

Legend

- 1 Pedestrian Access to New Road
- 2 Bus Stop (76, 51, 76B)
- 3 ESB Sub-Station
- 4 Newlands Retail Centre
- 5 Newlands Home & Garden Centre
- 6 Statoi Garage
- 7 Bank of Ireland
- 8 Sam McCauley Pharmacy
- 9 Aldi
- 10 Bewley's Hotel
- 11 Renault Garage
- 12 Left In – Left Out Access to Renault
- 13 Deliveries Access to Renault
- 14 Lynch's Green Isle Hotel
- 15 Roadstone
- 16 Newlands Golf Club
- 17 Bus Stop/Shelter (Dublin Bus & Bus Eireann)
- 18 Bus Stop
- 19 Access to Newlands Golf Club
- 20 House Under Construction
- 21 Private Residence – Mooreen House
- 22 South Dublin County Council Property
- 23 Bord Gáis Eireann AGI No 0905
- 24 Memorial Plaque

Not To Scale

Ordnance Survey Ireland Licence Number
EN 0002807 © Government of Ireland



Legend

- 25 Bus Stop/Shelter (69X)
- 26 Derelict/Boarded Up House (Protected Structure)
- 27 Memorial Plaque
- 28 Farm Buildings (Protected Structure)
- 29 Heiton Buckley's – Building Merchants
- 30 Bus Stop
- 31 Access to Cement Roadstone Holdings
- 32 Fire Station
- 33 Corkagh Park
- 34 Michael Tynan Motors
- 35 N7 Service Road
- 36 "St Kevins Villa" Private Dwelling
- 37 Joels Restaurant
- 38 Esso Garage, Shop & Carwash
- 39 Pat Farrell Car Sales
- 40 McCormack MacNaughton
- 41 Site Earmarked for Development
- 42 St. Brigid's Cottages

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Existing Land Use

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Figure 3.1



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Existing Junction Layout


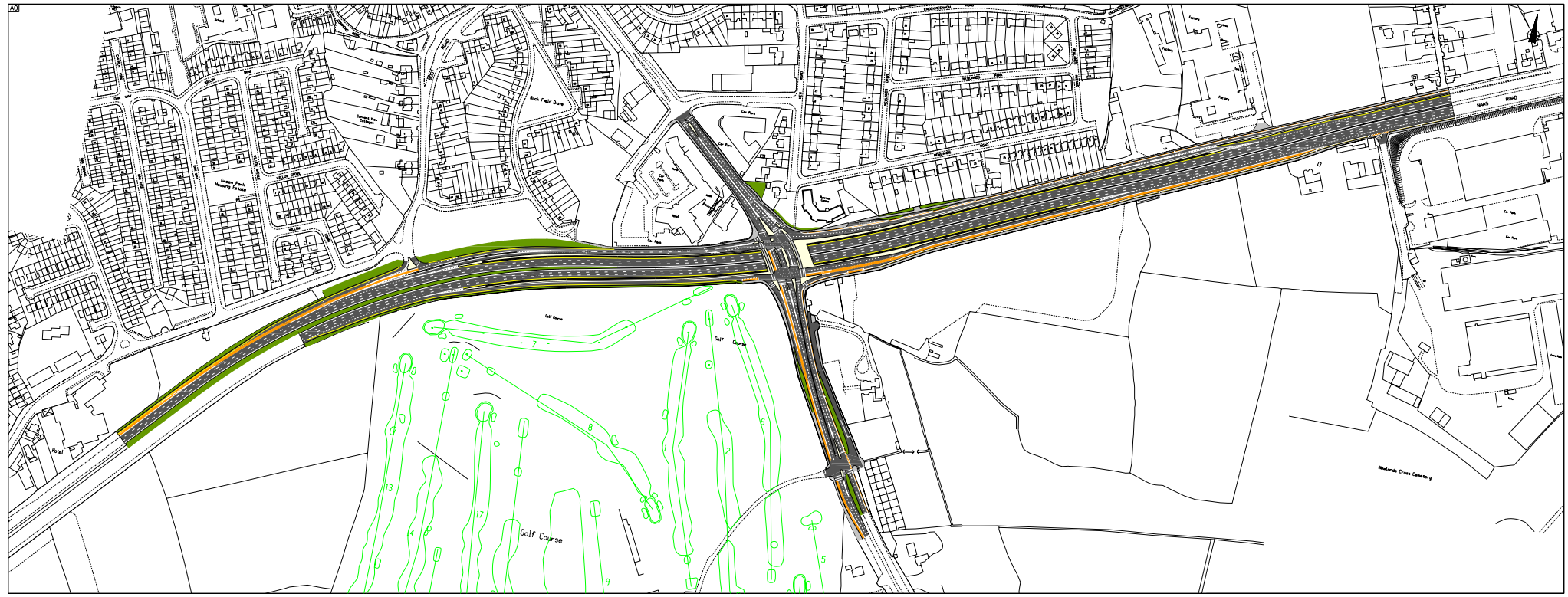
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Figure 3.2

0 metres 300
 Scale 1:7,500
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Underpass Scheme Plan
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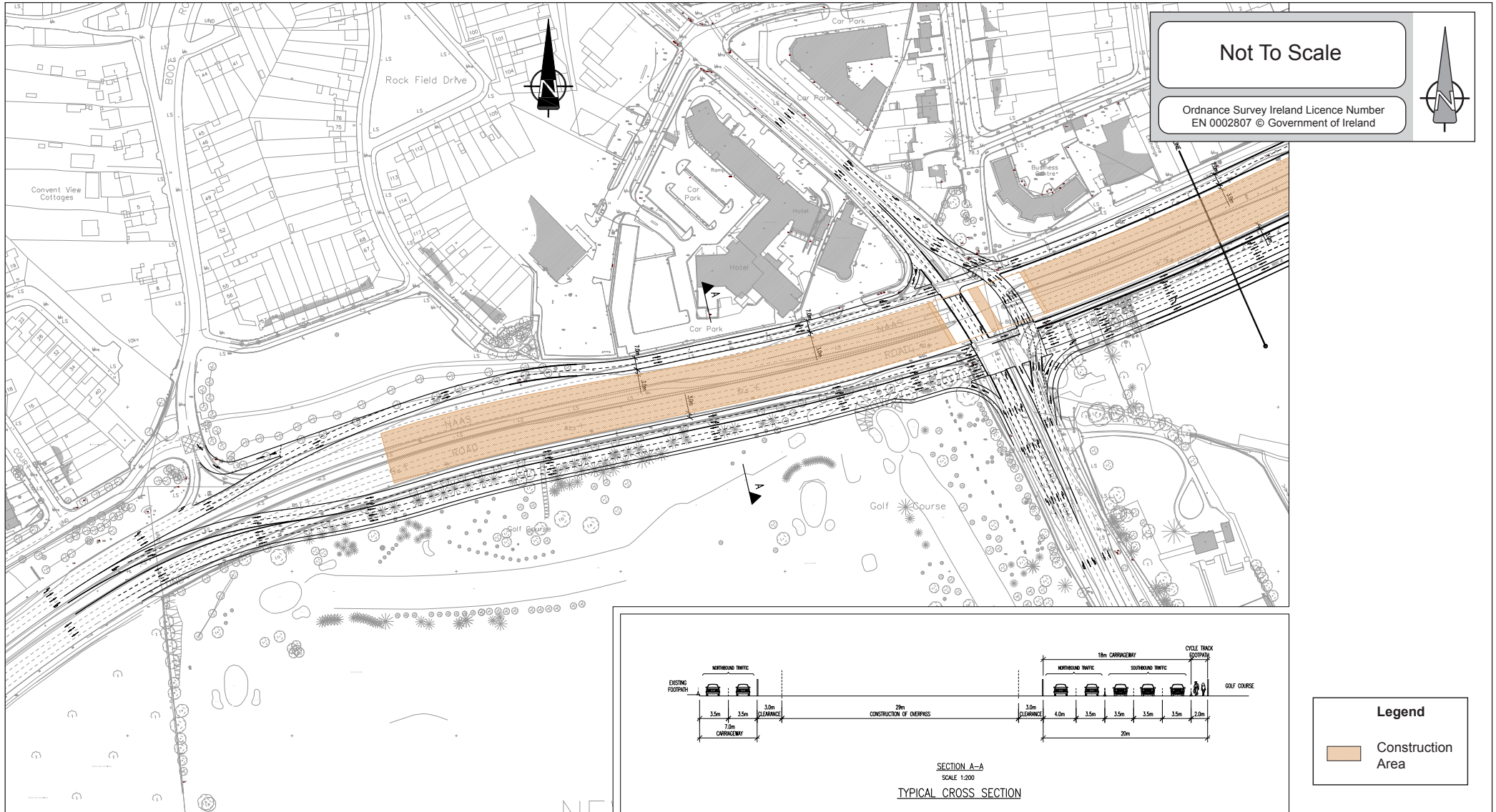
Artists Impression – Underpass

