

**GENERAL CONSTRUCTION NOTES**

- ALL MATERIAL (SANITARY, STORM & WATERMAIN) AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS, AND ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
- SERVICING DESIGN DRAWINGS TO BE READ IN CONJUNCTION WITH THE SITE SERVICING REPORT, REVISION 1 (MARCH 13, 2025) PREPARED BY J.L. RICHARDS & ASSOCIATES LIMITED (28989-003).
- DRAWINGS TO BE READ IN CONJUNCTION WITH UPDATED GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 2983, 3053 AND 3079 NAVAN ROAD OTTAWA, ONTARIO PREPARED BY EXP (DATED JANUARY 16, 2025), FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE TO THE CENTRELINE OF SEWER OR MAINTENANCE HOLE.
- THE NOMINAL DIAMETER OF PIPES ARE REFERRED TO IN PLAN VIEW.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE ENGINEER AND CITY OF OTTAWA.
- ALL CONNECTIONS TO EXISTING WATERMAIN FORCES (INCLUDING CONNECTIONS TO EXISTING WATERMAIN) TO BE COMPLETED BY CITY OF OTTAWA FORCES. CONTRACTOR TO PROVIDE EXCAVATION BACKFILLING, COMPACTION AND REINSTATEMENT, IN ACCORDANCE WITH CURRENT CITY SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE, VIA EXCAVATION, THE EXACT LOCATION AND ELEVATION OF THE EXISTING SANITARY SEWERS AND UNDERGROUND STRUCTURES AS REQUIRED FOR ALL CONNECTIONS, RELOCATIONS, AND BIANKINGS.
- ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL WATERMANS SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPS).
- WATERMANS CROSSING BELOW OR OVER A SEWER SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWING W25 AND W25.2.
- PROVIDE A MINIMUM OF 2.4m COVER ON ALL WATERMANS AND WATER SERVICES, OTHERWISE PROVIDE THERMAL INSULATION AS PER THE CITY STANDARD DRAWING W25 (SHALLOW TRENCHES) AND W23 (AT OPEN STRUCTURES).
- WATERMAIN THRUST BLOCKS TO BE CONSTRUCTED PER CITY STANDARD DRAWINGS W25.3 AND W25.4. THRUST BLOCKS ARE REQUIRED AT ALL BENDS, TEES, PLUGS, DEAD END CAPS, VALVES, REDUCERS, OR OTHER FITTINGS WHERE CHANGES OCCUR IN PIPE DIAMETER OR DIRECTION ALL IN ACCORDANCE WITH CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- WATERMAIN SERVICE LATERAL TO BUILDING TO BE PVC DR-18.
- ALL WATER DISTRIBUTION INFRASTRUCTURE TO BE PROVIDED WITH CATHODIC CORROSION PROTECTION AS PER CITY STANDARD W40.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER. ASPHALT RESTORATION SHALL BE IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARD DRAWING NO. R10.
- SANITARY AND STORM SERVICE LATERALS TO BUILDING TO BE PVC DR-28.
- SANITARY AND STORM SERVICES TO BE IN ACCORDANCE WITH CITY STANDARD DRAWING S11.1 AND PROVIDED WITH 0.3m MINIMUM VERTICAL CLEARANCE TO WATERMAIN. REFER TO WATERMAIN TABLE FOR CROSSING DETAILS.
- ALL FLOWS FROM THE UNDERGROUND PARKING GARAGE ARE TO BE CONVEYED TO THE SANITARY SERVICE. SANITARY FLOWS ARE TO BE PUMPED TO THE PROPOSED SANITARY SERVICE (TYP).
- THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSD 410.07, 410.07.16.04 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- SERVICES TO BE TERMINATED 1.0m FROM BUILDING WALL (TYPICAL), FOR STRUCTURAL WORK PROPOSED SERVICES TO BE SLEEVED THROUGH FOUNDATION WALL.
- BUILDER TO INSTALL BACKWATER VALVES ON SANITARY AND STORM SERVICE LATERALS IN ACCORDANCE WITH CITY OF OTTAWA STANDARD DETAIL DRAWINGS S14, S14.1, S14.2.
- ALL STORM & SANITARY MAINTENANCE HOLES C/W FRAME AND COVER AS PER CITY STANDARD DRAWINGS 24 AND 24.1. SANITARY AND STORM MAINTENANCE HOLES TO HAVE WATERTIGHT COVERS PER OPSD 401.030.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION DEPICTED ON THIS PLAN. PLEASE REFER TO THE 'VERTICAL CONTROL POINTS' SKETCH PROVIDED BY STANTEC SEPTEMBER 27, 2024 FOR LOCATION AND DESCRIPTION OF CONTROL POINTS.
- CATCH BASINS FOR LANDSCAPED APPLICATION (CB 122 & CB 124) TO BE IN ACCORDANCE WITH CITY STANDARD DETAIL S31. CB123 & CB125 TO BE 600x600mm PRECAST CONCRETE PER OPSD 705.010 C/W FRAME AND COVER AS PER CITY OF OTTAWA STANDARD DRAWING S19.
- FILL USED FOR GRADING BENEATH THE BASE AND SUB-BASE LAYERS OF PAVED AREAS SHOULD CONSIST, UNLESS OTHERWISE SPECIFIED, OF CLEAN IMPORTED GRANULAR SUCH AS OPSD GRANULAR 'A' GRANULAR 'B' TYPE II OR SELECT SUB-GRADE MATERIAL. THIS MATERIAL SHOULD BE TESTED AND APPROVED PRIOR TO DELIVERY TO THE SITE. THE FILL SHOULD BE PLACED IN LIFTS NO GREATER THAN 300mm THICK AND COMPACTED USING SUITABLE COMPACTION EQUIPMENT FOR THE LIFT THICKNESS. FILL PLACED BENEATH THE PAVED AREAS SHOULD BE COMPACTED TO AT LEAST 100% OF ITS SPMD.
- CONCRETE CURB TO BE BARRIER TYPE AS PER STANDARD DRAWING SC1.1.
- CONCRETE SIDEWALKS AND WALKWAYS TO BE CONSTRUCTED AS PER CITY OF OTTAWA DETAIL SC2 (OR SC1.4) AND SC4.
- EXCAVATION FOR THE INSTALLATION OF SERVICES ALONG OR IN PROXIMITY OF A BUILDING OR A STRUCTURE IS TO BE CONTAINED WITHIN A TRENCH BOX WIDTH AND IS TO ENSURE NO CONFLICT WITH ANY FUTURE FOOTINGS. SERVICE TRENCHES SHALL BE BACKFILLED WITH GRANULAR 'A' COMPACTED TO 100% SPMD WHERE ADJACENT TO A BUILDING FOR THE SECTION PARALLEL TO THE UNIT PLUS 5.0m PAST THE FRONT AND REAR OF THE UNIT. SELECT SUBGRADE MATERIAL, COMPACTED TO 100% SPMD TO 1.0m BELOW EXISTING GRADE FOR FULL TRENCH WIDTH OF DISTURBED AREA SHALL BE USED FOR BACKFILL INCLUDING ALONG ANY SEWERS AND WATERMANS ADJACENT TO A BUILDING OR OTHER STRUCTURE.
- MATCH EXISTING ELEVATIONS AT PROPERTY LIMITS UNLESS OTHERWISE INDICATED ON THE GRADING PLAN. ENSURE POSITIVE DRAINAGE TOWARDS A SUITABLE OUTLET WHETHER INDICATED OR NOT.
- THE CONTRACTOR SHALL PROVIDE ALL PAVEMENT MARKINGS AS SHOWN, INCLUDING HANDICAPPED PARKING SYMBOLS.
- ALL GROUNDWATER PUMPED FROM THE SITE TO BE METERED AND A PERMIT TO TAKE WATER OBTAINED AS APPLICABLE.
- CONTRACTOR TO INSTALL TEMPORARY INLET CONTROL DEVICE ORIFICE AS INDICATED ON THE DETAILS. THE ICD SHALL BE INSTALLED AND OPERABLE AT THE ONSET OF SANITARY SEWER CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL WRITTEN NOTIFICATION BY ENGINEER TO BE REMOVED.
- CONTROLLED ROOF DRAINS ARE TO BE CONVEYED TO THE FREE FLOWING STORM SERVICE/SEWERS.
- THE PROPOSED DRAINS CB 120 AND CB 121 ARE TO BE INSTALLED WITH THE FOLLOWING:
  - ZURN Z150F FLOW FLOW HIGH PERFORMANCE PROMENADE DECK DRAIN WITH ROTATABLE FRAME AND HEE-PROOF GRATE. PIPE DIAMETER SHALL BE 150mm DIA. PVC.
  - INSTALLATION OF THE ZURN PRODUCT SHALL INCLUDE AT MINIMUM A 100mm CONCRETE COLLAR AROUND THE ZURN SYSTEM AND PIPE FROM THE TOP OF SLAB TO 50mm BELOW TIG ELEVATION.
  - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
- PROPOSED PARKING AREA DRAINS, AND RAMP TRENCH DRAIN ARE TO BE CONVEYED TO THE PROPOSED CISTERN VIA THE INTERNAL PLUMBING, REFER TO THE MECHANICAL DRAWINGS FOR DETAILS.
- PAVEMENT STRUCTURE: FROM GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 2983, 3053, AND 3079 NAVAN ROAD OTTAWA, ONTARIO PREPARED BY EXP DATED SEPTEMBER 13 2024:
  - ACCESS LANE: FIRE TRUCK LANE, RAMP AND HEAVY TRUCK PARKING AREAS (ABOVE PODIUM DECK): 50mm WEAR COURSE - SP 12.5 50mm CAT B#1.8 300mm - OPSD 1010 GRANULAR 'A' BASE CRUSHED STONE COMPACTED TO 100% SPMD 150mm RIGID INSULATION, WATERPROOFING MEMBRANE AND PROTECTION BOARD
  - ACCESS LANE: FIRE TRUCK LANE, RAMP AND HEAVY TRUCK PARKING AREAS (OUTSIDE PODIUM DECK): 50mm WEAR COURSE - SP 12.5 50mm BINDER COURSE - SP 19.0 150mm - OPSD 1010 GRANULAR 'A' BASE CRUSHED STONE COMPACTED TO 100% SPMD 600mm - OPSD 1010 GRANULAR 'B' SUB-BASE TYPE II COMPACTED TO 100% SPMD
- REFER TO STRUCTURAL FOR DETAILS OF THE PAVEMENT STRUCTURE FOR THE RAMP INTO THE PARKING GARAGE.
- PAVEMENT STRUCTURE TRANSITIONS: FROM GEOTECHNICAL INVESTIGATION PROPOSED RESIDENTIAL DEVELOPMENT 2983, 3053, AND 3079 NAVAN ROAD OTTAWA, ONTARIO PREPARED BY EXP DATED SEPTEMBER 13 2024:
  - A 10 HORIZONTAL, 1 VERTICAL LONGITUDINAL TRANSITION ZONE SHOULD BE USED AT THE BOTTOM OF THE PAVEMENT STRUCTURES FOR ADJUTING PAVEMENT STRUCTURES WITH DIFFERENT PAVEMENT STRUCTURE THICKNESS.
  - THE JOINT BETWEEN A RIGID PAVEMENT STRUCTURE (CONCRETE PAVEMENT STRUCTURE) AND FLEXIBLE PAVEMENT STRUCTURE (ASPHALT PAVEMENT STRUCTURE) SHOULD BE SEALED WITH A POLYMER MODIFIED BITUMEN STRIP TO PREVENT INGRESS OF WATER, DIRT, VEGETATION AND OTHER PARTICLES THAT WOULD COMPROMISE THE PERFORMANCE OF THE PAVEMENTS AND TO WITHSTAND DIFFERENT RATES OF EXPANSION BETWEEN THE 2 DIFFERENT TYPES OF PAVEMENT STRUCTURES.

