



November 17, 2014

Thomas Holm, AICP
Environmental Planning Manager
URS Corporation
2020 East First Street, Suite 400
Santa Ana, CA 92705

SUBJECT: Technical Peer Review - Trip Generation Assessment and Site Access/Internal Circulation Evaluation for Tentative Tract Map No. 17779 at 1239 Victoria Street, Costa Mesa, California.

Dear Tom,

This technical memorandum summarizes the results of the Peer Review (**Traffic Review**) conducted by URS Corporation (URS) for the above referenced Trip Generation Assessment and Site Access/Internal Circulation Evaluation (**Traffic Report**) of the subject project located at 1239 Victoria Street, Costa Mesa, California. It is our understanding that the findings of the Traffic Review will be used in the determination of the adequacy of the Traffic Report to support a Mitigated Negative Declaration (MND) environmental documentation for the above-referenced project.

Subject Area 1 - Project Traffic Generation Forecast

1. Trip Generation Forecast Approach and Reference Material –

The Traffic Report had relied on the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition) in quantifying the trip generation potential of the existing land use characterized as ITE Land Use Code 760: Research and Development Center and the proposed Project characterized as ITE Land Use Code 210: Single-Family Detached Housing Units.

We concur that the ITE Land Use designations used in the Traffic Report were appropriate and reflect the current and proposed use of the site.

The forecast trip generation potential of the Proposed Project when compared to the calculated trip generation of the existing use at the site is anticipated to result in a net difference of -139 Daily (2-way) trips, -10 AM Peak Hour trips and -26 PM Peak Hour trips. These findings indicate that the Proposed Project will result in the reduction of trips contributed to the surrounding roadway circulation system as compared to the current use at the site.

Subject Area 2 – Sight Distance Evaluation for Project Driveways

1. Sight Distance Analysis Approach and Reference Material –

The Traffic Report had relied on Caltrans' Highway Design Manual in the determination of the minimum stopping sight distance which was determined to be 300 feet and a corner sight

distance of 440 feet. The aforementioned distance results were based on the posted roadway speed limit of 40 MPH.

2. Field Review and Verification –

A field review was conducted at the proposed driveway location to test and confirm that the minimum stopping (300 feet) and corner sight (440) distances are not obstructed. The clear sight distances of the minimum stopping and corner sight distances assumes the restriction of hardscape and landscaping within the ‘limited use area’ fronting the project site.

Additionally, photo images (Traffic Report Figures 1, 2, 3 and 4) were provided to confirm the clear and unobstructed sightlines from the driveway observation points.

We concur on the Traffic Report’s minimum stopping (300 feet) and corner sight (440) distance analysis findings based on the 40 MPH posted speed assumption. It must be noted that vehicular speed assumptions is a key factor in the determination of minimum stopping and corner sight distance recommendations and that lower or higher vehicular speed assumptions will directly influence the required minimum stopping and corner sight distances described above.

On page 4, 2nd paragraph of the Traffic Report, the correct page reference for Section 405.1(2)(c) Caltrans Highway Design Manual is page 400-22, rather than page 400-17. The aforementioned incorrect page reference does not affect the values and results of the minimum stopping and corner sight distance analysis.

Subject Area 3 – Internal Circulation Evaluation

1. Site Circulation Evaluation Approach and Reference Material –

The Traffic Report had relied on Turning Vehicle Templates and AutoTURN computer software in simulating vehicular turn maneuvers entering, circulating within, and exiting from the project site. The turning maneuver evaluation used both WB-40 large truck and Fire Truck turn vehicle templates.

We concur that the WB-40 large truck and Fire Truck turn vehicle templates used were appropriate and the proposed driveway and internal roadway circulation layout can adequately handle anticipated large vehicle circulation at the project site.

We concur with the Traffic Report’s approach to evaluate large vehicle templates only in the Traffic Report as they represent the worst possible and most extreme test of the project site’s access and circulation system, and therefore the testing of smaller vehicle templates is deemed moot and redundant.

Findings and Conclusion

Our finding conclude that the proposed project is CEQA compliant (Public Resources Code §§21000-21178) in terms of project generated traffic impact due to the very low project trip generation potential where the proposed project is forecast to generate less than the current use onsite that will be replaced by the proposed project, and that no further analysis is required beyond those presented in the aforementioned Traffic Report.

Additionally, the results of the engineering evaluation to determine the minimum stopping and corner sight distances meet the required minimum standards and the vehicle turning/circulation analysis meet and satisfy vehicle template standards.

Should you have any comments or questions regarding the findings of the Peer Review of the Traffic Report please let me know. It was a pleasure to be given the opportunity to comment and review this important document.

