

Amendments to Part 8 Consent for Hugh Lane Gallery


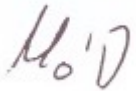
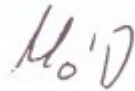
Drainage & Watermains Planning Report

Dublin City Council (DCC)

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Table of Contents

1.	Introduction.....	1
1.1	Background.....	1
1.2	Proposed Development.....	1
2.	Surface Water Drainage.....	3
2.1	Existing Surface Water Drainage.....	3
2.1	Proposed Surface Water Drainage.....	3
3.	Foul Water Drainage.....	4
3.1	Existing Foul Water Drainage.....	4
3.1	Proposed Foul Water Drainage.....	4
4.	Water Supply.....	6
4.1	Existing Water Supply.....	6
4.2	Proposed Water Supply.....	6
	Appendix A – DCC Drainage Diversion and Watermain Records.....	7

Figures

Figure 1.	Site Location Map (Source: Bing Maps).....	1
Figure 2.	Existing Hugh Lane Gallery Toiler Block to be Removed (Shown in Orange, Source: Hawkins Brown Architects).	2
Figure 3.	Proposed Hugh Lane Gallery Basement Toilet Block (shown in Blue, Source: Hawkins Brown Architects).	2
Figure 4.	Existing Combined Sewers Network (Source: Irish Water)	3
Figure 5.	Existing Drainage outfall Manhole within Hugh Lane Gallery Basement (Source: AECOM).....	4
Figure 6.	Existing Watermain Network (Source: Uisce Eireann).	6

1. Introduction

1.1 Background

AECOM have been appointed on behalf of Dublin City Council (DCC) to prepare a drainage and watermain planning report in support of a planning application for the proposed alterations to an approved part 8 development at High Lane Gallery. This report will detail the existing and proposed drainage and watermain infrastructure for the proposed development.

1.2 Proposed Development

The proposed Part 8 application includes the provision of a new energy centre on the roof of the existing Hugh Lane Gallery (HLG), a connection between the existing HLG building and the proposed library building (a separate planning application) and the relocation of an existing block of toilets from ground floor level to basement level of the existing HLG building.

Refer to **Error! Reference source not found.** for site location.

Refer to Figure 2 and 3 for the layout of the existing toilet block to be removed and proposed new toilet blocks respectively. The proposals include the removal of 6 No. existing toilets, 1 No. existing through urinal and 7 No. existing wash hand basins. These will be replaced with 8 No. proposed toilets (2 No. at ground floor level) and 5 No. proposed wash hand basins (2 No. at ground floor level).

