

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1

Date 30th November 2019

Dear Sir / Madam,

Re: Long View Estates Ltd

A Proposed SHD Application to An Bord Pleanála – Statement of Response to ABP Opinion

A proposed development consisting of a strategic housing development including 753 residential units to be constructed in a series of phases (six neighbourhoods in total), a local centre including retail (2 no. units), a crèche, doctors surgery and community use unit and all associated and ancillary infrastructure, services and site development works.

Introduction

The following is an application to An Bord Pleanála (“ABP” or the “Board”) and is the response that ABP’s requested to its *Pre-Application Consultation Opinion* under ABP-304350-19.

This *Statement of Response to the Pre-Application Consultation Opinion* is in two-parts. Part A offers a brief summary of key points in respect of the proposal to give the Inspectorate and Board context as to how the development will open up this Urban Expansion Area (Urban Expansion Area). Part B offers a point-by-point response to Items 1 – 8 of the *Pre Application Consultation Opinion*.

Ten-Year Consent

The Board will note that we are requesting a ten-year planning consent.

Having regard to the scale of the proposed development and the proposed staging over six phases, a ten-year permission is sought by Longview Estates Ltd under the provisions of Section 41 of the Planning and Development Act 2000 (as amended) (hereafter referred to as ‘the Act’). The request reflects complex project delivery as well as allowing sufficient time to successfully complete the development having regard to local market conditions.

The proposed development is a large residential scheme in an area that has not experienced growth on this scale before. We note that in other Strategic Housing Development proposals the Board has considered that this would not necessarily justify permission for a longer than normal period unless there was an objective reason as to why it should be allowed. In this case, as with others for which a longer permission period has been granted, the proposed scheme is central to the delivery of adjoining lands and delivers critical services infrastructure, a distributor road and Neighbourhoods / Phases which will best occur in a coordinated manner in line with supporting infrastructure.

In this instance, we respectfully submit that a ten-year consent is warranted.

Part A

Cork holds the position of Ireland's second city. Development in Cork City is generally complex with a stark choice between land that floods or land that is topologically challenged.

Development, to date, has largely been either to the South of the City – an area that commands good prices and is fully developed - or has been in low-density suburban satellite clusters.

The Northside of the City, despite being close to the city-centre, has been largely undeveloped. There is good reason for this as the Ballyvolane Urban Expansion Area, being hilly terrain, is extremely difficult to develop requiring significant investment in infrastructure to open-up the area. This large undeveloped area, that is a part of the Local Area Plan and is contiguous to the City, is seen by City planners as a huge opportunity for Cork to build a series of twenty-first century developments. To enable this it requires one large development to shoulder the initial cost of the infrastructure.

There are four aspects of infrastructure that are needed to encourage this and further developments.

Firstly, the area is topographically complex and requires an expensive distributor road to open-up not just this development but also extensive lands beyond and to the east. The cost of this road is significant.

Secondly the area has limited capability to handle sewerage generated, with most local properties being serviced by Septic Tanks. Longview will pay for the expensive and extensive sewer infrastructure and provide land for a large pumping station which will cater not just for this development but will, also, open up the Northside to future development including smaller scale developments that cannot be viably developed because of the lack of sewerage infrastructure.

Thirdly, the development will make a significant contribution to roads by providing land for the Ballyhooly Road to be widened along with the permanent pedestrian and cycleway connectivity sufficient to allow the necessary public transport to have access to the area.

Finally, the applicant will also reserve the necessary land for the Mayfield Kilbarry Link Road which is a further essential ingredient to opening up the Northside and in time promoting orbital routes around the City.

There is a further, less tangible but significant, problem in delivering development to the Northside. The Northside is perceived as being deprived and is, currently, not an aspirational area to live in. To attract developers into the area will require a different view to be taken by house buyers. Given the proximity to the City, this change in perception will not be difficult – but it will take time. The Longview application is gauged to allow it to re-brand the area by staging the development – both over time and in its presentation to Corks house buyers. This involves the development being built over a ten-year period, phasing delivery and type of houses delivered, to integrate it into Cork's urban framework in a sustainable and gradual manner. Longview fully expects other developments to compete with it as it opens the area up; indeed it is already cooperating, via an Irish Water "Private Works Service Agreement" (PWSA), with a 74 -house development to the west of the Ballyhooly Road at Dublin Pike; Cork Co Co reference 17/6781. To allow this area to become part of the City it is necessary that the first development achieves a critical mass.

Longview first approached ABP in February 2018 (PL04.300557). At this meeting ABP was critical of the densities achieved by Longview – essentially saying that the development was too suburban. Longview has assimilated the advice of the Board and, in the nineteen-months since the first



consultation, has acquired a further 41 hectares as the initial Longview landholding was not capable of delivering the type of development that the Board was outlining. To allow a development that will be part of the City, Longview has, and continues to, invest heavily in infrastructure which needs to be delivered in advance of the first house. In order to continue this investment it is necessary for Longview to be able to stage the development over ten-years – thereby achieving higher prices than currently achievable in Ballyvolane in later years as the area becomes more aspirational – and to be able to phase the neighbourhoods to allow it to gain some profitability in the early years even if it amortises early infrastructure costs over the full decade. This phasing will also allow the population of Cork to view the area in a more positive light.

At the most recent meeting with the Board in June 2019 (PL04 .304350) it was suggested that the development could, perhaps, be ‘leapfrogging’ development opportunities that are closer to the centre of the City. While there are a number of small and disaggregated holdings that are closer to the City – none of them, individually or collectively, are capable of shouldering the cost burden of providing the infrastructure necessary to allow development of the northside area. Indeed, the phasing of development in the Urban Expansion Area does not demand the geographically sequential development of its landholding. The entire Urban Expansion Area is deliverable only by approaching it from the west as this area contains the mix of uses and zones for development demanded in the Phase 1 development objectives of the Local Area Plan. The application site contains the only roads access demanded by the Local Area Plan to service the northern fringe of the Urban Expansion Area. With Longview Estates progressing, the roads and foul infrastructure necessary, the capacity is created for neighbouring holdings to be individually developed. Far from creating a situation where any perceived ‘leap-frogging’ occurs, the proposal generates the core infrastructure to allow adjacent lands to become capable of development (please see page 5, Part B, Sec 1.1, for further details). In short Longview is catalytic in opening up the Northside. Without it the area will remain neglected and underdeveloped despite its close proximity to the City.

Part B

An Bord Pleanála has requested the applicant's opinion on the following matters which are addressed in following sections.

1. Timing and Phasing of Development
2. Site Topography
3. Water and Waste Water infrastructure
4. Surface water management and Flooding
5. Residential Density
6. Traffic and Transportation
7. Public Open Space
8. Design, Layout and Unit Mix

However, we also invite the Board to refer to the accompanying *Design Evolution Document*. This provides background on how the project has evolved, the landholding extended, the density increased and the services solution developed over the past 24 months.

The proposed development has, with welcome feedback from ABP and the Planning Authorities, gone from a low density project, over which the Board expressed concerns, to this higher density, urban proposal that delivers the "kickstart" needed for development in the Ballyvolane Urban Expansion Area. Such a "kickstart" can only be delivered with a project of scale that is capable of supporting IW services, delivering a mix of uses and providing the access solutions that serve the Urban Expansion Area.

1.0 Timing and Phasing of Development

The Board has asked for:

"Further consideration of documents as they relate to the planning rationale for developing at this location having specific regard to the general sequential approach to developing on serviceable lands proximate to urban centres, the topography of the lands and potential environmental and sustainability impact of the proposed development in the wider area, the possible prematurity of development at this location pending the completion of Infrastructure related studies and upgrades as set out in the 'Indicative Development Programme' in the Cobh Local Area Plan 2017 and the extent of infrastructure to be delivered in Phase 1 of the proposed development. Further consideration of these issues may require an amendment to the documents and/or design proposals submitted".

So as to aid the review of this matter, we have chosen to breakdown the matter into a point by point review. The issues noted in the Board's opinion include:

- The matter of the “general sequential approach to developing on serviceable lands proximate to urban centres”.
- the “topography of the lands and potential environmental and sustainability impact of the proposed development in the wider area”.
- the “possible prematurity of development at this location pending the completion of Infrastructure related studies and upgrades as set out in the ‘Indicative Development Programme’ in the Cobh Local Area Plan 2017”.
- the “extent of infrastructure to be delivered in Phase 1 of the proposed development”.

We shall address these in turn.

1.1 The Matter Of The “Planning rationale for the general sequential approach to developing on serviceable lands proximate to urban centres”

Neither Cork City Council nor Cork County Council has, from either a planning or engineering perspective challenged the matter of this site advancing first.

The general sequential development of lands in the Ballyvolane Urban Expansion Area, can only progress in a number of ways and it is influenced by:

- Sub Regional Pattern of Growth
- The Local Level Pattern of Growth and Services Provisions
- Local Area Plan provisions.

All the above interact and over Local Area Plan in many respects and we shall comment on them in the following response to the matter of the **General Sequential Approach** to development.

Sub Regional

In the first instance, we ask the Board to note that spatially, from a “City level” perspective, development areas have been, and are, located in areas further from the City Centre than in Ballyvolane.

In many ways, the lack of development in the City's northside areas, due to the challenges and desirability of development in this area has seen the overall urban area become spatially unbalanced as developers have chosen to develop in satellite town locations, to the east and north or suburban areas to the south of the City core. Allowing the Ballyvolane area to commence development allows the “rebalancing” of the City to commence by bringing development into an area that is very close to the City Centre (approx. 3 kms).

Local Level

In addition, we submit that with large urban expansion areas, simple 2D progression (on a map) of housing / development parallel to a public road is not always the most logical or viable approach. Topography, landholdings, plan objectives and services locations all play a part in influencing the appropriate solution.

Traditionally the favoured approach is one that has always seen the progressive expansion of development out from an urban centre. This does not apply here for a number of reasons.

Firstly, development exists further north, east and west of the site in City scale perspective (See Images 1 and 2 overleaf, Greater Cork development locations and local City areas respectively).

Secondly, foul services exist in the area, on the public road (the Ballyhooly Road – R616). They are however, only sufficient for the first phase of this development. In summary, approx. 75-100 units.

Therefore, the service capacity of the Urban Expansion Area, without additional foul infrastructure is very limited. The entire western side of the Urban Expansion Area requires delivery of new Foul Services in the form of a Foul Pumping Station, to be served by local mains and downstream rising mains to Tivoli to the east in due course.

Funding and delivering this infrastructure requires a significant number of housing units to be consented / developed to allow it to take place. It is privately funded via a Project Works Service Agreement with Irish Water (“IW”) and needs to be of a sufficient scale to commit IW resources to the area.

Consequently, a project of scale has to be allowed so as to financially underpin a services solution.

The pumping station solution, incorporated into our proposal, at a location selected by IW, to their design and specification so that it can be taken in charge by them, has the capacity to provide foul pumping services for 5000 + units in the future, depending on network management, extensions and planning consents. Irish Water is committing to investment in the area because there is a viable volume of units in the pipeline.

There are also notable constraints in the area, such as the 110 kv Corridors (two of which exist and cross the applicants land holding) and the route of the Mayfield Kilbarry Link Road. All these traverse our land holding and have to be accommodated in phasing, delivery and design.

Image 1: Location of Site (In Area 5) / Other Urban Expansion Areas

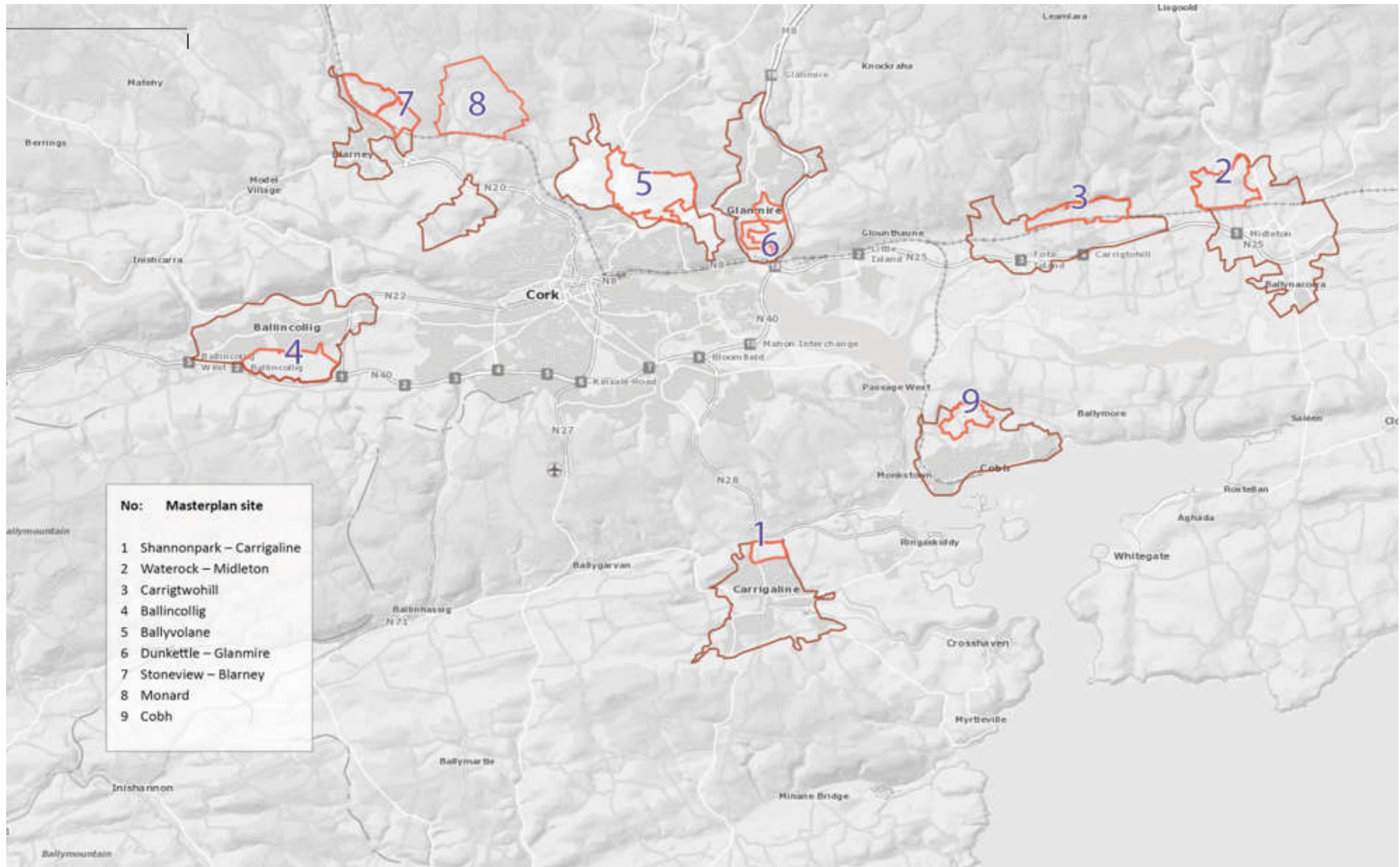
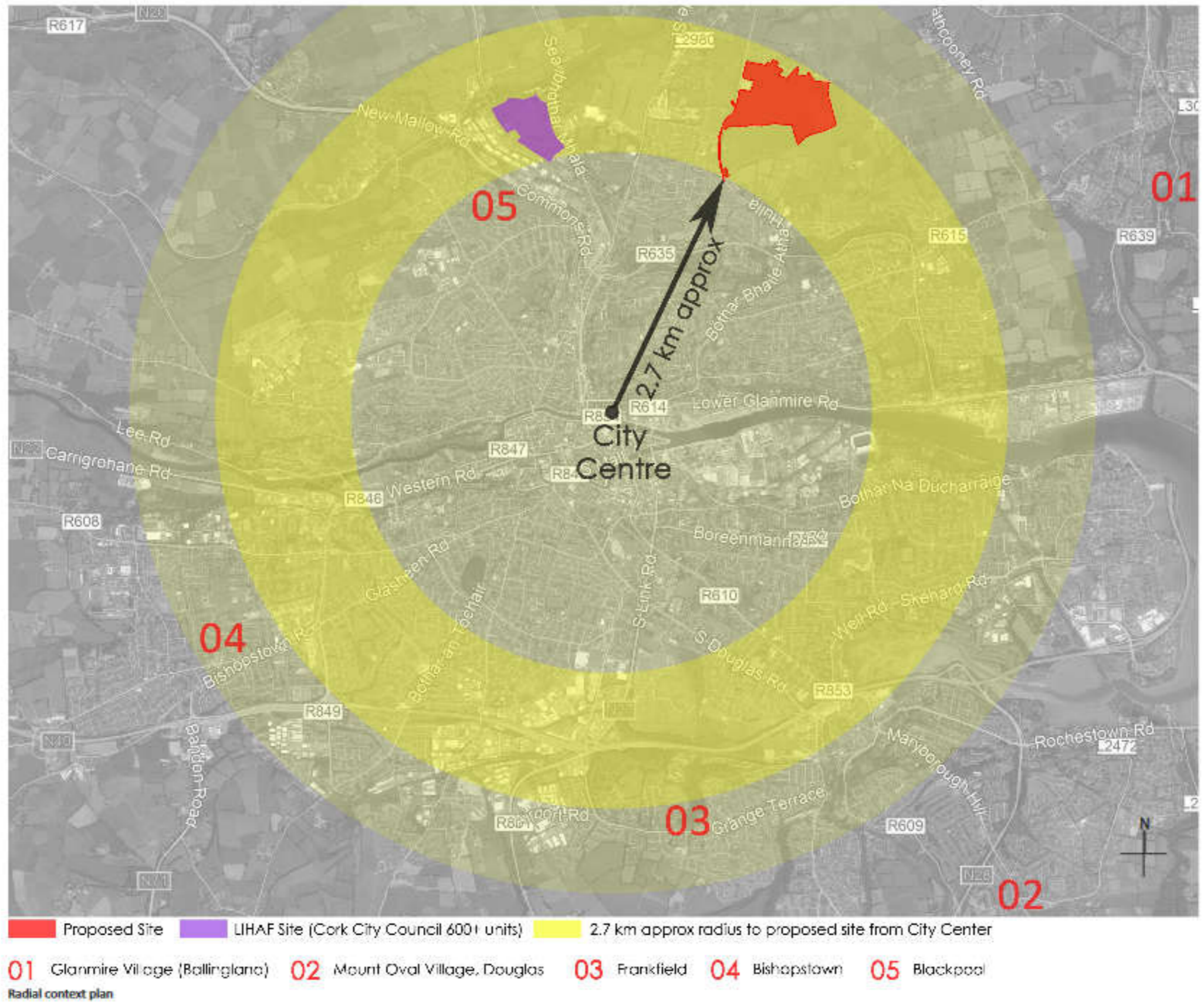


Image 2: Location of Development Areas and Proximity to City Centre



This then brings one to lands south of our landholding. These are the lands east of the Ballyhooly Road, and south of the proposed Pumping Station. These zoned residential areas cannot deliver the Local Area Plan objectives for Phase 1 of the Urban Expansion Area development other than to provide residential uses. While they potentially can develop / deliver a large notional number of units, there are no proposal for same in the design pipeline.

A Folio by Folio review (Appendix A) demonstrates that these lands do not fit well with traditional models of sequential development as they;

- a) are in multiple ownerships,
- b) have no obligations in the Local Area Plan to provide connectivity to the north or delivery anything other than housing,
- c) are not obliged to offer connectivity to the Mayfield Kilbarry Link Road – objective NE-U-06,
- d) do not have to deliver connections to third party lands,
- e) have no capacity to deliver parkland requirements of the scale mandated by NE-O-04, and
- f) can simply be developed or planned in a small scale, piecemeal manner (infrastructure permitting),
- g) do not have to deliver / or deal with constraints such as the 110 KV corridors or the road infrastructure / access demands in the same manner as our proposal.

Appendix A will detail a review of folios along the Ballyhooly Road so as to offer the Board additional clarity on the interaction of land ownership with the strategic Local Area Plan delivery objectives. However, as set out in the Guidelines for Development Plan preparation:

“Only in exceptional circumstances should the above principles¹ be contravened, for example, where a barrier to development is involved such as a lake close to a town. Any exceptions must be clearly justified by local circumstances and such justification must be set out in the written statement of the development plan”.

There are clear site specific reasons as to why this application area can and must come forward and clearly no provisions in the Cobh MD Local Area Plan to suggest that there is a mandated sequence to development.

In summary, as one progresses north from the “Fox and Hounds” junction to the application site and overall landholding, the sequential development of the lands cannot occur in a manner that commences the delivery of the infrastructure, use mix, or services that contributes to the sustainable development of the Urban Expansion Area as part of Cork’s housing solution.

Local Area Plan Objectives

The properties and landholdings that are presented as part of the initial phase of development in the Urban Expansion Area have to meet the requirements and objectives of the Phase 1 Local Area Plan objectives.

The Longview Estates landholding delivers Phase 1 Local Area Plan objectives in a way that no other site or landholding in the Urban Expansion Area can.

- It provides foul infrastructure solutions that no other site does.

¹ Those of the general approach to zoning land in a sequential manner.

- It provides (and is required to provide) access roads to the western side of the Urban Expansion Area that no other site does.
- It provides Park Land opportunities (that open up parkland uses for other areas in the Urban Expansion Area) that no other site does.
- It “opens up” and services zoned primary and secondary school lands in the Urban Expansion Area that no other site does.

In summary, we submit that this site brings forward Local Area Plan Objectives for Phase 1 of the URBAN EXPANSION AREA in a manner that is “sequentially” correct having due regard to constraints of 110kv corridors and long term roads reservations.

1.2 The Matter Of The “Planning Rationale for the topography of the lands and potential environmental and sustainability impact of the proposed development in the wider area”

The proposal seeks to deliver a design solution to a complex series of challenges, opportunities and constraints. The northside of Cork City is not an easy location to develop and deliver housing with current design guidance and building standards but this proposal does.

The Longview Estates landholding is well defined as a large c.220 acre landholding adjoining the Ballyhooly Road / R616. It is a hilly, rising site that climbs to a “plateau” to the north east and central areas of the Urban Expansion Area.

The northern portion of the holding presents challenging topography, but also has the only defined access point and alignment for service roads to the north west of the Urban Expansion Area. In this respect, development has to proceed from the western side of the Ballyhooly Road.

As a result of the topography, the proposal, in having to work with access gradients advocated by DMURS and roads radaii defined by Roads Design Standards, sees the proposed Distributor Road accessing the site traversing the topography in a circuitous route.

From an environmental viewpoint, this is much better than the route (NE-U-03) proposed by the Local Area Plan as this would see very significant volumes of cut and fill as one excavated through significant volumes of rising land. It has also allowed the opportunity to create defined neighbourhoods within the scheme where, flatter, DMURS & Part M compliant neighbourhoods are created.

The design also seeks to change the 110 kv power line wayleaves that traverse the site into positives, using them as greenways that traverse the site and create linkage opportunities. In this manner, we are working with the landscape, design, topographical and zoning parameters to create a positive design solution to the area. This above groundwork is also matched and reflected in sub surface engineering and ground works. Cut and Fill areas are created, and attenuation and infiltration areas established in open space areas.

As noted, the southern portion of the landholding (a portion that is outside the application area) is constrained by topography, “wayleaves”² for two no. 110kv Power corridors and the Mayfield Kilbarry Link Road Corridor. Pending the resolution of the detailed alignment of the Mayfield Kilbarry Link Road, and the location of the 110 KV wayleaves, this area is not readily developable for residential uses; although the junction of the Ballyhooly Road / Lower Dublin Hill and the Mayfield Kilbarry Link Road is well defined.

² Under ESB Guidance, no buildings are allowed under 110 kv lines under a 50 m corridor but the lands can function as locations for roads or generally open space locations / connections.

There is however, sufficient unencumbered land available to construct the required IW Pumping Station for the entire western and southern portion of the Urban Expansion Area along with the permanent alignment of the cycle way and pedestrian footpath for the “Ballyvolane Strategic Transport Corridor Project: North Ring Road To Ballincolly” as Tendered by Cork City Council (June 2019).

The site, in a broader context, is separated visually from the City to the south, by topography and the NE-O-04 Zone; a 35.4 Ha Open Space Passive Amenity area.

Part of this zone will provide a 20 Ha Public Park. Our land holding contains approx. 20 Ha of zoned NE-O-04 lands and we are proposing to enter into a Section 47 agreement with the City Council on the reservation of lands for the Public Park. The southern boundary of this NE-O-04 area will ultimately be defined by the route alignment of the Mayfield Kilbarry Link Road which will be delivered c. 2031. This latter road forms part of a wider orbital route that will be delivered by linking proposals across the north site of the City (under CMATS); it is a route that has the potential to fundamentally change traffic flows in the City once completed but currently demands further design work which limits the delivery of lands in the southern portion of the Urban Expansion Area as the detailed alignment and relationship to lands is to be developed. Note, that Plate 1 following shows two alignment options for the Mayfield Kilbarry Link Road. Option A is the LAP identified route; this creates a large cut through the hillside. Option B is a route that more naturally follows contours and has less of an impact (less cut). These options would naturally be assessed as part of the detailed design of the Mayfield Kilbarry Link Road but the choice options do highlight the constraint presented by the route at this stage.

Connections into and through the wider area are also supported by the application. These connections support pedestrian, cyclist and vehicular connection. A broader landscape strategy, prepared by AECOM, and agreed by Cork City Council Parks Department as a template for the Landscape Strategy across the Urban Expansion Area, is also incorporated into this proposal.

Drainage and services solutions are incorporated into the application and the scheme is designed so as to deliver solutions that support IW’s objectives for the area and beyond. These are addressed in the EIAR and NIS provided as part of the application, with the EIAR setting out significant impacts and mitigation measures for the environment.

In summary and conclusion, the proposal seeks to deliver a design solution to a complex series of challenges, opportunities and constraints. There is no ideal standardised design solution when developing on hilly topography as each site, with intrinsic design constraints, policy demands, sub surface challenges and wider interactions with adjacent lands offers a different set of responses. However, what we have sought to do as a design team is to minimise what we saw as adverse impacts, promote the positives and take advantage of site features and constraints where possible.

Plate 2 and 3 overleaf illustrate the manner in which the site topography and plan constraints interact with the zoned areas so as to influence layout in plan form and the sequencing of development.

1.3 The Matter Of The “Planning Rationale with respect to the possible prematurity of development at this location pending the completion of Infrastructure related studies and upgrades as set out in the ‘Indicative Development Programme’ in the Cobh Local Area Plan 2017”

Prematurity

Neither Cork City Council nor Cork County Council considered the proposal premature. There are provisions in the Local Area Plan that allow the Council to advance proposals in the area in advance of what may be considered to be suitable infrastructure. Para 3.4.114 of the Local Area Plan states that:



“Where capacity in existing infrastructure exists, lands benefitting from this should be developed first. In the interim, development proposals that can provide the necessary infrastructure can be considered for permission”.³

Capacity exists in current infrastructure to allow the initial phases of the proposal to be developed and the proposal develops and provides additional infrastructure to deliver scope for progressive expansion of the area.

We do not believe that the proposal is premature and we are of the view that it is the only proposal and opportunity (given the size of the landholding) that will both deliver and enable a mix of land uses and infrastructure for the area, which are central to the initial phases of the Urban Expansion Area being developed.

The proposal, its phasing and infrastructure go hand in hand with transportation and servicing enhancements. It will deliver and enable core parts of the Cobh MD Local Area Plan for the Ballyvolane Urban Expansion Area. In summary, the Urban Expansion Area will not be delivered in one complete package. It will be delivered in a series of phases, by many different actors over a prolonged period of time. Its delivery must commence at some point and it is our view that the Lahardane area, given;

- its ability to commence the delivery of park areas,
- its capacity to deliver the only eastbound access to the Urban Expansion Area from the Ballyhooly Road, and
- its capacity to delivery foul infrastructure central to the overall Urban Expansion Area and beyond,

is central to delivery.

³ Para 3.4.114 of Cobh MD LAP

Plate 1 - Gradient Challenges (Ownership lands covered by topographical survey)

LEGEND

These standard symbols will be found in the drawing.

