

comhairle chontae na mí meath county council

# Meath County Council Athboy Town Centre Project

**DMURS** Quality Report





Rialtas na hÉireann Government of Ireland Tionscadal Éireann Project Ireland 2040





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#### ATHBOY TOWN CENTRE PROJECT

#### **DMURS** Quality Audit

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### 1.0 INTRODUCTION

#### 1.1 DESCRIPTION OF THE SCHEME

#### 1.1.1 Background

TOBIN Consulting Engineers have been commissioned by Meath County Council to provide design consultancy services for the Athboy Town Centre Project. This DMURS Quality Audit report aims to assess the scheme from the perspective of the Design Manual for Urban Roads and Streets on aspects of safety, accessibility and streetscape. This project includes the provision of a bus stop facility to the NW of St. James Catholic Church including all ancillary highway works and Public Realm upgrade works up to the N51 Junction along with the relocation of the existing bring bank facility to the Council lands at Coille Dios.

Athboy lies within easy reach of Navan, Trim and Kells, being located in the west of County Meath. As a relatively large urban area, it is important that Athboy maintains good transportation linkages to surrounding urban and rural areas, which is a key factor in attracting future economic and residential populations. The Main Street is recognised as a constrained route which caters for local and national road traffic. This traffic is a mixture of heavy goods vehicles (HGVs), bus and utility service vehicles, as well as regional and local car traffic. Traffic is observed as relatively significant and constant throughout the day, particularly at peak times.

The Athboy Town Centre Project has been in planning by Meath County Council and the Athboy community for the past number of years. Key areas have been identified for improvements through the published documents of Athboy written Statement, Athboy Local Area Plan, Athboy Public Realm Plan and the Walkability Audit. These improvements have been envisaged with the goal of linking all areas of the town by introducing better walking facilities, pedestrian focused street space, and designated & controlled parking areas.

The relocation of the existing bus stops on Main St., located to the NE of the intersection of Main-Street (N51) and Connaught St. has been identified in each report. The existing bus stops have been criticized for causing traffic backups on the main street. They also require passengers to make their way through parked cars in order to embark/disembark the service which is a significant safety issue. The existing operation has a negative effect on both motorist and pedestrian.

The introduction of a defined bus stop would eliminate these issues. It would create a designated area for all passengers to access the bus services in a safe and comfortable manner, which will encourage use of the service. It will also solve the issue of traffic congestion due to bus traffic, and therefore create improved traffic flow through the town.

#### 1.1.2 The Scheme

The proposed scheme gives the town of Athboy a designated bus stop in an area just off the Main Street which is easily accessible to both pedestrians and buses. The bus stop would have the capacity to park two buses at any one time and provide a safer and more accessible space for service users.

In addition to the provision of a designated bus stop facility the scheme will enhance the public space adjacent to St. James Catholic Church, through the development of new pedestrian facilities and an upgraded urban realm space. The church is a key religious place of worship in



any Irish Town, generally with historical significance, as well as being a place of fostering a sense of community and spirit. The scheme is pedestrian focused to improve the sense of community but also introduces much needed structured layout for public transport, traffic and parking.

The scheme will also involve the relocation of the existing bring bank / recycling facilities to the Meath County Council depot lands at Coille Dios.



Figure 1-1: Existing and Proposed public transport arrangement. Google Map imagery © 2021



### 2.0 QUALITY AUDIT

Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.

Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly-designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.

Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.

In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.

The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.

DMURS states that Quality Audits should consist of the following parts:

- DMURS Street Design Audit
- Individual Design Audits
- Quality Audit Report

In the case of this report the individual design audits comprise an RSA, an Accessibility audit, a Walking audit and a Cycle audit.



### 3.0 METHODOLOGY

The Design Audit Team for the Quality Audit (Independent of the Road Safety Audit Team – Outlined in Chapter 5) was as follows:

- Ronan Murtagh Chartered Engineer MIEI
- David McHugh Associated Engineer MIEI

Road safety, non-motorized users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- the visual appearance of the scheme as it is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

Multiple Site Visits have been carried out by the Audit Team to enable the generation of the Quality Audit and the individual audits within. These site visits included:

- Assessment of existing infrastructure for Walkability, Accessibility and Cycle Audit
- Stakeholder Liaison
- Parking Studies

#### The documents provided for the audit were:

Drawing Number	Drawing Title		
11084-2000(A&B)	Overall Site Location		
11084-2001	Site Layout 1		
11084-2002	Site Location Map 1		
11084-2003 to 2005	Geometric Plan, Profiles and Cross Sections		
11084-2006	Typical Cross Sections		
11084-2007	Site Clearance		
11084-2008	Fencing & Boundary Treatments (Proposed Accesses & Boundary		
	Walls)		
11084-2009 to 2010	Pavement Details		
11084-2011	Drainage		
11084-2012	Kerbing and Paved Areas		
11084-2013	Signs & Lines		
11084-2014 to 2016	Public Lighting		
11084-2017	Landscaping		
11084-2018	Bus Stop Detail		
11084-2019	Car Park Detail		
11084-2020	Site Layout 2		
11084-2021	Site Location Map 2		
11084-2022	Church Boundary Wall Update		



11084-2030-2031	Autotrack Sketches

Copies of these audited drawings are contained in Appendix B of the Part 8 Particulars.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on <u>https://www.dmurs.ie/supplementary-material</u>) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

### 4.0 STREET DESIGN AUDIT

The use of DMURS in urban areas is mandatory and the DMURS Street Design Audit is an auditing tool that can be used to ensure that the relevant issues contained within DMURS have been duly considered.

The DMURS Street Design Audit is primarily concerned with four major aspects of street design:

- Connectivity
- Self-Regulating Street Environment
- Pedestrian and Cycling Environment
- Visual Quality

The DMURS Street Design Audits consists of a series of short tables that can be used to cross check a design against the principles, approaches and standards contained within DMURS. In doing so, it should be clear that:

- The issue is relevant or not relevant.
- The issue has been considered in accordance with the principles of DMURS.
- The issue is addressed in a more detailed design audit (see Section 3.2)
- The relevant approach or standard has been applied.
- Or if not, why not, and what mitigation measures have been applied (i.e. what is the alternative solution).

The Street Design Audit for the Athboy Town Centre Project has been carried out using the template as provided from <u>www.dmurs.ie</u> and is shown below





### **Design Manual for Urban Roads and Streets**

# **Street Design Audit**

Prepared in respect of: [Athboy Town Centre Project]

Prepared by: [TOBIN Consulting Engineers]



Date: [10/01/2022]



Connectivity		
Key Issues	Key DMURS Reference.	Design Response
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	<ul> <li>3.1 - Integrated Street Network</li> <li>3.2.1 - Movement Function</li> <li>3.3.1 - Street layouts</li> <li>3.3.4 - Wayfinding</li> </ul>	Design is creating a pedestrian and public transport orientated centre of the town at the Convergence of two of the main links into the Town Centre, The N51 Main street and R154 Connaught Street. The Scope of the project is to provide a designated bus stop which prioritises the movement of Public Transport and aims to cater for greater numbers of pedestrians and cyclists The design increases permeability and legibility by providing a new designated pedestrian footpath on the Southern side of the Street which does not currently exist making wayfinding easier and safer for vulnerable road users. The design is structured to draw people to the main focal points along the street inc. Proposed Bus Stop, St. James' Catholic Church, O'Growney National School, local creche, undertakers and public car park. Improved alignment and Desire lines are being provided for pedestrians through improved alignments and upgrading existing footpath widths.
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts	Currently within the study area, multiple points of uncontrolled access exist between the carriageway and undesignated parking areas. The proposed design limits and controls the locations of the points of access to the carriageway to improve the street layout for vulnerable road users and also to minimise the potential for conflict points between motorised road users without compromising on accessibility. Alignment is also being upgraded to improve the visibility and layout



	3.3.3 – Retrofitting <sup>1</sup>	This project retrofits an existing urban street with new footpath provisions which will improve connectivity to the Church grounds which are currently used as a link for pedestrians. New access points and continuation of footpath facilities and provision of a crossing point at the N51 junction to increase permeability. Design also includes the provision of a new fully accessible designated public transport facility along with street lighting and urban planting to significantly improve the aesthetics of the area
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	<ul> <li>The upgrade of an existing urban street with new footpath provisions which will improve connectivity to the Church grounds which are currently used as a link for pedestrians. New access points and continuation of footpath facilities and provision of a crossing point at the N51 junction to increase permeability</li> <li>The design increases permeability and legibility by providing a new designated pedestrian footpath on the Southern side of the Street which does not currently exist making wayfinding easier and safer for vulnerable road users. The design is structured to draw people to the main focal points along the street inc. Proposed Bus Stop, St. James' Catholic Church, O'Growney National School, local creche, undertakers and public car park.</li> <li>Operational Speeds from procured traffic counts show 85<sup>th</sup> %ile speeds if under 30kph in the area. While an improved alignment and restriction on access points may increase speeds, Design has included a raised table, signage and speed ramps to ensure low operational speeds are maintained. Vehicle permeability is retained to all private and public areas however a much greater control has been placed on the access and egress points to the carriageway. Where vehicles previously had priority also on the surrounds of St. James' church, the design has included a shared space giving priority to pedestrians, church and school users whilst still facilitating business access for the</li> </ul>

<sup>&</sup>lt;sup>1</sup> When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).



		undertakers adjacent. Layout, orientation and operational widths of the shared area are designed to minimise speeds in this small area
		Given the layout constraints and lack of pedestrian facility on the Southern side of the road and the goal to provide a designated public transport space, offline cyclist provision has not been provided on the scheme. Cyclists will be encouraged to use the shared space and cycle parking will be provided for the bus stop / public car park area. Cyclists will be required to use the road carriageway where low vehicle operational speeds are present
Through movements by private vehicles on local streets are discouraged by an appropriate level of	3.2.1 – Movement Function 3.2.3 – Place Context	The Development is a local street providing access within communities and to Arterial and Link Streets (N51 Main Street and Cloran Road). Junction upgrades to the N51 / Side Street Junction within the space available have been designed to optimise the movement of public transport.
traffic calming measures.	3.4.1 – Vehicle Permeability	The scheme is situated in the heart of Athboy adjacent to the main street, Catholic Church and National School. Focus therefore has been given in design to providing connectivity and accessibility demands of pedestrians while design and landscaping proposals promote the importance of the place. Footpath Widths and material proposals aim to cater for the higher levels of pedestrian movements around these places of importance whilst focusing on design elements to calm traffic and increase ease of movement for more vulnerable road users



Self-Regulating Street Environment			
Key Issues	Key DMURS Reference.	Design Response	
A suitable range of design speeds have been applied with regard to context and function.	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.2 - Place Context.</li> <li>4.1.1 - A Balanced Approach to Speed<sup>2</sup></li> </ul>	<ul> <li>85<sup>th</sup> %ile Operational Speeds on the existing street have been monitored at 30kph. A design Speed of 42kph has been chosen for the geometric design parameters and geometric improvements.</li> <li>Given the presence of the National School and Church, the geometric design parameters and traffic calming measures included in the design aim to lower operational speeds to between 30-40km/h in an area where pedestrians and cyclists are present in larger numbers</li> </ul>	
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures. <sup>3</sup>	<ul> <li>4.2.1 - Building Height and Street Width</li> <li>4.2.2 - Street Trees</li> <li>4.2.3 - Active Street Edges</li> <li>4.2.4 - Signage and Line Marking</li> </ul>	Introduction of a defined carriageway width and kerbing, a raised table along the N51 junction, speed ramp before and after the signalised crossing, school warning signs, multi coloured sign sleeves & pencil bollards will ensure that traffic is adequately calmed within and surrounding the study area. Controlled access points with low radii will ensure vehicles entering or leaving the carriageway can only do so at low speed to again generate a softer traffic calmed environment. Urban planting will provide a height element and moderate sense of enclosure to aid visual calming measures while the shared surface will be paved	

<sup>2</sup> Refer also to the National Speed Limit Guidelines

<sup>&</sup>lt;sup>3</sup> In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.



	• • • • • • • • • • • • • • • • • • •	
	<ul> <li>4.2.7 - Planting</li> <li>4.4.2 - Carriageway Surfaces</li> <li>4.4.9 - On-Street Parking</li> <li>Advice Note 1 - Transitions and Gateways</li> </ul>	<ul> <li>and not a flexible or rigid pavement design to raise awareness of the priority to pedestrians and cyclists in the area while also providing an active street edge along with the designated bus facility. On-street parking has been removed to encourage use of the designated public car park with controlled parking provided in the public car park which will now operate via a single entry/exit point with a one-way system of operation.</li> <li>Extensive road markings are proposed throughout the scheme to help narrow active carriageway widths, discourage illegal parking manoeuvres and vehicle speeds</li> </ul>
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	<ul> <li>4.4.1 - Carriageway Widths</li> <li>4.4.4 - Forward Visibility</li> <li>4.4.5 - Visibility Splays</li> <li>4.4.6 - Alignment and curvature</li> <li>4.4.7 - Horizontal and Vertical Deflections</li> <li>Advice Note 1 - Transitions and Gateways</li> </ul>	Design standards as outlined in DMURS have been adopted to improve the existing carriageway widths, road geometry, forward and junction visibilities and horizontal and vertical deflections throughout the scheme. A geometric design report has been produced to supplement the design report.



Pedestrian and Cycling Environment				
Key Issues	Key DMURS Reference.	Design Response		
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	<ul> <li>4.2.1 - Building Height and Street Width</li> <li>4.2.3 - Active Street Edges</li> <li>4.2.5 - Street Furniture</li> <li>4.4.9 - On-Street parking</li> </ul>	Key focus has been given to providing a fully accessible bus stop within the design with comfortable pedestrian facilities throughout for the Bus stop, Catholic Church, National School and Public Car Park Given constraints on cross sectional width and focus on providing pedestrian facilities on both sides of the road, no offline cycle facility is being provided. Low operational speeds and traffic calming will encourage and provide safety to cyclists using the carriageway while a cycle parking facility will also be provided for local and commuter use. Buildings are typically set back from the carriageway in private plots with accesses off the street while planting, street furniture and active street edges will take cognisance of pedestrians, cyclists and motorised users within the shared areas and adjacent pedestrian area.		
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised <sup>4</sup> .	<ul><li>4.3.2 - Pedestrian Crossings</li><li>4.3.3 - Corner Radii</li><li>4.4.3 - Junction Design</li></ul>	New pedestrian crossing with tactile paving on a raised table is being provided to provide additional safety and visibility to pedestrians along with a new street lighting design to improve safety. The designer has strived to ensure that corner radii are kept low however this cannot be facilitated at priority junctions catering for the NTA Bus fleet. The Designer has included overrun areas, line markings and a raised table to prevent excessive junction speeds in these areas		

<sup>&</sup>lt;sup>4</sup> Refer also to the National Cycle Manual (2011)



	4.4.7 - Horizontal and Vertical Deflections	
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.2.5 - Street Furniture</li> <li>4.3.1 - Footways, Verges and Strips</li> </ul>	Continuous footpaths are being provided as part of the proposed design to rectify an existing issue in the area. Minimum footpath widths of 2.25m are being provided throughout the proposed design and include widened provision around the proposed relocated church entrance to cater for the area of greatest pedestrian activity. Footpaths surrounding the bus stop and shelter are also a minimum of 3m width to cater for both pedestrians and those waiting to use the Public Transport service
	4.3.2 - Pedestrian Crossings	
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	<ul> <li>4.2.5 - Street Furniture</li> <li>4.3.1 - Footways, Verges and Strips</li> <li>4.3.2 - Pedestrian Crossings</li> <li>4.3.4 - Pedestrianised and Shared Surfaces</li> </ul>	The Designer has been cognisant of the use of tactile paving, kerbing at shared surfaces, pedestrian crossings and height changes between areas in the proposed design to consider needs of visually and mobility impaired users. The Bus Stop is being designed to fully accessible NTA standards to ensure access for all
Cycling facilities will cater for cyclists of all ages and abilities. <sup>5</sup>	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.3.5 - Cycle facilities.</li> </ul>	Given width constraints and the focus on prioritising pedestrian facilities and catering for NTA vehicles to use the designated Bus stop facility, space is not available within the study area to provide an offline cycle facility. Cyclists will share the carriageway with motorised road users. The Designer has included traffic

<sup>5</sup> Refer also to the National Cycle Manual (2011)



calming measures such as delineation, signage, raised table and speed ramp within the scheme extents to reduce operational speeds and improve safety for cyclists.
The designer notes that no cycle facilities exist on the N51 main street or Townsparks side of the scheme and that provision of offline or cycle lane facilities would be intermittent and should be considered as part of a larger cycle network upgrade.



