THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.

- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT.
- THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION
- AND TO THE SATISFACTION OF THE CITY OF OTTAWA. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE
- ENGINEER AND THE CITY OF OTTAWA.
- TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- 9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.

11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE CITY OF OTTAWA.

PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.

CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- L2. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY OF OTTAWA DETAILS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING
- 3. CONTACT THE CITY OF OTTAWA FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS. ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY OF OTTAWA'S SATISFACTION
- 14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- 15. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY: ELECTRICAL SERVICE - HYDRO ONE
 GAS SERVICE - ENBRIDGE
- TELEPHONE SERVICE BELL CANADA • TELEVISION SERVICE - ROGERS
- L6. INSTALLATION OF UTILITIES TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF INDIVIDUAL UTILITY APPROVAL AGENCIES AND THE CITY OF OTTAWA. 17. ALL PROPOSED CURB SHALL BE CONCRETE BARRIER CURB UNLESS SPECIFIED.
- 18. THIS PLAN MUST BE READ IN CONJUNCTION WITH GEOTECHNICAL REPORT BY McINTOSH PERRY #CP-19-0125 AND THE SERVICING & STORMWATER MANAGEMENT REPORT BY McINTOSH PERRY REPORT #CP-19-0125.

EROSION AND SEDIMENT CONTROL

- THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES LIMITING THE AMOUNT OF EXPOSED SOIL, TEMPORARY SEDIMENT INLET CONTROL DEVICES TO BE IMPLEMENTED DURING CONSTRUCTION ON ALL PROPOSED ROAD CATCHBAS REARYARD CATCHBASINS AND CATCHBASIN MANHOLES AND OTHER SEDIMENT TRAPS. NO RECYCLED GEOSOCK MATERIAL SHALL BE
- AT THE DISCRETION OF THE PROJECT MANAGER OR CITY OF OTTAWA INSPECTOR, ADDITIONAL SILT CONTROL DEVICES SHALL BE INSTALLED AT DESIGNATED LOCATIONS.
- FOR SILT FENCE BARRIER, USE OPSD 219.110.
- EXCEPT AS PROVIDED IN PARAGRAPHS 4.1., and 4.2. BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN
- WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR ERMANENTLY CEASE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS FEASIBLE 4.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY
- SEDIMENT THAT IS ACCUMULATED BY THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED IN A MANNER THAT AVOIDS ESCAPE OF THE SEDIMENT TO THE DOWNSTREAM SIDE OF THE CONTROL MEASURE AND AVOIDS DAMAGE TO THE CONTROL MEASURE. SEDIMENT SHALL BE REMOVED TO THE LEVEL OF THE GRADE EXISTING AT THE TIME THE CONTROL MEASURE WAS CONSTRUCTED AND BE ACCORDING TO THE FOLLOWING FOR LIGHT-DUTY SEDIMENT BARRIERS, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES THE LESSER OF THE
- A DEPTH OF ONE-HALF THE EFFECTIVE HEIGHT OF THE CONTROL MEASURE. A DEPTH OF 300 MM IMMEDIATELY UPSTREAM OF THE CONTROL MEASUR