- AJ=AJ
- ◆ BUILDING LEVELS
- ⊠ CBR=INSPECTION CHAMBER
- DP=DOWNPIPE
- EBX=ELECTRICITY BOX
- ECR=ELECTRICITY CHAMBER
- ⊗ EPE=ELECTRICITY POLE
- ⊕ FHT=FIRE HYDRANT
- ⊠ G=GULLY
- + LEVEL
- × LEVEL
- ⊕ LPE=LAMP POLE
- MCT=METER CABINET
- MHE=MANHOLE SQUARE OR CIRCULAR
- ⊕ MKR=SERVICE MARKER
- MTE=MATURE TREE TRUNK > 0.150
- ◆ PHL= PLINTH LEVEL
- ⊙ POLE=POLE
- △ STN=STATION/T.B.M.
- ◆ THL=THRESHOLD LEVEL
- ◆ TOF=TOP OF FENCE
- ◆ TOH=TOP OF HEDGE
- ◆ TOW=TOP OF WALL
- ⊗ TPE=TELEPHONE POLE
- ◆ TREE=TREE
- VP=VENT PIPE
- × WAL= WIRE ANCHOR LINE
- WMR=WATER METER
- ⊗ WVE=WATER VALVE
- BLOCKWALLS
- BOTTOM OF BANK
- BUILDINGS
- CONCRETE
- HEAVY DUTY FENCE
- HEDGE
- KERBLINE
- POST & WIRE FENCE
- ROAD EDGE
- ROOFLINES
- STONEWALLS
- TIMBER FENCE
- TOP OF BANK
- TREELINES

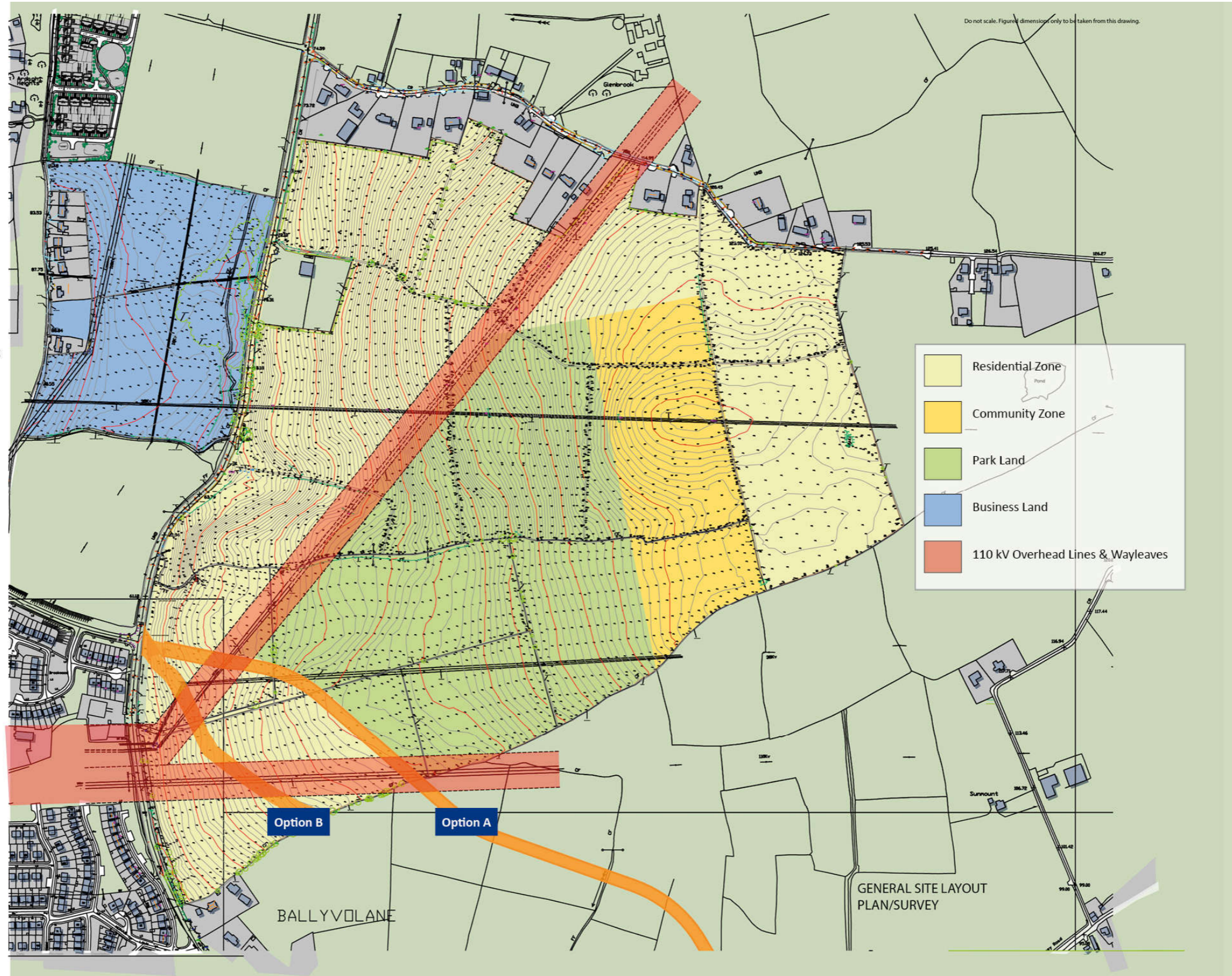
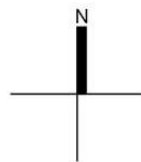


Plate 1 - Gradient Challenges (Site Ownership in Blue)



Ownership boundary High impact potential gradient Medium impact potential gradient Low impact potential gradient

Plate 2 – Gradient // Zoning / ESB 110 KV Corridors



(Source: AECOM Urban Expansion Area Landscape Strategy)

Phasing

The Local Area Plan sets out three indicative phases of development for the Ballyvolane Urban Expansion Area. The Phasing is predicated on the number of units, open space requirements, educational facilities, social facilities, amenities, physical infrastructure and the access strategy required.

Phase 1 is 0-1175 Units. Table 3.4.2 of the MD Local Area Plan, when considered with Para 3.4.114 does not preclude development occurring to a degree that it can be called premature.

Figure 1 Indicative Prior to Commencement as per Local Area Plan

| Table 3.4.2: Indicative Development Programme: Ballyvolane | |
|--|---|
| Phasing of Development | Strategic Infrastructure and Service Requirements* |
| ➤ Prior to Commencement of development | <p>Transport /Road Infrastructure</p> <ul style="list-style-type: none"> • Complete the Regional Transport Assessment; • Commence the detailed design process for the relevant road upgrades and new roads recommended in the above report to cater for initial phase of development; • Identify Package of measures to upgrade existing Northern Relief Road R635 and bus corridors into the City Centre in conjunction with City Council and NTA. <p>Water Services Infrastructure</p> <ul style="list-style-type: none"> • Irish Water to commence the review and planning for the provision of the water supply infrastructure, including reservoirs etc in line with assessment of Water Needs for future residential development currently being prepared; • Irish Water to commence the review and planning for the provision of the waste water infrastructure to ensure capacity for development of the lands in line with assessment of Water Needs for future residential development currently being prepared. <p>Surface Water Management</p> <ul style="list-style-type: none"> • Undertake SuDS Study which include lands take for retention /detention pond to serve the entire lands. <p>Open Space</p> <ul style="list-style-type: none"> • Complete a Landscape Strategy. |

In response to the Table 3.4.2 we make the following comments.

Point 1 – “complete the Regional Transport Assessment”

The Regional Transportation Assessment is complete and published in Draft form. The Draft Cork Metropolitan Area Transport Strategy (CMATS) has been completed and was published for public consultation in May 2019. Cork City Council is advancing detailed design processes for the roads in the URBAN EXPANSION AREA on a progressive basis with design proposals for radial routes being advanced by the Council and other linkage opportunities being progressed with developers / land owners who will provide for the delivery of the roads or reservation of roads corridors as part of development proposals.

Point 2 – “commence the detailed design process for the relevant roads upgrades and new roads recommended in the above report to cater for initial phase of development”

The design process by Cork City Council has commenced.

CMATS is a multi million euro investment in roads infrastructure and public transport in Cork so as to facilitate and deliver an “accessible, integrated transport network that enables the sustainable growth of the Cork Metropolitan Area as a dynamic, connected, and internationally competitive European city region as envisaged by the National Planning Framework 2040”.⁴

The infrastructure proposed under CMATS will be delivered on a progressive basis across the City. Complementary to CMATS are existing proposal to upgrade and improve the City’s integrated Transport Network which are now being advanced. The public transport enhancements to Ballyhooly Road are one set of such improvements and these enhancements are facilitated by development as proposed under this consent. Cork City Council, supported by the NTA, has instructed Consultants to advance the Ballyhooly Road upgrades, including public transport enhancements, in August 2019. The PROJECT BRIEF for the Ballyhooly Rd enhancements “For the provision of Engineering Design Team Services relating to the design and delivery of the BALLYVOLANE STRATEGIC TRANSPORT CORRIDOR PROJECT: NORTH RING ROAD TO BALLINCOLLY, JUNE 2019”⁵ has been instructed and design work has commenced.

The road setbacks incorporated into this scheme, in the applicant’s landholding, have been agreed with the City Council in advance of making the application and allow for the permanent setbacks envisaged by the Council.

With respect to prematurity, the Ballyhooly Road improvements are the only bus corridor enhancements programmed in the Urban Expansion Area (there are only two radial bus route enhancements proposed, the Ballyhooly Rd and the Old Youghal Rd – see Appendix C for update on the latter). This further supports the phasing approach of the western side of the Urban Expansion Area advancing.

Point 3 – “Identify package of measures to upgrade existing Northern Relief Road R635⁶ and bus corridors into the City Centre in conjunction with City Council and NTA”.

Cork City Council have identified a series of upgrades to the R635 – North Ring Road – in conjunction with the NTA. These neither have an immediate impact on traffic flows within the locality of, nor are they required to serve, the proposal. A scheme has also been designed for the upgrade of the Cork North Ring / R635 and Ballyhooly Road Junction to provide for additional capacity. Image 3 following illustrates the location of road improvement schemes now programmed by Cork City Council over the period to 2021.

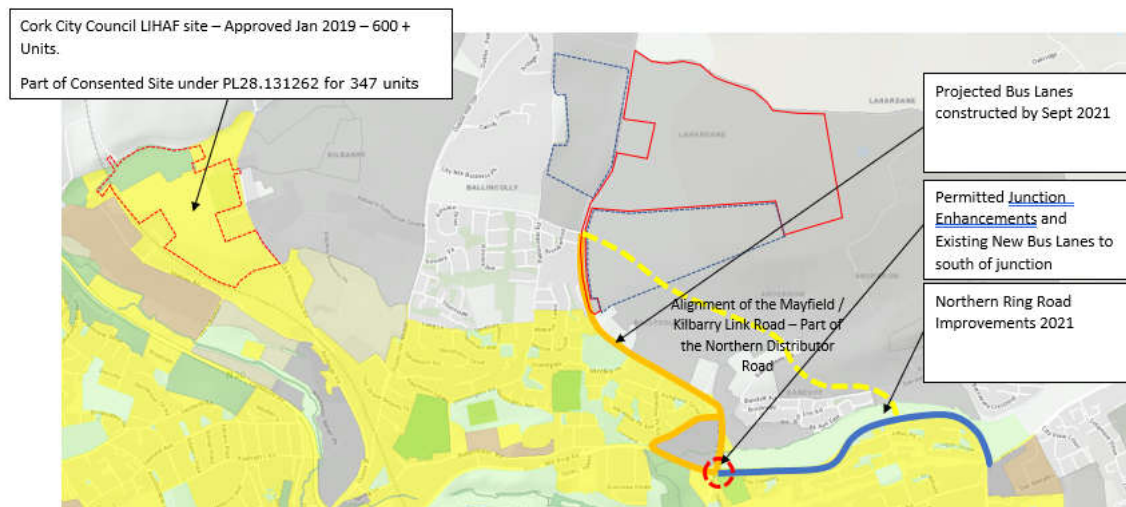
⁴ Pre Amble to Plan

⁵ Pages 1-2 included as Appendix B

⁶ The “North Ring Road” which goes from Blackpool to Tivoli

Image 3

Location of Enhancements – Also refer to Appendix B



The Ballyhooly Road upgrades have also been referred to above and these represent the bus corridor enhancements into the City Centre identified in the Local Area Plan.

CMATS sets a delivery timeframe of 2031 (medium term) for the Northern Distributor Road. The Northern Distributor Road (known in part as the Mayfield Kilbarry Link Road) passes through the applicant’s lands and they are retaining the area free from development at this stage so as to allow the appraisal and detailed design of the route to occur without any compromise.

The “appraisal” stage for this road - the Northern Distributor Road (known in part as the Mayfield Kilbarry Link Road) (Page 108 of CMATS) - will take place in the short term (2026). Longview Estates Ltd have reserved land to the south of the proposed development where the indicative route is shown on our drawings and Image 3 above so as not to compromise the development of the link road. The Cork Northern Distributor Route is identified in CMATS as the “Northern Outer Orbital Route” which *“will provide a variation on the same route, providing connectivity with new residential development at the Ballyvolane UAE and Old Whitechurch Road. This route will utilise the proposed Cork Northern Distributor Road (NDR) which is required to be multi-modal to cater for bus movements as well as segregated cycle and pedestrian infrastructure”.*

It must be noted that the proposed development, for public transport or vehicular movement, is not reliant on any “new roads” identified in CMATS but does support their delivery by making land available for them. The proposed development can be directly accessed from the Ballyhooly Road where two accesses are proposed. Again, the site is the only site that is mandated to deliver access roads from the Ballyhooly Road to the east. The proposal constructs distributor roads NE-U-03 and NE-U-04. These provide access from the east to within the landholding and beyond, accesses lands that are to be set aside for the Department of Education for schools to serve the entire area Urban Expansion Area and open up the park area to future use. None of the lands to the south of the application site that are also located abutting the Ballyhooly Road are required to be developed so as to serve areas to the north. Nor can they deliver a range of the suite of objectives for Phase 1 of the Urban Expansion Area.

The draft CMATS envisages a significantly enhanced Bus Connects service for Cork by 2027. The network will comprise of 200km of cross city routes, 50km of orbital routes and 150km of radial routes and will provide linkage with the Cork Suburban Rail Network, potential Light Rail network and the proposed Park and Ride services located around the Strategic Road Network. The Core Radial Bus Network connects the external corridors to the City Centre and has been refined to pair Cross-City travel demand to maximise the utilisation of the bus services on these corridors. The application site is located at the terminus of the Ballyvolane (Northside) to Donnybrook (Southside) corridor and is currently served by the 207 and 207 A City Bus routes. The NTA is supporting the Ballyhooly Road improvements – Appendix B – and they also have the power to redirect bus routes once the infrastructure is developed. The proposed development also delivers bus stops on the Ballyhooly Road, a signalised junction at the junction of the R615 and Lower Dublin Hill, pedestrian and cycle connectivity and internal bus stops and bus turning areas to accommodate bus movements into the site.

With respect to the Mayfield Kilbarry Link Road, four high frequency orbital services are proposed to serve multiple key destinations outside of the City Centre. These include the Northern Inner Orbital Route (10-minutes) and the Northern Outer Orbital Route (15-minutes). The Northern Orbital Inner Route will serve the north side of Cork City serving Little Island, Tivoli Docks, Mayfield, Blackpool and Knocknaheeny before crossing the River Lee to reach Model Farm Road and CIT. The Northern Outer Orbital Route will provide a variation on the same route, providing connectivity with new residential development at the Ballyvolane Urban Expansion Area and Old Whitechurch Road. This route will serve the Ballyvolane Area and will cross the applicant lands on the Mayfield Kilbarry Link Road. This route will utilise the proposed Cork Northern Distributor Road (NDR) which is required to be multi-modal to cater for bus movements as well as segregated cycle and pedestrian infrastructure.

Point 4 - Water Services Infrastructure

Table 3.4.2 Cobh MD Local Area Plan states that “Irish Water to commence the review and planning for the provision of the water supply infrastructure, including reservoirs etc in line with assessment of Water Needs for future residential development currently being prepared”

In response to this we state that Irish Water has carried out a review of Water Supply Infrastructure having regard to the future residential development proposed and possible in the Ballyvolane Urban Expansion Area.

Irish Water is satisfied that there is sufficient water supply capacity to accommodate the phased expansion of the area, with new infrastructure, and that foul services for the initial planning for 1000 + units, as envisaged under an agreed PWSA (Project Works Service Agreement) for the Ballyvolane Urban Expansion Area between Longview Estates Ltd and Irish Water, can be carried out. It is envisaged that future IW services to zoned lands, that are both adjoining and adjacent to the Longview Estates proposal will enter into pre connection discussions with IW which will provide for their connection to existing, and new network extensions, that are proposed.

Table 3.4.2 Cobh MD Local Area Plans also states that “Irish Water to commence the review and planning for the provision of the waste water infrastructure to ensure capacity for development of the lands in line with assessment of Water Needs for future residential development currently being prepared.

In response to this we state that Irish Water has carried out a review of foul services infrastructure having regard to the future residential development proposed and possible in the Ballyvolane Urban Expansion Area.

There are two pumping stations (“PS”) proposed as part of the development. A smaller pumping station is located internally within the site adjacent to Phase 5 / Neighbourhood 5. This PS is designed to IW specifications and will be delivered for them to be “taken in charge”.

Another PS adjacent to the Ballyhooly Road is a significant infrastructural item that will support IW’s need to service the wider Urban Expansion Area as it arises and other lands in this Northern Suburbs of Cork City. This will be delivered under the consent or by IW contractors. It will, via the initial chamber (three are included on the layout), accommodate the Longview proposal and some limited additional inflows from an under construction consent (App Ref 17/6781 - Construction of 74 no. residential units) further north.

In detail, Irish Water has entered into a Project Works Services Agreement with Longview Estates to service the area by way of PS (as included in our application on Ballyhooly Rd). The Ballyhooly Rd PS is central to both the provision and commercial implementation of the Foul Water services strategy locally and within the entire Urban Expansion Area.

The PS will be served by a rising main that is to be located in the public road and / or public lands before accessing a discharge point to the existing foul network on the R635 adjacent to the R615 / Old Youghal Rd. IW do not need statutory consents to construct this Rising Main and this is stated in their pre connection letter.

This rising main will follow the Ballyhooly Road south from the PS and thereafter along the R635 or otherwise as agreed with Cork City Council though adjoining public lands (see Appendix D). The PS and services upgrades to the area will service existing and proposed development allowing for the improved management of foul services as network loadings develop over the coming years with additional projected development.

Image 4 following (Page 26) illustrates IW / Atkins layout solution regarding mains works.

With respect to the details of the network extensions, including layout, design details and the timelines involved relative to the construction, the IW Confirmation of Feasibility initially issued to the applicant and provided to the Board at Pre App stage stated that the conceptual design for the foul and water services provisions had been identified⁷.

The phasing proposed for the completion of the proposed development, Table 3.1 following, also illustrates the proposed infrastructural interventions relative to phasing.

In summary, with respect to IW infrastructure, the proposal provides for the following:

- Phase 1 will be accommodated in the current infrastructure with water main extension.
- Phase 2 onwards will require the Pumping Station and IW Infrastructure to be in place. IW will deliver the required infrastructure by 2022 subject to the applicant executing a Major Connection Agreement.
- The Pumping Station proposed on Ballyhooly Road caters for three potential phases of development; it can be delivered in one phase or a series of phases. With three modular storage chambers. Chamber 1 would be an initial 1000 units. This would include the proposal and would likely cater for an additional project under construction^[2]. Chamber 2

⁷ Ref IW letter of 18th April.

^[2] **App Ref 17/6781** - Construction of 74 no. residential units comprising 23 no. detached 4-bed dwellings, 44 no. semi-detached dwellings of which 28 no. are 4-bed dwellings and 16 no. are 3-bed dwellings, and 7 no. townhouses of which 6 no. are 3-bed dwellings and 1 no. is a 2-bed dwelling and all associated site development works, foul and storm drainage including attenuation tank, and landscaping and amenity area.

would be to provide for 3000 + units and Chamber 3 would provide for wider expansion of the network in due course to accommodate areas such as Monard if required and subject to consents.

- The agreed PWSA included the delivery by IW, to service this application and potentially adjacent lands, of rising mains from the proposed Ballyhooly Rd Pumping Station, south along the Ballyhooly Rd to the junction with the North Ring Road at which point it will be routed east along the North Ring Road to a termination point at the Old Youghal Rd Junction. The overall rising mains will include 2400 m of 150mm rising main from the Pumping Station to the Old Youghal Road Junction; a parallel length from the pumping station of 800 m of 250 mm diameter watermain to allow connection / network management by IW including potential connect to existing interceptor sewers; or further extension as required. The rising mains will be routed in public roads (or public lands if available). 250 mm dia foul sewer connecting the housing scheme has been incorporated into the scheme drainage to connect to the Pumping Station proposed on Ballyhooly Road for all phases of housing delivery. This will also capture existing flows from the current 225 mm gravity foul to the north.
- Water supply will be delivered on a phased basis but will require the extension of the services by approx. 780 m; from a point to the west on Dublin Hill by way of a 300 mm main extension.
- the initial phase of this housing proposal can be connected to, and serviced by, the existing foul infrastructure in the area. The proposed PS will serve the overall proposal and has capacity to serve the residual Ballyvolane UEA lands subject to connection. The PS can be sized, with the land take offered, so as to form a central part of IW's delivery of serviced lands throughout the Northern City fringes.

The proposed development incorporates 1 no. new access from the L2980 (Dublin Pike) and 1 no. new access from the Ballincollie Road with individual accesses to 13 of the units also from the Ballincollie Road.

Table 1.1: Indicative Delivery Programme⁸

| Neighbourhoods | | N1 | N2 | N3 | N4 | N5 | N6 | |
|--|----------------------------------|------------------------------|-------------------------------|---|-------------------------------|--------------------------------|-------------------------------|--|
| Number of Residential Units | | 75 Units | 218 Units (Incl 27 Apts) | 63 Units | 93 Units | 178 Units | 126 Units | |
| Phases | Site Works | Phase 1 – End 2021 | Phase 2 / 3– End 2022 | Phase 2 / 3– End 2023 | Phase 4– End 2024 | Phase 5– End 2025 | Phase 6 - End 2026 | Phase 6- Mid 2027 – 2029 |
| Indicative House & delivery Programme | Q2 2020 Early 2021 | 75 units ⁹ | 100 units ¹⁰ | 100 Units ¹¹ | 100 Units ¹² | 100 Units ¹³ | 125 Units ¹⁴ | 153 ¹⁵ Units (Incl Apts in Neighbourhood 2 & 6) |
| Indicative Cumulative Delivery | 0 | 75 | 175 | 275 | 375 | 475 | 600 | 753 |
| Modal Shift | | 13% ¹⁶ | 25% | 35% | 40% | 45% | 45% | 45% |
| Range of Deliverables | Confirmation of Draft Section 47 | Widening of Ballyhooly Rd at | IW Type 1 Pumping Station and | Park Land Provision and Public Lighting | Construction of Second access | IW Type 3 Foul Pumping Station | Reduce the size and layout of | Construction of Community Room in |

⁸ Delivery of all units subject to Multi phase Connection Agreement with Irish Water

⁹ All Neighbourhood 1

¹⁰ 100 Units from Phase 2

¹¹ Remainder 91 Units from Neighbourhood 2 and 9 from Neighbourhood 3

¹² 54 Units from Neighbourhood 3 and 46 from Neighbourhood 4

¹³ Balance of 47 Units from Neighbourhood 4 and 53 from Neighbourhood 5

¹⁴ Residual Houses in Neighbourhood 5

¹⁵ Balance of Neighbourhood 5 and Neighbourhood 6

¹⁶ Public Transport and Non Vehicle use in area currently at 13%

| | | | | | | | |
|---|---|--|---|---|--|--|--|
| <p>Agreement between Cork City Council and Applicant prior to the commencement of development.</p> <p>Compliance / Submission & sign off by CCC.</p> <p>CEMP Preparation.</p> <p>Statutory Services Sign off (ESB / ESBI / IFI)</p> <p>Construction of compound, storage area together with offices and associated welfare facilities, cut & fill of land</p> | <p>entrance to site at Phase1.</p> <p>Setback of Ballyhooly Road for bus corridor and delivery of the permanent cycleway lands and pedestrian footpaths for widened road.</p> <p>New Bus Stop on Ballyhooly Road.</p> <p>Pedestrian Crossing to Ballyhooly Road including Signal Controlled crossing at Lower Dublin Hill / Ballyhooly Rd Junction.</p> <p>Landscaping to Phase 1.</p> <p>Landscaping to Ballyhooly Road boundary Phase 6.</p> <p>Landscaping to the Ballyhooly</p> | <p>associated infrastructure & Landtake to support the services facilities for the entire Ballyvolane Urban Expansion Area. Pumping Station to be taken in charge by Irish Water when requested by IW.</p> <p>Internal Access Distributor Road and Lighting.</p> <p>Landscaping to Phase 1 / 2 embankments and Distributor Road.</p> <p>Construction of Local Access to the Northern Local Road.</p> | <p>to Park as per NE-O-04.</p> <p>Balance of Park Zoned lands in Applicant Ownership / Control secured for passive amenity use as per NE-O-04</p> <p>Construction of all underground services, ducting etc to accommodate foul and surface water demands for later phases.</p> <p>Landscaping to Phase 3.</p> | <p>to Ballyhooly Road.</p> <p>Construction of Park Land / Greenway north of Internal Distributor Road and pedestrian links to local rural road to the north.</p> <p>Construction of footpath on Ballyhooly Road to west of Phase 4 frontage.</p> <p>Construction of all underground services, ducting etc to accommodate foul and surface water demands for later phases.</p> | <p>delivered to support lands to the north east of the land holding / site.</p> <p>Construction of all underground services, ducting etc to accommodate foul and surface water demands.</p> <p>Landscaping to Phase 5.</p> | <p>construction compound to allow for the construction of the apartments.</p> <p>Groundworks and sub level formation (relocation of compound to this area if necessary once complete).</p> | <p>Neighbourhood 2 as part of apartment building in Neighbourhood 2; these apts and community space may be delivered at an earlier date subject to demand.</p> <p>Commence Apartment Construction.</p> <p>Complete landscaping to Phase 6.</p> |
|---|---|--|---|---|--|--|--|



| | | | | | | | | |
|--|--|---|---|--|--------------------------------|--|--|--|
| | <p>being developed including the relocation on site of excess spoil and the storage on site of excess general fill material acceptable for re-use in Neighbourhood 6.</p> <p>Access Road and Internal Distributor Road Works and the construction of all necessary underground services, ducting etc to accommodate foul and surface water demands for later phases.</p> | <p>Road / Access to IW Pumping Station.</p> <p>Entrance Works.</p> <p>Public Lighting to Ballyhooly Road.</p> <p>Construction of houses including roads and services together with all construction works to facilitate the development.</p> <p>Construction of retaining structures and embankments to facilitate roads and development areas.</p> <p>Construction of all underground services, ducting etc to accommodate</p> | <p>Ground Works for Neighbourhood 2 & Park Land Works as per NE-O-04 (commence provision of Park and retain residual lands for park as open space – retain existing natural hedgerows and features).</p> <p>Internal Temp Bus Turning Bay.</p> <p>Creche Construction.</p> <p>Construction of all underground services, ducting etc to accommodate foul and surface water demands for later phases.</p> | | <p>Landscaping to Phase 4.</p> | | | |
|--|--|---|---|--|--------------------------------|--|--|--|

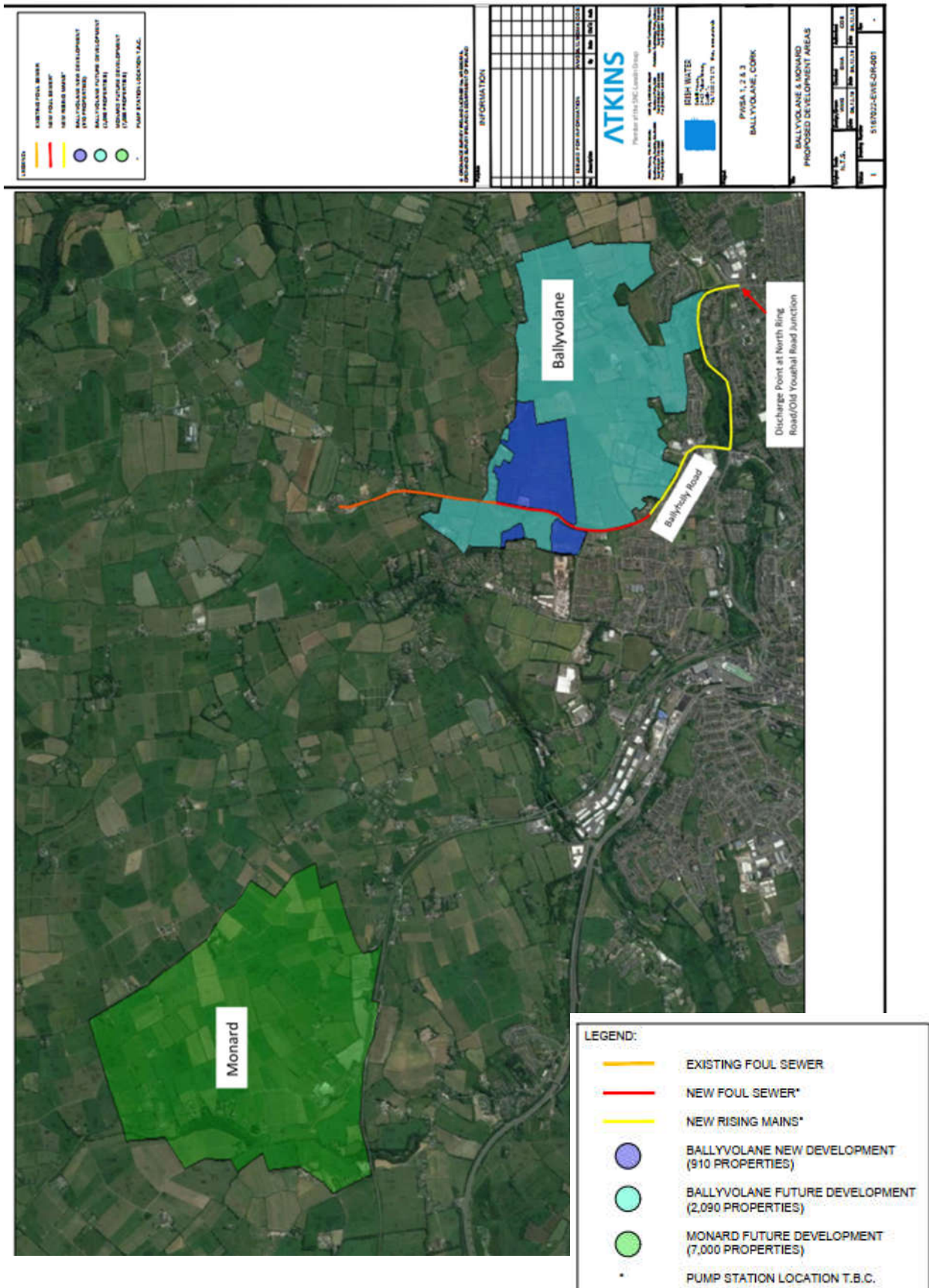


| | | | | | | | | |
|--|--|---|--|--|--|--|--|--|
| | <p>Commence undergrounding of 38KV Line traversing the site.</p> <p>Construction of all Surface Water Drainage Infrastructure to facilitate Phase 1.</p> <p>Securing construction safety areas around 110 Kv Pylons to the as agreed with ESBI.</p> <p>Planting to enhance boundary to the north and construction of boundary walls to the</p> | <p>foul and surface water demands for later phases.</p> | <p>Construction of Local Neighbourhood Centre.</p> | | | | | |
|--|--|---|--|--|--|--|--|--|



| | | | | | | | | |
|---|---------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | north as proposed to local residents. | | | | | | | |
| Timeline | 6-12 months | 12 months | 12 months | 12 months | 12 months | 12 months | 12 months | 24-30 months |
| Average Construction Workers | 30 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Peak Construction Workers | 50 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Est Average Daily Construction Vehicles | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Est Peak Daily Construction Vehicles (HGV / Van / Workers) | 80 (2 HGV'S / 7 Vans / 15 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) | 80 (2 HGV'S / 15 Vans / 60 Cars) |

Image 4: IW Services Planning Considerations (Subject to Planning)



Point 5 – “Undertake a SuDS study which includes lands takes for retention / detention pond to serve the entire lands”.