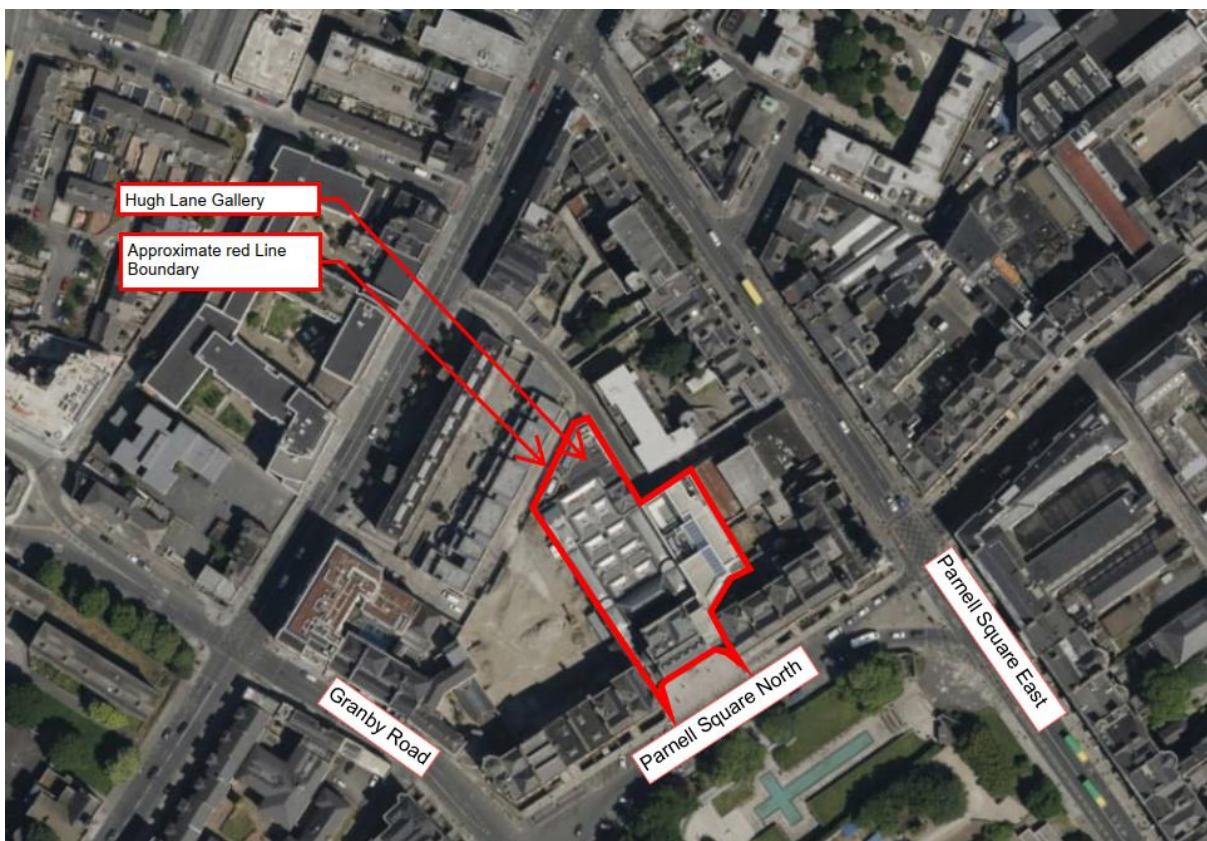


Figure 1. Site Location Map (Source: Bing Maps)

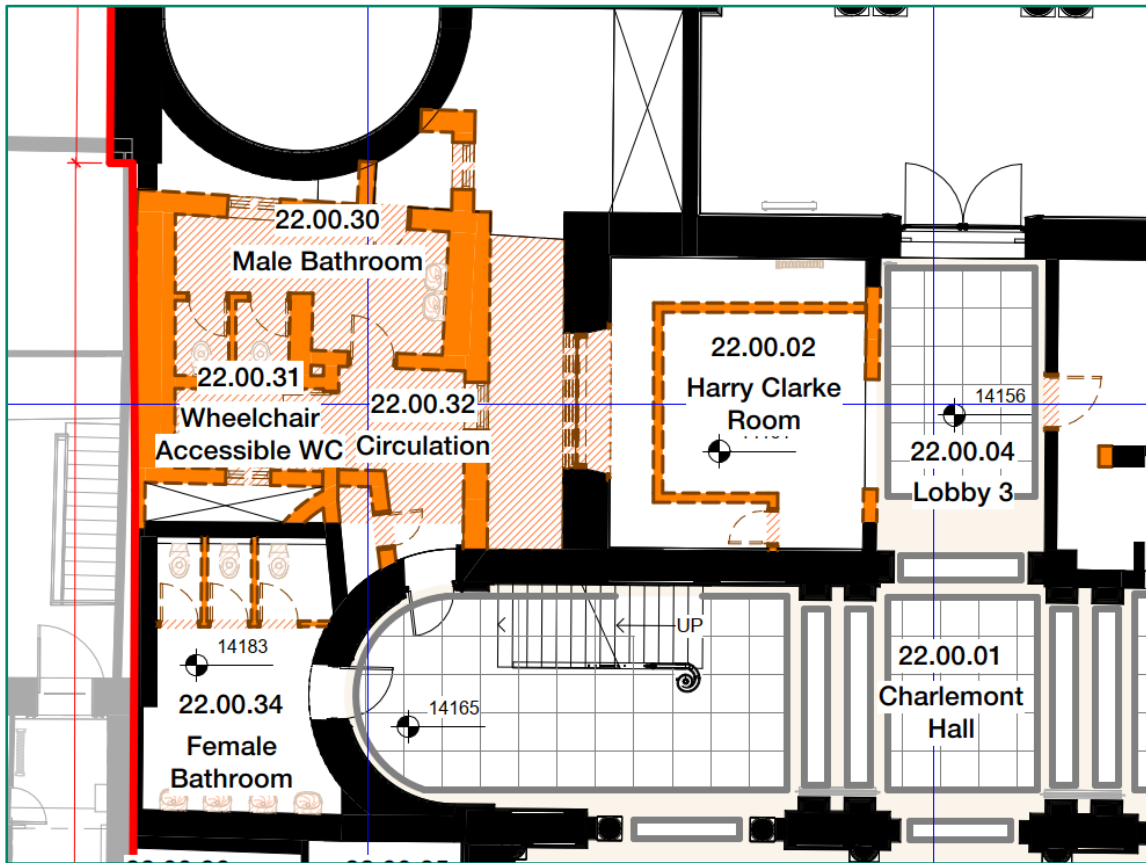


Figure 2. Existing Hugh Lane Gallery Toiler Block to be Removed (Shown in Orange, Source: Hawkins Brown Architects).