**KEY PLAN N.T.S.**

**LEGEND**

- SITE BOUNDARY
- UNDERGROUND AND GARAGE LIMITS
- DEDICATED SNOW STORAGE AREA
- EXISTING CATCH BASIN
- CATCH BASIN c/w ICD
- ELBOW REAR YARD CATCH BASIN AND LEAD PROPOSED WATERMAIN, HYDRANT, CURB STOP VALVE & VALVE BOX AND REDUCER
- EXISTING WATERMAIN, VALVE & HYDRANT
- PROPOSED STORM SEWER & MAINTENANCE HOLE
- EXISTING STORM SEWER & MAINTENANCE HOLE
- PROPOSED SANITARY SEWER & MAINTENANCE HOLE
- EXISTING SANITARY SEWER & MAINTENANCE HOLE
- TRENCH DRAIN
- PROPOSED WEAVING TILE
- ROOF DRAINS (REFER TO MECHANICAL)
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- CONCRETE SIDEWALK
- GRASSED AREA
- AT SURFACE BALCONY
- CANTILEVERED BALCONY
- WATER METER
- REMOTE METER
- BUILDING ENTRANCE
- SLIDING DOOR AT BALCONY
- 1.8m H. WOOD PRIVACY FENCE
- EXISTING 1.8m H. WOOD PRIVACY FENCE
- EXISTING CHAINLINK FENCE

**REVISIONS**

No.	ISSUE / REVISION	DDMMYY
3	ISSUED FOR THIRD ENGINEERING SUBMISSION	25/11/25
2	ISSUED FOR SECOND ENGINEERING SUBMISSION	13/03/25
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

THESE DRAWINGS HAVE BEEN PRODUCED BY J.L. RICHARDS & ASSOCIATES LIMITED AND ARE SUBJECT TO COPYRIGHT AND USE RESTRICTIONS SET OUT IN THE APPLICABLE PROJECT CONTRACT. ANY USE, REUSE, OR MODIFICATION OF THESE DRAWINGS FOR PURPOSES OTHER THAN THE ORIGINAL PROJECT OR EXECUTION OF THE DESCRIBED WORK IS NOT PERMITTED OR ENDORSED WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF J.L.R. JLR MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF THE SUITABILITY OR FITNESS OF THESE DRAWINGS FOR ANY OTHER PURPOSE, AND ANY PARTY WHICH CHOOSES TO USE, MODIFY, OR OTHERWISE RELY ON THESE DRAWINGS WITHOUT JLR'S AUTHORIZATION ACCEPTS THESE LIMITATIONS AND DOES SO AT THEIR SOLE RISK AND WITHOUT LIABILITY TO JLR.

VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING. SCALE: 1:200

**CLIENT:** Heafey GROUP

**CONSULTANT:** J.L. Richards ENGINEERS-ARCHITECTS-PLANNERS

**CONSULTANT:** J.L. Richards ENGINEERS-ARCHITECTS-PLANNERS

**PROFESSIONAL STAMP:** LICENSED PROFESSIONAL ENGINEER K.R. FERREY MORENO 100122432 2025-11-25 PROVINCE OF ONTARIO

**PROJECT:** NAVAN RESIDENTIAL AND COMMERCIAL BLOCK 17

2983 NAVAN ROAD OTTAWA, ONTARIO

**DRAWING:** KF/FA

**CHECKED:** KF

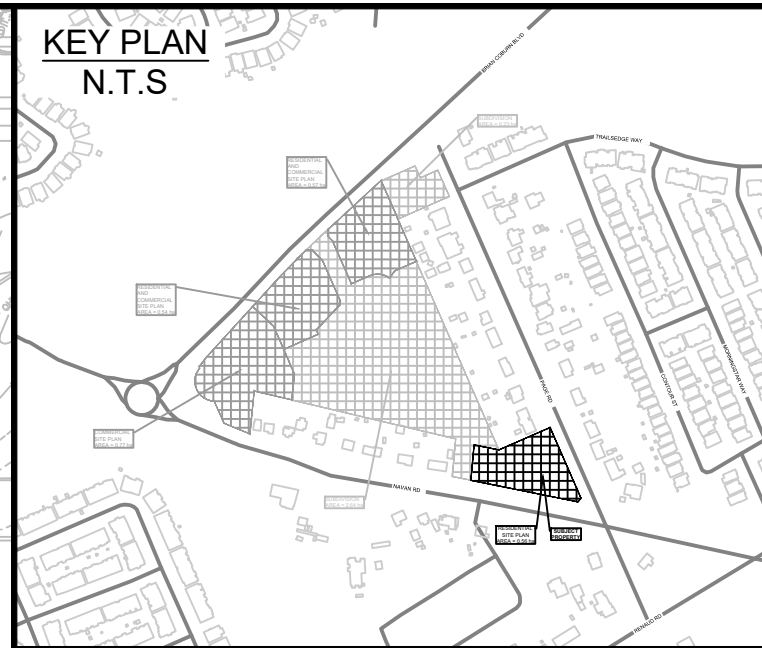
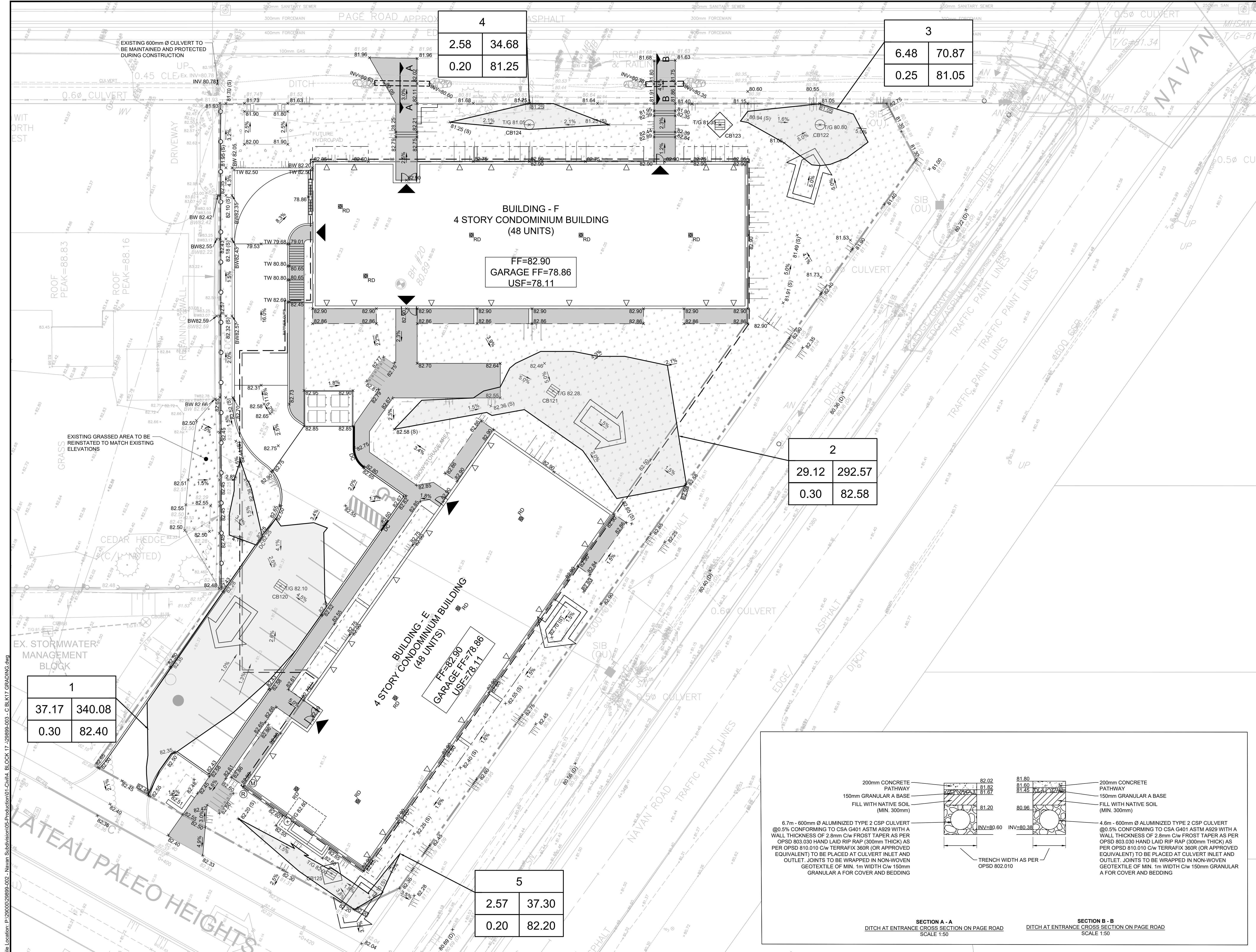
**JLR #:** 28989-003

**DRAWING #:** C01

**WATERMAIN TABLE - EX. STUB TO BUILDING 'E'**

ITEM	DETAIL	FINISHED GRADE	TOP OF WM
1	CONNECT TO EXISTING WM	82.38	79.98
2	45° BEND	82.35	79.95
3	45° BEND	82.46	80.06
4	CAP	82.86	80.48

NOTE: ALL WM CONSTRUCTED AT LEAST 2.4m BELOW FINISHED GRADE SHALL BE INSULATED IN ACCORDANCE WITH THE CITY OF OTTAWA'S REQUIREMENTS AS SET OUT IN THE CITY OF OTTAWA SPECIFICATION (F-415).



**LEGEND**

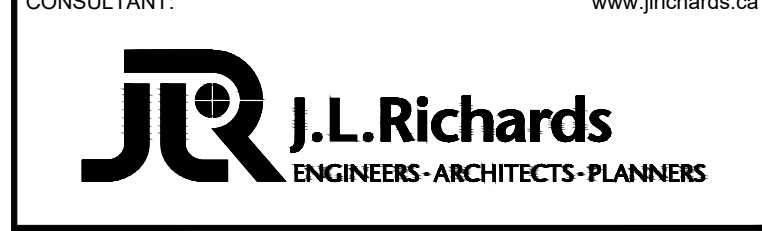
- SITE BOUNDARY
- UNDERGROUND GARAGE LIMITS
- PROPOSED ELEVATION
- PROPOSED SUBDIVISION ELEVATION
- PROPOSED HIGH POINT
- ORIGINAL SURVEY
- PROPOSED TERRACING (MAX 3:1)
- SURFACE SLOPE
- MAJOR EMERGENCY OVERLAND FLOW DIRECTION (+1-100 YR)
- DEPRESSED CURB
- FINISHED FLOOR ELEVATION
- GARAGE FF +82.40
- USF=1.65
- BUILDING ENTRANCE
- SLIDING DOOR AT BALCONY
- BOREHOLE NUMBER
- GROUND SURFACE ELEVATION (m)
- GROUND WATER ELEVATION (m)
- MAXIMUM WATER LEVEL (STATIC)
- MAX. PONDING VOLUME (m³)
- AREA ID
- MAX. PONDING AREA (m²)
- MAX. WATER LEVEL (STATIC)
- PONDING DEPTH (STATIC)
- AT SURFACE BALCONY
- CANTILEVERED BALCONY
- CONCRETE BARRIER CURB
- CONCRETE SIDEWALK
- GRASSED AREA

No.	ISSUE / REVISION	DDMMYY
3	ISSUED FOR THIRD ENGINEERING SUBMISSION	25/11/25
2	ISSUED FOR SECOND ENGINEERING SUBMISSION	13/03/25
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

THESE DRAWINGS HAVE BEEN PRODUCED BY J.L. RICHARDS & ASSOCIATES LIMITED AND ARE SUBJECT TO COPYRIGHT AND USE RESTRICTIONS SET OUT IN THE APPLICABLE PROJECT CONTRACT. ANY USE, REUSE, OR MODIFICATION OF THESE DRAWINGS FOR PURPOSES OTHER THAN THE ORIGINAL PROJECT OR EXECUTION OF THE DESCRIBED WORK IS NOT PERMITTED OR ENDORSED WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF J.L.R. J.L.R. MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF THE SUITABILITY OR FITNESS OF THESE DRAWINGS FOR ANY OTHER PURPOSE, AND ANY PARTY WHICH CHOOSES TO USE, MODIFY, OR OTHERWISE RELY ON THESE DRAWINGS WITHOUT J.L.R.'S AUTHORIZATION ACCEPTS THESE LIMITATIONS AND DOES SO AT THEIR SOLE RISK AND WITHOUT LIABILITY TO J.L.R.

VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE: 1:200



CONSULTANT:

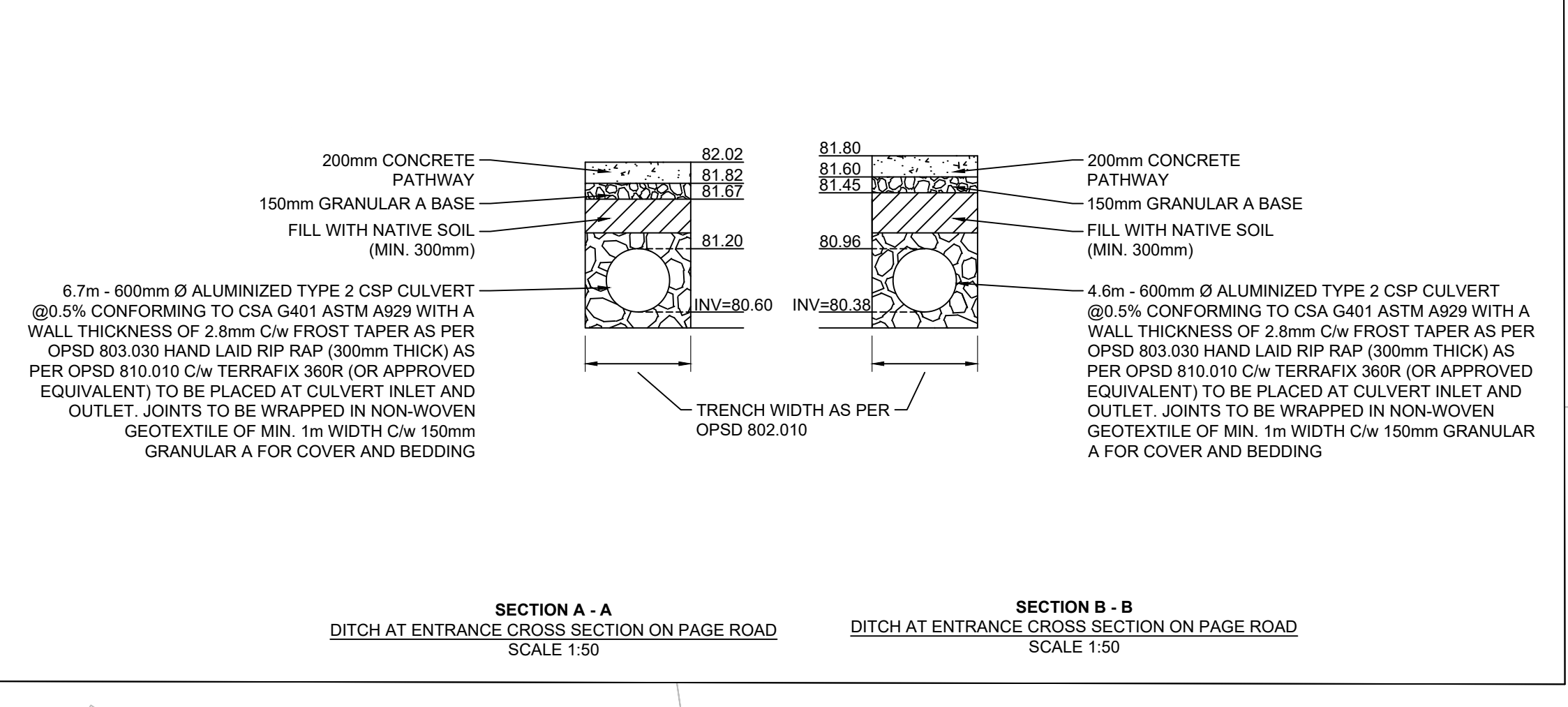


PROJECT: NAVAN RESIDENTIAL AND COMMERCIAL BLOCK 17  
2983 NAVAN ROAD OTTAWA, ONTARIO

DRAWING: GRADING AND PONDING PLAN

DESIGN: KF/FA  
DRAWN: FA  
CHECKED: KF  
JLR #: 29899-003

DRAWING #: C02



1	
37.17	340.08
0.30	82.40

2	
29.12	292.57
0.30	82.58

3	
6.48	70.87
0.25	81.05

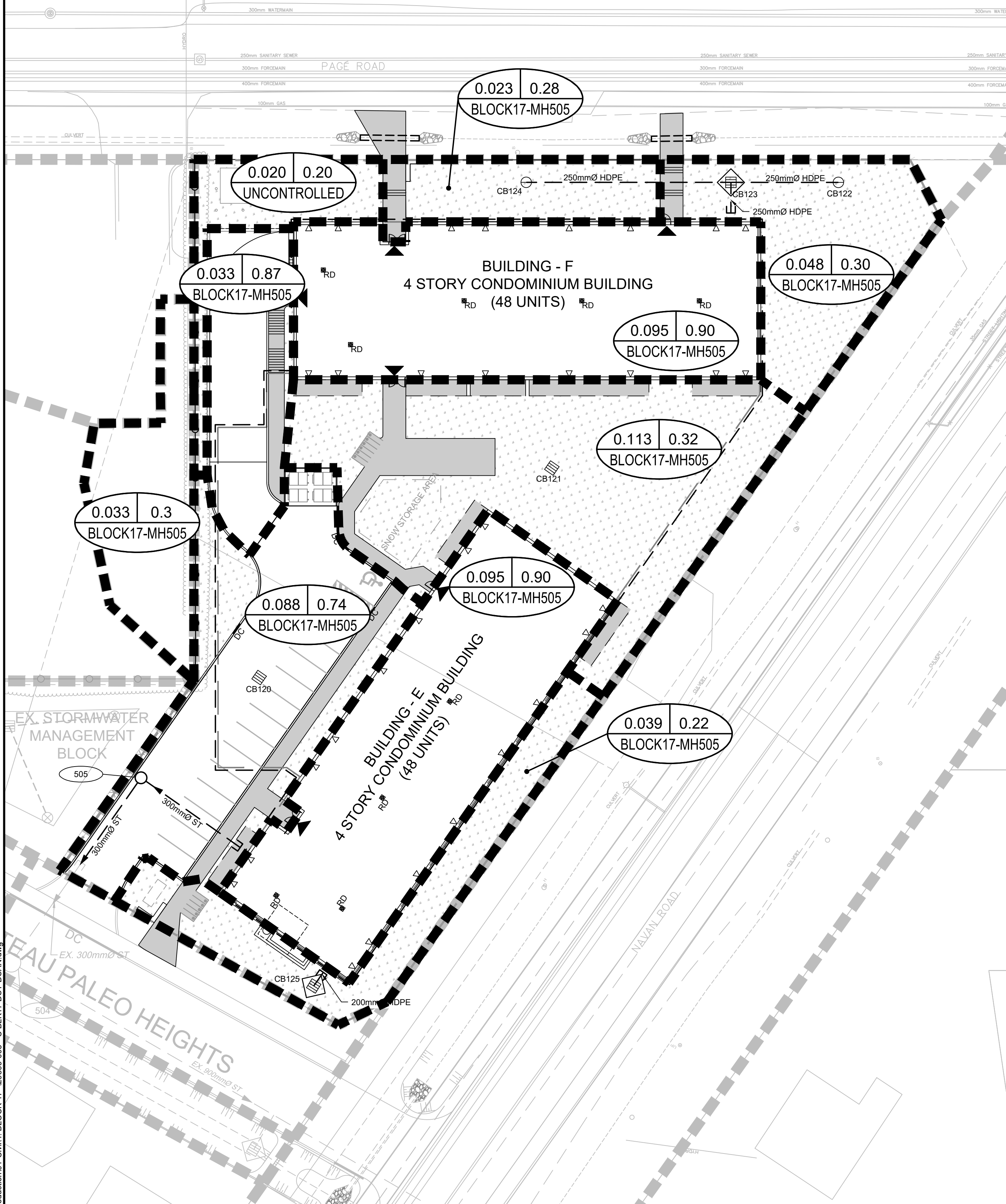
4	
2.58	34.68
0.20	81.25

5	
2.57	37.30
0.20	82.20

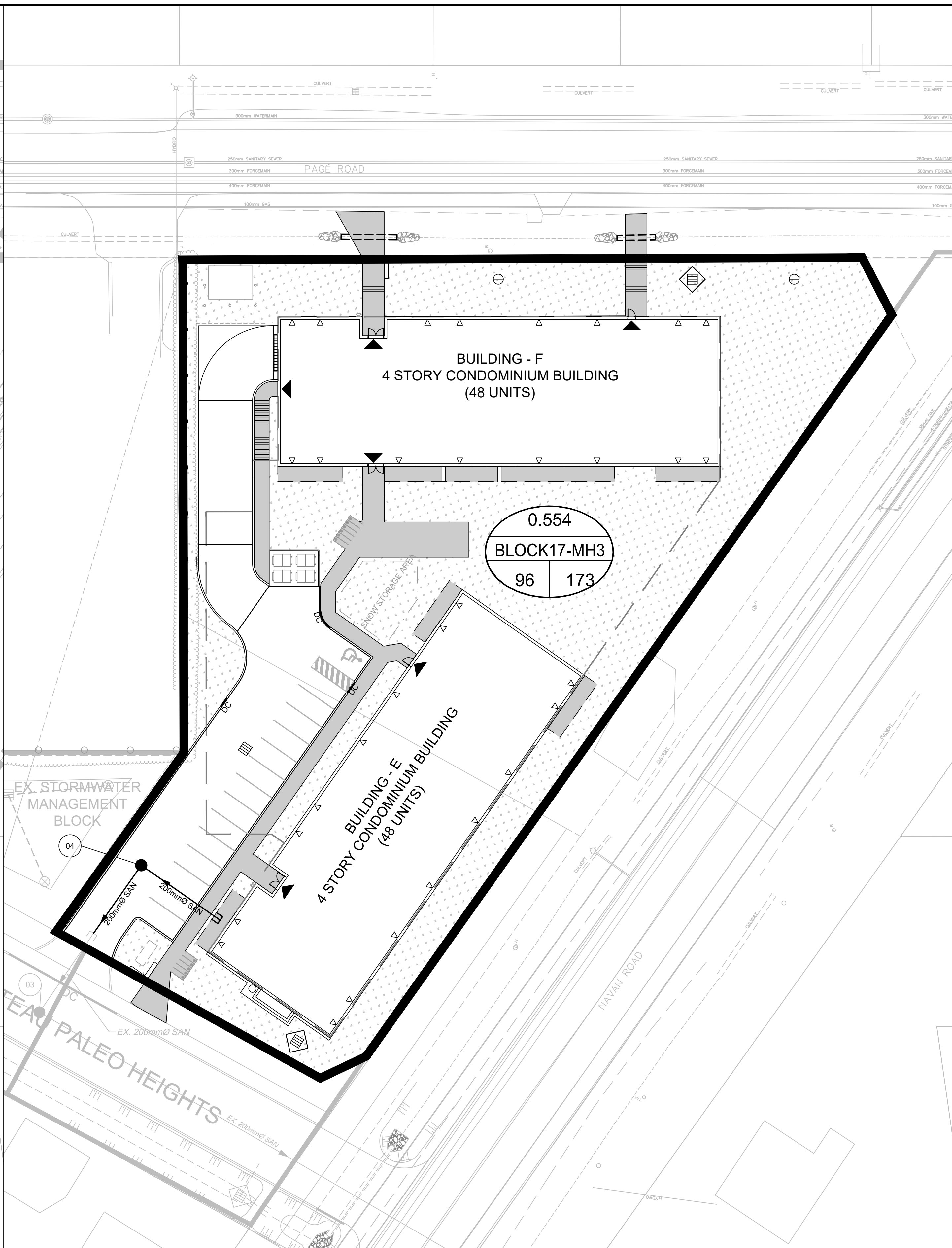
File Location: P:\2020\29899-002 - Navan, Subdivision\05-Production\01-Civil\4 - BLOCK 17 - 29899-003 - C.BL.K17 GRADING.dwg

PLOT DATE: Tuesday, November 25, 2025, 12:42:54 PM  
CITY PLAN No. 192508 CITY FILE No. D07-12-24-0120

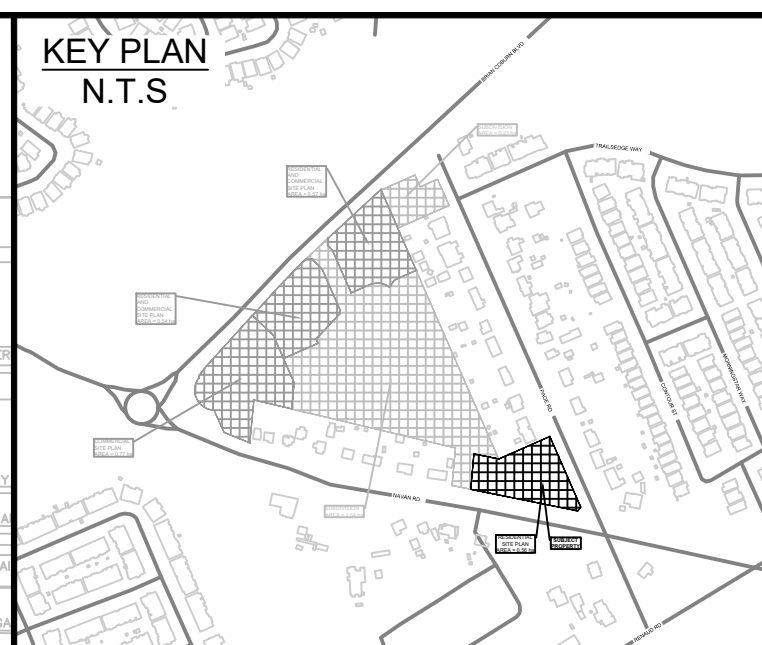
	1:100 Year Storage Volume (m³)	Roof Drain Release Rate (L/s)
Building E	49	2
Building F	49	2



## STORM DRAINAGE



## SANITARY DRAINAGE



**LEGEND**

- SITE BOUNDARY
- PROPOSED STORM DRAINAGE BOUNDARY
- MAJOR OVERLAND FLOW DIRECTION
- AREA IN HECTARES
- RUNOFF COEFFICIENT
- PIPE REACH UPSTREAM CATCHBASIN TO DOWNSTREAM CATCHBASIN
- EXISTING CATCH BASIN
- CATCH BASIN w/ ICD
- ELBOW REAR YARD CATCH BASIN AND LEAD HOLE
