



ITEM #E6
FISCAL YEAR ENDED JUNE 30, 2015
AUDIT REPORTS

MARCH 2, 2016



Board of Directors
Omnitrans
San Bernardino, California

We have audited the financial statements of Omnitrans for the year ended June 30, 2015. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, *Government Auditing Standards* and OMB Circular A-133, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our engagement letter dated May 5, 2015. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Omnitrans are described in Note 1 to the financial statements. As described in Note 1 to the financial statements, Omnitrans adopted Governmental Accounting Standards Board (GASB) Statements No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*, and No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68*, effective July 1, 2014. Accordingly, the cumulative effect of the accounting changes as of the beginning of the year is reported in Note 12 of the financial statements. We noted no transactions entered into by the governmental unit during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

- Management's estimate of the fair value of investments. Changes in fair value that occur during the fiscal year are recognized as investment income reported for that fiscal year.
- Management's estimate of the risk management liability for incurred but not reported (IBNR) claims is based on an actuarial valuation and an 80% confidence level.
- Management's estimate of the depreciation of capital assets is based upon the estimated useful lives of the related capital assets.
- Management's estimation of amounts related to the net pension liability, related deferred inflows of resources and deferred outflows of resources, and disclosures are based on actuarial valuations of the net pension liability for Omnitrans' defined benefit pension plan administered by the California Public Employees Retirement System (CalPERS).

We evaluated the key factors and assumptions used to develop the estimates in determining that they were reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

The disclosure of Omnitrans' defined benefit pension plan, net pension liability and related deferred inflows of resources and deferred outflows of resources in Note 8 to the financial statements. The valuation of the net pension liability and related deferred outflows/inflows of resources are sensitive to the underlying actuarial assumptions used including, but not limited to, the investment rate of return and discount rate. As disclosed in Note 8, a 1% increase or decrease in the discount rate has a material effect on Omnitrans' net pension liability.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. As a result of audit procedures, an adjustment to eliminate negative unearned revenue of approximately \$1.092 million was proposed and posted by management.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated January 28, 2016.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the entity's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as Omnitrans' auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to management's discussion and analysis, the schedule of changes in the net pension liability and related ratios, and schedule of contributions, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were not engaged to report on the Introductory Section or the Statistical Section, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of the Board of Directors and management of Omnitrans and is not intended to be and should not be used by anyone other than these specified parties.



Rancho Cucamonga, California
January 28, 2016

**OMNITRANS,
SAN BERNARDINO, CALIFORNIA
MANAGEMENT LETTER
FOR THE YEAR ENDED JUNE 30, 2015**



Board of Directors
Omnitrans
San Bernardino, California

We have audited the basic financial statements of Omnitrans for the year ended June 30, 2015 and have issued our report thereon dated January 28, 2016. In planning and performing our audit of the basic financial statements of Omnitrans, we considered internal control in order to determine our auditing procedures for the purpose of expressing our opinion on the basic financial statements. An audit does not include examining the effectiveness of internal control and does not provide assurance on internal control. We have not considered internal control since the date of our report.

During our audit we noted certain matters involving internal control and other operational matters that are presented for your consideration. These observations and recommendations, all of which have been discussed with the appropriate members of management, are intended to improve internal control or result in other operating efficiencies and are summarized as follows:

CURRENT YEAR MANAGEMENT LETTER COMMENTS

DERIVATIVE INSTRUMENT – EFFECTIVENESS EVALUATION

In accordance to Paragraph 31 of Governmental Accounting Standards Board (GASB) Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, potential hedging derivative instruments should be evaluated for effectiveness as of the end of each reporting period using either the consistent critical terms method or one of the quantitative methods. Through our test-work of Omnitrans' Compressed Natural Gas (CNG) futures contracts, an active hedging derivative instrument, we noted that management did not conduct an evaluation for the hedge's effectiveness as of the fiscal year end.

RECOMMENDATION:

We recommend Omnitrans implement policies and procedures to ensure all potential hedging derivative instruments are evaluated for effectiveness as of the end of reporting period.

Board of Directors
Omnitrans
San Bernardino, California
January 28, 2016

MANAGEMENT'S RESPONSE:

The Forward Fuel Purchase Program is the only hedging derivative instrument approved by Omnitrans' Board of Directors. The Board of Directors approved a recommendation to suspend the program on September 2, 2015, and granted authority to the CEO/General Manager to enter into another Forward Fuel Purchase Program for up to twelve (12) months should the price per gallon increase to or exceed the \$0.92 per gallon budgeted for FY2016. Omnitrans is in the process of implementing a pipeline fueling infrastructure to reduce the price uncertainty of natural gas on the open market. Once commissioned, the pipeline fueling infrastructure will eliminate the need to hedge fuel. However, going forward Omnitrans will consider your recommendation to implement policies and procedures to ensure all potential hedging derivative instruments are evaluated for effectiveness as of the end of the reporting period.

Our audit procedures are designed primarily to enable us to form an opinion on the financial statements, and therefore may not bring to light all weaknesses in policies or procedures that may exist. We aim, however, to use our knowledge of Omnitrans gained during our work to make comments and suggestions that we hope will be useful to you.

We would be pleased to discuss these comments and recommendations with you at any time.

This report is intended solely for the information and use of the Board of Directors of Omnitrans, Omnitrans' management and others within the organization and should not be used by anyone other than these specified parties.



Rancho Cucamonga, California
January 28, 2016

OMNITRANS

Agreed-Upon Procedures Performed
With Respect to the National Transit Database Report

For the Period
July 1, 2014 through June 30, 2015



INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

Board of Directors
Omnitrans
San Bernardino, California

The Federal Transit Administration (FTA) has established the following standards with regard to the data reported to it in the Federal Funding Allocation Statistics Form FFA-10 (FFA-10) for the Omnitrans annual National Transit Database (NTD) report:

1. A system is in place and maintained for recording data in accordance with NTD definitions. The correct data are being measured and no systematic errors exist.
2. A system is in place to record data on a continuing basis and the data gathering is an ongoing effort.
3. Source documents are available to support the reported data and are maintained for FTA review and audit for a minimum of three years following FTA's receipt of the NTD report. The data are fully documented and securely stored.
4. A system of internal controls is in place to ensure the data collection process is accurate and that the recording system and reported comments are not altered. Documents are reviewed and signed by a supervisor, as required.
5. The data collection methods are those suggested by FTA or meet FTA requirements.
6. The deadhead miles, computed as the difference between the reported total actual vehicle miles data and the reported total actual vehicle revenue miles data, appear to be accurate.
7. Data are consistent with prior reporting periods and other facts known about Omnitrans' operations.

We have applied the procedures described in Attachment 1 of this report, which were agreed to by Omnitrans and the FTA and specified in the declarations section of the *2014 Reporting Manual*, solely to assist you in evaluating whether Omnitrans complied with the standards described above and that the information included in the NTD report FFA-10 form for the year ended June 30, 2015, is presented in conformity with the requirements of the *Uniform System of Accounts and Records and Reporting System; Final Rule*, as specified in 49 CFR part 630, *Federal Register*, January 15, 1993 and as presented in the *2014 Reporting Manual*. Omnitrans' management is responsible for Omnitrans' compliance with those standards and the accuracy of the FFA-10 form.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described in Attachment 1 either for the purpose for which this report has been requested or for any other purpose.

The procedures and findings described in Attachment 1 of this report, which are referenced in order to correspond to the *2014 Reporting Manual* procedures, were applied separately to each of the information systems used to develop the reported vehicle revenue miles (VRM), passenger miles (PM), fixed guideway directional route miles (FG DRM), High Intensity Bus Lanes directional route miles (HIB DRM), and operating expenses of Omnitrans for the year ended June 30, 2015, and for each of the following modes: (1) Motor Bus - directly operated (MBDO), (2) Motor Bus - purchased transportation (MBPT) and (3) Demand Response - purchased transportation (DRPT).

The FTA did not publish a *2015 Reporting Manual* as of the date of this report. Therefore, the procedures in the *2014 Reporting Manual* were used per inquiry of FTA.

We were not engaged to, and did not, conduct an audit, the objective of which would be the expression of an opinion on compliance with the procedures noted in attachment 1 or on the FFA-10. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of Omnitrans management, Omnitrans Board of Directors and the FTA and is not intended to be and should not be used by anyone other than these specified parties.

Vavrinek, Trine Day & Co. LLP

Rancho Cucamonga, California
October 29, 2015

Excerpt from the FTA 2014 *Reporting Manual* Exhibit 71 - Federal Funding Allocation Data Review - Suggested Procedures:

FTA has specified and agreed to a set of procedures for the independent accountant to perform and satisfy the requirements of the Federal Funding Allocation data review. The procedures, to be applied to each applicable mode and type of service (TOS) directly operated (DO) and purchased transportation (PT), are:

- a. Obtain and read a copy of written system procedures for reporting and maintaining data in accordance with NTD requirements and definitions set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993, and as presented in the 2014 Policy Manual. If there are no procedures available, discuss the procedures with the personnel assigned responsibility for supervising the NTD data preparation and maintenance.

Results – We obtained and read a copy of written procedures related to the system for reporting and maintaining data and found them in accordance with NTD requirements and definitions set forth in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the 2014 Reporting Manual.

- b. Discuss the procedures (written or informal) with the personnel assigned responsibility for supervising the preparation and maintenance of NTD data to determine:
 - The extent to which the transit agency followed the procedures on a continuous basis, and
 - Whether these transit personnel believe such procedures result in accumulation and reporting of data consistent with NTD definitions and requirements set forth in 49 CFR Part 630, Federal Register, dated January 15, 1993, and as presented in the 2014 Policy Manual.

Results - We inquired regarding Omnitrans' procedures for the MBDO, MBPT and DRPT services noting that the asserted procedures were consistently applied. In addition, based on our inquiry with the Planning and Scheduling Manager and the Operations Services Supervisor, management asserted that the procedures resulted in the accumulation and reporting of data consistent with the NTD definitions and requirements set forth in 49 CFR Part 630, Federal Register, January 15, 1993 and as presented in the 2014 Reporting Manual.

- c. Ask these same personnel about the retention policy that the transit agency follows as to source documents supporting NTD data reported on the Federal Funding Allocation Statistics form.

Results - We inquired with the Planning and Scheduling Manager and the Operations Services Supervisor, regarding Omnitrans' retention policy for NTD data, Total Modal Operating Expenses data, Actual Vehicle Revenue Mile and Passenger Miles Traveled. Per inquiry, the current practice is to retain paper and electronic data for at least three years.

- d. Based on a description of the transit agency's procedures from items (A) and (B) above, identify all the source documents that the transit agency must retain for a minimum of three years. For each type of source document, select three months out of the year and determine whether the document exists for each of these periods.

Results - We inspected the following source documents for each type of service, selected three months out of the year and determined that the documents existed for each of these periods:

<i>Type of Service</i>	<i>Source Document</i>	<i>Months Tested</i>
<i>MBDO</i>	<ul style="list-style-type: none"> • <i>MBDO Statistics Reports (queried from TransTrack Manager System database)</i> • <i>Passenger Mile Survey Summary from Automated Passenger Count system GFI database</i> • <i>Ridership by Trip Reports</i> • <i>Trapeze FX Summaries by Route</i> • <i>Route Plans</i> 	<ul style="list-style-type: none"> • <i>July 2014, December 2014 and February 2015.</i> • <i>Three years of data were noted to be archived on Omnitrans' network.</i>
<i>MBPT</i>	<ul style="list-style-type: none"> • <i>MBPT Statistics Reports (queried from TransTrack Manager System database)</i> • <i>Ridership by Trip Reports</i> • <i>Trapeze FX Summaries by Route</i> • <i>Route Plans</i> • <i>Passenger Mile Survey Summary</i> • <i>Survey Trip Sheets</i> 	<ul style="list-style-type: none"> • <i>July 2014, December 2014 and February 2015.</i> • <i>Three years of data were noted to be archived on Omnitrans' network.</i>
<i>DRPT</i>	<ul style="list-style-type: none"> • <i>DRPT Statistics Reports (queried from TransTrack Manager System database)</i> • <i>Daily Totals from the Trapeze Pass system</i> • <i>Trip Distance Productivity Reports from the Trapeze Pass system</i> • <i>Driver Manifests generated from the Trapeze Pass system</i> • <i>Passenger Mile Survey Summary</i> • <i>Survey Trip Sheets</i> 	<ul style="list-style-type: none"> • <i>July 2014, December 2014 and February 2015.</i> • <i>Three years of data were noted to be archived on Omnitrans' network.</i>

- e. Discuss the system of internal controls. Inquire whether separate individuals (independent of the individuals preparing source documents and posting data summaries) review the source documents and data summaries for completeness, accuracy, and reasonableness and how often these individuals perform such reviews.

Results - We inquired regarding the system of internal controls noting that each respective mode/type of service is being reviewed by personnel independent of the preparation process. On a regular basis data from the TransTrack System for the MBDO, MBPT and DRPT modes of service are being reviewed for completeness and reasonableness by the Planning and Scheduling Manager for the MBDO and MBPT modes and the Operations Services Supervisor for the DRPT mode.

- f. Select a random sample of the source documents and determine whether supervisors' signatures are present as required by the system of internal controls. If supervisors' signatures are not required, inquire how personnel document supervisors' reviews.

Results – For the MBDO and MBPT modes data is collected by automated systems. The collected data is reviewed and approved by a supervisor who documents monthly results and signs off on performance reports. For the DRPT mode, we randomly selected three test days, examined ten Driver Manifests for each of those days, and noted that drivers and supervisors signed the manifests.

- g. Obtain the worksheets used to prepare the final data that the transit agency transcribes onto the Federal Funding Allocation Statistics form. Compare the periodic data included on the worksheets to the periodic summaries prepared by the transit agency. Test the arithmetical accuracy of the summaries.

Results - We obtained the worksheets utilized by Omnitrans to transcribe statistics to the Federal Funding Allocation Statistics form and compared the data to summaries without exception. We tested the arithmetical accuracy of the summarizations without exception.

- h. Discuss the procedure for accumulating and recording passenger miles traveled (PMT) data in accordance with NTD requirements with transit agency staff. Inquire whether the procedure is one of the methods specifically approved in the 2014 Policy Manual.

Results – Sampling was conducted for the MBDO, MBPT and DRPT mode. We inspected the sampling methodologies and noted that the sampling methodology used met the requirements of the 2014 Policy Manual.

- i. Discuss with transit agency staff (the auditor may wish to list the titles of the persons interviewed) the transit agency's eligibility to conduct statistical sampling for PMT data every third year. Determine whether the transit agency meets NTD criteria that allow transit agencies to conduct statistical samples for accumulating PMT data every third year rather than annually. Specifically:

1. According to the 2010 Census, the public transit agency serves an UZA with a population less than 500,000.
2. The public transit agency directly operates fewer than 100 revenue vehicles in all modes in annual maximum revenue service (VOMS) (in any size UZA).
3. Service purchased from a seller is included in the transit agency's NTD report.
4. For transit agencies that meet one of the above criteria, review the NTD documentation for the most recent mandatory sampling year (2014) and determine that statistical sampling was conducted and meets the 95% confidence and $\pm 10\%$ precision requirements.
5. Determine how the transit agency estimated annual PMT for the current report year.

Results – Omnitrans sampled all three modes in the current year and did not utilize the three year sampling option allowed for purchased transportation modes.

- j. Obtain a description of the sampling procedure for estimation of PMT data used by the transit agency. Obtain a copy of the transit agency's working papers or methodology used to select the actual sample of runs for recording PMT data. If the transit agency used average trip length, determine that the universe of runs was the sampling frame. Determine that the methodology used to select specific runs from the universe resulted in a random selection of runs. If the transit agency missed a selected sample run, determine that a replacement sample run was random. Determine that the transit agency followed the stated sampling procedure.

Results – For the MBDO, MBPT and DRPT modes, we obtained a copy of Omnitrans' methodology used in the statistical sampling to estimate average PM and determined that the methodology used by Omnitrans resulted in a random selection of runs and that the stated sampling procedure was followed without exception.

- k. Select a random sample of the source documents for accumulating PMT data and determine that the data are complete (all required data are recorded) and that the computations are accurate. Select a random sample of the accumulation periods and re-compute the accumulations for each of the selected periods. List the accumulations periods that were tested. Test the arithmetical accuracy of the summary.

Results - For MBDO we randomly selected 40 surveyed routes throughout the year. We verified the mathematical accuracy of the Trip Report Details and that the data was properly input to the accumulation worksheet designed to calculate the average PM without exception.

For MBPT we randomly selected 40 surveyed routes throughout the year. We verified the mathematical accuracy of the Trip Report Details and that the data was properly input to the accumulation worksheet designed to calculate the average PM without exception.

For DRPT we randomly selected 40 surveyed routes throughout the year. We verified the mathematical accuracy of the Trip Report Details and that the data was properly input to the accumulation worksheet designed to calculate the average PM without exception.

- l. Discuss the procedures for systematic exclusion of charter, school bus, and other ineligible vehicle miles from the calculation of actual vehicle revenue miles with transit agency staff and determine that they follow the stated procedures. Select a random sample of the source documents used to record charter and school bus mileage and test the arithmetical accuracy of the computations.

Results - The procedure identified above is not applicable. Per inquiry with Omnitrans' management, Omnitrans did not provide charter or school bus services.

- m. For actual vehicle revenue mile (VRM) data, document the collection and recording methodology and determine that deadhead miles are systematically excluded from the computation. This is accomplished as follows:

- If actual VRMs are calculated from schedules, document the procedures used to subtract missed trips. Select a random sample of the days that service is operated, and re-compute the daily total of missed trips and missed VRMs. Test the arithmetical accuracy of the summary.

Results – For the MBDO and MBPT modes, Omnitrans tracks actual VRM in real time using the Trapeze Intelligent Transportation System from which data is uploaded monthly to the TransTrack Manager System. The results are reviewed by management against total scheduled VRM and any discrepancies are investigated. The tracking is performed on fixed routes only which will not include deadhead miles. We randomly selected a sample of five MBDO routes and seven MBPT routes, recalculated the VRMs and compared them to amounts used in the total VRM without exception.

- If actual VRMs are calculated from hubodometers, document the procedures used to calculate and subtract deadhead mileage. Select a random sample of the hubodometer readings and determine that the stated procedures for hubodometer deadhead mileage adjustments are applied as prescribed. Test the arithmetical accuracy of the summary of intermediate accumulations.

Results - This procedure is not applicable because VRMs were measured using real time Trapeze Intelligent Transportation System tracking.

- If actual VRMs are calculated from vehicle logs, select random samples of the vehicle logs and determine that the deadhead mileage has been correctly computed in accordance with FTA definitions.

Results - For the DRPT mode, Revenue Miles are calculated based on the odometer readings from the first pickup to the last drop off. Deadhead miles are excluded from the Revenue Miles calculations. We selected 90 trips to test and noted that the deadhead miles are not included in the Revenue Miles calculations without exception.

- n. For rail modes, review the recording and accumulation sheets for actual VRMs and determine that locomotive miles are not included in the computation.

Results - The procedure identified above is not applicable as Omnitrans does not provide rail service.

- o. If fixed guideway or High Intensity Bus directional route miles (FG or HIB DRM) are reported, interview the person responsible for maintaining and reporting NTD data whether the operations meet the FTA definition of fixed guideway (FG) or High Intensity Bus (HIB) in that the service is:

- Rail, trolleybus (TB), ferryboat (FB), or aerial tramway (TR); or
- Bus (MB, CB, or RB) service operating over exclusive or controlled access rights-of-way (ROW); and
 - Access is restricted;
 - Legitimate need for restricted access is demonstrated by peak period level of service D or worse on parallel adjacent highway;
 - Restricted access is enforced for freeways; priority lanes used by other high occupancy vehicles (HOV) (i.e., vanpools (VP) carpools) must demonstrate safe operation; and
 - High Occupancy/Toll (HO/T) lanes meet FHWA requirements for traffic flow and use of toll revenues. The transit agency has provided the NTD a copy of the State's certification to the U.S. Secretary of Transportation stating that it has established a program for monitoring, assessing, and reporting on the operation of the HOV facility with HO/T lanes.

Results – We interviewed the management of Omnitrans and noted that the MBDO service operates over exclusive access rights-of way (ROW) that appears consistent with the FTA's definition of fixed guideways.

- p. Discuss the measurement of FG and HIB DRM with the person reporting NTD data and determine that the he or she computed mileage in accordance with the FTA definitions of FG/HIB and DRM. Inquire of any service changes during the year that resulted in an increase or decrease in DRMs. If a service change resulted in a change in overall DRMs, re-compute the average monthly DRMs, and reconcile the total to the FG/HIB DRM reported on the Federal Funding Allocation Statistics form.

Results – We determined that the mileage was computed in accordance with the FTA definitions of FG DRM. Per inquiry with the Planning and Scheduling Manager we determined that there were no changes during the year that resulted in an increase or decrease in DRMs. We recomputed the average monthly DRM for all reported segments and reconciled the total to the FG DRM without exception.

- q. Inquire if any temporary interruptions in transit service occurred during the report year. If these interruptions were due to maintenance or rehabilitation improvements to a FG segment(s), the following apply:

- Report DRMs for the segment(s) for the entire report year if the interruption is less than 12 months in duration. Report the months of operation on the FG/HIB segments form as 12. The transit agency should document the interruption.
- If the improvements cause a service interruption on the FG/HIB DRMs lasting more than 12 months, the transit agency should contact its NTD validation analyst to discuss. The FTA will make a determination on how to report the DRMs.

Results – Per inquiry of the Planning and Scheduling Manager, there were no temporary interruptions in transit service during the report year.

- r. Measure FG/HIB DRM from maps or by retracing route.

Results - We recalculated the length of all fixed guideway directional routes for the MBDO mode of service using publicly available maps without exception.

- s. Discuss whether other public transit agencies operate service over the same FG/HIB as the transit agency. If yes, determine that the transit agency coordinated with the other transit agency (or agencies) such that the DRMs for the segment of FG/HIB are reported only once to the NTD on the Federal Funding Allocation form. Each transit agency should report the actual VRM, PMT, and OE for the service operated over the same FG/HIB.

Results - We interviewed the management of Omnitrans and noted that no other public transit agencies operate service over the same DRMs as Omnitrans.

- t. Review the FG/HIB segments form. Discuss the Agency Revenue Service Start Date for any segments added in the 2015 report year with the persons reporting NTD data. This is the commencement date of revenue service for each FG/HIB segment. Determine that the date reported is the date that the agency began revenue service. This may be later than the Original Date of Revenue Service if the transit agency is not the original operator. If a segment was added for the 2015 report year, the Agency Revenue Service Date must occur within the transit agency's 2015 fiscal year. Segments are grouped by like characteristics. Note that for apportionment purposes, under the State of Good Repair (§5337) and Bus and Bus Facilities (§5339) programs, the 7-year age requirement for fixed guideway/High Intensity Bus segments is based on the report year when the segment is first reported by any NTD transit agency. This pertains to segments reported for the first time in the current report year. Even if a transit agency can document an Agency Revenue Service Start Date prior to the current NTD report year, the FTA will only consider segments continuously reported to the NTD.

Results - Omnitrans did not add any new segments during the 2015 report year. We obtained the FG segments form noting the FG segments and dates. Per inquiry of the Planning and Scheduling Manager, the dates noted as the start dates are consistent with the start dates of the service.

- u. Compare operating expenses with audited financial data after reconciling items are removed.

Results - Operating expenses were compared to the trial balances subject to audit without exception.

- v. If the transit agency purchases transportation services, interview the personnel reporting the NTD data on the amount of PT-generated fare revenues. The PT fare revenues should equal the amount reported on the Contractual Relationship form.

Results - We identified the fare revenues reported on the B-30 and reconciled the amounts to the general ledger without exception.

- w. If the transit agency's report contains data for PT services and assurances of the data for those services are not included, obtain a copy of the IAS-FFA regarding data for the PT service. Attach a copy of the statement to the report. Note as an exception if the transit agency does not have an Independent Auditor Statement for the PT data.

Results – The data for purchased transportation are included in the reporting by Omnitrans and therefore no IAS for the purchased transportation services is included.

- x. If the transit agency purchases transportation services, obtain a copy of the PT contract and determine that the contract specifies the public transportation services to be provided; the monetary consideration obligated by the transit agency or governmental unit contracting for the service; the period covered by the contract (and that this period overlaps the entire, or a portion of, the period covered by the transit agency's NTD report); and is signed by representatives of both parties to the contract. Interview the person responsible for retention of the executed contract, and determine that copies of the contracts are retained for three years.

Results - We inspected the MBPT and DRPT service contracts and determined that they contained the items noted above without exception. We inquired with the Planning and Scheduling Manager and the Operations Services Supervisor, regarding Omnitrans' retention policy for executed contracts for purchased transportation programs. Per inquiry, the current practice is to retain contracts for at least three years.

- y. If the transit agency provides service in more than one UZA, or between an UZA and a non-UZA, inquire of the procedures for allocation of statistics between UZAs and non-UZAs. Obtain and review the FG segment worksheets, route maps, and urbanized area boundaries used for allocating the statistics, and determine that the stated procedure is followed and that the computations are correct.

Results - Omnitrans provides services in more than one UZA but does not provide services to non urbanized areas. For the MBDO and MBPT modes allocations to urbanized areas are based on trip pattern analysis. The number of yearly trips per pattern is multiplied by the number of miles determined for each UZA. Eight allocations were tested for the MBDO and MBPT services without exception.

For the DRPT mode, vehicles are dispatched from two depots, one in each UZA. Ridership is tracked by depot and used to calculate the percentages for the UZA split of other data.

- z. Compare the data reported on the Federal Funding Allocation Statistics Form to data from the prior report year and calculate the percentage change from the prior year to the current year. For actual VRM, PMT or OE data that have increased or decreased by more than 10%, or FG DRM data that have increased or decreased, interview transit agency management regarding the specifics of operations that led to the increases or decreases in the data relative to the prior reporting period. The auditor should document the specific procedures followed, documents reviewed, and tests performed in the work papers. The work papers should be available for FTA review for a minimum of three years following the NTD report year. The auditor may perform additional procedures, which are agreed to by the auditor and the transit agency, if desired. The auditor should clearly identify the additional procedures performed in a separate attachment to the statement as procedures that were agreed to by the transit agency and the auditor but not by the FTA.

Results – The following fluctuations over 10% were noted on the F-30 and S-10 Forms:

- *A 12.3% decrease in Passenger Miles for MBDO*
- *A 11.0% increase in Operating Expenses for MBDO*

No fluctuations of over 10% were noted in the MBPT or DRPT modes. The Rapid Bus - directly operated (RBDO) mode was reported as a separate mode for fiscal year 2013-14 but was combined with the MBDO mode reporting for fiscal year 2014-15 per direction of the NTD.

The 12.3% decrease in Passenger Miles for MBDO is due to a 12% drop in ridership in fiscal 2014-15.

The 11.0% increase in Operating Expenses for MBDO is due to a combination of increases in salaries and wages, fuel, service, and casualty and liability costs in fiscal year 2014-15.

- aa. The auditor should document the specific procedures followed, documents reviewed, and tests performed in the work papers. The work papers should be available for FTA review for a minimum of three years following the NTD report year. The auditor may perform additional procedures, which are agreed to by the auditor and the transit agency, if desired. The auditor should clearly identify the additional procedures performed in a separate attachment to the statement as procedures that were agreed to by the transit agency and the auditor but not by the FTA.

Results – We have documented the procedures followed based on the FTA 2014 Reporting Manual Exhibit 71 - Federal Funding Allocation Data Review - Suggested Procedures, and noted the documents reviewed and tests performed in our workpapers. Additional procedures were not performed.

OMNITRANS

**SINGLE AUDIT REPORT
ON FEDERAL AWARDS**

YEAR ENDED JUNE 30, 2015

OMNITRANS

YEAR ENDED JUNE 30, 2015

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**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING
AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS,
THE TRANSPORTATION DEVELOPMENT ACT AND
CALIFORNIA GOVERNMENT CODE §8879.50**

Board of Directors
Omnitrans
San Bernardino, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Omnitrans as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise Omnitrans' basic financial statements, and have issued our report thereon dated January 28, 2016. Our report included an emphasis of matter paragraph regarding Omnitrans' adoption of Governmental Accounting Standards Board (GASB) Statements No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*, and No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date – an Amendment of GASB Statement No. 68*, effective July 1, 2014.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Omnitrans' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Omnitrans' internal control. Accordingly, we do not express an opinion on the effectiveness of Omnitrans' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Omnitrans' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, including Section 6667 of Title 21 of the California Code of Regulations and California Government Code §8879.50 et seq., and the allocation instructions of San Bernardino Associated Governments, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*, Section 6667 of Title 21 of the California Code of Regulations, or the California Government Code §8879.50 et seq.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



Rancho Cucamonga, California
January 28, 2016



**INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM;
REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON THE
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS REQUIRED BY
OMB CIRCULAR A-133**

Board of Directors
Omnitrans
San Bernardino, California

Report on Compliance for Each Major Federal Program

We have audited Omnitrans' compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of Omnitrans' major federal programs for the year ended June 30, 2015. Omnitrans' major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of Omnitrans' major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about Omnitrans' compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of Omnitrans' compliance.

Opinion on Each Major Federal Program

In our opinion, Omnitrans complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2015.

Report on Internal Control Over Compliance

Management of Omnitrans is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit, we considered Omnitrans' internal control over compliance with the requirements that could have a direct and material effect on a major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of Omnitrans' internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by OMB Circular A-133

We have audited the financial statements of Omnitrans as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise Omnitrans' basic financial statements. We issued our report thereon dated January 28, 2016, which contained an unmodified opinion on those financial statements. Our report included an emphasis of matter paragraph regarding Omnitrans' adoption of Governmental Accounting Standards Board (GASB) Statements No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*, and No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date – an Amendment of GASB Statement No. 68*, effective July 1, 2014. Our audit was performed for the purpose of forming our opinion on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133 and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the financial statements as a whole.



Rancho Cucamonga, California

January 28, 2016

OMNITRANS

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2015

Federal Grantor/Pass-through Grantor Program Title	Federal Domestic Assistance Number	Grant Number	Federal Financial Assistance Expenditure	Amount Provided to Subrecipients
U.S. Department of Transportation:				
<u>Direct Assistance:</u>				
Federal Transit - Capital Investment Grants	20.500	CA-03-0816-00	\$ 2,095,737	\$ -
Federal Transit - Capital Assistance	20.500	CA-04-0228-00	83,271	83,270
Federal Transit - Capital Assistance	20.500	CA-04-0229-00	6,317,164	6,317,164
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-96-X058-00	359,073	359,073
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-95-X124-00	3,500,014	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y064-00	2,086	2,086
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y164-00	191,593	89,082
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y251-00	74,177	189
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y333-00	57,298	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y396-00	46,138	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y495-00	16,014	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y602-00	378,142	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y672-00	153,205	153,205
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y681-00	558,769	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y775-00	479,112	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y850-00	21,803	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-95-X229-00	5,098,500	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-95-X257-00	4,235,996	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-95-X297-00	992,000	992,000
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Y939-00	1,137,449	15,142
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Z009-00	491,272	135,731
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Z112-00	1,613,975	30,874
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Z231-00	4,630,857	-
Federal Transit - Formula Grants (Urbanized Area Formula Program)	20.507	CA-90-Z280-00	3,224,231	-
Subtotal - Federal Transit Cluster			<u>35,757,876</u>	<u>8,177,816</u>
Public Transportation Research - FY 14-15 Section 5314	20.514	CA-26-7301-00	<u>169,540</u>	<u>-</u>
Job Access and Reverse Commute Program - FY06-08 Section 5316 Capital	20.516	CA-37-X090-00	236,879	236,879
Job Access and Reverse Commute Program - FY09-10 Section 5316 Capital	20.516	CA-37-X146-00	142,757	142,757
Job Access and Reverse Commute Program - FY11-12 Section 5316 Capital	20.516	CA-37-X174-00	154,605	154,605
New Freedom Program FY06-08 - 5317 (Amend)	20.521	CA-57-X017-00	177,642	169,788
New Freedom Program FY09-10 - 5317	20.521	CA-57-X062-00	145,579	131,135
New Freedom Program FY11-12 - 5317	20.521	CA-57-X089-00	5,283	5,283
Subtotal - Transit Services Programs Cluster			<u>862,745</u>	<u>840,447</u>
Holt Boulevard Alternative Analysis	20.522	CA-39-0008-00	<u>216,746</u>	<u>-</u>
Total - U.S. Department of Transportation			<u>37,006,907</u>	<u>9,018,263</u>
Total Expenditures of Federal Awards			<u>\$ 37,006,907</u>	<u>\$ 9,018,263</u>

See accompanying note to Schedule of Expenditures of Federal Awards.

OMNITRANS

NOTE TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS

FOR THE YEAR ENDED JUNE 30, 2015

NOTE #1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(A) Scope of Presentation

The accompanying schedule presents only the expenditures incurred by Omnitrans that are reimbursable under federal programs of federal financial assistance. For the purposes of this schedule, federal financial assistance includes both federal financial assistance received directly from a federal agency, as well as federal funds received indirectly by Omnitrans from a non-federal agency or other organization. Only the portion of program expenditures reimbursable with such federal funds is reported in the accompanying schedule. Program expenditures in excess of the maximum federal reimbursement authorized or the portion of the program expenditures that were funded with state, local or other non-federal funds are excluded from the accompanying schedule.

(B) Basis of Accounting

The expenditures included in the accompanying schedule were reported on the accrual basis of accounting. Under the accrual basis of accounting, expenditures are recognized when Omnitrans becomes obligated for payment as a result of the receipt of the related goods and services. Expenditures reported included any property or equipment acquisitions incurred under the federal program.

(C) Subrecipients

During the fiscal year ended June 30, 2015, Omnitrans provided \$9,018,263 in federal awards to subrecipients from funding provided by the U.S. Department of Transportation.

OMNITRANS**SCHEDULE OF FINDINGS AND QUESTIONED COSTS****FOR THE YEAR ENDED JUNE 30, 2015****I. SUMMARY OF AUDITORS' RESULTS****FINANCIAL STATEMENTS**

Type of auditors' report issued:

Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

No

Significant deficiency(ies) identified?

None Reported

Noncompliance material to financial statements noted?

No**FEDERAL AWARDS**

Internal control over major federal programs:

Material weakness(es) identified?

No

Significant deficiency(ies) identified?

None Reported

Type of auditors' report issued on compliance for major federal programs:

Unmodified

Any audit findings disclosed that are required to be reported in accordance with

Circular A-133, Section .510(a)

No

Identification of major federal programs:

CFDA Number(s)Name of Federal Program or Cluster20.500, 20.507Federal Transit Cluster

Dollar threshold used to distinguish between Type A and Type B programs:

\$ 1,110,207

Auditee qualified as low-risk auditee?

No

OMNITRANS

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

FOR THE YEAR ENDED JUNE 30, 2015

II. FINANCIAL STATEMENT FINDINGS

None reported.

OMNITRANS

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

FOR THE YEAR ENDED JUNE 30, 2015

III. FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

None reported.

OMNITRANS

SCHEDULE OF PRIOR YEAR AUDIT FINDINGS

FOR THE YEAR ENDED JUNE 30, 2015

Summarized below is the current status of all audit findings reported in the prior year audit's schedule of audit findings and questioned costs.

Financial Statement Findings

Finding No.	Area	Status of Corrective Action
2014-001	Financial Reporting	Implemented

OMNITRANS
San Bernardino, California

INDEPENDENT AUDITORS' REPORT ON
PROPOSITION 1B

Year Ended June 30, 2015

OMNITRANS

PROPOSITION 1B

JUNE 30, 2015

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Schedule of Unspent Funds and Cash Disbursements

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**INDEPENDENT AUDITORS' REPORT ON PROPOSITION 1B SCHEDULE OF
UNSPENT FUNDS AND CASH DISBURSEMENTS**

Board of Directors
Omnitrans
San Bernardino, California

We have audited the financial statements of Omnitrans as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise Omnitrans' basic financial statements and have issued our report thereon dated January 28, 2016, which contained an unmodified opinion on those financial statements. Those financial statements are the responsibility of Omnitrans' management. Our responsibility is to express an opinion on the financial statements based on our audit.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Omnitrans' basic financial statements. The accompanying Proposition 1B Schedule of Unspent Funds and Cash Disbursements is presented for purposes of additional analysis, to satisfy the requirements of Section 6667 of Title 21 of the California Code of Regulations, the California Government Code §8879.50, and the California State Senate Bill 88 (2007), et seq. and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Rancho Cucamonga, California
January 28, 2016

**OMNITRANS
PROPOSITION 1B**

**SCHEDULE OF UNSPENT FUNDS AND CASH DISBURSEMENTS
YEAR ENDED JUNE 30, 2015**

	<u>PTMISEA (1)</u>	<u>CTSG (2)</u>	<u>Total</u>
Unspent Prop 1B funds as of June 30, 2014	\$ 29,752,299	\$ 615,264	\$ 30,367,563
Prop 1B funds received during the year ended June 30, 2015	1,736,317	-	1,736,317
Interest revenue earned on unspent Prop 1B funds during fiscal year ended June 30, 2015	164,600	46	164,646
Change in fair market value of investments during the year ended June 30, 2015	52,114	-	52,114
Prop 1B disbursements during the year ended June 30, 2015	(1,217,162)	(459,875)	(1,677,037)
	<u> </u>	<u> </u>	<u> </u>
Unspent Prop 1B funds as of June 30, 2015	<u>\$ 30,488,168</u>	<u>\$ 155,435</u>	<u>\$ 30,643,603</u>

(1) Public Transportation, Modernization, Improvement, and Service Enhancement Account

(2) California Transit Security Grant, including CalEMA program from prior year

CONNECTING OUR COMMUNITY



OMNITRANS, San Bernardino, CA

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Year Ended June 30, 2015





OmniTrans employees proved once more that they are driven to make a difference! With the completion of sbX, OmniTrans finalized plans and opened the cornerstone of East Valley operations - the San Bernardino Transit Center! Federal Transit Administration Regional IX Director, Leslie Rogers, commended OmniTrans and the San Bernardino Associated Governments for their “Perseverance in overcoming the challenges and hurdles” to take the project from vision to reality. The Transit Center will take its next big step in 2017 by introducing a Metrolink connection at that location to further enhance the public’s mobility options.

OmniTrans has recently introduced significant route improvements to increase connectivity throughout the San Bernardino Valley; including expanded express bus service to connect to major metropolitan destinations outside the OmniTrans service area. These new opportunities for the community that enhance mobility, reduce commute times, and improve frequency are here today! Positive changes, coupled with the commitment to a safe and secure transit system for our employees and the public, has made OmniTrans a stronger transit leader in “connecting our community”.

*P. Scott Graham
CEO/General Manager*

OMNITRANS

San Bernardino, California

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Year Ended June 30, 2015
(With Independent Auditor's Report Thereon)



Prepared by the Finance Department

DONALD WALKER
Director of Finance

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CONNECTING OUR COMMUNITY



CONNECTING OUR COMMUNITY





November 24, 2015

To the Members of the OmniTrans Board of Directors, CEO/General Manager and Citizens of the County of San Bernardino:

California Government Code sections 25250 and 25253 require that every general-purpose local government publish within six months of the close of each fiscal year a complete set of audited financial statements. This report is published in fulfillment of that requirement for the fiscal year ended June 30, 2015.

This report provides an independently audited account of the financial condition of the Agency. The financial statements, supplemental schedules, and statistical information are the representations of OmniTrans' management. Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. Consequently, management assumes full responsibility for their accuracy, completeness and fairness.

Vavrinek, Trine, Day & Co., LLP, a firm of licensed certified public accountants, audited OmniTrans financial statements. The goal of the independent audit is to provide reasonable assurance that the financial statements of the Agency for the fiscal year ended June 30, 2015, are free of material misstatement. The independent auditor concluded, based upon the audit, that there was a reasonable basis for rendering an unqualified opinion that OmniTrans' financial statements for the fiscal year ended June 30, 2015 are fairly represented in conformity with Generally Accepted Accounting Principles (GAAP). The independent auditor's report is presented as the first component of the financial section of this report.

continued on next page

OmniTrans • 1700 West Fifth Street • San Bernardino, CA 92411
Phone: 909-379-7100 • Web site: www.OmniTrans.org • Fax 909-889-5779

Serving the communities of Chino Hills, Colton, County of San Bernardino, Fontana, Grand Terrace, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland and Yucaipa.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview and analysis of the basic financial statements. MD&A complement this letter of transmittal and should be read in conjunction with it.

The independent audit of the financial statements of OmniTrans was part of a broader, federally mandated "Single Audit" designed to meet the special needs of federal grantor agencies. The standards governing Single Audit engagements require the independent auditor to report on the fair presentation of the financial statements, with special emphasis on internal controls and legal requirements involving the administration of federal awards. These reports are included in a separate Single Audit report.

As stewards of the taxpayer's money, OmniTrans continues to achieve its primary objective of safeguarding the funds entrusted to us. Our primary focus is the planning, securing and controlling of OmniTrans' financial resources.

OmniTrans takes great pride in the fact that previously issued CAFRs have been awarded a prestigious award by the Government Finance Officers Association (GFOA) in the form of its Certificate of Achievement for Excellence in Financial Reporting. OmniTrans has received the GFOA "Certificate of Achievement for Excellence in Financial Reporting" a total of twelve times. These prior awards and the one that we are currently seeking this year evidence the significant improvements regarding the strengthening of internal controls and our compliance with stringent GFOA standards for professional financial reporting. OmniTrans' system of internal control is supported by written policies and procedures and is continually reviewed, evaluated and modified to meet current needs.

Local Economy

San Bernardino County is the largest county in the nation in terms of total land area. The county, along with Riverside County – its neighbor to the south – comprise the Inland Empire. The job and real estate markets are growing in the Inland Empire with the economy rebounding and the abundance of vacant land for residential, commercial and industrial development. The Inland Empire ranks 3rd as having the fastest growth rate at 4.2 percent, just under San Francisco and San Jose.

The Inland Empire was among the regions hardest hit by the recession in California, but it has since added back jobs at a pace exceeded only by the flourishing tech hubs in San Francisco and Santa Clara. The unemployment rate fell to 7.3% in January 2015 from a high of 14.2% in October 2009. Low and middle income families that dominate the area are benefitting from sunken oil prices, which encourage spending by making gasoline, food and other purchases more affordable.

The region is poised for new growth in residential and commercial development, the challenge will be ensuring the infrastructure is in place to accommodate development and attract developers to the region. Education will also be a challenge in terms of ensuring there are

enough properly trained and educated employees available for new companies establishing business in the county.

Long-term Financial Planning

OmniTrans continues to plan for the future in its short-term and the long-term planning. The short-term planning rarely looks further ahead than the 12 months in the fiscal year. It seeks to ensure that the Agency has enough cash to pay its bills. In the long-term planning, the planning horizon is typically 2 – 5 years. The long-term financial planning focuses on the Agency's long-term goals and the funding that must be secured prior to project implementation.

Like many medium-size public transit agencies, OmniTrans' approach to long-term financial planning is very conservative. The focus is centered on sustainability of current operations and the availability of federal, state, and local funding opportunities. Primarily all major capital projects are not implemented until the necessary funding has been identified and secured. OmniTrans does not issue debt of any kind to secure funding for its capital projects.

Under the direction of the Board of Directors, the Finance Department administers the financial affairs of OmniTrans. The department manages revenues, expenditures, investments, cash management, accounting, grants, and budgeting. The Finance Department is responsible for keeping abreast of current federal, state, and local grant funding opportunities to support the operations and long-term capital investment goals of OmniTrans.

There are two types of federal grant programs, (1) Formula grant programs - funded to States based on formulas of population, and (2) Discretionary grant programs - awarded based on meeting application requirements, and selected based on criteria specific to each grant. Each grant program is referred to by name and mostly by a number that correlates to the section number of Title 49 of the United States Code.

Listed below are capital projects along with a brief summary that are being discussed along with the opportunities and challenges of funding.

- Pipeline CNG Fueling Infrastructure Project
- West Valley Connector Corridor Project
- Rolling Stock Replacement Project

OmniTrans fueling process for its fleet of fixed-route buses include the delivery of liquefied natural gas (LNG), and gasification before fueling. Implementing a fueling infrastructure that utilizes pipeline gas will reduce fueling cost significantly.

The West Valley Connector Corridor is a rapid bus route from Fontana, CA to Pomona, CA. The rapid route is the initially preferred alternative that resulted from the sbX Holt Boulevard/4th Street Corridor Alternatives Analysis study funded by the FTA in 2011. The rapid route is projected to have 18,790 average daily boardings in 2035, a ridership increase of 45% along the corridor compared with the no-build alternative.

As with most of public transit systems, maintaining the condition of its transit infrastructure is an issue of vital importance and one that poses unique challenges. OmniTrans systematically replace its rolling stock after a vehicle has reached its useful life, ensuring the system is maintained in a “state of good repair” to provide efficient, reliable, and safe service.

Relevant Financial Policies

OmniTrans is required by its Board of Directors to develop a balanced annual operating and capital expenditure budget within the prescribed limits to meet the objectives of the subsequent fiscal year. The annual operating and capital budgets show in detail the estimated revenues and expenses necessary to operate OmniTrans’ service for the upcoming year. The annual budget serves as the foundation for OmniTrans financial planning and control of expenditures.

California Government Code, Section 53646, requires that each legislative body review and adopt an Investment Policy Statement on an annual basis. It is the policy of OmniTrans to invest public funds in a manner which will provide maximum security with the highest investment return while meeting the daily cash flow demands of the Agency and conforming to all state and local statutes governing the investment of public funds.

The investment policy applies to the cash funds of the Agency, except for its employees retirement system fund, which is administered separately by California Public Employees’ Retirement System (PERS) and the 457 Deferred Compensation Fund, administered separately by the International City/County Management Association Retirement Corporation.

OmniTrans implemented a Forward Fuel Purchasing Program whereby 150,000 gallons or 45% of its monthly compressed natural gas (CNG) is fixed on the New York Mercantile Exchange through Morgan Stanley. Due to the low price of fuel on the open market, the program is on hold until there is an increase in the price of natural gas.

Major Initiatives

Each year the federal government funds numerous public transit initiatives through an array of programs. Although the need for federal money to fund these initiatives has continued to grow, the federal budget increasingly has been strained by other competing funding priorities.

On the federal level, the Federal Transit Administration (FTA) sponsors an array of initiatives and programs to support research, coordination, and development of public transportation. Some of the FTA initiatives and programs that are of particular interest to OmniTrans include:

- Moving Ahead for Progress in the 21st Century Act (MAP-21) - MAP-21 consolidates certain transit programs to improve their efficiency and provides significant funding increases specifically for improving the state of good repair of the nation's transit systems. The law grants FTA authority to strengthen the safety of public transportation systems throughout the United States. It also streamlines the New Start process to expedite project delivery and provides for core capacity project eligibility.
- State of Good Repair (SGR) - State of Good Repair includes sharing ideas on recapitalization and maintenance issues, asset management practices, and innovative financing strategies. It also includes issues related to measuring the condition of transit capital assets, prioritizing local transit re-investment decisions and preventive maintenance practices. Finally, research and the identification of the tools needed to address this problem are vital. The FTA will lead the nation's effort to address the State of Good Repair by collaborating with industry to bring the nation's transit infrastructure into the 21st Century.

Although known for its car culture and extensive network of freeways and roads, California has a vast array of public transit systems statewide. It is expected that the State of California will enact new legislation on the transit industry.

- Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and environment of California. AB 32 calls for the state to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020.
- Assembly Bill 1250 (Bloom) [Chapter 484, Statutes of 2015], an Association-sponsored bill that provides long-term relief from California's bus axle weight limit. Prior to the enactment of AB 1250, California law generally prohibited a transit operator from procuring a transit bus of a gross weight on any one axle in excess of 20,500 lbs.
- California's Advanced Clean Transit (ACT) regulation under consideration requires a fraction of bus purchases to be Zero Emission Bus (ZEB) technology beginning in 2018. This requirement would increase over time, with the goal of transitioning all transit fleets to ZEB technology by 2040. The ACT regulation seeks to transition transit fleets to ZEB technology without directing any new funding to offset the associated costs.

Awards and Acknowledgements

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to OmniTrans for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2014. The Certificate of Achievement is a

prestigious national award, recognizing conformance with the highest standards for preparation of a state or local government financial report. This was the twelfth time OmniTrans has received this award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR.

OmniTrans' Procurement Department was awarded the Achievement of Excellence in Procurement (AEP). The AEP is awarded annually by the National Procurement Institute (NPI) to public and non-profit organizations throughout the United States and Canada who demonstrate innovation, professionalism, productivity, leadership and e-procurement excellence. OmniTrans' Procurement Department is one of 206 agencies that earned the 2015 AEP award, 12 of which are transit agencies.

As a result of the San Bernardino Bus Rapid Transit (sbX) project, E Street was voted "Best Urban Street Transformation of 2014 on StreetsBlog USA. It was one of five streets nominated in the national Streetsie award competition and garnered an overwhelming 48% of the vote. The transformation includes dedicated bus lanes, beautiful landscaping, and sbX BRT stations with original art whose themes share the rich histories of our local communities.

OmniTrans is proud to have been honored with multiple AdWheel Awards from the American Public Transportation Association (APTA). These prestigious annual awards acknowledge the creative excellence of member public transportation systems and business members in advertising, communications, and marketing.

- sbX Launch Commercial - 1st Place & Grand Prize Award in the Television Advertisement category
- OmniGo Bus Shelter Poster - 1st Place Award in the Billboard/Outdoor Advertising category
- Omnitrans App - 1st Place Award in the Mobile App category

Preparation of this report could not have been accomplished without the professional, efficient, and dedicated services of the Finance Department staff, with special thanks to Mae Sung, Accounting Manager and Maurice Mansion, Treasury Manager. We wish also to express our appreciation to P. Scott Graham, our CEO/General Manager, and Wendy Williams, Director of Marketing and Planning for their assistance and support of this report. We would also like to express our appreciation to the Board of Directors and members of the Administrative and Finance Committee.

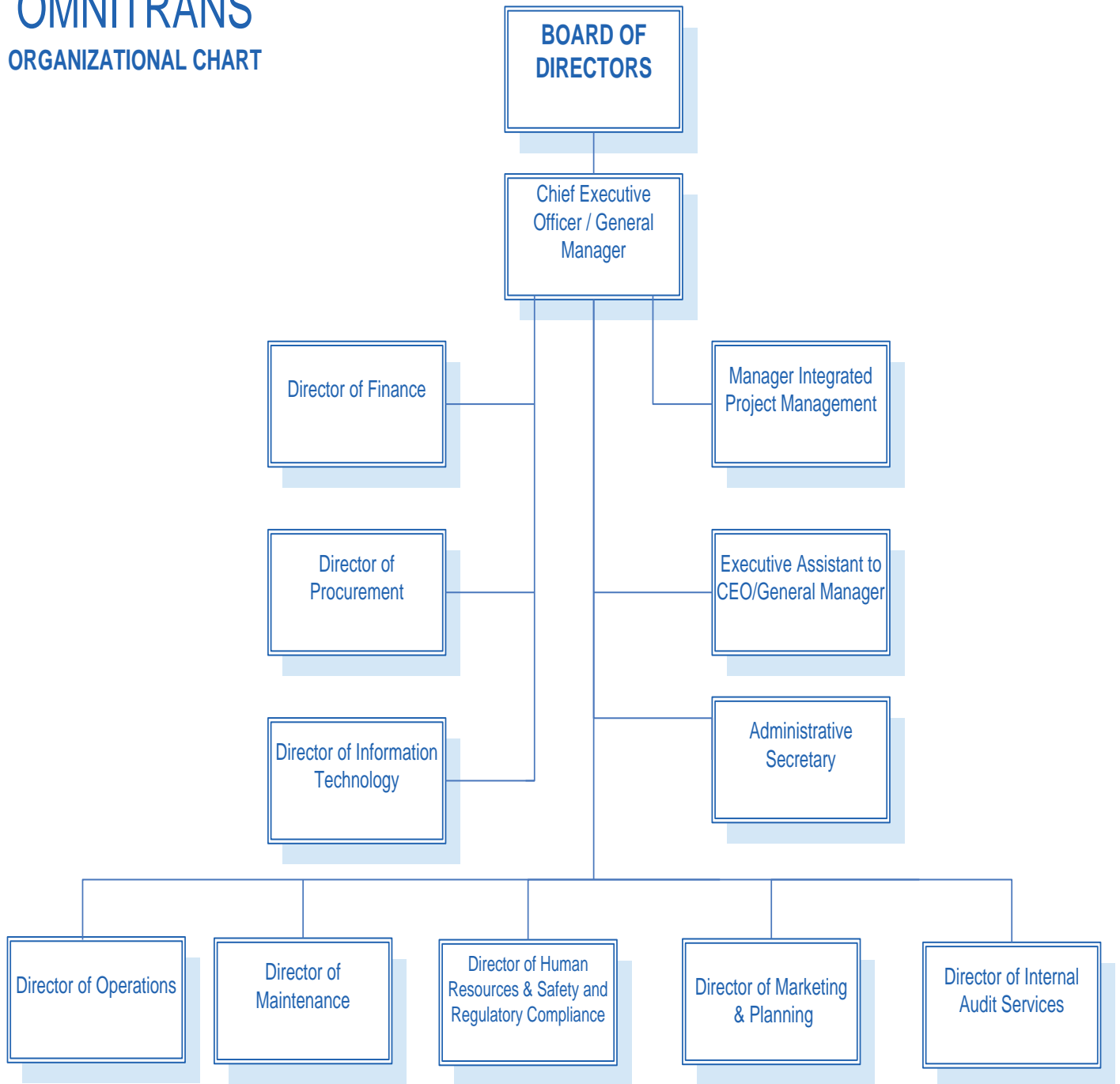
Respectfully submitted,



Donald Walker
Director of Finance, OMNITRANS

OMNITRANS

ORGANIZATIONAL CHART



OMNITRANS SENIOR LEADERSHIP TEAM

P. Scott Graham
CEO/General Manager

Donald Walker
Director of Finance

Marjorie Ewing
Director of Human Resources & Safety and Regulatory Compliance

Jacob Harms
Director of Information Technology

Andres Ramirez
Manager of Integrated Project Management Office

Samuel J. Gibbs
Director of Internal Audit Services

Jack Dooley
Director of Maintenance

Wendy S. Williams
Director of Marketing & Planning

Diane Caldera
Director of Operations

Jennifer Sims
Director of Procurement

OMNITRANS BOARD OF DIRECTORS



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Alan Wapner
Ontario



Vice Chair
Sam Spagnolo
Rancho Cucamonga



Supervisor
Curt Hagman
County



Supervisor
Josie Gonzales
County



Supervisor
James Ramos
County



Supervisor
Janice Rutherford
County



Supervisor
Robert Lovingood
County



Dennis Yates
Chino



Ed Graham
Chino Hills



Richard De La Rosa
Colton



John B. Roberts, Jr
Fontana



Sylvia Robles
Grand Terrace



Penny Lilburn
Highland



Ron Dailey
Loma Linda



Paul Eaton
Montclair



Pat Gilbreath
Redlands



Deborah Robertson
Rialto



Cary Davis
San Bernardino



Ray Musser
Upland



Dick Riddell
Yucaipa



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**Omnitrans
California**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2014

Executive Director/CEO

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PROFILE OF OMNITRANS

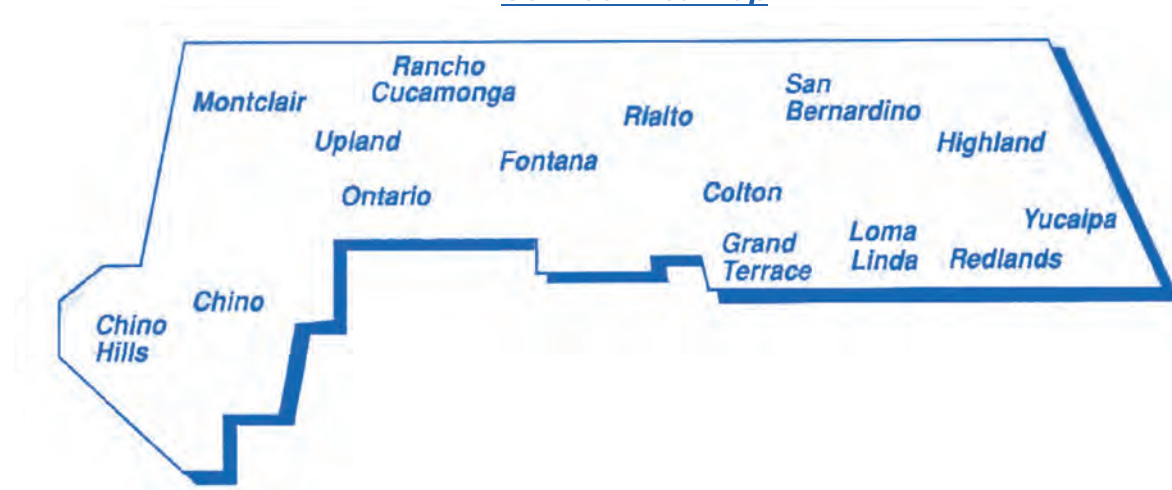
OmniTrans was founded in 1976 under a Joint Powers Agreement to provide transportation service to the San Bernardino Valley. OmniTrans is the major public transportation provider in the San Bernardino Valley, with a service area of approximately 456 square miles, serving fifteen municipalities, and many unincorporated areas of San Bernardino County. OmniTrans also travels beyond the service area to Pomona and Riverside, to provide links to neighboring transit agencies. The service area is bordered by the Los Angeles County line to the west, the San Gabriel and San Bernardino Mountains to the north, Yucaipa in the east and the Riverside County line to the south. The map below shows the OmniTrans service area. Employees work out of two locations: East Valley (San Bernardino) and West Valley (Montclair).

The Board of Directors, made up of elected officials from each of the member jurisdictions, governs the Agency. The member jurisdictions include the following:

City of Chino	City of Highland	City of Redlands
City of Chino Hills	City of Loma Linda	City of Rialto
City of Colton	City of Montclair	City of San Bernardino
City of Fontana	City of Ontario	City of Upland
City of Grand Terrace	City of Rancho	City of Yucaipa
County of San Bernardino		

Each city has one member and the County of San Bernardino has five members on the Board, who represent their respective County Districts. The Board is responsible for all policy, regulatory, and budgetary decisions of the Agency.

Service Area Map



Four Board committees oversee specific functional areas of the Agency with the provision to create ad-hoc committees as needed. These subcommittees are:

1. Executive Committee
2. Administrative and Finance Committee
3. Plans and Programs Committee
4. Operations and Safety Committee

As of June 30, 2015, OmniTrans had a staff of 657 employees to provide its services. The CEO/General Manager is responsible for the day-to-day management of the Agency and acts as the liaison to the Board of Directors and each of the committees. Reporting to the CEO/General Manager are the following departments:

1. Administration
2. Human Resources & Safety and Regulatory Compliance
3. Maintenance
4. Marketing & Planning
5. Operations
6. Integrated Project Management Office
7. Finance
8. Information Technology
9. Procurement

As cited in its Joint Powers Agreement (JPA), OmniTrans was created as a single umbrella agency to serve the bus transit needs of the San Bernardino Valley. Provisions were made in the JPA to: 1) Establish a uniform fare policy within the service area, 2) To coordinate a region wide bus transit marketing program, and 3) To consolidate bus transit operating and administrative functions in order to achieve increased economies of scale.

To meet the bus transportation service demands efficiently and effectively, OmniTrans uses a multimodal approach to the provisions of service. The types of services presently offered are summarized below:

sbX Bus Rapid Transit

- On April 28, 2014, OmniTrans launched the next generation of bus service in the San Bernardino Valley. The sbX Green line is a Bus Rapid Transit Line that serves the E Street Corridor in the cities of San Bernardino and Loma Linda..
- The sbX Green Line operates on weekdays from 6:00 AM with the last trip departing at 8:00 PM. It offers 10 minute peak service 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM. Off-peak service frequency is 15 minutes.
- The sbX Green Line is 15.7 miles long, with 5.4 miles of dedicated bus-only lanes. sbX has 16 named station locations and 23 platforms that offer enhanced amenities including level boarding, NexTrip arrival signs, ticket vending machines and custom shelters and benches.

Local Fixed Route Service

In accordance with the Operational Standards for the provision of service, OmniTrans operates 26 fixed routes and five OmniGo local circulator routes as of June 30, 2015.

Routes operate at 15 to 70 minute intervals.

All routes operate Monday through Friday with service beginning at 3:48 AM and ending at 11:13 PM. On Saturdays there are 24 routes and four OmniGo circulators in operation with service beginning at 5:13 AM and ending at 10:34 PM. On Sundays there are 22 routes and four OmniGo circulators in service which begin at 5:51 AM and end at 7:49 PM.

Coordinated local fixed-route service with Orange County Transit Authority, Foothill Transit, Riverside Transit Agency, and Mountain Area Regional Transit Authority; operated under Cooperative and/or Joint Service Agreements between OmniTrans and neighboring transit operators.

Regional Fixed Route Service

Route 215 is a cross-county service provided by OmniTrans. This route provides service between the OmniTrans 4th Street Transit Mall and Riverside Transit Agency's Downtown Terminal.

This route operates on 20/30-minute frequencies weekday and a 30-minute frequency on weekends.

FY14 Fixed-Route Service Frequency by Route

<i>Route Count</i>	<i>Route</i>	<i>Route Name</i>	<i>Service Days/Frequency</i>		
			<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>
1	1	ARMC - San Bernardino - Del Rosa	15/30	30	30
2	2	Cal State - E Street - Loma Linda	30	20	20/30
3	3	Baseline - Highland - San Bernardino CCW	15	20	20
4	4	Baseline - Highland - San Bernardino CW	15	20	20
5	5	South Waterman - Del Rosa - Cal State	30	60	60
6	7	N. San Bernardino - Sierra Way - San Bernardino	30/60	60	60
7	8	San Bernardino - Mentone – Crafton Hills	30/60	60	120
8	10	Fontana - Baseline - San Bernardino	30/60	60	60
9	11	San Bernardino - Muscoy - Cal State	60	60	60
10	14	Fontana - Foothill - San Bernardino	15	15/30	15
11	15	Fontana - San Bndo/Highland - Redlands	30	60	60
12	19	Fontana –Colton-Redlands--Yucaipa	30	60	60

13	20	Fontana Metrolink - Via Hemlock - Kaiser	30	60	60
14	22	North Rialto - Riverside Ave - ARMC	30	60	60
15	29	Bloomington - Valley Blvd - Kaiser	60	60	*
16/17	308/309	OmniGo: Yucaipa	30/60	30	60
18	310	OmniGo: Yucaipa	30/60	*	*
19	325	OmniGo: Grand Terrace	70	70	70
20	215	San Bernardino – Riverside	20/30	60	60
21	61	Fontana-Ontario Mills-Pomona	15	15	15
22	63	Chino-Ontario-Upland	60	60	60
23	65	Montclair-Chino Hills	60	60	60
24	66	Fontana-Foothill Blvd.-Montclair	15/30	30	30
25	67	Montclair-Baseline-Fontana	60	*	*
26	68	Chino-Montclair-Chaffey College	20/40	60	*
27	80	Montclair— Ontario Conv. Ctr. – Chaffey College	60	60	60
28	81	Ontario-Ontario Mills-Chaffey College	60	*	*
29	82	Rancho Cucamonga-Fontana-Sierra Lakes	60	60	60
30	83	Upland-Euclid-Chino	60	60	60
31	365	OmniGo: Chino Hills	60	60	60
32	sbX	Green Line	10/15	*	*

** No Saturday or Sunday Service (as applicable)*

Metrolink Regional Commuter Rail Feeder Service

- Metrolink service is provided between OmniTrans service area, Los Angeles, Riverside, Orange, Ventura and San Diego Counties by Southern California Regional Rail Authority.
- OmniTrans provides feeder bus service to seven Metrolink Stations located in San Bernardino, Rialto, Fontana, Rancho Cucamonga, Upland, Montclair and East Ontario.
- Metrolink ticket/pass is good for one free ride going to or leaving from any Metrolink Station that an OmniTrans bus serves. Tickets must be valid for the date on which you're riding the bus.

Access

- In accordance with the Americans with Disabilities Act (ADA), OmniTrans provides wheelchair lift equipped vans for origin-to-destination transportation services.
- Reservations for service must be made one day in advance of your travel needs, with the option to call up to seven days in advance.

- Access operates during the same days and hours as fixed route buses within a $\frac{3}{4}$ mile range of routes.
- Who can ride Access? – Those persons with an OmniTrans (or other transit agency) ADA certification ID card. Persons with an OmniTrans Disability card. Personal Care Attendants providing personal care to an ADA certified rider. Companions (Adult accompanying person with a disability) and/or Children of a qualified Adult ADA certified rider. (Maximum of two children 46” tall and under may ride free. Children under age 6 and/or under 60 pounds must travel in a rider supplied child restraint device).

Omnilink

- Omnilink was a general public demand response van service in the cities of Chino Hills and Yucaipa. OmniLink service was eliminated on September 2nd, 2014 and only operated for two months during FY2015.

OmniGo Circulator Service

- OmniGo is a small bus fixed route community circulator service that operates in the cities of Chino Hills, Grand Terrace, and Yucaipa.
- OmniGo connects points of interest within each city and provides connectivity to OmniTrans fixed route bus service.
- All OmniGo services are contracted out by OmniTrans and operated by a private contractor.
- OmniGo fares are the same as those for other OmniTrans fixed route bus services.