Visual Quality		
Key Issues	Key Considerations and DMURS Ref:	Design Response
The landscape plan responds to the street hierarchy and the value of the place.	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.2.2 - Street Trees</li> <li>4.2.7 - Planting</li> <li>Advice Note 1 - Transitions and Gateways</li> </ul>	<ul> <li>TOBIN Consulting Engineers have liaised with the Conservation Department of Meath County Council and Archaeology sections to ensure that the landscape plan is in keeping with the Planning specifications of the area.</li> <li>This includes consultation with adjacent impacted landowners such as Athboy Parish and O'Growney National School as well to ensure thorough design and thought is given to landscaping plans.</li> <li>The Design will include Street Trees and Planting to enhance the Urban Realm aesthetics</li> </ul>
Street furniture is orderly placed.	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.2.5 - Street Furniture.</li> <li>4.3.1 Footways, Verges and Strips</li> </ul>	Street Furniture will be placed cognisant of pedestrian desire lines, footpath widths and likely use of the various zones within the scheme extents



The use of signage and line marking has been minimised.	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.2.4 - Signage and Line Marking.</li> </ul>	Signage and line markings have not been minimised given the various elements and stakeholders adjacent to the scheme extents. Presence of a creche, National School, Church and Designated Bus Stop as well as an observed history of illegal parking behaviours within the town of Athboy have led to appropriate levels of signage and delineation being included as part of the design process.
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	<ul> <li>3.2.1 - Movement Function.</li> <li>3.2.3 - Place Context.</li> <li>4.2.6 - Materials and Finishes</li> <li>4.2.8 - Historic Contexts.</li> <li>4.3.2 - Pedestrian Crossings</li> <li>4.4.2 - Carriageway Surfaces</li> <li>Advice Note 2 - Materials and Specifications</li> </ul>	Materials and finishes will be chosen at detailed design stage in consultation with Meath County Council and following close consideration of the historic context of the area. Full consideration will be given to construction guidance as outlined in DMURS Advice Note 2 - Materials and Specifications to ensure that appropriate surface and sub surface materials and construction are implemented TOBIN are engaging with Meath County Council Architectural and Conservation departments along with planners to ensure a design in keeping with the area and in keeping with the long-term development and planning strategy for the town of Athboy.
Additional Comments		



Personnel Information				
	Name	Date	Signature	
Report Prepared By:	Ronan Murtagh C.Eng	18/01/2022	loran furtaat	
Principle Designers	David McHugh	18/01/2022	Dawid Mc Hugh	



### 5.0 ROAD SAFETY AUDIT

A Stage 1/2 Audit has been carried out in accordance with the relevant sections of Transport Infrastructure Ireland Publication (Standards) "Road Safety Audit" GE-STY-01024 (December 2017). The team have examined and reported only on the road safety implications of the design submitted and has not examined or verified the compliance of the design to any other criteria.

The Road Safety Audit Report has been included in Appendix A to this report.



### 6.0 WALKABILITY, ACCESSIBILITY & CYCLING AUDIT

The Design Team have carried out audits on Walkability, Accessibility and Cycle issues on the existing scheme and have used these issues to inform the design principles of the Athboy Town Centre Project. The issues identified across the 3 areas of Walkability, Accessibility and Cycling are outlined below and have been included in Appendix B to this report

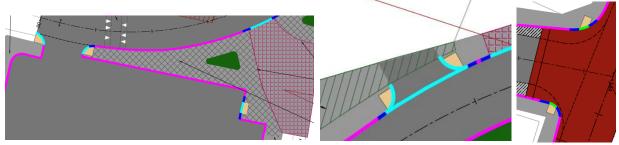
### Issue 6.1:

Within the existing extents of the scheme, there is a lack of drop kerbs facilitating pedestrian desire lines and no evidence of tactile paving at key junction crossings. In particular this was noted at the interface between the N51 and Side Street Junction and across the multiple access points to the Public Car Park.



### Suggestion:

Ensure Tactile paving of appropriate size and orientation is provided at drop kerbs for pedestrian desire lines, drop kerbs are provided at all pedestrian crossings and across all entrance points



### Issue 6.2:

Currently in Athboy there is a significant issue regarding accessibility and safety of pedestrians to use the existing bus stop facility. There exists no provision of facilitating less abled users, visually impaired users, or luggage storage at the existing location where pedestrians are forced

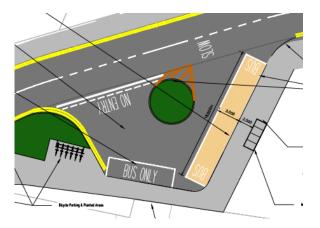


to walk onto the National Secondary Road to embark/disembark from the Public Transport Facility



### Suggestion:

Fully accessible offline bus stop to cater for all users including less abled users, visually impaired users as well as provision of a safe and secure facility with luggage storage offline, CCTV, RTI, Public Lighting and a Bus Shelter to benefit all members of the community.



# Issue 6.3:

Observed Illegal Parking throughout Study Area and N51 Main Street

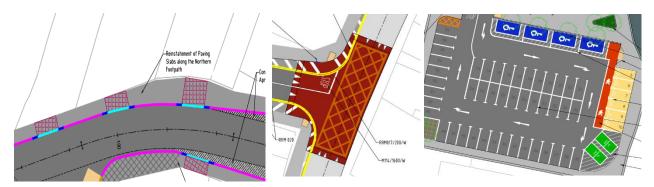






### **Suggestion:**

Full height kerbing to be provided on both sides of the side street to deter cars from mounting kerbs. Removal of undesignated parking along South side of the Side Street to change behaviour. Inclusion of Yellow Box and colour change Raised Table will deter road users from parking along the Main Street / Side Street Junction while formalising Public Car Park will encourage use as a public facility compared to the existing 3 entrance scenario that exists.



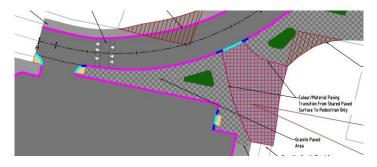
# Issue 6.4:

Existing Footpath widths are constrained at key locations preventing pedestrians from using the infrastructure comfortably with street furniture in the way e.g. Lighting Columns



### Suggestion:

Widened footpath provisions at all locations and considerations given to locations for planting and street furniture to prevent impeding pedestrian facilities. Relocate Public Lighting relocated away from pinch points to optimise pedestrian widths.





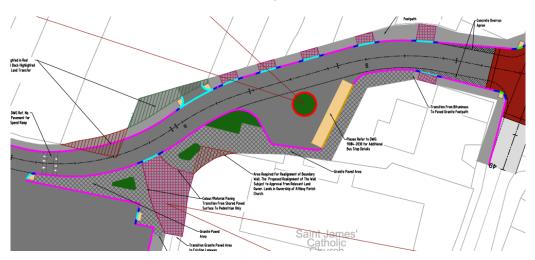
### Issue 6.5:

On the existing scheme, there is a lack of pedestrian facilities along the Southern Road boundary creating desire line issues, accessibility issues and safety issues in an area that contains the local Catholic Church, Creche, National School, Public Car Park and Undertakers. It is noted that this in addition to the lack of pedestrian crossing facilities at the N51/Side Road Junction.



### **Suggestion:**

Provision of a Footpath on Southern side of the Road, Controlled Access to and from the main carriageway reducing potential conflict points between both vehicles and pedestrians. Footpath provision to DMURS guidance and provision of Tactile Paving and drop kerb locations, in particular at the N51 Junction and Public Car Park Access. Providing Edge of Carriageway Markings will control and shape the carriageway and introduce an element of traffic calming along with raised table and speed ramp. Consideration for a Shared Surface surrounding the Church access and Undertakers will facilitate entrance in a relatively low traffic area but improve safety for Church and School users. Improved Road Alignment will provide better forward visibility to motorised users surrounding a school access also.



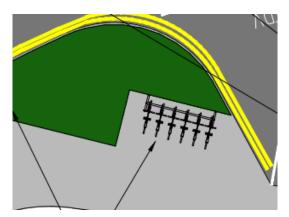


# <u>Issue 6.6:</u>

The existing scheme has no provision for cycle infrastructure and does not create a safe environment for cyclists given the lack of a distinct road boundary, uncontrolled access points and sub-standard road alignment.

### Suggestion:

Provision of Cycle Infrastructure where possible cognisant of the lack of existing provision either side of the Scheme Extents on the N51 and Townsparks area. Provision of a designated offline cycle facility is not possible given the road width constraints and focus on provision of pedestrian facilities to serve the designated bus stop. Cycle Parking is being provided for the Public Transport facility while traffic calming measures to control operational speeds of motorised users is being proposed to encourage cyclists sharing the carriageway and improve safety.





Appendix A - Stage 1/2 Road Safety Audit Report





**comhairle chontae na mí** *meath county council* meath county council

# **Meath County Council**

# **Athboy Town Centre Project**

Road Safety Audit Stage 1/2



www.tobin.ie

#### ATHBOY TOWN CENTRE PROJECT

#### ROAD SAFETY AUDIT STAGE 1/2

Document Control Sheet				
Document Reference	11084-TR01-RSA			
Report Status	FINAL			
Report Date	January 2022			
Current Revision	A			
Client:	Meath County Council			
Client Address:	Buvinda House,			
	Dublin Road,			
	Navan, Co. Meath			
	C15 Y291			
Project Number	11084			

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Revision	Description	Author:	Date	Reviewed By:	Date	Authorised by:	Date
A	FINAL	MR	11/01/2022	LG	13/01/2022	JOF	24/01/2022
			OPIN Consult	ing Engineer			
	TOBIN Consulting Engineers						

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### **Appendices**

- Appendix A List of Documents Examined
- Appendix B Road Safety Audit Feedback Form
- Appendix C Problem Location Map





### 1.0 INTRODUCTION

This report describes the Stage 1/2 Road Safety Audit carried out for a provision of two sites shown in Figure 1-1. The southern site includes a bus stop facility to the north-west of St. James Catholic Church including all ancillary highway works and Public Realm upgrade works up to the N51 Junction, Athboy, Co. Meath see Figure 1-2.



Figure 1-1: Site Locations (OSI licence CYAL50169152)



Figure 1-2: Proposed Bus Stop Facility Site Location (Google Maps)



The scheme also includes for the provision of an alternative bottle bank facility located on Coille Dios, Athboy, Co. Meath see Figure 1-3.



Figure 1-3: Proposed alternative Bottle Bank Facility Site Location (Google Maps)

### 1.1 Existing Environment

The existing site consists of existing car park, existing bottle bank facility and N51/Town Parks T-Junction. The proposed development is situated just off the Town Parks Road within a 50km/h urban speed limit. Street lighting and footways are present in the vicinity of the proposed development.

The Town Parks Road has a carriageway cross section comprising:

- A 4.5m wide two-way carriageway.
- Constant footway of 1.4 2.2m width in the westbound direction
- Intermittent footway of varying width in the eastbound direction.

The N51 is a national secondary road with a carriageway cross section comprising:

- A variable two-way carriageway width of 6.0m-6.8m.
- Footways on both sides of the carriageway with variable width a minimum of 1.5m to 2.7m.

The Coille Dios is located within a residential area, with a carriageway cross section comprising:

- A variable two-way carriageway width of 5.0m-5.5m.
- Footways on westbound side of the carriageway with variable width a minimum of 1.6m to 2.0m.

Road markings and signage are present on the existing road network and the pavement is in good condition. Drainage along the section is predominantly via piped gullies.



### **1.2** Proposed Development

The proposed scheme consists of a designated bus stop area, located off the N51 Main Street in the town of Athboy. The purpose of this report is for a Stage 1/2 Road Safety Audit of the entire scope of development works.

The proposed development will consist of the following:

- Upgrade works on N51/ Town Park Road T-Junction
- Realignment of the Church View / Town Parks Road with 2 no. 3.25m traffic lanes with footways to both sides of the carriage (minimum width 2.25m).
- Off-road bus set down area with provision for 2 no. buses parking spaces;
- Modifications to the existing public car parking including:
  - Modified access junction, boundary treatment and footways with provision of car parking including:
    - 4 no. disabled parking spaces;
    - 6 no. Age Friendly parking spaces;
    - 57 no. car parking spaces; and
- Relocation of existing bottle bank to Coille Dios with provision of 4no. associated car parking spaces.

No departures from standard have been notified to the Road Safety Audit Team.

### 1.3 Audit Details

The audit took place at the Galway office of TOBIN Consulting Engineers in January 2022. The audit comprised an examination of the documents provided by the Design Team and listed in Appendix A. The following information was not made available to the audit team:

- Signage Schedule;
- Pavement Specification;
- Coille Dios Signage Drawing;
- Visibility Slay Details; and
- Corner Radii Geometry.

In addition, a day-time site visit took place on the 10<sup>th</sup> of January 2022 during daylight hours. During the site visit the weather was cold with a light drizzle.

The audit team members were as follows: *Audit Team Leader* 

• Laura Gaffney - MSc. Env. Eng., BEng (Hons) Civil Eng., CEng., MIEI. Senior Engineer for Roads & Transportation, TOBIN Consulting Engineers. – TII Reference LG3386505

#### Audit Team Member

• Maria Rooney- BEng (Hons) Civil Eng., MEng, CEng, MIEI. Project Engineer for Roads & Transportation, TOBIN Consulting Engineers. – TII Reference MR3384505

This Stage 1/2 Audit has been carried out in accordance with the relevant sections of Transport Infrastructure Ireland Publication (Standards) "Road Safety Audit" GE-STY-01024 (December 2017). The team have examined and reported only on the road safety implications of the design submitted and has not examined or verified the compliance of the design to any other criteria. However, to clearly explain a problem or a recommendation, it may be necessary to refer to



another Standard or Advice Note, but such reference will not conflict with the requirements of the above Terms of Reference.

Road Collision Data available on the Road Safety Authority Database, within the period 2005 to 2016, has identified no collisions in the vicinity of the proposed development, as detailed in Figure 1-4 and Figure 1-5 below.

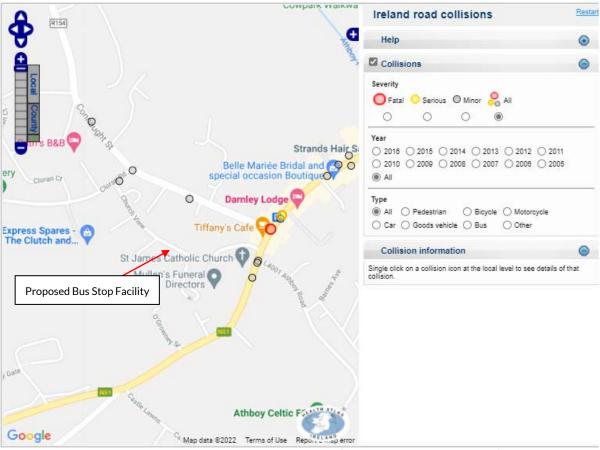
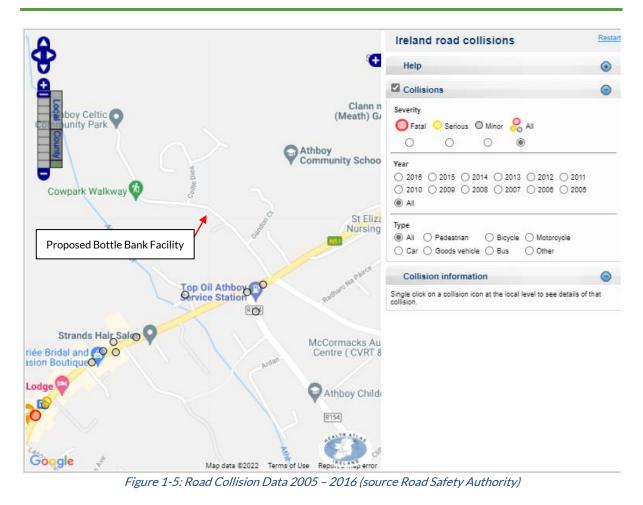


Figure 1-4: Road Collision Data 2005 – 2016 (source Road Safety Authority)





Note - the RSA database is not a comprehensive record of collisions and should be reviewed in conjunction with the Local Authority / Gardaí records for the site.

The Design Team and Employer (Client) is reminded that the Road Safety Audit Feedback Form, in Appendix C, shall be completed and returned to the Road Safety Audit Team Leader for sign off.



# 2.0 ITEMS RESULTING FROM THIS ROAD SAFETY AUDIT

# 2.1 General

#### 2.1.1 PROBLEM

#### Signage Location / Position

The audit team noted road signs were located within the footway at several locations within the scheme. The position of the signs are shown overhanging into the trafficable lanes. This may result in vulnerable road users striking a sign post and the signs faces being struck by vehicles.

#### Recommendation

Designers should position signs clear of vulnerable road users desire lines and clear of vehicles.

# 2.2 N51 & Town Parks Road

#### 2.2.1 PROBLEM

#### **Pedestrian Walkway**

The Road Safety Audit Team note on Drawing No. 11084-2019 a walkway is proposed west of the age friendly parking spaces. The Audit Team are concerned this will result in vulnerable road users being struck by vehicles when reversing. The swept path analysis also shows vehicles encroaching into this walkway.



Plate 2-1: Proposed Pedestrian Walkway within Car Park

#### Recommendation

The design team should remove the pedestrian walkway.



## 2.2.2 PROBLEM

#### Access to Bicycle Parking

It is noted no facility is provided for cyclists to access the bicycling parking from the road level onto the footway. Dismounting cyclists in proximity to a parked bus may lead to collisions between cyclists and buses.