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Figure 3.4



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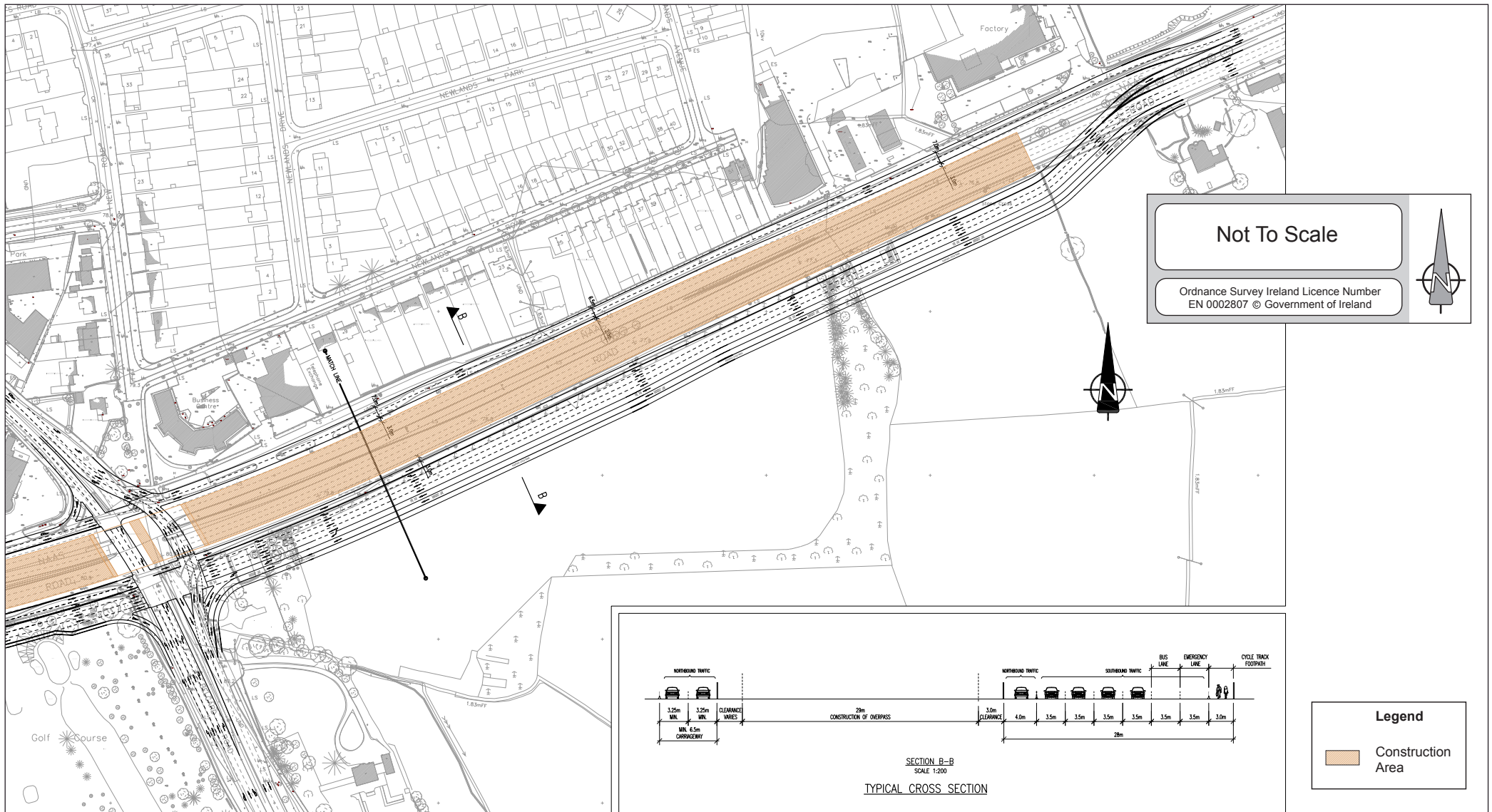
Traffic Management Overpass - 1 of 2