CONNECTING OUR COMMUNITY



CONNECTING OUR COMMUNITY





INDEPENDENT AUDITORS' REPORT

Board of Directors
Omnitrans
San Bernardino, California

Report on the Financial Statements

We have audited the accompanying financial statements of Omnitrans as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise Omnitrans' basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Omnitrans as of June 30, 2015, and the changes in financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 to the financial statements, Omnitrans implemented Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*, and GASB Statement No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date – an Amendment of GASB Statement No. 68*, effective July 1, 2014. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 13, the schedule of changes in the net pension liability and related ratios on page 38, and the schedule of contributions on page 39, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise Omnitrans' basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Prior-Year Comparative Information

We have previously audited Omnitrans' 2014 financial statements, and we expressed an unmodified audit opinion on those financial statements in our report dated December 12, 2014. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2014, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated January 28, 2016, on our consideration of Omnitrans' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Omnitrans' internal control over financial reporting and compliance.



Rancho Cucamonga, California
January 28, 2016

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of OmniTrans (the Agency), we offer the readers of the Agency's financial statements this narrative overview and analysis of the financial activities for the Agency for the fiscal year ended June 30, 2015.

We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in the transmittal letter and financial statements, which are included in this report.

Financial Highlights

- At the end of fiscal year 2015, the Statement of Net Position presents total assets of \$258.4 million. A decrease of \$62.8 million at the close of the previous fiscal year-end. Of this amount, \$72.1 million in capitalized assets associated with the construction of the E Street Bus Rapid Transit (sbX) was transferred to the City of San Bernardino.
- Cash and investments decreased \$12.5 million or 22.8 percent below the previous fiscal year-end. Federal grants for preventive maintenance were not available for drawdown due to the hold by the Department of Transportation (DOT). Additionally, FY2014 surplus of \$5.8 million is held by San Bernardino Associated Governments, the County Transportation Commission for the valley.
- Intergovernmental receivables at June 30, 2015 decreased \$1.5 million or 8.0 percent compared to last fiscal year-end. At fiscal year-end for 2014 and 2015 the availability of grant funds for drawdown was limited due to the ongoing litigation regarding California's Public Employee Pension Reform Act (PEPRA).
- Capital assets decreased \$49.0 million or 19.9 percent compared to the previous fiscal year-end. This decrease is attributed to the transfer of assets to the City of San Bernardino. This decrease was offset by the bus facility remodel and the San Bernardino Transit Center not yet completed.
- Current liabilities at fiscal year end June 30, 2015 decreased \$12.0 million or 20.5 percent below the previous fiscal year-end. The decrease is mainly attributed to a reduction in accounts payable and unearned revenue of \$6.4 million and \$5.4 million, respectively.
- Noncurrent liabilities at June 30, 2015 increased \$8.9 million or 116.6 percent compared to June 30, 2014. The increase is attributed to recognition of a \$10.3 million *Net Pension Liability* under Governmental Accounting Standards Board Statement No. 68 (GASB 68).

MANAGEMENT'S DISCUSSION AND ANALYSIS

- Operating revenues increased \$0.7 million or 4.7 percent over the previous fiscal year-end. Operating expenses, excluding depreciation, at fiscal year-end June 30, 2015 increased \$5.5 million or 8.4 percent compared to last fiscal year end.
- Non-operating revenues, which include federal and local operating grants, pass-through and donation to other agencies, decreased by \$63.7 million or 137.0 percent due to the transfer of sbX capitalized assets to the City of San Bernardino.
- Capital assistance decreased \$21.8 million or 36.9 percent compared to the previous fiscal year-end. This decrease is due to the substantially completed sbX project, and the San Bernardino Transit Center.

Overview of the Financial Statements

This annual financial report consists of two parts, Management's Discussion and Analysis, and the financial statements, including notes to the financial statements, and required supplementary information. The Agency financial statements offer key, high-level financial information about the Agency's activities.

The Agency is a government funded entity that follows enterprise fund accounting and presents its financial statement on the accrual basis of accounting. The enterprise fund concept is similar to how private business enterprises are financed and operated.

The statements of net position include information on all of the Agency's assets and deferred outflows of resources and liabilities and deferred inflows of resources with the difference reported as net position. Changes in net position may serve as a useful indicator of whether the financial position of the Agency is improving or deteriorating.

The statement of revenues, expenses and change in net position present information regarding how the Agency net position changed during the fiscal years ended June 30, 2015 and 2014. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, and amounts are measurable, regardless of the timing of related cash flows.

Financial Statements Analysis

The following tables summarize revenues, expenses and changes in net position comparing fiscal year 2015 with fiscal year 2014. For additional information regarding the Agencies financial activities for fiscal year ended June 30, 2015, readers are encourage to read this section in conjunction with the accompanying Notes to the Basic Financial Statements.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Revenues and Expenses

Revenues

OmniTrans total revenues for fiscal year ending June 30, 2015 show a \$16.5 million or 13.1% decrease compared to last fiscal year-end. Revenue from fares, pass and ticket sales less discount to pass sale vendors was \$0.6 million above the previous fiscal year-end. Total advertising and other transportation revenues were \$586.8 thousand compared to \$527.3 thousand for the previous fiscal year-end.

Federal and local operating grants for OmniTrans increased from \$50.8 million in fiscal year 2014 to \$55.1 million in fiscal year 2015. This represents a \$4.3 million or 8.5 percent increase in federal and local operating grants revenue. OmniTrans receives federal, state, and local funding which are utilized for both operating and capital expenditures.

Financing the construction, operation and maintenance of public transportation systems involves many different types of funding sources, including federal and non-federal grants, and other revenue sources. The source of federal and local operating grants and capital assistance OmniTrans receive include the following:

- Measure I - the ½ cent sales tax collected throughout San Bernardino County for transportation improvements.
- Local Transportation Fund (LTF) - Transportation Development Act (TDA) earmark ¼ percent of the state sales tax for transit.
- Urbanized Area Formula Program (5307) - transit capital and operating assistance in urbanized areas and for transportation-related planning.
- Congestion Mitigation and Air Quality Improvement (CMAQ) - established to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief.
- Job Access and Reverse Commute (JARC) – established to improve access to transportation services to employment and employment related activities for welfare recipients and eligible low-income individuals and to transport residents of urbanized areas and non-urbanized areas to suburban employment opportunities.
- New Freedom - a formula grant program aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force available to people with disabilities beyond the requirements of the Americans with Disabilities Act of 1990 (ADA).

MANAGEMENT'S DISCUSSION AND ANALYSIS

- State Transit Assistance Fund (STAF) - derived from sales tax on gasoline and diesel fuel, this funding is an allocation to local transit agencies to fund a portion of the operations and capital costs associated with local mass transportation programs.
- Public Transportation Modernization, Improvement, and Service Enhancement Account Program (PTMISEA) - created by Proposition 1B, is funding available to transit operators over a ten-year period. PTMISEA funds may be used for transit rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or rolling stock (buses and rail cars) procurement, rehabilitation or replacement.

Interest income for the Agency consists of quarterly return on investment with the Local Agency Investment Fund (LAIF). The LAIF program offers local agencies the opportunity to participate in a major portfolio, which invests hundreds of millions of dollars, using the investment expertise of the State Treasurer's Office at no additional cost. Total interest income for fiscal year ended June 30, 2015 was \$43.5 thousand or 1.9 percent below previous fiscal year-end.

Revenue from the Compressed Natural Gas (CNG) fuel tax credit for fiscal year ended June 30, 2015 increased \$252.8 thousand or 23.6 percent compared to last fiscal year-end. The credit initially went into effect October 1, 2006 and expired December 31, 2009. Congress extended this credit three times.

The first extension extended the credit for 2011, and made it retroactive for fuel sales or use during 2010. The second extension occurred January 3, 2013, and extended the availability of the 50-cent credit through the end of 2013 and made it retroactive for 2012. The third extension extended the credit for 2014.

The Senate Committee on Finance approved semi-annual extensions of several business tax credits and deductions in July 2015. The extensions included the extension of the Alternative Fuel Tax Credit for calendar year 2015 and 2016. The extensions are still in Congress waiting approval.

Other non-operating revenues consist mainly of quarterly reimbursement to the Agency from the Amalgamated Transit Union (ATU) Local 1704 for wages and benefits paid by the Agency to ATU Officers/Stewards during normal work hours to process grievances. Total other non-operating revenues increased \$16.0 thousand or 103.5 percent above last fiscal year-end.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OMNITRANS' Revenues

	<u>2015</u>	<u>2014</u>	<u>Increase (Decrease)</u>	<u>Percent Increase (Decrease)</u>
Passenger fares	\$ 15,015,499	14,368,317	647,182	4.5
Advertising revenue	532,322	485,327	46,995	9.7
Other Transportation Revenue	54,440	41,978	12,462	29.7
Federal and local operating grants	55,090,857	50,785,745	4,305,112	8.5
Capital assistance	37,167,461	58,935,750	(21,768,289)	(36.9)
Interest Income	43,486	44,311	(825)	(1.9)
CNG fuel tax credit	1,324,615	1,071,808	252,807	23.6
Other non-operating revenues/(expenses)	31,549	15,505	16,044	103.5
Total Revenue	\$ <u>109,260,229</u>	<u>125,748,741</u>	<u>(16,488,512)</u>	(13.1)

Expenses

Total expenses for fiscal year-end 2015 increased \$71.6 million or 83.1 percent compared to the previous fiscal year-end. Significant increases in wages, salaries, and benefits, general and administrative expenses, professional and technical services were offset by decreases in pass-through to other agencies, loss on disposal of capital assets, depreciation. Expenses include \$72.1 million in donation to other agency of capitalized assets.

Wages, salaries and benefits increased \$2.6 million or 6.6 percent over the previous fiscal year-end. This increase is attributed to the agreement on January 14, 2015 between OmniTrans and the Amalgamated Transit Union Local 1704 effective April 1, 2013 through March 31, 2016. The agreement included a 0% wage increase in Year 1, 2.75% in Year 2, and 2.75% in Year 3. Also, the five (5) year wage freeze was lifted for management confidential employees.

General and administrative expenses include occupancy expenses (utilities, communication and office equipment, repairs, ground maintenance, stops and stations, etc.), casualty & liability expenses (property, general, vehicle, and workers compensation insurance). Occupancy expenses increased \$273 thousand or 8.7% above previous fiscal year. Casualty & liability expenses increased \$1.7 million or 148.8% above previous fiscal year. Previous fiscal year-end Workers compensation expense was significantly lower due to reserve adjustments by the new Third Party Administrator for workers compensation.

Capital purchases are grant reimbursed costs not associated with a capital asset, or do not increase the expected life of a capital asset. These costs are expensed at the time of purchase. Capital purchases decreased \$255 thousand or 33.6% below the previous fiscal year-end.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Material and supplies increased \$46.6 thousand or 0.5 percent over last fiscal year-end. The increase in the cost for unleaded fuel was offset by the decrease in cost for compressed natural gas (CNG).

Professional and technical services at fiscal year ended June 30, 2015 increased \$754.5 thousand or 32.6 percent above previous fiscal year ended June 30, 2014. The increase in cost is mainly attributed to the Board of Directors approving a one-time stipend paid to active ATU members upon the signing of the Memorandum of Understanding (MOU).

OmniTrans, as a direct grantee of FTA funding, is responsible for complying with specific FTA requirements. San Bernardino Associated Governments (SANBAG) conducts the solicitation, evaluation and selection process for FTA funds. However OmniTrans does participate in the evaluation process as well, and is solely responsible for project management oversight for sub-recipients. The pass-through to other agencies represents federal and local reimbursements to sub-recipients for cost incurred on approved projects. Pass-through payments to other agencies decreased \$3.2 million or 70.9 percent compared to the previous fiscal year-end.

Loss on disposal of capital assets decreased \$645.6 thousand when compared to fiscal year ended June 30, 2014. The decrease in loss on disposal of capital assets is attributed to the a higher than normal loss on disposal for fiscal year-end 2014 due to the demolition and remodel of the bus wash and fueling facilities to accommodate the sbX articulated buses.

Donation to other agencies were capitalized assets associated with construction of the sbX Bus Rapid Transit (BRT) project in areas that are within the public Right of Way. The remaining capitalized assets associated with the project consist of work at the stations, and park and rides, which are physical property retained and maintained by OmniTrans.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OMNITRANS' Expenses

		<u>2015</u>	<u>2014</u>	<u>Increase (Decrease)</u>	<u>Percent Increase (Decrease)</u>
Wages, salaries, and benefits	\$	41,697,176	39,097,952	2,599,224	6.7
Purchased transportation services		9,261,048	9,075,431	185,617	2.0
General and administrative expenses		6,344,136	4,365,255	1,978,881	45.3
Materials and supplies		9,191,072	9,144,483	46,589	0.5
Capital purchases		503,602	758,859	(255,257)	(33.6)
Professional and technical services		3,066,686	2,312,152	754,534	32.6
Advertising and printing		939,460	881,217	58,243	6.6
Pass-through to other agencies		1,297,931	4,459,471	(3,161,540)	(70.9)
Loss on disposal of capital assets		323,574	969,126	(645,552)	(66.6)
Depreciation		12,742,411	14,899,383	(2,156,972)	(14.5)
Miscellaneous		364,956	208,516	156,440	75.0
Donation to Other Agency		<u>72,050,050</u>	<u>0</u>	<u>72,050,050</u>	100.0
Total Expenses	\$	<u>157,782,102</u>	<u>86,171,845</u>	<u>71,610,257</u>	83.1

Net Position

The Agency's total net position for fiscal year ending June 30, 2015 decreased \$63.5 million or 24.9 percent below fiscal year ended June 30, 2014. Total assets for the fiscal year decreased \$62.8 million or 19.5 percent. This is due primarily to the transfer of \$72.1 million in capitalized assets to the City of San Bernardino. The capitalized assets were associated with construction of the sbX Bus Rapid Transit (BRT) project in areas that are within the public Right of Way.

Total liabilities decreased \$3.1 million or 4.7% compared to the previous fiscal year-end. Current liabilities decreased \$12.0 million or 20.5 percent due to a larger than normal accrual of capital liabilities at fiscal year ended June 30, 2014. Long-term liabilities increased \$8.9 million or 116.6 percent due to the recognition of \$10.3 million in Net Pension liability required by Governmental Accounting Standards Board Statement No. 68 (GASB 68).

Also new to the Statement of Net Position is deferred inflows/outflows of resources, related to pension as required by GASB 68. For fiscal year ended June 30, 2015, deferred inflows of resources was \$8.9 million. The \$8.9 million is the net difference between projected and actual earnings on the pension plan investments. In addition, deferred outflows of resources include contribution made subsequent to the measurement date.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OMNITRANS' Statement of Net Position

	<u>2015</u>	<u>2014</u>	<u>Increase (Decrease)</u>	<u>Percent Increase (Decrease)</u>
Assets:				
Current and other assets	\$ 61,750,576	75,531,155	(13,780,579)	(18.2)
Net Capital Assets	<u>196,610,392</u>	<u>245,580,650</u>	<u>(48,970,258)</u>	(19.9)
Total Assets	<u>258,360,968</u>	<u>321,111,805</u>	<u>(62,750,837)</u>	(19.5)
Deferred outflow of resources:				
Deferred amount on pensions	<u>5,057,296</u>	<u>0</u>	<u>5,057,296</u>	100.0
Total Deferred outflow of resources	<u>5,057,296</u>	<u>0</u>	<u>5,057,296</u>	100.0
Liabilities:				
Current Liabilities	46,755,675	58,791,800	(12,036,125)	(20.5)
Long-term Liabilities	<u>16,523,112</u>	<u>7,628,446</u>	<u>8,894,666</u>	116.6
Total Liabilities	<u>63,278,787</u>	<u>66,420,246</u>	<u>(3,141,459)</u>	(4.7)
Deferred inflow of resources:				
Deferred amount on pension (Note 8)	<u>8,921,206</u>	<u>0</u>	<u>8,921,206</u>	100.0
Total Deferred inflow of resources	<u>8,921,206</u>	<u>0</u>	<u>8,921,206</u>	100.0
Net Position:				
Invested in capital assets	196,481,291	245,312,381	(48,831,090)	(19.9)
Unrestricted (Note 13)	<u>(5,263,020)</u>	<u>9,379,178</u>	<u>(14,642,198)</u>	(156.1)
Total Net Position	<u>\$ 191,218,271</u>	<u>254,691,559</u>	<u>(63,473,288)</u>	(24.9)

Changes in Net Position

The following Statement of Revenues, Expenses, and Changes in Net Position table illustrate and compare the various categories of assets, liabilities and net position for the two fiscal years.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OMNITRANS' Statement of Revenues, Expenses, and Changes in Net Position

	Fiscal Year <u>2015</u>	Fiscal Year <u>2014</u>	Increase <u>(Decrease)</u>	Percent Increase <u>(Decrease)</u>
Revenues:				
Passenger fares	\$ 15,015,499	14,368,317	647,182	4.5
Advertising revenues	532,322	485,327	46,995	9.7
Other transportation revenues	<u>54,440</u>	<u>41,978</u>	<u>12,462</u>	29.7
Total revenues	<u>15,602,261</u>	<u>14,895,622</u>	<u>706,639</u>	4.7
Expenses:				
Depreciation and amortization	12,742,411	14,899,383	(2,156,972)	(14.5)
Other operating expenses	<u>71,365,710</u>	<u>65,839,285</u>	<u>5,526,425</u>	8.4
Total expenses	<u>84,108,121</u>	<u>80,738,668</u>	<u>3,369,453</u>	4.2
Nonoperating Revenue/(Expenses)				
Fed. & local operating grants (Note 3)	55,090,857	50,785,745	4,305,112	8.5
Interest income	43,486	44,311	(825)	(1.9)
Interest expense	(2,426)	(4,580)	2,154	(47.0)
Pass-through to other agencies (Note 10)	(1,297,931)	(4,459,471)	3,161,540	(70.9)
CNG fuel tax credit	1,324,615	1,071,808	252,807	23.6
Donation to other agency	(72,050,046)	0	(72,050,046)	(100.0)
Other nonoperating revenues (expenses)	<u>(292,025)</u>	<u>(953,621)</u>	<u>661,596</u>	(69.4)
Total nonoperating revenues	<u>(17,183,470)</u>	<u>46,484,192</u>	<u>(63,667,662)</u>	(137.0)
Income before capital contribution	<u>(85,689,330)</u>	<u>(19,358,854)</u>	<u>(66,330,476)</u>	342.6
Capital contributions				
Capital assistance	<u>37,167,461</u>	<u>58,935,750</u>	<u>(21,768,289)</u>	(36.9)
Total capital contributions	<u>37,167,461</u>	<u>58,935,750</u>	<u>(21,768,289)</u>	(36.9)
Change in net assets	(48,521,869)	39,576,896	(88,098,765)	(222.6)
Net position, beginning of year	<u>254,691,559</u>	<u>215,114,663</u>	<u>39,576,896</u>	18.4
Prior Period Adjustment (Note 12)	<u>(14,951,419)</u>	<u>0</u>	<u>(14,951,419)</u>	(100.0)
Net position, beginning of year, as restated	<u>239,740,140</u>	<u>215,114,663</u>		
Net position, end of year	\$ <u><u>191,218,271</u></u>	<u><u>254,691,559</u></u>	<u><u>(63,473,288)</u></u>	(24.9)

MANAGEMENT'S DISCUSSION AND ANALYSIS

Capital Assets and Debt Administration

Capital Assets

At June 30, 2015, the Agency had a total of \$196.6 million invested in capital assets. This total represents an overall decrease of \$49.0 million or 19.9% below the prior fiscal year-end total of \$245.6 million. The majority of the capitalized assets associated with the sbX project were transferred from construction in progress to building and improvements. Additionally, \$72.1 million in capitalized assets associated with the project were transferred to the City of San Bernardino.

OMNITRANS' Capital Assets (net of accumulated depreciation)

	Fiscal Year <u>2015</u>	Fiscal Year <u>2014</u>	Increase (Decrease)	Percent Increase (Decrease)
Buildings and improvements	\$ 108,559,520	44,328,931	64,230,589	144.9
Operations equipment	114,988,700	107,251,843	7,736,857	7.2
Furniture and office equipment	37,358,411	35,569,147	1,789,264	5.0
Construction in progress	44,725,273	161,973,272	(117,247,999)	(72.4)
Land	10,522,709	10,522,709	0	0.0
Accumulated depreciation	<u>(119,544,221)</u>	<u>(114,065,252)</u>	<u>(5,478,969)</u>	4.8
Total capital assets	\$ <u>196,610,392</u>	<u>245,580,650</u>	<u>(48,970,258)</u>	(19.9)

Additional information regarding the Agency's capital assets can be found in Note 5 in the Notes to the Basic Financial Statements.

Debt Administration

At June 30, 2015, the Agency had \$22.0 million in long-term liabilities compared to \$33.0 million at June 30, 2014. The June 30, 2014 balance was increased \$19.7 million to include the Net pension liability. The portion of long-term liabilities anticipated to become payable within one year is \$5.5 million or 24.8%. Additional information regarding the Agency's long-term liabilities can be found in Note 4 to the Basic Financial Statements.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OMNITRANS' Long-Term Liabilities

	Fiscal Year \$ <u>2015</u>	Fiscal Year <u>2014</u>	Increase (Decrease)	Percent Increase (Decrease)
Claims payable	7,884,314	9,493,032	(1,608,718)	(16.9)
Capital leases	129,101	268,269	(139,168)	(51.9)
Compensated absences	3,634,716	3,553,056	81,660	2.3
Net pension liability	<u>10,336,490</u>	<u>19,700,991</u>	<u>(9,364,501)</u>	(47.5)
Total long-term liabilities	\$ <u>21,984,621</u>	<u>33,015,348</u>	<u>(11,030,727)</u>	(33.4)

Next Year's Budget

OmniTrans prepares an operating and capital budget annually that is approved by the Board of Directors prior to the beginning of its fiscal year. The operating budget for fiscal year ending June 30, 2016 increased proportionately due to the launch of the sbX BRT service. The challenge is containing cost, and providing safe, dependable, and quality public transit service at current levels.

The capital budget consists of a multi-year program that includes the San Bernardino Transit Center, fixed route and access service vehicle replacement. Funding for these major projects have been identified, approved by the Board of Directors, and committed to those projects.

Contacting the Agency's Financial Management

This financial report is designed to provide our customers, stakeholders, and creditors with an overview of the Agency's financial operations and condition. If you have a question about this report or need additional information, you may contact the Agency's Finance Director at 1700 W. 5th Street, San Bernardino, California 92411-2499.

OMNITRANS

STATEMENT OF NET POSITION

JUNE 30 2015 (WITH COMPARATIVE TOTALS FOR JUNE 30, 2014)

	2015	2014
ASSETS:		
CURRENT ASSETS:		
Cash and investments (Note 2)	\$ 42,154,334	\$ 54,606,906
Receivables:		
Accounts, net of allowances	135,029	263,240
Interest	9,034	13,944
Intergovernmental	16,971,427	18,445,255
Inventory	2,006,703	1,787,199
Prepaid items	474,049	414,611
TOTAL CURRENT ASSETS	61,750,576	75,531,155
NONCURRENT ASSETS:		
Capital assets, not depreciated (Note 5)	55,247,982	172,495,981
Capital assets, depreciated, net (Note 5)	141,362,410	73,084,669
TOTAL NONCURRENT ASSETS	196,610,392	245,580,650
TOTAL ASSETS	258,360,968	321,111,805
DEFERRED OUTFLOW OF RESOURCES:		
Deferred amount on pensions (Note 8)	5,057,296	-
TOTAL DEFERRED OUTFLOW OF RESOURCES	5,057,296	-
LIABILITIES:		
CURRENT LIABILITIES:		
Accounts payable	8,256,718	14,657,136
Accrued salaries and benefits	2,161,099	2,102,918
Retainage payable	-	38,968
Interest payable	464	634
Unearned revenue	30,875,885	36,306,233
Compensated absences payable -		
current portion (Note 4)	2,409,511	2,387,968
Capital leases payable - current portion (Note 4)	129,101	139,168
Claims payable - current portion (Note 4)	2,922,897	3,158,775
TOTAL CURRENT LIABILITIES	46,755,675	58,791,800
NONCURRENT LIABILITIES:		
Compensated absences payable (Note 4)	1,225,205	1,165,088
Capital leases payable (Note 4)	-	129,101
Claims payable (Note 4)	4,961,417	6,334,257
Net Pension Liability (Note 8)	10,336,490	-
TOTAL NONCURRENT LIABILITIES	16,523,112	7,628,446
TOTAL LIABILITIES	63,278,787	66,420,246
DEFERRED INFLOW OF RESOURCES:		
Deferred amount on pensions (Note 8)	8,921,206	-
TOTAL DEFERRED INFLOW OF RESOURCES	8,921,206	-
NET POSITION:		
Net investment in capital assets (Note 13)	196,481,291	245,312,381
Unrestricted (Note 13)	(5,263,020)	9,379,178
TOTAL NET POSITION	\$ 191,218,271	254,691,559

See accompanying notes to basic financial statements.

OMNITRANS

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

YEAR ENDED JUNE 30 2015 (WITH COMPARATIVE TOTALS FOR JUNE 30, 2014)

	2015	2014
OPERATING REVENUES:		
Passenger fares	\$ 15,015,499	\$ 14,368,317
Advertising revenue	532,322	485,327
Other transportation revenue	54,440	41,978
TOTAL OPERATING REVENUES	15,602,261	14,895,622
OPERATING EXPENSES:		
Salaries and benefits	41,697,176	39,097,952
Purchased transportation services	9,261,048	9,075,431
General and administrative	6,344,136	4,365,255
Materials and supplies	9,191,072	9,144,483
Capital purchases	503,602	758,859
Professional and technical services	3,066,686	2,312,152
Advertising and printing	939,460	881,217
Depreciation	12,742,411	14,899,383
Miscellaneous	362,530	203,936
TOTAL OPERATING EXPENSES	84,108,121	80,738,668
OPERATING INCOME/(LOSS)	(68,505,860)	(65,843,046)
NONOPERATING REVENUES/(EXPENSES):		
Federal and local operating grants	55,090,857	50,785,745
Interest income	43,486	44,311
Interest expense	(2,426)	(4,580)
Pass-through to other agencies (Note 10)	(1,297,931)	(4,459,471)
Loss on disposal of capital assets	(323,574)	(969,126)
CNG fuel credit	1,324,615	1,071,808
Donation to other agency	(72,050,046)	-
Other nonoperating revenues	31,549	15,505
TOTAL NONOPERATING REVENUES/(EXPENSES)	(17,183,470)	46,484,192
INCOME/(LOSS) BEFORE CAPITAL CONTRIBUTIONS	(85,689,330)	(19,358,854)
CAPITAL CONTRIBUTIONS:		
Capital assistance	37,167,461	58,935,750
CHANGE IN NET POSITION	(48,521,869)	39,576,896
NET POSITION, BEGINNING OF YEAR	254,691,559	215,114,663
Prior Period Adjustment (Note 12)	(14,951,419)	-
NET POSITION, BEGINNING OF YEAR, AS RESTATED	239,740,140	215,114,663
NET POSITION, END OF YEAR	\$ 191,218,271	\$ 254,691,559

See accompanying notes to basic financial statements.

OMNITRANS

STATEMENT OF CASH FLOWS

YEAR ENDED JUNE 30 2015 (WITH COMPARATIVE TOTALS FOR JUNE 30, 2014)

	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash received from customers	\$ 15,730,472	\$ 14,732,720
Nonoperating miscellaneous receipts (payments)	1,243,289	1,087,313
Cash payments to suppliers for goods and services	(36,024,320)	(29,011,617)
Cash payments to employees for services	(43,804,197)	(42,550,403)
Net cash used for operating activities	(62,854,756)	(55,741,987)
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:		
Federal, state, and local operating grants	55,090,857	56,538,655
Pass-through payments to other agencies	(1,297,931)	(4,459,471)
Net cash provided by non-capital financing activities	53,792,926	52,079,184
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(36,184,741)	(55,454,294)
Principal paid on capital leases	(139,168)	(157,122)
Interest paid on capital leases	(2,596)	(5,444)
Capital grants received	32,887,367	95,435,008
Net cash provided by (used for) capital and related financing activities	(3,439,138)	39,818,148
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from sales and maturities of investments	55,321,513	44,200,000
Purchase of investments	(33,457,023)	(75,933,688)
Interest received	48,396	37,626
Net cash provided by/(used for) investing activities	21,912,886	(31,696,062)
Net increase in cash and cash equivalents	9,411,918	4,459,283
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	14,193,888	9,734,605
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 23,605,806	\$ 14,193,888
RECONCILIATION OF CASH AND CASH EQUIVALENTS TO AMOUNTS REPORTED ON STATEMENT OF NET POSITION:		
Reported on statement of net position:		
Cash and investments	\$ 42,154,334	\$ 54,606,906
Less investments not meeting the definition of cash and cash equivalents	(18,548,528)	(40,413,018)
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 23,605,806	\$ 14,193,888

(Continued)

See accompanying notes to basic financial statements.

OMNITRANS

STATEMENT OF CASH FLOWS (CONTINUED)

YEAR ENDED JUNE 30 2015 (WITH COMPARATIVE TOTALS FOR JUNE 30, 2014)

	2015	2014
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY (USED FOR) OPERATING ACTIVITIES:		
Operating income (loss)	\$ (68,505,860)	\$ (65,843,046)
Adjustments to net cash used by operating activities:		
Depreciation	12,742,411	14,899,383
Nonoperating miscellaneous income	1,356,164	1,087,313
Realized (gain) loss on sale of capital assets	323,574	969,126
(Increase) decrease in accounts receivable	128,211	(162,902)
(Increase) decrease in inventory	(219,504)	(193,738)
(Increase) decrease in prepaid items	(59,438)	(111,197)
Increase (decrease) in accounts payable	(6,400,418)	(2,934,475)
Increase (decrease) in salaries and benefits payable	(692,838)	351,742
Increase (decrease) in compensated absences payable	81,660	(186,760)
Increase (decrease) in claims payable	(1,608,718)	(3,617,433)
NET CASH USED FOR OPERATING ACTIVITIES	<u>\$ (62,854,756)</u>	<u>\$ (55,741,987)</u>

See accompanying notes to basic financial statements.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

OmniTrans was organized on March 8, 1976, by a joint powers agreement between the County of San Bernardino, California and the following cities: Chino; Colton; Fontana; Loma Linda; Montclair; Ontario; Redlands; Rialto; San Bernardino; and Upland under Section 6506 of the California Government Code for the purpose of providing transit services under a single agency. The following cities were added thereafter: Rancho Cucamonga and Grand Terrace in 1979; Highland in 1988; Yucaipa in 1990; and Chino Hills in 1992.

OmniTrans provides a variety of transit services to the public of San Bernardino County. These services include bus operations, purchased transportation services with independent contractors and demand response transportation services. OmniTrans also functions as a “pass-through” administrative agency for various federal, state and local grants.

Basis of Accounting

OmniTrans is accounted for as an enterprise fund (proprietary fund type). Proprietary fund financial statements are reported using the *economic resources measurement focus* and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Classification of Revenues and Expenses

Enterprise funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with an enterprise fund’s principal operations. The principal operating revenues of OmniTrans consist of bus transit services. Non-operating revenues consist of federal, state and local operating grants, and investment income. Operating expenses for enterprise funds include the cost of sales, administrative expenses and depreciation on capital assets.

Expenses not meeting this definition are reported as non-operating expenses. Non-operating expenses primarily consist of payments to pass-through agencies and interest expense.

Capital contributions consist of grants that are legally restricted for capital expenses by federal, state or local law that established those charges.

When both restricted and unrestricted resources are available for use, it is OmniTrans’ policy to use restricted resources first, and then unrestricted resources as they are needed.

Cash and Cash Equivalents

For the purposes of the Statement of Cash Flows, cash equivalents are defined as short-term, highly liquid investments that are both readily convertible to known amounts of cash or so near their maturity that they present insignificant risk of changes in value because of changes in interest rates, and have an original maturity date of three months or less.

Investments

Investments are reported in the accompanying Statement of Net Position at fair value. Changes in fair value that occur during the fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in fair value, and any gains or losses realized upon the liquidation or sale of investments.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Allowance for Doubtful Accounts

OmniTrans provides an allowance for doubtful accounts for all accounts deemed uncollectible. As of June 30, 2015, all accounts were deemed collectible resulting in an allowance for doubtful accounts of \$0.

Inventories

Inventories consist of Operations vehicles' parts and fuel in storage held for consumption. The parts and fuel in storage are stated at the lower of cost (average cost method) or market. The value of parts and fuel held in storage as of June 30, 2015 was \$2,006,703.

Capital Assets

Capital assets are valued at cost or estimated historical cost if actual cost is not available. Donated assets are valued at their estimated fair market value on the date donated. OmniTrans capitalizes all assets with a historical cost of at least \$2,000 and a useful life of at least one year. The cost of normal maintenance and repairs that do not add to the value of the assets or materially extend asset lives are not capitalized.

Depreciation of capital assets used by OmniTrans is charged as an expense against its operations. Depreciation is computed utilizing the straight-line method over the following estimated useful lives:

<u>Category</u>	<u>Number of Years</u>
Buildings and improvements	5 to 30
Operations equipment	3 to 12
Furniture and office equipment	3 to 20

Deferred Outflows/Inflows of Resources

In addition to assets, the Statement of Net Position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expense) until then. OmniTrans reports deferred amount on pension contributions subsequent to the measurement date as outflows of resources in the period that the amounts become available.

In addition to liabilities, the Statement of Net Position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until that time. The government has one item that qualifies for reporting in this category. OmniTrans reports deferred amount on pensions for differences between projected and actual earnings on pension plan investments.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Compensated Absences

It is OmniTrans' policy to permit employees to accumulate earned but unused vacation and sick leave benefits up to certain limits. Management, non-exempt, and coach operator employees begin to accrue vested sick leave hours after six months of service. Upon voluntary resignation, retirement or death and after six months of service, management and non-exempt employees or their estate are paid for any unused sick leave up to a maximum of 50 percent of the available sick leave hours not to exceed 1,200 hours (e.g. 50 percent of 1,200 hours would be paid at 600 hours). Represented employees begin to accrue vested sick leave hours after reaching a certain amount of service time based upon their respective work classification. Teamsters accrue sick leave after 1,040 hours of actual hours worked and Amalgamated Transit Union (ATU) members are after their first year of continuous full-time employment, based upon their respective work classification. Upon voluntary resignation, retirement, or death, and after a certain amount of years of service (ATU members after 8 years of service and Teamsters after 10 years of service), represented employees or their estate are paid for any unused sick leave up to a maximum of 50 percent of available sick leave hours not to exceed 1,200 hours (e.g. 50 percent of 1,200 hours would be paid at 600 hours).

Full-time non-represented employees begin to accrue vacation hours after 6 months of service. Employee vacation credits may be accrued and accumulated up to a maximum of 2 years total accumulated vacation credits. Eligible employees with an annual accrual of 3 or more weeks of vacation per year, after taking 80 hours vacation, shall be permitted to request 2 weeks pay in lieu of time off. Represented employees will accrue vacation benefits in accordance with the provisions of their respective Memorandum of Understanding (MOU).

Accumulated unpaid vacation and vested sick leave pay is recorded as an expense and a liability at the time the benefit is earned. Total compensated absences payable was \$3,634,716 at June 30, 2015.

Prior Year Data

Selected information regarding the prior year has been included in the accompanying financial statements. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with OmniTrans' prior year financial statements, from which this selected financial data was derived.

Federal, State and Local Grants

Federal, state and local governments have made various grants available to OmniTrans for operating assistance and acquisition of capital assets. Grants for operating assistance, the acquisition of equipment or other capital outlay are not formally recognized in the accounts until the grant becomes a valid receivable as a result of OmniTrans complying with appropriate grant requirements. Operating assistance grants are included in non-operating revenues in the year in which the grant is applicable and the related expenses are incurred. Revenues earned under capital grants are recorded as capital contributions.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Pass-Through Activities

Revenues associated with grants, where OmniTrans serves as the administering agent, are recorded as either non-operating revenues or capital contributions based on the approved use of the grant. The related expense is recorded as “pass-through to other agencies” in the Statement of Revenues, Expenses, and Changes in Net Position as the expenses do not support the operations of OmniTrans nor provide an asset.

Pension

For the purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the OmniTrans’ California Public Employees’ Retirement System (CalPERS) plans (Plans) and additions to/deductions from the Plans’ fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Net Position

Net investment in capital assets consists of capital assets reduced by accumulated depreciation and by any outstanding debt incurred to acquire, construct, or improve those assets.

Unrestricted net position is the net amount of the assets, deferred outflow of resources, deferred inflow of resources, and liabilities that are not included in the determination of net position component listed above.

Use of Estimates/Reclassifications

The preparation of basic financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts and disclosures at the date of the financial statements and results for the reporting period. Actual results could differ from those estimates. Certain amounts in the prior year have been reclassified to conform to the current year presentation.

New Accounting Pronouncements

Effective in this Fiscal Year

GASB Statement No. 68 – In June 2012, GASB issued Statement No. 68, *Accounting and Financial Reporting for Pensions—an Amendment of GASB Statement No. 27*. This Statement establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit pensions, this Statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. OmniTrans has implemented this Statement effective July 1, 2014.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

New Accounting Pronouncements (Continued)

GASB Statement No. 69 – In January 2013, GASB issued Statement No. 69, *Government Combinations and Disposals of Government Operations*. This Statement establishes accounting and financial reporting standards related to government combinations and disposals of government operations. As used in this Statement, the term government combinations includes a variety of transactions referred to as mergers, acquisitions, and transfers of operations. This Statement did not have an effect on the current financial statements.

GASB Statement No. 71 – In November 2013, GASB issued Statement No. 71, *Pension Transition for Contributions made Subsequent to the Measurement Date – an Amendment of GASB No. 68*. The objective of this Statement is to address an issue regarding application of the transition provisions of Statement No. 68, *Accounting and Financial Reporting for Pensions*. The issue relates to amounts associated with contributions, if any, made by a state or local government employer or nonemployer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. OmniTrans has implemented this Statement effective July 1, 2014.

Effective in Future Fiscal Years

GASB Statement No. 72 – In February 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application*. The objective of the Statement is to address accounting and financial reporting issues related to fair value measurements. The Statement is effective for periods beginning after June 15, 2015. OmniTrans has not determined the effect on the financial statements.

GASB Statement No. 73 – In June 2015, GASB issued Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. The principal objectives of this Statement is to improve the information provided in the general purpose external financial reports of state and local governments about pensions and related assets that are not within the scope of Statement No. 68. The Statement is effective for periods beginning after June 15, 2015. OmniTrans has not determined the effect on the financial statements.

GASB Statement No. 74 – In June 2015, GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. The Statement is effective for periods beginning after June 15, 2016. OmniTrans has not determined the effect on the financial statements.

GASB Statement No. 75 – In June 2015, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The objective of this Statement is to improve accounting and financial reporting by state and local governments for OPEB. This Statement replaces the requirements of Statements No. 45 and No. 57. The Statement is effective for periods beginning after June 15, 2017. OmniTrans has not determined the effect on the financial statements.

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NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

New Accounting Pronouncements (Continued)

GASB Statement No. 76 – In June 2015, GASB issued Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The objective of this Statement is to identify – in the context of the current governmental financial reporting environment – the hierarchy of generally accepted accounting principles (GAAP). The Statement is effective for periods beginning after June 15, 2015. OmniTrans has not determined the effect on the financial statements.

GASB Statement No. 77 – In August 2015, GASB issued Statement No. 77, *Tax Abatement Disclosures*. The objective of this Statement is to provide financial statement users with essential information about the nature and magnitude of the reduction in tax revenues through tax abatement programs. The Statement is effective for periods beginning after December 15, 2015. OmniTrans has not determined the effect on the financial statements.

NOTE 2 – CASH AND INVESTMENTS

Cash and investments as of June 30, 2015 consist of the following:

Cash on hand	\$ 3,700
Deposits with financial institutions	23,602,106
Investments	18,548,528
	<u>\$ 42,154,334</u>

Investments Authorized by the California Government Code or OmniTrans' Investment Policy

The table below identifies the investment types that are authorized by the California Government Code (or OmniTrans' investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or OmniTrans' investment policy, where more restrictive) that address interest rate risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
Local Agency Bonds	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
Federal Agency Securities	5 years	None	None
Banker's Acceptances	180 days	40%	30%
Commercial Paper	270 days	25%	10%
Negotiable Certificates of Deposit	5 years	30%	None
Repurchase Agreements	1 year	20%	None
Medium - Term Notes	5 years	30%	None
Local Agency Investment Fund	N/A	None	None
California Asset Management Program (CAMP)	N/A	None	None
California Local Agency Securities System (CLASS)	N/A	None	None

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NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 2 – CASH AND INVESTMENTS (CONTINUED)

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment the greater the sensitivity of its fair market value to changes in market interest rates. The investment policy of OmniTrans provides safety and liquidity guidelines for managing interest rate risk.

Information about the sensitivity of the fair values of OmniTrans' investments to market interest rate fluctuations is provided by the following table that shows the distribution of OmniTrans' investments by maturity:

Investment Type	Remaining Investment Maturities			Fair Value
	12 Months Or Less	1 to 3 Years	3 to 5 Years	
Local Agency Investment Fund	\$ 10,115,352			\$ 10,115,352
Negotiable Certificates of Deposit	1,000,591	\$ 2,253,084	\$ 1,002,375	4,256,050
U.S. Government Sponsored Enterprise Securities:				
FFCB	2,190,110			2,190,110
FNMA			1,987,016	1,987,016
Total Cash Investments	<u>\$ 13,306,053</u>	<u>\$ 2,253,084</u>	<u>\$ 2,989,391</u>	<u>\$ 18,548,528</u>

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a nationally recognized statistical rating organization. The table below represents the minimum rating required by the California Government Code (where applicable), or OmniTrans' investment policy, and the actual rating as of year-end for each investment type.

Investment Type	Total as of June 30, 2015	Minimum Legal Rating	AA+	Unrated
Local Agency Investment Fund	\$ 10,115,352	(1)		\$ 10,115,352
Negotiable Certificates of Deposit	4,256,050	(1)		4,256,050
U.S. Government Sponsored Enterprise Securities:				
FFCB	2,190,110	(1)	\$ 2,190,110	
FNMA	1,987,016	(1)	1,987,016	
Total	<u>\$ 18,548,528</u>		<u>\$ 4,177,126</u>	<u>\$ 14,371,402</u>

(1) Not Applicable

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 2 – CASH AND INVESTMENTS (CONTINUED)

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of OmniTrans' investment in a single issue. The investment policy of OmniTrans contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. As of June 30, 2015, the following investments represented 5% or more of OmniTrans' total investments.

Issuer	Total as of June 30, 2015	Percentage of Total Investments
FFCB	\$ 2,190,110	5.20%

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, OmniTrans will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and OmniTrans' investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits. The California Government Code requires that a financial institution secure deposits made by state or local government units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure OmniTrans' deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. As of June 30, 2015, OmniTrans had deposits of \$22,737,994 held in excess of federal depository insurance corporation (FDIC) limits covered by collateralization.

Investment in LAIF

OmniTrans is a voluntary participant in the Local Agency Investment Fund (LAIF), which is regulated by California Government Code Section 16429.1 through 16429.4 under the oversight of the Treasurer of the State of California. LAIF is a governmental investment pool managed and directed by the California State Treasurer and is not registered with the Securities and Exchange Commission. An oversight committee comprised of California State officials and various participants provide oversight to the management of the fund. The daily operations and responsibilities of LAIF fall under the auspices of the State Treasurer's office. The fair value of OmniTrans' investment in this pool is reported in the accompanying financial statements at amounts based upon OmniTrans' pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 3 – FEDERAL STATE AND LOCAL GRANTS

OmniTrans receives operating and capital assistance from various federal, state and local sources.

Federal Assistance

Under the provision of the Federal Transit Administration (FTA), funds are available to OmniTrans for preventive maintenance, security, and various capital costs.

Transportation Development Act Assistance

Pursuant to provisions of the 1971 Transportation Development Act (TDA), as amended, the California State Legislature enacted the Local Transportation Fund (LTF) and the State Transit Assistance Fund (STAF) to provide operating and capital assistance for public transportation. These funds are received from the County of San Bernardino based on annual claims filed by OmniTrans and approved by the San Bernardino Associated Governments (SANBAG), the regional transportation planning entity.

To be eligible for TDA funds, OmniTrans must maintain a ratio of passenger fares to operating costs of not less than 20.00% for general public transit service and 10.00% for specialized service for the elderly and handicapped. After considering certain cost exemption provisions of the TDA, OmniTrans' ratios for the fiscal year ended June 30, 2015 were 23.69% for general public transit service, and 13.82% for specialized service for the elderly and handicapped.

In accordance with 6634 of the TDA, an operator may not receive TDA funds in an amount that exceeds its actual operating costs. For the fiscal year ended June 30, 2015, OmniTrans recognized revenue for TDA funds in the amount of \$34,926,011.

Measure I

OmniTrans receives Measure I funds for paratransit operating costs. Measure I funds are derived from a locally imposed 0.5% retail sales and use tax on all taxable sales within the County of San Bernardino. The allocation and administration of Measure I is performed by SANBAG.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 3 – FEDERAL STATE AND LOCAL GRANTS (CONTINUED)

Proposition 1B

The Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) Fund is a part of the State of California's Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 (Bond Act), approved by California voters as Proposition 1B on November 7, 2006. A total of \$19.9 billion was deposited into the PTMISEA fund, \$3.6 billion of which was made available to project sponsors in California for allocation to eligible public transportation projects over a 10-year period. Proposition 1B funds can be used for rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or for rolling stock procurement, rehabilitation or replacement. During the fiscal year ended June 30, 2015, Proposition 1B cash receipts and cash disbursements were as follows:

Unspent Proposition 1B funds as of June 30, 2014	\$ 30,367,563
Proposition 1B funds received during the fiscal year ended June 30, 2015	1,736,317
Proposition 1B expenses incurred during the fiscal year ended June 30, 2015	(1,677,037)
Interest revenue earned on unspent Proposition 1B funds during the fiscal year ended June 30, 2015	164,646
Change in fair market value of investments held during the year ended June 30, 2015	52,114
	<u>\$ 30,643,603</u>

The amount of unspent Proposition 1B funds noted above is included in unearned revenue on the Statement of Net Position as of June 30, 2015.

Operating assistance is summarized as follows for the year ended June 30:

Federal Assistance	\$ 10,809,626
LTF	34,926,105
STAF	4,055,126
Measure I	5,300,000
	<u>\$ 55,090,857</u>

Capital contributions for the year ended June 30 were as follows:

Federal Assistance	\$ 27,797,281
LTF	3,216,424
STAF	2,195,416
Measure I	93,022
CalTrans	3,865,318
	<u>\$ 37,167,461</u>

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NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 4 – LONG-TERM LIABILITIES

Long-term liabilities for the year ended June 30, 2015 are as follows:

	Balance at June 30, 2014	Additions	Deletions	Balance at June 30, 2015	Due Within One Year	Amount Due Beyond One Year
Compensated absences	\$ 3,553,056	\$ 2,237,125	\$ (2,155,465)	\$ 3,634,716	\$ 2,409,511	\$ 1,225,205
Capital leases	268,269		(139,168)	129,101	129,101	-
Claims payable	9,493,032	387,969	(1,996,687)	7,884,314	2,922,897	4,961,417
Net pension liability	19,700,991	-	(9,364,501)	10,336,490	-	10,336,490
Total Long-Term Liabilities	<u>\$ 33,015,348</u>	<u>\$ 2,625,094</u>	<u>\$(13,655,821)</u>	<u>\$ 21,984,621</u>	<u>\$ 5,461,509</u>	<u>\$ 16,523,112</u>

Capital Lease Obligations

In December 2011 OmniTrans entered into a lease financing arrangement for 29 vehicles with Enterprise Fleet Services. The minimum lease payments required during the current five-year term of these agreements are \$665,411. The lease payments have a present value of \$652,369, which approximate the value of the assets, and is the amount capitalized in OmniTrans' capital assets. The outstanding principal balance was \$129,101 as of June 30, 2015.

The future minimum lease obligations as of June 30, 2015 were as follows:

Year Ending June 30,	Principal	Interest	Total
2016	\$ 129,101	\$ 1,392	\$ 130,493
Total	<u>\$ 129,101</u>	<u>\$ 1,392</u>	<u>\$ 130,493</u>

NOTE 5 – CAPITAL ASSETS

	Balance at June 30, 2014	Additions	Retirements	Balance at June 30, 2015
CAPITAL ASSETS, NOT DEPRECIATED:				
Land	\$ 10,522,709			\$ 10,522,709
Construction in progress	161,973,272	\$ 35,682,096	\$ (152,930,095)	44,725,273
Total assets, not depreciated	<u>172,495,981</u>	<u>35,682,096</u>	<u>(152,930,095)</u>	<u>55,247,982</u>
CAPITAL ASSETS, DEPRECIATED:				
Buildings and improvements	44,328,931	136,312,333	(72,081,744)	108,559,520
Operations equipment	107,251,843	12,898,679	(5,161,822)	114,988,700
Furniture and office equipment	35,569,147	4,331,906	(2,542,642)	37,358,411
Total capital assets, depreciated	<u>187,149,921</u>	<u>153,542,918</u>	<u>(79,786,208)</u>	<u>260,906,631</u>
LESS ACCUMULATED DEPRECIATED FOR:				
Buildings and improvements	(25,223,910)	(2,789,048)	31,698	(27,981,260)
Operations equipment	(55,409,833)	(7,836,639)	4,689,102	(58,557,370)
Furniture and office equipment	(33,431,509)	(2,116,724)	2,542,642	(33,005,591)
Total accumulated depreciation	<u>(114,065,252)</u>	<u>(12,742,411)</u>	<u>7,263,442</u>	<u>(119,544,221)</u>
Total capital assets, depreciation, net	<u>73,084,669</u>	<u>140,800,507</u>	<u>(72,522,766)</u>	<u>141,362,410</u>
Capital assets, net	<u>\$ 245,580,650</u>	<u>\$ 176,482,603</u>	<u>\$ (225,452,861)</u>	<u>\$ 196,610,392</u>

Depreciation expense for the year ended June 30, 2015 was \$12,742,411

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NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 6 – OPERATING LEASES

OmniTrans leases facilities and tires under noncancelable operating leases. Total costs for such leases were \$727,932 during the year ended June 30, 2015. The future minimum lease payments for these leases are as follows:

Year Ending June 30,	Total
2016	\$ 742,747
2017	528,475
2018	174,724
2019	167,029
2020	110,449
Total	<u>\$ 1,723,424</u>

NOTE 7 – RISK MANAGEMENT

OmniTrans is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors or omissions; and natural disasters for which they carry commercial insurance. Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been Incurred But Not Reported (IBNR). Claim liabilities are calculated considering the effects of inflation, recent claim settlement trends including frequency and amount of payouts and other economic and social factors. The outstanding claims at June 30, 2015 were estimated to be \$7,884,314 and were based on an IBNR study performed in fiscal year 2014-2015. Changes in the fund claims liability amount for the last two fiscal years are as follows:

Year Ending June 30,	Beginning of Year Liability	Provisions of Claims	Claim Payments	End of Year Liability
2014	\$ 13,110,465	\$ (3,486,199)	\$ (131,234)	\$ 9,493,032
2015	9,493,032	387,969	(1,996,687)	7,884,314

OmniTrans is a member of the Association of California Public Transit Operators Joint Powers Insurance Authority (Authority). The Authority is a risk-pooling self-insurance authority, created under provisions of California law in 1987. The purpose of the Authority is to arrange and administer programs of insurance for the pooling of self-insured losses and to purchase excess insurance coverage.

At June 30, 2015, OmniTrans' participation in the self-insurance programs of the Authority is as follows:

- General Liability: OmniTrans is self-insured up to \$1,000,000 per occurrence and has purchased re-insurance and excess insurance coverage.
- Automobile Liability: OmniTrans is self-insured up to \$1,000,000 per occurrence and has purchased re-insurance and excess insurance coverage.
- Public Officials Errors and Omissions: OmniTrans is self-insured up to \$1,000,000 per occurrence and has purchased re-insurance and excess insurance coverage.
- Vehicle Collision and Comprehensive Liability: Insured up to actual cash value of covered vehicles up to \$10,000,000 per occurrence subject to per vehicle deductibles. The Authority has purchased excess insurance coverage.

Separate financial statements of the Authority can be obtained at 1415 L Street, Suite 200, Sacramento, California 95814.

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NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 7 – RISK MANAGEMENT (CONTINUED)

OmniTrans has also purchased additional insurance coverage outlined below:

- Workers Compensation Liability: OmniTrans is self-insured for workers' compensations claims up to \$1,000,000 with a limit of liability of \$5,000,000 and excess coverage up to \$95,000,000.
- Property Liability: OmniTrans is self-insured for property damage up to \$25,000 for Electronic Data Processing Equipment and \$10,000 for all other losses per occurrence, with limit of liability up to \$32,522,360. OmniTrans has also purchased earthquake and flood coverage for damage, for which it is self-insured up to \$25,000 for an earthquake and \$50,000 for a flood per occurrence, with a limit of liability of \$10,000,000 and excess coverage of \$10,000,000.
- Crime Liability: OmniTrans is self-insured for employee dishonesty and theft up to \$1,000 per occurrence, with a limit of liability up to \$50,000.
- Pollution Remediation Liability: OmniTrans is self-insured for pollution remediation claims up to \$50,000 per occurrence and \$150,000 in aggregate, with a limit of liability of \$5,000,000 per occurrence and \$10,000,000 in aggregate.
- Employment Related Practices Liability: OmniTrans is self-insured for employment related practices liability claims up to \$50,000 with a limit of liability of \$1,000,000

For the past three fiscal years, none of the above programs of protections has had settlements or judgments that exceeded pooled or insured coverage.

NOTE 8 – DEFINED BENEFIT PENSION PLAN

A. General Information about the Pension Plan

Plan Description

All qualified employees are eligible to participate in the OmniTrans' Miscellaneous Employee Pension Plan, an agent multiple-employer public employee defined benefit pension plan administered by the California Public Employees Retirement System (CalPERS). CalPERS acts as a common investment and administrative agent for its participating member employers. Benefit provisions under the plan are established, and may be amended, by State statute and OmniTrans resolution. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions and membership information that can be found on the CalPERS website.

Benefits Provided

CalPERS provide service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 8 – DEFINED BENEFIT PENSION PLAN (CONTINUED)

A. General Information about the Pension Plan (Continued)

The Plans' provisions and benefits in effect at June 30, 2015 are summarized as follows:

	Miscellaneous	
	Prior to January 1, 2013	On or after January 1, 2013
Hire Date		
Benefit formula	2% @ 55	2% @ 62
Benefit vesting schedule	5 years service	5 years service
Benefit payments	monthly for life	monthly for life
Retirement age	50 - 55	52 - 67
Monthly benefits, as a % of annual salary	2.0% to 2.7%	1.0% to 2.5%
Required employee contribution rates	7%	7%
Required employer contribution rates	11.070%	10.618%

For the year ended June 30, 2015, OmniTrans has paid the employer's and employees' shares of the contributions. The contributions recognized, were as follows:

	Miscellaneous
Contributions - employer	\$ 3,093,598
Contributions - employee	1,963,698

Employees Covered

At June 30, 2015, the following employees were covered by the benefit terms for the Plan:

	Miscellaneous
Inactive employees or beneficiaries currently receiving benefits	292
Inactive employees entitled to but not yet receiving benefits	371
Active employees	628
Total	1291

Contributions

Section 20814(c) of the California Public Employees' Retirement law requires that the employer contribution rates for all public employers are determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in rate. Funding contributions for the Plan is determined annual on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. OmniTrans is required to contribute the difference between the actuarially determined rate and the contribution rates of employees.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 8 – DEFINED BENEFIT PENSION PLAN (CONTINUED)

B. Net Pension Liability

OmniTrans' net pension liability for the Plan is measured as the total pension liability, less the pension plan's fiduciary net position. The net pension liability is measured as of June 30, 2014, using an annual actuarial valuation as of June 30, 2013 rolled forward to June 30, 2014 using standard update procedures. A summary of principal assumptions and methods used to determine the net pension liability is shown below.

Actuarial Assumptions

The total pension liabilities in the June 30, 2013 actuarial valuations were determined using the following actuarial assumptions:

	<u>Miscellaneous</u>
Valuation Date	June 30, 2013
Measurement Date	June 30, 2014
Actuarial Cost Method	Entry-Age Normal Cost Method
Actuarial Assumptions:	
Discount Rate	7.50%
Inflation	2.75%
Payroll Growth	3.00%
Projected Salary Increase	3.3% - 14.2% (1)
Investment Rate of Return	7.5% (2)
Mortality	(3)

(1) Depending on age, service and type of employment

(2) Net of pension plan investment expenses, including inflation

(3) Derived using CalPERS Membership Data for all Funds

The underlying mortality assumptions and all other actuarial assumptions used in the June 30, 2013 valuation were based on the results of a January 2014 actuarial experience study for the period of 1997 to 2011. Further details of the Experience Study can be found on the CalPERS website.

Discount Rate

The discount rate used to measure the total pension liability was 7.50% for the Plan. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing, none of the tested plans run out of assets. Therefore, the current 7.50 percent discount rate is adequate and the use of the municipal bond rate calculation is not necessary. The long term expected discount rate of 7.50 percent will be applied to all plans in the Public Employees Retirement Fund (PERF). The stress test results are presented in a detailed report that can be obtained from the CalPERS website.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 8 – DEFINED BENEFIT PENSION PLAN (CONTINUED)

B. Net Pension Liability (Continued)

According to Paragraph 30 of Statement 68, the long-term discount rate should be determined without reduction for pension plan administrative expense. The 7.50 percent investment return assumption used in this accounting valuation is net of administrative expenses. Administrative expenses are assumed to be 15 basis points. An investment return excluding administrative expenses would have been 7.65 percent. Using this lower discount rate has resulted in a slightly higher Total Pension Liability and Net Pension Liability. CalPERS checked the materiality threshold for the difference in calculation and did not find it to be a material difference.

CalPERS is scheduled to review all actuarial assumptions as part of its regular Asset Liability Management (ALM) review cycle that is scheduled to be completed in February 2018. Any changes to the discount rate will require Board action and proper stakeholder outreach. For these reasons, CalPERS expects to continue using a discount rate net of administrative expenses for GASB 67 and 68 calculations through at least the 2017-18 fiscal year. CalPERS will continue to check the materiality of the difference in calculation until such time as the methodology changes.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent.

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation. These rates of return are net of administrative expenses.

Asset Class	Target Allocation	Real Return Years 1 - 10 (a)	Real Return Years 11+ (b)
Global Equity	47.0%	5.25%	5.71%
Global Fixed Income	19.0%	0.99%	2.43%
Inflation Sensitive	6.0%	0.45%	3.36%
Private Equity	12.0%	6.83%	6.95%
Real Estate	11.0%	4.50%	5.13%
Infrastructure and Forestland	3.0%	4.50%	5.09%
Liquidity	2.0%	-0.55%	-1.05%
Total	100%		

(a) An expected inflation of 2.5% used for this period.

(b) An expected inflation of 3.0% used for this period.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 8 – DEFINED BENEFIT PENSION PLAN (CONTINUED)

C. Changes in the Net Pension Liability

The changes in the Net Pension Liability for the Plan follows:

Miscellaneous Plan:

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability/(Asset)
Balance at June 30, 2014	<u>\$ 131,169,067</u>	<u>\$ 111,468,076</u>	<u>\$ 19,700,991</u>
Changes in the year:			
Service Cost	\$ 5,032,912		\$ 5,032,912
Interest on the total pension liability	9,875,147		9,875,147
Contribution - employer		\$ 2,857,424	(2,857,424)
Contribution - employee		1,892,148	(1,892,148)
Net investment income		19,522,988	(19,522,988)
Benefit payments, including refunds of employee contributions	(4,033,818)	(4,033,818)	
Net changes	<u>10,874,241</u>	<u>20,238,742</u>	<u>(9,364,501)</u>
Balance at June 30, 2015	<u>\$ 142,043,308</u>	<u>\$ 131,706,818</u>	<u>\$ 10,336,490</u>

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of OmniTrans for the Plan, calculated using the discount rate for the Plan, as well as what OmniTrans' net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	Miscellaneous
1% Decrease	6.50%
Net Pension Liability	\$ 30,041,991
Current Discount Rate	7.50%
Net Pension Liability	\$ 10,336,490
1% Increase	8.50%
Net Pension Liability	\$ (6,012,267)

Pension Plan Fiduciary Net Position

Detailed information about OmniTrans' pension plan's fiduciary net position is available in the separately issued CalPERS financial reports.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 8 – DEFINED BENEFIT PENSION PLAN (CONTINUED)

C. Changes in the Net Pension Liability (Continued)

Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions

For the year ended June 30, 2015, OmniTrans recognized pension expense of \$2,643,167. At June 30, 2015, OmniTrans reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to measurement date	\$ 5,057,296	
Net differences between projected and actual earnings on plan investments		\$ 8,921,206
Total	<u>\$ 5,057,296</u>	<u>\$ 8,921,206</u>

The amount of \$5,057,296 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability during the next measurement period. Amounts reported as deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year ended June 30,	
2016	\$ 2,230,302
2017	2,230,302
2018	2,230,301
2019	2,230,301
Total	<u>\$ 8,921,206</u>

NOTE 9 – COMMITMENTS AND CONTINGENCIES

Litigation

OmniTrans is subject to lawsuits and claims which arise out of the normal course of business. In the opinion of management, based upon the opinion of legal counsel, the disposition of such actions of which it is aware will not have a material effect on the financial position, results of operations or liquidity of OmniTrans.

Contingencies

OmniTrans has received federal and state funds for specific purposes that are subject to review and audit by grantor agencies. Although, such audits could generate expenditure disallowances under the terms of the grants, in the opinion of management, any additional required reimbursement will not have a material effect on the financial position, results of operations or liquidity of OmniTrans.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 9 – COMMITMENTS AND CONTINGENCIES (CONTINUED)

Commitments

Commitments consist primarily of additions to operations equipment and building improvements. Significant commitments are as follows:

Project	Amount Authorized	Cumulative Expenses June 30, 2015	Unexpended Commitments
Facilities Future Expansion and Remodel	\$ 2,090,976	\$ 2,085,337	\$ 5,639
Computer Software and Hardware	1,456,105	1,449,322	6,783
E Street Bus Rapid Transit - Vehicle Maintenance Facility	17,907,617	17,417,055	490,562
San Bernardino Transit Center	23,517,283	21,952,437	1,564,846
Paratransit Buses	1,177,862	1,176,127	1,735
Vehicle & Shop Equipment	897,420	644,995	252,425
Total major components of construction in progress	<u>\$ 47,047,263</u>	<u>\$ 44,725,273</u>	<u>\$ 2,321,990</u>

NOTE 10 – PASS-THROUGH GRANTS

Pass-through activity for the year ended June 30, 2015 is summarized as follows:

Central City Lutheran	\$ 9,458
City of Fontana	15,143
City of Yucaipa	359,073
OPARC	154,881
Inland Empire United Way	173,990
LLUMC Adult Day Health Services	40,667
Pomona Valley Community Services	92,498
Pomona Valley Workshop	171,878
Valley Transportation Services	250,431
Victor Valley	29,912
	<u>\$ 1,297,931</u>

NOTE 11 – DONATION TO OTHER AGENCY

In accordance with the Master Cooperative Agreement Between and Among OmniTrans, City of San Bernardino, and the Successor Agency of the City of San Bernardino for the "E" Street Corridor sbX Bus Rapid Transit Project, the City will take ownership of the exclusive sbX BRT lanes to be designated for and exclusively used by sbX BRT buses and be responsible for their maintenance. Through the end of Fiscal Year 2015, total capitalizable assets associated with the sbX BRT lanes in areas considered as public Right of Way in the City of San Bernardino transferred to the City is valued at \$72,050,046.

OMNITRANS

NOTES TO BASIC FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

NOTE 12 – RESTATEMENT

A prior period adjustment of \$14,951,419 was made to decrease the beginning net position. The adjustment was made to record beginning net pension liability and deferred outflows of resources for contributions subsequent to the measurement date.

The restatement of beginning net position is summarized as follows:

	June 30, 2014 Previously Stated	Restatement	July 1, 2014 Restated
Net Pension Liability		\$ (19,700,991)	\$ (19,700,991)
Deferred Outflows		4,749,572	4,749,572
Net Position	<u>\$ 254,691,559</u>	<u>\$ (14,951,419)</u>	<u>\$ 239,740,140</u>

NOTE 13 – NET POSITION

The following is a detailed breakdown of net position.

Capital assets, net of accumulated depreciation	\$ 196,610,392
Less: Debt offsetting capital assets	<u>(129,101)</u>
Net investment in capital assets	<u>196,481,291</u>
Unrestricted net position	<u>(5,263,020)</u>
Total net position	<u>\$ 191,218,271</u>

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OMNITRANS

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS YEAR ENDED JUNE 30, 2015

	<u>2015</u>
Total Pension Liability	
Service Cost	\$ 5,032,912
Interest on the total pension liability	9,875,147
Differences between actual and expected experience	-
Changes in assumptions	-
Changes in benefit terms	-
Benefit payments, including refunds of employee contributions	(4,033,818)
Net change in total pension liability	<u>10,874,241</u>
Total pension liability - beginning	<u>131,169,067</u>
Total pension liability - ending (a)	<u>\$ 142,043,308</u>
 Plan fiduciary net position	
Contributions - employer	\$ 2,857,424
Contributions - employee	1,892,148
Net investment income	19,522,988
Benefit payments	(4,033,818)
Net change in plan fiduciary net position	<u>20,238,742</u>
Plan fiduciary net position - beginning	<u>111,468,076</u>
Plan fiduciary net position - ending (b)	<u>\$ 131,706,818</u>
 Plan net pension liability - ending (a)-(b)	<u>\$ 10,336,490</u>
 Plan fiduciary net position as a percentage of the total pension liability	92.72%
 Covered - employee payroll	28,280,626
 Plan net pension liability as percentage of covered employee payroll	36.55%

Notes to Schedule:

* - Fiscal year 2015 was the 1st year of implementation, therefore only one year is shown.