- PROPOSED STORM SEWER & MAINTENANCE HOLE
- EXISTING STORM SEWER & MAINTENANCE HOLE
- PROPOSED SANITARY DRAINAGE BOUNDARY
- AREA IN HECTARES
- PIPE REACH UPSTREAM MAINTENANCE HOLE TO DOWNSTREAM MAINTENANCE HOLE
- POPULATION
- NUMBER OF UNITS
- PROPOSED SANITARY SEWER & MAINTENANCE HOLE
- EXISTING SANITARY SEWER & MAINTENANCE HOLE

No.	ISSUE / REVISION	DDMMYY
3	ISSUED FOR THIRD ENGINEERING SUBMISSION	25/11/25
2	ISSUED FOR SECOND ENGINEERING SUBMISSION	13/03/25
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

THESE DRAWINGS HAVE BEEN PRODUCED BY J.L. RICHARDS & ASSOCIATES LIMITED AND ARE SUBJECT TO COPYRIGHT AND USE RESTRICTIONS SET OUT IN THE APPLICABLE PROJECT CONTRACT. ANY USE, REUSE, OR MODIFICATION OF THESE DRAWINGS FOR PURPOSES OTHER THAN THE ORIGINAL PROJECT OR EXECUTION OF THE DESCRIBED WORK IS NOT PERMITTED OR ENDORSED WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF J.L.R. J.L.R. MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF THE SUITABILITY OR FITNESS OF THESE DRAWINGS FOR ANY OTHER PURPOSE, AND ANY PARTY WHICH CHOOSES TO USE, MODIFY, OR OTHERWISE RELY ON THESE DRAWINGS WITHOUT J.L.R.'S AUTHORIZATION ACCEPTS THESE LIMITATIONS AND DOES SO AT THEIR SOLE RISK AND WITHOUT LIABILITY TO J.L.R.

