AT 0.3%	122.64m x 200Ø WAT AT 0.3%
0+560 - 0+580	42.33m x 375Ø STM AT 0.3%	0+583.93	8.27m x 200Ø WAT AT 0.4%
0+580 - 0+600	64.21m x 375Ø STM AT 0.3%		
0+600 - 0+620			
0+620 - 0+640			
0+640 - 0+660			
0+660 - 0+680			
0+680 - 0+700			
0+700 - 0+720	Ex. 300Ø STM AT 0.3%	127.81m x 525Ø SAN AT 0.3%	74.80m x 200Ø WAT AT 0.6%
0+720 - 0+730			

<p>THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.</p> <p>THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.</p> <p>INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.</p>			<p>0 1:250 10 0 1:50 2</p>			<p>McElhanney</p> <p>Suite 1 5008 Poble Avenue TERRACE BC Canada V6G 4S8 T 250 635 7163</p>			<p>PERMIT TO PRACTICE</p> <p>McElhanney Ltd. PERMIT NUMBER: 1003299</p> <p>Engineers and Geoscientists of British Columbia</p>			<p>PROFESSIONAL</p> <p>K. B. SOUSA # 52453 C. BRITISH C. U.M.</p> <p>2023-02-24 Approved Sealed</p>			<p>CITY OF TERRACE 5003 GRAHAM AVENUE TERRACE, BC V6G 1B3</p> <p>4800-4900 GRAHAM RECONSTRUCTION</p> <p>PLAN AND PROFILE</p> <p>GRAHAM 0+540 - 0+730</p> <p>4800 - 4900 GRAHAM AVE TERRACE, BC</p>			<p>Drawing No. C-204</p> <p>Project Number 2321-02168-00</p> <p>Rev. 0</p>		
---	--	--	--------------------------------	--	--	--	--	--	--	--	--	--	--	--	---	--	--	---	--	--



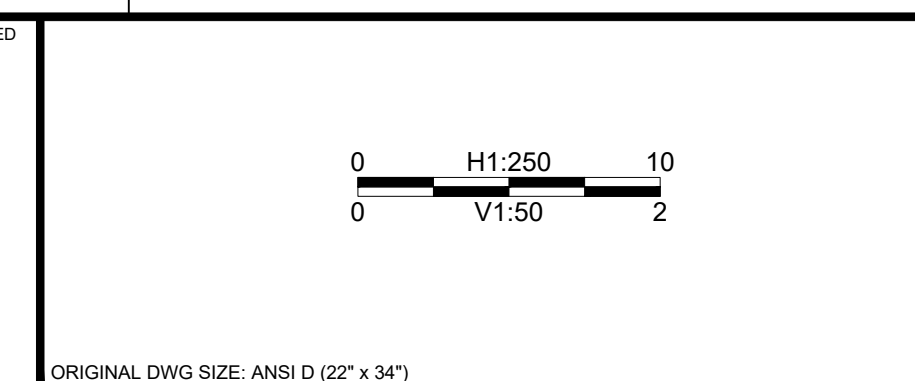
FG 59.01 OG 59.05	FG 58.95 OG 59.08	FG 58.83 OG 59.11	FG 58.83 OG 59.13	FG 59.18 OG 59.20	FG 59.56 OG 59.35	FG 59.74 OG 59.75	FG C
PROPOSED AND EXISTING GRADE AT CENTRELINE		PROPOSED SANITARY SEWER		PROPOSED STORM SEWER		PROPOSED WATER MAIN	
127.81m x 525Ø SAN AT 0.3%		74.80m x 200Ø WAT AT 0.6%		49.72m x 200Ø WAT AT 0.4%		3.08m x 525Ø SAN AT 1.4%	
Ex. 300Ø STM AT 0.3%		Ex. 300Ø STM AT -0.0%		Ex. 200Ø WAT AT 0.2%		Ex. 1800Ø STM AT 1.2%	
Ex. 300Ø WAT AT 0.4%		Ex. 200Ø WAT AT 0.4%		Ex. 200Ø WAT AT 0.4%		Ex. 375Ø SAN AT 0.3%	

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF MCELHANEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF MCELHANEY. MCELHANEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. MCELHANEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT MCELHANEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. MCELHANEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

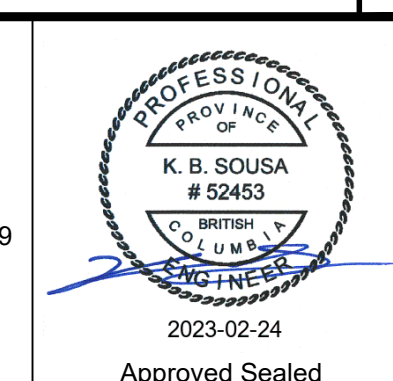
Suite 1
5008 Pohlle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia



CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

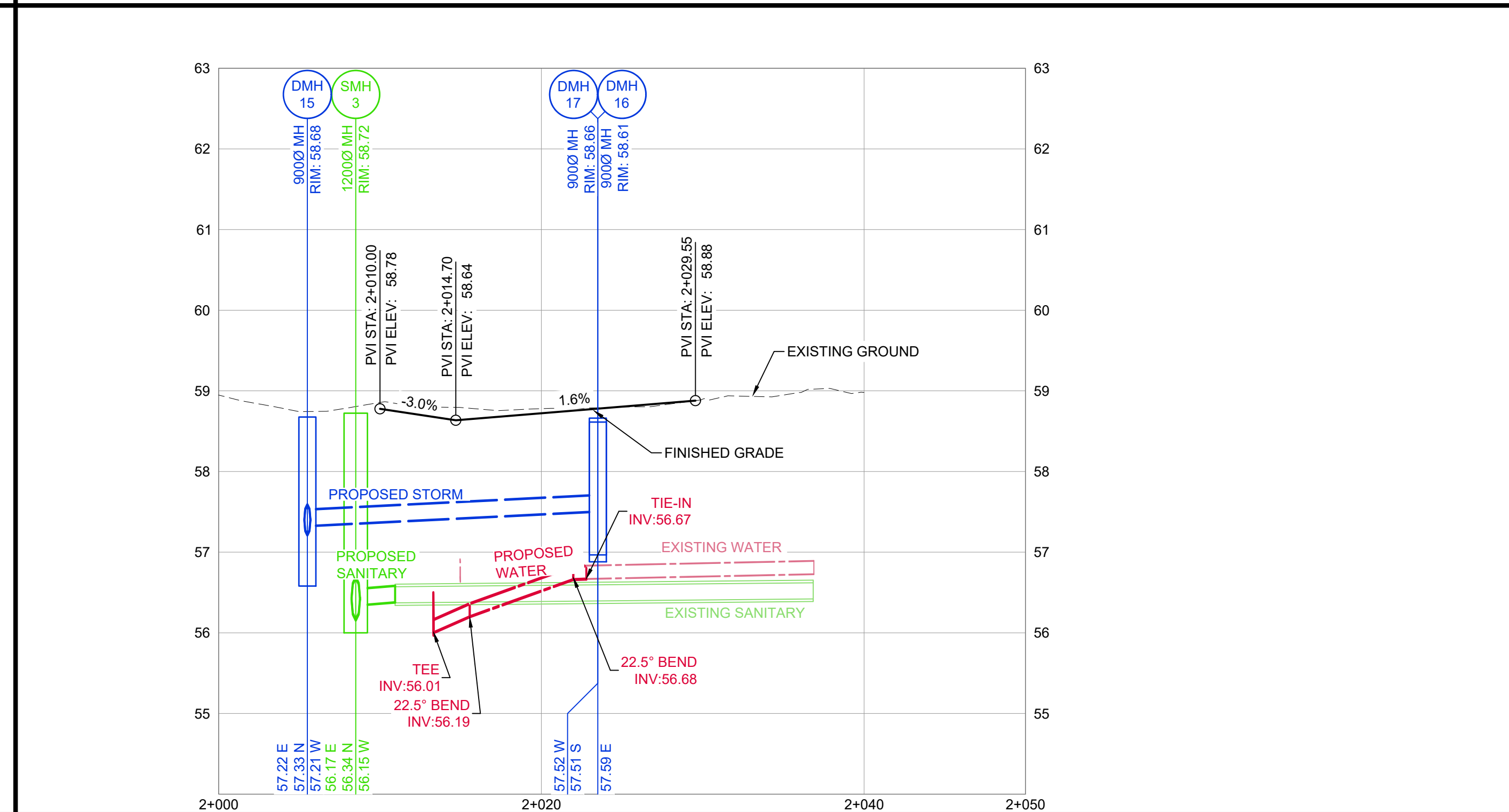
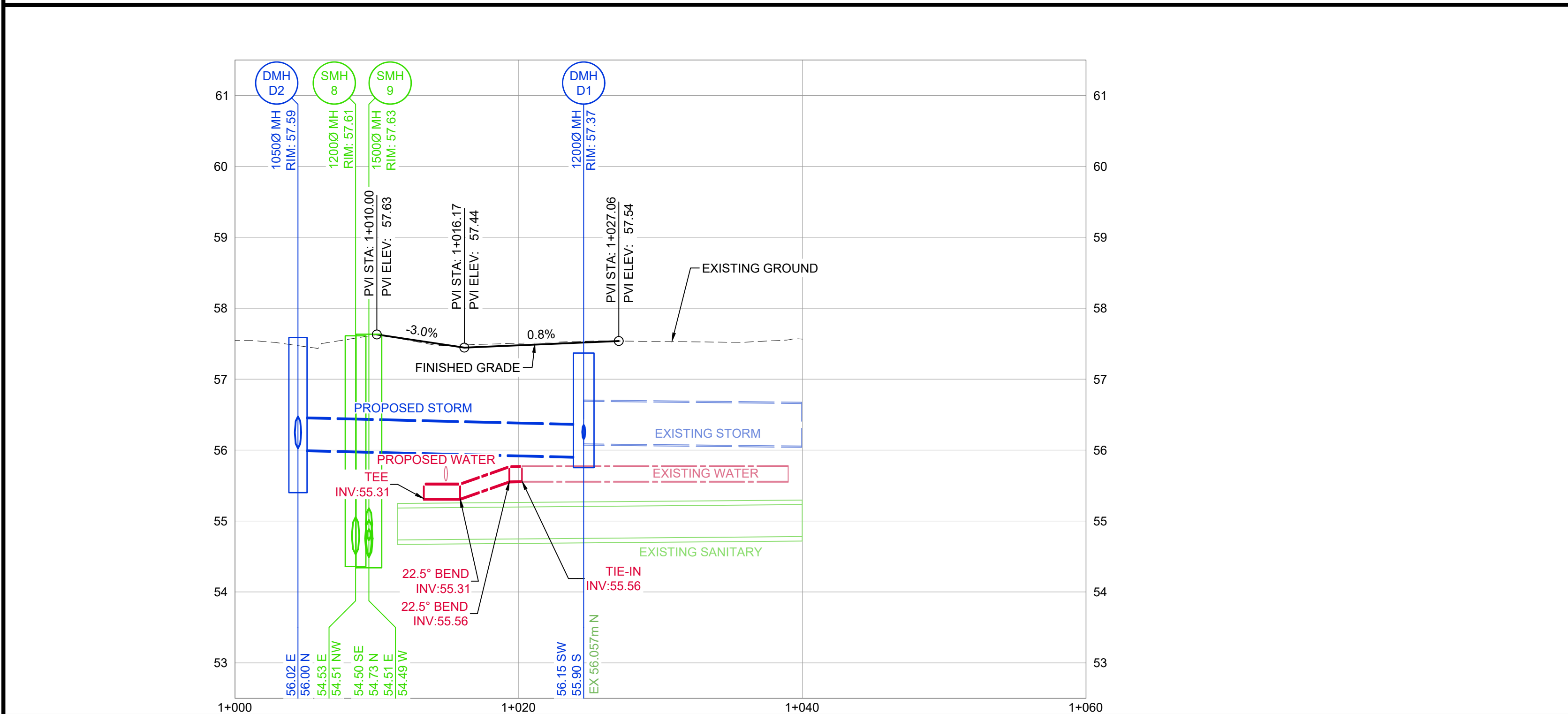
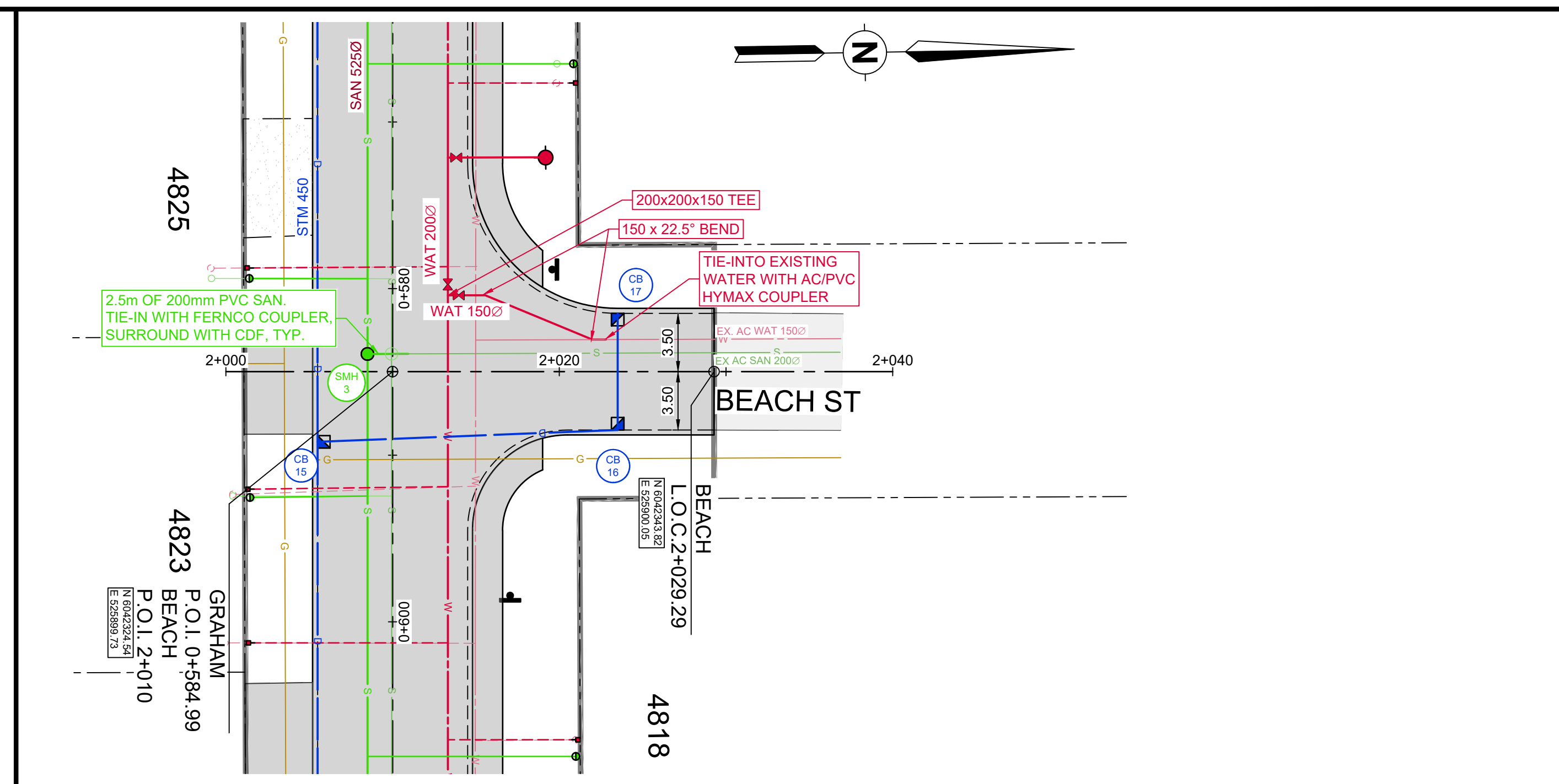
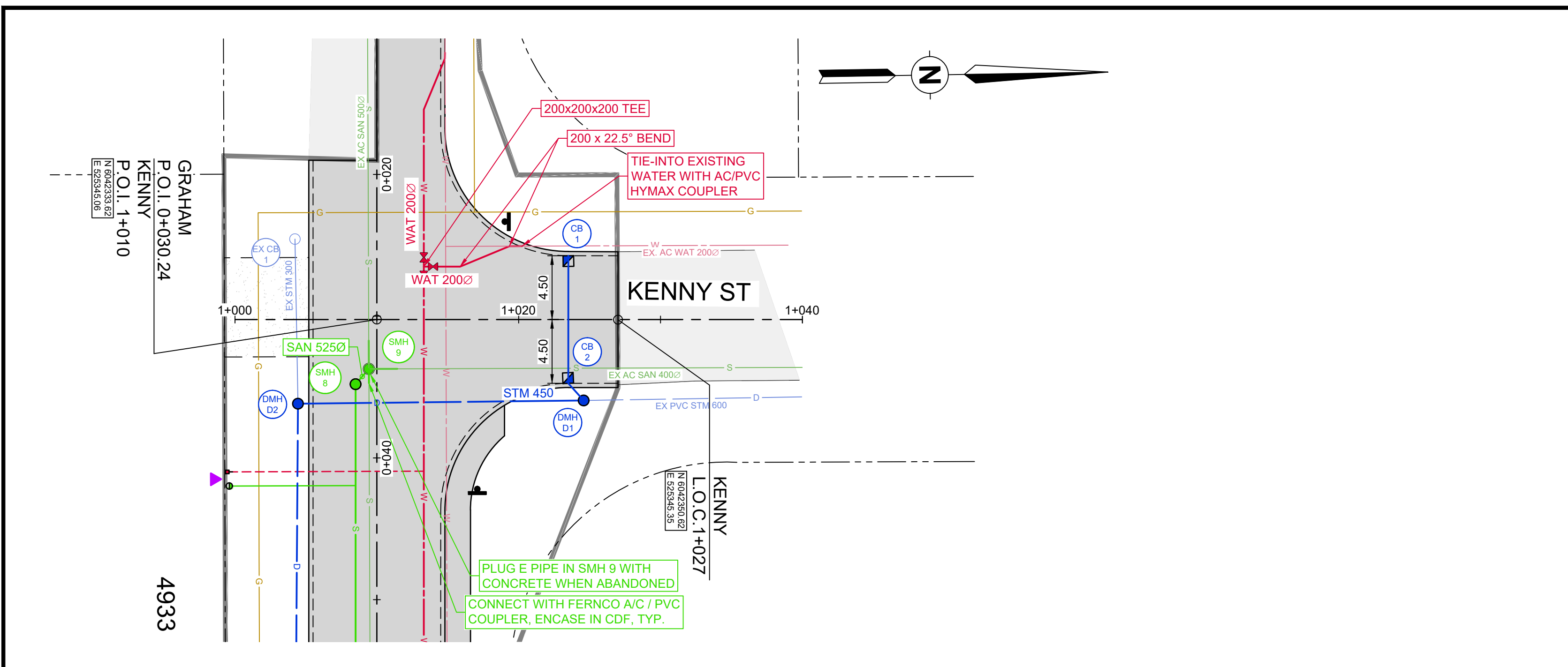
4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
GRAHAM 0+730 - 0+860

8400 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-205

Project Number
2321-02168-00

Rev.
0



FG	OG	FG	OG	FG	OG
57.55	57.51	57.56	57.51	57.56	57.51

FG	OG	FG	OG	FG	OG
58.95	58.78	58.78	58.78	58.98	58.98

1+004.44	1+006.50	1+009.44	1+024.58
----------	----------	----------	----------

2+005.50	2+006.50	2+023.50
----------	----------	----------

20.15m x 450 \varnothing STM AT 0.5%	Ex. 600 \varnothing STM AT -0.2%
--	------------------------------------

18.02m x 200 \varnothing STM AT 1.0%	Ex. 200 \varnothing SAN AT 0.2%
--	-----------------------------------

2.56m x 200 \varnothing WAT AT -0.0%	3.77m x 200 \varnothing WAT AT 6.5%	0.89m x 200 \varnothing WAT AT 0.5%	Ex. 200 \varnothing WAT AT 0.0%
--	---------------------------------------	---------------------------------------	-----------------------------------

2.25m x 150 \varnothing WAT AT 8.9%	6.97m x 150 \varnothing WAT AT 6.6%	0.81m x 150 \varnothing WAT AT 0.7%	Ex. 150 \varnothing WAT AT 0.4%
---------------------------------------	---------------------------------------	---------------------------------------	-----------------------------------

Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF MCELHANNNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF MCELHANNNEY. MCELHANNNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. MCELHANNNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT MCELHANNNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. MCELHANNNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

0 1:250 10
0 1:500 2

ORIGINAL DWG SIZE: ANSI D (22" x 34")

McElhanney

Suite 1
5008 Pohle Avenue
Terra BC
Canada V6G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.
PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

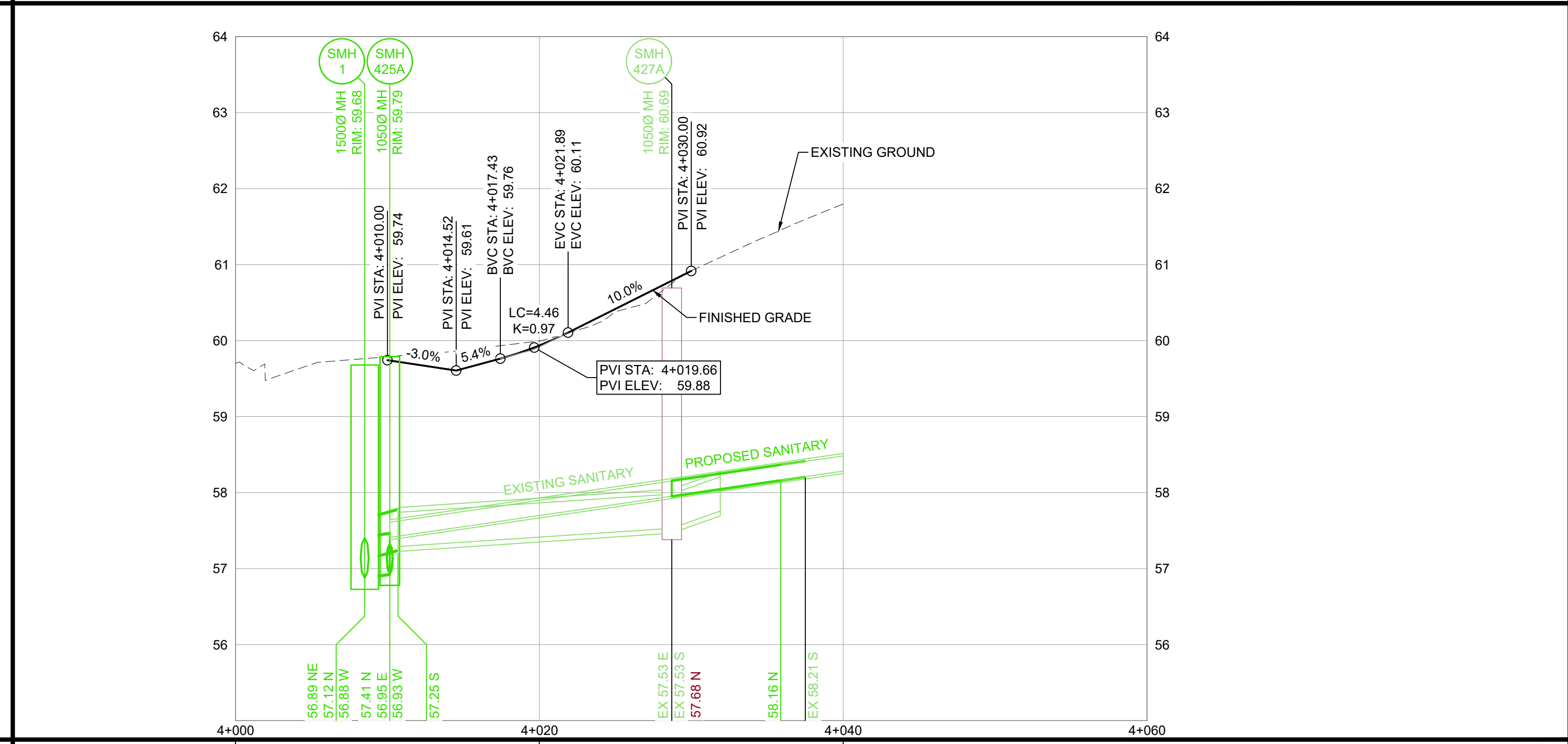
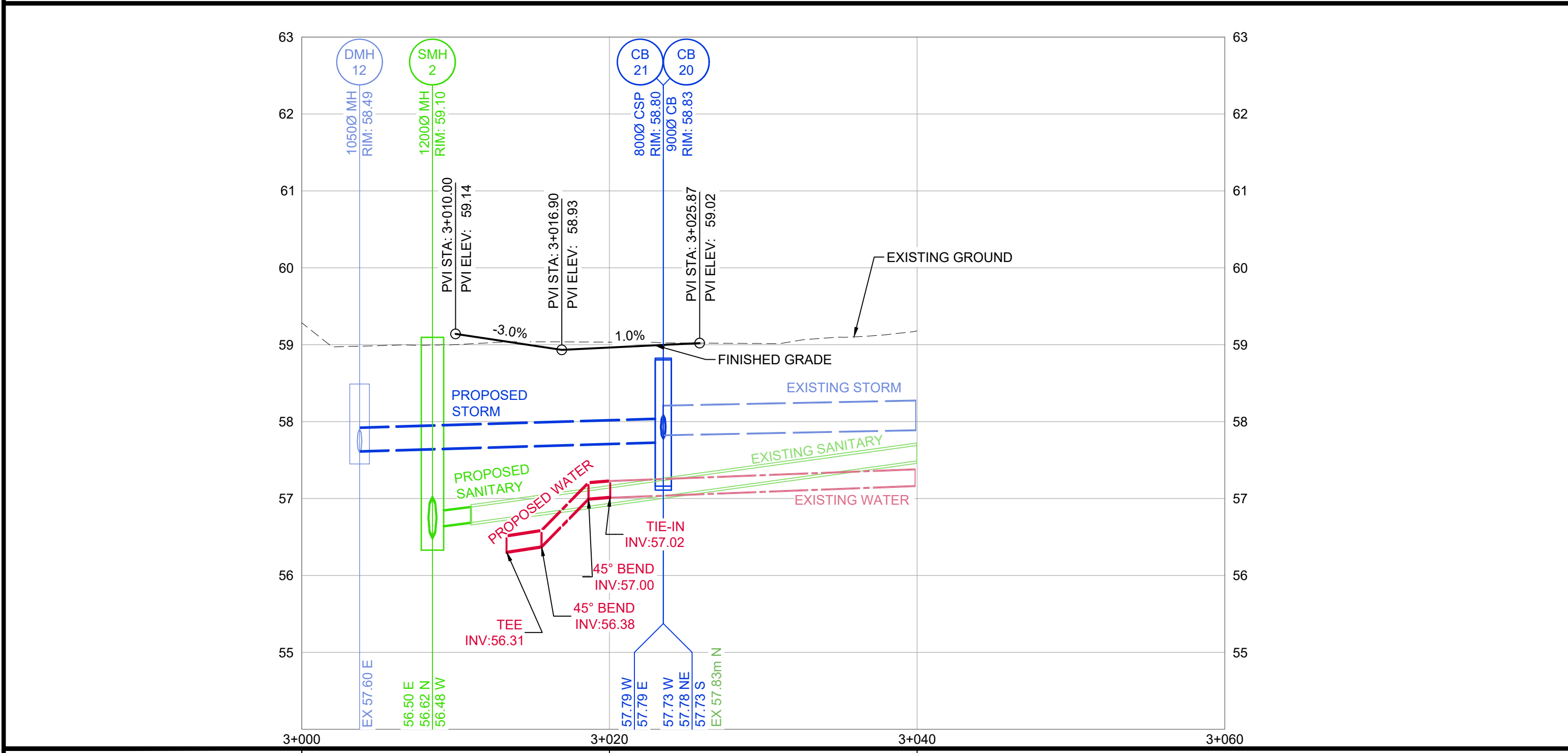
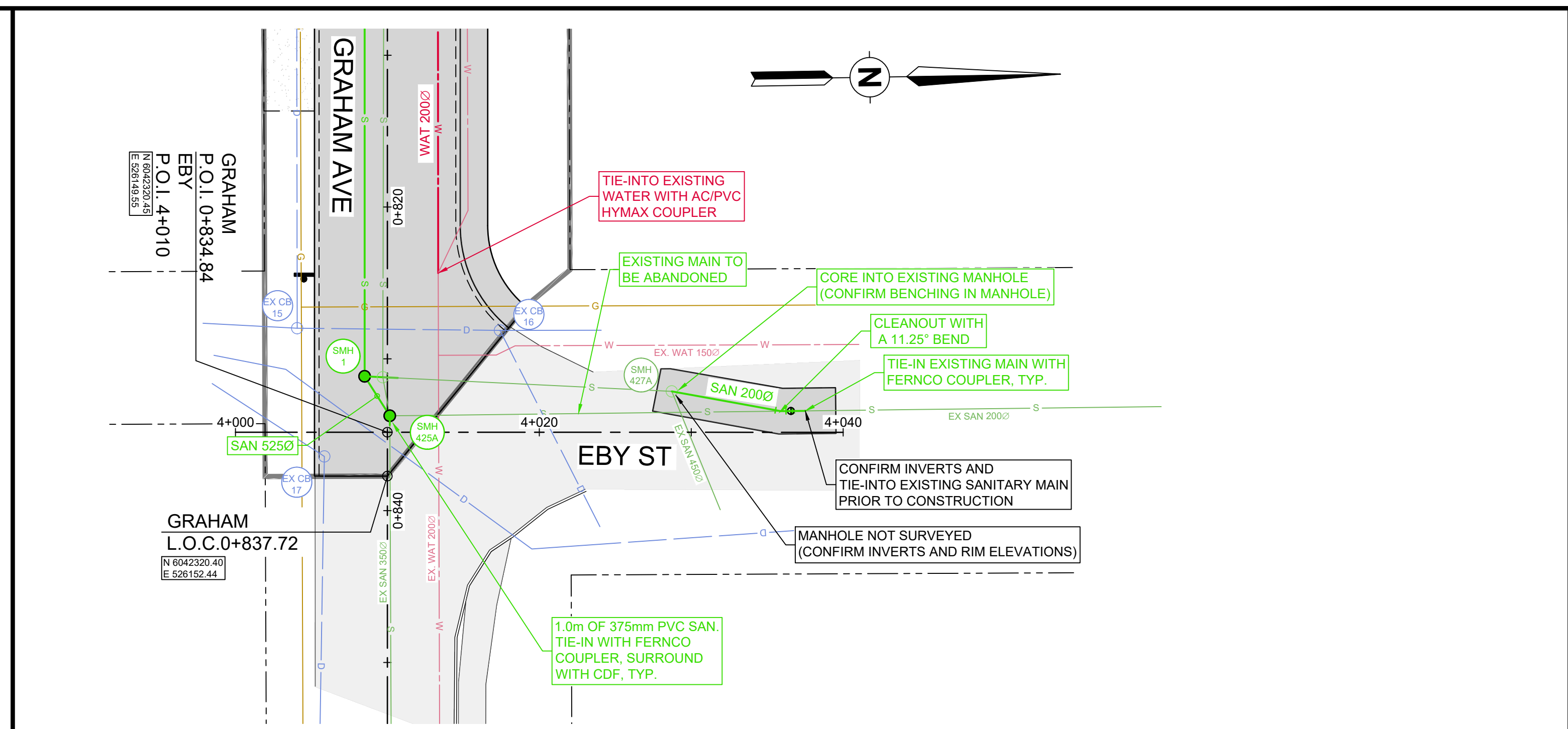
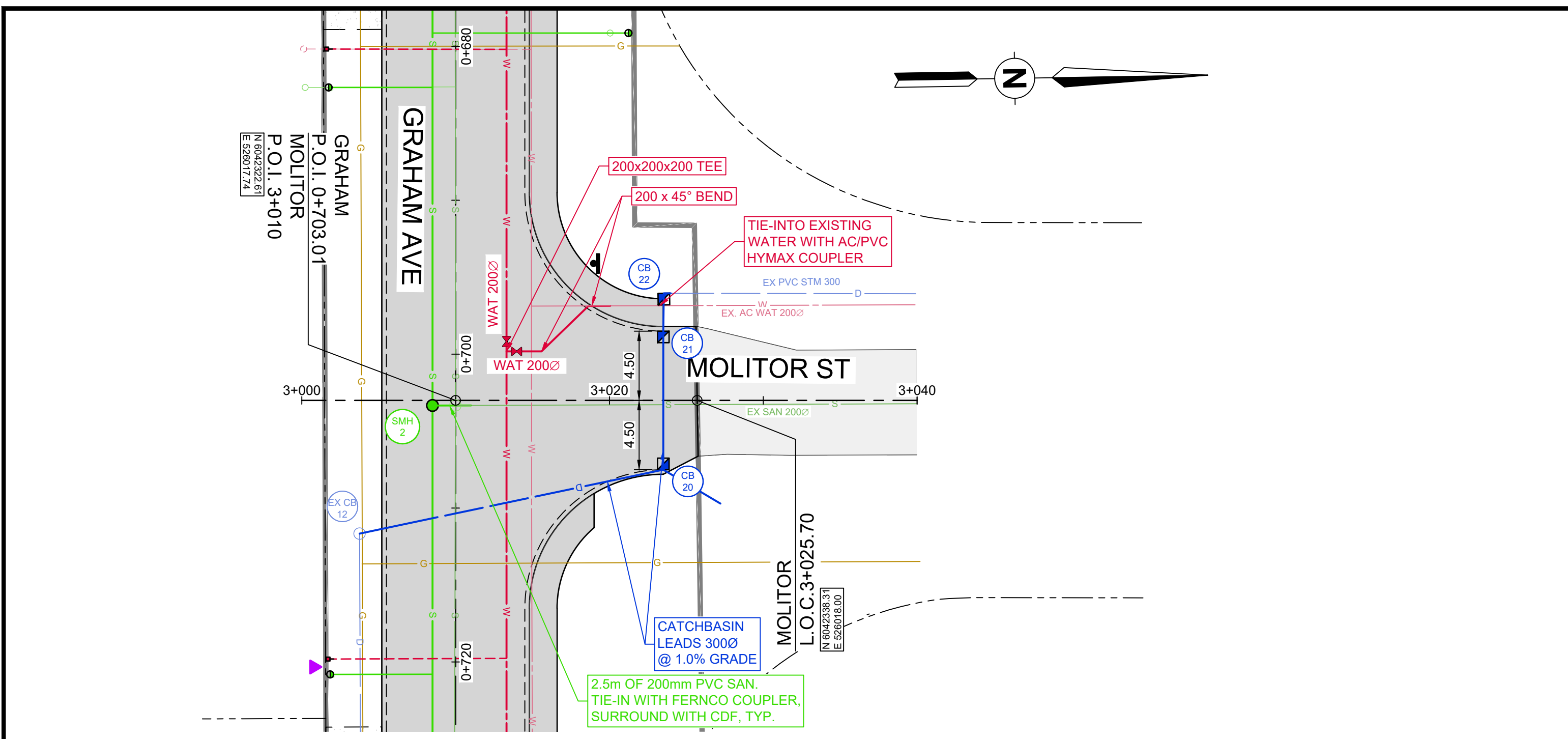
4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
KENNY STREET AND BEACH STREET

800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-206

Project Number
2321-02168-00

Rev.
0



FG OG 59.29	FG 58.96 OG 59.03	FG OG 59.18	PROPOSED AND EXISTING GRADE AT CENTRELINE
3+003.76	2.50m x 2000 SAN AT 2.5%	9.00m x 300 STM AT 0.6%	PROPOSED SANITARY SEWER
	20.18m x 300 STM AT 0.6%	Ex. 375 STM AT 0.4%	PROPOSED STORM SEWER
	2.27m x 200 WAT AT 3.1%	4.30m x 200 WAT AT 14.6%	PROPOSED WATER MAIN

FG OG 59.70	FG 59.93 OG 59.99	FG OG	PROPOSED AND EXISTING GRADE AT CENTRELINE
4+008.50	4+010.69	4+028.72	PROPOSED SANITARY SEWER

0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS
Rev	Date	Description	Drawn	Design	App'd

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

0 1:250 10
0 1:500 2

ORIGINAL DWG SIZE: ANSI D (22" x 34")

McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.
PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

PROFESSIONAL
PROPERTY OF
K. B. SOUSA
52453
C. BRITISH
U.M.

