

Addendum No. 8 October 13, 2021

Project Name/Description:	RFP for Earth Works and Site Servicing
	for 470,599,600,622 and 652 Tremblay Road
Location:	Ottawa, Ontario
Owner:	Canada Lands Company
RFP Coordinator:	Krisendat Sewgoolam
	Development Manager, Real Estate
	100 Queen Street, Suite 1050
	Ottawa, Ontario K1P 1J9
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RFP Number:	602199-02
RFP Issue Date:	July 8, 2021
RFP Closing Date:	November 4, 2021 at 10am EDT
Total number of pages	
within this issued Addendur	n: 2 plus attachments

All Addenda shall form an integral part of the RFP and are to be read in conjunction therewith. The Addenda shall take precedence over the aforementioned RFP which may prove to be at variance or may otherwise be qualified in writing by authorized personnel.

This information shall be incorporated into and be read together with the relevant Sections of the Request for Proposal document.

Schedule 1 Drawings and Schedule B (Drawings) in Schedule 10 are hereby deleted and replaced with the attached Revised Schedule 1 Drawings and Revised Schedule B (Drawings) in Schedule 10.

Schedule 6 and Schedule D (Schedule of Prices) in Schedule 10 are hereby deleted and replaced with the attached Revised Schedule 6 and Revised Schedule D (Schedule of Prices) in Schedule 10.

Question 1:

Section A-A on Dwg. SWM2 notes a concrete liner to be installed at the bottom of the Forebay. The notes refers to a recommendation from the geotechnical consultant, however, the recommendation is not provided with the tender documents. Could you please provide the recommendation or confirm the details of the concrete liner? The access road to the proposed pond calls for "cable concrete matting" however the detail on SWM2 does not show any matting. Please provide a detailed spec which indicates what is required. The detail for the proposed 20m wide emergency spillway on drawing SWM2 does not provide stone thickness and type of stone required. Please provide a spec for the Geoweb, the specified stone, and the thickness required.



Answer: Drawings SWM1 and SWM2 have been revised accordingly to provide clear direction on the detailed specifications required for the Access Road, Emergency Spillway, Overland Flow Path, and Pond Liner.

Question 2:

In the event that provisional item A18 is used, Does the work completed under A17 reduce in quantity? Where are we leaving the grades for the boulevards? As per item A-20, please provide the pre-grade elevation

Answer: Item A-20 is all cut-to-fill.

Pregrades are as follows: 1) Block 1-6 - 0.30m 2) Block 7 - 0.25m 3) Block 8 - 0.30m in areas of contamination 4) Street 1 Right-of-Way - 0.86m

REVISED SCHEDULE 1 and REVISED SCHEDULE B-1 of Schedule 10

DRAWINGS FOR CONTRACT I

The following Drawings are attached to this Schedule B-1 and form part of Contract I:

- 1. General Notes 19M-00609-NT1
- 2. REVISED General Plan 19M-00609-G1
- 3. Storm Drainage 19M-00609-G1A
- 4. Sanitary Drainage Plan 19M-00609-G1B
- 5. REVISED Grading Plan 19M-00609-GR1
- 6. REVISED Grading Plan 19M-00609-GR2
- 7. REVISED Grading Plan 19M-00609-GR3
- 8. REVISED Grading Plan 19M-00609-GR4
- 9. Street '2' 19M-00609-P1
- 10. Street '1' 19M-00609-P2
- 11. Street '2' 19M-00609-P3
- 12. Street '1' 19M-00609-P4
- 13. Street '1' 19M-00609-P5
- 14. Ex. Tremblay Road 19M-00609-P6
- 15. REVISED Erosion and Sediment Control Pre Earthworks 19M-00609-ESC1
- 16. REVISED Erosion and Sediment Control Pre Servicing 19M-00609-ESC2
- 17. REVISED Erosion and Sediment Control Post Servicing 19M-00609-ESC3
- 18. REVISED Erosion and Sediment Control Details 19M-00609-ESC4
- 19. REVISED Stormwater Management Pond 19M-00609-SWM1
- 20. REVISED Stormwater Management Pond Details 19M-00609-SWM2
- 21. REVISED Stormwater Management Pond Details 19M-00609-SWM3

- 22. NEW Composite Utility Plans 19M-00609-UC1
- 23. NEW Composite Utility Plans 19M-00609-UC3
- 24. NEW Composite Utility Plans 19M-00609-UC2
- 25. NEW Composite Utility Plans 19M-00609-UC4
- 26. NEW Standard Road Cross Sections 19M-00609-D1
- 27. NEW Details 19M-00609-D2
- 28. NEW Details 19M-00609-D3
- 29. NEW Details 19M-00609-D4
- 30. NEW Details & Cross Sections 19M-00609-D5

REVISED SCHEDULE B-2 of Schedule 10

DRAWINGS FOR CONTRACT II

The following Drawings are attached to this Schedule B -2 and form part of Contract II:

- 1. General Notes 19M-00609-NT1
- 2. REVISED General Plan 19M-00609-G1
- 3. Storm Drainage 19M-00609-G1A
- 4. Sanitary Drainage Plan 19M-00609-G1B
- 5. REVISED Grading Plan 19M-00609-GR1
- 6. REVISED Grading Plan 19M-00609-GR2
- 7. REVISED Grading Plan 19M-00609-GR3
- 8. REVISED Grading Plan 19M-00609-GR4
- 9. Street '2' 19M-00609-P1
- 10. Street '1' 19M-00609-P2
- 11. Street '2' 19M-00609-P3
- 12. Street '1' 19M-00609-P4
- 13. Street '1' 19M-00609-P5
- 14. Ex. Tremblay Road 19M-00609-P6
- 15. REVISED Erosion and Sediment Control Pre Earthworks 19M-00609-ESC1
- 16. REVISED Erosion and Sediment Control Pre Servicing 19M-00609-ESC2
- 17. REVISED Erosion and Sediment Control Post Servicing 19M-00609-ESC3
- 18. REVISED Erosion and Sediment Control Details 19M-00609-ESC4
- 19. REVISED Stormwater Management Pond 19M-00609-SWM1
- 20. REVISED Stormwater Management Pond Details 19M-00609-SWM2
- 21. REVISED Stormwater Management Pond Details 19M-00609-SWM3

- 22. NEW Composite Utility Plans 19M-00609-UC1
- 23. NEW Composite Utility Plans 19M-00609-UC3
- 24. NEW Composite Utility Plans 19M-00609-UC2
- 25. NEW Composite Utility Plans 19M-00609-UC4
- 26. NEW Standard Road Cross Sections 19M-00609-D1
- 27. NEW Details 19M-00609-D2
- 28. NEW Details 19M-00609-D3
- 29. NEW Details 19M-00609-D4
- 30. NEW Details & Cross Sections 19M-00609-D5

470 TREMBLAY ROAD

STA 0+000 TO STA 0+232.04

STA 0+000 TO STA 0+224.77

STA 0+220 TO STA 0+299.74

STA 1+000 TO STA1+260

STA 1+260 TO STA 1+419

STA 0+000 TO STA 0+180

LIST OF DRAWINGS

COVER **GENERAL NOTES** GENERAL PLAN STORM DRAINAGE PLAN SANITARY DRAINAGE PLAN

GRADING PLAN GRADING PLAN GRADING PLAN GRADING PLAN

STREET '2' STREET '1' STREET '2' STREET '1' STREET '1' EX. TREMBLAY ROAD

PONDING AREA AND ICD PLAN PONDING AREA AND ICD PLAN PONDING AREA AND ICD PLAN PONDING AREA AND ICD PLAN

EROSION AND SEDIMENT CONTROL PRE-EARTHWORKS EROSION AND SEDIMENT CONTROL PRE-SERVICING **EROSION AND SEDIMENT CONTROL POST-SERVICING EROSION AND SEDIMENT CONTROL DETAILS**