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Figure 3.5a



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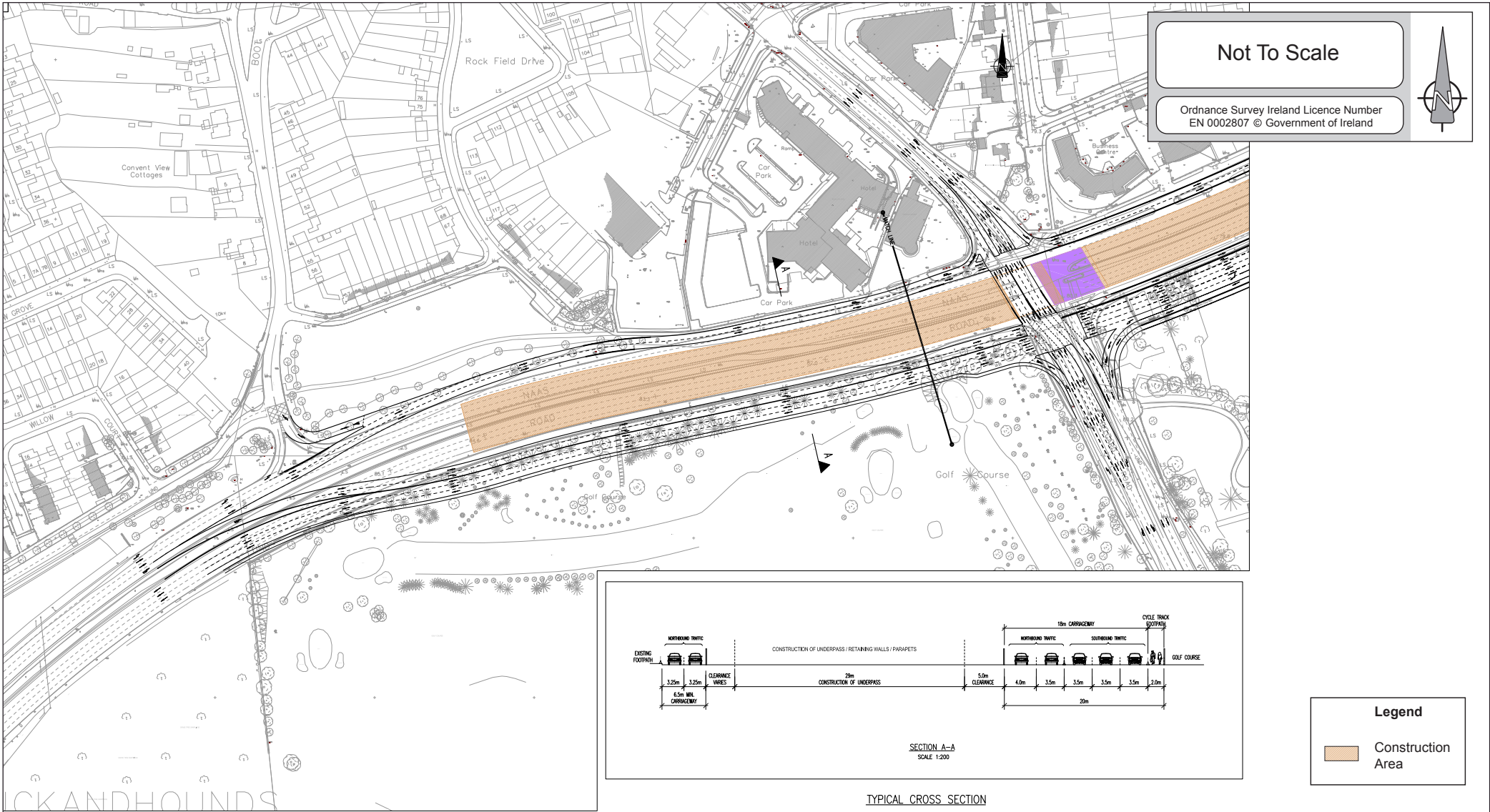
Traffic Management Overpass - 2 of 2

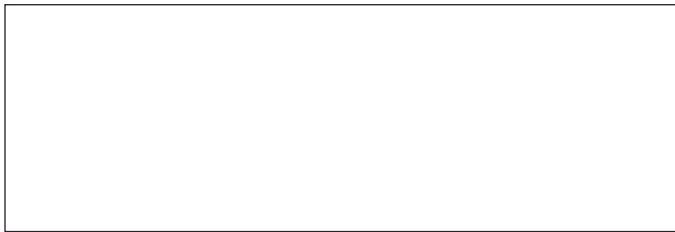
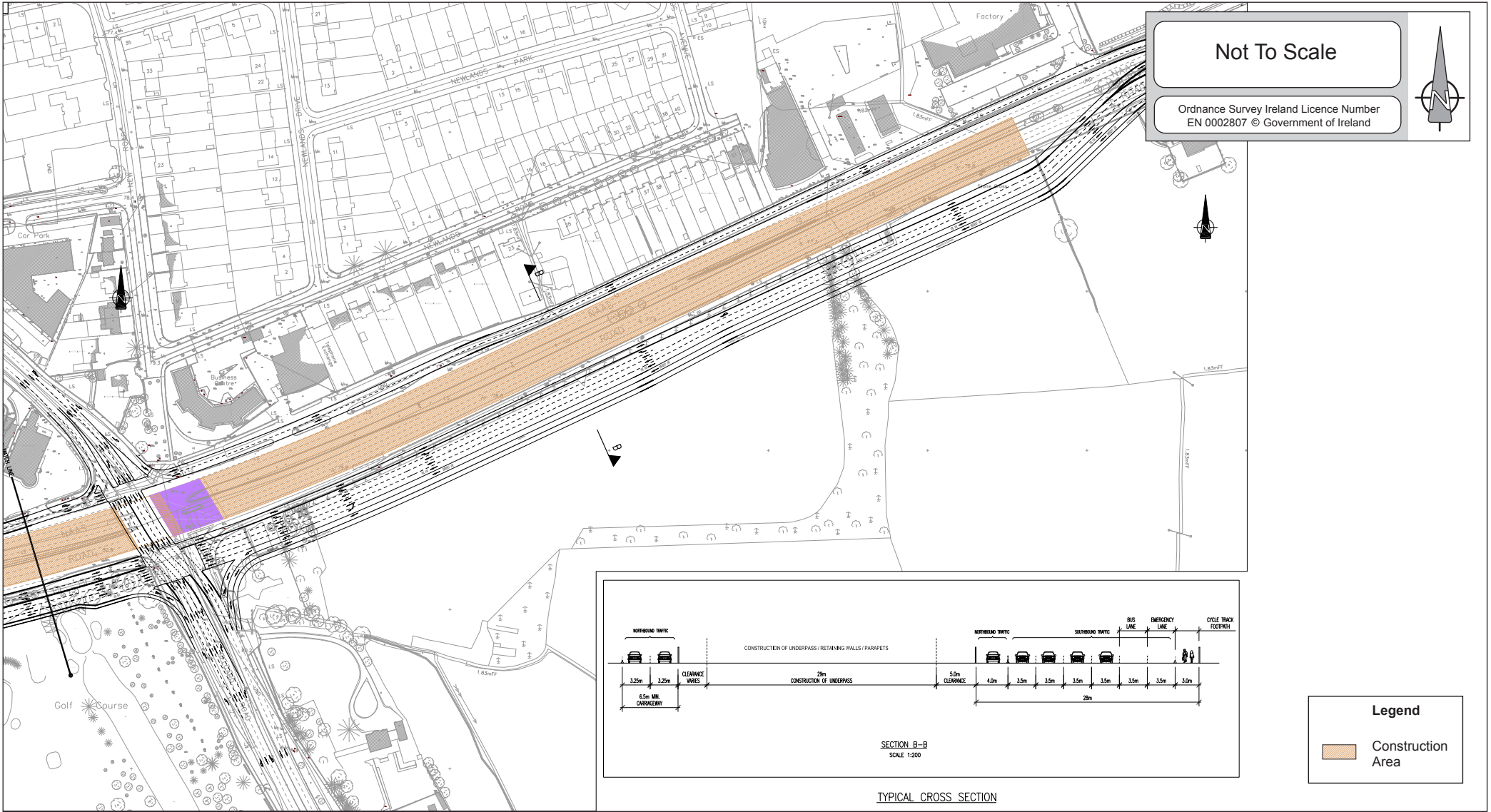
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Figure 3.5b