2023-02-24
Approved Sealed

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

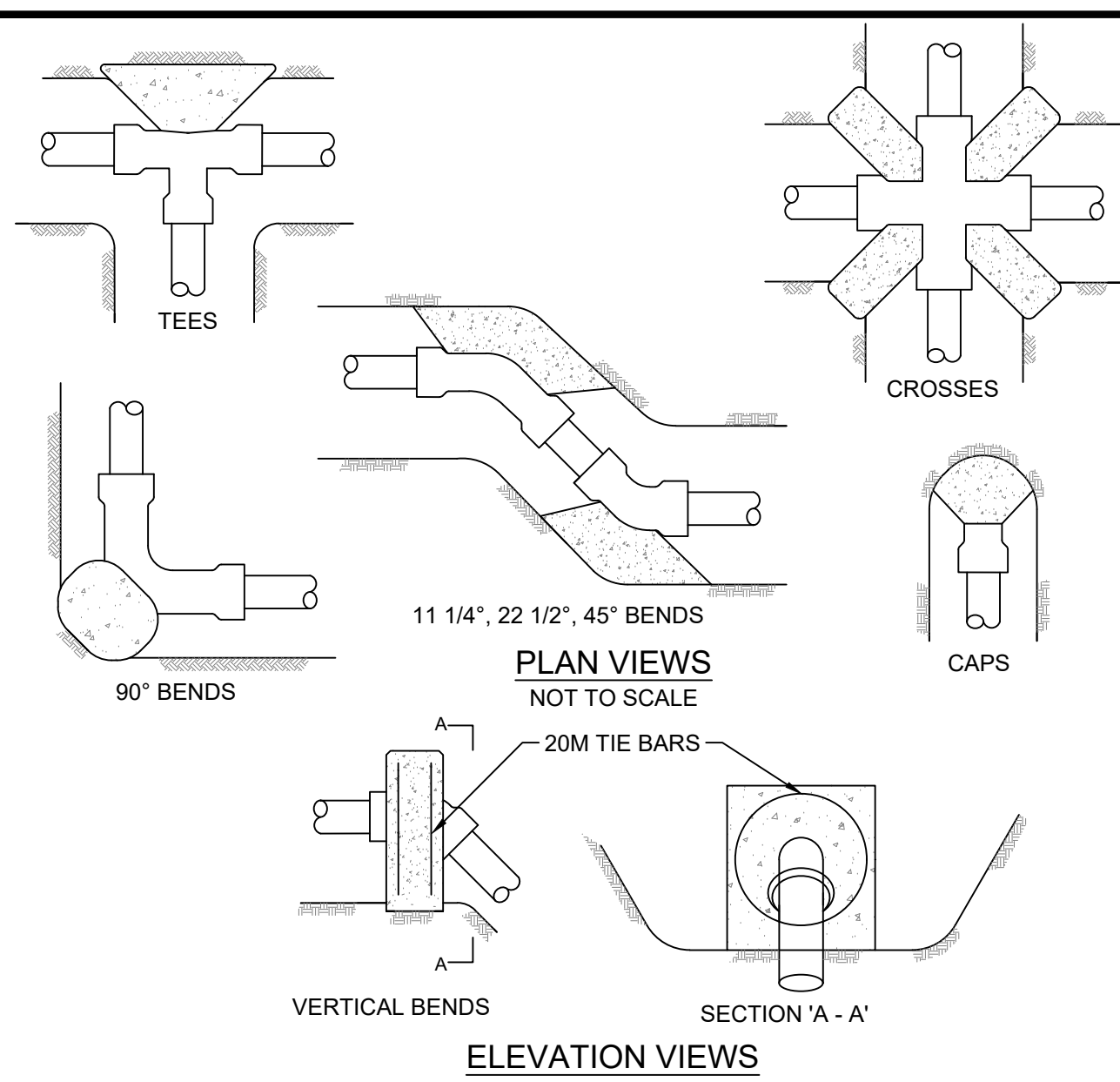
4800-4900 GRAHAM RECONSTRUCTION
PLAN AND PROFILE
MOLITOR STREET AND EBY STREET

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-207

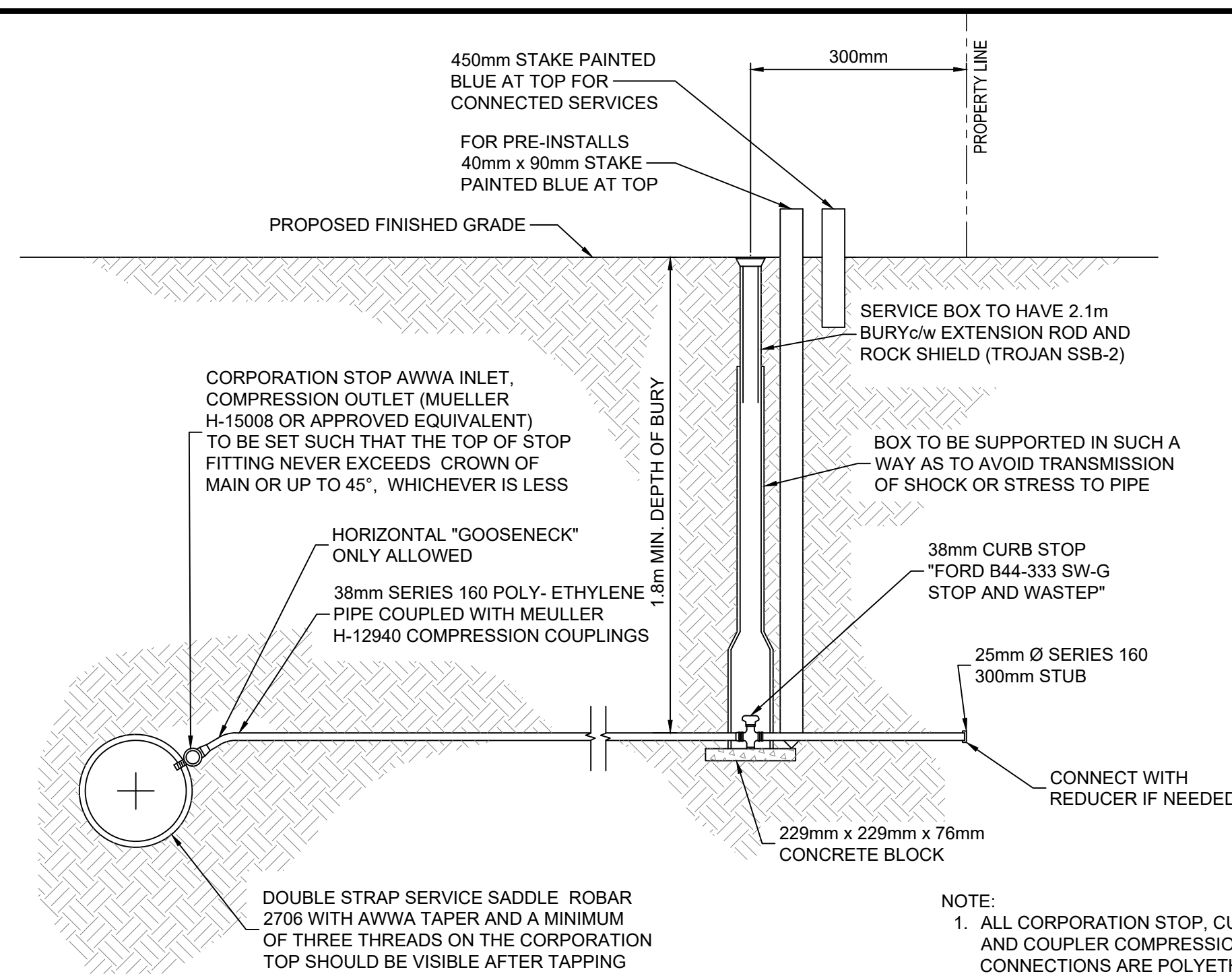
Project Number
2321-02168-00

Rev.
0



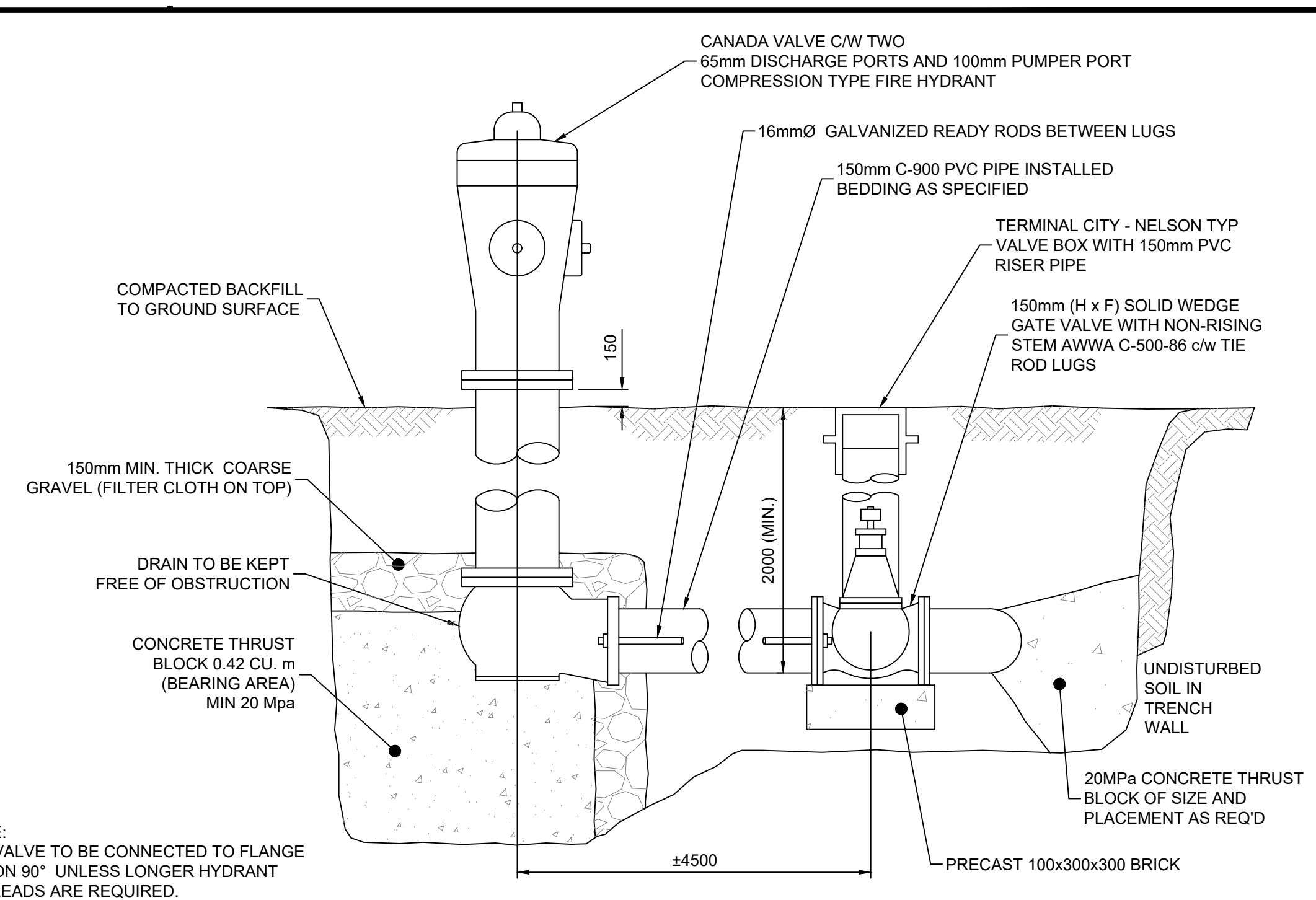
- NOTE:
- REFER TO CONTRACT DRAWINGS FOR SPECIFIED BEARING AREAS OF THRUST BLOCKS AND/OR SPECIFIC REQUIREMENTS NOT SHOWN ON THIS DRAWINGS.
 - PLACE 6 mil POLYETHYLENE ON INTERFACE BETWEEN CONCRETE AND FITTING
 - PLACE 20 MPa CONCRETE AGAINST UNDISTURBED GROUND; KEEP CONCRETE CLEAR OF FITTING JOINTS
 - REFER TO CONTRACT DRAWINGS, SECTIONS 33 11 01 AND 03 30 53 FOR DETAILED SPECIFICATIONS.

TYPICAL THRUST BLOCK ARRANGEMENTS NOT TO SCALE



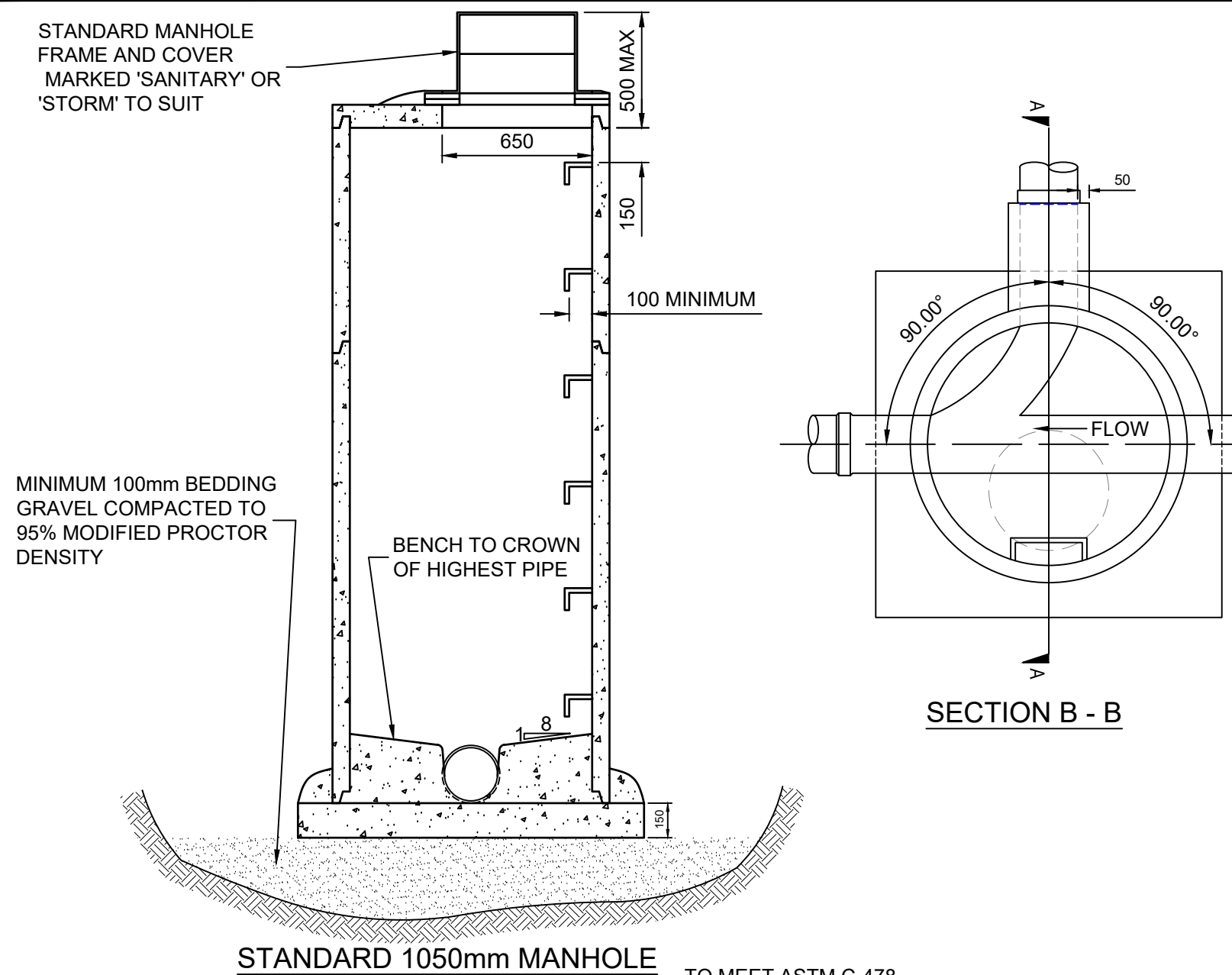
- NOTE:
- ALL CORPORATION STOP, CURB STOP, AND COUPLER COMPRESSION CONNECTIONS ARE POLYETHYLENE SERVICE PIPE TO BE USING STAINLESS STEEL INSERT STIFFENERS (MUELLER 506139)

WATER SERVICE CONNECTION NOT TO SCALE



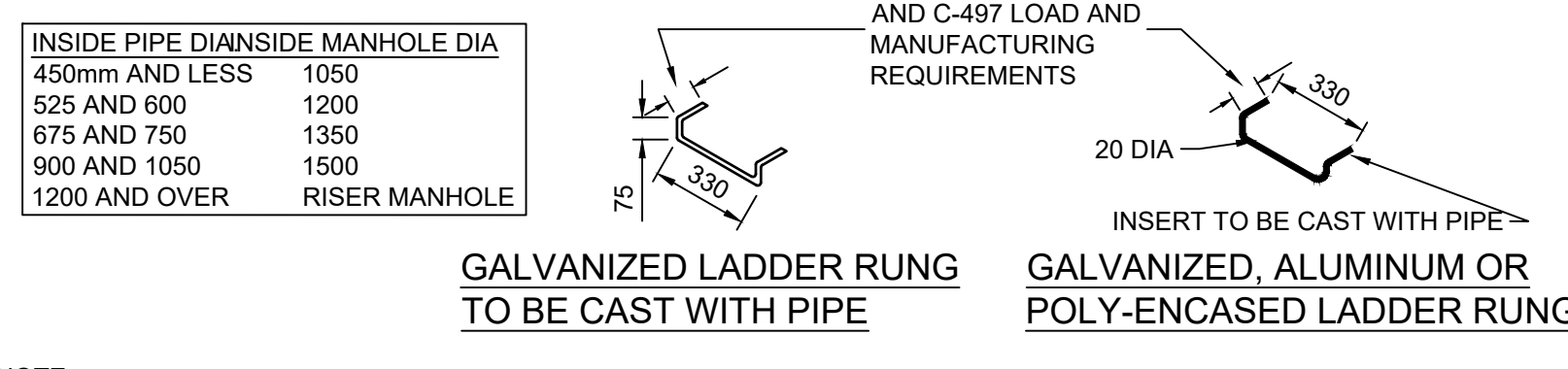
- NOTE:
- VALVE TO BE CONNECTED TO FLANGE ON 90° UNLESS LONGER HYDRANT LEADS ARE REQUIRED.

FIRE HYDRANT ASSEMBLY DETAIL NOT TO SCALE



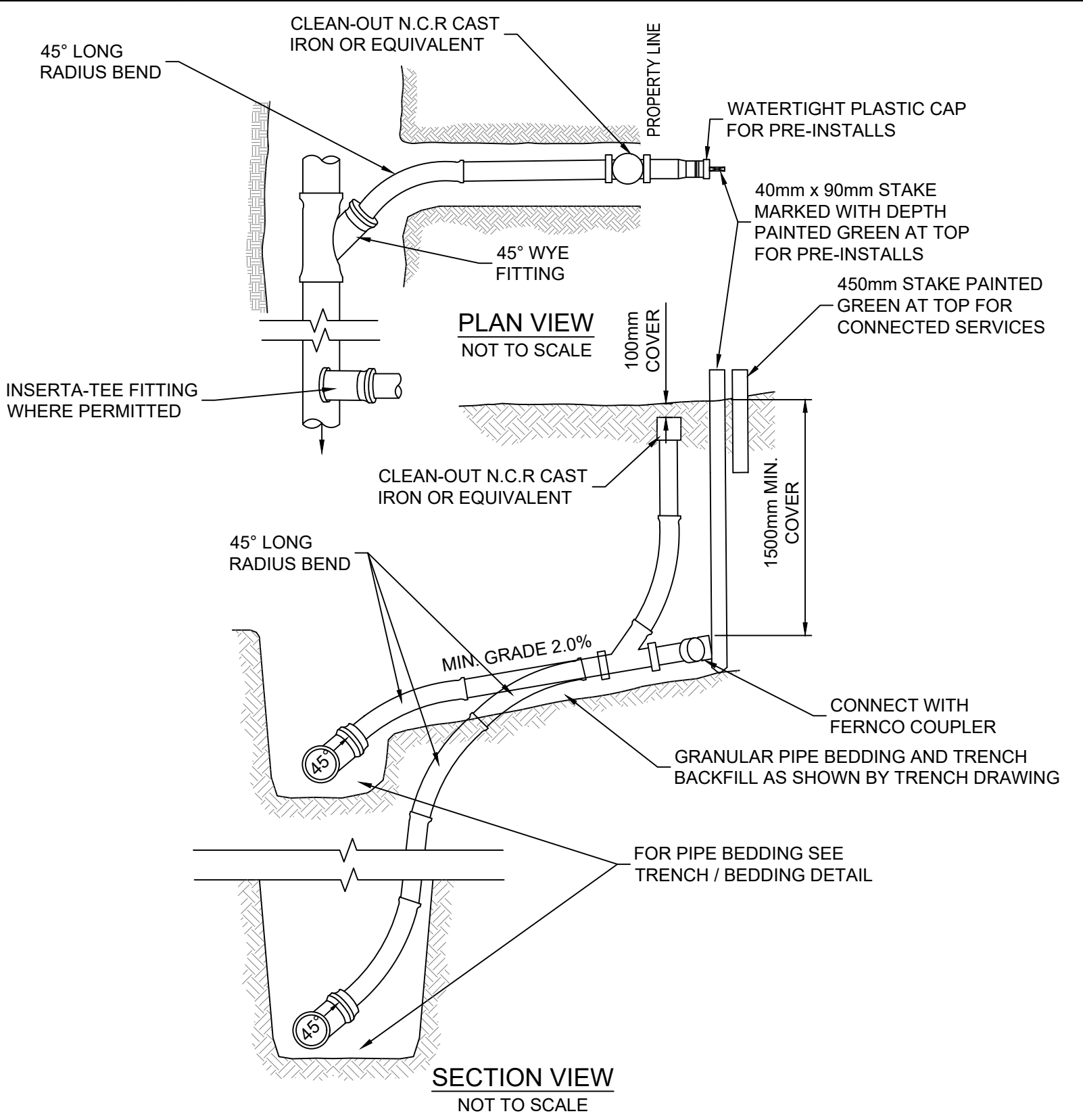
INSIDE PIPE DIAMETER	MANHOLE DIA
450mm AND LESS	1050
525 AND 600	1200
675 AND 750	1350
900 AND 1050	1500
1200 AND OVER	RISER MANHOLE

PREFAB SANITARY MANHOLE DETAILS				
MANHOLE ID & STATION	NORTH INV. ANGLE	EAST INV. ANGLE	WEST INV. ANGLE	
MH#				
STAT.				



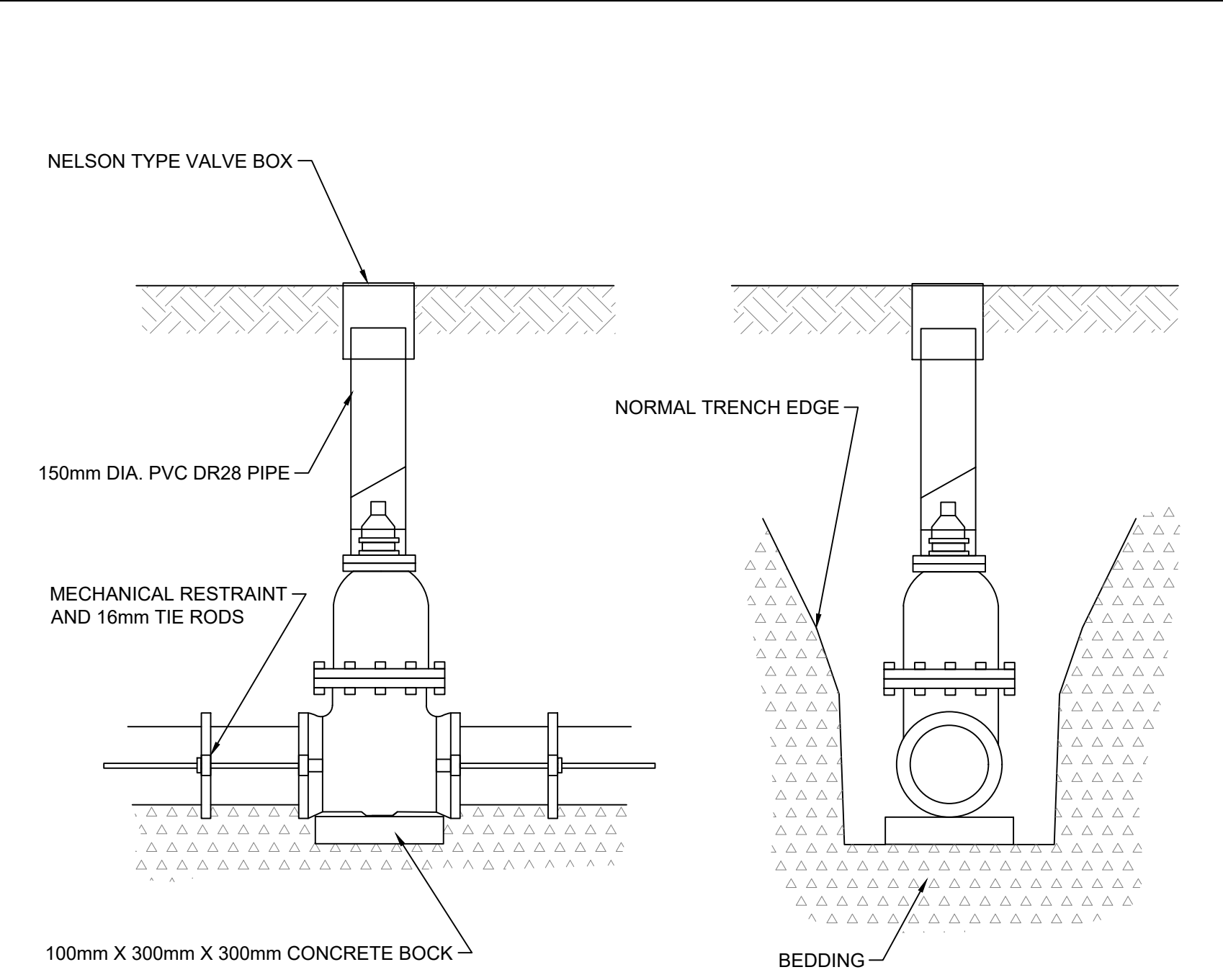
- NOTE:
- DETAILS ARE DRAWN FOR PRECAST RISERS ON CAST-IN-PLACE BASE. PRECAST BASES APPROVED BY CONTRACT ADMINISTRATOR ARE ACCEPTABLE.
 - MAXIMUM DEPTH TO FIRST RUNG IS 500mm. WHEN HANDHOLD IS INSTALLED BETWEEN TOP AND FIRST RUNG, MAXIMUM DEPTH MAY BE INCREASED TO 660mm.
 - FOR MANHOLES OVER 1200mm DIA. BASE THICKNESS TO BE 200mm.
 - REFER TO DRAWING S2 FOR CONNECTION DETAILS.
 - REFER TO CONTRACT DRAWINGS, MMCD SECTION 33 44 01 FOR DETAILED SPECIFICATIONS.

STANDARD MANHOLE CONNECTION DETAILS SCALE: NTS



- NOTE:
- CONNECTIONS TO BE 100mm PVC DR 28 UNLESS NOTED OTHERWISE
 - RISER TYPE SERVICE MAY BE USED WHEN SERVICE IS MORE THAN 2.4m ABOVE WYE INSERT OR AS DIRECTED BY ENGINEER.
 - LAY BELL ENDS UP STREAM
 - SERVICES WILL TERMINATE 0.6m INSIDE PROPERTY LINE, UNLESS OTHERWISE STATED.