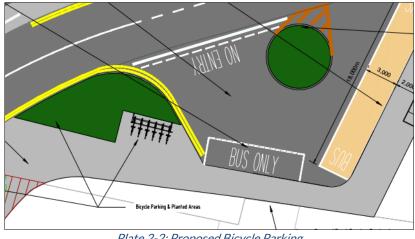


Plate 2-2: Proposed Bicycle Parking

#### Recommendation

The design team should provide facilities for cyclists to transition from the road level to the bicycling parking located on the footway away from parked and moving buses.



# 2.2.3 PROBLEM

#### Tactile Paving at Junction

At the junction of Towns Park/ N51, the proposed tactile paving has a narrow width. The audit team are concerned reduced width of tactile paving may be missed by visually impaired pedestrians. This may result in pedestrians entering the carriageway resulting in a collision between a visually impaired road users and a vehicle.



Plate 2-3: Proposed Tactile Paving at junction of the N51 / Town Parks

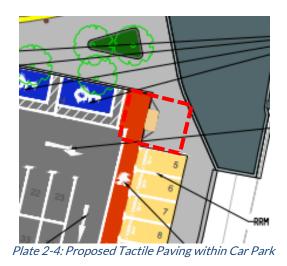
#### Recommendation

The design team should ensure the appropriate width of tactile paving is provided at all crossing points.

## 2.2.4 PROBLEM

#### Tactile Paving Connectivity within Car Park

A single tactile paving is proposed with the drop kerb beside the disable parking. However, there is no second tactile paving in line with the direction of travel. This will guide a visually impaired person into a parked vehicle and may lead to a collision between the visual impaired pedestrian and a vehicle.



#### Recommendation

The design team should remove the proposed tactile paving at this location.



## 2.2.5 PROBLEM

#### Proposed Yellow Box on the N51

After a review of the autotracks provided the audit team are concerned the length of the proposed yellow box may result in driver frustration. Vehicles on the mainline may enter the yellow due to its length causing obstruction for vehicles entering/exiting the minor road. This may lead side-on collisions.

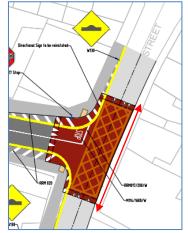


Plate 2-5: Proposed Yellow Box on the N51

#### Recommendation

The design team to amend the extents to only capture the required area.



# 2.2.6 PROBLEM

#### Road Markings - Double Yellow on N51

It was noted on site double yellow markings are currently provided on the N51/Town Park Road T-Junction. However, the proposed design does not propose to remark the existing road markings. This may lead to rear end collisions if cars park along the southbound carriageway.



Plate 2-6: Existing Road Markings

#### Recommendation

The design team should ensure parking is restricted along the southbound carriageway on the N51/ Town Park Road T-Junction.



## 2.2.7 PROBLEM

#### Existing Bollards

On site the audit team observed bollards along the corner radii of the N51 / Town Parks T-Junction. The site clearance drawing indicates these bollards are to be removed and are absent from the proposed sign design drawing. The audit team are concerned this may result in vehicles overrunning onto the footway and colliding with pedestrians.



Plate 2-7: Existing Bollards

#### Recommendation

The design team should protect pedestrians from vehicles turning at the junction.

#### 2.2.8 PROBLEM

#### Bus Parking

No information was provided on the volume and frequency of buses which will be utilise the proposed bus stop facility.

#### Recommendation

The design team should ensure the proposed design provide adequate volume of bus parking spaces for the volume and frequency of the buses.



# 2.2.9 PROBLEM

# Lighting Columns Town Park Road North Footway

The audit team noted a discrepancy on drawings 11084-2007 and 11084-2014 where existing lighting columns are proposed to be removed and retained. Absent of suitable lighting will may result in slips and trips for vulnerable road users.

#### Recommendation

The design team should ensure adequate lighting is proposed.

#### 2.2.10 **PROBLEM**

#### N51 Raised Table - Dropped Kerb

The Road Safety Audit Team note on Drawing 11084-2012 a proposed 75mm drop kerb at the raised table. A step in level over 6mm may result in pedestrians tripping into the carriageway into oncoming traffic.

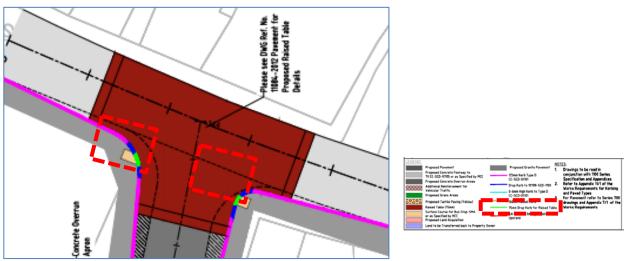


Plate 2-8: Proposed 75mm Drop Kerb

#### Recommendation

The design team should ensure that adequate at-grade crossing are proposed.



### 2.2.11 PROBLEM

#### Car Park - Fencing

The Road Safety Audit Team note on Drawing 11084-2008 it is proposed to run a new post and rail fence along the north of the car park. The audit team are concerned pedestrians travelling from the west along the footway will enter into the carriageway at the car park junction to access the internal footway within the car park layout. Pedestrians on the carriageway will be in conflict with vehicles resulting in a collision.

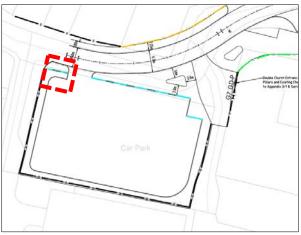


Plate 2-9: Proposed Post and Rail to Car Park

#### Recommendation

The design team should implement measures or design changes to provide for vulnerable road users desire lines.



### 2.2.12 **PROBLEM**

#### Drainage – Town Park Road

The Road Safety Audit Team note on Drawings 11084-2003 and 11084-2011 gullies are proposed downstream of the proposed ramp and south of the proposed vertical alignment low point at chainage 70m the . This may lead to ponding where a vehicle may have a loss of control or slip/falls on frozen standing water.

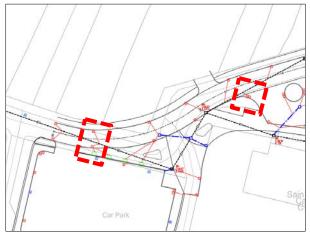


Plate 2-10: Proposed Drainage Town Parks Road

#### Recommendation

The design team should ensure the adequate drainage is proposed upstream of the proposed ramp and at all low points along the scheme.



# 2.3 Coille Dios – Bottle Bank

# 2.3.1 PROBLEM

#### Existing Signage

The audit team noted a warning sign is located with the extents of the site which was not annotated on the drawings. The audit team are concerned the sign will be removed during construction and not installed resulting in higher driving speeds and potential collisions with pedestrians.



Plate 2-11: Existing Warning Sign

#### Recommendation

The design team to retain or relocate the existing signage with adequate visibility to inform drivers of vulnerable road users in the area.

# 2.3.2 PROBLEM

#### Carparking Dimensions

No dimensions were provided for car parking at Coille Dios on the drawings supplied. The Audit Team are concerned that the size of the car parking spaces are not of a sufficient width or length for vehicles to manoeuvre into / out of the spaces. This may result in impact between parked vehicles and vehicles passing.

#### Recommendation

The design team should provide car parking is in line with the requirements set-out in the Traffic Signs Manual and the Development Plan.

#### 2.3.3 PROBLEM

#### Autotrack Drawing

No autotrack drawing were provided to the audit team at Coille Dios. If the refuse vehicles cannot carry out a safe turning manoeuvres this may result in the refuse vehicles reversing out of the Coille Dios Road. This may result in a collision between reduce vehicles and pedestrians.

#### Recommendation

The design team should ensure the proposed designs are suitable for refuse vehicles to undertake a safe manoeuvre.

#### 2.3.4 PROBLEM

#### Proposed Drainage

No drainage drawings were provided for Coille Dios to the audit team.

#### Recommendation

The design team should ensure no ponding occurs that may result in vehicle loss of control or slip/falls on frozen standing water. Additionally, surface water flows from the proposed development will not drain to the Coille Dios road and negatively impact the existing drainage here.

#### 2.3.5 PROBLEM

#### Height Difference

The audit team noted there is a significant level difference to the rear of the proposed bottle bank and the Meath County Council Depot. This may result in a potential failure or collapse of the slope and therefore failure of the road causing

#### Recommendation

The design team to ensure the proposed bottle back design is provided with an adequate foundation and slope stability.



# 2.4 Observations

# 2.4.1 Fencing

The audit team noted the existing fencing is damaged adjacent to the works area at Coille Dios.



Plate 2-12: Damaged Fencing at Coille Dios

# 2.4.2 Area Provided by the Employer

The audit team observed has works proposed by the Designer outside the Area Provided the Employer and scope of this RSA.

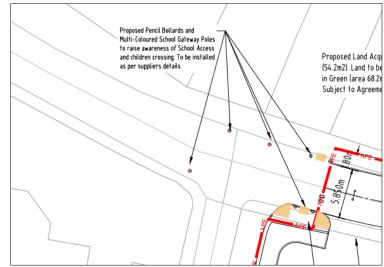


Plate 2-13: Proposed Pencil Bollards



# 3.0 AUDIT TEAM STATEMENT

We certify that we have examined the design drawings and other information listed in the Appendices to this report and have carried out a desktop study. This examination has been carried out with the sole purpose of identifying any features of the scheme that can be removed or modified in order to improve the safety of the scheme. The problems that we have identified have been noted in this report, together with suggestions for improvement, which we recommend should be studied for implementation. We have not been involved with the scheme design.

#### AUDIT TEAM LEADER

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TII Reference:	LG3386505	Date:	24/01/21
Position:	Senior Engineer		
Organisation:	TOBIN Consulting Engineers		
Address:	Fairgreen House,		
	Fairgreen Road,		
	Galway.		

#### AUDIT TEAM MEMBERS

Name:	Maria Rooney	Signed:	Horia Roone J.
TII Reference:	MR3384505	Date:	24/01/21
Position:	Project Engineer		
Organisation:	TOBIN Consulting Engineers		
Address:	Fairgreen House,		
	Fairgreen Road,		
	Galway.		



# Appendix A – List of Documents Examined

11084 ACC-001 Accommodation works-11084-ACC-001

11084 ACC-002 Accommodation works (Coille Dois)-11084-ACC-002.

11084-2000-Site Location-D00

11084-2001 Scheme Plan-D00

11084-2002 Area Provided By Employer- D00

11084-2003-2005 Geometric Plan, Profiles & cross-sections-D00

11084-2006 Typical Cross Sections-D00

11084-2007 Site Clearance-D00

11084-2008 Fencing & Boundary Treatment (Proposed accesses and boundary walls)-D00

