Douglas Tidy Towns Submission to Cork BusConnects

Introduction

Douglas Tidy Towns works with our local community with the aim of becoming a 'Sustainable Community' incorporating the three pillars of sustainability: Economic, Social and Environment. We are therefore very supportive of the underpinning principles and the financial investment by the Government in providing enhanced modes of travel in Cork, which are truly sustainable in our community.

The UN Sustainable Development Goals state "Sustainable transport achieves better integration of the economy, while respecting the environment". The stated benefits of this project are improved bus journey times, a better environment for cyclists, enhanced facilities for pedestrians and a sustainable and liveable city – ideals that all our residents can understand and aspire to.

However, having reviewed that proposed plans, with particular reference to Sections I (Maryborough to the City) and K (Kinsale Road to Douglas), it would seem that the focus is much more about driving through communities with bus and cycle lanes and not properly considering the impact this would have on that community, and its existing environment. All for the sake of a small reduction in travelling time at peak hours, which may or may not increase the use of public transport and reduce single car journeys – the Plan, as it is currently written seems to be all pain for little gain! It may be looking to help reduce the impact of climate change, but it is not respecting our existing environment, now or in the future. Furthermore, in order to win over the local communities impacted, understanding that long term gain for the health of our planet is critical.

Douglas Tidy Towns does believe that if the NTA (and Cork City Council) listens carefully to the views of the public, BusConnects can be a very positive initiative for Cork. Our key concerns can be summarised under seven headings:

Best Practice

We understand that the Plan is based on best practice, but it is a desk exercise that has not:

- Looked at the impact on the communities within Cork
- Looked at the impact on the existing environment
- Looked at what is best practice for Cork, rather than general best practice!

The Mangala/Ballybrack Woods

The NTA proposes to 'piggyback' on the proposed City Council bridge across the Mangala. This proposal will effectively destroy one of the key green spaces and active travel paths within our community for minimum benefit.

Bus Lanes

Installation of bus lanes in both directions are planned for the routes regardless of whether there is an actual need for dual lanes for the full length of each route. Further detailed consideration needs to **first** be undertaken to understand the actual current and potential future traffic flows, together with the benefits of simply improving the existing bus network service and traffic management systems and then planning bus lanes thereafter.

Green Spaces and Biodiversity

The loss of green spaces and biodiversity proposed throughout the Plan is totally unacceptable, as is the volume of CO_2 emissions this will create. The proposals for "replanting" or "landscaping in other locations" does not in any way adequately respond to the loss to the community as a whole.

Cycle Paths

Installation of cycle lanes in both directions are planned for the proposed routes, without considering alternatives, such as the use of greenways or the development of greenways that would create a true and safer network across the city for both cyclists and pedestrians.

Foot Paths

The Plan notes "enhanced facilities for pedestrians" but actually makes little reference to pedestrians and footpaths in the detailed plans other than improved (and welcome) pedestrian crossings.

Douglas Village

The proposed bus gates and no left/right turns proposed for Douglas Village will ruin what's left of the heart and community of the village, as well as its economy.

Below we develop Points 2-6 in more detail. We believe Point 1 is self-explanatory.

The Mangala (Ballybrack Woods)

Ballybrack Woods, known locally as 'The Mangala', is situated in a riverine wooded valley in Douglas in the south-east environs of Cork City. Douglas Tidy Towns has worked with both the City and County Councils and the local community to manage and protect the Mangala over many years. The value of the Mangala was recognised by the County Council in 2019 when they funded us to develop the Ballybrack Woods Biodiversity Action Plan. The value of both the wild natural and managed green spaces in Douglas as a whole was recognised nationally by The Community Foundation for Ireland who funded our development of the Douglas Biodiversity Action Plan in 2020/21, the implementation of which is supported by the City Council.

The Mangala is an important location for ***environment sustainability***:

- It has a complex and well-developed ecosystem which includes ten different habitats: watercourses; improved grassland; semi-natural grassland; dense bracken; semi-natural woodland; highly modified/non-native woodland; scrub/transitional woodland; linear woodland/scrub; exposed rock and disturbed ground; and built land
- Semi-natural grassland in Ireland has become an extremely vulnerable habitat type, particularly wet grasslands which are important in supporting many species of flora and fauna. In a local context, the wet grassland habitats found in the Mangala are of high importance
- A bat survey undertaken adjacent to the Mangala as part of an Environmental Impact Assessment Report recorded Common Pipistrelle, Soprano Pipistrelle, Leisler's Bat and Natterer's Bat. All bat species in Ireland are strictly protected. As part of the development of the pathway through the woods, the lighting was installed (and the timing of lights off) with a view to minimising the impact on bats, as well as local birds and other creatures

- Over 170 species of flora have been identified in the Mangala as part of the habitat mapping undertaking during the development of the above-mentioned Biodiversity Action Plans. Geranium purpureum, classified as an endangered species by the NBDC has been recorded here
- Bee species recorded included the Large Red-Tailed Bumble Bee and the Buffish Mining Bee, both of which are listed as 'Near Threatened' by the NBDC.

The construction of the proposed bridge alone will devastate these ecosystems and biodiversity as well as causing unnecessary water pollution in a stream which currently has a CSSI score of 'moderate' quality. Once operational, the noise, lights and pollution from the bridge will continue to have a considerable negative impact on what will be left of the biodiversity of the Mangala.