STORMWATER MANAGEMENT POND STORMWATER MANAGEMENT POND DETAILS STORMWATER MANAGEMENT POND DETAILS

COMPOSITE UTILITY PLANS COMPOSITE UTILITY PLANS COMPOSITE UTILITY PLANS

COMPOSITE UTILITY PLANS

STANDARD ROAD CROSS SECTIONS DETAILS DETAILS DETAILS **DETAILS & CROSS-SECTIONS**

MUNICIPALITY



19M-00609-NT1 19M-00609-G1 19M-00609-G1A 19M-00609-G1B

19M-00609-GR1 -GR2 -GR3 -GR4

19M-00609-P1

-P2 -P3 -P4 -P5 -P6

19M-00609-ICD1 -ICD2 -ICD3 -ICD4

19M-00609-ESC1 -ESC2 -ESC3 -ESC4

19M-00609-SWM1 -SWM2 -SWM3

19M-00609-UC1 -UC2 -UC3 -UC4

19M-00609-D1 -D2 -D3 -D4 -D5

DEVELOPER



LOCATION PLAN

CANADA LANDS

COMPANY CLC

LIMITED

CONSULTANT

100 Commerce Valley Dr. West, Thornhill, ON Canada L3T 0A1 f: 905.882.0055 t: 905.882.1100 www.wsp.com

19M-00609 MAY 2021

16-20-0009 CITY FILE No. D07-

GENERAL NOTES & SPECIFICATIONS:	WATER SUPPLY:
1. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, AND ONTARIO PROVINCIAL STANDARDS (OPSD) AND SPECIFICATIONS (OPSS), AS AMENDED BY THE CITY OF OTTAWA.	1. WATERMAIN INSTALLATION SHALL CONFORM TO LATEST CITY OF OTTAWA STANDARDS (LATEST REVISIONS) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS) AS AMENDED BY THE CITY OF OTTAWA.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.	 ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18 OR APPROVED EQUAL. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
3. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.	4. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
4. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.	5. WATER SERVICES ARE TO BE TYPE K SOFT COPPER AS PER CITY OF OTTAWA STD. W26 UNLESS OTHERWISE SPECIFIED. SINGLE SERVICES SHALL BE19mm DIA 50mm DIA. COPPER SHALL BE USED FOR PARK SERVICES. WATEI SERVICES SHALL BE MARKED WITH A "50mm X 100mm", EXTENDING FROM THE INVERT TO 1.0m ABOVE GRADE DAINTED BLUE STAND POSTS (SHUT OFES SHALL BE INSTALLED AT THE PROPERTY LINE.
5. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE DEVELOPER.	 CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE	7. CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL.
 ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 	 FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18. VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W24.
(LATEST AMENDMENT). 8. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.	10. 50mm DIAMETER WATERMAINS SHALL BE TYPE 'K' COPPER TUBING. WATERMAIN INSTALLATION IN CUL-DE-SAC TO BI INSTALLED AS PER CITY OF OTTAWA STD. W37.
9. THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.	11. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6
10. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CITY OF OTTAWA HAS BEEN OBTAINED	12. TRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
11. ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, SHALL BE INSTALLED WITH PIPE LASER AND CHECKED WITH JEVEL INSTRUMENT PRIOR TO BACKELLING	13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTING OF THE WATERMAIN.
 THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH OF PIPE IF THE MAXIMUM TRENCH WIDTH AS SPECIFIED BY OPED AND/OR CITY OF OTTAWA STANDARD IS EXCEEDED. 	14. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.
 ALL PIPE / CULVERT / SECTION SIZES REFER TO INSIDE DIMENSIONS. 	15. WHERE THE SEPARATION BETWEEN SERVICES AND MANHOLES IS LESS THAN 1.2m, WATER SERVICES ARE TO BE INSULATED AS PER CITY OF OTTAWA STD. W23.
 SHOULD DEEPLY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY. STREET LIGHTING SHALL BE ACCORDING TO CITY OF OTTAWA STANDARDS. 	16. AS PER CITY GUIDELINES, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY STD W25.2. FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.50m AS PER CITY STD. W25. FOR CROSSING UNDER SEWER, THE ADEQUATE STRUCTURAL SUPPOR FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTRED AT THE POINT OF CROSSING SO THAT THE JOINS WILL BE FOUND STANT AND AS FA
16. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING.	AS POSSIBLE FROM THE SEWER.
17. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM	 17. FOR STODS DESIGNED FOR FOTORE WATERMAIN CONNECTION, THE END OF THE FIFE SHOULD BE CAFFED TO MAK IT WATERTIGHT AND THRUST RESTRAINT ADDED ACCORDING TO CITY STANDARD. 18. ALL WATER SERVICES CROSSING SEWERS ARE TO BE INSTALLED AS PER CITY OF OTTAWA STD W38.
 18. CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING NO. S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG 	ROADWORK SPECIFICATIONS:
(IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM BELOW THE FROST LINE, 1.5 TO 2.0m BELOW FINISHED GRADE AND FULLY PENETRATE THE BEDDING, SUB-BEDDING AND PIPE COVER MATERIAL. THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND	1. ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPED WITHIN THE ROAD ALLOWANCE PRIOR TO THE
COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm THICK LOOSE LAYERS COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S SPMDD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 100m INTERVALS IN THE SERVICE TRENCHES.	 CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1 (BARRIER CURB) AND SC1.3 CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1 (BARRIER CURB) AND SC1.3
19. ALL BOREHOLES SHOWN ON THE DRAWINGS ARE FOR INFORMATION ONLY. REFER TO GEOTECHNICAL	(MOUNTABLE CURB). PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS AND DRIVEWAYS. 3. ROAD SUBDRAINS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R1.
STORM SEWERS:	 CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC3 ADN SC1.4. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STI R10 AND OPSD 509.010, OPSS 310.
1. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1	6. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND AL STRUCTURES WITHIN PAVEMEN AREA.
(LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).	7. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
 ALL STORM SEWER THENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. 30 AND 37 CLASS 'B' UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER. 	 ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSART REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER. SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
3. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.	10. PEDESTRIAN CURB RAMP WITH BOULEVARD SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC7.
 ALL STORM LATERALS SHALL BE PVC SDR 28, WHITE IN COLOUR AND MARKED WITH A 50mm X 100mm WOODEN MARKER EXTENDING FROM THE INVERT TO 1.0m ABOVE GRADE PAINTED GREEN. HOUSE CONNECTIONS SHALL BE 2.0m MIN. BELOW FINISHED GRADE AT STREET LINE WHERE POSSIBLE. SINGLE CONNECTIONS SHALL BE 100mm DIA. 	 11. PAVEMENT DESIGN TYPE COLLECTOR ROADS (STREET 1) - 150mm ASPHALT (50mm SURFACE COURSE, 50mm + 50mm BASE COURSES)
 ALL STORM SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1 AND S25. 	- 150mm OPSS GRANULAR "A" - 500mm OPSS GRANULAR "B" TYPE II
7. SAFETY PLATFORMS SHALL BE IN ACCORDANCE WITH OPSD 404.02.	LOCAL ROADS (STREET 2) - 40mm HL-3 SURFACE COURSE
 BROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01. STORM SEWER MANHOLES SERVING LOCAL SEWERS LESS THAN 900mm SHALL BE CONSTRUCTED WITH 300mm 	- 50mm HL-8 BINDER COURSE - 200mm OPSS GRANULAR "A" - 300mm OPSS GRANULAR "B" TYPE II
SUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701.021. 10. SINGLE AND DOUBLE CATCHBASINS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S1. AND OPSD 705.020,	
RESPECTIVELY. FRAMES AND GRATE SHALL BE AS PER CITY OF OTTAWA STD. S19.1 FOR REAR LOT CATCHBASINS AND STREET CATCHBASINS.	GRADING SPECIFICATIONS:
 CORB INCET THE CATCH BASIN (CICB) SHALL BE IN ACCORDANCE WITH CITT OF OTTAWA STD. 33. FRAME AND GRATE SHALL BE AS PER CITY OF OTTAWA STD. S22 AND S23, UNLESS OTHERWISE NOTED. SINGLE AND DOUBLE CATCHBASIN LEADS SHALL BE 200mm AND 250mm DIA (MIN.). RESPECTIVELY, AT 1.0% SLOPE 	A FLAT AREA HAVING A WIDTH OF 0.000 SHALL BE PROVIDED AT THE BOUNDARY LIMITS OF ADJACENT DEVELOPED PROPERTIES IN ORDER THAT THE EXISTING BOUNDARY ELEVATIONS WILL BE MAINTAINED.
(MIN.) UNLESS OTHERWISE NOTED.	2. ALL ROOF DOWINSPOOTS SHALL DISCHARGE TO THE GROUND ONTO SPLASH PADS AND SHALL NOT BE CONNECTED TO THE STORM SEWER OR THE BUILDING FOUNDATION DRAIN.
 ALL STREET CATCHBASINS AND CATCHBASIN MANHOLES SHALL HAVE SUMPS WITH 600mm DEPTH. ALL REAR YARD CATCHBASINS (OPSD 705.010) SHALL HAVE SUMPS WITH 300mm DEPTH, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL ENCLIPE THAT CATCHBASINS ARE INSTALLED AT THE LOW POINT OF SAC CLIPB WORK? 	 ALL SWALES SHALL BE 0.15m DEEP WITH 3:1 SIDE SLOPES UNLESS OTHERWISE INDICATED. THE MINIMUM LONGITUDINAL SLOPE IS 1% AND 1.5% WITH INSTALLATION OF SUBDRAIN OR WITHOUT, RESPECTIVELY. TOP OF OPATE (T(2)) ELEVATION OF OP ALL OTREET OATCUPACING AUDION ON BLANC REFER TO THE ELEVATION OF AUDION OF SUBDRAIN OF
 14. CONTRACTOR SHALL ENSURE THAT CATCHDASING ARE INSTALLED AT THE LOW POINT OF SAG CORD WORKS. 15. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. WHERE THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. WHERE 	4. TOP OF GRATE (1/G) ELEVATIONS FOR ALL STREET CATCHBASING SHOWN ON PLANS, REFER TO THE ELEVATIONS A GUTTER OR EDGE OF PAVEMENT, WHERE APPLICABLE.
BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.	5. A GEOTECHNICAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO IS TO INSPECT ALL SUBGRADE SURFACES FO FOOTING AND PAVEMENT STRUCTURES PRIOR TO CONSTRUCTION.
16. THE MINIMUM DIAMETER FOR REAR LOT PERFORATED PIPE IS 250mm, REFER TO CITY STD. S29 FOR DETAIL, UNLESS OTHERWISE NOTED.	 ALL EROSION AND SEDIMENT CONTROL ARE TO BE INSTALLED AND OPERATIONAL PRIOR TO COMMENCEMENT OF ANY SITE ALTERATION / GRADING WORKS TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA. ALL EROSION AND SEDIMENT CONTROL SHALL BE IN PLACE UNTIL CONSTRUCTION IS COMPLETED.
17. FOR TWO OR MORE REAR LOT CATCH BASINS CONNECTED IN SERIES, THE LEAD FROM THE LAST REAR LOT CATCH BASIN TO THE STORM SEWER SHALL BE SOLID PIPE.	
18. ALL STORM SEWERS WITH LESS THAN 2.0m COVER SHALL BE INSULATED AS PER CITY OF OTTAWA STANDARD AS SHOWN ON ENGINEERING DRAWINGS.	 PRE-CAST UNIT RETAINING WALL TYPE TO BE SPECIFIED BY PROJECT LANDSCAPE ARCHITECT AT LOCATIONS, AS
SANITARY SEWERS:	2. ALL RETAINING WALLS SHALL BE CONCRETE, CONCRETE PRODUCT WITH TIE-BACK SYSTEM OR HEAVY BLOCK
1. ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD B182.2 OR	SYSTEM. 3. ALL TYPICAL RETAINING WALLS GREATER THAN 1.0m HEIGHT ARE TO BE DESIGNED, APPROVED AND STAMPED BY A
LATEST AMENDMENT, UNLESS OTHERWISE NOTED. 2. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING	CONSULTING ENGINEER SPECIALIZING IN STRUCTURAL ENGINEERING. 4. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS CERTIFIED BY A
UNLESS OTHERWISE NOTED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.	STRUCTURAL ENGINEER. 5. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A CERTIFICATE FROM A STRUCTURAL
3. ALL SANITARY LATERALS ARE TO BE PVC SDR 28, IPEX "RING-TITE" (OR EQUIVALENT), ANY COLOUR EXCEPT WHITE AND MARKED WITH A 50mm X 100mm WOODEN MARKER, EXTENDED FROM THE INVERT TO 1.0m ABOVE GRADE PAINTED RED. HOUSE CONNECTIONS SHALL BE 2.75m BELOW FINISHED GRADE AT STREET LINE WHERE POSSIBLE. SINGLE CONNECTIONS SHALL BE 135mm DIA.	 ENGINEER CERTIFYING THAT THE WALL HAS BEEN CONSTRUCTED IN CONFORMANCE WITH THE APPROVED ENGINEERING DRAWINGS AND THE CERTIFIED SHOP DRAWINGS. 6. FENCES OR RAILINGS ARE REQUIRED FOR WALLS HIGHER THAN 0.6m.
 ALL SANITARY SERVICES ARE TO BE EQUIPPED WITH APPROVED BACKWATER VALVES. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24 AND S25. WATERTIGHT 	GEOTECHNICAL REPORT:
COVERS TO BE LOCATED WITHIN PONDING AREAS. 6. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02.	1. REFER TO GEOTECHNICAL INVESTIGATION REPORT NO. 19M-00609-00-CLC, DATED NOVEMBER 2019, BY WSP.
7. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.	ACCURACY IS NOT GUARANTEED. CONTRACTORS ARE ADVISED TO READ THE GEOTECHNICAL REPORT AND ASSUM THEIR OWN CONCLUSIONS.
 SANITARY SEWER MANHOLES SHALL BE BENCHED AS PER OPSD 701.021. SANITARY PRE-CAST MANHOLE SHALL BE CONSTRUCTED WITH A HIGHER PERCENTAGE OF SHUCA FUME IN THE 	
CONCRETE TO MAKE IT MORE DENSE AND LESS SUSCEPTIBLE TO CORROSION OR PINHOLE LEAKS.	
RECOMMENDATION OF THE PROJECT GEOTECHNICAL CONSULTANT, CRETEX SEALS, OR A SIMILAR PRODUCT, SHALL BE INSTALLED IN THE FIRST PRE-CAST MANHOLE SECTION TO JUST BELOW THE MANHOLE FRAME TO PREVENT INFILTRATION.	