OMNITRANS

REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CONTRIBUTIONS YEAR ENDED JUNE 30, 2015

	<u>2015</u>
Actuarially determined contribution	\$ 3,283,410
Contribution in relation to the actuarially determined contributions	3,283,410
Contribution deficiency (excess)	<u>\$ -</u>
Covered-employee payroll	\$ 29,803,123
Contribution as a percentage of covered employee payroll	11.02%

Notes to Schedule

Valuation date June 30, 2013

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	20 Years as of the valuation date
Asset valuation method	15-year smoothed market
Inflation	2.75%
Salary increases	Varies by entry age and service
	7.50% net of pension plan
	investment and administrative
Investment rate of return	expenses; includes inflation
Retirement age	57 years
	Derived using CalPERS'
Mortality	membership data for all funds



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STATISTICAL SECTION

This section of OmniTrans' Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information say about OmniTrans' overall financial health. This information has not been audited by the independent auditors.

	<u>Page</u>
Financial Trends	41
These schedules contain trend information to help the reader understand how the OmniTrans financial performance and well-being has changed over time.	
Revenue Capacity	43
These schedules contain information to help the reader assess OmniTrans' most significant local revenue source, passenger fares.	
The Economy and Economic Outlook	48
These schedules offer demographic and economic indicator to help the reader understand the environment within OmniTrans' financial activities take place.	
Operating Information	49
These schedules contain service and infrastructure data to help the reader understand how the information in OmniTrans' financial report relates to the services OmniTrans provides and the activities it performs.	

Source: Unless otherwise noted, the information in these schedules derived from the Comprehensive Annual Financial Reports for the relevant years.

NET POSITION BY COMPONENT

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Net investment in capital assets	\$ 79,318,662	84,731,356	84,317,308	94,909,096	114,540,764	119,480,534	136,703,207	206,982,298	245,580,650	196,610,392
Less: Debt offsetting capital assets	(57,044)	(404,372)	(364,370)	(241,226)	(251,129)	(114,308)	(590,371)	(425,391)	(288,269)	(129,101)
Total invested in capital assets, net of related debt	79,261,618	84,326,984	83,952,938	94,667,870	114,289,635	119,366,226	136,112,836	206,566,907	245,312,381	196,481,291
Unrestricted net assets	28,256,748	29,683,079	33,300,903	33,883,455	29,320,746	14,717,794	8,548,071	8,547,756	9,379,178	(5,263,020)
Total net position	\$ 107,518,366	114,010,063	117,253,841	128,551,325	143,610,381	134,084,020	144,660,907	215,114,663	254,691,559	191,218,271

The decrease in net position is mainly attributed to donation of capitalized assets to the City of San Bernardino. The capitalized assets were cost associated with construction of the sbX Bus Rapid Transit (BRT) project in areas that are within the public Right of Way.

Source: Finance Department

CHANGES IN NET POSITION

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Operating Revenues:										
Passenger fares	\$ 12,202,126	12,761,463	13,511,536	13,779,684	14,242,013	14,538,747	14,536,931	14,317,987	14,368,317	15,015,499
Advertising revenues	677,943	824,253	948,051	967,628	849,585	909,176	805,904	481,994	485,327	532,322
Other transportation revenues	111,577	37,862	47,307	42,708	39,752	41,802	39,819	39,819	41,978	54,440
Total revenues	\$ 12,991,646	13,623,578	14,506,894	14,790,020	15,131,350	15,489,725	15,382,654	14,839,800	14,895,622	15,602,261
Operating Expenses:										
Depreciation and amortization	8,275,341	8,323,081	8,861,306	9,255,553	10,999,458	12,772,455	17,070,294	16,678,098	14,899,383	12,742,411
Other operating expenses	64,867,497	66,481,860	67,756,893	67,770,003	67,501,900	66,529,837	69,206,132	70,539,078	65,839,285	71,365,710
Total expenses:	\$ 73,142,838	74,804,941	76,618,199	77,025,556	78,501,358	79,302,292	86,276,426	87,217,176	80,738,668	84,108,121
Non-operating Revenues/(Expenses):										
Federal & local operating grants	54,858,935	52,112,668	55,587,601	52,983,639	48,085,804	52,675,797	47,875,811	54,087,458	50,785,745	44,098,417
Interest income	995,770	1,714,629	1,656,529	758,950	243,098	74,302	52,727	24,915	44,311	43,486
Interest expense	(2,218)	(5,762)	(11,029)	(9,149)	(6,835)	(6,590)	(3,980)	(8,349)	(4,580)	(2,426)
Pass-through to other agencies	(800,137)	(729,007)	(1,254,751)	(2,779,299)	(3,031,642)	(18,754,320)	(620,108)	(2,254,293)	(4,459,471)	(1,297,931)
Donation to other agency										(72,050,046)
Other non-operating revenues (expenses)	55,196	(305,583)	(258,422)	(24,710)	(299,568)	(719,668)	(246,487)	1,409,847	118,187	1,032,590
Total non-operating revenues	\$ 55,107,546	52,786,945	55,719,928	50,929,431	44,990,857	33,269,521	47,057,963	53,259,578	46,484,192	(28,175,910)
Income before capital contribution	(5,043,646)	(8,394,418)	(6,391,377)	(11,306,105)	(18,379,151)	(30,543,046)	(23,836,809)	(19,117,798)	(19,358,854)	(96,681,770)
Capital Contributions										
Capital assistance	\$ 7,274,580	14,623,890	9,635,155	22,603,589	33,438,207	21,016,685	34,412,696	89,571,554	58,935,750	48,159,901
Contributions from other agencies	0	262,225	0	0	0	0	0	0	0	0
Total capital contributions	\$ 7,274,580	14,886,115	9,635,155	22,603,589	33,438,207	21,016,685	34,412,696	89,571,554	58,935,750	48,159,901
Change in net position	\$ 2,230,934	6,491,697	3,243,778	11,297,484	15,059,056	(9,526,361)	10,576,887	70,453,756	39,576,896	(48,521,869)
Net position, beginning of year	\$ 105,287,432	107,518,366	114,010,063	117,253,841	128,551,325	143,610,381	134,084,020	144,660,907	215,114,663	254,691,559
Prior Period Adjustment (Note 12)										(14,951,419)
Net Position, Beginning Of Year, As Restated										239,740,140
Net position, end of year	\$ 107,518,366	114,010,063	117,253,841	128,551,325	143,610,381	134,084,020	144,660,907	215,114,663	254,691,559	191,218,271

Notes: The FY2005 beginning balance in Change in net position includes an adjustment for workers' compensation reserve that was previously overstated. In addition, the restatement includes certain revenues and expenses that were not recognized in prior period. Pass-through to other agencies for 2011 include return of \$16M in LTF funds to SANBAG for future allocation.

Source: Finance Department

REVENUE SOURCE

Passenger Fares - Individuals

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
F/R Full Fares - Cash	\$3,885,180	\$4,321,978	\$4,571,811	\$4,510,511	\$4,715,996	\$4,756,220	\$4,564,607	\$4,512,614	\$4,399,894	\$4,414,989
F/R Senior/Disable Fare - Cash	179,632	210,954	256,870	263,959	297,986	334,730	360,603	383,045	447,239	557,592
F/R 1-Day & 7 Day Full Fare - Pass	3,910,662	4,139,709	4,015,846	3,925,863	3,626,533	3,540,680	3,478,828	3,386,969	3,534,008	3,577,714
F/R 1-Day & 7 Day S/D Fare - Pass	538,213	562,418	613,947	606,615	666,085	716,572	712,770	770,747	813,797	893,643
F/R 31-Day Full Fare - Pass (less: discount)	1,004,008	1,069,585	1,197,152	1,299,310	1,423,947	1,354,296	1,125,569	1,083,657	1,419,430	1,574,959
F/R 31-Day Youth Fare-Pass	833,925	866,516	837,689	1,010,097	1,239,874	1,247,839	909,534	1,014,034	524,795	579,142
F/R 31-Day Senior Fare - Pass	84,538	82,373	86,571	93,902	0	0	0	0	0	0
F/R 31-Day Disability Fare - Pass	362,423	325,432	352,027	367,110	479,601 *	542,878	571,416	591,712	560,936	622,658
University Passes	0	0	0	0	0	0	736,134 **	531,763	755,568	753,215
VET - Cash	0	0	0	0	0	0	0	0	0	13,154
VET 31-Day Pass	0	0	0	0	0	0	0	0	0	41,824
VET 7 Day Pass	0	0	0	0	0	0	0	0	0	12,490
VET 1 Day Pass	0	0	0	0	0	0	0	0	0	4,394
MetroLink Transfer	920	37,819	43,237	66,712	49,419	51,325	100,098	54,326	43,628	53,169
F/R 7-Day Youth Pass		6,500	227,621	347,973	417,670	446,094	340,581	356,291	214,219	208,442
Access Base Fare - Cash	154,518	130,641	150,814	138,464	158,044	166,246	144,141	142,900	153,870	193,297
Access Base Fare (3 zones) - Ticket	889,053	918,970	1,032,973	991,817	1,023,493	1,183,363	1,248,892	1,275,349	1,291,015	1,452,471
Access Additional (1 zone) - Ticket	1,553	3,660	5,175	3,916	4,059	12,989	17,071	10,927	17,596	14,181
Access Monthly Subscription Zone - Pass	4,315	4,055	6,020	21,510	16,075	13,340	12,905	8,410	725	0
Total Passenger Fares	\$11,848,938	\$12,680,609	\$13,397,751	\$13,647,749	\$14,118,782	\$14,366,590	\$14,323,149	\$14,122,744	\$14,176,720	\$14,967,334
Special Transit Fares - Group										
F/R 1 - Trip Full Fare - Ticket	0	25	378	54,675	41,475	57,705	67,330	42,516	21,644	43,880
OmniLink (Yucaipa) - Cash	37,802	40,075	48,104	46,238	50,305	26,859	20,777	19,396	18,317	2,821
OmniLink (Chino Hills) - Cash	12,688	12,829	22,388	22,368	20,570	10,017	8,914	7,629	8,730	1,329
OmniLink S/D Fare - Ticket	2,583	2,525	5,821	5,495	5,994	5,535	4,199	1,701	851	81
OmniLink Full Fare - Ticket	40,250	25,400	35,960	297	459	0	54	0	0	0
OmniLink Youth Fare - Ticket			1,134	2,862	4,428	2,934	2,304	2,340	2,070	54
OmniGo - Fares						69,107	110,204	121,661	139,985	0
Total Special Transit Fares	\$93,322	\$80,854	\$113,785	\$131,935	\$123,231	\$172,157	\$213,782	\$195,243	\$191,597	\$48,165
Total Fares	\$11,942,260	\$12,761,463	\$13,511,536	\$13,779,684	\$14,242,013	\$14,538,747	\$14,536,931	\$14,317,987	\$14,368,317	\$15,015,499

* F/R 31-Day Senior and Disable Passes were combined into a single pass.

** Implemented GoSmart Student Pass Program.

Source: Finance Department

DEMOGRAPHICS AND STATISTICS SAN BERNARDINO COUNTY

Fiscal Year	(A) Population	(B) Personal Income (000)	(B / A) Per Capita Personal Income	Median Age	School Enrollment	Unemployment Rate
2006	1,987,505	53,928,618	27,134	30.4	427,631	4.8%
2007	2,007,800	56,940,673	28,360	30.3	427,583	5.6%
2008	2,044,895	59,800,525	29,244	30.3	428,142	8.0%
2009	2,045,632	60,875,315	29,759	30.3	420,325	13.6%
2010	2,048,217	60,800,000	29,684	30.3	415,549	14.3%
2011	2,053,348	63,600,000	30,974	30.9	417,202	14.3%
2012	2,065,000	65,200,000	31,574	31.2	417,000	12.2%
2013	2,080,914	68,100,000	32,726	31.7	412,155	10.4%
2014	2,088,371	68,387,465	32,747	32.4	411,583	7.4%
2015	2,112,619	70,261,483	33,258	31.0	410,696	6.5%

Source: U.S. Department of Labor, Bureau of Labor Statistics; Bureau of Economic Analysis; California Employment Development Department; California Basic Educational Data Systems (CBEDS); San Bernardino County Economic Forecast; California Department of Education.

PRINCIPAL EMPLOYERS OF SAN BERNARDINO COUNTY

Employer	Employees	% of Total Employment	Ranking									
			2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Loma Linda University*	10,000 - 15,000	1.8%	1	1	3	3	6	6	3	3	8	4
U.S. Marine Corps Air Ground Combat Center	10,000 - 15,000	1.7%	2	2	4	4	5	5	2	4	4	3
County of San Bernardino, San Bernardino	10,000 - 15,000	1.6%	3	3	1	1	3	3	1	1	2	1
Stater Brothers Markets, San Bernardino	10,000 - 15,000	1.4%	4	4	6	6	1	1	5	6	1	2
Kaiser Permanente	10,000 - 15,000	1.3%	5	5	9	9	9	9	8	9	7	6
Wal-Mart Stores Inc.	5,000 - 10,000	1.1%	6	6	8	8	8	8	7	8	-	9
U.S. Army, Fort Irwin & National Training Center	5,000 - 10,000	1.0%	7	7	2	2	4	4	4	2	3	8
Ontario International Airport, Ontario	5,000 - 10,000	1.0%	8	8	7	7	7	7	-	7	6	5
San Bernardino City Unified School District	5,000 - 10,000	0.8%	9	9	5	5	-	-	6	5	5	7
United Parcel Service (UPS)	5,000 - 10,000	0.5%	10	10	10	10	10	10	9	10	-	10

* Includes: Loma Linda University, Loma Linda Medical Center, and VA Loma Linda Healthcare Systems

Source: U.S. Census Bureau, Inland SoCal, Economy.com

Riverside San Bernardino Ontario MSA
(Riverside and San Bernardino Counties)
Industry Employment & Labor Force
Benchmark

TITLE	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15
Civilian Labor Force	1,746,000	1,767,400	1,780,400	1,777,600	1,798,600	1,795,300	1,811,900	1,819,100	1,807,600	1,940,000
Civilian Employment	1,656,700	1,664,200	1,637,000	1,537,300	1,541,000	1,542,400	1,582,100	1,625,400	1,655,500	1,813,700
Civilian Unemployment	89,300	103,200	143,400	240,300	257,600	252,900	229,800	193,700	152,100	126,300
Civilian Unemployment Rate	5.1%	5.8%	8.1%	13.5%	14.3%	14.1%	12.7%	10.7%	8.4%	6.5%
Total, All Industries	1,315,100	1,316,200	1,274,500	1,187,900	1,172,600	1,163,600	1,198,400	1,241,900	1,277,700	1,345,300
Total Farm	22,500	22,800	21,900	20,900	21,100	19,100	20,300	18,700	18,900	17,500
Total Nonfarm	1,292,600	1,293,400	1,252,600	1,167,000	1,151,400	1,144,500	1,178,100	1,223,200	1,258,800	1,327,800
Total Private	1,065,300	1,064,400	1,018,800	927,700	909,800	913,700	952,000	995,700	1,028,700	1,094,900
Goods Producing	259,400	237,800	203,500	159,900	147,900	146,300	152,100	156,800	160,100	176,700
Mining and Logging	1,400	1,300	1,200	1,200	1,000	1,000	1,200	1,200	1,200	1,200
Construction	132,600	116,600	93,800	69,800	61,300	59,500	63,500	68,600	71,800	81,500
Construction of Buildings	22,500	20,300	16,300	12,000	10,600	10,700	10,800	11,400	12,400	13,700
Heavy & Civil Engineering Construction	12,500	13,000	11,700	9,100	8,200	8,900	10,400	9,900	9,700	10,400
Specialty Trade Contractors	97,600	83,300	65,800	48,700	42,500	39,800	42,300	47,300	49,700	57,400
Building Foundation & Exterior Contractors	37,200	29,200	20,800	13,600	12,400	10,800	11,700	12,500	13,700	16,700
Building Equipment Contractors	22,900	21,800	19,200	15,800	13,700	13,400	13,800	16,000	17,400	18,700
Building Finishing Contractors	25,900	21,600	16,500	12,400	10,400	9,900	10,500	12,200	13,100	14,500
Manufacturing	125,400	119,900	108,500	88,900	85,500	85,800	87,400	87,000	87,100	94,000
Durable Goods	88,600	83,100	73,700	58,200	55,500	56,400	57,300	57,000	57,200	62,000
Fabricated Metal Product Manufacturing	16,800	16,100	14,900	11,900	11,500	12,200	12,700	13,000	13,400	14,900
Nondurable Goods	36,800	36,800	34,800	30,700	30,000	29,400	30,100	30,000	29,900	32,000
Food Mfg & Beverage & Tobacco Product Mfg	10,800	11,100	10,500	9,700	9,800	9,500	10,000	10,300	10,600	10,700
Service Providing	1,033,200	1,055,600	1,049,100	1,007,100	1,003,600	998,200	1,026,000	1,066,400	1,098,700	1,151,100
Private Service Providing	805,900	826,600	815,300	767,800	761,900	767,400	799,900	838,900	868,600	918,200
Trade, Transportation & Utilities	290,600	299,000	293,300	270,000	269,000	273,000	285,200	296,100	305,700	321,800
Wholesale Trade	54,200	56,900	55,000	48,900	48,900	49,000	52,300	55,900	57,700	62,000
Merchant Wholesalers, Durable Goods	34,100	34,500	33,000	29,100	29,200	29,200	30,800	33,100	34,300	36,000
Merchant Wholesalers, Nondurable Goods	14,500	16,500	16,600	15,400	15,500	15,500	17,300	18,000	18,300	21,500
Retail Trade	171,000	173,300	168,100	154,100	153,900	155,600	159,300	162,800	167,100	167,500
Motor Vehicle & Parts Dealer	25,900	25,300	23,200	18,600	18,700	19,600	20,600	21,500	22,500	23,400
Automotive Parts, Accessories & Tire Stores	6,800	6,400	6,300	6,000	6,400	6,500	6,800	6,900	7,000	7,200
Building Material & Garden Equipment Stores	16,200	15,400	13,900	12,800	12,500	12,400	13,000	13,900	14,600	14,300
Food & Beverage Stores	31,800	33,700	33,300	32,900	32,700	30,700	30,700	30,900	31,200	32,400
Health & Personal Care Stores	8,300	8,900	9,400	9,000	9,100	9,300	9,600	9,900	10,000	10,100
Clothing & Clothing Accessories Stores	14,500	16,100	16,200	14,400	15,600	17,100	17,600	17,700	17,700	18,000
Clothing Stores	11,000	12,400	12,600	11,200	12,300	13,400	13,700	13,500	13,500	13,600
General Merchandise Stores	37,800	37,700	37,100	36,000	35,400	34,900	35,400	36,400	36,200	38,100
Transportation, Warehousing & Utilities	65,400	68,800	70,200	67,100	66,200	68,400	73,600	77,400	80,900	92,300
Utilities	5,600	5,700	5,900	5,800	5,800	5,800	5,800	5,600	5,500	5,500
Transportation & Warehousing	59,800	63,100	64,300	61,300	60,400	62,500	67,800	71,800	75,400	86,800
Truck Transportation	23,100	23,700	22,900	21,400	20,200	21,700	22,400	23,200	23,700	25,900
General Freight Trucking	16,100	16,800	16,800	16,200	15,500	16,400	16,900	17,600	18,200	19,900
Couriers & Messengers	8,200	7,900	7,900	7,600	7,000	7,000	7,000	7,100	6,800	9,600
Warehousing & Storage	14,100	16,100	16,900	17,200	19,300	22,100	24,400	25,900	29,400	36,000
Information	15,400	15,500	14,800	14,300	14,300	12,200	11,600	11,400	11,600	11,100
Publishing Industries (except Internet)	3,400	3,200	3,000	2,400	1,900	1,800	1,700	1,600	1,600	1,600
Telecommunications	6,000	5,900	5,800	6,300	6,800	5,700	5,400	5,500	5,900	5,500
Financial Activities	52,100	50,200	46,500	42,200	40,900	39,900	40,800	42,200	42,300	44,500
Finance & Insurance	31,700	30,500	27,500	25,900	25,400	25,300	26,000	26,500	26,100	27,500
Credit Intermediation & Related Activities	19,000	18,200	16,500	15,300	14,900	14,900	15,000	14,900	14,400	15,000
Depository Credit Intermediation	10,400	11,000	10,800	10,100	10,100	9,900	10,000	9,600	9,500	8,900
Nondepository Credit Intermediation	6,800	5,500	4,400	4,000	3,600	4,100	3,900	3,900	3,800	4,200
Insurance Carriers & Related	10,600	10,300	9,100	8,900	8,800	9,000	9,500	10,000	10,100	10,800
Insurance Carriers	5,500	5,100	4,200	4,100	4,100	4,100	4,500	4,900	4,800	4,800
Real Estate & Rental & Leasing	20,400	19,700	19,000	16,300	15,500	14,600	14,800	15,700	16,200	17,000
Real Estate	13,700	13,000	12,000	10,500	10,400	10,100	10,700	11,300	11,900	12,300
Professional & Business Services	141,800	145,400	138,700	124,500	122,900	123,400	128,000	131,200	140,500	149,600
Professional, Scientific & Technical Services	39,300	40,300	39,800	36,700	34,100	34,300	36,800	36,800	39,600	43,600
Management of Companies & Enterprises	10,800	9,700	9,800	9,000	8,700	8,600	8,400	8,900	8,700	9,100
Administrative & Support & Waste Services	91,700	95,400	89,100	78,800	80,200	80,400	82,800	85,500	92,200	96,900
Administrative & Support Services	88,900	92,600	86,200	76,200	77,500	77,400	79,400	81,800	88,600	92,900
Employment Services	49,600	53,100	47,000	36,300	37,200	36,400	37,100	37,500	40,900	43,200
Investigation & Security Services	8,000	8,000	8,000	9,600	9,900	10,800	11,100	11,800	12,500	13,200
Services to Buildings & Dwellings	19,100	18,500	17,300	16,400	16,100	16,200	17,000	18,100	18,700	18,500
Educational & Health Services	136,200	140,700	148,500	155,100	152,800	155,800	164,400	181,300	187,900	195,800
Educational Services	13,700	14,300	15,100	15,600	14,900	14,900	15,200	16,800	17,100	19,100
Colleges, Universities & Professional Schools	4,600	4,600	4,900	5,600	5,400	5,500	5,600	5,600	5,600	6,000
Health Care & Social Assistance	122,500	126,400	133,400	139,500	137,900	140,900	149,200	164,500	170,800	176,700
Ambulatory Health Care Services	46,500	46,800	49,000	50,300	51,200	53,100	57,200	58,700	60,500	63,800
Offices of Physicians	21,700	20,400	21,900	23,000	23,200	24,300	26,500	27,200	28,400	30,500
Hospitals	28,800	30,100	31,700	32,600	32,300	34,100	35,000	35,700	35,700	36,200
Nursing & Residential Care Facilities	19,400	20,600	20,700	20,300	20,400	21,300	22,300	23,000	23,600	25,400
Leisure & Hospitality	128,400	133,800	131,300	124,100	122,900	123,600	129,100	135,500	141,200	151,400
Arts, Entertainment & Recreation	15,600	16,700	16,100	14,800	14,900	14,300	14,700	15,900	15,300	17,500
Accommodation & Food Services	112,800	117,100	115,200	109,300	108,000	109,300	114,400	119,600	125,900	133,900
Accommodation	18,200	17,400	16,300	14,600	13,600	13,900	14,300	14,500	14,400	15,700
Food Services & Drinking Places	94,600	99,700	98,900	94,700	94,400	95,400	100,100	105,100	111,500	118,200
Full-Service Restaurants	40,300	41,900	40,900	38,900	39,300	40,100	42,600	44,300	44,100	47,500
Limited-Service Eating Places	51,300	54,300	54,300	52,500	51,700	51,800	53,900	57,200	61,300	65,100
Other Services	41,400	42,000	42,200	37,500	39,200	39,400	40,800	41,200	39,400	44,000
Repair & Maintenance	16,400	15,900	15,400	13,000	12,900	13,100	13,800	14,700	14,600	15,900

Personal & Laundry Services	9,600	10,300	10,400	9,600	9,800	9,700	10,500	10,600	10,400	11,500
Government	227,300	229,000	233,800	239,300	241,700	230,800	226,100	227,500	230,100	232,900
Federal Government	19,300	19,500	19,700	20,300	25,100	21,400	20,500	20,200	20,400	20,400
Department of Defense	5,700	5,600	5,800	6,100	6,300	6,400	5,900	5,800	5,800	5,800
Federal Government excluding Department of Defense	13,600	13,900	13,900	14,200	18,700	15,000	14,600	14,400	14,600	14,600
State & Local Government	208,000	209,500	214,100	219,100	216,600	209,400	205,600	207,300	209,700	212,500
State Government	27,900	29,300	30,500	30,800	29,900	30,100	28,900	28,400	28,800	29,200
State Government Education	10,300	10,700	11,100	11,200	10,900	11,600	11,200	11,400	11,800	12,100
State Government Excluding Education	17,600	18,600	19,400	19,600	19,000	18,500	17,700	17,000	17,000	17,100
Local Government	180,100	180,200	183,600	188,300	186,700	179,300	176,700	178,900	180,900	183,300
Local Government Education	99,900	97,100	99,700	105,800	107,100	103,000	102,400	105,400	107,600	109,400
Local Government Excluding Education	80,200	83,100	83,900	82,500	79,600	76,300	74,300	73,500	73,300	73,900
County	36,000	37,400	37,700	37,500	36,400	35,200	34,200	33,300	32,800	32,400
City	16,200	17,300	17,900	17,700	16,600	16,200	15,400	15,000	15,400	15,100
Special Districts plus Indian Tribes	28,000	28,400	28,300	27,300	26,600	24,900	24,700	25,200	25,100	26,400

Source: State of California Employment Development Department (website CA.gov)

THE ECONOMY AND ECONOMIC OUTLOOK

The Inland Empire (IE), comprised of San Bernardino and Riverside Counties, is the fastest growing metropolitan statistical area (MSA) in California. Employment has recovered to pre-recession levels, but output has not. Job growth is the second in the Inland Empire is the second highest in the state, if taking in considerations workers who commute out of the region.

The high value generating sectors, manufacturing and construction, have been replaced by lower-paying sectors, health and education services and leisure and hospitality. The Inland Empire's modestly educated labor force and lower costs for homes and industrial facilities have historically caused its moderate paying blue collar firms to be among its fastest growing sectors.

The five (5) sectors powering the Inland Empire's economic base are 1) logistics, 2) construction, 3) health care, 4) manufacturing, and 5) professional, engineering, scientific and managerial. Every sector in the Inland Empire has added jobs since the recession in 2008. In general measures of employment, all jobs that have been lost, have been recovered in terms of numbers. However, the Inland Empire has still not recovered the level of gross domestic product output it had at the peak of its economic activity in 2006.

The Inland Empire is projected to pick up 44,100 jobs next year, giving opportunities to those among our unemployed who have the education and skills to fill them. Educational attainment is still the greatest challenge, by far, for the region's workforce. The higher-paying jobs that the Inland Empire is creating are in professional and business service and that trend continues from a year ago.

Of course, it's not all sunshine and lollipops in the Inland Empire. One reason the Inland Empire's economy is growing faster than others is that it has had a deeper hole to climb out of. The two-county region was hit so hard by the Great Recession that there's pretty much been nowhere to go but up.

Number of Employees

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Administration	4	4	5	5	5	5	5	5	3	4
Operation	504	494	504	474	473	445	438	443	450	468
Maintenance	116	117	118	118	111	99	102	101	100	102
Information Technology	6	7	10	10	10	6	6	5	5	8
Marketing	24	22	23	23	24	23	23	25	24	29 **
Planning	7	7	17 *	15	16	17	19	18	15	0
Human Resources	10	10	11	11	11	9	9	9	9	9
Safety & Security	2	2	4	4	4	4	4	3	3	3
Procurement	22	19	21	21	21	17	19	18	19	18
Finance	15	17	16	16	12	12	12	11	11	12
Integrated Project Mgmt. Oversight (IPMO)										4 ***
Total	<u>710</u>	<u>699</u>	<u>729</u>	<u>697</u>	<u>687</u>	<u>637</u>	<u>637</u>	<u>638</u>	<u>639</u>	<u>653</u>

* Revised in 2008 to include Integrated Project Management Oversight (IPMO) Employees with the Planning Department.

** Re-organization combined the Marketing Department and Planning Department.

*** Re-organization separated the Project Management Oversight (IMPO) Employees from the Planning Department.

Source: Human Resources Department

OPERATING EXPENSES BY CATEGORY

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Personnel	\$24,297,509	\$25,198,119	\$25,639,106	\$26,704,109	\$26,628,484	\$24,869,713	\$25,280,131	\$25,718,114	\$25,505,890	\$26,313,115
Materials & Supplies	10,732,723	10,911,136	10,053,655	9,062,296	8,831,959	7,743,557	8,479,014	8,396,813	8,533,634	8,494,603
Casualty & Liability	3,704,840	2,206,571	4,981,889	4,448,557	4,233,360	4,674,142	5,100,830	6,525,076	1,146,301	2,851,520
Purchased Transportation	7,404,173	6,241,231	6,336,702	6,719,510	7,114,073	8,831,959	8,882,227	9,084,344	9,075,431	9,261,048
Depreciation & Other	27,003,593	30,247,884	29,606,847	30,091,084	31,693,482	33,182,921	38,534,224	37,492,829	36,477,412	37,187,835
Total Operating Expenses	<u>\$73,142,838</u>	<u>\$74,804,941</u>	<u>\$76,618,199</u>	<u>\$77,025,556</u>	<u>\$78,501,358</u>	<u>\$79,302,292</u>	<u>\$86,276,426</u>	<u>\$87,217,176</u>	<u>\$80,738,668</u>	<u>\$84,108,121</u>

Source: Finance Department

OPERATING EXPENSES BY FUNCTION

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Transportation	\$24,680,219	\$25,506,068	\$26,163,421	\$27,787,511	\$28,239,330	\$29,168,399	\$29,261,593	\$29,269,181	\$30,149,343	\$31,337,405
Maintenance	17,488,081	18,315,985	17,867,594	16,627,719	15,770,795	14,204,780	14,830,016	15,043,634	15,213,652	16,223,257
Risk Management *	3,708,749	2,206,571	4,981,889	4,448,557	4,233,360	4,674,142	5,100,830	6,525,076	1,146,301	2,851,520
Marketing	2,275,828	2,328,273	2,366,484	2,330,561	2,673,847	2,260,166	2,259,488	2,452,956	2,411,375	2,925,275
General Administration	6,510,371	7,341,094	9,569,184	7,451,941	7,226,877	7,835,246	8,052,766	6,887,007	8,473,242	8,147,166
Depreciation & Other **	18,481,808	19,106,950	15,669,627	18,379,268	20,357,148	21,159,558	26,771,733	27,039,322	23,344,755	22,623,498
Total Operating Expenses	\$73,145,056	\$74,804,941	\$76,618,199	\$77,025,556	\$78,501,358	\$79,302,292	\$86,276,426	\$87,217,176	\$80,738,668	\$84,108,121

* Risk Management consist of casualty and liability costs.

** Depreciation & Other cost consist of depreciation, purchased transportation, leases and rentals, and capital purchases charged to operating.

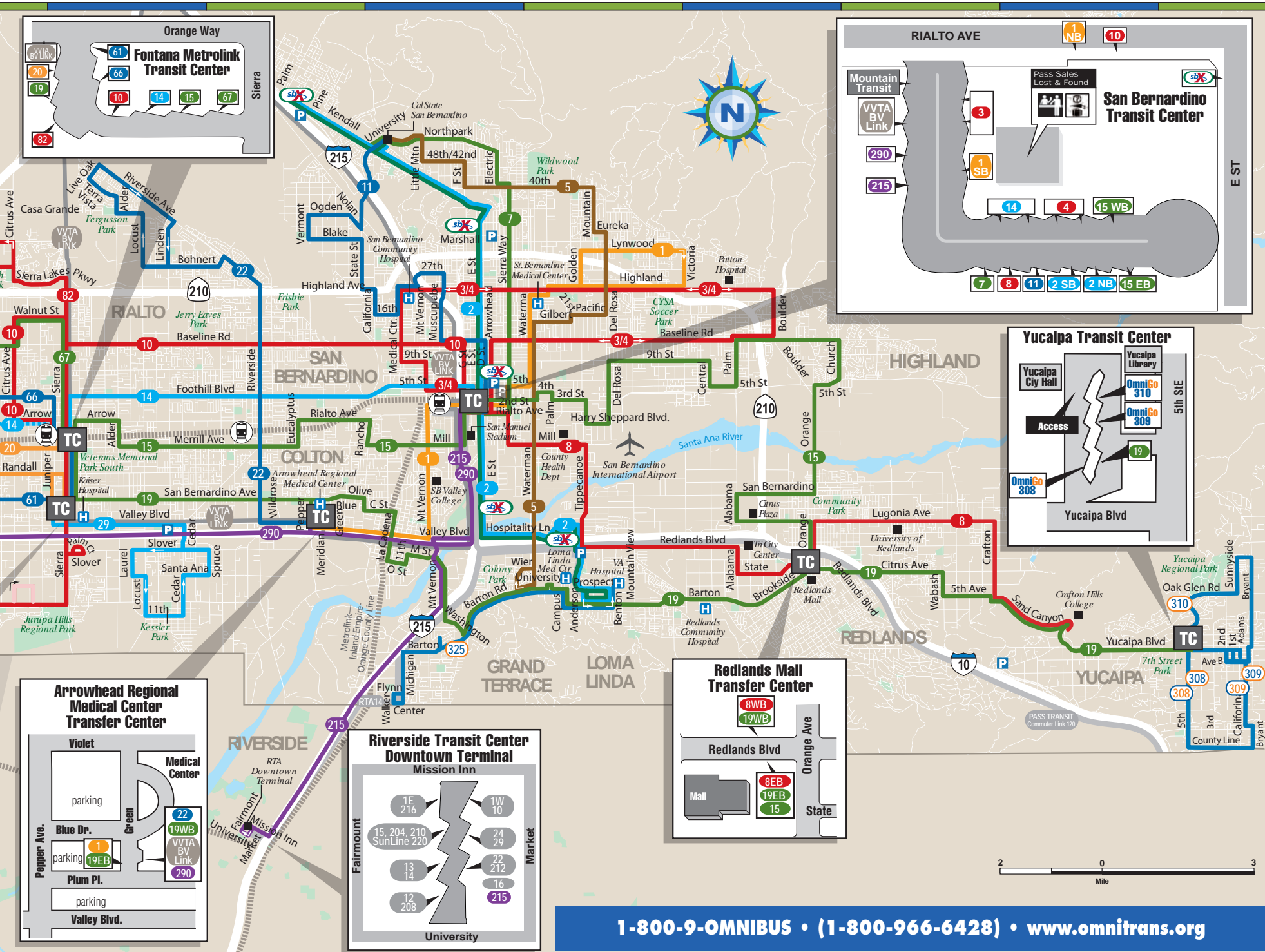
Source: Finance Department

CAPITAL ASSETS BY FUNCTION

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Fixed route Buses	181	180	175	173	177	167	179	172	186	191
Paratransit Paratransit buses	101	101	95	102	101	106	106	96	126	122
Paratransit vans	0	0	6	10	10	10	10	10	10	9
Support vehicles Vans, cars & trucks	39	31	35	52	49	42	43	37	37	40

Source: Finance Department.





Route Listing

Route	Route Name
	Palm/Kendall - CSUSB - VA Hospital
	ARMC - San Bernardino - Del Rosa
	Kendall/Palm - Cal State - E Street - Loma Linda
	Baseline - Highland - San Bernardino
	S. Waterman - Del Rosa - Cal State
	Cal State - Sierra Way - San Bernardino
	San Bernardino - Mentone - Crafton Hills College
	Fontana - Baseline - San Bernardino
	San Bernardino - Muscoy - Cal State
	Fontana - Foothill - San Bernardino
	Fontana - San Bernardino/Highland - Redlands
	Fontana - Colton - Redlands - Yucaipa
	Fontana Metrolink - Via Hemlock - Kaiser
	North Rialto - Riverside Ave - ARMC
	Bloomington - Valley Blvd - Kaiser
	Fontana - Ontario Mills - Pomona
	Fontana - Foothill Blvd - Montclair
	Chaffey College - Baseline - Fontana
	Ontario - Vineyard Ave - Chaffey College
	Chino - Haven - Chaffey College
	Rancho Cucamonga - Fontana - Sierra Lakes
	Chino - Euclid Ave - Upland
	Chino - Mountain Ave - Upland
	Chino - Montclair - Chaffey College
	S. Ontario - Campus Ave - San Antonio Hospital
	Chino Hills - Ramona Ave - Montclair
	Riverside - San Bernardino
	San Bernardino - ARMC - Ontario Mills - Montclair
	OmniGo Yucaipa
	OmniGo Yucaipa
	OmniGo Grand Terrace
	OmniGo Chino/Chino Hills

LEGEND

	Bus Route		Landmark
	Tripper Service		Hospital
	Long-term Detour		Interstate
	Metrolink		State Highway
	Metrolink Station		Park and Ride
	TransCenter (Timed Transfers)		sbX Bus Rapid Service Route

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Effective January 2016

Routes and schedules are subject to change without notice.

Important Phone Numbers

Text A Tip (909)368-7711
Send non-emergency text messages to Omnitrans Security

WE TIP (800)782-7463
National anonymous crime tip hotline

Omnitrans Lost & Found
(909)379-7100

OTHER TRANSIT SERVICES

Amtrak (800)872-7245
Providing national passenger rail service

Foothill Transit (800)743-3463
Serving the San Gabriel and Pomona Valleys, and unincorporated Los Angeles County

Greyhound (800)231-2222
Providing national bus service

LAMetro (323)466-3876 or (323)466-3876
Serving Los Angeles County

Mountain Transit (909)878-5200
Serving Big Bear Valley, Rim of the World, including off-the-mountain service between San Bernardino and several mountain communities

Orange County Transportation Authority (OCTA) (714) 636-7433
Serving Orange County

Metrolink (800) 371-5465
Providing regional commuter rail service

Pass Transit (951)769-8530
Serving Banning, Beaumont, Cabazon and Cherry Valley

RTA (951)565-5002
Serving Western Riverside County

VVTA (760)948-3030
Serving Adelanto, Apple Valley, Hesperia, Victorville and portions of San Bernardino County

CONNECTING OUR COMMUNITY



OMNITRANS
1700 W Fifth Street
San Bernardino, CA 92411



**ITEM #F3
SUPPLEMENTAL INFORMATION**

**CONTRACT MKP16-83
PERMANENT FENCE
SAN BERNARDINO TRANSIT CENTER**

MARCH 2, 2016



ATTACHMENT A
Specifications/Drawings

MKP16-83

**PERMANENT FENCE
San Bernardino Transit Center
(SBTC)**

Construction Documents

**Permit Set Specifications
100% Drawings Base Bid
and Alternates**

December 11, 2015

Owner

OMNITRANS

Architect

HDR, Inc

801 S. Grand Avenue

Suite 500

Los Angeles, Ca 90017-4633



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MKP16-83

Permanent Fence SBTC

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SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for substitutions which are the Contractor proposed changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.

1.2 RELATED REQUIREMENTS

- A. Section 01 33 00 - Submittal Procedures.
- B. Section 01 40 00 - Quality Requirements.
- C. Section 01 60 00 - Product Requirements.

1.3 SUBSTITUTION FOR SPECIFIED PRODUCTS

- A. The Contract Documents, including Contract Plans and Specifications have been prepared to complement and accommodate certain specified equipment, products or systems, and any modifications, adjustments, or redesign required to assimilate any OWNER approved substitution of "or equivalent" equipment, products, or systems shall be at the Contractor's sole expense. The Contractor shall provide a complete and workable application and shall satisfy design criteria and aesthetic values to the sole satisfaction of OWNER. The Contract Time for completion of the Work specified in the Contract Documents shall not be increased by any circumstances whatsoever arising from the provisions of this Specification.

1.4 SUBSTITUTION REQUESTS

- A. The Contractor shall submit four copies of each request for consideration identifying product or fabrication or installation method to be replaced. Include Specification section number and title and plan sheet number and title. Indicate type of substitution:
 - 1. Substitutions for Cause: Changes proposed by the Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions Required Because of Federal Government Restrictions: Changes proposed by the Contractor that result from Federal Government restrictions or other causes growing out of the national defense or war programs.
 - 3. Substitutions for Lack of Availability: Changes proposed by the Contractor because certain materials or equipment specified are entirely unobtainable or not obtainable in sufficient quantities or within a reasonable time.
 - 4. Substitutions for Convenience: Changes proposed by the Contractor or OWNER that are not required in order to meet other Project requirements, but may offer advantage to the Contractor or OWNER.
- B. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - 1. A statement indicating why the specified product or fabrication or installation cannot be provided, if applicable.

2. Coordination information including a list of changes or revisions needed to other parts of the Work and to construction performed by OWNER and separate contractors that will be necessary to accommodate the proposed substitution.
 3. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Include an annotated copy of the applicable Specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 4. Product data, including plans and descriptions of products and fabrication and installation procedures.
 5. Samples, where applicable or requested.
 6. Certificates and qualification data, where applicable or requested.
 7. A list of similar installations for completed projects, with project names and addresses and the names and addresses of pertinent engineers and authorities.
 8. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
 9. Research reports demonstrating compliance with building codes in effect for the Project, from recognized testing laboratories or agencies, technical trade associations, and code authorities.
 10. A detailed comparison of the Contractor's construction schedule using the proposed substitution with products specified for the Work, including the effect on the overall Contract Time. If the specified product or method of construction cannot be provided within the Contract Time, include a letter from the manufacturer, on the manufacturer's letterhead, stating the date of receipt of the purchase order and attesting to the lack of availability or delays in delivery.
 11. Cost information, including a proposal of change (if any) in the Contract Price.
 12. The Contractor's certification that the proposed substitution complies with requirements in the Contract Documents, except as indicated in the substitution request; is compatible with related materials; and is appropriate for the indicated applications.
 13. The Contractor's waiver of right to claim additional payment or time that may subsequently become necessary because of any failure of the proposed substitution to produce indicated results.
- C. OWNER's Action: If necessary, OWNER will request additional information or documentation for evaluation after receipt of a request for substitution. OWNER will notify the Contractor of acceptance or rejection of a proposed substitution.
1. Forms of Acceptance: Change Order, Change Notice, or Resident Engineer's Bulletin for minor changes in the Work.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause, Federal Government Restrictions or due to Lack of Availability: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to the time required for preparation and review of related submittals.
- B. OWNER will consider the Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, OWNER will return requests without action, except to record noncompliance with these requirements:
 1. Requested substitution is consistent with the Contract Documents and will produce the indicated results.
 2. Requested substitution provides sustainable design characteristics that specified product provided.

3. Substitution request is fully documented and properly submitted.
 4. Requested substitution will not adversely affect the Contractor's construction schedule.
 5. Requested substitution has received necessary approvals of authorities having jurisdiction.
 6. Requested substitution is compatible with other portions of the Work.
 7. Requested substitution has been coordinated with other portions of the Work.
 8. Requested substitution provides the specified warranty.
 9. If the requested substitution involves more than one Contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all Contractors involved.
 10. Any and all costs incurred by both parties, including reviews and design modifications, to implement the approved substitution and incorporate resultant changes into the Work shall be borne solely by the Contractor.
- C. Substitutions for Convenience: OWNER will consider requests for substitution if received within 45 days after the Notice of Award. Requests received after that time may be considered or rejected at the discretion of OWNER. OWNER will consider the Contractor's request for substitution when the conditions below are satisfied. If the following conditions are not satisfied, OWNER will return requests without action, except to record noncompliance with these requirements:
1. Requested substitution offers OWNER a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities OWNER must assume. OWNER's additional responsibilities may include compensation to OWNER for redesign and evaluation services, increased cost of other construction by OWNER, and similar considerations.
 2. Requested substitution does not require extensive revisions to the Contract Documents.
 3. Requested substitution is consistent with the Contract Documents and will produce the indicated results.
 4. Requested substitution provides sustainable design characteristics that the specified product provided.
 5. Substitution request is fully documented and properly submitted.
 6. Requested substitution will not adversely affect the Contractor's construction schedule.
 7. Requested substitution has received necessary approvals of authorities having jurisdiction.
 8. Requested substitution is compatible with other portions of the Work.
 9. Requested substitution has been coordinated with other portions of the Work.
 10. Requested substitution provides the specified warranty.
 11. If requested substitution involves more than one Contractor, the requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all Contractors involved.

PART 3 - EXECUTION (NOT USED)

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for the submittal schedule and procedural requirements for submitting Shop Drawings, Product Data, Samples, administrative and miscellaneous (non-administrative) work-related submittals.

1.2 RELATED REQUIREMENTS

- A. Section 01 25 00, Substitution Procedures.
- B. Section 01 60 00, Product Requirements.
- C. Section 01 77 19, Project Closeout
- D. Section 01 78 39, Project Record Documents.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require responsive action from appropriate reviewers. Action submittals are those submittals indicated in individual Specification Sections as action submittals.
- B. Informational Submittals: Written and graphic information and physical samples that do not require a response. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals so described in individual Specification Sections.
- C. Work Plans: Include narrative descriptions, diagrams, equipment, procedures for excavation, demolition, site clearing, maintenance of traffic, etc
- D. Certificates: Include certified Material test reports, certification of proper disposal of demolition Materials, or tickets demonstrating compliance with Materials, tests or Specifications indicated.
- E. Equipment: Include equipment Specifications, manufacturer information and demonstration of suitability of equipment for intended use.
- F. Product Data: Include standard printed information on Materials, products and systems to be furnished by the Contractor for this Contract.
- G. Shop Drawings: Include detailed manufacturing and layout information, demonstrating the Contractor's approach to meeting the intent of the Plans and Specifications.
- H. Samples: Include physical examples of Materials either for limited visual inspection or (where indicated) for confirmation, testing, and analysis by OWNER.
- I. Miscellaneous Submittals: Such submittals shall be related directly to the Work, but not necessarily administrative related. Include Work schedule, phasing plans, warranties, guarantees, maintenance agreements, workmanship bonds, survey data and reports, physical work records, quality testing and certifying reports, copies of industry standards, Record Plans, field measurement data, operating and maintenance Materials, overrun stock (and similar information) and, devices and Materials applicable to the Work but not processed as Shop Drawings, Product Data or samples.

1.4 PATENTS

- A. In the event that any patented article, material, or process is to be installed or used in the performance of the Work as shown on the plans or particular specifications thereof, the Contractor shall pay the royalty chargeable and shall save, keep, and bear OWNER and OWNER's Representatives harmless from (a) all damage, costs, and expenses by reason of any infringement of the patent or any failure to pay the royalty chargeable for use thereof, or (b) any loss to OWNER in the event that OWNER is enjoined from using such patented article or material, or (c) the incidental damage caused by the loss of use and damage to OWNER property in removing same, and (d) the cost of replacing the article or material the use of which is enjoined. It is further provided that the Bond for faithful performance shall be deemed to expressly apply to this provision of the specifications.

1.5 CONTRACTOR-PREPARED PLANS, PRODUCT DATA, AND SAMPLES

- A. The Contract Documents shall be supplemented by Shop Drawings, working plans, equipment layout plans, coordination plans, lift plans, product data, samples, and similar submittals prepared by the Contractor or its Subcontractors or Suppliers, of any tier. These materials and similar submittals shall be furnished as required for coordination of the Contractor's work, as required for the coordination of the work with forces of OWNER or other Contractors working for OWNER, as required by the various Sections of the Specifications, or as requested by OWNER. The purpose of the submittal is to demonstrate for those portions of Work for which submittals are required the manner in which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents.
- B. When Shop Drawings, Working Plans, Equipment Layout Plans, Coordination Plans, Lift Plans, product data, samples or similar submittals are required by any Section of the Specifications or have been requested by OWNER, the Contractor shall coordinate all Work under the various sections of the Specifications to ensure that no interferences occur in the areas, structures, or rooms for which such plans have been required, and that necessary clearances are provided.

1.6 SUBMITTAL SCHEDULE

- A. Submit a schedule of submittals, arranged in chronological order by dates required by the construction schedule. When establishing dates, include the time required for review, ordering, manufacturing, fabrication, and delivery. Include additional time required for making submittal corrections or modifications noted by OWNER or OWNER's Representatives, and additional time for handling and reviewing submittals required by those corrections.
1. Coordinate the submittal schedule with the list of subcontracts, the Schedule of Values, and the Contractor's construction schedule.
 2. Submit Initial Submittal Schedule 15 days after issuance of Limited Notice to Proceed. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work, and those required early because of long lead time for manufacture or fabrication. Indicate if a submittal is on the critical path for project completion.
 3. Final Submittal: Submit concurrently with the first complete submittal of the Contractor's construction schedule. Submit a revised submittal schedule to reflect changes in the current status and timing for submittals.
 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category (action or informational).
 - d. Name of Subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for reviewer's response.
 - g. Scheduled dates for purchasing.

- h. Scheduled dates for delivery and installation.
- i. Activity or event number.
- j. Float.

1.7 PROCESSING REQUIREMENTS FOR SUBMITTALS

- A. Coordination: Coordinate preparation and processing of submittals with the performance of construction activities. Transmit each submittal sufficiently in advance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on an approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 - 4. Coordinate the transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of the need to review submittals concurrently for coordination.
 - 5. The Contractor shall show his executed internal review and approval marking. Submittals, which are received from sources other than through the Contractor's office or which have not undergone Contractor review, will be returned marked "without action."
 - 6. OWNER reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on the first full working day after OWNER receives the submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 14 working days for initial review of each submittal. In the event that Submittal is reviewed by a third-party (including Railroad Operators and authorities having jurisdiction), allow up to an additional 14 working days time for OWNER's response. OWNER's response to Submittal may include a request for additional information in which case OWNER's time for response will date from time of receipt of additional information.
 - 2. Concurrent Consultant Review: Where concurrent review of submittals is required, allow 21 working days for initial review of each submittal.
- C. Transmittal: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. OWNER will return, without review, any submittals received from sources other than the Contractor.
 - 1. Transmittal Form: Provide locations on the form for the following information:
 - a. Project name.
 - b. Date.
 - c. Destination (To:).
 - d. Source (From:).
 - e. Names of Subcontractor, manufacturer, and supplier.
 - f. Category and type of submittal.
 - g. Submittal purpose and description.
 - h. Specification Section number and title.
 - i. Indication of full or partial submittal.
 - j. Plan number and detail references, as appropriate.
 - k. Transmittal number, numbered consecutively.
 - l. Submittal and transmittal distribution record.
 - m. Remarks.
 - n. Signature of transmitter.

- D. Identify applicable standards, ASTM, ACI, OSHA, etc. and identify options requiring selection by reviewer.
- E. Deviations: Identify deviations from the Contract Documents on submittals.
- F. Resubmittals: Make resubmittals in the same form and with the same number of copies as the initial submittal.
 - 1. Note the date and content of the previous submittal.
 - 2. Note the date and content of the revision in the label or title block, and clearly indicate the extent of revision.
 - 3. Resubmit submittals until they are stamped with action by reviewer.
- G. Distribution: Furnish copies of final submittals to manufacturers, Subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on the transmittal forms.
- H. Use for Construction: Retain full copies of approved submittals on the Work Site. Use only final submittals that are marked with approval notation from the reviewer's action stamp.

1.8 CONFORMANCE OF SUBMITTALS

- A. The Contractor is responsible for conformance of all submittals prepared by the Contractor or its Subcontractors or suppliers, of any tier, with all requirements of the Contract Documents. Where required by California law, or as specified in the Contract Documents, submittals shall be signed and sealed by a Professional Engineer licensed in the State of California, or Land Surveyor licensed in the State of California as applicable.
- B. The Contractor shall show his executed internal review and approval marking. Submittals, which are received from sources other than through the Contractor's office or which have not undergone Contractor review, will be returned marked "without action."
- C. Acceptance of Shop Drawings, Working Plans, Equipment Layout Plans, Coordination Plans, Lift Plans, product data, samples, and similar submittals shall not relieve the Contractor from responsibility for deviations from the Contract Documents, nor from responsibility for errors or omissions of any sort with such plans and data. Neither shall the acceptance of such plans and data by OWNER or OWNER's Representative relieve the Contractor from responsibility for the correct installation, or for the proper operation in service, of items requiring submittal of such plans and data.

PART 2 - PRODUCTS

2.1 SUBMITTAL PERFORMANCE REQUIREMENTS

- A. Any Work performed without an approved submittal will be done at the Contractor's own risk. The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by OWNER's review of Shop Drawings, Product Data, Samples, or similar submittals unless the Contractor has specifically informed OWNER in writing of such deviation at the time of the submittal and given written acceptance to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by OWNER's review thereof.

2.2 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. The required types of submittals are indicated in individual Specification Sections.

1. Submit electronic submittals via e-mail as PDF electronic files. OWNER will return the annotated file. Annotate and retain one copy of file as an electronic Project record document file. Full-size plans must be submitted in hard-copy form.
 2. Action Submittals: Submit six paper copies of each submittal, unless otherwise indicated. OWNER will return one copy.
 3. Make copies of the returned copy as required for distribution and for operations and maintenance manuals. Mark up and retain one returned copy as a Project Record Document.
 4. Informational Submittals: Submit six paper copies of each submittal, unless otherwise indicated. OWNER will not return copies.
 5. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 77 19 - Project Closeout.
 6. Certificates and Certifications Submittals: Provide a statement that includes the signature of the entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity who is an Engineer or Architect recognized to practice engineering or architecture in the State of California.
 7. Provide a notarized statement on original paper copy certificates and certifications where indicated.
 8. Test and Inspection Reports Submittals: Comply with requirements specified in Section 01 40 00 - Quality Requirements.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment. A Safety Data Sheet shall be submitted for each product.
1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - i. Manufacturer's written recommendations.
 - j. Manufacturer's installation instructions.
 - k. Mill reports.
 - l. Standard product operation and maintenance manuals.
 - m. Approval number of organizations or agencies as required by agencies having jurisdiction.
 - n. Notation of dimensions verified by field measurements.
 - o. Notation of coordination requirements.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before or concurrent with Samples.
 6. Submit Product Data in the following format:
 - a. PDF electronic file: Make copies of the returned copy as required for distribution and for operations and maintenance manuals. Mark up and retain one returned copy as a Project Record Document.

- b. Product Data: Submit six paper copies unless otherwise indicated. OWNER will return one copy. Make copies of the returned copy as required for distribution and for operations and maintenance manuals. Mark up and retain one returned copy as a Project Record Document.
- C. Shop Drawings, Working Plans, Equipment Layout Plans, and Coordination Plans: Prepare Project-specific information, drawn accurately to scale. Do not base Plans on reproductions of the Contract Documents or standard printed data, unless submittal based on the Engineer's digital data plan files is otherwise permitted. Unless otherwise approved by OWNER or indicated in specific Sections of the Specifications, Shop Drawings shall be scaled sufficiently large to accurately show all pertinent aspects of the item and its relationship to the Work. The Contractor shall additionally submit the Shop Drawing in PDF electronic format
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Product Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of California registered professional engineer if specified.
 - h. Dimensions and clearances.
 - i. Fabrication and installation Drawings.
 - j. Roughing-in and setting diagrams.
 - k. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring. Differentiate between manufacturer-installed and field-installed wiring.
 - l. Templates and patterns.
 - m. Design calculations.
 - n. Approval number of organizations or agencies with jurisdiction for the Work..
 - 2. Sheet Size: Except for templates, patterns, and similar full-size plans, submit Shop Drawings on sheets at least 8-1/2 x 11 inches but no larger than 24 by 36 inches.
 - 3. Submit Shop Drawings in the following format:
 - a. PDF electronic file: Make copies of the returned copy as required for distribution and for operations and maintenance manuals. Mark up and retain one returned copy as a Project Record Document.
 - b. Opaque copies: Submit six of each submittal. Mark up and retain one returned copy as a Project Record Document.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements, and for a comparison of these characteristics between the submittal and the actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components (such as accessories) together in one submittal package.
 - 2. Identification: Attach a label on the unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 - 3. Disposition: Maintain sets of approved Samples at the Work Site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.

- b. Samples not incorporated into the Work, or otherwise designated as OWNER's property, are the property of the Contractor.
- 4. Samples Detailed Work Plans shall be submitted by the Contractor for temporary structures and for such other temporary Work as may be required for construction, but which does not become an integral part of the completed Project. Submittals shall include back-up calculations or any information needed to explain the structure or system or its intended use.
- 5. Where a submittal involves engineering computations or original design Work is depicted, the submittal shall show the name, the State of California registration number, seal, and signature of the Professional Engineer certifying that such computations or design Work are correct and in conformance with standards, codes, and acceptable engineering practice.
- 6. Number of Initial Selection Samples: Submit four full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from a manufacturer's product line.
- 7. Samples for Verification: Submit full-size units or Samples of the size indicated, prepared from the same material to be used for the Work, cured and finished in the manner specified, physically identical with the material or product proposed for use, and showing the full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
- 8. Number of Verification Samples: Submit four sets of Samples. Mark up and retain one returned Sample set as a Project record sample.
 - a. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - b. If variations in color, pattern, texture, or other characteristics are inherent in the material or product represented by a Sample, submit at least four sets of paired units that show the approximate limits of the variations.
- 9. The Contractor shall submit 1 reproducible set and 5 copies of each Shop Drawing submittal. Distribution of submitted Shop and Working Plans by the Contractor for OWNER's use will be performed by OWNER. The Contractor shall make and distribute all copies required for his purposes.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating the types of products required for the Work and their intended location. Include the following information in tabular form:
 - 1. Type of product: Include a unique identifier for each product.
 - 2. Manufacturer and product name, and model number if applicable.
 - 3. Number and name of room or space.
 - 4. Location within room or space.
 - 5. Submit the product schedule in the following format:
 - a. PDF electronic file: Mark up and retain one returned copy as a Project Record Document.
 - b. Paper copies: Submit four paper copies of the product schedule or list, unless otherwise indicated. Mark up and retain one returned copy as a Project Record Document.
- F. Certificates of Compliance: Certificates of Compliance shall be submitted by the Contractor to OWNER for those Materials and products for which no samples and test results are specified. The certificates shall:
 - 1. State that the product complies with the respective Contract Specification and Contract Plan requirements.

2. Be accompanied by a certified copy of test results pertaining to the product. All test equipment used shall be verified to be in calibration at the time of each test and test reports shall so indicate. No test shall be made without such verification. When required by the Contract Documents or by law, certified test results shall be sealed by a Professional Engineer licensed to practice in the State of California.
 3. Show product represented and its location in the Contract, producer's name, product trade name and catalog number as applicable, place of product origin, test date, testing organization's name and address, quantity of the product to be furnished, and the related Contract Plan Sheet(s) and Specification section numbers.
- G. Where required by the Specification or if requested by OWNER, submit the following written statements on the manufacturer's letterhead:
1. Certification that the manufacturer, its products or materials complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 2. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results verifying the material's compliance with requirements in the Contract Documents.
 3. Product Test Reports: Submit written reports indicating the current product produced by the manufacturer complies with requirements in the Contract Documents. Base reports on an evaluation of tests performed by the manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
 4. Research Reports: Submit written evidence, from a model code organization acceptable to jurisdictional authorities that the product complies with the building code in effect for the Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.
 5. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of the product to determine compliance with performance requirements in the Contract Documents.
 6. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
 7. Field Test Reports: Submit reports indicating and interpreting results of field tests performed either during installation of the product or after the product is installed in its final location to verify compliance with requirements in the Contract Documents.
 8. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, a list of applicable codes and regulations, and calculations. Include a list of assumptions and other performance and design criteria, and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
 9. Manufacturer's Instructions: Prepare written or published information that documents the manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include the name of the product and the name, address, and telephone number of the manufacturer. Include the following, as applicable:
 - a. Preparation of substrates.
 - b. Required substrate tolerances.
 - c. Sequence of installation.
 - d. Required installation tolerances.

- e. Required adjustments.
 - f. Recommendations for cleaning and protection.
10. Manufacturer's Field Reports: Prepare written information documenting the factory-authorized service representative's tests and inspections. Include the following, as applicable:
- a. Name, address, and telephone number of the factory-authorized service representative making the report.
 - b. Statement on condition of substrates and their acceptability for installation of product.
 - c. Statement that products at Work Site comply with requirements.
 - d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - e. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - f. Statement whether conditions, products, and installation will affect warranty.
 - g. Other required items indicated in individual Specification Sections.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with an approval stamp before submitting to OWNER.
- B. Project Closeout and Maintenance/Material Submittals: Refer to requirements in Section 01 77 19 - Project Closeout and Section 01 78 23 Operation and Maintenance Data.

3.2 OWNER'S ACTION

- A. OWNER will not review submittals that do not bear the Contractor's approval stamp, and will return such submittals without action.
 - 1. The review is not conducted for the purpose of determining the accuracy and completeness of other details, such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor.
 - 2. Compliance with specified characteristics is the Contractor's responsibility; it is not considered part of OWNER's review and indication of action taken.
 - 3. Acceptance of submittals with deviations shall not relieve the Contractor from responsibility for additional costs of changes required to accommodate such deviations. Deviations included in submittals without prior acceptance are excepted from review of submittals, whether noted or not on returned copy.
 - 4. Review of a separate item shall not indicate acceptance of the assembly of which the item is a part.
 - 5. Make only those revisions required or accepted by OWNER.
 - 6. Notations by OWNER which increase Contract Cost or Contract Time shall be brought to OWNER's attention, in writing as a Request for Change, before proceeding with Work.
 - 7. When professional certification of performance criteria of materials, systems, or equipment is required by the Contract Documents, OWNER shall be entitled to rely on the accuracy and completeness of such calculations and certifications.
- B. Action Submittals: OWNER will review each submittal, make marks to indicate corrections or modifications required, and return it. OWNER will stamp each submittal with an action stamp and mark the stamp appropriately to indicate the action required.

- C. Informational Submittals: OWNER will review each submittal and will generally not return it (it will be returned if it does not comply with requirements). OWNER will forward each submittal to the appropriate party.
- D. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from OWNER.
- E. Incomplete submittals are not acceptable; they will be considered nonresponsive, and will be returned without review.
- F. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

3.3 SUBMITTAL STATUS

- A. Submittals reviewed by OWNER and returned to the Contractor will be marked with one of the following designations:
 - 1. No Exceptions Taken
 - 2. Approved as Noted.
 - 3. Revise and Resubmit.
 - 4. Rejected
 - 5. No Action Taken.
- B. The Contractor shall not proceed with procurement, manufacture or fabrication of items submitted for review, until such submittals have been designated by OWNER as "No Exceptions Taken" or "Approved as Noted." Until submittal items receive such designation by OWNER, any costs associated with procurement for these items shall be at the Contractor's risk.

3.4 SUBMITTALS DESIGNATED AS "NO EXCEPTIONS TAKEN" OR "APPROVED AS NOTED"

- A. Each copy of the submittal so designated by OWNER will be identified accordingly by being so stamped and dated. One reproducible copy will be returned to the Contractor.
- B. The Contractor shall take responsibility for and bear all cost of damages, which may result from the ordering of any material or from proceeding with any part of the Work prior to being marked "No Exceptions Taken" or "Approved as Noted" by OWNER.
- C. Where Plans are stamped "Approved as Noted", OWNER shall indicate the corrected detail or information as required.
- D. Submittals stamped "No Exceptions Taken" do not relieve the Contractor from the responsibility of performance of Work as intended in the Plans and Specifications.

3.5 SUBMITTALS DESIGNATED AS "REVISE AND RESUBMIT," OR "REJECTED. RESUBMIT"

- A. Each copy of the submittal so designated by OWNER will be identified accordingly by being so stamped and dated. One reproducible copy will be returned to the Contractor.
- B. If corrections to the submittals are required, copies returned to the Contractor will be marked "Rejected, Resubmit", or "Revise and Resubmit" and the required corrections shall be made on the re-submittal copies.
- C. Re-submittals will be processed in the same manner as first submittals. On every re-submittals, the Contractor shall note in writing any revisions other than the corrections requested by OWNER on previous submittals. Re-submittals shall use the same number as original submittal but will be modified by R and number of re-submittal in the suffix.
- D. The Contractor shall notify OWNER prior to execution of any correction, which constitutes a change of the Contract requirements indicated on the submittals.

3.6 SUBMITTALS DESIGNATED AS “NO ACTION TAKEN”

- A. Each copy of the submittal so designated by OWNER will be identified accordingly by being so stamped and dated. One reproducible copy will be returned to the Contractor.
- B. Submittals made by the Contractor that are not required by the Contract Documents or were not otherwise requested shall be designated “No Action Taken.”