Sincerely,

URS CORPORATION

Noel V. Casil, PE, TE, PTOE
Senior Transportation Engineer

cc: Douglas Smith, P.E. (URS)

Reference Documents:

General Plan Circulation Element, City of Costa Mesa, 2000

Highway Design Manual, Chapter 200 Geometric Design and Structure Standards, Caltrans

Highway Design Manual, Chapter 400 Intersections At Grade, Caltrans

**Technical Report: Phase 1 Environmental Assessment, Andersen Environmental, April 22, 2013 and
Hazardous Materials Survey Report, Hillman Consulting, December 30, 2013.**

Reviewer: Ron Gregg, URS

Comment Number	Location in Document	Comments
General Comments		
1.	Phase 1 report	The Phase 1 report used the ASTM E-1527-05 protocol. It is a standard Phase 1 report. The existing building site does not have hazardous waste management issues, site contamination, or off site problems from neighboring sites. The issue identified is that the building site is within 1,000 feet of an unidentified landfill or oil well that could subject the new development to state, county, and fire code methane regulations.
2.	Hazardous Materials Survey Report	The entire building was surveyed in detail for asbestos, leaded paint, and mercury and PCBs in light ballasts. All of these items were found and are noted in detailed comments below.
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Other Comments		
1.	Page 26 of the Phase 1 report	An attempt to locate the unidentified landfill or oil well should be made. If it is a landfill within 1,000 feet, the Orange County Fire regulations may apply and if it is an oil well within 300 feet, the regulations may apply. The regulation is Orange County Fire Combustible Soil Gas Hazard Mitigation Guideline C-03 January 1, 2014
2.		The Phase 1 consultant should be contacted to identify the location of the landfill or oil well identified in the Phase 1 report.
3.	URS has copies of the relevant Fire	Most likely, this will not be an issue because methane has never been noted as an issue at the site previously, once the location of the facility noted in the Phase 1 is determined, the issue can be

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	Department regulations	addressed better.
4.	Page 2 - 3	Asbestos occurs in the roofing mastic and was documented in 6 samples out of 123 collected. The asbestos material is on the roof of the building. This material must be addressed before demolition of the building begins.
5.	Page 5	Twenty- four leaded paint samples were taken and none contained more than the 0.5% by weight and thus are not considered leaded paint. However, paint in 5 samples contained lead above the detection limit. The leaded paint must be addressed in the demolition plan for the facility.
6.	Page 13	The survey identified 250 mercury containing florescent light bulbs in the facility. These were mounted in ceiling fixtures. These bulbs should be collected prior to demolition and disposed as mercury waste according to regulations.
7.	Page 13	The survey identified 75 fluorescent light ballasts that were not marked as not containing PCBs thus they may contain PCBs. These should be collected prior to demolition and sampled and disposed of according to regulations.
8.		A demolition report covering the handling and disposal of the building materials should be part of the project documents and the disposition of asbestos, leaded paint, mercury waste and PCB ballasts should be defined. These are common issues for a building built in the 1950's and do not necessarily represent a significant impact, but should be handled during demolition according to regulations.

Technical Report: Exterior Noise Analysis
Reviewer: Ted Lindberg

Comment Number	Location in Document	Comments
General Comments		
1.	Table 7, page 12	At Lots 1, 5, 13 and 28, why are the first floor mitigated noise levels higher than the unmitigated levels at the second and third floors?
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Other Comments		
1.		Suggest there be an additional table showing the noise level results at Lots 1, 7, 13 and 20 which are mitigated with the recommended 8' high wall.
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Technical Report: Exterior Noise Analysis
Reviewer: Ted Lindberg

Comment Number	Location in Document	Comments
10.		

Technical Report: Trip Generation Assessment and Site Access/Internal Circulation Evaluation for Tentative Tract Map No. 17779, at 1239 Victoria Street, Costa Mesa
Reviewer: Noel V. Casil, PE, TE, PTS, Senior Transportation Engineer

Comment Number	Location in Document	Comments
General Comments		
1.	Project Traffic Generation Forecast	We concur that the ITE Land Use designations used in the Traffic Report were appropriate and reflect the current and proposed use of the site. The forecast trip generation potential of the Proposed Project when compared to the calculated trip generation of the existing use at the site is anticipated to result in a net difference of -139 Daily (2-way) trips, -10 AM Peak Hour trips and -26 PM Peak Hour trips. These findings indicate that the Proposed Project will result in the reduction of trips contributed to the surrounding roadway circulation system as compared to the current use at the site.
2.	Sight Distance Evaluation for Project Driveways	We concur on the Traffic Report's minimum stopping (300 feet) and corner sight (440) distance analysis findings based on the 40 MPH posted speed assumption. It must be noted that vehicular speed assumptions is a key factor in the determination of minimum stopping and corner sight distance recommendations and that lower or higher vehicular speed assumptions will directly influence the required minimum stopping and corner sight distances described above.
3.	Internal Circulation Evaluation	<p>We concur that the WB-40 large truck and Fire Truck turn vehicle templates used were appropriate and the proposed driveway and internal roadway circulation layout can adequately handle anticipated large vehicle circulation at the project site.</p> <p>We concur with the Traffic Report's approach to evaluate large vehicle templates only in the Traffic Report as they represent the worst possible and most extreme test of the project site's access and circulation system, and therefore the testing of smaller vehicle templates is deemed moot and redundant.</p>
4.	Findings and Conclusion	Our findings conclude that the proposed project is CEQA compliant (Public Resources Code §§21000-21178) in terms of project generated traffic impact due to the very low project trip generation potential where the proposed project is forecast to generate less than the current use onsite that will be replaced by the proposed project, and that no further analysis is required beyond those presented in the aforementioned Traffic Report.

