



June 13, 2025

OnSite Locates Inc.


48 Isabella - SUE QL - A, B, C and D

CITY OF TORONTO

REPORT

SUBSURFACE UTILITY ENGINEERING SERVICES

Project Reference #: **25-46-40993**

Prepared For	Prepared By	Reviewed By
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## 2. Table of Contents

1. Title Page.....	1
2. Table of Contents.....	2
3. Project Summary.....	3
4. Project Area.....	4
5. Subsurface Utility Engineering Investigation Methodology .....	5
5.1 CI/ASCE Standard 38-02 Summary.....	5
6. Equipment and Techniques.....	5
6.1 Electromagnetic Designating Equipment.....	5
6.2 Survey Equipment.....	6
6.3 Inver Measurement.....	6
6.4 Computer-Aided Design (CAD) Drafting.....	6
7. Subsurface utility Engineering Investigation Summary.....	6
7.1 Utility Circulation Request.....	6
7.2 Field Investigation.....	6
7.3 Data Analysis .....	7-8
7.4 CAD Presentation.....	8
8. List of Appendix.....	9
9. Appendix A – Base Plan.....	10
10. Appendix B – QL-A Report.....	11-25



### 3. Project Summary

OnSite Locates Inc. (OSL) was engaged to complete Subsurface Utility Mapping of the above noted property by Land's Edge Property Management Ltd. on May 13<sup>th</sup>, 2024 and contracted to complete the QL-A on February 28<sup>th</sup>, 2025.

The SUE Investigation was completed in accordance with *CI/ASCE Standard 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*.

The work was conducted between May 13<sup>th</sup>, 2024 – June 9<sup>th</sup>, 2025, and was successful in designating the alignment of the underground utilities within the Project Area.

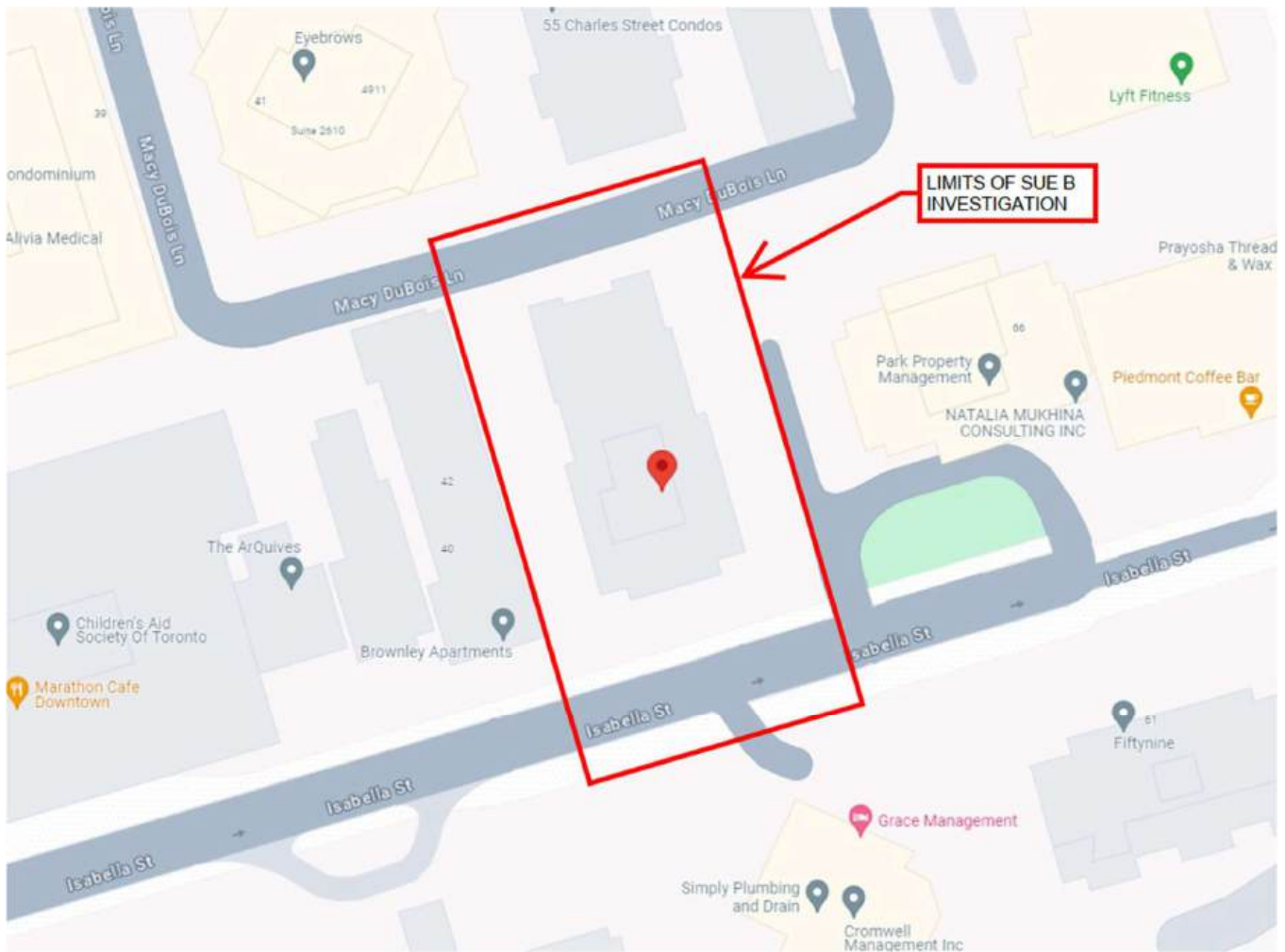
The following utilities were identified:

- Gas
- Electrical
- Telecommunications
- Water
- Sanitary and Storm

This Report was created to supplement the digital file(s) *25-46-40993.dwg* that make up the final deliverable of the project.



#### 4. Project Area





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## 5. Subsurface Utility Engineering Investigation Standards

OnSite Locates Inc. performed the SUE Investigation in accordance with the *CI/ASCE Standard 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*.

### 5.1. CI/ASCE Standard 38-02 Summary

Quality Level D (QL-D) - information derived from utility records or oral recollections.

Quality Level C (QL-C) - Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to quality level D information.

Quality Level B (QL-B) - Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality level B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents.

Quality Level A (QL-A) - Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for utility damage. A precise horizontal and vertical location, as well as other utility attributes, is shown on plan documents. Accuracy is typically set to 15-mm vertical and to applicable horizontal survey and mapping accuracy as defined or expected by the project owner.

## 6. Equipment and Techniques

JDB/OSL survey crews are trained to use the tools provided to them in accordance with the JDB/OSL Standard Operating Procedures, project scope, conditions, and the manufacturer's instructions to ensure the work is completed safely, accurately, and on time. Below is a description of the equipment and techniques used by JDB/OSL during the SUE Investigation.

### 6.1 Electromagnetic Designating Equipment

JDB/OSL uses industry standard electromagnetic cable and pipe locate kits. This equipment consists of a transmitter and receiver operating in a range of frequencies. In essence, the transmitter is used to induce a signal on a utility either through direct connection to the utility or electromagnetic induction and the signal is detected by the transmitter allowing the operator to mark on the ground the approximate horizontal location of the utility. The receiver also provides a depth estimation of the buried utility.

It is important to note that this type of equipment has its limitations, since it is the electromagnetic field that is detected, and not the utility itself. It will not locate non-metallic lines such as plastic pipes. Additionally, there are several factors that may distort the signal, causing the designation to be inaccurate, or making the utility impossible to detect. These factors are broken tracer wires, utility congestion, and change in utility material etc.



## 6.2 Invert Elevation Measurement

Sewer invert depths were manually measured using measuring tapes from the lid/grate of the given feature. Invert elevations were calculated from elevations provided in the topographic survey.

## 6.3 Survey Equipment

JDB/OSL employs the use of typical surveying instruments such as Total Stations and high accuracy Global Navigation Satellite Systems (GNSS). GNSS units are primarily used, with Total Stations being an alternative when there is no good satellite signal: under trees, near buildings etc.

## 6.4 Computer-Aided Design (CAD) Drafting

JDB/OSL employs the use of industry standard programs e.g. MicroStation and AutoCAD to manipulate and present data.