TYPICAL SANITARY SEWER SERVICE NOT TO SCALE



- NOTE:
- REFER TO CONTRACT DRAWINGS FOR VALVE INSTALLATION DETAILS IN AREAS OF UNSTABLE GROUND (WHERE APPLICABLE)
 - REFER TO CONTRACT DRAWINGS AND SECTION 02666 OF CITY OF TERRACE SCHEDULE I FOR DETAILED SPECIFICATIONS
 - TOP OF CAP SHALL BE 12mm BELOW GRADE FOR PAVED SURFACES AND 75mm BELOW GRADE FOR GRAVEL SURFACES
 - GATE VALVE SHALL BE MUELLER WITH NON-RISING SPINDLE

INLINE GATE VALVE DETAIL NOT TO SCALE

DATE: 2023-02-24, 11:10 FILE: X:\23105\021005\02168-00 Design Services-4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3.1 Engineering\10.3.1 Sheets\C-300-Details.dwg	<p>THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.</p> <p>THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.</p> <p>INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.</p>												
<table border="1"> <tr> <th>Rev</th> <th>Date</th> <th>Description</th> <th>Drawn</th> <th>Design</th> <th>App'd</th> </tr> <tr> <td>0</td> <td>2023-02-24</td> <td>ISSUED FOR TENDER</td> <td>JMD</td> <td>JMD</td> <td>KS</td> </tr> </table>	Rev	Date	Description	Drawn	Design	App'd	0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS	<p>ORIGINAL DWG SIZE: ANSI D (22" x 34")</p>
Rev	Date	Description	Drawn	Design	App'd								
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS								

AS SHOWN



PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists of British Columbia



CITY OF TERRACE

5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION DETAILS

800 - 4900 GRAHAM AVE TERRACE, BC

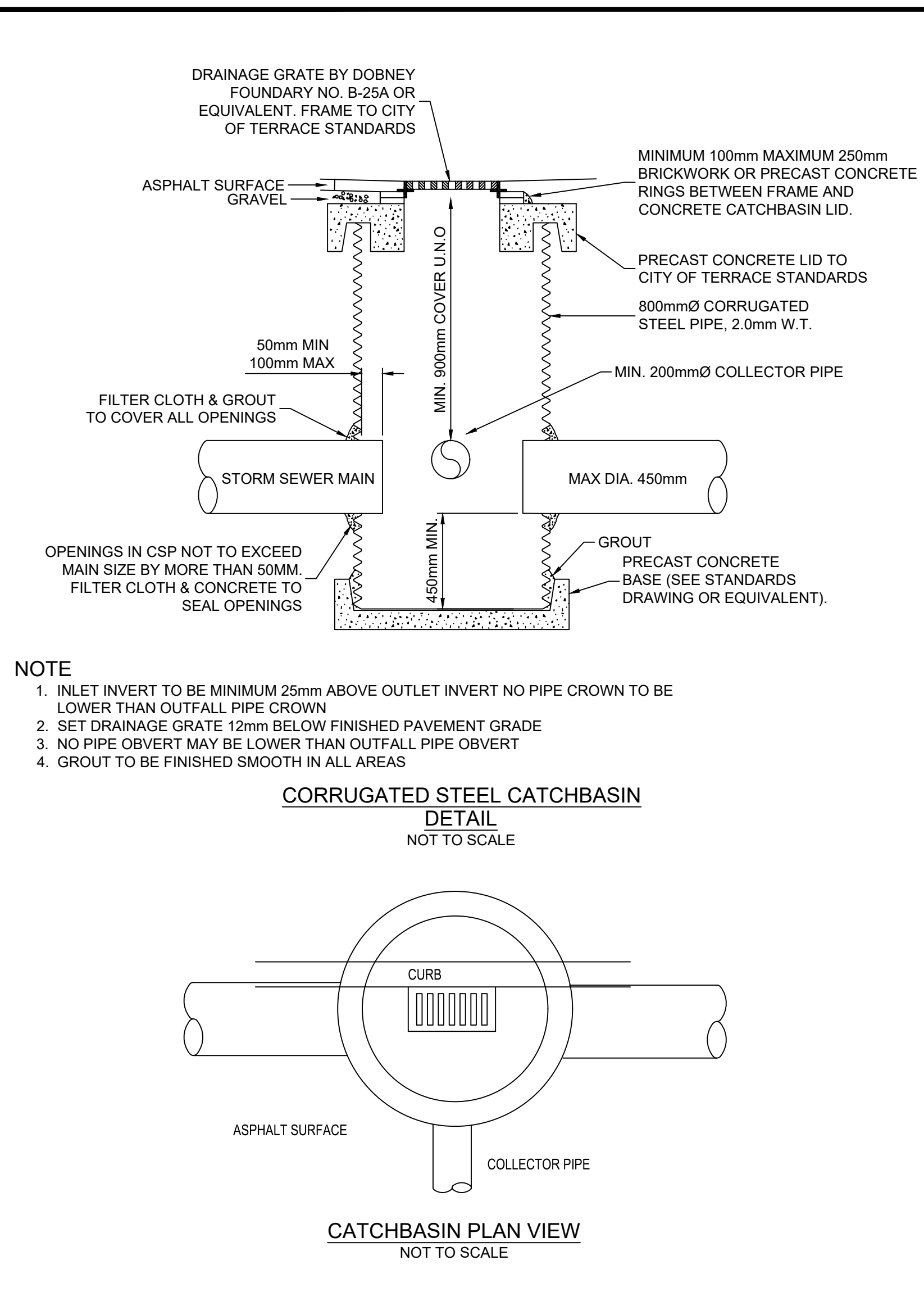
Drawing No. C-301

Project Number 2321-02168-00

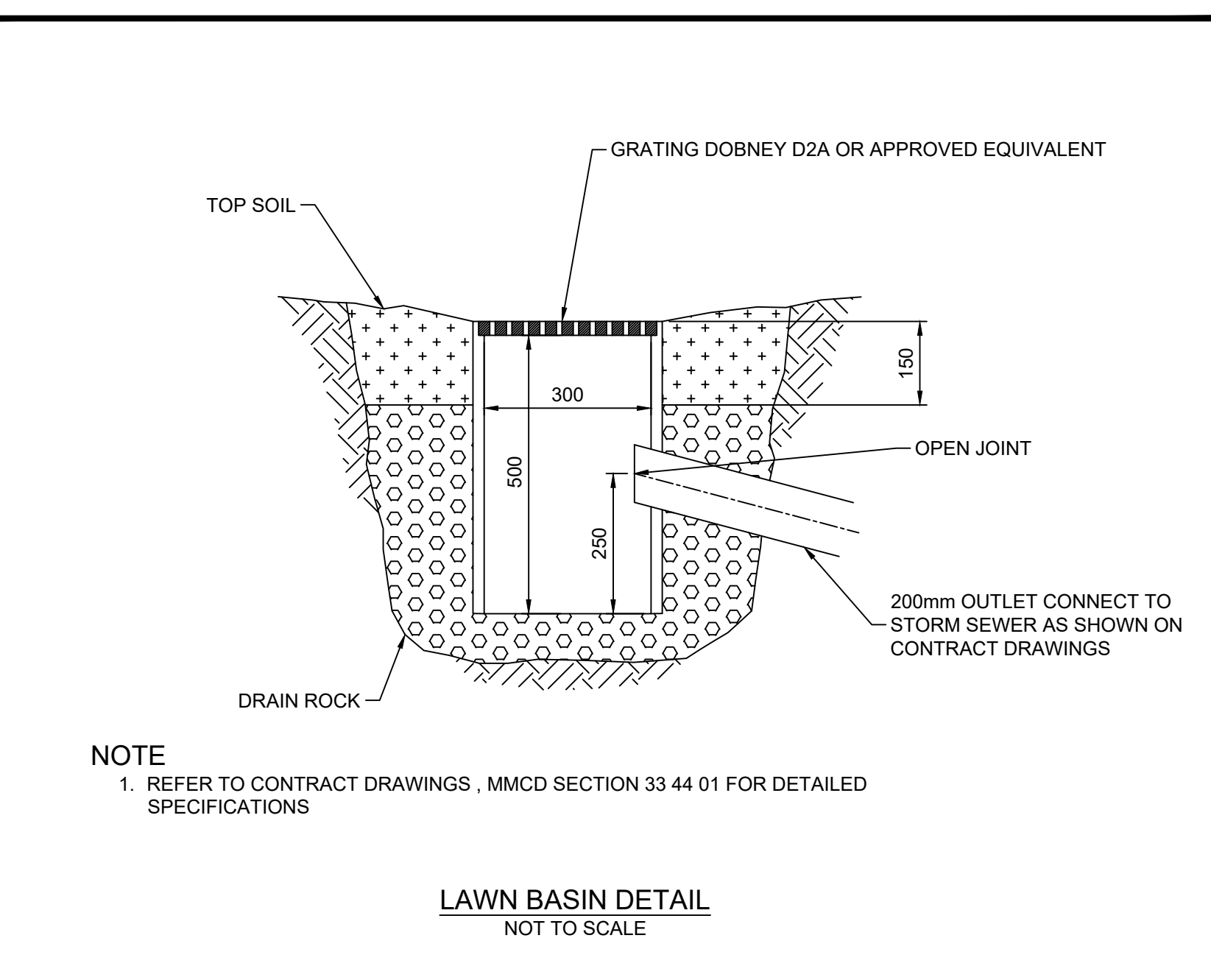
Rev. 0

McElhanney ANS D - 2019-05-11

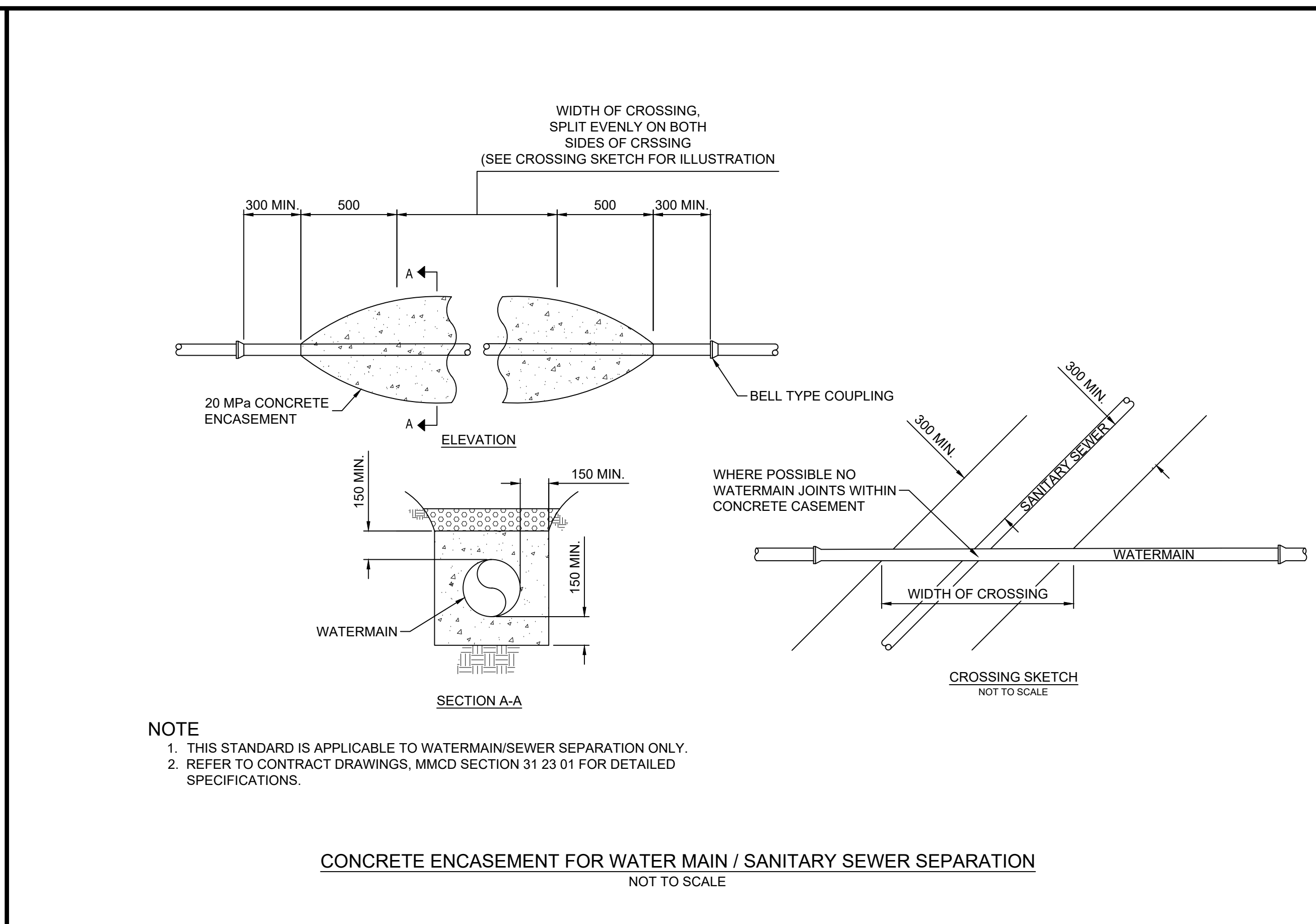
DATE: 2023-02-24, 11:10 FILE: X:\2321021\001\02168-00 Design Services -4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3 Details\C-300-Details.dwg



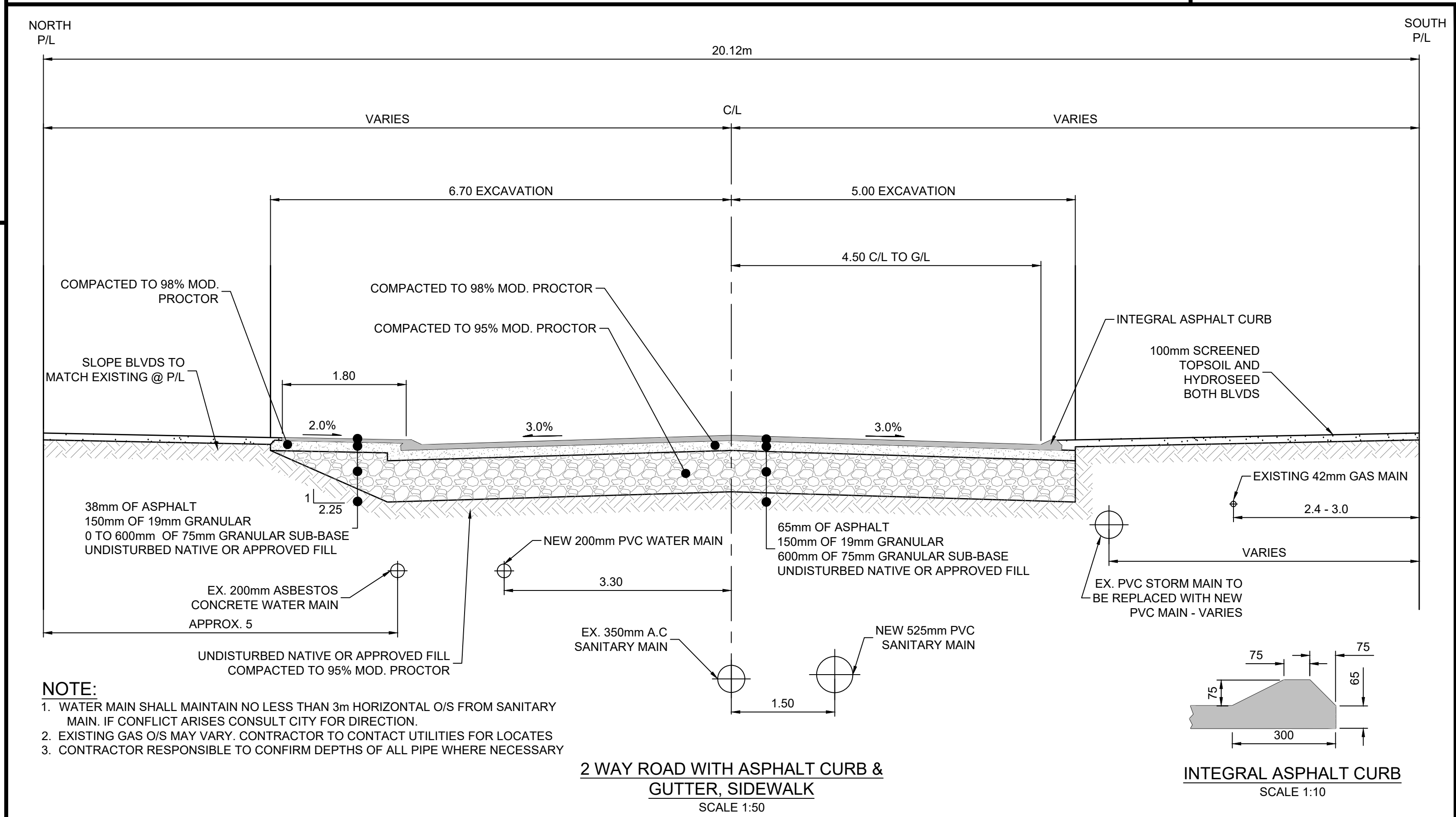
- NOTE**
1. INLET INVERT TO BE MINIMUM 25mm ABOVE OUTLET INVERT NO PIPE CROWN TO BE LOWER THAN OUTFALL PIPE CROWN
 2. SET DRAINAGE GRATE 12mm BELOW FINISHED PAVEMENT GRADE
 3. NO PIPE OBVERT MAY BE LOWER THAN OUTFALL PIPE OBVERT
 4. GROUT TO BE FINISHED SMOOTH IN ALL AREAS



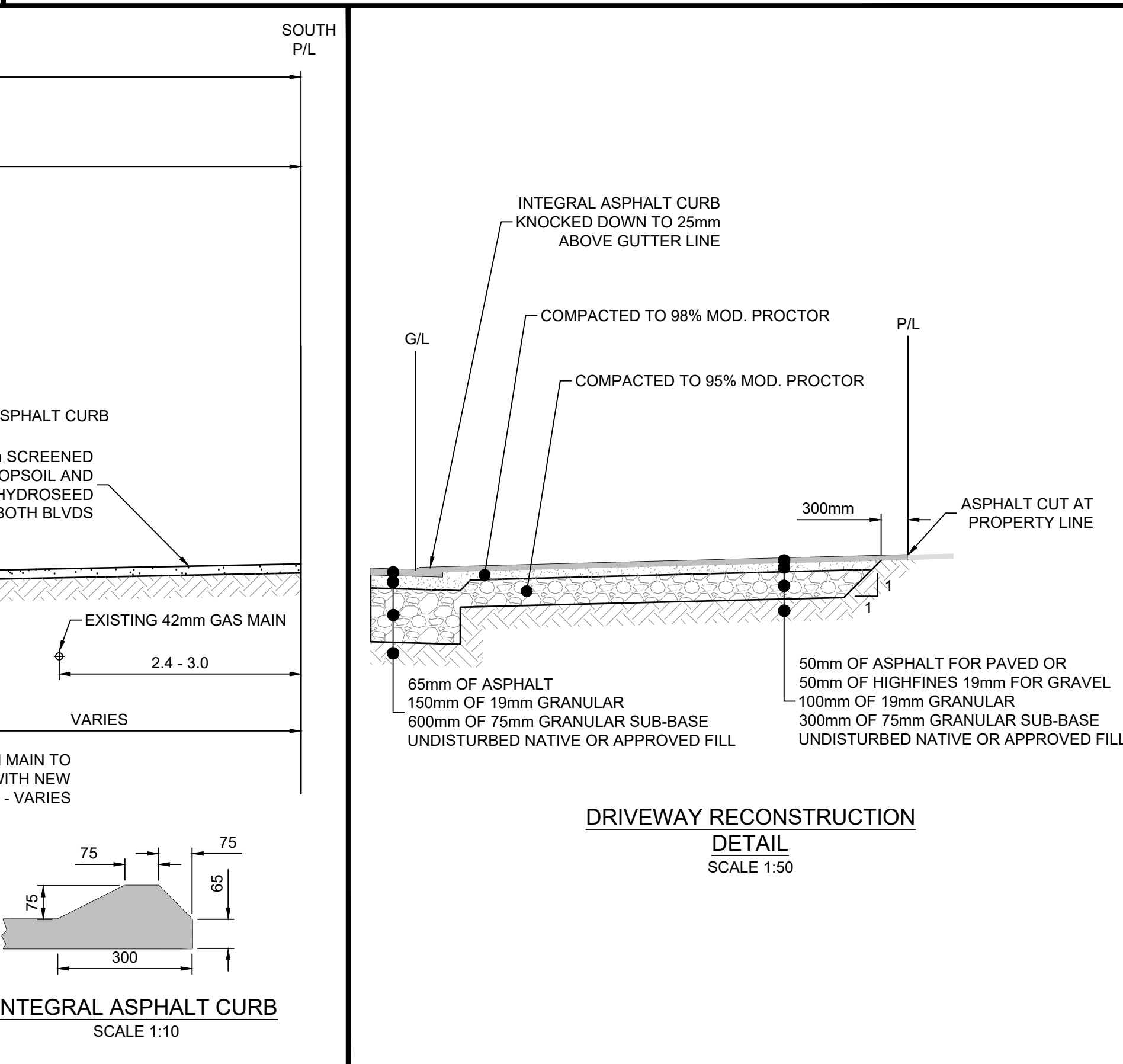
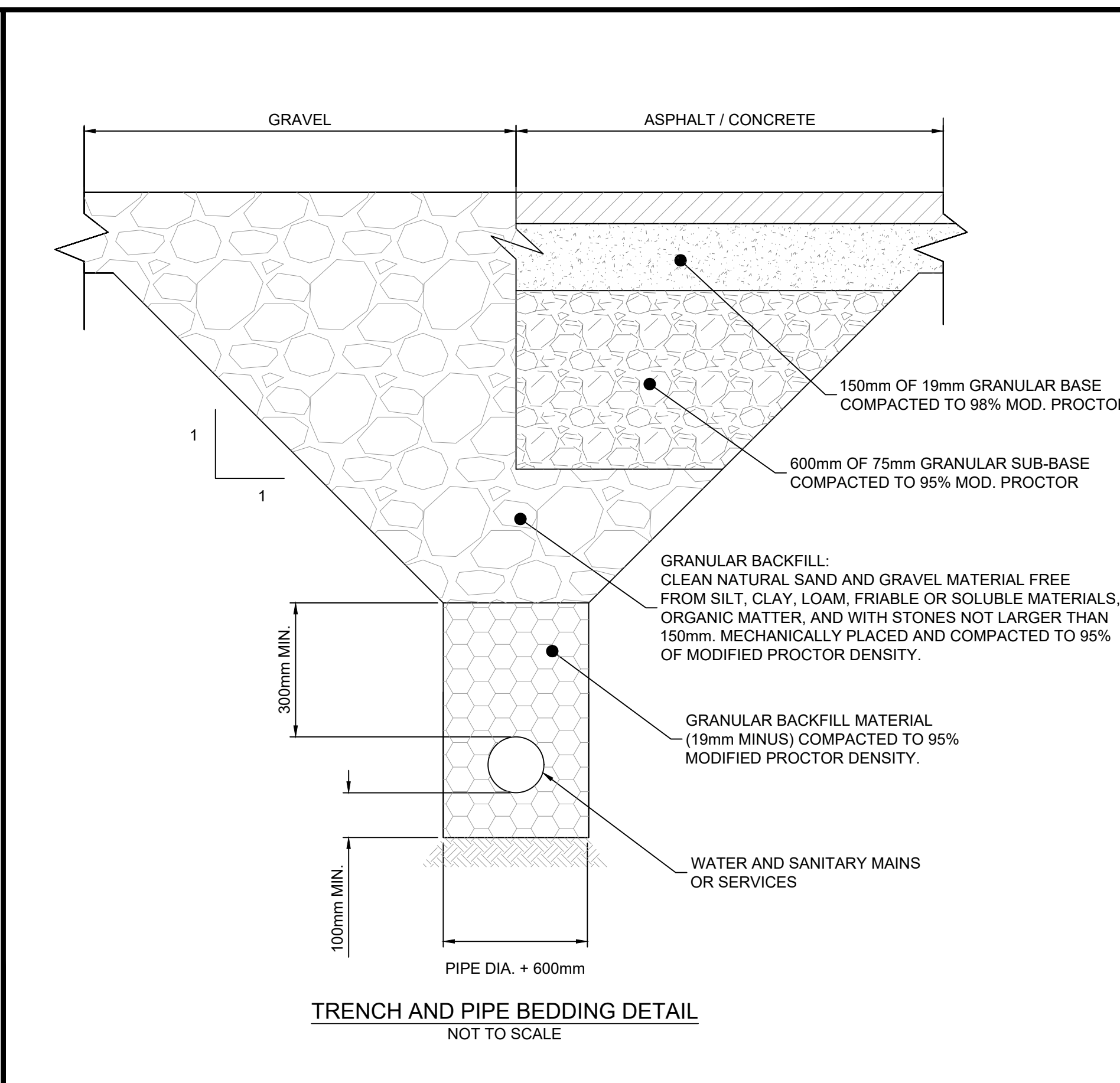
- NOTE**
1. REFER TO CONTRACT DRAWINGS, MMCD SECTION 33 44 01 FOR DETAILED SPECIFICATIONS



- NOTE**
1. THIS STANDARD IS APPLICABLE TO WATERMAIN/SEWER SEPARATION ONLY.
 2. REFER TO CONTRACT DRAWINGS, MMCD SECTION 31 23 01 FOR DETAILED SPECIFICATIONS.



- NOTE:**
1. WATER MAIN SHALL MAINTAIN NO LESS THAN 3m HORIZONTAL O/S FROM SANITARY MAIN. IF CONFLICT ARISES CONSULT CITY FOR DIRECTION.
 2. EXISTING GAS O/S MAY VARY. CONTRACTOR TO CONTACT UTILITIES FOR LOCATES
 3. CONTRACTOR RESPONSIBLE TO CONFIRM DEPTHS OF ALL PIPE WHERE NECESSARY



Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

AS SHOWN

ORIGINAL DWG SIZE: ANSI D (22" x 34")

McElhanney

Engineers and Geoscientists of British Columbia

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

PROFESSIONAL ENGINEER

K. B. SOUSA

52453

2023-02-24

Approved Sealed

CITY OF TERRACE

5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION DETAILS

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.

C-302

Project Number

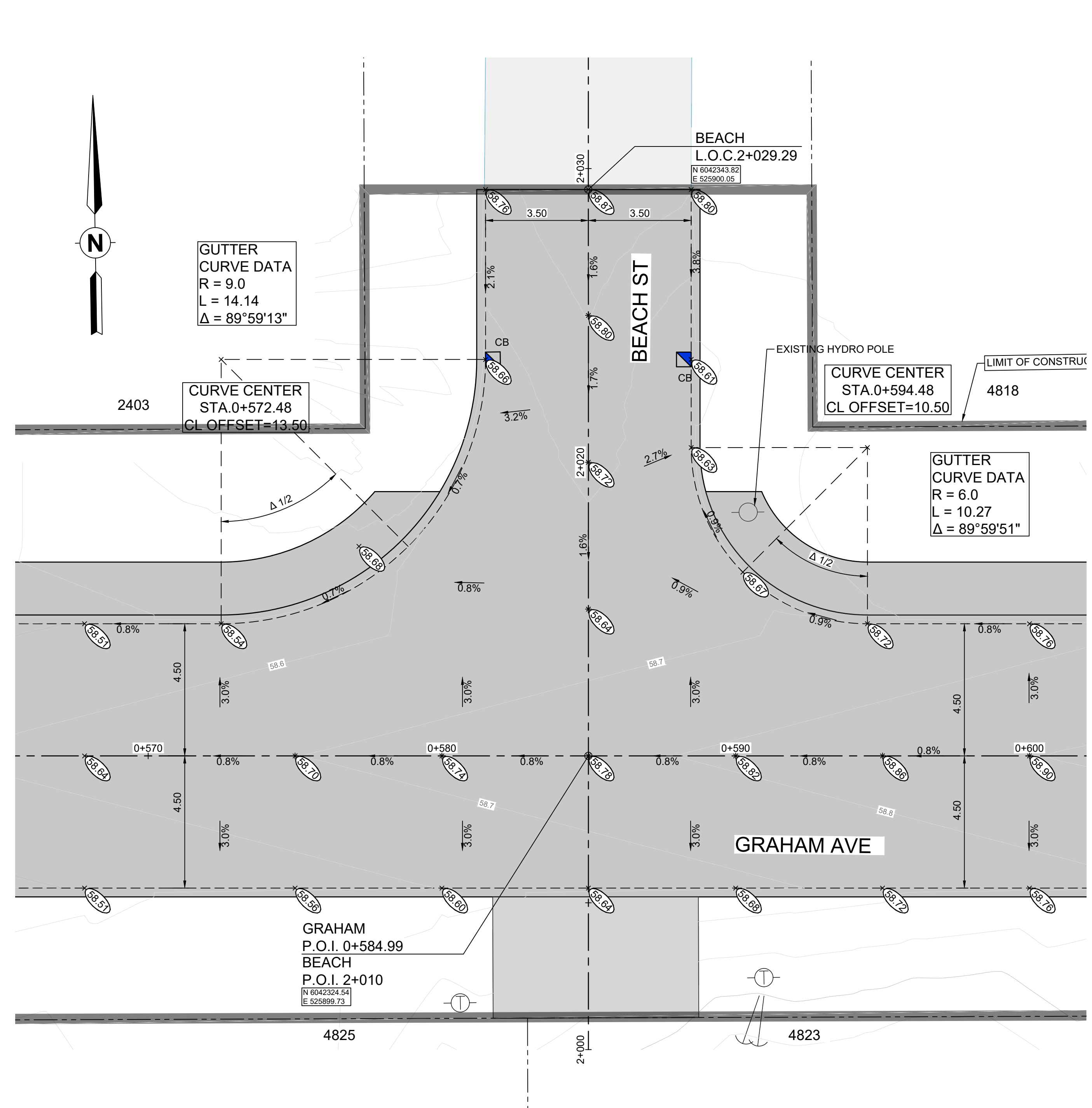
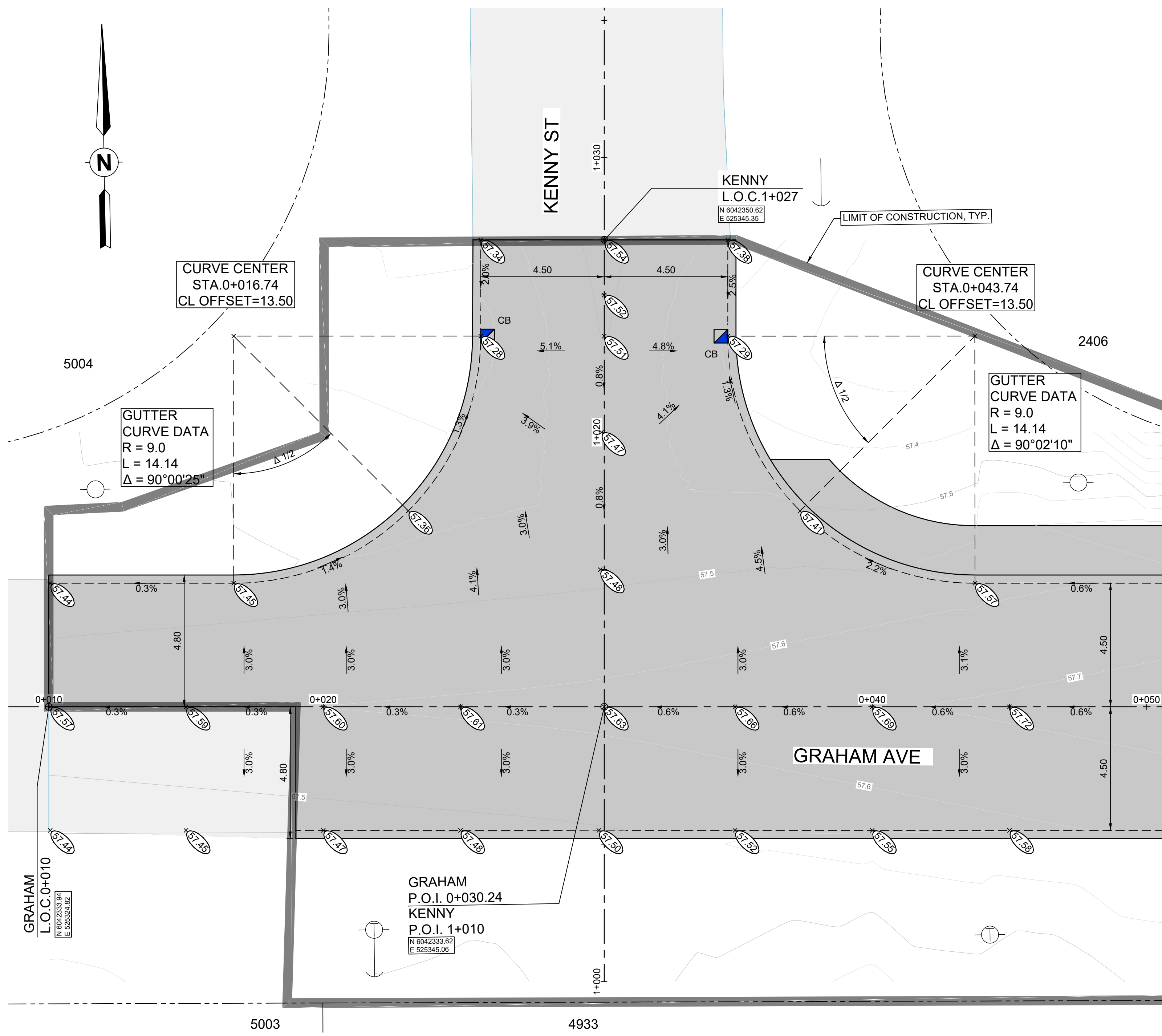
2321-02168-00

Rev.