11084-2009-2010 Pavement Details D00

11084-2011 Drainage-D00

11084-2012 Kerbing and Paved Areas-D00

11084-2013 Signs & Lines-D00

11084-2014-2016 Public Lighting-D00

11084-2017 Landscaping-D00

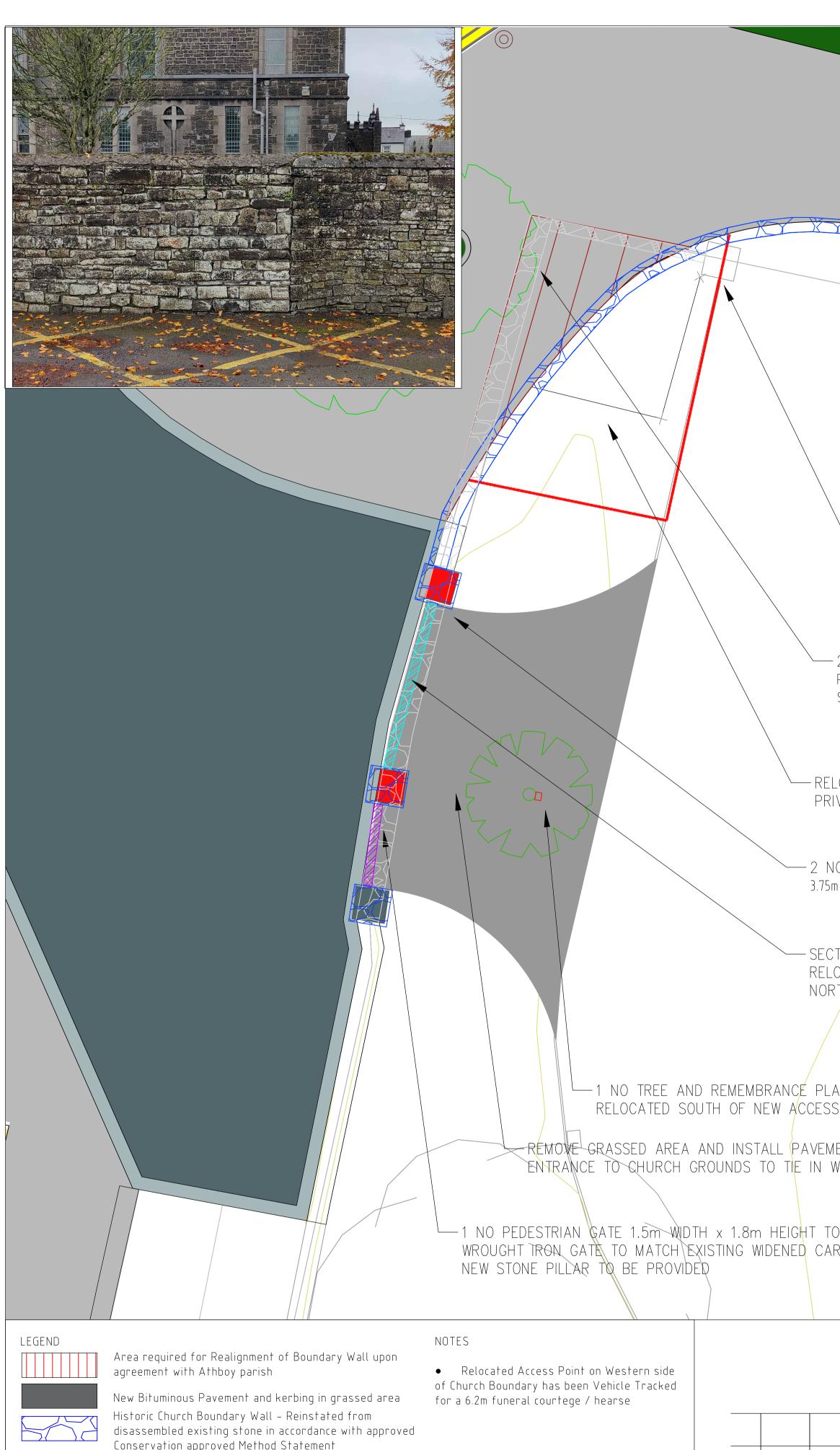
11084-2018 Bus Stop Detail-D00

11084-2019 Car Park Detail-D00

11084-2020 - Alternative Bring Bank Facility Location

11084-2025 Area Provided By Employer Coille Dios- D00

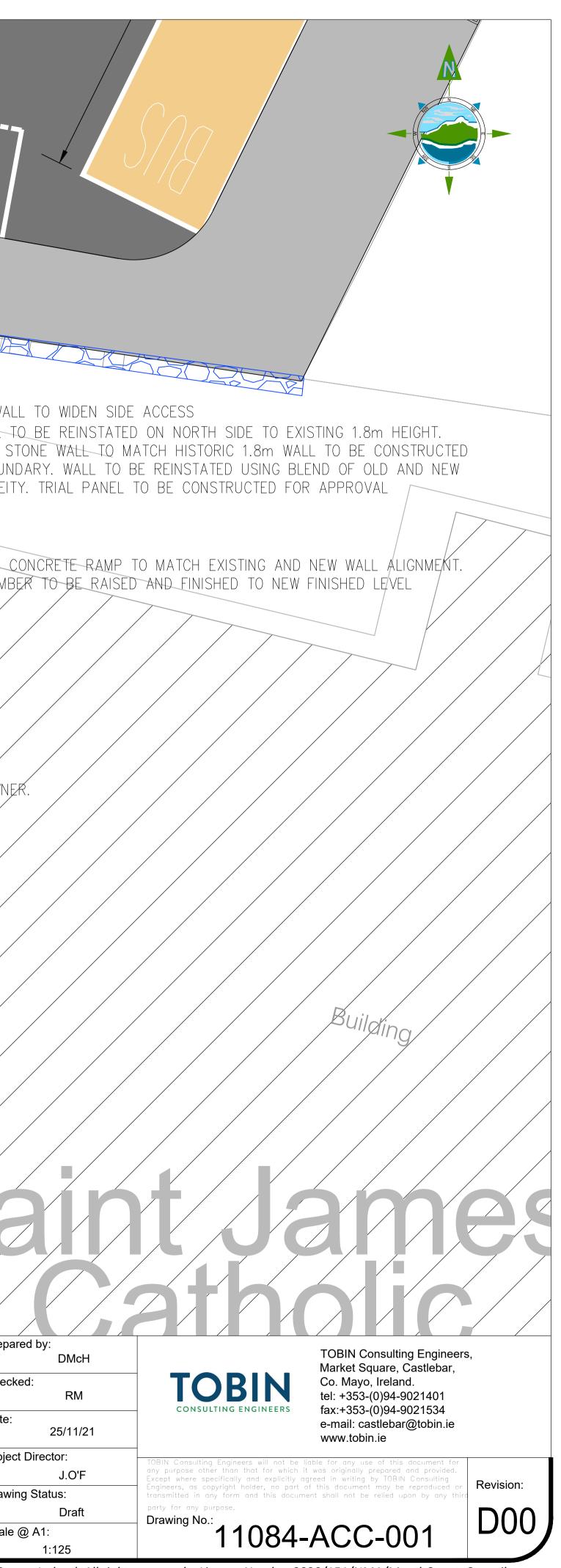
11084-2030-2031 Autotrack

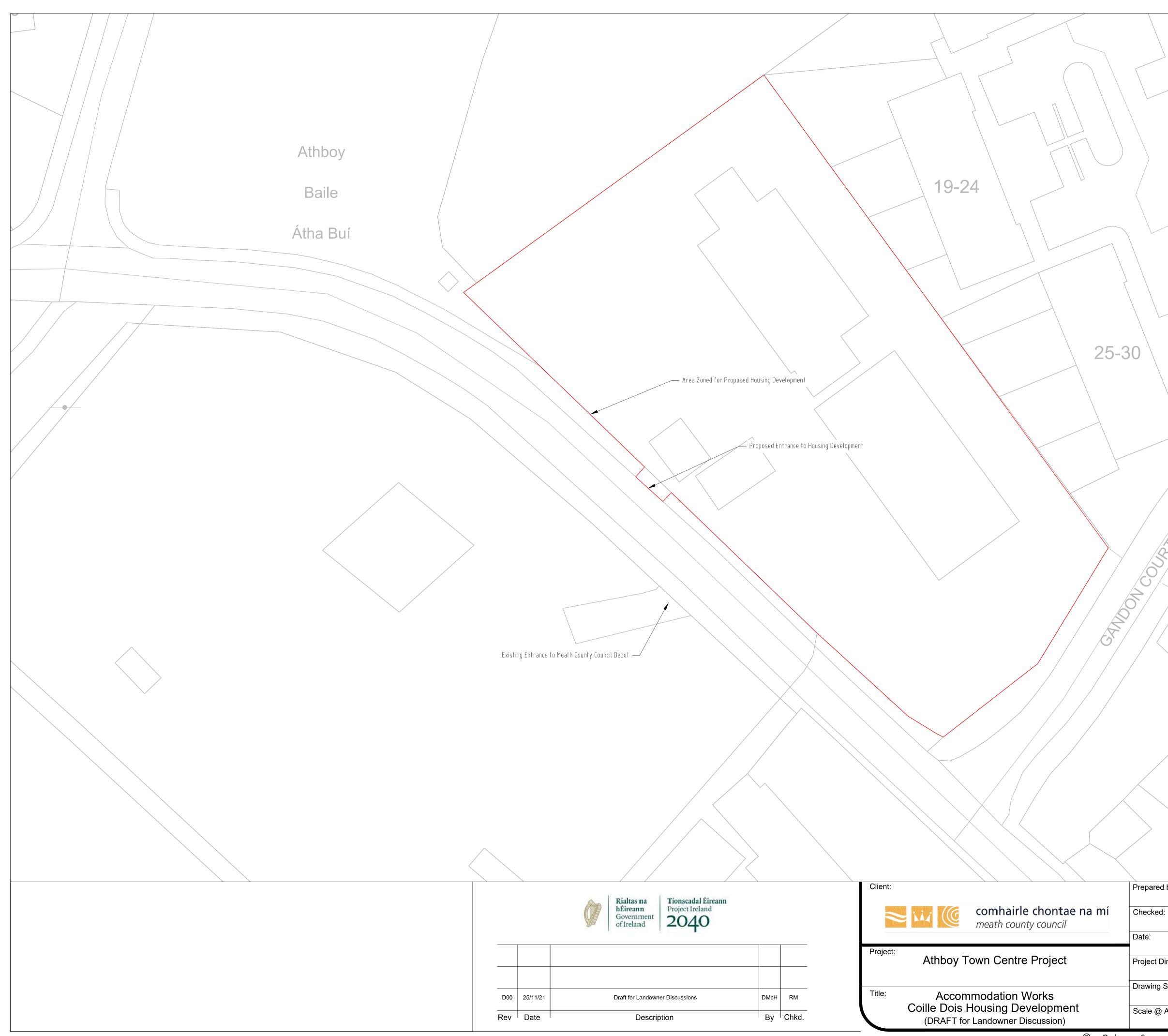


disassembled existing stone in accordance with approve Conservation approved Method Statement Resetting of Existing 3.75m wide Church Gate on Stone Pillars with Ducting Provision

New Wrought Iron Pedestrian Gate and Pillar, 1.5m width. Character to be in keeping with existing 3.75m vehicular gate

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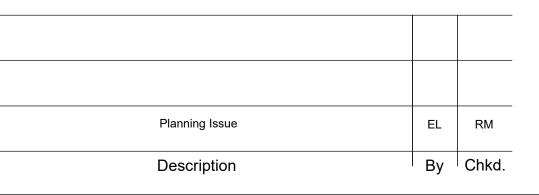




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RM	TOBI CONSULTING ENGIN	fax:+353-(0)94-902153	34
25/11/21		e-mail: castlebar@tobi www.tobin.ie	n.ie
Director: J.O'F	any purpose other than that f	II not be liable for any use of this docume or which it was originally prepared and pro	vided.
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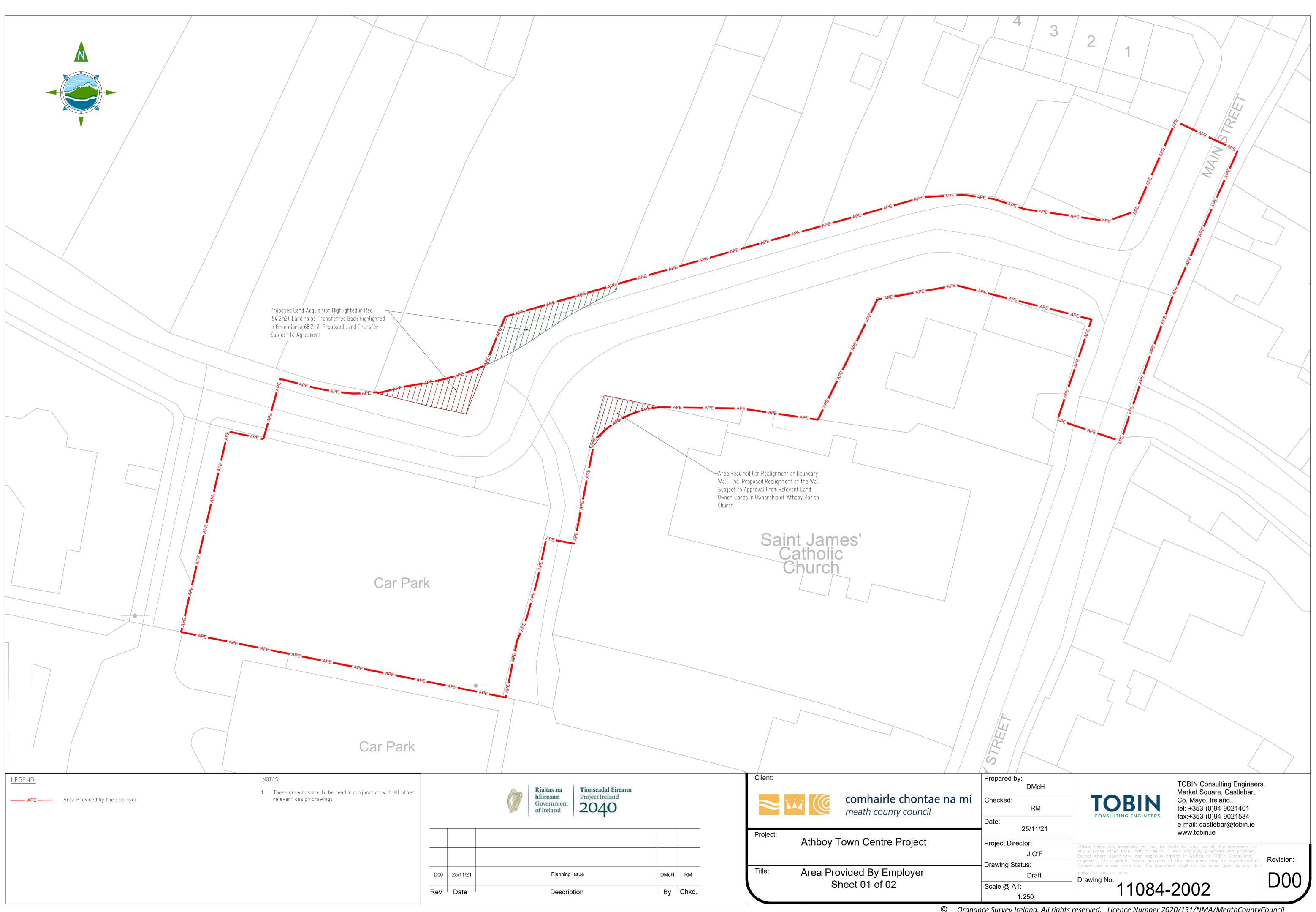
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ł	Rev	Date	

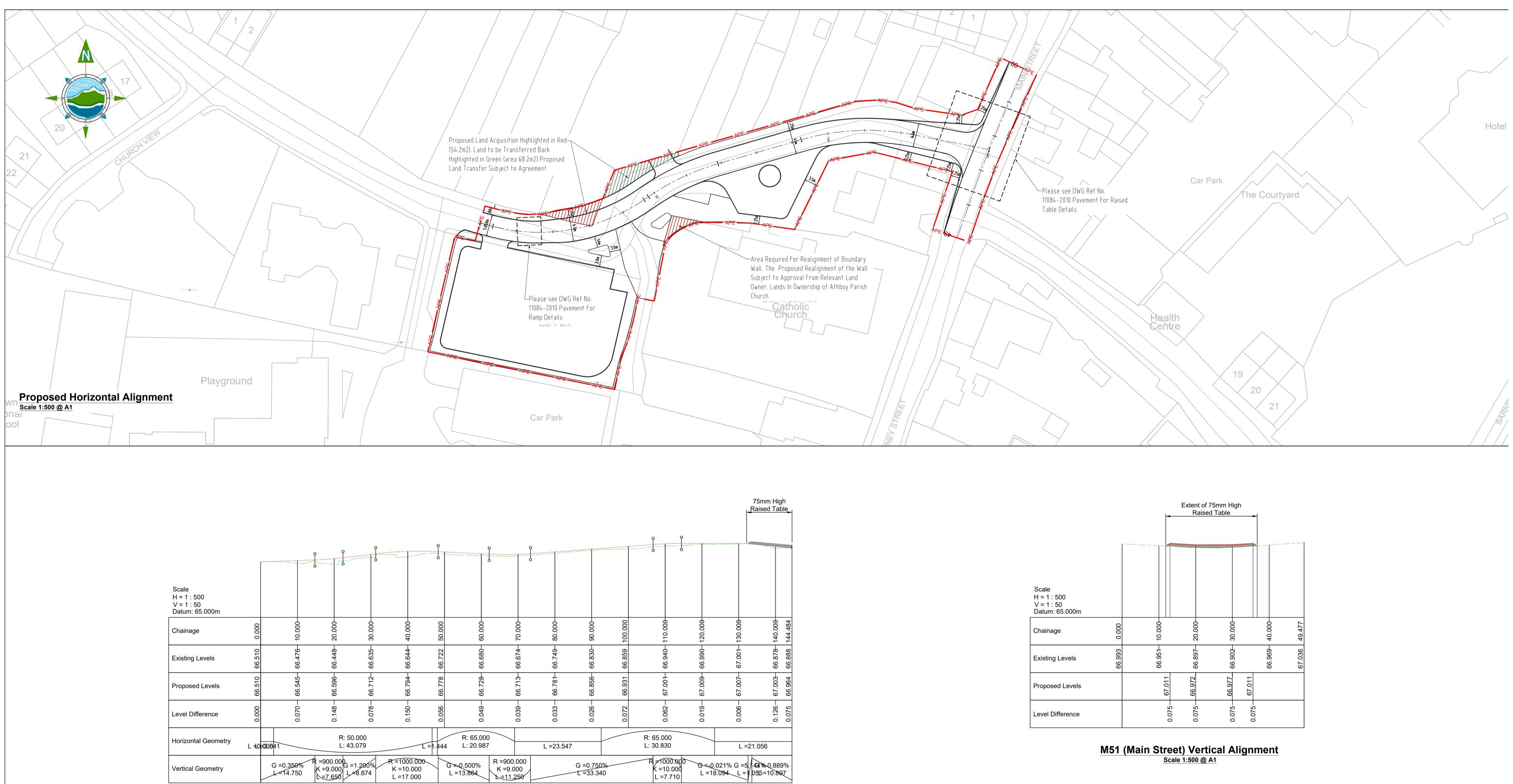


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Project: Athboy	Town Centre Project	Projec	t
Title:		Drawir	ną
	Site Location	Scale	0



D00	25/11/21	
Rev	Date	





**Proposed Vertical Alignment** Scale 1:500 @ A1

# LEGEND:

Existing Ground on New Centreline - Proposed Ground on New Centreline

> D00 23/03/2021 Rev <sup>|</sup> Date

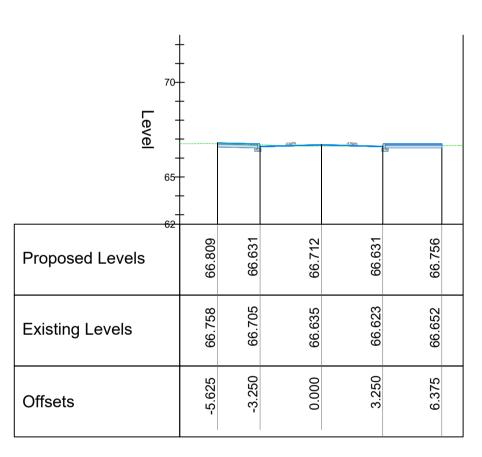
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66.993	

Rialtas na hÉireann Government of IrelandTionscadal Éireann Project Ireland2040			Client: Client: Client: Comhairle chontae na mí meath county council Maath County Council	Prepa Chec
			Meath County Council Project: Athboy Town Centre Project	Date: Projec
Planning Issue Description	EL	RM Chkd.	Title: Geometric Plan & Profile Sheet 01 of 03	- Drawi Scale

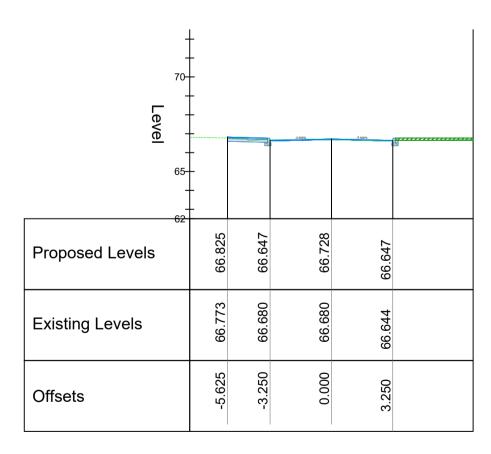


- 70- - - - - 65- -	- - - - - - -	8	- 2.50m	-1 2005	-	
Proposed Levels	66.615	66.562	66.510	66.562	66.615	
Existing Levels	66.532	66.560	66.510	66.565	66.535	
Offsets	-5.175	-3.050	0.000	3.050	5.175	

Chainage 0.000



# Chainage 30.000



# Chainage 60.000 Church View Rd. Ch. 0+000 to 0+080m Scale 1:200 @ A1

LEGEND

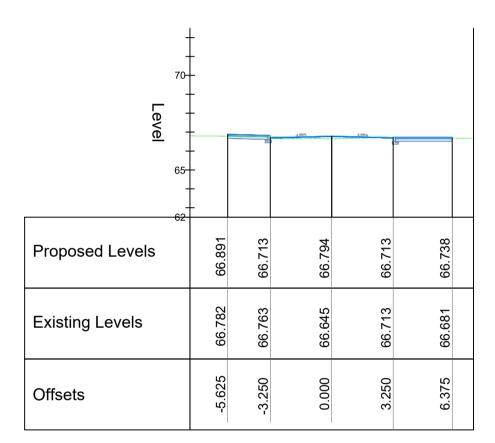
Proposed Design Level

Existing Ground Level

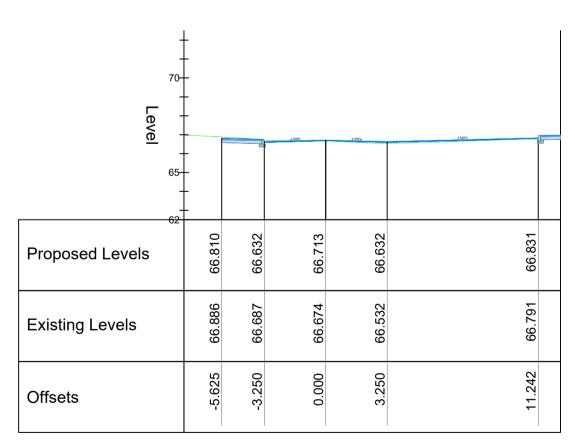
D00 23/03/2021 Rev Date

	- - - - - -		2.00%	2.00%		
Proposed Levels	66.650	66.597	66.545	66.597	66.650	
Existing Levels	66.494	66.485	66.476	66.356	66.570	
Offsets	-5.175	-3.050	0.000	3.050	5.175	

Chainage 10.000



# Chainage 40.000



Chainage 70.000

Rialtas na hÉireann Government of Ireland	Tionscadal Éireann Project Ireland 2040			
Planning Is	Planning Issue			
Descripti	on	Ву	Chkd.	

