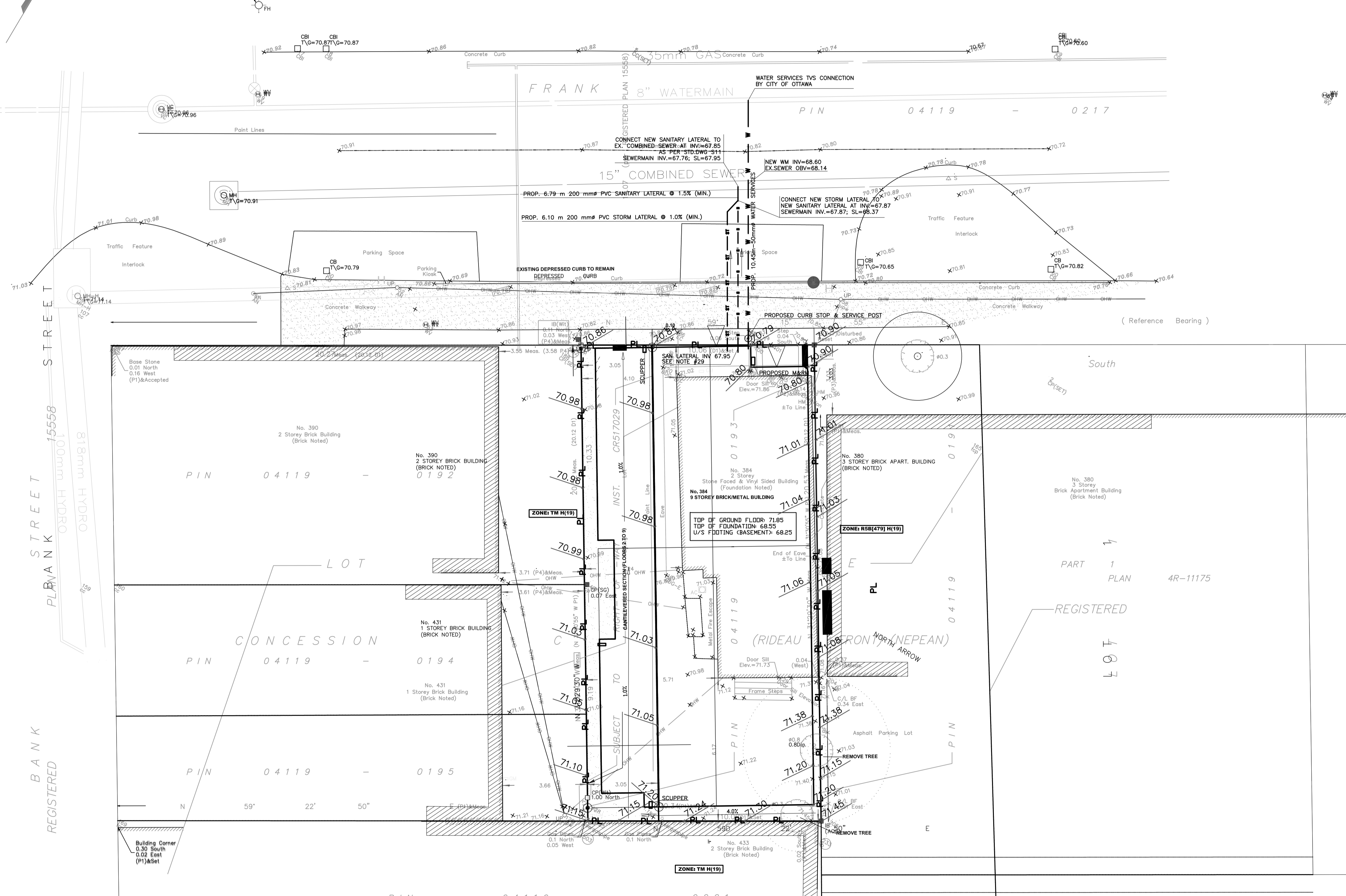


Site Benchmark
Fire Hydrant
Top of Spindle
Elevation = 72.03



384 Frank Street: PROPOSED 50mm WATERMAIN TABLE (2.4 m COVER)

STATION	SURFACE ELEVATION	TOP OF WM ELEVATION	TOP OF MAIN	INVERT OF MAIN	DESCRIPTION
0+0.00	70.79	68.39			CONNECTION TO THE BUILDING
0+2.75	70.87	68.47		69.2	CROSSING UNDER HYDRO DUCT
0+6.90	70.8	68.4	68.14		CROSSING ABOVE COMBINED SEWER
0+10.45	70.8	68.4	TBC		CONNECTION TO 203 mm WATERMAIN

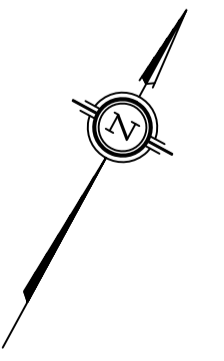
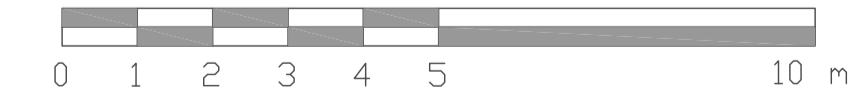
NOTE: CONTRACTOR TO CONFIRM BY EXCAVATING

