To: Ms. Caroline Phelan
Senior Planner
Galway City Council

Date: 22/01/2015

AN BORD PLEANÁLA
TIME 11:05 BY GALWAY CITY CO.
23 JAN 2015
LTR-DATED JM FROM
PL PA0033

Response to Landscape & Visual Brief of Evidence of Margaret Egan January 2015.

Dear Caroline,

As you know I currently am not available on Fridays (I also will be unavailable next Monday) and am providing here comments as requested in the above regard. As you know I have in my submission to the Planning Department set out wider comments and would be available to answer queries from the Inspector of required next Tuesday/Wednesday.

My views as set out in my submission in the context of Visual Impact remain unchanged and I see little in the Evidence submission to alter that view. As also stated previously I hold to the view that attempting to establish planting on top of the proposed reclaimed lands will be very difficult, certainly to establish the woodland type proposed will be impossible given the extreme exposure levels that will be encountered and over-topping of waves during storms. At best a coastal scrub edge with stunted or more kindly referred to as sculpted trees may be established. However this will only occur after many years of continual replacement.

We have directly experienced these issues in our work namely we have had no success in establishing trees in Salthill Park and South Park due to salt exposure which is less exposed than the proposed lands, however, on the contrary Quincentennial Park which is as near to the sea, but, is set below road level and protected by a retaining wall has established, the difference in the two sites is only exposure. There will be no opportunity to protect new planting from exposure on the proposed site as designed. If it is being seriously considered I would advise that a scheme of planting, with extreme protection methods (using very young stock) that was managed over a minimum of twenty years to reach whatever level of basic establishment would need to be employed. Ms. Egan cited one of our properties ie Barna & Lough Rusheen Woods as an example of the potential to establish trees and woods. What she probably does not know is that those woods were established over 140 years ago and they are far less exposed. What is interesting about both of these woods is that the trees in some cases are almost like Bonsai trees.

In my report I referred to the creation of a Wetland/Marine Scrub Exoskeleton which was inspired from reading how the impact was caused to New Orleans by the Hurricane (was it Catriona?). That Hurricane was not the first to hit New Orleans which had previously enjoyed the protection of extensive salt wetland areas. They functioned to spill the energy of the winds, however reclamation of lands and felling of wetland trees removed that protection and New Orleans suffered consequently. I understand the Authorities are working to restore these areas.

I would like clarification if possible to two other things: -

1. A page was provided from Ait Urbanism -Landscape titled Galway Harbour Extension EIS, *Indicative Treatment of Proposed Wetland Area,* however Ms Egan made no reference in her document/oral comments. Can that be queried. See scan copy attached.
2. Mr. O' Laoire in his evidence provided a drawing on page 23 which set out extensive proposals public amenity, I may have taken this wrongly but he referred to Ms Egan's

AN BORD PLEANALA
TIME 11:08 BY GALWAY CITY CO.
23 JAN 2015
PL PA0033

Submission to An Board Pleanala on Justification of Financial Contribution requested by Galway City Council for Proposed Galway Harbour Extension

Calculations of HGV traffic generated by the proposed Harbour Development has indicated that the equivalent million standard axels (msa) that will be generated as a result of the development is approximately 11.46 msa (increasing the msa on Lough Atalia Road from 7.81 to 19.27 over the lifespan of a new road construction, assuming a full depth reconstruction of Lough Atalia was carried out prior to the development proceeding). This increase in HGV traffic will shorten the lifespan of the existing road by approximately 60%. Should the proposed development not proceed the existing Lough Atalia road will continue to function for its remaining lifespan (which has not been determined to date). If the development were to proceed Galway City Council will be required to invest heavily in a new Lough Atalia Road construction years earlier than would be expected. As the proposed development will account for approximately 60% of all HGV traffic using Lough Atalia Road should the development proceed (not including Harbour related HGV traffic that currently uses Lough Atalia Road), Galway City Council consider a financial contribution of 60% of the cost of the road to be a fair and reasonable proportion.

The Applicants EIS provides traffic modelling results for a number of junctions in the city, but the 2 junctions which it will have the greatest impact on traffic flow are the Lough Atalia Road / College Road junction and the Moneenageisha Junction. From the applicants submission they state that the traffic generated by the development will be less than a 5% increase in volume through these junctions, however this volume has a larger proportional effect on delay. Using AM and PM peak hours only, it is calculated that in 2021, Galway Harbour generated traffic will have an annual delay cost of €119,460 (based on Peak hour traffic only over 250 days per year). This equates to approx €955,000 over an 8 year period (the equivalent of the proposed construction period of the harbour). If this cost were calculated over a 40 year period it would roughly equate to €4.77m Euro assuming no growth in traffic occurred after 2021.
The existing College Road / Lough Atalia Road junction currently has a poor alignment for vehicles travelling outbound on Lough Atalia Road as they are required to turn through a tight "S" shaped bend. This manoeuvre cannot always be completed due to queuing traffic which results in HGVs blocking all movements through the junction. The realigning of this junction in order to make the Lough Atalia Road outbound movement align with College Road to Moneenageisha would allow for all HGVs movements to navigate the junction with significantly greater ease and could also allow for a second outbound lane at the junction which could continue on towards the moneenageisha junction. This would allow for greater capacity of both junctions due to:
a) a longer 2 lane approach to Moneenageisha junction and
b) Slow moving HGVs turning through the "S" bend would not delay all vehicles behind it due to the provision of a 2nd outbound lane.
This would help to mitigate against the impacts of traffic generated by the proposed development at the College Road / Lough Atalia Road junction and the Moneenageisha junction. As the proposed development will generate an approximate 246% increase in Million Standard Axels through this junction and delay costs of €955,000 over an 8 year period, Galway City Council consider that Galway Harbour should be required to upgrade this junction at their own cost to a design to be agreed with Galway City Council or alternatively provide Galway City Council with a financial contribution of the full cost of this project.