I SHALL CONFORM TO LATEST CITY OF OTTAWA STANDARDS (LATEST REVISIONS) AND NDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS) AS AMENDED BY THE CITY OF

THERMAL INSULATION FOR WATERMAINS IN SHALLOW TRENCHES
(CITY OF OTTAWA STD. W22)

Depth of Cover	Thickness of Insulation
(m)	(mm)
1.20	100
1.25	100
1.30	100
1.35	100
1.40	100
1.45	100
1.50	75
1.55	75
1.60	75
1.65	75
1.70	75
1.75	75
1.80	50
1.85	50
1.90	50
1.95	50
2.00	50
2.05	50
2.10	50
2.15	50
2.20	50
2.25	50
2.30	50
2.35	50
Notos	

1) Increments of thickness adjusted to 25mm

2) TI = (2400 - H) / 12 Where:

TI = Thickness of insulation (mm)

H = Depth of Cover (mm) 3) Minimum thickness of insulation of 50mm

LEGEND:

GE

NERAL	
	LIMIT OF SUBDIVISION
	DRAINAGE BOUNDARY

DRAINAGE BOUNDARY CURB CUT PER OPSD 604.010 DEPRESSED CURB

WATERMAIN **8** 8

> ٠

C.C.

VALVE & BOX, EX. VALVE & BOX HYDRANT, EX. HYDRANT WATER SERVICE PIPE INSULATION

SANITARY

• 🛛 SANITARY MANHOLE, EX. SANITARY MANHOLE — UPSTREAM MH TO DOWNSTREAM MH 109A-108 0.16 0+ - POPULATION \checkmark — AREA IN HECTARES



STORM

ORM	
O O	STORM MANHOLE, EX. STORM MANHOLE
Св	EX. CATCHBASIN
	CATCHBASIN/DOUBLE CATCHBASIN
	CATCHBASIN/DOUBLE CATCHBASIN WITH INLET CONTROL DEVICE
СІВС	CURB INLET CATCHBASIN
DCIBC	DOUBLE CURB INLET CATCHBASIN
0	CATCHBASIN MANHOLE
	BIOSWALE PER DETAIL ON DWG. No. D4
2-YR•	STORM FREQUENCY
110 - 109	UPSTREAM MH TO DOWNSTREAM MH
0.04 0.80	RUNOFF COEFFICIENT
	AREA IN HECTARES

2.78AC = 2.82 - EXTERNAL 2.78AC TC = 10 MIN • EXTERNAL TIME OF CONCENTRATION

C = 0.80 2-YR + EXTERNAL STORM FREQUENCY ------ EXTERNAL BLENDED RUN OFF COEFFICIENT

(OPSD 1109.030) Depth of Cover (m) 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 1) Specified Minimum Depth of Cover = 2.00m 2) Thickness of insulation equivalent to 25mm for every 300mm reduction in depth cover

3) Increments of thickness adjusted to 25mm

4) Minimum thickness of insulation of 50mm

GRADING	
+ 67.62	EX. ELEVATION
+68.50	PROP. ELEVATION
	EX. CONTOUR
	OVERLAND FLOW
SEDIMENT CON	TROL
RACE COLOR	MUD MAT
~~	BOCK CHECK DAM
******	SILTATION CONTROL FENCE
	TEMP. SWALE DURING CONSTRUCTION
ð===	TEMP. HICKENBOTTOM DRAIN
õ	CB WITH SILTATION CONTROL DEVICE
н	
B	
R	
	STORM AND SANITARY CONNECTION
	WATER SERVICE CONNECTION
В	BELL PEDESTAL
8	BELL GRADE LEVEL BOX
	HYDRO TRANSFORMER
0	STREET LIGHT POWER SUPPLY PEDESTA
 ■ R	ROGERS CABLE PEDESTAL
	ROGERS VAULT
MB	COMMUNITY MAILBOX
.₩-•	STREET LIGHT POLE
	DRIVEWAY

HYDRO SERVICE CONNECTION STREET TREE

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45. VADIVARIARM ODEOD 530 Troombio MALINIODE Conversional ODEOD 201 40



KEY PLAN NTS LEGEND UPSTREAM MH TO DOWNSTREAM MH V VPSTREAM MH TO DOWNSTREAM MH	
DPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBERK LTD. PROJECT NO. 17732-19 SURVEY DATED AUGUST 22, 2019 CALCULATED M-PLAN PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBERK LTD. PROJECT NO. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2021 DEMONDER TO MATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBERK LTD. PROJECT NO. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2021 PROJECT NO. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2020 NETHYDAY PROJECT NO. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2020 NETHYDAY PROJECT NO. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2020 NETHYDAY PROJECT NO. 17732-19. SURVEY RECEIVED SUBMISSION PROJECT NO. 17732-19. SURVEY RECEIVED SUBMISSION PROJECT NO. 17732-19. SURVEY RECEIVER SUPERSEDED	Image: market market Image: market market
CLIENT CANADA LANDS COMPANY MUNICIPALITY MUNICIPALITY PROJECT TITLE 470 TREMBLAY ROAD SHEET TITLE SANITARY DRAINAGE PLAN CONSULTANT CONSULTAN	
	Ar ROAD Ar ROAD Ar ROAD Ar ROAD



NAME: X:\DIV10\19M-00609 - 530 Tremblay\M TDATE: Sep 15, 2021 - 9:22am, CAPP073636

SEE DWG No. GR4

FL. 68.44

67.88

0.0019M-00609 - 530 Tremblay/MUN\008 - Profiles\19M-00609_F

ALL WATERMAIN STUBS FOR CATCHBASIN AND ICD ALL CONNECTION OF NEW WATERMAIN TO PERMISSION IS **REQUIRED TO WORK** TO HAVE 2.4m MINIMUM INFORMATION, REFER TO DRAWINGS EXISTING WATERMAIN, AS WELL AS DECOMMISSIONING OF EXISTING WATERMAIN ON ADJACENT LANDS. COVER. ICD1 TO ICD4 FOR DETAILS. SHALL BE PERFORMED BY THE CITY OF OTTAWA FORCES. CONTRACTOR SHALL PROVIDE EXCAVATION, BACKFILL AND REINSTATEMENT TO THE SATISFACTION OF THE CITY OF OTTAWA BLOCK 4 $\overline{}$ BLOCK Ш TRE . С BLOCK 3 STREET '2' 146.12 28.00 1.80m CONC. SIDEWALK 1.80m CONC. SIDEWALK H&V-C 2000 PVE WATERMAIN ⊾MH111A [≦] ^ଛ୍ 116.9m - 🕏 50Ø PVC SAN @ 0.25 🖗 95.5m - 600Ø CONC STM @ 0.15% 115.9m - 750Ø CONC STM @ 0.15% CB3 CB5 5.5m - 250Ø PVC STM @ 2.0% SDR-35-5.5m - 250Ø PVC STM @ 2.0% SDR-35 VER. BEND DICB 302 TEMP. DICB 303 600x600mm OPSD 705.030 WITH GRATE OPSD 403.010 SI OPE: 3:1 T/G 67.80 C SI OPE: 402 SI OPE: 3:1 DICB 302 TEMP. DICB 303 TEMP. DICB 303 TEMP. DICB 303 TEMP. DICB 303 C SI OPE SI OPE: 3:1 T/G 67.80 C SI OPE T/S C SI WEST LIMIT OF SUBDIVISION DICB 301 600x600mm OPSD 705.030 WITH GRATE OPSD 403.010 SLOPE: 3:1 T/G 68.55 SLOPE: 3:1 T/G 68.77 OUT INV. 66.35 OUT INV. 67.11 OUT INV. 67.34 T=4 87 T=4 87 @ 3.00% 0.70% 59.21m @ 0.70% 21.50m @ 0.70% 54.00m @ 0 70% 17.89m @ 0.70% LVC = 9.747 K = 4.0 MH111A TOP 69.46 1200Ø PC OPSD 701.0 MH110 TOP 69.38 1800Ø PC OPSD 701.0 Щ 8 −PROPOSED C/U GRADE H&V FLANG ELEV. H&V FLAN ECEV - EXISTING GROUND FILL 、 -RÒAD BÀSÈ -ROAD BASE - 100-YR HGL 250Ø DICB LEAD <u>INV. 67.23</u> -HGL = 67.44 250Ø DICB LEAD INV. 67.00 OC PVC WATERMAIN SDR-18 CL INSULATE STORM PIPE WITH RIGID SAFETY PLATFORM PER OPSD 404.020 INSULATION WHERE COVER IS 250Ø DICB LEAD -INV. 66.28 ELEV. 66.50 LESS THAN 2.0m (SEE DWG. NT1 FOR THICKNESS AND DETAILS) /X//XSEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6, S7 AND GEOTECHNICAL ENGINEER'S RECOMMENDATION\$ 69.63 69.70 69.73 69.72 .11 69. 69. ര് H&V 66.79 66.78 57.18 N66.12 S65.97 95.5m - 600Ø CONC STM @ 0.15% CL-65D 115.9m - 750Ø CONC STM @ 0.15% CL-65D 13 N64. S64. 116.9m - 250Ø PVC SAN @ 0.25% SDR-35 069.95 069.81 55. 6

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30.2m - 250Ø F SAN @ 0.25% SI	VC 890 DR-35 00	E63.50		87.8m - 250Ø	PVC SAN @ 0.25% SDF	२-35	87 5 17.8m - 29 87 5 27.8m 87 5 27.8m 80 27.8m	50Ø 07 66 1 @ 25 65 R-35 8	
+289.34 +295.56 1+300	+308.76	+315.35	1+320	1+340	1+360	1+380	1+400	1+420	

TREMBLAY ROAD STREET '1' KEY PLAN NTS <u>LEGEND</u> EXISTING ELEVATION + 263.25 ×261.00 PROPOSED ELEVATION EXISTING CONTOUR MUD MAT XB-70F ROCK CHECK DAM SILTATION CONTROL FENCE TEMP. SWALE DURING CONSTRUCTION OVERLAND FLOW DIRECTION LIMIT OF SUBDIVISION TEMPORARY HICKENBOTTOM DRAIN DRAINAGE DIVIDE CATCHMENT AREA (6.1 ha) CB WITH SILTATION CONTROL DEVICE

TEMPORARY SEDIMENT POND 1

DRAINAGE AREA: 4.4 ha SIDE SLOPES: 4:1 MAX MAX POND DEPTH: 1.3m EMERGENCY SPILLWAY WIDTH: 10.0m EMERGENCY SPILLWAY DEPTH: 0.3m ORIFICE SIZE: 75mm

REQUIRED: PERMANENT POOL (125 cu.m/ha): 550 cu.m EXTENDED POOL (125 cu.m/ha): 550 cu.m

PROVIDED: PERMANENT POOL: 890 cu.m EXTENDED POOL: 640 cu.m

BOTTOM ELEV. = 64.85 PERMANENT POOL ELEV. = 65.50 EXTENDED POOL ELEV. = 65.85 TOP OF POND ELEV. = 66.15

> TOPOGRAPHIC INFORMATION TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.

PROJECT No. 17732-19 SURVEY DATED AUGUST 22, 2019

LEGAL INFORMATION CALCULATED M-PLAN PROVIDED BY ANNIS, O'SULLIVAN,

VOLLEBEKK LTD. PROJECT No. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2021

NOT FOR CONSTRUCTION

Elevations shown are geodetic, derived from Control Monument 2011-0096,

having an elevation of 68.24, and are referred to the CGVD28 geodetic datum.