VERIFY SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

SCALE: 1:300

CLIENT:

CONSULTANT:

ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:

PROJECT NORTH

PROJECT:

**NAVAN RESIDENTIAL AND COMMERCIAL BLOCK 17**

2983 NAVAN ROAD OTTAWA, ONTARIO

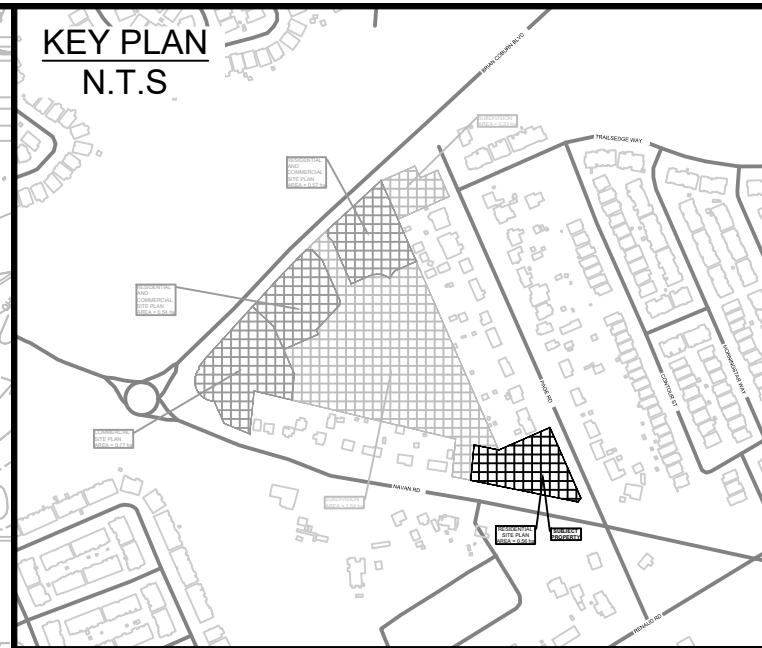
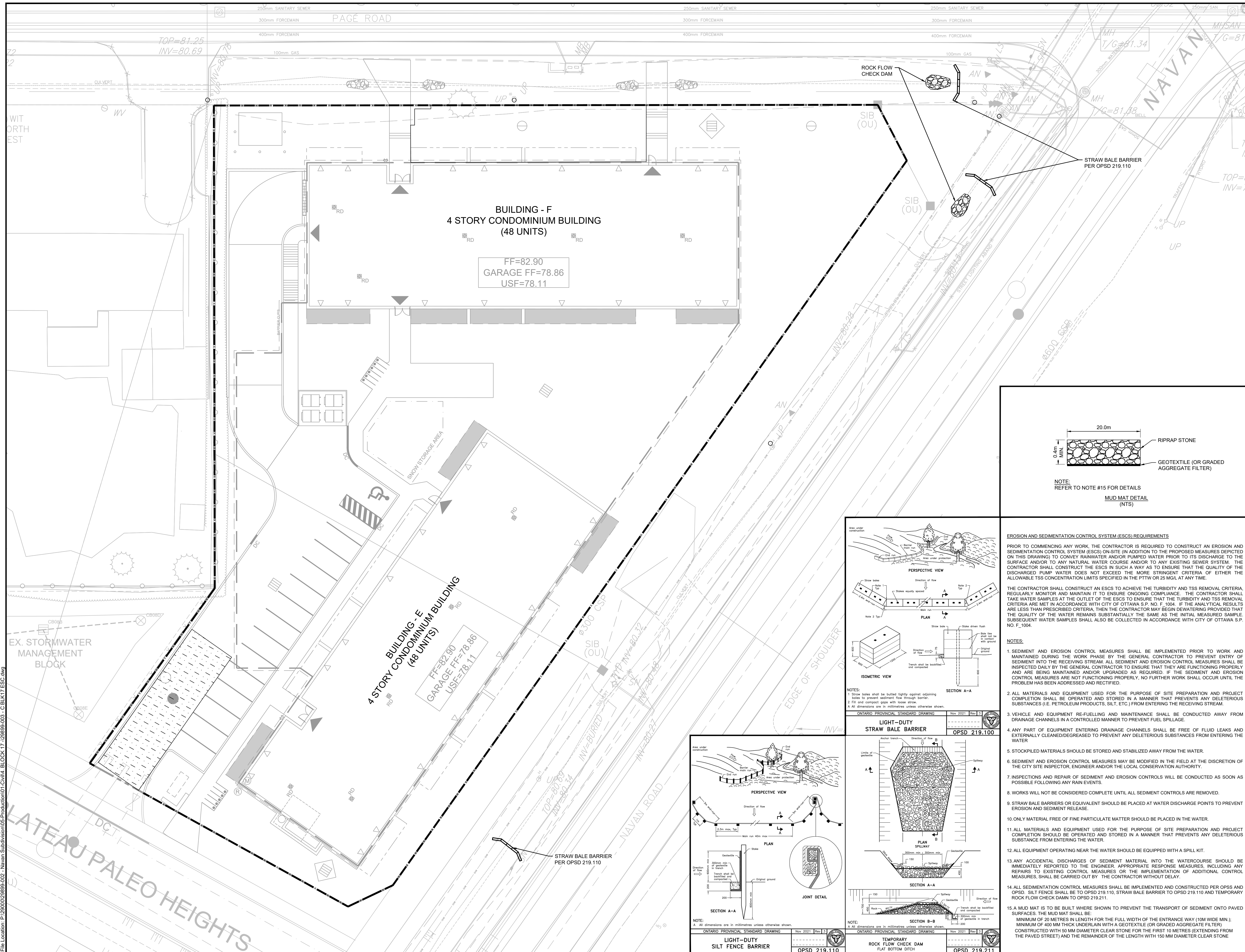
DRAWING:

**STORM AND SANITARY DRAINAGE PLANS**

DESIGN:	KF/FA	DRAWING #:	<b>C03</b>
DRAWN:	FA		
CHECKED:	KF		
JLR #:	29899-003		

File Location: P:\2020\028899-002 - Navan\_Subdivision\05-Production\01-Civil\BLOCK 17\_28899-003 - C.BLOCK17.DST.DSAL.dwg

PLOT DATE: Tuesday, November 25, 2025, 12:43:15 PM  
CITY PLAN No. 19208 CITY FILE No. D07-12-24-0120



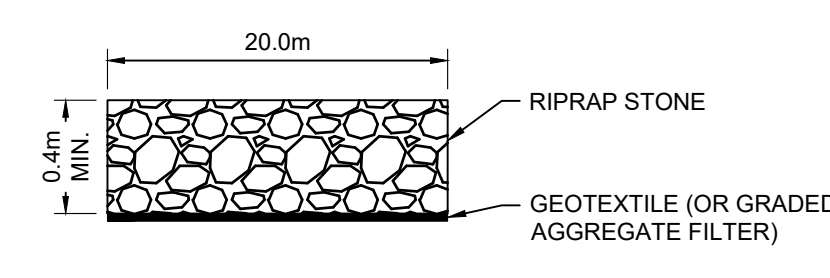
**LEGEND**

- SITE BOUNDARY
- EXISTING CATCH BASIN
- CATCH BASIN c/w ICD
- ELBOW REAR YARD CATCH BASIN AND LEAD
- STORM MAINTENANCE HOLE
- EXISTING STORM MAINTENANCE HOLE
- SANITARY MAINTENANCE HOLE
- EXISTING SANITARY MAINTENANCE HOLE
- EXISTING FENCE
- MUD MAT
- PROPOSED STRAW BALE BARRIER
- PROPOSED ROCK FLOW CHECK DAM
- PROPOSED SILT FENCE