The Applicant has stated that they intend to connect the proposed new signalised access junction at the Harbour to Galway City Councils UTMC system. Galway City Council are seeking a financial contribution of €10,000 towards this connection and the connection of a VMS sign recommended by Galway City Council. This contribution shall be used by GCC to configure the junction operation to work in UTC mode, communication configuration costs of GCCs communications and

IT network, integrating the junction into the existing Omnia system and maintenance of all traffic signal and communications equipment when handed over to Galway City Council by the applicant. The applicant will be required to procure and install any hardware equipment and ducting necessary to connect the proposed junction to Galway City Councils network.

Summary Of Financial Contributions Requested By Galway City Council

Upgrade and Realign Lough Atalia Road / College Road Junction	
Anticpiated Construction Costs to Upgrade Junction	€750,000.00
Anticipated, Design Procurement and Supervision Costs	€125,000.00
Total cost of Junction Upgrade	€875,000.00
Proportion Of costs requested	100.00%
Financial Contribution Requested	€875,000.00
Road Strengthening of Lough Atalia Road and College Road	
Anticipated Construciton Costs	€1,030,000.00
Anticipated Design Procurement and Supervision Costs	€55,000.00
Total Cost of Works	€1,085,000.00
Proportion of Costs requested	60.00%
Financial Contribution Requested	€651,000.00
Connection to UTMC	
Anticipated Costs	€10,000.00
Proportion of Costs requested	100.00%
Financial Contribution Requested	€10,000.00
Total Financial Contribution Requested	**€1,536,000.00**

Delay Costs at Moneenageisha 2021

AM Peak

		2021 Do Min Delay (s)	Vehicles	Total Delay (veh.sec)	2021 Do Harbour Delay (s)	Vehicles	Total Delay (veh.sec)
Wellpark Rd	East	35	29	1015	35	29	1015
	South	669	78	52182	736	89	65504
	West	657	100	65700	733	100	73300
Dublin Rd	South	371	666	247086	371	676	250796
	West	492	238	117096	494	238	117572
	North	74	0	0	74	0	0
College Rd	West	481	3	1443	487	3	1461
	North	481	146	70226	487	164	79868
	East	481	392	188552	487	394	191878
Moneenageisha Rd	North	185	266	49210	202	266	53732
	East	185	435	80475	202	435	87870
	South	35	147	5145	35	147	5145
Total Delay (s)				878130			928141

Increase in Delay (veh.sec) 50011 sec
833.5166667 min
13.89194444 hours @€8/hr 111.1355555556 Euro per AM peak

Delay Without Harbour 878130 sec
14635.5 min
243.925 hours @€8/hr 1951.4 Euro per AM Peak

PM Peak

		2021 Do Min Delay (s)	Vehicles	Total Delay (veh.sec)	2021 Do Harbour Delay (s)	Vehicles	Total Delay (veh.sec)
Wellpark Rd	East	21	75	1575	22	75	1650
	South	459	212	97308	507	236	119652
	West	154	201	30954	169	201	33969
Dublin Rd	South	329	842	277018	375	861	322875
	West	101	373	37673	118	373	44014
	North	59	36	2124	59	36	2124
College Rd	West	522	0	0	534	0	0
	North	522	362	188964	534	392	209328
	East	522	268	139896	541	276	149316
Moneenageisha Rd	North	253	56	14168	293	56	16408
	East	253	422	106766	293	422	123646
	South	45	7	315	45	7	315
Total Delay (s)				896761			1023297

Increase in Delay (veh.sec) 126536 sec
2108.933333 min
35.14888889 hours @€8/hr 281.1911111111 euro per PM peak

Delay Without Harbour 896761 sec
14946.01667 min
249.1002778 hours @€8/hr 1992.8022222222 Euro per AM Peak

Daily Peak Hour Cost by Harbour 392.3266667 per day
250 working days per year €98,082 per year delay due to Harbour

Daily Peak Hour Cost without Harbou 3944.202222 per day
250 working days per year €986,051 per year delay without Harbour

Delay Costs at Coolege Road / Lough Atlaia Road 2021

AM Peak

		2021 Do Min Delay (Harbour)	Vehicles	Total Delay (veh.sec)	2021 Do Harbour Delay (s)	Vehicles	Total Delay (veh.sec)
College Rd (N)	South	2	591	1182	2	608	1216
	West	29	200	5800	29	200	5800
Lough Atalia Rd	West	20	2	40	20	2	40
	North	37	285	10545	37	304	11248
College Rd (W)	North	39	258	10062	40	258	10320
	South	0	0	0	0	0	0

Total Delay (s) 27629 28624

Increase in Delay (veh.s 995 sec
16.58333333 min
0.276388889 hours @€8/hr 2.2111111111 Euro per AM peak

PM Peak

		2021 Do Min Delay (Harbour)	Vehicles	Total Delay (veh.sec)	2021 Do Harbour Delay (s)	Vehicles	Total Delay (veh.sec)
College Rd (N)	South	2	700	1400	2	738	1476
	West	29	214	6206	30	214	6420
Lough Atalia Rd	West	20	3	60	20	3	60
	North	543	414	224802	559	462	258258
College Rd (W)	North	570	374	213180	580	374	216920
	South	0	0	0	0	0	0

Total Delay (s) 445648 483134

Increase in Delay (veh.s 37486 sec
624.7666667 min
10.41277778 hours @€8/hr 83.3022222222 euro per PM peak

Daily Peak Hour Cost by Harbour 85.51333333 per day
250 working days per year 21378.33333 per year delay due to Harbour
262931.6667