ELEVATION = 68.64

ELEVATION = 72.37

ELEVATION NOTES:

Fire Hydrant - Top of Spindle

Elevation = 68.64

SITE BENCHMARK No. 1

SITE BENCHMARK No. 2

 100 Commerce Valley Dr. West, Thornhill, ON Canada L3T 0A1 t: 905.882.1100
 www.wsp.com

 STAMP
 Image: Commerce Valley Dr. West, Thornhill, ON Canada L3T 0A1 www.wsp.com
 Image: Commerce Valley Dr. West, Thornhill, ON Canada L3T 0A1 www.wsp.com

 DESIGNED
 DRAWN
 CHECKED
 Image: Checked Dr. P.P.

 J.C.V.
 10/12 CAD
 P.P.
 Image: Checked Dr. P.P.
 Image: Checked Dr. P.P.

 SCALE
 0m
 10m
 20m
 30m
 DATE
 OCTOBER 2020
 Image: Checked Dr. PROJECT NUMBER
 DWG. NUMBER
 Image: Checked Dr. P.P.
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 Image: Checked Dr. P.P.

CITY PLAN No. 18482

E: X:DIV10130M-00600 - 530 Tramblav\MIIN\0000 - Erretion and Sadiment Control\190M-0060

SCALE: NTS

The contractor shall make best efforts to avoid having heavy construction machinery drive over locations

Water collected in low spots to be dewatered via pump and filter sack to existing or proposed swales per

• Connect storm sewer networks to their respective stormwater management pond, ensuring that all inlet

• Decommission all erosion control ponds and associated swales; dewater ponds to approved outlet points

The Developer shall be responsible for ensuring all necessary permits are received and posted on site, and ensuring conformity with all necessary federal, provincial and local by-laws and regulations. Anticipated

SCALE: NTS

INTERIM HICKENBOTTOM DRAIN OUTLET DETAIL - PLAN N.T.S.

— OPEN TOP

0 60m

COMPACTED

CLAY EARTH

300mmØ PVC OUTLET PIPE

0.3m DEEP RIP-RAP -

SPILLWAY CHANNEL

CONNECT OUTLET PIPE

TO SWALE HEADWALL

INTERIM HICKENBOTTOM DRAIN **OUTLET DETAIL - SECTION A-A** NTS

VERTICAL-

BEND

LEGAL INFORMATION CALCULATED M-PLAN PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. PROJECT No. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2021									
NOT FOR CONSTRUCTION									
ELEVATION NOTES: Elevations shown are geodetic, derived from Control Monument 2011-0096, having an elevation of 68.24, and are referred to the CGVD28 geodetic datum.									
SITE BENCHMARK No. 1 ELEVATION = 68.64 Fire Hydrant - Top of Spindle Elevation = 68.64									
SIT Mag Eleva	EBENCHMARK No. 2 E netic Nail - Set in Concrete Sidewalk ation = 72.37		ΓΙΟΝ = 72	2.37					
2	SECOND SUBMISSION	PP	05/21/2021						
1	FIRST SUBMISSION	PMD	11/02/2020						
No.	REVISIONS TO DRAWING	BY	DATE	APPR.					
	ALL PREVIOUS ISSUES OF THIS DRAWIN	IG ARE SI	UPERSEDED						
MUI	CANADA LANDS COMPANY								
SHE ST	470 TREMBLAN		DAD GEME	INT					
	DETAIL	S							
COI	NSULTANT								
	100 Commerce Valley Dr. West, Thornhill, ON t: 905.882.1100 f: 905.882.0055	I Canada L www.w	3T 0A1 /sp.com						
STA	MP								
DFS	SIGNED DRAWN	C⊢	IECKED						
SC	J.C.V. 10/12 CAD		P.P.						
			DBER 2020						
	19M-00609		SMM3	;					

TOPOGRAPHIC INFORMATION

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN,

VOLLEBEKK LTD. PROJECT No. 17732-19 SURVEY DATED AUGUST 22, 2019

CITY PLAN No. 18482

X-111/10/10/10/00/00 - 530 T-reministry 10/010 - 1 Hiltinise 10/00/00 110

	ΤΒΕΜΒΙ ΑΥ ΒΩΑD	
		ST. LAURENT BOULEVARD
		NTS
1.80m CON 1.50m ASPHAL CICB17 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB18 CICB17 CICB18 CICB18 CICB17 CICB18 CICB1	LEGEND ○ STORM MANHOLE, S □ CB □ DCB CATCHBASIN, DOUB - - N + HYDRANT & VALVE, N - + HYDRO LINE - B BELL CABLE - R ROGERS CABLE - G GASMAIN - ML METROLOOP CABLE - STREET LIGHT CABL H=B=R=G=ML JOINT UTILITY TRENS	E CH CROSSING
X	STORM AND SANITAL • • •<	RY CONNECTION NNECTION BOX IER ER SUPPLY PEDESTAL DESTAL DX INNECTION
SEE DWG No. UC4	NOT FOR CONSTR	
	2 SECOND SUBMISSION	PP 05/21/2021
~	1 FIRST SUBMISSION	PMD 11/02/2020
BLOCKO	No. REVISIONS TO DRAWING	BY DATE APPR.
SOUTH LIMIT OF SUBL	CLIENT CANADA LANDS (MUNICIPALITY	COMPANY
AILWAY	470 TREMBLAY	' ROAD
	CONSULTANT 100 Commerce Valley Dr. West, Thornhill, ON t: 905.882.1100 f: 905.882.0055	Canada L3T 0A1 www.wsp.com
ELEVATION NOTES: Elevations shown are geodetic, derived from Control Monument 2011-0096, having an elevation of 68.24, and are referred to the CGVD28 geodetic datum. SITE BENCHMARK No. 1 ELEVATION = 68.64 Fire Hydrant - Top of Spindle Elevation = 68.64	STAMP REMORESSION REMORESD PLICART 100216395 REMORESD PLICART 1002216395 REMORESD PLICART DESIGNED DRAWN	CHECKED
SITE BENCHMARK No. 2 ELEVATION = 72.37	J.C.V.10/12 CADSCALEDATE	
Elevation = 72.37	PROJECT NUMBER	DWG. NUMBER
	19M-00609	UC3

TOPOGRAPHIC INFORMATION TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. PROJECT No. 17732-19 SURVEY DATED AUGUST 22, 2019 LEGAL INFORMATION

CALCULATED M-PLAN PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. PROJECT No. 17732-19. SURVEY RECEIVED FEBRUARY 10, 2021

ELEVATION NOTES: Elevations shown are geodetic, derived from Control Monument 2011-0096, having an elevation of 68.24, and are referred to the CGVD28 geodetic datum.

SITE BENCHMARK No. 1 ELEVATION = 68.64 Fire Hydrant - Top of Spindle Elevation = 68.64 SITE BENCHMARK No. 2 ELEVATION = 72.37 DESIGNED

Magnetic Nail - Set in Concrete Sidewalk Elevation = 72.37

REVISED Schedule 6 Pricing Schedule

The Proponent should use the following charts to set out its pricing. Where an item is irrelevant, indicate "N/A" in the space provided. The information listed below is not a complete description. All Proponents should refer to and review the applicable sections in the RFP before responding. In addition:

- a. all prices shall be provided in Canadian funds and shall include all applicable customs duties, tariffs, overhead, profit, permits, licenses, labour, carriage insurance, and warranties, and further shall not be subject to adjustment for fluctuation in foreign exchange rates. All prices shall be quoted exclusive of the harmonized sales taxes or other similar taxes, each of which, if applicable, should be stated separately;
- b. all prices quoted, unless otherwise instructed in this RFP, shall remain firm for the period set out in the RFP;
- c. in the event of any discrepancy in the pricing, the lowest unit price submitted shall prevail.

Proponent Name

Part A - Pricing

THE QUANTITIES THAT HAVE BEEN PROVIDED IN THIS SCHEDULE OF PRICES ARE NOT FINAL AND ARE ESTIMATES THAT MAY BE SUBJECT TO SIGNIFICANT VARIATION.

ACTUAL QUANTITIES WILL BE ADJUSTED UPWARDS OR DOWNWARDS AS THE PROJECT PROGRESSES REFLECTING THE UNIT RATE PROVIDED BY THE SUCCESSFUL PROPONENT FOR EACH LINE ITEM LISTED BELOW. COSTS ASSOCIATED WITH THE UNIT PRICE WORK WILL VARY DEPENDING U PON THE ACTUAL QUANTITIES EXECUTED AND MEASURED, AND AUTHORIZED BY THE COMPANY'S CONSULTANT DURING THE COMPLETION OF THE SCOPE OF WORK AND THE FINAL AGREEMENT AMOUNT WILL BE ADJUSTED ACCORDINGLY, UPWARDS OR DOWNWARDS, BASED UPON THE QU OTED UNIT RATES PROVIDED AS PART OF THIS RFP AND PROPOSAL SUBMISSIONS. **REVISED** SCHEDULE D in Schedule 10

SCHEDULE OF PRICES

SUMMARY OF CONTRACT PRICING FOR 470 TREMBLAY ROAD

CITY OF OTTAWA

ITEM		AMO	UNT
CONTRACT I	Earthworks and Remediation Work	\$	
CONTRACT II	Underground Site Servicing to Base Course Asphalt including Stormwater Management Pond	\$	-
	SUB-TOTAL (LESS H.S.T.)	\$	-
	Harmonized Sales Tax (13%)	\$	-
	TOTAL TENDER PRICE	\$	-

REVISED SCHEDULE D-1

CONTRACT I - SCHEDULE OF PRICES

SCHEDULE OF CONTRACT PRICING FOR 470 TREMBLAY ROAD

CONTRACT I: EARTHWORKS AND REMEDIATION WORKS

CITY OF OTTAWA

SUMMARY

ITEM		AN	IOUNT
A.	SITE PREPARATION, TOPSOIL STRIPPING AND EARTHWORKS	\$	
В.	SCHEDULE OF ADDITIONAL UNIT PRICES	\$	-
	SUB-TOTAL (LESS H.S.T.)	\$	
	Harmonized Sales Tax (13%)	\$	-
	TOTAL TENDER PRICE	\$	-

Note: Prices tendered in Contract I shall be valid for the years 2021 and 2022.