3	ISSUED FOR THIRD ENGINEERING SUBMISSION	25/11/25
2	ISSUED FOR SECOND ENGINEERING SUBMISSION	13/03/25
1	ISSUED FOR FIRST ENGINEERING SUBMISSION	26/09/24

No.	ISSUE / REVISION	DDMMYY

THESE DRAWINGS HAVE BEEN PRODUCED BY J.L. RICHARDS & ASSOCIATES LIMITED AND ARE SUBJECT TO COPYRIGHT AND USE RESTRICTIONS SET OUT IN THE APPLICABLE PROJECT CONTRACT. ANY USE, REUSE, OR MODIFICATION OF THESE DRAWINGS FOR PURPOSES OTHER THAN THE ORIGINAL PROJECT OR EXECUTION OF THE DESCRIBED WORK IS NOT PERMITTED OR ENDORSED WITHOUT THE PRIOR WRITTEN AUTHORIZATION OF J.L.R. JLR MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, OF THE SUITABILITY OR FITNESS OF THESE DRAWINGS FOR ANY OTHER PURPOSE, AND ANY PARTY WHICH CHOOSES TO USE, MODIFY, OR OTHERWISE RELY ON THESE DRAWINGS WITHOUT JLR'S AUTHORIZATION ACCEPTS THESE LIMITATIONS AND DOES SO AT THEIR SOLE RISK AND WITHOUT LIABILITY TO JLR.



NOTE: REFER TO NOTE #15 FOR DETAILS

VERIFICATION SHEET SIZE AND SCALES. THE BAR TO THE RIGHT IS 25mm IF THIS IS A FULL SIZE DRAWING.

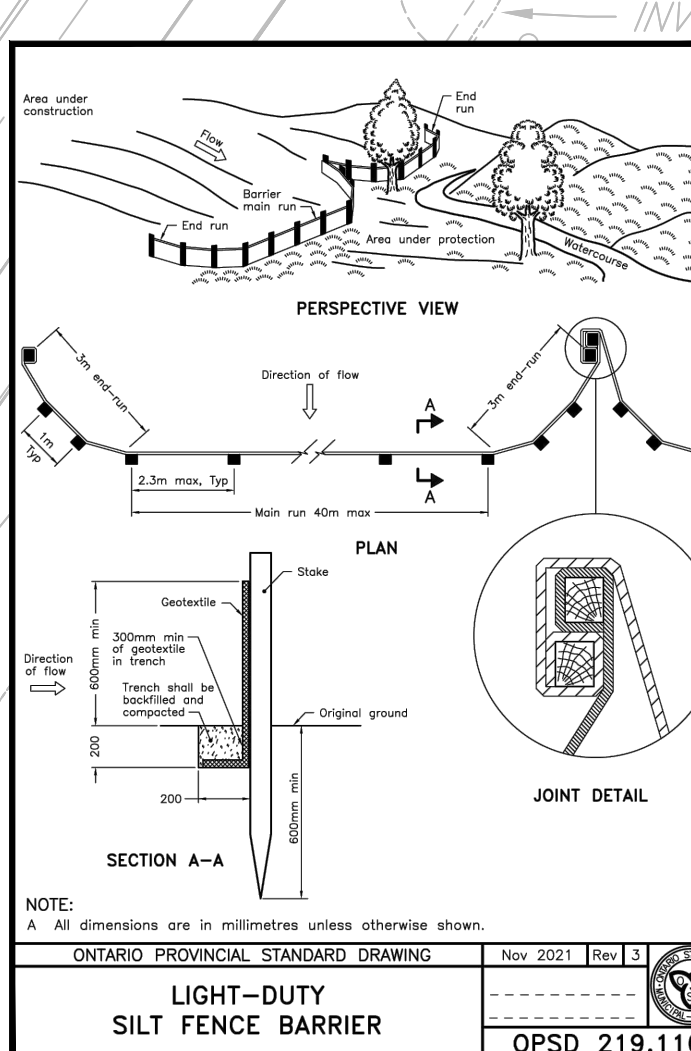
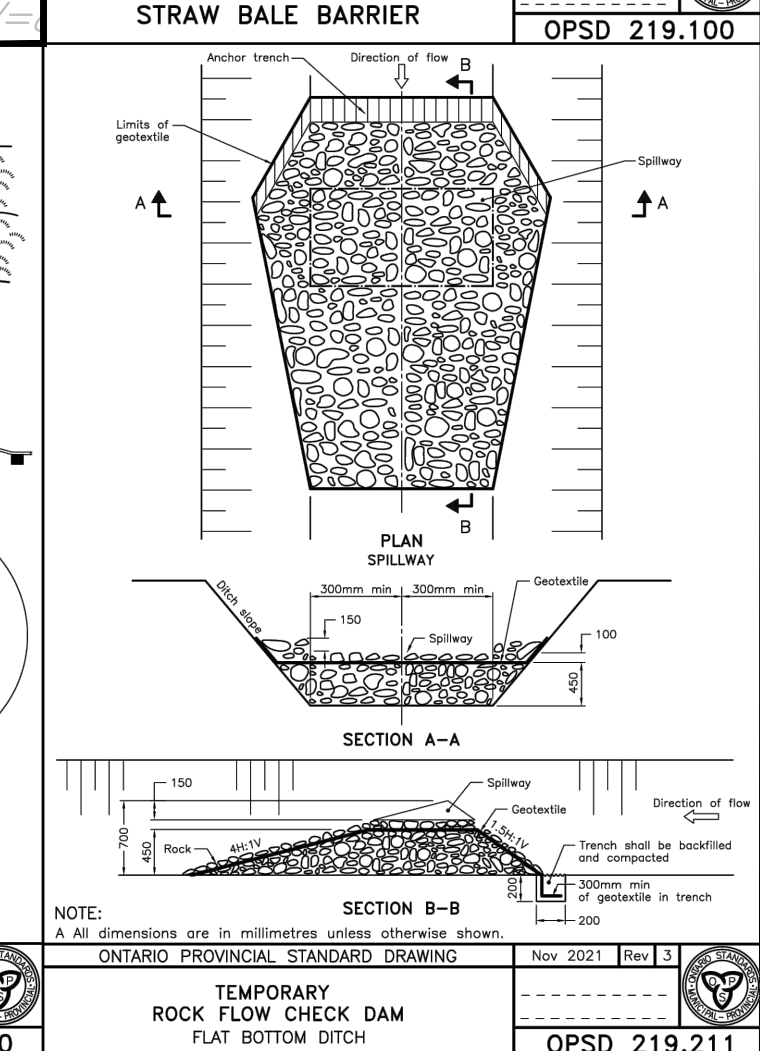
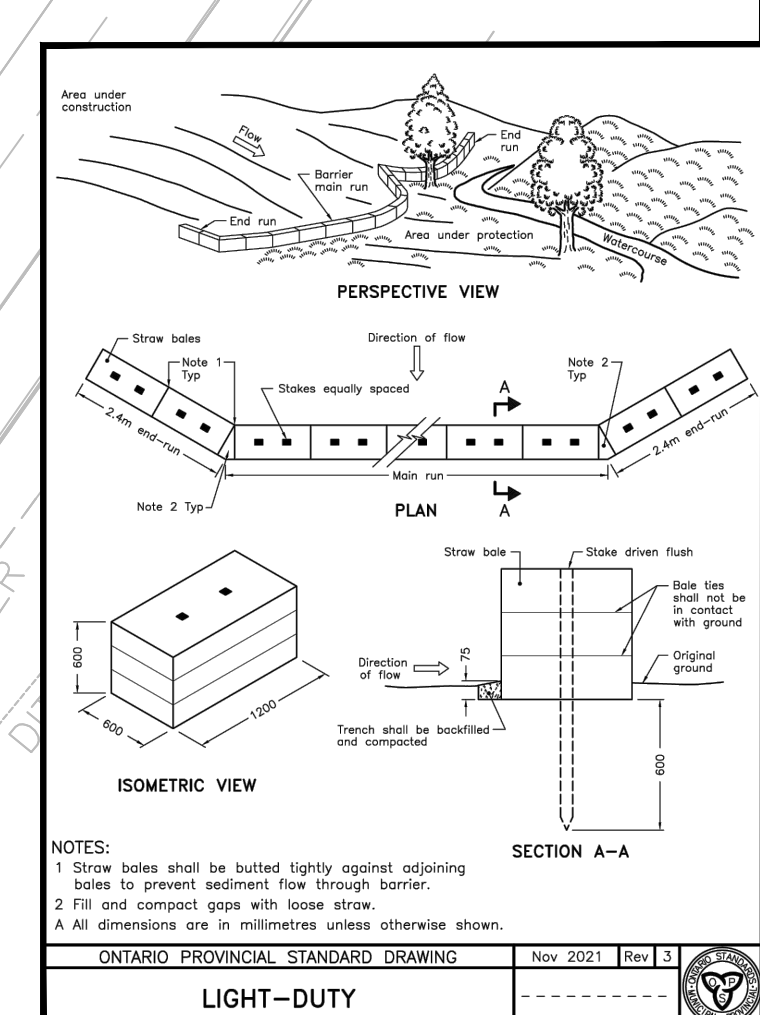
SCALE: 1:200

**EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) REQUIREMENTS**

PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS REQUIRED TO CONSTRUCT AN EROSION AND SEDIMENTATION CONTROL SYSTEM (ESCS) ON-SITE (IN ADDITION TO THE PROPOSED MEASURES DEPICTED ON THIS DRAWING) TO CONVEY RAINWATER AND/OR PUMPED WATER PRIOR TO ITS DISCHARGE TO THE SURFACE AND/OR TO ANY NATURAL WATER COURSE AND/OR TO ANY EXISTING SEWER SYSTEM. THE CONTRACTOR SHALL CONSTRUCT THE ESCS IN SUCH A WAY AS TO ENSURE THAT THE QUALITY OF THE DISCHARGED PUMP WATER DOES NOT EXCEED THE MORE STRINGENT CRITERIA OF EITHER THE ALLOWABLE TSS CONCENTRATION LIMITS SPECIFIED IN THE PTTW OR 25 MG/L AT ANY TIME.

THE CONTRACTOR SHALL CONSTRUCT AN ESCS TO ACHIEVE THE TURBIDITY AND TSS REMOVAL CRITERIA. REGULARLY MONITOR AND MAINTAIN IT TO ENSURE ONGOING COMPLIANCE. THE CONTRACTOR SHALL TAKE WATER SAMPLES AT THE OUTLET OF THE ESCS TO ENSURE THAT THE TURBIDITY AND TSS REMOVAL CRITERIA ARE MET IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F. 1004. IF THE ANALYTICAL RESULTS ARE LESS THAN PRESCRIBED CRITERIA, THEN THE CONTRACTOR MAY BEGIN DEWATERING PROVIDED THAT THE QUALITY OF THE WATER REMAINS SUBSTANTIALLY THE SAME AS THE INITIAL MEASURED SAMPLE. SUBSEQUENT WATER SAMPLES SHALL ALSO BE COLLECTED IN ACCORDANCE WITH CITY OF OTTAWA S.P. NO. F. 1004.

- NOTES:**
1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO WORK AND MAINTAINED DURING THE WORK PHASE BY THE GENERAL CONTRACTOR TO PREVENT ENTRY OF SEDIMENT INTO THE RECEIVING STREAM. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY AND ARE BEING MAINTAINED AND/OR UPGRADED AS REQUIRED. IF THE SEDIMENT AND EROSION CONTROL MEASURES ARE NOT FUNCTIONING PROPERLY, NO FURTHER WORK SHALL OCCUR UNTIL THE PROBLEM HAS BEEN ADDRESSED AND RECTIFIED.
  2. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHALL BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCES (I.E. PETROLEUM PRODUCTS, SILT, ETC.) FROM ENTERING THE RECEIVING STREAM.
  3. VEHICLE AND EQUIPMENT RE-FUELLING AND MAINTENANCE SHALL BE CONDUCTED AWAY FROM DRAINAGE CHANNELS IN A CONTROLLED MANNER TO PREVENT FUEL SPILLAGE.
  4. ANY PART OF EQUIPMENT ENTERING DRAINAGE CHANNELS SHALL BE FREE OF FLUID LEAKS AND EXTERNALLY CLEANED/DEGREASED TO PREVENT ANY DELETERIOUS SUBSTANCES FROM ENTERING THE WATER.
  5. STOCKPILED MATERIALS SHOULD BE STORED AND STABILIZED AWAY FROM THE WATER.
  6. SEDIMENT AND EROSION CONTROL MEASURES MAY BE MODIFIED IN THE FIELD AT THE DISCRETION OF THE CITY SITE INSPECTOR, ENGINEER AND/OR THE LOCAL CONSERVATION AUTHORITY.
  7. INSPECTIONS AND REPAIR OF SEDIMENT AND EROSION CONTROLS WILL BE CONDUCTED AS SOON AS POSSIBLE FOLLOWING ANY RAIN EVENTS.
  8. WORKS WILL NOT BE CONSIDERED COMPLETE UNTIL ALL SEDIMENT CONTROLS ARE REMOVED.
  9. STRAW BALE BARRIERS OR EQUIVALENT SHOULD BE PLACED AT WATER DISCHARGE POINTS TO PREVENT EROSION AND SEDIMENT RELEASE.
  10. ONLY MATERIAL FREE OF FINE PARTICULATE MATTER SHOULD BE PLACED IN THE WATER.
  11. ALL MATERIALS AND EQUIPMENT USED FOR THE PURPOSE OF SITE PREPARATION AND PROJECT COMPLETION SHOULD BE OPERATED AND STORED IN A MANNER THAT PREVENTS ANY DELETERIOUS SUBSTANCE FROM ENTERING THE WATER.
  12. ALL EQUIPMENT OPERATING NEAR THE WATER SHOULD BE EQUIPPED WITH A SPILL KIT.
  13. ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE SHOULD BE IMMEDIATELY REPORTED TO THE ENGINEER. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
  14. ALL SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED AND CONSTRUCTED PER OPSD AND OPSD. SILT FENCE SHALL BE TO OPSD 219.110, STRAW BALE BARRIER TO OPSD 219.110 AND TEMPORARY ROCK FLOW CHECK DAM TO OPSD 219.211.
  15. A MUD MAT IS TO BE BUILT WHERE SHOWN TO PREVENT THE TRANSPORT OF SEDIMENT ONTO PAVED SURFACES. THE MUD MAT SHALL BE:
    - MINIMUM OF 20 METRES IN LENGTH FOR THE FULL WIDTH OF THE ENTRANCE WAY (10M WIDE MIN.);
    - MINIMUM OF 400 MM THICK UNDERLAIN WITH A GEOTEXTILE (OR GRADED AGGREGATE FILTER) CONSTRUCTED WITH 50 MM DIAMETER CLEAR STONE FOR THE FIRST 10 METRES (EXTENDING FROM THE PAVED STREET) AND THE REMAINDER OF THE LENGTH WITH 150 MM DIAMETER CLEAR STONE.



CLIENT:



CONSULTANT:

**JLR J.L. Richards**  
ENGINEERS - ARCHITECTS - PLANNERS

CONSULTANT:



PROJECT:

**NAVAN RESIDENTIAL AND COMMERCIAL BLOCK 17**

2983 NAVAN ROAD OTTAWA, ONTARIO

DRAWING:

**EROSION AND SEDIMENT CONTROL PLAN**

DESIGN: KF/FA  
DRAWN: FA  
CHECKED: KF  
JLR #: 29899-003

DRAWING #:  
**C04**

File Location: P:\2000\029899-002 - Navan Subdivision\05-Production\01-Civil\4 - BLOCK 17 - 29899-003 - C.BLK17\_ESC.dwg

PLOT DATE: Tuesday, November 25, 2025 12:43:33 PM  
CITY PLAN No. 19208  
CITY FILE No. D07-12-24-020