Client:		Prepa
//	comhairle chontae na mí meath county council	Chec
	Meath County Council	Date:
Project:	Athboy Town Centre Project	Proje
		Draw
Title:	Cross-sections Sheet 02 of 03	Scale

Chainage 50.000

Proposed Levels

Existing Levels

Offsets

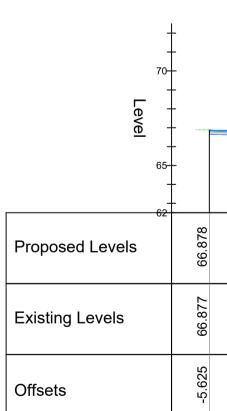
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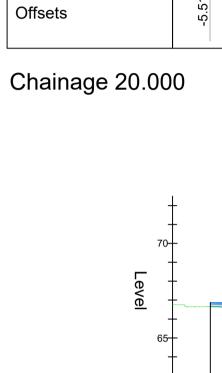
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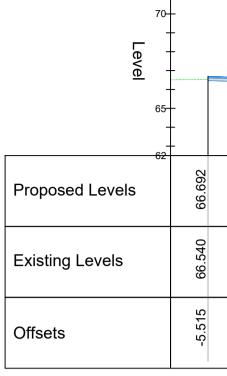
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ίΩ'



Chainage 80.000





	-2 500%. Las	3 50%		
66.514	66.596	66.523	66.523	
66.563	66.448	66.531	66.531	
-3.140	0.000	3.050	6.745	

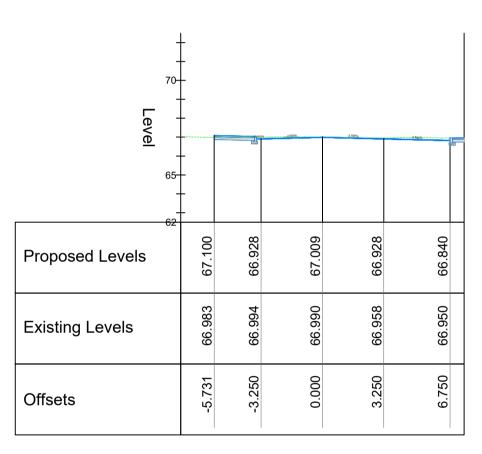
K	-3 509%	-2 500%		
66.697	66.778	66.697	66.822	
66.700	66.722	66.665	66.742	
-3.250	0.00	3.250	6.375	

	-2.500%	-2 500%	2005	
66.700	66.781	66.700	67.081	
66.703	66.749	66.659	66.911	
-3.250	0.000	3.250	18.477	

pared by:		
EL	TOBIN Consulting Engineers, Market Square, Castlebar,	
ecked:		
RM	Co. Mayo, Ireland. tel: +353-(0)94-9021401 fax:+353-(0)94-9021534	
e: 24/11/21	e-mail: castlebar@tobin.ie www.tobin.ie	
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- 70- - - - - - - - - - - - - - 			23075	3.00%	1005	
Proposed Levels	66.953	66.775	66.856	66.775	66.979	
Existing Levels	66.896	66.774	66.830	66.790	66. <u>9</u> 04	
Offsets	-5.625	-3.250	0.000	3.250	11.401	

Chainage 90.000



Chainage 120.000

Church View Rd. Ch. 0+080 to 0+130m Scale 1:200 @ A1

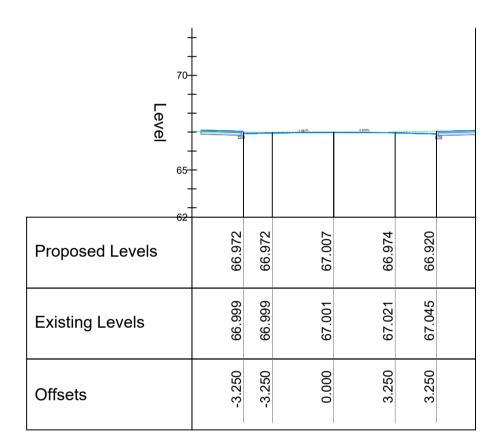
<u>LEGEND</u>

Proposed Design Level
Existing Ground Level

D00 25/11/2021 Rev Date

			2 2005	2 keps		
Proposed Levels	67.028	66.850	66.931	66.850	66.859	
Existing Levels	66.878	66.822	66.859	66.804	66.795	
Offsets	-5.625	-3.250	0.000	3.250	3.599	

Chainage 100.000

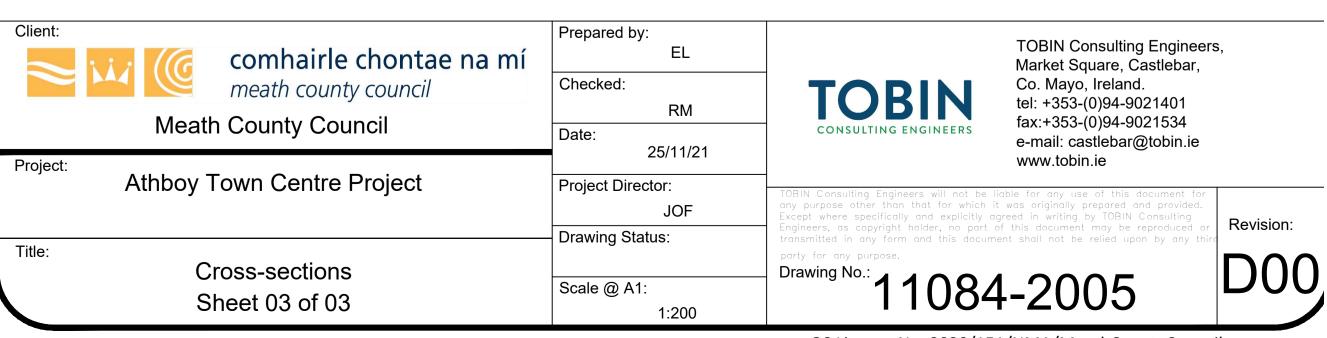


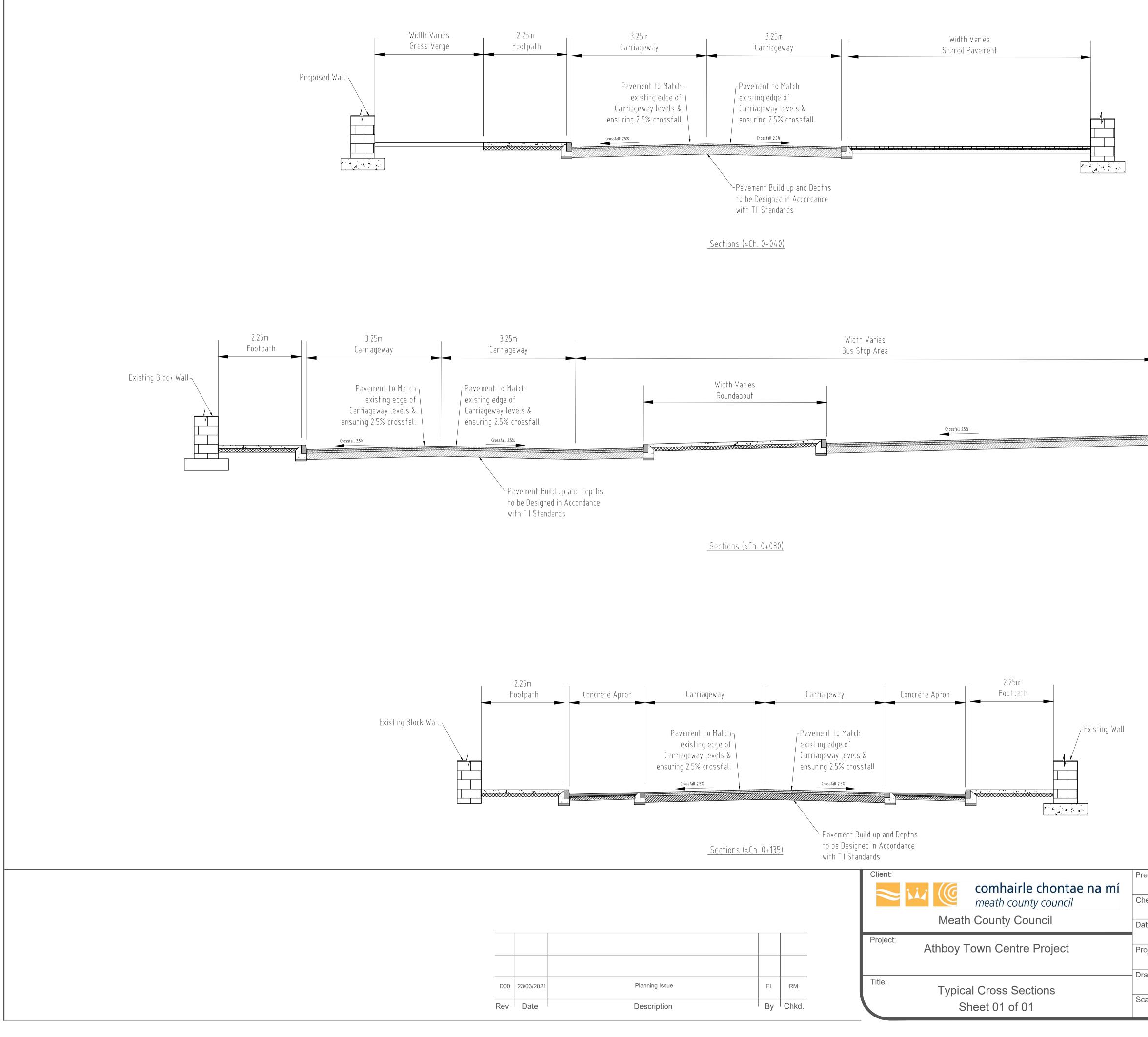
Chainage 130.000

- 70- - - - - - 65- -	- - - - - - -		2.00%	-2.00%	(
Proposed Levels	67.098	66.920	67.001	66.920	
Existing Levels	66.915	66.942	66.940	66.895	
Offsets	-5.625	-3.250	0.00	3.250	

Chainage 110.000

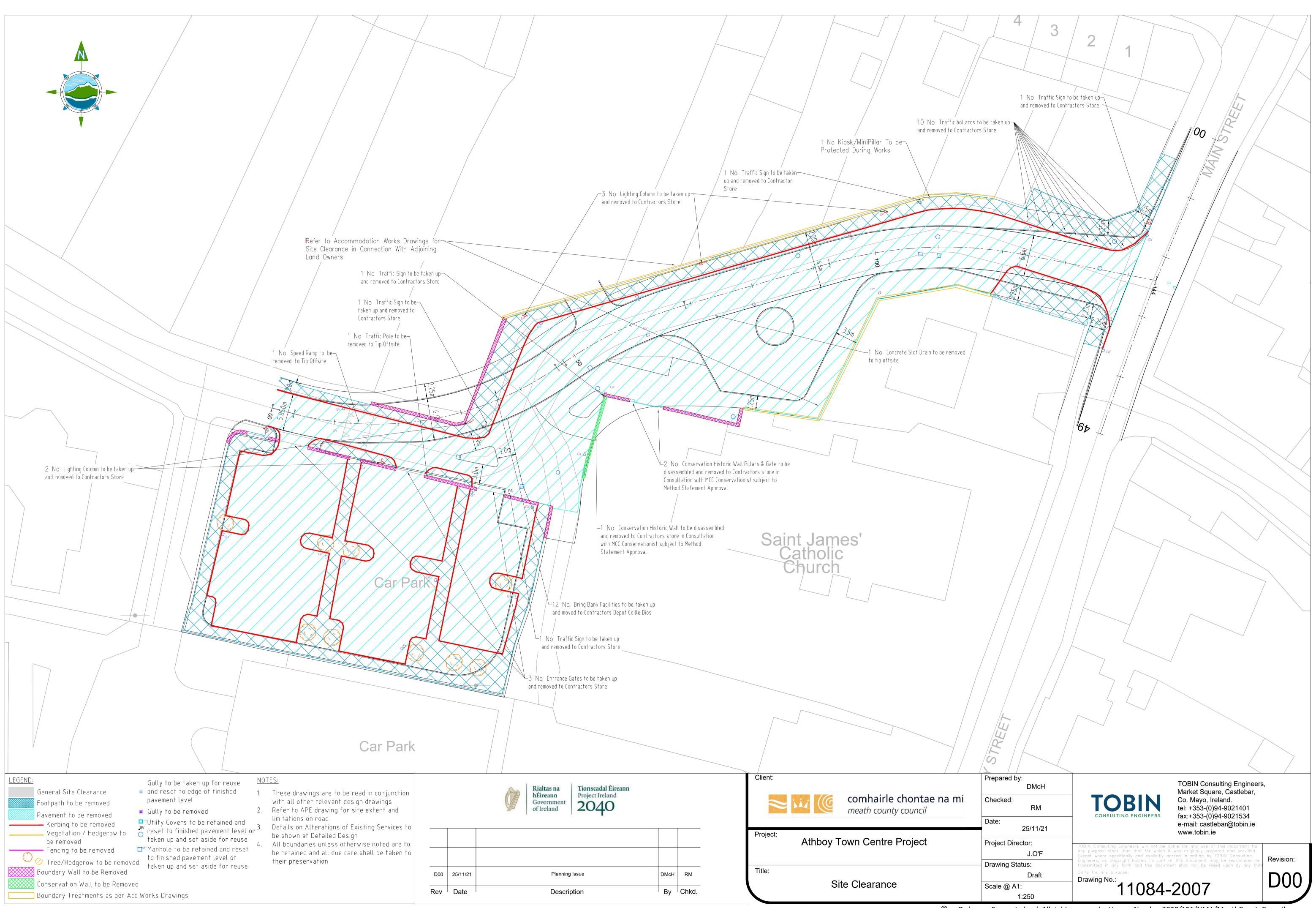
Ø	Rialtas na hÉireann Government of Ireland	Tionscadal Éireann Project Ireland 2040		
	Planning Is	ssue	EL	RM
	Descript	ion	Ву	Chkd.