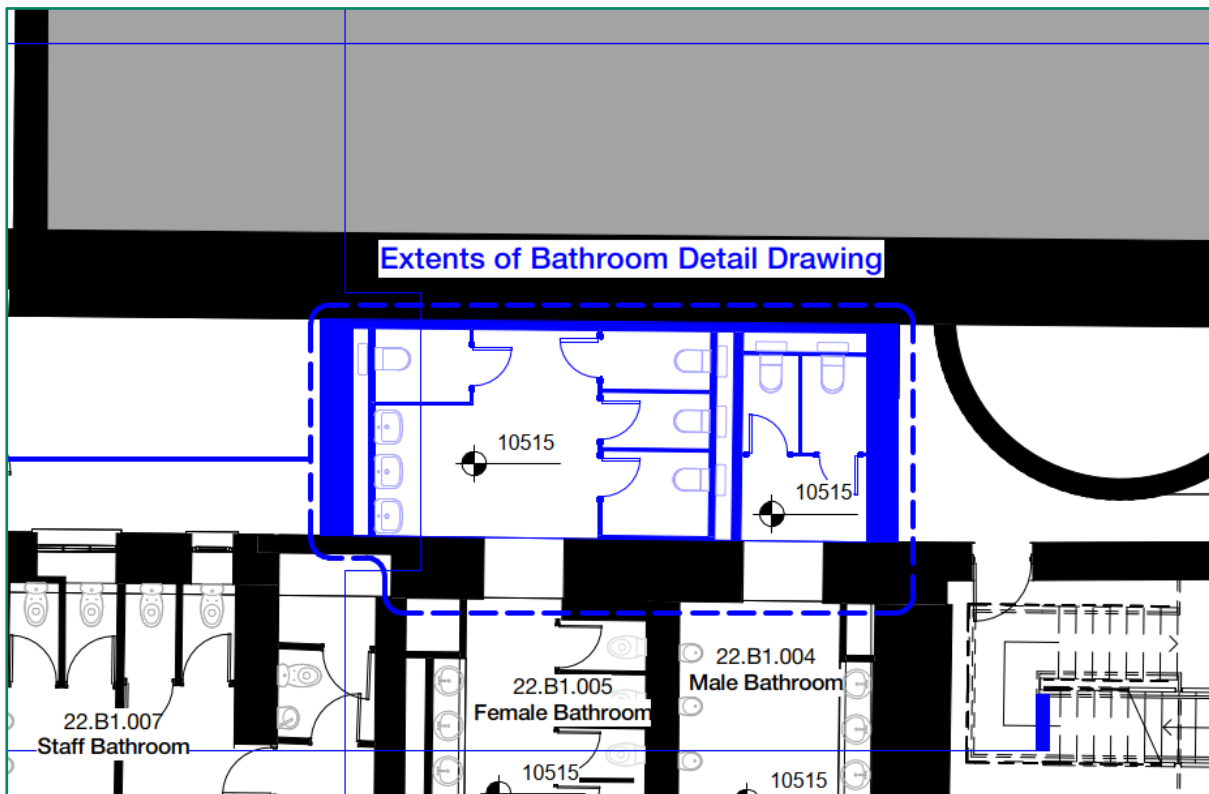


Figure 3. Proposed Hugh Lane Gallery Basement Toilet Block (shown in Blue, Source: Hawkins Brown Architects).

2. Surface Water Drainage

2.1 Existing Surface Water Drainage

Based on existing drainage records, refer to figure 2.1 below, there does not appear to be any existing surface water sewers located in the vicinity of the proposed site, but there are existing combined sewers. Therefore, based on the available record information, it appears that existing surface water runoff discharges to the existing combined sewer network.

The existing drainage systems on the site are mainly combined foul and surface water drains. There is an existing 2450 x 780 mm combined sewer along Parnell Square North to the south of the site, a 300 mm combined sewer on Bethesda Place and a 300 mm combined sewer on Frederick Lane North both to the north of the site. It is noted that several surface water road gullies are located along the north of the development and appear to discharge into the existing combined sewer.

