



**re:**     **Geotechnical Review of Site Servicing Plans**  
          **Proposed Residential Development**  
          **5618 Hazeldean Road – Abbott's Run – Block 13 – Ottawa, Ontario**

**to:**     Minto Communities Inc. – **Erin Harrington** – [eharrington@minto.com](mailto:eharrington@minto.com)

**date:**   October 27, 2025

**file:**   PG7640-MEMO.03

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Further to your request and authorization, Paterson Group (Paterson) has prepared the current memorandum to document our review of the site servicing plans, and to provide associated recommendations from a geotechnical perspective for the aforementioned project. The present memorandum should be read in conjunction with Paterson Group Geotechnical Report PG7460-1 Revision 1 dated May 28, 2025.

## **Site Servicing Plan Review**

Paterson reviewed the following site servicing drawings set prepared by DSEL for the aforementioned development:

- ☐ Abbott's Run Block 13 Site Plan - Project No. 1295\_Block13, Sheet No. 1 to 19, Revision 2 dated October 24, 2025.

Based on our review of the above-noted site service plans, the majority of the design details are considered to be acceptable from a geotechnical perspective. However, additional geotechnical precautions are recommended for the following items:

- ☐ Design recommendations for lateral support zone interferences

Paterson noted several areas in which underground services are proposed within the lateral zone of influence of the adjacent proposed buildings (i.e. within the plane extending 1 Horizontal:1 Vertical down and outwards from the edge of proposed footing). To ensure that the proposed services do not incur additional loading due to the adjacent proposed dwellings, and to permit future maintenance of the underground services without causing detrimental effects to the adjacent structures, Paterson has provided additional construction recommendations in subsequent sections of the present memorandum



## Geotechnical Recommendations

### Lateral Zone of Influence Protection with Adjacent Services

It is recommended that the lateral zones of influence be lowered in the affected areas such that the influence plane (1H:1V) extending down and outwards from the edge of the proposed footings do not contain any underground services. This may be accomplished by extending the underside of footing (USF) for impacted strip footings to the elevations provided in Table 1 below. Alternatively, this may be accomplished by casting a near-vertical lean-concrete (minimum 15 MPa, 28-day strength) in-filled trench extending between the design underside of footing elevation to the recommended elevations provided below in Table 1 to a depth which would be unaffected by service trench works. The near vertical, zero-entry trench should extend horizontally a minimum 150 mm beyond the overlying footing faces.

| Table 1 – Design Recommendations for Lateral Support Zone Interferences                     |                           |                                                              |                               |
|---------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------------------|-------------------------------|
| Block / Lot Number                                                                          | Current USF Elevation (m) | Revised USF/ Underside of Lean-Concrete Trench Elevation (m) | USF Concrete Trench Depth (m) |
| Block 1 – Unit 1 & 2 Staircase Footing                                                      | 101.51*                   | 100.31                                                       | 1.20                          |
| Block 1 – Unit 3 & 4 Staircase Footing                                                      | 101.51*                   | 100.31                                                       | 1.20                          |
| Block 1 – Unit 7 & 8 Staircase Footing                                                      | 101.51*                   | 100.61                                                       | 0.90                          |
| Block 5 – Unit 4 & 5 Staircase Footing                                                      | 102.01*                   | 100.11                                                       | 0.90                          |
| *Staircase pier footing USF elevation assumed to be same as overall building USF elevation. |                           |                                                              |                               |

The zero entry, near-vertical trench sidewalls are intended to act as the formwork to cast the concrete. The bottom of the excavation should be reviewed by Paterson personnel prior to placing concrete. Once the trench excavation is approved by Paterson, lean concrete can be poured up to the design underside of footing elevation.

The extents of the trench running below a strip footing and adjacent to a site service pipe should be terminated by extending the trench upwards and back up to the design underside of footing elevation at an incline of 1H:2V along the opposite oriented-running strip footings. Reference should be made to the attached Figure 1 – Recommended Lateral Zone of Influence Protection Areas for approximate locations in which the above-noted recommendations should be carried out.



## Frost Protection for Sewer Alignments

Based on our review, the subject site services have been provided with sufficient frost cover to their obverts (i.e., a minimum of 2.1 m). Therefore, the proposed frost protection measures for the proposed service pipes at the aforementioned site are considered acceptable from a geotechnical perspective. Based on this, additional frost protection in the form of rigid insulation is not required.