# 7. Subsurface Utility Engineering Investigation Summary

## 7.1 Utility Circulation Request

The record search process commenced on May 13<sup>th</sup>, 2024 the final records were obtained on July 22<sup>nd</sup>, 2024. The results and status of the records search is provided below:

- Enbridge – Received 2024-07-08
- Bell – Received 2024-07-22
- Beanfield – Cleared 2024-07-08
- GT – Cleared 2024-07-08
- Hydro One – Cleared 2024-06-27
- Rogers – Received 2024-07-03
- Telus – Cleared 2024-06-20
- Toronto Engineering – Received 2024-07-09
- Toronto Hydro – Received 2024-06-21
- TTC – Cleared 2024-07-17
- Zayo – Cleared 2024-06-20

## 7.2 Field Investigation

The field investigation was conducted using geophysical locate techniques. All above ground features related to underground utilities, such as pedestals, ground level boxes etc. were investigated. All manholes and catch basins in the investigation area were inspected to obtain invert depth and diameters measurements for storm and sanitary sewers.



### 7.3 Data Analysis

Field and record data were analyzed using professional judgement to provide a comprehensive presentation of the utility plant and infrastructure within the workspace.

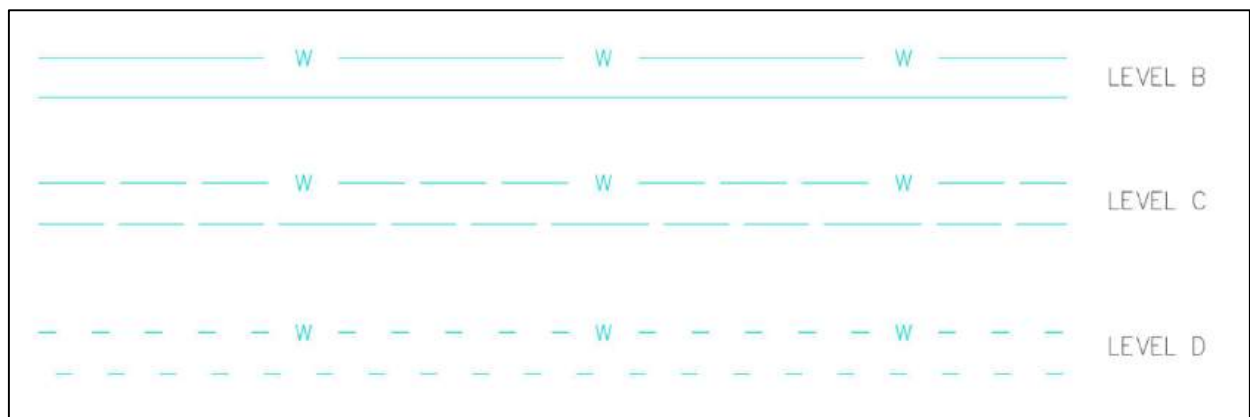
Utility Owner and Record	Assessment	Quality Level
Bell Telecommunications	<p>The records were verified by using geophysical tools.</p> <p>In areas where the utility could be confirmed using geophysical methods, the said utility was marked as Level B.</p> <p>In areas where a utility was depicted on a record, but it could not be field verified nor had no visible above-ground utility feature, the said utility was designated as Level D.</p>	Quality Level B Quality Level D
Toronto Engineering	<p>The records were verified by using geophysical tools.</p> <p>In areas where the utility could be confirmed using geophysical methods, the said utility was marked as Level B.</p> <p>Storm and sanitary sewers that were present in the drawing could only be verified using the above ground feature and were marked as Level C.</p> <p>In areas where a utility was depicted on a record, but it could not be field verified nor had no visible above-ground utility feature, the said utility was designated as Level D.</p>	Quality Level C and D-Sewer Quality Level B and D-Water
Enbridge	<p>The records were verified by using geophysical tools.</p> <p>In areas where the utility could be confirmed using geophysical methods, the said utility was marked as Level B.</p> <p>In areas where a utility was depicted on a record, but it could not be field verified nor had no visible above-ground utility feature, the said utility was designated as Level D.</p> <p>It was noted from records and field investigations that the 600 Dia gas pipeline was not currently active at the time of investigation.</p>	Quality Level B Quality Level D



Rogers	<p>The records were verified by using geophysical tools.</p> <p>In areas where the utility could be confirmed using geophysical methods, the said utility was marked as Level B.</p> <p>In areas where a utility was depicted on a record, but it could not be field verified nor had no visible above-ground utility feature, the said utility was designated as Level D.</p>	Quality Level B Quality Level D
Toronto Hydro	<p>The records were verified by using geophysical tools.</p> <p>In areas where the utility could be confirmed using geophysical methods, the said utility was marked as Level B.</p> <p>In areas where a utility was depicted on a record, but it could not be field verified nor had no visible above-ground utility feature, the said utility was designated as Level D.</p>	Quality Level B Quality Level D

#### 7.4 CAD Presentation

Line styles are designated as per the CI/ASCE Standard 38-02 and are depicted in the CAD deliverable as seen below.



