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**Vale of Glamorgan**

**Highway Authority Observation Sheet**

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| Planning Application Ref: | 2020/01170/OUT |
| Observations By: | James Aitken |
| Date: | 20th December 2023 |
| Location: | Land at Upper Cosmeston Farm, Lavernock Road, Penarth |
| Proposal: | Outline application for residential development, a primary school, community space and public open space with all matters reserved other than access |
| Case Officer: | Mr. Robert Lankshear |

The above-mentioned proposed development relates to a new development on land to the East of Lavernock Road opposite Cosmeston Lakes Country Park. The development is for 576 residential dwellings and a new one form primary school and associated infrastructure. The development proposed a new priority junction for the site access complete with ghost island right hand turn lane and this has been confirmed as suitable within the Transport Assessment. Precise details can be agreed as part of a suitable worded condition.

The highway authority still has concerns regarding the impact of the development on two key junctions:-

1. Lavernock Road/Westbourne Road Junction - Priority T-Junction.
2. Lavernock Road/Dinas Road/Victoria Road – Signalised Junction.

The junction of Lavernock Road/Westbourne Road will likely require improvements due to the impact of the proposed development on the junction as shown in the Transport Assessment and this has been confirmed by an independent transport consultation who were commissioned to look at the junction modelling on the highway authority’s behalf. This will likely need to be improved to provide a new mini roundabout which has been initially checked and would significantly mitigate the impact of the development. A ghost island right hand turn lane has also been suggested although this may not have the desired improvement on the junction. A condition will be provided for further investigation to confirm the most suitable improvements to be provided which will need to undergo Stage 1 Road Safety Audits.

The signalised junction of Lavernock Road/Dinas Road/Victoria Road would also be impacted by the development and a scheme was discussed to alter the staging of the junction to provide a new two-stage signalised junction with right turn holding lanes in the centre of the junction allowing right turning movements depending on gap acceptance. This should reduce the impact of the development on the junction however there is concern from the highway authority on the safety implications of right turn movements for two arms in the centre of the junction. On balance, it is the opinion of the highway authority that a potential improvement to the capacity of the junction should not be implemented if highway safety is impacted. Therefore, a condition should be provided to look at potential capacity improvements in the signal staging and MOVA software.

The development is envisaged to have a material impact on the Merrier Harrier junction however it is recognised that the improvements to this junction to reduce capacity will be significant and complex. It would be beneficial for a contribution to be provided by the applicant/developer to go towards future improvements, along with other future committed development contributions which will be impacting on the junction.

The proposals provisionally aim to provide new active travel improvements along the site frontage and on the opposite side of Lavernock Road complete with new bus stop facilities and proposed new controlled toucan crossing point. These are all suitable improvements in principle and conditions will be sought to secure proper implementation and extents/details etc. It is also understood that a sustainable transport contribution will be provided as part of a Section 106 agreement.

Discussions were ongoing regarding the internal road layouts and junction layouts of the proposed development masterplan however it is understood that this can be discussed during any future reserved matters application(s) and conditioned accordingly. The current masterplan and design codes for internal road and active travel layouts would not be supported by the highway authority therefore conditions will be provided to secure suitable designs in accordance with local and national highway design standards.

Therefore, the highway authority has no objection to the outline consent in principle subject to the following:

1. A revised Master Plan and accompanying Design Code shall be submitted as part of reserve matters application to and approved by the Local Planning Authority before any development is commenced.

Reason:- To ensure the minimum design and construction standards are achieved in the interests of Highway / Public Safety.

1. All reserved matters application(s) shall be accompanied by full Engineering details incorporating in brief the vehicular / pedestrian access inclusive of vision splays , the internal road layout for the site inclusive of turning facilities, street lighting, highway drainage, onsite parking and any associated highway retaining structures within the vicinity of the site required by the Local Highway / Planning Authority have been submitted and approved by the Local Planning Authority. These details shall fully complying with Design Manual for Roads and Bridges / Technical Directives / Local transport Notes/ Vale of Glamorgan Councils Standards for adoption.

Reason: - To ensure the minimum Design and Construction Standards are achieved in the interests of Highway / Public Safety.