	2.25m Footpath		
<u>/////</u>		به م	*

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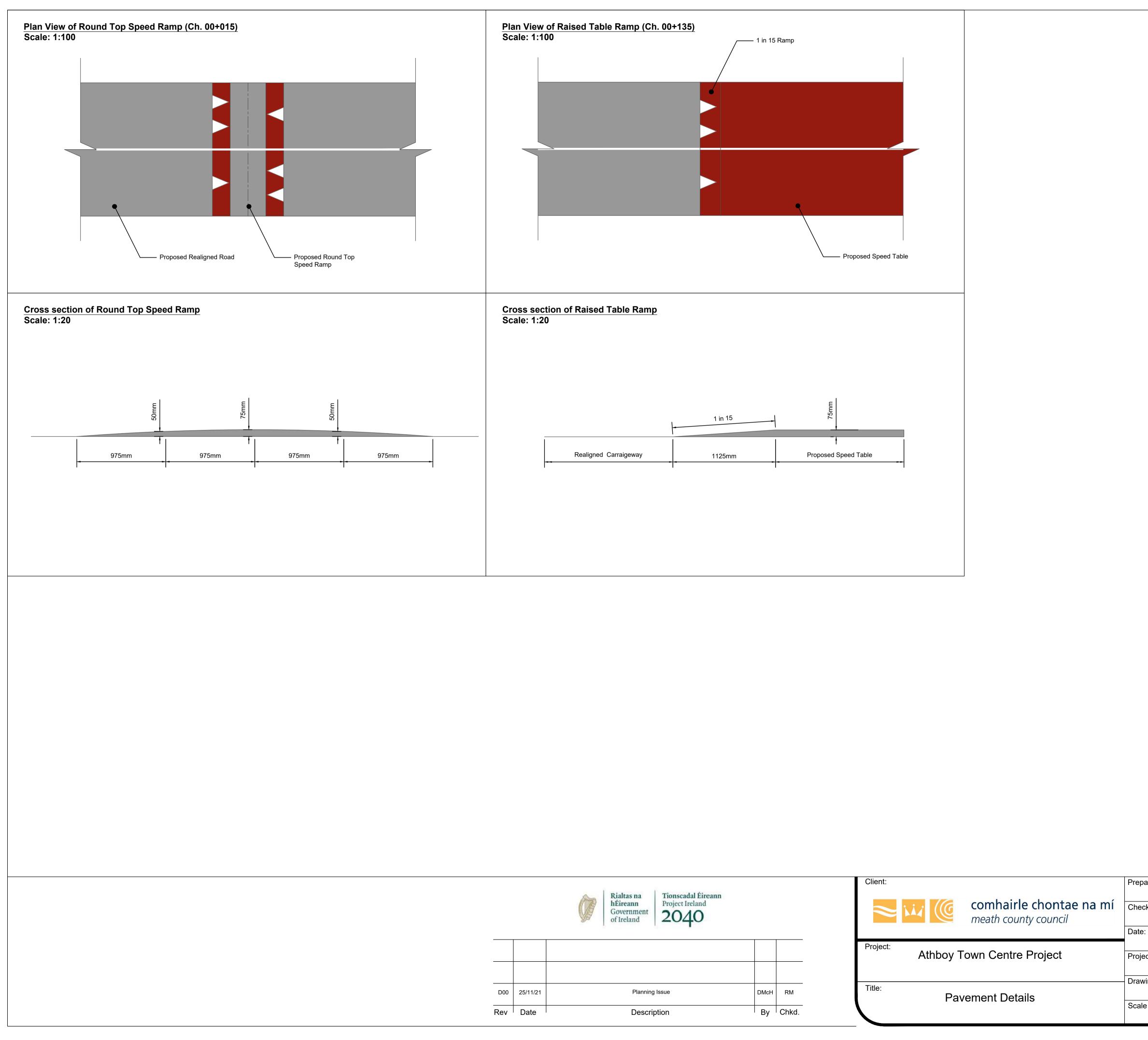


	C CHURCH BOUNDARY WA				
	E				
			2.25m 6.5lm	Ball Hore	$\bigcirc$
		Car Pa	rk		
	<u>+</u>		3		
LEGEND:         — E       Existing Wall / Boundary to remain intact         — F1       Post and Rail Fence         Heritage Stone Wall, refer to Landowner Accommodation works drawings for details on disassembly and reinstatement.         — F8       Low Wall and Railing Boundary Treatment to match existing	<u>NOTES:</u> 1. Drawings to be read in c 300 Series Appendices 2. Accommodation Works, in detailed on Series 2700 Works Drawings.	nc. gates are			
GD-PExisting Church Boundary Gate relocated to Western Boundary WalG7Single Pedestrian Gate as agreed with Athboy Parish	ι		D00 Rev	25/11/21 Date	



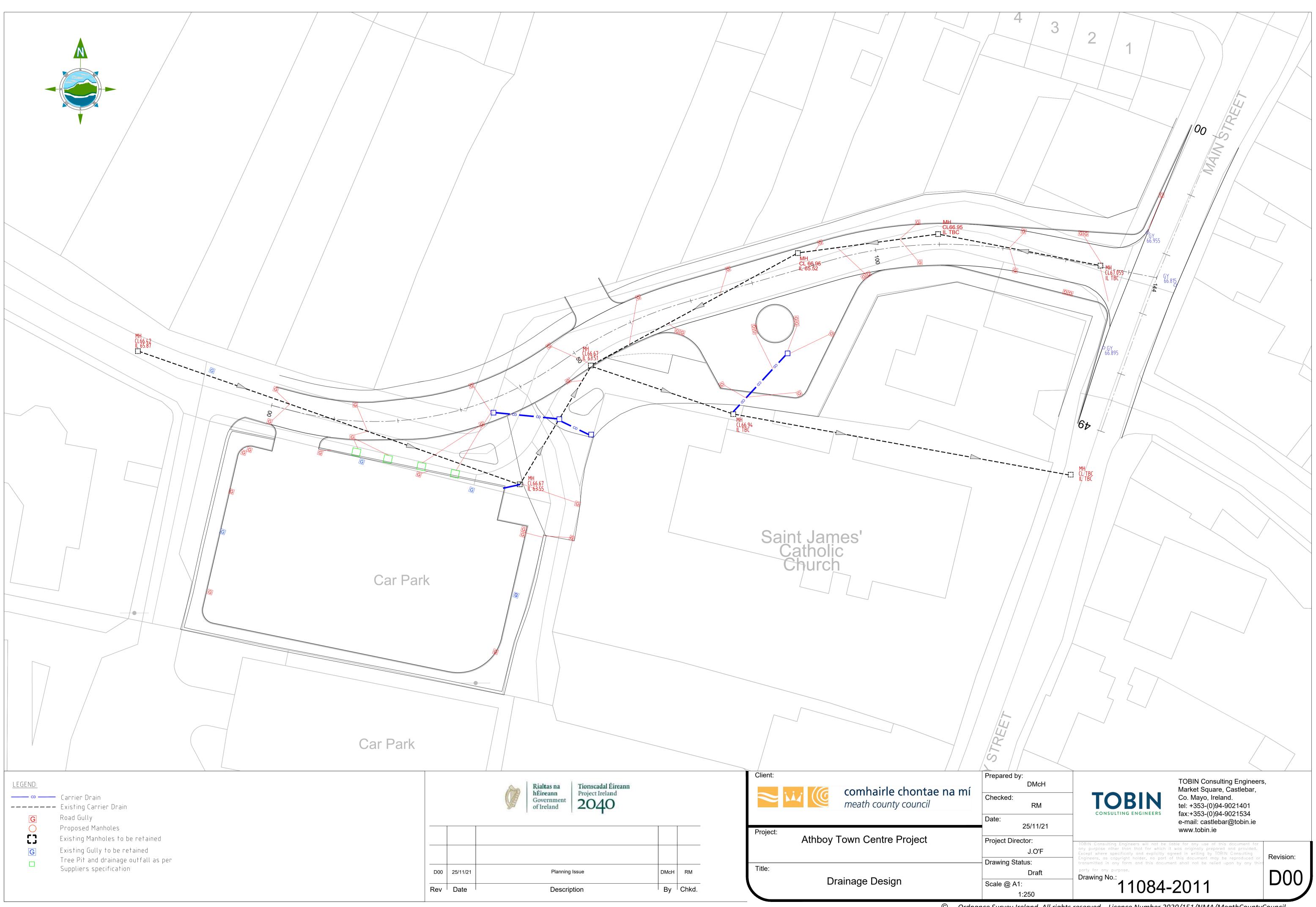
	Please see DV 11084-2010 Pa Ramp Details	avement For	Tie into Exist			
	Car Park				Saint James' Catholic Church	
Pavement Type Option 1 (Refer to Specification Appendix 1. 7/1 for Pavement Details) – Full Depth Inlay Construction Finished to Existing Road Surface Levels 2	Car Park Car Park		Rialtas na         hÉireann         Government         of Ireland		comhairle chontae na mí meath county council	Pre
7/1 for Pavement Details) – Full Depth Inlay Construction	limitations on road For all joints, both longitudinal and transverse, between new and existing pavements, refer to TII Standard Construction Detail CC-SCD-00703 and CC-SCD-00704	D00         25/11/21           Rev         Date	Planning Issue Description	DMcH RM By Chkd.	Project: Athboy Town Centre Project	Dat Pro Dra Sca

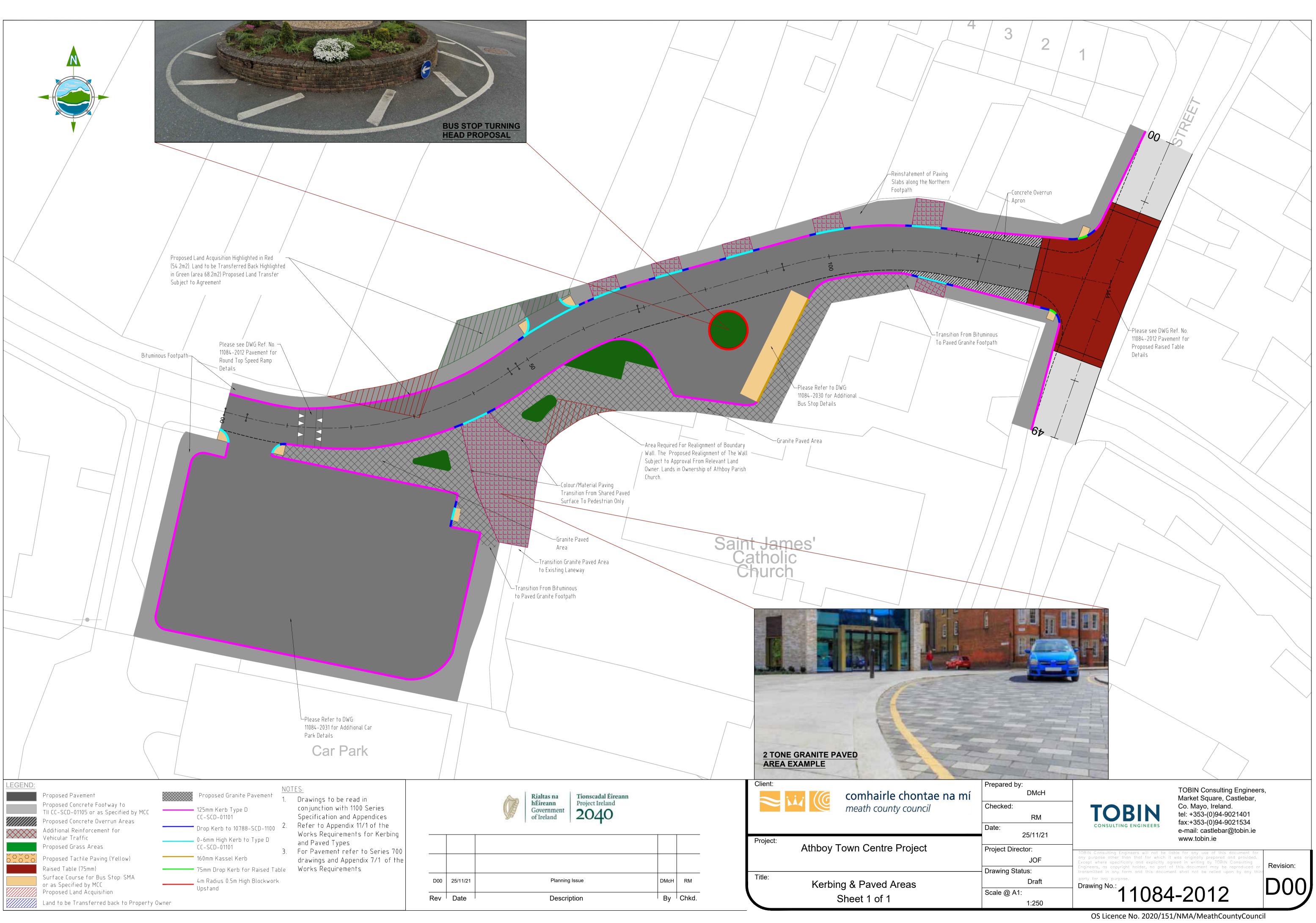




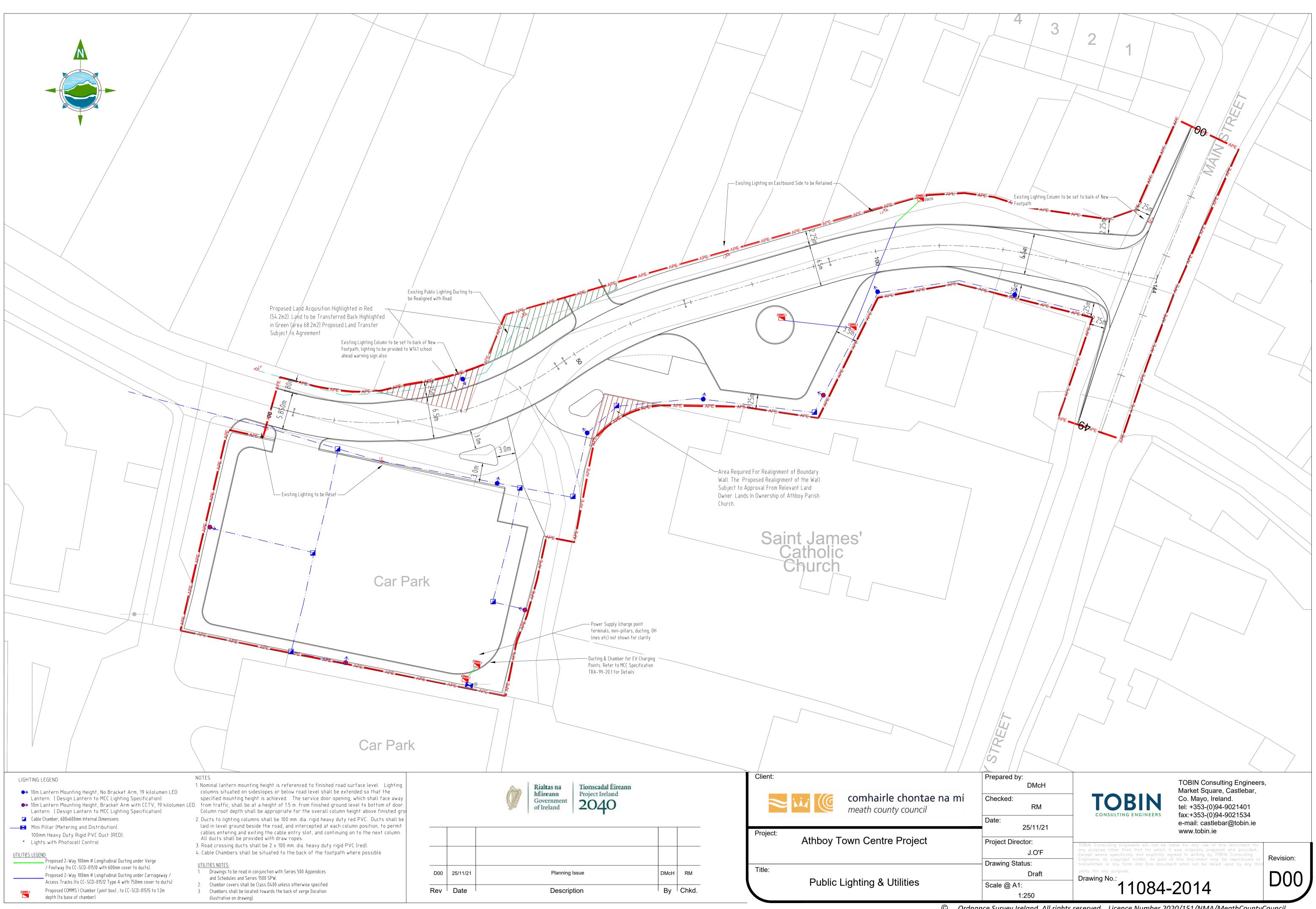
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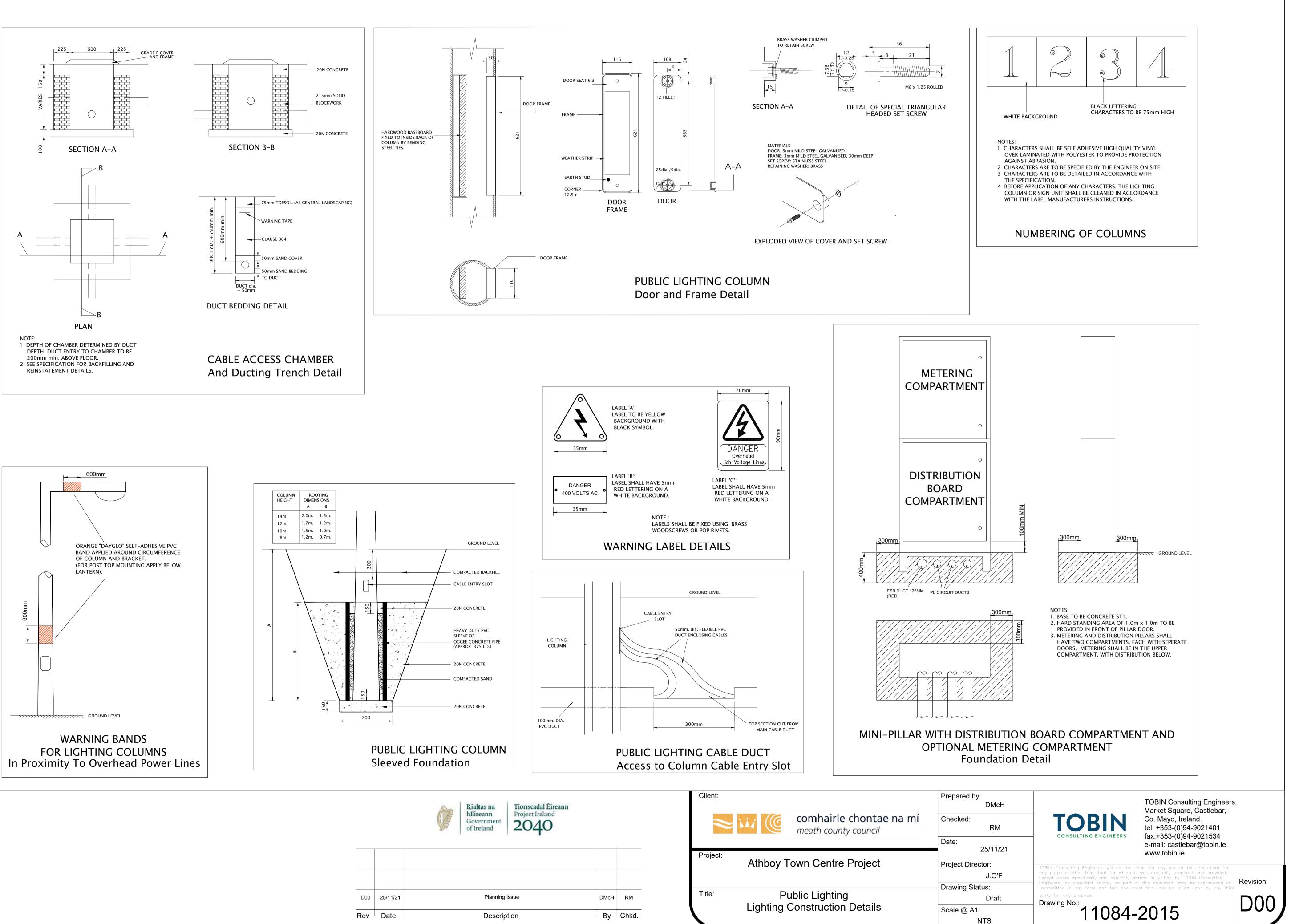
pared by: DMcH		TOBIN Consulting Engineers Market Square, Castlebar,	ò,
ecked:		Co. Mayo, Ireland.	
RM	TOBIN	tel: +353-(0)94-9021401 fax:+353-(0)94-9021534	
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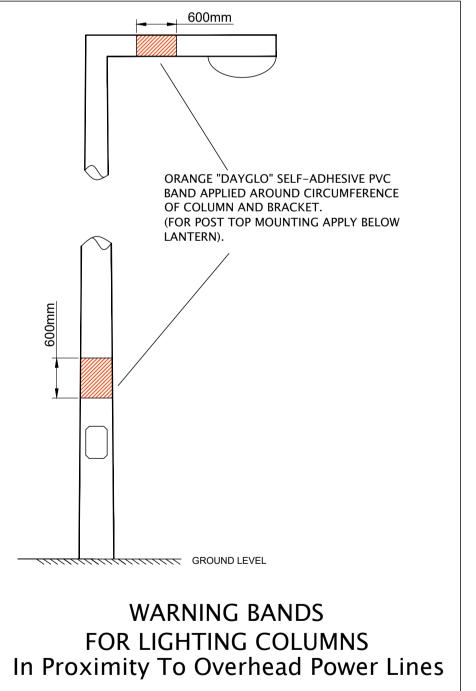


