

CITY OF MORGAN HILL
SIDEWALK REPLACEMENT PROJECT
TECHNICAL PROVISIONS

SCOPE OF WORK:

The Sidewalk Replacement Project will occur at multiple locations within Morgan Hill, CA 95037, and the Scope of Work is described as follows:

- Remove and replace damaged sidewalk, curb & gutter (including root removal), totaling approximately 3,700 square feet.
- Remove five street trees and replace with 15-gallon trees.

GENERAL REQUIREMENTS:

1.01 ORDER OF WORK

- a. Description: Order of work shall conform to the provisions in the CalTrans Standard Specifications (CSS) and these special provisions.

Prior to construction, contractor must obtain an Encroachment Permit from the City.

Upon scheduled date of the preconstruction meeting, contractor shall prepare and submit a detailed schedule to the City Project Manager for review and approval. In addition, contractor shall provide and deliver a notice (minimum of 48 hours prior to construction) to all affected residents.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Order of Work" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.02 MAINTAINING TRAFFIC

- a. Description: Attention is directed to Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", and 12, "Construction Area Traffic Control Devices", of the Standard Specifications and to the provisions in "Public Safety" of these special provisions and these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.04.

The Contractor may detour traffic in a route approved by the City Project Manager. Flaggers shall be provided at non-signalized intersections when traffic conditions warrant as determined by the City Project Manager. At least one lane of traffic shall be provided through the construction area during construction. Two lanes of traffic shall be provided through the project area during non-construction time.

Vehicular and pedestrian access to all properties shall be maintained at all times. Contractor shall place "no parking" signs as required in order to prevent the public from blocking the work. Contractor shall provide trench plates where necessary to accommodate access or provide other means of access.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Maintaining Traffic" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.03 PUBLIC SAFETY

- a. Description: The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.04, "Public Safety", of the Standard Specifications and these special provisions.

The Contractor shall install temporary railing (Type K) between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

A. Excavations.— The near edge of the excavation is 12 feet or less from the edge of the lane, except:

1. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
2. Excavations less than one foot deep.
3. Trenches less than one foot wide for irrigation pipe or electrical conduit, or excavations less than one foot in diameter.
4. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
5. Excavations in side slopes, where the slope is steeper than 1:4 (vertical:horizontal).
6. Excavations protected by existing barrier or railing.

B. Temporarily Unprotected Permanent Obstacles.— The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the City Project

Manager, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.

C. Storage Areas.—Material or equipment is stored within 12 feet of the lane and the storage is not otherwise prohibited by the provisions of the Standard Specifications and these special provisions.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this section "Public Safety" and in Section 7-1.04, "Public Safety," of the Standard Specifications, shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than one foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15 feet minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.08, "Temporary Railing (Type K)," of the Standard Specifications. Temporary railing (Type K), conforming to the details shown on 1999 Standard Plan T3, may be used. Temporary railing (Type K) fabricated prior to January 1, 1993, and conforming to 1988 Standard Plan B11-30 may be used, provided the fabrication date is printed on the required Certificate of Compliance. Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of these special provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these special provisions:

Approach Speed of Public Traffic (Posted Limit)	Work Areas
45 Miles Per Hour	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45 Miles Per Hour	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the City Project Manager.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure. Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Public Safety," including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.04 DUST CONTROL

- a. Description: Dust control shall conform to the provisions in Section 10, "Dust Control", of the Standard Specifications and these Special Provisions.
- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Dust Control" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.05 WATER POLLUTION CONTROL

- a. General: *Water pollution control work shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these special provisions.*

Water pollution control work shall conform to the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and the "Construction Site Best Management Practices (BMPs) Manual," and addenda thereto issued up to, and including, the date of advertisement of the project, hereafter referred to respectively as the "Preparation Manual" and the "Construction Site BMP Manual" and collectively as the "Manuals." Copies of the Manuals may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520. Copies of the Manuals may also be obtained from the Department's Internet Web Site at: <http://www.dot.ca.gov/hq/construc/stormwater.html>.

The Contractor shall know and fully comply with the applicable provisions of the Manuals and Federal, State, and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction.

Under no circumstances, shall concrete wash water, water from saw-cutting operations or any other contaminated water be allowed to enter the storm drain system or other drainage courses.

Unless arrangements for disturbance of areas outside the project limits are made by the City of Morgan Hill and made part of the contract, it is expressly agreed that the City assumes no responsibility whatsoever to the Contractor or property owner with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.