5.4. ACCUMULATED SEDIMENT IS TO BE REMOVED AND DISPOSED OF AS PER OPSS 180

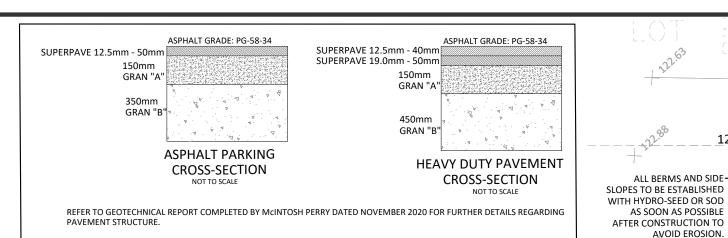
- FOR ALL CONTROL MEASURES, ACCUMULATED SEDIMENT SHALL BE REMOVED AS NECESSARY TO PERFORM MAINTENANCE REPAIRS. 5.3. ACCUMULATED SEDIMENT SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE CONTROL MEASURE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MONITORED TO ENSURE THEY ARE IN EFFECTIVE WORKING ORDER. THE CONDITION OF THE CONTROL MEASURES SHALL BE MONITORED PRIOR TO ANY FORECAST STORM EVENT AND FOLLOWING A
- DUST CONTROL MEASURES SHOULD BE CONSIDERED PRIOR TO CLEARING AND GRADING. THE USE OF WATER, CALCIUM CHLORIDE FLAKES/SOLUTION OR MAGNESIUM CHLORIDE FLAKES/SOLUTION SHALL BE USED AS DUST SUPPRESSANTS AS PER OPSS 506. THIS IS TO LIMIT WIND EROSION OF SOILS WHICH MAY TRANSPORT SEDIMENTS OFFSITE, WHERE THEY MAY BE WASHED INTO THE RECEIVING
- ALL 'GREEN AREAS' TO BE TREATED WITH 150mm TOPSOIL AND SOD AS SOON AS FEASIBLE. AS PER OPSS 570. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95%
- STANDARD PROCTOR DENSITY.
- 10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED. 1. STOCKPILED MATERIAL IS TO BE STORED AWAY FROM POTENTIAL RECEIVERS (E.G. STORM CATCHBASINS, MANHOLES), AND BE SURROUNDED BY EROSION CONTROL MEASURES WHERE MATERIAL IS LEFT IN PLACE IN EXCESS OF 14 DAYS
- .2. IF REQUIRED. DEWATERING/SETTLING BASINS SHALL BE CONSTRUCTED AS PER OPSD 219.240 AND LOCATED ON FLAT GRADE UPSTREAM OF OTHER EXISTING MITIGATION MEASURES. WATERCOURSES SHALL NOT BE DIVERTED, OR BLOCKED, AND TEMPORARY WATERCOURSES CROSSINGS SHALL NOT BE CONSTRUCTED OR UTILIZED. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. IF CLOSURE OF ANY PERMANENT WATER PASSAGE IS NECESSARY, THE CONTRACTOR SHALL RELEASE ANY STRANDED FISH TO THE OPEN PORTION OF THE
- WATERCOURSE WITHOUT HARM. 13. ALL FROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO OPSS 577.
- 14. WHERE DEWATERING IS REQUIRED, THE DISCHARGED WATER SHALL BE CONTROLLED IN ACCORDANCE WITH OPSS 518.
- 15. ALL SETTLING/FILTRATION BASINS SHALL BE EQUIPPED WITH TERRAFIX 270R GEOTEXTILE (OR APPROVED EQUIVALENT) AND SHALL BE CLEANED AND REPLACED AS REQUIRED.

SEWER NOTES

- CONSTRUCT ALL SEWERS AND APPURTENANCES TO CITY OR TOWNSHIP STANDARDS (IF AVAILABLE) OR AS PER OPSD STANDARDS SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
- BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
- SUB-BEDDING, IF REQUIRED SHALL BE AS PER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
- BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR SAND.
- TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0m BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- SEWERS AND CONNECTIONS 150mm DIAMETER AND SMALLER TO BE PVC SDR 28 OR APPROVED EQUIVALENT. SEWERS AND CONNECTIONS 200mm DIAMETER AND LARGER TO BE PVC SDR 35 OR APPROVED EQUIVALENT
- INSULATE ALL SEWERS AND/OR SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"x8' LONG MARKER.
- . CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ONSITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- 11. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN.
- 2. ALL CATCHBASIN AND CATHCBASIN MANHOLE LEADS ARE TO BE MINIMUM 200mmØ WITH MINIMUM 1.0% SLOPE UNLESS
- 3. ALL CATCHBASINS EXCLUDING LANDSCAPE CATCHBASINS ARE TO HAVE 150 mmØ PERFORATED PIPE FOR 3.0m ON ALL AVAILABLE SIDES AS PER CITY OF OTTAWA STANDARD DRAWING 'R1