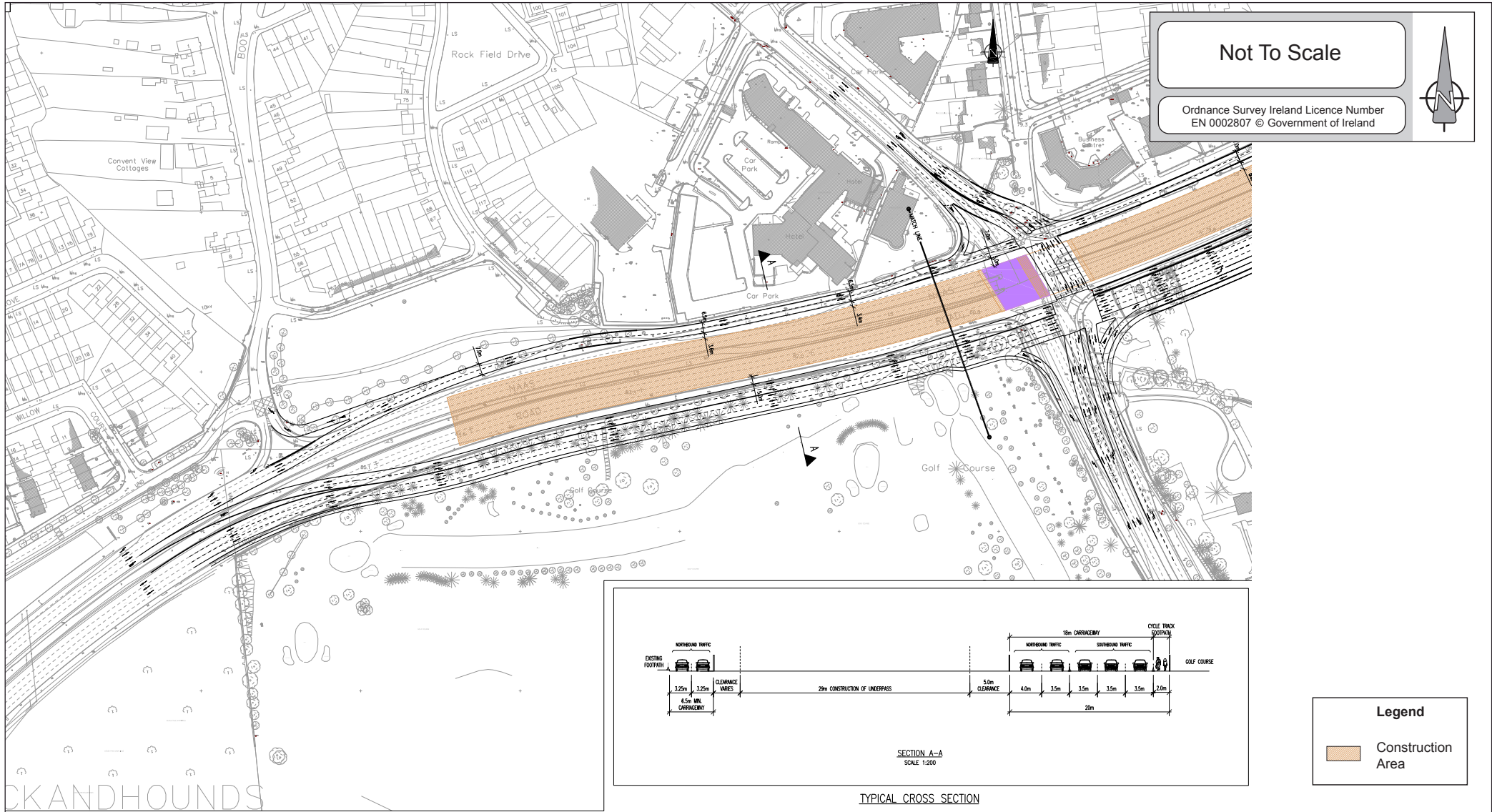




Traffic Management Underpass Phase 1 - 2 of 2

Newlands Cross Upgrade EIS

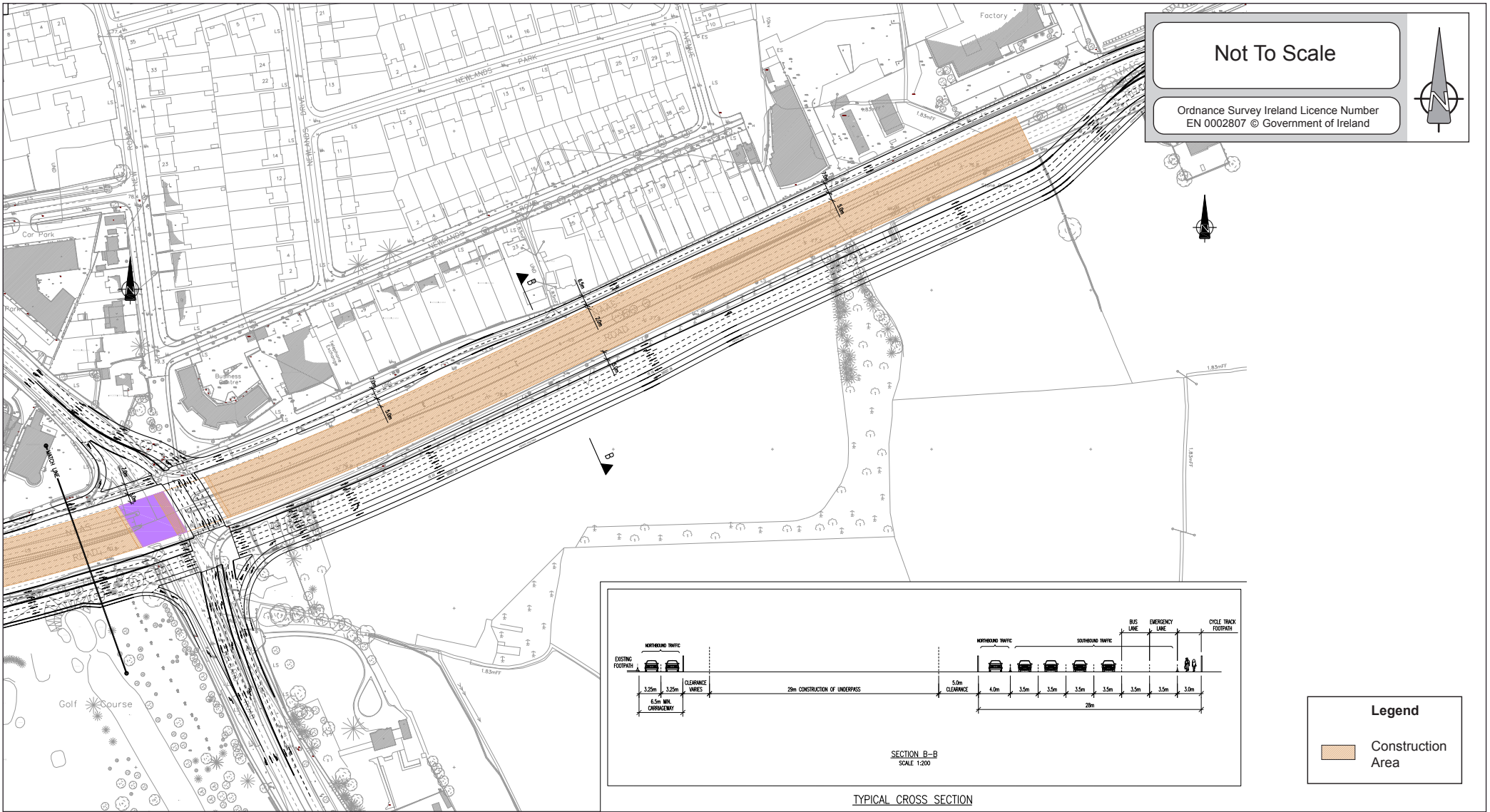