1. No works whatsoever shall commence on site until the design calculations, duly certified by a Professional Engineer, and full Engineering details of any structures, drainage systems, street lighting, water culverts etc. abutting or within close proximity to the existing / proposed highway have been submitted to and approved by the Local Planning Authority.

Reason: - To ensure the minimum Design and Construction Standards are achieved

in the interests of Highway / Public Safety.

1. Notwithstanding the information provided in the Transport Assessment, the junction of Lavernock Road/Westbourne Road will require investigation to determine the most suitable measures for improvements such that the impact of the development can be mitigated. The investigation works shall include but not be limited to:
2. A new Ghost island right hand turn lane on Lavernock Road and wideneing of Wesbourne Road to accommodate left and right turn exit.
3. A new 3-arm mini roundabout.

Each proposal shall be re-modelled with development +5 and +10 years and the highway authority can then determine the most suitable mitigation measures based on capacity analysis on each proposed improvement scheme. The applicant/developer to implement any such agreed mitigation measures to the junction prior to beneficial occupation of the proposed development.

Reason: in the interests of highway safety and to maintain free flow of traffic along the adopted highway network.

1. Notwithstanding the information provided in the Transport Assessment, the signalised junction of Lavernock Road/Dinas Road/Victoria Road shall undergo further investigation to determine if there is any spare capacity in the signal operations and/or MOVA software/control. The investigations shall provide any possible improvements to mitigate capacity increases as a result of the proposed development which shall be agreed by the highway authority. The applicant/developer to implement any such agreed mitigation measures to the junction prior to beneficial occupation of the proposed development.

Reason: in the interests of highway safety and to maintain free flow of traffic along the adopted highway network.

1. The highway hierarchy within the residential development to have the following required widths and junction geometry in-line with Vale of Glamorgan Councils Standards for adoption:

* Primary Vehicle Route – 6.5m
* Vehicle Route general road – 5.5m
* Pedestrian priority Home Zones (Shared Surface) – 6.8m
* Parking lane (Shared Surface) – 6.8m
* Pedestrian footway – 2.0m min
* Active Travel pedestrian/cycle lane – 3.5m (min)

The proposed layout to be checked to allow for a 15m coach to traverse safely through the two primary access roads and 11.220m refuse vehicle through all category roads.

Reason: - To ensure the minimum Design and Construction Standards archived in the interests of Highway / Public Safety.

1. The parking requirements for the residential development shall be in according to the Vale of Glamorgan Council’s Supplementary Planning Guidance, Parking Standards.

Reason: - To ensure a minimum standard of parking when the development is brought into use and in the interest of Highway / Public Safety.

1. The proposed development is to be designed to promote walking and cycling internally and to connect with its surrounding active travel infrastructure and links to the new adjacent primary school, National Coastal path and Cosmeston Lakes. Route NCN 88 is to be extended through the site to provide a direct active travel corridor to Penarth centre.

Reason: - To promote active travel and accessibility by Sustainable Transport modes.

1. The vehicle access for the Primary School shall be via the southern secondary junction off the B4267 Lavernock Road. The proposed junction and primary access road to be 6.5m wide and shall be designed and tracked for a 15m coach to allow to enter and exit and manoeuvre safely within the school perimeter in a forward gear.

Reason: - In the interest of highway/Public Safety and the free flow of traffic along the adopted highway network.

1. With regard to the primary School site, a drop off/pick up area shall be provided to allow school coaches and parent/guardians to drop off and pick up pupils in a safe area to minimise conflict between pedestrians and vehicles and reduces inconvenience for local nearby residents.

The drop off/pick up area shall be designed and tracked to accommodate a 15m coach to enter, drop off and exit the area in a forward gear. A separate safe route for pupils, teachers and parents shall be provided to access the school from the drop off/pick up area to avoid conflict with stationary and manoeuvring vehicles.

Reason: - To create safe pedestrian links within the school and In the interest of highway/Public Safety

1. With regard to the primary School site a separate parking area shall be provided to accommodate teachers and visitors and shall be designed in accordance according to the Vale of Glamorgan Council’s Supplementary Planning Guidance, Parking Standards. The parking area shall be designed to allow vehicles to enter and exit in forward gear onto the highway with suitable signage provided. A safe route for teachers and visitors shall be provided to and from the school to avoid conflict with stationary and manoeuvring vehicles.