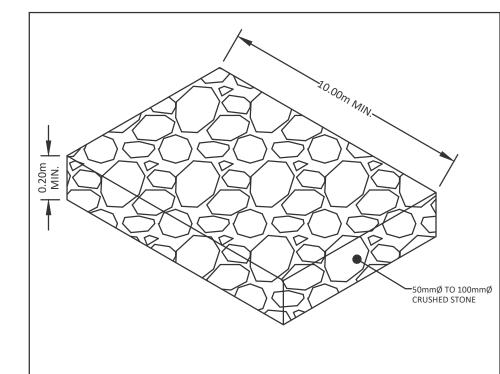
WATERMAIN NOTES

- CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY
- WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W22.
- IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
- VALVES TO BE OPERATED BY CITY STAFF ONLY
- NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION. CONNECTION, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE OMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE
- SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE WORKS PRIOR TO INITIATING CONSTRUCTION. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.
- . ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT
- O. ALL WATERMAIN TO BE FOLIPPED WITH TRACER WIRE.
- L. AS PER CITY GUIDELINE. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION F JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.
- SWABING, CHLORINATION AND CONTINUITY TESTING FOR PROPOSED WATER SERVICES IS TO FOLLOW CITY OF OTTAWA SPECIAL



WATER COVER TABLE			
LOCATION	FINISHED GRADE	TOP OF PIPE	COVER
CAP AT BUILDING	124.82	122.42	2.40
45° Bend	125.07	122.67	2.40
45° Bend	125.07	122.67	2.40
Water Valve	125.29	122.89	2.40
500mm Culvert Crossing	125.23	122.83	2.40
Connection	125.21	122.81	2.40

REFER TO ATTACHED DETAIL SHEET (C100) FOR **ADDITIONAL CROSS SECTIONS AND DETAILS.**



ROADWAY NOTES

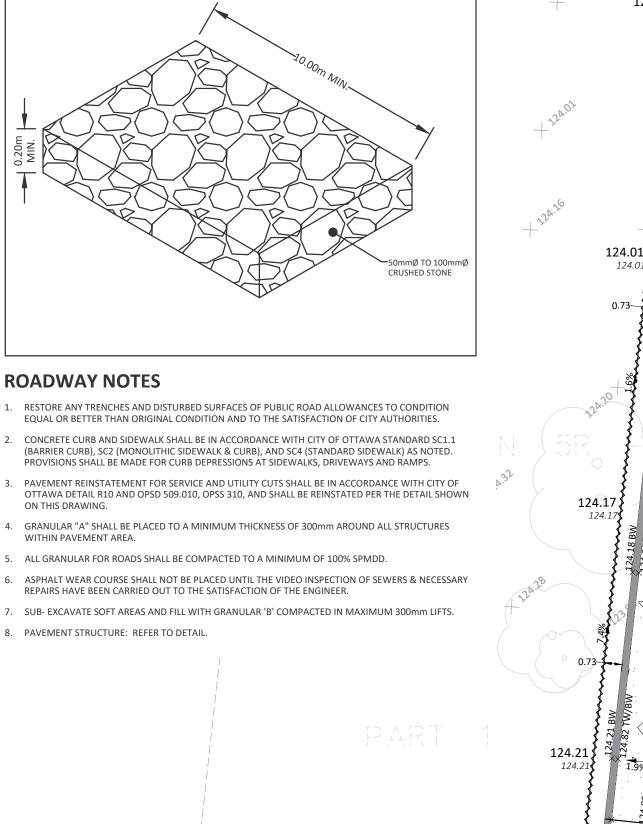
- 1. RESTORE ANY TRENCHES AND DISTURBED SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF CITY AUTHORITIES.
- 2. CONCRETE CURB AND SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD SC1.1 (BARRIER CURB), SC2 (MONOLITHIC SIDEWALK & CURB), AND SC4 (STANDARD SIDEWALK) AS NOTED.
- OTTAWA DETAIL R10 AND OPSD 509.010, OPSS 310, AND SHALL BE REINSTATED PER THE DETAIL SHOWN
- ON THIS DRAWING. 4. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES
- WITHIN PAVEMENT AREA.
- 5. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 100% SPMDD.
- REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE ENGINEER.
- 7. SUB- EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
- 8. PAVEMENT STRUCTURE: REFER TO DETAIL.

