From: Barrita, Michael <BarritaM@metro.net>

Sent time: 10/04/2018 03:01:57 PM
To: elva.nuno-odonnell@lacity.org

Cc: Sheridan, Georgia <SheridanG@metro.net>

Subject: Metro DevRev - Comment Letter - Hollywood Center Project

Attachments: Metro DevRev - Comment Letter - Hollywood Center Project.pdf CMP Appendix D -Transport Impact Analysis Guidelines.pdf Adj

Constr Design Manual - Metro Design Criteria_Rev 2 121615.pdf

Ms. Oropeza,

Thank you for the opportunity to comment on the "Hollywood Center Project" located in the City of Los Angeles. The Metro comment letter is attached along with the associated attachments.

Please contact Eddi Zepeda at 213.418.3483 if you have any questions.

Regards,

Michael A. Barrita

LA Metro

Transportation Associate II, Countywide Planning & Development Joint Development/Strategic Initiatives 213.418.3482

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Los Angeles County Metropolitan Transportation Authority One Gateway Plaza Los Angeles, CA 90012-2952 213.922.2000 Tel metro.net

October 4, 2018

Elva Nuno-O'Donnell Department of City Planning Los Angeles 6262 Van Nuys Blvd., Room 351 Downey, CA 91401

RE: Hollywood Center Project – Notice of Preparation and Environmental Impact Report and Public Scoping Meeting

Dear Ms. Nuno-O'Donnell:

Thank you for coordinating with the Los Angeles County Metropolitan Transportation Authority (Metro) regarding the proposed Hollywood Center Project (Project) located in the City of Los Angeles (City). Metro is committed to working with local municipalities, developers, and other stakeholders across Los Angeles County on transit-supportive developments to grow ridership, reduce driving, and promote walkable neighborhoods. Transit Oriented Communities (TOCs) are places (such as corridors or neighborhoods) that, by their design, allow people to drive less and access transit more. TOCs maximize equitable access to a multi-modal transit network as a key organizing principle of land use planning and holistic community development.

The purpose of this letter is to briefly describe the proposed Project, based on the Notice of Preparation of Environmental Impact Report (EIR) and Public Scoping Meeting, and to outline recommendations from Metro concerning issues that are germane to our agency's statutory responsibility in relation to the Metro Redline and bus facilities and services, which may be affected by the proposed Project.

Project Description

The Project would be comprised of a new mixed-use development on an approximately 4.46 acre site. It would include four new buildings, including a 35-story "West Building," 46-story "East Building," and two 11-story senior buildings set aside for extremely-low and very-low income households. The Project would include a total of 872 market-rate units, 133 senior affordable housing units, and 30,176 square feet of commercial floor area for retail and restaurant uses. The Project would include a total of 1,521 vehicle parking spaces and 551 bicycle parking spaces.

Metro Comments

In addition to the specific items outlined below, Metro would like to provide the Project Sponsor with a user-friendly resource, the Metro Adjacent Development Handbook (attached), which provides an

Hollywood Center Project
Notice of Preparation of (EIR) & Public Scoping Meeting – Metro Comments
October 4, 2018

overview of common concerns for development adjacent to Metro right-of-way (ROW), as well as the Adjacent Construction Manual with technical information (also attached). These documents and additional resources are available at www.metro.net/projects/devreview/.

Transit Orientation

Considering the Project's proximity to the Hollywood and Vine Station (Station), Metro would like to identify the potential synergies associated with transit-oriented development:

- Land Use: Metro supports development of commercial and residential properties near transit stations and understands that increasing development near stations represents a mutually beneficial opportunity to increase ridership and enhance transportation options for the users of developments. Metro encourages the City and Project Sponsor to be mindful of the Project's proximity to the Station, including orienting pedestrian pathways towards the station.
- 2. **Walkability:** Metro strongly encourages the installation of wide sidewalks, pedestrian lighting, a continuous canopy of shade trees, enhanced crosswalks with ADA-compliant curb ramps, and other amenities along all public street frontages of the development site to improve pedestrian safety and comfort to access the nearby rail station. The City should consider requiring the installation of such amenities as part of the conditions of approval for the Project.
- 3. Access: The Project should address first-last mile connections to transit, encouraging development that is transit accessible with bicycle and pedestrian-oriented street design connecting transportation with housing and employment centers. For reference, please view the First Last Mile Strategic Plan, authored by Metro and the Southern California Association of Governments (SCAG), available on-line at: http://media.metro.net/docs/sustainability path design guidelines.pdf
- 4. Active Transportation: Metro encourages the City to work with the Project Sponsor to promote bicycle use through adequate short-term bicycle parking, such as ground-level bicycle racks, as well as secure and enclosed long-term bicycle parking, such as bike lockers or a secured bike room, for guests, employees, and residents. Bicycle parking facilities should be designed with best practices in mind, including: highly visible siting, effective surveillance, easy to locate, and equipment installed with preferred spacing dimensions, so they can be conveniently accessed. The Project Sponsor should coordinate with the Metro Bike Share Program for a potential Bike Share station at this development, in the future if applicable. Additionally, the Project Sponsor should help facilitate safe and convenient connections for pedestrians, people riding bikes, and transit users to/from the Project site and nearby destinations,
- 5. Wayfinding: The Project is also encouraged to support these connections with wayfinding signage inclusive of all modes of transportation. Any temporary or permanent wayfinding signage with content referencing Metro services, or featuring the Metro brand and/or associated graphics (such as bus, rail, bike share, or other standard Metro pictograms) requires review and approval by Metro Art & Design. Please contact Lance Glover at 213-922-2360 or GloverL@metro.net for current Metro Design Standards and coordination.