Due to the topography of the site no surface water retention / detention pond is possible in the application area of the Urban Expansion Area.

Cork City Council requires that all developments discharge occurs at greenfield run off rates, or better, so as to manage surface water flows downstream in the Glen River Valley and Blackpool ultimately. The proposal discharges to surface watercourses that are within the applicant’s land ownership. Discharge of surface water to these streams has been permitted in recent consents by Cork County Council.

During the design process of the proposed development, a series of site investigation works were carried out by Priority Geotechnical Ltd. This included 13 rotary core holes to measures the depth and strength of rock, 34 trial pits to measures the depth of soil and rock and 10 infiltration pits to measure the onsite infiltration rate. Groundwater Seepage Assessment was also carried out by JBA Consulting to provide an assessment of the groundwater conditions. The storm water attenuation system proposed as part of this development has been designed to account for groundwater. The results of the soil infiltration tests have informed the design of the storm water network. Soak pits are proposed for the eastern portion of the site while the rest of the site will be positively drained. Attenuation tanks have been designed to control the flow of storm water off the site to 5 litres per second per hectare of land which is less than the existing green field runoff rate (refer to MHL Engineers Reports).

Cork City Council Water Services section have been consulted on the surface water design solution so as to obtain guidance on the provisions of the Cobh MD Local Area Plan which states, in Table 3.4.2 that an Indicative, “Prior to Commencement Objective” of the Plan is that it will “Undertake SuDS Study which include lands take for retention / detention pond to serve the entire lands”. In response;

- *due to the topography of the site no surface water retention / detention pond is possible / required in this area of the Urban Expansion Area.*
- *Cork City Council requires that all developments discharge at greenfield run off rates, or better, so as to manage surface water flows downstream in the Glen River Valley and Blackpool ultimately. The proposal discharges to surface watercourses that are in the applicant’s ownership and discharges from adjacent zoned lands will discharge from the taken in charge network to these watercourses. Discharge of surface water to these streams has been permitted in recent consents by Cork County Council. A natural “pond” location occurs at a low point east of the Longview Estates holding due to local topography. This area may in the future form part of a surface water management strategy in that area. However, with respect to the overall area, the Council approach to SuDS is to facilitate all design solutions that promote managed, low discharge rates to watercourses. Nevertheless SuDS measures are included in the proposal and these are identified in the Engineering drawings.*
- *The proposal employs a series of infiltration areas and attenuation tanks. This is an acceptable solution given the site context.*
- *It is noted that, following a Groundwater Seepage Assessment carried out by JBA Consulting to provide an assessment of the groundwater conditions, the storm water attenuation system proposed as part of this development has been designed to account for groundwater seepage.*
- *The results of the soil infiltration tests have informed the design of the storm water network **and permeable paving solutions are being provided where practical**. Soak pits are proposed for the eastern portion of the site (**flatter topography**) while the rest of the site will be*

positively drained. Attenuation tanks have been designed to control the flow of storm water off the site to 5 litres per second per hectare of land which is below the existing green field runoff rate or Q_{bar} ".

Point 6 - Open Space

Table 3.4.2 of the Cobh MD Local Area Plan states that it was Cork County Council's objective to "Complete a Landscape Strategy".

Cork County Council did prepare a draft Landscape Strategy in 2007 which was never adopted and the City Council prepared the Cork City Landscape Study in 2008.

In addition, the applicant, working with AECOM and Cork City Council has prepared a Landscape Strategy for the Urban Expansion Area which Cork City Council Parks Dept will use to inform their consideration of proposals for the area.

The proposed development has had regard to the County Strategy in which the North Environs is identified as a City Harbour and Estuary landscape type. This has a very high landscape value and its sensitivity is described as very high. The proposed development has had regard to the relevant recommendations of the landscape strategy. In the absence of a County Council landscape strategy specific to the lands at Ballyvolane, the landscape plan for the proposed development has been developed in accordance with the Local Area Plan which states that "mitigation measures in the form of extensive planting as part of a landscaping strategy will be required to reduce magnitude of the impact" and the draft Landscape Strategy 2007.

The ownership of Longview Estates contains approximately 20 ha of an area identified as "passive Open Space". As a hillside area located to the eastern side of the Urban Expansion Area, next to the Ballyhooly Road (a north south aligned radial route into Cork City Centre), and framed by an access road designed to meet gradients favoured by DMURS, the parkland proposed by this application, creates a viable park area for transition to, and opening up of, the residual area of passive park designated area to the east. The southern extent of the "parkland" is framed by the Mayfield Kilbarry Link Road. To the east it is framed by zoned school lands.

The open space area is therefore very well defined and very well framed by access and zoning.

The overall volume of Passive Open Space in the Urban Expansion Area amounts to 60+ Ha zoned for Amenity Space, approximately 20 ha of which is in the applicant's landholding (within one block zoned for Open Space NE-O-04 – A 35 Ha "block" of land). The Plan proposes to deliver Public Open Space as part of their proposal. The applicant will design and deliver the initial phase of the park (which will provide for their "houses" needs but the additional lands essentially cater for the residual properties in what are third party ownerships. This parkland will serve what could be up to 3000+ units (or higher if ABP densities are mandated).

The Park will most likely occur in the largest zoned area, NE04, which crosses the applicant ownership. This area is identified as 35.6 Ha in Local Area Plan.

In the scheme at present, approximately 3.0 Ha of Open Space is contained in the scheme as Public Parkland; this pro rata meets the requirement for the housing proposed. Including the Park approx. 32 % of the scheme is proposed as POS. Without the Park, POS is 15.2 %. 3.0 Ha is consistent with the population equivalent of open space / park that one could project as being required to serve the Longview scheme where lands in the area are developed at 35 units per Ha.

However, as noted, the ownership contains approx. 20 Ha of Open Space in total and the applicant has agreed with Cork City Council that their lands are reserved free from development as a passive



amenity space pending a Council decision on the detail of how that space is delivered. Preliminary designs and layouts are contained in the application submission and these have been agreed by the City Council as the basis for future design discussion as they advance their plans for the Mayfield Kilbarry Link Road. The proposal is covered by a Section 47 agreement the draft of which is submitted with this application.

2.0 Site Topography

The Board has asked for:

“Further consideration of the documents as they relate to the proposed changes in the topography of the site having specific regard to urban design and environmental considerations given the extent of ‘cut and fill’ activities proposed. Further consideration should also be given to, inter alia, excavation methods to be used on site, volumes of soil and rock to be excavated/extracted, re-used and/or removed off site, associated traffic movements to and from the site. Such details should be included in the Environmental Impact Assessment Report. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- The matter of *“the extent of ‘cut and fill’ activities proposed”*.
- the *“excavation methods to be used on site, volumes of soil and rock to be excavated/extracted, re-used and/or removed off site, associated traffic movements to and from the site”*.

These issues are considered in more detail in the EIAR submitted, Draft CEMP and Engineering Reports provided. However, in summary, we ask the Board to note the following on both issues.

2.1 The Extent Of ‘Cut And Fill’ Activities Proposed

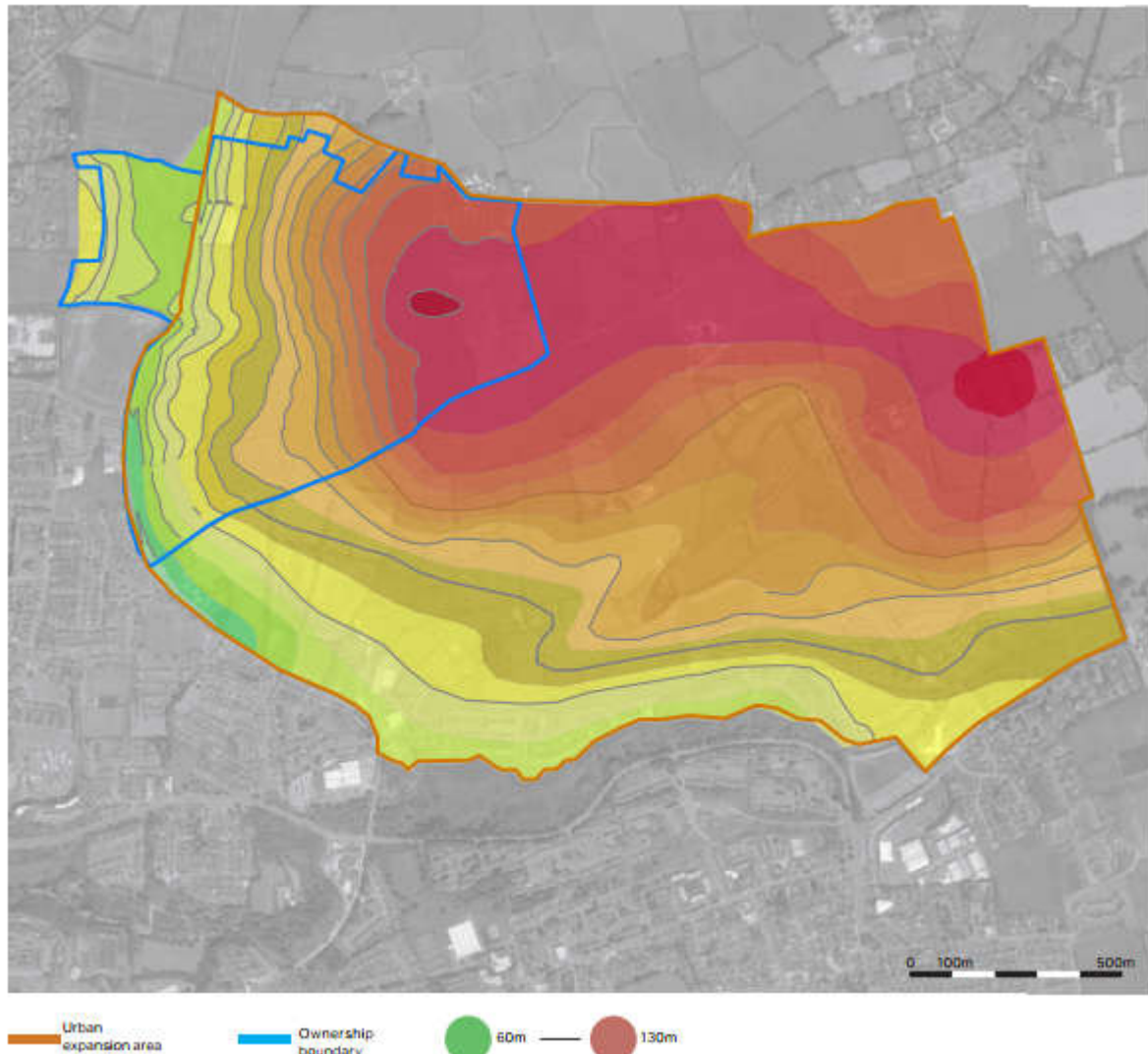
The extent of cut and fill activities (and material management / reuse) has been minimised in so far as is possible, with respect to the necessary distributor road, prevailing ground conditions and the needs to maintain Part M¹⁷ compliant areas of access.

The applicant has sought to provide for the required access road / distributor road at appropriate design standard gradients, given the topography, in an efficient manner. The road has to be of a gradient, and alignment suitable to serve the future schools and adjacent lands.

The Board will note that the site has challenging topography. Image 5 overleaf illustrate the topography.

¹⁷ Access and Use

Image 5: Topography (Source: Aecom – see Landscape Strategy Submitted)



The route that the access road / distributor road then takes within the site is dictated by design gradients and connectivity requirements.

Image 6 following illustrates the manner in which the circuitous distributor route progresses uphill from Ballyhooly Road, first in cut, then fill (to achieve a level area), then fill again and finally to the plateau area to the east of the landholding.

The areas of cut and fill, and the consequent housing neighbourhoods” are therefore defined. Options involving stepping housing up hills were looked at and drawn. These, however, were considered to have significant adverse impacts and challenging practical issues when designed. For example, challenges including;

- Very deep drainage runs in rock to the front of a house or drainage runs to the rear of a house which could not be “taken in charge”.
- Sub level tanking or major retaining walls.
- Significant rock excavation.
- Interference with sub surface hydrology flows.
- Viability issues. Excess build costs.

- Reduce landscaping zones.
- Difficult / impossible permeability on an east west basis.

Image 6: Topography



2.2 Excavation Methods To Be Used On Site, Volumes Of Soil And Rock To Be Excavated/Extracted, Re-Used And / Or Removed Off Site, Associated Traffic Movements To And From The Site

These issues are considered in more detail in the EIAR submitted, Draft CEMP and Engineering Reports provided. However, in summary, we ask the Board to note that site development works will include actions such as stripping of topsoil, excavation of sub soil layers, filling on excavated ground, construction traffic and associated construction / ground works. It is expected that all excavated materials will be reused on site

Excavation of subsoil layers will be required in order to allow the construction of the roads network, reprofiling of ground to facilitate the construction of units, foundation excavation, drainage and utility services installation and the provision of underground attenuation/infiltration systems. Excavated materials will be reused as structural fill in the construction of roads and in the general raising of ground levels where required.

The development of the scheme layout has taken consideration of the existing topography in so far as possible however certain regrading works are necessary in order to comply with the principals of DMURS (Design Manual for Roads and Streets) and Part M of the Building Regulations.

The following table presents a summary of cut/fill requirements on a Neighbourhood by Neighbourhood basis and includes a breakdown of topsoil, subsoil and rock.

Table 2.1 Cut / Fill Figures

| Summary | | |
|-----------------------|-----------------------|------------------------|
| Description | Cut (m ³) | Fill (m ³) |
| Main Distributor Road | 33025.15 | 28830.26 |
| Neighbourhood 1 | 58223.55 | 12171.37 |
| Neighbourhood 2 | 12923.79 | 33821.76 |
| Neighbourhood 3 | 17088.67 | 38556.4 |
| Neighbourhood 4 | 31270.01 | 22554.65 |
| Neighbourhood 5 | 16701 | 11741.69 |
| Neighbourhood 6 | 17600.46 | 4760.655 |

| | | |
|-----------------|-----------------|-----------------|
| Subtotal | 186832.6 | 152436.8 |
|-----------------|-----------------|-----------------|

| Cut Breakdown m ³ | | |
|------------------------------|----------|----------|
| Topsoil | Subsoil | Rock |
| 6758.158 | 17621.66 | 8645.337 |
| 7448.902 | 30180.86 | 20593.79 |
| 5843.401 | 6305.963 | 774.425 |
| 4220.603 | 8655.356 | 4212.708 |
| 7708.464 | 15569.45 | 7992.096 |
| 10940.72 | 5755.966 | 4.312 |
| 2695.258 | 6229.607 | 8675.59 |

| | | |
|----------|----------|----------|
| 45615.51 | 90318.86 | 50898.26 |
|----------|----------|----------|

In line with the findings of the site investigations carried out, it is anticipated that the bulk of excavated subsoil and rock will be undergo soil improvement works on-site and will be reused as structural fill material under roads and in the build-up of housing platform areas. Un-treated subsoil will be used as non-structural fill (e.g. Build up in back gardens, public open spaces and reprofiling the ground in the Park area).

It was found that the rock varied from that of a moderately strong sandstone to a weak siltstone and that much of the rock (approx. 50,000 m³) will require grading and moisture content reduction prior to use.

Top soils will also be reused on site and pending use will be stockpile on the school lands to the east of the site.

The engineering drawings submitted also indicate the distributor road build up and cut / fill arrangements for same as it progresses through the site west to east.

Table 1.1 (previous) provides an indicative volume of construction vehicles / deliveries on site.

3.0 Irish Water Works and Infrastructure

The Board has asked for:

“Further consideration/clarification of the documents as they relate to the required extension in water and wastewater infrastructural network to serve the proposed development. The prospective applicant is advised to liaise with Irish Water with regard to the nature of works required to address any proposed extension to the network. The documentation at application stage should provide details with regard to the network extensions including layout and design details and the timelines involved relative to the construction and completion of the proposed development. Further where any infrastructural works form part of an application, details/agreements regarding asset management upon completion of such works should be clearly set out”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- The prospective applicant is advised to liaise with Irish Water with regard to the nature of works required to address any proposed extension to the network.
- The documentation at application stage should provide details with regard to the network extensions including layout and design details and the timelines involved relative to the construction and completion of the proposed development.
- Further where any infrastructural works form part of an application, details/agreements regarding asset management upon completion of such works should be clearly set out

We shall address these in turn.

3.1 The Matter of “liaison with Irish Water”

The applicant has liaised extensively with Irish Water (“IW”) since 2017 to ensure the delivery of a workable infrastructure solution in the Ballyvolane area.

The proposed Pumping Stations, the main on Ballyhooly Rd and the smaller Type 3 in Neighbourhood 5, will be Constructed to IW Specifications and will be “Taken in Charge” by IW upon completion.

Critically, a PWSA has been entered into with Irish Water (IW) whereby the Applicant is funding a significant portion of network improvements by IW to both service the Site and to allow potential release of other lands in the area; using a design / funding solution that has, prior to now, not been possible.

A PWSA was entered into between IW and the applicant in 2017 to design an infrastructure solution to design and facilitate the future delivery of infrastructure to service lands in Ballyvolane.

The PWSA between IW and the applicant provided for the following;

- Detailed design and extension of the waste water network.
- A new foul gravity sewer, pumping station and rising main to cater for expected waste water flows.
- Assessment of the infrastructure proposed and the upsizing / extension by IW for future growth in line with projected growth figures.
- Approx. 2000 m of gravity sewers
- Approx. 1500 of foul rising main.
- Detailed design of the water network extension.
- A new gravity watermain.



- Upsizing and extension of networks inline with projected growth figures.

IW have confirmed in their letter of offer that the proposal's first phase of development can be accommodated within the existing foul network provision.

At the initial stages of the project, the proposed Ballyhooly Rd foul pumping station was not part of the proposal by the applicant. It is now (see Images 7 and 8 Overleaf); Image 8 illustrates the initial concept layout provided by IW on which application drawings were based. A Statement of Design Acceptance has been obtained by the applicant from Irish Water.

Image 7: Application – Pumping Station Drawing

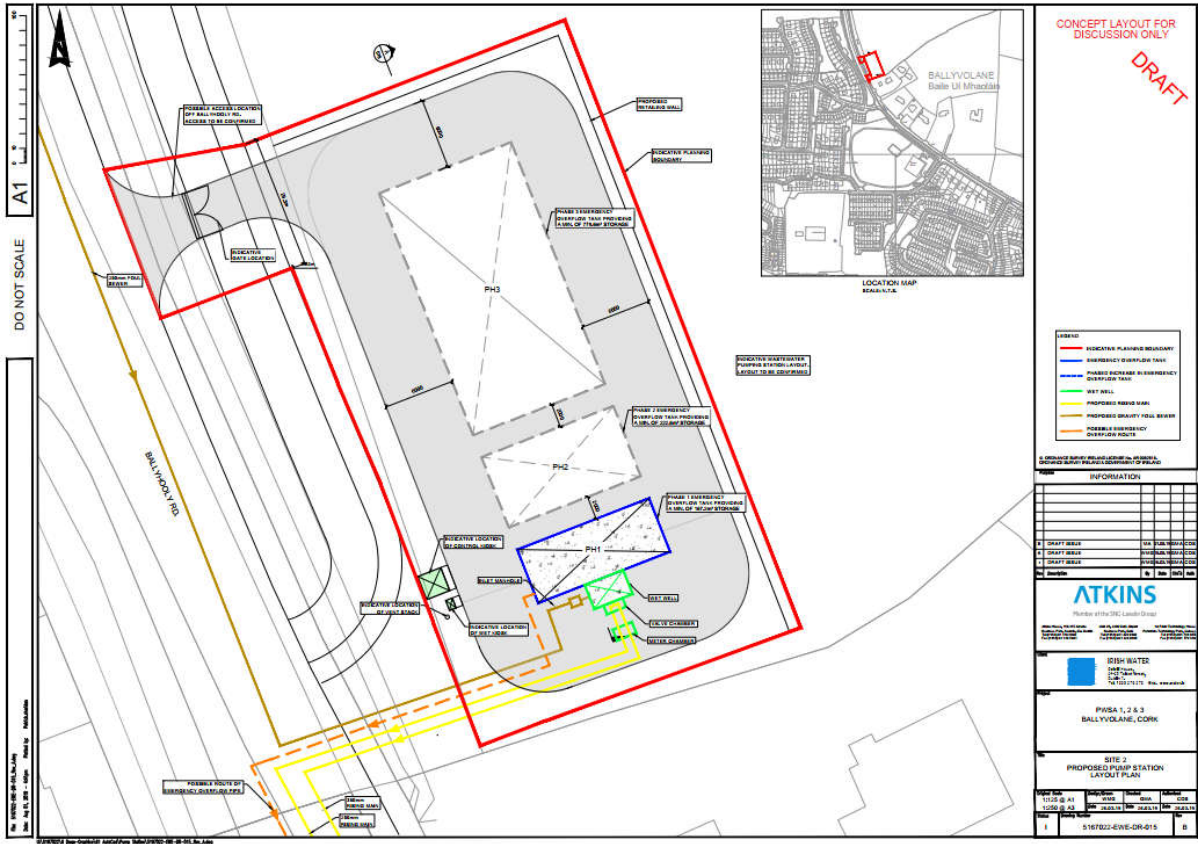
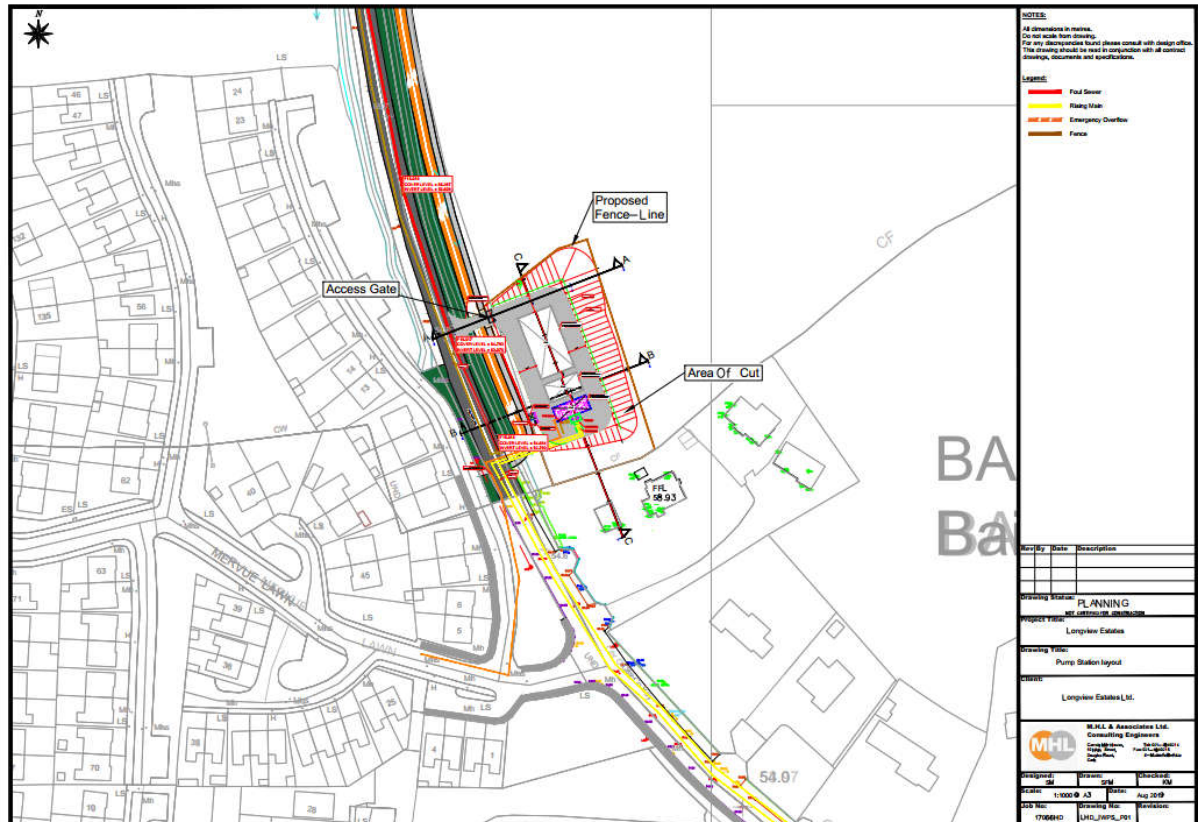


Image 8: Irish Water Indicative Layout for Pumping Station (base for Image 7 Above)



Over the course of the design development, and subsequent to additional land acquisitions by the applicant, IW advanced their site identification process for the proposed PS and determined that appropriate sites would either be in the Public Park at Kempton or on the applicants lands where shown.

Given the relationship of the applicant's proposal to the services upgrades and the desire to minimise impact on public lands in the park area it was determined that we would include the proposed PS in the applicant landholding. This is included as part of the application so as to provide for an integrated design solution that addresses needs in the overall area and allows IW to manage and expand their network as and where required.

This pumping station is critical to the development of the overall Urban Expansion Area. Without this housing proposal to underpin the delivery of the pumping station, there will be no pumping station to service the Urban Expansion Area Without the Pumping Station there will be no housing in the Urban Expansion Area.

This PS also contributes longer term network planning by IW in that it has the capacity to enable longer term servicing of areas such as Monard and Blarney subject to mains provision.

In this respect, the application has the potential to:

1. Open up the Ballyvolane Urban Expansion Area.
2. Potentially open up Monard and Blarney zoned areas subject to demand and network extension; and
3. Create additional options in network management for IW in their management of foul flows into and through the City; additional mains in Ballyvolane create the ability to redirect flows in the North of the City, eastwards to Tivoli, thereby freeing up capacity for services from the Ballincollig zoned areas and Urban Expansion Area to flow into the City network.

In this respect, the proposal immediately services and facilitates delivery of units in the western and southern portion of the Urban Expansion Area and can potentially service the eastern portion of the Urban Expansion Area (although this area is more likely to be serviced by gravity drainage to Glanmire).

In summary, the works that are required to upgrade the network are fully identified by IW in the connection letter offer to the applicant. The Ballyhooley Rd Pumping Station referred to in same letter has been designed by Atkins Engineers, on behalf of and under the instruction of IW, provided to our consulting engineers (MHL Consulting Engineers). It has been incorporated into the scheme layout in a manner that allows it to be sited relative to the corridor for the Ballyhooley Road improvements (now being designed) and the associated set back for the cyclist and pedestrian connectivity to the south along Ballyhooley Road.