JOB BENCHMARK 1

TOP OF SPINDLE ON

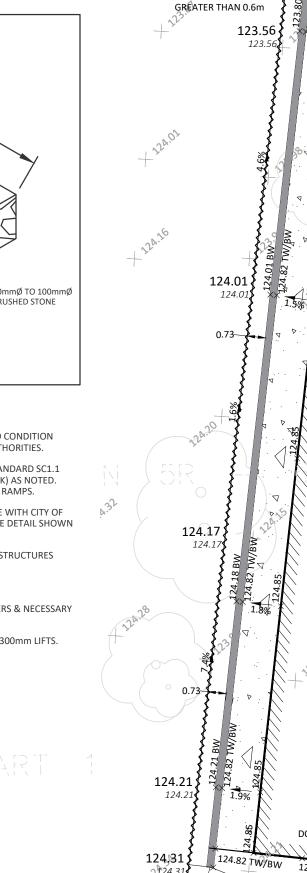
200mm DIA. WATERMAIN

FIRE HYDRANT ELEV: 126.12



TOP OF BANK

EDGE OF ASPHALT



-PROPOSED SWALE @0.5%

APPROXIMATE EDGE OF ASPHALT

L_{TIE} INTO EXISTING GRADES

WATER SERVICE TOP = 122.83

INSULATE PER CITY STD. W23

DIA. CULVERT

CARP ROAD

500mm CSP CULVERT INV = 124.25

CENTRELINE OF

TOP = 122.81

TEE CONNECTION TO EXISTING 203mm-

EXCAVATION AND REINSTATEMENT

DIA. WATERMAIN BY CITY FORCES

BY SITE SERVICING CONTRACTOR

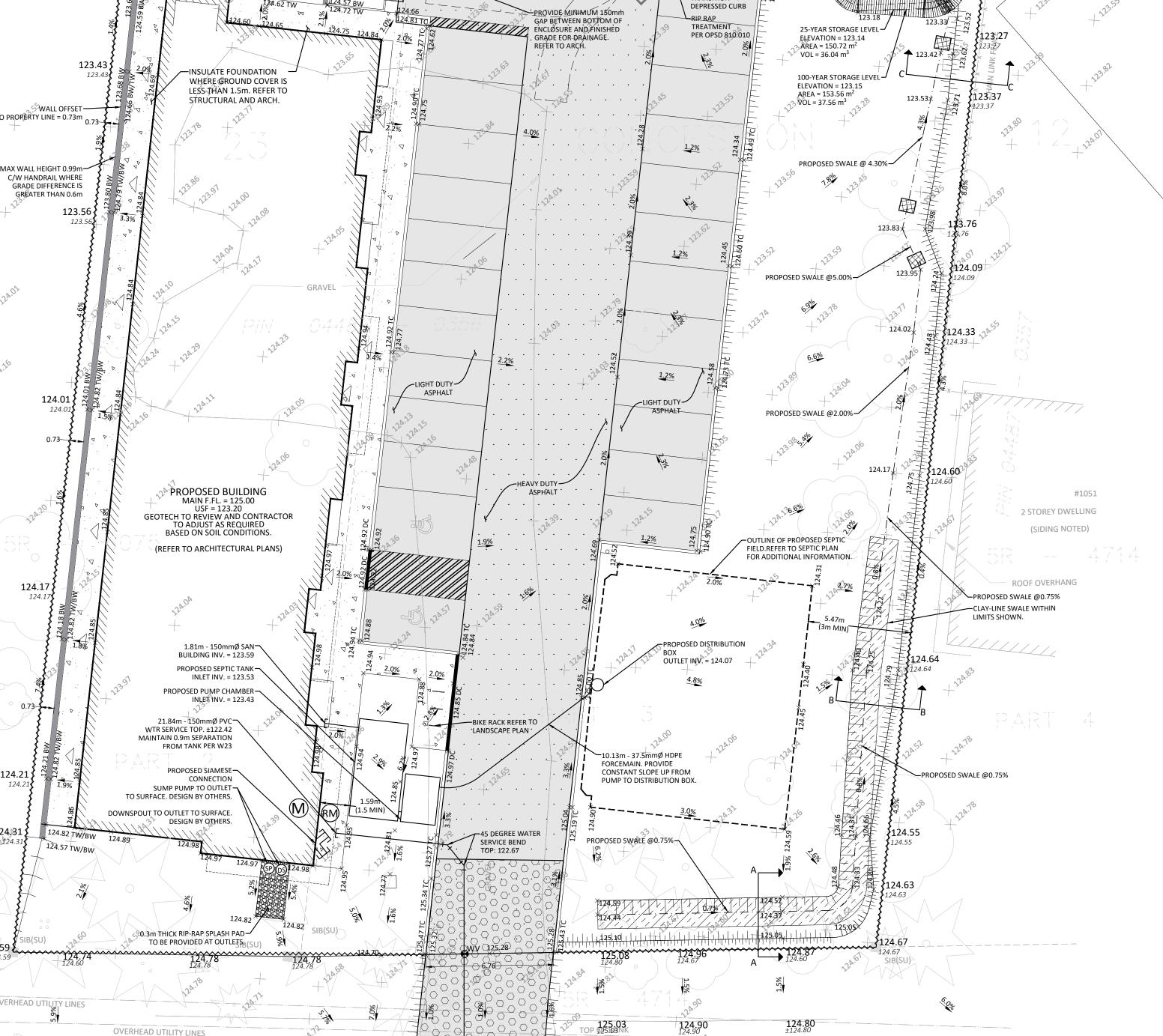
122.87

ALL BERMS AND SIDE-

AS SOON AS POSSIBLE

AVOID EROSION

123.36



REDEFINE EXISTING

REMOVE EXISTING CULVERT

-EXCAVATE, BACKFILL, AND

REINSTATE AS PER CITY STD R10

NW INV. 124.27

SE INV. 124.21

REPLACE WITH PROPOSED CULVERT 12m - 500mmØ CSP @0.5%

TO BE INSTALLED PER CITY STD. S26

DITCH

AT 0.5% 200mm DIA. WATERMAIN

CLAY SEAL TO BE

SIDE OF BERM AS PER CITY

STANDARD S8. GEOTECH

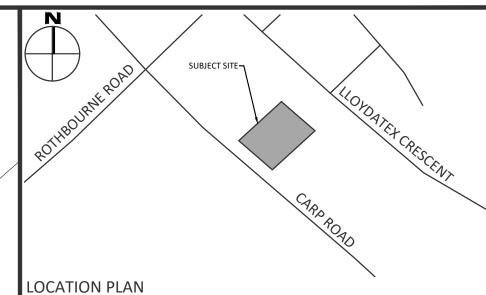
TO REVIEW AND REVISE

DURING CONSTRUCTION

AS REQUIRED.

BOARD FENCE

CONSTRUCTED ALONG P.I



SILT FENCE

(AS PER OPSD 219.130)

ROCK CHECK DAM

BUILDING ENTRANCES

(MAIN, SIDE, OVERHEAD)

STRAW BALE CHECK DAN

AS PER OPSD 219.180

RETAINING WALI

MUD MAT

CLAY-SEAL

EX. CB APPROXIMATE LOCATION-