Hollywood Center Project Notice of Preparation of (EIR) & Public Scoping Meeting – Metro Comments October 4, 2018

- 6. **Multi-modal Connections:** With an anticipated increase in traffic, Metro encourages an analysis of impacts on non-motorized transportation modes and consideration of improved non-motorized access to the Project and nearby transit services, including pedestrian connections and bike lanes/paths. Appropriate analyses could include multi-modal LOS calculations, pedestrian audits, etc.
- 7. **Parking:** Metro strongly encourages the incorporation of transit-oriented, pedestrian-oriented parking provision strategies such as the reduction or removal of minimum parking requirements for specific areas and the exploration of shared parking opportunities. These strategies should be pursued to reduce automobile-orientation in design and travel demand.
- 8. **Transit Pass:** Metro would like to inform the Project Sponsor of Metro's employer transit pass programs including the Annual Transit Access Pass (A-TAP) and Business Transit Access Pass (B-TAP) programs which offer efficiencies and group rates that businesses can offer employees as an incentive to utilize public transit. For more information on these programs, contact Devon Deming at 213-922-7957 or DemingD@metro.net.

Congestion Management Program

Beyond impacts to Metro facilities and operations, Metro must also notify the Project Sponsor of state requirements. A Transportation Impact Analysis (TIA), with roadway and transit components, is required under the State of California Congestion Management Program (CMP) statute. The CMP TIA Guidelines are published in the "2010 Congestion Management Program for Los Angeles County," Appendix D (attached). The geographic area examined in the TIA must include the following, at a minimum:

- All CMP arterial monitoring intersections, including monitored freeway on/off-ramp intersections, where the proposed Project will add 50 or more trips during either the a.m. or p.m. weekday peak hour (of adjacent street traffic).
- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed Project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.
- 3. Mainline freeway-monitoring locations where the Project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hour.
- 4. Caltrans must also be consulted through the NOP process to identify other specific locations to be analyzed on the state highway system.

The CMP TIA requirement also contains two separate impact studies covering roadways and transit, as outlined in Sections D.8.1 – D.9.4. If the TIA identifies no facilities for study based on the criteria above, no further traffic analysis is required. However, projects must still consider transit impacts. For all CMP TIA requirements please see the attached guidelines.

Hollywood Center Project Notice of Preparation of (EIR) & Public Scoping Meeting – Metro Comments October 4, 2018

If you have any questions regarding this response, please contact Eddi Zepeda by phone at 213-418-3484, by email at DevReview@metro.net, or by mail at the following address:

Metro Development Review One Gateway Plaza MS 99-23-4 Los Angeles, CA 90012-2952

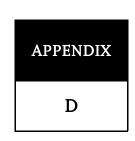
Sincerely,

Georgia Sheridan, AICP

Senior Manager, Transit Oriented Communities

Attachments and links:

- Adjacent Construction Design Manual
- Adjacent Development Handbook: https://www.metro.net/projects/devreview/
- CMP Appendix D: Guidelines for CMP Transportation Impact Analysis



GUIDELINES FOR CMP TRANSPORTATION IMPACT ANALYSIS

Important Notice to User: This section provides detailed travel statistics for the Los Angeles area which will be updated on an ongoing basis. Updates will be distributed to all local jurisdictions when available. In order to ensure that impact analyses reflect the best available information, lead agencies may also contact MTA at the time of study initiation. Please contact MTA staff to request the most recent release of "Baseline Travel Data for CMP TIAs."

D.1 OBJECTIVE OF GUIDELINES

The following guidelines are intended to assist local agencies in evaluating impacts of land use decisions on the Congestion Management Program (CMP) system, through preparation of a regional transportation impact analysis (TIA). The following are the basic objectives of these guidelines:

- ☐ Promote consistency in the studies conducted by different jurisdictions, while maintaining flexibility for the variety of project types which could be affected by these guidelines.
- ☐ Establish procedures which can be implemented within existing project review processes and without ongoing review by MTA.
- Provide guidelines which can be implemented immediately, with the full intention of subsequent review and possible revision.

These guidelines are based on specific requirements of the Congestion Management Program, and travel data sources available specifically for Los Angeles County. References are listed in Section D.10 which provide additional information on possible methodologies and available resources for conducting TIAs.