D4556.10 | December 2007 | Figure 3.5d

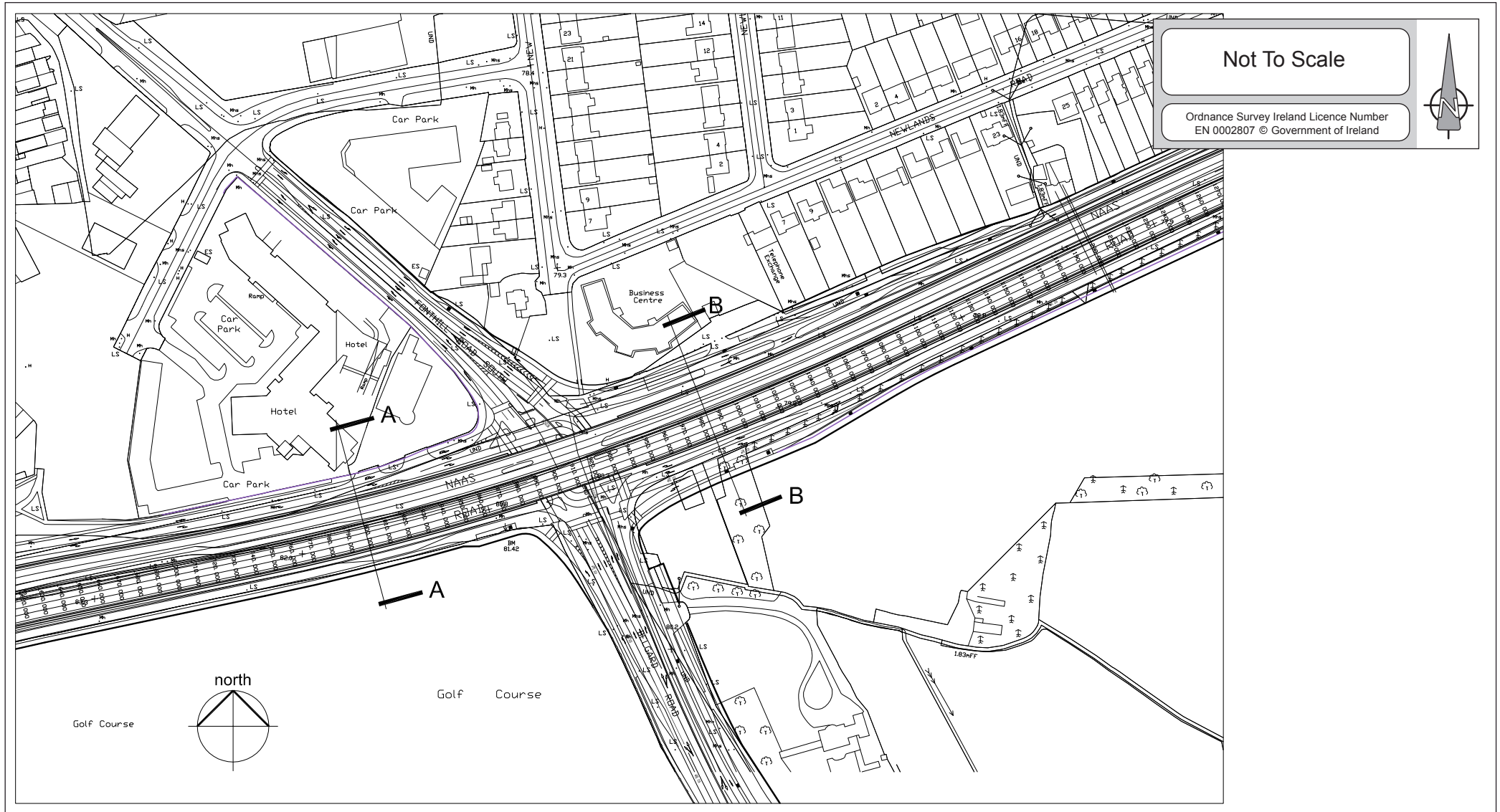


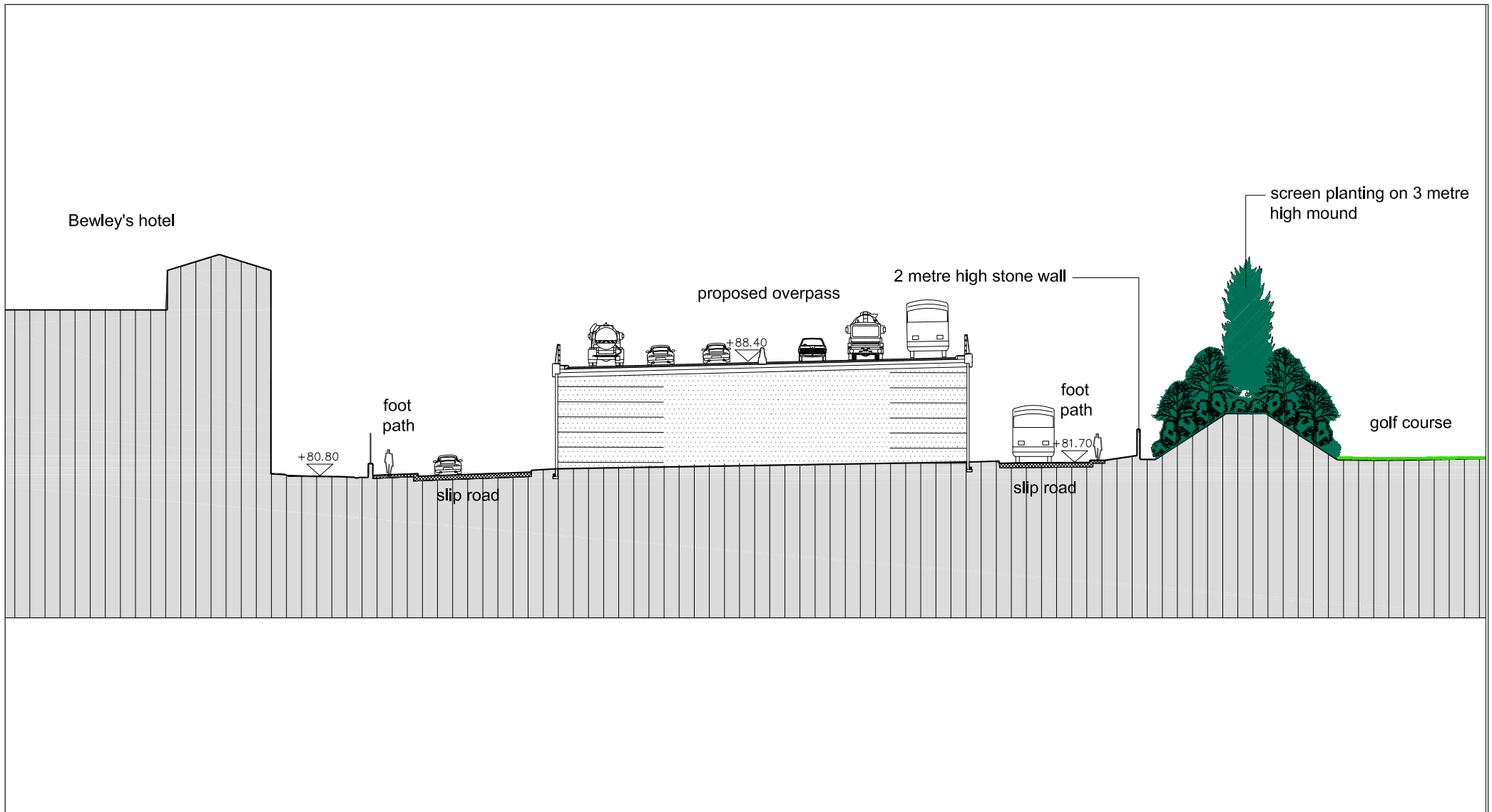
Traffic Management Underpass Phase 2 - 1 of 2