3.2 The Matter of liaison with IW on “details with regard to the network extensions including layout and design details and the timelines involved relative to the construction and completion of the proposed development”

With respect to the details of the network extensions, including layout, design details and the timelines involved relative to the construction, the IW Letter of Offer initially issued to the applicant and proved to the Board at Pre App stage stated that the conceptual design for the foul and water services provisions had been identified¹⁸.

¹⁸ Ref IW letter of 18th April.

The phasing proposed for the completion of the proposed development, Table 3.1 overleaf, also illustrates the proposed infrastructural interventions relative to phasing.

In summary, with respect to IW infrastructure, the proposal provides for the following:

- Phase 1 will be accommodated in the current infrastructure with water main extension.
- Phase 2 onwards will require the Pumping Station and IW Infrastructure to be in place. IW will deliver the required infrastructure by 2022 subject to the applicant executing a Major Connection Agreement.
- The Pumping Station proposed on Ballyhooly Road caters for three potential phases of development; it can be delivered in one phase or a series of phases. With three modular storage chambers. Chamber 1 would be an initial 1000 units. This would include the proposal and would likely cater for an additional project under construction^[2]. Chamber 2 would be to provide for 3000 + units and Chamber 3 would provide for wider expansion of the network in due course to accommodate areas such as Monard if required and subject to consents.
- The agreed PWSA included the delivery by IW, to service this application and potentially adjacent lands, of rising mains from the proposed Ballyhooly Rd Pumping Station, south along the Ballyhooly Rd to the junction with the North Ring Road at which point it will be routed east along the North Ring Road to a termination point at the Old Youghal Rd Junction. The overall rising mains will include 2400 m of 150mm rising main from the Pumping Station to the Old Youghal Road Junction; a parallel length from the pumping station of 800 m of 250 mm diameter watermain to allow connection / network management by IW including potential connect to existing interceptor sewers; or further extension as required. The rising mains will be routed in public roads (or public lands if available). 250 mm dia foul sewer connecting the housing scheme has been incorporated into the scheme drainage to connect to the Pumping Station proposed on Ballyhooly Road for all phases of housing delivery. This will also capture existing flows from the current 225 mm gravity foul to the north.
- Water supply will be delivered on a phased basis but will require the extension of the services by approx. 780 m; from a point to the west on Dublin Hill by way of a 300 mm main extension.
- the initial phase of this housing proposal can be connected to, and serviced by, the existing foul infrastructure in the area. The proposed PS will serve the overall proposal and has capacity to serve the residual Ballyvolane UEA lands subject to connection. The PS can be sized, with the land take offered, so as to form a central part of IW's delivery of serviced lands throughout the Northern City fringes.

^[2] **App Ref 17/6781** - Construction of 74 no. residential units comprising 23 no. detached 4-bed dwellings, 44 no. semi-detached dwellings of which 28 no. are 4-bed dwellings and 16 no. are 3-bed dwellings, and 7 no. townhouses of which 6 no. are 3-bed dwellings and 1 no. is a 2-bed dwelling and all associated site development works, foul and storm drainage including attenuation tank, and landscaping and amenity area. The proposed development incorporates 1 no. new access from the L2980 (Dublin Pike) and 1 no. new access from the Ballincollie Road with individual accesses to 13 of the units also from the Ballincollie Road.

3.3 The Matter of “details/agreements regarding asset management upon completion of such works should be clearly set out”

The proposed pumping stations are to be delivered in accordance with IW requirements and will be constructed by either by the applicant or an IW nominated contractor and taken in charge by IW once constructed.

They will thereafter be an Irish Water Asset for use and service of foul water demands.

Foul water infrastructure and water supply infrastructure externally will be delivered by IW to facilitate connection agreements. IW has identified in their Pre Connection Letter that the water main and foul sewer extensions are located in public areas (the public road) and can be located there without statutory consent under the provisions of the Water Services Acts.

4.0 Surface Water Management and Flooding

The Board has asked for:

“Further consideration of documents as they relate to the potential for increased risk of flooding in the wider area including the Blackpool area. Further consideration of this issue may require an amendment to the documents and/or design proposals submitted. The prospective applicant is advised to liaise with the planning authority regarding surface/storm water proposals prior to making an application”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- the potential for increased risk of flooding in the wider area including the Blackpool area

We shall address this below.

4.1 The Matter of “the potential for increased risk of flooding in the wider area including the Blackpool area”

There will be no increased risk of flooding in the Blackpool Area, or wider area, as a result of the proposal.

The application contains a Flood Risk Assessment (within the Engineering Report) that addresses this. The matters of surface water discharge from the site and downstream flooding are related topics.

In the first instance, Cork City Council demands that sites discharge surface water at rates below greenfield run off rates. This is achieved in this proposal

The Cobh MD Local Area Plan states, in Table 3.4.2 that an Indicative, “Prior to Commencement Objective of the Plan is that it will “Undertake SuDS Study which include lands take for retention / detention pond to serve the entire lands”.

With respect to the application site we wish to confirm that;

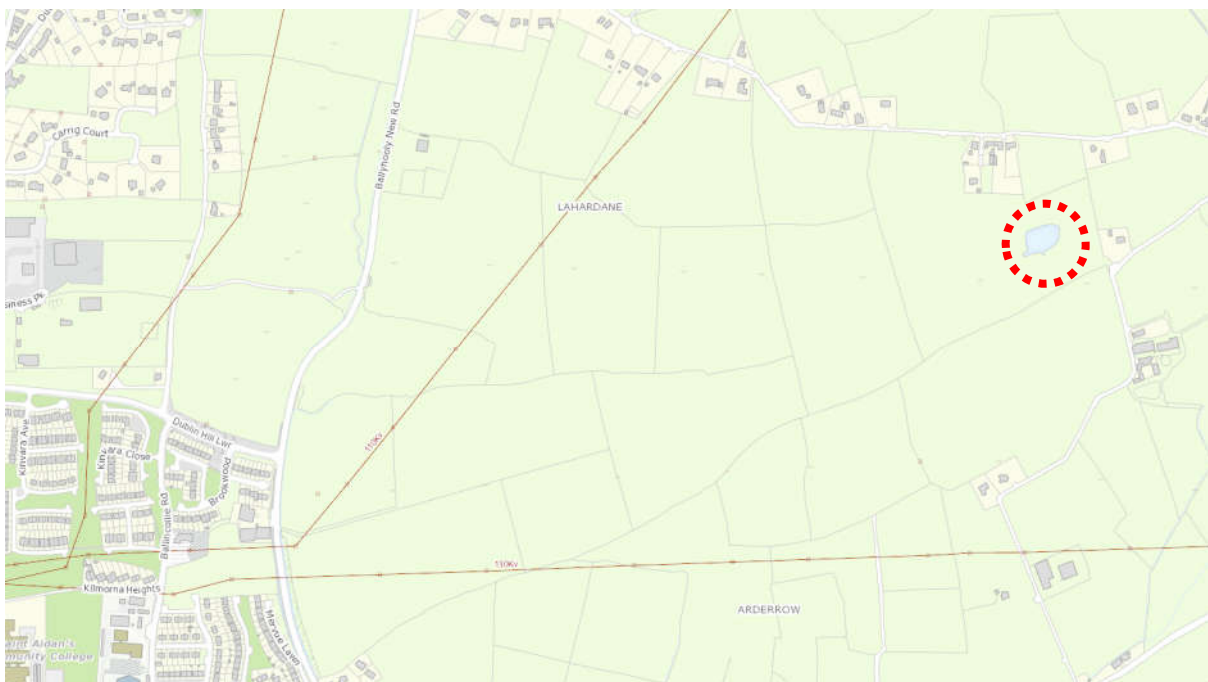
- due to the topography of the site no surface water retention / detention pond is possible / required in this area of the Urban Expansion Area. Cork City Council have confirmed this .
- Cork City Council requires that all developments discharge at greenfield run off rates, or better, so as to manage surface water flows downstream in the Glen River Valley and Blackpool ultimately. The proposal discharges to surface watercourses that are in the applicant’s ownership and discharges from adjacent zoned lands will discharge from the “taken in charge” network to these watercourses. Discharge of surface water to these streams has been permitted in recent consents by Cork County Council¹⁹.
- A natural “pond” location occurs at a low point east of the Longview Estates holding due to local topography; See Image 9. This area may in the future form part of a surface water management strategy in that area as it is in a flatter plateaued area of the Urban Expansion

¹⁹ **App Ref 17/6781** - Construction of 74 no. residential units comprising 23 no. detached 4-bed dwellings, 44 no. semi-detached dwellings of which 28 no. are 4-bed dwellings and 16 no. are 3-bed dwellings, and 7 no. townhouses of which 6 no. are 3-bed dwellings and 1 no. is a 2-bed dwelling and all associated site development works, foul and storm drainage including attenuation tank, and landscaping and amenity area. The proposed development incorporates 1 no. new access from the L2980 (Dublin Pike) and 1 no. new access from the Ballincollie Road with individual accesses to 13 of the units also from the Ballincollie Road.

Area. However, with respect to the overall area, the City Council approach to SuDS is to facilitate all design solutions that promote managed, low discharge rates to watercourses.

- The proposal employs a series of infiltration areas and attenuation tanks. This is an acceptable solution given the site context. Infiltration areas are located in the “flatter” areas of the site to the east. Attenuation Tanks are located in the hilly areas on the western portion of the site so as to control downhill flows of water to an acceptable rate. Local areas of permeable paving are employed within the scheme to provide additional SuDS capacity.
- A Groundwater Seepage Assessment has been carried out by JBA Consulting to provide an assessment of the groundwater conditions. The storm water attenuation system proposed as part of this development has been designed to account for groundwater seepage in cut areas where it is likely that groundwater will be encountered. The results of the soil infiltration tests have informed the design of the storm water network and permeable paving solutions are being provided where practical. Soak pits are proposed for the eastern portion of the site (flatter topography) while the rest of the site will be positively drained. Attenuation tanks have been designed to control the flow of storm water off the site to 5 litres per second per hectare of land which is below the existing green field runoff rate or Q_{bar} ”.

Image 9 Natural Low Point in northern plateaued area of Urban Expansion Area – water lodges in this area depending on precipitation



Downstream of the site there are surface water culverts in various locations, namely at Lower Dublin Hill and at Mervue Park. These will require ongoing monitoring of debris screens etc during rainfall events by Cork City Council, as currently occurs, as part of surface water management in the area. This, and discharge locations, have been confirmed with Cork City Council prior to submission to ABP.

5.0 Residential Density

The Board has asked for:

“Further consideration of documents as they relate to the residential density of the site. This consideration and justification should have regard to, inter alia, the minimum densities provided for in the ‘Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas’ (including the associated ‘Urban Design Manual’) and the phasing arrangements on site. Particular regard should be had to the need to develop at a sufficiently high density to underpin the efficiency of existing or planned public transport services and to how the net density was calculated having regard to the provisions of Appendix A of the aforementioned Guidelines. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted relating to density and layout of the proposed development”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- Having regard to, inter alia, the minimum densities provided for in the ‘Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas’ (including the associated ‘Urban Design Manual’) and the phasing arrangements on site.
- Developing at a sufficiently high density to underpin the efficiency of existing or planned public transport services.
- Explaining how the net density was calculated having regard to the provisions of Appendix A of the aforementioned Guidelines.

We shall address these in turn.

5.1 Density in the ‘Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas’

When considering density in the proposal we have had regard to:

- Density and mix; and
- Access gradients, topography and engineering design standards; and
- Economics and viability.

The scheme’s overall net density is 35.7 units Per/Ha. However, the site is a large, multi phase development that will be delivered in conjunction with progressive public transport enhancements planned under active programmes such as those outlined in Appendix B. In summary, medium density, more commercially viable units and mixes will be developed in earlier phases;

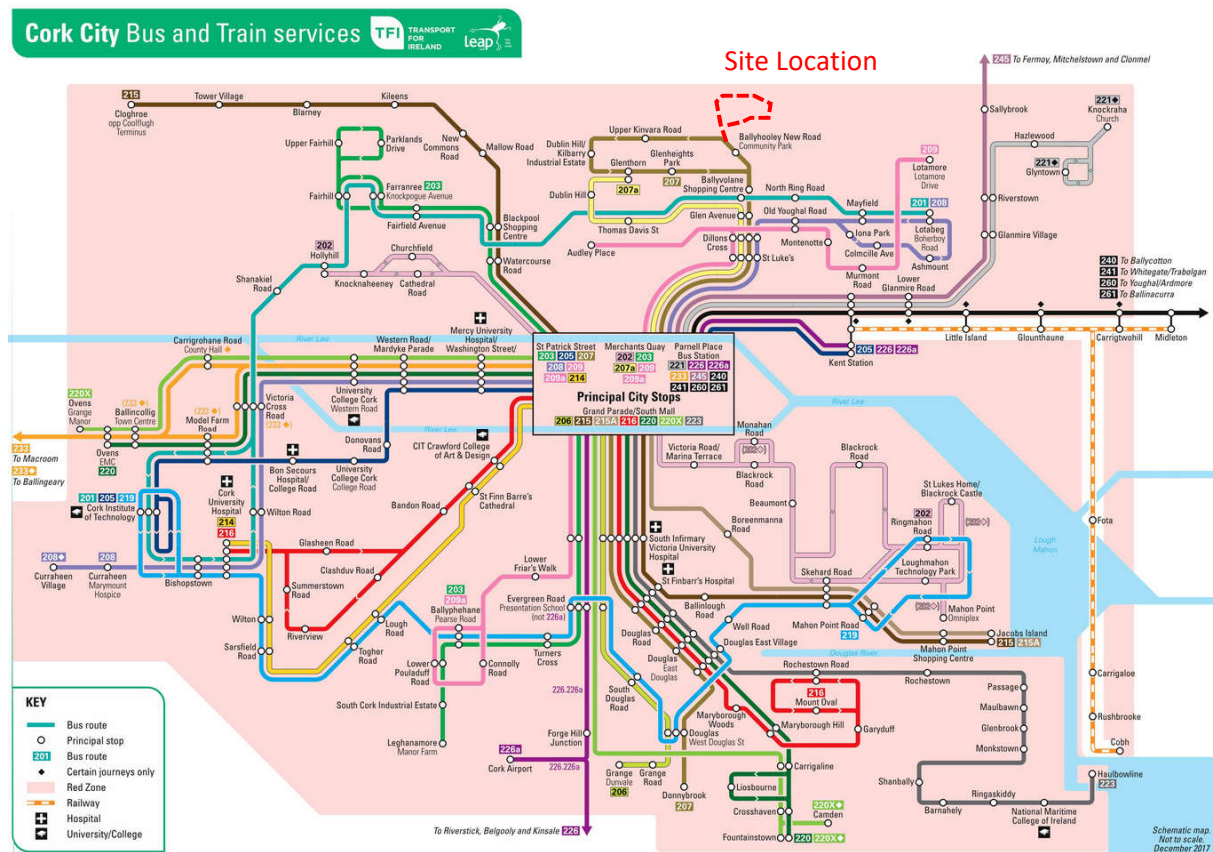
1. This will assist in offsetting the cost of upfront infrastructure and roads construction to both “service” the site and “get up the hill” into the body of the site.
2. This lower density will reduce loadings on the road network (as is seen in the TA modelling) while establishing the basis for a progressive move towards public transport.
3. The higher density areas in the north and east of the site will be developed at a time when public transport enhancements will be in place,

- The highest density area, Phase 6, the apartments will be developed last, just prior to delivery of the proposed Mayfield Kilbarry Link Road which will essentially redistribute traffic across the north of the City.

The proposal delivers housing in phases in a logical manner.

It supports and facilitates public transport infrastructure improvements, which in turn generate the impetus for additional public transport provisions. The area is already served by the 207 and 207 A Buses. The NTA supported Bus Corridors that are to be developed along the Ballyhooly Road by 2022 and our proposal's commitment to accommodate same though road widening, set backs (and provision of a bus stop – southbound - and signalization of the Lwr Dublin Hill / Ballyhooly Rd Junction) all create conditions for modal shift from the current 12% non car use in Ballyvolane to 40%+ over time.

Image 10: Schematic Bus Map and Site Location



5.2 The matter of developing at a sufficiently high density to underpin the efficiency of existing or planned public transport services

With respect to density as referred to in the Guidelines, the site comes within two potential classifications. These are provisions 5.8 and 5.11 of the Guidelines. Those particular provisions relate to, and consider, density. These will be addressed in the following sections as those densities have been identified, by guidance, as being appropriate to underpin the efficiency of existing or planned public transport services.

5.2.1 50 Units Per Ha Standards

The “Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas” state under Para 5.8 that:

“The State has committed very substantial investment in public transport under the Transport 21 capital programme. To maximise the return on this investment, it is important that land use planning underpins the efficiency of public transport services by sustainable settlement patterns – including higher densities – on lands within existing or planned transport corridors.

The phasing of proposed major residential development in tandem with new public transport infrastructure / services (as in the case of the Adamstown Strategic Development Zone) should be considered.

Walking distances from public transport nodes (e.g. stations / halts / bus stops) should be used in defining such corridors. It is recommended that increased densities should be promoted within 500 metres walking distance of a bus stop, or within 1km of a light rail stop or a rail station. The capacity of public transport (e.g. the number of train services during peak hours) should also be taken into consideration in considering appropriate densities. In general, minimum net densities of 50 dwellings per hectare, subject to appropriate design and amenity standards, should be applied within public transport corridors, with the highest densities being located at rail stations / bus stops, and decreasing with distance away from such nodes. Minimum densities should be specified in local area plans, and maximum (rather than minimum) parking standards should reflect proximity to public transport facilities”.

(emphasis added)

Within 500 m of the proposed Ballyhooly Rd Bus Stop, 207 and 207 A Route, the proposal has a nett density of 50 Per / Ha.

5.2.2 35 Units Per Ha Standards

The “Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas” state under Para 5.11 that:

“These may be defined as open lands on the periphery of cities or larger towns whose development will require the provision of new infrastructure, roads, sewers and ancillary social and commercial facilities, schools, shops, employment and community facilities. Studies have indicated that whilst the land take of the ancillary facilities remains relatively constant, the greatest efficiency in land usage on such lands will be achieved by providing net residential densities in the general range of 35-50 dwellings per hectare and such

densities (involving a variety of housing types where possible) should be encouraged generally. Development at net densities less than 30 dwellings per hectare should generally be discouraged in the interests of land efficiency, particularly on sites in excess of 0.5 hectares”.

Overall the proposal has a net density of 35.7 Units Per / Ha.

The topographical challenge of moving west to east across the site 64 M OD at Ballyhooly Rd to 125 M OD (60 M in elevation changes) in the north east of the site, and the challenge of delivering a DMURS compliant distributor road requires substantial reprofiling of the site.

This is an engineering challenge which sees a gross development area at 30.66 Ha²⁰ but the net development area reducing to 21.33 Ha when one excludes steep slopes , greenway (i.e. 110 kV lines), parkland, buffers etc. (see Table 5.1 following).

Appendix F following illustrates the density and project/layout/evolution in more detail. Further commentary follows in Section 5.3.

Table 5.1: Area Explanations – See Appendix F

| Area | Commentary |
|-----------|---|
| 30.6 Ha. | This is the area of the site where the actual physical development of housing and road improvements will occur. This includes the distributor road, greenway and areas of the site that are unsuitable housing due to topography and steep slopes. |
| 21.33 Ha. | This is the residual nett development area, excluding steep slopes, distributor road, greenway (i.e. 110 kV lines), boundary buffers, parkland etc. 21.33 Ha is the net development area that defines the calculation of an overall density of 35.7 units per Ha. |

Density per Ha is not the only relevant measure of density.

While overall density of 35.7 p/Ha Nett is achieved, the mix of house types and unit types is delivering a high density of rooms per Ha. National guidance on density makes reference, in general, to the position that;

“Studies have indicated that whilst the land take of the ancillary facilities remains relatively constant, the greatest efficiency in land usage on such lands will be achieved by providing net residential densities in the general range of 35-50 dwellings per hectare and such densities (involving a variety of housing types where possible) should be encouraged generally. Development at net densities less than 30 dwellings per hectare should generally be discouraged in the interests of land efficiency, particularly on sites in excess of 0.5 hectares”.

However, the Irish Guidance, is derived from UK guidance²¹ which delves further into the discussion of density by also looking at “Habitable rooms Per Hectare”. Table 5.2 is a Density Matrix extracted from the “Urban Design Compendium Homes and Communities Agency UK”.

²⁰ The actual Red Line area is 46.9 Ha due to that area including the route of the 38 KV undergrounding.

²¹ Urban Design Compendium Homes and Communities Agency UK

This reflects a more nuanced approach to density than the raw calculation of housing density as a function of units per Ha in that it also considered habitable rooms per Ha. In total there are 3743 Habitable Rooms in the scheme which equates to a figure of approx. 175 rooms per Hectare.

Table 5.2 below clearly shows that 175 Rooms Per Ha is the suburban standard for “Sites Along Transport Corridors”. The proposed development, on the basis of habitable rooms, achieves a density approx. 40 Per Ha Nett.

Table 5.2: Extract from *Urban Design Compendium Homes and Communities Agency UK*

| | | Option 1 | Option 2 | Option 3 |
|--|-----------------|--|---|---|
| Car Parking Provision | | High 2-1.5 spaces per unit | Moderate 1.5-1 space per unit | Low less than 1 space per unit |
| Redominant Housing Type | | Detached & linked houses | Terraced houses & flats | Mostly flats |
| Location | Setting | | | |
| Site within Town Centre 'Ped-Shed' ↑ Accessibility Index 6 ↓ | Central | | | 240-1100 hr / ha 240-435 u / ha Ave. 2.7 hr / u |
| | Urban | | 200-450 hr / ha 55-175 u / ha Ave. 3.1 hr / u | 450-700 hr / ha 165-275 u / ha Ave. 2.7 hr / u |
| | Suburban | | 240-250 hr / ha 35-60 u / ha Ave. 4.2 hr / u | 250-350 hr / ha 80-120 u / ha Ave. 3.0 hr / u |
| Sites along Transport Corridors & Sites close to a Town Centre 'Ped-Shed' ↑ 3 ↓ | Urban | | 200-300 hr / ha 50-110 u / ha Ave. 3.7 hr / u | 300-450 hr / ha 100-150 u / ha Ave. 3.0 hr / u |
| | Suburban | 150-200 hr / ha 30-50 u / ha Ave. 4.6 hr / u | 200-250 hr / ha 50-80 u / ha Ave. 3.8 hr / u | |
| Currently Remote Sites ↑ 2 ↓ | Suburban | 150-200 hr / ha 30-65 u / ha | | |
| | | Ave. 4.4 hr / u | | |

Table 3.3 Density matrix

Average densities are based on case studies analysed as part of the *Sustainable Residential Quality: Exploring the housing potential of large sites* research (LPAC, DETR, GOL, LT and HC, 2000)

In summary, the development has gone from a density of 19 units Per Ha Nett to 35.7 units Per Ha Nett currently (and a figure of 40 units Per Ha Nett on an equivalency basis if measured against rooms per Ha guidance in the UK) since initial engagement with ABP under the SHD process.

It delivers 50+ units per Ha along the Ballyhooly Road close to the 207 / 207 A Bus line and Bus Corridors south and overall within the scheme delivers a density of 35+ Per Ha.

5.3 The matter of how net density was calculated having regard to the provisions of Appendix A of the aforementioned Guidelines

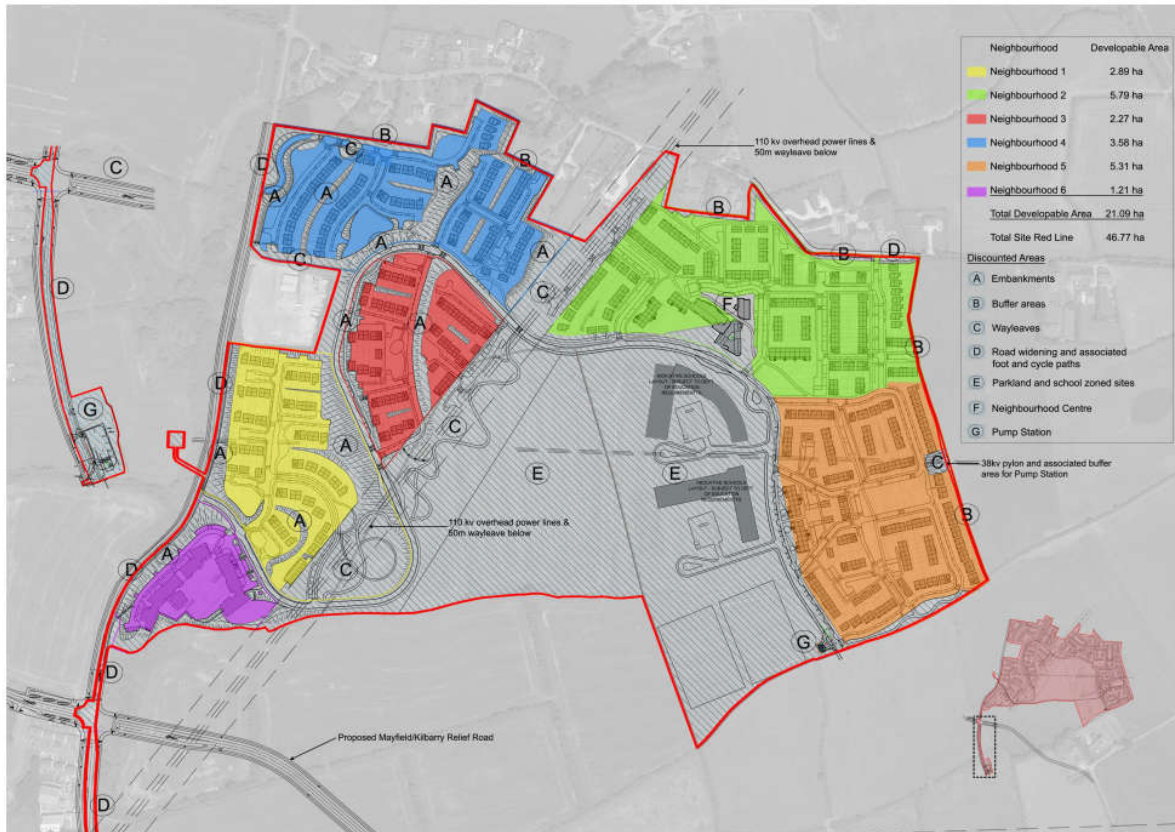
The net density is calculated by discounting the following areas are per the: Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas:

- Distributor Road and associated shared pedestrian and cycle path
- Neighbourhood Centre retail units and doctor's surgery

- Community/Utility zoned lands on which creche is located
- Greenway under the 110kv overhead powerlines (wayleave area)
- Existing and proposed landscaped buffer strip
- Neighbourhood embankments that are undevelopable.

This matter is considered further in the Architects Design Statement.

Image 11: Nett Density Area (in Colour)



6.0 Traffic and Transportation

The Board has asked for:

“Further consideration of documents as they relate to the delivery and timing of road infrastructure upgrades in the wider area as identified in the Local Area Plan including connectivity of the proposed development to the urban centre, the proposed urban park and the school site. Further consideration of how the layout, proposed spine road and access arrangements are consistent with the principles of Design Manual for Urban Roads and Streets should be provided. Further consideration should also be given to the impact of the proposed traffic upon Ballyhooly road pending the delivery of connections in the wider Urban Expansion Area. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- *delivery and timing of road infrastructure upgrades in the wider area as identified in the Local Area Plan including connectivity of the proposed development to the urban centre.*
- *the proposed urban park and the school site.*
- *Further consideration of how the layout, proposed spine road and access arrangements are consistent with the principles of Design Manual for Urban Roads and Streets should be provided.*
- *Further consideration should also be given to the impact of the proposed traffic upon Ballyhooly road pending the delivery of connections in the wider Urban Expansion Area.*

6.1 The Matter Of The “Delivery and timing of road infrastructure upgrades in the wider area as identified in the local area plan including connectivity of the proposed development to the urban centre”

6.1.1 Agreed Heads of Terms – A Proposed Section 47

The applicant and Cork City Council are proposing to enter into a Section 47 Agreement to regulate the use of the lands in the applicant’s ownership and offer certainty as to the delivery of roads enhancements locally. This includes the Ballyhooly Road upgrades and the Mayfield Kilbarry Link Road delivery.

Details of the proposed Section 47 are included in the Draft Heads of Terms in Appendix G.

We note that Cork City Council at the Pre Application Consultation / Tri Partite Meeting, stated that the delivery of the works was likely 2022 =/1 6 months; programme allowing.

The proposed development can be serviced up to 2026 without any additional traffic improvements but with minor additional delays. These delays would be typical for an urban area of this nature.