D.2 GENERAL PROVISIONS

Exhibit D-7 provides the model resolution that local jurisdictions adopted containing CMP TIA procedures in 1993. TIA requirements should be fulfilled within the existing environmental review process, extending local traffic impact studies to include impacts to the regional system. In order to monitor activities affected by these requirements, Notices of Preparation (NOPs) must be submitted to MTA as a responsible agency. Formal MTA approval of individual TIAs is not required.

The following sections describe CMP TIA requirements in detail. In general, the competing objectives of consistency & flexibility have been addressed by specifying standard, or minimum, requirements and requiring documentation when a TIA varies from these standards.

D.3 PROJECTS SUBJECT TO ANALYSIS

In general a CMP TIA is required for all projects required to prepare an Environmental Impact Report (EIR) based on local determination. A TIA is not required if the lead agency for the EIR finds that traffic is not a significant issue, and does not require local or regional traffic impact analysis in the EIR. Please refer to Chapter 5 for more detailed information.

CMP TIA guidelines, particularly intersection analyses, are largely geared toward analysis of projects where land use types and design details are known. Where likely land uses are not defined (such as where project descriptions are limited to zoning designation and parcel size with no information on access location), the level of detail in the TIA may be adjusted accordingly. This may apply, for example, to some redevelopment areas and citywide general plans, or community level specific plans. In such cases, where project definition is insufficient for meaningful intersection level of service analysis, CMP arterial segment analysis may substitute for intersection analysis.

D.4 STUDY AREA

The geographic area examined in the TIA must include the following, at a minimum:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).
 If CMP arterial segments are being analyzed rather than intersections (see Section D.3), the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions). Within the study area, the TIA must analyze at least one segment between monitored CMP intersections.
 Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.
- □ Caltrans must also be consulted through the Notice of Preparation (NOP) process to identify other specific locations to be analyzed on the state highway system.

If the TIA identifies no facilities for study based on these criteria, no further traffic analysis is required. However, projects must still consider transit impacts (Section D.8.4).

D.5 BACKGROUND TRAFFIC CONDITIONS

The following sections describe the procedures for documenting and estimating background, or non-project related traffic conditions. Note that for the purpose of a TIA, these background estimates must include traffic from all sources without regard to the exemptions specified in CMP statute (e.g., traffic generated by the provision of low and very low income housing, or trips originating outside Los Angeles County. Refer to Chapter 5, Section 5.2.3 for a complete list of exempted projects).

D.5.1 Existing Traffic Conditions. Existing traffic volumes and levels of service (LOS) on the CMP highway system within the study area must be documented. Traffic counts must

be less than one year old at the time the study is initiated, and collected in accordance with CMP highway monitoring requirements (see Appendix A). Section D.8.1 describes TIA LOS calculation requirements in greater detail. Freeway traffic volume and LOS data provided by Caltrans is also provided in Appendix A.

D.5.2 Selection of Horizon Year and Background Traffic Growth. Horizon year(s) selection is left to the lead agency, based on individual characteristics of the project being analyzed. In general, the horizon year should reflect a realistic estimate of the project completion date. For large developments phased over several years, review of intermediate milestones prior to buildout should also be considered.

At a minimum, horizon year background traffic growth estimates must use the generalized growth factors shown in Exhibit D-1. These growth factors are based on regional modeling efforts, and estimate the general effect of cumulative development and other socioeconomic changes on traffic throughout the region. Beyond this minimum, selection among the various methodologies available to estimate horizon year background traffic in greater detail is left to the lead agency. Suggested approaches include consultation with the jurisdiction in which the intersection under study is located, in order to obtain more detailed traffic estimates based on ongoing development in the vicinity.

D.6 PROPOSED PROJECT TRAFFIC GENERATION

Traffic generation estimates must conform to the procedures of the current edition of <u>Trip Generation</u>, by the Institute of Transportation Engineers (ITE). If an alternative methodology is used, the basis for this methodology must be fully documented.

Increases in site traffic generation may be reduced for existing land uses to be removed, if the existing use was operating during the year the traffic counts were collected. Current traffic generation should be substantiated by actual driveway counts; however, if infeasible, traffic may be estimated based on a methodology consistent with that used for the proposed use.

Regional transportation impact analysis also requires consideration of trip lengths. Total site traffic generation must therefore be divided into work and non-work-related trip purposes in order to reflect observed trip length differences. Exhibit D-2 provides factors which indicate trip purpose breakdowns for various land use types.

For lead agencies who also participate in CMP highway monitoring, it is recommended that any traffic counts on CMP facilities needed to prepare the TIA should be done in the manner outlined in Chapter 2 and Appendix A. If the TIA traffic counts are taken within one year of the deadline for submittal of CMP highway monitoring data, the local jurisdiction would save the cost of having to conduct the traffic counts twice.

D.7 TRIP DISTRIBUTION

For trip distribution by direct/manual assignment, generalized trip distribution factors are provided in Exhibit D-3, based on regional modeling efforts. These factors indicate Regional Statistical Area (RSA)-level tripmaking for work and non-work trip purposes.