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

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SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with specified or indicated Work requirements. These services do not relieve the Contractor of responsibility for compliance with the Contract Documents requirements.
- C. Specific tests and inspection requirements are not specified in this Section but rather indicated or included elsewhere in the Plans and Specifications.

1.2 RELATED REQUIREMENTS

- A. Specific quality assurance and quality control requirements for individual construction activities are specified in the Specifications sections that specify those activities and may also cover production of standard products.
- B. Requirements for Contractor to provide quality assurance and quality control services required by OWNER, and the several authorities having jurisdiction, are not limited by provisions of this Section.
- C. Specified tests, inspections and related actions do not limit Contractor's other quality assurance and quality control procedures that facilitate compliance with the Contract Documents requirements.

1.3 DEFINITIONS

- A. Quality Assurance Services: Activities, actions, and procedures performed prior to and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with the Contract Documents requirements.
- B. Quality control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with the Contract Documents requirements. These services do not include contract enforcement activities performed by OWNER or OWNER's Representative.
- C. Mockups: Full-size physical assemblies constructed on-site are used to verify selections made under Sample submittals; to demonstrate aesthetic effects and the qualities of products and materials and execution; to review details for construction, coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with required installation tolerances. Mockups are not Samples. Unless otherwise directed by OWNER, approved mockups establish the standard by which the Work will be evaluated.
- D. Pre-construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work in order to verify performance or compliance with specified criteria.

- E. Product Testing: Tests and inspections that are performed by a Nationally Recognized Testing Laboratory (NRTL), a National Voluntary Laboratory Accreditation Program (NVLAP), or other testing agency qualified to conduct product testing, which firm and procedures must be acceptable to OWNER and all other authorities having jurisdiction, to establish product performance and compliance with the specified requirements.
- F. Source Quality Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- G. Field Quality Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections, or both. "Testing laboratory" shall mean the same as testing agency.
- I. Installer/Applicator/Erector: The Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-Subcontractor, to perform a particular construction operation, including installation, erection, application, and similar construction operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals or that requirements specified apply exclusively to specific trade(s).
- J. Experienced: When used with an entity of individual, "experienced" means having successfully completed a minimum of 5 previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement and refer conflicting requirements to OWNER for a determination before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed by Contractor. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. Refer uncertainties to OWNER for a determination before proceeding.
- C. Items indicated on the Plans but not included in the Specifications, or included in the Specifications but not indicated on the Plans, shall have the same effect as if indicated or included in both the Plans and Specifications.
 - 1. In case of conflict or inconsistency between the Plans and Specifications, Contractor shall request additional information or interpretation; any adjustment by Contractor without such official determination shall be at Contractor's own risk and expense.

1.5 REGULATORY REQUIREMENTS

- A. Comply with all applicable requirements of the laws, codes, ordinances, and regulations of Federal, State, and Municipal authorities having jurisdiction where the Project is located, and obtain necessary approvals from all such authorities.

1.6 ACTION SUBMITTALS

- A. Shop Drawings: The shop drawings shall indicate the manufacturer and model number of individual components. Show plans, sections, and elevations, indicating materials and products specified.
 - 1. Provide axonometric plans for conditions difficult to illustrate in two dimensions.

- B. Engineering-assist Submittal: In addition to Shop Drawings, Product Data, and other required submittals, Contractor shall submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to the Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated.
 - 1. Include listing of codes, loads, and other factors used as a basis in performing these design services.

1.7 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality Control (CQC) Plan: Submit a formal plan detailing Contractor's quality assurance and quality control activities and responsibilities. Submit in a format acceptable to OWNER. The CQC Plan is due within 30 calendar days following receipt of Notice of Contract Award, but not later than 5 working days prior to initial session of the Pre-Construction Conference.
 - 1. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out the Contractor's quality control responsibilities.
 - 2. Coordinate this Contractor's Quality control (CQC) Plan with the Contractor's construction schedule.
 - 3. Engage qualified full-time personnel adequately trained and experienced in managing and executing construction quality control procedures similar in nature and extent to those required for this Project.
 - a. Contractor's assigned project quality control manager may not serve as project superintendent.
 - 4. Include a comprehensive schedule of Work which delineates required tests and inspections and Contractor-elected tests and inspections, including (a) Contractor-performed tests and inspections, as well as Subcontractor-performed tests and inspections, (b) Special Tests and Inspections pursuant to sub-Section 1.12 – Special Tests and Inspections, and (c) OWNER-performed tests and inspections, including tests and inspections required to be performed by the Commissioning Authority and the Railroad Operators.
 - 5. Describe procedures for ensuring compliance with the Contract Documents requirements conducting iterative reviews and effectively managing the submittal process.
 - 6. Describe processes for continuous inspections and non-destructive testing to identify and correct deficiencies in the Work, in addition to specified testing and inspecting. Indicate types of corrective actions to bring non-conforming portions of the Work into compliance with standards of workmanship established by the Contract Documents requirements and approved mockups.
 - 7. Maintain testing and inspection reports, including a log of approved and rejected results. Indicate corrective actions either proposed or taken to bring non-conforming portions of the Work into compliance. Comply with requirements of all authorities having jurisdiction.
- B. Contractor Quality Control Manager Qualifications: Assign a qualified, full-time individual who shall have at least 10 years' experience as a quality control manager implementing manufacturing and field quality control programs and developing quality assurance procedures.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit a copy of Contractor's written statement to authorities having jurisdiction before starting work on engineered systems, sub-systems and components which shall include, but are not limited to:
 - 1. Temporary systems, assemblies and components for shoring, bracing, earth retaining, scaffolding, railing, forming, falsework and similar means and methods of the Contractor.
 - 2. Temporary and modified passenger platforms including, phasing, staging, and accessibility.
 - 3. Temporary and modified traffic signaling, street lights, striping, and signage.

- D. Contractor's Testing Agency Qualifications: For testing agencies specified in sub-Section 1.09 -- Quality Assurance to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection (audit) of the testing agency by a recognized authority.
- E. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of tests and inspection procedures, and use of test equipment.
 - 4. Identification of applicable standards.
 - 5. Identification of testing and inspection methods.
 - 6. Number of tests or inspections required by testing standard.
 - 7. Time schedule or time span for tests or inspections.
 - 8. Requirements for obtaining samples for testing.
 - 9. Unique characteristics of each quality control service rendered.

1.8 REPORTS AND DOCUMENTS

- A. Tests and Inspection Reports: Prepare certified written reports specified in other Sections of these Specifications. Include the following data:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the tested and inspected portion of the Work, and the test and/or inspected method.
 - 7. Identification of product and associated Specifications section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results, and interpretation of test results.
 - 10. Record of temperature, prevailing weather conditions at time of sampling, test, or inspection.
 - 11. Comments or professional opinion on whether tested or inspected Work complies, or not.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on re-testing or re-inspection, if applies.
- B. Manufacturer Technical Representative Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections of these Specifications. Include the following data:
 - 1. Name, address, and telephone number of technical representative making the report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at the Work Site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other proving tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect manufacturer's warranty.
 - 7. Other required items/actions indicated in individual Specifications sections.
- C. Factory-authorized Service Representative Field Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections of these Specifications. Include the following data:
 - 1. Name, address, and telephone number of factory-authorized service representative making the report.
 - 2. Statement that installed equipment complies with requirements.

3. Results of operational and other proving tests, and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions, products, and installation will affect manufacturer's warranty.
 5. Other required items/actions indicated in individual Specifications sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, all established for compliance with standards and regulations bearing on performance of the Work.

1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this sub-Section establish the minimum qualification levels required; individual Specifications sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experience in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A California Professional Engineer legally qualified to practice in the jurisdiction where the Project is located and experienced in performing engineering services of the kind indicated. Engineering services are defined as those performed for installation, construction and maintenance of the infrastructure including, but not limited to a system, sub-system, assembly, component, or product similar in material, design, and extent to those indicated for this Project.
- F. Specialists: Certain Specifications sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
1. Requirements for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade jurisdiction settlements and similar conventions.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing or inspecting indicated, as documented according to ASTM D 329, and with additional qualifications specified in individual Sections of these Specifications; and, where required by the authorities having jurisdiction, a testing agency that is acceptable to these authorities, as follows:
1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
 3. Each testing agency shall be authorized by the several authorities having jurisdiction to perform testing and inspection services in connection with the Project.
 4. The testing agency shall employ inspecting and testing personnel who are duly certified by the following organizations for materials testing categories listed:
 - a. ACI (American Concrete Institute): Concrete and laboratory
 - b. ASNT (American Society for Non-destructive Testing): Metal fabrications and connections
 - c. AWS (American Welding Society): Metal fabrications and connections.

- H. Manufacturer Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect the installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect the installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Pre-construction Testing: Where testing agency is indicated to perform pre-construction testing for compliance with specified requirements for performance and test methods, comply as follows:
 - 1. Contractor's responsibilities include all of the following:
 - a. Provide test specimens that are representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of site-assembled test assemblies and mockups, as well as laboratory mockups to adequately demonstrate the capability of products to comply with specified performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform the same tasks for the completed Work.
 - e. Build laboratory mockups at testing facility using personnel, products and methods of construction indicated for the completed Work.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality assurance services to OWNER with a copy to Contractor.
- K. Mockups: Prior to installation of those portions of the Work requiring mockups, Contractor shall build mockups for each form or construction and finish required to comply with the following requirements, using materials required for the Work:
 - 1. Build mockups in a location, and of the size required or, if not indicated, then as directed by OWNER.
 - 2. Notify OWNER at least 7 days in advance of dates and times when the mockup(s) will be constructed.
 - 3. Employ supervisory personnel who will oversee mockup construction, Employ construction workers who will also be employed during construction of the Work.
 - 4. Demonstrate the proposed range of aesthetic effects, material qualities, and workmanship.
 - 5. Obtain approval of mockup(s) prior to performing subject portion of the Work, whether fabrication or construction.
 - a. Allow 7 days for initial review and each subsequent review of each mockup.
 - 6. Maintain all mockups during construction in an undisturbed condition, intended as a standard for judging acceptability of the completed Work.
 - 7. Demolish and remove mockups from Work Site when so directed.

1.10 QUALITY CONTROL

- A. Contractor's Responsibilities: Tests and inspections not explicitly assigned to Owner under provisions in sub-Section 11.12 – Special Tests and Inspections shall be the responsibility of the Contractor. Contractor shall perform additional quality control activities necessary to verify that the Work complies with the Contract Documents requirements, whether specified or not.
 - 1. Unless otherwise indicated elsewhere in the Contract Documents, Contractor shall provide quality control services required to verify that the Work complies with the Contract Document requirements, whether specified or not, in addition to testing and inspections required by the several authorities having jurisdiction (e.g. fire marshal, building official, city engineer, Caltrans, SCRRRA, BNSF, etc.).

2. Quality control services are Contractor's responsibility. Contractor shall engage a qualified testing agency to perform required quality control services.
 - a. Contractor shall not employ same entity engaged by Owner for testing and inspection unless agreed to, in writing, by Owner.
 - b. Contractor shall notify testing agencies at least 48 hours in advance of time when the Work that requires testing or inspecting will be performed.
 - c. Contractor shall submit a certified report, in duplicate, of each quality control service performed.
 - d. Contractor shall submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
 3. Any testing or inspecting requested by Contractor but not required by the Contract Documents shall be Contractor's responsibility and sole expense.
- B. Manufacturer Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report all results in writing.
- C. Manufacturer Technical Services: Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Such services include participation in pre-installation conferences, examination of substrates and conditions, verification of materials used, observation of installer's activities, inspection of completed portions of the Work, and submission of written reports.
- D. Re-testing/Re-inspection: Regardless of whether original tests or inspections were Contractor's responsibility, Contractor shall provide quality control services, including re-testing and re-inspecting, for any construction that replaced portions of the Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Testing Agency shall cooperate with all parties, including OWNER and Contractor, in the performance of Testing Agency's duties. Testing Agency shall provide qualified personnel to perform required tests and inspections.
1. Notify OWNER and Contractor promptly of irregularities or deficiencies observed in the Work during the performance of Testing Agency's services.
 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections, and state in each report whether the tested and inspected work complies with or deviates from specified requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality control service performed.
 5. Testing Agency shall not release, revoke, alter, or increase the Contract Documents requirements, or approve or accept any portion of the Work.
 6. Testing Agency shall not, in any way, perform any duties of the Contractor.
- F. Associated Services: Cooperate with testing agencies performing required tests, inspections, and similar quality control services, and provide reasonable auxiliary services as requested. Notify testing agency sufficiently in advance to permit timely assignment of testing and/or inspecting personnel.
1. See also sub-Section 1.11 -- Quality Coordination procedures for further description of associated quality control services.

1.11 QUALITY COORDINATION

- A. General: Coordinate sequence of Work activities to accommodate required quality assurance and quality control services with a minimum of delay and to avoid necessity of removing and replacing construction to facilitate testing and inspection.
- B. Notify OWNER at least 48 hours in advance of time when Work that requires testing or inspecting will be performed. Also provide the following in support of testing and inspection services:

1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist testing agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Preliminary design mix proposed for use for material mixes that may require production control by testing agency.
 6. Security and protection for samples and for testing and inspecting equipment either cured or stored at Work Site.
- C. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality control services required by the Contract Documents, which component of Contractor's Quality Control Plan shall be submitted concurrently with Contractor's construction schedule, but no later than 30 days after Limited Notice to Proceed.

1.12 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: OWNER will engage a qualified special inspector to conduct special tests and inspections as required by the authorities having jurisdiction for enforcing code compliance.
- B. It shall be understood that the Special Inspector's activities do not relieve the Contractor of his obligations under this Section 01 40 00 of these Specifications.

1.13 SOURCE OF SUPPLY AND QUALITY OF MATERIALS

- A. OWNER shall approve the source of supply of each type of the materials supplied by Contractor before the Contractor or Subcontractor purchases or delivers these materials to the Project.
1. Promptly after receiving the Contract award, Contractor shall notify OWNER of all proposed material sources. If it is found after trial that sources of supply previously approved do not produce uniform and satisfactory products, or if the product from any source proves unacceptable at any time, Contractor shall furnish materials from other sources as approved by OWNER.
- B. Only materials conforming to these Specifications and approved in advance by OWNER may be used in the Work subject to verifying inspection or tests at any time during their preparation or use. No materials or products determined to be unsatisfactory can be used in the Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 INSPECTION AND TESTING PROCEDURES

- A. Contractor shall provide OWNER with full access to the Work and reasonable time for inspection for ascertaining whether or not the Work is performed in accordance with the requirements and intent of the Contract.
- B. No Work shall be covered or materials used without making the Work, products or materials available for inspection by OWNER and authorities having jurisdiction; any Work that is required to be uncovered, removed or replaced shall be at Contractor's own expense.
- C. Inspection will not relieve Contractor from the responsibility of the quality of this Work and obligation to perform the Work in accordance with the requirements of the Contract Documents.

- D. All materials and every process of manufacture and construction are subject to inspection at all times. OWNER and authorities having jurisdiction shall have free access to all such operations. Contractor shall furnish necessary materials and OWNER shall have the right to select suitable samples of materials for testing or examination which Contractor shall supply without charge. In case such samples must be shipped to some other point for inspection or testing, Contractor shall box or crate samples as necessary and shall deliver them to points designated for shipment without charge.
1. Omission of inspection shall not relieve Contractor of its obligation to perform the Work required by the Plans and Specifications.
 2. Non-conforming or rejected Work and material shall be removed promptly from the Worksite, and Contractor, at its sole expense, shall promptly remove, reconstruct, replace, and make good any defective Work.
 3. Oversight or error in the judgment of inspectors, or previous acceptance of the Work shall not relieve Contractor from its obligation to correct any defects, wherever and whenever discovered, at Contractor's sole expense.
- E. Adequate facilities shall be made available for the necessary tests and inspections, with free access to all parts of the Work also available, at all reasonable times. Contractor shall have appropriate provisions inserted into each Subcontract it enters into providing for the necessary documentation, facilitation, or in-plant services in support of testing and inspection by OWNER.
- F. In the event Contractor does not correct non-conforming Work or remove rejected materials within a reasonable time fixed by written notice, OWNER may direct that removals and corrections be performed by other contractors. All charges for such removals and corrections shall be deducted from Contractor's payments due under this Contract or from proceeds paid by Contractor's surety.
- G. Acceptance or rejection by the Railroad Operators shall in no way relieve the Contractor of responsibility for performing Work in accordance with the Contract Documents.
1. After completing the Work, a final inspection will be made and any previous inspection or acceptance will not preclude rejection at time of the final inspection for any item that is not satisfactory to OWNER.
- H. In the event, within such period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract, whichever warranty is longer, for any Work found to be defective or non-conforming, Contractor shall correct it promptly after receipt of written notice from OWNER. The warranty obligation shall survive acceptance of the Work or termination of the Contract.
1. In the event OWNER prefers to accept or not require correction of defective or non-conforming Work, OWNER may do so instead of requiring its removal and correction, in which case OWNER shall determine an appropriate sum to be deducted from the Contract Price or otherwise charged against the Contractor, which determination shall be final and binding upon the Parties. Such monetary adjustment shall be effected whether or not final payment has been made.
- I. All defective Work, which has been rejected, shall be remedied or removed and replaced by Contractor, at its own expense, in a manner acceptable to OWNER.
- J. OWNER may charge the Contractor for any additional costs it incurs for tests and inspections, wherever and whenever Work is not ready at the time indicated by Contractor's notice or when an additional re-inspection is necessitated by prior rejection.
- K. OWNER will have access, at all reasonable times, to Contractor's documents, calculations, supporting materials, data, and information concerning the Work, including computer programs and printouts, which supportive information OWNER may determine is required to evaluate the Work properly and expeditiously.

3.2 TESTS AND INSPECTIONS LOG

- A. Prepare a complete record of tests and inspections include the following data:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. An Inspection Checklist appropriate to the portion of Work.
 - 4. Date test or inspection results were transmitted to OWNER and authorities having jurisdiction.
 - 5. Identification of testing agency or special inspector conducting the particular test or inspection service.
- B. Maintain log at Work Site. Post changes and modifications as they occur. Provide access to the test and inspection log for OWNER's reference during normal working hours. No notice will be required for OWNER's access to the Contractor's test and inspection logs and associated documents.

3.3 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sampling, and similar services, repair damaged construction and restore substrates and finishes.
- B. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as nearly invisible as possible.
- C. Protect construction exposed by or for quality control service activities.
- D. Repair and protection are the Contractor's sole responsibility, regardless of the assignment of responsibility for quality control services.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements relating to selection of products, materials and equipment for the Work and their delivery, storage, and handling.

1.2 RELATED REQUIREMENTS

- A. Section 01 25 00 - Substitution Procedures
- B. All Division Sections for specific requirements relating to products and installations.

1.3 SAFETY DATA SHEETS

- A. The Safety Data Sheet (SDS) is prepared by manufacturers and suppliers of products that contain hazardous materials. Hazardous material is defined as any substance which is a physical, or health hazard, or is included in the Cal-OSHA Director's List of Hazardous Substances, or is listed in Title 22 of the California Code of Regulations, Section 12000, Chemicals Known to the State to Cause Cancer or Reproductive Toxicity (Proposition 65 Substances).
- B. No hazardous materials shall be delivered, stored, or used at any work site or facility unless they are properly labeled, tagged or marked, and a copy of the SDS has been provided to OWNER or Owner's Representative. A copy of any updated SDSs shall be provided to OWNER immediately.
- C. The Contractor shall also maintain a file of relevant SDSs at the work site. SDS files shall be kept current; new or updated SDSs shall be added immediately and a copy provided to OWNER.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and, unless otherwise indicated, that are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete functional installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. OWNER reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," OWNER will make the selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
 - 6. Or Equivalent: Where products are specified by name and accompanied by the term "or equivalent" or "or approved equivalent" or "or approved," comply with provisions in Section 01 33 00 - Submittal Procedures to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:

1. Product: Where the Specifications name a single product and manufacturer, provide the named product that complies with requirements. Where the Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
2. Where the Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements. Where the Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
3. Basis of Design Product: Where the Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. The Plans and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Section 01 25 00 - Substitution Procedures for consideration of an unnamed product by the other named manufacturers.
4. Visual Matching Specification: Where the Specifications require matching an established sample, select a product that complies with requirements and matches OWNER's sample. OWNER's decision will be final on whether a proposed product matches.
5. If no product available within the specified category matches and complies with other specified requirements, comply with provisions in Section 01 25 00 - Substitution Procedures for proposal of a product.

2.2 LISTING OF ELECTRICAL EQUIPMENT

- A. It is the Contractor's responsibility to ensure that electrical equipment, machinery control panels and electrical components, and field installed devices and components will meet the all applicable codes and regulations of both the local authority and the State of California, for "listing" of electrical equipment by an accredited laboratory. Applicable provisions of all Underwriter's Laboratory standards, as incorporated under the laws within the State of California, shall apply to the work of this project, except as modified herein, and are hereby made a part of the Specifications to the extent required.
- B. The UL listing is acceptable; however, other certifications must be checked for acceptance under the applicable laws and regulations of the State of California and approved by OWNER prior to equipment purchase. Custom built control panels and systems, wherein listing has not been established prior to manufacture, will be accepted only if they are built under the UL self certification labeling procedures. Compliance with, the costs of, and any scheduling impacts associated with the laws, codes and regulations of the state and local jurisdictions are the responsibility of the Contractor and its suppliers.

PART 3 - EXECUTION

3.1 PRODUCT DELIVERY, UNLOADING, STORAGE, AND HANDLING

- A. The Contractor shall, at its own expense, deliver, unload, store, handle, and be responsible for all materials, whether furnished by OWNER or by the Contractor. All OWNER furnished material, whether unloaded by OWNER or by the Contractor, shall be moved by the Contractor, at its expense, from the point where it is delivered by OWNER to the Work Site.
- B. Deliver: Unload, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions. The unloading, storing and hauling of all OWNER's or the Contractor's material shall be considered as incidental to Contract pricing.
- C. Delivery and Handling:
 1. Schedule delivery to minimize long-term storage at the Work Site, and to prevent overcrowding of construction spaces.

2. Coordinate delivery with installation times to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 3. Deliver products to the Work Site in an undamaged condition in the manufacturer's original, sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 5. Track materials shall be handled and stored in accordance with the SCRRA Track Maintenance and Engineering Instructions.
- D. Storage:
1. Store products to allow for inspection and measurement of quantity or counting of units. Store products with seals and labels intact and legible.
 2. Store materials in a manner that will not endanger any structures. Materials shall not be placed nor stored within 20 feet of the centerline of any active railroad track.
 3. Comply with the product manufacturer's written instructions regarding temperature, humidity, ventilation, and weather-protection requirements for storage.
 4. Store loose granular materials on solid flat surfaces in a well drained area. Prevent mixing with foreign matter.
 5. Store cementitious products and materials on elevated platforms.
 6. Store foam plastic away from exposure to sunlight, except to the extent necessary for a period of installation and concealment.
 7. Protect stored products from damage and liquids from freezing.
 8. Building materials will be stored in a protected environment safe from sun, rain, and excessive dust. Damaged or excessively dirty materials will be rejected.
 9. Electrical and mechanical equipment shall be maintained in accordance with the manufacturer's operation and maintenance instructions until the Contractor is relieved of the responsibility by OWNER.
 10. When permission to do so is given in writing by OWNER, the Contractor may store materials and erect temporary buildings on OWNER property, provided such property is not required for OWNER's use or is not under lease to other parties.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

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SECTION 01 74 19
CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for salvaging nonhazardous demolition and construction waste, recycling nonhazardous demolition waste and disposing of nonhazardous demolition and construction waste.
- B. The Owner has established that this Project shall include proactive measures for waste management participation by all parties to the contract.
- C. The purpose of this program is to ensure that during the course of the Project all diligent means are employed to pursue practical and economically feasible waste management and recycling options.
- A. Upon award, Contractor and Subcontractors shall be required to furnish documentation from suppliers or manufacturers regarding waste management and recycling options for those products and procedures furnished. Waste disposal to landfills shall be minimized.

1.2 RELATED REQUIREMENTS

- A. Division Sections for specific requirements relating to disposition of waste resulting from the Work including but not limited to disposition of waste resulting from site clearing and removal of above and below-grade improvements.

1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Construction Waste Management Plan (CWMP): A Project-specific plan for the collection, transportation, and disposal of the waste generated at the construction site.
- C. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- D. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- E. Hazardous waste: Any material or byproduct of construction that is regulated by the Environmental Protection Agency and that may not be disposed in any landfill or other waste end-source without adherence to applicable laws.
- F. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- G. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- H. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.
- I. Trash: Any product or material unable to be returned, reused, recycled or salvaged.

- J. Waste: Any material that has reached the end of its intended use. Waste includes salvageable, returnable, recyclable and reusable construction materials that would otherwise be discarded or destroyed.

1.4 PERFORMANCE REQUIREMENTS

- A. Facilitate recycling and salvage of materials to achieve maximum rates for salvage/recycling by weight of total non-hazardous solid waste generated. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators.
1. CWMP Goal: Develop plan that results in end-of-Project rates for salvage/recycling of a minimum of 75 percent by weight of total waste generated by the Work.
- B. Packaging: Regardless of salvage/recycle goal indicated above, salvage or recycle 100 percent of the following uncontaminated packaging materials, including paper, cardboard, plastic, polystyrene packaging and wood crates.

1.5 SUBMITTALS

- A. Within 14 days of LNTP, submit a CWMP, according to ASTM E 1609, the requirements of the jurisdiction having authority, and requirements in this Section. Distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use the same units of measure throughout the waste management plan. List each type of waste and whether it will be salvaged, recycled, or disposed of in a landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
- B. Project Information:
1. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit copies of report. Include separate report for demolition and construction waste. Include the following information:
 - a. Material category.
 - b. Total quantity of waste in tons.
 2. Quantity of waste salvaged, both estimated and actual in tons.
 - a. Quantity of waste recycled, both estimated and actual in tons.
 - b. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - c. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
 3. Waste Reduction Calculations: Before request for Substantial Completion, submit copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
 4. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
 5. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
 6. Recycling and Processing Facility Records: Indicate receipt and acceptance of waste by landfills and Waste to Energy facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
 7. Landfill and Waste to Energy Disposal Records: Indicate receipt and acceptance of waste by landfills and Waste to Energy or facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- C. LEED Information:
1. MR 2: Construction Waste Management:
 - a. Construction Waste Management Plan.
 - b. Calculations indicating amount of construction waste in tons and the amount of construction waste recycled.

1.6 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, with record of successful waste management coordination of projects with similar requirements, that employs a LEED Accredited Professional, certified by USGBC as Contractor's Waste Management Coordinator (CWMC).
- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference: Project Manager shall conduct conference at Project site to review methods and procedures related to waste management including but not limited to, the following:
 - 1. Review and discuss Waste Management Plan.
 - 2. Review requirements for documenting quantities of each type of waste and its disposition.
 - 3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - 4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 5. Review waste management requirements for each trade.

1.7 CONSTRUCTION WASTE MANAGEMENT PLAN

- A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Include separate sections in plan for construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed in landfill or Waste to Energy facilities. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 - 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone number.
 - 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - 4. Recycled Materials: Assign recycling to recycling subcontractor, or list local receivers and processors, and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 - 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and Waste to Energy facility. List hazardous material waste and disposal separately.
 - 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.
- D. Waste Management Plan shall include locations of sorting and waste storage facilities on Site Plan of project.

PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement waste management plan as approved by OWNER. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract. Comply with the following procedures:
 - 1. Define specific areas to facilitate separation of materials for recycling, salvage, reuse or return.
 - 2. Separate construction waste by type to the maximum extent practical.
 - 3. Recycle and waste bin areas are to be maintained in an orderly manner and clearly marked to avoid contamination of materials. Inspect containers and bins weekly for contamination and remove contaminated materials if found.
 - 4. Do not mix recyclable materials.
 - 5. Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 6. Store materials away from construction area. Do not store within drip line of remaining trees.
 - 7. Store components off the ground and protect from weather.
 - 8. Remove construction waste off-site and transport to appropriate receiver or processor.
 - 9. Provide handling, containers, storage, signage, transportation, and other items as required to implement the CWMP for the entire duration of the Contract.
- B. Waste Management Coordinator: Designate a CWMC to be responsible for implementing, monitoring, and reporting status of the CWMP.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1. Distribute waste management plan to everyone concerned within seven days of submittal return.
 - 2. Distribute waste management plan to entities when they first begin work on site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to salvaged, recycled, reused, donated, and sold.
 - 2. Comply with environmental controls specified in Division 01 Section 01 50 00 Temporary Facilities, Construction Controls and Facilities.
- E. Hazardous Wastes: Store in secure areas and comply with the following:
 - 1. Hazardous wastes shall be separated, stored and disposed of in accordance with local and EPA regulations and additional criteria listed below:
 - a. Building products manufactured with PVC or containing chlorinated compounds shall not be incinerated.
 - b. Disposal of fluorescent tubes and ballasts to open containers is not permitted.
 - c. Disposal of building elements containing mercury to open containers is not permitted.
 - 2. Unused fertilizers shall not be co-mingled with construction waste.

- F. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities. Designate specific areas on the Work Site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
- G. "Waste Reduction Progress Reports: Submit each month as part of the Contractor's Application For Payment.
 - 1. Materials identified in the Report shall be reported by weight.
 - 2. Where weight is not applicable, Contractor shall report materials by units applicable to material recipient.
 - 3. Procure receipts or other validation of waste management procedures and include them as part of the submittal.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged items for reuse in the Work: Salvage designated items for reuse and handle as follows:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning.
 - 3. Identify contents of containers.
 - 4. Store items in a secured area until reinstallation.
 - 5. Protect items from damage during transport and storage.
- B. Salvaged items for sale and donation: None
- C. Salvaged items for OWNER use: As directed by OWNER.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to the benefit of OWNER.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at the Work Site to the maximum extent practical, according to the approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from the Work Site. Include a list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials (if found).
 - 2. Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from the construction area. Do not store within the drip line of remaining trees.
 - 4. Store components off the ground, and protect them from the weather.
 - 5. Remove recyclable waste from OWNER property and transport to a recycling receiver or processor.
- E. Asphaltic Concrete Paving: Grind asphalt to maximum 4" particle size.
- F. Concrete: Remove reinforcement and other metals from concrete and sort with other metals. Pulverize concrete to a maximum 4" particle size.

- G. Wood Materials: Sort and stack materials according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- H. Metals: Separate metals by type.
 - 1. Reinforcing Steel: Separate from concrete.
 - 2. Structural Steel: Stack materials according to size, type, and length.
 - 3. Miscellaneous Metals: Remove and dispose of bolts, nuts, washers, and other rough hardware.
- I. Piping and Conduit: Reduce materials to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.

3.4 RECYCLING AND CONSTRUCTION WASTE

- A. Packaging:
 - 1. Cardboard and Boxes: Break down packaging to flat sheets. Bundle and store in a dry location.
 - 2. Polystyrene Packaging: Separate and bag materials.
 - 3. Pallets: Require deliveries as much as possible using pallets to remove from project site. For pallets that remain onsite, break down pallets into component wood pieces and comply with requirements for recycling wood.
 - 4. Crates: Breakdown crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 - 1. Clean Cut-offs of Lumber: Grind or chip into small pieces.
 - 2. Clean Sawdust: Bag sawdust that does not contain paint or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.
 - 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.5 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from the Work Site and legally dispose of them in a landfill or in another manner acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of to accumulate on site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials offsite and legally dispose of them.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 77 00

SUBSTANTIAL COMPLETION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section addresses administrative and procedural requirements for establishing Substantial Completion.

1.2 RELATED REQUIREMENTS

- A. Section 01 77 19 - Project Closeout
- B. Section 01 78 23 - Operation and Maintenance Data
- C. Section 01 78 39 - Project Record Documents

1.3 SUBSTANTIAL COMPLETION SUBMITTALS

- A. Submit the following a minimum of 14 days prior to requesting inspection for determining the Date of Substantial Completion:
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, all of which would grant unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Specifications Sections, including Project Record Documents, all material testing and special inspection results, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information, warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 3. Submit maintenance material submittals, specified in individual sections of these Specifications, including tools, spare parts, extra materials, and similar items, to be delivered to the location designated by OMNITRANS.

1.4 SUBSTANTIAL COMPLETION PROCEDURES

- A. The Contractor shall complete the following prior to requesting inspection for determining the Date of Substantial Completion:
 - 1. Provide a Final As-Built Schedule that is approved by OMNITRANS.
 - 2. Advise OMNITRANS of pending insurance changeover requirements.
 - 3. Make the final changeover of permanent locks and deliver keys to OMNITRANS. Advise OMNITRANS of the changeover in security provisions.
 - 4. Complete the start-up and testing of systems and equipment.
 - 5. Perform preventive maintenance on equipment used prior to Substantial Completion.
 - 6. Instruct OMNITRANS's personnel in the operation, adjustment, and maintenance of products, equipment, and systems.
 - 7. Advise OMNITRANS of the changeover in utilities.
 - 8. Terminate and remove temporary facilities from the Work Site, along with mockups, construction tools, and similar elements.
 - 9. Complete final cleaning requirements, including areas adjacent to the Work Site such as streets, curbs, gutters, swales and other drainage facilities.
 - 10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

11. Deliver tools, spare parts, extra materials, and similar items to the location designated by OMNITRANS. Label with manufacturer's name and model number where applicable.
- B. The Contractor shall submit a written request for inspection to determine Substantial Completion. On receipt of such request, OMNITRANS will either proceed with the inspection or notify the Contractor of unfulfilled requirements. OMNITRANS will prepare the Certificate of Substantial Completion after inspection, or will notify the Contractor of outstanding items that must be completed or corrected before the certificate will be issued.
- C. The Date of Substantial Completion is the date certified by OMNITRANS when the Work is sufficiently complete, in accordance with the Contract Documents. At any time OMNITRANS may occupy or use the Work, or a designated part or portion thereof, for the use for which it is intended. OMNITRANS' possession or use shall not be deemed an acceptance of any Work under the Contract.

1.5 BENEFICIAL OCCUPANCY

- A. OMNITRANS shall have the right to take beneficial occupancy of any portion of the Work that is not otherwise complete. OMNITRANS may at any time notify the Contractor in writing of its intention to take such beneficial occupancy.
- B. At the time of taking beneficial occupancy, the Contractor and OMNITRANS shall make an inspection of that portion of the Work to determine status of completion and shall prepare a list of work items remaining to be completed.
- C. During beneficial occupancy, OMNITRANS shall allow the Contractor reasonable access to complete or correct the remaining work items and to otherwise complete the Work. However, a failure by OMNITRANS to list any remaining work item shall not relieve the Contractor of responsibility for complying with all terms of the Contract.
- D. While OMNITRANS is in possession or early use of premises, the Contractor shall be relieved of responsibility for maintenance, loss, or damage to only that portion of work for which OMNITRANS has taken beneficial occupancy other than that resulting from Contractor's act or omission, negligence, willful misconduct, or breach of warranty. If such possession or early use by OMNITRANS unreasonably delays progress of the Work or causes additional expense to the Contractor, an adjustment may be made in accordance with the Contract Documents. OMNITRANS's Possession or Early Use of Premises shall not be deemed an acceptance of any work under the Contract.

PART 2 - PRODUCTS

2.1 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in Section 01 78 23 - Operation and Maintenance Data and individual Specification Sections.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations.
- B. Cleaning Procedures: Complete the following cleaning operations before requesting inspection for Substantial Completion:

1. Clean the Work Site, yard, and grounds in areas disturbed by construction activities, including landscaped areas, making them clear of rubbish, waste material, litter, and other foreign substances.
2. Clean paved areas with street sweeper and water truck. Remove petrochemical spills, stains, and other foreign deposits.
3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
4. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
5. Remove debris and surface dust from limited-access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
6. Sweep concrete floors broom-clean.
7. Vacuum carpet and similar soft surfaces, removing debris and excess nap; clean according to the manufacturer's recommendations if visible soil or stains remain.
8. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Polish mirrors and glass, taking care not to scratch surfaces.
9. Remove labels that are not permanent.
10. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
11. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
12. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
13. Clean ducts, blowers, and coils if units were operated without filters during construction, or if they display contamination with particulate matter on inspection.
14. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency.
15. Wash and wipe clean all appurtenances and exposed finished surfaces associated with passenger platform areas, walkways and approaches, including railings and fences.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to their specified condition.
- C. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
- D. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that already show evidence of repair or restoration.
- E. Do not paint over "UL" and other required labels and identification, including mechanical and electrical nameplates. Remove paint applied to required labels and identification.
- F. Replace parts subject to operating conditions during construction that may impede operation or reduce longevity.
- G. Replace burned-out bulbs, bulbs noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 77 19
PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies procedures and requirements for close out, including but not limited to final submittals, final acceptance, all required financial and legal documentation, and release of final payment to the Contractor.

1.2 RELATED REQUIREMENTS

- A. Section 01 77 00 - Substantial Completion.
- B. Section 01 78 39 - Project Record Documents.

1.3 FINAL COMPLETION SUBMITTALS

- A. Submit the following a minimum of 14 days prior to requesting inspection for determining the Date of Final Completion and Acceptance:
 - 1. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with Contract insurance requirements.
 - 2. Consent of the Surety to Final Payment
 - 3. All required Labor Compliance documents.
 - 4. Financial:
 - a. Final liquidated damages settlement statement, if applicable.
 - b. Application for Final Payment shall include the following documentation:
 - 1) Lien Releases from all Subcontractors, Suppliers and other vendors that have filed preliminary notice of liens.
 - 2) Certificate – “No Claims” all Subcontractors, Suppliers and other vendors that have filed preliminary notice of liens.
 - 3) Certificate from Contractor that all– Warranties and Guarantees are in Effect.
 - 5. Construction:
 - a. Provide documentation of completed Punchlist items.
 - b. Provide documentation of permit sign-off by third party agencies, as required and provide Certificates of Release from jurisdictional authorities.
 - c. Final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion (or when OWNER took possession of and assumed responsibility for corresponding elements of Work), if applicable.
 - d. Certificate of Insurance: For continuing coverage if specified in Contract Documents.

1.4 ACCEPTANCE

- A. OWNER shall determine when the Work is fully completed and acceptable for purposes of contract close out. The Contractor shall submit to OWNER a written Request for Acceptance of Work. After receipt of the Contractor’s Request for Acceptance of Work, OWNER shall review all requirements of the Work and either: (1) reject the Contractor’s Request for Acceptance of Work, specifying defective or uncompleted Work items, or (2) accept the Work as complete by issuing to the Contractor a Certificate of Final Acceptance and approving the final payment.

- B. If OWNER rejects the Contractor's Request for Acceptance of Work, the Contractor shall promptly remedy the defective or uncompleted Work items. Thereafter, the Contractor shall again give OWNER a written Request for Acceptance of Work. The foregoing procedure shall apply successively thereafter until OWNER has issued the Contractor a Certificate of Final Acceptance.
- C. OWNER requires that all Punchlist items be completed prior to Final Acceptance. If OWNER determines that any of the Punchlist items have not been satisfactorily completed, OWNER reserves the right to engage other contractors to complete such Punchlist items at the expense of the Contractor.

PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)

PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION)

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 78 23
OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory
 - 2. Emergency manuals
 - 3. Operation manuals for systems, subsystems, and equipment
 - 4. Product maintenance manuals
 - 5. Systems and equipment maintenance manuals

1.2 RELATED REQUIREMENTS

- A. Section 01 33 00 - Submittal Procedures.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content, formatted and organized as required by this Section.
 - 1. OWNER OR Owner's Representative will approve the contents of operations and maintenance submittals.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file: Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to OWNER.
 - 2. Name each indexed document file in the composite electronic index with the applicable item name. Include a complete, electronically linked operation and maintenance directory. Enable inserted reviewer comments on draft submittals.
 - 3. Submit six paper copies and include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. OWNER will return three copies.
- C. Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion, and at least 21 days before commencing demonstrations and training.

1.5 QUALITY ASSURANCE

- A. In preparation of operation and maintenance data, use personnel thoroughly trained and experienced in the operation and maintenance of the equipment or systems involved. Where manuals require written instructions, provide technical writing that clearly communicates essential data. Where maintenance manuals require Plans or diagrams, prepare Plans clearly, in an understandable format. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by those representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
 - 1. List of documents
 - 2. List of systems
 - 3. List of equipment
 - 4. Table of contents
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment that are not part of a system, list alphabetically in a separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with the same designation used in the Contract Documents.

2.2 OPERATION AND MAINTENANCE MANUAL FORMAT

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page
 - 2. Table of contents
 - 3. Manual contents
- B. Title Page: Include the following information:
 - 1. Subject matter included in manual
 - 2. Name and address of the Project
 - 3. Name and address of OWNER
 - 4. Date of submittal.
 - 5. Name and contact information for the Contractor
 - 6. Name and contact information for OWNER
 - 7. Names and contact information for major consultants to the Engineer that designed the systems contained in the manuals.
 - 8. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in the manual, identified by product name, indexed to the content of the volume, and cross-referenced to the Specification Section number in the Project manual.

- D. If operation or maintenance documentation requires more than one volume to accommodate data, include a comprehensive table of contents for all volumes in each volume of the set.
- E. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- F. Manuals, Electronic Files: Submit manuals in the form of a multiple-file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by the manufacturer where available. Where scanning of paper documents is required, configure the scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in the manual directory and the table of contents. Group documents for each system and subsystem into individual composite bookmarked files. Then create a composite manual so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure the electronic manual to display the bookmark panel upon opening the file.
- G. Manuals, Paper Copy: Submit manuals in the form of hard-copy, bound, and labeled volumes.
- H. Binders: Use heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in the thickness necessary to accommodate the contents; sized to hold 8-1/2 x 11 IN paper; with a clear plastic sleeve on the spine to hold a label describing the contents; and with pockets inside the covers to hold folded oversize sheets.
 - 1. If two or more binders are necessary to accommodate data for a system, organize the data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for the proper operation or maintenance of the equipment or system.
 - 2. Identify each binder on its front and spine with a printed title ("OPERATION AND MAINTENANCE MANUAL"), Project title or name, and subject matter of contents, and indicate the Specification Section number on the bottom of the spine. Indicate the volume number for multiple-volume sets.
- I. Dividers: Use heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate its contents. Include a typed list of products and major components of equipment included in the section on each divider, cross-referenced to the Specification Section number and the title of the Project manual.
- J. Protective Plastic Sleeves: Use transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
- K. Supplementary Text: Prepared on 8-1/2 x 11 IN white bond paper.
- L. Plans: Attach reinforced, punched binder tabs on plans, and bind them with text.
 - 1. If oversize Plans are necessary, fold Plans to the same size as text pages and attach them as foldouts.
 - 2. If Plans are too large to be used as foldouts, fold and place Plans in labeled envelopes and bind envelopes in the rear of the manual. At appropriate locations in the manual, insert typewritten pages indicating plan titles, descriptions of contents, and Plan locations.
 - 3. Provide specially prepared Plans where necessary to supplement the manufacturer's printed data to illustrate the relationship of component parts of equipment or systems, or to provide control or flow diagrams. Coordinate specially prepared Plans with information contained in the Project Record Documents to ensure correct representation of completed installations.
- M. Originals: Do not use original record documents as part of operation and maintenance manuals.
- N. Specifications: Component or system Specification Sections that are copied and inserted should be complete, with all modifications.

2.3 OPERATION AND MAINTENANCE MANUAL CONTENT

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections, as well as the following specific information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on the Contract Documents.
 - 2. Performance and design criteria if the Contractor has delegated design responsibility.
 - 3. Operating standards
 - 4. Operating procedures
 - 5. Operating logs
 - 6. Wiring diagrams
 - 7. Control diagrams
 - 8. Piped system diagrams
 - 9. Precautions against improper use
 - 10. License requirements, including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number. Use designations for products indicated on the Contract Documents. Include manufacturer's name, equipment identification, with the serial number of each component.
 - 2. Equipment function, operating characteristics and limiting conditions
 - 3. Performance curves, Engineering data and tests
 - 4. Complete nomenclature and number of replacement parts
- C. Operating Procedures: Include the following, as applicable:
 - 1. Start-up procedures
 - 2. Equipment or system break-in procedures
 - 3. Routine and normal operating instructions
 - 4. Regulation and control procedures
 - 5. Instructions on stopping
 - 6. Normal shutdown instructions
 - 7. Seasonal and weekend operating instructions
 - 8. Required sequences for electric or electronic systems
 - 9. Special operating instructions and procedures
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram the controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.
- F. Abbreviated Operating Instructions: Abbreviated instructions for start-up, shut-down, emergency operation, safety precautions, unusual features, and troubleshooting instructions. In addition to including a copy in the Operation and Maintenance Manual, permanently secure a laminated copy adjacent to the equipment, where the copy can be easily read by operating personnel.
- G. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include the responsibilities of OWNER's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- H. Emergency Procedures: Include the following, as applicable:
 - 1. Instructions on stopping.
 - 2. Shutdown instructions for each type of emergency.
 - 3. Operating instructions for conditions outside normal operating limits.
 - 4. Required sequences for electric or electronic systems.
 - 5. Special operating instructions and procedures.

2.4 PRODUCT MAINTENANCE MANUAL CONTENT

- A. Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. List each product included in the manual, identified by product name and arranged to match the manual's table of contents. For each product, list the name, address, and telephone number of the Installer or supplier and the maintenance service agent, and cross-reference the Specification Section number and title in the Project manual and Drawing or schedule designation or identifier (where applicable). Data may be taken directly from manufacturer's standard catalogs. Information shall be edited or marked to show only conditions pertinent to this Contract. This information shall also be scanned in .tif or .pdf format at a suitable resolution so that it is legible when printed.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number
 - 2. Manufacturer's name
 - 3. Color, pattern, and texture
 - 4. Material and chemical composition
 - 5. Reordering information for specially manufactured products
- D. Maintenance Procedures: Include the manufacturer's written recommendations, as well as the following:
 - 1. Inspection procedures
 - 2. Types of cleaning agents to be used, and methods of cleaning
 - 3. A list of cleaning agents and methods of cleaning that could be detrimental to the product.
 - 4. The schedule for servicing, lubrication, routine cleaning and maintenance.
 - 5. Repair instructions
- E. Repair Materials and Sources: Manufacturer's recommended special maintenance tools and list of spare parts and recommended stock quantities for one year of routine maintenance. Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect the validity of warranties or bonds. Include the procedures to follow and the notifications required for warranty claims.

2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL CONTENT

- A. List each system, subsystem, and piece of equipment not part of a system, included in the manual, identified by product name and arranged to match the manual's table of contents. Include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, a spare parts list, maintenance service contracts, and warranty and bond information, as described below. For each product, list the name, address, and telephone number of the Installer or supplier and the maintenance service agent, and cross-reference the Specification Section number and title in the Project Manual and Plan or schedule designation or identifier where applicable.
- B. Manufacturers' Maintenance Documentation: Include the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Plans, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly. If the system's control Plan is not adequate, provide simplified, professionally drawn, single line diagrams on minimum 8-1/2 x 11 IN, 20 LB white bond paper.
 - 3. Identification and nomenclature of parts and components.
 - 4. A list of items recommended to be stocked as spare parts.

- C. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.
 - 7. List of special tools required to service or maintain equipment.
- D. Preventive Maintenance Instructions: Typewritten excerpts from manufacturer's written instructions for weekly, monthly, quarterly, annual, and other regularly scheduled maintenance prepared by a mechanical Subcontractor, with assistance from the equipment supplier.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, a list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Control Plans: Include Control Plans for equipment and components, including sequence of operations included in the control section of the Operation and Maintenance Manual submittal.
- G. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to the manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- H. Maintenance Service Contracts: Include copies of maintenance agreements, with the name and telephone number of the service agent.
- I. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect the validity of warranties or bonds. Also include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION)

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

END OF SECTION

SECTION 01 78 39
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section addresses administrative and procedural requirements for preparing project As-Built Drawings, Specifications, and Construction Schedule, Product Data and other miscellaneous records submitted as required by the Contract Documents.

1.2 RELATED REQUIREMENTS

- A. Section 01 33 00 - Submittal Procedures
- B. Section 01 77 00 - Substantial Completion
- C. Section 01 77 19 - Project Closeout

PART 2 - PRODUCTS

2.1 AS-BUILT DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings (Plans) and Shop Drawings incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require the individual or entity who obtained the record data, whether the individual or entity is an Installer, Subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints as follows:
 - a. Provide complete information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes and revisions to details shown on Plans. The lines shall be located on the Plans dimensionally from a fixed point, such as a street-curb line, centerline, permanent structure, or an exposed part of a structure.
 - b. Depths of foundations below first floor.
 - c. Locations and depths of underground utilities including horizontal and vertical location of underground utilities affected by the Work. This includes new utilities installed and utilities found and left in place.
 - d. Revisions to routing of piping and conduits.
 - e. Revisions to electrical circuitry.
 - f. Actual equipment locations, duct size and routing.
 - g. Changes made by Change Order or Change Directive.
 - h. Changes made following OWNER's written orders.
 - i. Details not on the original Plans.
 - j. Field records for variable and concealed conditions.
 - k. Record information on the Work that is shown only schematically.
 - l. Actual locations of trackwork, signals, and signal conductors.

3. Mark Plans and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up prints. Record new information and details that are recognized to be of importance to OWNER, but that were not shown on either the Plans or on Shop Drawings. Record changes on whichever Plan is most capable of showing the “field” condition fully and accurately; and when Shop Drawings are used for As-Built Drawings.
4. Mark the As-Built set with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
5. Mark important additional information that was either shown schematically or omitted from the original Plans.
6. Note Construction Change Directive numbers, RFI numbers, option numbers, Change Order numbers, and similar identification, where applicable.
7. Each drawing sheet, marked or unmarked, shall be stamped “As-Built” in red ink.
8. As-Built drawings require approval by OWNER.
9. Submit two complete sets of full-size marked-up prints and a complete PDF electronic file. Include each drawing sheet whether or not changes and additional information were recorded.

2.2 AS-BUILT SPECIFICATIONS

- A. Preparation: Mark-up Specifications to indicate the actual product installation whenever the installation varies from that indicated in Specifications, addenda, and contract modifications.
 1. Provide detailed information on concealed products and equipment installations that cannot be readily identified and recorded later.
 2. Mark-up copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Record the name of the manufacturer, supplier, and Installer, and include other information necessary to provide a record of the selections made.
 4. For each principal product indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 5. Note related Change Orders, record Product Data, and Record Drawings where applicable.
- B. Format: Submit As-Built Specifications as paper copy and scanned PDF electronic files of the marked-up paper copy of the Specifications.

2.3 AS-BUILT CONSTRUCTION SCHEDULE

- A. In order to obtain Substantial Completion a final As-Built schedule shall be submitted and approved by the OWNER.

2.4 PRODUCT DATA

- A. Preparation: Mark-up Product Data to indicate the actual product installation whenever the installation varies substantially from that indicated in the Product Data submittal.
 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to the Work Site, and changes in the manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.
- B. Format: Submit Record Product Data as paper copy and scanned PDF electronic file(s) of the marked-up paper copy of the Product Data. Include a Record Product Data directory organized by Specification section number and title, electronically linked to each item of the Record Product Data.

2.5 MISCELLANEOUS RECORDS

- A. Assemble miscellaneous records required by other Specification sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as paper copy and scanned PDF electronic file(s) of marked-up miscellaneous record submittals. Include a miscellaneous record submittals directory organized by Specification section number and title, electronically linked to each item of the miscellaneous record submittals.

2.6 SUBMITTAL TITLE

- A. Label each document "AS-BUILT" in two-inch high printed letters or a height appropriate to document.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. The monthly progress payment application will not be processed by OWNER until the Contractor is found by OWNER to have completely and accurately recorded all as-built information for Work performed through the period of the progress payment application.
- B. Store record documents and Samples in the field office in files and racks apart from the Contract Documents (Plans) used for construction. Do not use Project Record Documents for construction purposes. Maintain documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. OWNER shall be provided access to Project Record Documents.

PART 4 - MEASUREMENT AND PAYMENT

4.1 BASIS OF PAYMENT

- A. Work of this Section is considered incidental to Work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section. As-Built Drawings and photographs will be reviewed each month and the monthly progress payment will only be approved and processed if the Contractor is found by OWNER to be in conformance with the requirements of this Section.

END OF SECTION

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SECTION 03 08 13

CONCRETE TESTING AND EVALUATION - OWNER

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish all labor, materials, tools, equipment, and services for Concrete Testing and Evaluation - Owner, as indicated, in accordance with provisions of Contract Documents.
- B. Completely coordinate with work of other trades.

1.2 QUALITY ASSURANCE

- A. Standards:
 - 1. ASTM-C31: Standard Practice for Making and Curing Concrete Test Specimens in Field.
 - 2. ASTM-C42: Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
 - 3. ACI 318: Building Code Requirements for Structural Concrete and Commentary.
 - 4. ASTM-E329: Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.
- B. Contractor's testing agency:
 - 1. Qualifications: Acceptable to Owner, with evidence of recent inspection by Cement and Concrete Reference Laboratory of National Institute of Standards and Technology and of having corrected deficiencies noted, and meet requirements of ASTM E 329.
 - 2. Authority: Agency and its representatives are not authorized to revoke, alter, relax, enlarge or release any requirement of Contract Documents, nor to approve or accept portion of Work.

1.3 SUBMITTALS

- A. Project Information:
 - 1. Contractor's testing agency qualifications.
 - 2. Production sample test reports (when required): Include same data as for mix designs.
 - 3. Reports of Contractor-optional tests.
 - 4. Test reports on in-place testing, if such testing is performed.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.1 DESCRIPTION - GENERAL

- A. Test concrete materials and inspect operations as work progresses. Failure to detect defective work or material shall not prevent later rejection when such defect is discovered nor shall it obligate Owner for final acceptance.
- B. Payment for testing:
 - 1. Pay for testing services required in paragraph "Responsibilities and Duties of Contractor."
 - 2. Routine testing of concrete furnished to job site for compliance with Contract Documents will be performed by Owner's testing agency at Owner's expense.
 - a. Routine testing consists of tests for compressive strength, slump, air, temperature and unit weight.
 - b. Tests shall be performed every 75 YD³ or fraction thereof, for each mixture design placed in one day.

- c. Composite samples shall be obtained in accordance with ASTM-C172. Obtain each sample from a different batch of concrete on a random basis. Test batch shall be selected at random before commencement of concrete placement.
- d. Agency shall mold and cure sufficient specimens from each sample in accordance with ASTM-C31 and report deviations from requirements, if any. Number of specimens molded shall be coordinated with the test specification requirements and construction operations.
- e. Specimens shall be tested in accordance with ASTM-C39.

3.2 RESPONSIBILITIES AND DUTIES OF CONTRACTOR

- A. Provide necessary testing services for qualification of proposed materials and establishment of mix designs. Services performed by Contractor's testing agency.
- B. Submit concrete materials and concrete mix designs proposed for use. Include results of testing performed to qualify materials and to establish mix designs. Place no concrete until Contractor has received approval in writing. See submittals paragraph.
- C. Use of testing service shall in no way relieve Contractor of responsibility to furnish materials and construction in full compliance with Contract Documents.
- D. To facilitate testing and inspection:
 - 1. Furnish labor to assist Owner's testing agency in obtaining and handling samples at site or other sources of materials.
 - 2. Advise Owner's testing agency sufficiently in advance of operations to allow for completion of routine testing and for assignment of personnel.
 - 3. Provide and maintain adequate facilities for safe storage and proper curing of concrete compressive strength test specimens on site for first 8 HR or until they gain sufficient strength, as required by ASTM-C31.
- E. Pay for following additional testing services to be performed by Owner's testing agency, on occasions indicated:
 - 1. Additional testing and inspection, whenever changes in materials or proportions are requested by Contractor.
 - 2. Additional testing of materials or concrete, whenever they fail by test or inspection, to meet specification requirements.
 - 3. Other testing services needed or required by Contractor, such as:
 - a. Additional field cured test specimens as needed for control of work by Contractor such as, when concrete may be stripped, reshored, unshored, post-tensioned, etc.

3.3 EVALUATION AND ACCEPTANCE OF COMPRESSIVE STRENGTH TEST RESULTS

- A. Evaluate test results for standard molded and cured test cylinders separately for each concrete mix design. For evaluation of potential strength and uniformity, each mix design shall be represented by at least five tests.
- B. Strength level of concrete will be considered acceptable so long as averages of sets of three consecutive strength test results equal or exceed specified strength (f'c) and no individual strength test result falls below specified strength (f'c) by more than 3450 kPa 500 PSI.

3.4 TESTING CONCRETE IN PLACE

3.5 ACCEPTANCE OR REJECTION OF CAST-IN-PLACE CONCRETE

- A. General:
 - 1. Completed concrete work which conforms to applicable requirements of Contract Documents will be accepted without qualification.
 - 2. Concrete work which fails to conform to one or more requirements of Contract Documents shall be rejected and will not be accepted until repaired or proven adequate by concrete testing.

3. Contractor pays costs incurred in providing remedial work necessary to change rejected work to accepted work. Remedial work includes, but is not necessarily limited to, applicable repairs, replacement, reinforcement, engineering, and testing as denoted in following paragraphs.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

SECTION 03 31 00
CONCRETE MATERIALS AND PROPORTIONING

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish labor, materials, tools, equipment, and services for Concrete Materials and Proportioning, as indicated, in accordance with provisions of Contract Documents.
- B. Completely coordinate with work of other trades.

1.2 QUALITY ASSURANCE

- A. ASTM International (ASTM):
 - 1. ASTM C33 Standard Specification for Concrete Aggregates
 - 2. ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
 - 3. ASTM C94 Standard Specification for Ready-Mixed Concrete
 - 4. ASTM C138 Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
 - 5. ASTM C143 Standard Test Method for Slump of Hydraulic-Cement Concrete
 - 6. ASTM C150 Standard Specification for Portland Cement
 - 7. ASTM C157 Standard Test Method for Length Change of Hardened Hydraulic-Cement Mortar and Concrete
 - 8. ASTM C173 Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method
 - 9. ASTM C192 Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory
 - 10. ASTM C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
 - 11. ASTM C260 Standard Specification for Air-Entraining Admixtures for Concrete
 - 12. ASTM C311 Standard Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete
 - 13. ASTM C330 Standard Specification for Lightweight Aggregates for Structural Concrete
 - 14. ASTM C496 Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens
 - 15. ASTM C567 Standard Test Method for Determining Density of Structural Lightweight Concrete
 - 16. ASTM C595 Standard Specification for Blended Hydraulic Cements
 - 17. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
 - 18. ASTM C989 Standard Specification for Slag Cement for Use in Concrete and Mortars
 - 19. ASTM C1399 Standard Test Method for Obtaining Average Residual-Strength of Fiber-Reinforced Concrete
 - 20. ASTM C1602 Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
- B. American Concrete Institute (ACI):
 - 1. Comply with applicable provisions of following ACI publications, latest edition, except as otherwise indicated.
 - 2. ACI 301 Specifications for Structural Concrete for Buildings.
- C. Concrete Mixture Proportioning:
 - 1. Employ and pay for testing agency acceptable to Architect and Owner to perform materials evaluation, testing and design of concrete mixes.

2. Certificates, signed by material producer and Contractor, may be submitted in lieu of material testing when approved by Architect.
- D. Concrete Testing:
 1. Specified in Section 03 08 13
 2. Contractor to assist with related communication and temporary storage of test cylinders at jobsite.

1.3 SUBMITTALS

- A. Product Data:
 1. Concrete Mix Designs:
 - a. Submit each Mix Design individually.
 - b. Do not combine multiple mix designs into a single submittal.
 - c. Submit following data for each concrete mix proposed:
 - 1) Intended use.
 - 2) Proportions of materials.
 - 3) Slump.
 - 4) Air content.
 - 5) 7-day and 28-day compression test results of trial mixes or those used for standard deviation analysis of an established mix.
 - a) Test records for use in standard deviation analysis must have been made within 24 months of the date of the submittal and represent a time span of production of not less than 45 days.
 - d. Submit source and certification or proof of quality (and compatibility of admixtures) for each of the constituents of the proposed concrete mixes. Compatibility of admixture must be certified.
 - 1) Cement.
 - 2) Aggregate.
 - 3) Water.
 - 4) Admixtures:
 - a) Air Entraining Admixture.
 - b) High-Range Water Reducer.
 - c) Other.
 - e. Submit concrete mix designs using the mix design submittal form included at the end of this specification:

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Normal Weight Concrete:
 1. Concrete for which density is not a controlled attribute.
 2. Materials used in production must be of same quality, properties and proportion as indicated in approved concrete mix design as approved by Architect.
- B. Cement:
 1. Portland cement conforming to ASTM C150 or blended cements conforming to ASTM C595.
 2. Color: Natural gray.
- C. Aggregates:
 1. General:
 - a. Regard fine and coarse aggregates as separate ingredients.
 - b. Each size of coarse aggregate, as well as combination of sizes when two or more are used, shall conform to grading requirements of applicable ASTM specifications.
 2. Normal Weight Concrete:

- a. ASTM C33, also aggregate shall be obtained from a source approved by the State Highway Department for use in concrete for state bridges.

D. Potable Water:

- 1. Conforming to ASTM C1602.

E. Admixtures:

- 1. Use only when specifically required or permitted by Contract Documents, otherwise must be approved by Architect.
- 2. Trial mixes and tests shall be prepared with job materials, including admixture, to demonstrate that there will be no subsequent reduction in strength or durability of hardened concrete.
- 3. Provide admixtures certified by manufacture to be compatible with other admixtures. Calcium chloride, thiocyanates, and admixtures containing more than 0.05 percent chloride ions are not permitted.
- 4. Mid-Range Water Reducer: ASTM C494, Type A.
- 5. High-Range Water Reducer :
 - a. ASTM C494, Type F or G. Subject to complying with these specifications, the following manufacturers of High Range Water Reducing Admixtures are approved:
 - 1) Daracem – 100 or Adva Flow Series by Grace Construction Products.
 - 2) MasterRheobuild 1000 , MasterGlenium Series or PS 1466 by BASF Master Builders Solutions.
 - 3) Eucon 37 , Eucon SPJ or Plastol Series by Euclid Chemical.
 - 4) PSP-N, PSP-N2, PSP-R, and PSP-L by Procrete Industries.
 - b. Other manufacturers desiring approval comply with “Instructions to Bidders, Section H, Request for Clarification/Approved Equals/Exceptions.
- 6. Water-reducing, Retarding, and Accelerating Admixtures: ASTM C494.
- 7. Non-Chloride, Non-Corrosive Accelerating Admixture:
 - a. ASTM C494, Type C or E, and not contain more chloride ions than are present in municipal drinking water. The admixture manufacturer must have long-term non-corrosive test data from an independent testing laboratory (of at least a year’s duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures.
 - b. Acceptable products include:
 - 1) Euclid Chemical Co; Accelguard (The) 80, 90 or NCA . www.euclidchemical.com
 - 2) BASF; Masterset AC 534. www.buildingsystems.basf.com
 - 3) W.R. Grace & Co; Daraset. www.na.graceconstruction.com
 - c. Other manufacturers desiring approval comply with “Instructions to Bidders, Section H, Request for Clarification/Approved Equals/Exceptions.
- 8. Viscosity Modifying Admixture (VMA):
 - a. Specialty admixture to reduce bleed and segregation in concrete
 - 1) Euclid Chemical Company (The); Viscrol.
 - 2) Boral Materials Technologies; Boral SL.
 - 3) BASF; MasterMatrix VMA Series
 - b. Other manufacturers desiring approval comply with “Instructions to Bidders, Section H, Request for Clarification/Approved Equals/Exceptions.
- 9. Calcium-nitrite Corrosion Inhibitor:
 - a. Liquid admixture meeting the requirements of ASTM C1582; added to concrete during the batching process; chemically inhibits the corrosive action of chlorides on reinforcing steel and pre-stressed strands in concrete.; promotes strength development of the concrete while meeting ASTM C494 requirements as a Type C admixture; contains strength development of the concrete while meeting ASTM C494 requirements as a Type C admixture.
 - b. Acceptable products include:
 - 1) Base Products: DCI and DCI S by Grace Construction Products.
 - 2) Rheocrete CNI by BASF Master Builders Solutions.
 - 3) Eucon CIA by the Euclid Chemical Company

- c. Other manufacturers desiring approval comply with “Instructions to Bidders, Section H, Request for Clarification/Approved Equals/Exceptions.
10. Supplementary Cementitious Materials:
- a. Fly ash - ASTM C618, Class C or Class F.
 - 1) Samples shall be obtained, prepared, and tested in accordance with ASTM C311.
 - b. Ground Granulated Blast-Furnace Slag: ASTM C989, Grade 100 or 120.
11. Synthetic Macro Fibers
- a. ASTM C1116 Type III
 - b. Where permitted, fiber reinforced concrete shall replace and provide equivalent reinforcing to that indicated in both direct tension and bending capacity for concrete thickness indicated
 - c. Testing per ASTM C1018 and/or ASTM C1399 shall indicate a minimum residual strength of 170 PSI. Establish dosage rate required to meet performance specified.
 - 1) Submit manufacturers data verifying conformance
 - d. Minimum Dosage rate 4 LBS/CU YD.
 - e. Acceptable manufacturers
 - 1) W.R.Grace Co.; Strux 90/40
 - 2) Euclid Chemical Company Tuf-Strand SF
 - f. Other manufacturers desiring approval comply with “Instructions to Bidders, Section H, Request for Clarification/Approved Equals/Exceptions.