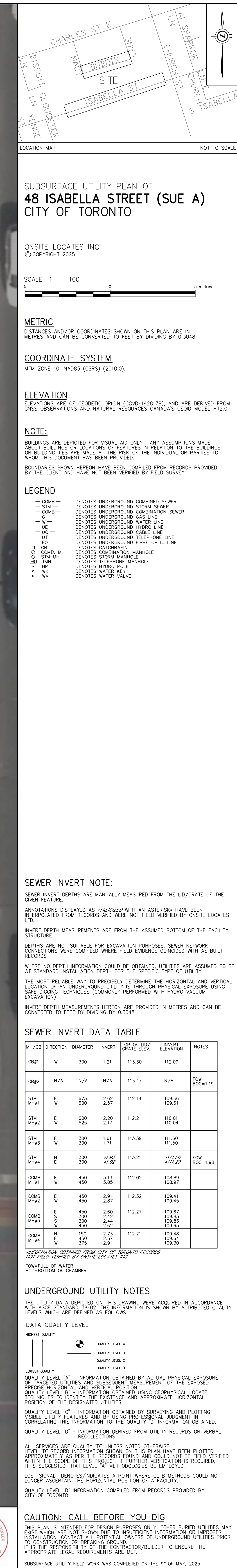


8. [List of Appendix](#)

Appendix A – Base plan

Appendix B – QL-A Report

**Appendix A**  
**Base Plan**






**ONSITE LOCATES INC.**  
UTILITY LOCATE SERVICES  
A wholly owned subsidiary of J.D. Barnes Ltd.

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## **Appendix B**

### **QL-A Report**




Project Name: 48 Isabella St.		<b>Test Hole No.: 1</b>
Project No: 25-46-40993		
Client Project No:		
City/Prov.: Toronto, Ontario		
<b>Test Hole Information</b>		<b>Site Photo</b>
<b>Location</b>		
TH Date: May 8, 2025		
Station: N/A		
Utility Orientation: E-W		
<b>Description</b>		
Utility Type: Fibre-optic Cable		
Utility Material: Plastic		
Utility Width: 100mm		
<b>Elevation of Utility</b>		
Reference Elevation: 112.40m		
Top of Utility: 111.26m		
Bottom of Utility: 111.16m		
<b>Depth from Grade</b>		
Top of Utility: 1.14m		
Bottom of Utility: 1.24m		
Depth of Excavation: 1.46m		
<b>Notes:</b>		
Prepared by: KB	Checked by: ZW	Date: June 13, 2025



Utility Locate Services | Subsurface Utility Engineering and Mapping  
140 Renfrew Drive | Suite 100 | Markham | Ontario | Canada | L3R 6B3  
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[www.onsitelocates.ca](http://www.onsitelocates.ca)




Project Name: 48 Isabella St.	<b>Test Hole No.: 3</b>	
Project No: 25-46-40993		
Client Project No:		
City/Prov.: Toronto, Ontario		
<b>Test Hole Information</b>	<b>Site Photo</b>	
<b>Location</b>		
TH Date: May 9, 2025		
Station: N/A		
Utility Orientation: E-W		
<b>Description</b>		
Utility Type: Fibre-optic Cable		
Utility Material: Plastic		
Utility Width: 100mm		
<b>Elevation of Utility</b>		
Reference Elevation: 112.27m		
Top of Utility: 111.01m		
Bottom of Utility: 110.91m		
<b>Depth from Grade</b>		
Top of Utility: 1.26m		
Bottom of Utility: 1.36m		
Depth of Excavation: 1.36m		
<b>Notes:</b> Large chunks of debris present during dig.		
Conduit enters the underside of GLB.		
Prepared by: KB	Checked by: ZW	Date: June 13, 2025