(These RSAs are illustrated in Exhibit D-4.) For locations where it is difficult to determine the project site RSA, census tract/RSA correspondence tables are available from MTA.

Exhibit D-5 describes a general approach to applying the preceding factors. Project trip distribution must be consistent with these trip distribution and purpose factors; the basis for variation must be documented.

Local agency travel demand models disaggregated from the SCAG regional model are presumed to conform to this requirement, as long as the trip distribution functions are consistent with the regional distribution patterns. For retail commercial developments, alternative trip distribution factors may be appropriate based on the market area for the specific planned use. Such market area analysis must clearly identify the basis for the trip distribution pattern expected.

D.8 IMPACT ANALYSIS

CMP Transportation Impact Analyses contain two separate impact studies covering roadways and transit. Section Nos. D.8.1-D.8.3 cover required roadway analysis while Section No. D.8.4 covers the required transit impact analysis. Section Nos. D.9.1-D.9.4 define the requirement for discussion and evaluation of alternative mitigation measures.

D.8.1 Intersection Level of Service Analysis. The LA County CMP recognizes that individual jurisdictions have wide ranging experience with LOS analysis, reflecting the variety of community characteristics, traffic controls and street standards throughout the county. As a result, the CMP acknowledges the possibility that no single set of assumptions should be mandated for all TIAs within the county.

However, in order to promote consistency in the TIAs prepared by different jurisdictions, CMP TIAs must conduct intersection LOS calculations using either of the following methods:

The Inte	ersection	Capacity	Utilization	(ICU)	method	as	specified	for	CMP	highway
monitori	ng (see A	Appendix A	4); or							

☐ The Critical Movement Analysis (CMA) / Circular 212 method.

Variation from the standard assumptions under either of these methods for circumstances at particular intersections must be fully documented.

TIAs using the 1985 or 1994 Highway Capacity Manual (HCM) operational analysis must provide converted volume-to-capacity based LOS values, as specified for CMP highway monitoring in Appendix A.

D.8.2 Arterial Segment Analysis. For TIAs involving arterial segment analysis, volume-to-capacity ratios must be calculated for each segment and LOS values assigned using the V/C-LOS equivalency specified for arterial intersections. A capacity of 800 vehicles per hour per through traffic lane must be used, unless localized conditions necessitate alternative values to approximate current intersection congestion levels.

- **D.8.3 Freeway Segment (Mainline) Analysis.** For the purpose of CMP TIAs, a simplified analysis of freeway impacts is required. This analysis consists of a demand-to-capacity calculation for the affected segments, and is indicated in Exhibit D-6.
- **D.8.4 Transit Impact Review.** CMP transit analysis requirements are met by completing and incorporating into an EIR the following transit impact analysis:
- ☐ Evidence that affected transit operators received the Notice of Preparation.
- A summary of existing transit services in the project area. Include local fixed-route services within a ¼ mile radius of the project; express bus routes within a 2 mile radius of the project, and; rail service within a 2 mile radius of the project.
- ☐ Information on trip generation and mode assignment for both AM and PM peak hour periods as well as for daily periods. Trips assigned to transit will also need to be calculated for the same peak hour and daily periods. Peak hours are defined as 7:30-8:30 AM and 4:30-5:30 PM. Both "peak hour" and "daily" refer to average weekdays, unless special seasonal variations are expected. If expected, seasonal variations should be described.
- □ Documentation of the assumption and analyses that were used to determine the number and percent of trips assigned to transit. Trips assigned to transit may be calculated along the following guidelines:
 - ➤ Multiply the total trips generated by 1.4 to convert vehicle trips to person trips;
 - For each time period, multiply the result by one of the following factors:
 - 3.5% of Total Person Trips Generated for most cases, except:
 - 10% primarily Residential within 1/4 mile of a CMP transit center
 - 15% primarily Commercial within 1/4 mile of a CMP transit center
 - 7% primarily Residential within 1/4 mile of a CMP multi-modal transportation center
 - 9% primarily Commercial within 1/4 mile of a CMP multi-modal transportation center
 - 5% primarily Residential within 1/4 mile of a CMP transit corridor
 - 7% primarily Commercial within 1/4 mile of a CMP transit corridor
 - 0% if no fixed route transit services operate within one mile of the project

To determine whether a project is primarily residential or commercial in nature, please refer to the CMP land use categories listed and defined in Appendix E, *Guidelines for New Development Activity Tracking and Self Certification*. For projects that are only partially within the above one-quarter mile radius, the base rate (3.5% of total trips generated) should be applied to all of the project buildings that touch the radius perimeter.

☐ Information on facilities and/or programs that will be incorporated in the development plan that will encourage public transit use. Include not only the jurisdiction's TDM Ordinance measures, but other project specific measures.