2.00m WIDE RIPRAP LINED WEIR

WEIR ELEVATION = 123/14m

DEPRESSED STORAGE AREA MIN. TOP ELEXATION = 123.18

WOOD RAIL FENCE—

-5-YEAR STORAGE LEVEL

ELEVATION = 123.04

AREA = 122.64 m^2

 $VOL = 22.43 \text{ m}^3$



CB6 DI6 CATCHBASIN OR DITCH INLET ECB4 LANDSCAPE CATCHBASIN

MH7A SANITARY MANHOLE PERFORATED PIPE IN SWALES WATER VALVE/CHAMBER FIRE HYDRANT CENTRELINE OF SWALE

SLOPING AT 3:1 (UNLESS SPECIFIED) **95.94** *93.20* PROPOSED ELEVATION **EXISTING ELEVATION** SWALE ELEVATION

TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION **EMERGENCY OVERLAND** FLOW ROUTE

06 ISSUED FOR SITE PLAN CONTROL AUG. 08, 202 ISSUED FOR MUNICIPAL REVIEW MAR. 24, 2023 04 ISSUED FOR MUNICIPAL REVIEW NOV. 29, 2022 ISSUED FOR COORDINATION SEP. 10, 2021 02 ISSUED FOR MUNICIPAL REVIEW ISSUED FOR COORDINATION AUG. 27, 2021 Date Check and verify all dimensions

SCALE 1:150

McINTOSH PERRY 115 Walgreen Road, RR3, Carp, ON KOA 1L0

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before proceeding with the work



Do not scale drawings

JIM BELL ARCHITECTURE DESIGN INC. 26 BERT G ARGUE DRIVE STITTSVILLE, ON K2S 1X9

TIE INTO EXISTING GRADES

PHASE 1 - Office Building 1037 CARP ROAD, OTTAWA, ON

SITE GRADING, DRAINAGE AND **SEDIMENT & EROSION CONTROL**

1:150 CP-19-0125 Drawn By: B.G.S R.D.F. B.G.S