A. SITE PREPARATION, TOPSOIL STRIPPING AND EARTHWORKS

	DESCRIPTION	ESTIMATED		τοται
IIEM	DESCRIPTION	QUANTITY	UNIT	\$ S
	Supply all necessary materials, equipment, mobilization, demolition, traffic control and labour to perform the following work in accordance with the drawings and specifications and as directed by the Consultant. Unit prices shall include all items specified in the special conditions, specifications, project specifications, and the engineering plans.			
1	Pre-construction structural survey, photo survey, and conditions report for existing building located at 466 Tremblay Road.	1	Lump Sum	
2	Preparation of Construction Schedule, and keeping updated for the duration of the contract. Poor weather conditions and Saturday work to be allowed for in schedule milestones.	1	Lump Sum	
3	All survey works required to complete the works within the contract, as outlined in contract specification and conditions:			
	a) Construction Layout	1	Lump Sum	
	b) Topsoil Stripped grades	1	Lump Sum	
	c) Topsoil Stockpiles	1	Lump Sum	
	d) As-constructed Pregrade	1	Lump Sum	
4	Supply, install, maintain and remove (at the consultant's request) siltation control fence per OPSD 219.110 on drawing ESC4.	1,725	m	
5	Remove existing fence within the construction limit at the consultant's request:			
	a) Existing black chain-link fence. b) Existing T-Bar and wire fence.	770 790	m m	
6	Decommission and remove offsite all existing monitoring wells in alignment with current MECP standards, including all permitting and coordination with MECP.	19	each	
7	Clear all trees and vegetation as identified on Figure CG1 - Clearing and Grubbing Plan. All material to be disposed of offsite, including grubbing all tree stumps. All vegetation outside of the construction limits are to be protected.	1	Lump Sum	
8	For the duration of the Contract, supply, maintain and install temporary metal mudloc fencing around the adjacent development boundary northeast of the construction zone.	720	m	
9	Construct, maintain and remove (at the consultant's request) temporary mud mat per City standards.	2	each	
10	Construct temporary sedimentation ponds as shown on drawings ESC1 and ESC2 including hickenbottom drain, outlet pipe and spillway. Maintain through the entire duration of the contract, and ultimately remove and reinstate area to appropriate engineer-filled pregrade at the direction of the Engineer. Removal of sediment off- site.	1	Lump Sum	
11	Cut temporary diversion swales as per dwg. No ESC1, ESC2 and ESC3.	2,125	m	

A. SITE PREPARATION, TOPSOIL STRIPPING AND EARTHWORKS (CONTINUED)

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
12	Supply, place and maintain rock check dams as per OPSD 219.210 on dwg no. ESC4.	34	each		
13	Construct, maintain and remove (at the consultant's request) temporary 20x10m sediment trap ditches per OPSD 219.220 on drawing ESC4, including hickenbottom drains as required.	3	each		
14	Supply install and remove (at the consultant's request) temporary: a) 500mm CSP culvert (Provisional) b) 600mm CSP culvert (Provisional)	21 28	m m		
15	Supply, install, maintain and remove (at the consultant's request) catchbasin sediment trap as per detail on drawing ESC4.	19	each		
16	Construct and maintain 0.3m plunge pool complete with 50mm dia. clearstone fixed on Geotextile 270R.	1	each		
17	Strip topsoil as per the specifications and in alignment with the Pregrade Plan Figure. Stockpile within Block 5 and/or Block 8 with a maximum stockpile height of 3.0m and maximum side slopes of 2:1. Stabilize the stockpiles as required and provide boundary siltation control fence.	11,700	m ³		
18	Strip topsoil as per the specifications within the construction limit and dispose off site. (Provisional)	5,000	m ³		
19	Excavate and remove offsite unsuitable material at the direction of the Consultant, including transportation and disposal of material at a suitable landfill location. (Provisional)	13,365	m³		
20	Cut to fill site including transport and placement to pregrade (balance line) elevations within the limits of the site and compaction to engineered fill standards. Item to include Third Party Geotechnical Compaction Testing as mentioned in the Contract	18,300	m ³		
21	Import geotechnically appropriate, suitable material for engineered fill from offsite including a provision for load and haul route restrictions and including a provision for certification of material indicating its suitability. Material to be placed as fill and compacted to the recommendations of the Geotechnical Engineer and to the specified pregrade elevations. Import material to be sourced by the Proponent. Item to include Third Party Geotechnical Compaction Testing as mentioned in the Contract Specifications. (Provisional)	28,400	m ³		
22	Fill and compact topsoil within the park block, all 3:1 sloping areas, and where engineered fill is not required, at the direction of the Consulting Engineer. Item to include Third Party Geotechnical Compaction Testing as mentioned in the Contract Specifications. (Provisional)	4,200	m³		
23	Convert temporary sediment pond to ultimate pond design in pond block as shown on drawing ESC2 including hickenbottom drain, outlet pipe and spillway.	1	Lump Sum		

A. SITE PREPARATION, TOPSOIL STRIPPING AND EARTHWORKS (CONTINUED)

ITEM 24	DESCRIPTION Supply and install erosion protection blankets to stabilize temporary swales as directed by the consultant (Provisional).	ESTIMATED QUANTITY 2,125	UNIT m	UNIT PRICE	TOTAL
25	Mud and Dust control for the duration of the Contract.	1	Lump Sum		
26	Topographic survey with tie-in perimeter grades a minimum of 10 m from area of work.	1	Lump Sum		
27	Hydroseed stripped ground to stabilize inactive areas after 30 days of inactivity (Provisional) .	70,000	m²		
28	Traffic Control - provide all necessary permits, traffic signage, traffic control devices, temporary line painting, delineators, and flag persons as required in accordance with the requirements of the City of Ottawa at all times during the duration of the Contract.	1	Lump Sum		
29	Remove existing asphalt pavement and curb.	1	Lump Sum		
30	Remove existing catchbasins and dispose off-site.	1	each		
31	Supply, install, and maintain temporary dead-end barricade as per OPSD 973.130 with no dumping signs.	2	each		
32	Remove temporary dead-end barricade as per OPSD 973.130 with no dumping signs.	2	each		
33	Supply, install, and maintain temporary concrete jersey barrier as per OPSD 911.180 for use as temporary sidewalk barricade.	2	each		
34	Remove temporary concrete jersey barrier as per OPSD 911.180 for use as temporary sidewalk barricade.	2	each		
35	For the duration of the Contract, provide a site trailer exclusively for the Client's use.	1	Lump Sum		
36	For the duration of the Contract, maintain and implement Health and Safety Measures in alignment with Provincial Standards throughout the duration of construction, including but not limited to site signage, wash stations, and site check-in protocol measures.	1	Lump Sum		
37	Construct a temporary parking lot and construction staging area that measures 50m x 50m: a) Grade and shape subgrade as specified by the Geotechnical Consultant. (Provisional) b) Provide, lay, and compact sub-base course of Granular 'B' over the area as specified by the Geotechnical Consultant, to a depth of 300mm. (Provisional)	2,500	sq.m		
	c) Provide, lay, and compact sub-base course of Granular 'A' over the area as specified by the Geotechnical Consultant, to a depth of 200mm. (Provisional)	750 500	cu.m cu.m	_	

SUB-TOTAL CARRIED FORWARD TO SUMMARY

\$

В.	SCHEDULE OF ADDITIONAL UNIT PRICES					
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
					•	•
	All items must be priced and requested percentages fi	lled in. Failure	e to do so mav			
	invalidate the Pricing Schedule. Prices shall include al	l costs in carr	ving out the work			
	prescribed in accordance with the Specifications and s	hall include o	or exclude			
	Provincial and Federal Sales Taxes in accordance with	n the directior	ns elsewhere.			
	All items in this section are provisional and shall be ca	rried out as d	irected by the			
	Consultant		inected by the			
-	Conocitation					
	Prices submitted shall be valid until the end of 2021 ar	nd 2022 unles	ss otherwise			
	noted and shall be applicable regardless of final quant	itv.				
		Ĺ				
	This schedule of additional unit prices may be used by	the Consulta	ant to evaluate			
	changes in the Work in accordance with items 12.1(b)	and 12.1(c) of	of Article GC 12			
	of the General Conditions.	()				
1	Cut and place as fill topsoil from the stock pile			m ³		
ŀ				- 111		
(2 a)	Excavate soft unacceptable native ground to any			m ³		
- ~,	depth and spread to dry at the direction of the					
	Consultant and Geotechnical Consultant and replace					
	with engineered fill from within the construction limit.					
b)	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry within 150 m at the direction					
	of the Consultant and Geotechnical Consultant and					
	replace with dried material within the construction limit					
L	to engineered fill standards.					
(c)	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry at the direction of the					
	Consultant and Geotechnical Consultant and dispose					
	within the construction limit					
d)	Excavate soft unacceptable native ground to any			³		
, u	depth and spread to dry at the direction of the					
	Consultant and Geotechnical Consultant and replace					
	with imported engineered fill.					
e)	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry within 150 m at the direction					
	of the Consultant and Geotechnical Consultant and					
	replace with imported dried material to engineered fill					
-	standards.					
(† †)	Excavate soft, unacceptable native ground to any			m°		
	depth and spread to dry at the direction of the					
	material off-site and replace with imported engineered					
	fill					
a)	Excavate fragmented unacceptable bedrock that can			m ³		
9/	be excavated using standard excavation practices to					
	any depth and remove and dispose of the material off-					
	site.					
h)	Blast and fragment bedrock as required to allow for			m ³		
ĺ	the excavation of the bedrock to any depth and					
	remove and dispose of the material off-site.					
i)	Hoe ram and fragment bedrock as required to allow			m ³		
	for the excavation of the bedrock to any depth and					
	remove and dispose of the material off-site.					

В.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTI	NUED)				
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
i)	Prepare and provide a blast survey for any blasting			each	•	• •
"	work completed.			Cuon		
3	Spread, place and compact suitable material imported			m ³		
	by others as engineered fill at the request of the					
	owner to assist completion of regarding in any					
	location.					
4	Excavate additional material at the direction of the			m ³		
	Consultant and stockpile within the construction limit.					
5	Supply, place, grade and compact at any location as d	irected by the	Consultant:			
a)	Granular A			tonne		
b)	Granular B			tonne		
c)	20mm clear limestone			tonne		
d)	50mm clear limestone			tonne		
e)	20 mm crusher run limestone			tonne		
f)	50 mm crusher run limestone			tonne		
g)	150 mm Rip-rap stone			tonne		
h)	300 mm Rip-rap stone			tonne		
6	Dispose off-site rubble, garbage, debris, fencing and			tonne		
	boulders at a location arranged by the contractor					
7	Remove and dispose off site any field tile material			m		
	that is encountered during the earthworks program					
8	Hydroseed areas where requested by the consultant					
	using "Soil Stabilizer" mix by Pickseed (include					
	required topsoil):					
a)	Topsoil stockpiles			m ²		
b)	Areas of exposed native clay			m ²		
c)	Areas of exposed fill			m ²		
,						
9	Additional water for dust control			hr		
10	Removal and disposal of large boulders offsite			tonne		
11	Removal of non-contaminated mixed debris			m ³		
12	Remove and dispose offsite material dumped by other	s		tonne		
13	Installation of erosion control measures further to those	e specified in	the contract			
	and drawings:					
L	a) Repair and stabilization of eroded slopes			m ²		
	b) Installation of sod on slopes at the direction of the C	onsultant		m ²		
	c) Installation of Terraseed slopes at the direction of th	e Consultant		m ²		
	d) Supply, erect and maintain heavy duty siltation cont	rol fence		m		
	e) Supply, erect and maintain .double siltation control f	ence		m		
	f) Supply, place, maintain, and remove (at the			each		
	consultant's request) rock check dams					
	g) Supply, place, maintain, and remove (at the			each		
	consultant s request) straw bale check dams					

В.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTI	NUED)				
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
14	Repair of erosion and sediment control measures after	completion of	of the contract			
	a) Replacement of sediment fence post			each		
	b) Removal and replacement of damaged sediment fer	nce		m		
	c) Repair and stabilization of eroded slopes			m ²		
	d) Installation of sod on slopes at the direction of the C	onsultant		m ²		
	e) Installation of Terraseed slopes at the direction of the	e Consultant		m²		
15	Remove siltation control fencing and dispose offsite.			m		
16	Repair temporary dead-end barricade as per OPSD 973.130 with no dumping signs.			each		
17	Remove temporary concrete jersey barrier as per OPSD 911.180 for use as temporary sidewalk barricade.			each		
18	Percentages to be applied to adjustments of Additional Work valuated under Article GC12.2(c) of the General Conditions:					
a)	Surcharge on net hourly labour cost to cover all payroll burden, overhead and profits					
b)	Surcharge on net material cost to cover all overhead and profit					
c)	Discount on equipment rental cost in accordance with current OPSS 127 (Schedule of Rental Rates of Construction Equipment)					