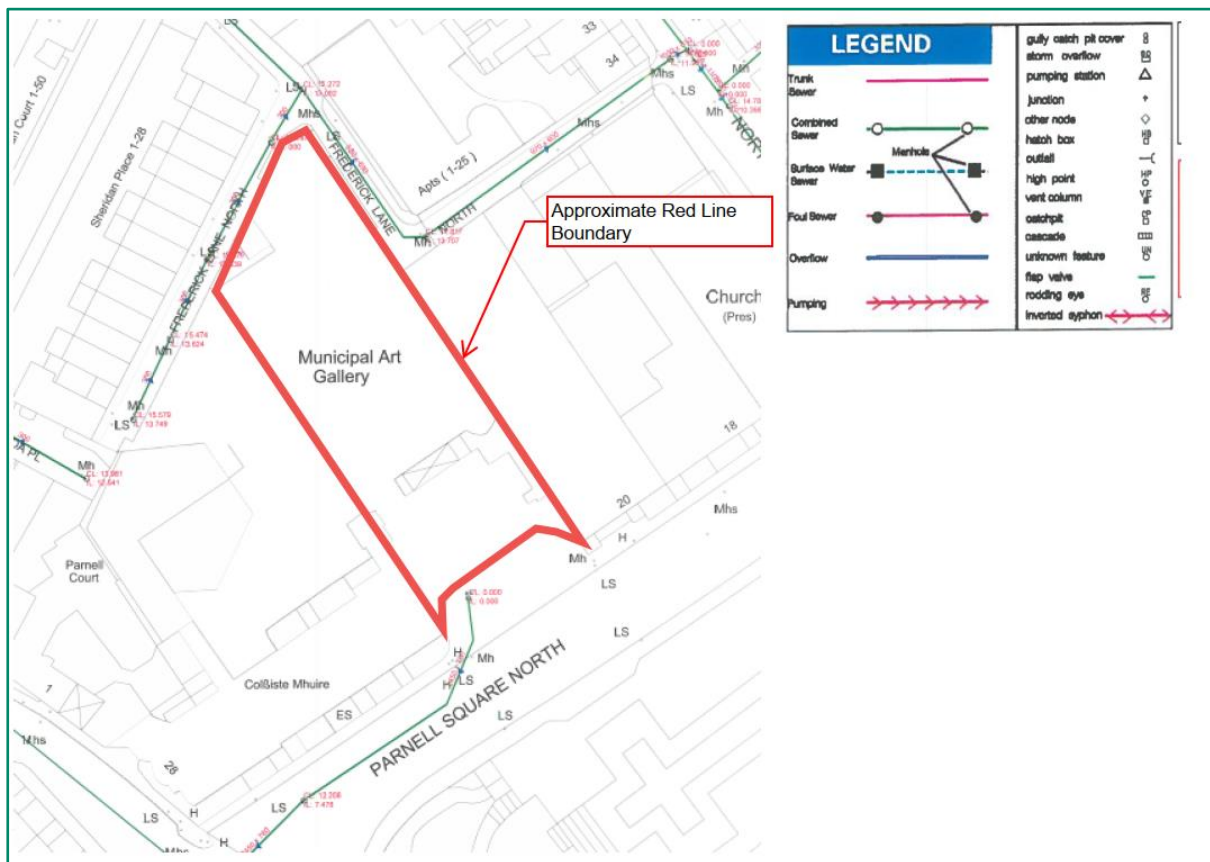


Figure 4. Existing Combined Sewers Network (Source: Irish Water)

2.1 Proposed Surface Water Drainage

The current proposals are not expected to have any impact on the existing surface water drainage of the Hugh Lane Gallery and it is expected that this will continue to operate as normal upon completion of the proposals.

3. Foul Water Drainage

3.1 Existing Foul Water Drainage

The existing networks are the same combined sewers as outlined in Section 2.1 of this report, which includes the existing 2450 x 780 mm combined sewer along Parnell Square North to the south of the site, a 300 mm combined sewer on Bethesda Place and a 300 mm combined sewer on Frederick Lane North both to the north of the site. Refer to Appendix A for the existing drainage records.

Based on a site visit undertaken on 16th February 2024, it has been observed that the existing toilet blocks within the basement of the existing Hugh Lane Gallery appear to be conveyed via an existing 150mm dia. gravity basement drainage network towards the existing brick arch sewer located within Parnell Square North (by gravity). The invert level of this outfall has been measured to be 9.79mOD, which discharges by gravity to the existing 2450mm x 780mm brick arch sewer located within Parnell Square North. Refer to Drg. PSL-ACM-XX-B1-DR-C-000503 for indicative existing drainage layout. The exact details of the existing basement drainage within the existing Hugh Lane Gallery basement are yet to be confirmed, including invert levels and pipe gradients.



Figure 5. Existing Drainage outfall Manhole within Hugh Lane Gallery Basement (Source: AECOM).

3.1 Proposed Foul Water Drainage

Foul drainage from the proposed toilet block are currently proposed to connect to the existing High Lane Gallery basement drainage network, which outfalls, by gravity to the existing Uisce Eireann combined sewer network located within Parnell Square North. It is not currently expected that any external drainage will be required to be upgraded as part of the current proposals.

Refer to Drg. PSL-ACM-XX-B1-DR-C-000503 for indicative proposed drainage layout. The exact details of the proposed connections are to be finalised at detailed design stage, upon review of further investigations and surveys of the existing basement drainage network.

It is proposed that all new manholes within the proposed basement are provided with triple hydraulically sealed manhole covers.