0

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

DATE: 2023-02-24, 11:10 FILE: X:\2321021\00\02\168-00\Drawings\10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-400.dwg
 McElhanney ANS D - 2015-05-11
 McElhanney 10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-400.dwg
 McElhanney ANS D - 2015-05-11



Rev	Date	Description	Drawn	Design	App'd
0	2023-02-24	ISSUED FOR TENDER	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")

Scale: 1:100

McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists
of British Columbia

PROFESSIONAL
ENGINEER
K. B. SOUSA
#52453
BRITISH COLUMBIA
2023-02-24
Approved Sealed

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

**4800-4900 GRAHAM RECONSTRUCTION
CURB RETURN
KENNY AND BEACH - PLAN**

4800 - 4900 GRAHAM AVE
TERRACE, BC

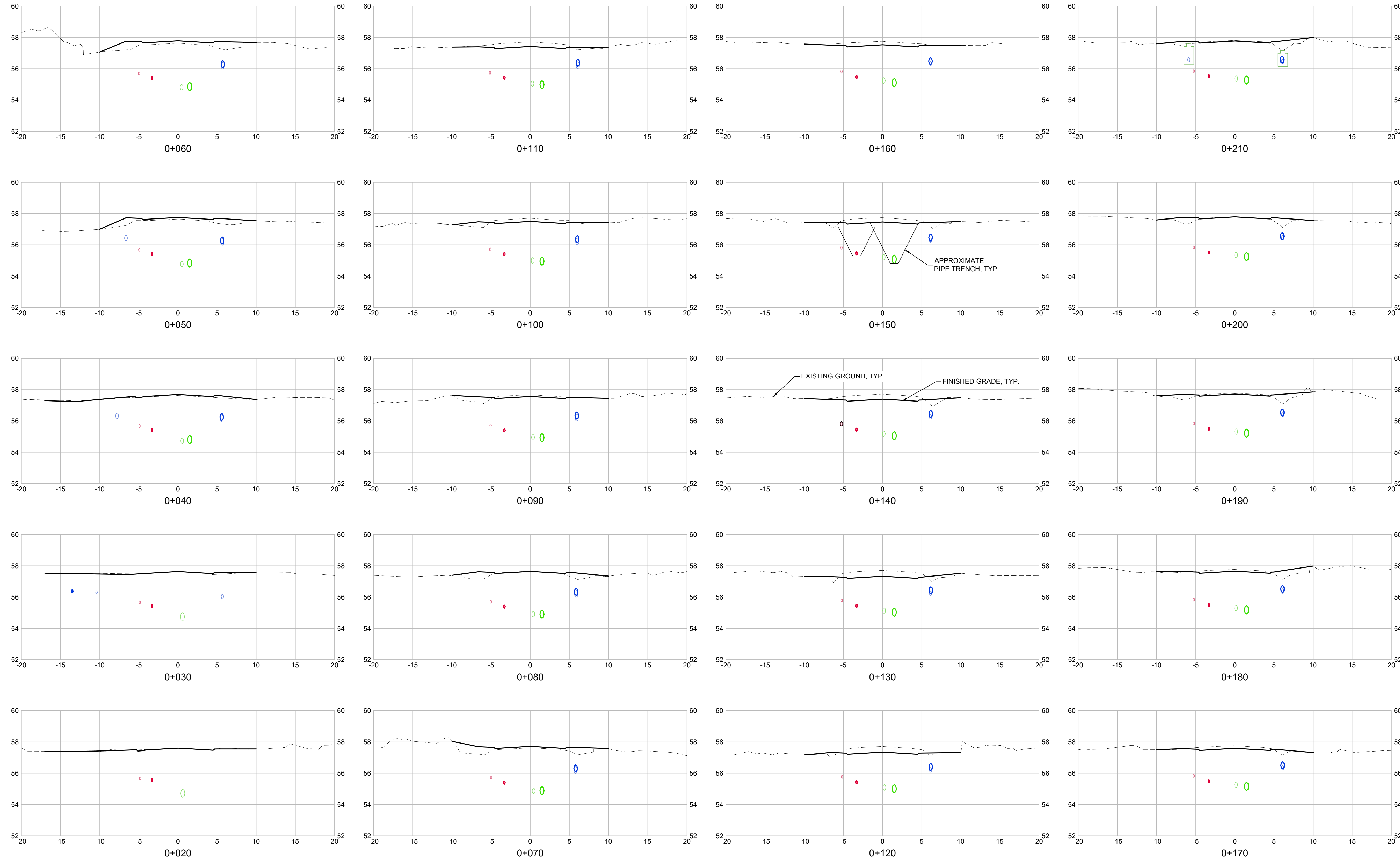
Drawing No.
C-401

Project Number
2321-02168-00

Rev.
0

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

DATE: 2023-02-23 17:12 FILE: X:\232102100\02168-00 Design Services\4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-900.dwg

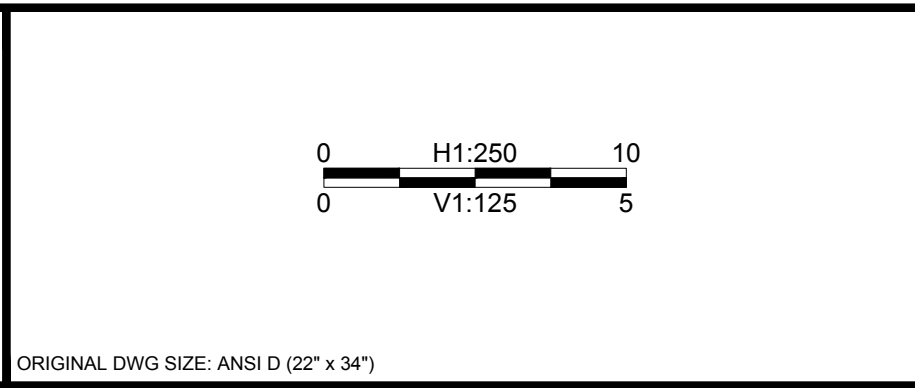


Rev	Date	Description	Drawn	Design	App'd
PD	2023-02-24	ISSUED FOR INFORMATION	JMD	JMD	KS
PC	2023-02-16	ISSUED FOR 95% REVIEW	JMD	JMD	KS
PB	2023-01-26	ISSUED FOR 70% REVIEW	JMD	JMD	KS
PA	2022-12-22	ISSUED FOR 30% REVIEW	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.



McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PRELIMINARY
NOT FOR CONSTRUCTION

THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION SECTIONS

4800 - 4900 GRAHAM AVE
TERRACE, BC

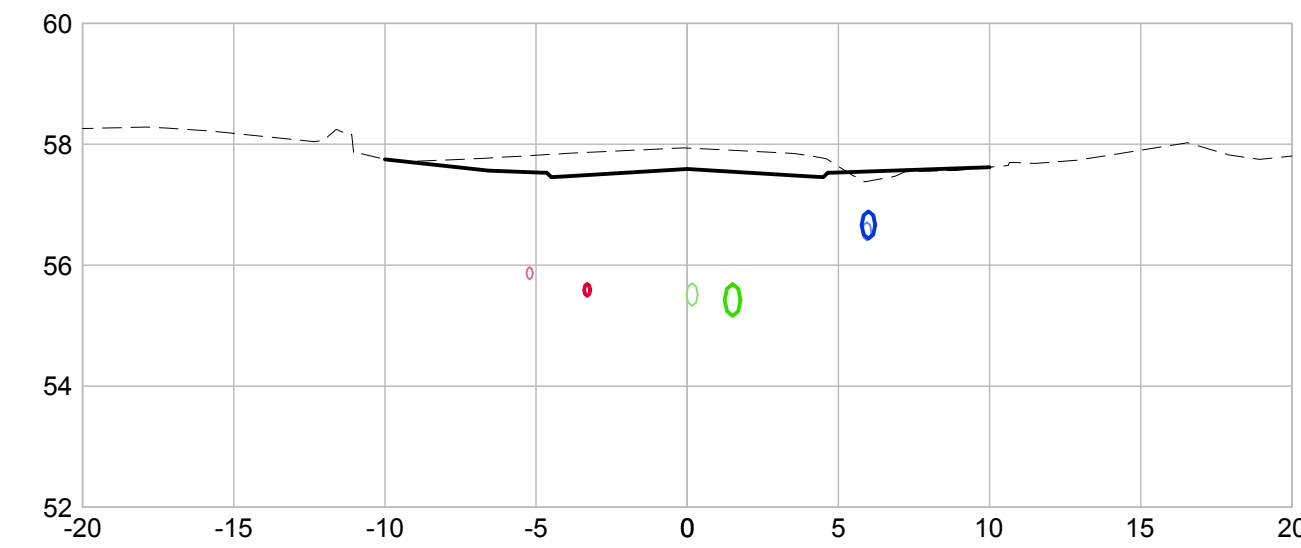
Drawing No.
C-901

Project Number
2321-02168-00

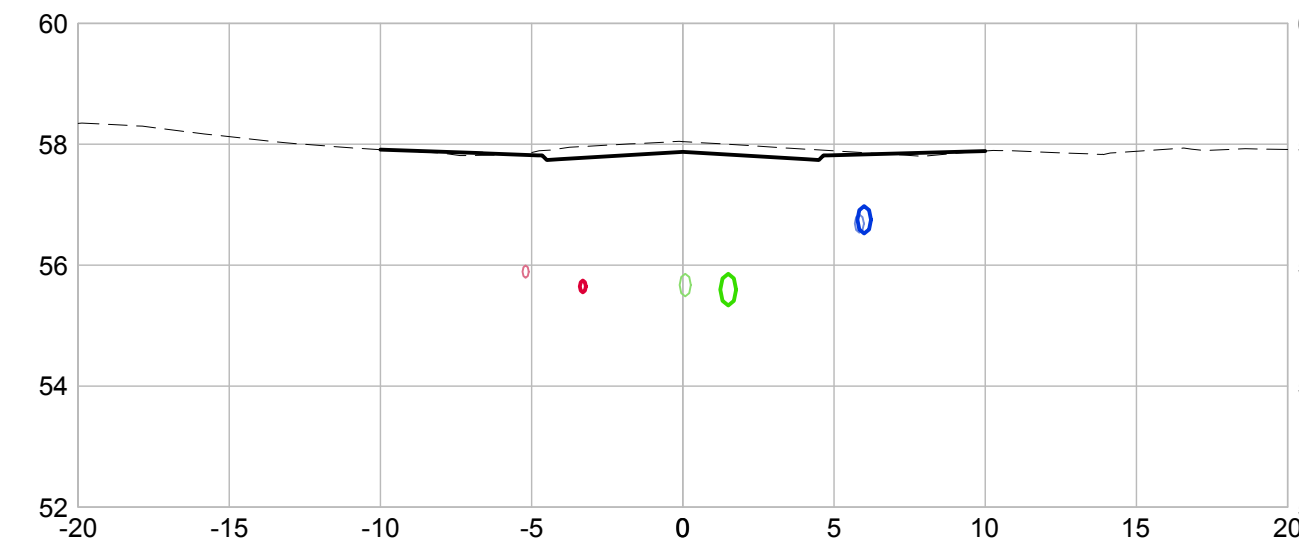
Rev.
PD

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

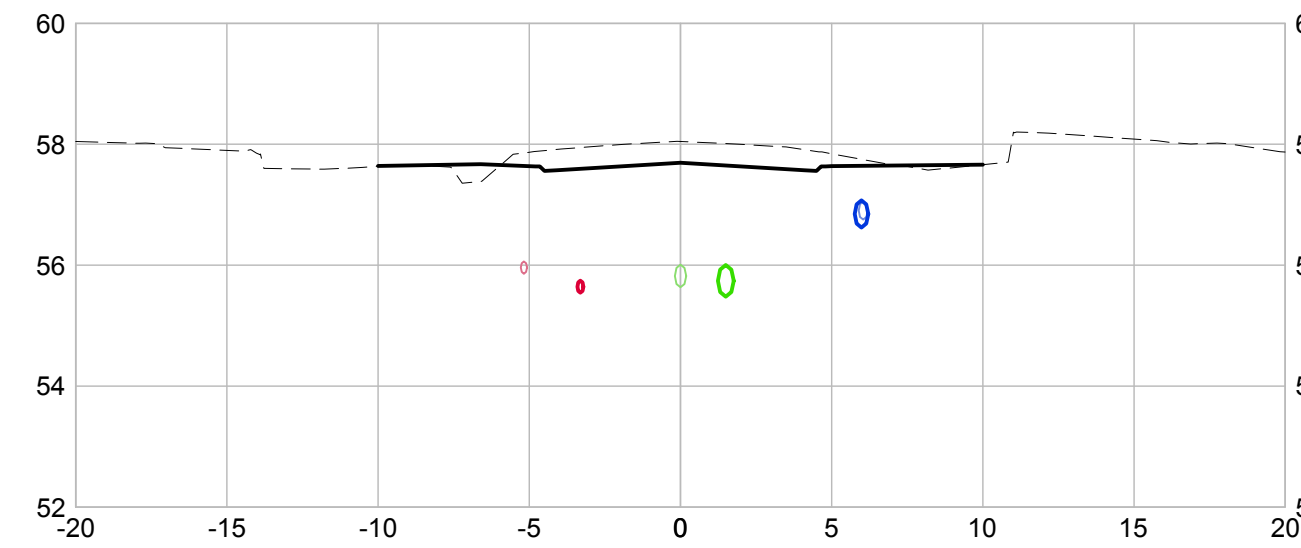
DATE: 2023-02-23 17:12 FILE: X:\232102100\02168-00 Design Services\4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3.1 Sheets\C-900.dwg
 McElhanney ANS I D - 2019.05.11
 McElhanney