В.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTIN	IUED)				
19	Price for equipment that may be used. Hourly price to in	nclude opera	tor and any suppl	ies		
	(Attach an additional sheet if required)					
			*OPSS discount			
			*Operator markup)		
			Rating/size	OPSS	<u>Operator</u>	Total Rate*
				Hourly		
	<u>Equipment type</u>			<u>rate</u>		
i	Scraper					
ii						
iii						
iv	Backhoe					
v	(hydraulic excavator)					
vi						
vii	Off-road Truck					
viii						
ix						
х	Front-end loader					
xi						
xii						
xiii	Bulldozer					
xiv						
xv						
xvi						
xvii	Compaction equipment					
xviii						
xix						
хх	Tandem Dump Truck					

REVISED SCHEDULE D-2

CONTRACT II-SCHEDULEOF PRICES

SCHEDULE OF CONTRACT PRICING FOR 470 TREMBLAY ROAD

CONTRACT II: UNDERGROUND SITE SERVICING TO BASE COURSE ASPHALT INCLUDING STORMWATER MANAGEMENT POND WORKS

CITY OF OTTAWA

SUMMARY

ITEM		AMOUNT	Γ
A.	SITE PREPARATION	\$	-
В.	SANITARY SEWERS AND APPURTENANCES	\$	-
C.	STORM SEWERS AND APPURTENANCES	\$	-
D.	WATERMAINS AND APPURTENANCES	\$	-
E.	STORMWATER MANAGEMENT FACILITY	\$	-
F.	ROADS TO BASE COURSE ASPHALT	\$	-
G.	SCHEDULE OF ADDITIONAL UNIT PRICES	\$	-
		¢	

SUB-TOTAL (LESS H.S.T.)	\$ -
Harmonized Sales Tax (13%)	\$ -
TOTAL TENDER PRICE	\$ -

Note: Prices tendered in Contract II shall be valid for the year 2021 and 2022.

A. SITE PREPARATION

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE \$	TOTAL \$
	Supply all necessary materials, equipment, mobilization, demolition, traffic control and labour to perform the following work in accordance with the drawings and specifications and as directed by the Consultant. Unit prices shall include all items specified in the special conditions, specifications, project specifications, and the engineering plans. All erosion and sediment measures to be functional and maintained until completion of Contract II.			v	¥
1	Traffic Controls				
	 a) Prepare and provide a Traffic Control Plan in alignment with City of Ottawa specifications F-1010 and F-1012. b) Prepare and provide a Construction Site Pedestrian Control Plan 	1	Lump Sum		
	in alignment with City of Ottawa specifications F-1012 and F-1013. c) Provide all necessary permits, traffic signage, traffic control devices, temporary line painting, delineators, and flag persons as required in accordance with the requirements of the City of Ottawa	1	Lump Sum		
	at all times during the duration of the Contract. This shall include Police Assistance at intersections as per City of Ottawa F-1012 as	1	Lump Sum		
2	Assume, maintain, and repair all siltation within the construction limits as per drawings ESC1 to ESC4 for the duration of the contract and including all warranty periods.	1,725	m		
3	Assume, maintain, and repair all other erosion protection within the construction limit as per drawings ESC1 to ESC4 including mud and dust control for the duration of the contract and including all warranty periods.	1	Lump Sum		
4	Remove and dispose offsite all fencing around perimeter of the site limit when works are completed and at the direction of the				
	Consultant or City.	1,725	m		
5	Preparation of Construction Schedule, and keeping updated for the duration of the contract. Poor weather conditions and Saturday work to be allowed for in schedule milestones.	1	Lump Sum		
6	All survey works required to complete the works within the contract, as outlined in contract specification and conditions:				
	a) Construction Layout	1	Lump Sum		
	 b) As-constructed base-course asphalt survey of roads c) Pregrade survey of development blocks following post-servicing lot cleanup restoration to pregrade. Elevations to be provided at all lot corners, changes in grade, on a maximum 15m by 15m grid and as required per the Special Conditions and Specifications 	1	Lump Sum		
		1	Lump Sum		
7	Complete all as-builts per the City of Ottawa requirements, the Project Specifications, and Special Conditions.	1	Lump Sum		
8	Maintain and remove temporary mud mat per City standards.	2	each		

A. SITE PREPARATION (CONTINUED)

	DESCRIPTION	ESTIMATED			TOTAL
9 9	Maintain and remove temporary 20x10m sediment trap ditches per OPSD 219.220 on drawing ESC4, including hickenbottom drains as required.	3 3	each	PRICE	TOTAL
10	Maintain and remove at the Consultant's request temporary:				
	a) 500mm CSP culvert (Provisional)	21	m		
	b) 600mm CSP culvert (Provisional)	28	m		
11	Mud and Dust control for the duration of the Contract.	1	Lump Sum		
12	For the duration of the Contract, provide a site trailer exclusively for the Client's use.	1	Lump Sum		
13	For the duration of the Contract, maintain and implement Health and Safety Measures in alignment with Provincial Standards throughout the duration of construction, including but not limited to site signage, wash stations, and site check-in protocol measures.	1	Lump Sum		
14	Supply and install temporary block drain as shown on drawing	4	each		
15	Supply, install, maintain and remove (at the Consultant's request) catchbasin sediment traps as per detail on drawing ESC4.	42	each		
16	Construct Concrete Toe Wall as per OPSD 3120.100 complete with guide rail as per City of Ottawa specification F1.	193	m		

SUB-TOTAL CARRIED FORWARD TO SUMMARY

-

\$

B. SANITARY SEWERS AND APPURTENANCES

Supply all necessary materials, equipment and labour to perform the following work as per the drawings and specifications and as directed by the Engineer.

Construct the following sanitary sewers with storm sewers including all necessary excavation, bedding, backfill, compaction to 98% SPDD, with spacing as shown on the Engineering plans.

					Average	Estimated		Unit	
Street Name	Manh	nole No.	Pipe Dia.	Type/Class	Depth ⁽¹⁾	Length	Notes	Price	Total
	From	To.	(mm)		(m)	(m)	(1)	\$	\$
BLOCK 5	114A	113A	200	SDR-35	4.0	13.0	(1)		
STREET '2'	113A	112A	250	SDR-35	4.3	49.9	(1)		
STREET '2'	PLUG	112A	250	SDR-35	4.6	8.5	(1)		
STREET '2'	112A	111A	250	SDR-35	5.0	116.9	(1)		
STREET '2'	111A	110A	250	SDR-35	4.8	107.7	(1)		
STREET '2'	110A	EX MH SAN4	250	SDR-35	4.3	8.9	(1)		
STREET '1'	109A	108A	250	SDR-35	4.4	61.3	(1)		
STREET '1'	108A	107A	250	SDR-35	4.3	118.6	(1)		
STREET '1'	107A	EX MH SAN3	250	SDR-35	4.2	29.6	(1)		
STREET '1'	105A	104A	250	SDR-35	4.2	25.6	(1)		
STREET '1'	104A	103A	250	SDR-35	4.4	99.1	(1)		
STREET '1'	103A	102A	250	SDR-35	4.7	30.2	(1) (2)		
STREET '1'	102A	101A	250	SDR-35	4.0	87.8	(1) (2)		
STREET '1'	101A	100A	250	SDR-35	3.1	17.8	(1) (2)		

(1) Average depth is measured from invert to finished road elevation.

(2) Include appropriate backfill within existing right-of-way as per City of Ottawa Requirements. Unused spoils to be discarded off-site.

2 Standard Manholes

1

Supply all necessary materials, equipment and labour to perform the following work in accordance with the drawings specifications, City Standards and as directed by the Consultant.

Construct the following **sanitary** manholes including, frames and covers, steps, benching, safety platforms and bulkheads in accordance with the drawings and specifications and as directed by the Consultant. For backfill and compaction, refer to Geotechnical report. Watertight joints per City standards.

Street Name	Manhole Number	Notes	Detail Drawing No.	Depth to Top ⁽¹⁾ of Concrete (m)	Chamber Size (mm)	Estimated Quantity	Unit	Unit Price \$	Total \$
BLOCK 5	114A	(1)	OPSD 701.010	4.0	1200	1	each		
STREET '2'	113A	(1)	OPSD 701.010	4.1	1200	1	each		
STREET '2'	112A	(1)	OPSD 701.010	4.7	1200	1	each		
STREET '2'	111A	(1) (3)	OPSD 701.010	5.3	1200	1	each		
STREET '2'	110A	(1)	OPSD 701.010	4.2	1200	1	each		
STREET '1'	109A	(1)	OPSD 701.010	4.1	1200	1	each		
STREET '1'	108A	(1) (3)	OPSD 701.010	4.6	1200	1	each		
STREET '1'	107A	(1)	OPSD 701.010	4.1	1200	1	each		
STREET '1'	105A	(1)	OPSD 701.010	4.3	1200	1	each		
STREET '1'	104A	(1)	OPSD 701.010	4.2	1200	1	each		
STREET '1'	103A	(1)	OPSD 701.010	4.6	1200	1	each		
EX. TREMBLAY ROAD	102A	(1) (4)	OPSD 701.010	4.8	1200	1	each		
EX. TREMBLAY ROAD	101A	(1) (4)	OPSD 701.010	3.2	1200	1	each		
EX. TRIOLE STREET	100A	(1) (4)	OPSD 701.010	3.4	1200	1	each		

(1) Depth of manhole is measured from the lowest invert to top course asphalt elevation.

(2) Include drop structure(s) per engineering drawings.

(3) Include safety platform(s) per engineering drawings.

(4) Include appropriate backfill within existing right-of-way as per City of Ottawa Requirements. Unused spoils to be discarded off-site.

B. SANITARY SEWERS AND APPURTENANCES (CONTINUED)

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE \$	Total \$	
3	Connect new sewer into existing sanitary manhole and re-bench to City of Ottawa standards	3	each			
4	Supply and install 250mm dia sanitary plug for future sanitary connection Per City of Ottawa Standards.	1	each			
5	Flushing of all sanitary sewers. Re-flush of all sanitary sewers as necessary until free of debris. CCTV inspection to follow upon flushing. CCTV inspection to be redone once sanitary sewer is free of debris.	775	m			
	SUB-TOTAL CARRIED FORWARD TO SUMMARY			:	\$ -	_

STORM SEWERS AND APPURTENANCES C.

Supply all necessary materials, equipment and labour to perform the following work in accordance with the drawings and specifications as directed by the Consultant.

Construct the following storm sewers with sanitary sewers 1 including all necessary excavation, bedding, backfill, compaction to 98% SPDD, with spacing as shown on the Engineering plans.