	Analysis of expected project impacts on current and future transit services and proposed project mitigation measures, and;
	Selection of final mitigation measures remains at the discretion of the local jurisdiction/lead agency. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the existing mitigation monitoring requirements of CEQA.
D (O IDENTIFICATION AND EVALUATION OF MITICATION

D.9 IDENTIFICATION AND EVALUATION OF MITIGATION

- **D.9.1 Criteria for Determining a Significant Impact.** For purposes of the CMP, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C \geq 0.02), causing LOS F (V/C > 1.00); if the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C \geq 0.02). The lead agency may apply a more stringent criteria if desired.
- **D.9.2 Identification of Mitigation.** Once the project has been determined to cause a significant impact, the lead agency must investigate measures which will mitigate the impact of the project. Mitigation measures proposed must clearly indicate the following:
- ☐ Cost estimates, indicating the fair share costs to mitigate the impact of the proposed project. If the improvement from a proposed mitigation measure will exceed the impact of the project, the TIA must indicate the proportion of total mitigation costs which is attributable to the project. This fulfills the statutory requirement to exclude the costs of mitigating inter-regional trips.
- ☐ Implementation responsibilities. Where the agency responsible for implementing mitigation is not the lead agency, the TIA must document consultation with the implementing agency regarding project impacts, mitigation feasibility and responsibility.

Final selection of mitigation measures remains at the discretion of the lead agency. The TIA must, however, provide a summary of impacts and mitigation measures. Once a mitigation program is selected, the jurisdiction self-monitors implementation through the mitigation monitoring requirements contained in CEQA.

- **D.9.3 Project Contribution to Planned Regional Improvements.** If the TIA concludes that project impacts will be mitigated by anticipated regional transportation improvements, such as rail transit or high occupancy vehicle facilities, the TIA must document:
- □ Any project contribution to the improvement, and
 □ The means by which trips generated at the site will access the regional facility.
- **D.9.4 Transportation Demand Management (TDM).** If the TIA concludes or assumes that project impacts will be reduced through the implementation of TDM measures, the TIA must document specific actions to be implemented by the project which substantiate these conclusions.

D.10 REFERENCES

- 1. Traffic Access and Impact Studies for Site Development: A Recommended Practice, Institute of Transportation Engineers, 1991.
- 2. *Trip Generation*, 5th Edition, Institute of Transportation Engineers, 1991.
- 3. Travel Forecast Summary: 1987 Base Model Los Angeles Regional Transportation Study (LARTS), California State Department of Transportation (Caltrans), February 1990.
- 4. *Traffic Study Guidelines*, City of Los Angeles Department of Transportation (LADOT), July 1991.
- 5. *Traffic/Access Guidelines*, County of Los Angeles Department of Public Works.
- 6. Building Better Communities, Sourcebook, Coordinating Land Use and Transit Planning, American Public Transit Association.
- 7. *Design Guidelines for Bus Facilities*, Orange County Transit District, 2nd Edition, November 1987.
- 8. *Coordination of Transit and Project Development*, Orange County Transit District, 1988.
- 9. Encouraging Public Transportation Through Effective Land Use Actions, Municipality of Metropolitan Seattle, May 1987.

ADJACENT CONSTRUCTION DESIGN MANUAL

1.0 INTRODUCTION

- 1.1 Parties planning construction over, under or adjacent to a-Metropolitan Transportation Authority (MTA) facilitiesy or structures are advised to submit for review seven (7)two (2) hard copies and one (1) electronic copy of their design drawings and four (4) copies of their calculations showing the relationship between their project and the MTA facilities, for MTA review. The purpose of the MTA review is to reduce the chance of conflict, damage, and unnecessary remedial measures for both MTA and the parties. Parties are defined as developers, agencies, municipalities, property owners or similar organizations proposing to perform or sponsor construction work near MTA facilities.
- 1.2 Sufficient drawings and details shall be submitted at each level of completion such as Preliminary, In-Progress, Pre-final and Final, etc. to facilitate the review of the effects that the proposed project may or may not have on the MTA facilities. An MTA review requires internal circulation of the construction drawings to concerned departments (usually includes Construction, Operations, Maintenance, and Real Estate) for MTA departments review. Parties shall be responsible for all costs related to MTAdrawing reviews by MTA. MTA costs shall be based upon the actual hours taken for review at the hourly rate of pay plus overhead charges. Drawings normally required for review are:
 - A. Site Plan
 - B. Drainage Area Maps and Drainage Calculations
 - C. Architectural drawings
 - D. Structural drawings and calculations
 - E. Civil Drawings
 - F. Utility Drawings
 - G. Sections showing Foundations and MTA Structures
 - H. Column Load Tables
 - I. Pertinent Drawings and calculations detailing an impact on MTA facilities
 - J. A copy of the Geotechnical Report.
 - K. Construction zone traffic safety and detour plans: Provide and regulate positive traffic guidance and definition for vehicular and pedestrian traffic adjacent to the construction site to ensure traffic safety and reduce adverse traffic circulation impact.
 - L. Drawings and calculations should be sent to:

MTA Third Party Administration (Permits Administration) Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza Los Angeles, California 90012

Baseline: 03.03.99

- 1.3 If uncertainty exists on the possible impacts a project may have on the MTA facilities, and before submitting a formal letter requesting a review of a construction project adjacent to the Metro System, the party or his agent may contact the MTA Third Party Administrator (Permits). The Party shall review the complexity of the project, and contact MTA to receive an informal evaluation of the amount of detail required for the MTA review. In those cases, whereby it appears the project will present no risk to MTA, the Third Party Administrator (Permits) shall immediately route the design documents to Engineering, Construction, Operations, Maintenance, and Real Estate departments for a preliminary evaluation. If it is then confirmed that MTA risk is not present, the Administrator shall process an approval letter to the party.
- 1.4 A period of 30 working days should be allowed for review of the drawings and calculations. Thirty (30) work days should be allowed for each successive review as required. It is noted that preliminary evaluations are usually produced within 5 working days.
- 1.5 The party shall reimburse the MTA for any technical review or support services costs incurred that are associated with his/her request for access to the Metro TransitRail System
- 1.6 The following items must be completed before starting any construction:
 - A. Each part of the project's design may be reviewed and approved by the MTA. The prime concern of the MTA is to determine the effect of the project on the MTA structure and its transit operations. A few of the other parts of a project to be considered are overhead protection, dust protection, dewatering, and temporary use of public space for construction activities.
 - B. Once the Party has received written acceptance of the design of a given project then the Party must notify MTA prior to the start of construction, in accordance with the terms of acceptance.
- 1.7 Qualified Seismic, Structural and Geotechnical Oversight

The design documents shall note the name of the responsible Structural Engineer and Geotechnical Engineer, licensed in the State of California.

2.0 REVIEW PROCEDURE

- 2.1 All portions of any proposed design that will have a direct impact on an MTA facility or structure will be reviewed to assure that the MTA facility or structure is not placed in risk at any time, and that the design meets all applicable codes and criteria. Any portion of the proposed design that is to form part of an MTA controlled area shall be designed to meet the MTA Design Criteria and Standards.
- 2.2 Permits, where required by the local jurisdiction, shall be the responsibility of the party. City of L.A. Dept. of Bldg. and Safety and the Bureau of Engineering permit review shall remain in effect. Party shall refer to MTA Third Party Administration policies and procedures, THD5 for additional information.
- 2.3 Monitoring of the temporary support of excavation structures for adjacent construction shall be required in all cases for excavations within the geotechnical zone of influence of MTA structures. The extent of the monitoring will vary from case to case.

- 2.4 Monitoring of the inside of MTA tunnels and structures shall be required when the adjacent excavation will unload or load the MTA structure or tunnel. Monitoring of vertical and horizontal distortions will include use of extensometers, inclinometers, settlement reference points, tiltmeters, groundwater observation wells, tape extensometer anchor points and load cells, as appropriately required. Acceptable limits of movement will depend on groundwater conditions, soil types and also the length of service the stations and tunnels have gone through. Escorts will be required for the survey parties entering the Metro operating system in accordance with MTA Operating Rules and Procedures. An MTA account number will be established and the costs for the escort monitoring and surveying service will be billed directly to the party or his agent as in section 1.2.
- 2.5 The calculations submitted for review shall include the following:
 - A. A concise statement of the problem and the purpose of the calculation.
 - B. Input data, applicable criteria, clearly stated assumptions and justifying rationale.
 - References to articles, manuals and source material shall be furnished with the calculations.
 - D. Reference to pertinent codes and standards.
 - E. Sufficient sketches or drawing references for the work to be easily understood by an independent reviewer. Diagrams indicating data (such as loads and dimensions) shall be included along with adequate sketches of all details not considered standard by MTA.
 - F. The source or derivation of all equations shall be shown where they are introduced into the calculations.
 - G. Numerical calculations shall clearly indicate type of measurement unit used.
 - H. Identify results and conclusions.
 - I. Calculations shall be neat, orderly, and legible.
- 2.6 When computer programs are used to perform calculations, the following information shall accompany the calculation, including the following:
 - A. Program Name.
 - B. Program Abstract.
 - C. Program Purpose and Applications.
 - D. Complete descriptions of assumptions, capabilities and limitations.
 - E. Instructions for preparing problem data.
 - F. Instructions for problem execution.
 - G. List (and explanation) of program acronyms and error messages.
 - H. Description of deficiencies or uncorrected errors.
 - I. Description of output options and interpretations.
 - J. Sample problem(s), illustrating all input and output options and hardware execution statements. Typically, these problems shall be verified problems.
 - K. Computer printout of all supporting calculations.