Reason: - To ensure a minimum standard of parking when the school is brought into use and in the interest of Highway/Public Safety.

1. With regard to the primary School site a separate service delivery area and entrance shall be provided to allow deliveries to the school and shall be designed and tracked to allow vehicles to enter and exit in forward gear onto the highway. The service area to be separate from the drop off/pick up and parking areas.

Reason: - To create vehicle links within the school and In the interest of highway/Public Safety

1. The proposed primary school to be designed to promote walking and cycling with suitable shared cycle/pedestrian access links to the adjoining proposed residential development and the surrounding active travel infrastructure.

Reason: - To create safe pedestrian and cycle links from and into the school and In the interest of highway/Public Safety

1. From 7 January 2019, all new developments in Wales of more than 1 dwelling house or where the construction area is 100m2 or more will require Sustainable Drainage Systems (SuDS) for surface water. This needs to be considered as part of the detailed design for the internal road with the potential use of block paving. These SuDS must be designed and built in accordance with standards published by Welsh Government and approved by the local authority acting in its role as a SuDS approval body (SAB). The SAB will then have the duty to adopt any compliant systems; serving multiple properties. Early discussions with the SAB is advised
2. The applicant / developer must enter into a highway agreement under S278 of the Highways Act 1980 with the Council to facilitate the construction of the proposed site accesses arrangements serving the residential & School and associated offsite improvement works (including any required Traffic Regulation Orders), in accordance with a scheme which shall first have been submitted to and agreed in writing by the Local Highway Authority.

Reason: - In the interest of Highway / Public Safety, the free flow of traffic along the adopted highway and to ensure the minimum design and construction standards are achieved.

1. The applicant/developer will be required to incorporate as part of the requirement for full engineering details the provision of new Traffic Regulatory Orders (TRO’s) for the relocation of the existing 30mph gateway along the B4267 Lavernock Road to include all carriageway markings, signage and street lighting. To include any additional requirements as deemed necessary by the Local Planning Authority in order to provide a safe means of access and to prevent the parking along the site frontage along B4267 Lavernock Road. The applicant/developer to cover all legal costs at time of application and any additional costs such as objections/unforeseen issues and all associated engineering works to implement on site.

Reason: - In the interest of Highway / Public Safety and the free flow of traffic along the adopted highway

1. The development will be accessed via two access points with junctions off B4267 Lavernock Road where the most northerly access will primarily serve the residential development and the secondary access will serve part residential and the primary school.

The highway Authority would advise that the proposed visibility splays onto B4267 Lavernock Road off each junction to have an X distance (distance back along the minor road junction) of 4.5m and a Y distance (distance along the major road B4267) based on approaching vehicle speeds in correlation with the revised 30mph speed limit in accordance with the Sight Stopping Distance (SSD) formula / chart within Manual for Streets 2.

Reason: - In the interest of Highway / Public Safety and the free flow of traffic along the adopted highway

1. The applicant/developer will be required to provide a toucan crossing facility along B4267 Lavernock Road providing cycle and pedestrian links from the proposed shared cycle/pedestrian footway on the East fronting the site to the proposed cycle/pedestrian shared surface to the West fronting Cosmeston Lakes and providing cycle/pedestrian link into Cosmeston Lakes Park. Details to be submitted and approved by the Local Planning Authority. These details shall fully complying with Design Manual for Roads and Bridges / Technical Directives / Local transport Notes/ Vale of Glamorgan Councils Standards for adoption.

Reason: - To create safe pedestrian and cycle links from and into the development and In the interest of highway / Public Safety

1. The applicant/developer to provide a 3.5m wide illuminated shared footway/ cycleway facility designed across the full site frontage of the site on the Eastern side of the B4267 Lavernock Road which shall extend northwards to tie into the existing facility at Upper Cosmeston Farm Road and southwards to Ford Road to include a carriageway drop kerb facility for cyclists to return to the carriageway. The facility to extend on the western side of the B4267 Lavernock Road to tie into the proposed pedestrian/cycle friendly central crossing Island and the Toucan Crossing providing cycle/pedestrian link into Cosmeston Lakes Park.