					Average	Estimated		Unit	
Street Name	Manh	ole No.	Pipe Dia.	Type/Class	Depth ⁽¹⁾	Length	Notes	Price	Total
	From	To.	(mm)		(m)	(m)		\$	\$
STREET '2'	112	111	375	SDR-35	1.6	10.0	(1)		
STREET '2'	111	110	600	CL-65D	2.6	95.5	(1)		
STREET '2'	110	109	750	CL-65D	3.4	115.9	(1)		
STREET '2'	PLUG	109	525	CL-65D	3.2	6.5	(1)		
STREET '2'	109	107	1,050	CL-65D	3.4	53.9	(1)		
STREET '2'	108	107	300	SDR-35	2.7	12.0	(1)		
STREET '2'	107	105	1,050	CL-65D	3.4	26.7	(1)		
EX. TREMBLAY ROAD	DCB 204	DCB 203	450	SDR-35	1.6	0.3	(1)		
EX. TREMBLAY ROAD	DCB 203	DCB 202	450	SDR-35	1.6	0.3	(1)		
EX. TREMBLAY ROAD	DCB 202	DCBMH 201	450	SDR-35	1.6	1.4	(1)		
EX. TREMBLAY ROAD	DCBMH 201	118	600	CL-65D	1.8	3.2	(1)		
STREET '1'	118	117	1,200	CL-65D	2.6	9.9	(1)		
STREET '1'	117	106	1,350	CL-65D	3.4	107.1	(1)		
STREET '1'	106	105	1,350	CL-65D	3.8	108.7	(1)		
STREET '1'	105	104	1,650	CL-65D	3.8	89.0	(1)		
STREET '1'	104	103	1,650	CL-65D	3.5	81.2	(1)		
STREET '1'	103	102	1,650	CL-65D	3.2	54.4	(1)		
STREET '1'	119	102	300	SDR-35	1.7	49.5	(1)		
BLOCK 7	102	HW1	1,650	CL-65D	2.3	24.1	(1)		
BLOCK 7	HW2	101	525	CL-65D	3.0	6.8	(1)		
BLOCK 7	101	HW3	525	CL-65D	3.3	28.2	(1)		

(1) Average depth is measured from invert to finished road elevation.

2 Storm Manholes - Construct the following storm manholes including, frames and covers, steps, benching, safety platforms and half-depth bulkheads in accordance with the drawings and specifications and as directed by the Consultant. For backfill and compaction, refer to Geotechnical report.

Street &	Mani	hole	Detail Drawing	Depth to Top ⁽¹⁾ of Concrete	Chamber Size	Est. Quantitv	Unit Price	Total
Drawing No.	Number	Notes	No.	(m)	(mm)		\$	\$
STREET '1'	119	(1)	OPSD 701.010	1.8	1200	1		
EX. TREMBLAY ROAD	118	(1)	OPSD 701.013	2.4	2400	1		
STREET '1'	117	(1)	OPSD 701.013	3.0	2400	1		
STREET '2'	112	(1)	OPSD 701.010	1.5	1200	1		
STREET '2'	111	(1)	OPSD 701.011	2.0	1500	1		
STREET '2'	110	(1)	OPSD 701.012	3.4	1800	1		
STREET '2'	109	(1)	OPSD 701.013	3.5	2400	1		
BLOCK 5	108	(1)	OPSD 701.010	2.7	1200	1		
STREET '2'	107	(1)	OPSD 701.012	3.4	1800	1		
STREET '1'	106	(1)	OPSD 701.014	3.8	3000	1		
STREET '2'	105	(1)	OPSD 701.015	3.9	3600	1		
STREET '1'	104	(1)	OPSD 701.014	3.6	3000	1		
STREET '1'	103	(1)	OPSD 701.014	3.4	3000	1		
BLOCK 7	102	(1)	OPSD 701.015	2.9	3600	1		
BLOCK 7	101	(1)	OPSD 701.011	2.1	1500	1		
EX. TREMBLAY ROAD	DCBMH 201	(1)	OPSD 701.011	1.8	1500	1		

(1) Depth of manhole is measured from the lowest invert to top course asphalt elevation.

(2) Include drop structure(s) per engineering drawings.
(3) Include safety platform(s) per engineering drawings.

C. STORM SEWERS AND APPURTENANCES (CONTINUED)

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE \$	Total \$
3	Supply and install thermal insulation for storm sewers with less than 2m cover per OPSD 1109.030 as shown on dwg no. NT1.	390	m		
4	a) Install single catchbasin per most recent OPSD and OPSS requirements including lead (SDR-28), ICD	9	each		
	and risers as required, complete with: Frame and cover per City Std S19.1 (perforated) b) Install single catchbasin per most recent OPSD and OPSS requirements including lead (SDR-28), ICD and risers as required, complete with:	12	each		
	Frame and cover per City Std S22 and S23 (curb inlet) c) Install double catchbasin per most recent OPSD, and OPSS requirements including lead (SDR-28), ICD	4	each		
	and risers as required, complete with: Frame and cover per City Std S19.1 (perforated) d) Install double catchbasin per most recent OPSD, and OPSS requirements including lead (SDR-28), ICD and risers as required, complete with: Frame and cover per City Std S22 and S23 (curb inlet)	1	each		
5	a) Install DICB per most recent OPSD and OPSS requirements including lead (SDR-28)	5	each		
	and risers as required, complete with: Frame and cover per City Std S19.1 (perforated) b) Install temporary DICB per most recent OPSD and OPSS requirements including lead (SDR-28) and risers as required, complete with: Frame and cover per City Std S19.1 (perforated)	1	each		
6	Supply and install 525mm dia storm plug for future storm connection Per City of Ottawa Standards.	1	each		
7	Cut and cap existing 400mm dia. storm sewer on Ex Tremblay Road. Abandon existing 300mm dia. and 400mm dia. sewers, catchbasins and leads upstream of the cap.	1	Lump Sum		
8	Flushing of all storm sewers. Re-flush of all storm sewers as necessary until free of debris. CCTV inspection to follow upon flushing. CCTV inspection to be redone once storm sewer is free of debris.	885	m		
9	Complete the grading of the bioswale within boulevard, per detail drawing D4. (Provisional)	118	m		
				_	

SUB-TOTAL CARRIED FORWARD TO SUMMARY

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D. WATERMAINS AND APPURTENANCES

Supply all necessary materials, equipment and labour to perform the following work in accordance with the drawings and specifications and as directed by the Consultant.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE ¢	TOTAL
1	Construct watermain to the current City of Ottawa Standards and Specifications for Watermains, including fittings, blow-offs, reducers, thrust blocks, tracer wire, tie rods, sacrificial anodes, bedding and backfill, mechanical restraints on all joints and temporary plugs: a) 200 mm diameter	228	m	Ψ	Ψ
	b) 300mm diameter	590	m		
	c) 300mm diameter within existing St. Laurent Boulevard, including appropriate backfilling and trenching techniques within an existing city right-of-way as per City of Ottawa Standards. Spoils to be disposed of and removed off-site.	50	m		
2	Supply and install main-line water valves per				
	a) 200mm Valve & Box	2	each		
	b) 300mm Valve & Box	6	each		
	c) 400mm Valve & Box	1	each		
	,				
3	Supply and install hydrants complete with 150mm lead,				
	shut-off valve and valve box, per City of Ottawa standards.	8	each		
4	Connect to existing watermain by others including restoration as necessary, per City of Ottawa standards as outlined on the Watermain Commissioning Plan: a) 400mm diameter watermain (St Laurent Boulevard)	1	each		
	b) 300mm diameter watermain (Ex Tremblay Road)	2	each		
5	Supply and install 150mm dia. water service connections c/w V&Bs and other appurtenances for Block 5 per City of Ottawa Standard	1	each		
6	Supply and install 300mm dia plug for future watermain connection per City of Ottawa Standards.	1	each		
7	Hydrostatic testing, disinfection, swabbing and flushing of all watermains to City of Ottawa standards and specifications.	1	Lump Sum		
8	Additional hydrostatic testing, disinfection, swabbing and flushing of all watermains to City of Ottawa standards and specifications.	25	m		
	SUB-TOTAL CARRIED FORWARD TO SUMMARY				\$

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E. STORMWATER MANAGEMENT POND

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE \$	TOTAL \$
	Supply all necessary materials, equipment, mobilization, demolition, traffic control and labour to perform the following wor in accordance with the drawings and specifications and as direct by the Consultant. Unit prices shall include all items specified in the special conditions, specifications, project specifications, and the engineering plans.	rk ted			
1	Supply and install headwall for 1650mm dia. storm sewer as per OPSD 804.040 with grating as per OPSD 804.050 as shown on dwg no. SWM1.	1	each		
2	Supply and install headwall for 525mm dia. storm sewer as per OPSD 804.030 with grating as per OPSD 804.050 as shown on dwg no. SWM1.	2	each		
3	Construct 6m wide Overland Flow Route c/w 500mm of 300mm dia. riprap on Geotextile Terrafix 270R s per dwg no. SWM1.	22	m		
4	Construct 20m wide emergency spillway with geoweb or approved equivalent as per dwg no. SWM1.	55	m		
5	Construct 5m wide access road as per dwg no. SWM1 and SWM2.	200	m		
6	Specify and install retaining wall as per dwg no. SWM1. Retaining Wall type to be amourstone wall and in alignment with City of Ottawa Standard Detail L7. Retaining Wall design to be specified by the Contractor and approved by City of Ottawa and the Engineering Consultant prior to construction. Railing to be installed as per City of Ottawa Standards.	25	m		
7	Construct 1.0m flat bottom outlet channel as per dwg no. SWM1.	65	m		
8	Install pond liner as per recommendations of Geotechnical Engineer.	3490	m²		
9	Supply and install bollards as per dwg no. SWM1 and as per City of Ottawa Detail F5.	6	each		
10	Supply and install pond warning signage as per dwg no. SWM1.	1	lump sum		
11	Supply and install a P-Gate at the storm facility access road entry way as located on drawing SWM1 and as per City of Ottawa Standard F-10.	1	lump sum		
12	Supply and install the 1800mm by 2400mm SWM Pond Outlet Structure as outlined on drawing SWM3.	1	lump sum		

SUB-TOTAL CARRIED FORWARD TO SUMMARY

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F. ROADS TO BASE COURSE ASPHALT

Supply all necessary materials, equipment and labour to perform the following work in accordance with the drawings and specifications and as directed by the Consultant.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
	—			\$	\$
1	Fine grade to shape subgrade and boulevards over the width of the road allowance, and compact subgrade over				
	the full payement width plus 0.3 m beyond the back of curb				
	on each side, unless otherwise specified by Geotechnical				
	Consultant.				
	a) 18.0 m R.O.W.	221	m		
	b) 20.0 m R.O.W.	87	m		
	c) 26.0 m R.O.W.	492	m		
2	Provide, lay and compact sub-base course of				
	Granular 'B' over the full pavement width plus 0.3m beyond				
	back of curb as per City/Geotechnical recommendations				
	a) to a final compacted depth of 300mm (18.0 m R.O.W.)	2,130	m²		
	b) to a final compacted depth of 300mm (20.0 m R.O.W.)	765	m²		
	c) to a final compacted depth of 500mm (26.0 m R.O.W.)	5,550	m²		
з	Supply and install 150mm dia, PVC subdrains with filter	1 635	m		
5	cloth per OPSD 216.021 & dwg. No. D2 beneath all curbs.	1,000			
	·····				
4	a) Construct concrete barrier curb with standard gutter as per				
	OPSD 600.040	1,650	m		
	b) Construct concrete semi-mountable depressed curb with				
	standard gutter at lay-by parking locations as per OPSD	05	m		
	c) Construct concrete semi-mountable depressed curb with	90			
	standard gutter at lay-by parking locations as per OPSD				
	600.060 (Provisional).	130	m		
5	Regulate sub-base course to proper grade, supply, lay and				
5	compact base course of Granular 'A'				
	a) to a final compacted depth of 200mm (18.0 m R.O.W.)	1.865	m²		
	b) to a final compacted depth of 200mm (20.0 m R.O.W.)	740	m²		
	c) to a final compacted depth of 150mm (26.0 m R.O.W.)	5,250	m ²		
6	Raise frames and covers to base course asphalt level				
	a) manholes	27	each		
	b) single catchbasins	21	each		
	c) double catchbasins	2	each		
	d) 200mm Valve and Box	2	each		
	e) 300mm Valve and Box	6	each		
	f) 400mm Valve and Box	1	each		
7	Provide, law and compact HI & asphalt base				
'	course in accordance with specifications over the				
	full pavement width to a compacted depth as noted or				
	as otherwise specified by the Geotechnical Consultant.				
	a) to a compacted depth of 50mm (18.0 m R.O.W.)	1,865	m²		
	b) to a compacted depth of 50mm (20.0 m R.O.W.)	740	m²		
8	Provide, lay and compact SP19 asphalt base course				
-	compacted in maximum 50mm layers in accordance with				
	specifications over the full pavement width to a compacted				
	depth as noted or as otherwise specified by the				
	Geotechnical Consultant.		2		
	a) to a tinal compacted depth of 100mm (26.0 m R.O.W.)	5,250	mŕ		