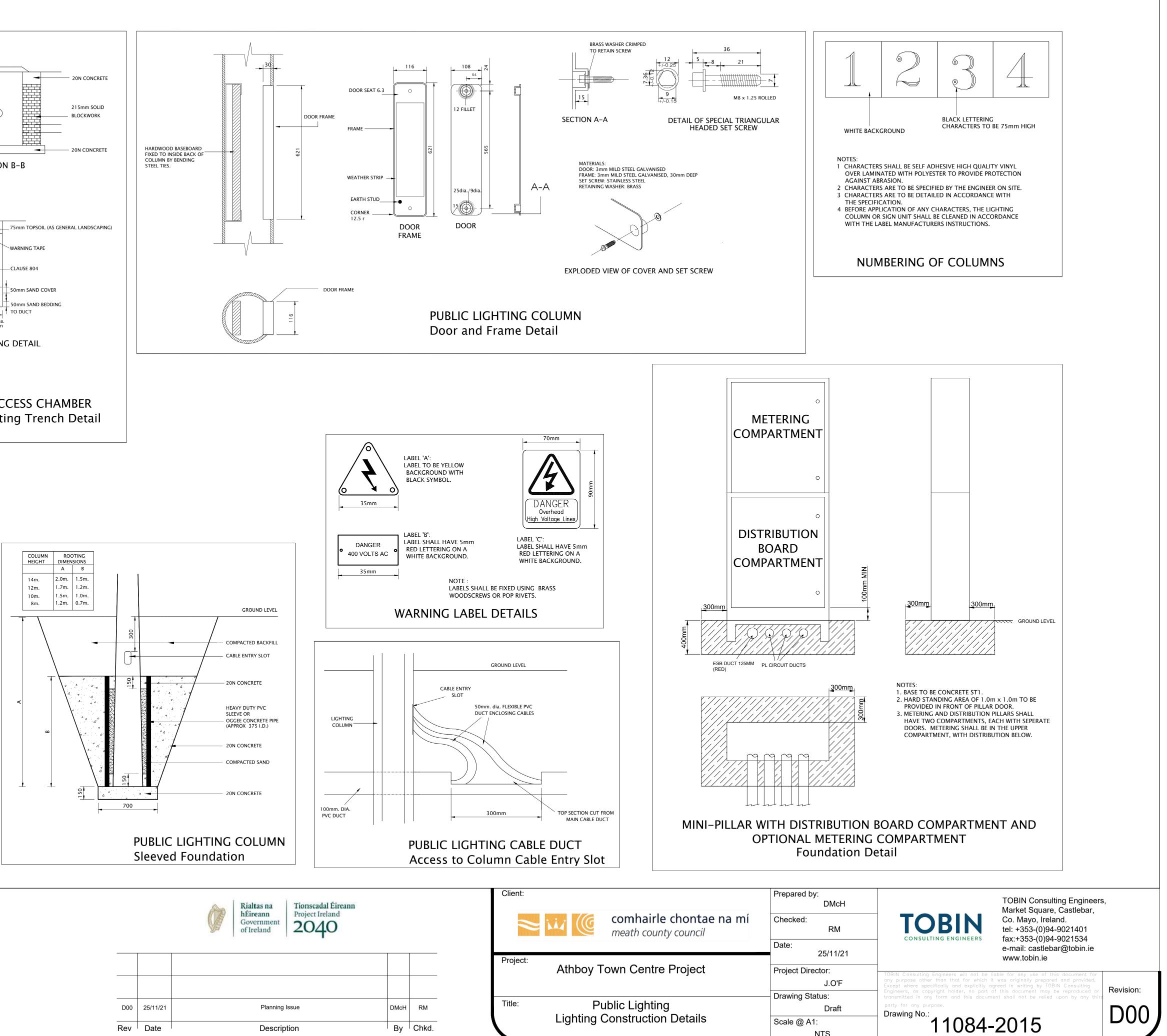






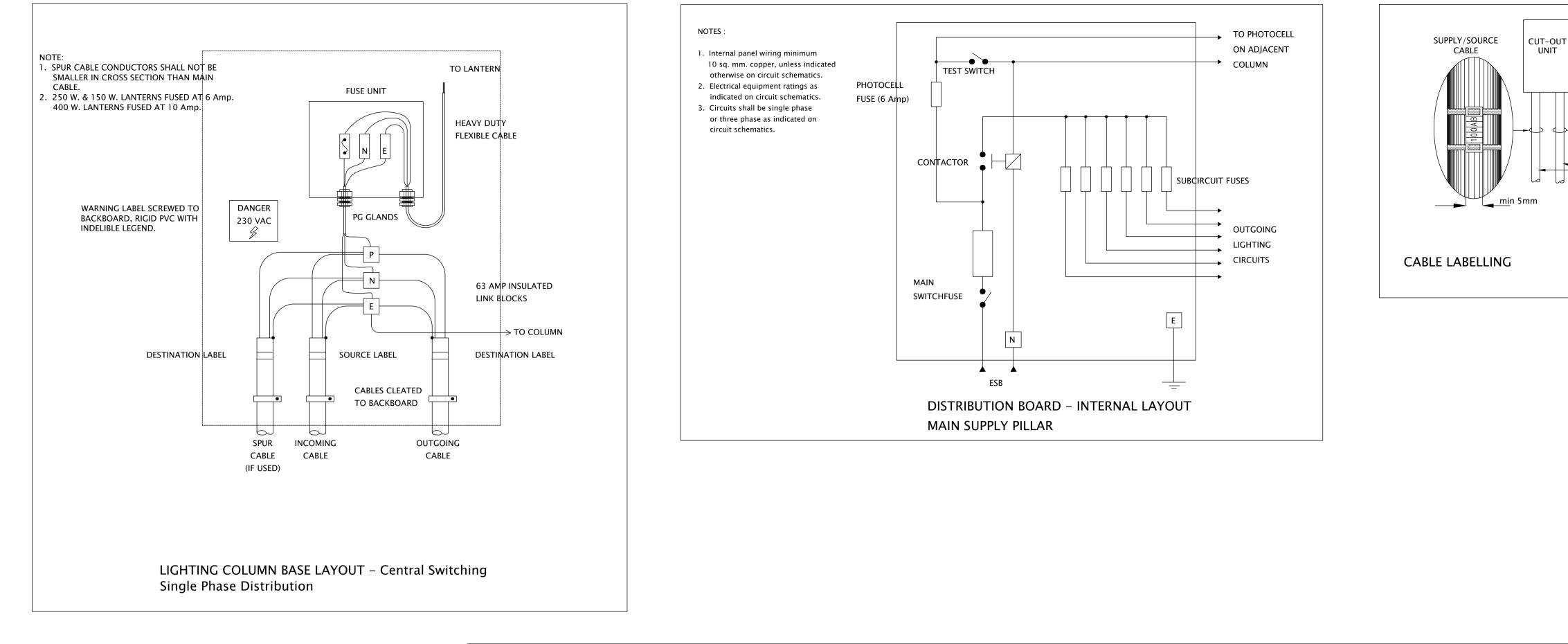


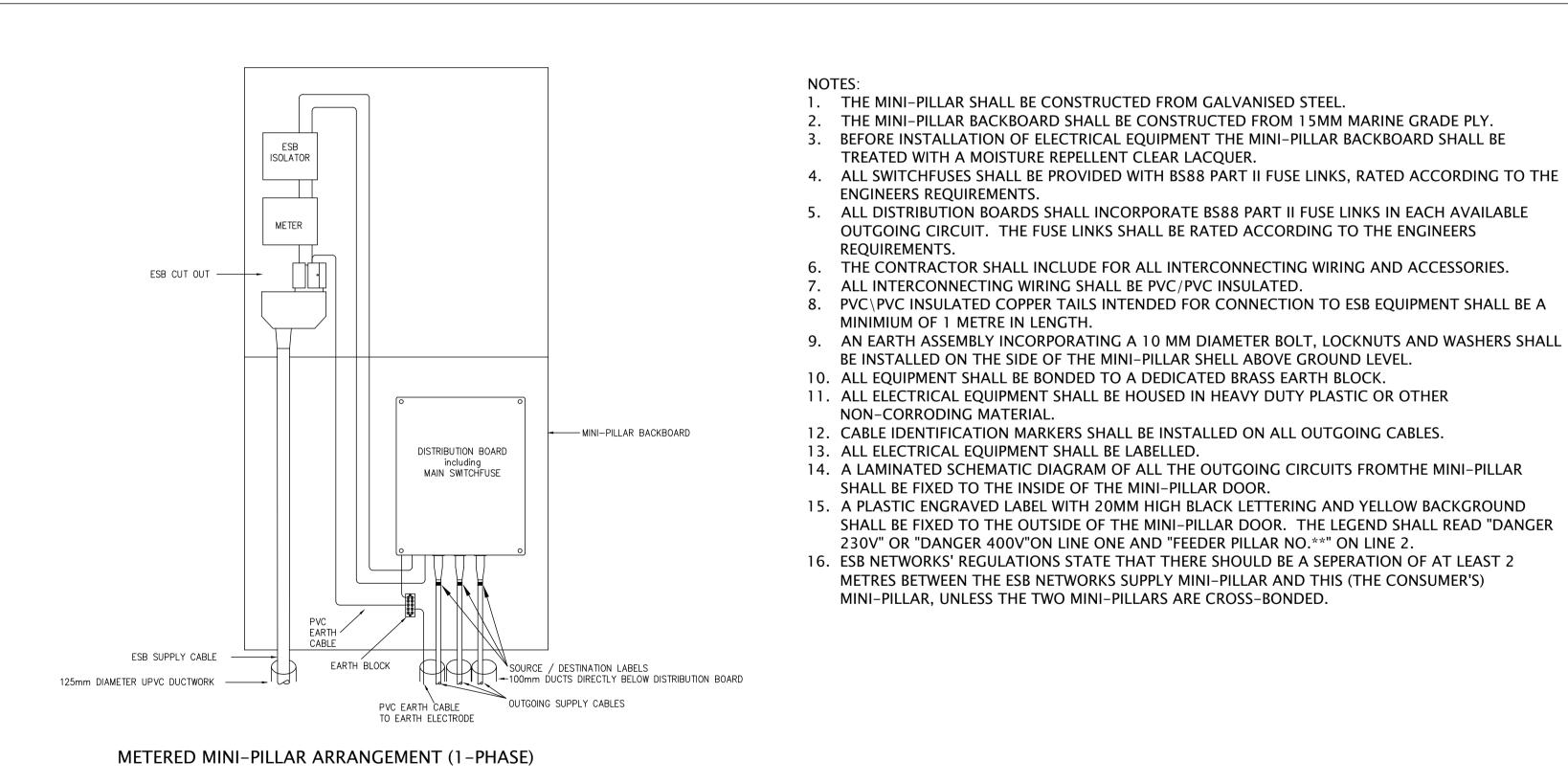




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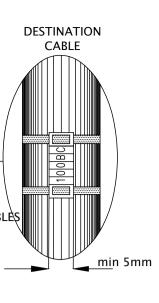
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						Date:	25/11/2 <sup>-</sup>
					Project:		25/11/2
					Athboy Town Centre Project	Project Dire	ector:
							J.O'F
						Drawing Sta	atus:
	Planning Iss	sue	DMcH	RM	Title: Public Lighting		Draft
				Standard Electrical Details	Scale @ A <sup>2</sup>	1:	
	Descriptio	on	By <sup> </sup>	Chkd.			NTS



SOURCE/DESTINATION LABEL NOTES:

- 1 ALL CABLES SHALL BE MARKED TO INDICATE THE SUPPLY SOURCE/ DESTINATION. FINAL DETAILS SHALL BE AGREED BY THE ENGINEER.
- 2 ALL CABLES MARKERS SHALL BE BLACK ON WHITE AND SHALL BE MANUFACTURED FROM PLASTICIZED PVC AND HELD IN POSITION WITH BLACK PLASTIC TIE WRAP OR SIMILAR AND APPROVED BY THE ENGINEER.