NOTES:

- EXISTING SERVICES AND UTILITIES SHOWN ON THIS DRAWING WERE TAKEN FROM THE BEST AVAILABLE RECORDS. CONTRACTOR IS REQUESTED TO CHECK IN THE FIELD FOR LOCATION AND ELEVATION OF PIPES AND CHECK WITH AUTHORITIES AND UTILITIES TO HIS SATISFACTION BEFORE DIGGING.
- CONTRACTOR IS ADVISED TO COLLECT INFORMATION ON SOIL CONDITIONS AS DEEMED NECESSARY.
- PROPOSED SITING DETAILS FOR THIS PROPOSED BUILDING WERE TAKEN FROM THE SITE PLAN PREPARED BY 'SDMA PRO DESIGNS'
- EXISTING HORIZONTAL AND VERTICAL SURVEY DATA SHOWN ON THIS PLAN INCLUDING SITE BENCHMARK, ROAD ELEVATION, SEWER INVERT ELEVATIONS AND THE TOPOGRAPHICAL INFORMATION OF THE LOT SHOWN WERE PROVIDED BY 'ANNIS/D'SULLIVAN & VOLLEBEKK' AND ARCH-NOVA DESIGN INC. IS NOT RESPONSIBLE FOR THE SURVEY PROVIDED.
- ALL GRADING SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA.
- ALL GRADES SHOWN ARE METRIC. EXISTING AND PROPOSED GRADES SHOWN ON THIS DRAWING ARE BASED ON A GEODETIC BENCHMARK PROVIDED BY 'SDMA PRO DESIGNS.' AS SHOWN ON THEIR SITE PLAN.
- ALL WILL BE CONSTRUCTED TO CITY OF OTTAWA'S LATEST REVISED STANDARDS ON APPROVAL BY THE CITY. USE SADDLE CONNECTIONS WITH CORP STOPS FOR THE 50 MM WATER SERVICES.
- CONSTRUCT ALL SANITARY PIPES IN ACCORDANCE WITH CITY OF OTTAWA'S LATEST REVISED STANDARDS OTHERWISE AS PER OPSD AND OPSD SPECIFICATIONS.
- ALL WORKS CONSTRUCTED BY THE CONTRACTOR SHALL MEET CITY OF OTTAWA'S CURRENT ENGINEERS' STANDARDS AND PER CITY'S REQUIREMENTS.
- THE CONTRACTOR SHALL CONSTRUCT AND ENSURE THAT THE 50 mm WATER SERVICES ON THIS LOT SHALL HAVE A MINIMUM OF 2.4m OF GROUND COVER; OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY SPECIFICATIONS W 21, W 22 AND W 23. THE WATER SERVICE INSTALLATION SHALL BE STEEL PIPE AND CONSTRUCTED IN ACCORDANCE WITH STD DWG W26.
- IF WATER SERVICE IS LESS THAN 0.3 m FROM SEWER, MANHOLE OR CATCH BASIN, CONTRACTOR IS REQUESTED TO INSULATE BETWEEN THEM WITH S/M RIGID INSULATION (AS PER CITY DETAIL W-23).
- ALL WATERMAIN SERVICE AND FITTINGS SHALL CONFORM TO APPROVED AWWA AND OR CSA STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS TO COMPLETE THE WORKS.
- WATER SERVICES CONNECTION ON FRANK STREET SHALL BE DONE BY THE CITY. EXCAVATION, BACKFILLING AND REINSTATEMENTS BY CONTRACTOR.
- THE OWNER AND/OR HIS CONTRACTOR SHALL CONTACT ALL THE UTILITY COMPANIES REGARDING RELOCATION REQUIREMENTS FOR ANY EXISTING OVERHEAD UTILITY POLE.
- WATER SERVICE AND WATERMAIN TRENCH DETAILS AS PER CITY W-17 DETAIL.
- SANITARY SERVICES LATERAL PROPOSED SHALL BE PVC-SDR28 OR EQUIVALENT AND CONNECTION TO THE EXISTING SEWER SHALL BE AS PER CITY OF OTTAWA DWG. S11. SEWER TRENCH DETAILS AS PER STD DWG S6 & S7. CONNECT TO CITY SEWER PIPES USING SADDLE SEWER TRENCH DETAILS AS PER STD DWG S6 & S7. SADDLE CONNECTIONS (MAX 300 MM), MANUFACTURED 'T' CONNECTIONS OR FOR LARGE DIAMETERS NEW MANHOLES.
- SANITARY AND STORM SEWER SERVICES BENDS AND RISERS USED MUST BE CONSTRUCTED TO THE CITY'S SATISFACTION.
- DETAILS OF THE EXISTING SEWERS AND WATERMAIN SHOWN ON FRANK STREET FROM THE CITY MAY NOT BE CURRENT. THE CONTRACTOR SHALL REFER TO THE CITY'S SEWER AND WATERMAIN DRAWINGS FOR DETAILS. CONTRACTOR IS ADVISED TO EXCAVATE AND INVESTIGATE THE SEWER ELEVATIONS IN FRONT OF THIS PROPERTY FIRST TO ENSURE THAT 1.5% (MIN) PIPE SLOPE OF THE SANITARY LATERAL CAN BE ACHIEVED USING THE PROPOSED UNDERSIDE OF CONCRETE FOOTINGS ELEVATIONS. IF 1.5% (MIN) SLOPE IS NOT POSSIBLE FROM THE HOUSE TO THE SEWER THEN THE CONTRACTOR SHOULD INFORM THE OWNER'S PROJECT MANAGER AND THE CITY ACCORDINGLY FOR FURTHER DIRECTION.
- FOR DEVELOPMENT OF THIS LOT, THE CONTRACTOR MUST CONSTRUCT THE UNDERGROUND SANITARY AND WATER SERVICES FROM SEWER AND WATERMAIN TO THE PROPERTY FIRSTLY, PRIOR TO HOUSE CONCRETE FOUNDATION POURING.
- IF THE DEPTH FROM UNDERSIDE OF HOUSE CONCRETE FOOTING TO PROPOSED FINISHED GROUND ELEVATION IS LESS THAN 1.8 M IT IS RECOMMENDED THAT INSULATION (500 mm TICK) MINIMUM BE INSTALLED AT THE BUILDING FOOTING AND FOUNDATION OF THE HOUSE TO PROVIDE SUFFICIENT FROST COVER FOR THE FOUNDATION STRUCTURES. THE FOOTINGS WILL NEED TO BE REVIEWED FOR INSULATION BY THE OWNER'S SOILS ENGINEER. EXACT INSULATION REQUIREMENTS SHALL BE AS PER ARCHITECT'S INSULATION DETAILS AS SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND CONFIRMED BY THE OWNER'S SITE SOILS ENGINEER.
- CONCRETE BARRIER CURB AND DEPRESSED CURB DETAILS AS PER CITY OF OTTAWA STANDARDS (DWG # SC-2 AND SC-6, FEB. 2002). CONCRETE CURB AND CONCRETE SIDEWALK CONSTRUCTION AND REINSTATEMENT SC-2 AND SC-6, FEB. 2002). CONCRETE CURB AND CONCRETE SIDEWALK CONSTRUCTION AND REINSTATEMENT SHALL BE DONE TO THE SATISFACTION OF THE CITY OF OTTAWA, AND IN ACCORDANCE WITH THE LATEST REVISED CITY ENGINEERING STANDARDS.
- WATER SERVICE LINES AS PER STD.DWG W26.
- BLANK WATER SERVICES AT CITY WATERMAIN BY CITY FORCES.
- EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF CITY'S SEWER OPERATIONS.
- BACKWATER VALVES WILL BE USED ON SERVICES PER SC14, SC14.1 AND SC14.2
- ASPHALT AND GRAVEL SURFACES TO BE CLEARED AND REPLACED WITH SOFT LANDSCAPING AS SHOWN ON ARCHITECTURAL AND LANDSCAPING PLANS.
- ALL SERVICE LATERALS UNDER THE BUILDING FOOTINGS TO BE SLEEVED IF THE PIPE IS LESS THAN 0.3 M BELOW THE FOOTING.
- BASEMENT AREA SERVICES BY SANITARY PUMPING SYSTEM. CONNECTION ELEVATION IS ABOVE THE BASEMENT FLOOR ELEVATION.