F. ROADS TO BASE COURSE ASPHALT (CONTINUED)

ITEM	DESCRIPTION		UNIT	UNIT PRICE	TOTAL
9	Match new asphalt to asphalt by others including saw cutting, grind a 0.30m wide strip to 40 mm depth lap joint and seal.	1	Lump Sum		
11	Permits for road occupancy from the City.	1	Lump Sum		
12	Supply and install all temporary traffic control signage on streets after construction of base asphalt, including removal.				
	a) Stop Signs (Ra-1)	4	each		
	b) Street Name Signs	5	each		
	c) Unassumed Road Signs	3	each		
13	Provide and install 1.5m high black vinyl chain link fence as per the Engineering Drawings.	560	m		
14	Install a Typical Closure at Emergency Access as per City of Ottawa Standards F6.1 as required and at the direction of the Consultant. (Provisional)	1	each		
15	Install a Typical Closure at City Roadway as per City of Ottawa Standards F6 as required and at the direction of the Consultant. (Provisional)	2	each		

SUB-TOTAL CARRIED FORWARD TO SUMMARY

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\$

G.	SCHEDULE OF ADDITIONAL UNIT PRICES					
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
	All items must be priced and requested percentages fil	led in. Failur	e to do so mav			
	invalidate the Pricing Schedule. Prices shall include all	l costs in car	rving out the work			
	prescribed in accordance with the Specifications and s	hall include o	or exclude			
	Provincial and Federal Sales Taxes in accordance with	n the direction	ns elsewhere.			
		1	1			
-			line et e al les r the e			
	All items in this section are provisional and shall be call	rried out as d	lirected by the			
-						
-	Drives submitted shall be uslid until the and of 2004 an					
	Prices submitted shall be empliable remembers of final event	10 2022 UNIE	ss otherwise			
		ity.				
	This schedule of additional unit prices may be used by	the Consulta	ant to evaluate			
	changes in the Work in accordance with items 12.1(b)	and 12.1(c)	of Article GC 12			
	of the General Conditions.					
1	Cut and place as fill topsoil from the stock pile			m³		
2 a	Evenuete asft unaccontable native ground to any			m ³		
	excavate soil, unacceptable native ground to any					
	Consultant and Costophical Consultant and rankes					
	Consultant and Geolecinical Consultant and replace					
	with engineered hill from within the construction limit.					
b	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry within 150 m at the direction					
	of the Consultant and Geotechnical Consultant and					
	replace with dried material within the construction limit					
	to engineered fill standards.					
С	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry at the direction of the					
	Consultant and Geotechnical Consultant and dispose					
	material off-site and replace with engineered fill from					
	within the construction limit.					
d	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry at the direction of the					
	Consultant and Geotechnical Consultant and replace					
	with imported engineered fill.					
e	Excavate soft, unacceptable native ground to any			m ³		
	depth and spread to dry within 150 m at the direction					
	of the Consultant and Geotechnical Consultant and					
	replace with imported dried material to engineered fill					
	standards.			3		
T	Excavate soft, unacceptable native ground to any			m		
	depth and spread to dry at the direction of the					
	Consultant and Geolecinical Consultant and dispose					
	IIII.			3		
g g	he exervited using standard exervician practices to			m		
	be excavated using standard excavation practices to					
	any deput and remove and dispose of the material off-					
<u>ل</u>	Sile.			3		
l n	the exercision of the bodreek to any death and			m		
	remove and dispass of the meterial off site					
:\	Hoe ram and fragment bedroek as required to allow			3		
)	for the exception of the bedrock to any donth and			m		
	remove and dispose of the material off site					
L	Terrove and dispose of the Material Oli-Site.		1		1	

G.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTIN	NUED)				
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
i)	Prenare and provide a blast survey for any blasting			each	•	¥
]/	work completed			Cacil		
	work completed.					
3	Spread, place and compact suitable material imported			³		
Ŭ	by others as engineered fill at the request of the			111		
	owner to assist completion of regarding in any					
	location					
4	Excavate additional material at the direction of the			³		
-	Consultant and stocknile within the construction limit			111		
5	Supply place grade and compact at any location as di	rected by the	Consultant:			
о а)	Granular A	rootod by the	o o nounant.	tonne		
– u) – h)	Granular B			tonne		
(C)	20mm clear limestone			tonne		
(0 d)	50mm clear limestone			tonne		
u)	20 mm crusher run limestone			tonne		
() (t)	50 mm crusher run limestone			tonne		
(i a)	150 mm Rin-ran stone			tonne		
9) b)	300 mm Pin ran stone			tonne		
				lonne		
6	Excavate unsuitable native material under sewer			3		
Ŭ	bedding and cast on adjacent lots as directed by the			m		
	Consultant and replace with material as per					
	Consultant and replace with material as per					
	SFD.					
7	Excavate unsuitable subgrade material in road area			m ³		
'	and dispose surplus material on adjacent lots as			111		
	directed by Consultant					
-						
8	Excavate unsuitable subgrade in road area and place			m ³		
Ŭ	on adjacent lots to dry. I oad and place dry material					
	back in roadway					
9	Install temporary Jersey barriers from streetline to			each		
Ŭ	streetline complete with reflective dead end sign.					
	Price to include removal off-site when directed by the					
	Consultant.					
10	Dispose off-site rubble, garbage, debris, fencing and			tonne		
	boulders at a location arranged by the contractor					
11	Remove and dianage off site any field tile material			m		
	that is apsountered during the parthworks program					
	that is encountered during the earthworks program					
10						
12	Hydroseed areas where requested by the consultant					
	using "Soli Stabilizer" mix by Pickseed (include					
	required topsoil):			2		
a)				^		
b)	Areas of exposed native clay			m²		
c)	Areas ot exposed fill			m²		
L						
13	Additional water for dust control			hr		
14	Removal and disposal of large boulders offsite			tonne		
				~		
15	Removal of non-contaminated mixed debris			m ³		

G.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTINUED))				
ITEM	DESCRIPTION			UNIT	UNIT PRICE	TOTAL
					\$	\$
16	Remove and dispose offsite material dumped by others			tonne		
17	Installation of crossion control measures further to these speci	ified in	the contract			
17	and drawings:					
	a) Repair and stabilization of eroded slopes			m ²		
	b) Installation of sod on slopes at the direction of the Consult	ant		m ²		
	c) Installation of Terraseed slopes at the direction of the Consultant					
	d) Supply, erect and maintain heavy duty siltation control fence			m		
	e) Supply, erect and maintain .double siltation control fence			m		
	f) Supply, place, maintain, and remove (at the			each		
	consultant`s request) rock check dams					
	g) Supply, place, maintain, and remove (at the			each		
	consultant`s request) straw bale check dams					
10			<u> </u>			
18	Repair of erosion and sediment control measures after compl	letion of	of the contract			
	a) Replacement of sediment fence post			eacn		
	c) Repair and stabilization of ground slopes			111 m ²		
	d) Installation of sod on slopes at the direction of the Consult	ant		2		
	a) Installation of Sod on slopes at the direction of the Consultant			2		
		Suitani		m		
19	Remove siltation control fencing and dispose offsite.			m		
20	Densistemporary dead and berricade as per OPCD			aaah		
20	973.130 with no dumping signs.			each		
21	Remove temporary concrete jersey barrier as per OPSD 911.180 for use as temporary sidewalk barricade.			each		
22	Supply and place concrete sower hadding including					
22	brick support of sewers prior to placement					
	a) 0.4 MPa unshrinkable fill			m ³		
	b) 20 MPa Concrete			m ³		
23	Supply and place 150 mm to 300 mm thick Rip-Rap including filter fabric (Terrafix 300R or equivalent, maximum EOS 50), including pregrading as directed by Consultant.			m²		
0.4						
24	Adjust hydrants as directed by Consultant			occh		
	a) raise 100 mm			each		
				each		
25	Remove damaged asphalt off-site and supply and place base asphalt, including grinding or planning to match existing roads (where not included in pricing			tonne		
	already).					

G.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTI	NUED)			
ITEM	DESCRIPTION		UNIT		τοται
				\$	\$
26	a) Remove damaged curb and gutter within development limit, including off-site disposal.		m	•	•
	b) Remove and replace damaged curb and gutter within development limit, including off-site disposal and restoration of boulevard and pavement.		m		
	c) Remove sidewalk as directed by the consultant, including off-site disposal.		m		
27	Asphalt grinding to 40mm depth.		m		
28	Flush and clean sewers prior to builder activity.		m		
29	Clean and pump catchbasins.		m m m each each each each		
	a) single catchbasin		each		
	b) double catchbasin		each		
30	Repaint hydrants, at the end of maintenance period, to Municipal standards.		each		
31	Provide and install new frame and grates as per applicable OPSD standards.				
	a) Maintenance Holes (Provisional)		each		
	b) Catchbasins (Provisional)		each		
	c) Double Catchbasins (Provisional)		each		
	d) Valve Boxes (Provisional)		each		
32	Provide and install as directed by the Engineering Consultant Clay Seals as per City of Ottawa Standard Detail S8.		each		
33	Form and place concrete sidewalk up to 2 0m wide at		m		
	the intersection of Street 1 and St. Laurent Boulevard and.or Street 1/Street 2 and Existing Tremblay Road. Sidewalk to be aligned and poured as directed by the Consultant.				

G.	SCHEDULE OF ADDITIONAL UNIT PRICES (CONTI	NUED)				
34	Percentages to be applied to adjustments of					
	Additional Work valuated under Article GC12.2(c) of					
	the General Conditions:					
a)	Surcharge on net hourly labour cost to cover all					
	payroll burden, overhead and profits					
b)	Surcharge on net material cost to cover all overhead					
	and profit					
c)	Discount on equipment rental cost in accordance with					
	current OPSS 127 (Schedule of Rental Rates of					
	Construction Equipment)					
35	Price for equipment that may be used. Hourly price to i	include opera	ator and any suppl	ies		
	(Attach an additional sheet if required)					
			*OPSS discount			
			*Operator markup)		
			<u>Rating/size</u>	<u>OPSS</u>	<u>Operator</u>	Total Rate*
				Hourly		
	<u>Equipment type</u>			<u>rate</u>		
i 	Scraper					
II 						
111						
i. <i>i</i>	Paal/baa					
IV	(hydraulia avagyatar)					
V Vi						
VI						
vii	Off road Truck					
viii						
viii iv						
17						
v	Eront-end loader					
^						
vi						
xii						
xiii	Bulldozer					
xiv						
xv						
xvi						
xvii	Compaction equipment					
xviii						
xix						
xx	Tandem Dump Truck					