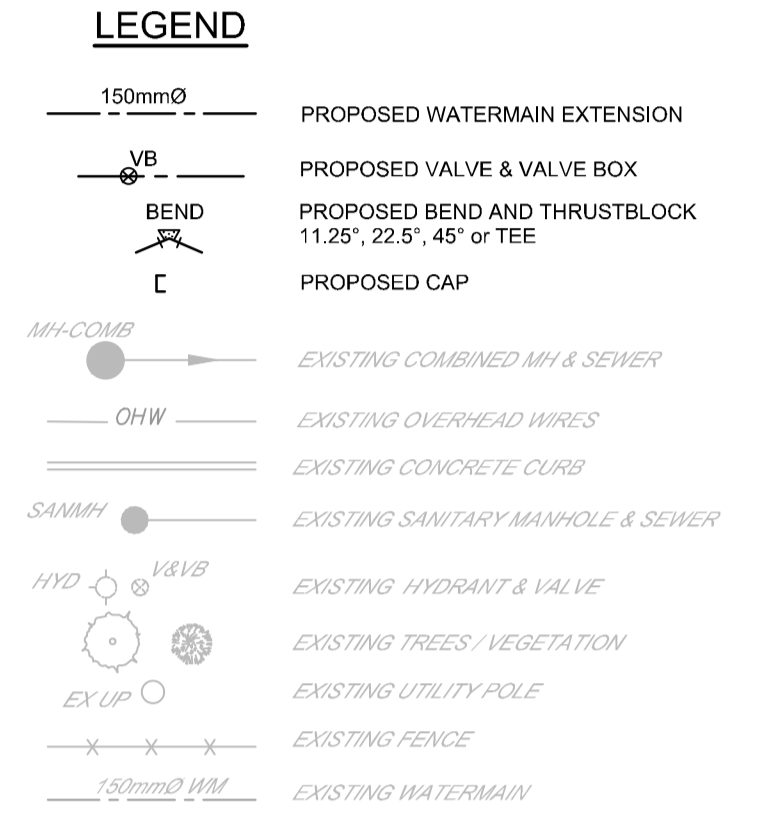