2.2 PROPORTIONING CONCRETE MIXES

- A. General:
- 1. Contractor and concrete supplier are responsible to provide concrete, in-place, which satisfies requirements listed in following table.
 - 2. Contractor and concrete supplier are responsible to adjust the concrete mixes, as needed, to:
 - a. Correct for non-conformance.
 - b. Correct for a variation in the quality of a constituent.
 - c. Compensate for extreme conditions in the field.
- B. Establish concrete material proportions by any of the proportioning methods described in ACI-301 guidelines.

Concrete Properties Table – IP Units							
Use	28-day strength (KS l)	Dry Unit Weight (PCF)	Max Aggregate. Size (IN)	Air percent	Max. W/C Ratio	Slump (l N)	Cement type
Footings ,Grade Beams	4.0		1-1/2	4.5	0.48		I
Drilled Piers	4.0		1 1/2		0.57		I
Walls	4.0		1	4.5	0.48		I
Slabs-on-grade	3.5		1 1/2		0.53		I
Structural floors, girders, slabs, columns	4.0		3/4		0.45		I
Post-tensioned slabs & beams	5.0		3/4 or 1	6	0.40		I
Columns	6.0		3/4		0.35	9	I
Radiology Shield, Wall, and Roof	3.0	147	1		0.70		I
Lt. Wt. Slabs on composite metal deck	3.5	115	3/4		0.50		I
Norm. Wt. Slabs on composite	3.5		3/4		0.50		I

Concrete Properties Table – IP Units							
Use	28-day strength (KS I)	Dry Unit Weight (PCF)	Max Aggregate Size (IN)	Air percent	Max. W/C Ratio	Slump (I N)	Cement type
metal deck							
Lt. Wt. Slabs, beams, girders	4.0	112	3/4		0.57		I
All other uses	4.0		3/4	6	0.48		I

C. Instructions for use of Table:

1. Provide concrete mixes with properties indicated in locations identified in Use column.
2. 28-day Strength:
 - a. Installed concrete must meet or exceed the minimum 28-day compressive strength indicated.
 - b. Laboratory mix design strengths must exceed this strength by the appropriate amount per AC1-301.
 - c. Determine strength in accordance with ASTM C192 and ASTM C39.
3. Dry Unit Weight:
 - a. If no value is listed, assume normal weight.
 - b. Dry unit weight of light weight mixes shall be maximum air dry unit weight permitted.
 - c. Correlate fresh weight with air dry weight of same mix to use as basis of acceptance on job site. Test in accordance with ASTM C567 and ASTM C138.
 - d. Dry unit weight for concrete for Radiation Shielding shall be minimum air dry unit weight permitted. Use heavy aggregate if necessary.
4. Maximum Aggregate Size:
 - a. Maximum size of coarse aggregate determined in accordance with:
 - 1) ASTM C33 for normal weight concrete.
 - b. Some mixes are designated 3/4 IN or 1 IN, permitting contractor option.
5. Air Content:
 - a. Required percentage of entrained and entrapped air as measured by ASTM C231, ASTM C173, or ASTM C138, as appropriate.
 - b. Tolerance of air content as delivered is +/- 1-1/2 percent for normal weight and +/- 2 percent for lightweight concrete.
 - c. When left blank, the required air content is not specified. All concrete exposed to freezing and thawing shall have air content between 4.5% and 7.5%. All interior slabs and all slabs to receive dry shake shall have a maximum air content of 3%.
6. Water Reducer:
 - a. Mid Range Water Reducer or High Range Water Reducer shall be provided as necessary to achieve slump indicated.
 - b. Contractor, as option, may elect to use Water Reducers to improve workability or permit pumping.
7. Maximum W/C Ratio:
 - a. Maximum ratio of pounds of water allowed to pounds of cementitious material used in the concrete mix.
8. Slump:
 - a. Mixes without Water Reducers:
 - 1) Slump tolerance: Up to 1 IN above maximum indicated is allowed, provided the average of 5 consecutive batches does not exceed the indicated amount by more than a 1/2 IN.
 - b. Mixes with Water Reducers:
 - 1) Slump indicated is after dosing.
 - 2) Slump tolerance after dosing: +1-1/2 IN and -1 IN is permitted for each batch.
 - c. Determine slump in accordance with ASTM C143.
 - d. Where slump is not specified, provide concrete with slump in accordance with approved mix designs
9. Cement:

- a. Type: Provide cement type indicated.
 - b. As option, the contractor/supplier may use Fly Ash or Ground Blast Furnace Slag for partial replacement of cement.
 - 1) For each unit of cement that is removed, replace with two units of Class F Fly Ash or one unit of Class C Fly Ash.
 - 2) For each unit of cement that is removed, replace with one unit of Ground Blast Furnace Slag.
 - 3) Maximum amount of cement replaced shall not exceed that specified in table 4.2.2.7.b.2 of ACI 301
 - 4) W/C ratio shall be based on total cementitious material content
- D. Admixtures:
- 1. Use admixtures in accordance with manufacturer's instructions.
 - 2. Use only approved admixtures.

PART 3 - EXECUTION

3.1 STORAGE OF MATERIALS

- A. Store cement in weather tight buildings, bins, or silos which will exclude moisture and contaminants.
- B. Arrange aggregate stockpiles and use in a manner to avoid excessive segregation and to prevent contamination with other materials or with other sizes of like aggregates.
 - 1. Perform tests for determining conformance to requirements for cleanliness and grading on samples secured from aggregates at point of batching.
 - 2. Do not use frozen or partially frozen aggregates.
- C. Allow sand to drain until it has reached relatively uniform moisture content before use.
- D. Store admixtures in manner to avoid contamination, evaporation, or damage.
 - 1. For those used in form of suspensions or non-stable solutions, provide agitating equipment to assure uniform distribution of ingredients.
 - 2. Protect liquid admixtures from freezing and temperature changes which would adversely affect their characteristics.

3.2 MIXING AND DELIVERY

- A. Batch, mix and transport concrete in accordance with ASTM C94.
- B. Batch and mix admixtures in accordance with manufacturer's instructions.
- C. Concrete shall have a slump of 2 to 4 IN when it arrives at job site.
 - 1. Water additions at job site shall be limited to comply with W/C Ratio requirements.
 - 2. Do not allow water to be added to the mix unless the amount allowed is clearly indicated on the truck delivery ticket.
- D. Following addition of High Range Water Reducer, mix for a minimum of 70 revolutions or 5 minutes to assure a consistent mixture.
- E. Reduction of required average strength:
 - 1. During construction, and after sufficient data becomes available, laboratory strength of mixes may be reduced in accordance with Section 3.11 of ACI-301, subject to approval by the Architect.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision and incidentals necessary as described by the Contract Documents.

END OF SECTION

SECTION 03 31 10
CONCRETE MIXING, PLACING, JOINTING AND CURING

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish all labor, materials, tools, equipment, and services for Concrete Mixing, Placing, Jointing and Curing as indicated, in accordance with provisions of Contract Documents.
- B. Completely coordinate with work of other trades.

1.2 QUALITY ASSURANCE

- A. Materials standards:
 - 1. ASTM C171: Standard Specification for Sheet Materials for Curing Concrete.
 - 2. ASTM C309: Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
 - 3. ASTM C1315: Standard Specification for Liquid Membrane Forming Curing Compounds Having Special Properties for Curing and Sealing Concrete.
 - 4. ASTM D1751: Standard Specification for Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).
 - 5. ASTM D1752: Standard specification for Preformed Sponge Rubber and Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
 - 6. ASTM E1643 Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
 - 7. ASTM E1745 Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs
- B. Production standards:
 - 1. ASTM C94: Standard Specification for Ready-mixed Concrete.
 - 2. ASTM C138 Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete.
 - 3. ASTM C567: Standard Test Method for Determining the Density of Structural Lightweight Concrete.
 - 4. ACI 305.1: Hot Weather Concreting.
 - 5. ACI 306.1: Cold Weather Concreting.

1.3 SUBMITTALS

- A. Shop drawings:
 - 1. Placement plans: Indicate proposed locations of construction joints and placement sequence.
 - 2. Screeding and finishing plan.
- B. Product Data
- C. Project information:
 - 1. Joint filler technical data.
 - 2. Curing compound technical data.
 - 3. Waterstop technical data.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Concrete materials and proportioning: See Section 03 31 00.

- B. Expansion joint filler, premolded: Type required, conforming to ASTM D1751 or ASTM D1752.

PART 3 - EXECUTION

3.1 MIXING AND PRODUCTION OF CONCRETE

- A. Batch, mix and transport ready-mixed concrete in accord with ASTM C94.
1. Plant equipment and facilities shall conform to Check List for Certification of Ready Mixed Concrete Production Facilities of National Ready Mixed Concrete Association.
- B. Site batched and mixed concrete will be permitted only after ability to control quality has been demonstrated to satisfaction of Architect.

3.2 MIXING - CONTROL OF ADMIXTURES

- A. Admixtures shall be added in accordance with Manufacturers recommendations
- B. If two or more admixtures are used, verify compatibility with manufacturers

3.3 MIXING - TEMPERING AND CONTROL OF MIXING WATER

- A. Mix concrete only in quantities for immediate use. Discard concrete which has set.
- B. When concrete arrives at project with slump below that suitable for placing, water may be added only if neither maximum permissible water-cement ratio nor maximum slump is exceeded.
1. Incorporate water by additional mixing equal to at least half of total mixing required.
2. Do not add water after discharge commences

3.4 MIXING - WEATHER CONDITIONS

- A. Cold weather:
1. Comply with ACI 306.
2. In cold weather, temperature of concrete when delivered at site shall conform to following limitations:
3. For sections with least dimension greater than 36 IN, comply with table 3.1 of ACI 306R

Minimum Concrete Temperature Required at Time of Pour		
Air Temperature @ time of pour	For sections with least dimension less than 12 IN	For sections with least dimension 12 IN to 36 IN
Above 30 DegF	60 DegF	55 DegF
0 to 30 DegF	65 DegF	60 DegF
Below 0 DegF	70 DegF	65 DegF

Minimum Concrete Temperature Required within 24 Hours of Pour		
Air Temp within 24 Hours of pour	For sections with least dimension less than 12 IN	For sections with least dimension 12 IN or greater
Below 32	60 DegF	50 DegF

4. If water or aggregate is heated above 100 degF, combine water with aggregate in mixer before cement is added.
a. Do not mix cement with water or with mixtures of water and aggregate having a temperature greater than 100 degF.
b. Final temperature of combined mix shall not exceed 90 degF or be high enough to cause flash set or loss of slump or workability.
- B. Hot weather:

1. Comply with ACI 305 if high temperature, low slump, flash set, or cold joints are encountered.
2. Cool ingredients before mixing, or add flake ice or well-crushed ice of a size that will melt completely during mixing for all or part of mixing water. Account for water contribution by ice when calculating the quantity if mixing water and insure that specified W/C ration is not exceeded.

3.5 PREPARATION BEFORE PLACING

A. Equipment:

1. Remove hardened concrete and foreign material from inner surfaces of conveying equipment.
2. Provide spare vibrator on job site during concrete placing operations.
3. In cold weather, have protective blankets ready and heaters operational and in-place before placing concrete.

B. Forms:

1. Complete formwork: Remove, water and foreign material; secure reinforcement in place, position expansion joint material, anchors, and other embedded items and have entire preparation inspected prior to concrete placement.
2. In hot weather when temperature of reinforcing or forms is greater than 120 degF spray forms and reinforcement with water just prior to placing concrete.

C. Screeds and screed rails:

1. General:
 - a. Develop a screed system to accurately strike off fresh concrete to the surfaces defined on the drawings.
 - b. Anticipate the deflection of all formwork and support systems. Provide and place extra concrete as necessary to produce finish surfaces with specified tolerances at designated elevations and contours at no additional cost to the Owner.
 - c. When form work is cambered whether shored or un-shored and screeding is performed perpendicular (i.e., up and over) to the crown of the camber set screed rails to follow the camber and provide a slab of uniform thickness.
 - 1) When screeding parallel with the camber set one screed at midspan along the crown of the camber and one along the girder or support.
 - 2) Two passes of the screed is necessary to cover one full bay.
 - d. Other screeding methods may be used provided the deflection of un-shored formwork is taken into consideration.
 - e. On unshored steel framing systems, accurately strike off concrete to produce a level surface after steel supporting system has deflected due the dead weight of the fresh concrete. Slab thickness on cambered steel shall not be less than that indicated on plan.
 - f. If not required in the documents and subjected to the approval of the Architect, the Contractor as option may camber the formwork.
 - g. All concrete shall be struck off with a vibrating screed.
 - h. Use of a "wet screed" system will not be permitted unless:
 - 1) The concrete is struck with a pneumatically vibrated "floater screed."
 - 2) A highway straight edge is used to true the surface perpendicular to the direction of the screeding.
 - 3) A satisfactory finish is produced on a trial slab.
 - i. Submit a screeding and finishing plan for approval.
 - 1) A representative trial slab pour shall be provided to demonstrate that the specified tolerances and a satisfactory surface can be provided by the proposed method of screeding and finishing.

D. Subgrade for slabs on grade:

1. Subgrade shall be well drained and of adequate and uniform load bearing nature.
 - a. Keep in-place density of subgrade soils at least to minimum indicated.
2. Keep subgrade free of frost before concrete placing begins.

- a. If temperature inside a building where concrete is to be placed is below freezing, raise temperature and maintain above 50 degF long enough to remove frost from subgrade and reinforcing.
3. Keep subgrade moist at time of concreting.
 - a. If necessary, dampen with water in advance of concreting.
 - b. Allow no free water standing on subgrade nor muddy or soft spots when concrete is placed.

3.6 PROTECTION

- A. Unless adequate protection is provided and approval is obtained, do not place concrete when temperature is below freezing or during rain, sleet or snow.
- B. Do not allow rainwater to increase mixing water nor to damage surface finish.
- C. Concrete damaged by rain or weather and judged defective by Architect shall be removed and replaced by Contractor at no additional cost to Owner or corrected by procedures listed in Section "Testing and Acceptance."

3.7 CONVEYING

- A. Handle concrete from mixer to place of final deposit as rapidly as practicable by methods which prevent segregation or loss of ingredients and assure that quality is maintained.
- B. Use equipment conforming to ASTM C94.
- C. Use horizontal belt conveyors or mount at a slope which will not cause excessive segregation or loss of ingredients.
 1. Protect concrete against undue drying or rise in temperature.
 2. Handle to prevent segregation.
 3. Do not allow mortar to adhere to belt.
 4. Discharge long runs into a hopper or through a baffle.
- D. Use metal or metal-lined chutes with slope between 1 vertical and 2-3 horizontal.
 1. Chutes more than 20 FT long and chutes not meeting slope requirements may be used provided they discharge into a hopper before distribution.
- E. Pumping or pneumatic conveying equipment shall be of suitable kind with adequate pumping capacity.
 1. Control pneumatic placement so that segregation is not apparent in discharged concrete.
 2. Loss of slump in pumping or pneumatic conveying equipment shall not exceed 2 IN.
 3. Do not convey concrete through pipe made of aluminum or aluminum alloy.

3.8 DEPOSITING IN FORMS

- A. Work includes:
 1. Deposit concrete continuously or in layers of such thickness that no concrete is deposited on concrete which has hardened sufficiently to cause formation of seams or planes of weakness within section.
 2. Place at such a rate that concrete which is being integrated with fresh concrete is still plastic.
 3. Do not deposit concrete which has partially hardened or has been contaminated by foreign materials.
 4. Remove temporary spreaders in forms when concrete placing has reached an elevation rendering their service unnecessary.
 5. They may remain embedded in concrete only if made of metal or concrete and if prior approval has been obtained.
- B. Do not start placing concrete in supported elements until concrete previously placed in columns and walls is no longer plastic and has been in place at least two hours.

- C. Deposit concrete as nearly as practicable in its final position to avoid segregation due to re-handling or flowing.
 - 1. Do not subject concrete to procedure which will cause segregation.
 - 2. Concrete shall not drop more than 6 FT unless approved by the Owner. For greater heights, provide special mix design, chutes, spouts, tremies, or other approved method.
- D. Concrete buckets shall be equipped with rubber discharge tubes.
 - 1. Tube size shall be effective in directing flow of concrete directly downward between reinforcing.
 - 2. Unless it can be demonstrated, no segregation will occur with greater distances, maximum free fall distance of concrete below flexible tube is limited to 4 FT.
- E. Consolidation:
 - 1. Consolidate concrete by vibration, so that concrete is thoroughly worked around reinforcement, around embedded items and into corners of forms eliminating air or stone pockets which may cause honeycombing, pitting, or planes of weakness.
 - 2. Use internal vibrators having a minimum frequency of 8000 vibrations per minute to consolidate concrete effectively.
 - 3. Do not use vibrators to transport concrete within forms.
 - 4. Insert vibrators and withdraw at points approximately 18 IN apart.
 - 5. At each insertion allow duration sufficient to consolidate concrete but not sufficient to cause segregation; generally from 5 to 15 sec.
 - 6. Where concrete is to have an as-cast finish, bring a full surface of mortar against form by vibration process, supplemented if necessary by spading, to work coarse aggregate back from formed surface.

3.9 SLAB PLACEMENT

- A. Coordinate mixing and placing with finishing.
 - 1. Do not place concrete on subgrade or forms more rapidly than it can be spread, straight edged, and darbled or bull floated.
 - 2. Perform these operations before bleed water has an opportunity to collect on surface.
- B. To obtain good surfaces and avoid cold joints, plan size of finishing crews with due regard for effects of concrete temperature and atmospheric conditions on rate of hardening of concrete.
 - 1. If construction joints become necessary, construct as required under joints and embedded items.
- C. Consolidation:
 - 1. Thoroughly consolidate concrete in slabs.
 - 2. Use internal vibration in beams and girders of framed slabs and along bulkheads of slabs on grade.
 - 3. Obtain consolidation of slabs with vibrating screeds, roller pipe screeds, internal vibrators, or other approved means.

3.10 JOINTS AND EMBEDDED ITEMS

- A. Construction joints, other than slab on grade:
 - 1. Locate joints not indicated so as to least impair strength of structure.
 - a. Place joints in locations approved by Owner.
 - 2. In general, locate near middle of spans of slabs, beams, and girders unless a beam intersects a girder at this point, in which case, offset joint in girder a distance equal to twice width of beam.
 - a. Locate joints in walls and columns at underside of floors, slabs, beams, or girders and at tops of footings or floor slabs.
 - b. Place beams, girders, brackets, column capitals, haunches, and drop panels at same time as slabs.
 - c. Make joints perpendicular to main reinforcement.
 - 3. Continue reinforcement across joints.

4. Clean surface of concrete at joints thoroughly and remove laitance.
 - a. Prior to placing adjoining concrete, dampen (but do not saturate) hardened concrete of construction joints.
- B. Joints in slabs-on-grade:
 1. Construction joints:
 - a. Place keyed dowelled or diamond plate construction joints as indicated on plans and at locations where a slab placement is terminated or interrupted.
 - b. Size of placements and sequence of slab placement is Contractor's option, except construction joints shall be located at a control joint location.
 - c. Construction joints act as control joints.
 2. Control joints:
 - a. Provide contraction (control) joints as indicated.
 - b. If not shown, provide along column centerlines.
 - c. Where column centerline spacing or spacing between column centerlines and walls exceeds 30 FT, provide an intermediate joint(s) at intervals not exceeding 30 FT. Locate joints to produce panels that are as square as possible with the length no more than 1.5 times the width
 - d. Also provide joints where change in slab width occurs, such as at block-outs, pits, etc.
 - e. If saw cut joints are required or permitted, time cutting properly with set of concrete by one of the following methods
 - 1) Start cutting as soon as concrete has hardened sufficiently to prevent aggregates being dislodged by saw. Complete sawing within 12 hours after placement.
 - 2) The soff cut saw shall be used within two hours of final finishing.
 - a) Cut depth not less than 10 percent of slab thickness with a 1-inch minimum.
 - b) Remove debris in path of cut and under Skid Plate before cutting. Skid Plate must remain flat on surface.
 - c) Use Soff-Cut blades and Skid Plates, using a new Skid Plate with each new blade.
 - d) Install Soff-Cut joint protector at saw-cut intersection prior to cross-cut.
 - e) Remove dry powder without disturbing finish.
 - f) Avoid traffic across saw cut until sufficient strength is gained to protect joint edges.
 - 3) If an alternate method or timing is proposed, submit detailed plans for review and acceptance.
 3. Complete before shrinkage stresses become sufficient to produce cracking.
 4. Isolation joints:
 - a. Provide isolation joints around columns, and between slab on grade and walls.
 - b. Also provide isolation joints around equipment or machinery isolation pads, pits, pipes, etc., unless detailed otherwise.
- C. Expansion joints:
 1. Do not permit reinforcement or other embedded metal items bonded to concrete, except dowels in floors bonded on only one side of joints, to extend continuously through expansion joint.
 2. Locate expansion joints as indicated.
- D. Place sleeves, inserts, anchors, and embedded items required for adjoining work or for its support, prior to concreting.
 1. Give Contractors whose work is related to concrete or supported by it ample notice and opportunity to introduce and/or furnish embedded items before concrete placement.
 2. Position expansion joint material, waterstops, and other embedded items accurately and support against displacement.
 3. Fill voids in sleeves, inserts and anchor slots temporarily with readily removable material to prevent entry of concrete.

3.11 BONDED JOINTS

- A. At construction joints indicated as bonded, obtain bond by one of following methods:
1. Roughen surface of concrete in an approved manner which will expose aggregate uniformly and not leave laitance, loosened particles of aggregate or damaged concrete at surface.
 - a. Dampen (but do not saturate) hardened concrete of joints in exposed work; joints in middle of beams, girders, joists, and slabs; and joints in work designed to contain liquids.
 - b. Thoroughly cover with a coat of cement grout of similar proportions to mortar in concrete.
 - c. Use grout as thick as possible on vertical surfaces and at least 1/2 IN thick on horizontal surfaces.
 - d. Place fresh concrete before grout has attained its initial set.
 2. Prepare joints receiving an adhesive and apply adhesive in accordance with manufacturer's recommendations prior to placing of fresh concrete.
 3. Prepare surfaces of joints which have been treated with a chemical retarder in accordance with manufacturer's recommendations prior to placing of fresh concrete.

3.12 CURING AND PROTECTION

- A. Work includes: Beginning immediately after placement, protect concrete from premature drying, hot or cold temperatures, and mechanical injury, and maintain with minimal moisture loss at relatively constant temperature for period necessary for hydration and hardening of concrete. Materials and methods of curing subject to approval.
- B. Preservation of Moisture:
1. Interior Slabs:
 - a. Application of sheet curing materials.
 - b. Application of strippable curing compound.
 - 1) Submit written approval from floor covering manufacturer prior to use.
 - 2) Apply in accord with recommendations of manufacturer immediately after water sheen, which may develop after finishing, has disappeared.
 - 3) Apply continuous film at manufacturer's specified rate.
 - 4) Completely remove prior to application of floor covering material.
 2. Other concrete surfaces not in contact with forms apply one of following procedures immediately after completion of placement and finishing:
 - a. Ponding or continuous sprinkling.
 - b. Application of absorptive mats or fabric kept continuously wet.
 - c. Application of sand kept continuously wet.
 - d. Continuous application of mist spray, not exceeding 150 degF.
 - e. Application of sheet curing materials.
 - f. Application of other moisture-retaining covering as approved.
 - g. Application of curing compound.
 - 1) Apply in accord with recommendations of manufacturer immediately after water sheen, which may develop after finishing, has disappeared.
 - 2) Apply continuous film at manufacturer's specified rate.
 - 3) Do not use on surface against which additional concrete or other material is to be bonded, unless it is proven that curing compound will not prevent bond or positive measures are taken to remove curing compound completely from areas to receive bonded applications.
 3. Minimize moisture loss from surfaces placed against wooden forms or metal forms exposed to heating by sun by keeping forms wet until they can be safely removed.
 - a. After form removal cure concrete until end of time prescribed.
 4. Continue curing in accordance with ACI 318. Seven days for most concrete.
 - a. If tests made of cylinders, kept adjacent to structure and cured by same methods, indicate average compressive strength has reached 70 percent of specified strength, (fc'), moisture retention methods may be terminated.

- b. If one of curing procedures indicated above is used initially, it may be replaced by one of other procedures indicated any time after concrete is 1 day old, provided concrete is not permitted to become surface dry during transition.
- C. Temperature, wind and humidity:
 - 1. Cold weather:
 - a. When mean daily outdoor temperature is less than 40 degF maintain temperature of concrete between 50 and 70 degF for required curing period.
 - b. When necessary make arrangements for heating, covering, insulating, or housing concrete work adequate to maintain required temperature without injury.
 - c. Do not use combustion heaters during first 24 hours unless precautions are taken to prevent exposure of concrete to exhaust gases which contain carbon dioxide.
 - 2. Hot weather:
 - a. When necessary make provision for windbreaks, shading, fog spraying, sprinkling, ponding, or wet covering with a light colored material.
 - b. Take such protective measures as quickly as concrete hardening and finishing operations will allow.
 - 3. Rate of temperature change:
 - a. Keep changes in temperature of air immediately adjacent to concrete during and immediately following curing period as uniform as possible.
 - b. Do not exceed 5 degF in any 1 hour or 50 degF in any 24-hour period.
- D. Protection from mechanical injury:
 - 1. During curing period, protect concrete from damaging mechanical disturbances, such as load stresses, heavy shock, and excessive vibration.
 - 2. Protect finished concrete surfaces from damage by construction equipment, materials, or methods, and by rain or running water.
 - 3. Do not load self-supporting structures in such a way as to overstress concrete.
- E. Protection of slabs-on-grade from frost:
 - 1. Interior slabs exposed to freezing temperatures shall be adequately protected so that frost does not develop in supporting subgrade.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

SECTION 08 71 00
HARDWARE - PADLOCK

Part 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes ancillary commercial gate hardware for the following:
 - 1. Swinging pedestrian gates
 - 2. Swinging driveway gates
 - 3. Sliding gates.
 - 4. Other gates to the extent indicated.
- B. Gate hardware includes, but is not necessarily limited to, the following:
 - 1. Padlocks.
- C. Related Sections:
 - 1. Section 32 31 16 Welded Wire Fences and Gates.
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 101 - Life Safety Code.
 - 4. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Gate Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Gate Hardware Schedule with gates, and related work to ensure proper size, thickness, hand, function, and finish of gate hardware.
 - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 - 2. Organization: Organize the Gate Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Gate Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Gate Hardware Sets will be rejected and subject to resubmission.
 - 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each gate hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of gate hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for gate hardware.

- C. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.
- D. Warranties and Maintenance: Special warranties and maintenance agreements specified in this Section.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type and variety of Door Hardware specified in this Section from a single source, qualified supplier unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- B. Regulatory Requirements: Comply with, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the model building code including, but not limited to, the following:
 - 1. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:
 - 2. NFPA 101: Comply with the following for means of egress doors:
 - a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.
 - b. Thresholds: Not more than 1/2 inch high.
- C. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory gate hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Gate Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, access control credentials, and related accessories directly to Owner via registered mail or overnight package service.

1.6 WARRANTY

- A. General Warranty: Attachment F - General Provisions warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Faulty operation of the hardware.
 - 2. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

1.7 MAINTENANCE SERVICE

- A. Continuing Service: Beginning at Substantial Completion, and running concurrent with the specified warranty period, provide continuous (6) months full maintenance including repair and replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door opening operation. Provide parts and supplies as used in the manufacture and installation of original products.

Part 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
1. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
- a. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- B. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 AUXILIARY LOCKS

- A. Hidden Shackle Padlock: Heavy-Duty High Security Hidden Shackle Padlock. 3/8" Dia., Boron Alloy –Iron Shrouded Shackle. Solid Steel, 2-3/8" Thick Body, 5 pins, keying per Owner standard.
1. Basis of Design:
- a. MASTER LOCK 6T410 Series
- b. Or approved equal

2.3 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

Part 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

3.2 INSTALLATION

- A. Install each item of mechanical hardware comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
- C. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.3 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.4 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.5 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. and provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.6 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.7 DOOR HARDWARE SCHEDULE

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made

prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

Hardware Schedule

Set: 01

All Gates

- | | | |
|---|------------------------|--|
| 1 | Hidden Shackle Padlock | Match Omnitrans Existing
Key System |
|---|------------------------|--|

Part 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

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SECTION 31 11 00
SITE PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Site clearing and grubbing of trees, stumps, undergrowth, brush, trash, grass, weeds, roots, rubbish, refuse, or other debris, modifying irrigation systems, stripping of topsoil and protecting trees within the limits of excavation, embankment, borrow, and other areas as shown on the Contract Plans or required to perform the Work of this Contract.
- B. Related Specification Sections include but are not necessarily limited to:
 - 1. Division 01 - General Requirements.
 - 2. Section 31 11 50 - Demolition, Cutting, and Patching.

1.2 SUBMITTALS

- A. General:
 - 1. Submittals shall be made in accordance with Division 01 requirements.
- B. Site Clearing Plan:
 - 1. A site clearing plan must be prepared by the Contractor and submitted to the Owner for acceptance prior to commencing work. The site clearing plan shall include:
 - a. Location and limits of clearing and grubbing.
 - b. Methods for protection of areas of vegetation designated as “no construction zones” and trees noted in plans to be saved.
 - c. Methods to be employed and equipment to be used.
 - d. Safety measures including signs, barriers, temporary walkways and hand railing.
 - e. Haul routes and disposal sites.
 - f. Permits for transport of materials off the Work Site where applicable and other permits as required by local agencies, project environmental documents and the project Plans.
- C. Permits, Notices, Certifications and Authorizations:
 - 1. The following permits, notices, certifications and authorizations shall be obtained with copies submitted by the Contractor to OWNER:
 - a. Delivery manifests for disposed materials in accordance with site clearing plan and permit conditions in accordance with Division 01 requirements.
 - b. Private property owner’s release for material removed and deposited on private property in accordance with Division 01 requirements.
 - 1) Releases shall absolve OWNER and its member agencies from any responsibility in connection with the disposal of materials on private property.
 - 2) Releases shall be signed by the owner(s) of the property on which the material will be deposited.
 - 3) Two copies of the releases must be submitted to the Owner for approval not more than 15 days before the start of material being deposited on private property.
 - c. Disposal Certification for materials removed from Job Site indicating they have been disposed of in accordance with applicable laws and regulations in accordance with Division 01 requirements.

1.3 ENVIRONMENTAL CONDITIONS

- A. On site burning or burial of site clearing materials will not be allowed.
- B. The Contractor must take possession of material and debris collected from site clearing procedures and shall be responsible for disposing of them in accordance with these Specifications, any project permits, and applicable laws and regulations in accordance with Division 01 requirements.

- C. Contractor shall provide noise abatement in accordance with Division 01 requirements.
- D. Site cleanliness, sweeping and dust control shall be in accordance with Division 01 requirements.

PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect existing trees, other vegetation, and existing site improvements on OWNER or adjacent property that are to remain.
 - 1. Do not smother trees by stockpiling construction materials or excavated materials within drip line.
 - 2. Avoid foot or vehicular traffic or parking of vehicles within drip line of trees or shrubs.
 - 3. Provide barricades, coverings, temporary fencing, or other types of temporary protection as required by the Project environmental documents or the Owner in accordance with the Plans and these Specifications.
- B. Repair or replace trees, vegetation, and existing site improvements including modifying irrigation systems that are to remain that are damaged by construction operations.
 - 1. Repair of damaged trees and shrubs to be performed by a certified arborist or tree surgeon.
 - 2. Remove trees that are damaged to the extent that a certified arborist or tree surgeon determines cannot be repaired and restored to full-growth status.
 - a. Replace with new trees of minimum 4 IN caliper.
 - 3. Damaged vegetation shall be replaced in-kind as approved by the Owner.
 - 4. Existing site improvements will be repaired or replaced as approved by the Owner.
 - 5. Irrigation systems shall be modified as shown in the Plans.
- C. OWNER will obtain authority for removal and alteration work, as required by the Plans, on adjoining property prior to Contractor starting work.
- D. Within the limits of clearing, all stumps, roots, root mats, logs, debris and other objectionable material shall be removed as follows:
 - 1. Grubbing shall extend to the outside excavation and fill slope lines except where tops of slopes are to be rounded. In these locations, the areas shall extend to the outside limits of slope rounding.
 - 2. Grub where subdrainage trenches will be dug, unsuitable material removed, or structures built.
 - 3. Grub areas in which hillsides or existing embankments will be terraced.
 - 4. Grub areas upon which embankments, foundations or other structures will be placed.
 - a. Areas beneath embankments greater than 3 FT in depth shall be free from all vegetation and roots to a depth of 6 IN below the ground surface (after topsoil has been removed).
 - b. For embankments 3 FT in depth or less, roots that are over 2 IN DIA shall be removed to a depth of 1 foot below ground surface.

3.2 CLEAN-UP

- A. Remove and dispose of barricades, coverings or other protections used to prevent damage to existing vegetation or improvements upon clean-up of the Work.

3.3 SCHEDULE

- A. Contractor must complete clearing and grubbing work far enough in advance of other operations to permit the placement of construction stakes. Construction schedule shall be adjusted so cleared areas are not left susceptible to erosion or sediment runoff due to weather.

3.4 ACCEPTANCE

- A. Upon completion of the site clearing, obtain OWNER's written acceptance of the extent of clearing, depth of stripping, and removal of deleterious material.

PART 4 - MEASUREMENT AND PAYMENT

- A. Site Clearing (clearing and grubbing) will be measured by lump sum. The Contract Lump Sum Price shall include full compensation for furnishing all labor, materials, fees, tools, equipment, and incidentals for doing all work involved in clearing and grubbing, removals, disposal of materials at a legal dump site (see 1.2, C above), and other incidental site clearing activities as shown on the plans, and as specified in these Specifications.
- B. The Contract Lump Sum Price for Site Clearing shall include full compensation for preparing and gaining approval of the Site Clearing Plan.

END OF SECTION

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SECTION 31 11 50
DEMOLITION, CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes but is not limited to:
1. Demolition, removal and disposal, salvage, cutting and patching of existing construction, surface or subsurface, where shown on Plans, or as required to accommodate new work shown or specified; including backfilling of excavations and depressions to restore the Work Site to final grade.
 2. Demolition, removal and disposal of existing Reinforced Concrete Pipe (RCP), Portland Cement Concrete Pavement (PCCP), Asphalt Concrete Pavement (ACP), Polyvinyl Chloride Pipe (PVC), Corrugated Metal Pipe (CMP) storm drain where shown on Plans, and other related manmade features or as required to accommodate new work shown.
 3. Demolition, removal and disposal of existing Under Drain (UD) pipe and UD cleanouts where shown on Plans, or as required to accommodate new work shown.
 4. Demolition, removal and disposal of existing storm drain manholes, inlets and headwalls where shown on Plans, or as required to accommodate new work shown.
 5. Saw cut of existing concrete pavement, existing Asphalt Concrete / HMA pavement at the locations shown on the Contract Plans or as required to perform the Work of this Contract.
 6. Removal of existing HMA pavement and Aggregate Base (AB) Material at the locations shown on the Contract Plans or as required to perform the Work of this Contract.
 7. Removal and disposal of existing chain link fence as shown on the contract plans or required to perform the Work of this Contract.
 8. Demolition and removal of existing minor structures (bollards, planter, manholes, storm drain inlets, headwalls) as shown on the Contract Plans or required to perform the Work of this Contract.
 9. Removal and disposal of existing pavement markings and markers as shown on the Contract plans or required to perform the Work of the Contract.
- B. Related Specification Sections include but are not necessarily limited to:
1. Division 01 - General Requirements.
 2. Section 31 11 00 - Site Preparation.
 3. Section 31 22 00 – Site Excavation

1.2 SUBMITTALS

- A. General
1. Submittals shall be made in accordance with requirements.
- B. Contractor shall provide a Site Demolition Plan:
- a. Proposed materials and methods to be used for cutting and patching, or matching and repairing existing construction to remain.
 - b. Safety measures including signs, barriers, temporary walkways and hand railing.
 - c. Haul routes and disposal sites.
 - d. Traffic control measures or traffic plan where required by Contractor's proposed methods in accordance with Division 01 requirements.
 - e. Identification of permits as required by the project environmental documents, federal, state or local agency in accordance with requirements.
- C. Contractor shall provide copies of notices, permits, certifications and authorizations:
1. Copies of demolition authorization permits and other permits as required by project environmental documents, federal, state or local agency in accordance with requirements.
 2. Delivery manifests for materials hauled and disposed by Contractor.
 3. Private Property Owner's Release for material removed from the OMNITRANS project site and

deposited on private property.

- a. Releases shall absolve OMNITRANS and its member agencies from any and all responsibility in connection with the disposal of materials on private property.
 - b. Releases shall be signed by the owner(s) of the property on which the material will be deposited.
 - c. Two copies of the releases shall be submitted to the Owner for approval a minimum of 15 days prior to the start of material being deposited on private property.
4. Disposal Certification for materials removed from Job Site indicating they have been disposed of in accordance with applicable laws and regulations.
- D. Contractor shall provide material certification:
1. Indicating manufacturer and type of proposed nonshrink grout and/or epoxy bonding adhesive for patching or repairs to existing concrete structure to remain.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. General:
1. Contractor to salvage items, designated for Owner's salvage, as a functional unit.
 2. Clean, list and tag each item in a manner acceptable to the Owner for storage.
 3. Protect salvage items from damage and deliver to location designated in the Plans or as directed by the Owner.
 4. Salvage each item with auxiliary or associated equipment required for operation.
- B. Demolished Materials:
1. On-site burning or burial of demolished materials will not be permitted.
 2. Contractor shall take possession of all demolished materials except as noted in the Contract Documents to be salvaged.
 3. Contractor shall be responsible for disposing of demolished materials in accordance with applicable federal, state and local laws and regulations in accordance with Division 01 requirements.
- C. Environmental Requirements:
1. Cleanliness, Sweeping and Dust Control shall be maintained in accordance with Division 01 requirements.
 2. Contractor will provide noise abatement as required by environmental permits or local agency requirements in accordance with Division 01 requirements.

1.4 SEQUENCING AND SCHEDULING

- A. Coordinate and reschedule work as required to avoid interference with other operations of Omnitrans, as identified in the Construction Documents or in accepted schedule of site demolition, cutting and patching.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

2.2 MATERIALS

- A. Nonshrink Grout:
1. Nonmetallic, noncorrosive and nonstaining.
 2. Premixed with only water to be added in accordance with manufacturer's instructions at jobsite.
 3. Grout to produce a positive but controlled expansion. Mass expansion not to be created by gas liberation or by other means.
 4. Minimum compressive strength at 28 days to be 6500 psi.
 5. Coat exposed edges of grout with a cure/seal compound recommended by grout manufacturer.
- B. Epoxy Bonding Adhesive:
1. Two component, moisture insensitive adhesive manufactured for the purpose of bonding fresh concrete to hardened concrete.
- C. Other Temporary or Permanent Material:

1. Other temporary or permanent Material shall be provided by the Contractor for proper execution of work in this Section.

PART 3 - EXECUTION

3.1 GENERAL

- A. No party other than the Contractor shall remove demolished material from Omnitrans property.
- B. Contractor shall perform the demolition, removal, salvage, cutting and patching (including handling of demolished debris) in accordance with the Contract Plans, Project Specifications and the submitted and approved Site Demolition Plan.
- C. Sawcut Existing Pavement and Remove Structural Sections:
 1. Remove Structural Sections (Existing HMA Pavement) includes the removal of existing AC/HMA pavement and AB base to the limits shown in the plans.
 2. The outline of the AC/HMA surface to be removed shall be cut on neat lines along score lines where they exist with a power-driven saw to a minimum depth of 0.15 FT before removing the surfacing. Surfacing and base shall be removed without damage to surfacing that is to remain in place. Damage to pavement which is to remain in place shall be repaired to a condition satisfactory to the Owner, or the damaged pavement shall be removed and replaced with new asphalt concrete if ordered by the Owner. Repairing or removing and replacing pavement damaged outside the limits of pavement to be replaced shall be at the Contractor's expense and no compensation will be provided thereof.
 3. Removed materials shall become the property of the Contractor and shall be disposed of outside the public right of way in conformance with the provisions in Section 300-1.3 "Removal and Disposal of Materials" of the Standard Specifications for Public Works Construction 2009.
 4. All concrete that is to be removed shall be saw cut and removed to the next expansion joint or score mark. All asphalt removals shall be to a clean saw cut line. All cuts are to be perpendicular to the curb and gutter with no longitudinal cuts. No diagonal cuts will be allowed. Any curb, gutter, or sidewalk sections which are to be removed and/or reconstructed shall be replaced in minimum 5 FT sections.
- D. Remove Existing Chain Link Fence:
 1. Remove Existing Chain Link Fence includes the removal of existing metal chain link fence wire mesh, fence post, and fence post foundation at the locations shown in the Plans.
 2. Damage to fencing which is to remain in place shall be repaired to a condition satisfactory to the Owner, or the damaged fence shall be removed and replaced with new fencing if ordered by the Owner. Repairing or removing and replacing fencing damaged outside the limits shown in the plans shall be at the Contractor's expense and no compensation will be provided thereof.
 3. Removed materials shall become the property of the Contractor and shall be disposed of outside the public right of way in conformance with the provisions in Section 01 74 19 - Construction Waste Management and Disposal and reference Section 300-1.3 "Removal and Disposal of Materials" of the Standard Specifications for Public Works Construction 2009.
- E. Remove Existing Bollards, Headwalls, Manholes, and Inlets:
 1. Remove Existing Bollards, Planter, Headwalls, Manholes, and Inlets include the removal of existing reinforced concrete storm drain headwalls, manholes, and inlet structures as shown on the Plans.
 2. Removed structures shall be removed in conformance with the provisions in Section 15-3, "Removing Concrete," of the Caltrans Standard Specifications.
- F. Removed materials shall become the property of the Contractor and shall be disposed of outside the public right of way in conformance with the provisions in Section 01 74 19 - Construction Waste Management and Disposal and reference Section 300-1.3 "Removal and Disposal of Materials" of the Standard Specifications for Public Works Construction 2009.
- G. All demolition materials shall be removed to a legal disposal site. Burning of materials will not be allowed. The roadway and adjacent areas shall be left with a neat and finished appearance.

3.2 EXISTING STRUCTURES AND RELATED FACILITIES

- A. Where demolition is indicated, remove and dispose of:
 - 1. Existing fences as identified in the Plans.
 - a. Coordinate fence removal with maintaining temporary and permanent site security.
 - b. Fence removal shall be done to the nearest post to provide clean removal limits.
 - c. Fence removal shall include the fence posts and fence post foundations.
 - 2. Temporary fences when no longer required to protect and secure the construction site.
 - 3. Structures in their entirety or portions to be demolished as indicated in the Plans.
 - a. Exposed remaining concrete faces shall be saw cut to neat lines or finished with epoxy binder and non-shrink grout.
 - b. Concrete shall be removed as required, and any remaining concrete to be utilized in the finished work or left as an existing structure shall be protected from damage and finished with epoxy binder and non-shrink grout or as indicated in the Plans.
 - 4. Obstructions in their entirety or portions of obstructions as indicated in the Plans; including abandoned concrete signal foundations, footings and bases located within the right-of-way shall be demolished.
 - 5. Removal and disposal shall be in accordance with these Specifications and the submitted and approved site demolition plan.
- B. Where salvage of material or portions of structures and related facilities is indicated, material shall be carefully removed as shown in the plans for installation of new work and neatly stacked at a location approved in advance by and in accordance with the approved Site Demolition Plan. The materials shall be left in a satisfactory condition for use by as identified in the Plans or in future projects.
- C. The Contractor shall replace or repair, at no expense to OMNITRANS, any existing structure or portion of existing structure or related facility designated to remain that is damaged during removal of the portions designated for demolition.

3.3 PAVEMENT

- A. Pavement shall be demolished as indicated in the Plans and removed in accordance with the submitted and approved Site Demolition Plan.
- B. Pavement shall be removed to clean, straight lines. Saw cutting of edges to be joined is required. Saw cuts shall be a minimum depth of 1-1/2 IN.
 - 1. Portland cement concrete pavement (PCCP) removal shall have a second full depth relief saw cut offset 12 to 18 IN parallel to the initial saw cut unless approved otherwise.
 - 2. If a saw cut in concrete falls within three feet of a construction joint, cold joint, expansion joint, or edge, the concrete shall be removed to the joint or edge.
- C. The Contractor shall replace at no expense to OWNER any existing pavement designated to remain that is damaged as a result of Contractor activities.
- D. All existing pavement markings and markers that are being relocated or removed shall be removed by sand blasting.

3.4 WIRING AND POLES

- A. Wiring and Poles designated to be removed by the Contractor shall be removed in accordance with the Plans and the approved Site Demolition Plan. No work shall be performed until clearance to proceed has been provided by the Owner.

3.5 UTILITIES

- A. Demolition of existing utilities removed by others if shown in the Plans shall be coordinated by the Contractor with the utility companies and agencies in accordance with Division 01 of these Specifications and the approved Site Demolition Plan.
- B. Existing utilities shall be permanently or temporarily rerouted/relocated and deemed operational by

OWNER before the existing utilities are taken out of service.

- C. The Contractor shall cap and plug storm drain (sanitary sewer) and underdrains in accordance with the utility owner's standard details and instructions. Cap and plug pipe and other conduits abandoned due to demolition, with approved type caps and plugs as required by the utility owners.

3.6 BACKFILL OF DEMOLITION EXCAVATIONS

- A. Any shoring used for support of demolition excavations shall be removed.
- B. Excavations created by demolition activities shall be backfilled and compacted.

3.7 CLEANING OF RIGHT-OF-WAY

- 1. The Contractor shall, upon completion of the work to be performed within the right-of-way and/or properties of the Railroad and adjacent to its tracks, wire lines and other facilities, promptly remove from the Railroad right-of-way all Contractor's tools, implements and other materials whether brought upon the right-of-way by the Contractor or any subcontractors employee or agent of Contractor or of any subcontractor, and leave the right-of-way in a clean and presentable condition to the satisfaction of the Railroad.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work for Site Demolition, Cutting and Patching completed in accordance with the Contract Documents shall be considered incidental to Work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. This price shall be considered full compensation for furnishing all labor, materials, tools, equipment, cutting, patching, dump fees and incidentals required for doing all work to complete the work as shown. Work shall include, but not be limited to, removing/hauling and disposing of concrete, concrete post foundations, base plates, bolts, utilities, wiring, conduit, fencing (removal and/or salvage), paving and salvage of existing signs, as shown on the Plans, the Site Demolition Plan and as may be described elsewhere in Contract Documents.

END OF SECTION

SECTION 31 22 00
SITE EXCAVATION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Definitions:
 - 1. Unsuitable material: Debris and/or soil material judged unsuitable by Owner for support of slabs or other site improvements.

1.2 EXTRA WORK

- A. Removal and replacement of unsuitable material below design elevations will be paid for as extra work.
 - 1. Notify Owner's agent in time to have Owner measure and record quantity removed.
 - 2. Recorded quantity will be basis for payment.
 - 3. Include unit price per cubic yard on Bid Form.

1.3 QUALITY ASSURANCE

- A. Compaction density test:
 - 1. Standard Proctor, ASTM-D698.
- B. Layout work by Surveyor or Civil Owner registered in the State of California.
- C. Tolerances of sub-grade:
 - 1. Unsurfaced areas: Plus/minus 0.20 FT from required elevations.
 - 2. Paved areas: Plus/minus 0.10 FT from required elevations.

1.4 JOB CONDITIONS

- A. Protect existing facilities, utilities (overhead and underground), sidewalks, pavement.
 - 1. Repair damaged items.
 - 2. Cost of repair to items not indicated paid by Owner.
 - 3. Notify Owner and make emergency repair as directed.
- B. Protect graded areas against erosion.
 - 1. Re-establish grade where settlement or washing occurs at no extra cost.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Fill materials:
 - 1. Reasonably free of roots, organic material, trash, frozen matter, and stones larger than 6 IN.
 - 2. Add water to dry material, as required.
 - 3. Allow wet material to dry, as required.
 - 4. Fill can only be obtained on site where removed from excavating and grading.
 - 5. Provide additional off-site borrow or fill as required, at no extra cost.
- B. Surplus material:
 - 1. Remove from site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Layout units, structures, piping, roads, parking areas and walks and establish their elevations.
- B. Perform other layout work required.
- C. Replace property corner markers to original location if disturbed or destroyed.

3.2 GENERAL

- A. Excavate for miscellaneous footings, slabs, walks and other structures.
- B. Maintain ditches and drains to provide drainage.
- C. Provide pumping if required.
- D. Do not fill under footings. If excavation is deeper than necessary, fill with concrete of same strength as footing concrete.
- E. Remove unsuitable materials which cannot be compacted as specified and replace with suitable material.
 - 1. Dispose material on site as directed.
 - 2. Dispose material off site as directed.
- F. Remove materials unsuitable to receive fill and replace with suitable material.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

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SECTION 32 13 13
CONCRETE PAVING

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

- A. The Conditions of the Contract and Division 1 apply to this section as fully as if repeated herein.

1.2 WORK INCLUDED

- A. Provide all equipment and materials to perform all work necessary to construct the exterior concrete paving work, complete, as indicated on the Plans and as specified.
1. Pedestrian concrete paving shall include but is not limited to: concrete sidewalks and accessibility ramps, patio areas.
 2. Vehicular concrete paving shall include but is not limited to: drive aisles, access ways, and associated vehicular ramps.

1.3 RELATED WORK

- A. Division 03 – Concrete
Section 32 13 23 – Special Concrete Finishes

1.4 REFERENCES

- A. ASTM C33 – Standard Specification for Concrete Aggregates
- B. ASTM C94 – Standard Specification for Ready-Mixed Concrete
- C. ASTM C150 – Standard Specification for Portland Cement
- D. ASTM C260 – Standard Specification for Air Entraining Admixtures for Concrete
- E. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete
- F. ASTM C309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
- G. ACI 117 – Tolerances for Concrete Construction and Materials
- H. ACI 301 – Structural Concrete
- I. ACI 303.1 – Cast-in-Place Architectural Concrete
- J. ACI 305.1 – Hot Weather Concreting
- K. ACI 306.1 – Cold Weather Concreting
- L. ACI 308R – Curing Concrete
- M. ACI 316R-82 – Construction of Concrete Pavements and Concrete Bases
- N. ACI 347 – Formwork for Concrete
- O. SSPWC – Standard Specifications for Public Works Construction
- P. CPUC – California Public Utilities Commission, General Orders 26D and 118
- Q. California Code of Regulations Title 24 CBC

1.5 QUALITY ASSURANCE

- A. Construction minimum standards: State of California Department of Transportation, "Standard Specifications for Road and Bridge Construction," as amended to date.
- B. Should conflicts arise between standard specifications of government agencies mentioned herein and Contract Documents, Contract Documents shall govern.
- C. Where a particular type of material or method is specified, no other type of material or method will be permitted, except as described in SUBSTITUTION PRIOR TO BIDDING section (Instructions to Bidders, Section H, Request for Clarifications/Approved Equals, Exceptions), but balance of State Specifications shall apply.
- D. Work, materials, and color of the handicap ramp paving shall conform to applicable sections of CCR Title 24, Section 1127B and Figures 11B-19A through 19C and 11B-20A through 20E; as well as Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG) for Buildings and Facilities.
- E. Paving work, base course, and related construction, shall be done only after all excavation and construction work which might damage the paving has been completed. Damage caused during construction shall be repaired before acceptance.
- F. Any existing paving area shall, if damaged or removed during the course of this project, be repaired or replaced under this section, unless marked for demolition. Workmanship and materials for such repair and replacement, except as otherwise noted, shall match as closely as possible those employed in existing work.

1.6 SUBMITTALS

- A. Description of Methods and Sequence of Placement.
- B. Shop Plans:
 - 1. Indicating all joint locations identified by type and shown for review
 - 2. Method of keying
- C. Product Data:
 - 1. Concrete mix design
 - 2. Form release agent
 - 3. Prefabricated control joint
 - 4. Preformed joint filler
 - 5. Sealants
 - 6. Slip plane joint
- D. Delivery tickets: Copies of delivery tickets for each load of concrete delivered to the site, showing date, time of loading, time of delivery, class, strength of concrete, Contract number, mix design, slump ordered, type of cement, admixtures, name of purchasing Contractor, batch weights of all materials, number of the revolution counter when the truck left the plant, any water added at the site, and the authorizing person.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Aggregates: protect aggregates staged on-site from weather and contamination.
- B. Cement: protect sacks of cementitious materials from damp or wet conditions.
- C. Formwork: insure form lumber is stored so to preserve shape and structural integrity.

1.8 ENVIRONMENTAL CONDITIONS

- A. Comply with requirements of Division 03 for techniques of placing concrete.

- B. Concrete Paving: schedule placement to minimize exposure to wind and hot sun before curing materials are applied; avoid placing concrete if rain, snow, or frost is forecast within 24 hours. Protect fresh concrete from moisture and freezing.
- C. Formed Concrete: schedule work to minimize differences in curing conditions; when possible, apply curing compound as soon as forms are stripped.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Portland Cement Concrete
 - 1. Ratio per Geotechnical recommendation.
 - 2. Conforming to ACI 325.9F, Guide for Construction of Concrete Pavements and Bases, and ASTM C94 and ASTM C231.
 - 3. Minimum compressive strength at 28 days shall be 3500 psi.
 - 4. Concrete slump shall be no less than 2 inches nor greater than 4 inches, in accordance with ASTM C143.
 - 5. Fine and coarse aggregates shall conform to ASTM C33.
 - 6. Concrete shall contain a water reducing agent to minimize cement and water content of the concrete mix at the specified slump. Water reducing agent shall conform to ASTM C494.
 - 7. No admixtures other than those specified shall be used in the concrete without the specific written permission of the Owner in each case.
- B. Steel Reinforcement:
 - 1. Steel reinforcing bars:
 - a. Shall conform to ASTM A 615.
 - b. Bars employed as reinforcement shall be deformed type.
 - c. Bars employed as dowels shall be hot-rolled plain rounds.
 - d. Unless otherwise indicated on the Plans, reinforcing bars shall be Grade 60.
 - 2. Welded wire fabric reinforcement:
 - a. ASTM-A185 or ASTM-A497.
 - b. Vehicular paving: 6 x 6 - W2.9 x W2.9.
- C. Refer to Section 32 13 23 Special Concrete Finishes for finish information.
- D. Dowels, load transfer devices, tie bars, etc.: ASTM-A615, Grade-60.
- E. Expansion Joint Filler:
 - 1. Preformed, non-bituminous type joint filler conforming to ASTM D 1752, Type II, similar to Sealtight Cork Expansion Joint Filler, or approved equal or ASTM-D545, flexible foam.
 - 2. Thickness:
 - a. Pedestrian: 1/2"
 - b. Vehicular paving and curbs: 1/2"
 - 3. Pre-molded filler shall be one piece for the full depth and width of the joint leaving a sealant recess as indicated. Use caps to match filler width.
 - 4. Use of multiple pieces of lesser dimensions to make up required depth and width of joint will not be permitted.
 - 5. Expansion joint shall receive joint backer rod and shall be sealed with joint sealant.
- F. Sealant:
 - 1. F.S.TT-S-00227F, Type 1, Class A, polyurethane type.
 - 2. Use self-leveling type for horizontal joints.
 - 3. Use gun grade, non-sag type for horizontal and vertical joints.
 - 4. Color of sealant shall be selected by the Owner's Representative from the manufacturer's full color range.
 - 5. Primer shall be that recommended by the sealant manufacturer for the use intended.
 - 6. Joint backing where required shall be as recommended by the sealant manufacturer.

- G. Curing Materials:
1. Curing Blankets:
 - a. Full Term Indoor/Outdoor Curing Blanket for 7 day curing duration.
 - b. Lightweight and non-staining
 - c. Even and flat roll outs.
 - d. Disposable, single use fabric.
 - e. McTEch Group UltraCure disposable blankets for colored or decorative concrete, or approved equal.
 2. Curing Material for Colored Concrete:
 - a. Water-base modified acrylic co-polymer emulsion that doubles as a membrane forming curing compound and a long-lasting sealer
 - b. Quick drying.
 - c. Semi-gloss, non-yellowing and durable barrier against moisture, oil and most stains.
 - d. Dries clear.
 - e. Suitable for use on architectural, colored, sand blasted or exposed aggregate concrete.
 - f. Davis Colors W-1000 Clear Cure and Seal, or approved equal.
 3. Curing Material for Uncolored Concrete:
 - a. Curing shall be by moist curing or by use of curing compound.
 - b. Curing paper shall be non-staining, fiber reinforced laminated Kraft bituminous product conforming to ASTM C 171. 4 mil polyethylene sheeting may be substituted for curing paper.
 - c. Curing compound shall be a resin-base, white pigmented compound conforming to ASTM C 309, Type 2.

PART 3 - EXECUTION

3.1 CONSTRUCTION - GENERAL

- A. Construct to line and grade indicated.
- B. Construct in accordance with State and Federal specifications.

3.2 PREPARATION OF SUBGRADE

- A. Areas to be paved shall be compacted and brought to subgrade elevation per soils report before work of this section is performed. Final fine grading, filling, and compaction of areas to receive paving, as required to form a firm, uniform, accurate, and unyielding subgrade at required elevations and to required lines, shall be done under this Section.
- B. Existing subgrade material which will not readily compact as required shall be removed and replaced with satisfactory materials. Additional materials needed to bring subgrade to required line and grade and to replace unsuitable material removed shall be material conforming to this Section.
- C. Subgrade of areas to be paved shall be re-compacted per soils report.
- D. Excavation required in pavement subgrade shall be completed before fine grading and final compaction of subgrade are performed. Where excavation must be performed in complete subgrade, sub base, base, or pavement, subsequent backfill and compaction shall be performed per soils report.
- E. Areas being graded or compacted shall be kept shaped and drained during construction. Ruts greater than or equal to 2 feet deep in subgrade, shall be graded out, reshaped as required, and re-compacted before placing pavement.
- F. Materials shall not be stored or stockpiled on subgrade.
- G. Disposal of debris and other material excavated under this section, and material unsuitable for or in excess of requirements for completing work of this section shall be disposed of off-site.

- H. Prepared subgrade will be inspected by Soils Engineer.
 - 1. Subgrade shall be approved before installation of gravel base course.
 - 2. Disturbance to subgrade caused by inspection procedures shall be repaired under this section of the specification.

3.3 AGGREGATE BASE COURSE

- A. Aggregate base course for paving and the spreading, grading, and compaction methods employed shall conform to standard requirements for usual base course of this type for first class road work, and the following:
 - 1. Greenbook Standard Specifications for Public Works Construction (SSPWC), Section 200-2.
- B. Aggregate material shall be applied in lifts less than or equal to 6 inches thick, compacted measure. Each lift shall be separately compacted to specified density, using a 6-ton steel wheel roller or vibratory roller equivalent to a 6-ton static roller, or an approved equivalent.
 - 1. Material shall be placed adjacent to wall, manhole, catch basin, and other structures only after they have been set to required grade and level.
 - 2. Rolling shall begin at sides and progress to center of crowned areas, and shall begin on low side and progress toward high side of sloped areas. Rolling shall continue until material does not creep or wave ahead of roller wheels.
 - 3. Surface irregularities which exceed 1/2 inch as measured by means of a 10-foot long straightedge shall be replaced and properly recompacted.
- C. Base course shall be compacted at optimum moisture content to not less than 95% of maximum density as determined by ASTM D 1557.
- D. Subgrade and base course shall be kept clean and uncontaminated. Less select materials shall not be permitted to become mixed with gravel. Materials spilled outside pavement lines shall be removed and area repaired.
- E. Portions of subgrade or of construction above which become contaminated, softened, or dislodged by passing of traffic, or otherwise injured, shall be cleaned, replaced, or otherwise repaired to conform to the requirements of this specification before proceeding with next operation.

3.4 STEEL REINFORCEMENT

- A. Before being placed in position, reinforcing for reinforced concrete shall be thoroughly cleaned of loose mill and rust scale, dirt, ice and other foreign material which may reduce the bond between the concrete and reinforcing. Where there is delay in placing concrete after reinforcement is in place, bars shall be reinspected and cleaned when necessary.
- B. Any bar showing cracks after bending shall be discarded.
- C. Unless otherwise indicated on the Plans, reinforcing shall extend within 2 inches of form work and expansion joints. Reinforcing shall continue through control joints. Adjacent sheets of fabric reinforcing shall lap 6 inches.
- D. After forms have been coated with form release agent, but before concrete is placed, reinforcing steel anchors shall be securely wired in the exact position called for, and shall be maintained in that position until concrete is placed and compacted. Chair bars and supports shall be provided in a number and arrangement satisfactory to the Owner's Representative.

3.5 PORTLAND CEMENT CONCRETE PAVING

- A. Paving mix, equipment, methods of mixing and placing, and precautions to be observed as to weather, condition of base etc., shall meet the requirements of ACI 316R.
- B. Place concrete in accordance with ACI 301.

- C. Owner's Representative shall be notified of concrete placement sufficiently in advance of start of operation to allow his representative to complete preliminary review of the work, including subgrade, forms, and reinforcing steel, if used.
- D. Concrete shall arrive at the job site so that no additional water will be required to produce the desired slump. When conditions develop that require addition of water to produce the desired slump, permission of the Owner's Representative must be obtained. The concrete shall be transported from the mixer to its place of deposit by a method that will prevent segregation or loss of material.
- E. Work shall not be performed during rainy weather or when temperature is less than 40° F.
- F. Form areas of different colors and different materials separately.
- G. Adjacent work and existing conditions of context shall be thoroughly protected from stain and damage during entire operation. Damaged and stained areas shall be replaced or repaired to equal their original conditions.
- H. To prevent contamination of soil at tree pits, the Contractor shall:
 - 1. Fasten sheet barrier prior to removal of formwork around tree wells.
 - 2. Tree pits shall only be dug after all acid washing is completed and the contaminated soil removed from the site.
- I. Existing concrete, earth, and other water-permeable material against which new concrete is to be placed shall be thoroughly damp when concrete is placed. There shall be no free water on surface.
- J. Concrete which has set or partially set before placing shall not be employed. Re-tempering of concrete will not be permitted.
- K. Concrete shall be thoroughly spaded and tamped to secure a solid and homogeneous mass, thoroughly worked around reinforcement and into corners of forms.
- L. Ensure reinforcement, inserts, embedded parts, and formed joints are not disturbed during concrete placement.
- M. Place concrete continuously between predetermined construction and control joints. Do not break or interrupt successive pours such that cold joints occur.
- N. Honeycomb or embedded debris in concrete is not acceptable. Notify Owner's Representative upon discovery.
- O. When joining fresh concrete to concrete which has attained full set, the latter shall be cleaned of foreign matter, and mortar scum and laitance shall be removed by chipping and washing. Clean, roughened base surface shall be saturated with water, but shall have no free water on surface. A coat of 1:1 cement-sand grout, approximately 1/8" thick, shall be well scrubbed into thoroughly dampened concrete base. New concrete shall be placed immediately, before grout has dried or set.

3.6 CONCRETE VEHICULAR PAVING

- A. On properly compacted sub-grade, install concrete of thickness detailed on plans.
 - 1. Screed to avoid material segregation using mechanical methods.; manual methods may be used in small areas.
 - 2. Hand finish as necessary, non-directional, swirled and uniform.
 - 3. Texture surface by a wet, double-burlap drag or broom-finish unless otherwise specified on plans.
- B. Provide longitudinal and transverse contraction joints in locations indicated.
 - 1. 1/2" wide by 0.25 depth of slab with 1/4" radius edges at top, or:
 - 2. Saw cut, 1/8" by minimum 0.25 depth of slab.
 - 3. Fill with sealant.

- C. Provide expansion joints in locations indicated or per SSPWC.
 - 1. 3/4 IN wide by full depth of pavement with 1/4" radius edges at top.
 - 2. Provide expansion joints where paving abuts other structures.
 - 3. Set joint filler to within 1" of surface.
 - 4. Seal with sealant.
- D. Provide construction joints at end of each day's work and whenever necessary to suspend work for a period of more than 30 minutes.
 - 1. Key joints with 2" x 1" key.
 - 2. Provide 1/2" diameter by 3" long deformed tie bars at 30" OC, centered in pavement; perpendicular to joint.
 - 3. Provide 1/2 IN wide by 1 IN deep joint with 1/4 IN radius edges at top.
 - 4. Seal with sealant.
- E. Correct surface deviations by removing and replacing the non-complying sections; or by grinding as approved by Owner.
- F. Vehicular concrete is to be Broom finish unless specified otherwise on plans; refer to Section 32 13 23 Special Concrete Finishes.
- G. Dimensions on Plans are to face of curb.
- H. Depress curbs for curb ramps.

3.7 CONCRETE WALK PAVING

- A. Refer to Section 32 13 23 for Concrete Finish information.
- B. On properly compacted sub-grade, install 4" layer of concrete.
 - 1. Place walk paving 1/4" above top of curb.
 - 2. Slope surface at 1:50 transversely toward curb.
 - 3. See plans for finish information.
- C. At single width walks of 8 feet or less, provide bond breaker between walk paving and back of curb.
 - 1. At other locations, provide expansion joint material between walk paving and back of curb.
- D. Provide contraction joints:
 - 1. Construct tooled (dummy) joints as indicated on plans or at 10' intervals as applicable.
 - 2. Keep joints straight and perpendicular to edge of walk unless otherwise indicated.
 - 3. Locate joints as indicated on hardscape layout plans.
- E. Provide expansion joints as indicated and where walks meet other structures.
 - 1. Expansion joints at maximum 20 feet OC
 - 2. Set joint filler to within 1/2" of surface
 - 3. Do not seal transverse joints of single width walks
 - 4. Seal other joints
- F. Correct any isolated low points to eliminate ponding conditions.
 - 1. Correct surface deviations by removing and replacing the non-complying sections; or by grinding as approved by Owner.
 - 2. Reevaluate final grade after any adjustments to insure compliance with all State and Federal universal accessibility laws.
- G. Do not place concrete where standing water is present.