Newlands Cross Upgrade EIS

D4556.10 | December 2007 | Figure 3.5e







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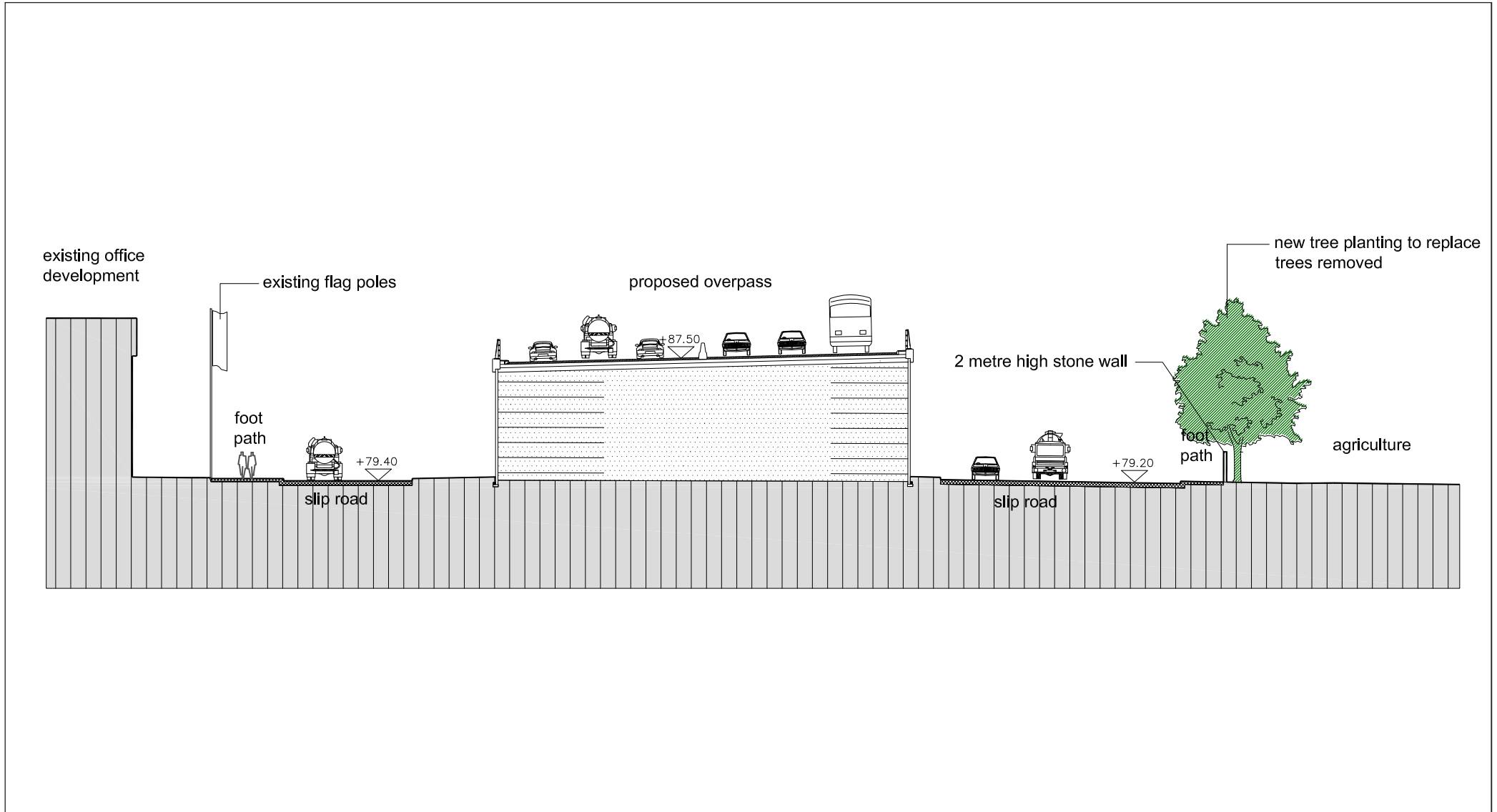
Overpass Context Section A-A at Chainage 800