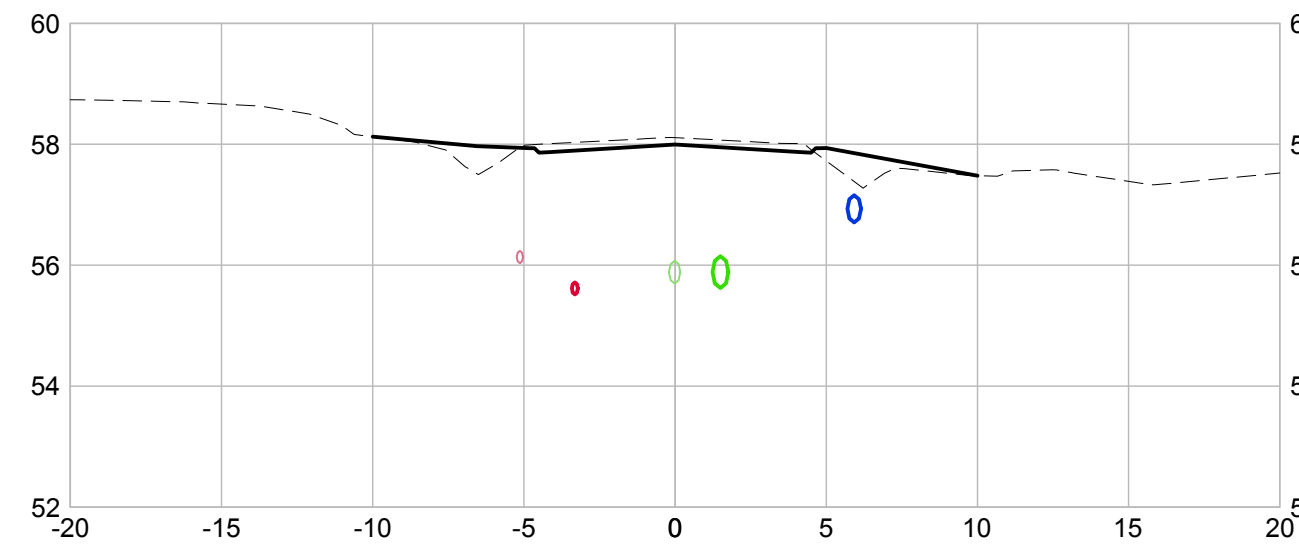
0+260



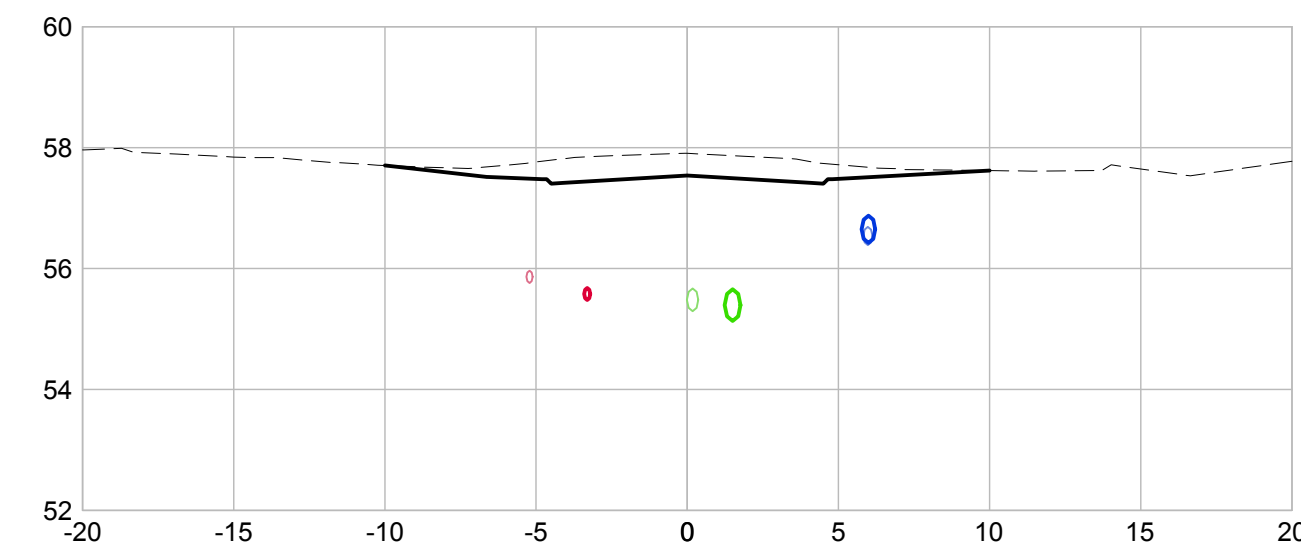
0+310



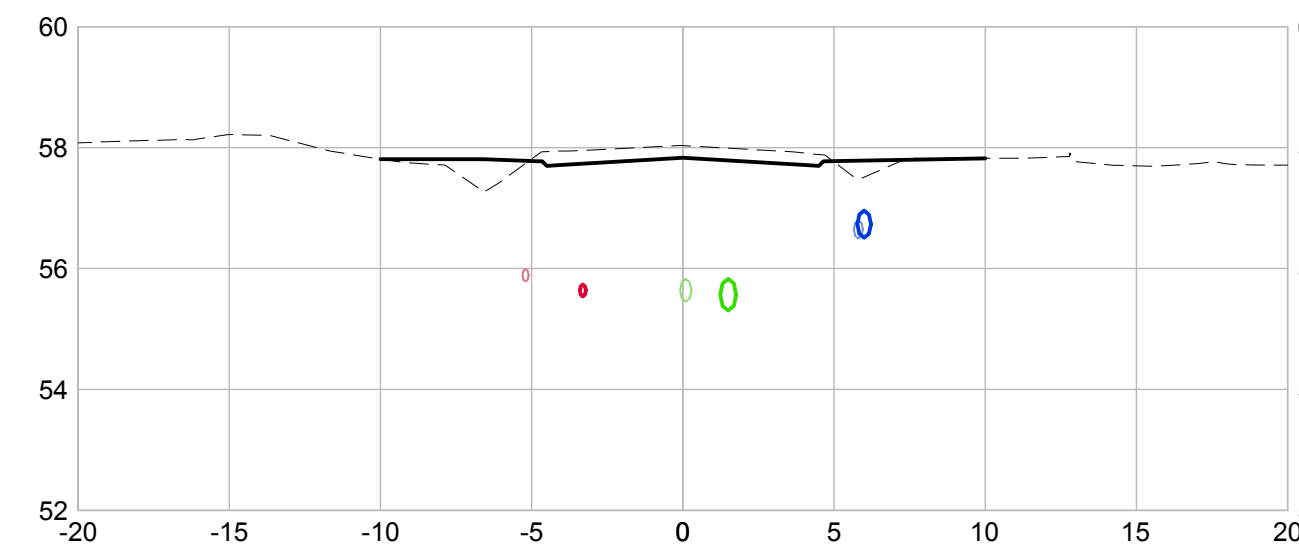
0+360



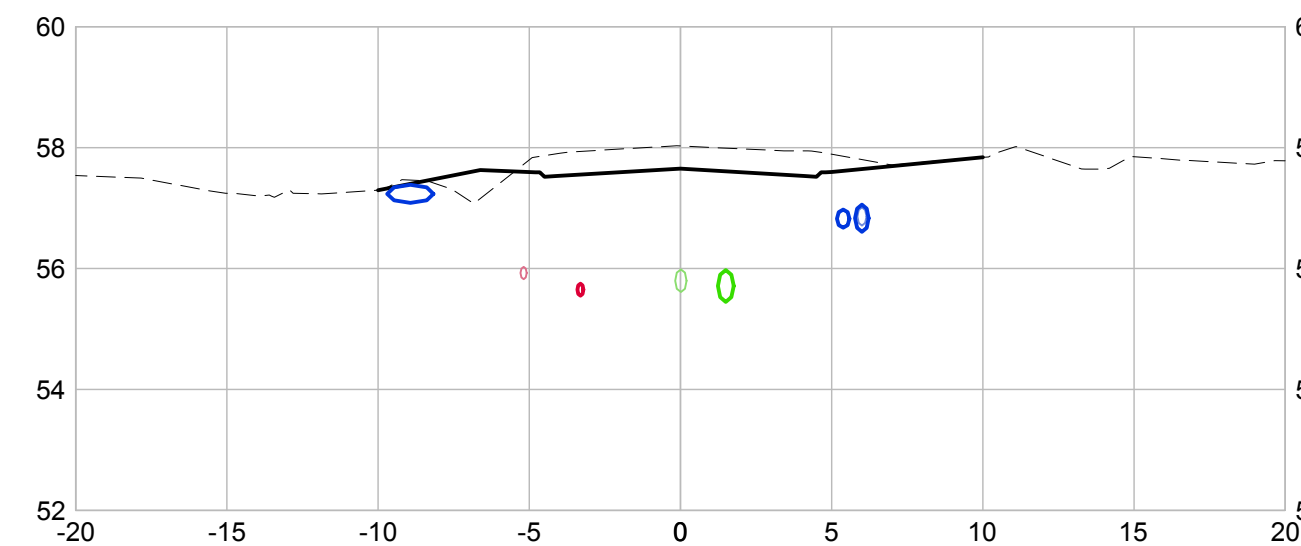
0+410



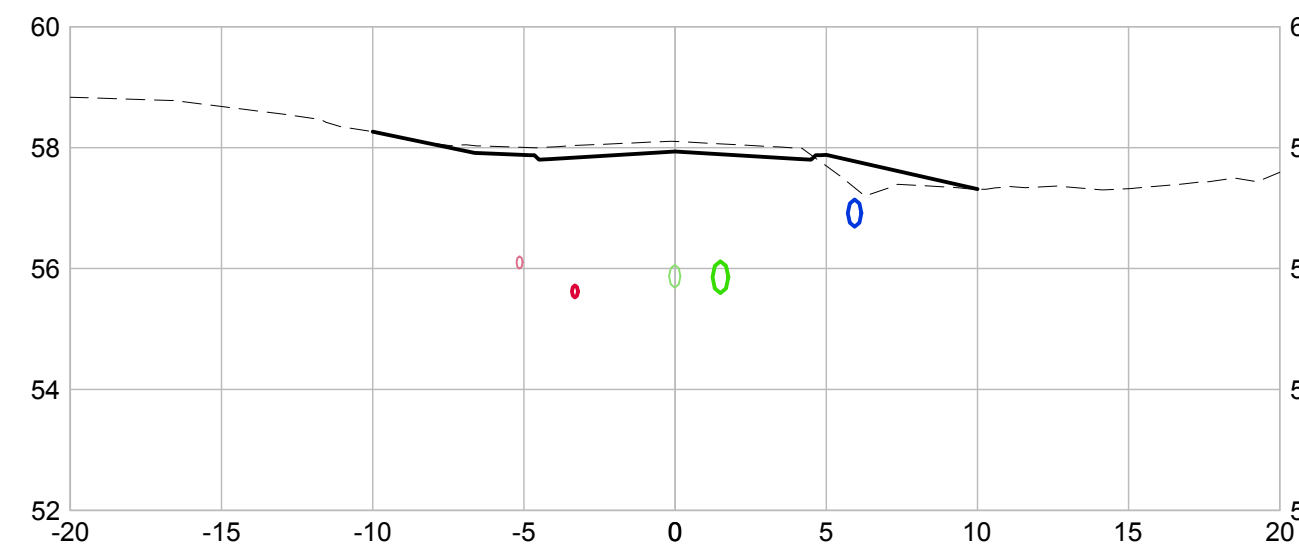
0+250



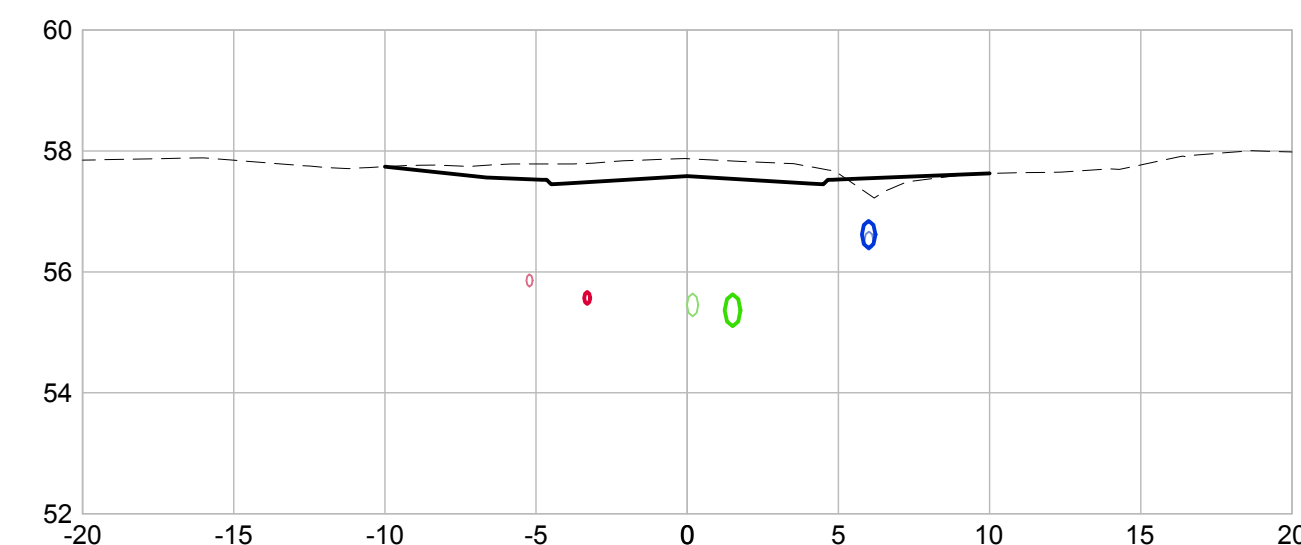
0+300



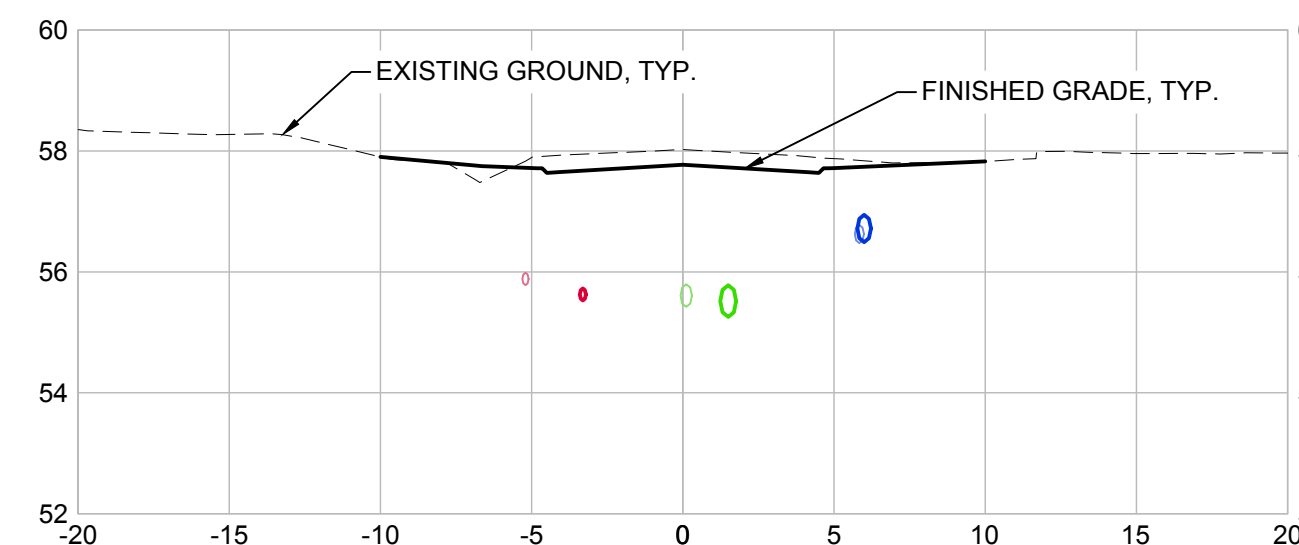
0+350



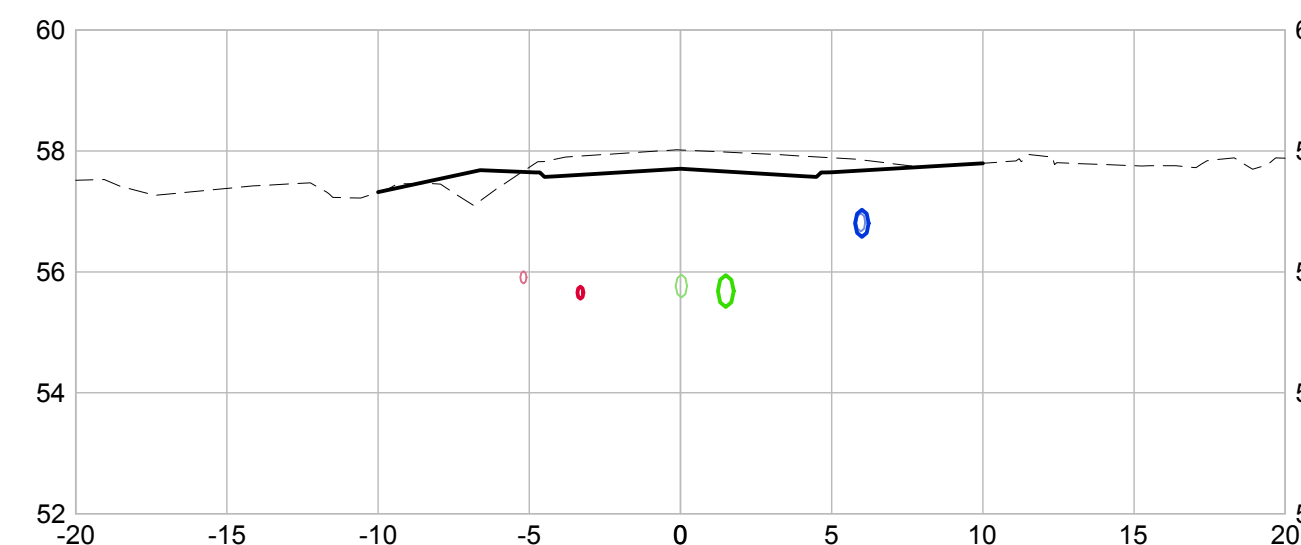
0+400



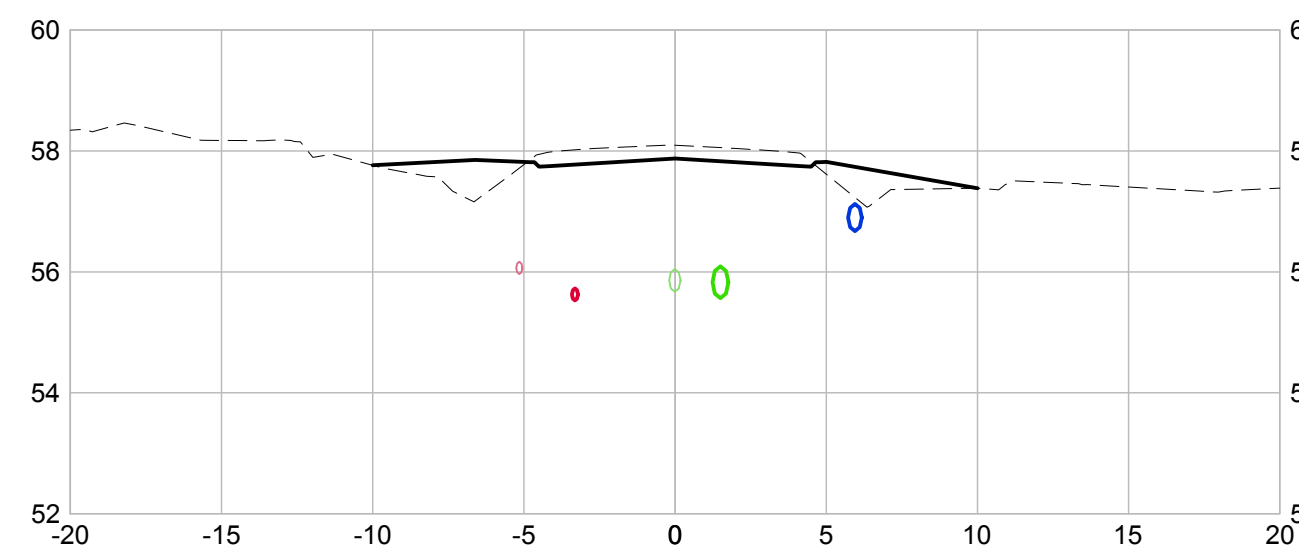
0+240



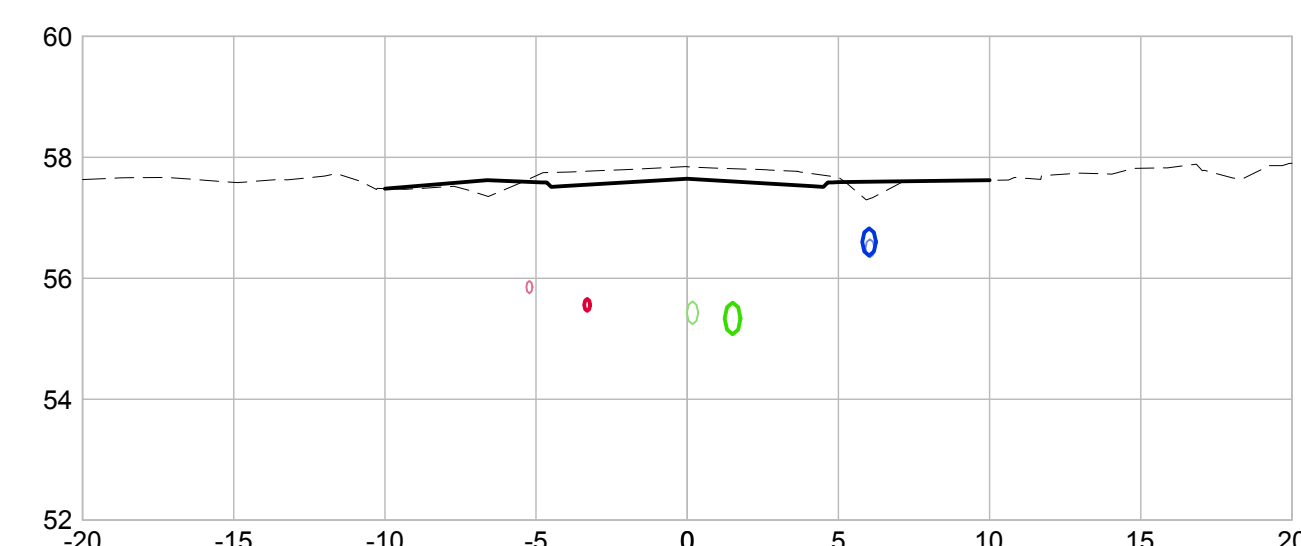
0+290



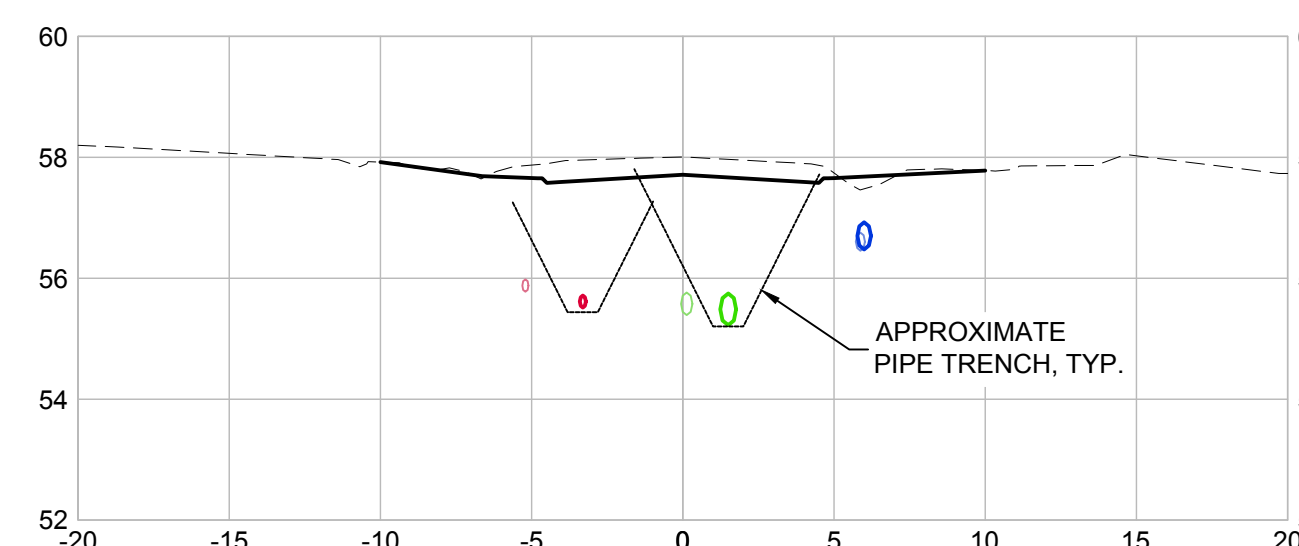
0+340



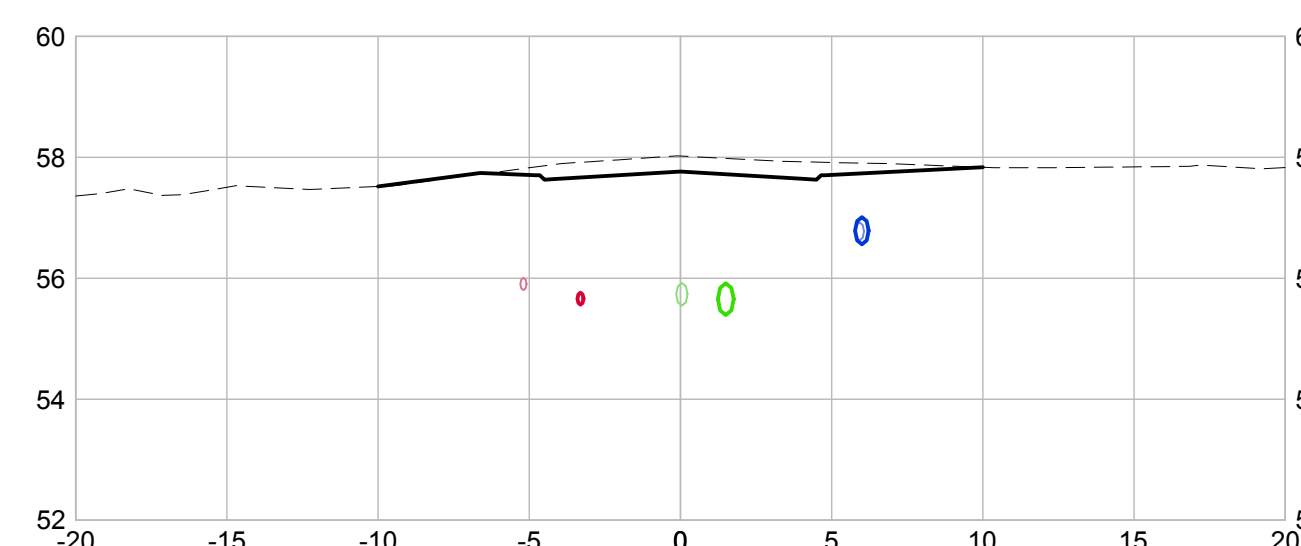
0+390



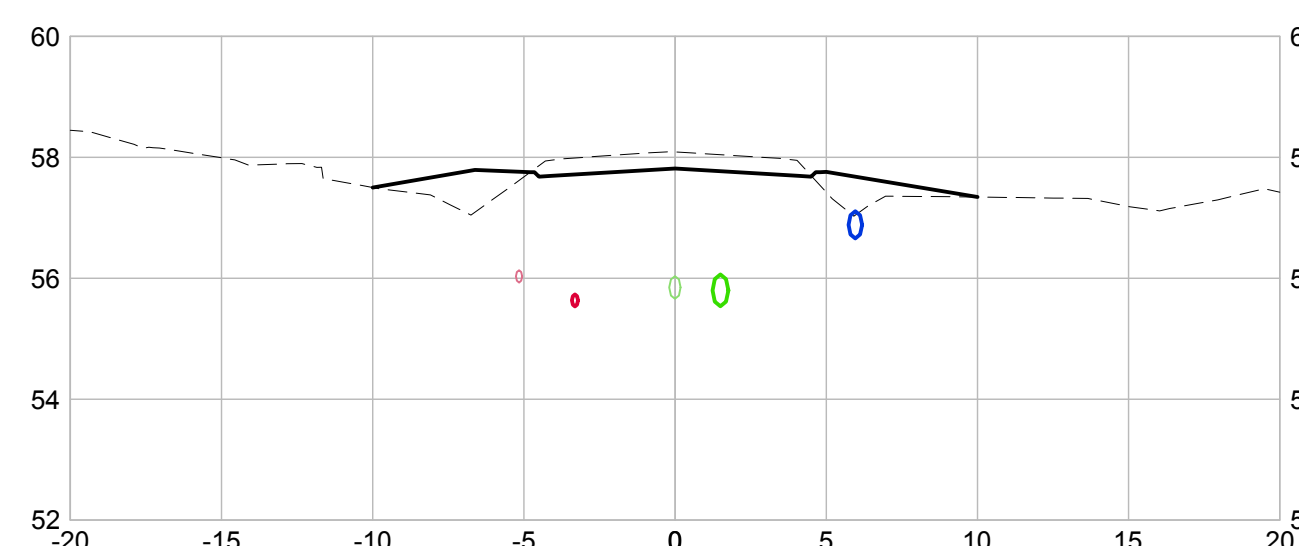
0+230



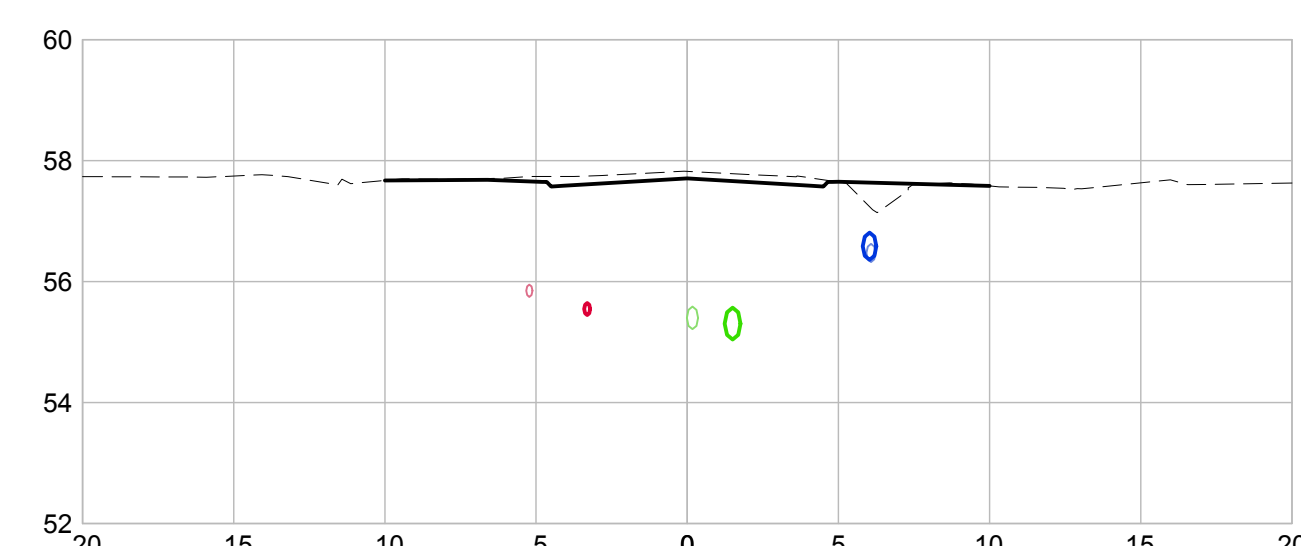
0+280



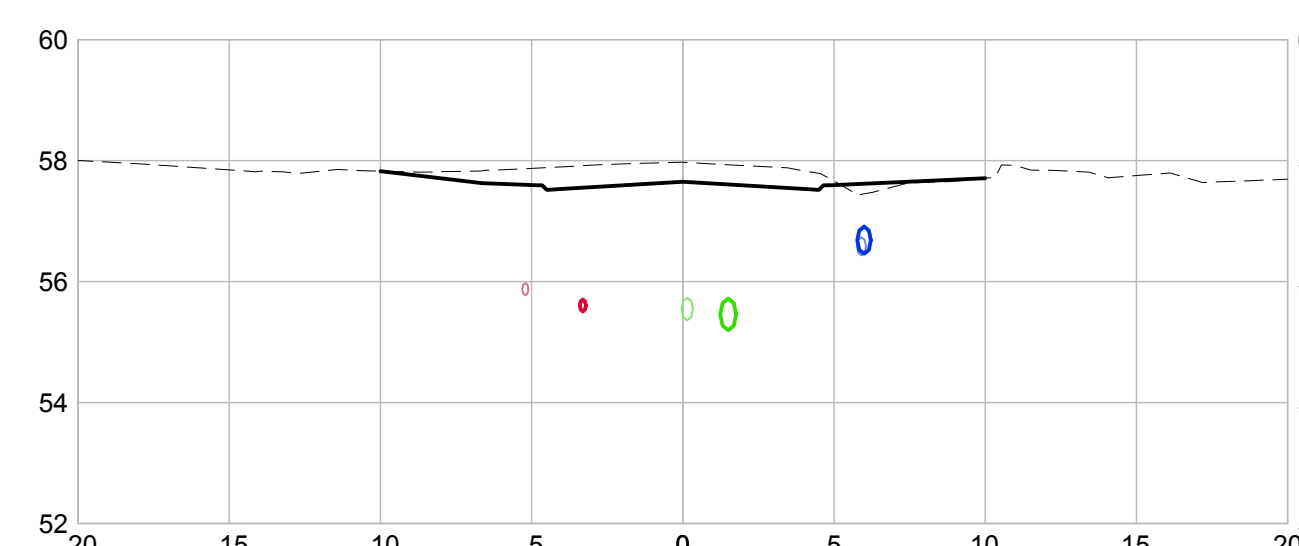
0+330



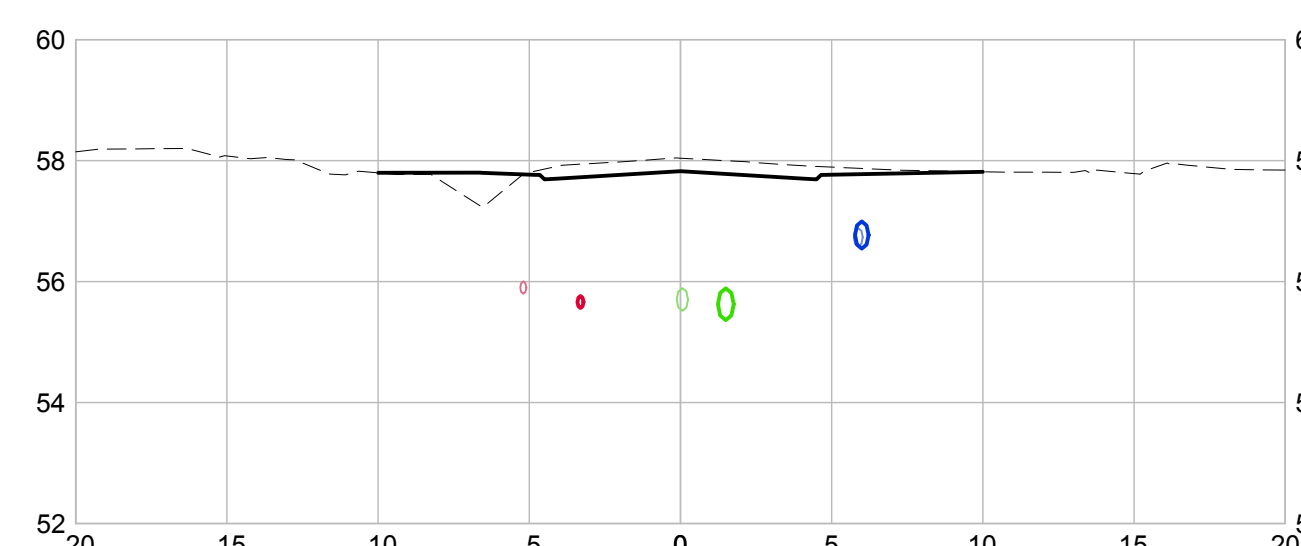
0+380



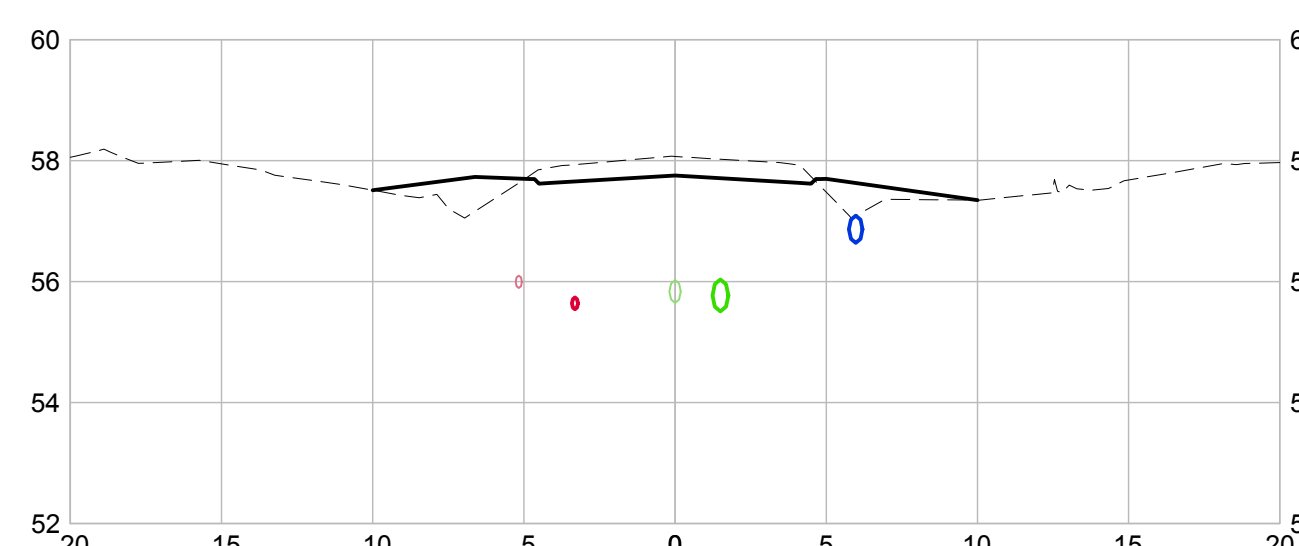
0+220



0+270



0+320



0+370

Rev	Date	Description	Drawn	Design	App'd
PD	2023-02-24	ISSUED FOR INFORMATION	JMD	JMD	KS
PC	2023-02-16	ISSUED FOR 95% REVIEW	JMD	JMD	KS
PB	2023-01-26	ISSUED FOR 70% REVIEW	JMD	JMD	KS
PA	2022-12-22	ISSUED FOR 30% REVIEW	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

0 1:250 10
 0 1:125 5

ORIGINAL DWG SIZE: ANSI D (22" x 34")

Suite 1
 5008 Pohle Avenue
 Terrace BC
 Canada V8G 4S8
 T 250 635 7163

PRELIMINARY
 NOT FOR CONSTRUCTION

THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS

CITY OF TERRACE
 5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION SECTIONS