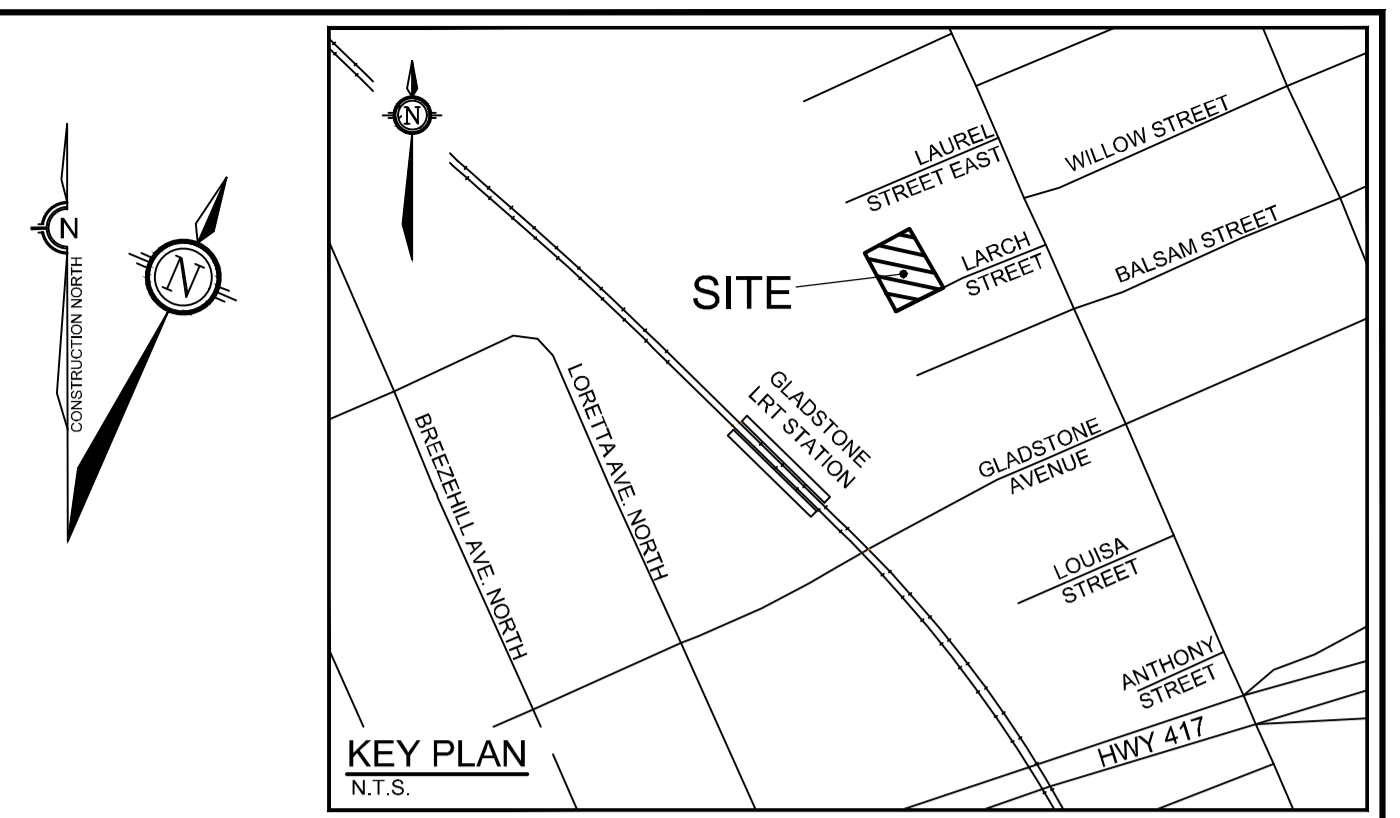