Technical Report: Trip Generation Assessment and Site Access/Internal Circulation Evaluation for Tentative Tract Map No. 17779, at 1239 Victoria Street, Costa Mesa
Reviewer: Noel V. Casil, PE, TE, PTS, Senior Transportation Engineer

Comment Number	Location in Document	Comments
	Findings (Cont.)	Additionally, the results of the engineering evaluation to determine the minimum stopping and corner sight distances meet the required minimum standards and the vehicle turning/circulation analysis meet and satisfy vehicle template standards.
Other Comments		
1.	Page 4, 2 nd paragraph	The correct page reference for Section 405.1(2)(c) Caltrans Highway Design Manual is page 400-22, rather than page 400-17. The aforementioned incorrect page reference does not affect the values and results of the minimum stopping and corner sight distance analysis.
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Technical Report: Preliminary Geotechnical Evaluation for the Proposed Residential Development at 1239 Victoria Street, City of Costa Mesa, California; report by LGC Geotechnical, Inc., dated April 28, 2014

Reviewer: Dan Stoica, Geotechnical Engineer, URS Corp.; review date Nov. 19, 2014

Comment Number	Location in Document	Comments
General Comments		
1.	Sect 1.4 and App B-Infiltration Test Data	Please explain the large difference between the Pre-Test Water Level drop rate (1.96'/30min = 0.65'/10min) and Main Test Data (ranging from 0.85 to 1 ft/10min.).
2.	Sect 4.3	There are no bearing capacity, earth pressures, and settlement calculations included in the appendices.
3.	Sect 4.6	What are the preliminary recommendations for infiltration zones setback from foundations?
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Other Comments		
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Technical Report: Preliminary Geotechnical Evaluation for the Proposed Residential Development at 1239 Victoria Street, City of Costa Mesa, California; report by LGC Geotechnical, Inc., dated April 28, 2014

Reviewer: Dan Stoica, Geotechnical Engineer, URS Corp.; review date Nov. 19, 2014

Comment Number	Location in Document	Comments
10.		

Technical Report: Conceptual Water Quality Management Plan
 Reviewer: Nathan Chase

Comment Number	Location in Document	Comments
General Comments		
1.	Section II, Page 4	Please update all references to the Technical Guidance Document to use the latest version (December 2013).
2.	General Comment	Please confirm that adequate setbacks from proposed structures are provided for the proposed infiltration areas. Please confirm that the geotechnical concerns with subsurface water infiltration have been addressed (see page 20, section 4.6 of the LGC geotechnical report). Please confirm that the presence of sandy clays and clayey sands at the site will not result in an inability to meet the WQMP infiltration requirements.
Other Comments		
1.	Certification, Page 2	Add PE Registration # C24695 for David Frattone.
2.	Section I, Page 1	Confirm that the City of Costa Mesa has not yet provided site-specific water quality conditions. If available, add to this section as appropriate.
3.	Section III, Page 8	What vertical datum are the elevations above mean sea level referenced to? Please include the datum in the text.
4.	Section III, Page 10	Please confirm that stormwater will not run onto the site from Sea Bluff Dr.
5.	Section IV, Page 11	Insert bolded text: “A WIHMP has not been approved for the Santa Ana River watershed.”
6.	Section IV, Page 12	Under <i>Maximize Natural Infiltration Capacity</i> , insert the bolded text at the end of the last sentence: “Additionally, project runoff will be allowed to infiltrate to the underlying soils via proposed pervious pavement areas. ”
7.	Section IV, Page 13	Revise text under the HSC-1 header to reflect the fact that only a portion of the project DCV will be captured with the HSC-1 BMPs (i.e., only the portion corresponding to DMAs 3, 4 and 5).
8.	Section IV, Page 14	Revise “HSC BMP SUMMARY” table to include the correct drainage area names: DMA3, DMA4, and DMA5 (see table on Page 13 for consistency).

Technical Report: Conceptual Water Quality Management Plan
Reviewer: Nathan Chase

Comment Number	Location in Document	Comments
9.	Attachment C, Table 2.7, Item 4	Change basis text to: “Per NRCS and project’s geotechnical investigation, site resides on HSG Group A soils, capable of infiltrating runoff. Based on geotechnical report, site soils is favorable for infiltration.”
10.	Attachment C	Are BMP Fact Sheets intended to be provided? If so, please include.