AECOM, in parallel with this Part 8 application, will submit a Pre-Connection Enquiry to Uisce Eireann for the proposals.

4. Water Supply

4.1 Existing Water Supply

Several Irish Water watermains are situated in the vicinity of the development, specifically a 250mm Ductile Iron main on Parnell Square North and a 125mm HPPE main on Frederick Lane North.

There is an existing water supply connection to the existing Hugh Lane Gallery, which is understood to be fed from the existing 250mm Ductile iron watermain located on Parnell Square North.

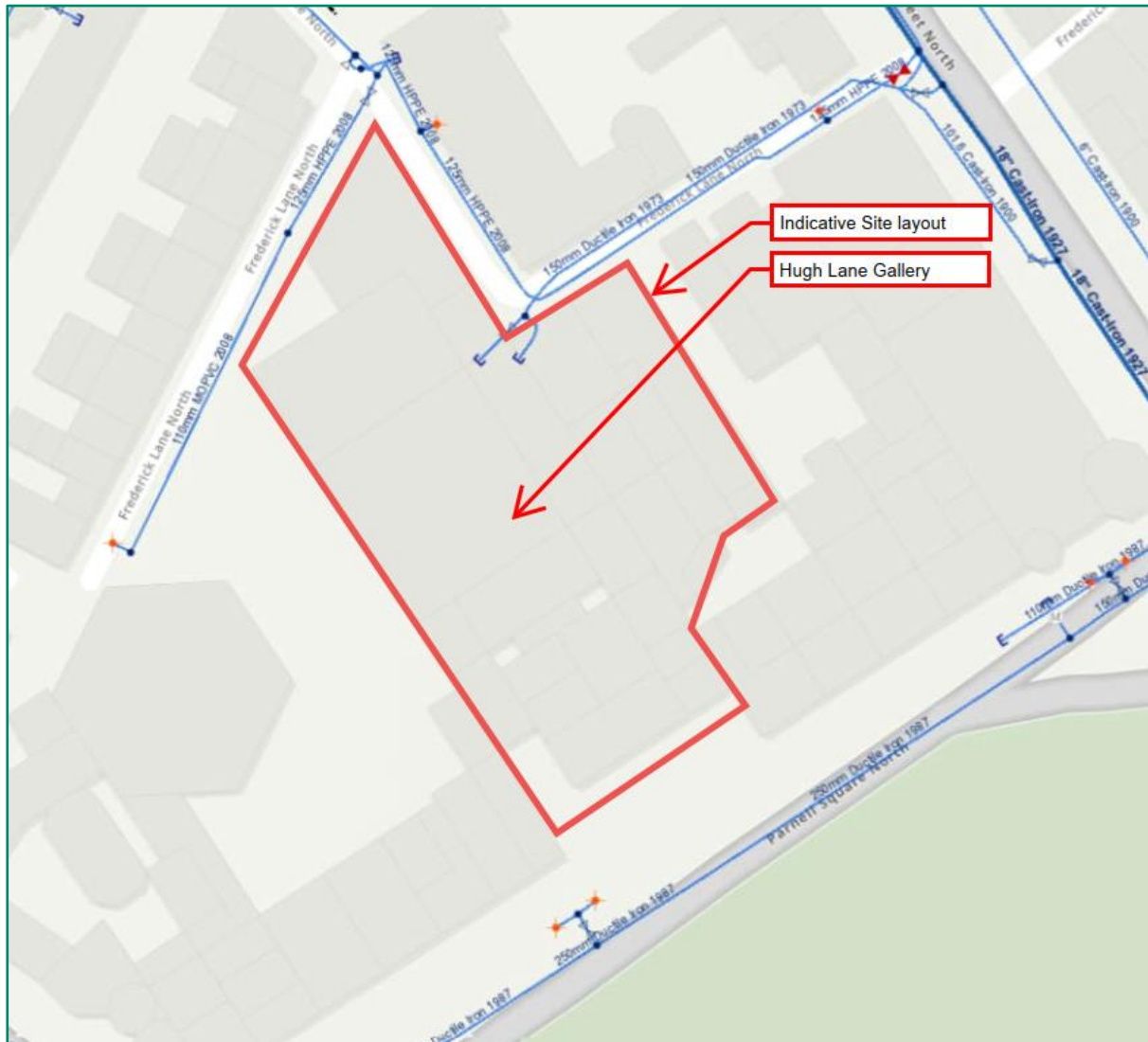


Figure 6. Existing Watermain Network (Source: Uisce Eireann).

4.2 Proposed Water Supply

It is not currently envisaged that any external upgrades will be required to the existing Hugh Lane Gallery water supply, as a result of the current proposals. The internal water supply connections between the existing Hugh Lane Gallery potable water supply pipework, will be designed at detailed design stage by a Mechanical Engineer as part of the Mechanical Engineering works for the proposals.