Baseline: 03.03.99

- L. The "User's Manual" shall also include a certification section. The certification section shall describe the methods and how they cover the permitted options and uses of the program.
- 2.7 Drawings shall be drawn, to scale, showing the location and relationship of proposed adjacent construction to existing MTA structures at various stages of construction along the entire adjacent alignment. The stresses and deflections induced in the existing MTA structures should be provided.
- 2.8 The short-term and long-term effects of the new loading due to the adjacent construction on the MTA structures shall be provided. The soil parameters and other pertinent geotechnical criteria contained in existing contract documents for the affected structure, plus any additional conditions shall be used to analyze the existing MTA structures.
- 2.9 MTA structures shall be analyzed for differential pressure loadings transferred from the adjacent construction site.

3.0 MECHANICAL CRITERIA

- 3.1 Existing services to MTA facilities, including chilled water and condenser water piping, potable and fire water, storm and sanitary sewer, piping, are not to be used, interrupted nor disturbed without written approval of MTA.
- 3.2 Surface openings of ventilation shafts, emergency exits serving MTA underground facilities, and ventilation system openings of surface and elevated facilities are not to be blocked or restricted in any manner. Construction dust shall be prevented from entering MTA facilities.
- 3.3 Hot or foul air, fumes, smoke, steam, etc., from adjacent new or temporary facilities are not to be discharged within 40 feet of existing MTA ventilation system intake shafts, station entrances or portals. Tunnel ventilation shafts are both intake and discharge structures.
- 3.4 Clear access for the fire department to the MTA fire department connections shall be maintained at all times. Construction signs shall be provided to identify the location of MTA fire department connections. No interruption to fire protection water service will be permitted at any time.
- 3.5 Modifications to existing MTA mechanical systems and equipment, including ventilation shafts, required by new connections into the MTA System, shall only be permitted with prior review and approval by MTA. If changes are made to MTA property as built drawings shall be provided reflecting these changes.

At the option of MTA, the adjacent construction party shall be required to perform the field tests necessary to verify the adequacy of the modified system and the equipment performance. This verification shall be performed within an agreed time period jointly determined by MTA and the Party on a case by case basis. Where a modification is approved, the party shall be held responsible to maintain original operating capacity of the equipment and the system impacted by the modification.

4.0 OPERATIONAL REQUIREMENTS

4.1 GENERAL

- A. Normal construction practices must be augmented to insure adequate safety for the general public entering Metro Stations and riding on Metro Trains and Buses. Design of a building, structure, or facility shall take into account the special safety considerations required for the construction of the facility next to or around an operating transit system.
- B. Projects which require working over or adjacent to MTA station entrances shall develop their construction procedures and sequences of work to meet the following minimum requirements:
 - Construction operations shall be planned, scheduled and carried out in a way that will afford the Metro patrons and the general public a clean, safe and orderly access and egress to the station entrance during revenue hours.
 - Construction activities which involve swinging a crane and suspended loads over pedestrian areas, MTA station entrances and escalators, tracks or Metro bus passenger areas shall not be performed during revenue hours. Specific periods or hours shall be granted on a case-by-case basis, with the approval of Construction Work Plan by MTA Construction Safety Department.
 - 3. All cranes must be stored and secured facing away from energized tracks, when appropriate.
 - 4. All activity must be coordinated through the MTA Track Allocation process in advance of work activity. All members of the work crew will be required to attend MTA Safety Training.
 - 5. In order to provide a safe zone to maintain adjacent developments. All developments adjacent to Metro At-Grade Stations, Aerial Stations or Track Guideways shall provide a minimum 5 foot setback from the Metro and developer's shared property line to the outside face of the proposed structure at Metro or the developer's property for maintenance to be performed or installed from within the zone created by this setbacks.

4.2 OVERHEAD PROTECTION - Station Entrances

- A. Overhead protection from falling objects shall be provided over MTA facilities whenever there is possibility, due to the nature of a construction operation, that an object could fall in or around MTA station entrances, bus stops, elevators, or areas designed for public access to MTA facilities. Erection of the overhead protection for these areas shall be done during MTA non-revenue hours.
 - 1. The design live load for all overhead protection shall be 150 pounds per square foot minimum. The design wind load on the temporary structures shall be 20 pounds per square foot, on the windward and leeward sides of the structure.
 - The overhead protection shall be constructed of fire rated materials. Materials and equipment shall not be stored on the completed shield. The roof of the

ADJACENT CONSTRUCTION DESIGN MANUAL

shield shall be constructed and maintained watertight.