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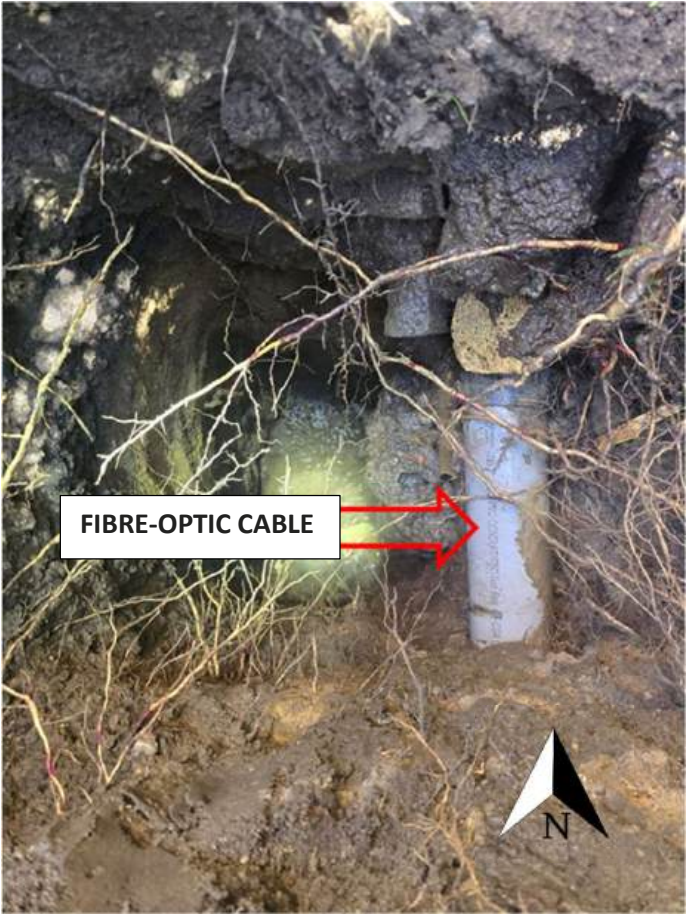


Project Name: 48 Isabella St.	<b>Test Hole No.: 5</b>	
Project No: 25-46-40993		
Client Project No:		
City/Prov.: Toronto, Ontario		
<b>Test Hole Information</b>	<b>Site Photo</b>	
<b>Location</b> TH Date: May 9, 2025 Station: N/A Utility Orientation: E-W		
<b>Description</b> Utility Type: Fibre-optic Cable Utility Material: Plastic Utility Width: 100mm		
<b>Elevation of Utility</b> Reference Elevation: 112.42m Top of Utility: 112.00m Bottom of Utility: 111.90m		
<b>Depth from Grade</b> Top of Utility: 0.42m Bottom of Utility: 0.52m Depth of Excavation: 0.55m		
<b>Notes:</b>		
Prepared by: KB	Checked by: ZW	Date: June 13, 2025



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Project Name: 48 Isabella St.		<b>Test Hole No.: 6B</b>
Project No: 25-46-40993		
Client Project No:		
City/Prov.: Toronto, Ontario		
<b>Test Hole Information</b>		<b>Site Photo</b>
<b>Location</b>		
TH Date: May 9, 2025		
Station: N/A		
Utility Orientation: N-S		
<b>Description</b>		
Utility Type: Fibre-optic Cable		
Utility Material: Plastic		
Utility Width: 100mm		
<b>Elevation of Utility</b>		
Reference Elevation: 112.39m		
Top of Utility: 112.03m		
Bottom of Utility: 111.93m		
<b>Depth from Grade</b>		
Top of Utility: 0.36m		
Bottom of Utility: 0.46m		
Depth of Excavation: 1.67m		
<b>Notes:</b>		
Prepared by: KB	Checked by: ZW	Date: June 13, 2025



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Project Name: 48 Isabella St.	<b>Test Hole No.: 8</b>	
Project No: 25-46-40993		
Client Project No:		
City/Prov.: Toronto, Ontario		
<b>Test Hole Information</b>	<b>Site Photo</b>	
<b>Location</b>		
TH Date: May 9, 2025		
Station: N/A		
Utility Orientation: E-W		
<b>Description</b>		
Utility Type: Gas (Abandoned)		
Utility Material: Concrete		
Utility Width: 600mm		
<b>Elevation of Utility</b>		
Reference Elevation: 112.59m		
Top of Utility: 111.03m		
Bottom of Utility: 110.43m		
<b>Depth from Grade</b>		
Top of Utility: 1.56m		
Bottom of Utility: 2.16m		
Depth of Excavation: 1.85m		
<b>Notes:</b>		
Prepared by: KB	Checked by: ZW	Date: June 13, 2025



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