3.8 EXPANSION JOINTS

- A. Unless otherwise indicated in the plans, expansion joints shall adhere to the following: :
 - 1. Pre-molded filler shall be one piece for the full depth and width of the joint leaving a sealant recess as indicated on the plans. Utilize caps to match filler width.

2. Use of multiple pieces of lesser dimensions to make up required depth and width of joint will not be permitted.
 3. Except as otherwise noted on the drawings, joint filler shall be 1/4" thick.
- B. Expansion joint shall receive joint backer rod and shall be sealed with joint sealant.

3.9 CONTROL JOINTS

- A. Control joints (noted as score lines or "paving joint" on plans) shall meet the requirements of weakened plan joints in conformance with SSPWC 2009, Section 302-6.5.4.
- B. Unless otherwise dimensioned on the Plans, control joints shall be located 10 feet OC maximum, integrated into jointing pattern on Plans.
- C. Saw cut joints shall be sawn using a diamond blade concrete power saw. Joint shall be made after concrete is finished and when the surface is stiff enough to support the weight of workmen without damage to the slab. If early sawing causes undercutting or washing of the concrete, delay the sawing operation and repair the damaged areas.
- D. Saw shall cut into slab no less than 25% of slab depth. Cuts shall be full depth for entire area indicated; no radical transitions. Hand cut with hand saw radial end ducts for full cut.
- E. The saw cut shall not vary more than 1/4" from the true joint alignment. Discontinue sawing if a crack develops ahead of a saw cut. Immediately after each joint is sawed, thoroughly clean the saw cut and adjacent concrete surface. Re-spray surfaces treated with curing compound which are damaged during the sawing operations as soon as the water disappears. Protect joints in a manner to prevent the curing compound from entering the joints.
- F. Unless otherwise indicated, score lines shall be tooled into the concrete slab in pattern indicated on the Plans, or every 10 feet OC maximum. Joint shall be made after concrete is finished and when the surface is stiff enough to support the weight of workmen without damage to the slab, but before slab has achieved its final set.

3.10 CONSTRUCTION JOINTS

- A. Transverse construction joints shall be placed whenever placing of concrete is suspended for more than 30 minutes. All joints may not be shown on drawing; adhere to locations or patterns shown on plans where possible.
 1. Butt joint with dowels and thickened edge joint shall be used if construction joint occurs at location of control joint.
 2. Keyed joints with tie bars shall be used if the joint occurs at any other location.

3.11 SEALING OF JOINTS

- A. Sealant for sealing of control joints and expansion joints in concrete paving shall be a two component polyurethane based sealant conforming to ASTM C920, Type M, Grade P, Class 25, Use T₁ with a Shore A hardness of 30 plus or minus 5, or better.
- B. Verify color of sealant with Owner's Representative; primer shall be utilized as recommended by the sealant manufacturer for the use intended.
- C. Joint backing shall be as recommended by the sealant manufacturer.

3.12 CURING AND SEALING

- A. Keep concrete continuously damp from time of placement until end of specified curing period. Water is not to be added to surface during floating and troweling operations, and not earlier than 24 hours after concrete placement. Between finishing operations, protect surface from rapid drying by a covering of waterproofing paper. Surface shall be damp when the covering is placed over it, and shall be kept damp by means of a fog spray of water, applied as often as necessary to prevent drying, but not sooner than 24 hours after placing concrete. None of the water so applied shall be troweled or floated into surface.

- B. All concrete shall be cured with new, non-staining, curing paper and sealed with a penetrating, non-gloss finish sealer. The concrete shall be at least one month old, dry, clean, and free of dust, paint plaster, oils and waxes, curing compounds, and other marks and discoloration.
- C. If concrete is cured with a curing compound, compound shall be applied at a rate of 200 SQ FT/GAL, in 2 applications perpendicular to each other.
- D. Maintain concrete between 65-85° F during curing.
- E. Curing Colored Concrete:
 - 1. Colored concrete shall not under any circumstances, be cured using water fog misting or ponding, burlap, plastic sheeting, or other wet covering.
 - 2. Curing material and method shall be in strict conformance with manufacturer's guidelines and recommendations.
 - 3. Only if additional protection is absolutely required, the surface should remain uncovered for at least 4 days, after which time new and unwrinkled non-staining reinforced waterproof Kraft curing paper may be used.
- F. Sealant:
 - 1. General:
 - a. Color of sealant shall be selected by the Owner's Representative from the manufacturer's full color range.
 - b. Primer shall be that recommended by the sealant manufacturer for the use intended.
 - c. Joint backing where required shall be as recommended by the sealant manufacturer.

3.13 PATCHING

- A. Patching is limited to 2% of any exposed surface.
- B. Patch voids larger than 3/4" wide or 1/2" deep; remove projections larger than 1".
- C. Immediately after removing forms, patch minor defects and honeycombed area; patch before concrete is thoroughly dry.
- D. Repair by cutting back to full solid surface and in a manner to form a key for cement mortar fill.
- E. Thoroughly wet areas to be patched prior to placing patching mortar.
- F. Patch and compact patching material into place; neatly finish exposed surface. Match adjoining surface per accepted mockup.

3.14 TOLERANCES

- A. Unless otherwise noted, conform to ACI 302.1R.

3.15 PROTECTION OF CONCRETE SURFACES

- A. Concrete surfaces shall be protected from traffic or damage until surfaces have hardened sufficiently. If necessary, 1/2 inch thick plywood sheets shall be used to protect the exposed surface.

PART 4 - MEASUREMENT AND PAYMENT

- A. No separate measurement and payment will be made to the Contractor for Work of this Section. The Contract Price indicated on the Contractor's completed Bid Form for the Bid Items listed above of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

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SECTION 32 13 23
SPECIAL CONCRETE FINISHES

PART 1 - GENERAL

1.1 GENERAL CONDITIONS

- A. The Conditions of the Contract and Division 1 apply to this section as fully as if repeated herein.

1.2 SCOPE OF WORK

- A. Integrally colored concrete with surface retardant.
- B. Integrally colored concrete with surface retardant and specialty aggregate.
- C. Exposed aggregate concrete.

1.3 RELATED WORK

- A. Section 32 13 13 – Concrete Paving
- B. Division 03 – Concrete

1.4 REFERENCES

- A. ASTM C33 – Standard Specification for Concrete Aggregates
- B. ASTM C260 – Standard Specification for Air Entraining Admixtures for Concrete
- C. ASTM C494 – Standard Specification for Chemical Admixtures for Concrete
- D. ASTM C979 – Standard Specification for Pigments for Integrally Colored Concrete
- E. ACI 117 – Tolerances for Concrete Construction and Materials
- F. ACI 303.1 – Cast-in-Place Architectural Concrete

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with ACI 301.
- B. Work is to be performed by an installer regularly engaged in installation of architectural concrete having a record of successful installations acceptable to the Owner's Representative.

1.6 SUBMITTALS

- A. For each type of specialty-finished concrete indicated on Plans, provide description of methods and sequence of placement.
- B. Product Data:
 - 1. Concrete mix design
 - 2. Concrete additives
 - 3. Curing products
 - 4. Form facing materials
 - 5. Form releasing agents
 - 6. Proprietary cleaning agents
 - 7. Surface retardants
- C. Samples of:
 - 1. Concrete color additive (sample chips) for verification
 - 2. Additional/specialty aggregate and sand

1.7 DELIVERY, STORAGE AND HANDLING

- A. Color Additives: Comply with manufacturer's instructions; deliver to site or batch plant in original, unopened packaging and store in dry conditions. Schedule delivery of concrete to provide consistent mix times from time color additive is placed in mixture until placement of concrete on site.
- B. Aggregates: protect aggregates staged on-site from weather and contamination.

1.8 ENVIRONMENTAL CONDITIONS

- A. Comply with requirements of Division 03 for techniques of placing concrete.
- B. Concrete Paving: schedule placement to minimize exposure to wind and hot sun before curing materials are applied; avoid placing concrete if rain, snow, or frost is forecast within 24 hours. Protect fresh concrete from moisture and freezing.
- C. Formed Concrete: schedule work to minimize differences in curing conditions; when possible, apply curing compound as soon as forms are stripped.

1.9 PRECONSTRUCTION MOCK-UP PANELS:

- A. Coordinate mock-up requirements with mock-ups specified in other sections; the same mock-up may be used for more than one purpose.
- B. Provide mock-ups simulating actual design and execution conditions for concrete mix materials, reinforcement, form work, placing sequence, form removal, curing, finishing, and methods and materials of stain removal and correction of defective work. Sample full-scale mock-up panel, 5-foot X 5-foot minimum, shall be constructed prior to start of paving.
- C. General mock-up requirements:
 - 1. Schedule mock-up casting for acceptance 7 days prior to casting of concrete surfaces represented by the mock-ups.
 - 2. Locate mock-up panels in non-public areas accepted by the Owner.
 - 3. Mock-up sequences of forming, placing, form removal, curing, and finishing shall be reviewed and accepted by the Owner.
 - 4. Mock-up form-work shall be reviewed and accepted by the Owner's Representative before placing of concrete.
 - 5. Construct mock-up panels or areas as indicated to demonstrate the ability to cast concrete for concrete layout, banding or detail to achieve shape, color, and textured finish required.
 - 6. Continue to cast mock-ups until acceptable mock-ups are produced. Accepted mock-ups shall be the standard for color, texture, finish, and workmanship for the work of this section.
 - 7. Demonstrate in the construction of the mock-up form work the sealer material, form release agent, and curing materials and methods to be used.
 - 8. Use the same concrete mixes and placement procedures, accepted in mock-ups, in the final work, unless otherwise directed by the Owner.
 - 9. Protect accepted mock-ups from damage until completion and acceptance of the work represented by the mock-up.
 - 10. Remove mock-up panels at completion of project, as directed by the Owner.
- D. Source of materials: Utilize the same source, stock, or brand of concrete materials for each class or mix of concrete which is to be exposed. Do not interchange materials or mixes until an additional mock-up shows that uniformity in finish texture and color as compared to original mock-up will be maintained. If necessary, obtain and stockpile materials in sufficient quantity to ensure continuity and uniformity.

PART 2 - PRODUCTS

2.1 CONCRETE MIX

- A. Mixes shall result in concrete to match approved samples.
- B. Mix color additives in accordance with manufacturer's instructions until color additives are uniformly dispersed throughout mixture and disintegrating bags, if used, have completely disintegrated or their remnants are removed.
- C. Mix in admixtures of quantities specified and in accordance with manufacturer's instructions; maintain consistent quantities throughout job.
- D. Maintain water content as constant as possible; use only fresh, clean and potable water.
- E. Control slump (4") to maintain constant color; if greater slump is required, use water-reducing or super-plasticizing admixture; do not add water.
- F. Do not retemper mix or add water in field.

2.2 SPECIALTY AGGREGATES

- A. Must adhere to ASTM C33
- B. Type: Fine-graded silica carbide
- C. Size: 16/36
- D. Application rate: 0.20 to 0.25 pounds per square foot

2.3 COLOR ADMIXTURE:

- A. Must adhere to ASTM C979; do not use calcium chloride admixtures.
- B. Color admixture shall be of a type and quality which will not adversely affect workability, setting, or strength of concrete. Color pigments shall consist of chemically inert, non-fading, alkali-fast mineral oxides, finely ground and specially prepared for the use in both cement and mortar.
- C. Mix design shall conform to manufacturer's recommendations, and directions of the Owner's Representative to achieve desired color. Strictly monitor additive/cement ratio throughout job to ensure uniform color.
- D. Shall be factory-formulated and packaged in one cubic yard dosage increments, preferably in pre-measured mix-ready disintegrating bags.
- E. Manufacturer: Davis Colors or approved equal.
- F. Colors:
 - 1. Miami Buff #5447
 - 2. Carbon #8084

2.4 SURFACE RETARDER

- A. Must comply with ACI 303.1 and ASTM C494.
- B. Manufacturer: Dayton Superior TopCast or approved equal.
- C. Apply in accordance with manufacturer's recommendations.

PART 3 - EXECUTION

3.1 FINISHES

- A. See drawings for finish schedule.

- B. All finishes shall be consistent throughout and shall match approved mock-up and be per product instructions, if used.
- C. Where finishing is performed before end of curing period, concrete shall not be permitted to dry out and shall be kept continuously moist from time of placing until end of curing period, or until curing membrane is applied.
- D. Broom Finish:
 - 1. Pull broom across freshly floated concrete to produce medium texture in straight lines perpendicular to main direction of travel.
 - 2. Do not dampen brooms.
- E. Trowel Finish:
 - 1. Provide smooth surface; hard-trowel to densify surface.
 - 2. Do not over-trowel or begin troweling late.
 - 3. Hand-trowel: use steel trowel.
 - 4. Machine-trowel: Use steel-reinforced plastic or steel trowel blades.
- F. Abraded/Retarded Surface:
 - 1. Utilize Surface Retardant per manufacturer's recommendations.
 - 2. Standard TopCast finish gradation applies; adhere to final finish exposure size as closely as possible.

3.2 APPEARANCE TOLERANCES

- A. Appearance: Minor variations in appearance of integrally colored concrete that are similar to natural variations in color and appearance of uncolored concrete are acceptable.

3.3 CLEANING

- A. Efflorescence: Remove efflorescence as soon as practical after it appears and as part of final cleaning.
- B. Use least aggressive cleaning techniques possible.
- C. Do not use muriatic or hydrochloric acid on integrally colored concrete.
- D. If proprietary cleaning agents are used, pre-wet surface, test cleaning agent on small, inconspicuous area, and check effects prior to proceeding. At walls, begin cleaning at top and work downward. Thoroughly rinse surface afterward with clean water. Follow cleaner manufacturer's instructions.

3.4 DEFECTIVE CONCRETE

- A. Modify or replace concrete not conforming to required color, texture, levels and lines, details and elevations.
- B. Repair or replace concrete not properly finished or of the specified type.

3.5 FIELD QUALITY CONTROL

- A. Field inspection and testing will be performed under provisions of Section 32 13 13.

3.6 PROTECTION

- A. Protect finished work under provisions of Section 32 13 13.
- B. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- C. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

- D. Defer to manufacturer's recommendations when curing concrete containing specialized or proprietary additives; confirm process with Owner's Representative.

3.7 CLEANING

- A. When desired finish is achieved, wash and rinse exposed aggregate surface with water or with trisodium phosphate and water, if necessary.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION

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SECTION 32 31 16
WELDED WIRE FENCES AND GATES

1.1 SUMMARY

- A. Furnish all labor, materials, tools, equipment, and services for Pre-fabricated Ornamental Steel Fence, as indicated, in accordance with provisions of Contract Documents.
- B. System Description:
 - 1. Supply a total ornamental metal fencing system of the style indicated.
 - 2. The system shall include all components (i.e., pickets, rails, posts, gates and hardware) and their installation.
- C. Completely coordinate with work of other trades.

1.2 RELATED WORK

- A. Division 03 – Concrete
- B. Section 32 13 13 – Concrete Paving

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: an experienced installer who has completed fences and gates similar in material, design, and extent to those indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Source Limitations for Fences and Gates: obtain each color, grade, finish, type, and variety of components for fences and gates from one source with resources to provide fences and gates of consistent quality in appearance and physical properties.
- C. Emergency Access Requirements: comply with requirements of authorities having jurisdiction for gates serving as a required means of access.
- D. References:
 - 1. Local Building Codes: As locally adopted and amended.
 - 2. American Society for Testing and Materials (ASTM), Fifth edition.
 - 3. ASTM-A82: Cold Drawn steel wire, Plain, for Concrete Reinforcement. ASTM-A185: Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
 - 4. A123/A123M-02: Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
 - 5. A 641: Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
 - 6. A1008: Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy (HSLA) and HSLA with Improved Formability
 - 7. A787-01: Standard Specification for Electric-Resistance-Welded Metallic-Coated Carbon Steel Mechanical Tubing
 - 8. A513-00: Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing
 - 9. A653: Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - 10. A500: Standard Specification for Cold formed welded and seamless carbon steel structural tubing in round shapes. B 6 (1987) Standard Specification for Zinc
 - 11. B 117: Standard Test Method of Salt Spray (Fog) Testing
 - 12. B 221: Standard Specification for Aluminum and aluminum-alloy extruded bars, rods, wire, shapes and tubes
 - 13. D 2247: Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
 - 14. D 2794: Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)

15. D 3359: Standard Test Methods for Measuring Adhesion by Tape
16. F 900: Standard Specification for industrial and commercial swing gates
17. F 934: Standard Specification for Standard Colors for Polymer-Coated Chain Link Fence Materials
18. F 1184: Standard Specification for industrial and commercial horizontal slide gates
19. F 1043-11A: Standard Specification for Strength and Protective Coatings on Steel Industrial Chain Link Fence Framework
20. F2919: Standard Specification for Welded Wire Mesh Fence Fabric (Metallic-Coated or Polymer Coated) with Variable Mesh Patterns or Meshes Greater than 6 sq. in. in Panels
21. A121: Standard Specification for Metallic-Coated Carbon Steel Barbed Wire
22. F626: Standard Specification for Fence Fittings

1.4 SUBMITTALS

- A. Product Data: Material descriptions, construction details, dimension of individual components and profiles, and finishes for the following:
 1. Fence and gate posts, rails, and fittings.
 2. Gates and hardware.
- B. Shop Drawings: Show locations of fence, each gate, posts, rails, and details of gate swing, or other operation, hardware, and accessories. Indicate materials, dimensions, sizes, weights, and finishes of components. Include plans, elevations, sections, gate swing and other required installation and operational clearances, and details of post anchorage, attachment and bracing. Installation procedures and instructions by manufacturer describing all details for a typical fence and gates.
 1. Large scale Plans, Elevations, Sections, and Details showing extent of fencing required.
 2. Locate hardware mounting plates, and show detail
- C. Samples for Verification: Request a color chip from the manufacturer.
- D. Contract Closeout Information:
 1. Maintenance data

1.5 DELIVERY, STORAGE, AND HANDLING

- A. All materials shall be checked to ensure that no damage occurred during shipping or handling.
- B. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism, and theft.

1.6 SITE CONDITIONS

- A. Existing Utilities: do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 1. Notify Owner's Representative not less than three days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Owner's Representative's written permission.
- B. Field Measurements: verify layout information for fences and gates shown on drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Pre-fabricated, Ornamental Steel Fence System:
 1. Base:

San Bernardino Transit Center
WELDED WIRE FENCES AND GATES
Omnitrans
32 31 16 - 2

- a. Ameristar Fence Systems (800) 836-6342 Model: Wireworks Plus
2. Optional:
 - a. Betafence USA, Prism 3D Fence System (888) 650-4766
 - b. Or equal
- B. Other manufacturers desiring approval shall comply with Section 00 26 00.

2.2 MATERIALS

- A. 'WireWorks Plus' double-wire Pre-Fabricated, Architectural Welded Wire Fence System:
 1. Nominal height: 4 feet
 2. Panel module: 8-foot panels
 - a. 4-foot and 6-foot panels may be utilized at special conditions; see layout plans
 3. Color: Standard – Signal Black/RAL 9004
- B. Fabricated Welded Wire Mesh Panels:
 1. 98-7/8" wide, formed by one vertical wire of 0.192" placed between two horizontal wires of 0.225", as per ASTM-A185 & A853
 2. The wires are welded by resistance weld at each crossing to form rectangles 1-15/16" x 7 7/8".
 3. Cold rolled wire shall have a tensile strength of at least 75,000 psi and a 3150 lbs break strength for an individual wire.
 4. One end of the vertical wires of the panel shall exceed 1" from the last or first horizontal wire thereby creating a spiked top or bottom depending of its position when installed. The other end is cut flush.
 5. The mesh panel shall be zinc-coated steel wire conforming to specification ASTM A 641 (1989) Class 1.
 6. A 4 mils polyester powder coating is applied on the mesh. Note: Panel camber may not exceed 0.094".
- C. Gate:
 1. 'WireWorks Plus' double-wire, double-sliding
 2. Mesh panels, see 2.2.B
 3. All vertical tubes 11 Ga
 4. 6-inch square or custom posts, consult manufacturer
 5. Double-gate hardware:
 - a. One drop bar/anchor bolt to secure in closed position on of the gate leaves, complete with stop pipe/sleeve to engage the center drop rod
 - b. Self-locking device with padlock eyes as an integral part of latch. High Security Keyed Lock Box (Knox Box): surface mount with hinged door, with/without UL Listed tamper switches. 1/4" plate steel housing, 1/2" thick steel door with interior gasket seal and stainless steel door hinge. Box and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability per local jurisdictional emergency access requirements or equal.
 - a) Exterior Dimensions: Surface mount body- 4"H x 5"W x 3-3/4"D
 - b) UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.
 - c) Color: Standard – Signal Black/RAL 9004
 - c. Consult Agency Representative for Gate Operator option
- D. Posts:
 1. 3-inch square, coating to match panels
 2. Installed in-ground with concrete footing
 3. The posts are cold rolled from 1008 grade steel and meet ASTM 500 and ASTM A787-01.
 4. Square, flat aluminum alloy post caps
 5. Up-sized posts at gate per detail

6. Support posts for installation of Knox Box, finish/coating to match panels.

E. Hardware:

1. 3-inch 'Universal Bracket Kit': 12 gauge steel collar and wire retaining plate, 1/4" x 1" nut, washer and carriage bolt, 5/16" x 1-1/4" all galvanized steel. For 90° turn, used the same bracket. For different angles, use the "Universal angle brackets."
2. 3-inch 'U Shape Bracket Kit': a stainless steel U rod Ø5/16", a rear flange in PVC 3 1/2" x 1 1/2" x 1-1/8", a forehead support in PVC 2-3/8" x 5/8" x 1-1/16" cosmetic plastic caps and nuts (M8).
3. Gate Hardware shall be provided by Fence/Gate Manufacturer per Manufacturer's recommendations. Ultimate hardware selection by manufacturer shall accommodate final weight of gate, and shall be approved by the Architect. Functional Basis of Design is as follows:

Set: 01

G6, G11

1pr	Heavy Duty TruClose Hinge	Self-closing (tension adjustable) hinge for heavier or high-traffic metal gates around commercial areas	#8000-2115
1	Heavy Duty LokkLatch Deluxe	Dual 6-pin re-keyable lock	LLDAB-KSA

Set: 02

G8

1pr	Heavy Industrial/Security Adjustable 180 Hinge		MIH180
1	Strong Arm Single Gate Latch		DS_600
1	Drop Rod	Drop Rod with embedded sleeve	DLB100

Set: 03

G9, G10

2pr	Heavy Industrial/Security Adjustable 180 Hinge		MIH180
1	Industrial Double Drive Gate Latch		DDB200
2	Drop Rod	Drop Rod with embedded sleeve	DLB100

Set: 04

G1, G2, G3, G4, G5, G7

1	Set of Cantilever Slide Gate hardware per Manufacturer		Kit #TGKCD
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- 1 Drop Rod Drop Rod with embedded sleeve DLB100

- F. Concrete: Concrete Mixture: Normal-weight concrete with not less than 3000 psi (20.7 Mpa) compressive strength (28 days), 3 inch slump, and contain "coarse aggregate" of a minimum diameter of 1/5" to a maximum of 3/4" maximum size aggregate.

2.3 COATINGS

- A. Zinc Coating:
1. The wire meshes is coated with 0.5 oz./sqft zinc in conformity with ASTM A 641 (1989) Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire, known as galvanized before welding (GBW).
 2. The fence posts, the swing gate frame and posts are zinc coated (galvalume process) – 0.90 oz/sqft as per ASTM A653.
- B. The polyester surface coating color shall be standard black. Polyester coating to be minimum 4 mils applied by an electrostatic method. Coating shall cover all surfaces of the wire and post sections. Coating shall be capable of withstanding the following tests:
1. Mechanical adhesion test as per ASTM D 3359 (1990) - Method B.
 2. Shock resistance tests as per ASTM D 2794 (1990).
 3. Salt spray testing with a min. of 1,000 hrs without red rust appearance, as per ASTM B 117 (1990).
 4. Humidity resistance in a weather meter chamber as per ASTM D 2247 (1988).
 5. Exposure to ultraviolet light with exposure of 1000 hours using apparatus Type E and 63°C as per ASTM D1499

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that site has been prepared according to the design intent indicated, and that it is ready for fence installation to commence.
- B. Do not begin fence installation until final grading is complete, unless otherwise directed.

3.2 PREPARATION

- A. Installation shall be laid out in accordance with the construction plans, modified as necessary to accommodate actual field dimensions and established grades. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, irrigation system, underground structures, benchmarks, and property monuments.

3.3 INSTALLATION

- A. Install fencing on established boundary lines inside property line.
- B. General Post Installation:
1. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacing indicated, in firm, undisturbed or compacted soil.
 2. Post Setting: Set posts in concrete footing. Protect portion of posts above ground from concrete splatter. Place concrete around posts and consolidation. Using mechanical devices to set posts is not permitted. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during placement and finishing operations until concrete is sufficiently cured.

- a. Dimensions and Profile: As indicated on Drawings.
 - b. Space line posts uniformly on center.
 - c. Exposed Concrete Footings: Extend concrete 2 inches above grade, smooth, and shape to shed water.
 - d. Concealed Concrete Footings: Stop footings 2 inches below grade to allow covering with surface material.
 - e.
 3. Posts Set into Concrete in Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, and finished sloped to drain water away from post.
 4. Posts Set into Concrete in Voids: Form or core drill holes not less than 5 in. deep and $\frac{3}{4}$ in. larger than OD of post. Clean holes of loose material, insert posts, and fill granular space between post and concrete with anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, and finished sloped to drain water away from post.
- C. 'WireWorks Plus' Model Installation
1. Terminal Posts: Locate terminal end, corner, and gate posts at changes in horizontal or vertical alignment of 30 degrees or more.
 2. 3" Square post installation: Post hole shall be a minimum of 8" in diameter and 42" in depth.
 3. Once the concrete is set, the mesh sections are installed with the 3" Universal Bracket kits always install flush with horizontal wire of the panel (no gap).
 4. 3" Post spacing: 98-3/4" OC with a adjustment of $\pm 1\frac{1}{2}$ " on each side.
 5. For the fence to follow slopes, it is required to step the fence sections. The Universal bracket on square posts can be slid along the post at the desired height and should always be installed flush with horizontal wire (no gap).
 6. When faced with a steep slope, it will be necessary to order longer posts and panels cut in half as to keep the gap under the panel to a minimum.
 7. Mesh Panels: Vertical wire extensions should point down for safety. The fence panel shall be installed a distance of a minimum of $1\frac{1}{4}$ " and maximum of 2" above finished grade.
 8. Upon cutting or trimming, a post or a wire mesh section, apply a zinc rich primer to the exposed ends and finish with the matching touch-up paint supplied by the manufacturer.
- D. Concrete:
1. General: Comply with ACI 301 for cast-in-place concrete.
 2. Materials: Portland cement complying with ASTM C 150, aggregates complying with ASTM C 33, and potable water for ready-mixed concrete complying with ASTM C 94. Measure, batch, and mix project-site-mixed concrete according to ASTM C 94.
 3. Concrete Mixture: Normal-weight concrete with not less than 3000 psi (20.7- Mpa) compressive strength (28 days), 3-inch slump, and contain coarse aggregate of a minimum diameter of $\frac{1}{5}$ " to a maximum of $\frac{3}{4}$ " maximum size aggregate. 5-7% air entrained or according to recommendation of Section 03 55 00.
 4. Materials: Dry-packaged concrete mix complying with ASTM C 387 for normal-weight concrete mixed with potable water according to manufacturer's written instructions.
- E. Grout and Anchoring Cement
1. Nonshrink, nonmetallic grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.

2. Erosion-resistant anchoring cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended in writing by manufacturer for exterior applications.

3.4 FIELD QUALITY CONTROL

- A. Field Tolerances:
 1. Post to post spacing: +/- 1/2 inch
 2. Plumb-ness of Posts: +/- 1/8 inch
 3. Visual Alignment of Posts and Rails: Fencing which is visibly misaligned will not be accepted, and shall be corrected.
 4. Consistent picket alignment

3.5 ADJUSTING

- A. Adjust hardware on gates to operate smoothly and ensure positive latching.
- B. Correct minor grade irregularities to maintain maximum 2-inch clearance.

3.6 CLEANING

- A. Clean the jobsite of excess materials; post hole excavations shall be scattered uniformly away from posts.

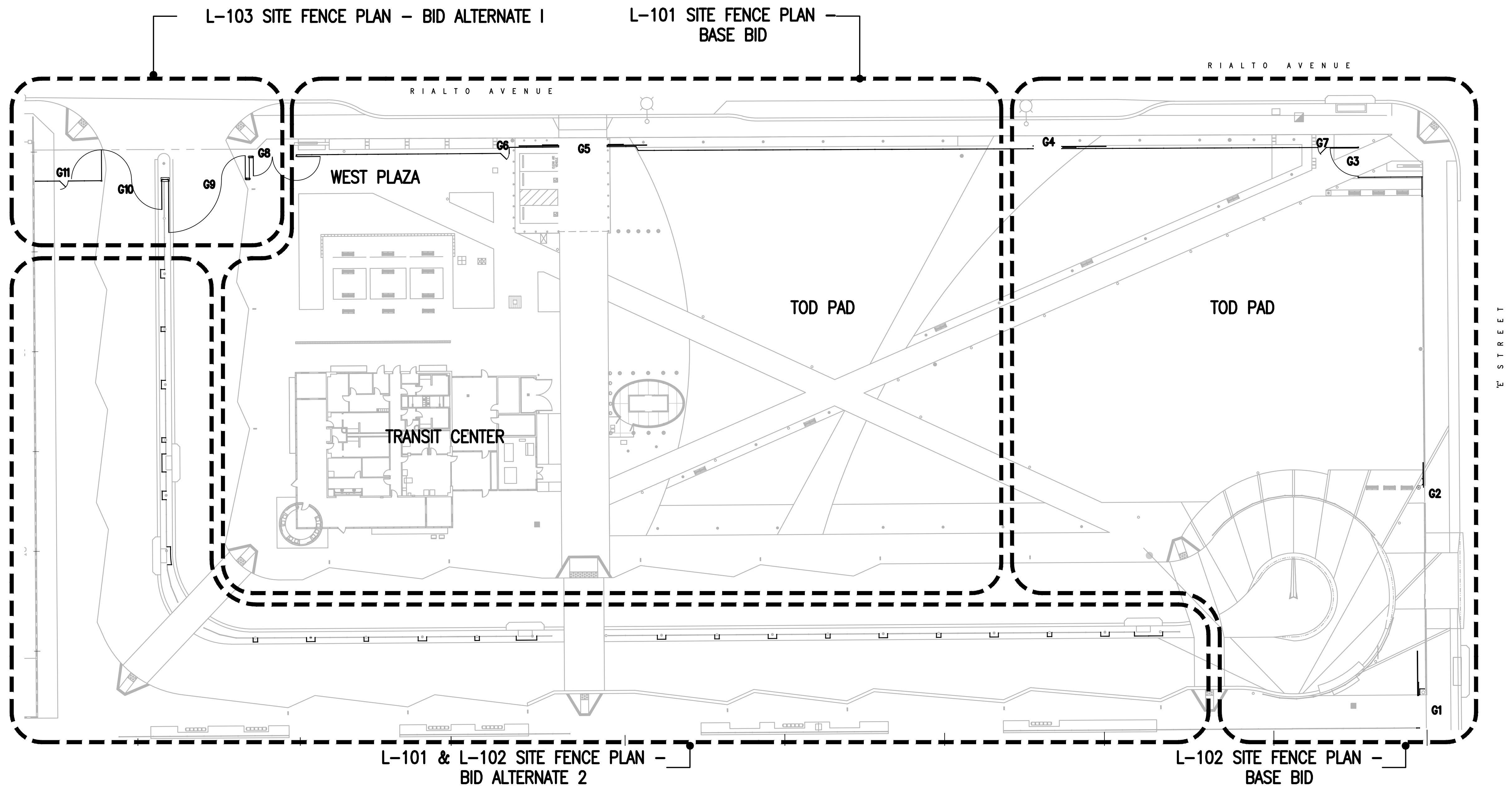
3.7 PROTECTION

- A. Protect completed work from damage.
 1. Repair or replace damaged items as necessary.

PART 4 - MEASUREMENT AND PAYMENT

- A. Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary as described by the Contract Documents.

END OF SECTION



GATE SCHEDULE

GATE NUMBER	DOOR OPENING SIZE			DOOR			FRAME			HARDWARE SET	REMARKS
	WIDTH	HEIGHT	THICKNESS	MATERIAL	TYPE	FINISH	MATERIAL	FINISH	DETAIL		
G1	SEE PLAN	4'-0" UNO	PER MFR	MTL	A	P1	MTL	P1	SEE PLAN	04	
G2	SEE PLAN	4'-0" UNO	PER MFR	MTL	A	P1	MTL	P1	SEE PLAN	04	
G3	SEE PLAN	4'-0" UNO	PER MFR	MTL	C	P1	MTL	P1	SEE PLAN	02	OPEN DURING BUSINESS HOURS
G4	SEE PLAN	4'-0" UNO	PER MFR	MTL	A	P1	MTL	P1	SEE PLAN	04	
G5	SEE PLAN	4'-0" UNO	PER MFR	MTL	B	P1	MTL	P1	SEE PLAN	04	
G6	SEE PLAN	4'-0" UNO	PER MFR	MTL	C	P1	MTL	P1	SEE PLAN	01	
G7	SEE PLAN	4'-0" UNO	PER MFR	MTL	C	P1	MTL	P1	SEE PLAN	01	
G8	SEE PLAN	4'-0" UNO	PER MFR	MTL	D	P1	MTL	P1	SEE PLAN	02	BID ALTERNATE 1, UNEVEN LEAF, 180° SWING ON ONE LEAF
G9	SEE PLAN	4'-0" UNO	PER MFR	MTL	E	P1	MTL	P1	SEE PLAN	03	BID ALTERNATE 1, UNEVEN LEAF
G10	SEE PLAN	4'-0" UNO	PER MFR	MTL	E	P1	MTL	P1	SEE PLAN	03	BID ALTERNATE 1, 180° SWING ON ONE LEAF
G11	SEE PLAN	4'-0" UNO	PER MFR	MTL	C	P1	MTL	P1	SEE PLAN	01	BID ALTERNATE 1

MATERIAL:

MTL METAL

DOOR TYPE:

- A CANTILEVER SINGLE SLIDING GATE
B CANTILEVER DOUBLE SLIDING GATE
C PEDESTRIAN SWING GATE
D PEDESTRIAN DOUBLE WIDE SWING GATE
E VEHICULAR DOUBLE WIDE SWING GATE

FINISH:

P1 FACTORY PAINTED SEE SPECS FOR COLOR

NOTE:

EACH GATE (EXCEPT PEDESTRIAN SWING GATE) SHALL HAVE DROP ROD AND SLEEVE AT OPEN AND CLOSED POSITION, SEE PLANS

SITE KEY PLAN

1"=30'-0"



1
L-100

REV.	DATE	DESCRIPTION	BY	SUB.	APP.
	09.22.15	SITE FENCE PERMIT SET			
	12.07.15	SITE FENCE BID SET			

DESIGNED BY	H. HABIG
DRAWN BY	H. HABIG
CHECKED BY	U. GONZALES
APPROVED BY	R. JANIK
DATE	12.07.15

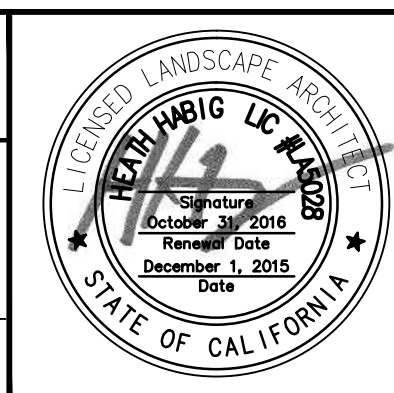
Omnitrans

SANBAG
San Bernardino Associated Governments

HDR
801 S. GRAND AVENUE
Suite 500
Los Angeles, Ca 90017-4633

ISSUED FOR
CONSTRUCTION

APPROVED: _____



TRANSIT CENTER



SITE FENCE KEY PLAN
AND GATE SCHEDULE - BASE BID

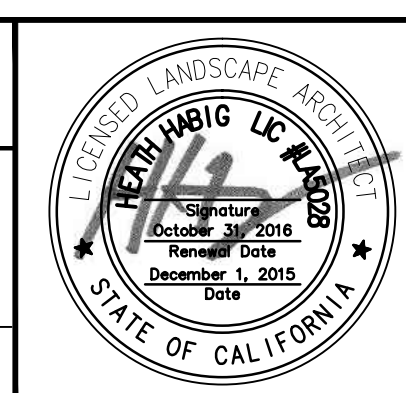
CONTRACT NO. IFB MKP16-83	
DRAWING NO. L-100	
REVISION	SHEET NO. 4 OF 8
SCALE 1"=30'-0"	



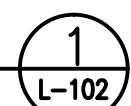
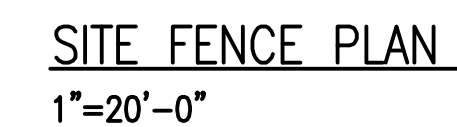
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L-101

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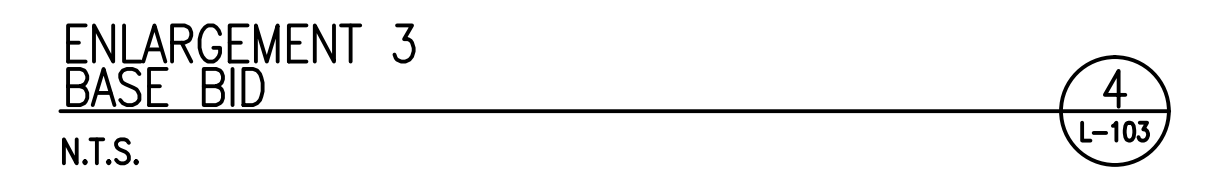
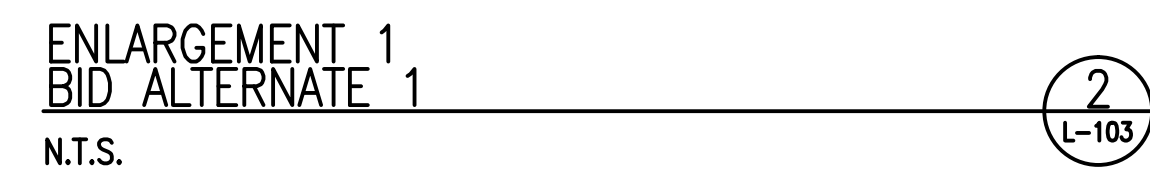
		
	<p>801 S. GRAND AVENUE Suite 500 Los Angeles, Ca 90017-4633</p>	
<p>SUBMITTED: _____ PROJECT MANAGER _____</p>		



CONTRACT NO. IFB MKP16-83	
DRAWING NO. L-101	
REVISION	SHEET NO. 5 OF 8
SCALE 1"=20'-0"	



CONTRACT NO. IFB MKP16-83	
DRAWING NO. L-102	
REVISION	SHEET NO. 6 OF 8
SCALE 1"=20'-0"	



NOTE:

1. SEE GATE SCHEDULE ON SHEET L-100 FOR INFORMATION NOT SHOWN
2. FIELD VERIFY ALL DIMENSIONS SHOWN

	09.22.15	SITE FENCE PERMIT SET		
	12.07.15	SITE FENCE BID SET		
REV.	DATE		BY	APP.

DESIGNED BY	H. HABIG
DRAWN BY	H. HABIG
CHECKED BY	U. GONZALES
APPROVED BY	R. JANIK
DATE	12.07.15

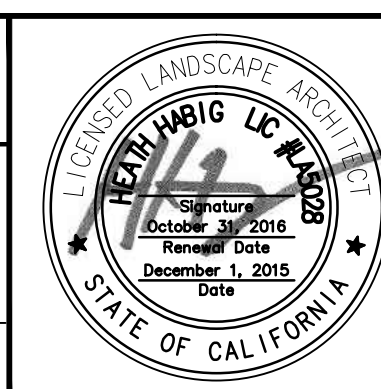


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SANBAG
Working Together

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Suite 500
Los Angeles, Ca 90017-4633

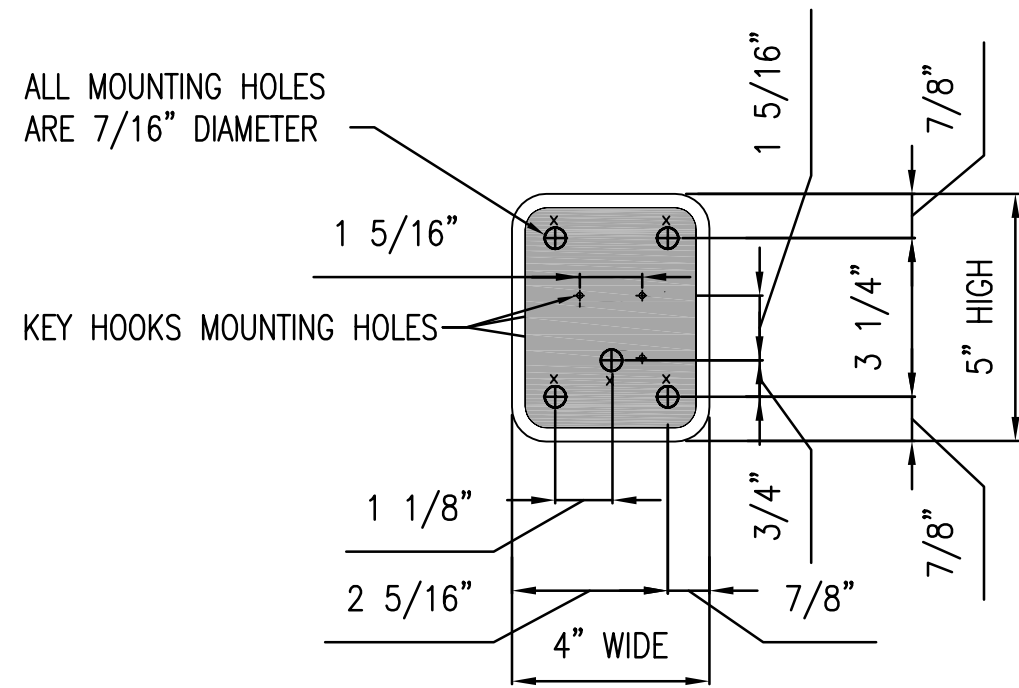
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TRANSIT CENTER

SITE FENCE PLAN – BID ALTERNATE 1 + BASE BID

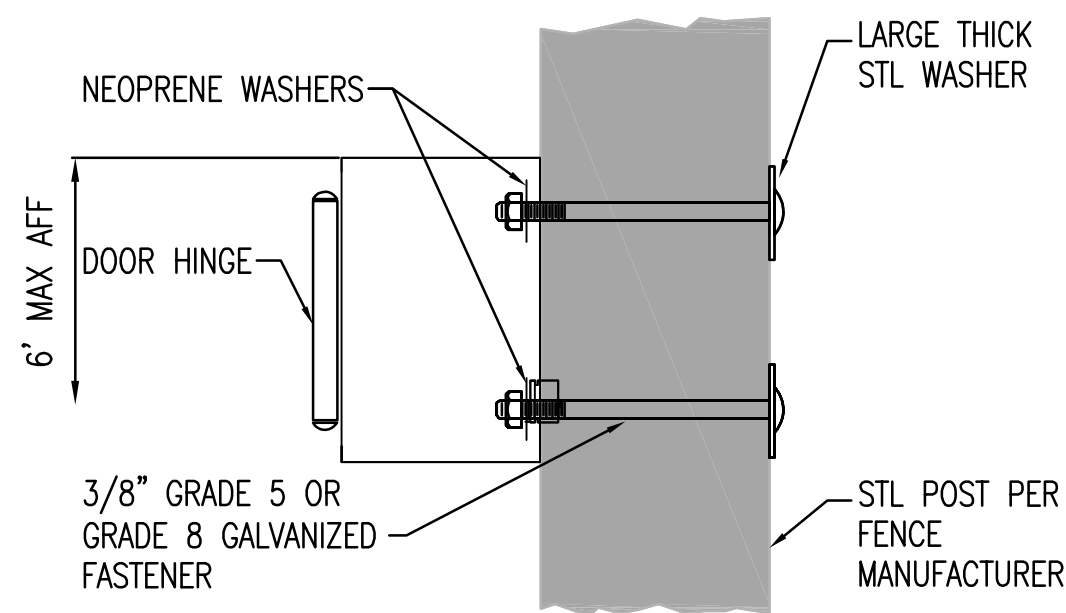
CONTRACT NO. IFB MKP16-83	
DRAWING NO. L-103	
REVISION	SHEET NO. 7 OF 8
SCALE 1"=20'-0"	



HOLES MARKED "X" ARE USED FOR MOUNTING WITH AT LEAST 3/8" GRADE 5 OR GRADE 8 GALVANIZED FASTENERS

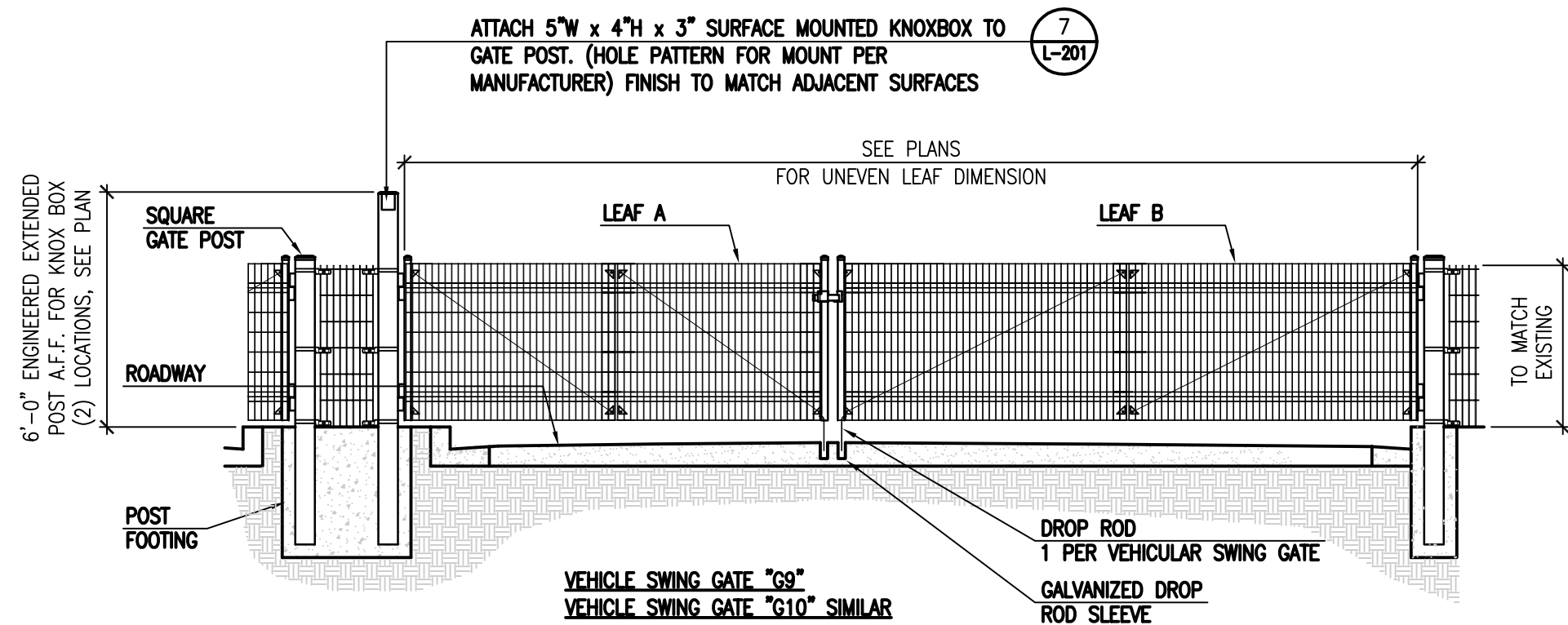
KNOX BOX HOLE LOCATION

3" = 1'-0"



KNOX BOX LIFT-OFF MODEL MOUNTING DETAIL

3" = 1' - 0"



DOUBLE WIDE SWING GATE

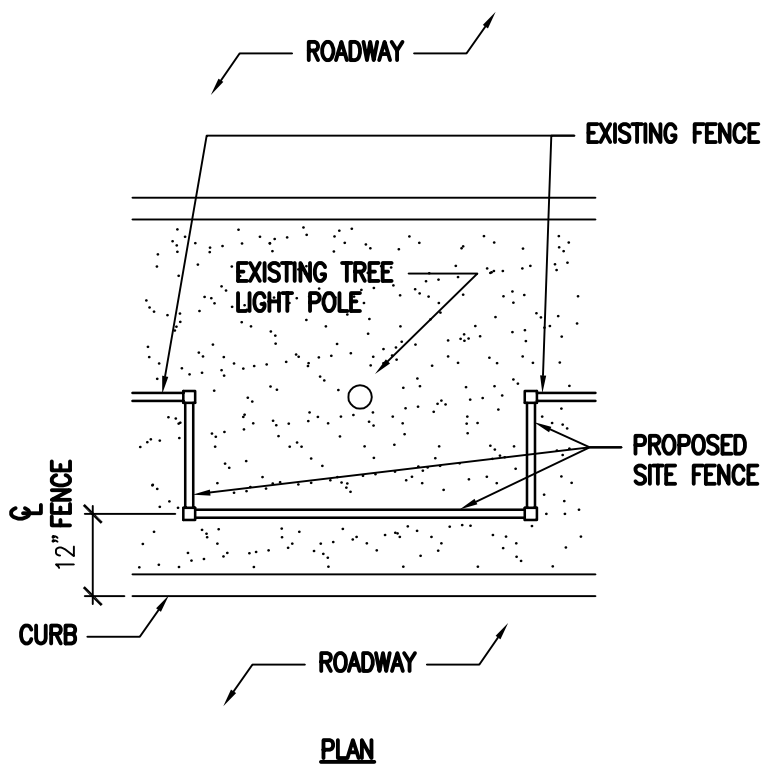
NOT TO SCALE

NOTES:

1. MESH AND FINISH TO MATCH EXISTING SITE FENCE PANELS
2. COORDINATE SECURE EMERGENCY EGRESS CLOSURE/ACCESS WITH AGENCY
3. PADLOCK HARDWARE TO BE PROVIDED FOR EACH GATE
4. SEE PLANS FOR LOCATIONS OF KNOX BOX (2 LOCATIONS). TO BE INSTALLED ON 6' TALL END POST
5. PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION - SEE SPECIFICATIONS
6. TAMPERPROOF FASTENERS - TYPICAL
7. GATE POSTS (1 LATCH, 4 SUPPORT) SHALL BE 4" SQUARE EXTRA FENCE LINE POST BETWEEN GATE POST IF MOUNTING EXCEEDS 8' O.C.
8. TOP AND BASE TRACKS REQUIRED. REFER TO MANUFACTURER'S RECOMMENDATIONS

GENERAL FENCE NOTES

NOT TO SCALE

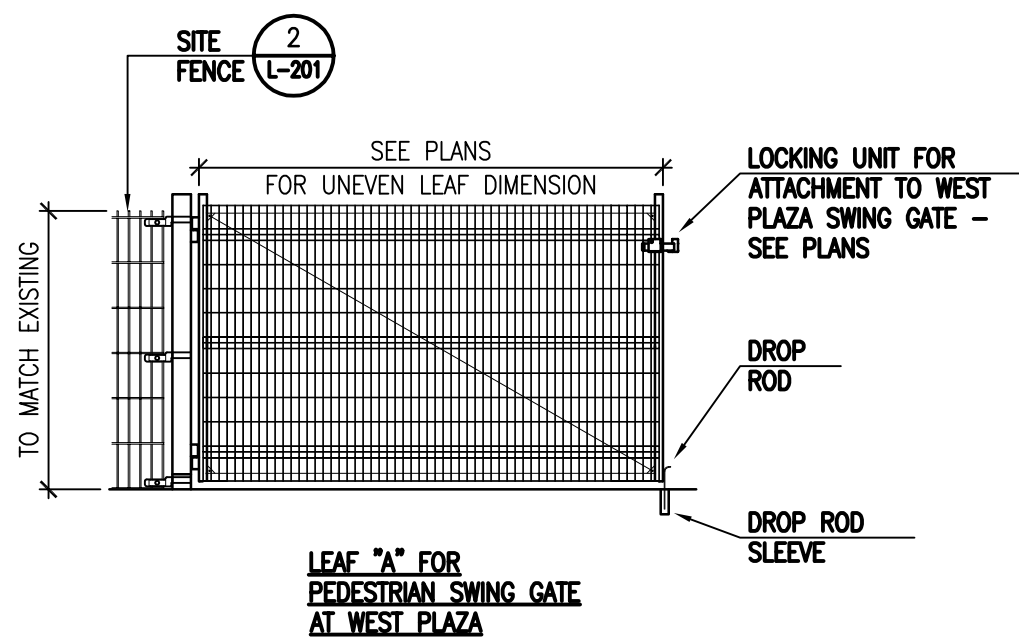


NOTES:

1. PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION - SEE SPECIFICATIONS
2. POSITION FOOTINGS TO AVOID ALL UNDERGROUND UTILITIES INCLUDING BUT NOT LIMITED TO IRRIGATION PIPES

FENCE LAYOUT AT MEDIAN TREES/LIGHT POLES

NOT TO SCALE

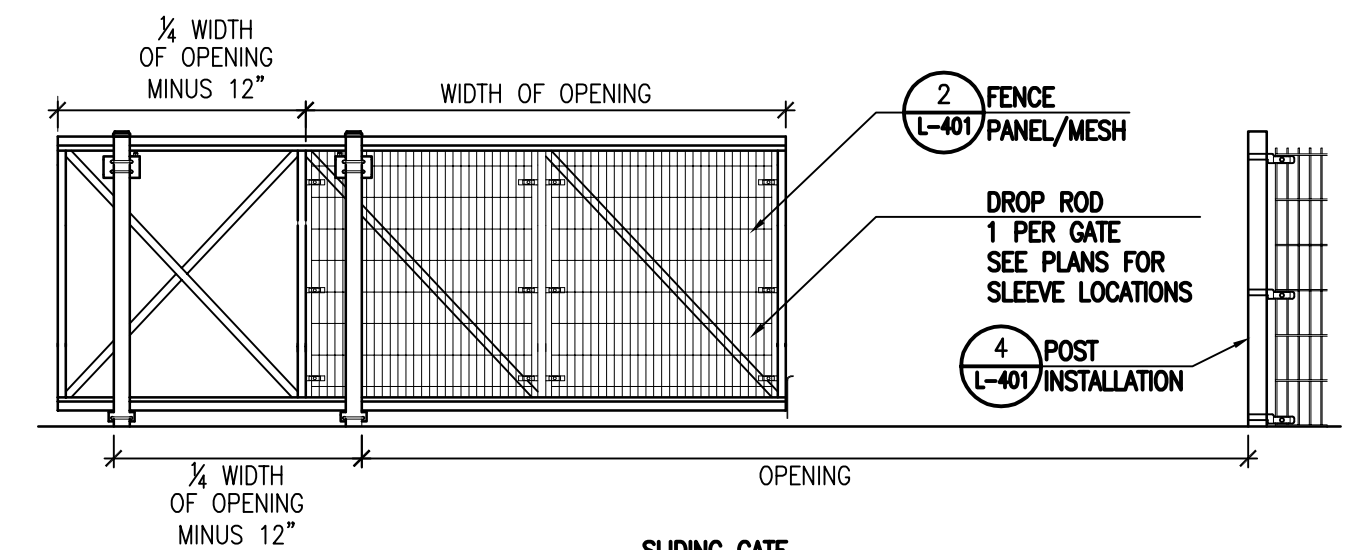
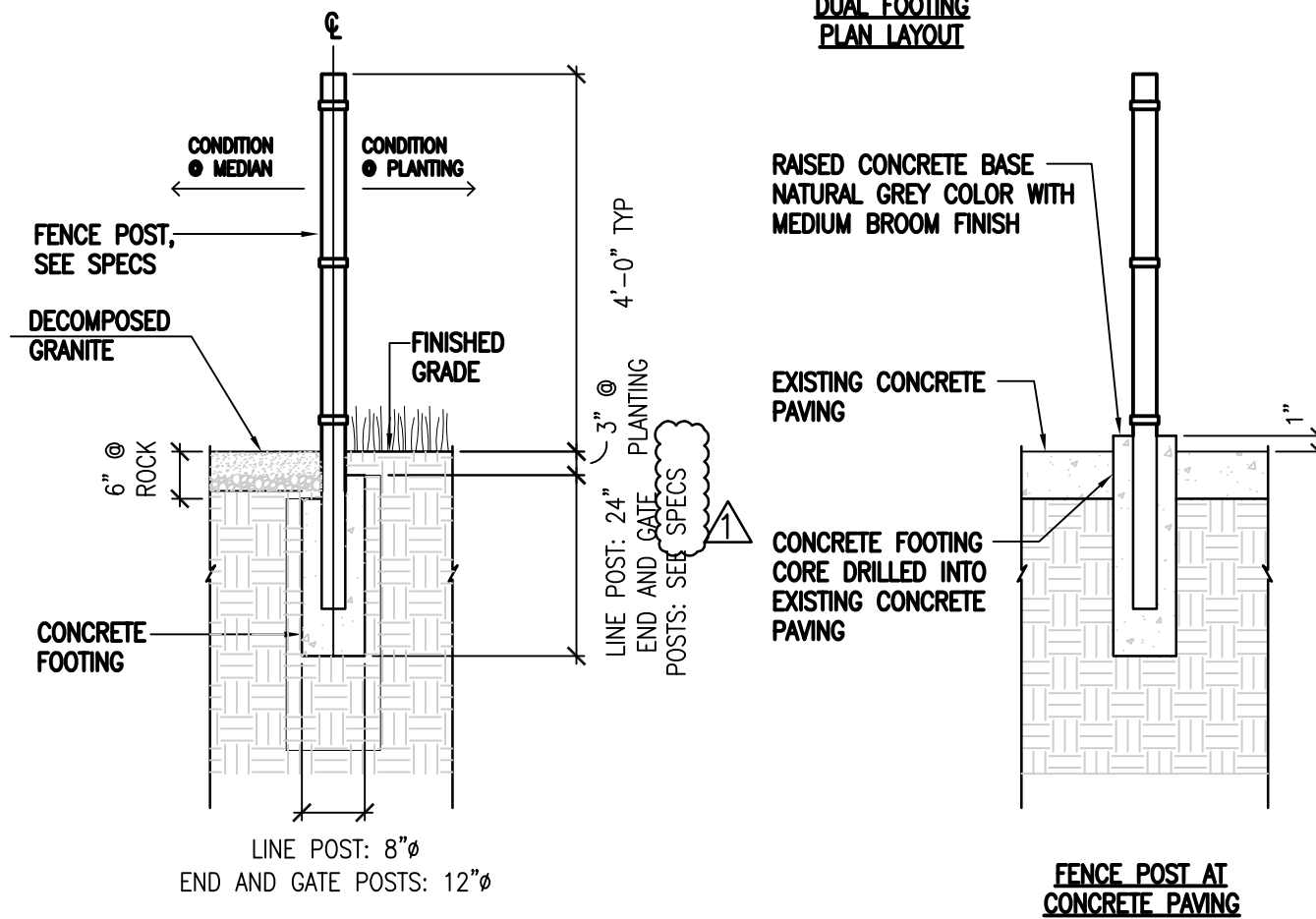


DROP ROD

NOT TO SCALE

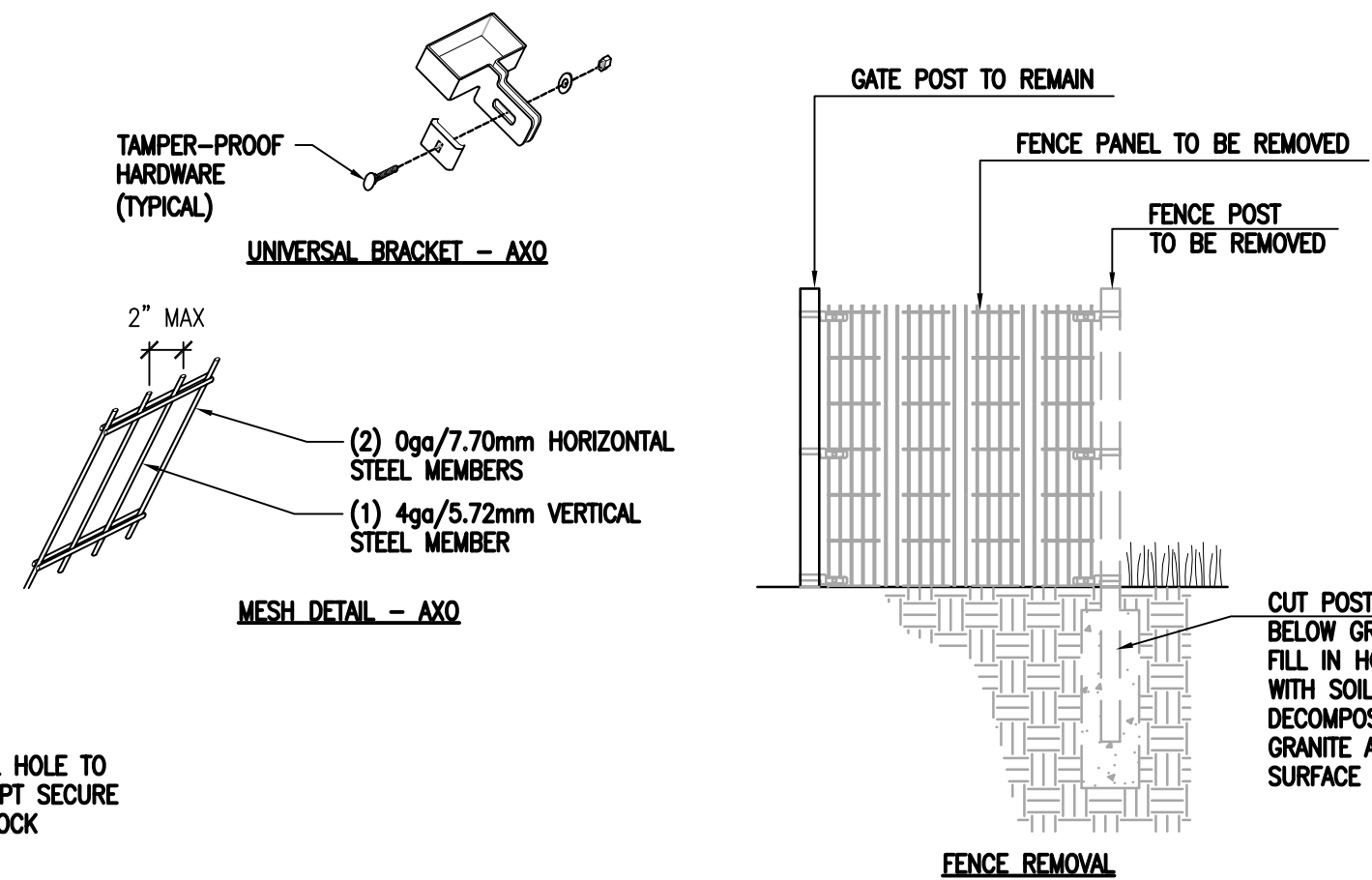
FENCE POST

NOT TO SCALE



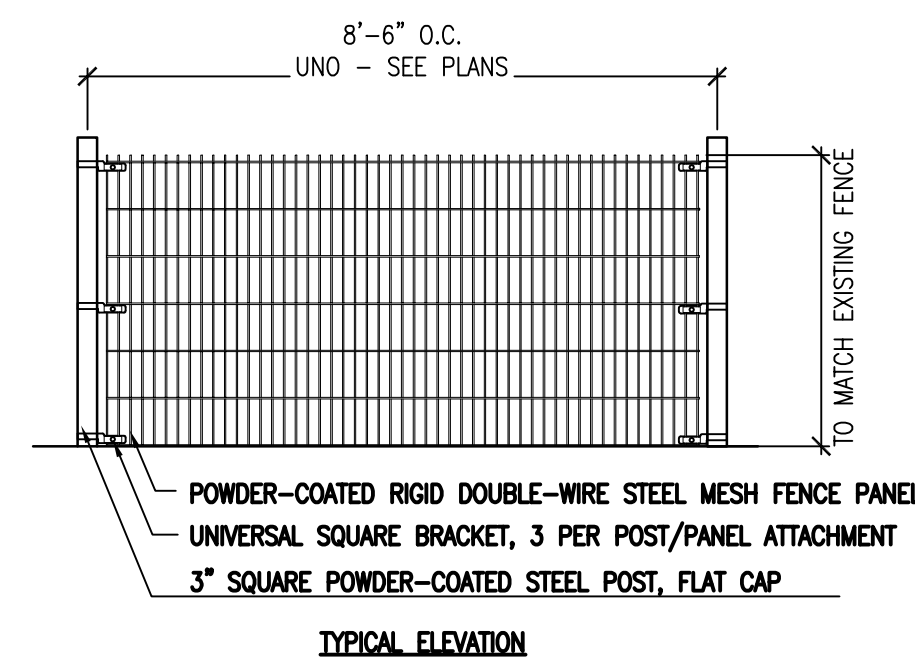
SLIDING GATE AND PEDESTRIAN SWING GATE

NOT TO SCALE





SITE FENCE


NOT TO SCALE



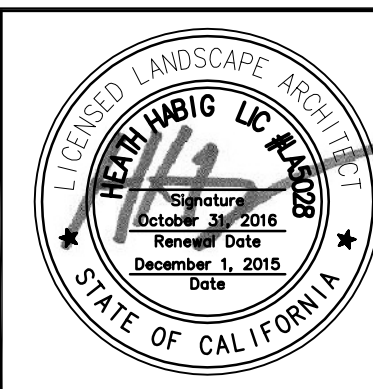
	09.22.15	SITE FENCE PERMIT SET			
	12.07.15	SITE FENCE BID SET			
	01.27.16	SITE FENCE BID ADDENDUM			
REV.	DATE		BY	SUBJ.	APP.