AECOM, in parallel with this Part 8 application, will submit a Pre-Connection Enquiry to Uisce Eireann for the proposals.

Appendix A – DCC Drainage Diversion and Watermain Records

Legend

- Boundary Meter
 - Unknown Meter - Other Meter
 - Non-Return
 - PRV
 - Sluice Valve Open
 - Sluice Valve Closed
 - Sluice Valve Closed
 - Double Air Control Valve
- Water Hydrants**
- Hydrant Function**
- Fire Hydrant
 - Pump Stations
 - Telemetry Kiosk
 - Cap
 - Other Fittings
- Water Distribution Mains**
- Owned By**
- Irish Water
 - Irish Water
 - Water Abandoned Lines
- Sewer Manholes**
- Manhole Type**
- Standard
 - Gravity - Combined

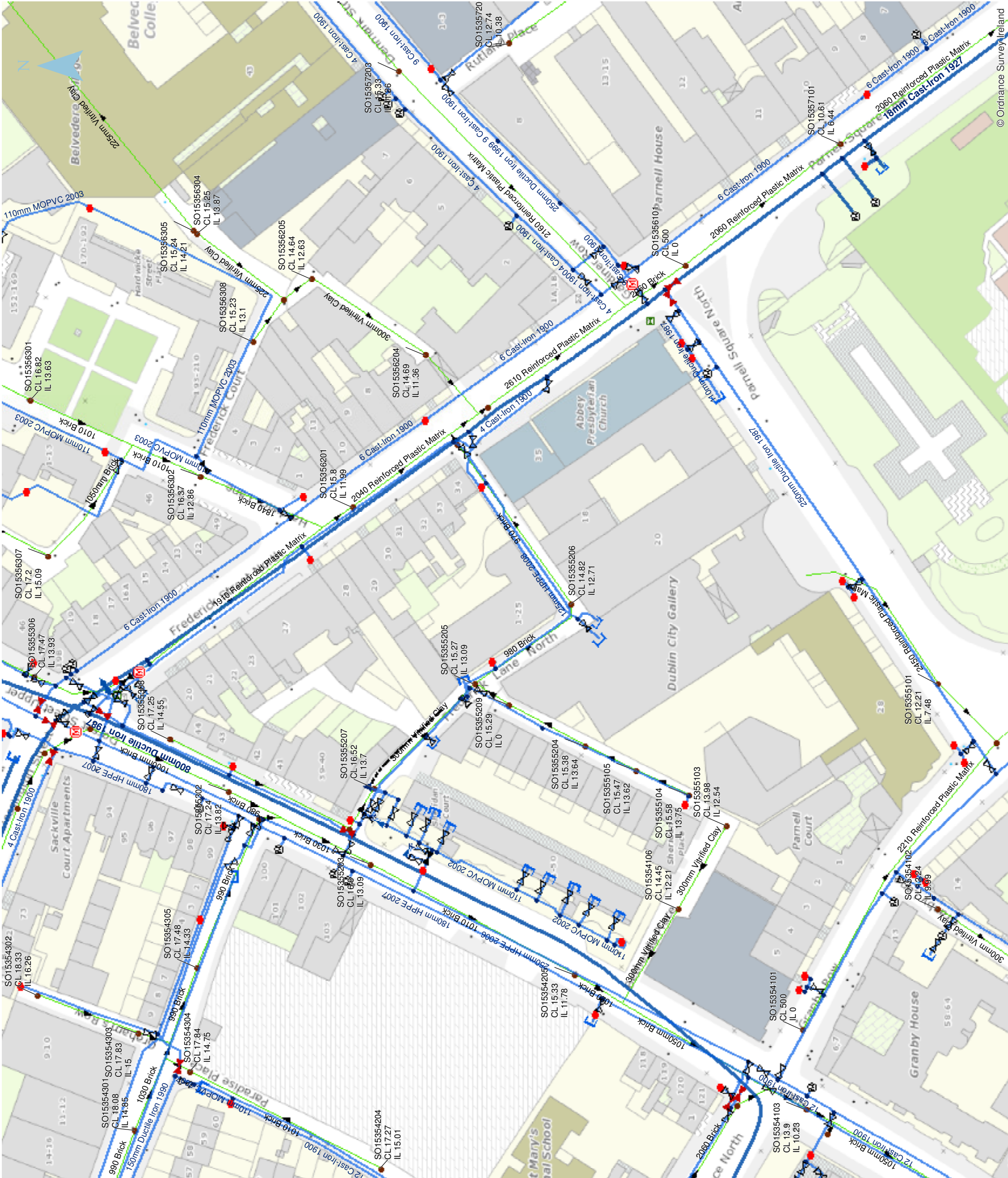
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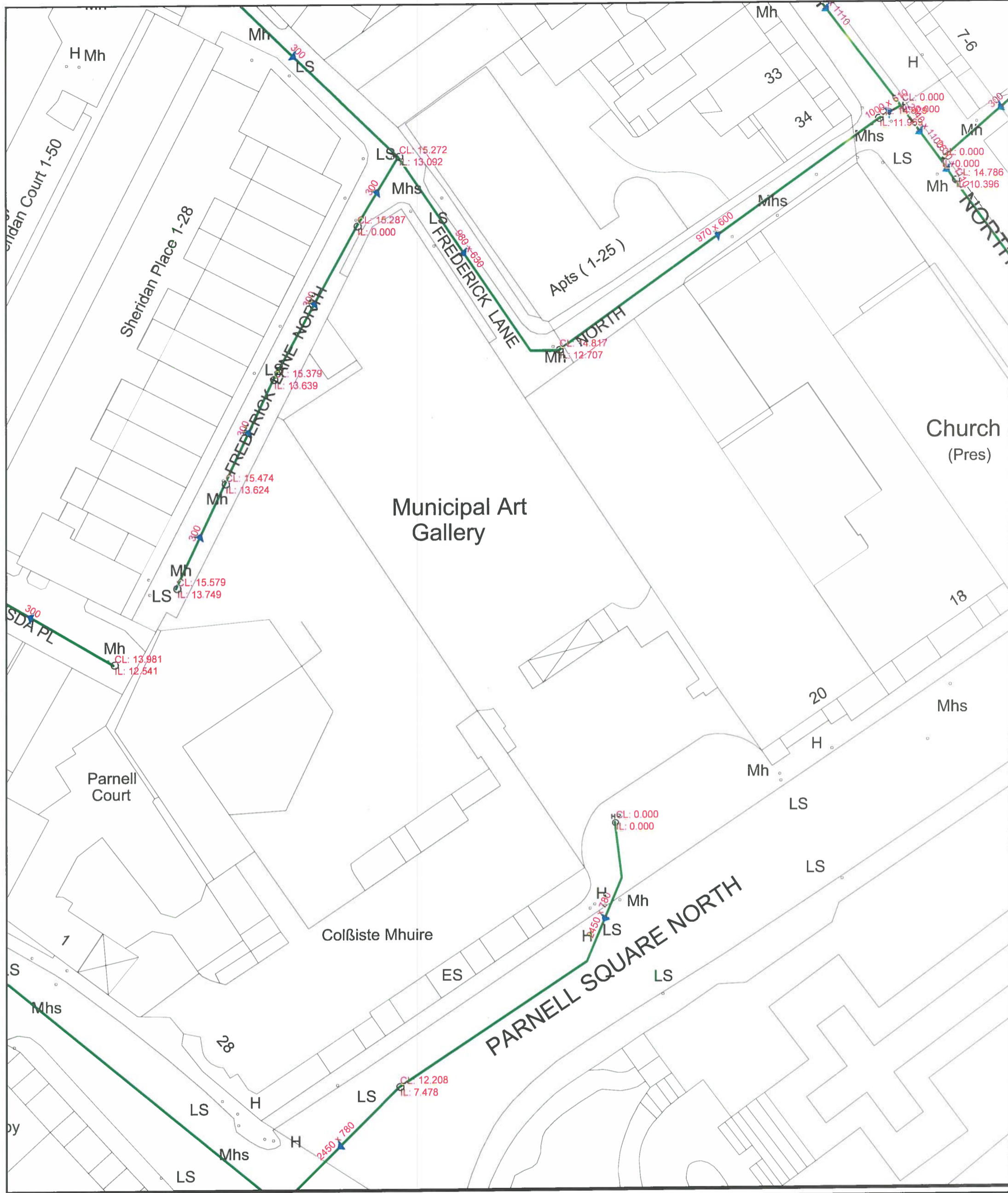