## Construction Inspections

It is recommended that the above-noted items, as well as service bedding/spring-line/cover placement, clay seal installation (for roadways and service laterals), lateral support zone reinstatement, roadway subgrade fill placement and roadway subbase, base and asphalt layer placement should be reviewed at the time of construction by Paterson personnel.

We trust that this information is satisfactory for your immediate requirements.

Best Regards,

**Paterson Group Inc.**

Nicholas F. R. Versolato, CPI, B.Eng

Drew Petahtegoose P.Eng.

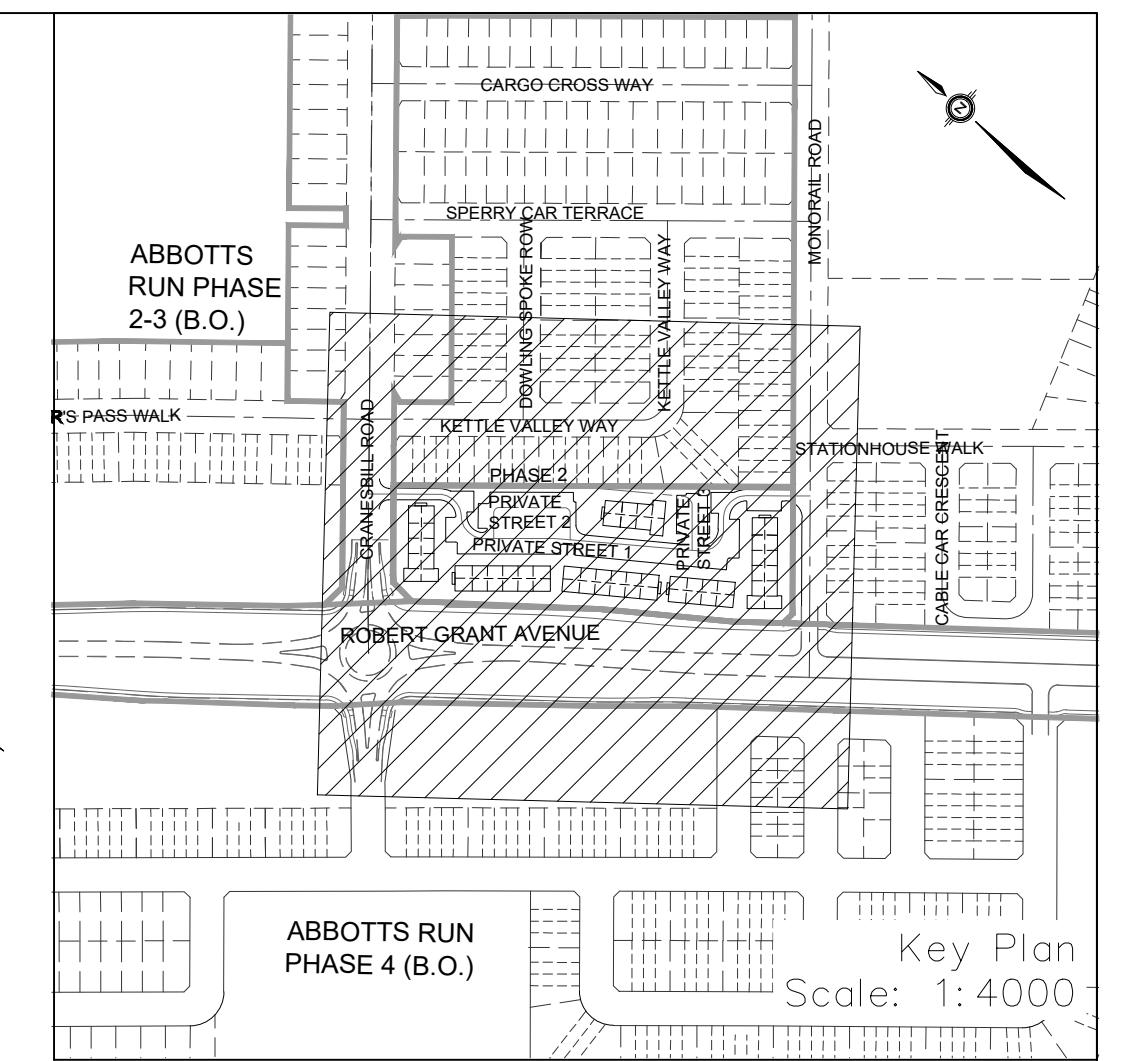
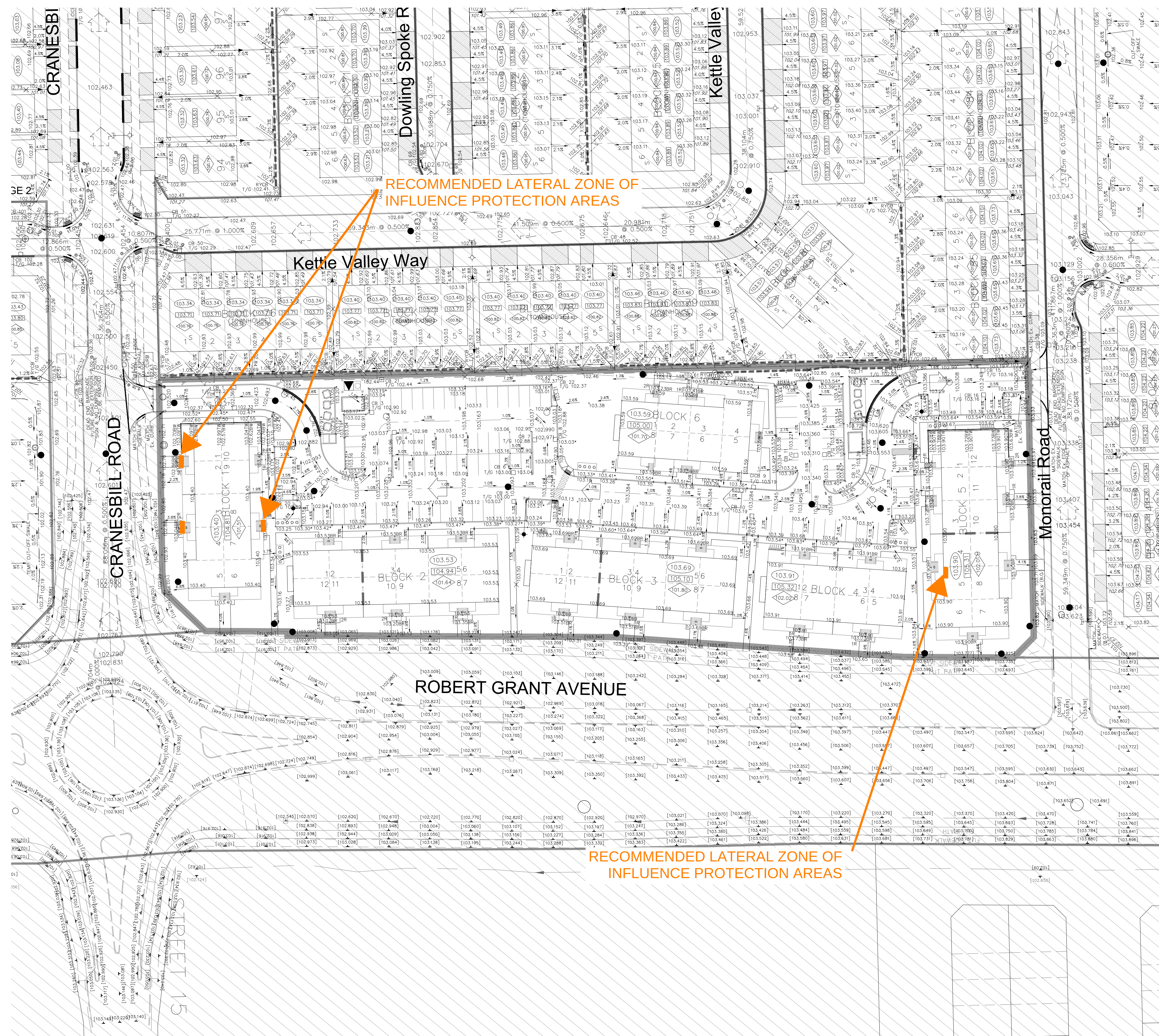