4800 - 4900 GRAHAM AVE
 TERRACE, BC

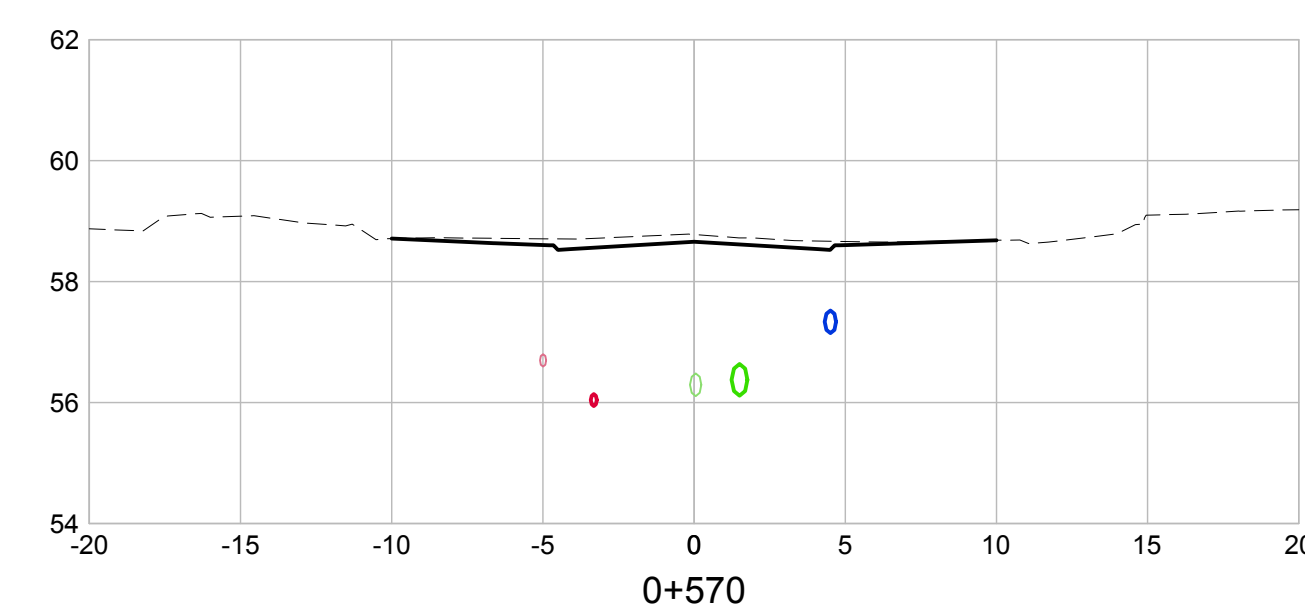
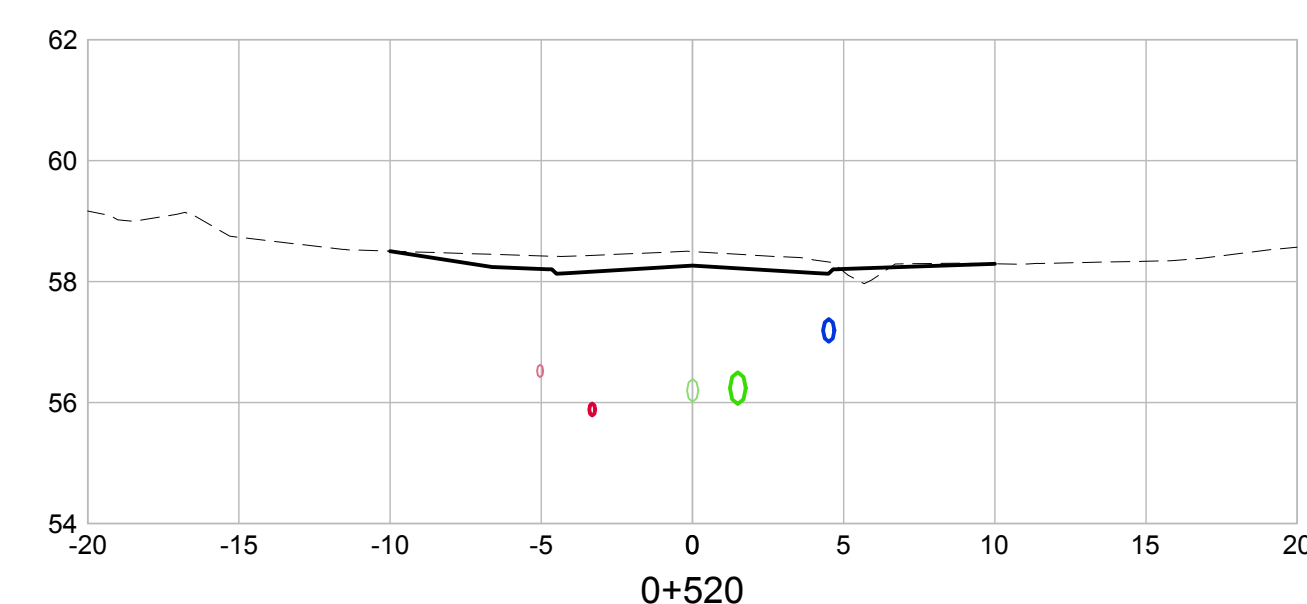
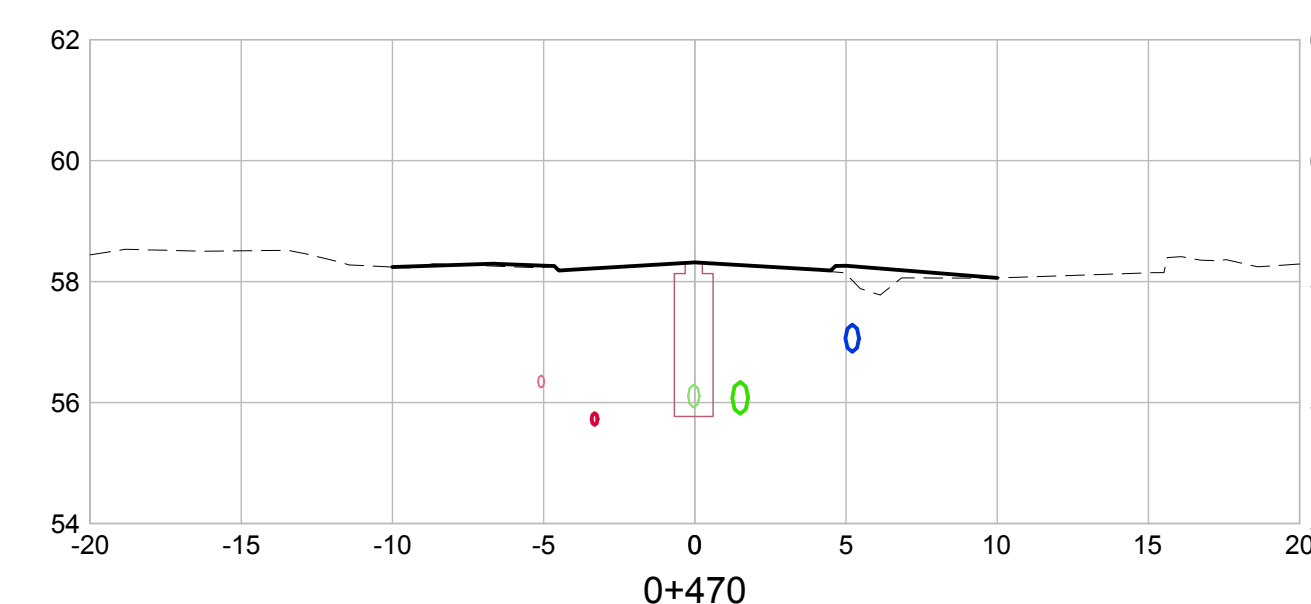
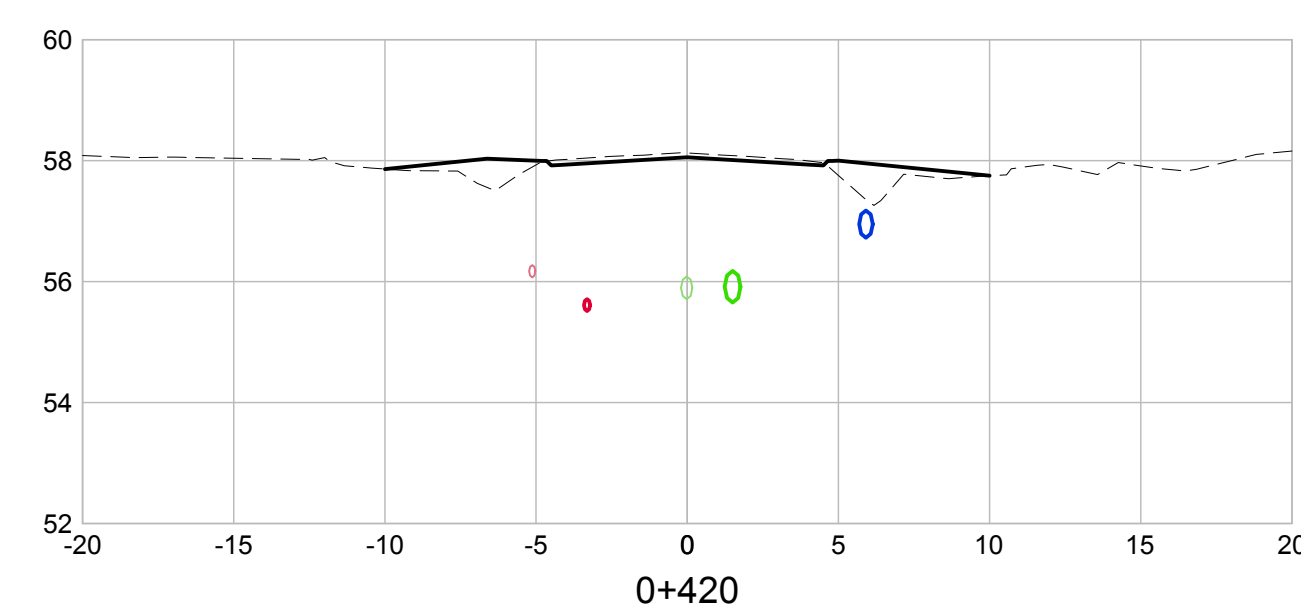
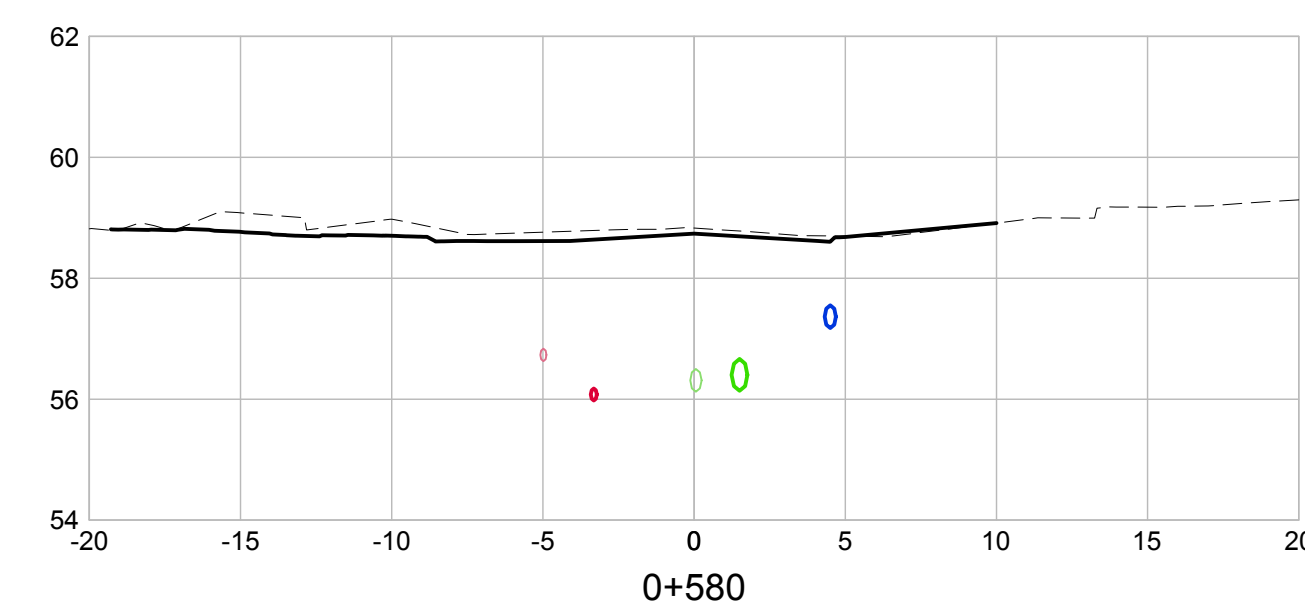
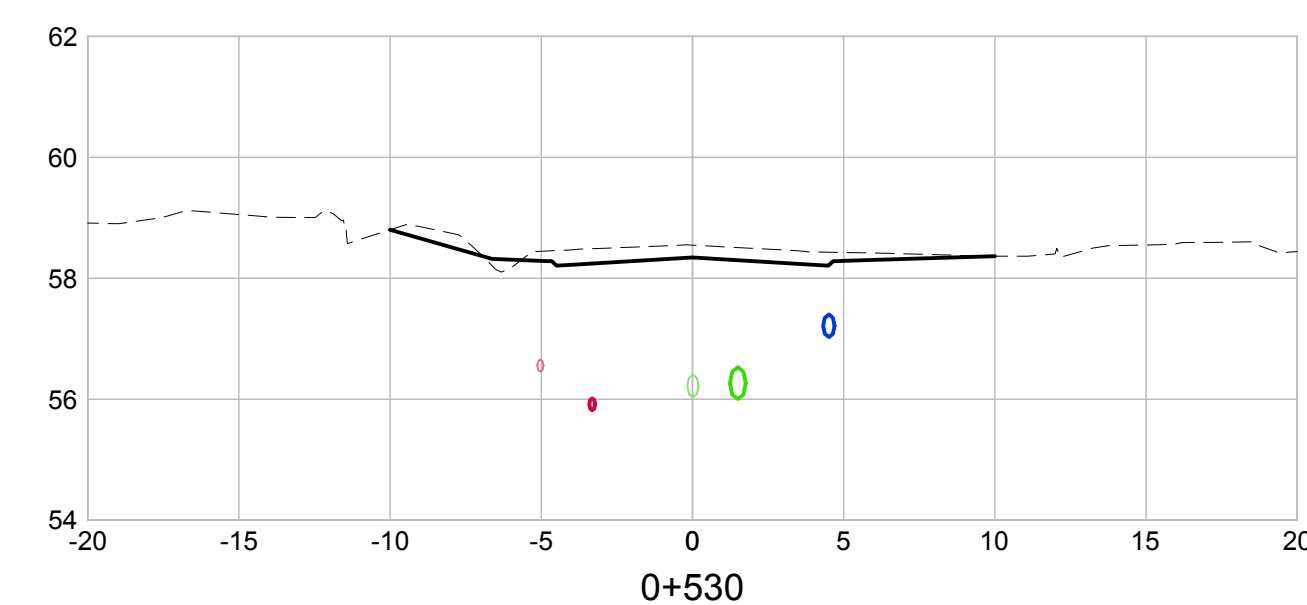
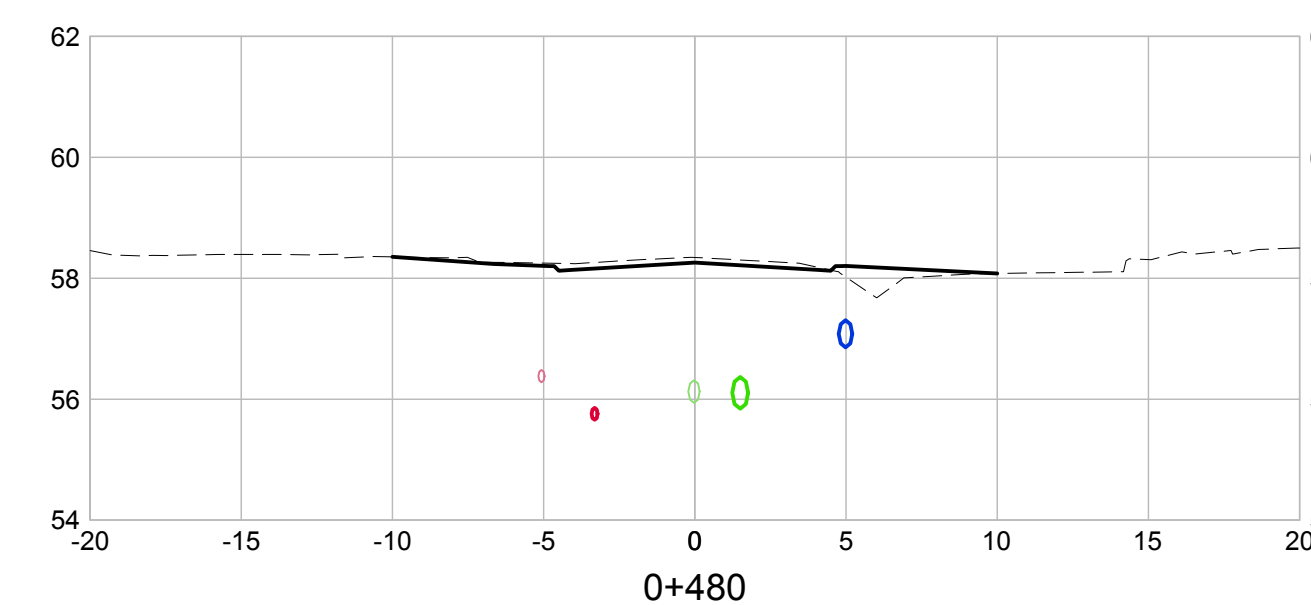
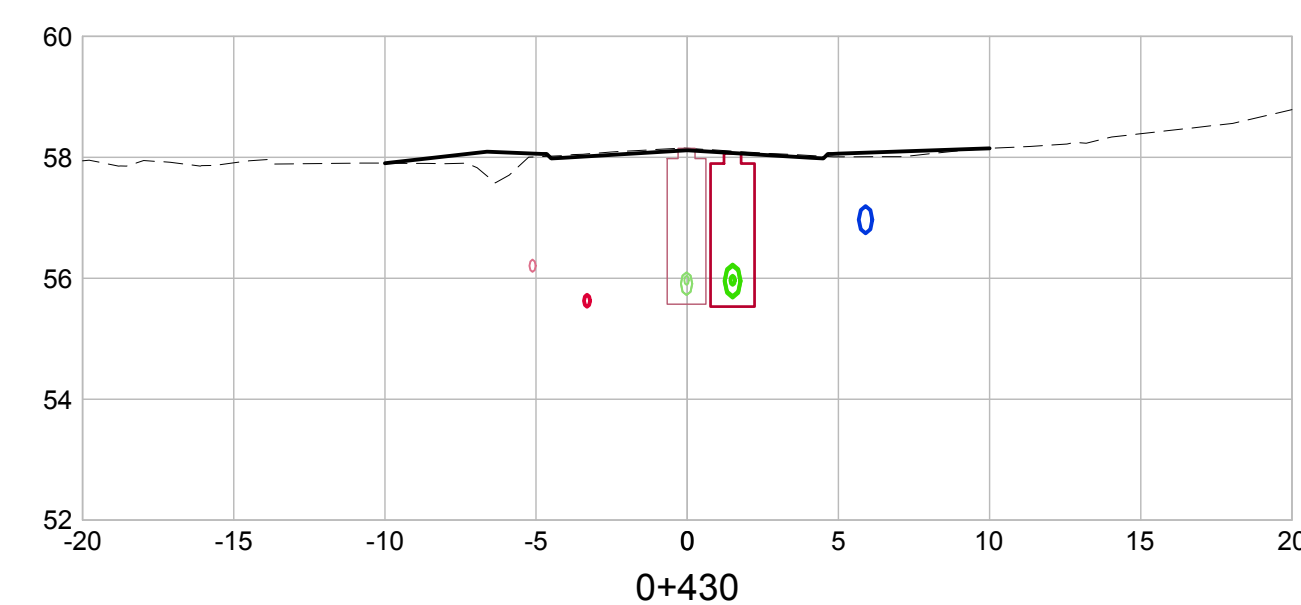
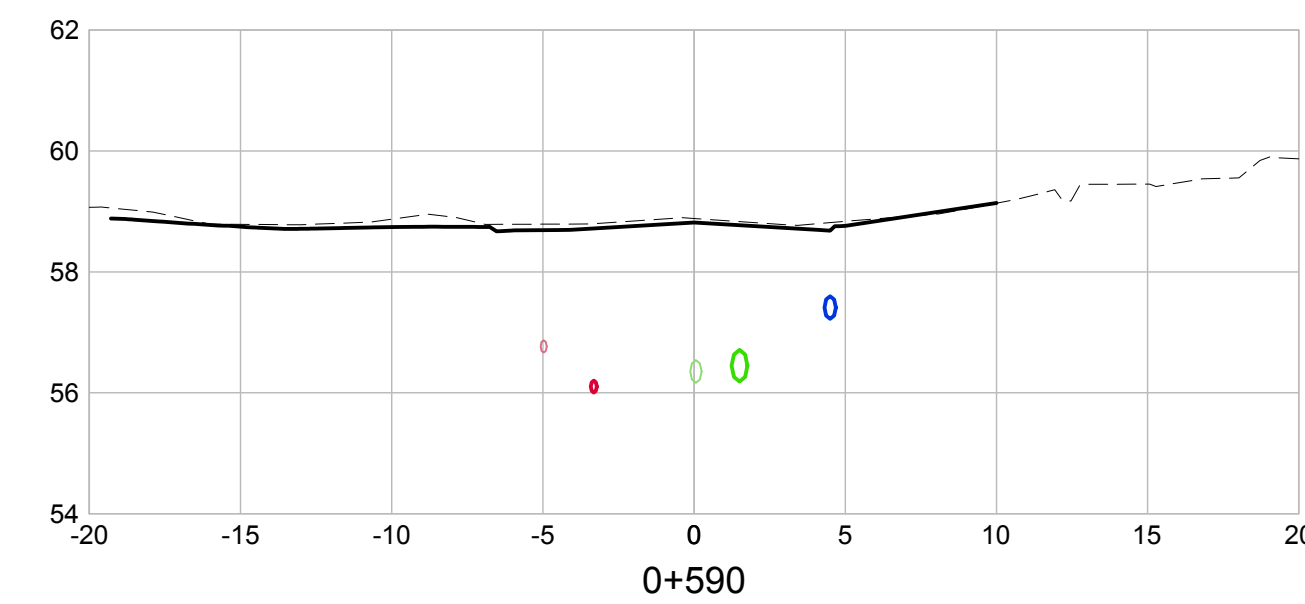
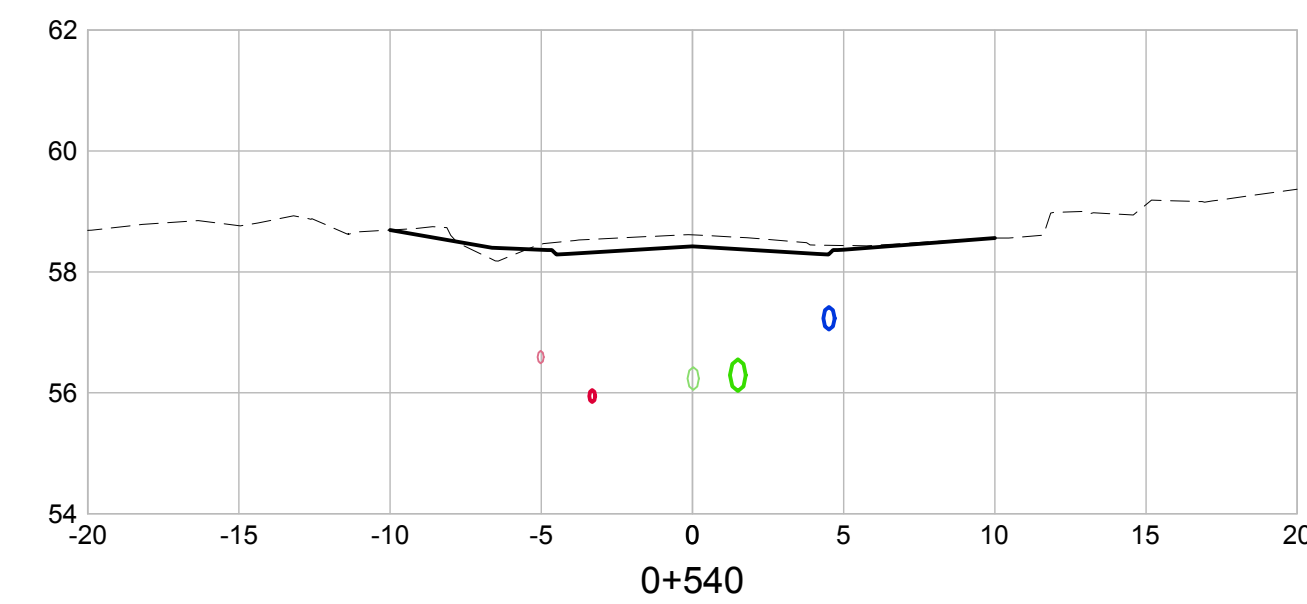
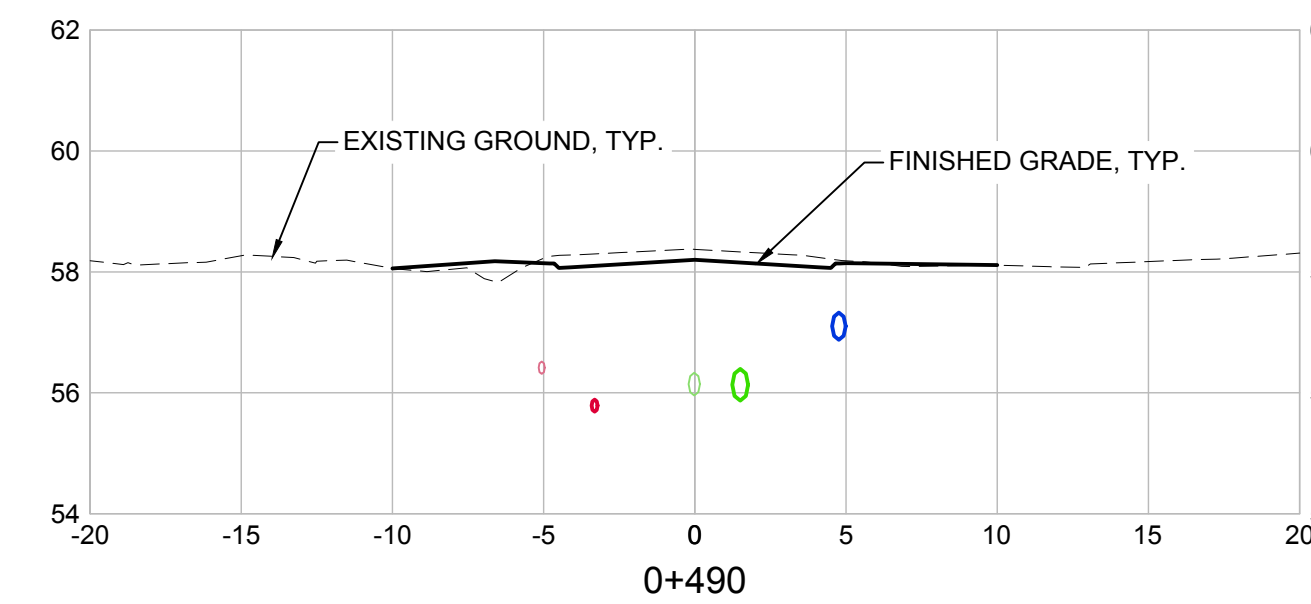
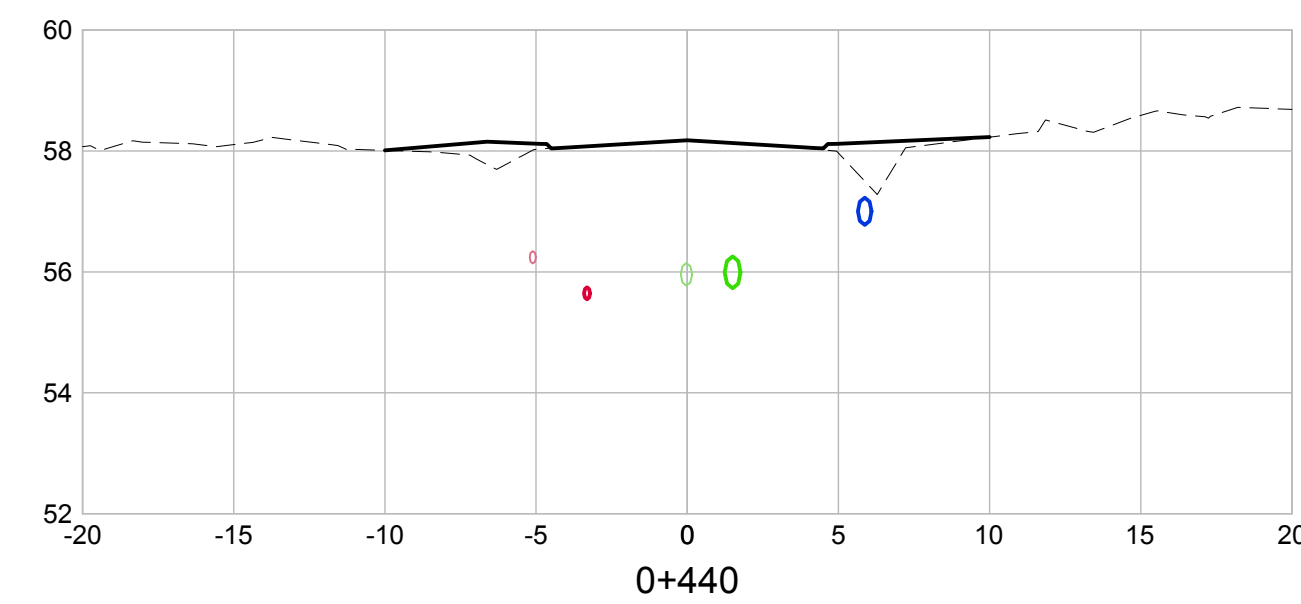
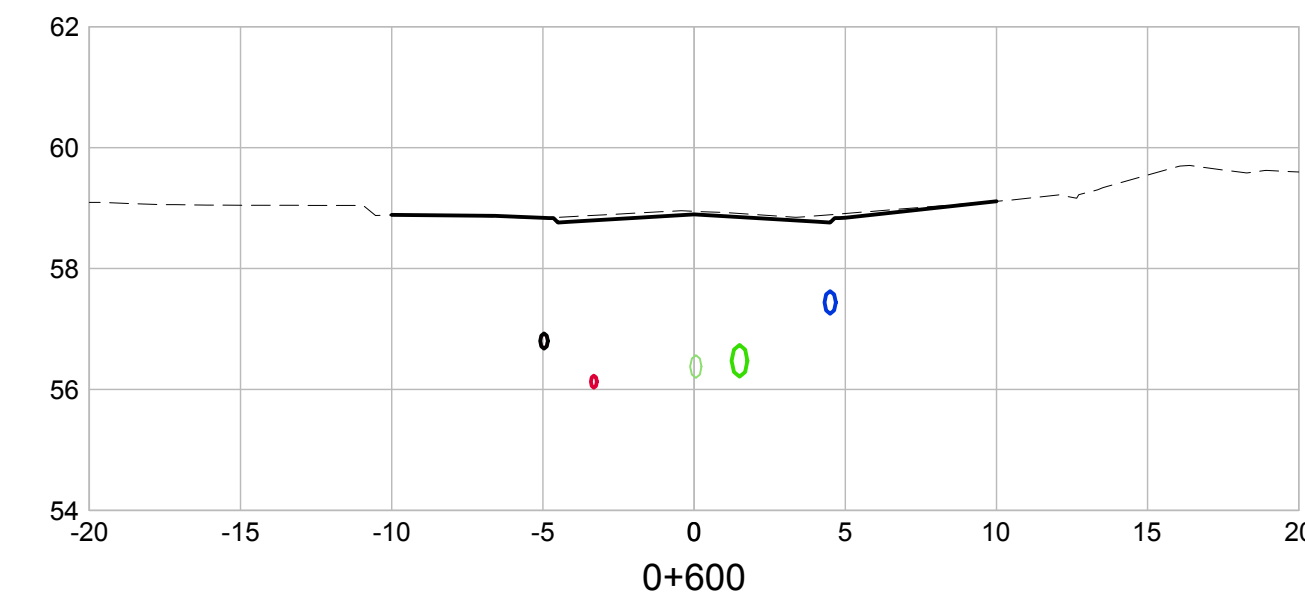
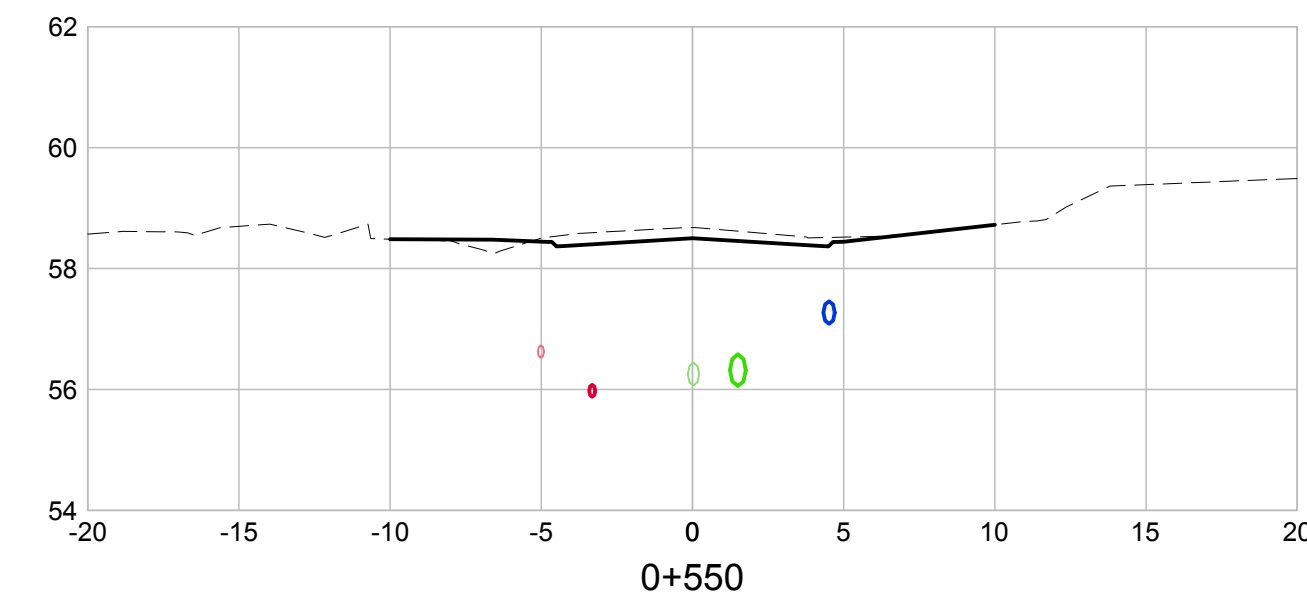
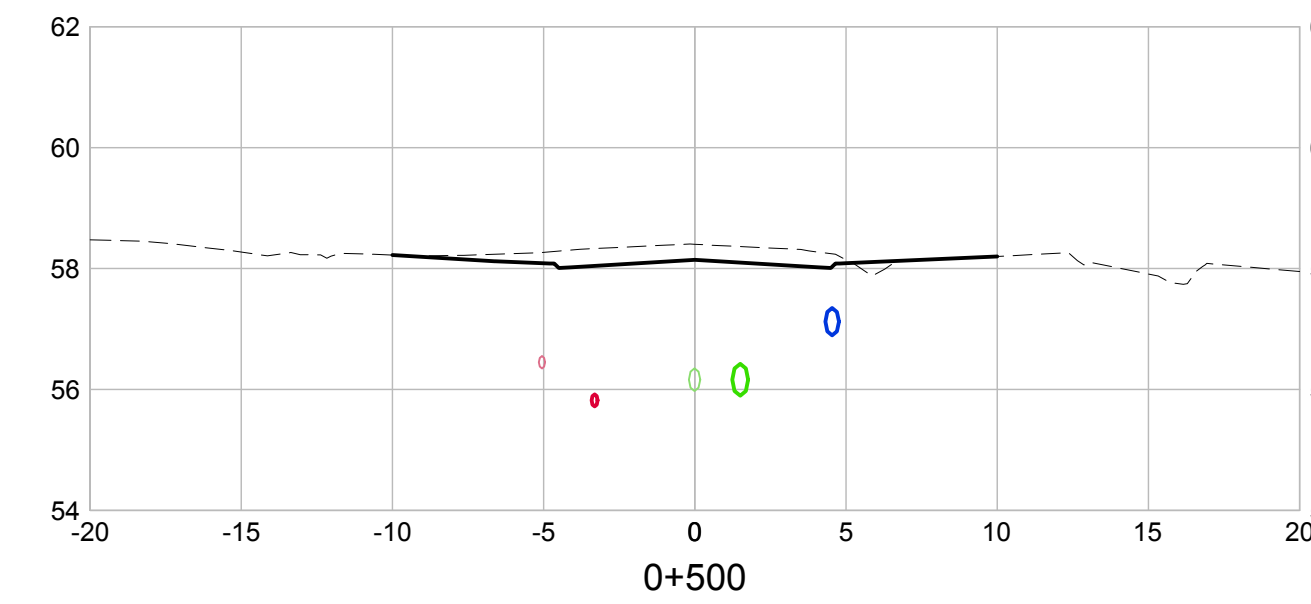
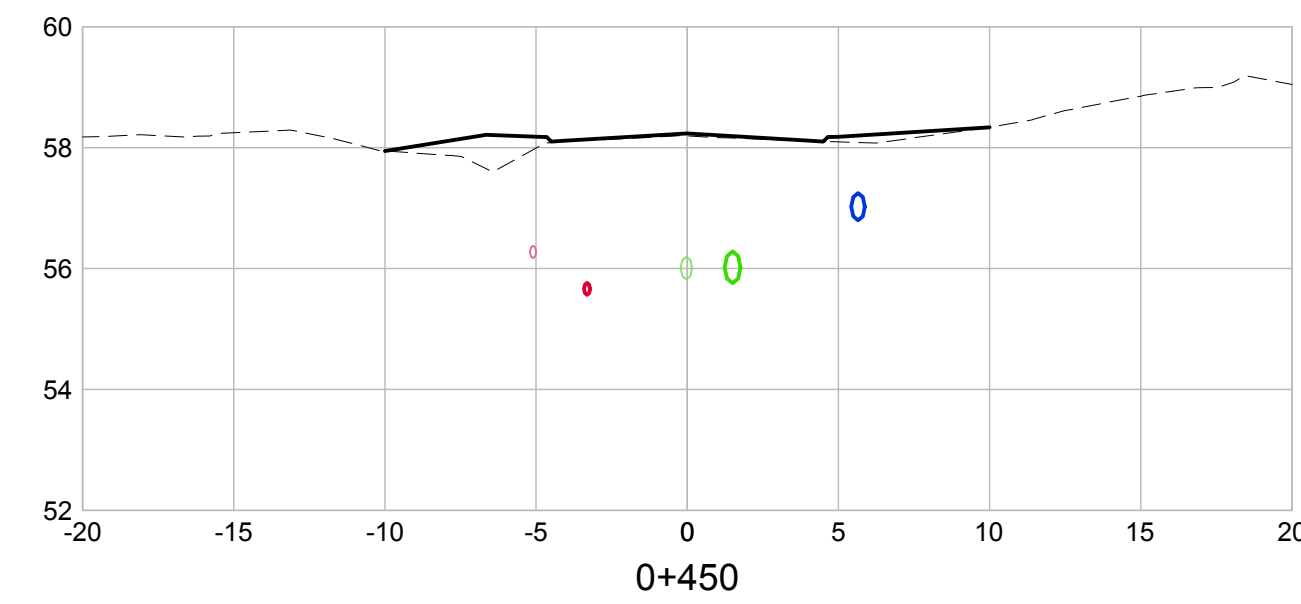
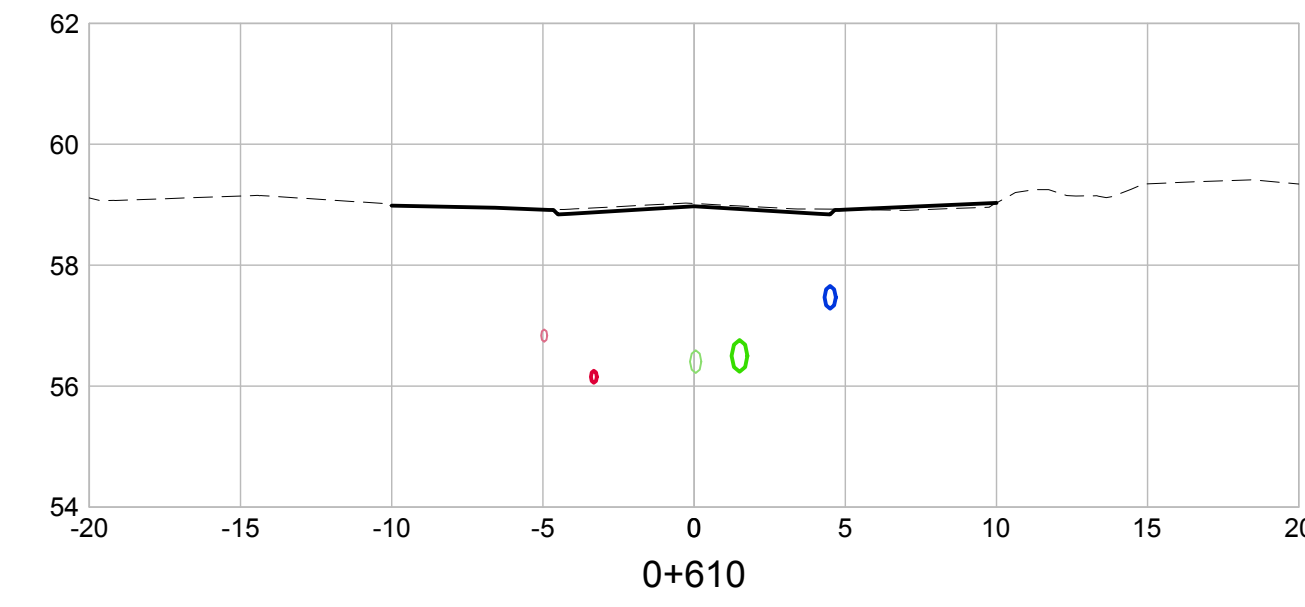
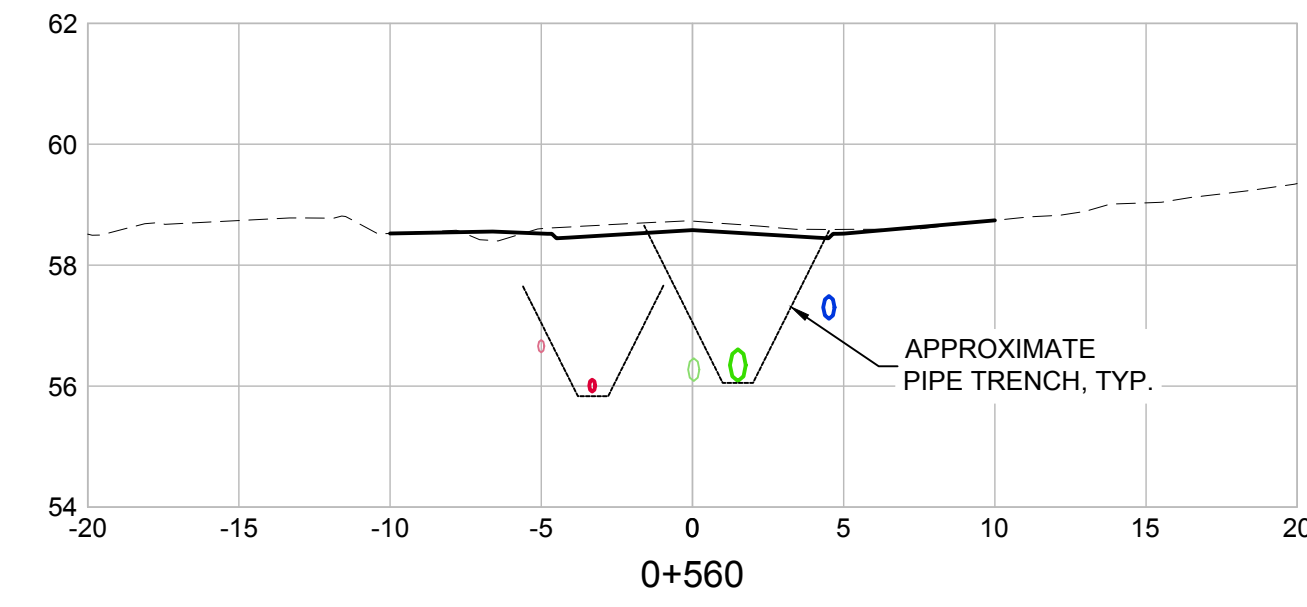
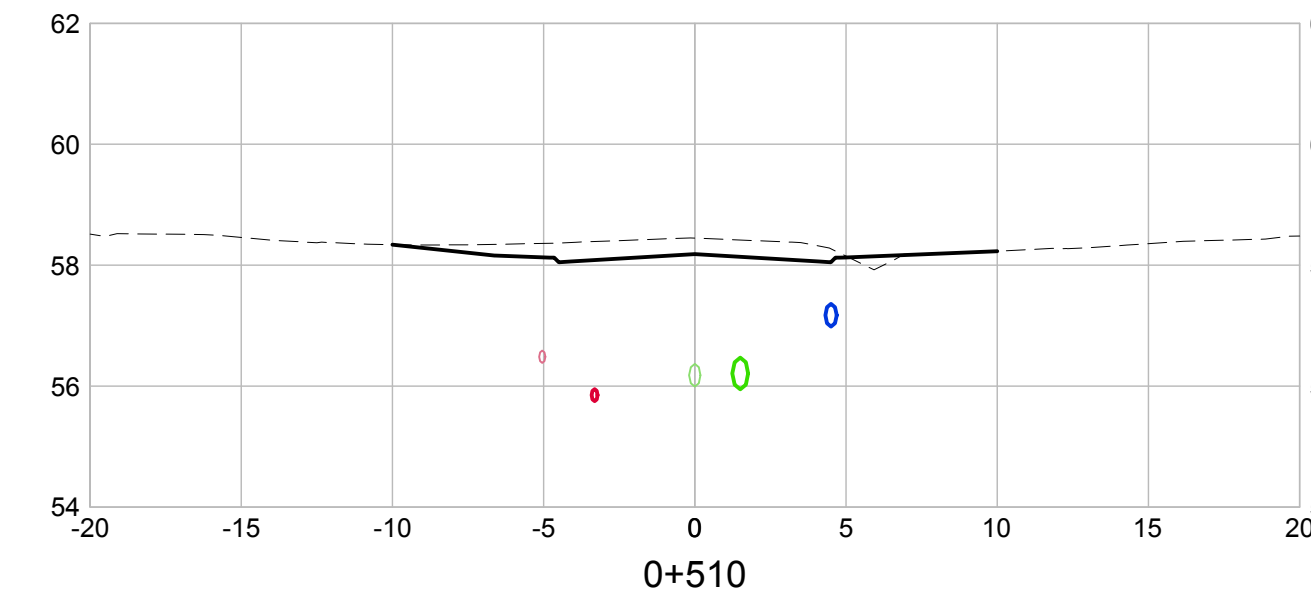
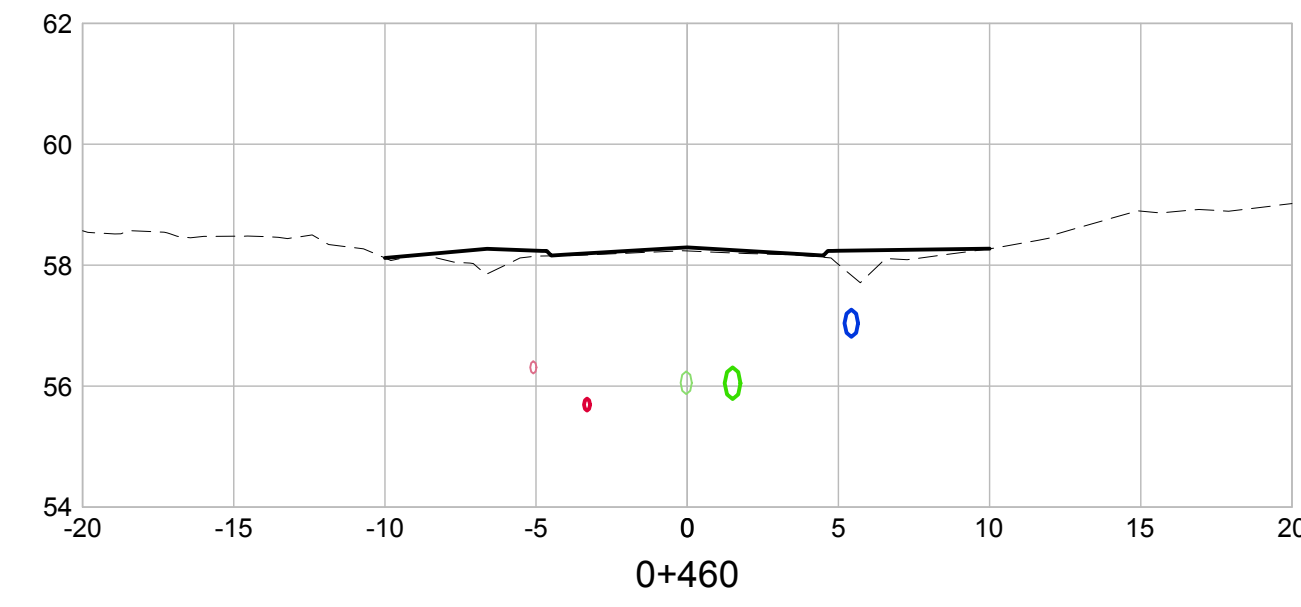
Drawing No.
C-902