LEGEND

- 56.63 PROPOSED ELEVATION
- 57.87 EXISTING ELEVATION
- U/S FOOTING PROPOSED UNDERSIDE OF CONCRETE FOOTING ELEVATION
- W PROPOSED 50mm WATER SERVICES COPPER TYPE "K"
- - - PROPOSED 150mm PVC SANITARY LATERAL SERVICES @ 1% (MIN.) SLOPE
- ST PROPOSED 200mm PVC STORM SEWER
- P EXISTING UNDERGROUND POWER LINE/CONDUIT
- ⊗ EXISTING CATCH BASIN
- ⊗ EXISTING STORM MANHOLE
- ⊗ EXISTING SANITARY MANHOLE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- PROPOSED CURB STOP & SERVICE POST
- PROPOSED METER & REMOTE METER
- ROOF DRAIN
- PL PROPERTY LINE
- D4 DRAIN



Drawn by: Z.M.
Checked by: Z.M.
Approved by: Z.M.
ARCH-NOVA Design Inc. 45 Banner Road NEPEAN ON K2H 8X5 613-629-5722 contact@archnova.ca

Rev 1 Date: January 2018 Description: City comments

Rev 2 Date: Description: Location: 384 FRANK STREET, OTTAWA, ON

Rev 3 Date: Description: Owner: 384 Frank Street Ltd. 433-1500 Bank Street, Ottawa, ON, K1H 1B8 Project No: CW-03-17 City of Ottawa File No:

APPROVED REFUSED
DATE: February 2018
Drawing No: W-01
Scale: 1:100

Don Henweyer, M.C.P. R.P.P., Manager, Development Review Urban Services

18.02.2018
City of Ottawa File No.: 007-12-13-0021