1. Locally, the first 2-3 Phases of development can occur without any additional works.
2. Up to Phase 5, the proposal can also operate with junction delays that are consistent with delays that are seen in urban areas.

3. However, with the upgrades to the Ballyhooly Road under the BALLYVOLANE STRATEGIC TRANSPORT CORRIDOR PROJECT: NORTH RING ROAD TO BALLINCOLLY, JUNE 2019²² – now instructed and design work commenced – these works are due to be delivered no later than 2022-23, the junctions will operate within capacity to 2028. Some pressure is predicted by 2029 on some junctions but this would be without the effect of modal shift reducing the background traffic growth numbers at current rates. By 2029, the delivery of the Mayfield Kilbarry Link Road as part of the Northern Inner Orbital Road will be advanced and further changes in traffic patterns will be occurring to further disperse traffic and provide for modal shift changes.

The road setbacks for the Ballyhooly Road upgrade are incorporated into this scheme, as they are in the applicant's landholding and have been agreed with the City Council in advance of making the application.

The Ballyhooly Road improvements are the only bus corridor enhancements programmed in the Urban Expansion Area (there are only two radial bus route enhancements proposed, the Ballyhooly Rd and the Old Youghal Rd – see Appendix C for update on the latter).

Cork City Council have identified a series of upgrades to the R635 – North Ring Road – in conjunction with the NTA. These neither have an immediate impact on traffic flows within the locality nor are they required to serve the proposal.

The Initial Traffic Assessment (MHL Consulting Engineers) provided to An Bord Pleanála as part of the pre application consultation submission was very robust in that it demonstrated that a significant volume of units could be accommodated, approx. 600 units, before the “*modelled network loses operational functionality (delay greater than 120 sec)*”. This was demonstrated in a context where that modelling, had no regard to modal shift through the creation of bus and cycle way provisions. The scheme in its design and provisions is inherently designed to facilitate cycle provision and pedestrian connectivity to bus routes and bus stops. Therefore, a significant degree of modal shift can be expected.

That traffic assessment has been further refined and the scope of the junctions assessed increased as part of the current application with an assessment based on very robust parameters. The refined TA now submitted to the Board is robust as it demonstrates:

1. For future year models the anticipated modal share target has not been applied to existing background traffic flows; they are only applied to the proposed scheme. Improvements to public transport provision, funded by the NTA, are primarily for the benefit of existing road users with the aim being to increase the modal share towards sustainable transport solutions. Therefore, additional reductions in traffic volumes can be expected.
2. TII Medium growth rate factors have been applied to background flows for future year traffic models. With committed to investment in public transport in the area this growth rate would be expected to be negated by an increase in public transport usage.
3. Traffic generation for the proposed development has been carried out on a phased basis inline with the expected delivery of units and uses an existing housing scheme in the same area (IN/OUT data recorded in 2019). The implication is that the scheme will begin to benefit from

²² Pages 1-2 included as Appendix B

an increase in modal shift in 2023 onwards; i.e. approx. 275+ units completed. Based on similar transport provision in Blanchardstown-Coolmine area the anticipated increase in modal shift would be up to 45% (based on 2016 CSO figures for sustainable transport modes). As an added factor of safety only a 25% factor (results in a 12% reduction as current modal shift is 13%) has been applied to the 2023 traffic generation from the site. The impact of full modal shift is only applied for in 2026 for Phase 5 of the development.

4. Traffic Generation for the site is based on a local housing scheme comprising of semi-detached houses with 2 car parking spaces per unit. The proposed development will not have this level of parking provided and comprises mixed scale residential provision.
5. No allowance has been made for future measures that discourage private car use such as restrictions on City Centre Car Parking, ongoing reductions in on street car parking public spaces, increases in tariffs or general measures by central government that increase the cost of private vehicle ownership.

The above approach mirrors and better, the approach adopted in the LIHAF supported SHD Site, Ballinglanna (ABP-300543-18).

The modelling exercise also proposed, and presented in the TTA, has been informed by the City Council position at the Pre Application Consultation with ABP where the delivery of Ballyhooly Road Corridor improvements was noted as being likely 2022; +/- 6 months (John Stapleton, Cork City Council). The TTA has also been informed by consultations with the Traffic Section of City Hall post the opinion of ABP on the pre application consultation whereby approaches regarding the determination of modal splits on foot of the proposed improvements were discussed and presented.

6.1.2 CMATS

CMATS sets a delivery timeframe of 2031 (medium term) for the Northern Distributor Road (the lands for this are reserved by the applicant free from development – identified in the Local Area Plan as the Mayfield Kilbarry Link Road).

The Northern Distributor Road passes through the applicant's lands and they are retaining the area free from development at this stage so as to allow the appraisal and detailed design of the route to occur without any compromise.

The "appraisal" stage for this road - the Northern Distributor Road (known in part as the Mayfield Kilbarry Link Road) (Page 108 of CMATS) - will take place in the short term (2026).

It must be noted that the proposed development, for public transport or vehicular movement, is not reliant on any "new roads" identified in CMATS but does support their delivery by making land available for them.

6.1.3 Local Distributor Roads

The site is the only site that is mandated to deliver access roads from the Ballyhooly Road to the east.

The proposal constructs distributor roads NE-U-03 and NE-U-04. These provide access from the east to within the landholding and beyond, access lands that are to be set aside for the Department of

Education for schools to serve the entire area Urban Expansion Area and open up the park area to future use.

None of the lands to the south of the application site that are also located abutting the Ballyhooly Road are required to be developed so as to serve areas to the north.

6.2 The Matter Of The “Proposed urban park and the school site”

6.2.1 The Park Lands

The application site and the applicant landholding includes an area that is part of the area zoned as Passive Amenity Area in the Cobh MD Local Area Plan (lands zoned Objective NE-O-04). We will:

1. commence delivery of the Public Park
2. reserve lands for the future park delivery.
3. Provide a Landscape Strategy to the Council to facilitate park delivery; see enclosed AECOM Document.

Zoning Objective NE-O-04 states that it is to provide for “Open Space for public recreation as an Urban Park. The amenity parkland should provide passive amenity for residents of the North Eastern suburbs and the site. It should also contain the necessary walkways and cycle-ways for accessibility between residential, business, retail and community uses”. The NE-O-04 Zone is 35.4 Ha. in total. The Phase 1 Objective for the Urban Expansion Area includes an objective to “partially” develop a 20 Ha Public Park.

Our land holding contains approx. 20 Ha of zoned NE-O-04 lands and we are proposing to enter into a Section 47 agreement with the City Council on the reservation of lands for same. The southern boundary of this NE-O-04 / park area will ultimately be defined by the route alignment of the Mayfield Kilbarry Link Road which will be delivered c. 2031.

In summary;

- the Applicant will provide an area designed as a public parkland area, consistent with a pro rata calculation of its proposed housing unit numbers. This will be delivered as part of Phase 2 / 3 of the proposed housing scheme.
- This land (referred to above), approx. 2.6 – 3.0 Ha will form part of the proposed “Urban Park”, an area of land that is envisaged to become a 20 Ha. public park under the zoning policy.
- The Applicant retains an additional area of land, also zoned as part of NE-O-04 objective on the Cobh MD Local Area Plan. The overall “park” area within ownership amount to approx. 20 Ha. in total.
- The application drawings shows how our initial park provision can link to the proposed residual park zoned lands. Refer to enclosed Landscape Plan and AECOM Landscape Strategy.

Under the terms of a Section 47 Agreement, or as otherwise agreed, the Applicant will;

- a) Maintain open access to the “Application Park Area” from completion of the park until such time as the park is taken in charge by the Council.
- b) Maintain the residual c. 17 Ha of lands zoned NE-O-04 in the ownership/control of the Applicant in an open grassland use as specified by the area’s zoning designation. This will continue until the lands are required to form part of the 20 Ha Park objective for the UEA, or

their use is otherwise defined with the resolution of the alignment of the Mayfield -Kilbarry Link Road to the satisfaction of the Council.

The proposal also, though its provisions and the Landscape Strategy prepared by AECOM, have used and identified the 110 kv wayleave corridors as suitable locations for green routes through and across the Urban Expansion Area.

6.1.2 The Matter of the “School Site”

The Local Area Plan states that Phase 1 of the Urban Expansion Area should;

“Plan and make provision of a primary school (Dept of Education) on the lands reserved for a 16 classroom primary school adjacent to the proposed town centre and on the Rathcooney Road and adjacent to the large open space. The site should be procured by the Dept of Education”²³

The Rathcooney Road Primary School (NE-C-01 – 2.0 Ha.) site zoned in the Local Area Plan is landlocked and cannot provide for any school use until the Mayfield Kilbarry Road is created.

However, the application site includes a school zoning for (NE-C-02 – 8.1 Ha.) *“Proposed primary and secondary school campus with playing pitches”*. This site can meet the needs of school delivery as required by the Department of Education providing school and amenity provisions.

The submission drawings include an indicative layout for a Primary and Secondary School. The County Plan states that;

“The Planning Authority also supports the concept of multi-campus school arrangements such as 2/3 primary schools side by side or primary and secondary institutions sharing a site. This approach can lead to more sustainable provision of schools in that it reduces the land take required for such developments”.

The proposal is consistent with that. The school site (NE-C-02 – 8.1 Ha.) will be maintained as “open grassland” pending its acquisition by the Department of Education and Skills and will in the short term be used to store and locate excess overburden from the site during the construction phases. Access to the school site will be via the proposed Distributor Road and servicing will be via the proposed services network; a foul pump station will be located on the south eastern corner of the NE-C-02 zoning.

Appendix H following, details correspondence from the Department of Education & Skills stating that they have no immediate school needs in the area.

This position appears consistent with County Development Plan objectives for the area which advise that (as per Section 5.4.4 of the County Development Plan) only a 16 class school is required in the Northern Environs of the City; see Table 6.1 Overleaf.

²³ Table 3.4.3 Cobh MD LAP

Table 6.1: Extract from County Plan 2014

| Table 5.1 New School Requirements in Main Settlements | | |
|---|--|----------------|
| Area | Primary | Post Primary |
| Cork North Environs | 1 x 16 classroom | |
| Monard | 1 x 16 classroom | |
| Blarney | 1 x 24 classroom | |
| Carrigaline | 1 x 16 classroom | |
| Ballincollig | 1 x 24 classroom | |
| Midleton | 1 x 24 classroom and 1 x 16 classroom | 1 x 800 pupils |
| Carrigtwohill | 2 x 16 classroom | 1 x 600 pupils |
| Mallow | 2 x 16 classroom | |

It is our view that the provisions made in this application, having regard to the correspondence of the Department of Education & Skills are a sustainable solution, providing for a “campus” style school provision, that is consistent with the stated Local Area Plan objectives that;

*“The Department guidelines state that generally, the Department will not build a post primary school with greater than 1,000 places. Therefore, the additional 482 places required at post primary level to accommodate the revised population targets are likely to be accommodated by an increase in the size of existing post primary schools in the area. However, if the North Environs is to accommodate some of the population shortfall arising from the capacity deficit in the smaller settlements, the need for additional post primary education facilities might become more acute. A post primary school is proposed in the Ballyvolane Urban Expansion Area, together with two primary schools”.*²⁴

(emphasis added)

6.3 The Matter Of DMURS, The Proposed Spine Road And Access Arrangements Are Consistent With The Principles Of Design Manual For Urban Roads And Streets

The principles of the Design Manual for Urban Roads and Streets (DMURS) have been incorporated into the design of the development’s roads, to clearly define a hierarchy which aims to improve legibility throughout the scheme.

The proposal has sought to provide housing units to face the spine road and to introduce parallel parking.

These design changes seek to create additional on street activity and overlooking on this distributor road.

DMURS commences by stating that an objective is;

“The desire for safe, attractive and vibrant streets is reflected in a range of existing environmental policies and objectives” .

²⁴ 3.4.28 , Cobh MD LAP

It states that design must be;

- a) Influenced by the type of place in which the street is located, and
- b) Balance the needs of all users.

“A further aim of this Manual is to put well designed streets at the heart of sustainable communities. Well designed streets can create connected physical, social and transport networks that promote real alternatives to car journeys, namely walking, cycling or public transport”.

This has been achieved in this proposal. It is a proposal that has had to balance:

- Site Topography,
- Distributor Road provision at radii and gradients that allow access solutions for larger vehicles (such as Buses to serve the schools and other service vehicles), cyclists and pedestrians. This road essentially serves as a “Link” or “Arterial” Street as perceived by DMURS,
- Connectivity to lands to the north,
- Connectivity within the scheme in a safe and practical manner for cyclists and pedestrians all at acceptable gradients,
- The creation of interlinking Neighbourhoods with appropriate pedestrian and cyclist connectivity, and
- 110 KV power corridors that demand wayleaves that have been turned from a constraint, to an opportunity, with the creation of a “Greenway” linking the lower areas of the site with the upper areas; while also creating the initial parkland area demanded by the area LAP and creating the opportunity for onwards extension to the greenway north and south.

As such, the design team has sought to apply a holistic, design and topography led approach to achieving the LAP objectives of the areas residential, open space and community zoned lands.

The proposal has sought to;

- a) assign higher priority to pedestrians and cyclists, without unduly compromising vehicle movement, in order to create secure, connected places that work for all members of the community.
- b) Create attractive places to live.
- c) Facilitate walking and cycling as alternative modes of transport (both in the layout of spaces and the provision of walks, cycle paths and ample cycle parking).
- d) Deprioritize the car, accommodating it where necessary (the Distributor Road) and controlling its design effect in the housing areas.

The following sections includes issues that are identified in DMURS as design areas of concern which need consideration by a design team.

The Design Team in this instance included:

- Architectural and Urban Design – Horgan Carroll (“Design Champion”)
- Consulting Engineers – MHL

- Landscape Architect – Cunnane Stratton Reynolds
- Town Planning - Cunnane Stratton Reynolds

Street Hierarchy

The development adjoins the Ballyhooly Road on the western portion of the site, from which 2 no. entrances are proposed. The first one connects to the distributor road on the southern end of the site and the second entrance on the northern portion of the site accessing neighbourhood 4. The proposal includes the provision of local widening of the Ballyhooly Road for bus corridor and permanent pedestrian and cycle paths for widened road.

Distributor Road

The alignment of the distributor road within the LAP results in extensive cut & fill requirements which have adverse effects on houses & on-site connectivity. This issue, the manner in which the LAP alignment militated against good pedestrian and cyclist connectivity at acceptable gradients, became a clear challenge in light of discussions over the previously submitted proposal (Tripartite Meeting (ABP Ref PL04.300557) held in February 2018). This road was not DMURS compliant in terms of road gradients.

The current proposal deviates from the LAP, maintains the required connectivity and realigns the Distributor Roads vertical alignment // gradient to comply with DMURS by taking a more circuitous route. This has also provided a more rational approach to the creation of a series of neighbourhoods through the scheme.

The road is clearly defined as a major circulation route providing access to surrounding lands with provision made for adjacent lands to connect into the road and housing areas in due course.

The 6m distributor road is flanked for the entirety of its length with planted verges in strategic positions accompanied by shared foot & cycle paths. Houses addressing the road where possible, due to topography and zonings, create active frontages and interaction with the road, enhancing the sense of place, overlooking & passive surveillance. On street parking has also been proposed to create added activity on the road at selected positions. Entrance roads to the neighbourhoods feed off the distributor road into local neighbourhood streets.

The distributor road by its design and associated amenities is clearly defined as the dominant road off which lower status roads feed.

In-neighbourhood distribution

Feeder roads lead into each neighbourhood from the distributor road at 6m widths with accompanying 2.8m footpath consisting of 2m clear footpath and 800mm planted verge buffer to create heightened awareness of pedestrians and added separation from vehicles. All intersections and crossing points have a shared surface finish to encourage speed reduction and create awareness of pedestrians.

Local neighbourhood roads feed off the feeder roads into more intimate “Homezones” with a reduced width of 5.5m and tighter radii corners. Homezone roads are finished with a shared surface to announce arrival into the residential zones. 2.8m footpaths consisting of a 800mm planted verge creates added separation from the street to assist the on-grade design of the footpaths to accommodate on-curtilage parking. A clear and recognisable hierarchy exists to assist in place-making and orientation for all users as they move through the development & neighbourhoods.

Permeability and legibility

The conceptual driver in the design process was to contrast the organic sloping portion of the site (the western portion) with the more urban level portion of the site (the eastern portion). This conceptual composition of the design process has been brought through into the design and layout of the roads and streets.

Where levels permit it to occur, a high level of permeability throughout the site is achieved by creating pedestrian connections and access for all users throughout the development. Pedestrian and cycle paths are prioritised to destination areas of the site by providing an off-road series of interconnected paths which extends north through Neighbourhood 5 from its southern boundary, into Neighbourhood 2 and west to the proposed “Greenway” linkage. The Greenway then provides connectivity to the south and the Ballyhooly Road with all neighbourhoods along the Greenway having direct pedestrian connectivity. The Distributor Road while available to pedestrians and cyclist as a “way” does not have to be the only option for residents, occupants and those engaging with the open spaces and connections proposed. This design solution, the Greenway and Distributor Road maximises wayfinding through the scheme.

Where topography and levels do not allow permeability such as when embankments are created, high quality Homezones are designed to increase the sense of place and identity to each street by using cul-de-sacs. Connections with the adjoining Neighbourhoods is made as soon as levels allow. Connectivity is prioritised for pedestrian and cycle movement by a series of pathways from within neighbourhoods.

The street hierarchy is clearly defined by the Distributor Road from the Ballyhooly road that connects all the neighbourhoods together. This road has associated cycle and footpaths on both sides of the road to allow connectivity along the entire route. Two bus stops are also located along this road as destination points. Feeder roads lead into each neighbourhood from the distributor road with accompanying footpaths and end in more intimate Homezones.

A clear and recognisable hierarchy exists to assist in place-making and orientation for all users as they move through the development & neighbourhoods.

Management

Raised tables are proposed at important junctions along the distributor road and within neighbourhoods. These are important transition areas into the residential neighbourhoods and Homezones.

Homezone areas, controlled and uncontrolled crossing points are included at appropriate locations to ensure that vehicle speeds are kept to a minimum to create awareness of pedestrians and cyclists. All routes are overlooked where possible throughout the scheme & are designed to passively control traffic movement and speed by avoiding long stretches of roads. The winding nature of the distributor road and regular raised tables at neighbourhood entrances encourage slower vehicle speeds and create heightened awareness.

Cul-de-sacs have only been used in areas to create a safe and relatively traffic free residential environment where permeability is not possible due to site constraints. DMURS allows “cul-de-sacs” in instances where there is a concern about traffic movement but encourages the:

“movement towards more integrated and sustainable forms of development will result in a shift away from dendritic street layouts to highly connected networks which maximise permeability, particularly for pedestrians and cyclists. When designing new street networks

designers should implement solutions that support the development of sustainable communities. In general, such networks should:

- be based on layouts where all streets lead to other streets, limiting the use of cul-de-sacs that provide no through access.*
- maximise the number of walkable/ cycleable routes between destinations” .*

In two neighbourhoods, the western Neighbourhoods 1 and 4, cul-de-sacs have occurred where the site topography and Distributor Road layout (levels) that militate against direct pedestrian movement through the proposed Homezone; importantly, they mitigate against vehicular use and filter permeability. However, all these areas have short and direct pedestrian connectivity to the Greenway or neighbouring areas as a mitigation while the scheme seeks to maximise deliverable density in a sustainable manner. All other areas promote maximum pedestrian permeability and connectivity.

Homezone streets have tight radii at their entrance points with raised table crossings to indicate to all users the transition into the Homezone. Within the Homezones, streets are narrowed to 5.5m with the pedestrian priority surface material laid to remind drivers that the space is a Homezone with the focus on free movement for vulnerable users such as cyclists and pedestrians.

The greenway and urban park extension provide a large linear amenity space which is linked to the neighbourhood areas via a series of pedestrian and cycle paths. The pedestrian trails meander through the greenway and parkland to destination play areas situated off the main circulation route. The proposed pedestrian network increases connectivity through the site while also encouraging more activity and more social interaction between residents.

The free movement of pedestrians and cyclists is maximised by providing connectivity desire lines with pathways designed to allow for pedestrian and cyclist easy movement between each residential street, neighbourhood and the greater development.

These conscious design decisions have been made to create awareness and give priority to pedestrians and cyclists.

Block Sizes

In addition to a highly permeable layout, block sizes have been designed to achieve the optimum design standard of 80 m lengths.

Streetscapes

Homezones are separated from the distributor road with shared surfaces at selected intersections and areas & footpath configurations and verge planting. Feeder roads are 6 metres in width off the Distributor Road then narrow to 5.5 metres at strategic points and intersections with local streets. Homezone street widths are 5.5 metres with strategically placed pedestrian priority surface materials to remind drivers that they are in a home zone. Where streets end in cul-de-sacs, a shared surface with pedestrian priority is proposed to prioritise free movement of pedestrians.

Within Homezones, footpaths are raised max. 20mm and widened to 2.8m to allow for an added buffer area from vehicles and planted with trees at regular intervals to soften the edge. This allows for vehicle drivers to be made aware of their surroundings, pedestrians and cyclists.

Along Feeder roads, footpaths are raised to 125mm to allow a clear separation from the road and where possible a 1m tree planted grass verge is designed to create an added buffer zone and

protection as it is prioritized as the main circulation route in and out of neighbourhoods for pedestrians and vehicles.

The streetscapes within Homezones are designed to have houses create active edges with all streets within the development. Where houses are situated on corners of streets, a dual aspect is proposed.

Building heights are generally kept to 2 and 3 storeys within the Homezones, narrow streets and pedestrian priority surfaces. Footpaths are widened as previously noted by 1m buffer planting. A clear separation of public, semi-private and private spaces exist which enhance the overall sense of place and cohesiveness to the Homezones.

Enclosure

The scheme promotes strong sense of enclosure within the Neighbourhoods. The character of the enclosure to the Distributor Road / the school lands and the park is more open and layouts provide for overlooking from the residential areas and active streets with parallel residential parking, ground floor duplex and upper floor duplex and apartment overlooking.

Indicative School layouts demonstrate how a future school proposal would provide for a consistent sense of enclosure across on the Distributor Road.

Judicious use of street trees and planting is also employed throughout to enhance enclosure.

Landscape layouts are consistent with DMURS.

- Sparse planting has been used in linkage areas and the shared pedestrian / cyclist routes in Neighbourhood 2 and 5 so as to enhance its urban qualities.
- Smaller species are being proposed in close proximity to the street edge carriageway (i.e. to take account of overshadowing, growth restrictions).

Lighting

Public Lighting has been designed in accordance with the required standards to ensure the required Lux Levels are achieved in all parts of the scheme. Off-road pedestrian/cycle desire lines have also been included with lighting been designed to complement the proposed landscaping scheme.

Materials

Please refer to Architects Design Report.

Finishes

At all junctions and intersections within each of the Neighbourhoods, raised crossing consisting of permeable paving in some instances (inline with the SuDS strategy) and colour contrasted surfacing in others is proposed as a traffic calming feature. This change in material helps to promote the 'Homezone' concept.

Footways, Verges and Strips

As previously outlined footways and verges are provided throughout the scheme along all road types. In addition, off-road footways/cycle paths are provided through green areas promoting pedestrian permeability through the site in the direction of travel and shifting focus from the car.

Pedestrian Crossings

Pedestrian crossing points are provided on all pedestrian desire lanes where they interact with trafficked roads.

Corner Radii

The parameters for a design speed of 40km/h were used to produce the horizontal alignment as required by Cork County Council and are outlined in Table 4.3, DMURS. The minimum value used for horizontal curvature is 56m. Table 4.3 is highlighted in Image 10 below.

Image 10: Parameters for a design speed of 40km/h were used to produce the horizontal alignment as required by Cork County Council and are outlined in Table 4.3, DMURS

| HORIZONTAL CURVATURE | | | | | | |
|--|----|----|----|----|-----|-----|
| Design Speed (km/h) | 10 | 20 | 30 | 40 | 50 | 60 |
| Minimum Radius with adverse camber of 2.5% | - | 11 | 26 | 56 | 104 | 178 |
| Minimum Radius with superelevation of 2.5% | - | - | - | 46 | 82 | 136 |

| VERTICAL CURVATURE | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|
| Design Speed (km/h) | 10 | 20 | 30 | 40 | 50 | 60 |
| Crest Curve K Value | N/A | N/A | N/A | 2.6 | 4.7 | 8.2 |
| Sag Curve K Value | N/A | N/A | 2.3 | 4.1 | 6.4 | 9.2 |

Pedestrianized and Shared Surfaces

As previously outlined.

Cycle Facilities

A comprehensive network of cycle paths has been developed within the scheme, linking to the broader Ballyvolane area along desire lines such as schools, retail provision and sports clubs.

Carriageway Widths

To produce a robust design for the distributor road it is prudent to introduce elements of the Design Manual for Roads and Bridges and TII document Rural Road Link Design – DN-GEO-03031. As the horizontal radii are low and this road is likely to be used by heavy goods vehicle for rubbish collection or deliveries, table 3.2 in the TII document recommends lane widths are widened at curves to 4.5m for a 56m radii curve. In discussions with Cork County Council it was agreed that a relaxation to 3.6m

widening at tight bends be used to enforce traffic calming on this route. With regards the vertical alignment, a minimum K-value of 6.5 was used, taken from table 1.3 of the TII document, refer to Image 11 below.

Image 11: Rural Road Link Design Table 3.2 Minimum lane widths on curves

| Curve Radius (m) | Minimum Lane Width along curve (m) |
|------------------|------------------------------------|
| 500 | 3.35 |
| 400 | 3.50 |
| 350 | 3.50 |
| 300 | 3.50 |
| 250 | 3.50 |
| 200 | 3.65 |
| 180 | 3.65 |
| 160 | 3.65 |
| 140 | 3.75 |
| 120 | 3.80 |
| 100 | 3.95 |
| 90 | 4.00 |
| 80 | 4.10 |
| 70 | 4.25 |
| 60 | 4.40 |
| 50 | 4.65 |
| 40 | 5.00 |

Carriageway Surfaces

The proposed wearing course will be Clause 804 Type B and finished with 100mm Clause 916 Surface Course (AC 10 open surf 70/100 rec). The wearing course will include colour contrasted materials in traffic calmed areas and pedestrian priority zones.

Junction Design

All junctions have been designed in accordance with the Geometric Guidelines for the design of priority junctions and have been audited by qualified Road Safety Auditors.

Forward Visibility

Internal junctions and estate roads have been designed to provide forward visibility in accordance with DMURS. Main road junctions have been designed in accordance with the Design Manual for Roads & Bridges.

Visibility Splays

Visibility Splay drawings for each of the main junctions are included as part of the application. Internal roads are fully compliant with the DMURS standard. Junctions with the R614 Ballyhooly Road comply with the DMRB (Design Manual for Roads and Bridges).

Horizontal and Vertical Deflections

As previously outlined in Corner Radii.

Kerbs

All dropped kerbs will be constructed in accordance with the appropriate standard included as part of the Scheme Construction Details submitted as part of the application.

On-Street Parking



Elements of on-street parking have been introduced on the Main Distributor Road following consultation with the local authority.

6.4 Further consideration should also be given to the impact of the proposed traffic upon Ballyhooly road pending the delivery of connections in the wider Urban Expansion Area

Please refer to the accompanying Traffic Impact Assessment and Sections 6.1.1, 6.1.2 and 6.1.3 of this submission.

The proposal will allow for the widening of the Ballyhooly Road within the applicant's ownership so as to accommodate the Council road improvements.

Traffic modelling predicts that with the proposed enhancements that Cork City Council is to implement that the development can be serviced and that junctions locally will operate effectively.

7.0 The Matter Of The “Open Space, Parks, active open spaces, integration and connections surveillance and level changes”

The Board has asked for:

“Further consideration should be given in relation to the design rationale/justification outlined in the documents as it relates to the open space proposed particularly in the context of ensuring delivery of the public urban park as identified in the local area plan, the quantum and usability of the active open spaces on the site, integration and connections to the proposed public urban park, ensuring surveillance of the open spaces, and addressing level changes across the site. The further consideration of this issue may require an amendment to the documents and/or design proposals submitted”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- *design rationale/justification outlined in the documents as it relates to the open space proposed particularly in the context of ensuring delivery of the public urban park as identified in the local area plan.*
- *quantum and usability of the active open spaces on the site.*
- *integration and connections to the proposed public urban park.*
- *addressing level changes across the site.*

We shall address these in turn.

7.1 Design rationale for delivery of urban parkland

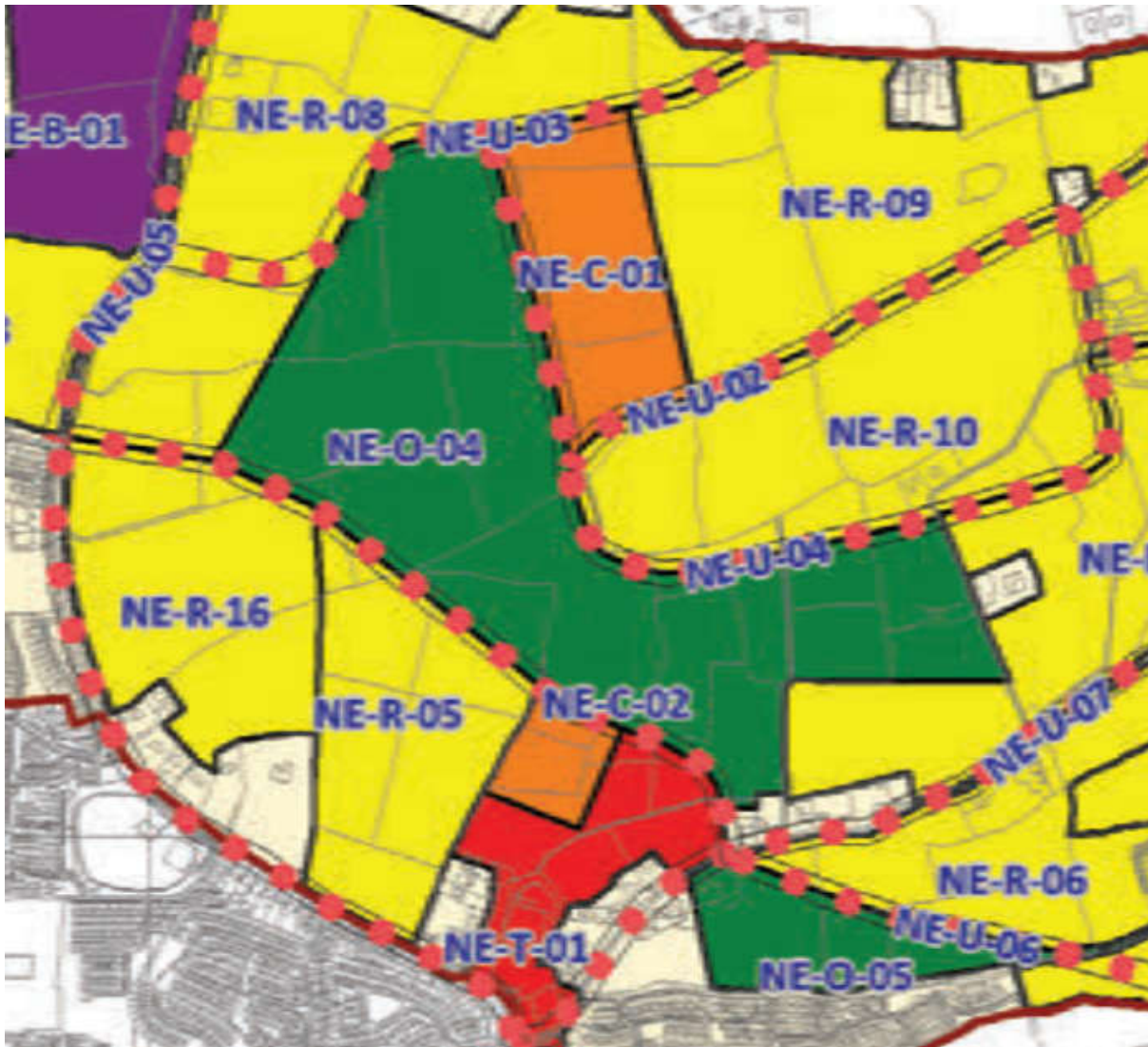
There are three components to the park provision. These are its location, size and its form.

- **Location**

The Phase 1 of the Urban Expansion Area expansion requires, according to the Local Area Plan, partial delivery of a 20 Ha Park.

This park area is contained in the NE-O-04 area of the site in a landlocked portion of the overall area; see Image 12 below. It can only be accessed from new roads. Therefore, it has to be delivered in conjunction with the local access / distributor road from the Ballyhooly Road (and or the Mayfield Kilbarry Link Road) scheduled for delivery in 2031 and, a housing / development proposal.

Image 12: Landlocked Park Area (NE-0-04 is 35.4 Ha. 20 Ha of this site is in the applicant ownership)



In developing a park, it must correlate to access and housing solutions presented both because it relies on the access being provide and because, from a design perspective, the park and housing must “speak” to each other.

- **Size**

From a size perspective, we are proposing a park area that is a pro rata area of space to housing proposed. The principle of the design / layout is to allow the progressive expansion of the formal park lands over time as required by the City Council so as to cater for population growth and housing expansion / provision in the Urban Expansion Area.

An approx. 3 Ha hectare park is to be provided as part of the planning consent equating to 15% percent of the lands zoned for a proposed 20 Ha *Urban Parkland* as sought by the Local Area Plan (Phase 1). This also correlates with the Urban Expansion Area provision being approx. 5000²⁵ units and the subject site supporting 750 units; requiring 15 per cent of the projected 20 Ha. park provision. A proposed Section 47 agreement has been developed with Cork City Council with respect to the

²⁵ At 35+ Units per Ha

reservation of residual park zoned lands (NE-O-04) to be availed of by the Council as required, as demand for park area increases.

This area of space is a manageable space allowing more effective management and control of the space by Cork City Council as the area expands. This approach has been agreed with Cork City Council Parks Dept and the space will be secured as needed so that the City Council can take it in charge in time.

The park land in this instance also interacts with the 110kv wayleaves. This space cannot be home to permanent buildings and as a result we have used this area as a greenway to promote connectivity. It is envisaged that in time that all 110 kv corridors traversing the Urban Expansion Area will be used to enhance connectivity or be used as open spaces.

- **Form**

The open space and park land areas cross hilly slopes. The lands are identified as a Passive Amenity Area (as opposed to Active Amenity Areas) in the Local Area Plan. The western side of the Park area is defined by the zoned area, topography, the need to provide good ambulant access at good walking gradients and the 110kv power line corridors.

All the above have been taken into account in the park design.

The park areas essentially “step up”, south west to north east, following the gradual rise in the land while introducing flowing walks to achieve the appropriate access gradients.

The design and layout of the park, allows for expansion into the adjoining zoned park lands which in turn connect to the School Zone NE-C-01 where, within the school campus area, there is potential for active amenity areas (playing pitches etc).

7.2 Quantum and usability of the active open spaces on the site

The active open spaces on the site include the proposed 3 hectare park as well as a range of green spaces within neighbourhoods throughout the site. These create a corridor of green spaces and cycleways that create a network of linkages. Overall, there is approx.

- 3.2 Ha of Public Open Space in the housing areas (15.2% Open Space) and 32% Open Space (over 5 Ha.) when the Greenway is included.

A key feature of the green network is a combined pedestrian / cyclist pathway which runs through the site providing opportunity for safe circulation between the park and the neighbourhoods removed from the Distributor Road (which itself has cycleways and pedestrian connectivity).

The landform through the urban park is configured to facilitate a range of spaces for kickabout and play activities, typically at 1:40 gradients which makes them ideal for such use. An outdoor gym facility and play area are provided in the park as destination attractions. Two “amphitheatre” structures are also provided in the park areas to provide additional opportunities for resting and socialising and benches will be positioned along the main circulation path.

The slopes and embankments arising from the formation of the flatter spaces will generally function as natural meadows and provide additional opportunity for exploration and informal play. An open aspect is to be maintained through the park to facilitate good visibility and passive surveillance from the adjoining neighbourhoods.

The open spaces within neighbourhoods are overlooked and easily accessible. In the eastern part of the site the relatively gentle gradients mean that all open spaces are available for a variety of kickabout and informal play. Two play areas are also provided for additional interest and activity.

In the western half of the site where gradients are more challenging, the open spaces are configured to provide useable flat areas typically with 1:40 gradients with adjoining embankments making up the level differences. The steepness of slopes varies but where gradients are more severe than 1:3 low protective fences or knee rails to be are provide at the edge of the useable spaces.

7.3 Integration and connections to the proposed public urban park

The urban park comprises the wayleave land associated with the 110kv overhead powerlines and an adjoining strip of land immediately to the east.

The eastern boundary of the new park, where it interfaces with the remainder of the lands zoned as urban parkland will be defined by a hedge-bank and fence line. This will facilitate maintenance and management of the park, with a view to it being taken in charge by Cork City Council, whilst also allowing progressive expansion of the park area into residual zoned lands.

Circulation and boundary infrastructure within the park is configured to accommodate ease of connectivity to the wider urban parkland at any time in the future.

The landscape masterplan indicates potential circulation and amenity provision in the wider urban parkland immediately to the east of the subject site.

7.4 Addressing level changes across the site

The landscape masterplan and site sections show how level changes across the site are dealt with by means of cut and fill measures to provide universal access and circulation through the site and along the urban parkland.

They also show how the landform is to be adjusted to provide flatter areas of ground for kickabout and play activities typically at gradients of 1:40. The plans also reveal how footpath connections can be provided to facilitate access to the wider urban parkland in the future.

8.0 The Matter Of The “Sustainable Residential Development in Urban Areas Guidelines”

The Board has asked for:

“Further consideration of documents as they relate to the layout of the proposed development particularly in relation to the 12 criteria set out in the Urban Design Manual which accompanies the Sustainable Residential Development in Urban Areas Guidelines and also reference to the Design Manual for Urban Roads and Streets. The matters of unit mix, the configuration of the layout, design and alignment of roads, how the development including consideration of the phasing arrangements contribute to the creation of a high-quality urban extension to Ballyvolane whilst respecting the existing landscape character of the site should be given further consideration. Further consideration of these issues may require an amendment to the documents and/or design proposals submitted”.

So as to aid the review of this matter we have chosen to breakdown the matter into a point by point review. The issues noted in the Board’s opinion include:

- *The 12 criteria set out in the Urban Design Manual which accompanies the Sustainable Residential Development in Urban Areas Guidelines.*
- *Design Manual for Urban Roads and Streets.*
- *Unit mix, the configuration of the layout, design and alignment of roads.*
- *How the development including consideration of the phasing arrangements contribute to the creation of a high-quality urban extension to Ballyvolane whilst respecting the existing landscape character of the site should be given further consideration.*

We shall address these in turn.

8.1 The 12 criteria set out in the Urban Design Manual which accompanies the Sustainable Residential Development in Urban Areas Guidelines

The proposed development has been designed having regard to the relevant National and Local planning and design policies.

The Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual make specific reference to 12 no. Urban Design Criteria. These criteria and how they apply to the proposed development are considered in the Architectural Design Statement that accompanies this submission to An Bord Pleanála.

8.2 DMURS

The manner of how the proposal relates to DMURS has been addressed in Section 6.3 of this letter. It is also referenced in the accompanying DMURS Statement.

8.3 Unit mix, the configuration of the layout, design and alignment of roads

The proposed development provides for a wide variety of house types and tenures which will offer new opportunities to prospective residents. The mix includes:

- 67 no. Detached houses
- 278 no. Semi-Detached houses
- 186 no. Terrace houses

- 153 no. Apartments
- 69 no. Duplex Units

The proposed unit mix is spread throughout the site with high concentration of terraces, duplexes and apartments located in neighbourhood 2 and 5 due to the proximity to the on-site bus stop and neighbourhood centre, to avail of associated services.

Neighbourhood 6 apartments are located close to the Ballyhooly Road with 2 bus stop options in close proximity to service the apartments; one on-site and the second along the Ballyhooly Road as indicated.

The proposed residential density and unit mix will meet the needs of current residents and future requirements.

A variety of layouts are proposed which offer different aspects to different areas of the site.

A variety of house types ranging from duplex's to detached units has been provided, with the range of units also providing for PV panels if required, different Master Bedroom arrangements (Type 11 units) if required by purchasers for some units (subject to the aspect of a property) and some units, the Type 5 Four Bed Detached, offering the option of a chimney if required.

In terms of house types, excluding the Duplex Units and Apartments, there are over 25 + different house types / variations. In addition, local specific designs are employed to reflect orientation to open space and movement routes. In the case of the duplex and apartment units, again, location specific and unique solutions are employed where necessary so as to provide for appropriate passive overlooking, orientation and amenity.

All the above, adds to the sense of character and uniqueness while employing similar design languages.

8.4 How the development including consideration of the phasing arrangements contribute to the creation of a high-quality urban extension to Ballyvolane whilst respecting the existing landscape character of the site should be given further consideration

Section 2 and Table 3.1 of this letter speak to the phasing and topographical concerns that informed the design and layout process.

Landscape design and the transformation of above ground design challenges such as the 110 KV corridors into an opportunity, through the creation of greenways, has been achieved. This sees the scheme located around a central spines of park, pedestrian and cyclist connectivity corridors which traverse the housing areas. This is also addressed in Section 1 and Section 7 of this letter.

Linkage potential and expansion of amenity areas and schools has also be accommodated so that community spaces are the heart of the area whilst distributor road penetration through the site has been kept to a minimum though rationalising linkages set out in the Cobh MD Local Area Plan.

9.0 Conclusion

Through a significant level of interaction between stakeholders, statutory bodies, Councils and the multi-disciplinary design team, the Longview development has undergone significant evolution to what is now before the Board.

The proposal has evolved from a site that for many years had lain idle, (despite its inclusion in plans for Urban Expansion for many years), to the initial layout proposed by Longview Estates Ltd to Cork County Council in early 2017, to subsequent iterations to An Bord Pleanála in late 2017, which in turn have been significantly altered as a consequence of that interaction, to its current layout.

While the core of the approach and process has been to ensure that the proposal is, in so far as it is possible, consistent with the adopted LAP, as well other local and national design and development guidelines, we are also trying to deliver a viable development that can;

- Deliver housing to meet a real and present need over the coming years.
- Develop lands in a sustainable manner that respects existing constraints and opportunities.
- Allow for adjoining lands to be opened up for further development.
- Provide for statutory plan objectives.
- Meet housing needs and Objectives in the Draft RSES.
- Provide and future proofs for the Cork Metropolitan Area Transport Strategy Objectives.
- Supports and is consistent with Irish Water objectives and investment in the area.

Any site layout and design has to have regard to the existing infrastructure and Detailed Topography, 110kV Infrastructure the potential alignment of the Mayfield – Kilbarry Link Road. These have all informed design choices that have led to the proposed layout.

In delivering this layout we are seeking to be consistent with all issues, parameters, opportunities and constraints that are present on site and in the surrounding area. In this respect, we ask the Board to understand that the site layout has sought to reflect feedback of the Council while also seeking to present a proposal that “works” having regard to topography and site arrangement.

Yours Sincerely



John Crean *BA Hons MURP Dip EIA Mgmt MRTPI MIPI*

Appendix A

The following is a review of properties, by land ownership, on the western side of the Ballyvolane Urban Expansion Area in response to ABP questions as to how the development in this zoned area is “naturally” sequenced; i.e. whether we are proposing a natural progression of development.

In considering the following, we ask the Board to not only think of the proposal in its local setting, but also in terms of the strategic manner in which the proposal facilitates and creates strategic opportunities for the Ballyvolane Urban Expansion Area to fulfil long standing objectives to create new residential areas in the Northside of the City.

The conventional approach to the natural development of lands reflects guidance for the zoning of lands in the first instance as set out in the Development Management Guidelines “DMG” (15 – Development Plans); there is no reference to phases of development, other than internally within a proposal in the Development Management Guidelines (“DMG”) (13 – Development Control);

DMG 15 states that the;

“Following the approach set out, a development plan should ensure that enough land will be available to meet anticipated development requirements and will be developed in a sequential and co-ordinated manner. This will avoid, for example, a situation where housing estates are built beyond the outer edges of existing built-up areas while intervening lands lie undeveloped resulting in deficiencies in terms of footpaths, lighting, drainage or adequate roads infrastructure”²⁶.

In response,

1. The Board will note that there are existing houses, housing estates and development lands further north, and west, of the application site. The zoning of the Urban Expansion Area in general and the Lahardane and Ballincolla townlands in particular is therefore consistent with the DMG provisions.
2. The site is the only site that is mandated to deliver access roads from the Ballyhooly Road to the east. The proposal constructs distributor roads NE-U-03 and NE-U-04. These provide access from the east to within the landholding and beyond, access to lands that are to be set aside for the Department of Education for schools to serve the entire area Urban Expansion Area, and open up the park area to future use. None of the lands to the south of the application site that are also located abutting the Ballyhooly Road are required to be developed so as to serve areas to the north.
3. The adopted Local Area Plan makes no reference to “internal” sequencing of the delivery of lands in the Urban Expansion Area other than to accommodate proposals that can “provide the necessary infrastructure (which) can be considered for permission”²⁷. The proposal provides such necessary infrastructure.
4. The phasing of delivery of lands in the Ballyvolane Urban Expansion Area is based on a “unit number” basis as opposed to the sequencing of lands. The initial phase of development in Ballyvolane identified in the Local Area Plan is based on 0-1174 Units (at the lower densities mandated by the Local Area Plan – the actual delivery possible could be higher subject compliance with National design guidance) being delivered along with enabling infrastructure

²⁶ Page 38, Development Management Guidelines 15, 2007

²⁷ Section 3.4.114, Cobh MD LAP

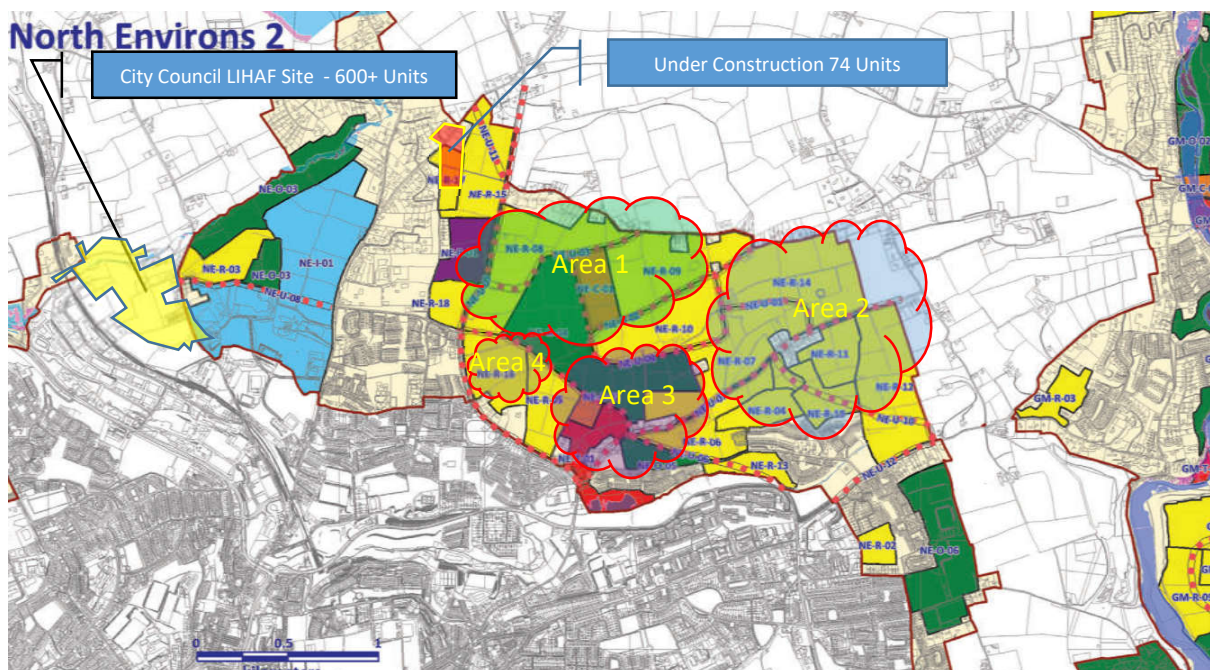
and the commencement of planning for infrastructure for various provisions such as roads and park areas. The proposal has the capacity to deliver a significant part of this number on the western side of the area Urban Expansion Area along with enabling infrastructure.

- The only logical progression of the initial tranche of units in the area Urban Expansion Area is where it is developed from the west, east or south. The following details the reasons case for developing from the western side off the Ballyhooly Road with the initial phase being the application area.

To assist the Board’s consideration of this matter the Figure A.1 below illustrates the general arrangement of strategic approaches to developing the lands in question. In real terms , there are four physical areas / zones that are identified for development but not all are sequentially suitable for development in the initial tranche of 0-1174 units envisaged in the Cobh MD Local Area Plan.

In the following sections we will consider Areas 1 through 4 so as to demonstrate that Area 1, the application zone, is the correct area to commence development.

Figure A.1 Development Zones



Area 1 - Progressing Eastwards from Ballyhooly Road

The Ballyvolane area Urban Expansion Area cannot be developed without Irish Water (“IW”) Foul Services Infrastructure.

This is recognised by the Local Area Plan which states that (Section 3.4.39);

“Waste Water Infrastructure to cater for future demand is inadequate as the North Environs is connected to the Waste Water Treatment Plant at Carrigrennan, Little Island. However, to facilitate the level of development planned for the North Environs major new investment is required to provide infrastructure to connect Ballyvolane (linking with Blarney and Monard) to Carrigrennan Waste Water Treatment Plant. Irish Water has responsibility for the provision of waste water infrastructure. Irish Water has taken a strategic view in relation to waste water collection and treatment. A detailed assessment into the provision of an adequate waste water disposal system including the necessary infrastructure is being prepared at present”.

IW have reviewed the proposal and the foul services demands in the area.

They can only advance investment in foul services where it is supported by private sector investment via Private Works Service Agreements (PWSA's) in the Ballyvolane Urban Expansion Area. The applicant is party to a PWSA with IW for the design and delivery of a Foul Pumping Station, and attendant infrastructure, at this site. We have included this PS in our application, and it is to be delivered for use by IW (who will take the facility in charge as part of their network).

This PS can provide for phased expansion to serve the residual lands in the area Urban Expansion Area, and Monard and Blarney in due course as needs arise and as IW needs to expand its services in line with development proposals.

This PS will also allow IW to improve their management of foul services and the direction of flows in this area of the City, allowing them to manage / redirect flows in, and to, the City Centre's foul services network to enable capacity for the western suburbs to be created in the City Centre network.

No other significant application is proposed in this area as part of a PWSA and as part of a funding solution to the infrastructure needs.

No other significant application is proposed in this area as part or as part of a solution to support the delivery of a Foul Pumping Station of the nature proposed. There is no IW business case for a Pumping Station without this development. Without this PS there is no development in the Catchment other than approx. 100 units in an area that has been identified as a strategic part of housing / population delivery in Cork City in both the County Development Plan, Local Area Plan, RSES and CMATS.

A smaller housing consent (17/6781)²⁸ which is also part of the PWSA has commenced construction and this is governed by a connection agreement with IW into the existing services network.

The immediate improvement of the Ballyhooly Road as part of Phase 1 is also provided for as part of this application by Longview Estates.

In summary Area 1 can provide:

1. IW Infrastructure.
2. Road Access into the Urban Expansion Area.
3. Ballyhooly Road enhancements.
4. Commence Park delivery for the entire Urban Expansion Area.

No other location can do this.

Area 2 – Progressing Westwards from Old Youghal Road / R615

This area can only be developed on a phased basis in the short to medium term as access from the east into the URBAN EXPANSION AREA is via a substandard road network. The roads and bus corridors in this area need to be improved / provided along with junction capacity. The area is also less connected to the urban area of the City as it is closer to Glanmire.

Land Assembly has taken place in this area and the lands are suitable for development subject to servicing and consent however, key part of Phase 1 objectives for the Urban Expansion Area can only

²⁸ Construction of 74 no. residential units comprising 23 no. detached 4-bed dwellings, 44 no. semi-detached dwellings of which 28 no. are 4-bed dwellings and 16 no. are 3-bed dwellings, and 7 no. townhouses of which 6 no. are 3-bed dwellings and 1 no. is a 2-bed dwelling and all associated site development works, foul and storm drainage including attenuation tank, and landscaping and amenity area. The proposed development incorporates 1 no. new access from the L2980 (Dublin Pike) and 1 no. new access from the Ballincollie Road with individual accesses to 13 of the units also from the Ballincollie Road.



be delivered to the west of the Urban Expansion Area, i.e. “Partial provision of the 20 Ha Public Park”. This land is located primarily to the west of the Urban Expansion Area. In addition, the lands to the west of the Urban Expansion Area provide a greater mix of land uses for the future Urban Expansion Area.

Area 3 - Progressing Northwards from Banduff / Rathcooney Road

This area has complex landownerships and higher order use zonings that are likely to become warranted / justified in the later phases of development in the Ballyvolane Urban Expansion Area. Town Centre and commercial uses are present along with educational uses.

The alignment and delivery of the Mayfield Kilbarry Link Road also has a profound impact on uses and mixes of development in this area as generally the lands are in question pending the resolution of an alignment in this area for that road.


The area is likely to drain to existing IW networks to the south but from capacity viewpoint will have to avail of the enhanced drainage infrastructure created by the Phase 1 lands and PS proposed as part of the Longview Estates proposal.


The Longview Estates proposal also creates the underlying population base to underpin commercial activities / uses envisaged by the zoning.

Area 4 - Progressing Northwards from Banduff / Rathcooney Road

Area challenged by 110 KV infrastructure and the final alignment of the Mayfield Kilbarry Link Road.


The area is also in fragmented ownerships.


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| Folio | CK2183F |
| Ownership | David Lane, Oakdene, Lahardane and Siobhan Carne |
| Location | Ballyhooly Road/ road to north of the site |
| Zoning | Existing built Up Area |
| Area | 0.2 Ha |
| Constraints | Land is occupied by an existing house on a small landholding. |
| Planning Permission | Ref. 432/73 – erection of a bungalow granted 13 th July 1973 |
| Summary | The site is too small to contribute to delivering Table 3.4.2 of the Cobh MD Local Area Plan. The site zoned as an “existing built up area” and is located north of the site on the Ballyhooly Road. |
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| Folio | CK74730F |
| Ownership | John Foley, Meadowpark Avenue, Ballyvolane |
| Location | Ballyhooly Road/ road to north of the site |
| Zoning | Existing built up area |
| Area | 0.4Ha |
| Constraints | Land is occupied by an existing house on a small landholding. |
| Planning Permission | Ref. 667/96 – erection of dwelling granted 5 th September 1996 |
| Summary | The site is too small to contribute to delivering Table 3.4.2 of the Cobh MD Local Area Plan. The site zoned as an “existing built up area” and is located north of the site on the Ballyhooly Road. |
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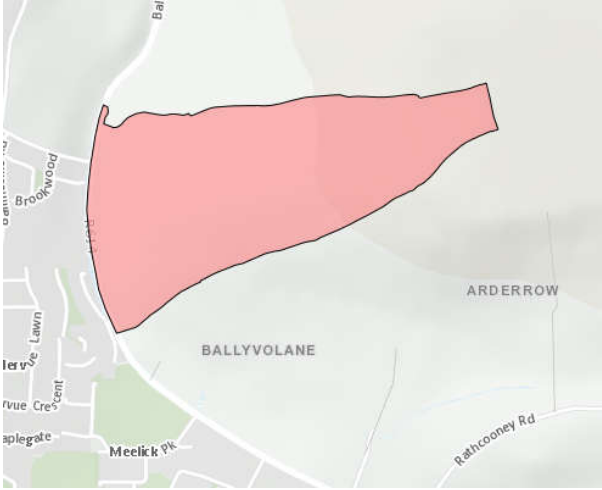
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| Folio | CK39713 |
| Ownership | Longview Estates Ltd |
| Location | Ballyhooly Road |
| Zoning | <p>Lands zoned as part of the Ballyvolane Urban Expansion Area. Lands about the Ballyhooly Road and existing infrastructure. Section 3.4.114 of the Cobh MD Local Area Plan states that “Where capacity in existing infrastructure exists, lands benefitting from this should be developed first. In the interim, development proposals that can provide the necessary infrastructure can be considered for permission”. The phasing of delivery of lands in the Ballyvolane Urban Expansion Area is based on a “unit number” basis as opposed to the sequencing of lands. The initial phase of development in Ballyvolane is based on 0-1174 Units being delivered along with enabling infrastructure and the commencement of planning for infrastructure for various provisions such as roads and park areas.</p> <p>This site has to be developed first as the landholding and application provides the only Service / Distributor Road identified in the Local Area Plan to service the western side of the Urban Expansion Area. The land holding site also provides the only location from where the City’s Northern Inner Distributor Road (as identified in CMATS and known on the Local Area Plan as the Mayfield Kilbarry Link Road) can commence.</p> <p>The proposal constructs NE-U-03 and part of NE-U-04. These service as Distributor Roads within the landholding, are designed to service and access lands that are to be set aside for the Department of Education for schools to serve the entire area Urban Expansion Area.</p> <p>No other landholding / folios off the Ballyhooly Road are mandated to deliver east / west connectivity sought in the Local Area Plan.</p> |
| Area | 37.5Ha |
| Constraints | <p>The application site is currently in agricultural use. The site has constraints as described in greater detail in the reports accompanying this planning application but nevertheless delivers the services and amenity infrastructure to support further URBAN EXPANSION AREA development. The topography is particularly challenging which requires access the route to satisfy Cobh MD Local Area Plan Objective NE-U-03, at acceptable DMURS compliant gradient, to be more circuitous than detailed in the MD Local Area Plan .</p> <p>However over the design period which commenced in 2017, the design team architects and engineers have through a series of iterations of the layout created a design solution that works with the sites constraints and opens up adjoining lands in the URBAN EXPANSION AREA through the development of a distributor road.</p> <p>The applicants have worked with Irish Water and have entered into a Project Works Services Agreement (PWSA) with Irish Water to service the area by way of a pumping station to be included on their lands in the proposed planning consent. Irish Water are satisfied that there is sufficient water supply capacity to accommodate the phased expansion of the area and that the initial planning for 1000+ units, as</p> |


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| | <p>envisaged under the agreed PWSA for the Ballyvolane Urban Expansion Area can be carried out.</p> <p>The site, if planning permission is granted, is servicable, accessible directly from the Ballyhooly Road and is capable of delivery over six proposed phases.</p> |
| <p>Planning Permission</p> | <p>No relevant planning permissions</p> |
| <p>Summary</p> | <p>The proposed development of this site is important to the delivery of infrastructure for the Urban Expansion Area. This land forms part of the PWSA with Irish Water and the proposal funds and creates the foul services infrastructrue that enables the servicing of the entire Urban Expansion Area.</p> <p>The proposal includes distributor road from Ballyhooly Road eastwards through the site which will open up lands in the Urban Expansion Area which are currently landlocked - Cobh MD Local Area Plan Objective NE-U-03.</p> <p>The site is servicable, accessible and capable of delivering densities that are being promoted by national planning policies and guidance.</p> |
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| Folio | CK54535F – |
| Ownership | Martin and Patrick O’Connell, Grenagh |
| Location | Ballyhooly Road |
| Zoning | Medium B Residential |
| Area | 0.2380 Hectares |
| Constraints | This folio is part of a defunct plant hire / storage yard which has been quarried out of the adjoining hillside. Due to this quarrying activity the site has no natural connectivity to the lands to the east, north and south other than via the potential for a pedestrian connection along the Ballyhooly Road. By itself, the site cannot help to meet the objectives set out in Table 3.4.2 of the Local Area Plan which are required prior to commencement of development. |
| Planning Permission | No relevant planning permission |
| Summary | The site cannot deliver any Table 3.4.2 Cobh MD Local Area Plan objectives on its own other than providing for a self contained residential development. |
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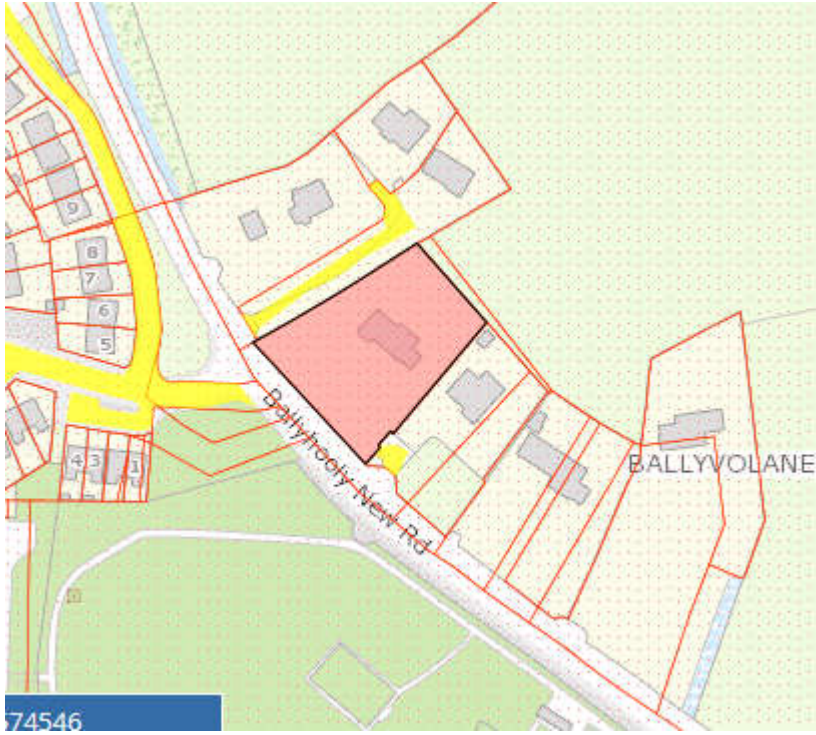
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| Folio | CK57524F |
| Ownership | Martin, Michael and Patrick O’Connell, Grenagh |
| Location | Ballyhooly Road |
| Zoning | Medium B residential |
| Area | 0.4400 Hectares |
| Constraints | This folio is part of a defunct plant hire / storage yard which has been quarried out of the adjoining hillside. Due to this quarrying activity the site has no natural connectivity to the lands to the east, north and south other than via the potential for a pedestrian connection along the Ballyhooly Road. By itself, the site cannot help to meet the objectives set out in Table 3.4.2 of the Local Area Plan which are required prior to commencement of development. |
| Planning Permission | No relevant planning permission |
| Summary | The site cannot deliver any Table 3.4.2 Cobh MD Local Area Plan objectives on its own other than providing for a self contained residential development. |
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|--------------------|--|
| Folio | CK12755F |
| Ownership | Waterrock View Ltd |
| Location | Ballyhooly Road |
| Zoning | Medium B residential, open space for public recreation as an urban park and proposed link road between Ballhooley Road and Mayfield. |
| Area | Plot 1 Area – 26.06 Hectares Plot 2 Area – 5.94 Hectares |
| Constraints | <p>These lands are within the applicant’s control. They were purchased to enhance pedestrian and cyclist linkages from the proposed development to Ballyvolane and onwards to the City Centre whilst also providing the natural location for the provision of the IW Foul Pumping Station to service the overall Urban Expansion Area.</p> <p>The lands are challenged by factors including:</p> <ul style="list-style-type: none"> Topography – steeply sloping. 110 KV lines (two no. and associated 50 m wayleaves). The proposed alignment of the Mayfield Kilbarry Link Road <p>These lands are, in particular the southern portion, are essentially sterilised by services corridors that traverses the parcel.</p> <p>They are being reserved free from development as a commitment to Cork City Council (by the applicant) until the final route and design of the Mayfield Kilbarry Link Road has been determined; the route’s alignment is currently indicated on these lands travelling in a south eastern direction from the junction of Lower Dublin Hill to the Banduff Road and onto the North Ring Road. The exact alignment will be dependinet on a route selection process that will adress gradient, cut / fill and interaction with the 110KV Pylon locaitons.</p> <p>The route is identified within the Cobh Local Area Plan as something that the Council must ‘plan and provide’ for in the intial phase of the Ballyvolane Urban Expansion Area.</p> <p>On its own the lands cannot deliver the volume of development that is needed to fund the IW infrastructure that opens up the area for residential deveopment.</p> <p>Lands zoned as part of the Ballyvolane Urban Expansion Area. Lands abut the Ballyhooly Road and exisatign infrastrucutre. Section 3.4.114 of the Cobh MD Local Area Plan states that “Where capacity in existing infrastructure exists, lands benefitting from this should be developed first. In the interim, development proposals that can provide the necessary infrastructure can be considered for permission”. The phasing of delivery of land sin the Ballyvolane URBAN EXPANSION AREA is based on a “unit number” basis as opposed to the sequencing of lands. The initial phase of development in Ballyvolane is based on 0-1174 Units being delivered</p> |


| | |
|-----------------------------------|---|
| | <p>along with enabling infrastructure and the commencement of planning for infrastructure for various provisions such as roads and park areas.</p> |
| <p>Planning Permission</p> | <p>No relevant planning permission</p> |
| <p>Summary</p> | <p>These lands facilitate pedestrian and cyclist connections from the site to Ballyvolane and the City Centre. The lands have been reserved free of development for now to accommodate the future provision of the Mayfield Link Road, the alignment of which has yet to be finalised.</p> |
| |  <p>The map displays a red-shaded area in Ballyvolane, Cork. The area is bounded by Brookwood to the west and Meelick Park to the south. To the east, the area borders Arderrow. The map also shows Rahrrooney Rd and other local streets like Lave Lawn and Meelick Pk.</p> |


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|----------------------------|---|
| Folio | CK34123 |
| Ownership | Ann Morgan, Ballyvolane Road |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.4400 Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | Ref. 01/1463 - 2 no. dwellings granted 29/11/2001 |
| Summary | The site is too small |
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|----------------------------|--|
| Folio | CK100576F |
| Ownership | Anne Morgan and Patrick Cronin, Ballyvolane Road |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.2Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | <p>ref 04/6371 – permission for a dwelling granted</p> <p>Condition - entrance shall be recessed a minimum of 4.5m from existing front boundary fence and side wall shall be splayed at an angle of 45 drgs and walls and piers shall not exceed a height of 1m over the level of the adjoining public road (sight distance for emerging traffic)</p> <p>Before development commences, the exact set back line of the existing road boundary and details of the construction of fence shall be agreed on site with the Councils Road Engineer.</p> |
| Summary | The site is too small |
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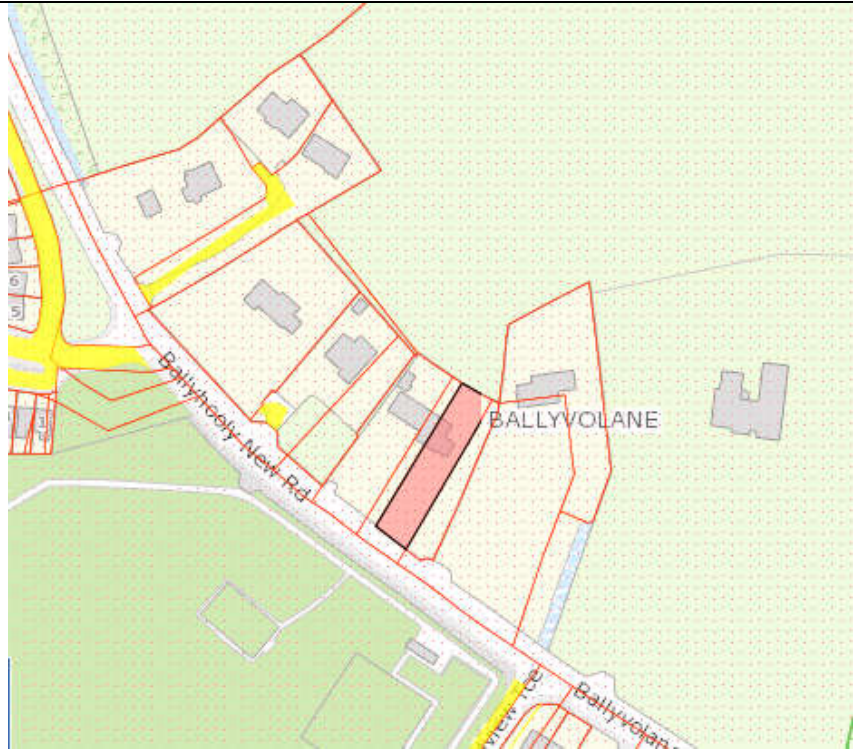
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| Folio | CK130863F |
| Ownership | Simon Reddy, Ballyhooly Road |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.3Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | <p>Ref. 04/3713 for demolition of bungalow andf construction of 2 no. dwellinghouses and revised entrance granted 24/11/2004</p> <p>Condition - Existing Road Boundary fence shall be set back in accordance with the plans submitted on 22/09/2004 and to the satisfaction of the Council's Area Engineer</p> <p>Condition - Entrance shall be recessed a minimum of 4.5m from the existing boundary fence and side walls shall be splayed at an angle of 45 drgs and walls and pillars shall not exceed a height of over 1m over the level of the road.</p> |
| Summary | The site is too small |
| |  |


| | |
|----------------------------|--|
| Folio | CK130842F |
| Ownership | Kevin Reddy and Marie Reddy, Ballyhooly Road |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | Just over 0.1Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | <p>Ref. 04/3713 for demolition of bungalow and construction of 2 no. dwellinghouses and revised entrance granted 24/11/2004</p> <p>Condition - Existing Road Boundary fence shall be set back in accordance with the plans submitted on 22/09/2004 and to the satisfaction of the councils Area Engineer</p> <p>Condition - Entrance shall be recessed a minimum of 4.5m from the existing boundary fence and side walls shall be splayed at an angle of 45 dgs and walls and pillars shall not exceed a height of over 1m over the level of the road.</p> |
| Summary | The site is too small |
| |  <p>The map shows an aerial view of the Ballyvolane area in Cork. A road labeled 'Ballyhooly New Rd' runs diagonally from the bottom left towards the top right. A specific plot of land is highlighted in red, situated between the road and a residential area. The word 'BALLYVOLANE' is printed in the upper right portion of the map. The map also shows other residential plots, some with buildings, and a green field area.</p> |

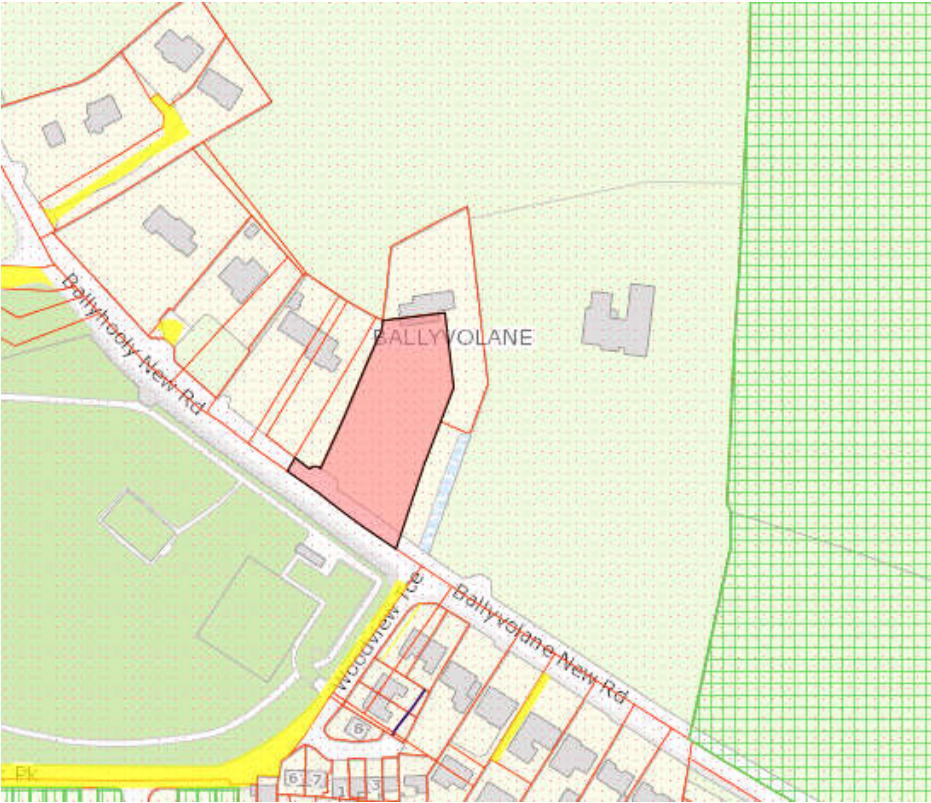
| | |
|----------------------------|--|
| Folio | CK130842F |
| Ownership | Kevin Reddy and Marie Reddy, Ballyhooly Road |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.1Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | <p>Ref. 04/3713 for demolition of bungalow and construction of 2 no. dwellinghouses and revised entrance granted 24/11/2004</p> <p>Condition - Existing Road Boundary fence shall be set back in accordance with the plans submitted on 22/09/2004 and to the satisfaction of the councils Area Engineer</p> <p>Condition - Entrance shall be recessed a minimum of 4.5m from the existing boundary fence and side walls shall be splayed at an angle of 45 dgs and walls and pillars shall not exceed a height of over 1m over the level of the road.</p> |
| Summary |  |

| | |
|----------------------------|---|
| Folio | CK55994 |
| Ownership | Mary Joe Hennigan, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.1188 Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | Ref. 02/1551 – one and a half storey extension granted 23/07/2002. No record of parent application. |
| Summary | The site is too small. |
| |  |

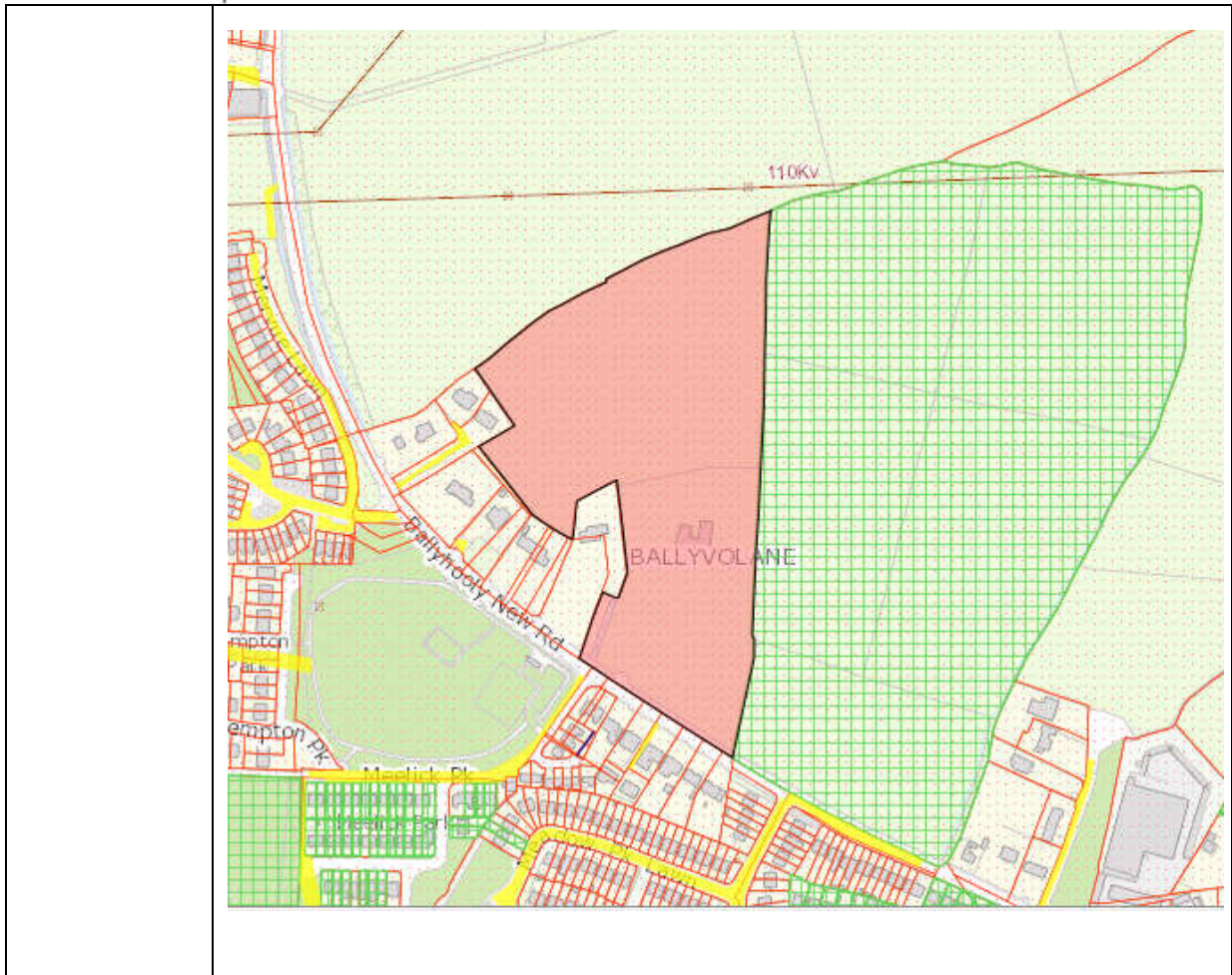
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|----------------------------|---|
| Folio | CK39773 |
| Ownership | Rosemary Dale, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | Just under 0.1Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | Ref. 02/1551 – one and a half storey extension granted 23/07/2002. No record of parent application. |
| Summary | The site is too small. |
| |  |

| | |
|----------------------------|---|
| Folio | CK142969F |
| Ownership | Dennis Hennigan, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | Jusdt over 0.1Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | Ref. 02/1551 – one and a half storey extension granted 23/07/2002. No record of parent application. |
| Summary | The site is too small to achieve objectives of the Local Area Plan. |
| |  |

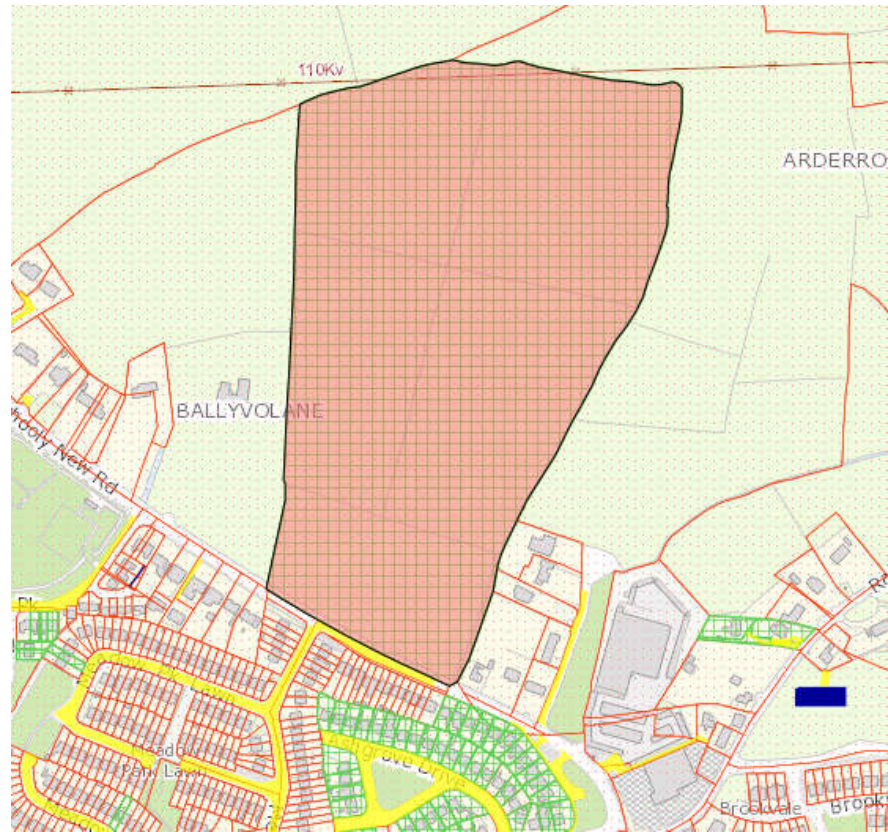
| | |
|----------------------------|---|
| Folio | CK142969F |
| Ownership | Dennis Hennigan, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | Approx 0.1Ha |
| Constraints | The site is occupied by an existing house. The landholding due to its size would not be able to accommodate the required densities or number of units to help to meet the objectives set out in Table 3.4.2 of the Local Area Plan. |
| Planning Permission | Strip of land forms boundary associated with above planning application ref. 02/1551 |
| Summary | The site is too small to achieve objectives of the Local Area Plan. |
| |  |

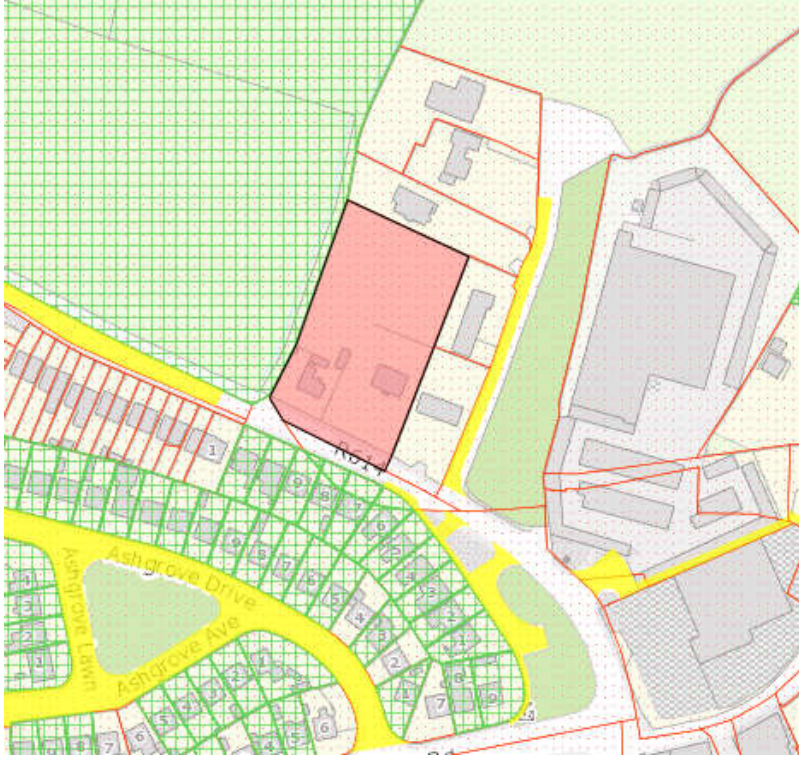
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|----------------------------|---|
| Folio | CK53643 |
| Ownership | Frederick James Kenneth Dale and Rosemary A Dale, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.328 Ha |
| Constraints | There is an existing hosue on site. This is a small landholding in the existing built up area that would not be capable of achieving the ibjectives of the Local Area Plan. |
| Planning Permission | No known planning history. |
| Summary | The site is too small to achieve objectives of the Local Area Plan. |
| |  |

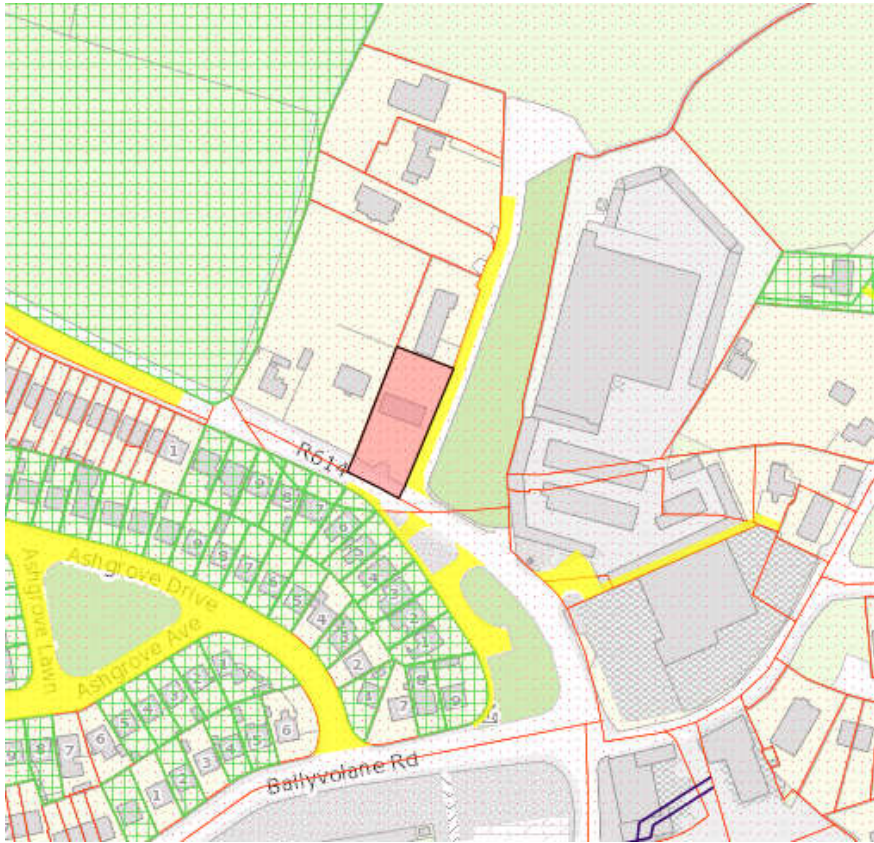
| | |
|----------------------------|---|
| Folio | CK56102F |
| Ownership | Michael and Carmel Murphy, 47 Meelick Park, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area/ NE-R-16 Medium B Residential |
| Area | 5.18 Ha |
| Constraints | The site is partially within the the medium B residential zoning. Howvere there is an existing house on site with a recent permission for another one. Accesss to the residentially zoned land could therefore be a an issue from the Ballyhooly Road. This part of the site is landlocked without access from the Ballyhooly Road |
| Planning Permission | No record of planning permisison for original house (family home) on site. Ref. 17/5783 – construction of a two storey dwelling Condition - Entrance shall be recessed a minimum of 3m behind new fence line and side walls shall be splayed at an angle of 45 drgs. and walls and piers shall not exceed a height of 1m over the level of the adjoining public road. |
| Summary | The part of the site closest the Ballyhooly Road is developed with an existing house and permission for an additional one. While the rear portion of the site is zoned for medium B residential, access from the Ballyhooly Road is a constraint and this part of the site may only come forward as lands to the north or south / south east of it are developed. The site is not required to provide any access to the lands to the north nor is it proposed to be develeped at a scale that will contribute to Irish Water infrastructure solutions. |