- B. Lighting in public areas and around affected MTA facilities shall be provided under the overhead protection to maintain a minimum level of twenty-five (25) footcandles at the escalator treads or at the walking surface. The temporary lighting shall be maintained by the Party.
- C. Wooden construction fencing shall be installed at the boundary of the areas with public access. The fencing shall be at least eight-feet high, and shall meet all applicable code requirements.
- D. An unrestricted public access path shall be provided at the upper landing of the entrance escalator-way in accordance with the following:
 - A vertical clearance between the walking surface and the lowest projection of the shield shall be 8'-0".
 - 2. A clear pedestrian runoff area extending beyond the escalator newel shall be provided, the least dimension of which shall be twenty (20) feet.
 - 3. A fifteen (15) foot wide strip (other than the sidewalk) shall be maintained on the side of the escalator for circulation when the escalator is pointed away from a street corner.
 - 4. A clear path from any MTA emergency exit to the public street shall be maintained at all times.
- E. Temporary sidewalks or pedestrian ways, which will be in use more than 10 days, shall be constructed of four (4") inch thick Portland cement concrete or four (4") inches of asphaltic concrete placed **over a minimum four (4") inches of untreated base material**, and finished by a machine.
- 4.3 OVERHEAD PROTECTION Operating Right-of-Way Trackage
 - A. MTA Rail Operations Control Center shall be informed of any intent to work above, on, or under the MTA right-of-way. Crews shall be trained and special flagging operations shall be directed by MTA Rail Operations Control Center. The party shall provide competent persons to serve as Flaggers. These Flaggers shall be trained and certified by MTA Rail Operations prior to any work commencing. All costs incurred by MTA shall be paid by the party.
 - B. A construction project that will require work over, under or adjacent to the at grade and aerial MTA right-of-way should be aware that the operation of machinery, construction of scaffolding or any operation hazardous to the operation of the MTA facility shall require that the work be done during non-revenue hours and authorized through the MTA Track Allocation process.
 - C. MTA flagmen or inspectors from MTA Operations shall observe all augering, pile driving or other work that is judged to be hazardous. Costs associated with the flagman or inspector shall be borne by the Party.

D. The party shall request access rights or track rights to perform work during non-revenue hours. The request shall be made through the MTA Track Allocation process.

4.4 OTHER METRO FACILITIES

- A. Access and egress from the public streets to fan shafts, vent shafts and emergency exits must be maintained at all times. The shafts shall be protected from dust and debris. See Exhibit A for details.
- B. Any excavation in the vicinity of MTA power lines feeding the Metro System shall be through hand excavation and only after authorization has been obtained through the MTA Track Allocation process. MTA Rail Operations Control Center shall be informed before any operations commences near the MTA power system.
- C. Flammable liquids shall not to be stored over or within 25 feet horizontally of MTA underground facilities. If installed within 25 to 100 feet horizontally of the structure, protective encasement of the tanks shall be required in accordance with NFPA STD 130. Existing underground tanks located within 100 feet horizontally of MTA facilities and scheduled to be abandoned are to be disposed of in accordance with Appendix C of NFPA STD 130. NFPA STD 130 shall also be applied to the construction of new fuel tanks.
- D. Isolation of MTA Facilities from Blast

Subsurface areas of new adjacent private buildings where the public has access or that cannot be guaranteed as a secure area, such as parking garages and commercial storage and warehousing, will be treated as areas of potential explosion. NFPA 130, Standard for Fixed Guideway Transit Systems, life safety separation criteria will be applied that assumes such spaces contain Class I flammable, or Class II or Class III Combustible liquids. For structural and other considerations, isolation for blast will be treated the same as seismic separation, and the more restrictive shall be applied.

E. Any proposed facility that is located within 20 feet radius of an existing Metro facility will require a blast and explosion study and recommendations to be conducted by a specialist who is specialized in the area of blast force attenuation. This study must assess the effect that an explosion in the proposed non-Metro facility will have on the adjacent Metro facility and provide recommendations to prevent any catastrophic damage to the existing Metro facility. Metro must approve the qualifications of the proposed specialist prior to commencement of any work on this specialized study.

4.5 SAFETY REGULATIONS

A. Comply with Cal/OSHA Compressed Air Safety Orders Title 8, Division 1, Chapter 4, Subchapter 3. Comply with California Code of Regulations Title 8, Title 29 Code of Federal Regulations; and/or the Construction Safety and Health Manual (Part F) of the contract whichever is most stringent in regulating the safety conditions to be maintained in the work environment as determined by the Authority. The Party recognizes that government promulgated safety regulations are minimum standards and that additional safeguards may be required

- B. Comply with the requirements of Chemical Hazards Safety and Health Plan, (per 29 CFR 1910.120 entitled, (Hazardous Waste Operations and Emergency Response) with respect to the handling of hazardous or contaminated wastes and mandated specialty raining and health screening.
- C. Party and contractor personnel while within the operating MTA right-of-way shall coordinate all safety rules and procedures with MTA Rail Operations Control Center.
- D. When support functions and electrical power outages are required, the approval MUST be obtained through the MTA Track Allocation procedure. Approval of the support functions and power outages must be obtained in writing prior to shutdown.

5.0 CORROSION

5.1 STRAY CURRENT PROTECTION

- A. Because stray currents may be present in the area of the project, the Party shall investigate the site for stray currents and provide the means for mitigation when warranted.
- B. Installers of facilities that will require a Cathodic Protection (CP) system must coordinate their CP proposals with MTA. Inquiries shall be routed to the Manager, Third Party Administration.
- C. The Party is responsible for damage caused by its contractors to MTA corrosion test facilities in public right-of-way.

End of Section