LARCH STREET



BENCHMARK INFO:

ALL ELEVATIONS ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM THE CITY OF OTTAWA VERTICAL CONTROL MONUMENT No. 2016-0357 HAVING AN ELEVATION OF 60.088 METRES. BEARINGS ARE MTM GRID AND ARE REFERRED TO THE SOUTHERLY LIMIT OF LARCH STREET, HAVING A BEARING OF N 85° 23' 30" E AS SHOWN ON A SURVEYOR'S REAL PROPERTY REPORT BY ANNIS, O'SULLIVAN, VOLLEBECK DATED NOVEMBER 2, 2017. THE EXISTING GRADES SHOWN ON THE PLANS ARE TAKEN DIRECTLY FROM SURVEYORS REAL PROPERTY REPORT PLAN (Ref. # 20-10-126-00), PREPARED BY J.D.BARNES LIMITED SIGNED AND DATED OCTOBER 22, 2020. SURROUNDING BACKGROUND TOPO INFORMATION BEYOND THE LIMITS OF THE SITE SURVEY ARE FROM CITY OF OTTAWA MAPPING AND UCC PLANS SHOWING CONTEXT ONLY.

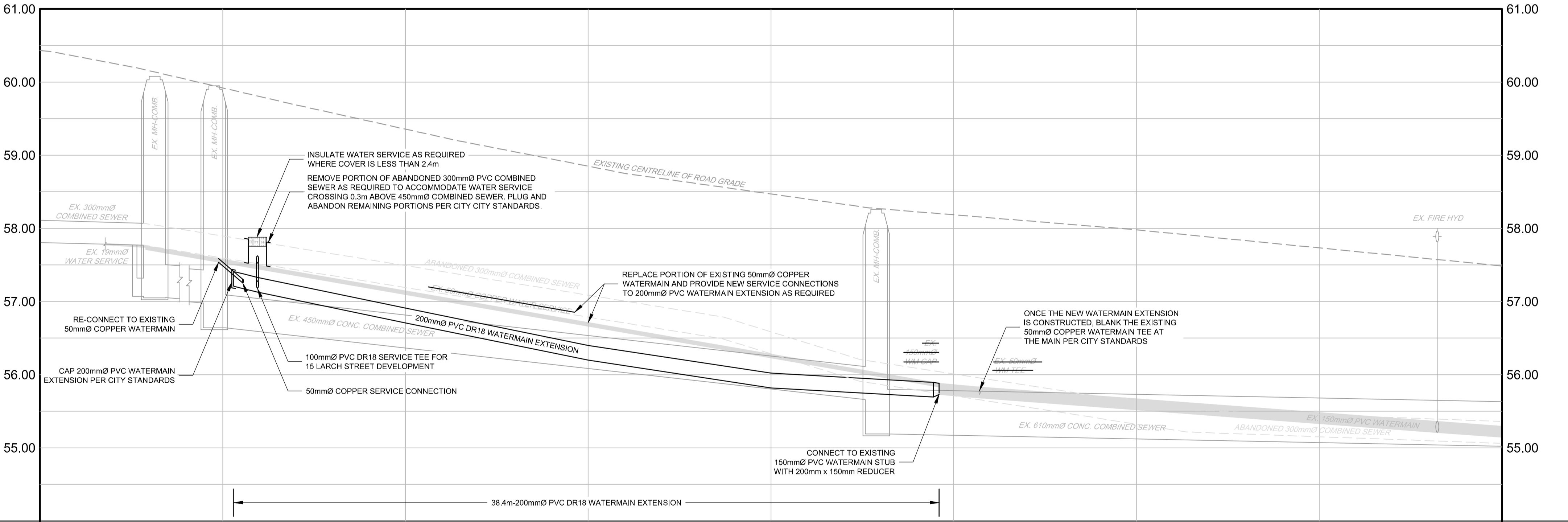
GENERAL NOTES:

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF MUNICIPAL AUTHORITIES.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL INVESTIGATION REPORT (NUMBER PG6071-1, REV. 1), DATED FEBRUARY 11, 2022, PREPARED BY PATERSON GROUP INC., FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO MECHANICAL PLAN FOR ROOF DRAIN INFORMATION.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACED AREAS AND DIMENSIONS.
- REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-001) PREPARED BY NOVATECH.
- SAW CUT AND KEYGRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE-IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).

WATERMAIN NOTES:

- SUPPLY AND CONSTRUCT ALL WATERMAIN AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS - ALL CURRENT VERSIONS AND 'AS AMENDED'.
- SPECIFICATIONS:

| ITEM | SPEC. No. | REFERENCE |
|--|------------------------------|----------------|
| WATERMAIN TRENCHING | W17 | CITY OF OTTAWA |
| THERMAL INSULATION IN SHALLOW TRENCHES | W22 | CITY OF OTTAWA |
| THERMAL INSULATION BY OPEN STRUCTURES | W23 | CITY OF OTTAWA |
| WATERMAIN CROSSING BELOW SEWERS | W25 | CITY OF OTTAWA |
| WATERMAIN MATERIAL | PVC DR 18 (100mm AND LARGER) | |
- EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS. EXCAVATION, INSTALLATION OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 0.5m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS, UNLESS OTHERWISE INDICATED.