DESIGNED BY	H. HABIG
DRAWN BY	H. HABIG
CHECKED BY	U. GONZALES
APPROVED BY	R. JANIK
DATE	12.07.15



SAN BERNARDINO ASSOCIATED GOVERNMENTS


 801 S. GRAND AVENUE
 Suite 500
 Los Angeles, Co 90017-4633

ISSUED FOR CONSTRUCTION



TRANSIT CENTER

SITE FENCE DETAILS

CONTRACT NO.	IFB MKP16-83
DRAWING NO.	L-201
REVISION	SHEET NO.
	8 OF 8
SCALE	AS NOTED

ATTACHMENT C – GENERAL PROVISIONS
MKP16-83
PERMANENT FENCING SAN BERNARDINO TRANSIT CENTER
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A. SCHEDULE OF VALUES

Within 15 calendar days after "Notice to Proceed," the Contractor shall, upon request by Omnitrans, submit a Schedule of Values of the lump sum Bid entered on the Bid Form for all construction work. This Schedule of Values will form the basis for progress payments in accordance with these Specifications and shall show all of the major categories and subcategories of work and equipment requested by Omnitrans. Bonds and insurance costs will be identified as a separate line item. Such Schedule of Values shall not be required if Omnitrans, at its sole discretion, elects to pay the Contractor in lump sum within thirty (30) calendar days of receipt of proper invoice following the Contractor's satisfactory completion and Omnitrans' acceptance of all work.

B. PROGRESS PAYMENTS

1. Invoicing Instructions and Requirements:
 - a) Contractor shall invoice Omnitrans monthly based upon the Schedule of Values.
 - b) Invoices shall be separately numbered and sent to Omnitrans at the address listed below:

Omnitrans
1700 West Fifth Street
San Bernardino, California 92411
Attn: Accounts Payables
 - c) The Contractor is required to submit a Conditional Waiver and Release Upon Partial Payment with each invoice. The Contractor must submit the Contractor Final Release with the final invoice.
2. For capital projects, Omnitrans pays invoices on the first Thursday of each month.
 - a) Subject to verification of receipt, accuracy, and quality of orders, invoices received will be paid on the first Thursday of the month after the received date of an invoice.
 - b) If received within the 10 days prior to the first Thursday of the month, payment may be delayed to the following month.
3. In no event shall Omnitrans be obligated to make any payment on account of the Services which would cause the total amount paid to Contractor to exceed that not-to-exceed amount set forth above unless the Contract is amended through a Change Order.
4. For purposes of calculating the progress payments, Omnitrans will use the Schedule of Values submitted by the Contractor at the start of this Agreement. In no event will Omnitrans make a progress payment that, when added to the prior progress payments, amounts to a sum more than the Contractor's actual aggregate incurred expenses, adjusted to include Contractor's overhead and profit as allocated to such incurred expenses.
5. Omnitrans will pay only 95% of each progress payment amount as determined above,

retaining 5% as part security for the fulfillment of this Agreement by the Contractor. Unless otherwise required by law, the final payment of five percent (5%) of the value of the total price of this Agreement, if unencumbered, shall be paid no later than sixty (60) days after the date of recordation of the Notice of Completion.

6. No progress payments will be made for materials not installed.
7. Progress payments made by Omnitrans in no way shall be deemed or construed as acceptance by Omnitrans of work or waiver by Omnitrans of any rights hereunder.
8. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against Omnitrans arising from this Agreement.
9. The Contractor shall pay subcontractors, promptly upon receipt of each Omnitrans progress payment, the respective amounts allowed the Contractor on account of the work performed by subcontractors, to the extent of each such subcontractor's interest therein. Such payments to subcontractors shall be based on estimates made pursuant to this Agreement. Any diversion by the Contractor of payments received for prosecution of a contract, or failure to reasonably account for the application or use of such payments, constitutes ground for termination of the Contractor's control over the work and for taking over the work, in addition to disciplinary action by the Contractor's State License Board. The subcontractor shall notify, in writing, the Contractor's State License Board and Omnitrans of any payment less than the amount or percentage approved for the class or item of work as set forth in this Agreement.
10. In addition to other amounts properly withheld under this Agreement, Omnitrans shall withhold all legally required sums for, but not necessarily limited to, stop payment notices, labor and tax liens, etc.

C. FINAL INSPECTION AND ACCEPTANCE

Promptly after Substantial Completion has occurred, Contractor shall perform all Punch List Work, if any, which was deferred for purposes of Project Completion, and shall satisfy all of its other contractual obligations under the contract documents.

When the Contractor determines that the work is fully completed, including satisfactory completion of all inspections, tests, and required documentation, Punch List and clean-up items, Contractor shall give Omnitrans a written request for Final Acceptance within ten (10) days thereafter, specifying that the work is completed and the date on which it was completed.

Within thirty (30) days after receipt of the request for Final Acceptance from Contractor, Omnitrans will make a final inspection of the work and will either:

1. Reject the request for Final Acceptance, specifying the defective or uncompleted work; or
2. Issue a written Final Acceptance and record Notice of Completion with County Recorder.

Substantial Completion is defined herein as; In the opinion of Omnitrans, that Work or portion thereof that is sufficiently complete and in accordance with the Contract, that it can be utilized by Omnitrans for the purpose for which it was intended. A determination of

Substantial Completion does not waive, but may not require the prior completion of minor items, which do not impair Omnitrans ability to safely occupy and utilize the Work for its intended purpose.

D. FINAL PAYMENT

1. After the filing of the Notice of Completion, Omnitrans will make a proposed final estimate, in writing, of the total amount payable to the Contractor, including therein an itemization of said amount, segregated as to contract item quantities, extra work and any other basis for payment, and shall also show therein all deductions made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the proposed final estimate. Within 15 days after proposed final estimate has been submitted, Contractor shall submit to Omnitrans written approval of proposed final estimate and/or a written statement of all claims of the contract. No claim will be considered that was not included in written statement of claims, nor will any claim be allowed unless the Contractor has previously complied with the notice and protest requirements.
2. On the Contractor's approval, or if he files no claim within stated period, Omnitrans will issue a final written estimate, in accordance with the proposed final estimate submitted to the Contractor; and 35 days after the date of filing the Notice of Completion Omnitrans will pay the entire sum found to be due. Such final estimate and payment thereon shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except as otherwise provided.
3. If the Contractor within said period of 15 days files claims, Omnitrans will issue a semi-final estimate in lieu of the final estimate submitted to the Contractor; and 35 days after the date of filing of the Notice of Completion, Omnitrans will pay the sum found to be due. Such semi-final estimate and payment thereon shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except insofar as affected by the claims filed within the time and in the manner required hereunder and except as otherwise provided.
4. Upon final determination of any outstanding claims, Omnitrans shall then make and issue a final estimate in writing and within 30 days thereafter, Omnitrans will pay the entire sum, if any, found due. Such final estimate shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except as otherwise provided.

E. MODIFICATIONS IN THE SPECIFICATIONS AND SCOPE OF WORK

1. Modifications to the Specifications and or Scope of Work
 - a. Omnitrans may, from time to time, make changes to the Specifications and or Scope of Work under the Contract, through a Change Order.
 - b. A Change Order shall not modify the overall purpose of the Contract.
 - c. At any time during the term of the Contract, Omnitrans may order Additional Services to be performed by the Contractor by a Change Order.

- d. *Additional Services* are defined as services that were not contained in the Contract and are determined by Omnitrans to be necessary, and where a reasonable relationship to the services originally described in the Contract exists.
- e. Contractor shall not be entitled to make any changes in the services or perform any Additional Services unless authorized, in advance, by written Change Order.
- f. Contractor shall continue performance of the Scope of Work as modified by the Change Order upon receipt of a Change Order approved by Omnitrans.
- g. Contractor and Owner hereby agree and acknowledge that execution of the Change Order constitutes a mutual accord and satisfaction as to the work covered hereby. Contractor specifically waives and releases: any and all claims; rights or interest; including, but not limited to, those for: impact; disruption; loss of efficiency; "ripple"; other extraordinary; or consequential costs, arising directly or indirectly out of the work described in this Change Order, except as specifically included herein.

2. Authorization of Additional Work

- a. Authorization to make changes to the Specifications and or Scope of Work under the Contract shall be completed through a written Change Order.
- b. Persons authorized to make those changes will exclusively be:
Contractor: the person whose duly authorized signature appears on the PROPOSAL documents and has authority to legally bind the firm.
Omnitrans: CEO/General Manager.
- c. Either Omnitrans or Contractor may designate other persons as agreed upon in writing or as designated herein.
- d. For the purposes of this contract, temporary work ordered for special occasions that is not meant to affect the overall purpose and intent of this contract will be issued by Omnitrans under a separate contract and or purchase order. Any such additional work will be under the terms and conditions of that contract or purchase order, but may reference any portions of this contract.

3. Price Adjustments

- a. Any change in the contract that causes an increase or decrease in cost to Omnitrans, or the time required for the performance of the contract, must be approved as prescribed herein.
- b. An equitable adjustment in the compensation and schedule will be made upon an approved Change Order, which shall be incorporated, into the Contract by reference.
- c. Contractor shall be liable for all costs resulting from, and or for satisfactorily correcting, any specification change not properly ordered by written modification to the contract and signed by the Contracting Officer.

- d. Except as otherwise expressly provided in the Contract, when costs are a factor in any determination of a contract price adjustment, such costs shall be in accordance with the applicable cost principles of Subpart 31.2 of the Federal Acquisition Regulations (*FARs*) in effect at the onset of the Contract.

F. CLAIMS

1. In accordance with Public Contract Code Sections 20104 *et seq.* and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and Omnitrans shall be resolved under the following statutory procedure unless Omnitrans has elected to resolve the dispute pursuant to Public Contract Code Section 10240 *et seq.*
2. **All Claims.** All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before the date of final payment unless other notice requirements are provided in the Contract Documents. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by Omnitrans. The Contractor shall promptly comply with the Contract Documents in the performance of Work and/or the requests of Omnitrans even though a written claim has been filed. The Contractor and Omnitrans shall make good faith efforts to resolve any and all claims that may arise during performance of the Work covered by this Contract.
3. **Claims Under \$50,000.** Omnitrans shall respond in writing to the claim within 45 days of receipt of the claim, or, Omnitrans may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims Omnitrans may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of Omnitrans and the claimant. Omnitrans' written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.
4. **Claims over \$50,000 but less than or equal to \$375,000.** Omnitrans shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims Omnitrans may have against the claimant. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between Omnitrans and the claimant. Omnitrans' response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater. The Contractor shall make these records and documents available at all reasonable times, without any direct charge.
5. The Contractor will submit the claim justification in the following format:
 - 1) Summary of claim merit and price, and Contract clause pursuant to which the claim is made.

- 2) List of documents relating to claim
 - (a) Specifications
 - (b) Drawings
 - (c) Clarifications (Requests for Information)
 - (d) Schedules
 - (e) Other
 - 3) Chronology of events and correspondence
 - 4) Analysis of claim merit
 - 5) Analysis of claim cost
 - 6) Analysis of time impact analysis in CPM format
 - 7) Cover letter and certification of validity of the claim
6. If the claimant disputes Omnitrans' response, or if Omnitrans fails to respond within the statutory time period(s), the claimant may so notify Omnitrans within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, Omnitrans shall schedule a meet and confer conference within 30 Days.
7. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code 900 et seq. and Government Code 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.

Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by Omnitrans, is a condition precedent to any action, proceeding, litigation, suit, general conditions claim, or demand for arbitration by Contractor.

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the language listed below. Failure to submit the notarized certificate will be cause for denying the claim.

Certificate

Under the penalty of law for perjury or falsification with specific reference to the California False Claims Act, Government Code Section 12650 et. Seq., the undersigned,

(Name)

(Title)

(Company)

herby certifies that the claim for the additional compensation and time, if any, made herein for the work on this Contract is a true statement of the actual cost incurred and time sough, and is fully documented and supported under the Contract between the parties

Dated: _____

Signature: _____

NOTARY CERTIFICATION	
STATE OF _____	}SS:
COUNTY OF _____	
Subscribed and sworn to before me this _____ day of _____, 20____, by _____, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.	
Signature of Notary Public _____	
Printed/typed name of Notary Public _____	
County of residence _____ Date commission expires _____	
(SEAL)	

G. ACCELERATION

1. Omnitrans reserves the right to accelerate the work of the Contract at any time during its performance. In the event that Omnitrans directs acceleration, such directive will be

given to the Contractor in writing. The Contractor shall keep cost and other Project records related to the acceleration directive separately from normal Project cost records and shall provide a written record of acceleration costs to Omnitrans on a daily basis.

2. In the event that the Contractor believes that some action or inaction on the part of Omnitrans constitutes an acceleration directive, the Contractor shall immediately notify Omnitrans in writing that the Contractor considers the actions or inactions an acceleration directive. This written notification shall detail the circumstances of the acceleration directive. The Contractor shall not accelerate their work efforts until Omnitrans responds to the written notification. If acceleration is then directed or required by Omnitrans, all cost records referred to in section (1) shall be maintained by the Contractor and provided to Omnitrans on a daily basis.
3. In order to recover additional costs due to acceleration, the Contractor must document that additional expenses were incurred and paid by the Contractor. Labor costs recoverable will only be overtime or shift premium costs or the cost of additional laborers brought to the site to accomplish the accelerated work effort. Equipment costs recoverable will only be the cost of added equipment mobilized to the site to accomplish the accelerated work effort.

H. STOP PAYMENT NOTICES

Omnitrans, at its sole discretion, may, at any time, retain out of any amounts due the Contractor, sums sufficient to cover claims filed pursuant to Section 9530 et. seq. of the California Civil Code.

I. ORDER OF WORK

Contractor shall perform work hereunder at such places, and in such order or precedence, as may be determined necessary by the Engineer to expedite completion of the required work.

J. LABOR PROVISIONS

1. Prevailing Wages

- a. Contractor shall comply with all applicable requirements of Division 2, Part 7, Chapter 1 of the Labor Code and all applicable federal requirements respecting prevailing wages. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the wage rates determined by the Director of the Department of Industrial Relations (DIR) for similar classifications of labor, the Contractor and subcontractors shall not pay less than the higher wage rate. The DIR will not accept lower state wage rates not specifically included in the Federal minimum wage determination.
- b. The Contractor and each subcontractor shall forfeit as a penalty to Omnitrans not more than Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker

was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

- c. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may view a copy of the prevailing rates of per diem wages upon request to OMNITRANS. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project Site. Contractor shall post, at appropriate conspicuous points on the Project Site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

2. Minimum Wages

- a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally, and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts due at time of payment computed at wage rates not less than those specified in the General Wage Determinations referenced in this section regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics; and the wage determination decision shall be posted by the Contractor at the site of the work in a prominent place where it can be easily seen by the workers. For the purpose of this clause, contributions made or cost reasonably anticipated under the Labor Code of the State of California on behalf of laborers or mechanics are considered wages paid by such Laborers or mechanics. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.
- b. Omnitrans shall require that any class of laborers or mechanics, including apprentices and trainees, which is not listed in the General Wage Determinations and which is to be employed under this Contract, shall be classified conformably to such wage determinations. In the event Omnitrans does not concur in the Contractor's proposed classification or reclassification of a particular class of laborers and mechanics (including apprentices and trainees) to be used, the question, accompanied by the recommendation of Omnitrans, shall be referred to the State Director of Industrial Relations for determination.
- c. Omnitrans shall require, whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage and the Contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon cash equivalent of the fringe benefit, the questions, accompanied by the recommendation of Omnitrans, shall be referred to the State Director of Industrial Relations for determination.

- d. All disputes concerning the payment of wages or the classification of workers under this Agreement shall be promptly reported to Omnitrans.

3. Deductions

In addition to amounts which Omnitrans may retain under other provisions of the Contract Documents Omnitrans may withhold payments due to Contractor as may be necessary to cover:

- a. Stop Payment Notice Claims.
- b. Defective work not remedied.
- c. Failure of Contractor to make proper payments to its subcontractors or suppliers.
- d. Completion of the Contract if there exists a reasonable doubt that the work can be completed for balance then unpaid.
- e. Damage to another Contractor or third party.
- f. Amounts which may be due Omnitrans for claims against Contractor.
- g. Failure of Contractor to keep the record ("as-built") drawings up to date.
- h. Failure to provide updates on the construction schedule and/or a recovery schedule if required.
- i. Site clean-up.
- j. Failure of the Contractor to comply with requirements of the Contract Documents, including but not limited to Contractor's failure to provide approved complete as-builts prior to filing of Notice of Completion.
- k. Liquidated damages.
- l. Legally permitted penalties.
 - i. Omnitrans may apply such withheld amount or amounts to payment of such claims or obligations at its discretion with the exception of subsections (a), (c) and (e) of this Article, which must be retained or applied in accordance with applicable law. In so doing, Omnitrans shall be deemed the agent of Contractor and any payment so made by the Contractor shall be considered as a payment made under contract by Omnitrans to Contractor and Omnitrans shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of the claim or obligations. Omnitrans will render Contractor a proper accounting of such funds disbursed on behalf of the Contractor.

- ii. Upon completion of the Contract, Omnitrans will reduce the final Contract amount to reflect costs charged to the Contractor, back charges or payments withheld pursuant to the Contract Documents.
- iii. All amounts owing by Contractor to Omnitrans under the Contract shall earn interest from the date on which such amount is owing at the lesser of (i) 10% per annum or (ii) the maximum rate allowable under applicable Governmental Rules.

4. Payrolls and Basic Records

- a. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three (3) years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name, address and social security number of each such worker, the correct classification, rates of pay, daily and weekly number of hours worked, deductions made and actual wages paid.
- b. Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the work. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury
- c. The Contractor will submit weekly a copy of all payrolls to Omnitrans as required in these "Labor Provisions" as well as to the Department of Industrial Relations (DIR). See subsection 17, Certified Payroll Compliance Monitoring, in this section. The copy shall be accompanied by a statement signed by the employer or its agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the State Director of Industrial Relations and that the classifications as set forth for each laborer or mechanic conform to the work performed. A submission of the "Weekly Statement of Compliance," which is required under this Contract, shall satisfy this requirement. The prime Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The Contractor will make the records required under the labor standard clauses of the contract available for the inspection by authorized representatives of Omnitrans, and will permit such representatives to interview employees during working hours on the job. In the event of noncompliance with the requirements of this Section, the Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this section. Should noncompliance still be evident after such ten (10) day period, the Contractor shall, as a penalty to Omnitrans, forfeit One Hundred Dollars (\$100.00) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the DIR, such penalties shall be withheld from contract payments

5. Apprentices and Trainees

- a. Apprentices: Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide

apprenticeship program as defined in section 1777.5 of the Labor Code of the State of California. The allowable ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the State Director of Industrial Relations for the classification of work he actually performed. The Contractor or subcontractor will be required to furnish to Omnitrans or the State Director of Industrial Relations written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman's rate contained in the applicable wage determination).

- b. Trainees: Except as provided in 29 CFR 5.15, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to or individually registered in a program which has received prior approval, evidenced by formal certification, by the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training. The ratio of trainees to journeymen shall not be greater than that permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor will be required to furnish the contracting officer or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the certification of his program, the registration of the trainees, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- c. Equal Employment Opportunity: The utilization of apprentices and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR, Part 30.

6. Compliance With Copeland Regulations (29 CFR, Part 3)

The Contractor shall comply with the Copeland Regulations (29 CFR, Part 3) of the Secretary of Labor which are herein incorporated by reference.

7. Contract Termination; Debarment

A breach of item 1 through 6 may be grounds for termination of the contract, and for debarment as provided in 29 CFR 5.6.

8. Overtime Requirements

No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work week in which he is employed on such

work to work in excess of 8 hours a day or 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 8 hours a day or 40 hours in such work week.

9. Violation; Liability for Unpaid Wages

Pursuant to section 1775 of the Labor Code of the State of California, in the event that any workman employed on this public works project is paid less than the amount specified in the General Prevailing Wage Determinations or less than is required, relative to overtime, the Contractor and any subcontractor responsible therefore shall be liable to the affected workman for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the State of California or Omnitrans for liquidated damages. Such liquidated damages shall be computed with respect to each individual workman found to be underpaid and shall be in the amount of \$50 per calendar day that a workman was underpaid.

10. Withholding for Liquidated Damages

Omnitrans may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for liquidated damages as provided in this section.

11. Final Labor Summary

The Contractor and each subcontractor shall furnish to Omnitrans, upon the completion of the contract, a summary of all employment, indicating for the completed project, the total hours worked and the total amount earned.

12. Final Certificate

Upon completion of the contract, the Contractor shall submit to Omnitrans, with the voucher for a final payment for any work performed under the contract, a concerning wages and classifications for laborers and mechanics, including apprentices and trainees employed on the project, in the following form:

The undersigned, Contractor on

(Contract No.)

hereby certifies that all laborers, mechanics, apprentices and trainees employed by the Contractor or by a subcontractor performing work under the contract on the project have been paid wages at rates not less than those required by the contract provisions, and that the work performed by each such laborer, mechanic, apprentice or trainee conformed to the classifications set forth in the contract or training program provisions applicable to the wage rate paid.

Signature and Title

13. Notice to Omnitrans of Labor Dispute

Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to Omnitrans.

14. Disputes Clause

- a. All disputes concerning the payment of prevailing wage rates or classifications shall be promptly reported to Omnitrans for its referral to DOT for decision or, at the option of Omnitrans, DOT referral to the Secretary of Labor. The decision of DOT or the Secretary of Labor, as the case may be, shall be final.
- b. All questions relating to the application or interpretation of the Copeland Act, the Contract Work Hours Standards Act, the Davis-Bacon Act, or Section 13 of the Act shall be sent to the Federal Transit Administration (FTA) for referral to the Secretary of Labor for ruling or interpretation, and such ruling or interpretation shall be final.

15. Convict Labor

In connection with the performance of work under this Contract, the Contractor agrees not to employ any person-undergoing sentence of imprisonment at hard labor. This does not include convicts who are on parole or probation.

16. Insertion in Subcontracts

The Contractor shall set forth in item 1 through 15 of this Section so that all of the provisions of this section will be inserted in all construction subcontracts of any tier, and such other clauses as the Government may by appropriate instructions require.

17. Certified Payrolls Compliance Monitoring

- a. This project is subject to monitoring and enforcement by the Department of Industrial Relations (DIR).
- b. This project is subject to prevailing wages.
- c. Contractors and subcontractors are obligated to submit certified payroll records utilizing the DIR's eCPR system. You can access additional information regarding the DIR's reporting system by using the following link: <http://www.dir.ca.gov/Public-Works/Certified-Payroll-Reporting.html>.

K. TIME EXTENSION/DELAYS

1. Contractor may be granted an extension of time for any portion of a delay in completion of the work due to acts of God, the public enemy, wars, civil unrest, fires, quarantine restrictions, or weather more severe than normal, providing that (1) the aforesaid causes were not foreseeable and did not result from an act or omission by the Contractor, (2) Contractor has taken reasonable precautions to prevent further delays owing to such

- causes, and (3) Contractor notifies Omnitrans in writing of the cause(s) for the delay within ten (10) days from the beginning of any such delay. No claims for additional compensation or damages for the foregoing delays shall be allowed to the Contractor, and the extension of time provided for herein shall be the sole remedy of the Contractor on account of any such delays.
2. An extension of time will not be granted for a delay described in the above paragraph(s) caused by a shortage of materials, except if materials are furnished by Omnitrans, unless the Contractor supplies Omnitrans with documented proof that every effort to obtain the materials from all known sources that (a) such materials could have been obtained only at exorbitant prices or (b) the prices were entirely inconsistent with current rates, taking into account the quantities; and (c) such facts could not have been known or anticipated at the time the Notice To Proceed was issued. Contractor shall also submit proof, that the inability to obtain such materials when originally planned, did in fact, cause a delay in completion of the work that could not be compensated for by revising the sequence of its operations. Only the physical shortage of material will be considered as a basis for an extension of time.
 3. An extension of time for weather more severe than normal shall be granted only to the extent the work is actually delayed as determined by Omnitrans. Normal is defined as the monthly average of the temperature and rainfall wherein the work was performed for the prior 20 years before the execution of the contract.
 4. In the event Contractor is actually and necessarily delayed by an act or omission on the part of Omnitrans, as determined by Omnitrans, the Contractor shall notify Omnitrans in writing within five (5) days from the beginning of any such delay. The time for completion of the work may be extended at the sole discretion of Omnitrans.
 5. Within 30 days after the last day of delay, Contractor shall provide Omnitrans with detailed information concerning the circumstances of the delay, the number of days actually delayed, and the measures taken to minimize or prevent the delay. Failure to submit information shall be sufficient reason to deny the claim. Omnitrans shall ascertain the facts and the extent of the delay; and provide the Contractor its written findings, which will be final and conclusive. Except for the additional compensation for herein and except as provided in Public Contract Code Section 7102, Contractor shall have no claim for damages or compensation for any delay or hindrance.
 6. No extension of time will be granted for any Omnitrans caused delay or delay as defined in which (a) the performance of work would have been concurrently delayed by Contractor induced causes, including but not limited to an act or omission of the Contractor, or (b) remedies are included or excluded by any other contract provision. Only the actual delay necessarily resulting from the causes specified in this Article shall be grounds for extension of time. Should the Contractor be delayed at any time for any period by two or more of the causes specified in this article, Contractor shall only be entitled to one time extension for the entire delay.
 7. Any time extension granted to Contractor shall not release the Contractor or surety from its obligations. Work shall continue and be carried on in accordance with the contract provisions, unless formally suspended or terminated by Omnitrans.

L. NONDISCRIMINATION

During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to employment; upgrading; demotion; transfer; recruitment or recruitment advertising; layoff; termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post, in conspicuous places available to the employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.
3. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this Section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
5. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations or orders, this Contract may be canceled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts or Federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order, of the Secretary of Labor, or as otherwise provided by law.
6. The Contractor will include the provisions of this Paragraph ("Nondiscrimination") in every subcontract or purchase order entered into under this Agreement unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for

noncompliance provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

7. No person employed on the work covered by this Agreement shall be discharged or in any way discriminated against because he has filed any complaints or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable hereunder to his employer.

M. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Contractor agrees to comply with and ensure compliance by all subcontractors with all requirements of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §2000d; 49 U.S.C. §5332 and Department of Transportation Regulations, “Nondiscrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act,” 49 CFR Part 21.

N. GOVERNMENT INSPECTIONS

Omnitrans or Government representatives shall have access to the construction site and shall have the right to inspect all project works.

O. LICENSING, PERMITS AND INSPECTION COSTS

1. The Contractor warrants that it has all necessary licenses and permits required by the laws of the United States, State of California, the County of San Bernardino, the Local Jurisdictions, and all other appropriate governmental agencies, and agrees to maintain these licenses and permits in effect for the duration of the Agreement. Further, Contractor warrants that its employees, agents, and Contractors and subcontractors shall conduct themselves in compliance with such laws and licensure requirements including, without limitation, compliance with laws applicable to nondiscrimination, sexual harassment and ethical behavior throughout the duration of this Agreement. Contractor further warrants that it shall not retain or employ an unlicensed subcontractor to perform work on this Project. Contractor shall notify Omnitrans immediately and in writing of its employees’, agents’, Contractors’ or subcontractors’ inability to obtain or maintain, irrespective of the pendency of any appeal, any such licenses, permits, approvals, certificates, waivers, and exemptions. Such inability shall be cause for termination of this Agreement.
2. Contractor shall procure all permits and licenses and pay all charges, assessments and fees as may be required by the ordinances and regulations of the public agencies having jurisdiction over the areas in which the work is located, and shall comply with all the terms and conditions thereof and with all lawful orders and regulations of each such public agency relating to construction operations under the jurisdiction of such agency.
3. Contractor shall act as permittee on behalf of Omnitrans for coordination of all associated City of San Bernardino Building Department inspections.

P. HAZARDOUS SUBSTANCES

1. CAL-OSHA Requirements

All flammable, corrosive, toxic or reactive materials being bid must have a complete CAL-OSHA Material Safety Data Sheet accompanying the submitted bid.

2. Notice of Hazardous Substances

Title 8, California Code of Regulations, Section 5194 (e)(c), states that the employer must inform any Contractor employers with employees working in the employer's workplace of the hazardous substances to which their employees may be exposed while performing their work. In compliance with this requirement, Omnitrans hereby gives notice to all Bidders that the following general categories of hazardous substances are present on Omnitrans' premises:

- a. adhesives, sealant, patching and coating products
- b. antifreeze, coolants
- c. cleaners, detergents
- d. paints, thinners, solvents
- e. pesticides, petroleum products (diesel and unleaded fuel, oil products)
- f. printing, photocopying materials
- g. propane welding materials/compressed gases (e.g., acetylene, oxygen, nitrogen)

More specific information may be obtained from Omnitrans Safety and Security Office at (909) 379-7125, and from Material Safety Data Sheets for individual products.

Q. MEDIA AND THE PUBLIC

Contractor shall immediately refer all inquiries from the news media or other public sources to Omnitrans' Project Manager, or designated representative, relating to this project.

R. COORDINATION AND ACCESS

Omnitrans may undertake or award other contracts for additional work at the project site. Contractor is responsible for coordinating its work with the work of other Contractors as appropriate. The Contractor acknowledges that they do not have any exclusive access to the site or other work areas. Omnitrans may require that certain facilities and areas be used concurrently by the Contractors and others. Contractor shall cooperate fully with Omnitrans Contractors/consultants that may be performing work in the construction area.

S. UTILITIES RELATED DELAYS

If, due to interruptions caused by the undocumented utilities, Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, there shall be paid to the Contractor that amount that Omnitrans may find to be a fair and reasonable compensation for the part of the Contractor's actual loss, that, in the opinion of Omnitrans was unavoidable, determined as follow: Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the

performance of extra work paid for on a force account basis per Section E, Modifications in the Specifications and Scope of Work, with the following exceptions:

1. The utility related delay factor for each classification of equipment shown in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates will be applied to that equipment rental rate.
2. The time for which the compensation will be paid will be the actual normal working time during which the delay condition exists, but in no case will exceed 8 hours in any one day.
3. The days for which compensation will be paid will be the calendar days, excluding Saturdays, Sundays and legal holidays, during the existence of the delay, except that when the rented equipment can be returned or used elsewhere on the project, then no payment will be made for utilities related delays.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of workers, and cost of extra moving of equipment.

T. UTILITIES AND SUBSURFACE STRUCTURES

Contractor shall protect from damage utility and other subsurface structures that are to remain in place, be installed, relocated or otherwise rearranged (as used herein, rearranged includes installation, relocation, alteration or removal).

The right is reserved to Omnitrans, or their authorized agents, to enter upon the site for the purpose of making those changes that are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. Contractor shall cooperate with forces engaged in this work and shall conduct operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by the other forces. Wherever necessary, the work of Contractor shall be coordinated with the rearrangement of utility or other non-highway facilities, and Contractor shall make arrangements with the owner of those facilities for the coordination of the work.

Attention is directed to the possible existence of underground main or trunk line utilities not indicated on the plans or in the special provisions and to the possibility that underground main or trunk lines may be in a location different from that which is indicated on the plans or in the special provisions. Contractor shall ascertain the exact location of underground main or trunk lines whose presence is indicated on the plans or in the special provisions, the location of their service laterals or other appurtenances, and of existing service lateral or appurtenances of any other underground facilities which can be inferred from the presence of visible facilities such as buildings, meters and junction boxes prior to doing work that may damage any of the facilities or interfere with their service.

If Contractor cannot locate an underground utility whose presence is indicated on the plans or in the special provisions, the Contractor shall so notify Omnitrans in writing. If the utility for which the notice is given is in a substantially different location from that indicated on the plans or in the special provisions, the additional cost of locating the utility will be paid for as extra per Section E, Modifications in the Specifications and Scope of Work.

If Contractor discovers underground main, trunk lines or other structures and utilities not indicated on the plans or in the special provisions, Contractor shall immediately give Omnitrans and the Utility Company written notification of the existence of those utilities. Such utilities shall be located and protected from damage as directed by Omnitrans, and the cost of that work will be paid for as extra work per Section E, Modifications in the Specifications and Scope of Work. Contractor shall, if directed by Omnitrans repair any damage which may occur to the main or trunk lines. The cost of that repair work, not due to the failure of the Contractor to exercise reasonable care, will be paid for as extra work per Section E, Modifications in the Specifications and Scope of Work. Damage due to Contractor's failure to exercise reasonable care shall be repaired at the Contractor's cost and expense.

Where it is determined by Omnitrans that the rearrangement of an underground utility essential in order to accommodate the project work and the plans and specifications do not provide that the utility is to be rearranged, Omnitrans will provide for the rearrangement of the utility by other forces or the rearrangement shall be performed by Contractor and will be paid for as extra work per Section E, Modifications in the Specifications and Scope of Work.

When ordered by Omnitrans in writing, Contractor shall rearrange any utility or other subsurface structures necessary to be rearranged as a part of the project work and that work will be paid for as extra work per Section E, Modifications in the Specifications and Scope of Work.

Should Contractor desire to have any rearrangement made in any utility facility, or other improvement, for the Contractor's convenience in order to facilitate the Contractor's construction operations, which rearrangement is in addition to, or different from, the rearrangements indicated on the plans or in the special provisions, the Contractor shall make whatever arrangements are necessary with the owners of the utility or other subsurface structure for the rearrangement and bear all expenses in connection therewith.

Contractor shall immediately notify Omnitrans of any delays to the Contractor's operations as a direct result of underground utilities or other structures which were not indicated on the plans or in the special provisions or were located in a position substantially different from that indicated on the plans or in the special provisions, (other than delays in connection with rearrangements made to facilitate the Contractor's construction operations or delays due to a strike or labor dispute). These delays will be considered utilities related delays within the meaning of Section S, Utilities Related Delays and compensation for the delay will be determined in conformance with the provisions in Section J, Labor Provisions. Contractor shall be entitled to no other compensation for that delay.

U. LOCATION OF UNDERGROUND UTILITIES (OFFSITE WORK ONLY)

Contractor is required to obtain permits prior to start of excavation by contacting the appropriate permitting agencies at least 15 calendar days in advance. For the Offsite work scan the construction site with electromagnetic or sonic equipment, and mark the surface of the ground where existing underground utilities are discovered. Verify the elevations of existing piping, utilities, and any type of underground obstruction not indicated or specified to be removed but indicated or discovered during scanning in locations to be traversed by piping, ducts, and other work to be installed. Verify elevations before installing new work closer than

nearest manhole or other structure at which an adjustment in grade can be made. Perform potholing to confirm location of all the utilities along the construction alignment prior to start of the construction. The Contractor is responsible for all costs associated with these investigations including the cost of equipment, labor and materials required for any confined space entry.

V. UNFORESEEN HAZARDOUS OR REGULATED MATERIALS

All known hazardous or regulated materials are indicated in the contract documents. If material that is not indicated in the contract documents is encountered that may be dangerous to human health upon disturbance during construction operations, stop that portion of work and notify Omnitrans immediately. Intent is to identify materials such as PCB, lead paint, mercury, petroleum products, and friable and non-friable asbestos. The handling, containment and disposal of hazardous and containment material shall be in accordance with applicable State, Federal, and local environmental laws and regulations.

Contractor shall immediately notify Omnitrans of any delays to the Contractor's operations as a direct result of Unforeseen Hazardous and Regulated Materials. These delays will be considered utilities related delays within the meaning of Section S, Utilities Related Delays and compensation for the delay will be determined in conformance with the provisions in Section J, Labor Provisions. Contractor shall be entitled to no other compensation for that delay.

W. CONTRACTOR'S OBLIGATIONS

1. Overview of Contractor's Responsibilities

1.1. General:

Contractor shall furnish the following on the Project, in accordance with Omnitrans-furnished Contract Documents and all other requirements set forth in the Contract:

- 1.1.1. Construction Services – Contractor shall furnish labor, material and equipment necessary to construct the Project as designed in a timely manner, in accordance with all construction practices generally accepted as standards of the industry in the State of California, in a good and workmanlike manner, free from construction defects.

1.2. Compliance with Requirements – Contractor shall perform all services set forth in Paragraph entitled General Guidelines above (in this section), provide all materials and undertake all efforts necessary or appropriate (excluding only those materials, services and efforts that the Contract Documents specify will be furnished by Omnitrans or other persons) to construct the Project in accordance with the requirements of the Contract Documents, the Schedule, all applicable Laws, all Governmental Approvals, the Construction Documents provided to Omnitrans, and all other applicable safety, environmental and other requirements, and other physical limits resulting from constraints affecting the Project, so as to achieve Substantial Completion and Final Acceptance and to perform all required tests by the deadlines specified herein, and otherwise to do everything required by and in accordance with the Contract Documents.

1.3. Professional Qualifications – Contractor shall perform the Work under the supervision of persons licensed and certified to practice the applicable function/profession in the State of California, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the Work in accordance with the Contract, and who shall assume professional responsibility for the accuracy and completeness of the Work prepared or checked by them.

1.4. Governing Dimensions – Before commencing any construction work, Contractor shall verify all governing dimensions at the Worksite, examine all adjoining work and activities that may have an impact on Work, and ensure that the Contract Documents (and any other documents related to the Work) accurately depict all governing and adjoining dimensions.

1.5. Scheduling – Contractor shall schedule and direct its work to provide an orderly work progression, achieve on-time completion of all Milestones set forth in the Schedule, and complete its work within the Contract Time. To accomplish this goal, Contractor shall furnish such employees, materials, facilities and Equipment, and work such hours (including extra shifts, overtime operations, Sundays and holidays), as may be necessary.

1.6. Means and Methods – Contractor shall be solely responsible for the performance of its Work in accordance with its own means, methods, sequences, and procedures, and for coordination of all portions of its Work in compliance with the Contract.

1.7. Performance During Disputes – At all times during the term hereof, including during any Dispute, Contractor shall perform as directed by Omnitrans, and shall comply with all provisions of the Contract.

1.8. Ascertaining Facts – Contractor shall be solely responsible for its failure to ascertain the facts and take the actions described, represented, warranted, and acknowledged in this Article, and no provision of this Contract shall be construed to relieve Contractor from responsibility for such failure.

1.9. Subcontractors & Suppliers – Contractor shall be responsible for the acts and omissions of its Subcontractors and Suppliers. Contractor agrees to bind every subcontractor to the terms of this Agreement as far as such terms are applicable to subcontractor's portion of the Work

1.10. Assistance to Omnitrans – Contractor shall provide such assistance as is reasonably requested by Omnitrans in dealing with any Government Entity, or in prosecuting and defending Environmental lawsuits in any and all matters relating to the Work. Such assistance may include providing information and reports regarding the Work, as well as executing declarations and attending meetings and hearings. In no event shall the Contractor be required to provide legal services.

1.11. Cooperation – The Contractor will cooperate with Omnitrans and its Authorized Representative(s), in their review(s) and/or inspection(s) of any portion or phase of the Work, and other matters relating to the Work.

1.12. Mitigation – The Contractor will Mitigate Delay in all circumstances, to the extent reasonably possible, including the re-sequencing, reallocating or redeploying of its forces to other work, as appropriate.

X. CONTRACTOR’S REPRESENTATIONS, WARRANTIES AND COVENANTS

Contractor represents, warrants and covenants for the benefit of Omnitrans that:

1. Status – If it is a corporation, limited partnership, general partnership, and/or joint venture, it is duly organized, validly existing and in good standing under the Laws of its jurisdiction of formation, and has full power and authority to own and operate its business and properties and perform the Work within the State of California.
2. Contractor & Subcontractor Qualifications – It and all of its Subcontractors are, and will be and will remain, fully experienced and properly qualified to perform the Work, and are, and throughout the term of this Contract shall remain, properly licensed, equipped, organized and financed to perform the Work hereunder and shall perform it in accordance with the Contract and in accordance with professional standards of skill, care, and diligence adhered to by firms recognized for their expertise, experience and knowledge in performing Work of a similar nature.
3. Control of Employees and Subcontractors – It shall maintain complete control of its employees, and its Subcontractors and Suppliers of all tiers, and shall not assign or transfer Work from itself or any listed Subcontractor or Supplier to itself or any other Subcontractor or Supplier without the written consent of Omnitrans.
4. Review of Information and Inspection of Worksites – It has, in accordance with prudent and generally accepted engineering and construction practices:
 - a. Reviewed all of the information provided in the Contract (including reports provided by Omnitrans);
 - b. Inspected and evaluated the Worksite and surrounding locations to the extent the Contractor deems necessary or advisable for performing all portions/phases of the Work under the Contract. These inspections and evaluations include without limitation:
 - 1) The character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Worksite, including review of the Contract Documents provided by Omnitrans.
 - 2) Conditions bearing upon transportation, disposal, handling, and storage of materials, Goods, and Equipment;
 - 3) The availability of labor, water, electric power, and roads;
 - 4) Uncertainties of weather, or physical conditions at the site;

- 5) The conformation and conditions of the ground;
 - 6) The character of Equipment and facilities needed preliminary to and during Work performance; and
 - 7) Conditions bearing upon security and protection of material, Goods, Equipment, and Work in progress.
5. Physical Requirements – As a result of its inspection and examination of the Worksite, and other related and surrounding sites and conditions, it is familiar with and accepts the physical requirements of the Work.
 6. Feasibility – As a result of its review of all the information and its inspection and examination of the Worksite, it has evaluated the feasibility of performing the Contract within the Contract Time and for the Total Contract Price, and has reasonable grounds for believing and does believe that such performance, including achievement of Substantial Completion of the Project within the Contract Time, for the Total Contract Price is feasible and practicable.
 7. Legal Proceedings – There are no existing or threatened legal proceedings against Contractor that would have an adverse effect on its ability to perform its obligations under the Contract, its financial condition or its operations.
 8. Governmental Approvals – Based upon its review of the Contract Documents, it shall be able to obtain and keep in effect throughout the Contract Time all Governmental Approvals the Contractor is obligated to obtain in accordance with the Contract.
 9. Difficulty and Cost of Work – It has estimated the difficulty and cost of successfully performing the Work, and based upon that estimate has concluded that it can successfully perform the Work at the Total Contract Price.
 10. Non-Debarment: In accordance with the provisions of the California Labor Code, Contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant section 1777.1 or section 1777.7 of the California Labor Code. Any contract on a public works project entered into between a Contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to Omnitrans. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.
 11. Non-Discrimination: Contractor shall comply with all applicable federal, state, and local laws, rules, and regulations pertaining to non-discrimination, including but not limited to, Section 1735 of the California Labor Code and Section 12940 of the California Government Code. The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US DOT

assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

12. Conflicts of Interest/ Criminal Activities: A Contractor shall not permit any official, officer or employee of Omnitrans during his tenure, or for one year thereafter, to have any interest, direct or indirect, in this Contract or the proceeds thereof. However, this subsection shall not be construed to extend to this Contract if made with a corporation for its general benefit. Contractor, its employees, its Subcontractors or their employees shall not provide or offer to provide any campaign contribution to any member of Omnitrans in violation of California Government Code Section 84308. Further, to Contractor's knowledge, neither Contractor nor any of its employees nor its Subcontractors nor their employees has either promised or provided a campaign contribution of \$250 or more to any member of Omnitrans within 12 months prior to the award of this Contract or any subcontract of this Contract, unless an explicit statement to the contrary accompanies Contractor's bid. In no event shall gratuities (in the form of entertainment, gifts, or otherwise) be offered promised or given by Contractor, or any agent or representative of Contractor, to any official, officer or employee of Omnitrans or its Authorized Representative. Contractor or his employees shall not enter into any Contract involving not be considered a conflict under Sections 1090 et seq. and 87100 et seq. of the Government Code of the State of California. In the event Contractor, or any of its officers, partners, principals or employees are convicted of any crime arising out of, or in connection with, the work to be done or payment to be made under this Contract, this Contract in whole or any part thereof may, at the discretion of Omnitrans, be terminated for default. Any violation of the terms of this Section by Contractor may be considered a default of the Contract by Omnitrans and may result in termination of same pursuant to applicable provisions of this Contract. In the event of such a termination, Omnitrans shall be entitled to pursue the same remedies against Contractor as it could pursue in the event of a breach of the Contract by Contractor. Rights and remedies provided to Omnitrans by this Section are in addition to any additional rights and remedies provided by law or under the Contract services or property with a person or business prohibited from transacting such business with Omnitrans pursuant to Sections 1090 et seq. and 87100 et seq. of the Government Code of the State of California. To Contractor's knowledge, no Board member, officer, or employee of Omnitrans has any interest, whether contractual, non-contractual, financial or otherwise, in this transaction, or in the business of Contractor, unless an explicit statement to the contrary accompanies Contractor's bid. If any such transaction comes to the knowledge of Contractor at any time, a full and complete disclosure of such information shall be made to Omnitrans, even if such interest would

Y. INDEPENDENT CONTRACTOR

1. Contractor, and its Subcontractors and Suppliers of any tier, are independent Contractors, and nothing in this Contract shall be construed to create the relationship of agent, servant, employee, partnership, joint venture, or other association as between Contractor and Omnitrans. The employees and agents of one party shall not be, or be construed to be, the employees or agents of the other party for any purpose whatsoever.

2. Contractor, as an independent Contractor, shall have responsibility for and control over the details and means for performing the Work, provided that Contractor is in compliance with the terms of this Contract. Anything in this Contract that may appear to give Omnitrans the right to direct Contractor as to the details of the performance of the Work, or to exercise a measure of control over Contractor, shall mean that Contractor shall follow the desires of Omnitrans only as to the intended results of the Work.

Z. COMPENSATION AND BENEFITS

Contractor shall be solely liable and responsible for providing all compensation and benefits to, or on behalf of, all persons performing Work pursuant to this Contract. Omnitrans will have no liability or responsibility for the payment of any salaries, wages, unemployment benefits, disability benefits, Federal, State, or local taxes, or other compensation, benefits, or taxes for any personnel provided by or on behalf of Contractor.

AA. WORKERS' COMPENSATION INSURANCE AND LIABILITY

If Contractor employs any person to perform work in connection with this Contract, Contractor shall procure and maintain at all times during the performance of such work Workers' Compensation Insurance in conformance with the laws of the State of California and Federal laws where applicable. Employers' Liability Insurance shall not be less than \$1,000,000 per accident or disease. Prior to execution of this Contract by any such employee, Contractor shall deliver to Omnitrans a Certificate of Insurance that shall stipulate that 30 days' advance written notice of cancellation, non-renewal or reduction in limits shall be given to Omnitrans

BB. CONTRACTOR'S REPRESENTATIVE, ORGANIZATION AND PERSONNEL

Before starting any Work, the Contractor shall submit for Engineer review and acceptance, an organization chart showing the proposed organization established by the Contractor for the performance of the Work, including:

- a. Lines of authority, responsibility, and communication;
- b. Office organizations, if any; and
- c. Names, titles, and functions of all the Contractor's key personnel.

CC. SUPERINTENDENT

1. The Contractor shall designate and keep a competent superintendent on the work at all times during its progress. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. Qualifications and experience shall include:
 - a. Demonstrated ability to work safely and supervise individuals in safe work.
 - b. Previous experience supervising and planning work activities of foremen and crews.

- c. Ability to read and understand construction plans.
- 2. The Superintendent must be:
 - a. Able to respond immediately to emergency or problem calls, 7 days a week, 24 hours a day.
- 3. The Superintendent shall manage and directly oversee the safety, condition, and quality of work that has been modified by the Contractor and shall direct corrective and maintenance measures to keep the site operating safely.

DD. CHANGE IN CONTRACTOR'S REPRESENTATIVE AND KEY PERSONNEL

The Contractor shall secure the prior written acceptance of Engineer for any change or reassignment of the Contractor's Representative(s) and other key personnel, submitting written documentation of the new individuals' qualifications. The Contractor shall not reassign key personnel to other projects until a satisfactory replacement has been approved by Engineer.

EE. REMOVAL OF CONTRACTOR PERSONNEL

Engineer may require the Contractor to remove any person assigned by the Contractor or by any Subcontractor or Supplier from the Project performing on the Project, if the Engineer considers such removal in the best interest of Omnitrans and the Work. The Engineer's decision to require Contractor to remove any Contractor personnel, including Contractor's Representative, shall be final and binding on the Contractor. Upon such direction, Contractor shall remove the person(s) and resolve all employment or contractual issues at no cost or expense to, and shall fully indemnify, Omnitrans.

FF. TRENCHES

- a. Trenches Five Feet or More in Depth. The Contractor shall submit to Omnitrans, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five feet or more in depth. If the plan varies from shoring system standards, the plan shall be prepared by a registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.
- b. Excavations Deeper than Four Feet. If work under this Contract involves digging trenches or other excavation that extends deeper than four feet below the surface, Contractor shall promptly, and before the following conditions are disturbed, notify Omnitrans, in writing, of any:
 - 1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

- 2) Subsurface or latent physical conditions at the Site differing from those indicated.
- 3) Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

Omnitrans shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of The Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between Omnitrans and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of The Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

GG. SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings for the use of all workers. All toilets shall comply with local codes and ordinances. Toilets shall be kept supplied with toilet paper, hand sanitizers and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in The Work under construction shall not be permitted. Any other Sanitary Facilities required by CAL-OSHA shall be the responsibility of the Contractor.

HH. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

II. CLEAN UP

Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Upon completion of Work, Contractor shall clean the interior and exterior of the building or improvement including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration. Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and Contractor shall also remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from Site. Contractor shall also clean all buildings, asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment.

Contractor shall fully clean up the Site at the completion of the Work. If the Contractor fails to immediately clean up at the completion of the Work, Omnitrans may do so and the cost of such clean up shall be charged back to the Contractor.

JJ. OCCUPANCY

Omnitrans reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute Acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

KK. STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against Contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a Contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

LL. WAIVER

No provision of these Contract Documents shall be deemed waived by either party unless such waiver shall be expressly specified in writing, regardless of the actions or inaction of the parties.

MM. MISCELLANEOUS

These Contract Documents shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of these Contract Documents, the action shall be brought in a state or federal court situated in the County of San Bernardino, State of California.

NN. INTEGRATION

No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the RFQ. The RFQ represents the entire agreement of Omnitrans and the Contractor.

OO. SCHEDULE OF WORK

1. Normal hours of work shall be between the hours of 7:00 a.m. and 6:00 p.m. Other hours, such as weekends and holidays, are permissible provided prior authorization has been granted by Omnitrans, Project Manager (s).
2. Contractor shall submit a Schedule of Work to Omnitrans' Project Manager as follows:
 - e. Submit within two (2) days after the Notice To Proceed date.
 - f. Show all major elements of the work and their duration and interrelationships; showing the proposed dates of commencement and completion.
 - g. All work must be completed by September 5, 2015, in advance of the September 8, 2015 public opening of the building. A grand opening ceremony

will be held throughout the day on August 24, 2015, during which time the lobby, hallway, entire building, and entire site must be completely clear, walkable, and accessible for visitors touring the facility. Thus all work must be scheduled accordingly.

- h. Submit a conceptual schedule with bid.
- 3. If any activity falls behind schedule, Contractor shall regain the time lost at its own cost and expense.
- 4. Omnitrans requires that the successful contractor perform the work that will interfere with Omnitrans' Operations, including electrical, water, natural gas, or sewer connection work, during non-business hours. These hours will be limited to Saturday evenings starting at 9:00pm and going through until Sunday morning at 6:00am.

PP. EXAMINATION OF WORK SITE

Bidder shall visit and become acquainted with the work site and the conditions thereof to fully understand the scope of work, difficulties and restrictions attending the execution of the work under contract.

QQ. OBSTRUCTIONS

The Contractor shall remove and dispose of all structures, or other obstructions of any character necessary to accommodate the work. Where such obstructions consist of improvements not required by law to be removed by Omnitrans, improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense except as otherwise specifically provided in the Contract.

RR. QUALITY OF THE WORK

1. AUTHORITY OF THE DIRECTOR OF MAINTENANCE

The Director of Maintenance, and/or his designee, shall decide any and all questions which may arise as to the interpretation of the plans and specifications and shall have authority to disapprove or reject materials and equipment furnished and work performed which, in his opinion, is not in accordance with the Contract.

2. SUPPLEMENTAL DRAWINGS

- a) The plans may be supplemented by such drawings as are necessary to better define the work. All such drawings delivered to the Contractor by the Project Manager shall be deemed written instructions to the Contractor. If the Contractor believes that any supplemental drawings call for changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so called for and shall within seven days of the receipt of the supplemental drawings notify the Project Manager in writing of his estimate of the changes in the contract amount and time for completion he believes to be appropriate.
- b) No payment for changes in the work will be made and no change in the time for completion by reason of changes in the work will be made, unless the

changes are covered by a written change order approved by Omnitrans in advance of the Contractor's proceeding with the changed work.

3. **CONFORMITY WITH CONTRACT DOCUMENTS**

- a) The work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the plans or set forth in the specifications. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Project Manager shall be the sole judge as to whether the work or materials deviate from the plans and specifications, and his decision as to any allowable deviations therefore shall be final.
- b) If specific lines, grades, and dimensions are not shown on plans, those furnished by the Project Manager shall govern.

4. **MANUFACTURER'S INSTRUCTIONS**

All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier, or distributor, except as otherwise specifically provided in the Contract.

SS. SUPERVISION AND SUPERINTENDENCE

- 1. The Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but the Contractor shall not be solely responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in and required by the Contract except as otherwise provided.
- 2. The Contractor shall be responsible to see that the completed work complies with the Contract.
- 3. The Contractor shall designate and keep a competent superintendent on the work at all times during its progress who shall not be replaced without written notice to the Project Manager. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor. During periods when the work is suspended, the Contractor shall make appropriate arrangements for any emergency work, which may be required.
- 4. Whenever the superintendent is not present on any particular part of the work where the Project Manager may desire to inform the Contractor relative to interpretation of the plans and specifications or to disapproval or rejection of materials or work performed, the Project Manager may so inform the foreman or other worker in charge of the particular part of the work in reference to which the information is given. Information so given shall be as binding as if given to the superintendent.
- 5. All equipment, materials, and supplies to be incorporated in the work shall be new, unless otherwise specified. All equipment, materials, and supplies shall be produced

in a good and workmanlike manner. When the quality of a material, process, or article is not specifically set forth in the plans and specifications, the best available quality of the material, process, or article shall be provided.

TT. CONTRACTOR'S RESPONSIBILITY FOR THE WORK

1. In the event any hazardous materials, including but not limited to asbestos, are utilized in construction or hazardous materials are otherwise encountered during construction, the Contractor shall take all appropriate precautions to protect persons and property and shall comply with all applicable regulations for the installation and handling of such hazardous materials. The Contractor is solely responsible for protection of persons and property that could be affected by construction and the Contractor's handling of such materials.
2. Until the acceptance of the work, the Contractor shall have the responsible charge and care of the work and of the materials to be used therein (including materials for which he has received partial payment or materials which have been furnished by the Omnitrans) and shall bear the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work.
3. The Contractor shall rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the work or the materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof. Where necessary to protect the work or materials from damage, the Contractor shall, at his expense, provide suitable drainage and erect such temporary structures as are necessary to protect the work or materials from damage. The suspension of the work or the granting of an extension of time from any cause whatever shall not relieve the Contractor of his responsibility for the work and materials as herein specified.
4. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, shall act at his discretion to prevent such threatened loss or injury.
5. Notwithstanding the foregoing provisions of this clause, the Contractor shall not be responsible for the cost of repairing or restoring damage to the work, which damage is determined to have been proximately caused by an Act of God, in excess of 5 percent of the contracted amount, provided that the work damaged is built in accordance with accepted and applicable building standards and the plans and specifications. For the purposes of this paragraph, "Acts of God" shall include the following occurrence or conditions and effect: earthquakes in excess of a magnitude of 3.5 on the Richter scale.

UU. PRESERVATION OF PROPERTY

1. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed.
2. All trees, shrubbery, and landscaping that are not to be removed, and pole lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines under or above ground, sewer and waterlines, all highway or street facilities,

and any other improvements or facilities within or adjacent to the work shall be protected from injury or damage, and the Contractor shall provide and install suitable safeguards to protect such objects from injury or damage. If such objects are injured or damaged by reason of the Contractor's operation, they shall be replaced or restored at the Contractor's expense to a condition as good as when the Contractor entered upon the work or as good as required by the plans and specifications if any such objects are a part of the work being performed.

3. The fact that any such pipe or other underground facility is not shown on the plans shall not relieve the Contractor of his responsibility under this clause.
4. In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the work which are in any way affected by the excavations or other operations connected with the performance of the work. Whenever any notice is required to be given by Omnitrans or the Contractor to any adjacent or adjoining landowner or other party before commencement of any work, such notice shall be given by the Contractor.
5. In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorizations, shall act at his discretion to prevent such threatened loss or injury.

VV. REGIONAL NOTIFICATION CENTER CONTACT

1. Contractor, except in an emergency, shall contact the appropriate regional notification center at least two working days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the Owner, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and Omnitrans has been given the identification number by the Contractor.
2. Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage (Government Code Section 4216).
3. Subsurface installation means any underground pipeline, conduit, duct, wire, or other structure operated or maintained in or across a public street or public right-of-way (Government Code Section 4216).

WW. SAFETY

1. In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work, and the Contractor shall fully

comply with all state, federal and other laws, rules, regulations, and orders relating to safety of workers and all others.

2. The right of the Omnitrans to conduct construction review or observation of the Contractor's performance will not include review or observation of the adequacy of the Contractor's safety measures in, on, or near the construction site.
3. Omnitrans reserves the right to correct unsafe practices by the Contractor's employees, or to stop work until the Contractor makes the necessary corrections.
4. Smoking

Omnitrans uses designated areas for smoking. Smoking is not allowed at any time in the bus yard, on or in any buildings, or by the entrances to any buildings. Smoking by employees of the Contractor, or sub-Contractors, shall not create a hazardous condition for themselves, co-workers, or employees and property of Omnitrans.
5. Eye Protection
 - a) Per Omnitrans eye protection policy, ANSI Z87 approved eye protection shall be worn by all persons while conducting business outside the boundaries of the established "green zone". The policy also requires that eye protection be utilized if hazardous work is being conducted within the "green zone". The Contractor shall ensure that all of its employees have been provided eye protection that meets the requirement.
 - b) The Project Manager , or his designee, reserves the right to stop the Contractor's work in the event that a Contractor employee is in violation, and that work will remain stopped until the violation is corrected.
6. Vests
 - a) Contractors and their employees working or performing services in outside work zones shall wear ANSI Class 2 Safety Vests. ANSI Class 2 Safety Vests must be worn at all times in the bus yard and in the relief vehicle locations.
 - b) Safety Vests are not required while in designated, marked with painted green borders Safety Zones on Agency property or while on sidewalks, curbs, or raised pavement.
7. Hazardous Materials
 - a) Contractor shall perform all work in a clean, safe and professional manner, causing no hazards to Omnitrans staff, facility the environment or Contractors service personnel.
 - b) All hazardous waste shall be handled, collected, stored and disposed of in accordance with federal, state and local environmental compliance regulations.
 - c) Coordination of hazardous waste collection, storage, and disposal shall be made through the Omnitrans' Facility Manager, or his designee.

XX. WARRANTY OF TITLE

No materials, supplies, or equipment for the work under this contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The

Contractor warrants clear and good title to all materials, supplies, and equipment installed and incorporated in the work and agrees upon completion of all work to deliver the premises, together with all improvements and appurtenances constructed or placed thereon by him, to Omnitrans free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any person, firm, or corporation furnishing any material or labor for any work covered by the contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this clause, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection or any right under any law permitting such persons to look to funds due the Contractor in the hands of Omnitrans. The provisions of this clause shall be inserted in all subcontracts and material contracts, and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

YY. PROPERTY RIGHTS IN MATERIALS

1. Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil, or after payment has been made for materials delivered to the site of the work, or stored subject to or under the control of Omnitrans. All such materials shall become the property of Omnitrans upon being so attached or affixed or upon payment for materials delivered to the site of the work or stored subject to or under the control of Omnitrans.
2. Soil, stone, gravel, and other materials found at the site of the work and which conform to the plans and specifications for incorporation into the work may be used in the work. No other use shall be made of such materials except as may be otherwise described in the plans and specifications.

ZZ. MUTUAL RESPONSIBILITY OF CONTRACTORS

1. Nothing in the contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by Omnitrans in the construction of the project, to the end that the Contractor may perform this contract in the light of such other contracts, if any.
2. The Contractor shall not cause any unnecessary hindrance or delay to any other Contractor working on the project. If the performance of any contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Project Manager shall decide which Contractor shall cease work temporarily and which Contractor shall continue or whether the work under the contracts can be coordinated so that the Contractors may proceed simultaneously. On all questions concerning conflicting interest of Contractors performing related work, the decision of the Project Manager shall be binding upon all Contractors concerned and Omnitrans, the Project Manager, and their Contractors shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or

indirectly from the award or performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Project Manager respecting the order of precedence in the performance of the contracts.

3. If through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against Omnitrans, the Project Manager, or their Contractors or any of their directors, officers, employees, or agents on account of any damage alleged to have been so sustained, Omnitrans shall notify the Contractor who shall hold harmless, indemnify, and defend Omnitrans, the Project Manager, and their Contractors, and each of their directors, officers, employees, and agents against any such claim, including all attorneys' fees and any other costs incurred by the indemnified parties relative to any such claim.

AAA. ASSIGNMENT OF ANTI-TRUST ACTIONS

1. In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.
2. In submitting a bid, the bidder offers and agrees that if the bid is accepted, it will assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the awarding body pursuant to the bid. Such assignment shall be made and become effective at the time the awarding body tenders final payment to the bidder.

BBB. EXISTING CONDITIONS

1. Drawings, if any, show existing conditions as supposed or believed. Drawings are based on the best evidence and information available, but no warranty is thereby expressed or implied that such conditions actually exist.
2. Omnitrans and any of its Contractors shall not be liable for any loss sustained by Contractor as a result of any variance between existing conditions as indicated on the plans and the actual conditions revealed during the progress of the work, provided that the Contractor should have reasonably known of or identified the existing condition.

CCC. WARRANTY OF SCOPE OF WORK AND FIRM FIXED PRICE

1. Contractor represents and warrants that in setting the Firm Fixed Price herein, that:
 - a) Contractor has done so after a thorough review of the description of work, plans, drawings and specifications;
 - b) Contractor deems that the aforementioned documents are sufficiently complete to enable Contractor to establish the Firm Fixed Price set forth herein;
 - c) Contractor deems the contract price is adequate to provide all the necessary labor, service, equipment or material to complete the work as stated herein, according to industry standards and good workmanship, and within the contract time set forth herein.
2. Contractor acknowledges that except for adjustments in the Firm Fixed Price by change orders, Contractor shall build the project in conformance to the contract documents and Omnitrans shall in no event be chargeable for more than the Firm Fixed Price.

DDD. OBSERVATION OF WORK BY PROJECT MANAGER

1. The Project Manager , shall at all times have access to the work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the work.
2. Whenever the Contractor varies the normal period during which work or any portion of it is carried on each day, he shall give timely notice to the Project Manager so that the Project Manager may be present to observe the work in progress. If the Contractor fails to give such timely notice, any work done in the absence of the Project Manager will be subject to rejection.
3. The Contractor shall give timely notice to the Project Manager in advance of backfilling or otherwise covering any part of the work so that the Director of Maintenance may observe such part of the work before it is concealed.
4. The observation, if any, by the Project Manager of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and materials and equipment furnished and work performed which is not in accordance with the Contract documents may be rejected notwithstanding the fact that such materials, equipment, and work have been previously observed by the Project Manager or that payment therefore has been included in an estimate for payment.

EEE. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

1. Any work which does not conform to the requirements of the Contract documents shall be remedied or removed and replaced by the Contractor, together with any other work which may be displaced in so doing, and no compensation or extension of time will be allowed him for such removal, replacement, or remedial work. All nonconforming materials shall be immediately removed from the site.

2. Costs for re-testing and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor and the Contract Price will be adjusted by Change Order.
3. Any work done beyond the lines and grades shown on the plans or established by the Project Manager or any changes in, additions to, or deductions from the work done without written authority will be considered as unauthorized and will not be paid for. Work so done may be ordered remedied, removed, or replaced at the Contractor's expense.
4. Upon failure on the part of the Contractor to comply promptly with any order of the Project Manager made under the provisions of this Contract, the Project Manager shall have authority to cause non-conforming materials, rejected work, or unauthorized work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due to the Contractor.