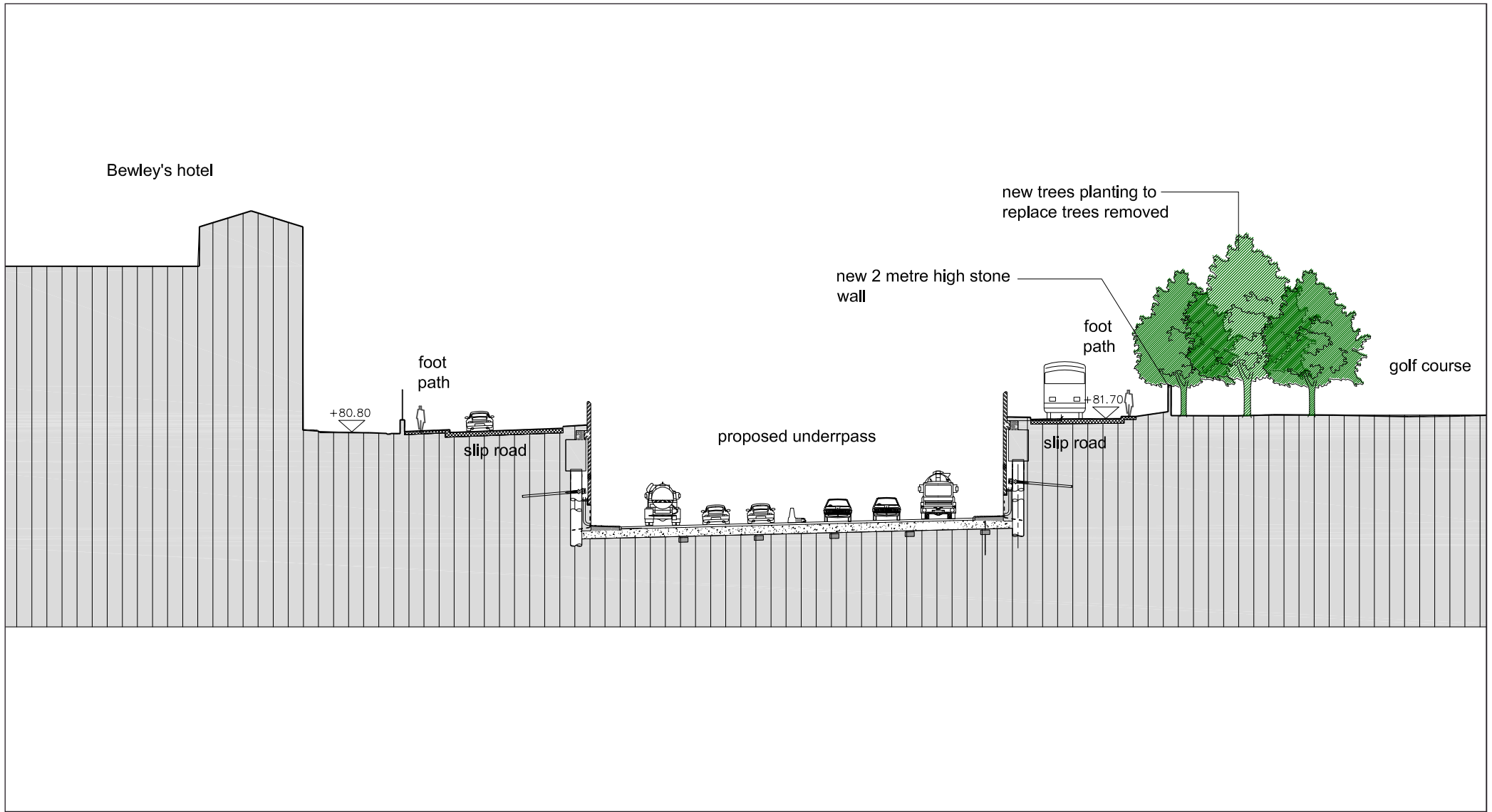
Newlands Cross Upgrade EIS

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Figure 3.7





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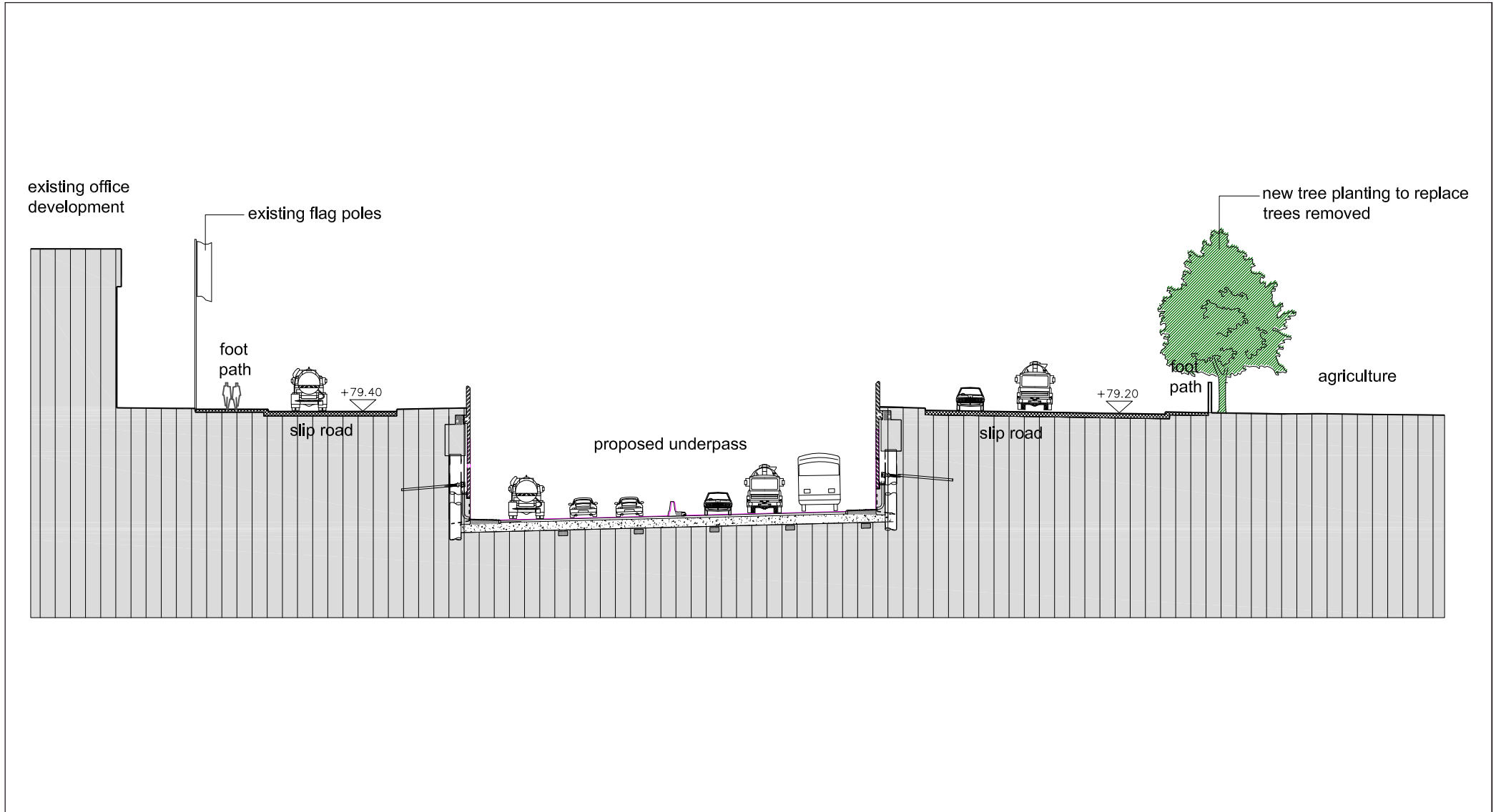
Underpass Context Section A-A at Chainage 800

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Figure 3.9



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Underpass Context Section B-B at Chainage 1000

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Figure 3.10

IMPACT RANKING: Note 1

Profound Positive	Profound Negative	Profound Neutral
Significant Positive	Significant Negative	Significant Neutral
Moderate Positive	Moderate Negative	Moderate Neutral
Slight Positive	Slight Negative	Slight Neutral
Imperceptible Positive	Imperceptible Negative	Imperceptible Neutral

DEFINITIONS: Note 1

Imperceptible Impact:	An impact capable of measurement but without noticeable consequences
Slight Impact:	An impact which causes changes in the character of the environment which are not significant or profound
Moderate Impact:	An impact that alters the character of the environment in a manner that is consistent with the existing and emerging trends.
Significant Impact:	An impact which, by its magnitude, duration or intensity alters an important aspect of the environment.
Profound Impact:	An impact which obliterates all previous characteristics
Positive Impact:	Represents a change which improves the quality of the environment.
Neutral Impact:	Represents a change which does not affect the quality of the environment.
Negative Impact:	Represents a change which reduces the quality of the existing environment.