Project Number
 2321-02168-00

Rev.
 PD

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

DATE: 2023-02-23 17:12 FILE: X:\232102100\02168-00 Design Services\4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-900.dwg
 McElhanney ANS I D - 2019.05.11



Rev	Date	Description	Drawn	Design	App'd
PD	2023-02-24	ISSUED FOR INFORMATION	JMD	JMD	KS
PC	2023-02-16	ISSUED FOR 95% REVIEW	JMD	JMD	KS
PB	2023-01-26	ISSUED FOR 70% REVIEW	JMD	JMD	KS
PA	2022-12-22	ISSUED FOR 30% REVIEW	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF McELHANNEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF McELHANNEY. McELHANNEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.
 THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. McELHANNEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT McELHANNEY'S PRIOR WRITTEN CONSENT.
 INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. McELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")

Suite 1
 5008 Pohle Avenue
 Terrace BC
 Canada V8G 4S8
 T 250 635 7163

PRELIMINARY
 NOT FOR CONSTRUCTION

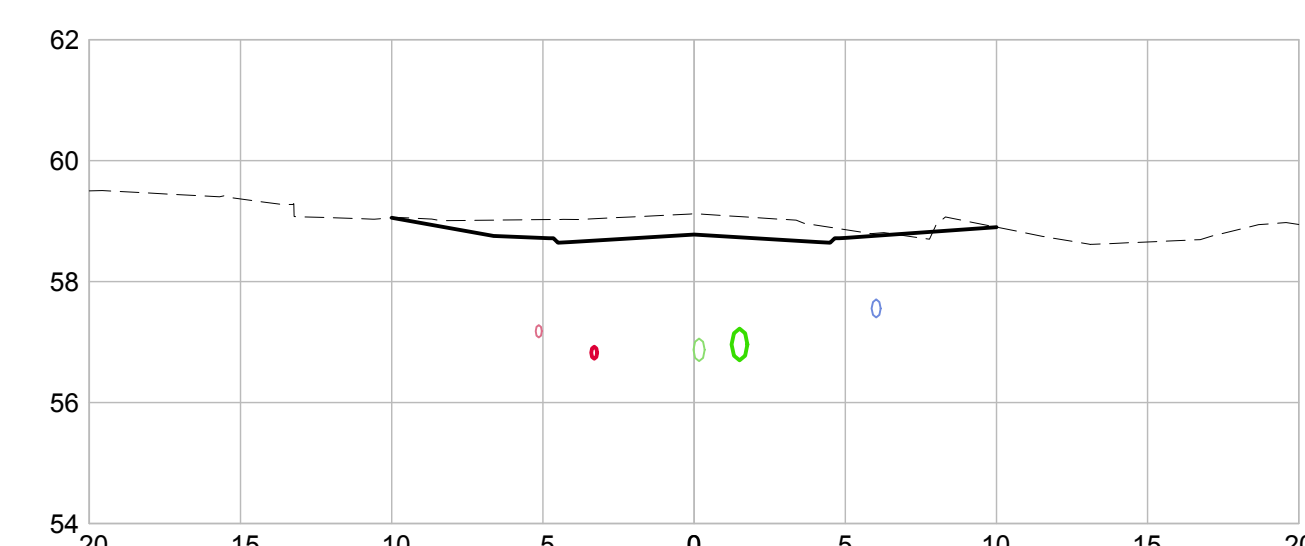
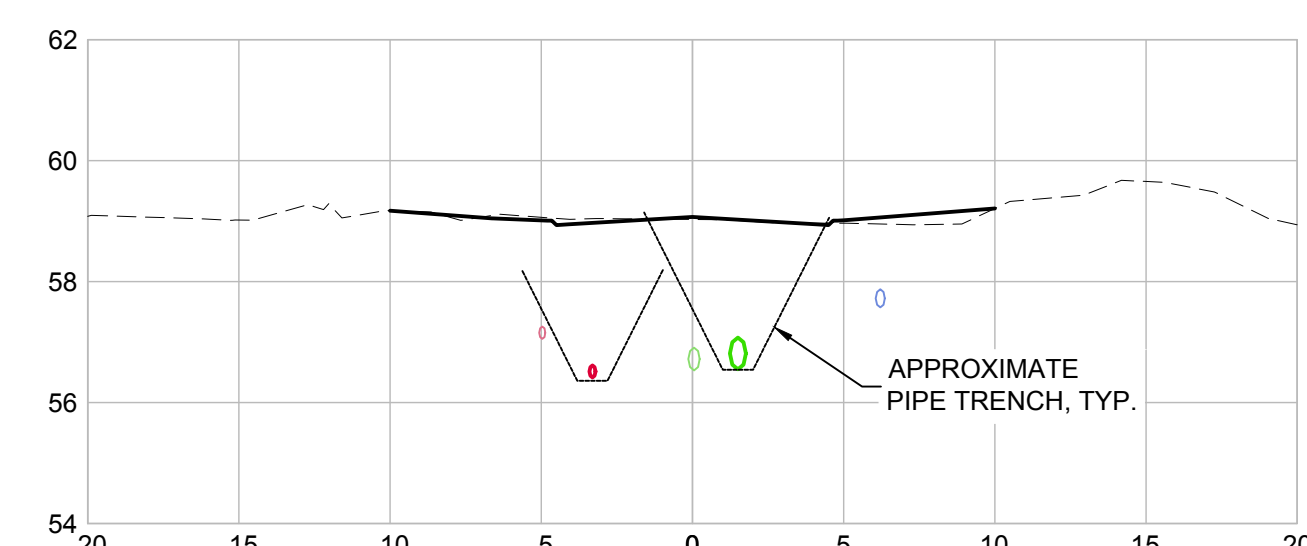
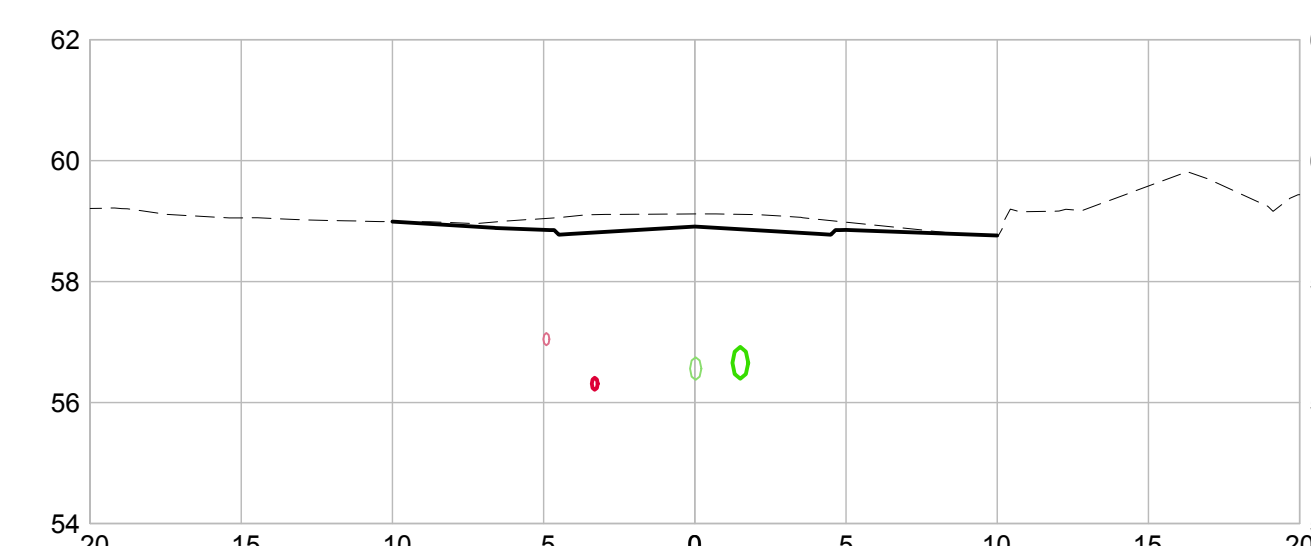
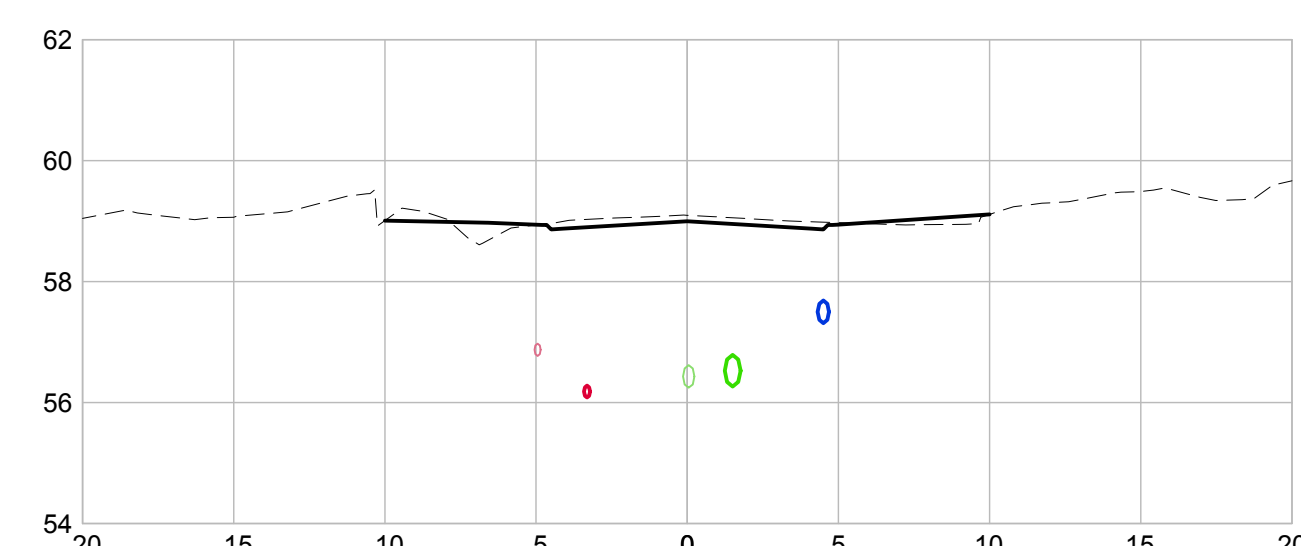
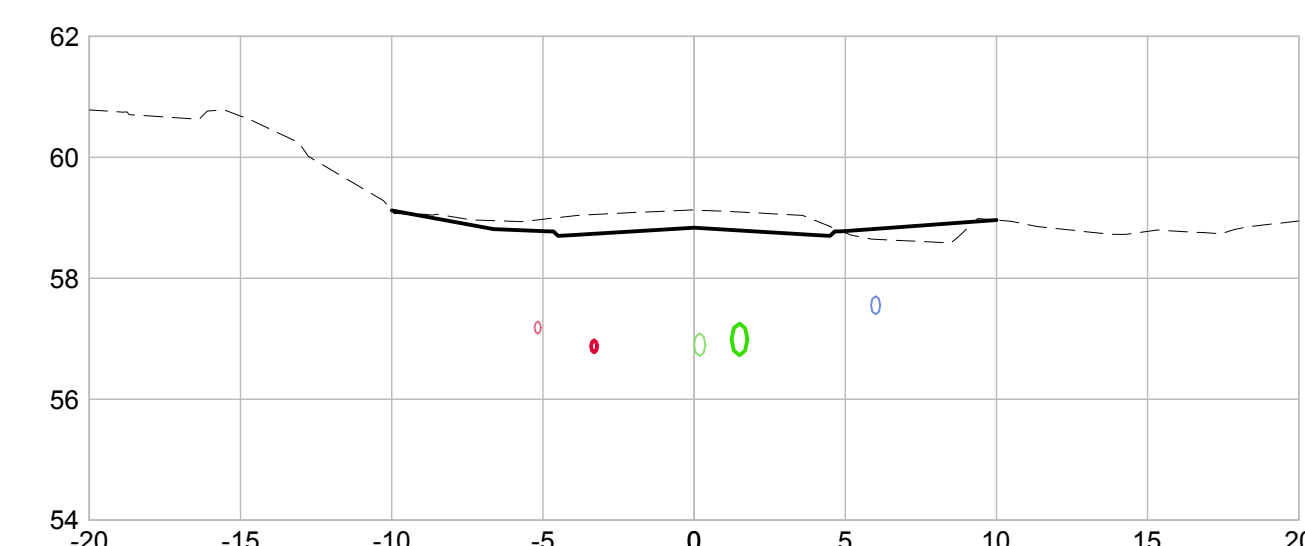
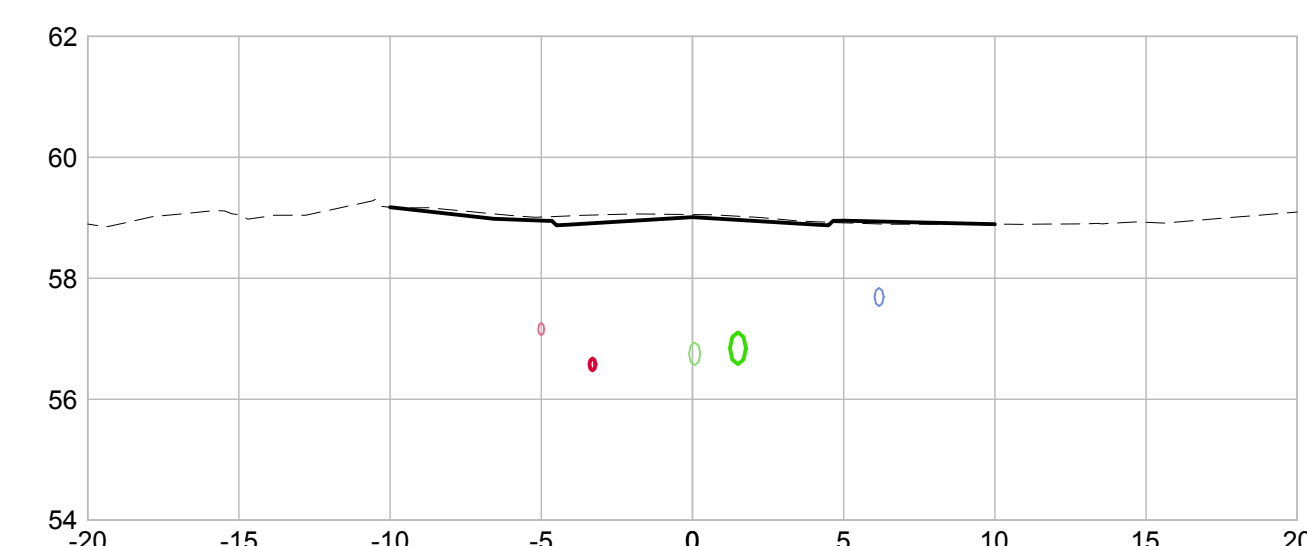
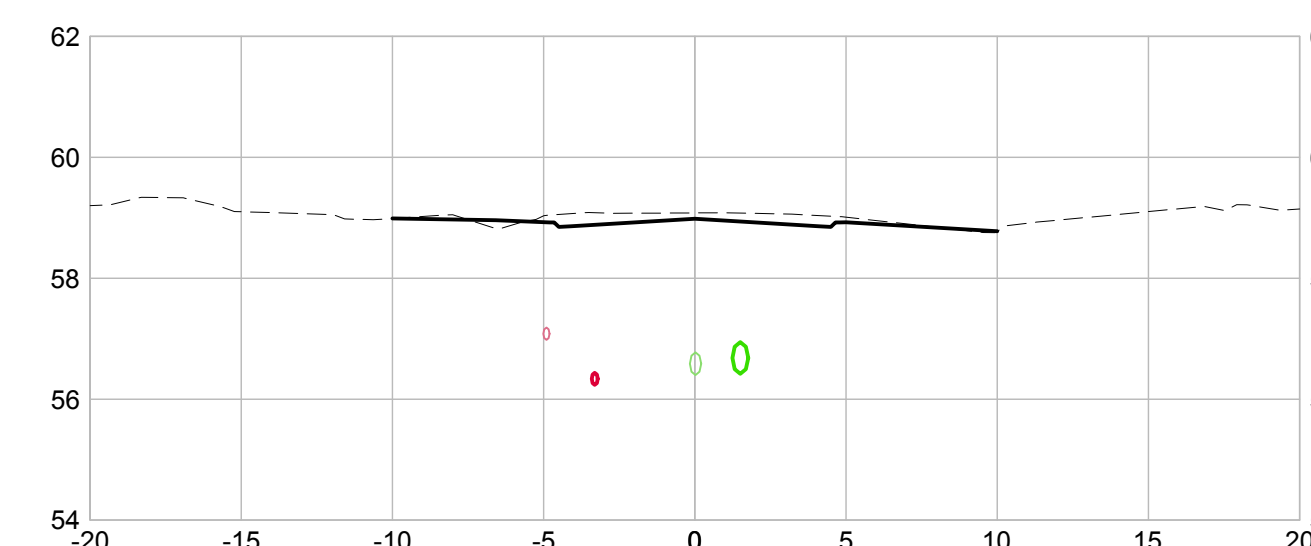
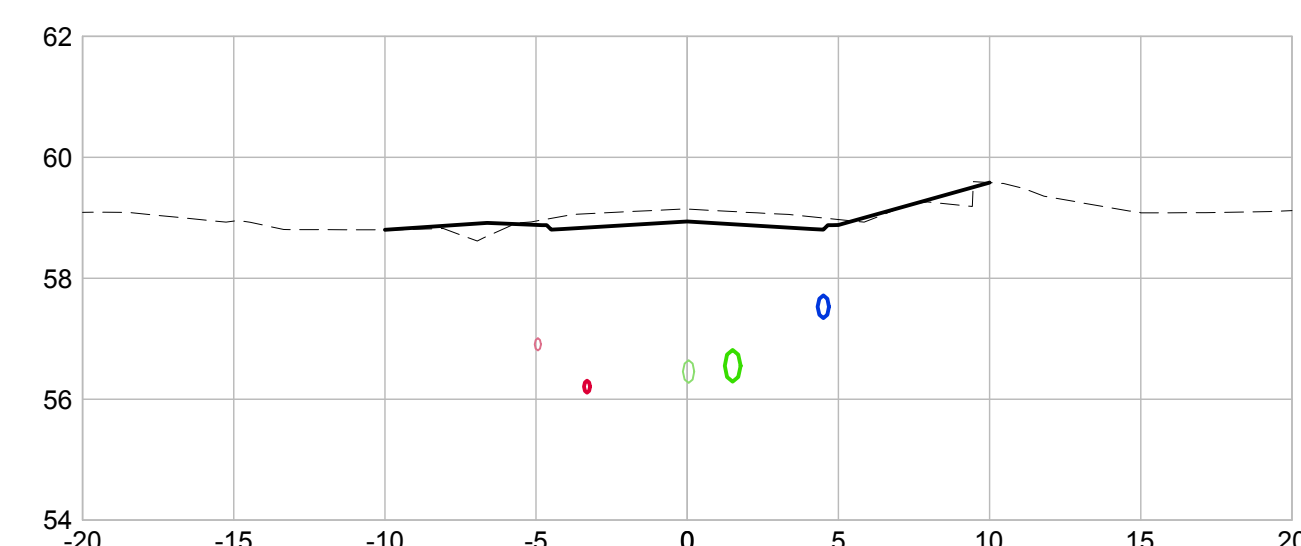
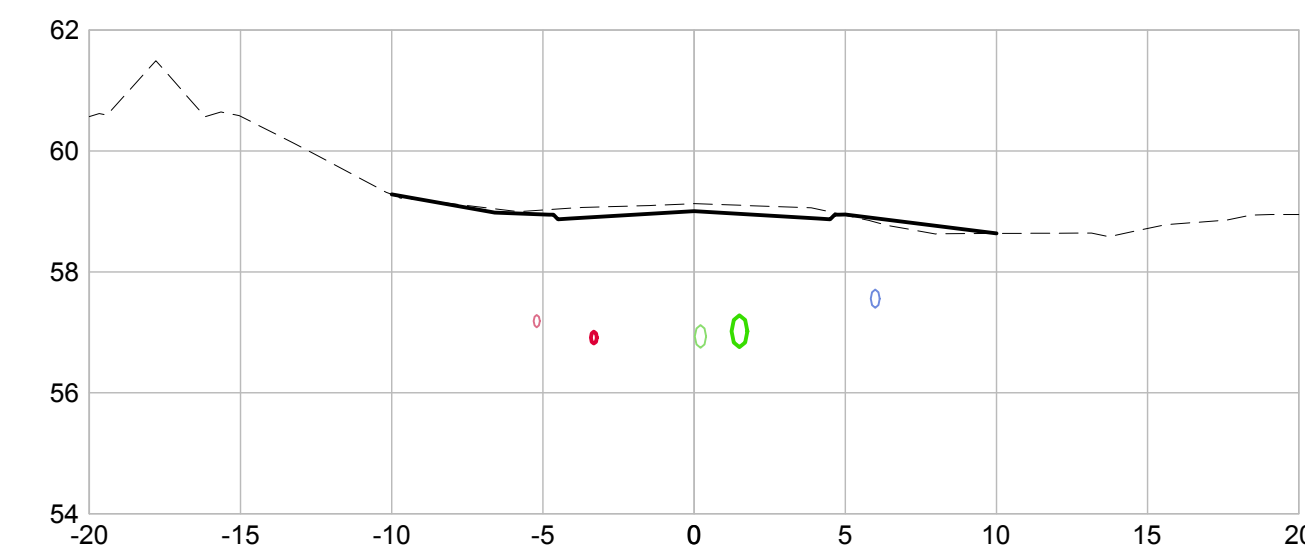
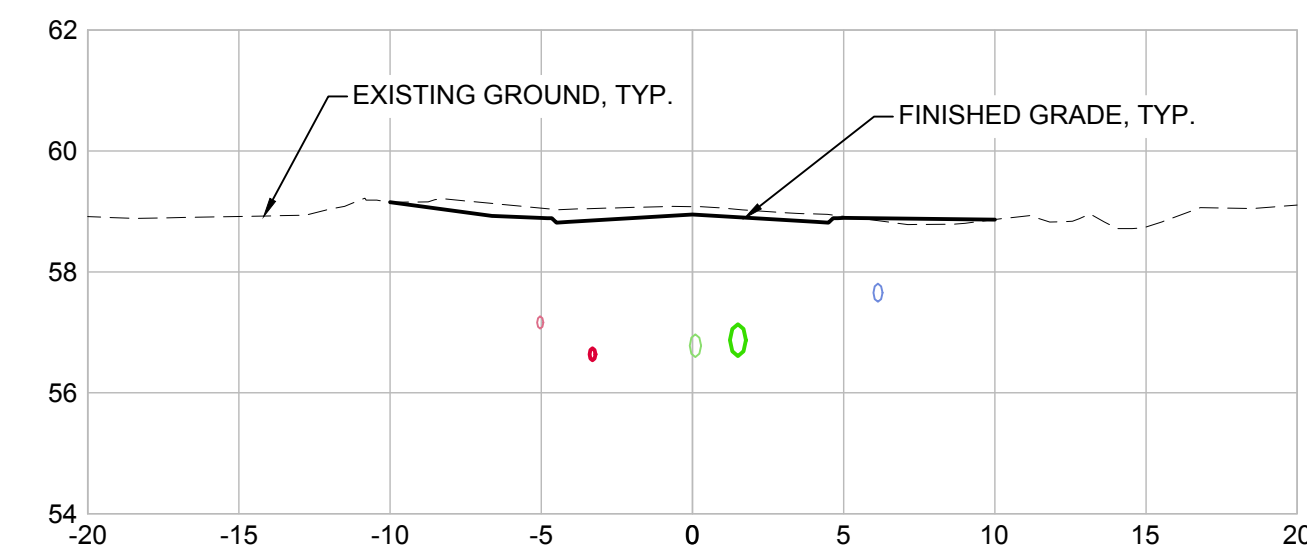
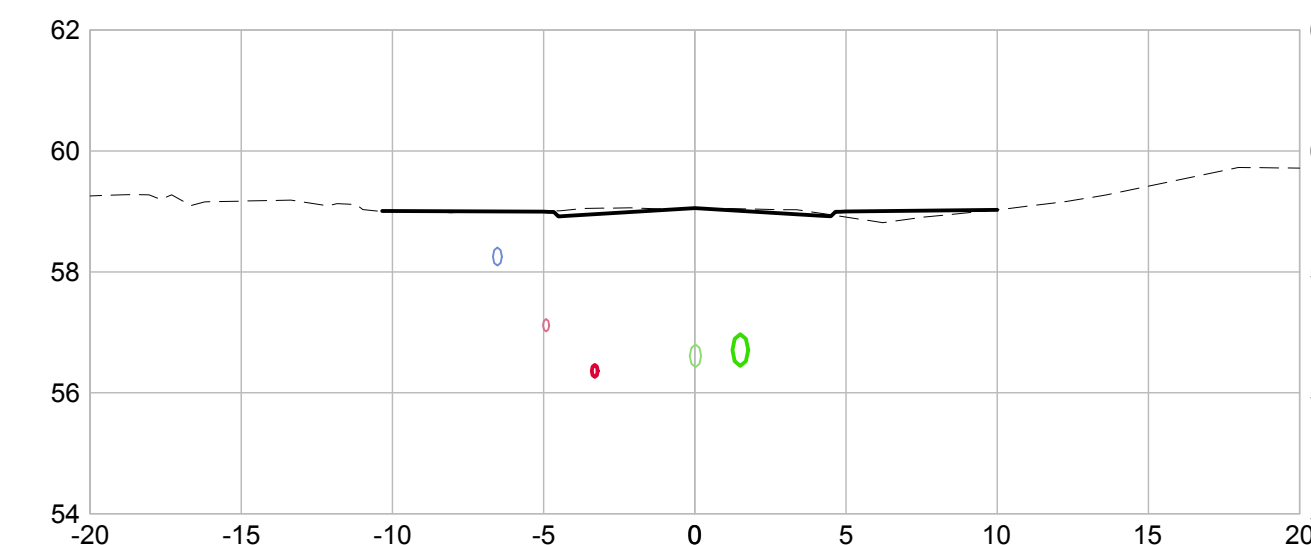
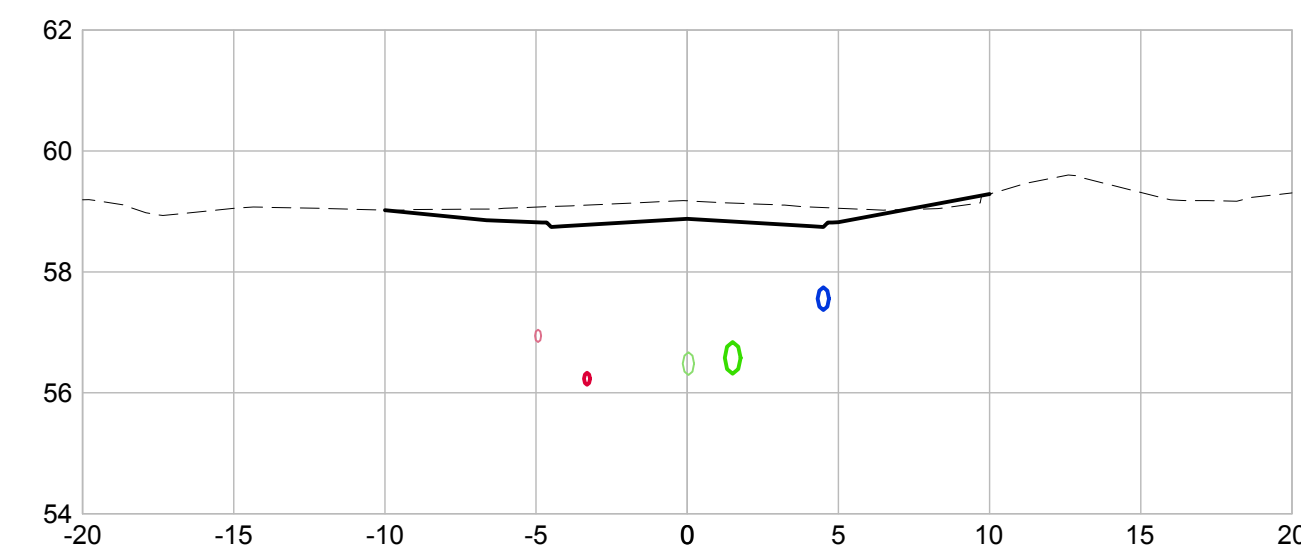
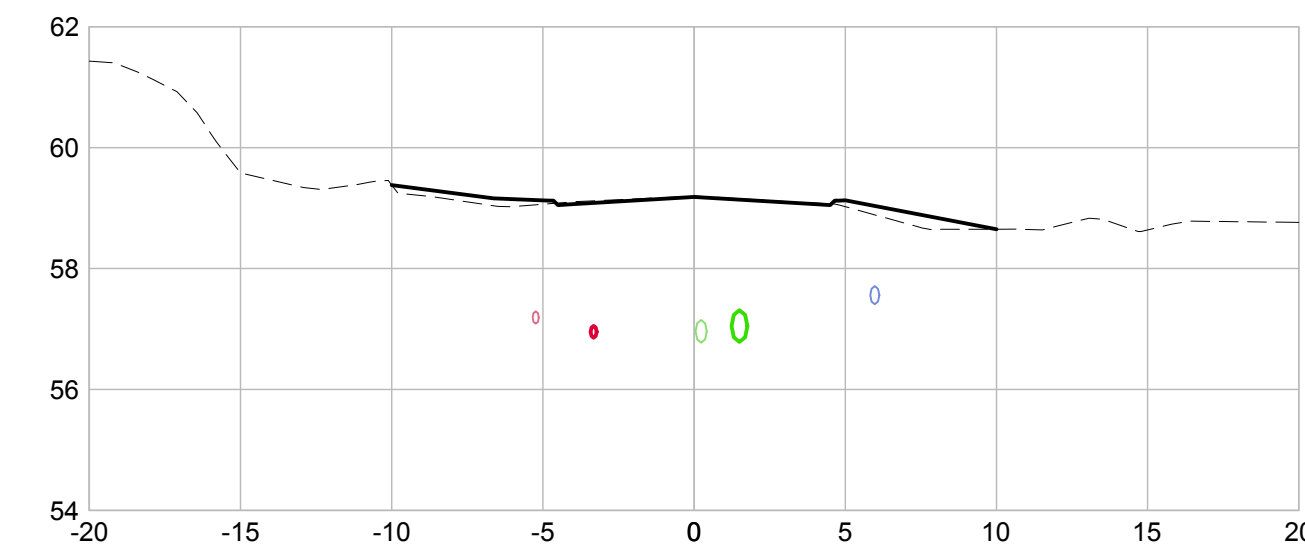
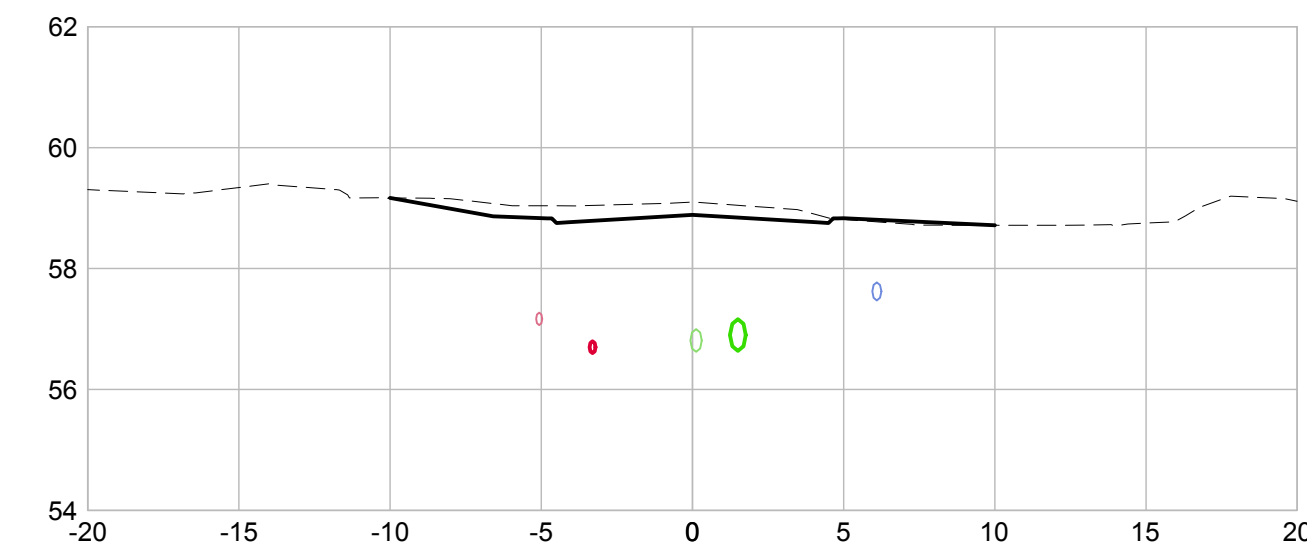
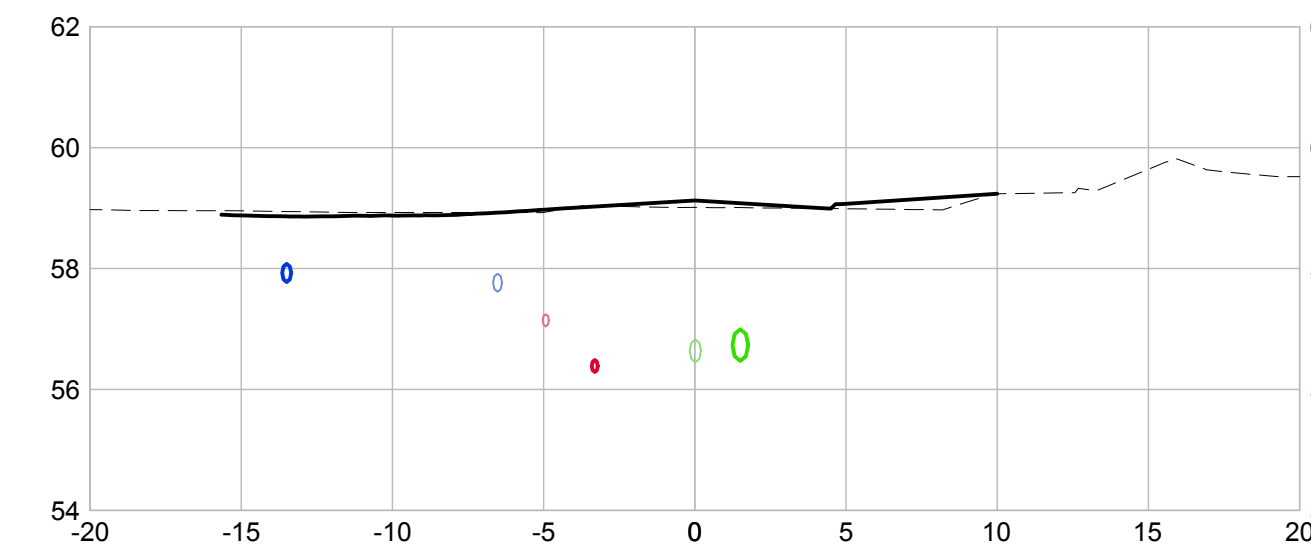
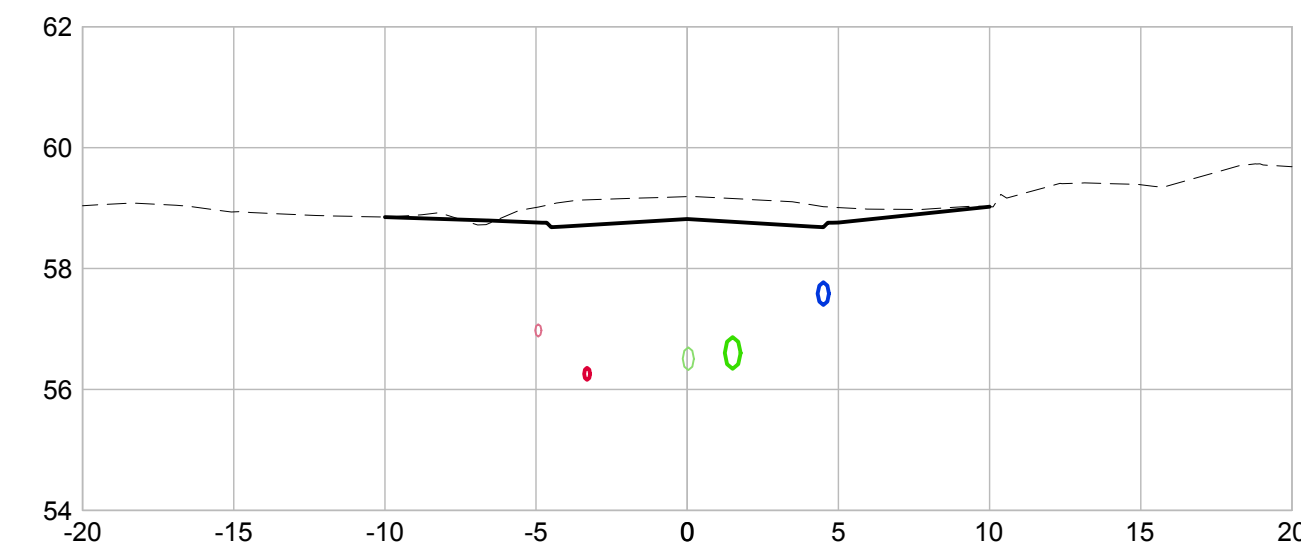
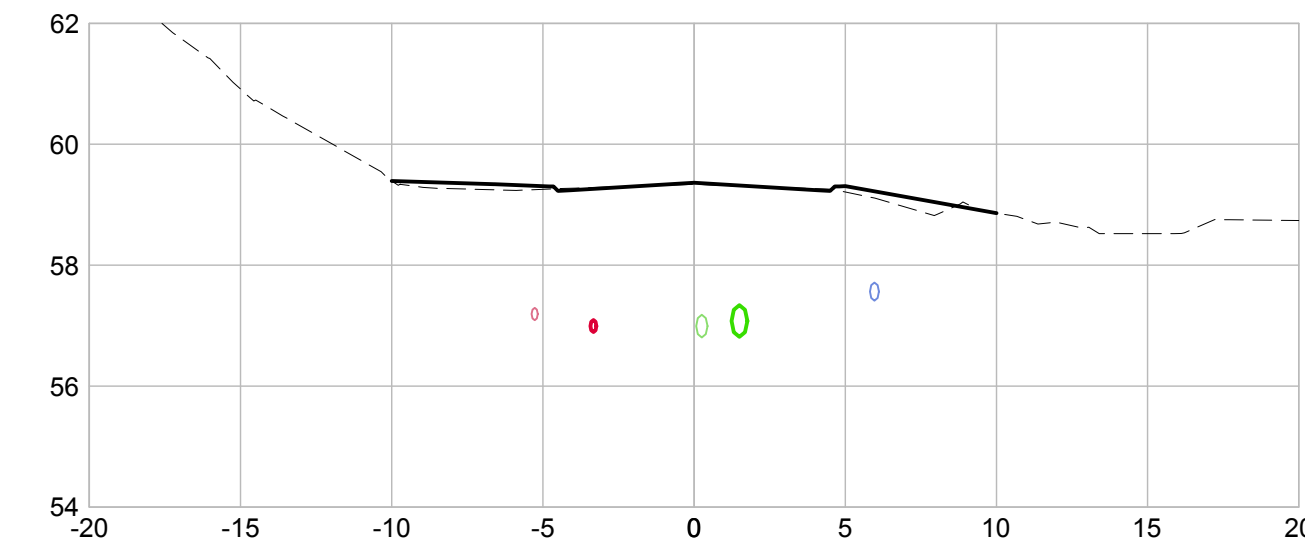
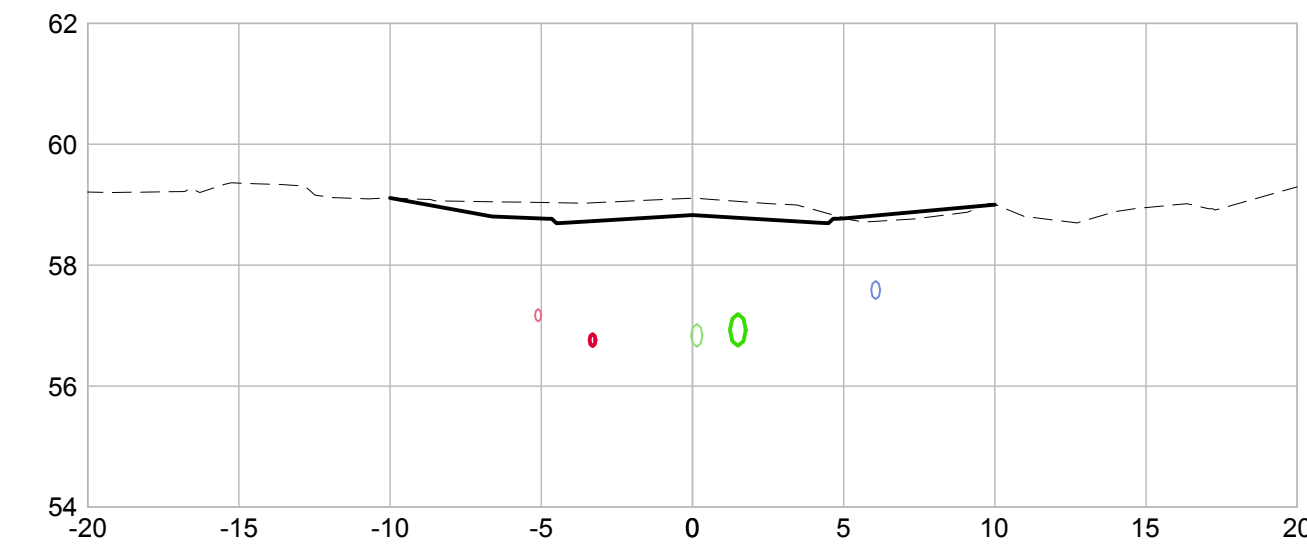
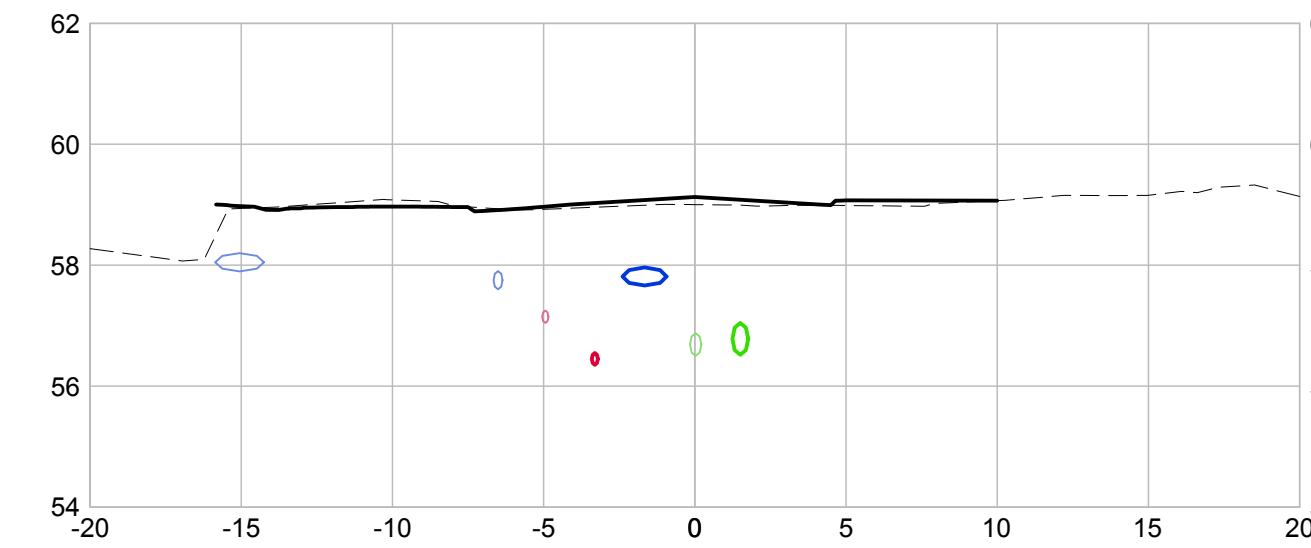
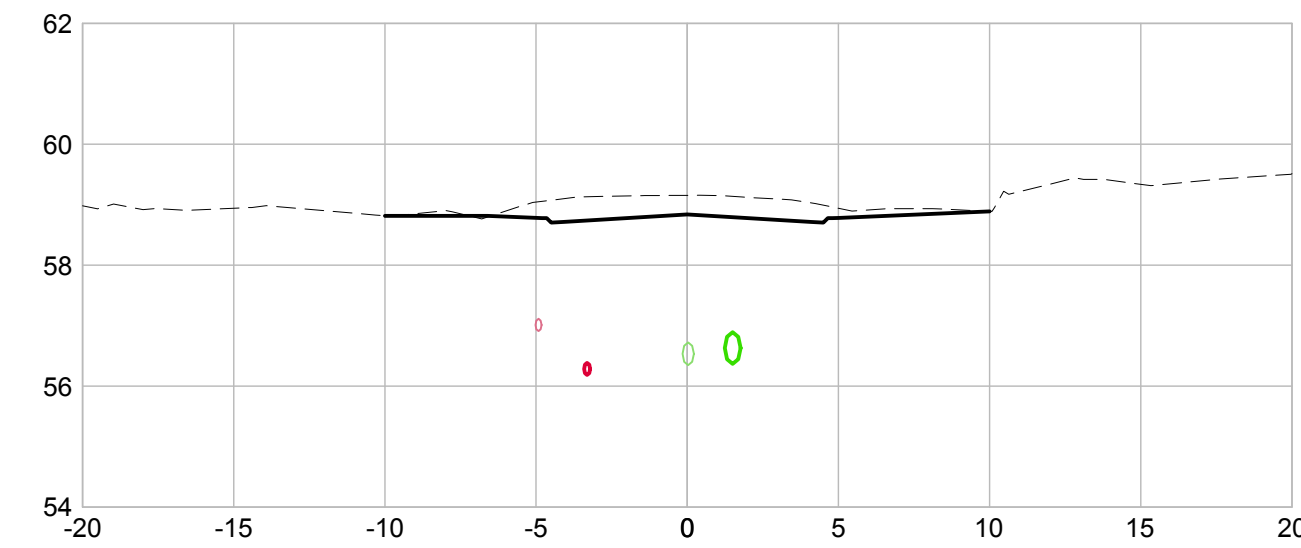
THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS

CITY OF TERRACE
 5003 GRAHAM AVENUE TERRACE, BC V8G 1B3
4800-4900 GRAHAM RECONSTRUCTION SECTIONS
 4800 - 4900 GRAHAM AVE
 TERRACE, BC

Drawing No.
C-903
 Project Number
 2321-02168-00
 Rev.
 PD

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

DATE: 2023-02-23 17:12 FILE: X:\232102100\02168-00 Design Services\4800-4900 Graham Ave Reconstruction\10.0 Drawings\10.3 Engineering\10.3.1 Sheets\C-900.dwg



Rev	Date	Description	Drawn	Design	App'd
PD	2023-02-24	ISSUED FOR INFORMATION	JMD	JMD	KS
PC	2023-02-16	ISSUED FOR 95% REVIEW	JMD	JMD	KS
PB	2023-01-26	ISSUED FOR 70% REVIEW	JMD	JMD	KS
PA	2022-12-22	ISSUED FOR 30% REVIEW	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF MCELHANEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF MCELHANEY. MCELHANEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. MCELHANEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT MCELHANEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. MCELHANEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V8G 4S8
T 250 635 7163

PRELIMINARY
NOT FOR CONSTRUCTION

THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION SECTIONS

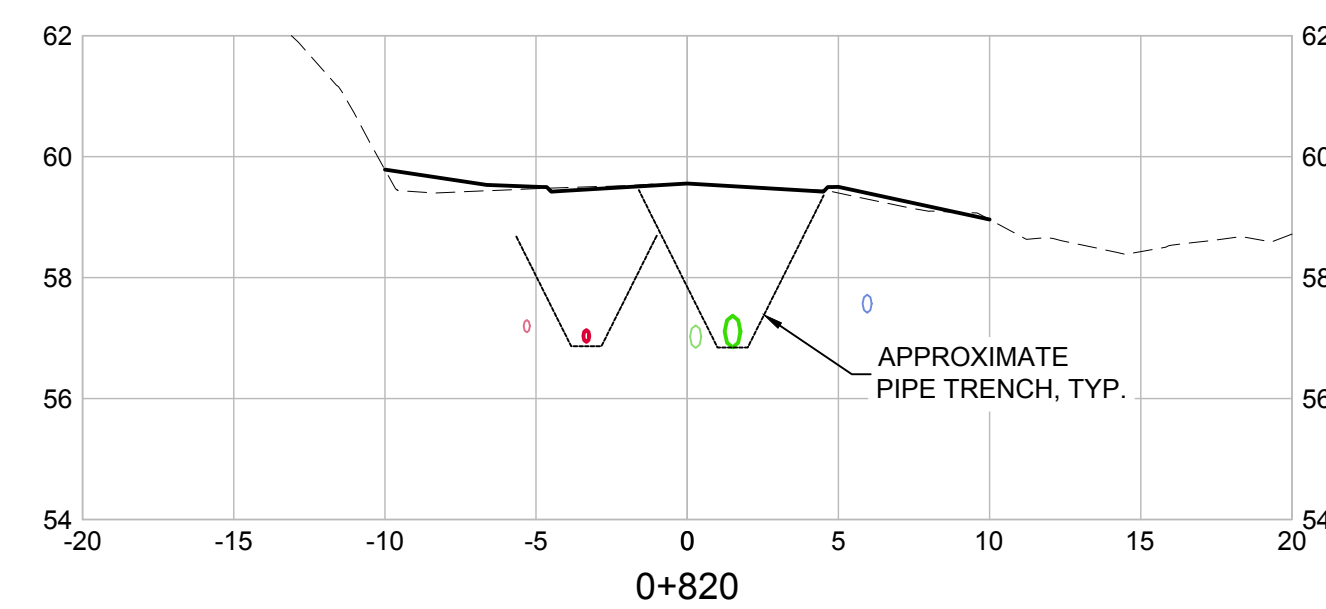
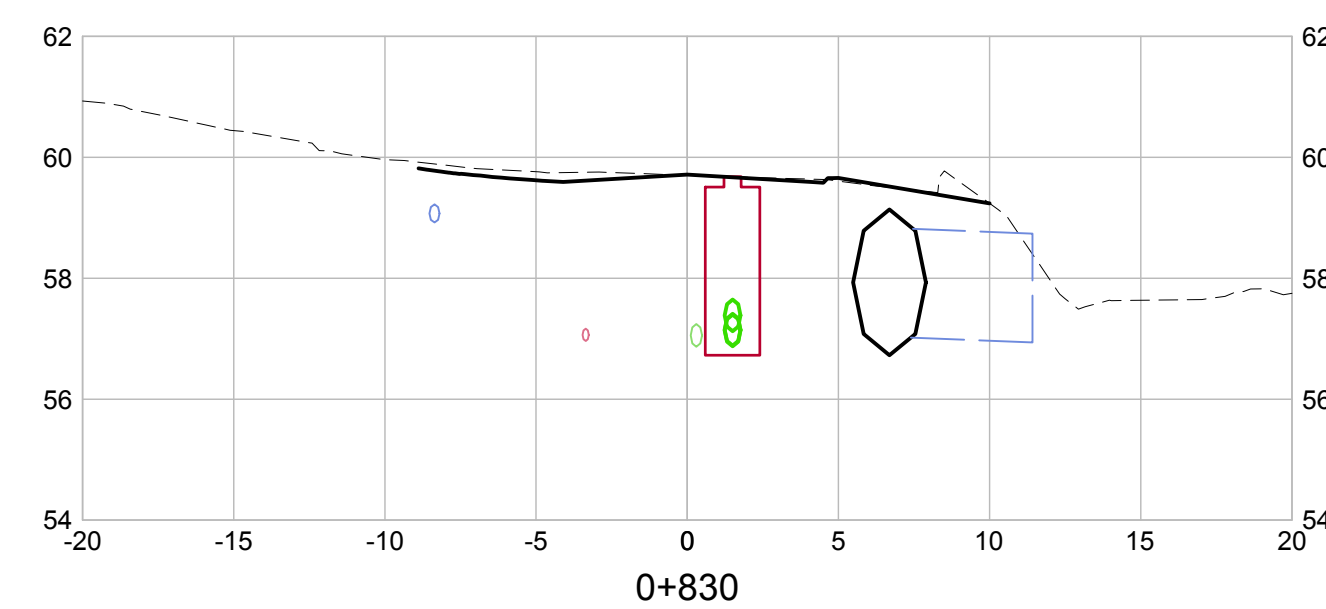
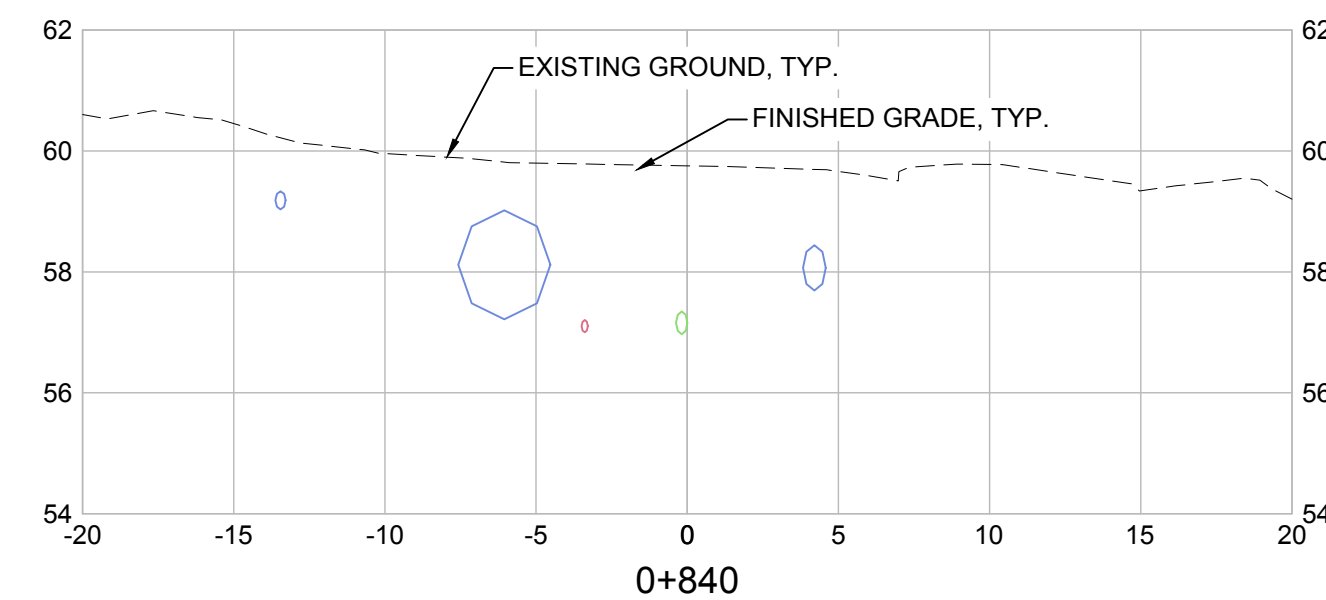
4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-904

Project Number
2321-02168-00

Rev.
PD

DESTROY ALL PRINTS BEARING PREVIOUS REVISION



Rev	Date	Description	Drawn	Design	App'd
PD	2023-02-24	ISSUED FOR INFORMATION	JMD	JMD	KS
PC	2023-02-16	ISSUED FOR 95% REVIEW	JMD	JMD	KS
PB	2023-01-26	ISSUED FOR 70% REVIEW	JMD	JMD	KS
PA	2022-12-22	ISSUED FOR 30% REVIEW	JMD	JMD	KS

THIS DRAWING AND DESIGN IS THE PROPERTY OF MCELHANEY AND SHALL NOT BE USED, REUSED OR REPRODUCED WITHOUT THE CONSENT OF MCELHANEY. MCELHANEY WILL NOT BE HELD RESPONSIBLE FOR THE IMPROPER OR UNAUTHORIZED USE OF THIS DRAWING AND DESIGN.

THIS DRAWING AND DESIGN HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES AT THE TIME OF PREPARATION. MCELHANEY, ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS WILL NOT BE LIABLE FOR ANY LOSSES OR OTHER CONSEQUENCES RESULTING FROM THE USE OR RELIANCE UPON, OR ANY CHANGES MADE TO, THIS DRAWING, BY ANY THIRD PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, WITHOUT MCELHANEY'S PRIOR WRITTEN CONSENT.

INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. MCELHANEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

ORIGINAL DWG SIZE: ANSI D (22" x 34")

0 H1:250 10
0 V1:125 5

McElhanney

Suite 1
5008 Pohle Avenue
Terrace BC
Canada V6G 4S8
T 250 635 7163

PRELIMINARY
NOT FOR CONSTRUCTION

THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS

CITY OF TERRACE
5003 GRAHAM AVENUE TERRACE, BC V8G 1B3

4800-4900 GRAHAM RECONSTRUCTION SECTIONS

4800 - 4900 GRAHAM AVE
TERRACE, BC

Drawing No.
C-905

Project Number
2321-02168-00

Rev.
PD