FFF. USE OF COMPLETED PORTIONS

1. When the Work or any portion of it is sufficiently complete to be utilized or placed into service, Omnitrans shall have the right upon written notification to the Contractor to utilize such portions of the work and to place the operable portions into service and to operate same.
2. Upon said notice and commencement of utilization or operation by Omnitrans, the Contractor shall be relieved of the duty of maintaining the portions so utilized or placed into operation; provided, however, that nothing in this article shall be construed as relieving the Contractor of the full responsibility for completing the work in its entirety, for making good defective work and materials, for protecting the work from damage, and for being responsible for damage and for the work as set forth in the Contract nor shall such action by Omnitrans be deemed completion and acceptance, and such action shall not relieve the Contractor, his sureties, or insurers of the provisions of Contractor's insurance, indemnity, and guarantees.

GGG. PROJECT COMPLETION

Project completion shall be defined as the date on which it is agreed by Omnitrans and its representatives, Contractor and permitting agencies that the project is accepted.

HHH. OBLIGATION TO CONTINUE WORK

Contractor, in the event of any dispute or controversy with Omnitrans over any matter whatsoever, shall not cause any delay or cessation in or of Contractor's work, but shall proceed under the contract with the performance of the work required thereby.

III. SUSPENSION OF WORK BY OMNITRANS

1. Omnitrans may, without cause, order Contractor in writing to suspend, delay, or interrupt the work in whole or in part for such period of time as Omnitrans may determine.

2. An adjustment shall be made for increases in the cost of performance of the contract, including profit on the increased cost of performance caused by suspension, delay or interruption.
3. No adjustment shall be made to the extent that:
 - d) Performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible;
 - e) Force Majeure;
 - f) An equitable adjustment was made under another provision of this contract.
4. Any such petitions for adjustments are subject to audit, Federal Cost Principles, and any other provision of this contract.

JJJ. GENERAL REQUIREMENTS

1. Contractor to field verify all areas for appropriate square footages, linear feet, etc.
2. It is the Contractor's responsibility to coordinate the Work so as to minimize conflicts and optimize efficiency.
3. If and when it should be necessary for the Contractor to impact day-to-day operations of Omnitrans functions in order to pursue the Work, the Contractor shall furnish adequate notice to Omnitrans and coordinate the means and timing to avoid, minimize, or circumvent such impacts. Omnitrans reserves the right to assess and anticipate such impacts and the right to stop or postpone the Work until a mutually satisfactory time and means can be agreed upon.
4. The Contractor shall not stop or park any of his vehicles in such a manner to prevent the timely entrance and exit of Omnitrans coaches from the parking area. Our customers expect prompt service, and our service is scheduled on a tight timeline, and we will not accept any delays.
5. All Work is to comply with all applicable state and city code requirements.
6. The Contractor shall ensure that all of his operations strictly adhere to all Federal, State, and Local safety and environmental laws and regulations. Omnitrans, in accordance with the dual employer law, reserves the right to correct unsafe practices by the Contractor's employees, or stop work until the Contractor makes the appropriate corrections.
7. The Contractor shall arrange for the disposal of all materials generated in the performance of this contract. No trash or waste of any kind that is generated by the Contractor shall be disposed of in any receptacle that is in place for the use of our employees. Any trash or waste that must be disposed of by Omnitrans due to the Contractor's failure to provide for proper disposal will result in a liquidated damage to the Contractor equal to the cost of disposal plus the labor costs associated with making those arrangements.
8. Contractor to repair any damage to irrigation or landscaping as a result of construction activity.

KKK. WARRANTY

1. Contractor warrants all Work under the Contract (which for purposes of this Section shall be deemed to include unauthorized work which has not been removed and any non-conforming materials incorporated into the Work) to be of good quality and free from any defective or faulty material and workmanship.
2. Contractor agrees that for a period of one year (or the period of time specified elsewhere in the Contract or in any guarantee or warranty provided by any manufacturer or supplier of equipment or materials incorporated into the Work, whichever is later) after the date of final acceptance, Contractor shall within ten (10) days after being notified in writing by Omnitrans of any defect in the Work or non-conformance of the Work to the Contract, commence and prosecute with due diligence all Work necessary to fulfill the terms of the warranty at its sole cost and expense.
3. Contractor shall act sooner as requested by Omnitrans in response to an emergency.
4. In addition, Contractor shall, at its sole cost and expense, repair and replace any portions of the Work (or work of other contractors) damaged by its defective Work or which becomes damaged in the course of repairing or replacing defective Work. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one year period, commencing with the date of acceptance of such corrected Work. Contractor shall perform such tests as Omnitrans may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstitution of equipment and materials necessary to gain access, shall be the sole responsibility of Contractor.
5. All warranties and guarantees of subcontractors, suppliers and manufacturers with respect to any portion of the Work, whether express or implied, are deemed to be obtained by Contractor for the benefit of Omnitrans, regardless of whether or not such warranties and guarantees have been transferred or assigned to Omnitrans by separate agreement and Contractor agrees to enforce such warranties and guarantees, if necessary, on behalf of Omnitrans.
6. In the event that Contractor fails to perform its obligations under this Section, or under any other warranty or guaranty under this Contract, to the reasonable satisfaction of Omnitrans, Omnitrans shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse Omnitrans for any expenses incurred hereunder upon demand.

End of General Provisions

ATTACHMENT D - INSURANCE REQUIREMENTS

MKP16-83

PERMANENT FENCE SAN BERNARDINO TRANSIT CENTER (SBTC)

1. INSURANCE REQUIREMENTS

A. General Requirements for Contractor

- 1) Without limiting or diminishing the Contractor's obligation to indemnify or hold Omnitrans harmless, Contractor shall procure, prior to commencement of the services required under this contract and maintain for the duration of the contract at its own expense, insurance of the kinds and in the amounts as indicated below;
- 2) Provide Omnitrans with valid original certificates of insurance and endorsements showing Omnitrans as an additional insured.

B. Deductibles or Self-Insured Retention (SIR)

SIR must be declared to and approved by Omnitrans. At the option of Omnitrans, either: the insurer shall reduce or eliminate such deductibles or SIR or Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

C. Other Insurance Provisions

1) *Commercial General Liability and Automobile Liability*

Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury covering claims which may arise from or out of Contractor's performance of its obligations hereunder and if Contractor's vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then Contractor shall maintain liability insurance for all owned, non-owned or hired vehicles so used. Policy shall name Omnitrans, its officers, officials, employees, agents and volunteers as insureds as respects: liability arising out of activities performed by or on behalf of Contractor; products and completed operations of Contractor; premises owned, occupied or used by Contractor; or automobiles owned, leased, hired or borrowed by Contractor. The coverage shall contain no special limitations of the scope of protection afforded Omnitrans, its officers, officials, employees, agents, and volunteers.

- a) For any claims related to this project, Contractor's insurance coverage shall be primary insurance as respects Omnitrans, its officers, officials, employees, agents, and volunteers. Any insurance and/or deductibles and/or self-insured retentions or self-insured programs maintained by Omnitrans, its officers, officials, employees, agents, and volunteers shall be excess of Contractor's insurance and shall not be construed as contributory.

- b) Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- c) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be cancelled by either party except after thirty (30) days prior written notice has been given to Omnitrans.

2) ***Workers' Compensation***

If the Contractor has employees as defined by the State of California, the Contractor shall maintain statutory Workers' compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in favor of Omnitrans and, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement.

3) ***Care, Custody, and Control***

Contractor shall insure any Omnitrans property while under its Care, Custody, and Control according to the requirements listed in the insurance coverage required.

D. Acceptability of Insurers

Insurance companies shall be State of California admitted or approved and have a current **A.M. Best's** rating of no less than **A:VIII**.

E. Verification of Coverage

- 1) Contractor shall furnish Omnitrans with original endorsements affecting coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. All insurance certificates and endorsements are to be received and approved by Omnitrans before work commences.
- 2) As an alternative, Contractor's insurer may provide complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.
- 3) In lieu of purchasing insurance and providing original endorsements and or certificates of insurance, the Contractor may provide proof of self-insurance; such proof must be to the satisfaction of Omnitrans.

F. Subcontractors

Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

G. Notification of Terminated Insurance

Insurance shall not be terminated or expire without thirty (30) days written notice, and are required to be maintained in force until completion of the contract.

2. MINIMUM INSURANCE COVERAGE

- 1) ☒ **Commercial General Liability including Products/Completed Operations:** \$1,000,000; per occurrence for bodily and property damage liability and \$2,000,000 aggregate; *Omnitrans named and endorsed as an Additional Insured.*
- 2) ☒ **Automobile Liability:** \$1,000,000; per occurrence for bodily and property damage liability and aggregate; *Omnitrans named and endorsed as an Additional Insured.*
- 3) ☐ **Errors and Omissions Liability:** \$1,000,000; combined single limit bodily and property damage liability per occurrence and \$3,000,000 aggregate or,
- 4) ☐ **Professional Liability:** \$1,000,000; per occurrence and aggregate.
- 5) ☒ **Workers' Compensation:** statutory limits or,
- 6) ☐ **Self Insurance Program:** a State Approved program in an amount and form that meets all applicable requirements of the Labor Code of the State of California.
- 7) ☒ **Employer's Liability:** \$1,000,000; per occurrence.
- 8) ☐ **Environmental Liability:** \$1,000,000; per occurrence and aggregate; *Omnitrans named and endorsed as an Additional Insured.*
- 9) ☐ **Umbrella Policy:** \$4,000,000; per occurrence and aggregate Additional coverage for the above policies, *Omnitrans Additional Insured.*
- 10) ☐ All drivers making deliveries of products specified on this solicitation shall have Hazardous Materials Endorsements on their Commercial Drivers License, and such other Endorsements as may be required by relevant laws and/or regulations.

ATTACHMENT E – PREVAILING WAGES

This project is funded under a financial assistance contract by the U.S. Department of Transportation and is subject to all conditions of the Davis-Bacon Act (40 U.S.C. 276a) and the Labor Code of the State of California commencing in Section 1770 et. seq. It is required that all mechanics and laborers employed or working at the site be paid not less than the current basic hourly rates of pay and fringe benefits. Wage schedules are attached or available on the internet at:

www.dir.ca.gov/DLSR/statistics_research.html

and

www.access.gpo.gov/davisbacon/.

Bidders shall utilize the relevant prevailing wage determinations in effect on the first advertisement date of the Invitation for Bids. In the event there are any differences between the minimum wage rates as determined by the United States Secretary of Labor and those determined by the State of California, the highest rate **MUST BE PAID**.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1
FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

LOCALITY: SAN BERNARDINO COUNTY
DETERMINATION: SBR-2015-2

DETERMINATION: SBR-2015-2			EMPLOYER PAYMENTS							STRAIGHT-TIME		OVERTIME HOURLY RATE		
CRAFT (JOURNEY LEVEL)		ISSUE DATE	EXPIRATION DATE	BASIC HOURLY RATE	HEALTH AND WELFARE	PENSION	VACATION/HOLIDAY	TRAINING	OTHER PAYMENTS	HOURS	TOTAL HOURLY RATE	DAILY	SATURDAY	SUNDAY AND HOLIDAY
#	BRICKLAYER, STONEMASON, MARBLE FINISHER, CEMENT BLOCKLAYER, POINTER, CAULKER, CLEANER	8/22/2015	04/30/2016*	A 37.150	7.500	5.420	-	B 0.760	0.350	C 8.0	51.180	D 69.760	D 69.760	88.330
#	BRICKLAYER:													
	MASON FINISHER	8/22/2015	04/30/2016*	A 26.550	7.500	6.900	-	E 0.670	0.350	C 8.0	41.970	D 55.240	D 55.240	68.520
# F	BRICK TENDER	8/22/2015	06/30/2016*	29.570	6.860	6.500	G 3.900	0.650	0.470	C 8.0	47.950	62.740	62.740	77.520
#	BRICK TENDER:													
	FORKLIFT OPERATOR	8/22/2015	06/30/2016*	30.020	6.860	6.500	G 3.900	0.650	0.470	C 8.0	48.400	63.410	63.410	78.420
#	CARPET, LINOLEUM, RESILIENT TILE LAYER	2/22/2015	12/31/2015**	H 29.850	5.080	5.800	2.050	0.630	0.200	8.0	43.610	58.540	I 58.540	73.460
J	MATERIAL HANDLER	2/22/2015	12/31/2015**	H 9.000	5.080	2.100	0.550	0.630	0.100	8.0	17.460	21.960	I 21.960	26.460
#	DRYWALL FINISHER													
	DRYWALL FINISHER	8/22/2015	09/30/2015**	H 35.180	7.550	4.620	3.070	0.670	0.470	8.0	51.560	69.150	K 69.150	86.740
#	ELECTRICIAN:													
	COMM & SYSTEM INSTALLER	2/22/2015	12/27/2015**	28.380	8.700	L 3.600	-	0.650	M 0.250	8.0	42.430	N 57.050	N 57.050	71.660
O	INSIDE WIREMAN - ZONE A	8/22/2015	05/31/2016**	P 36.070	9.320	L 10.810	-	0.680	Q 0.500	8.0	58.740	R 77.570	R 77.570	96.390
O	CABLE SPLICER - ZONE A	8/22/2015	05/31/2016**	P 37.570	9.320	L 10.810	-	0.680	Q 0.530	8.0	60.320	R 79.930	R 79.930	99.540
O	TUNNEL WIREMAN - ZONE A	8/22/2015	05/31/2016**	P 39.680	9.320	L 10.810	-	0.680	Q 0.550	8.0	62.510	R 83.220	R 83.220	103.930
#	FIELD SURVEYOR:													
S	CHIEF OF PARTY (018.167-010)	8/22/2015	09/30/2015**	43.910	11.200	8.550	G 4.150	0.900	0.150	8.0	68.860	N 90.810	N 90.810	112.770
S	INSTRUMENTMAN (018.167-034)	8/22/2015	09/30/2015**	41.410	11.200	8.550	G 4.150	0.900	0.150	8.0	66.360	N 87.060	N 87.060	107.770
S	CHAINMAN/RODMAN (869.567-010)	8/22/2015	09/30/2015**	40.830	11.200	8.550	G 4.150	0.900	0.150	8.0	65.780	N 86.190	N 86.190	106.610
#	GLAZIER	8/22/2015	05/31/2016**	T 40.700	U 7.000	13.030	V -	0.770	0.530	8.0	62.030	W 81.380	W 81.380	100.730
#	MARBLE FINISHER	8/22/2015	05/31/2016**	X 28.450	9.160	2.710	-	0.810	0.330	Y 8.0	41.460	Z 55.690	AA 55.690	AB 69.910
#	PAINTER													
AC	INDUSTRIAL PAINTER	8/22/2015	06/30/2016*	P 32.020	8.050	3.040	1.050	0.790	0.820	8.0	45.770	AD 61.780	AD 61.780	AD 61.780
#	PAINTER:													
AC	PAINTER, LEAD ABATEMENT	8/22/2015	06/30/2016*	P 30.720	8.050	3.040	1.050	0.690	0.820	8.0	44.370	AD 59.730	AD 59.730	AD 59.730
AC	REPAINT PAINTER, LEAD ABATEMENT	8/22/2015	06/30/2016*	P 27.290	8.050	3.040	1.050	0.690	0.820	8.0	40.940	AE 54.580	AE 54.580	AE 54.580
AC	INDUSTRIAL REPAINT PAINTER	8/22/2015	06/30/2016*	P 28.450	8.050	3.040	1.050	0.790	0.820	8.0	42.200	AE 56.430	AE 56.430	AE 56.430
#	PLASTERER	8/22/2015	08/02/2016**	32.910	8.930	4.210	AF 5.530	0.630	0.990	AG 8.0	53.200	AD 69.650	AH 69.650	86.110
# AI	PLASTER TENDER	8/22/2015	08/02/2016**	32.710	7.000	5.900	AF 5.050	1.020	1.020	8.0	52.700	AJ 69.060	AK 69.060	85.410
	PLASTER CLEAN-UP LABORER	8/22/2015	08/02/2016**	30.160	7.000	5.900	AF 5.050	1.020	1.020	8.0	50.150	AJ 65.230	AK 65.230	80.310
#	PLUMBER:													
	PLUMBER, INDUSTRIAL AND GENERAL PIPEFITTER	8/22/2015	06/30/2016**	X 42.930	7.110	AL 11.050	AM 3.030	2.550	AN 1.000	8.0	67.670	AO 89.850	AO 89.850	110.520
	SEWER AND STORM DRAIN PIPELAYER	8/22/2015	06/30/2016**	X 33.110	7.110	AL 8.200	AM 1.000	2.170	AN 1.000	8.0	52.590	68.850	AP 68.850	84.600
AQ	SEWER AND STORM DRAIN PIPE TRADESMAN	8/22/2015	06/30/2016**	X 17.060	7.110	0.380	-	1.600	AN 0.850	8.0	27.000	34.730	AP 34.730	42.460
	SERVICE & REPAIR (PLUMBER/HVAC-FITTER)	8/22/2015	06/30/2016**	X 41.510	7.110	AL 10.740	AM 3.030	1.880	AN 1.000	8.0	65.270	86.740	AR 86.740	AS 106.700
	LANDSCAPE/IRRIGATION FITTER	8/22/2015	06/30/2016**	X 27.620	7.110	AL 11.050	AM 2.490	1.940	AN 0.800	AP 8.0	51.010	66.070	66.070	79.880

LOCALITY: SAN BERNARDINO COUNTY
DETERMINATION: SBR-2015-2

[illegible]

LOCALITY: SAN BERNARDINO COUNTY

DETERMINATION: SBR-2015-2

- * EFFECTIVE UNTIL SUPERSEDED BY A NEW DETERMINATION ISSUED BY THE DIRECTOR OF INDUSTRIAL RELATIONS. CONTACT THE OFFICE OF THE DIRECTOR - RESEARCH UNIT AT (415) 703-4774 FOR THE NEW RATES AFTER TEN DAYS AFTER THE EXPIRATION DATE IF NO SUBSEQUENT DETERMINATION IS ISSUED.
- ** THE RATE TO BE PAID FOR WORK PERFORMED AFTER THIS DATE HAS BEEN DETERMINED. IF WORK WILL EXTEND PAST THIS DATE, THE NEW RATE MUST BE PAID AND SHOULD BE INCORPORATED IN CONTRACTS ENTERED INTO NOW. CONTACT THE OFFICE OF THE DIRECTOR - RESEARCH UNIT FOR SPECIFIC RATES AT (415) 703-4774.
- # INDICATES AN APPRENTICEABLE CRAFT. THE CURRENT APPRENTICE WAGE RATES ARE AVAILABLE ON THE INTERNET @ [HTTP://WWW.DIR.CA.GOV/OPRL/PWAPPWAGE/PWAPPWAGESTART.ASP](http://www.dir.ca.gov/OPRL/PWAPPWAGE/PWAPPWAGESTART.ASP). TO OBTAIN ANY STANDARDS' WEBSITE AT [HTTP://WWW.DIR.CA.GOV/DAS/DAS.HTML](http://www.dir.ca.gov/DAS/DAS.HTML).
- & THE BASIC HOURLY RATE AND EMPLOYER PAYMENTS ARE NOT TAKEN FROM A COLLECTIVE BARGAINING AGREEMENT FOR THIS CRAFT OR CLASSIFICATION.
- A INCLUDES AMOUNT WITHHELD FOR DUES CHECK OFF AND CONTRACT COMPLIANCE.
- B INCLUDES AN AMOUNT, \$0.50, FOR THE IMI TRAINING FUND.
- C SATURDAYS IN THE SAME WORK WEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORKWEEK DUE TO INCLEMENT WEATHER, OR REASONS BEYOND THE CONTROL OF THE EMPLOYER.
- D RATE APPLIES TO THE FIRST 2 DAILY OVERTIME HOURS AND THE FIRST 8 HOURS ON SATURDAY ONLY; ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME HOURLY RATE.
- E INCLUDES AN AMOUNT, \$0.41, FOR THE IMI TRAINING FUND.
- F THE RATIO OF BRICK TENDERS TO BRICKLAYERS SHALL BE AS FOLLOWS: ONE (1) BRICK TENDER TO NO MORE THAN THREE (3) BRICKLAYERS DURING THE INSTALLATION OF BLOCK ON A TYPICAL MASONRY PROJECT.
- G INCLUDES AN AMOUNT PER HOUR WORKED FOR SUPPLEMENTAL DUES.
- H INCLUDES AMOUNT WITHHELD FOR DUES CHECK OFF.
- I RATE APPLIES TO THE FIRST 12 HOURS ON SATURDAY, ALL OTHER TIME IS PAID AT DOUBLE TIME.
- J A MATERIAL HANDLER MAY BE UTILIZED IN RATIO OF ONE (1) MATERIAL HANDLER WITH ANY FIVE (5) JOURNEYMEN ON ANY GIVEN PROJECT.
- K RATE APPLIES TO FIRST 8 HOURS ONLY. DOUBLE TIME THEREAFTER. SATURDAYS IN THE SAME WORK WEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORK WEEK DUE TO INCLEMENT WEATHER.
- L IN ADDITION, AN AMOUNT EQUAL TO 3% OF THE BASIC HOURLY RATE IS ADDED TO THE TOTAL HOURLY RATE AND OVERTIME HOURLY RATES FOR THE NATIONAL EMPLOYEES BENEFIT BOARD.
- M INCLUDES AN AMOUNT FOR THE NATIONAL LABOR-MANAGEMENT COOPERATION FUND AND THE ADMINISTRATIVE MAINTENANCE FUND.
- N RATE APPLIES TO THE FIRST 4 DAILY OVERTIME HOURS AND THE FIRST 12 HOURS WORKED ON SATURDAY; ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME HOURLY RATE.
- O ZONE A IS DEFINED AS THE PORTION OF THE COUNTY 80 ROAD MILES FROM U.S. POST OFFICE, 455 W. ORANGE SHOW ROAD, SAN BERNARDINO. ZONE B IS DEFINED AS ANY WORK OUTSIDE OF ZONE A (80 MILE FREE ZONE) WHICH REQUIRES AN ADDITIONAL \$12.00 PER HOUR FOR TRAVEL/SUBSISTENCE. PAY SHALL BE ON A SEPARATE CHECK.
- P INCLUDES AMOUNT WITHHELD FOR WORKING DUES.
- Q IN ADDITION TO THE AMOUNT SHOWN, WHICH IS FACTORED AT THE APPLICABLE OVERTIME MULTIPLIER FOR EACH OVERTIME HOUR, \$0.28 IS ADDED TO THE TOTAL HOURLY RATE AND OVERTIME HOURLY RATES FOR THE LABOR MANAGEMENT COOPERATION COMMITTEE FUND.
- R RATE APPLIES TO THE FIRST 2 DAILY OVERTIME HOURS AND THE FIRST 8 HOURS ON SATURDAY ONLY; ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME HOURLY RATE. ALL OVERTIME WORKED DAILY OR ON SATURDAYS, FOR SERVICE AND REPAIR WORK OTHER THAN NEW WORK, MAY BE PAID AT THE RATE OF TIME AND ONE-HALF.
- S DICTIONARY OF OCCUPATIONAL TITLES, FOURTH EDITION, 1977, U.S. DEPARTMENT OF LABOR.
- T INCLUDES AMOUNT WITHHELD FOR DUES CHECKOFF, WHICH IS FACTORED IN THE OVERTIME RATES. INCLUDES \$2.00 OF VACATION THAT IS NOT FACTORED IN THE OVERTIME RATES.
- U INCLUDES AN AMOUNT PER HOUR WORKED OR PAID TO DISABILITY FUND.
- V INCLUDED IN STRAIGHT-TIME HOURLY RATE WHICH IS NOT FACTORED IN THE OVERTIME RATES.
- W RATE APPLIES TO THE FIRST 4 OVERTIME HOURS MONDAY THROUGH FRIDAY AND THE FIRST 8 HOURS WORKED ON SATURDAY. ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME RATE.
- X INCLUDES AMOUNT WITHHELD FOR ADMINISTRATIVE DUES.
- Y SATURDAYS IN THE SAME WORK WEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORKWEEK DUE TO A WORK STOPPAGE SUCH AS RAIN OR ANY OTHER STOPPAGE THAT IS BEYOND THE CONTROL OF THE CONTRACTOR.
- Z RATE APPLIES TO FIRST TWO DAILY OVERTIME HOURS WORKED; ALL OTHER OVERTIME IS PAID AT THE HOLIDAY OVERTIME HOURLY RATE.
- AA RATE APPLIES TO THE FIRST 8 HOURS WORKED ON A SIXTH OR SEVENTH CONSECUTIVE DAY DURING ANY ONE CALENDAR WEEK UP TO 50 HOURS IN ANY ONE CALENDAR WEEK. ALL OTHER TIME IS PAID AT THE HOLIDAY RATE.
- AB RATE APPLIES TO WORK ON HOLIDAYS ONLY; SUNDAYS ARE PAID AT THE SATURDAY OVERTIME HOURLY RATE.
- AC AN ADDITIONAL \$0.25 PER HOUR WILL BE ADDED TO THE BASIC HOURLY RATE WHEN PERFORMING PAPERHANGING WORK.
- AD DOUBLE TIME SHALL BE PAID FOR ALL HOURS WORKED OVER 12 HOURS IN ANY ONE DAY.
- AE ON REPAINT WAGE WORK ANY 8 HOURS IN A 24 HOUR PERIOD MONDAY THROUGH SUNDAY SHALL BE THE WORK DAY AND ANY 40 HOURS IN A WEEK SHALL BE THE WORK WEEK, PROVIDED THAT THE 40 HOURS IS WORKED IN 5 CONSECUTIVE DAYS (LEGAL HOLIDAYS WILL NOT BE COUNTED IN THE 5 CONSECUTIVE DAYS). FOR ALL WORK UNDER THIS CRAFT/CLASSIFICATION DOUBLE TIME SHALL BE PAID FOR ALL HOURS WORKED OVER 12 HOURS IN ANY ONE DAY.
- AF INCLUDES AN AMOUNT PER HOUR WORKED OR PAID FOR SUPPLEMENTAL DUES.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

LOCALITY: SAN BERNARDINO COUNTY

DETERMINATION: SBR-2015-2

- AG SATURDAY IN THE SAME WORKWEEK MAY BE WORKED AT THE STRAIGHT-TIME HOURLY RATE IF IT IS NOT POSSIBLE TO COMPLETE FORTY HOURS OF WORK MONDAY THROUGH FRIDAY WHEN THE JOB IS SHUT DOWN DUE TO INCLEMENT WEATHER OR SIMILAR ACT OF GOD, OR BEYOND THE CONTRACTOR'S CONTROL.
- AH RATE APPLIES TO THE FIRST 8 HOURS WORKED; ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME HOURLY RATE.
- AI THE RATIO OF PLASTER TENDERS TO PLASTERERS SHALL BE AS FOLLOWS: THERE SHALL BE A PLASTER TENDER ON THE JOBSITE WHENEVER THERE IS A PLASTERER PERFORMING WORK ON THE JOBSITE, EXCEPT ON SMALL PATCH WORK WHERE ONLY ONE PLASTERER IS PERFORMING WORK. FOR INSIDE BROWN COATINGS THERE SHALL BE 2 PLASTER TENDERS FOR UP TO EVERY 3 PLASTERERS. FOR INSIDE FINISH COATINGS THERE SHALL BE 1 PLASTER TENDER FOR UP TO EVERY 3 PLASTERERS. ON OUTSIDE FINISH AND BROWN COATINGS AND FOR ALL OTHER WORK, THERE SHALL BE 1 PLASTER TENDER FOR UP TO EVERY 2 PLASTERERS.
- AJ ALL WORK PERFORMED AFTER TWELVE (12) HOURS IN A DAY SHALL BE PAID AT THE SUNDAY/HOLIDAY RATE.
- AK RATE APPLIES TO THE FIRST EIGHT HOURS ON SATURDAY. ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME RATE. SATURDAY WORK MAY BE PAID AT THE STRAIGHT TIME RATE IF THE JOB IS SHUT DOWN DURING THE NORMAL WORK WEEK DUE TO INCLEMENT WEATHER.
- AL INCLUDES AMOUNT FOR NATIONAL PENSION AND RETIREE'S X-MAS FUND.
- AM FACTORED AT 1.5 TIMES FOR ALL OVERTIME.
- AN INCLUDES AN AMOUNT FOR THE P.I.P.E. LABOR MANAGEMENT COOPERATION COMMITTEE AND THE CONTRACTOR EDUCATION & DEVELOPMENT FUND.
- AO RATE APPLIES TO THE FIRST 2 DAILY OVERTIME HOURS AND THE FIRST 10 HOURS ON SATURDAY; ALL OTHER TIME IS PAID AT THE SUNDAY AND HOLIDAY OVERTIME HOURLY RATE.
- AP SATURDAYS IN THE SAME WORK WEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORKWEEK DUE TO INCLEMENT WEATHER.
- AQ PIPE TRADESMEN SHALL NOT BE PERMITTED ON ANY JOB WITHOUT A JOURNEYMAN.
- AR SATURDAY MAY BE WORKED AT STRAIGHT-TIME RATE, PROVIDED THAT THE HOURS DO NOT EXCEED 8 HOURS PER DAY OR 40 HOURS PER WEEK.
- AS DOUBLE TIME SHALL BE PAID FOR NEW YEAR'S DAY, EASTER SUNDAY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS.
- AT TRADESMEN SHALL ONLY BE USED IF THE FIRST WORKER ON THE JOB IS A LANDSCAPE/IRRIGATION FITTER, SECOND WORKER MUST BE A LANDSCAPE/IRRIGATION FITTER OR APPRENTICE LANDSCAPE/IRRIGATION FITTER. THE 3RD AND 4TH MAY BE A TRADESMAN. THE 5TH MUST BE A LANDSCAPE/IRRIGATION FITTER AND THEREAFTER TRADESMEN WILL BE REFERRED ON A 50-50 BASIS, TO JOURNEYMAN OR APPRENTICE.
- AU RATE APPLIES TO REMAINDER OF COUNTY.
- AV INCLUDES AN AMOUNT FOR SUPPLEMENTAL PENSION FUND.
- AW APPLIES TO THE CITIES OF ONTARIO AND MONTCLAIR.
- AX INCLUDED IN STRAIGHT-TIME HOURLY RATE.
- AY AMOUNT IS FOR INDUSTRY PROMOTION FUND AND P.I.P.E. FUND.
- AZ RATE APPLIES TO THE FIRST 10 HOURS WORKED ON SATURDAY. ALL OTHER HOURS ARE PAID AT THE SUNDAY/HOLIDAY RATE.
- BA INCLUDE AMOUNTS FOR DUES CHECK OFF AND VACATION/HOLIDAY, WHICH ARE NOT FACTORED INTO OVERTIME.
- BB INCLUDES AN AMOUNT PER HOUR WORKED FOR ANNUITY TRUST FUND.
- BC INCLUDE AMOUNTS FOR ADMINISTRATIVE FUND, COMPLIANCE FUND, INDUSTRY FUND, AND RESEARCH AND EDUCATION TRUST FUND.
- BD PURSUANT TO LABOR CODE SECTIONS 1773.1 AND 1773.8, THE AMOUNT PAID FOR THIS EMPLOYER PAYMENT MAY VARY RESULTING IN A LOWER TAXABLE BASIC HOURLY WAGE RATE, BUT THE TOTAL HOURLY RATES FOR STRAIGHT TIME AND OVERTIME MAY NOT BE LESS THAN THE GENERAL PREVAILING RATE OF PER DIEM WAGES.
- BE RATE APPLIES FOR THE FIRST 4 OVERTIME HOURS MONDAY THROUGH FRIDAY AND THE FIRST 12 HOURS WORKED ON SATURDAY. ALL OTHER TIME IS PAID AT THE SUNDAY/HOLIDAY RATE. SATURDAYS IN THE SAME WORKWEEK MAY BE WORKED AT STRAIGHT-TIME IF JOB IS SHUT DOWN DURING THE NORMAL WORKWEEK DUE TO INCLEMENT WEATHER.

LOCALITY: SAN BERNARDINO COUNTY
DETERMINATION: SBR-2015-2

DETERMINATION: SBR-2015-2			INCREASE 1			INCREASE 2			INCREASE 3			INCREASE 4		INCREASE 5		INCREASE 6		INCREASE 7	
CRAFT (JOURNEY LEVEL)	ISSUE DATE	EXPIRATION DATE	DATE OF NEXT CHANGE	AMOUNT OF INCREASE		DATE OF NEXT CHANGE	AMOUNT OF INCREASE		DATE OF NEXT CHANGE	AMOUNT OF INCREASE		DATE OF NEXT CHANGE	AMOUNT OF INCREASE		DATE OF NEXT CHANGE	AMOUNT OF INCREASE		DATE OF NEXT CHANGE	AMOUNT OF INCREASE
CARPET, LINOLEUM,																			
RESILIENT TILE LAYER	2/22/2015	12/31/2015**	1/1/2016	\$0.50	A														
B MATERIAL HANDLER	2/22/2015	12/31/2015**	1/1/2016	\$0.18	C														
DRYWALL FINISHER																			
DRYWALL FINISHER	8/22/2015	09/30/2015**	10/1/2015	\$1.91	D														
ELECTRICIAN:																			
COMM & SYSTEM INSTALLER	2/22/2015	12/27/2015**	12/28/2015	\$1.50	E	12/26/2016	\$1.50	E	1/1/2018	\$1.75	E	1/1/2019	\$2.00	E					
F INSIDE WIREMAN - ZONE A	8/22/2015	05/31/2016**	6/1/2016	\$1.80	E	6/1/2017	\$1.90	E	6/1/2018	\$1.95	E	6/1/2019	\$2.00	E					
F CABLE SPLICER - ZONE A	8/22/2015	05/31/2016**	6/1/2016	\$1.80	E	6/1/2017	\$1.90	E	6/1/2018	\$1.95	E	6/1/2019	\$2.00	E					
F TUNNEL WIREMAN - ZONE A	8/22/2015	05/31/2016**	6/1/2016	\$1.80	E	6/1/2017	\$1.90	E	6/1/2018	\$1.95	E	6/1/2019	\$2.00	E					
FIELD SURVEYOR:																			
G CHIEF OF PARTY (018.167-010)	8/22/2015	09/30/2015**	10/1/2015	\$2.00	H														
G INSTRUMENTMAN (018.167-034)	8/22/2015	09/30/2015**	10/1/2015	\$2.00	H														
G CHAINMAN/RODMAN (869.567-010)	8/22/2015	09/30/2015**	10/1/2015	\$2.00	H														
GLAZIER	8/22/2015	05/31/2016**	6/1/2016	\$1.33	I														
MARBLE FINISHER	8/22/2015	05/31/2016**	6/1/2016	\$1.00	E														
PLASTERER	8/22/2015	08/02/2016**	8/3/2016	\$1.75	E	8/2/2017	\$1.75	E											
J PLASTER TENDER	8/22/2015	08/02/2016**	8/3/2016	\$1.75	E	8/2/2017	\$1.75	E											
PLASTER CLEAN-UP LABORER	8/22/2015	08/02/2016**	8/3/2016	\$1.75	E	8/2/2017	\$1.75	E											
PLUMBER:																			
PLUMBER, INDUSTRIAL AND GENERAL PIPEFITTER	8/22/2015	06/30/2016**	7/1/2016	\$2.02	E	7/1/2017	\$2.43	E											
SEWER AND STORM DRAIN PIPELAYER	8/22/2015	06/30/2016**	7/1/2016	\$1.56	E	7/1/2017	\$1.87	E											
SEWER AND STORM DRAIN PIPE TRADESMAN	8/22/2015	06/30/2016**	7/1/2016	\$0.80	E	7/1/2017	\$0.97	E											
SERVICE & REPAIR (PLUMBER/HVAC-FITTER)	8/22/2015	06/30/2016**	7/1/2016	\$2.02	E	7/1/2017	\$2.43	E											
LANDSCAPE/IRRIGATION FITTER	8/22/2015	06/30/2016**	7/1/2016	\$1.52	E	7/1/2017	\$1.82	E											
(PROTECTION AND CONTROL SYSTEMS, OVERHEAD AND UNDERGROUND)	8/22/2015	12/31/2015**	1/1/2016	\$0.40	M														
(PROTECTION AND CONTROL SYSTEMS, OVERHEAD AND UNDERGROUND)	8/22/2015	12/31/2015**	1/1/2016		O														
N SHEET METAL WORKER	8/22/2015	06/30/2016**	7/1/2016	\$2.10	P	7/1/2017	\$2.00	Q	7/1/2018	\$2.00	E	7/1/2019	\$2.00	E					
TILE FINISHER	8/22/2015	05/31/2016**	6/1/2016	\$0.85	E														
TILE LAYER	8/22/2015	05/31/2016**	6/1/2016	\$1.15	E														
FOOTNOTES																			

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

LOCALITY: SAN BERNARDINO COUNTY

DETERMINATION: SBR-2015-2

- A \$0.50 TO PENSION
- B A MATERIAL HANDLER MAY BE UTILIZED IN RATIO OF ONE (1) MATERIAL HANDLER WITH ANY FIVE (5) JOURNEYMEN ON ANY GIVEN PROJECT.
- C \$0.18 TO PENSION
- D \$1.00 TO THE BASIC HOURLY RATE, \$0.51 TO PENSION AND \$0.40 TO HEALTH & WELFARE
THE PREDETERMINED INCREASE SHOWN IS TO BE ALLOCATED TO WAGES AND/OR EMPLOYER PAYMENTS. PLEASE CONTACT THE OFFICE OF THE DIRECTOR - RESEARCH UNIT AT (415) 703-4774 WHEN THE PREDETERMINED INCREASE BECOMES DUE TO CONFIRM THE DISTRIBUTION. PLEASE ALSO EXAMINE THE IMPORTANT NOTICES TO SEE IF ANY MODIFICATIONS HAVE BEEN ISSUED. AS THERE MAY BE REDUCTIONS TO PREDETERMINED INCREASES.
- E ZONE A IS DEFINED AS THE PORTION OF THE COUNTY 80 ROAD MILES FROM U.S. POST OFFICE, 455 W. ORANGE SHOW ROAD, SAN BERNARDINO. ZONE B IS DEFINED AS ANY WORK OUTSIDE OF ZONE A (80 MILE FREE ZONE) WHICH REQUIRES AN ADDITIONAL \$12.00 PER HOUR FOR TRAVEL/SUBSISTENCE. PAY SHALL BE ON A SEPARATE CHECK.
- F DICTIONARY OF OCCUPATIONAL TITLES, FOURTH EDITION, 1977, U.S. DEPARTMENT OF LABOR.
- G \$0.90 TO THE BASIC HOURLY RATE AND \$1.10 TO PENSION.
\$0.25 TO H&W, \$0.08 TO PENSION, AND \$1.00 TO BE ALLOCATED TO BE WAGES AND/OR EMPLOYER PAYMENTS. PLEASE CONTACT THE OFFICE OF THE DIRECTOR- RESEARCH UNIT AT (415) 703-4774 WHEN THE PREDETERMINED INCREASE BECOMES DUE TO CONFIRM THE DISTRIBUTION. PLEASE ALSO EXAMINE THE IMPORTANT NOTICES TO SEE IF ANY MODIFICATIONS HAVE BEEN ISSUED. AS THERE MAY BE REDUCTIONS TO PREDETERMINED INCREASES.
- I THE RATIO OF PLASTER TENDERS TO PLASTERERS SHALL BE AS FOLLOWS: THERE SHALL BE A PLASTER TENDER ON THE JOBSITE WHENEVER THERE IS A PLASTERER PERFORMING WORK ON THE JOBSITE, EXCEPT ON SMALL PATCH WORK WHERE ONLY ONE PLASTERER IS PERFORMING WORK. FOR INSIDE BROWN COATINGS THERE SHALL BE 2 PLASTER TENDERS FOR UP TO EVERY 3 PLASTERERS. FOR INSIDE FINISH COATINGS THERE SHALL BE 1 PLASTER TENDER FOR UP TO EVERY 3 PLASTERERS. ON OUTSIDE FINISH AND BROWN COATINGS AND FOR ALL OTHER WORK. THERE SHALL BE 1 PLASTER TENDER FOR UP TO EVERY 2 PLASTERERS.
- J PIPE TRADESMEN SHALL NOT BE PERMITTED ON ANY JOB WITHOUT A JOURNEYMAN.
- K RATE APPLIES TO REMAINDER OF COUNTY.
- L \$0.15 TO PENSION AND \$0.25 TO HEALTH AND WELFARE
- N APPLIES TO THE CITIES OF ONTARIO AND MONTCLAIR.
- O THERE IS A REALLOCATION OF THE BASIC HOURLY RATE AS FOLLOWS: \$0.40 REDUCTION TO THE BASIC HOURLY RATE, \$0.15 INCREASE TO PENSION, AND \$0.25 INCREASE TO HEALTH AND WELFARE.
\$1.20 TO PENSION AND \$0.90 TO WAGES AND/OR FRINGES. PLEASE CONTACT THE OFFICE OF THE DIRECTOR - RESEARCH UNIT AT (415) 703-4774 WHEN THE PREDETERMINED INCREASE BECOMES DUE TO CONFIRM THE DISTRIBUTION. PLEASE ALSO EXAMINE THE IMPORTANT NOTICES TO SEE IF ANY MODIFICATIONS HAVE BEEN ISSUED, AS THERE MAY BE REDUCTIONS TO PREDETERMINED INCREASES.
- P \$0.28 TO PENSION AND \$1.72 TO WAGES AND/OR FRINGES. PLEASE CONTACT THE OFFICE OF THE DIRECTOR - RESEARCH UNIT AT (415) 703-4774 WHEN THE PREDETERMINED INCREASE BECOMES DUE TO CONFIRM THE DISTRIBUTION. PLEASE ALSO EXAMINE THE IMPORTANT NOTICES TO SEE IF ANY MODIFICATIONS HAVE BEEN ISSUED, AS THERE MAY BE REDUCTIONS TO PREDETERMINED INCREASES.
- Q

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: # IRON WORKER

DETERMINATION: C-20-X-1-2015-2

ISSUE DATE: August 22, 2015

EXPIRATION DATE OF DETERMINATION: December 31, 2015** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within the State of California

CLASSIFICATION (Journey person)	<u>Employer Payments</u>						<u>Straight-Time</u>		<u>Overtime Hourly Rate</u>		
	Basic Hourly Rate	Health and Welfare	Pension	Vacation/ Holiday	Training	Other Payments	Hours	Total Hourly Rate	^b Daily 1 1/2X	^b Saturday 1 1/2X	Sunday/ Holiday
Iron Worker (Ornamental, Reinforcing, Structural)	\$33.50	9.42	12.97	^a 3.92	0.72	2.425	8	62.995	79.705	79.705	96.455
Fence Erector	\$27.08	7.25	8.64	^a 2.62	0.51	1.515	8	47.615	61.155	61.155	74.695

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet at <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a Includes supplemental dues.

^b Rate applies to the first 2 daily overtime hours and the first 8 hours on Saturday. All other overtime is at the Sunday/Holiday rate.

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

TRAVEL AND/OR SUBSISTENCE PAYMENT: In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

GENERAL PREVAILING WAGE DETERMINATION MADE BY THE DIRECTOR OF INDUSTRIAL RELATIONS
PURSUANT TO CALIFORNIA LABOR CODE PART 7, CHAPTER 1, ARTICLE 2, SECTIONS 1770, 1773 AND 1773.1

FOR COMMERCIAL BUILDING, HIGHWAY, HEAVY CONSTRUCTION AND DREDGING PROJECTS

CRAFT: #LABORER AND RELATED CLASSIFICATIONS

DETERMINATION: SC-23-102-2-2015-2

ISSUE DATE: August 22, 2015

EXPIRATION DATE OF DETERMINATION: July 3, 2016** The rate to be paid for work performed after this date has been determined. If work will extend past this date, the new rate must be paid and should be incorporated in contracts entered into now. Contact the Office of the Director – Research Unit for specific rates at (415) 703-4774.

LOCALITY: All localities within Imperial, Inyo, Kern, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura counties.

Classification ^a (Journey person)	Basic Hourly Rate	Employer Payments					Straight-Time		Overtime Hourly Rates		
		Health and Welfare	Pension	Vacation/ and Holiday ^d	Training	Other Payment	Hours	Total Hourly Rate	Daily ^b 1 1/2X	Saturday ^{bc} 1 1/2X	Sunday and Holiday

CLASSIFICATION GROUPS

Group 1	\$31.39	6.86	6.50	4.47	0.64	0.62	8	50.48	66.175	66.175	81.87
Group 2	31.94	6.86	6.50	4.47	0.64	0.62	8	51.03	67.00	67.00	82.97
Group 3	32.49	6.86	6.50	4.47	0.64	0.62	8	51.58	67.825	67.825	84.07
Group 4	34.04	6.86	6.50	4.47	0.64	0.62	8	53.13	70.15	70.15	87.17
Group 5	34.39	6.86	6.50	4.47	0.64	0.62	8	53.48	70.675	70.675	87.87

Indicates an apprenticeable craft. The current apprentice wage rates are available on the Internet @ <http://www.dir.ca.gov/OPRL/PWAppWage/PWAppWageStart.asp>. To obtain any apprentice wage rates as of July 1, 2008 and prior to September 27, 2012, please contact the Division of Apprenticeship Standards or refer to the Division of Apprenticeship Standards' website at <http://www.dir.ca.gov/das/das.html>.

^a For classification within each group, see page 14.

^b Any hours worked over 12 hours in a single workday are double (2) time.

^c Saturdays in the same work week may be worked at straight-time if job is shut down during work week due to inclement weather or similar Act of God, or a situation beyond the employers control.

^d Includes an amount per hour worked for supplemental dues

RECOGNIZED HOLIDAYS: Holidays upon which the general prevailing hourly wage rate for Holiday work shall be paid, shall be all holidays in the collective bargaining agreement, applicable to the particular craft, classification, or type of worker employed on the project, which is on file with the Director of Industrial Relations. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code. You may obtain the holiday provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Holiday provisions for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

TRAVEL AND/OR SUBSISTENCE PAYMENT: In accordance with Labor Code Sections 1773.1 and 1773.9, contractors shall make travel and/or subsistence payments to each worker to execute the work. You may obtain the travel and/or subsistence provisions for the current determinations on the Internet at <http://www.dir.ca.gov/OPRL/PWD>. Travel and/or subsistence requirements for current or superseded determinations may be obtained by contacting the Office of the Director – Research Unit at (415) 703-4774.

CLASSIFICATION GROUPS

GROUP 1

Boring Machine Helper (Outside)
Certified Confined Space Laborer
Cleaning and Handling of Panel Forms
Concrete Screeding for Rough Strike-Off
Concrete, Water Curing
Demolition Laborer, the cleaning of brick if performed by an employee performing any other phase of demolition work, and the cleaning of lumber
Fiberoptic Installation, Blowing, Splicing, and Testing Technician on public right-of-way only
Fire Watcher, Limbers, Brush Loaders, Pilers and Debris Handlers
Flagman
Gas, Oil and/or Water Pipeline Laborer
Laborer, Asphalt-Rubber Material Loader
Laborer, General or Construction
Laborer, General Cleanup
Laborer, Jetting
Laborer, Temporary Water and Air Lines
Plugging, Filling of Shee-Bolt Holes; Dry Packing of Concrete and Patching
Post Hole Digger (Manual)
Railroad Maintenance, Repair Trackman and Road Beds; Streetcar and Railroad Construction Track Laborers
Rigging and Signaling
Scaler
Slip Form Raisers
Tarman and Mortar Man
Tool Crib or Tool House Laborer
Traffic Control by any method
Water Well Driller Helper
Window Cleaner
Wire Mesh Pulling - All Concrete Pouring Operations

GROUP 2

Asphalt Shoveler
Cement Dumper (on 1 yard or larger mixer and handling bulk cement)
Cesspool Digger and Installer
Chucktender
Chute Man, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundations, footings, curbs, gutters and sidewalks
Concrete Curer-Impervious Membrane and Form Oiler
Cutting Torch Operator (Demolition)
Fine Grader, Highways and Street Paving, Airport, Runways, and similar type heavy construction
Gas, Oil and/or Water Pipeline Wrapper-Pot Tender and Form Man
Guinea Chaser
Headerboard Man-Asphalt
Installation of all Asphalt Overlay Fabric and Materials used for Reinforcing Asphalt
Laborer, Packing Rod Steel and Pans
Membrane Vapor Barrier Installer
Power Broom Sweepers (small)
Riprap, Stonepaver, placing stone or wet sacked concrete
Roto Scraper and Tiller
Sandblaster (Pot Tender)
Septic Tank Digger and Installer (leadman)

GROUP 2 (continued)

Tank Scaler and Cleaner
Tree Climber, Faller, Chain Saw Operator, Pittsburgh Chipper and similar type
Brush Shredders
Underground Laborer, including Caisson Bellow

GROUP 3

Asphalt Installation of all fabrics
Buggymobile Man
Compactor (all types including Tampers, Barko, Wacker)
Concrete Cutting Torch
Concrete Pile Cutter
Driller, Jackhammer, 2 1/2 ft. drill steel or longer
Dri Pak-it Machine
Gas, Oil and/or Water Pipeline Wrapper - 6-inch pipe and over by any method, inside and out
High Scaler (including drilling of same)
Impact Wrench, Multi-Plate
Kettlemen, Potmen and Men applying asphalt, lay-kold, creosote, lime caustic and similar type materials
Laborer, Fence Erector
Material Hoseman (Walls, Slabs, Floors and Decks)
Operators of Pneumatic, Gas, Electric Tools, Vibrating Machines, Pavement Breakers, Air Blasting, Come-Alongs, and similar mechanical tools not separately classified herein; operation of remote controlled robotic tools in connection with Laborers work
Pipelayer's backup man, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services
Power Post Hole Digger
Rock Slinger
Rotary Scarifier or Multiple Head Concrete Chipping Scarifier
Steel Headerboard Man and Guideline Setter
Trenching Machine, Hand Propelled

GROUP 4

Any Worker Exposed to Raw Sewage
Asphalt Raker, Luteman, Ironer, Asphalt Dumpman, and Asphalt Spreader Boxes (all types)
Concrete Core Cutter (walls, floors or ceilings), Grinder or Sander
Concrete Saw Man, Cutting Walls or Flat Work, Scoring old or new concrete
Cribber, Shorer, Lagging, Sheeting and Trench Bracing, Hand-Guided Lagging Hammer
Head Rock Slinger
Laborer, Asphalt-Rubber Distributor Bootman
Laser Beam in connection with Laborer's work
Oversize Concrete Vibrator Operator, 70 pounds and over
Pipelayer
Prefabricated Manhole Installer
Sandblaster (Nozzleman), Water Blasting, Porta Shot-Blast
Traffic Lane Closure, certified

GROUP 5

Blasters Powderman
Driller
Toxic Waste Removal
Welding, certified or otherwise in connection with Laborers' work

General Decision Number: CA150037 11/06/2015 CA37

Superseded General Decision Number: CA20140037

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

County: San Bernardino County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015
1	01/16/2015
2	01/23/2015
3	02/20/2015
4	03/27/2015
5	05/08/2015
6	06/19/2015
7	07/10/2015
8	07/17/2015
9	07/24/2015
10	07/31/2015
11	08/07/2015
12	08/14/2015
13	09/04/2015
14	10/09/2015
15	10/23/2015
16	11/06/2015

* ASBE0005-002 07/01/2015

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....\$ 36.74		19.49
Fire Stop Technician		

(Application of Firestopping
Materials for wall openings
and penetrations in walls,
floors, ceilings and curtain
walls).....\$ 25.38 16.81

* ASBE0005-004 06/29/2015

Rates Fringes

Asbestos Removal
worker/hazardous material
handler (Includes
preparation, wetting,
stripping, removal,
scrapping, vacuuming, bagging
and disposing of all
insulation materials from
mechanical systems, whether
they contain asbestos or not)....\$ 18.06 10.57

BOIL0092-003 10/01/2012

Rates Fringes

BOILERMAKER.....\$ 41.17 28.27

* BRCA0004-011 05/01/2015

Rates Fringes

BRICKLAYER; MARBLE SETTER.....\$ 37.15 13.02

*The wage scale for prevailing wage projects performed in
Blythe, China lake, Death Valley, Fort Irwin, Twenty-Nine
Palms, Needles and 1-15 corridor (Barstow to the Nevada
State Line) will be Three Dollars (\$3.00) above the
standard San Bernardino/Riverside County hourly wage rate

BRCA0018-004 06/01/2014

Rates Fringes

MARBLE FINISHER.....\$ 28.45 11.38
TILE FINISHER.....\$ 23.78 9.84
TILE LAYER.....\$ 35.14 14.33

BRCA0018-010 09/01/2013

Rates Fringes

TERRAZZO FINISHER.....\$ 26.59 10.34
TERRAZZO WORKER/SETTER.....\$ 33.63 11.13

CARP0409-001 07/01/2010

Rates Fringes

CARPENTER

(1) Carpenter, Cabinet Installer, Insulation Installer, Hardwood Floor Worker and acoustical installer.....	\$ 37.35	11.08
(2) Millwright.....	\$ 37.85	11.08
(3) Piledrivermen/Derrick Bargeman, Bridge or Dock Carpenter, Heavy Framer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial).....	\$ 37.48	11.08
(4) Pneumatic Nailer, Power Stapler.....	\$ 37.60	11.08
(5) Sawfiler.....	\$ 37.44	11.08
(6) Scaffold Builder.....	\$ 28.55	11.08
(7) Table Power Saw Operator.....	\$ 37.45	11.08

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre- drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): \$0.13 per hour additional.

CARP0409-002 07/01/2008

	Rates	Fringes
Diver		
(1) Wet.....	\$ 663.68	9.82
(2) Standby.....	\$ 331.84	9.82
(3) Tender.....	\$ 323.84	9.82
(4) Assistant Tender.....	\$ 299.84	9.82

Amounts in "Rates" column are per day

CARP0409-005 07/01/2010

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER....	\$ 37.35	11.08
STOCKER/SCRAPPER.....	\$ 10.00	6.67

CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

ELEC0440-004 05/26/2014

COMMUNICATIONS AND SYSTEMS WORK

Rates	Fringes
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Communications System

Installer.....	\$ 28.38	4%+11.45
Technician.....	\$ 30.18	4%+11.45

SCOPE OF WORK:

Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarms, and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test Station.

ELEC0477-002 06/01/2015

	Rates	Fringes
Electricians:.....	\$ 36.07	21.90

CABLE SPLICER: \$1.00 per hour above Electrician rate.
TUNNEL WORK: 10% above Electrician rate.

ZONE PAY:

Zone A - 80 road miles from Post Office, 455 Orange Show Lane, San Bernardino, will be a free zone for all contractors
Zone B - Any work performed outside Zone A's 80 road miles, shall add \$12.00 per hour to the current wage scale.

ELEC1245-001 06/01/2015

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 52.85	15.53
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....	\$ 42.21	14.32
(3) Groundman.....	\$ 32.28	14.03
(4) Powderman.....	\$ 47.19	14.60

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day,
Independence Day, Labor Day, Veterans Day, Thanksgiving Day
and day after Thanksgiving, Christmas Day

ELEV0018-001 01/01/2015

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 49.90	28.38

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly
rate as vacation pay credit for employees with more than 5
years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day,
Labor Day, Veterans Day, Thanksgiving Day, Friday after
Thanksgiving, and Christmas Day.

ENGI0012-003 07/06/2015

	Rates	Fringes
OPERATOR: Power Equipment		
(All Other Work)		
GROUP 1.....	\$ 39.95	23.35
GROUP 2.....	\$ 40.73	23.35
GROUP 3.....	\$ 41.02	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 41.86	23.35
GROUP 6.....	\$ 41.83	23.35
GROUP 8.....	\$ 42.84	23.35
GROUP 9.....	\$ 42.19	23.35
GROUP 10.....	\$ 42.96	23.35
GROUP 11.....	\$ 42.31	23.35
GROUP 12.....	\$ 43.13	23.35
GROUP 13.....	\$ 43.23	23.35
GROUP 14.....	\$ 43.26	23.35
GROUP 15.....	\$ 43.34	23.35
GROUP 16.....	\$ 43.46	23.35
GROUP 17.....	\$ 43.63	23.35
GROUP 18.....	\$ 43.73	23.35
GROUP 19.....	\$ 43.84	23.35
GROUP 20.....	\$ 43.96	23.35
GROUP 21.....	\$ 44.13	23.35
GROUP 22.....	\$ 44.23	23.35
GROUP 23.....	\$ 44.34	23.35
GROUP 24.....	\$ 44.46	23.35
GROUP 25.....	\$ 44.63	23.35
OPERATOR: Power Equipment		
(Cranes, Piledriving &		
Hoisting)		
GROUP 1.....	\$ 41.30	23.35
GROUP 2.....	\$ 42.08	23.35
GROUP 3.....	\$ 42.37	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 42.73	23.35
GROUP 6.....	\$ 42.84	23.35
GROUP 7.....	\$ 42.96	23.35

GROUP 8.....	\$ 43.13	23.35
GROUP 9.....	\$ 43.30	23.35
GROUP 10.....	\$ 44.30	23.35
GROUP 11.....	\$ 45.30	23.35
GROUP 12.....	\$ 46.30	23.35
GROUP 13.....	\$ 47.30	23.35
OPERATOR: Power Equipment (Tunnel Work)		
GROUP 1.....	\$ 41.80	23.35
GROUP 2.....	\$ 42.58	23.35
GROUP 3.....	\$ 42.87	23.35
GROUP 4.....	\$ 43.01	23.35
GROUP 5.....	\$ 43.23	23.35
GROUP 6.....	\$ 43.34	23.35
GROUP 7.....	\$ 43.46	23.35

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine

operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter (concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and

similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity); Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving

equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self-loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote-control earth-moving equipment operator (operating a second piece of equipment: \$1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.);

Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SBM to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1S, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO,

KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34. T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a thin strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of

Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman.....	\$ 49.50	23.60
(2) Dredge dozer.....	\$ 43.53	23.60
(3) Deckmate.....	\$ 43.42	23.60
(4) Winch operator (stern winch on dredge).....	\$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 42.33	23.60
(6) Barge Mate.....	\$ 42.94	23.60

IRON0377-002 07/01/2015

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 27.08	20.21
Ornamental, Reinforcing and Structural.....	\$ 33.50	28.85

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval
Reserve-Niland,
Edwards AFB, Fort Irwin Military Station, Fort Irwin Training
Center-Goldstone, San Clemente Island, San Nicholas Island,
Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine
Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base,
Naval Post Graduate School - Monterey, Yermo Marine Corps
Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0300-005 01/01/2014

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 28.00	15.25

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/01/2014

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1.....	\$ 34.79	17.92
GROUP 2.....	\$ 33.84	17.92
GROUP 3.....	\$ 30.30	17.92

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO0783-002 08/01/2015

	Rates	Fringes
LABORER (TUNNEL)		
GROUP 1.....	\$ 37.04	16.78
GROUP 2.....	\$ 37.36	16.78
GROUP 3.....	\$ 38.82	16.78
GROUP 4.....	\$ 38.51	16.78
LABORER		
GROUP 1.....	\$ 31.39	16.78
GROUP 2.....	\$ 31.94	16.78
GROUP 3.....	\$ 32.49	16.78
GROUP 4.....	\$ 34.04	16.78
GROUP 5.....	\$ 34.39	16.78

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellow

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete

core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller: All power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Changehouse person; Dump person; Dump person (outside); Swamper (brake person and switch person on tunnel work); Tunnel materials handling person; Nipper; Pot tender, using mastic or other materials (for example, but not by way of limitation, shotcrete, etc.)

GROUP 2: Chucktender, cabletender; Loading and unloading agitator cars; Vibrator person, jack hammer, pneumatic tools (except driller); Bull gang mucker, track person; Concrete crew, including rodder and spreader

GROUP 3: Blaster, driller, powder person; Chemical grout jet person; Cherry picker person; Grout gun person; Grout mixer person; Grout pump person; Jackleg miner; Jumbo person; Kemper and other pneumatic concrete placer operator; Miner, tunnel (hand or machine); Nozzle person; Operating of troweling and/or grouting machines; Powder person (primer house); Primer person; Sandblaster; Shotcrete person; Steel form raiser and setter; Timber person, retimber person, wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

LABO0783-005 07/01/2014

	Rates	Fringes
Brick Tender.....	\$ 29.12	15.78

LABO1184-001 08/01/2015

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...\$	32.60	12.16
(2) Vehicle Operator/Hauler.\$	32.77	12.16
(3) Horizontal Directional Drill Operator.....\$	34.62	12.16
(4) Electronic Tracking Locator.....\$	36.62	12.16
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....\$	33.76	15.04
GROUP 2.....\$	35.06	15.04
GROUP 3.....\$	37.07	15.04
GROUP 4.....\$	38.81	15.04

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

LAB01414-003 08/05/2015

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER....\$	30.16	17.11
PLASTER TENDER.....\$	32.71	17.11

Work on a swing stage scaffold: \$1.00 per hour additional.

Work at Military Bases - \$3.00 additional per hour:

Coronado Naval Amphibious Base, Fort Irwin, Marine Corps Air Station-29 Palms, Imperial Beach Naval Air Station, Marine Corps Logistics Supply Base, Marine Corps Pickle Meadows, Mountain Warfare Training Center, Naval Air Facility-Seeley, North Island Naval Air Station, Vandenberg AFB.

PAIN0036-001 07/01/2015

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Repaint (excludes San Diego County).....	\$ 27.29	12.83
(2) All Other Work.....	\$ 30.72	12.83

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.

PAIN0036-008 10/01/2015

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 36.18	16.82

PAIN0036-015 06/01/2015

	Rates	Fringes
GLAZIER.....	\$ 40.70	20.92

FOOTNOTE: Additional \$1.25 per hour for work in a condor, from the third (3rd) floor and up Additional \$1.25 per hour for work on the outside of the building from a swing stage or any suspended contrivance, from the ground up

PAIN1247-002 01/01/2015

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 29.85	13.56

PLAS0200-008 08/05/2015

	Rates	Fringes
PLASTERER.....	\$ 38.44	13.77

FORT IRWIN; MARINE CORPS AIR STATION 29 PALMS, AND MARINE

CORPS LOGISTICS SUPPLY BASE: \$3.00 additional per hour.

PLAS0500-002 07/01/2015

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.30	20.65

PLUM0016-002 07/01/2015

	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER		
Plumber and Pipefitter		
All other work except		
work on new additions and		
remodeling of bars,		
restaurant, stores and		
commercial buildings not		
to exceed 5,000 sq. ft.		
of floor space and work		
on strip malls, light		
commercial, tenant		
improvement and remodel		
work.....	\$ 45.96	20.71
Work at Edwards AFB.....	\$ 52.96	20.71
Work at Fort Irwin Army		
Base, Marine Corps		
Logistic Base at Nebo,		
Marine Corps Logistic Base		
at Yermo and Twenty-Nine		
Palms Marine Base.....	\$ 56.46	20.71
Work ONLY on new additions		
and remodeling of bars,		
restaurants, stores and		
commercial buildings, not		
to exceed 5,000 sq. ft. of		
floor space.....	\$ 44.54	19.73
Work ONLY on strip malls,		
light commercial, tenant		
improvement and remodel		
work.....	\$ 35.16	18.06

PLUM0345-001 07/01/2014

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter..	\$ 29.27	19.75
Sewer & Storm Drain Work....	\$ 33.24	17.13

ROOF0036-002 08/01/2014

	Rates	Fringes
ROOFER.....	\$ 35.02	13.57

FOOTNOTE: Pitch premium: Work on which employees are exposed

to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive \$1.75 per hour "pitch premium" pay.

SFCA0669-009 07/01/2013

Does not include the northern part of the City of Chino, or the Cities of Montclair and Ontario

	Rates	Fringes
SPRINKLER FITTER.....	\$ 34.19	19.37

SFCA0709-004 01/01/2015

THE NORTHERN PART OF THE CITY OF CHINO, AND THE CITIES OF MONTCLAIR AND ONTARIO:

	Rates	Fringes
SPRINKLER FITTER (Fire).....	\$ 40.46	24.17

SHEE0105-003 07/01/2015

LOS ANGELES (South of a straight line drawn between Gorman and Big Pines) and Catalina Island, INYO, KERN (Northeast part, East of Hwy 395), MONO ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
(1) Commercial - New Construction and Remodel work.....	\$ 41.26	25.38
(2) Industrial work including air pollution control systems, noise abatement, hand rails, guard rails, excluding aritechatural sheet metal work, excluding A-C, heating, ventilating systems for human comfort...	\$ 41.26	25.38

TEAM0011-002 07/01/2015

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 28.24	25.24
GROUP 2.....	\$ 28.39	25.24
GROUP 3.....	\$ 28.52	25.24
GROUP 4.....	\$ 28.71	25.24
GROUP 5.....	\$ 28.74	25.24
GROUP 6.....	\$ 28.77	25.24

GROUP 7.....	\$ 29.02	25.24
GROUP 8.....	\$ 29.27	25.24
GROUP 9.....	\$ 29.47	25.24
GROUP 10.....	\$ 29.77	25.24
GROUP 11.....	\$ 30.27	25.24
GROUP 12.....	\$ 30.70	25.24

WORK ON ALL MILITARY BASES:

PREMIUM PAY: \$3.00 per hour additional.

[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person (\$0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axles; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - \$1.25 additional when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which

these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request

review and reconsideration from the Wage and Hour Administrator
(See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the
interested party's position and by any information (wage
payment data, project description, area practice material,
etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an
interested party may appeal directly to the Administrative
Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION