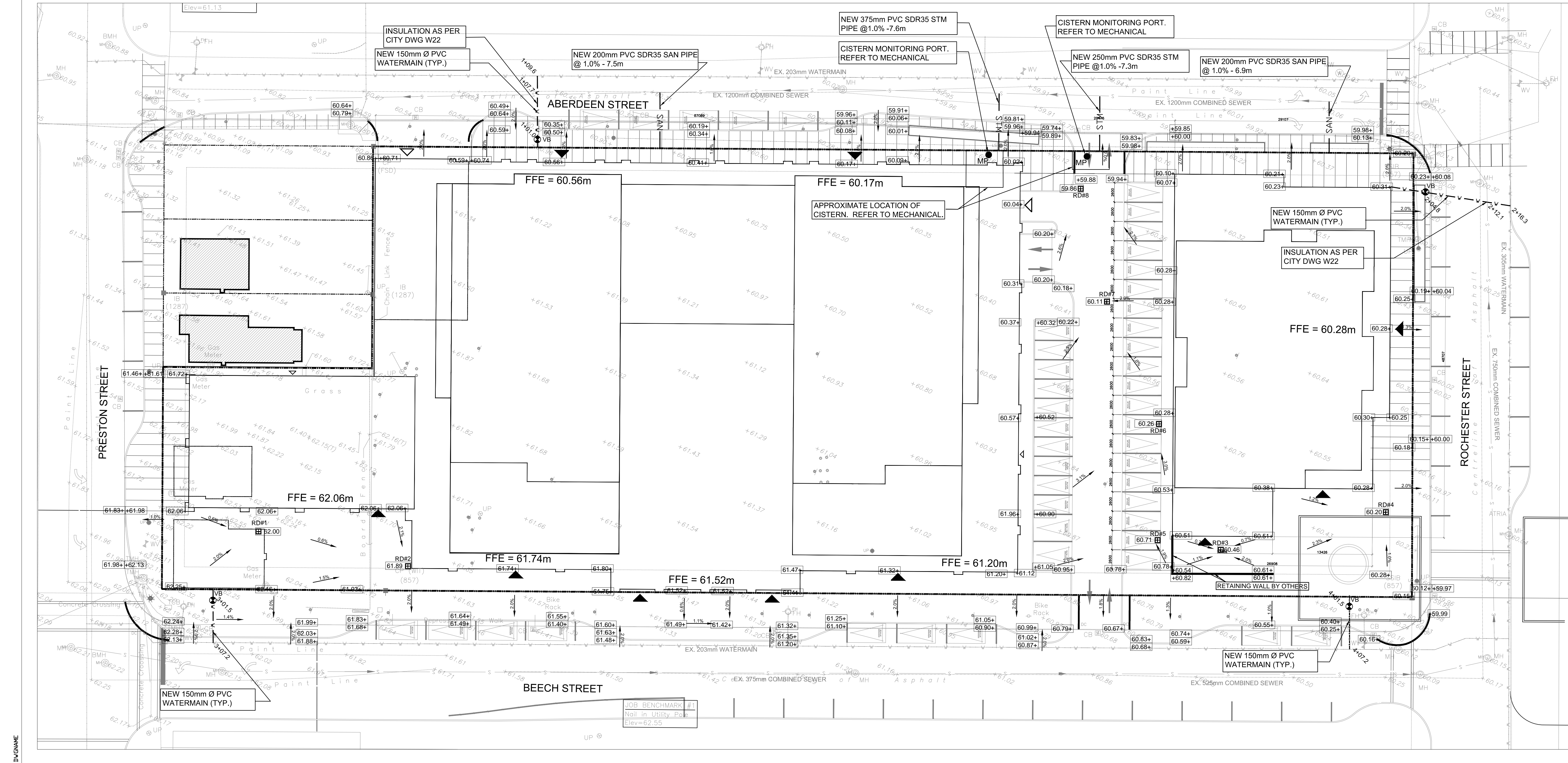


PRIVATE WATERMAIN TABLE					
	STATION	DESCRIPTION	TOP OF PIPE ELEVATION	GROUND ELEVATION	COMMENTS
150mm PVC WATER SERVICE	1+00.0	BUILDING/PARKING GARAGE CONNECTION	58.19	60.59	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
	1+01.0	VALVE & VALVE BOX	58.17	60.57	VALVE AND VALVE BOX PER W24
	1+07.7	COMBINED SEWER CROSSING	59.04	60.48	WM CROSSES OVER COMBINED SEWER PER W25.2 AND INSULATION PER W22. TOP OF SEWER PIPE PIPE = 58.64
	1+09.6	CONNECTION TO 203mmØ WM.	58.04	60.44	CONNECT TO CITY SEWER AS PER W33
150mm PVC WATER SERVICE	2+00.0	BUILDING/PARKING GARAGE CONNECTION	57.91	60.31	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
	2+04.8	VALVE & VALVE BOX	57.82	60.22	VALVE AND VALVE BOX PER W24
	2+09.0	COMBINED SEWER CROSSING	58.74	60.28	WM CROSSES OVER COMBINED SEWER PER W25.2 AND INSULATION PER W22. TOP OF SEWER PIPE PIPE = 58.34
	2+13.1	CONNECTION TO 305mmØ WM.	57.80	60.20	CONNECT TO CITY SEWER AS PER W33
150mm PVC WATER SERVICE	3+00.0	BUILDING/PARKING GARAGE CONNECTION	59.82	62.22	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
	3+01.5	VALVE & VALVE BOX	59.79	62.19	VALVE AND VALVE BOX PER W24
	3+16.1	CONNECTION TO 203mmØ WM.	59.68	62.08	CONNECT TO CITY SEWER AS PER W33
	4+00.0	BUILDING/PARKING GARAGE CONNECTION	57.96	60.36	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
150mm PVC WATER SERVICE	4+02.7	VALVE & VALVE BOX	57.94	60.34	VALVE AND VALVE BOX PER W24
	4+18.1	CONNECTION TO 203mmØ WM.	57.88	60.28	CONNECT TO CITY SEWER AS PER W33

STORM INVERT SCHEDULE				
STRUCTURE		TOP	INVERT	COMMENTS
PHASE 1 375mm P.V.C	RD#1	62.00	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#2	61.89	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#3	60.46	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#4	60.20	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#5	60.71	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#6	60.26	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#7	60.11	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
	RD#8	59.86	SEE MECHANICAL	ROOF DRAIN: SEE MECHANICAL
PHASE 2 250mm P.V.C	STORM CISTERN	60.01	58.17	STM CISTERN OBSERVATION WELL: SEE MECHANICAL FOR DETAILS
	BUILDING/PARKING GARAGE CONNECTION	59.99	58.17	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
	CONNECTION TO CITY SEWER	59.03	58.09	CONNECT TO 1200mm COMBINED SEWER AS PER CITY DWG S11. CITY SEWER INVERT 57.37.
	STORM CISTERN	59.86	58.31	STM CISTERN OBSERVATION WELL: SEE MECHANICAL FOR DETAILS
	BUILDING/PARKING GARAGE CONNECTION	59.85	58.31	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL
	CONNECTION TO CITY SEWER	59.91	58.24	CONNECT TO 1200mm COMBINED SEWER AS PER CITY DWG S11. CITY SEWER INVERT 57.39.

- NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS BY HOBIN ARCHITURE.
 - ALL WATERMAINS TO BE INSULATED IF LESS THAN 2.4 METERS COVER AS PER CITY OF OTTAWA STANDARD DETAIL W22. AT ANY PROXIMITY OF SEWER MANHOLES, INSULATE WATERMAIN AS PER CITY DETAIL W23.
 - SEWERS ARE TO MAINTAIN 500mm BARRELL TO BARRELL CLEARANCE ABOVE AND 250mm BARRELL TO BARRELL CLEARANCE BELOW WATERMAINS AT ALL CROSSINGS (AS PER CITY DWGS W25 AND W25.2). IF 22" BENOS ARE USED ON THE WATER MAIN, THEY MUST BE ONE METER AWAY FROM THE SEWER.
 - THRUST BLOCKS TO BE AS PER CITY OF OTTAWA STANDARD DRAWINGS W25.3 AND W25.4. RESTRAINING AND RETAINING RINGS TO BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DETAILS W25.5 AND W25.6.
 - TEMPORARY SUPPORT OF EXISTING UNDERGROUND UTILITIES IN ACCORDANCE WITH CITY STANDARD DETAIL W28.
 - WATERMAIN TRENCH AND BEDDING TO BE INSTALLED AS PER CITY DETAIL W17.
 - TAPPING VALVE SYSTEM CONNECTION TO CITY WATERMAIN BY CITY FORCES. EXCAVATION, BACKFILLING AND REINSTATEMENT BY CONTRACTOR.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING U/G AND OVERHEAD UTILITIES. VARIOUS UTILITIES CONCERNED TO BE GIVEN REQUIRED ADVANCE NOTICE PRIOR TO ANY DIGGING FOR STAKE OUT. THE OWNER AND CONSULTANT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF EXISTING UTILITIES AS INDICATED ON THIS DRAWING.
 - UTILITY INFORMATION WAS VERIFIED IN THE FIELD WHERE POSSIBLE. INDIVIDUAL COMPANIES SHOULD BE CONTACTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT FOR CONFIRMATION OF EXISTENCE AND LOCATION OF UTILITIES.
 - WATER SERVICE, STORM SEWERS AND APPURTENANCE TO COMPLY WITH THE REQUIREMENTS OF THE LATEST REVISION OF THE ONTARIO PLUMBING CODE AND APPLICABLE CITY OF OTTAWA ENGINEERING STANDARDS.
 - ALL SANITARY SEWERS TO BE INSULATED IF LESS THAN 2.0 METERS COVER. ALL STORM SEWERS TO BE INSULATED IF LESS THAN 2.0 METERS COVER. INSULATE AS PER CITY OF OTTAWA STANDARD DETAIL W22. ALL BUILDING CONNECTIONS TO HAVE SUFFICIENT COVER OR INSULATION IS REQUIRED.
 - CONTRACTOR SHALL CONTACT THE CONSULTANT, R.V. ANDERSON PRIOR TO BACKFILLING OF THE WATER SERVICE CONNECTIONS FOR THE PROPOSED LINES AND TIE-INS TO EXISTING LINES FOR AS-BUILT LOCATION RECORDS AND INSPECTION.
 - ANY ASPHALT CUT SHALL BE SAW CUT ON BOTH SIDES OF THE TRENCH FOR THE ENTIRE LENGTH OF THE EXCAVATION FOR PIPE INSTALLATIONS. REINSTATEMENT OF THE ROADS SHALL MATCH EXISTING OR MEET CITY STANDARD R10.
 - ANY CONCRETE CUT SHALL BE REMOVED AT EXPANSION JOINTS. IF NO JOINTS EXIST, THE CONCRETE SHALL BE SAW CUT ON BOTH SIDES OF THE TRENCH FOR THE ENTIRE LENGTH OF THE EXCAVATION FOR PIPE INSTALLATIONS. REINSTATEMENT SHALL MATCH EXISTING OR MEET CITY REQUIREMENTS.
 - PIPE BEDDING SHALL BE GRANULAR "A" AS PER CITY DETAIL S6, AND SHALL BE COMPACTED TO 95% SPD AND APPROVED SELECT NATIVE BACK FILL COMPACTED TO 95% SPD.
 - DRAWINGS TO BE READ IN CONJUNCTION WITH CONTRACT SPECIFICATIONS.
 - GRANULAR LAYERS BENEATH NEW ASPHALT SURFACES ON PROPERTY SHALL BE PLACED AT A THICKNESS NOT EXCEEDING 300mm. THE GRANULAR 'A' AND GRANULAR 'B' TYPE II IS TO BE COMPACTED TO A MINIMUM OF 100% SPMD USING SUITABLE VIBRATORY EQUIPMENT.
 - THE APPROVAL OF THIS PLAN DOES NOT EXEMPT THE OWNER'S BONDED CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING: ROAD CUT PERMITS, SEWER PERMITS, APPROACH APPROVAL PERMITS, RELOCATION OF SERVICES, COMMITTEE OF ADJUSTMENT, ENCROACHMENT AGREEMENTS, WATER PERMIT, ETC
 - THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. SPECIFICALLY, THE LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPS 410.07.01.16 AND 407.07.26. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
 - REFER TO LANDSCAPE DRAWINGS FOR DETAILS ON LANDSCAPING AND PLANTINGS.
 - SEWERS TO BE CONSTRUCTED AS PER CITY OF OTTAWA SPECIFICATIONS - SPECIAL PROVISION F-4100. ALL SEWER STRUCTURES AS PER F-4070, ALL WATER MAINS AS PER F-7010 AND ALL ASSOCIATED SPECIFICATIONS.
 - EROSION AND SEDIMENT CONTROL MEASURES (IN ACCORDANCE WITH THE REQUIREMENTS OF OPS 805 - NOVEMBER 2010 FOR TEMPORARY MEASURES) CONSISTING OF BOTH PERMANENT AND TEMPORARY MEASURES SHALL BE IMPLEMENTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO ENSURE THAT SEDIMENT IS CONTAINED WITHIN THE SITE. PERMANENT EROSION CONTROL MEASURES SHALL ENSURE THAT POTENTIAL LONG-TERM AND LOCALIZED EROSION PROBLEMS ARE DEALT WITH PRIOR TO THEIR OCCURRENCE. FILTER FABRIC SHALL BE INSTALLED UNDER THE FRAME OF ALL PROPOSED AND EXISTING CATCHBASINS AND STORM MANHOLES IMMEDIATELY ADJACENT TO ANY DISTURBED AREAS PRIOR TO CONSTRUCTION TO PREVENT SEDIMENT FROM ENTERING INTO THE STORM SEWER SYSTEM. THE FILTER FABRIC SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION ACTIVITIES AND SHALL NOT BE REMOVED UNTIL SUCH TIME AS THE LANDSCAPING HAS BEEN ESTABLISHED AND UPON AUTHORIZATION BY THE ENGINEER. LIGHT DUTY SEDIMENT FENCING SHALL ALSO BE PLACED AROUND THE PERIMETER OF THE SITE FOR THE DURATION OF THE CONSTRUCTION.
 - THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
 - CONNECTION OF THE WATER SERVICES TO THE CITY WATERMAIN BY CITY FORCES; EXCAVATION, BACKFILLING AND REINSTATEMENT BY CONTRACTOR.
 - REFER TO THE STORM WATER MANAGEMENT & SITE SERVICING REPORTS FROM R.V. ANDERSON DATED OCTOBER 21, 2019 FOR FURTHER DETAILS.
 - ROADWAY DESIGN TO BE COMPLETED BY OTHERS AT A LATER DATE.

SANITARY INVERT SCHEDULE				
	STRUCTURE	GROUND	INVERT	COMMENTS
PHASE 1 200mm PVC 200mm PVC	BUILDING/PARKING GARAGE CONNECTION	60.42	58.28	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL FOR MONITORING PORT IN PARKING GARAGE
	CONNECTION TO MAIN SEWER	60.30	58.20	CONNECT TO 1200mm COMBINED SEWER AS PER CITY DWG S11. CITY SEWER INVERT 57.31.
PHASE 2 200mm PVC 200mm PVC	BUILDING/PARKING GARAGE CONNECTION	60.16	58.41	CONNECTION TO BUILDING SERVICES: SEE MECHANICAL FOR MONITORING PORT IN PARKING GARAGE
	CONNECTION TO MAIN SEWER	60.06	58.34	CONNECT TO 1200mm COMBINED SEWER AS PER CITY DWG S11. CITY SEWER INVERT 57.44.



no.	date	revision
1	10/21/19	SITE PLAN APPROVAL

It is the responsibility of the appropriate contractor to check and verify all dimensions on site and report all errors and/or omissions to the architect.

All contractors must comply with all pertinent codes and by-laws.

Do not scale drawings.

This drawing may not be used for construction until signed.

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PROJECT/LOCATION:		450 ROCHESTER	
DRAWING TITLE:		C-01 SITE SERVICING AND GRADING	
DRAWN BY:	DATE:	SCALE:	PROJECT:
NR	10/21/19	1:250	184335
DRAWING NO.:		C-01	
REVISION NO.:			