| EXISTING GROUND ELEVATION | TOP OF WATERMAIN ELEVATION | COMBINED SEWER INVERTS | DESCRIPTION | CHAINAGE | EXISTING GROUND ELEVATION | TOP OF WATERMAIN ELEVATION | COMBINED SEWER INVERTS | DESCRIPTION | CHAINAGE |
|---------------------------|----------------------------|--------------------------|--|----------|---------------------------|----------------------------|------------------------|--|----------|
| 58.42 | EX. 19mm SERVICE | EX. 300mm COMBINED SEWER | RE-CONNECT TO EXISTING 50mm COPPER WATERMAIN | 1+000 | 58.42 | 57.81 | 57.77 | EX. 300mm COMBINED SEWER | 1+000 |
| 58.92 | 57.81 | 57.77 | INSULATE WATER SERVICE AS REQUIRED WHERE COVER IS LESS THAN 2.4m | 1+000 | 58.92 | 57.81 | 57.77 | EXISTING 450mm CONC. COMBINED SEWER @ 2.3% | 1+000 |
| 59.36 | 57.41 | 57.38 | REMOVE PORTION OF ABANDONED 300mm PVC COMBINED SEWER AS REQUIRED TO ACCOMMODATE WATER SERVICE CROSSING 0.3m ABOVE 450mm COMBINED SEWER. PLUG AND ABANDON REMAINING PORTIONS PER CITY CITY STANDARDS. | 1+020 | 59.36 | 57.41 | 57.38 | EX. 450mm CONCRETE COMBINED SEWER @ 2.6% | 1+020 |
| 59.35 | 56.91 | 56.64 | REPLACE PORTION OF EXISTING 50mm COPPER WATERMAIN AND PROVIDE NEW SERVICE CONNECTIONS TO 200mm PVC WATERMAIN EXTENSION AS REQUIRED | 1+030 | 59.35 | 56.91 | 56.64 | EX. 50mm COPPER WATER SERVICE | 1+030 |
| 59.47 | 56.02 | 55.88 | 38.4m-200mm PVC DR18 WATERMAIN EXTENSION | 1+040 | 59.47 | 56.02 | 55.88 | 200mm PVC DR18 WATERMAIN EXTENSION | 1+040 |
| 59.26 | 55.88 | 55.82 | CONNECT TO EXISTING 150mm PVC WATERMAIN STUB WITH 200mm x 150mm REDUCER | 1+050 | 59.26 | 55.88 | 55.82 | EX. 150mm PVC WATERMAIN | 1+050 |
| 57.88 | 55.82 | 55.82 | ONCE THE NEW WATERMAIN EXTENSION IS CONSTRUCTED, BLANK THE EXISTING 50mm COPPER WATERMAIN TEE AT THE MAIN PER CITY STANDARDS | 1+060 | 57.88 | 55.82 | 55.82 | EX. 50mm COPPER WATERMAIN TEE | 1+060 |
| 57.73 | 55.82 | 55.82 | 50mm COPPER SERVICE CONNECTION | 1+070 | 57.73 | 55.82 | 55.82 | EX. 610mm CONC. COMBINED SEWER @ 0.5% | 1+070 |
| 57.42 | 55.82 | 55.82 | 100mm PVC DR18 SERVICE TEE FOR 15 LARCH STREET DEVELOPMENT | 1+080 | 57.42 | 55.82 | 55.82 | EX. 610mm CONC. COMBINED SEWER @ 0.5% | 1+080 |

NOTE: THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

OWNER INFORMATION
15-19 LARCH ST. INC.
359 KENT STREET, SUITE 503
OTTAWA, ONTARIO, K2P 0R6
ROBERTO CAMPAGNA
PHONE: (613) 851-7823
roberto@rochomes.ca

| No. | REVISION | DATE | BY |
|-----|-------------------------------|-----------|----|
| 1 | ISSUED FOR SITE PLAN APPROVAL | FEB 17/22 | MS |

SCALE

1:150

0 2 4 6

1:75

0 1 2 3

DESIGN SM

CHECKED MS

DRAWN DWM / SM

CHECKED SM

APPROVED MS

FOR REVIEW ONLY

PROFESSIONAL ENGINEER

M. SAVIC

100102861

2/17/22

PROVINCE OF ONTARIO

NOVATECH

Engineers, Planners & Landscape Architects

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Ottawa, Ontario, Canada K2M 1P6

Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
15 LARCH STREET

DRAWING NAME
WATERMAIN EXTENSION
PLAN AND PROFILE
(1+000 TO 1+080 & LARCH STREET)

PROJECT No. 120251

REV #1

DRAWING No. 120251-PR1

PLAN #1

D07-12-22-