The Contractor shall be responsible for the costs and for liabilities imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Manuals and Federal, State, and local regulations. For the purposes of this paragraph, costs and liabilities include, but are not limited to, fines, penalties, and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to the remedies authorized by law, an amount of the money due the Contractor under the contract, as determined by the City of Morgan Hill, may be retained by the State of California until disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

A. The City give the Contractor 30 days notice of the City's intention to retain funds from partial payments, which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.

B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.

C. If the City has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the City shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the provisions in this section "Water Pollution Control" shall not relieve the Contractor from the Contractor's responsibilities as provided in Section 7, "Legal Relations and Responsibilities," of the Standard Specifications.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Water Pollution Control" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.06 DAMAGE REPAIR

- a. Description: Attention is directed to Section 7-1.16, "Contractor's Responsibility for the Work and Materials", and Section 7-1.11, "Preservation of Property", of the Standard Specifications and these Special Provisions.

Any damage to existing facilities or properties during the period of the work shall be returned to the original condition.

- b. Measurement and Payment: All damage to existing facilities shall be repaired and or replaced at the Contractor's expense.

1.07 RESPONSIBILITY FOR DAMAGE

- a. General: Responsibility for damage shall conform to the provisions in Section 7-1.12, "Responsibility for Damage", of the Standard Specifications.

1.08 PROGRESS SCHEDULE

- a. General: The progress schedule shall be in accordance with Section 8-1.04 of the CSS. Furthermore, on a weekly basis, the schedule shall be updated and submitted to the City Project Manager. This update shall show the progress on salient features, mark the dates of completion and incorporate changes in construction sequencing or in items of construction.
- b. Format: The construction schedule shall be a CPM format. The schedule shall be submitted in the following formats: Time-scaled Logic Diagram showing the name of the activity, the logical relationships, the duration, and the actual or scheduled start dates in a bar chart format; and an Activity Report showing the name of the activity, the actual and scheduled finish and start dates, the scheduled and actual durations, the logical relationships and other pertinent data. The schedule shall be subject to review, correction and acceptance by the City Project Manager.
- c. Periodic Scheduling Meetings: Weekly scheduling meetings will be required, in which the project teams of the Contractor and his agents and the City can meet to discuss the schedule and progress of project.
- d. Measurement and Payment: Full compensation for conforming to the provisions in this section "Progress Schedule" shall be considered as

included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.09 COORDINATION OF WORK

- a. Description: The Contractor shall give specified notifications to the property owners effected by the work. All properties affected by the work shall be notified in writing, 48 hours prior to the interruption. In addition, the Contractor shall attempt to notify the affected occupants or residents, in person, on the same day of the work.

Failure to notify property owners with written notification shall result in stopping the project progress.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Coordination of Work" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

1.10 DAILY AND FINAL CLEAN UP

- a. Description: The Contractor shall clean up all rubbish and excess materials from the work site on a daily basis, the material storage site, and all ground occupied by Contractor in connection with this work. All tree, roots, wood chips, branches, soil and concrete debris shall be removed from each repair location on a daily basis. The Contractor shall leave all parts of the work in a neat and presentable condition on a daily basis and prior to final inspection of the work by the Project Manager.
- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Daily and Final Clean Up" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

SIDEWALK, CURB & GUTTER REMOVAL AND REPLACEMENT

2.01 MOBILIZATION

- a. Description: Mobilization shall conform to the provisions in Section 11, "Mobilization", of the Standard Specifications. Mobilization shall include mobilizing labor and equipment and all necessary incidentals to complete the work at all of the various addresses listed in the Appendix. Underground Service Alert-Northern California (USA) shall be contacted prior to removal of sidewalks, curb and gutters, and trees in order to prevent possible utility damage.
- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Mobilization" shall be considered as included in the contract unit prices paid for the various items of work involved and no additional compensation will be allowed therefore.

2.02 SCHEDULING

- a. Description: The Contractor shall submit a complete, tentative project schedule at the time of the preconstruction meeting. A minimum of five (5) working days prior to beginning work on any of the streets, the Contractor shall submit to the City Project Manager for approval a detailed written schedule of work listing the dates on which individual streets shall be surfaced. Following approval, the Contractor shall adhere diligently to the approved written schedule in the prosecution of the work.