The Mangala is an important location for ***social sustainability***:

- It is a well-used route for walkers and cyclists as a preference to using a car
- People use this safe haven as a route to work, to school, to shop, to meet friends, to take a relaxing walk (with or without a dog)
- For the physical and mental health of the nation, we are encouraged to take exercise more and particularly in green space
- Local schools use the Mangala as an outdoor classroom. Workshops and training events are regularly held in the Mangala both for local residents and businesses
- Local residents participate in citizen science projects in the Mangala helping to maintain local biodiversity, gain a new skill and knowledge and provide valuable information to the National Biodiversity Centre and the Local Authority Waters Programme. Citizen science projects currently running in the Mangala include water quality monitoring and invasive species mapping
- It is a place that soothed people's mental health long before the pandemic and, during the pandemic (and the Beast from the East), it was a haven of green, somewhere we could escape to safely
- It is a place for children and teenagers to enjoy and explore, thus discouraging the boredom that leads to anti-social behaviour
- It is a place where elderly people can walk safely and have critical social interactions with other local people
- It is a safe and quiet important social gathering location to meet others and create new social networks.

This proposed bridge will remove much of the above social benefits, both during construction but also thereafter. The area will be closed off during construction, moving people back to their cars to do the work, school and retail runs. The area also includes a national trail which would also have to be closed off. Furthermore, bridges and overpasses are known to encourage anti-social behaviour, including indulging in alcohol and illegal substances and well as the dumping of waste.

No bridge over the Mangala will save money and so is also important for economic sustainability:

- There is no need for the construction of a bridge with cycle lanes or footpaths as these already exist – the pathways of the Mangala itself! A much safer, cleaner and more pleasant option!
- A sustainable transport project is not about creating infrastructure for cars, so all we are left with is buses – one bus route with 4 buses per hour each way and where the only possible perceivable benefit in travel times will be during the two hours a day of peak traffic.

Can the cost - economic, social and environment (remember the three pillars of sustainability) – really be justified? The simple answer is no!

The NTA has said that they are not "wedded" to the idea of a bridge over the Mangala and that other options can be considered. It is important that these potential options are offered to the community for consultation as soon as possible.

In summary, to even consider the construction (let alone use) of a 20-metre-wide bridge over the woods is an act of wanton environmental vandalism and has no place in a sustainable project.

Bus Lanes

The Plan states that it will "enhance the capacity and potential of the public transport system by improving bus speeds, reliability and punctuality through the provision of bus lanes and other measures to provide priority to bus movement…" The Plan also states that "consistently faster and more predictable journey times means a more reliable bus system". This is not the whole story! Bus lanes and the transition (at some point) to a zero emissions fleet will not be sufficient – further detailed consideration needs to **first** be given to:

Douglas Village:

The main bottleneck for traffic on both the Section I and K routes is Douglas village itself. This is for several reasons:

- The number of schools in the locality and the resultant number of cars dropping children off. The impact of this is evidenced during school holidays, when the traffic flow is much smoother as traffic volume is considerably reduced. If there were safer walkways and cycle paths, together with utilising the Walking School Bus and Cycle Bus schemes, this volume of traffic would reduce, and it is likely more parents commuting to work after dropping their children off to school would use public transport
- The narrowness of some of the streets – the reality of Douglas's history as a village
- Illegal parking, whether double parking, commercial vehicles unloading or parking on foot paths
- Planning permission being given (despite City Council objections) to the construction of large commercial premises on the Douglas Relief Road – well-named when constructed, but a misnomer now. The field currently under planning approval could instead be used as a bus terminus/hub within Douglas, close to all shopping and could include a landscaped green area
- No direct access to the South Ring Road eastward. If coming from the south or south-west, you have to go through Douglas and down the Rochestown Road. Donnybrook Hill is used as a rat run from the Airport Business Park to the east side of the City and Little Island by commuters. Without a direct access to the South Ring Road in Douglas, all this traffic gets bottlenecked in Douglas Village. No amount of bus lanes will change this major flaw in the design of the South Ring Road!

Actual Existing Traffic Flows

- A clear understanding of the actual current traffic flows (peak and off-peak) needs to be developed
- We understand that local surveys and modelling will not be done until this period of consultation has been completed. We understand that it is not wished to undertake these activities twice, but more informed local knowledge would (should) have resulted in a very different plan for the public to review at this submission. But what's done is done!
- Once the surveys and modelling have been completed and the Plan revised accordingly, there must be further opportunity for the community to respond and provide submissions before any plan is put out for approval.

Simple improvements to the existing Bus Service

- Understanding the positive impact that simply improving the existing bus network service could have. We would all be more inclined to use a bus for commuting if the service was more reliable!
- Local research undertaken with regular commuters in the Donnybrook and Grange area shows that issues relate to the reliability of the service (bus turning up on time or at all), rather than the length of the journey. People will only move onto buses when they are reliable, frequent, clean and safe!
- Sufficient buses are needed that allow for suitable frequency on each route and that actually turn up and are maintained properly so that they don't break down. Staff need to be recruited and trained so that there are sufficient drivers and mechanics available, let alone support staff
- It is understood and appreciated that there will be more tracker information at the busier bus stops to show when the next bus will arrive, as well as more bus shelters
- Consideration should be given to a fleet of shuttle buses, both for taking children to school and providing access to local stores.

Enforcing simple traffic management and regulations

- All the bus and cycle lanes in the world will have little impact on traffic flows and timely commutes while people still park in clearways, bus lanes and cycle paths. Expanding the clearway network and ensuring that existing bus lanes and box junctions are kept clear, and deliveries are only undertaken outside peak traffic hours, together with sensible traffic light programming would have significant impact on traffic flow.

Implementing intelligent traffic management systems

- Without efficient traffic flow and logistics, a transport system can barely operate. The implementation of an efficient intelligent traffic management system, which includes a smart traffic signal control system should take place prior to any physical infrastructure works
- An intelligent traffic management system needs to include data collection, analysis and conversion into intelligent information. Reacting to loads and timing, smart solutions in signal lights systems can be truly beneficial in reducing traffic congestion, saving users time, energy, and sometimes even lives.

City Ring Road

- Completion of the full circle of the link roads around Cork. It is ridiculous that the South and North ring roads do not link – thus resulting in traffic needing to travel to and through the City Centre.

Park & Ride

- At present there is only one Park & Ride facility in Cork. The Cork Metropolitan Area Transport Strategy (CMATS) includes plans for Park & Ride which should be fast tracked to install Park & Ride facilities at all strategic entrance points to the City. This would actually help get people out of their cars – assuming the facilities had sufficient capacity and the shuttle service into the City ran frequently.

Water Transport

- A water taxi or ferry service would be a boon to a city which is as much defined by the sea as it is the land. Many of Cork's major population centres are located in proximity to waterways or Cork Harbour, so a form of transportation linking water-based communities would nicely compliment road and rail based public transport.

With regard to the proposals in the Plan:

Zero emissions

- The bus fleet is to be transitioned from diesel to electric zero-emission vehicles, with the first buses due in Cork in 2023. But when will Cork actually be fully electric? Will we still be using heavy polluting diesel double decker buses for most of the next decade? The sound and smells of the fumes and engines also indicate that they age poorly in this environment. They are clearly far too heavy for the road surfaces of the older neighbourhoods that they serve, where they contribute to infrastructural damage as well as air and noise pollution in these areas
- Many people cannot avail of the upstairs seating in double decker buses and getting up and down the stairs in time can be difficult for most able-bodied people – thus impacting travelling time. Why are we still using this type of bus when most European cities have phased them out? Running single decker electric buses (and cross-route shuttle buses) more frequently would encourage far more users and would have a much bigger positive impact on the travel times and the environment
- It should be noted that a zero-emission vehicle is defined as one that does not emit exhaust gas or other pollutants from the onboard source of power. It will still produce CO2 and other emissions through its life cycle from build to disposal – this is not acknowledged in the Plan. Furthermore, can the NTA confirm that all electricity used will be from renewable energy? Again, this is not mentioned in the Plan.

The impact on schools

- Donnybrook Hill and the South Douglas Road provides access to 6 schools (4 primary and 2 secondary). The main Douglas Road provides access to 4 schools (3 primary and 1 secondary)
- While consideration of walking and cycling to school is discussed elsewhere in this submission, it is vital that parents are able to safely drop their children to school in the event that they are unable to walk or cycle to school
- Re-routing the school traffic through residential parks will cause large amounts of congestion each morning – these areas are not equipped for the level of traffic that would be diverted through them, nor will crossing these roads be safe for local residents and school-going children.

The need for dual bus lanes

- While we agree that bus lanes would be helpful to reduce travelling time by bus (and thus encourage people to actually travel by bus), we do question the need for bus lanes in BOTH directions for the FULL length of the proposed routes in each community 24/7
- For example, there are definitely issues at the Frankfield/Kinsale Road end for Section K during peak times, but these should be alleviated for buses by the extension to the Ballycurreen Road. Looking at the Donnybrook Hill end of the Grange Road, recent monitoring at peak time suggests that the existing inbound bus lane is sufficient and there is no requirement for an outbound bus lane at for much of the east portion of the Grange Road. Likewise, monitoring on the Douglas Road shows little need for bus lanes outside of peak hours.

Bus Gates and no right/left turns

- The proposals for Douglas (and no doubt other areas) are horrendous and inexplicable. Douglas will be impassable and virtually impenetrable with all the no right/left turns and bus gates - which are understandable in a city centre, but not in a residential area like Douglas! Our understanding is that the Plan is to provide a **sustainable** transport system, not to kill the heart of a community and push all traffic into side streets and residential areas?
- If the centre of the village is going to be so hard to get into, then it would make more sense to implement a long-wished plan of many of the local village businesses and residents to completely close off Douglas East Street from the Circle K garage to O'Driscoll's public house to vehicular traffic and give us a heart back in our village with a pedestrian plaza, but this proposed half-baked option will only make things worse! Pedestrian-only streets not only improve overall safety for those on foot, but they can also boost local air quality, land value, store sales and overall health, while reducing noise levels – truly a sustainable option! A 2016 study of more than 100 cities around the world that maintained multiple pedestrian-only streets found that retail sales increased by at least 49%
- Also, if enacted, more people will want to use the Douglas Village Shopping Centre car park, which does have loads of space, but access was badly designed and at peak times has queues of cars waiting to get in, which will only get worse and thus further impede traffic flow.

Bus gates should only be used where, and at times, where traffic modelling and local surveys indicates true value and with minimal impact to the heart and business of a community.

Impact on key local roads

- The proposed route in Section I will widen the Douglas Road to 17.6m, completely changing the visual character of the road and will involve approximately 4m to 8m of land take mostly along the northern side, over at least 1km of the road length at differing points. This will remove a substantial number of mature trees, hedging and shrubs approximately 1km of old white limestone boundary wall; and undermine local flora/fauna/nesting birds/insects, and other animal habitat along the road. The proposed route also directly affects 56 listed structures from the National Monuments Archive
- The Grange Road is similarly impacted. Both these roads and the South Douglas Road are busy at peak commuting hours and school drop off and pick up times, but have no minimal other traffic issues (so long as the simple traffic management and regulations noted above are enforced)
- The NTA should be aware that the Fingerpost, in its various reincarnations, has been a historical part of Douglas and is a much part of the community as each individual. A recent Tidy Towns adjudication report noted that the "Fingerpost roundabout is the best your adjudicator has seen anywhere in the country". Any proposals for this area, should remember and respect this history and its importance to the community.

Installation of new bus shelters

- This would be a welcome improvement to travelling by bus in Cork
- Consideration should be given to incorporating a low maintenance (perhaps with local community or tidy towns support) green roof on all new and existing shelters to support biodiversity and clean air. Successful examples of these can be seen in Utrecht in the Netherlands and we understand that Green Spaces for Health would be able to input to the design.

Bus Livery

- It is noted that there will be new bus livery – at what cost and what is the value? These funds could be more usefully invested in some of the other first priority measures noted above.

And three general questions:

- Why was the Bus Network for Cork designed before the BusConnects programme? It does seem the wrong way around! Or even better, considered as part of the final element of the BusConnects plan
- Is a 24/7 proposal of bus lanes really necessary?
- Are the time-saving claims actually realistic?

Cycle Paths

It is noted that only 1% of the trips made in the Cork Metropolitan Area on an average weekday are made on bicycles. We agree that this needs to improve and we fully support a better bike infrastructure. The city could benefit from everyone feeling bike travel is a safe and pleasant alternative, however cycle lanes must serve all members of local community including children, families and older people.

Use of Greenways

- Will cyclists want to use a cycle path on a main road to get into town when they can go through the Vernon Mount Valley Walk and the new bridge to Tramore Valley Park and into the City – or use the Mangala?
- We are delighted to see the proposal for a cycle/pedestrian path running parallel to the Well Road, however we feel it does not go far enough. A connection to both the Blackrock Greenway and Douglas Village will be critical for its success. The access point planned from the Douglas end of this path to the Well Road is unsafe, particularly for pedestrians
- Has serious consideration been given to using cycle & foot paths away from the main roads and developing and renewing existing greenways such as the Tramore River Walk from Douglas to Bishopstown? We presented a proposal on a Cork City Loop Greenway to the City Council in December 2020 which was met with interest, but no progress that we are aware of to date. This proposal included: Linking the Lee River in the east of Cork City to the west of the city taking a route through the southern suburbs of Bishopstown, Wilton, Togher, Douglas and Blackrock. This pedestrian/cyclist only route would follow the Curraheen, Two Pot, Tramore, Douglas and Lee rivers providing a safe route for walkers and cyclists. Key extracts from this proposal are attached in Appendix 1. This proposal would support of the proposed Lee2Sea greenway, creating an incredible cyclist and pedestrian network across the City. No doubt, a similar network could be developed in the northern suburbs.

For both the safety of the cyclists and other road users

- As noted above re bus lanes, cycle lanes must be kept clear, and regulations enforced re illegal parking as well as mandating that deliveries are only undertaken outside peak traffic hours
- Just like vehicle users, cyclists must obey the rules of the road and these need to be more enforced - which includes not cycling on foot paths, pedestrian crossing, going through red lights, cycling the wrong way up a one-way street, wearing headphones, etc.
- While there is not a legal obligation to wear a helmet or hi-vis clothing while cycling in Ireland, the Road Safety Authority of Ireland recommends cyclists wear both for safety and this should be the law
- It is noted that all proposed cycle lanes in the Plan will be segregated from vehicular traffic but are they segregated from pedestrians, i.e. clear demarcations between cycle and foot paths?

- The Plan notes that where is not possible to have segregated cycle lanes, there will be an option of turning into quiet roads for safer cycling. This is currently being proposed for the Rochestown to Douglas cycle path where on the final section into Douglas, cyclists would be directed up into Maryborough Estate and Lime Trees Road. It is highly unlikely that cyclists would take this diversion and will thus continue on the main road, without a cycle path. Again, consideration needs to be given to smarter alternatives such as development and utilisation of greenways
- Any cycle lanes installed must be safe. Cycling is often a social activity - cycling with children requires close parental proximity. The provision of a narrow bike lane next to four lanes of vehicular traffic will not be attractive to families wishing to move to cycling over other forms of transport
- We need better road maintenance and better drains maintenance - no drains that sit 3 inch deep in the pavement (lethal for cyclists) and a preventative (rather than reactive) maintenance programme to keep drains unblocked and roads from flooding.

Foot Paths/Pedestrians

We fully support a better footpath infrastructure. Cork is not a large city and would benefit from its residents knowing that walking as a mode of travel is a safe and pleasant alternative. Pedestrians currently account for 20% of trips in Cork and this could be increased significantly for minimal cost. We need to make Cork a truly 'Walkable City', the benefits of which would meet sustainable transport principles including:

- ***Equity:*** Walking is the cheapest form of transportation and accessible to the largest number of people. Designed well, it can open up access to seniors and people with disabilities
- ***Environment:*** Active transportation is also the greenest way to get around
- ***Health:*** A recent study showed that 43 % of people who live in walkable areas (meaning they have safe places to walk within ten minutes of home) achieve physical activity targets
- ***Social:*** When you're on foot, you interact with people more, and slow down enough to take in your environment.
- ***Less demand on other modes of travel:*** More walking reduces demands on the transportation network for more costly modes, like transit and driving.
- ***Economic development:*** A neighbourhood's WalkScore is a major factor when people look for places to live, work and visit. American cities with the highest walk scores, such as Boston and Philadelphia, have infrastructure that offer pedestrians shorter wait times at traffic signals and comfortable or safer sidewalks.

Our foot path concerns include:

- The Plan indicates that the new corridors will benefit the City by "creating a more efficient public transport network, reducing bus journey times and creating a safer environment for cyclists and pedestrians, but only refers to 93 km of bus lane/bus priority and a 56 km cycle network – so how are pedestrians being better served in the Plan other than by a number of enhanced crossings?
- It has been suggested pavements will be narrowed to allow for cycle paths, but how does this provide enhanced and safe facilities for pedestrians? Well-planned footpaths are continuous – not stopping abruptly mid-block or at road crossings
- Before you can get on a bus, start cycling or use your car, you need to be able to safely step out of a building onto the street – therefore the first priority must be for adequate and safe pavements
- The proposed improvements to pedestrian crossings will be critical but must include: dropped

kerbs for wheelchair users and buggies; tactile paving to let the visually impaired know where a dedicated crossing point is; and audible or tactile signals or 'rotating cones' found on the underside of the push button control box indicating when it is safe to cross.

Consideration should also be given to:

- The enhancement of our existing greenways and development of new greenways. Please also see the cycle lane section above re the use of greenways.
- Continue pedestrianisation of streets, especially outside of the city centre. The pedestrianisation of city centre streets has helped the rejuvenation of Cork City, and it would be great to see similar schemes in Cork's suburban areas. Please see our note above the pedestrianisation of part of Douglas East Street
- Pedestrian crossings that support access to schools – School principals have spoken to us about the lack of pedestrian crossings near their schools, which mean that parents drive, rather than walk their children to school.

Green Spaces and Biodiversity

The Plan proposes the removal of sections of gardens, the felling of mature trees and, less obviously, the disintegration of hedgerows, all of which will have an enormous impact on both CO2 emissions and biodiversity and thus, limits the Plan efforts be considered sustainable or respecting our current and future environment.

Trees (and Hedgerows)

Mature trees are not replaceable; they add character, enjoyment, shade, shelter and health benefits for all creatures and nature. Trees (together with and intertwined with hedgerows) are important because:

- They support our ecosystems and provide key biodiversity and habitat corridors (providing links between parks and open spaces), both of which require urgent and ongoing protection
- A typical tree can absorb around 21 kg of CO2 per year; however, this figure is only achieved when the tree is fully grown - saplings will absorb significantly less than this. Over a lifetime of 100 years, one tree could absorb around a tonne of CO2.
- They trap dust particles which improves air quality
- They help mitigate the risk of flooding – tree canopies intercept rainfall
- They help reduce noise by acting as a sound barrier; this is particularly important in absorbing traffic noise in built up areas
- They connect people with their surroundings. They mark the changes of seasons and bring an aesthetic value to spaces particularly within the built environment. Being long lived, they are a part of the social fabric, culture and history of an area.
- Studies show that they can increase the value of properties by between 5% and 18%
- They provide shade, shelter in wind and a regulation of local air temperature, providing positive effects on the heating and cooling buildings, thus reducing energy and heat costs – key to our efforts to combat climate change. As an example, a small area of very old beech trees on the north side of Douglas Road near the intersection of Douglas Road and the N40 is what's left of Reeves Wood. It is a refuge for people and wildlife as well as shade and having a cooling effect in increasingly hot weather

- They have a positive effect on physical health through the provision of shade, outdoor recreation amenity and clean air; on mental health through supporting quality of life; and on our emotional wellbeing through seasonal changes, flowers, fruits, colours and aromas, etc.

For all these reasons and more, trees are critical to promoting sustainability and to our fight against climate change and the NTA needs to significantly reduce the impact of that the proposed Plan will have on our trees, our hedgerows and our future on this plant.

We are promised a "comprehensive replanting programme" using "mature or semi-mature ready-grown trees where appropriate" in the Plan, and the programme "ensure that every tree removed will be replanted". These statements raise three key questions:

- What is the NTA's definition of a tree? According to irishstatutebook.ie "A tree means a free-standing woody perennial plant whose species has the potential to have a more or less definite crown and be capable of reaching a minimum height of 5 metres at maturity and includes a sapling"
- What is the NTA's definition of a semi-mature tree and a mature tree? Semi-mature trees are defined by the British Standards Institution as "Trees with an overall height in excess of 4 metres and or a stem girth measurement of 20 cm+ and are likely to be more than 10-15 years old". A mature tree is one that close to its full height and crown size and could be 15 metres high or more.
- What does "where possible" actually mean in real terms?

Additional concerns include:

- The removal of any tree releases CO2 into the atmosphere and the older the tree, the more CO2 is released. Removing mature trees will release significant volumes of CO2 and replacing these mature trees with a mix of semi-mature and young trees will continue to have a significant negative impact on our CO2 emissions. If there is to be any hope of providing a sustainable project, the number of trees replanted will need to significantly exceed those removed
- Ensuring that the replacement of any trees removed uses the principle of planting the 'right tree in the right place' not just planting to make up numbers. Consideration should be given to hedgerow planting where more appropriate. Trees and hedgerows should be native where at all possible
- All images in the Plan show trees in cement. Tree planting protocols say that trees reaching up to 9 metres high should be planted a minimum of 1.5m and trees between 9 and 15 metres high should be planted a minimum of 2 metres from a footpath. Furthermore, lime leaching from concrete raises the pH level in soil near concrete. Most plants, including trees, grow best in soil with a pH level of about 6.5 to 7.0. Concrete used near a tree can crack as the tree ages, and the root structure matures. How will NTA incorporate these protocols into their plans?
- The Plan says that in Section K "approximately 297 roadside trees may be removed". Having counted the number of trees marked for removal on the Plan, this would seem accurate. However, having counted the number of trees to be planted, we find that the number is approximately 65 trees short, i.e. 22% of the promised trees. This assumes that the actual count of existing trees is correct and based on surveys we have undertaken locally, we disagree with the existing count of existing trees by at least 20% and more in some places (based on the above definition of a tree). This does not take hedgerows into account which have been basically ignore throughout the Plan. It is extremely likely that there is a similar issue in other Sections. Will local surveys be done to accurate count the trees (and hedgerows) so that the correct replanting is provided?
- Some sections on the route will lose most if not all of their trees but will not gain any new ones – they go into another section. This does not respect the environment or the community!

Gardens

The Plan says “Where lands, such as parts of gardens, are being acquired for widening – we will purchase the portion of front gardens from property owners; ensure new landscaping and replanting of the gardens, as well as providing compensation for the garden portion loss and disruption.”. To take a portion of people’s driveway and gardens will have many negative impacts for the individual or family including:

- Reduction in property values, even when the monetary compensation is taken into account
- Reduced parking capacity as well as entry and exit to properties
- The closer proximity of a high volume of vehicles (including heavy commercial vehicles) will increase noise and pollution and could cause both structural and foundational issues to already aging properties
- Loss of outdoor space to breathe, for a child to play safely, to grow fruit and vegetables, to rewild or plant for biodiversity.

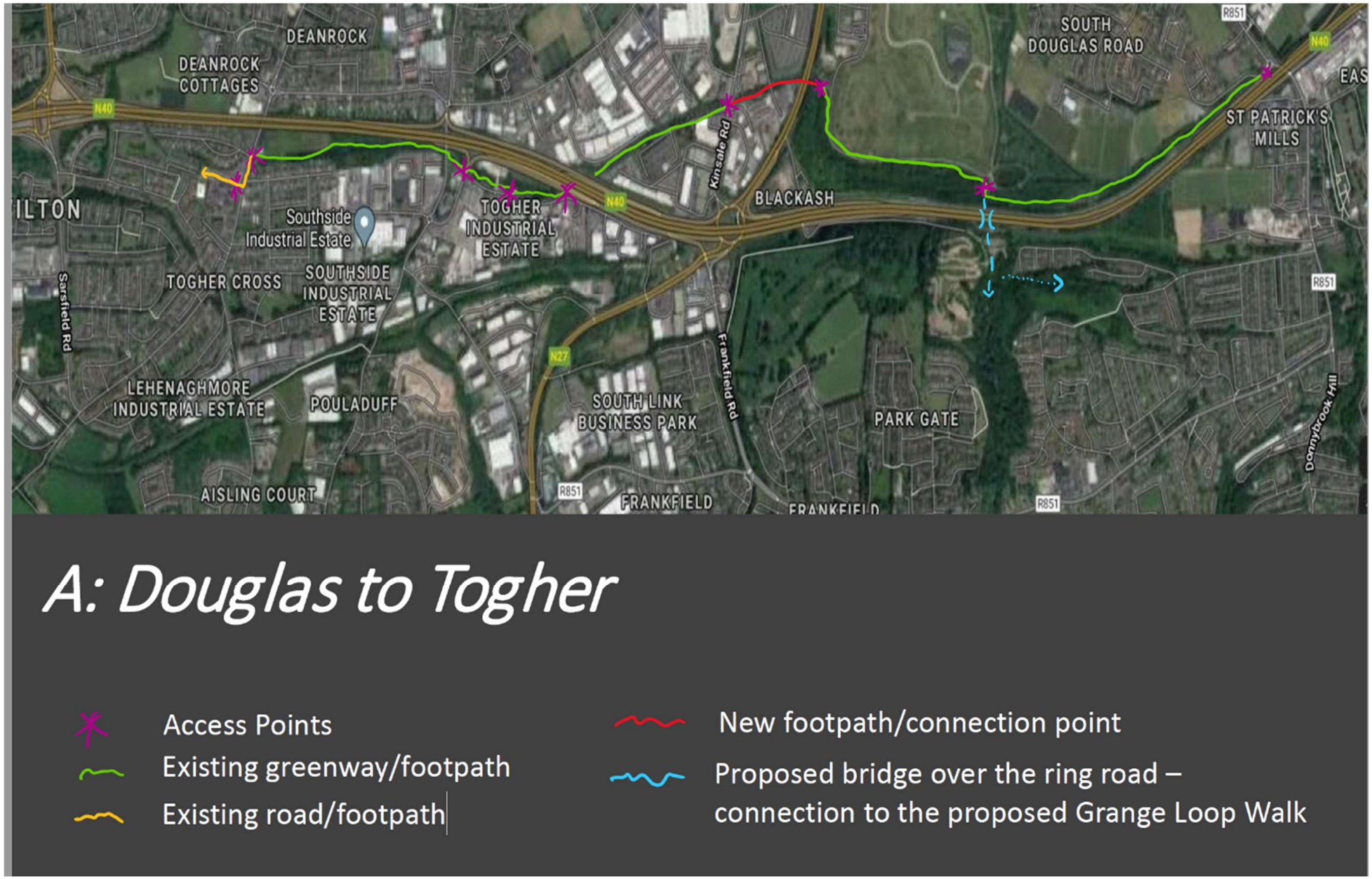
Losing one’s garden (or part thereof) is not something that can be compensated by money alone – nor will be one feel compensated by creating landscaping somewhere else! We should be encouraging gardens (not removing them) and gardening to help reduce biodiversity loss and improve quality of life.

General Concerns

- Will residents still be able to park safely outside or near their house – while we are supportive of trying to reduce car traffic, people need to be able to access their home safely, particularly with kids and the infirm. What about carers and meals on wheels, etc. – how will they gain access?
- What are the effects on the local traders and businesses? Will they lose access to their customers or suppliers by loss of on-street parking and loading areas? The document says “Where there is a loss of parking spaces and it is appropriate to provide replacement spaces, we will seek to provide, where feasible, alternative parking close by for residents and businesses.” What does this actually mean?!!
- Turning our main roads into four “lane” routes will significantly impact the community and the feel of the place. Communities, not corridors are what make a city – Cork is quite a green city, we are going to lose this to provide sustainable transport – which doesn’t make sense!
- Many new routes will be built with concrete which, taking into account all stages of production, is responsible for about 8% of the world's CO_2 emissions; if it were a country, it would be the world's worst culprit after the US and China. Furthermore, it will increase levels of pollution from urban runoff and increase flood risk – we would refer you to the Nature-based Solutions to the Government’s Best Practice Interim Guidance Document “Management of Rainwater and Surface Water Runoff in Urban Areas - Water Sensitive Urban Design. Concrete is not sustainable!
- Reduction of car use will not happen unless positively promoted and suitable alternatives are offered. Many of the proposed solutions (with particular reference to bus gates and no right/left turns) will just move the traffic into the residential estates, making a bigger problem
- Has the impact of digging up hundreds of metres of roadway and footpaths been considered with regard to the structural integrity of the adjacent properties and land, not to mention the environmental impact? What remedial and protection measures will be put in place?
- Has the EIA Directive which places the onus on a developer to set out a clear rationale for choosing an option that has more significant environmental effects than the alternative options been fully considered – can we see the rationale?

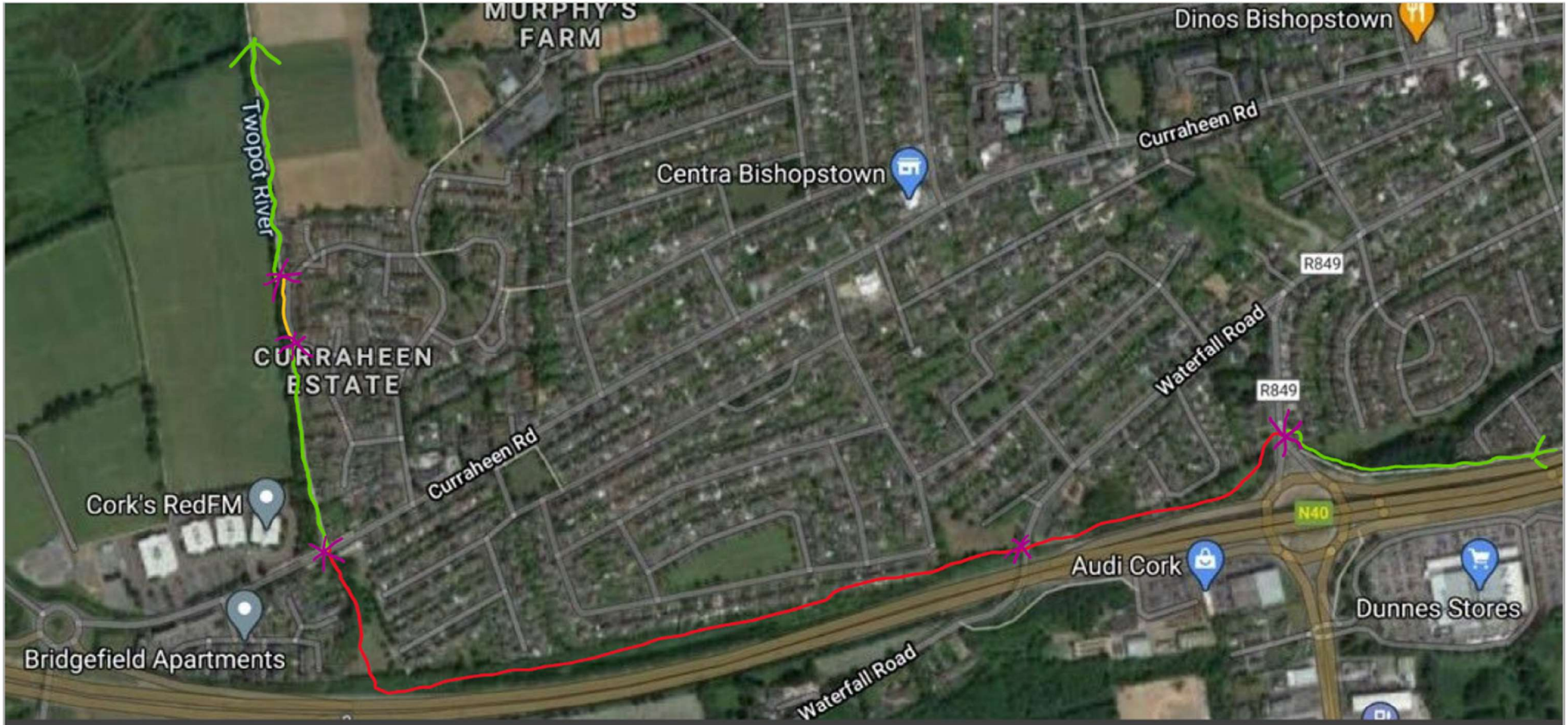
- The first paragraph of Page 6 of the plan states that “the NTA is planning an investment of half a billion Euro”, but the fourth paragraph states “BusConnects Cork will entail a €600m investment”. Already within one page, we have a difference of €100m before the plan has even been approved!

Appendix 1 – Key Extracts from Douglas Tidy Towns Proposal for a Cork City Loop Greenway



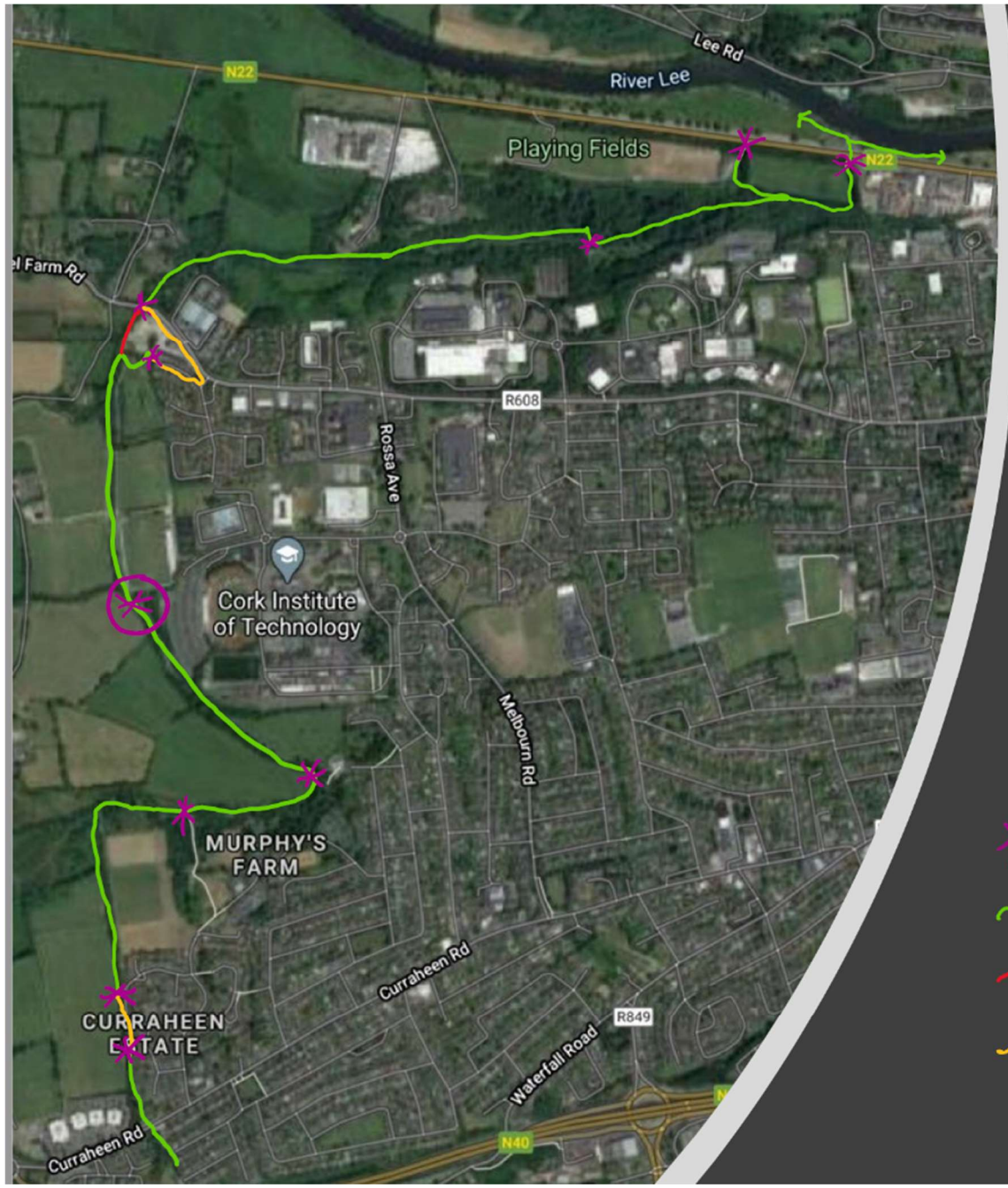
B: Togher to Bandon Road Roundabout

- Access Points
- Existing greenway/footpath
- New footpath/connection point
- Existing roads/footpaths



C: Bandon Road Roundabout to Two Pot River

- Access Points
- Existing greenway/footpath
- New footpath/connection point
- Existing road/footpaths



D: Two Pot River to the Lee via the Curraheen River

- Access Points
- Existing greenway/footpath
- New footpath/connection point
- Existing road/footpaths