21



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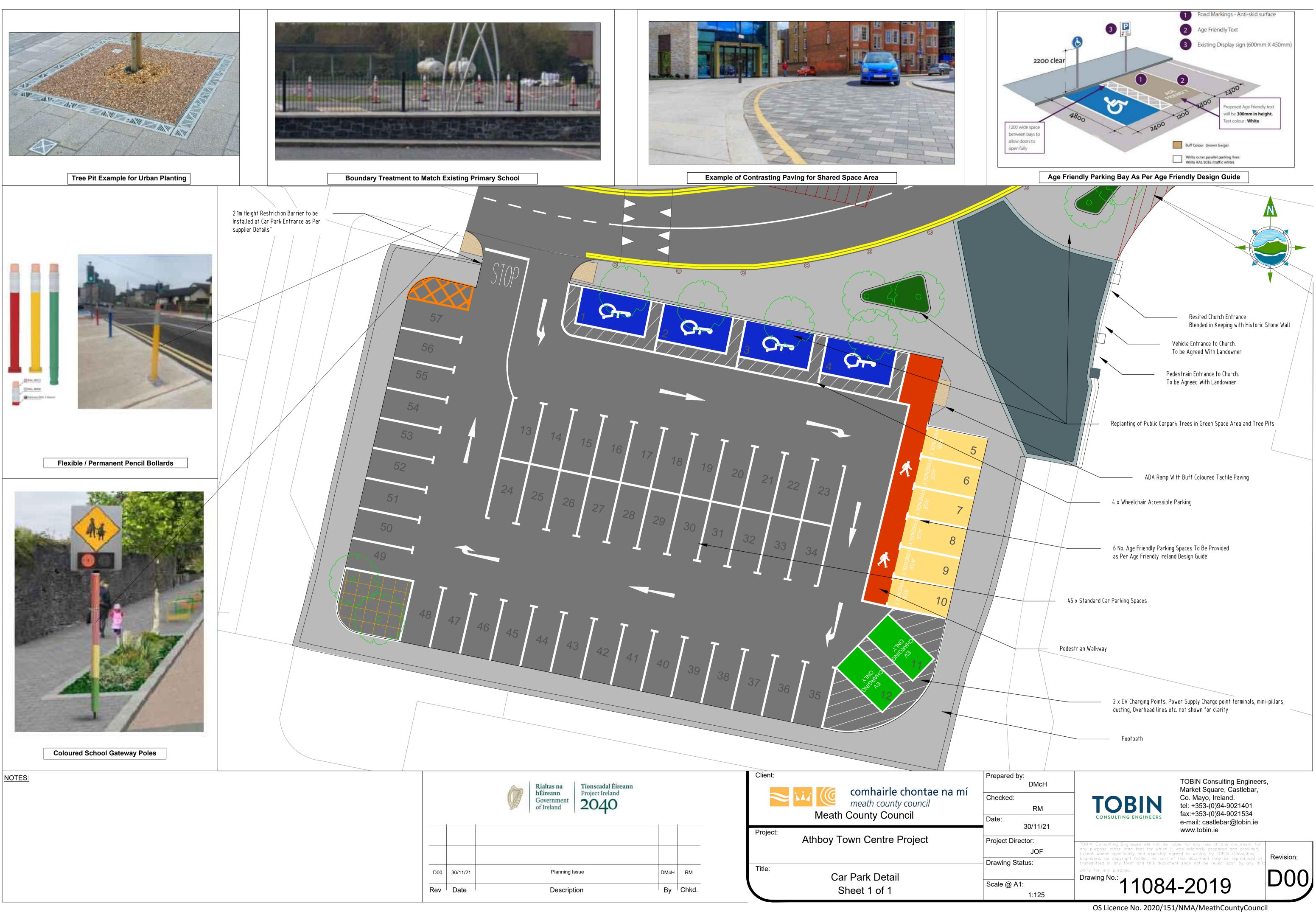




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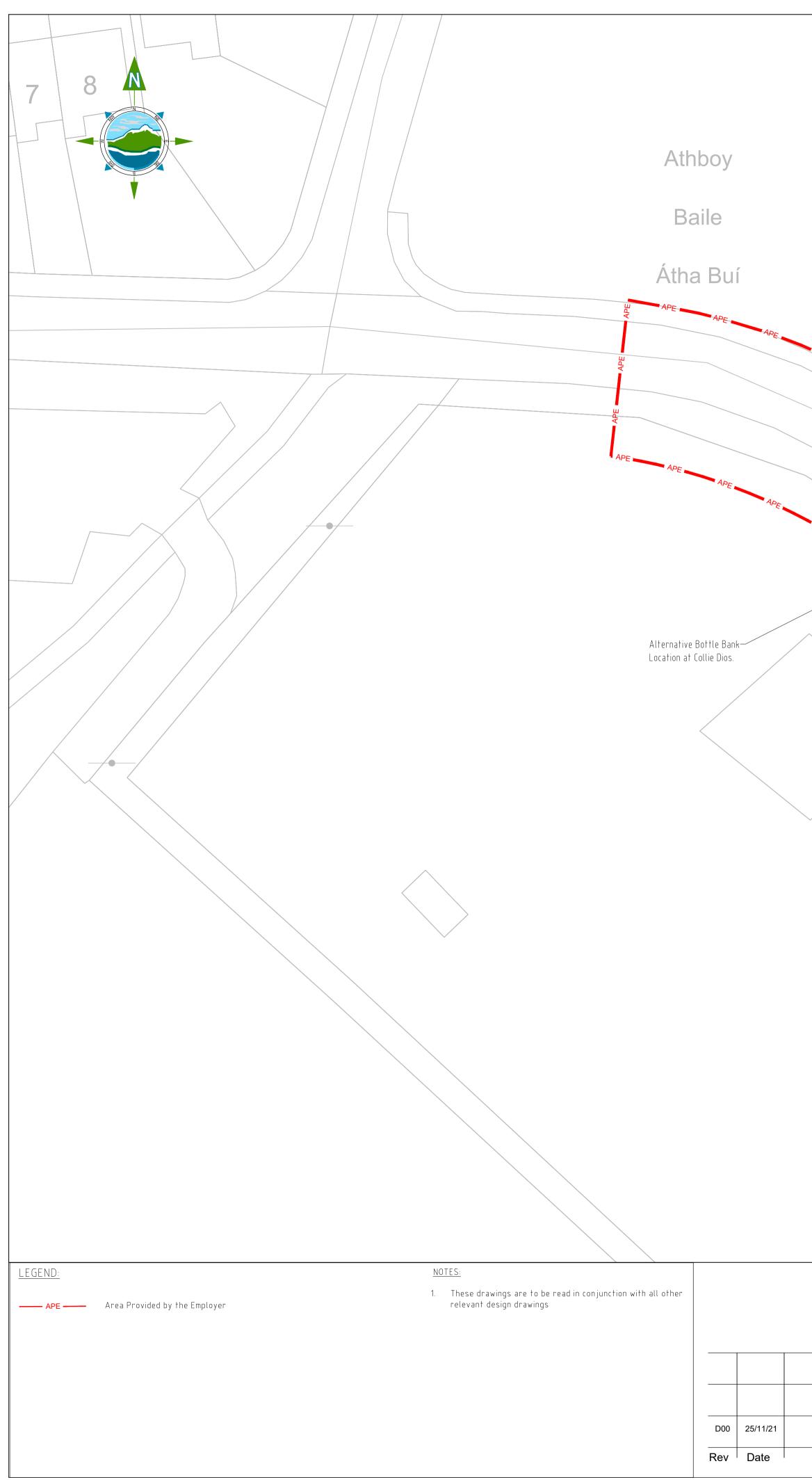


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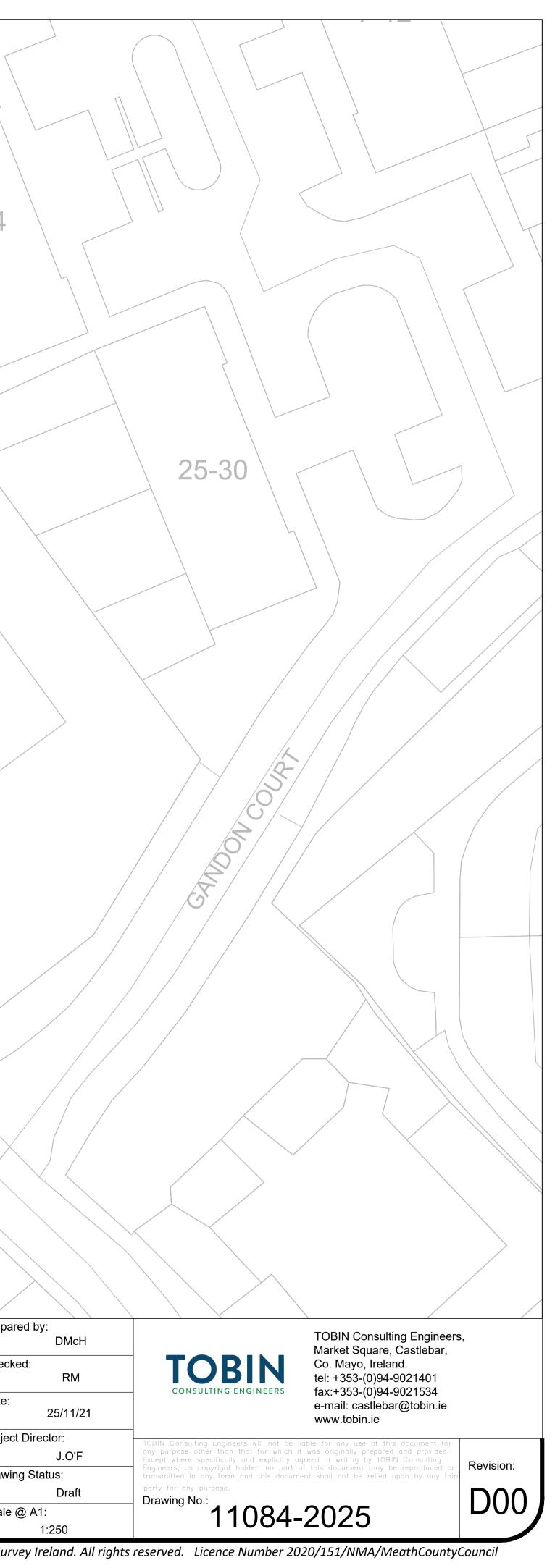


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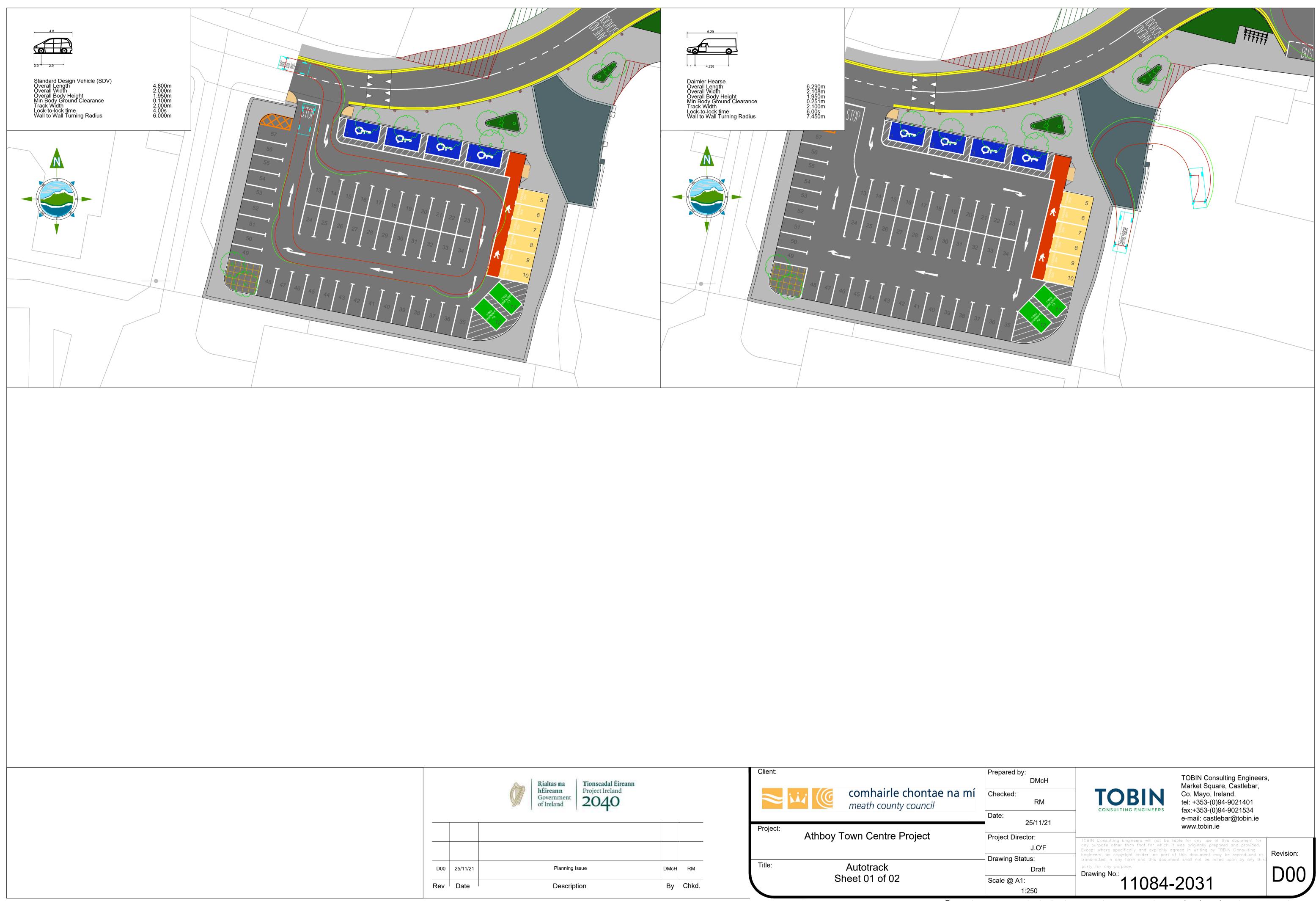




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Description	By Chkd.			rdnance Su







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hÉireann Government of Ireland				comhairle chontae na mí meath county council	Checked: RM
				<b>y</b>	Date: 25/11/21
			Project:		20/11/21
			Athboy	Town Centre Project	Project Director:
					J.O'F
					Drawing Status:
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Description		Chird	S	heet 01 of 02	Scale @ A1:
Description	Ву	Chkd.			1:250
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Appendix B – Problem Location Map



D00	25/11/21	
Rev	Date	





Appendix C – Road Safety Audit Feedback Form

	Road Safety Audit Feedback Form	
Scheme: Athboy Town Centre Project Bus Stop F	acility	
Audit Stage: 1-2	Route No.: N51, Town Parks and Coille Dios	Date of Audit: 10/01/2022

		Тс	be Completed by Designer	To Be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended Measures Accepted (yes/no)	Alternative Measures (describe). Give reason for not accepting recommended measure	Alternative Measures or reasons accepted by auditors(yes/no)
2.1.1	Yes	Yes		
2.2.1	Yes	Yes		
2.2.2	Yes	Yes		
2.2.3	Yes	Yes		
2.2.4	Yes	Yes		
2.2.5	Yes	Yes		
2.2.6	Yes	Yes		
2.2.7	Yes	Yes		
2.2.8	Yes	Yes		
2.2.9	Yes	Yes		
2.2.10	No	Yes	Design currently ensures that drop kerb and raised table are to be finished to same level within acceptable design tolerances.	
2.2.11	Yes	Yes		
2.2.12	Yes	Yes		
2.3.1	Yes	Yes		
2.3.2	Yes	Yes		
2.3.3	Yes	Yes		

	To Be Completed by Audit Team Leader			
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended Measures Accepted (yes/no)	Alternative Measures (describe). Give reason for not accepting recommended measure	Alternative Measures or reasons accepted by auditors(yes/no)
2.3.4	Yes	Yes		
2.3.5	Yes	Yes		

Signed:	loran Hurtrat	Designer	Ronan Murtagh	Date:	20/01/2022
Signed:	Paul Nee	Client	Paul McKown, Meath County Council	Date:	21/02/2022
Signed:	Laura g-ffrey	Audit Team Leader	Laura Gaffney	Date:	24/01/2022

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**Dublin** Block 10-4, Blanchardstown Corporate Park, Dublin 15, D15 X98N, Ireland. Tel: +353 (0)1 803 0406

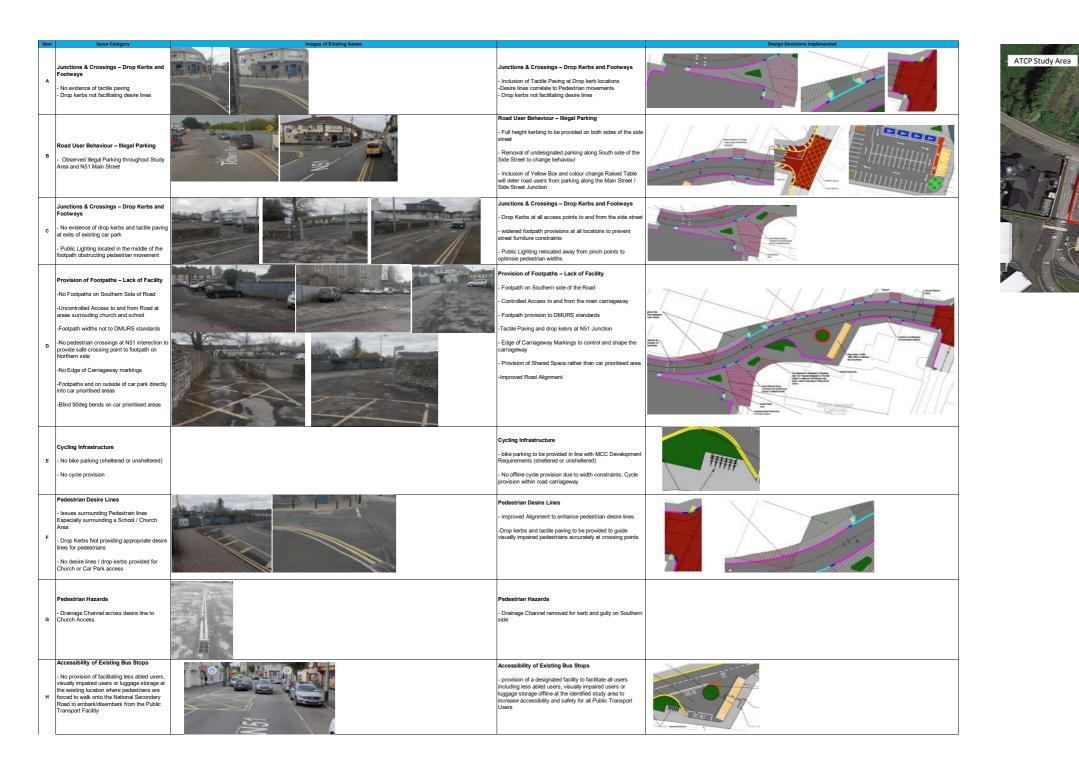
## etobinengineers

### Castlebar

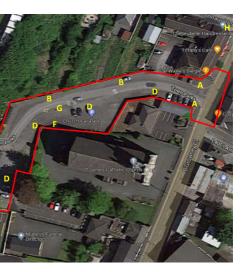
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Appendix B - Walkability, Accessibility & Cycling Audit



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