### Attachments:

- ☐ Figure 1 – Recommended Lateral Zone of Influence Protection Areas



NOTE: PLAN TO BE READ IN CONJUNCTION WITH PATERSON MEMORANDUM PG7460-MEMO.03 DATED OCTOBER 27, 2025



## LEGEND

- 
- PROPOSED ELEVATION** 103.45  
**PROPOSED TOP OF CURB ELEVATION** 103.60\*
- EXISTING ELEVATION** 102.73  
**FUTURE ELEVATION BY NOVATECH** [93.900]  
**PROPOSED SWALE GRADE** 1.5%  
**HIGH POINT** 102.16
- STREET CATCHBASIN**  
**STREET CATCHBASIN WITH SLOPED LID**  
**CATCHBASIN MANHOLE**  
**TIE CATCHBASIN**  
**ELBOW CATCHBASIN**
- HYDRANT, VALVE & VB**  
**VALVE & VC**  
**VALVE & VB**  
**SIDE OF FOUNDATION (TOP)**  
**FINISHED FLOOR ELEVATION (FFE) INSIDE OF FOOTING** [94.70]  
**ELEVATION (USF)** [92.00]
- LOTS EQUIPPED WITH PUMP UNIT ENGINEERED FILL (REFER TO DWG. 1)**  
**WALKOUT UNITS SLAB ON GROUND**
- BARRIER CURB, BARRIER CURB WITH GUTTER & DEPRESSION CURB (PER CITY OF OTTAWA**
- HYDRO TRANSFORMER**  
**STREET LIGHT STANDARD**  
**TACTILE WALKING SURFACE INVAIATOR (AS PER CITY OF OTTAWA STD. S06)**  
**CURB TRANSDITION**
- RETAINING WALL (SEE NOTES ON DWG. 103.10 FOR STRUCTURAL DWG'S FOR DETAIL)**  
**FIREWALL**  
**FOUNDATION SPLIT**  
**OVERLAND FLOW DIRECTION**
- EXTERNAL OVERLAND FLOW DIRECTION**
- EMERGENCY OVERLAND FLOW DIRECTION**
- EMERGENCY OVERLAND FLOW DIRECTION**
- RETAINING WALL AND ELEVATIONS BLACK VINYL COATED CHAINLINK FENCE (1.5m UNLESS OTHERWISE NOTED)**
- NOISE BARRIER**  
**PROPERTY BOUNDARY**  
**3:1 TERRACING MAXIMUM SLOPE**  
**PONDING AREA WITH SPILLWAY ELEVATION** 102.16  
**250Ø PVC PERFORATED PIPE (REFER TO CITY STD S28 FOR REAR YARD TRENCH AND PIPE DETAILS ONLY) (SUBDRAIN APPLIED FOR SLOPE LESS THAN 1.5%)**  
**EXISTING SANITARY MAINTENANCE HOLE**  
**EXISTING STORM MAINTENANCE HOLE**  
**SANITARY MAINTENANCE HOLE (WATERIGHT LID PER OPSD 4X1030)**  
**SANITARY MAINTENANCE HOLE**  
**SPEED HUMP PER CITY STD. R19**  
**FIREWALL**
- PHASE 2 AND FUTURE PHASES**
- T/W=103.10**  
**B/W=102.44**
- BC**

## TOPOGRAPHIC INFORMATION

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.  
PROJECT NO. 21942-22 DATED SEPTEMBER 1, 2022

### SITE PLAN INFORMATION

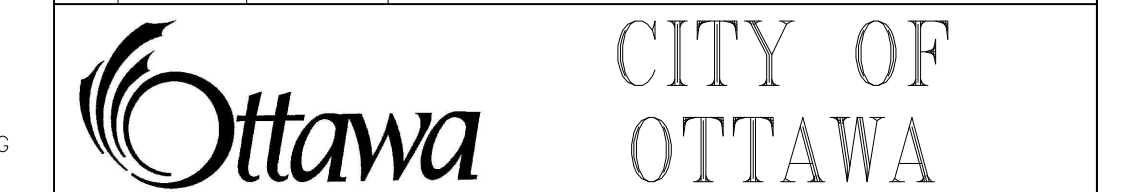
SITE PLAN PROVIDED BY SRN ARCHITECTS, DATED ON OCTOBER 20, 2025.

## ELEVATION NOTE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM VERTICAL CONTROL MONUMENT NO. BM88U502.

ELEVATION = 106.039 m

|     |       |            |                |
|-----|-------|------------|----------------|
| 2   | S.L.M | 2025-10-24 | 2nd SUBMISSION |
| 1   | S.L.M | 2025-06-20 | 1st SUBMISSION |
| No. | BY    | DATE       | DESCRIPTION    |



ABBOTT'S RUN  
BLOCK 13



## GRADING PLAN

|                   |                    |           |       |
|-------------------|--------------------|-----------|-------|
| DRAWN BY: E.D.    | CHECKED BY: S.L.M. | SHEET NO. |       |
| DESIGNED BY: E.D. | CHECKED BY: S.L.M. | 14        | OF 19 |
| SCALE: 1:500      | DATE: JUNE 2025    |           |       |

FIGURE 1 - RECOMMENDED LATERAL ZONE OF INFLUENCE PROTECTION AREAS