Note 1: Ranking Categories and Definitions are taken from Section 6 of the Environmental Protection Agency Advice Note on Current Practice in the Preparation of Environmental Impact Statements, EPA, September 2003



CONSTRUCTION PHASE				
SCHEME EFFECTS		OPTION 0 (Do Nothing)	OPTION 1 (Overpass)	OPTION 2 (Underpass)
PLANNING:	South Dublin County Development Plan			A variation to Specific Local Objective No. 52 with regard to Newlands Cross states the following: "Construct a grade-separated junction at Newlands Cross and that this Council favours an underpass on the N7 at Newlands Cross on the grounds that it may have less environmental impact than an overpass."
DURATION OF WORKS:	Construction Duration		Up to 2 years	Up to 3 years
IMPACT OF CONSTRUCTION ON ENVIRONMENT:	Noise & Vibration		There will be a slight negative impact from construction activity.	Same as for Option 1 but for a longer duration with potentially greater vibration due to rockbreaking and piling
	Air Quality		There will be a slight negative impact from construction activity.	More dust due to rockbreaking and piling. Number of Construction vehicles should be similar
	Landscape & Visual		The visual impact will be partially mitigated by site management measures and work practices. Appropriate site hoardings will be put in place around the perimeter of the site. Car parking will be provided for construction staff on site to prevent parking on the surrounding road network. In general the visual impact will be seen as an unavoidable part of construction works. The impact will be temporary and proper site management procedures will be implemented to ensure that the works are completed on programme. Tree protection measures will be implemented to protect the trees that will not be removed. The removal of the existing trees will be mitigated, after construction by their replacement with trees of similar species.	The visual impact will be partially mitigated by site management measures and work practices. Appropriate site hoardings will be put in place around the perimeter of the site. Car parking will be provided for construction staff on site to prevent parking on the surrounding road network. In general the visual impact will be seen as an unavoidable part of construction works. The impact will be temporary and proper site management procedures will be implemented to ensure that the works are completed on programme. Tree protection measures will be implemented to protect the trees that will not be removed. The removal of the existing trees will be mitigated, after construction by their replacement with trees of similar species.
	Socio-Economic:	- Journey Characteristics	Impacts for all journeys incl. pedestrians and cyclists during construction.	Same impact as Option 1 but for a longer duration.
		- Amenity	Deterioration in journey amenity for all journeys during construction.	Same as for Option 1 but for a longer duration
		- Severance	Traffic Management measures in particular the the splitting of the eastbound lanes into two will impact severance during construction.	Same impact as Option 1 but for slightly longer duration.
		- Economic	Construction land take associated with both options would affect business on either side, particularly access to the car dealers, restaurant and service station as well as appeal of these businesses (incl. Bewleys) to customers. The Golf course would be directly impacted through the possible loss of greens and removal of mature trees	Construction land take associated with both options would affect business on either side, particularly access to the car dealers, restaurant and service station as well as appeal of these businesses (incl. Bewleys) to customers. The Golf course would be directly impacted through the possible loss of greens and removal of mature trees
	Water		Potential to significantly impact on the water quality of Ballymount Park and the Camac River during construction. Extent of risk depends on the proximity of a construction activity to the watercourse and sensitivity of watercourse. If mitigation measures are implemented the potential risk is minimised.	As with Option 1
IMPACT OF CONSTRUCTION ON TRAFFIC:	Private Transport		Construction traffic management requirements will be similar for both schemes	Construction traffic management requirements will be similar for both schemes
	Public Transport		Construction traffic management requirements will be similar for both schemes	Construction traffic management requirements will be similar for both schemes
PROPERTY:	Landtake:	- Temporary	Approx. 13 Ha	Approx. 13.2 Ha
ECONOMICS:	Total Construction Cost		Approx. 53 million euro	Approx. 78.7 million euro

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Options Selection Matrix - Construction Phase

Newlands Cross Upgrade EIS

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Figure 3.11b

OPERATIONAL PHASE				
SCHEME EFFECTS		OPTION 0 (Do Nothing)	OPTION 1 (Overpass)	OPTION 2 (Underpass)
OPERATIONAL ENVIRONMENTAL IMPACTS	Noise		With adoption of low noise surfacing and mitigation measures at 5 No. Residence noise levels can be reduced to at least current levels.	With adoption of low noise surfacing measures noise levels can be reduced to slightly below current levels.
	Air Quality		The impact will be largely similar for both options. Freeflow traffic may generate slight improvement	The impact will be largely similar for both options. Freeflow traffic may generate slight improvement
	Landscape & Visual		The development will be seen as a natural improvement to the road system and will be compatible with other major intersections along the N7. In overall terms, due to the localised nature of the development, the visual impact will be moderate and neutral. There will be a localised moderate and negative visual impact at the row of two-storey houses located to the north-east backing onto the N7. There will also be a localised visual impact on a small area of the Newlands Golf Course to the south. However, once the tree planting has established along the boundary of the golf course the visual impact, in this location will be slight and neutral. In addition the improvement of traffic flow through the junction will greatly reduce the visual and environmental impact caused by existing excessive slow moving traffic at the junction.	The visual impact of this option will be slight and positive, there will be no significant elements above the existing ground level and views into the openings for the ramps will be extremely localised and will not be visible from surrounding areas. Similar to Option 1 the development will greatly improve traffic flow at the junction reducing the visual clutter caused by traffic stopped at the junction on a daily basis.
	Socio-Economic:	- Journey Characteristics	Moderate positive impact for all journeys incl. pedestrians and cyclists.	Same as for Option 1
		- Amenity (Journey amenity)	Slight positive impact for journey amenity	Moderate positive impact for this option as a result of lower level of exposure to traffic for cyclists, pedestrians and people waiting at the westbound bus stop.
		- Amenity (General amenity)	Freer flow of traffic will improve air quality in the general area. However, overpass will have a slightly greater visual impact.	Freer flow of traffic will improve air quality in the general area. Visual impact of the underpass will be slightly less than that of the overpass.
		- Severance	Slight positive for pedestrian journeys, cycle journeys and local vehicle journeys	Same as for Option 1
		- Economic	Reduced congestion will improve ease of access to most businesses in the vicinity of the junction. Some businesses may be affected by loss of familiarity in particular the car dealers, restaurant and service station. However, access provisions and adequate signage should mitigate these impacts.	Reduced congestion will improve ease of access to most businesses in the vicinity of the junction. Some businesses may be affected by loss of familiarity in particular the car dealers, restaurant and service station. These impacts will be greater in the case of the underpass. However, access provisions and adequate signage should mitigate these impacts.
		- Macro Economic	National and Regional Benefit from reduction in congestion	National and Regional Benefit from reduction in congestion
		Water	Operational risks from road runoff, winter maintenance and accidental spillage. Runoff from such sources would be split between the Camac River and Ballymount Park. If mitigation measures are implemented the potential risk is minimised.	Operational risks from road runoff, winter maintenance and accidental spillage. Runoff from such sources would be split between the Camac River and Ballymount Park. If mitigation measures are implemented the potential risk is minimised.
OPERATIONAL IMPACT ON TRAFFIC:	Private Transport		Significant reduction in congestion	Significant reduction in congestion
	Public Transport		Reduction in congestion assists public transport	Reduction in congestion assists public transport
	Road Safety		Reduction in traffic conflict should reduce the accident rate	Reduction in traffic conflict should reduce the accident rate
PROPERTY:	Landtake - Permanent		Permanent landtake same for both options	Permanent landtake same for both options