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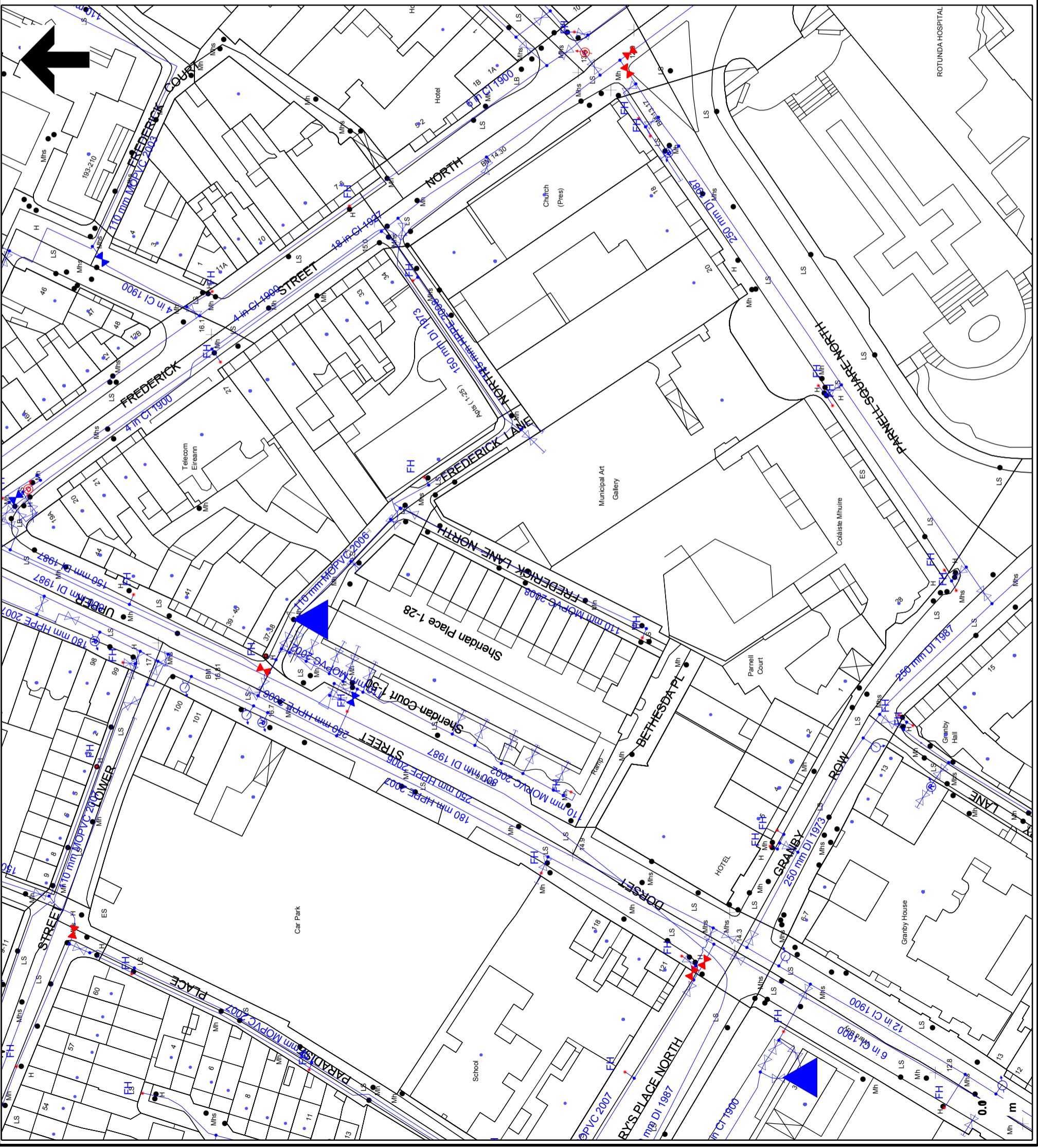


LEGEND	
Trunk Sewer	gully catch pit cover
Combined Sewer	storm overflow
Surface Water Sewer	pumping station
Foul Sewer	junction
Overflow	other node
Pumping	hatch box
	outfall
	high point
	vent column
	catchpit
	cascade
	unknown feature
	flap valve
	rodding eye
	inverted siphon

Scale: 1: 500
Date: 19 Aug 2014

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WATER ASSET LEGEND

	Design Potable Water		Construction Potable Water		Operational Potable Water
	Design Raw Water		Construction Raw Water		Operational Raw Water
	Decommissioned Water		Boundary Box		Raw Water Reservoir Impounding
	Raw Water Reservoir Impounding		Raw Water Reservoir		Raw Water Intake
	Raw Water Intake		Air Valve		Sluice Valve
	Air Valve		Water Meter (Abstraction)		Water Meter (Bulk)
	Water Meter (Abstraction)		Water Meter (Revenue)		Water Meter (Waste)
	Water Meter (Revenue)		Access Point (Pigging Port)		Water Treatment Works (Station)
	Access Point (Pigging Port)		Access Point (Meter Pit)		Water Treatment Works (Bound)
	Access Point (Meter Pit)		Pump Station High Lift		Depot
	Pump Station High Lift		Pump Station in Line Booster		Fire Hydrant
	Pump Station in Line Booster		Pump Station Raw Water Booster		End Cap
	Pump Station Raw Water Booster		River Monitoring Station		Workshop
	River Monitoring Station		Pipe Bridge		Address Point Marker
	Pipe Bridge		Office		Sensitive Address
	Office		Map Edge Connector		Ambulance Change Marker

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