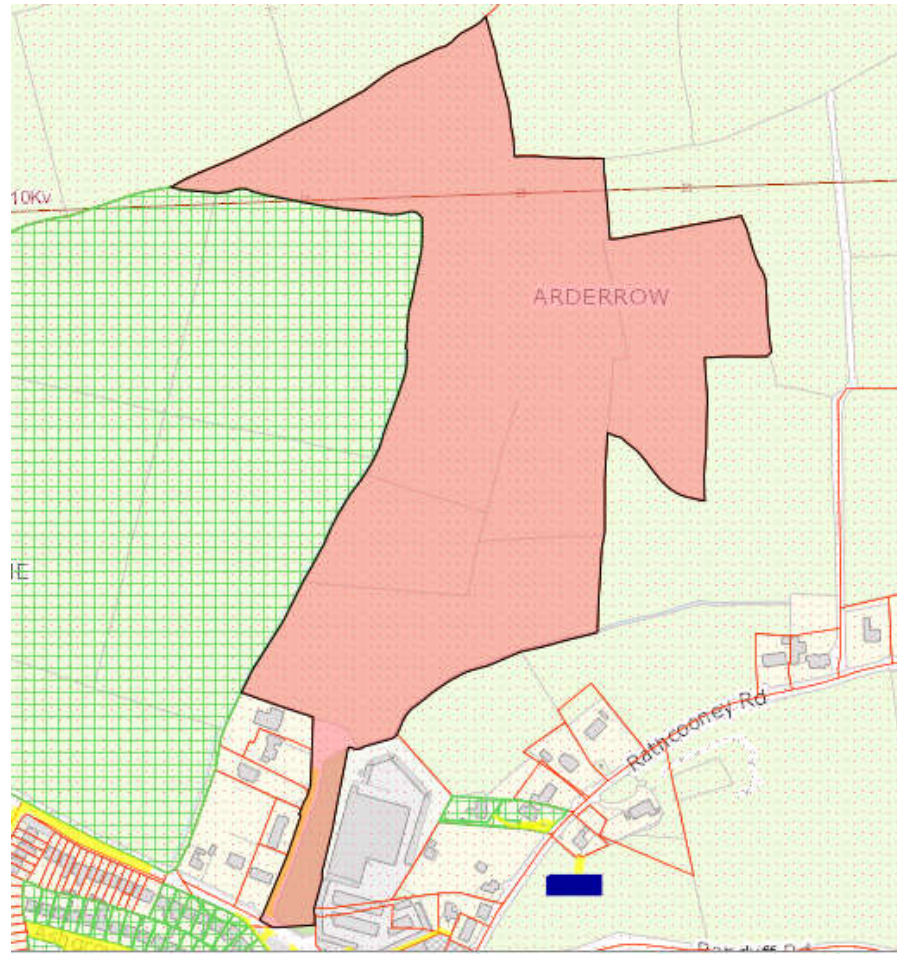
| | |
|----------------------------|---|
| Folio | CK29725 |
| Ownership | Patrick and David Kiely |
| Location | Ballyhooly Road |
| Area | 12.54 Hectares |
| Zoning | NE-R-05 – High and Medium A Residential Development |
| Constraints | <p>Land in Agricultural Use.</p> <p>Potentially constrained by the proposed alignment of the Mayfield Kilbarry Link Road which will run across the north of the landholding depending on detail design of alignment.</p> <p>No public plan to develop the site, potentially constrained by access arrangements and circulation routes leading to constraints on nett density.</p> <p>Not part of PWSA with IW for the delivery of infrastructure in the area.</p> <p>Per unit cost attributable to the delivery of IW infrastructure if dependent on this site alone would be very high and would compromise viability if sequential development of lands out from Fox and Hounds is advocated.</p> <p>PWSA lands will deliver services upgrades to benefit this area.</p> <p>Impacted by 110 kv wayleaves.</p> <p>Small land holding unable to deliver or provide for any other objectives / targets of the Table 3.4.2 Cobh MD Local Area Plan.</p> |
| Planning Permission | None |
| Summary | <p>PWSA lands will deliver services upgrades to benefit this area.</p> <p>Site cannot deliver Table 3.4.2 Cobh MD Local Area Plan Phase 1 objectives on its own.</p> <p>The site will benefit from the Ballyhooly Road upgrades generated by the applicant's proposal.</p> |



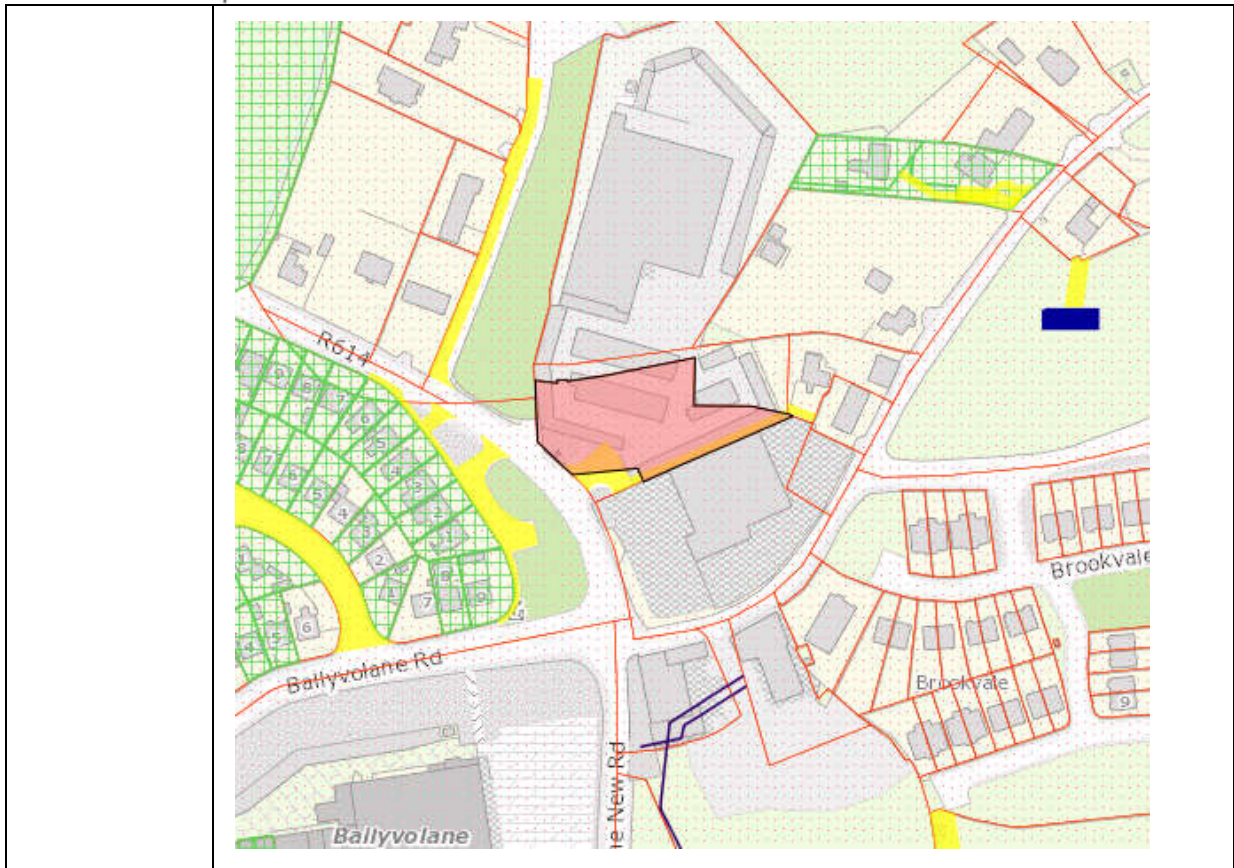
| | |
|----------------------------|---|
| Folio | CK34116 |
| Ownership | Kate Kinniery, Arderrow |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.4Ha |
| Constraints | The site is occupied by existing houses. Site is too small to help deliver the objectives set out in Table 3.4.2 Cobh MD Local Area Plan. |
| Planning Permission | No known planning history |
| Summary | The site is too small to help achieve the objectives of the Local Area Plan. |
| |  |

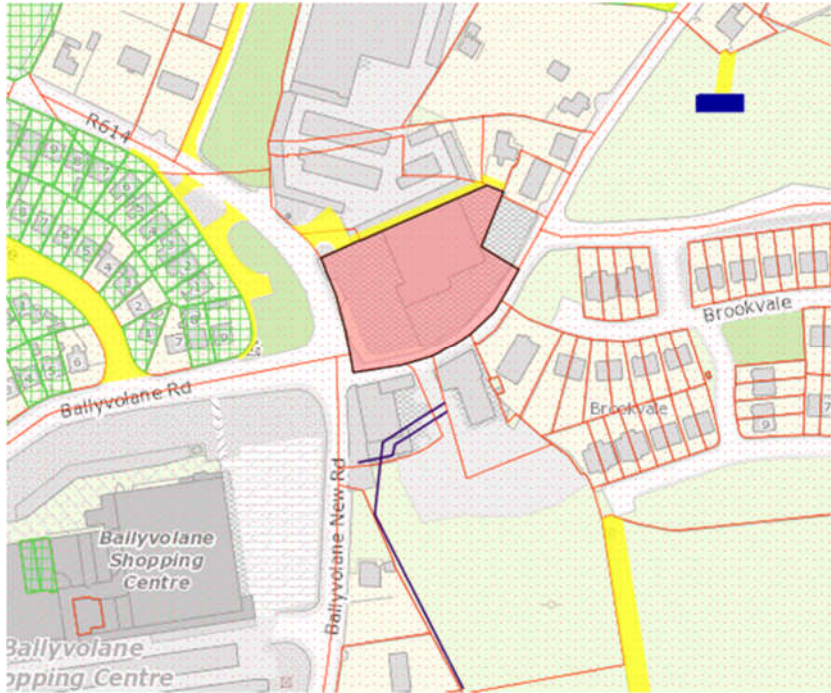
| | |
|----------------------------|---|
| Folio | CK9577F |
| Ownership | Gerrard Reynolds, 8 Audley Place, Patricks Hill, Catherine O'Shea, Arderrow, Ballyvolane |
| Location | Ballyhooly Road |
| Zoning | Existing Built Up Area |
| Area | 0.1Ha |
| Constraints | The site is occupied by an existing house. Site is too small to help deliver the objectives set out in Table 3.4.2 Cobh MD Local Area Plan. |
| Planning Permission | No known planning history |
| Summary | The site is too small to help deliver objectives of the Local Area Plan. |
| |  |

| | |
|----------------------------|--|
| Folio | CK5083 |
| Ownership | Sheila Beecher of 3 Margaret Street, Liam O’Shea of Arderrow, Ballyvolane, Timothy O’Shea of Knickboy, Carrignavar, John O’Shea of Arderrow, Ballyvolane, Mary Cronin of Arderrow, Ballyvolane and Catherine Reynolds of Arderrow, Ballyvolane (Full owners as tenants in common) |
| Location | Ballyhooly Road |
| Zoning | <p>NE-T-01 –</p> <p>Provide a district centre with provision for an appropriate range and scale of retail and commercial facilities to support the new population and taking into consideration the existing retail developments at Fox and Hounds, Dunnes Store and Lidl. The site should also allow for the development of a health centre and community hall/facility for the new residents. The existing neighbourhood centre at the Fox and Hounds will form part of the district retail Centre subject to the resolution of a number of issues.</p> <p>NE-O-04 - Open Space for public recreation as an Urban Park. The amenity parkland should provide passive amenity for residents of the North Eastern suburbs and the site. It should also contain the necessary walkways and cycleways for accessibility between residential, business, retail and community uses.</p> <p>NE-C-02 - Proposed primary school.</p> |
| Area | Approx. 11.5Ha |
| Constraints | <p>The site is impacted by the potential alignment of the Mayfield Kilbarry Link Road and impacted by 110 kv wayleaves. Any residential development as part of the district centre would be limited as Local Area Plan sees the district centre as mainly retail and commercial to support the new population.</p> <p>The land is in multiple ownerships.</p> |
| Planning Permission | No recent relevant planning history |
| Summary | The site is not zoned for residential development and any residential development as part of the district centre zoning is likely to be limited. The site is constrained by the Mayfield Kilbarry Link Road alignment and 110 kv wayleaves. |



| | |
|----------------------------|---|
| Folio | CK97930F |
| Ownership | Lidl Ireland GMBH, Great Connell Road, Newbridge, Kildare |
| Location | Ballyhooly Road |
| Zoning | NE-T-01 – Provide a district centre with provision for an appropriate range and scale of retail and commercial facilities to support the new population and taking into consideration the existing retail developments at Fox and Hounds, Dunnes Store and Lidl. The site should also allow for the development of a health centre and community hall/facility for the new residents. The existing neighbourhood centre at the Fox and Hounds will form part of the district retail Centre subject to the resolution of a number of issues. |
| Area | 0.2410 Ha |
| Constraints | Site already developed and built on. |
| Planning Permission | A number of applications by Lidl Ireland, the most recent and relevant being Cork City Council ref. 165477 - Development comprising the demolition of 1 no. building accommodating an existing Lidl Licenced Discount Foodstore (1,749 sq m Gross Floor Area with 1,391 sq m Net Retail Sales Area) and a disused retail unit formerly occupied by the New Furniture Centre (970 sq m Gross Floor Area with 776 sq m Net Retail Sales Area), and the construction of a new mono-pitched Licenced Discount Foodstore with ancillary infrastructure and associated site development works (all totalling 2,977 sq m Gross Floor Area and ranging in height equivalent from 1 to 2 storeys) granted 13/09/2016 |
| Summary | The site is already developed as part of the Lidl store which has been redeveloped in recent years. |



| | |
|----------------------------|---|
| Folio | CK9578F |
| Ownership | Liam and Marion O'Regan, Montenotte |
| Location | Junction of Ballyhooly Road and Rathcooney Road/ Fox and Hounds Junction |
| Zoning | <p>NE-T-01 –</p> <p>Provide a district centre with provision for an appropriate range and scale of retail and commercial facilities to support the new population and taking into consideration the existing retail developments at Fox and Hounds, Dunnes Store and Lidl. The site should also allow for the development of a health centre and community hall/facility for the new residents. The existing neighbourhood centre at the Fox and Hounds will form part of the district retail Centre subject to the resolution of a number of issues.</p> <p>NE-U-07 Upgrade of the Rathcooney Road in tandem with the development of the Ballyvolane Urban Expansion Area.</p> |
| Area | 0.7430 Ha |
| Constraints | Site is a brownfield site and has a commercial zoning. |
| Planning Permission | No relevant planning history |
| Summary | Any residential as part of the district centre would be very limited as the Local Area Plan the retention and expansion of the existing Lidl and Dunnes (Ballyvolane neighbourhood centre) as a district centre with retail and commercial uses to serve the new population in the urban expansion area. |
| |  |



Appendix B

LONGVIEW ESTATES LTD
MULTI-UNIT RESIDENTIAL DEVELOPMENT, BALLYVOLANE, CORK

Cork City Council

Project Brief v3



CORK CITY COUNCIL
INFRASTRUCTURE DEVELOPMENT

PROJECT BRIEF

**For the provision of Engineering Design Team Services relating to the design and delivery of the
BALLYVOLANE STRATEGIC TRANSPORT CORRIDOR PROJECT: NORTH RING
ROAD TO BALLINCOLLY**

JUNE 2019

1



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Appendix C

LONGVIEW ESTATES LTD
MULTI-UNIT RESIDENTIAL DEVELOPMENT, BALLYVOLANE, CORK

John Crean

From: Edith Roberts <edith_roberts@corkcity.ie>
Sent: 16 September 2019 16:23
To: John Crean
Subject: RE: Bus Corridors

John,

Nothing on old youghal road at the moment. However the junction at the Glanmire end forms part of the Glanmire Roads Improvement scheme (P4)
CMATS is not yet approved by NTA so Bus connects hasn't started yet.

Regards
Edith

From: John Crean [mailto:John.Crean@temporis.ie]
Sent: 16 September 2019 15:59
To: Edith Roberts
Subject: Bus Corridors

Edith

Don't know if you can answer this but is there any tender out, as per the Ballyhooley Rd, for the Old Youghal Road / R615 for bus connects style bus lanes?

John Crean

Temporis Limited, Unit 74, Penrose Wharf, Penrose Quay, Cork, T23 HF51
Direct: +353 21 6017636 | Main: +353 21 6010286 | Mob: +353 86 8222896
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TEMPORIS
SUSTAINABLE RETURNS

Appendix D – Parks Dept Correspondence

John Crean

From: Liam Casey <liam_casey@corkcity.ie>
Sent: 18 September 2019 10:26
To: John Crean
Subject: RE: Longview Estates - Irish Water

Hi John,
Confirm I have no objection to a wayleave through Glen Valley Park on condition that it doesn't compromise or injure the amenities in the park. The implications, if any, will be considered following your scoping and survey of the route.

Regards,

Liam.

*LIAM CASEY
SENIOR EXEC PARKS SUPT
PARKS, LANDSCAPE & CEMETERIES DIVISION
CORK CITY COUNCIL
CITY HALL
CORK*

*TEL...0214924275
0862636346*



Comhairle Cathrach Chorcaí
Cork City Council



European Union
European Regional
Development Fund



From: John Crean [mailto:John.Crean@temporis.ie]
Sent: 17 September 2019 12:28
To: Liam Casey
Subject: Longview Estates - Irish Water

Liam

Thanks for the meeting Friday 13th.



LONGVIEW ESTATES LTD

MULTI-UNIT RESIDENTIAL DEVELOPMENT, BALLYVOLANE, CORK

As discussed, and as presented at the SHD Meeting with ABP, City Council and Cork County Council, we are including the IW Pumping Station to service the UEA in the application. This will be served by a rising main that will be located in the public road. IW have statutory powers to locate the rising main in the public road; under the Water Services Act.

This rising main will go, from the pumping station, south along the Ballyhooley Road and onto the R635 Cork North Ring Road to allow onward connection to a point near the junction of the Old Youghal Road / R615 & R635 Cork North Ring Road.

An alternate route to the road may be to locate this rising main in the undeveloped Glen Valley park area to the east of the Ballyhooley Road (north of the R635) as IW already have foul mains in this area. We would like to take account of this potential route in our EIAR but obviously this would, if it were to be implemented require detailed design and appropriate easements (Wayleaves) over the route from Cork City Council Parks Dept.

Could you confirm that you would be agreeable to such easements (Wayleaves).

John Crean

Head of Housing and Planning

Temporis Limited, Unit 74, Penrose Wharf, Penrose Quay, Cork, T23 HF5 1
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LONGVIEW ESTATES LTD
MULTI-UNIT RESIDENTIAL DEVELOPMENT, BALLYVOLANE, CORK

Appendix E Drainage Dept Email

John Crean

From: Simon Lyons <simon_lyons@corkcity.ie>
Sent: 09 December 2019 15:22
To: kmanley
Cc: Helena O'Riordan; John Crean; Shane Moriarty
Subject: RE: Longview Residential Development Ballyvolane_Drainage Section Commentary

Hi Ken,

Resending the below email to provide clarity on our observations.

Firstly, I am satisfied with the storm water drainage / management and SuDS measures proposals for the development.

In addition to the items you have listed below, I note from our meeting that there will be more detailed work to be completed on the seepage issues (JBA) and flows reaching the existing Kempton Park culvert and the smaller culvert beneath the local road further north; however, I am satisfied with where these items are at, at this planning stage (mainly due to the Qbar limitation)...we can finalise details prior to finalising the detailed design.

I also note from our meeting that attenuation tank sizing is currently based on conservative assumptions (and hence, considered a robust design). I am satisfied with the proposal to finalise the tank sizing post-planning, when additional local site investigation information will enable you to make more accurate assertions about SuDS measures (e.g. infiltration via swales) and potentially take some benefit from this...I have no issue with this approach, only that it is agreed before commencement.

There may also be a number of pipeline / manhole routes that are subject to a value engineering exercise; again, I have no issue here, as this will not materially change anything.

In general, as discussed in our meeting, the engineering information to be submitted as part of the application is sufficient for the purposes of the Drainage Section's decision making process and to support us in the assessment of the EIAR. Our observations will then form part of the CE report to be submitted to ABP.

Other than these points, and as I mentioned in our meeting, the design looks robust and I thank you for engaging with us here in Drainage and responding to our concerns in the manner and detail you have.

Regards,

Simon Lyons
Senior Executive Engineer
Environment - Water Services (Drainage)
Cork City Council
City Hall
Cork
T12 T997

Tel: 021 - 492 4756
Mob: 086 - 4178569
Fax: 021 - 492 4006
Email: simon_lyons@corkcity.ie
Web: <http://www.corkcity.ie>



Comhairle Cathrach Chorcaí
Cork City Council

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Tá an post leictreonach seo, maraon le haon latáin ceangailte leis, príobháideach agus faoi rún agus tá úsáid an ábhair úd ceadaithe dóibh siúd amháin ar a raibh an t-ábhar dírithe ó thús. D'fhéadfadh ábhar lena mbaineann úinéireacht, eolas atá faoi rún nó príobháideacht a bheith sa teachtaireacht seo. Níor chóir d'aon dream eile cóipeáil, tagairt do, atóráil ná úsáid a bhaint as an ábhar seo. Munaer tuas an té lena mbaineann sé, ba chóir dul an t-íocht seo a scríosadh ó do rionnaire agus aon latáin a tháinig leis maraon le cóipeanna eile a bheadh déanta agat, agus cuir in iúl don té a sheolt chuagat i gan mhoill. Gabhaimid ár mbuiochas leat.

From: Ken Manley [<mailto:kmanley@mhl.ie>]
Sent: 26 November 2019 16:36
To: Simon Lyons; John Crean; Shane Moriarty
Subject: Longview Residential Development Ballyvolane

Hi Simon,

Further to our meeting on the 21 November 2019 where we presented the detail of our engineering solution for the Ballyvolane proposal, we discussed the design solution which generally allowed for:

1. Attenuation of each phase of development to QBar
2. SuDS features in each phase of development which have not been accounted for in the run-off calculations (factor of safety)
3. The use of Hydrocarbon interceptors in advance of each attenuation tank.
4. The use of the stormcell attenuation system or similar approved.
5. The use of groundwater recharge infiltration where conditions allow.

Can you confirm that the above is generally acceptable. As discussed, the proposed engineering solution presented is a very robust design with additional contingencies built in so as to mitigate impacts downstream.

We note that you may have comments on the full application once it is submitted for reporting and we will welcome those as we will be looking to ensure that the detail of the as built design solution, post compliance, is to the City Council's satisfaction for the purpose of Taking in Charge".

Kind Regards,

Appendix F Density Nett Calculation Layout (Refer also to Architects Design Statement)

Residential Density

The net density across the proposed site will be 35.70 units per hectare. The density is in accordance with the: Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, having regard for outer Suburban / "greenfield". The density of the development will vary across the proposed neighbourhoods due to the topographical challenges of the sloping portion of the site.

The neighbourhoods created, provide a series of distinct character areas with varying densities.

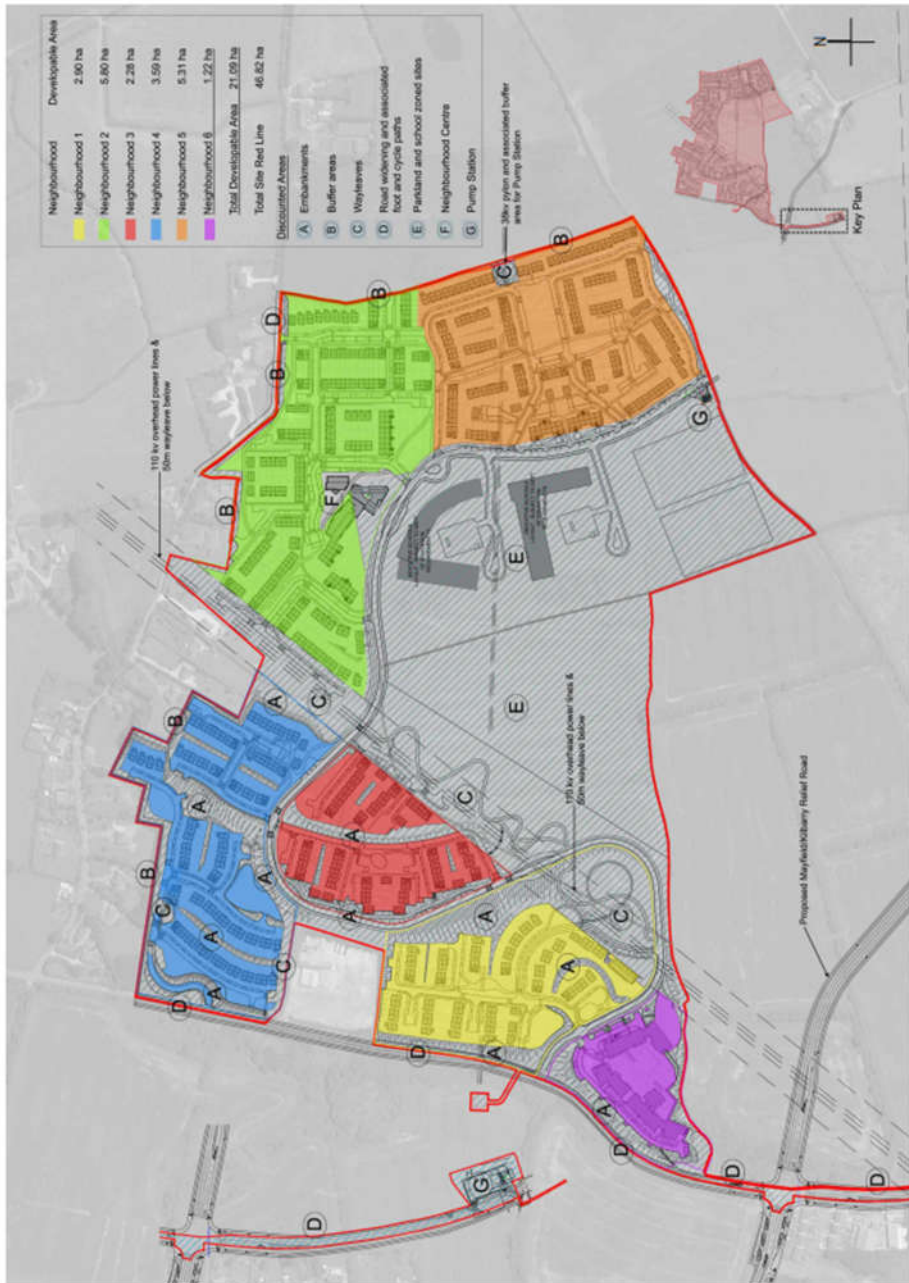
The net density is calculated by discounting the following areas as per the: Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas:

- Distributor Road and associated shared pedestrian and cycle path
- Neighbourhood Centre retail units and doctor's surgery
- Community/Utility zoned lands on which creches is located
- Greenway under the 110kV overhead powerlines (wayleave area)
- Developed portion of the urban parkland
- Existing and proposed landscaped buffer strips
- Neighbourhood embankments that are undevelopable

It is proposed that these densities represent an efficient use of available lands, taking into consideration the topography of the site and challenges overcome.

The masterplan of the development provides for a wide range of house types, apartments and duplexes. The density of the development varies across the 6 neighbourhoods due to topographical nature of the site which in turn allows for a series of the distinctive neighbourhood areas. The densities proposed represent an efficient use of the available subject lands as per below:

| Neighbourhood Density | Units per hectare |
|-----------------------|-------------------------------|
| Neighbourhood 1 | 25.9 units per hectare |
| Neighbourhood 1 | 37.6 units per hectare |
| Neighbourhood 1 | 27.6 units per hectare |
| Neighbourhood 1 | 25.9 units per hectare |
| Neighbourhood 1 | 33.5 units per hectare |
| Neighbourhood 1 | 103.5 units per hectare |
| Net Density | 35.7 units per hectare |



Site Layout Plan - Developable and discounted areas



LONGVIEW ESTATES LTD
MULTI-UNIT RESIDENTIAL DEVELOPMENT, BALLYVOLANE, CORK

Appendix G Section 47 Draft Heads of Terms

An Roinn Oideachais
agus Scileanna
Department of
Education and Skills



Orla O'Callaghan
c/o
Cunnane Strattan Reynolds
Land Planning & Design
Copley Hall
Cotters Street
Cork

04 June 2019

Re: Ballyvolane, North City Environs (UEA) Masterplan

Dear Orla,

I wish to acknowledge receipt of your correspondence and copy of the relevant Strategic Housing Development application in respect of lands at Ballyvolane.

This Department conducts nationwide demographic exercises into current and future need for primary and post-primary school places across the country and these are constantly monitored and updated as further demographic information emerges. While this Department has no current plans for the acquisition and development of the zoned school site at Ballyvolane, this position will continue to be reviewed as part of those nationwide demographic exercises.

Yours sincerely,



Alan Hanlon
Site Acquisitions and Property Management Section