These measures shall be designed and constructed to the relevant adoptable standards and be completed in materials approved by the Local Planning Authority PRIOR to beneficial occupation of the 1st dwelling.

All land with the ownership / control of the applicant / owner required to for the provision of the footway/ cycleway fronting the site for highway / public purposes ( dedicated ) shall be identified within a Land Dedication Plan to be submitted as part of the Planning application submission.

Reason: - To ensure a minimum standard of construction in the interests of highway / public safety and accessibility by Sustainable Transport modes and to minimise potential hazards.

1. The applicant/developer to upgrade/provide the provision of new Bus stop facilities on both North and South bound direction along the B4267 Lavernock Road within the vicinity of the site to be agreed as part of a subsequent application with the Vale of Glamorgan Councils Public Transport Section which will include a new illuminated bus shelter with bench seating, time table, flag and pole, electrical feeder pillar for internal lighting and to accommodate future real time information system, timetable, low rise bus stop kerbs (Kassel Kerbs), bi lingual bus stop carriageway markings, electrical feeder pillar to supply the new shelter and to accommodate future real time information system.

Reason:- In the interest of highway / public safety, accessibility to Sustainable Transport Modes, to minimize potential hazards and to aid in the delivery of sustainable Transport objectives and to support Local Transport Plan Policies.

1. Prior to the commencement of any works a Construction Traffic Management Plan incorporating delivery outside am / pm peak travel times / school pick / drop off times, Wheel Washing Facilities, Site compound layout, Parking of construction vehicles and access Route which shall incorporate adequate provision for addressing any abnormal wear and tear to the highway shall be submitted to and approved in writing with the Local Planning Authority in consultation with the Highway Authority together with proposals to control and manage construction traffic using the 'Construction Traffic Access Route' and to ensure no other local roads are used by construction traffic.

Reason: - In the interests of maintaining highway efficiency and safety.

1. Development shall not commence until a scheme detailing provision for onsite parking for construction workers for the duration of the construction period has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented throughout the construction period.

Reason: - To ensure adequate off-street parking during construction in the interests of highway safety.

1. Highway Authority will require at the developers expense to carry out **prior** to commencing **any** works a Condition Survey along agreed haulage route the extent to be agreed with The Councils Highway Network Manager which shall undertaken by a suitably qualified and experienced an independent Highway Maintenance Consultant to be approved by the Local Highway / Planning Authority.

Reason: - In the interest of highway / Public Safety

1. The Highway Authority will require at the developers expense a Second Condition Survey along agreed haulage route the extent to be agreed with The Councils Highway Network Manager to be undertaken by the approved independent Highway Maintenance Consultant on completion of the last property or such time that the Highway Authority instruct.

Reason: - In the interest of highway / Public Safety

1. The Highway Authority will require at the developers expense to carry out any remedial works identified during the construction phase use of the agreed haulage route and any

identified within the second condition survey that the Highway Authority Considers necessary as direct result of the works.

Reason: - In the interest of highway / Public Safety.

N.B. Internal road layout requirements

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| **VISIBILITY REQUIREMENTS – HIGHWAY SAFETY**  Please ensure that all vision splays and forward visibility envelopes are within highway land and not across 3rd party land. |
| Primary Routes – 30mph.  Carriageway Tarmacadam, width 6.5m with 2m footways either side  Junction – “Y” distance = 43m, “x” distance = 3m, radius = 6-10m  Forward visibility along road/bends = 43m |
| Primary Routes – 20mph.  Carriageway Tarmacadam, width 5.5-6.5m with 2m footways either side  Junction – “Y” distance = 25m, “x” distance = 3m, radius = 6m  Forward visibility along road/bends = 25m |
| Secondary Routes – 20mph.  Carriageway Tarmacadam, width 5.5m with 2m footways either side  Junction – “Y” distance = 25m, “x” distance = 2.4m, radius = 6m  Forward visibility along road/bends = 25m |
| Shared Surfaces – 15mph.  Carriageway Tarmacadam, width 6.8m with localised widening for visitor parking  Junction – “Y” distance = 25m, “x” distance = 2.4m, radius = 6m  Forward visibility along road/bends = 17m |
| Private Drives – 15mph/10mph  “Y” distance = 25m  Forward visibility along road/bends = Max 17m, Min 11m |