The contractor shall post No Parking signs on affected streets indicating the date of work at least two (2) calendar days prior to the actual work. The Contractor shall also notify individual residents who will be adversely affected by the work in writing via fliers or door hangers two (2) calendar days prior to work. The Contractor shall submit for approval by the City Project Manager a sample of the written notification to be supplied to residents. This sample shall be submitted at the time of the preconstruction meeting. Any expenses incurred by delays caused by the failure of the Contractor to adhere to the approved schedule or to properly notify residents shall be borne solely by the Contractor.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Scheduling" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

2.03 PROJECT APPEARANCE

- a. Description: The Contractor shall maintain a neat appearance at the work site in all areas visible to the public. Broken concrete, asphalt concrete, soil, tree branches and roots and other debris developed during construction shall be disposed of concurrently with its removal

on a daily basis. Stockpiling of new materials shall be permitted only with the approval of the City Project Manager and only in approved locations.

The Contractor shall sweep the streets daily within the project area as directed by the City Project Manager for the duration of the project. The Contractor shall not sweep construction materials or other debris onto private properties.

The Contractor shall be responsible for any and all damage to public and private property (including driveways, trees, plants, shrubs, fences, etc...) and shall replace with new material or correct any damaged property to the satisfaction of the City Project Manager.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Project Appearance" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

2.04 CONSTRUCTION AREA SIGNS

- a. Description: Construction area signs shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices", of the Standard Specifications and these special provisions.

Attention is directed to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions. Type II retro reflective sheeting shall not be used on construction area sign panels.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert-Northern California (USA)	1-800-642-2444 1-800-227-2600
Underground Service Alert-Southern California (USA)	1-800-422-4133 1-800-227-2600

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes.

Sign substrates for stationary mounted construction area signs may be fabricated from fiberglass reinforced plastic as specified under "Prequalified and Tested Signing and Delineation Materials" of these special provisions.

The Contractor may be required to cover certain signs during the progress of the work. Signs that are no longer required or that convey inaccurate information to the public shall be immediately covered or removed, or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the signs. The retro-reflective face of the covered signs shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the signs properly.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Construction Area Signs" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

2.05 TRAFFIC & PEDESTRIAN CONTROL

- a. Description: The Contractor shall comply with all of the requirements of the current edition of the State of California "Manual of Traffic Controls for Construction and Maintenance and Work Zones" for traffic control, pedestrian control and all construction area signs. Attention is also directed to Sections 7-1.03, "Public Convenience", and 7-1.04, "Public Safety", of the CSS and these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said Section 7-1.04.

Construction area signs shall be furnished, installed, maintained, and removed when no longer required in accordance with the provisions in Section 12, "Construction Area Traffic Control Devices", of the CSS, the Manual of Traffic Controls and these Special Provisions. **Sidewalk closure signs shall be placed at each sidewalk replacement location.**

When traffic control is not performed in compliance with the submitted Traffic Control Plan, the project shall be suspended until the Contractor conforms to the approved plan. During the period of suspension, all construction expenses incurred shall be the sole responsibility of the Contractor.

- b. Measurement and Payment: Full compensation for conforming to the provisions in this section "Traffic Control" shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

2.06 REMOVE AND REPLACE CONCRETE SIDEWALK

- a. Description: This work consists of the removal and replacement of damaged concrete sidewalk and the removal and replacement of concrete curb and gutter. Root removal and/or tree removal may be necessary at each location. Contractor shall have a Certified Arborist perform the tree and root removals. Exact locations of sidewalk replacement and tree removals are to be determined by the City Project Manager. It is anticipated that at least 3,700 SF of concrete sidewalk and five (5) street trees will be removed and replaced.

Sidewalk replacement Work includes removal and disposal of existing sidewalk, saw-cutting, root removal, expansion joints if required, score joints, removal/replacement & compaction of base material, formwork, curing compound, and rebar doweling per 2007 City Standard Details, to the dimensions at the locations listed in these special provisions or as directed by the City Project Manager and in conformance with Section 73 Concrete Curbs and Sidewalks, Section 15 Existing Highway Facilities of the CSS and the City's Standard Details for Construction.

- b. Submittals: Concrete mix design, concrete curing compound, asphalt mix design, and aggregate baserock mix design
- c. Order of Work: Contractor shall demo concrete sidewalk or curb & gutter to expose roots. Roots in conflict with the replacement sidewalk shall be **hand cut** and not torn-out using force or equipment. Work shall be performed by an ISA certified arborist. Roots shall be trimmed approximately 3 inches below the aggregate base. Contractor shall perform demo and replacement of sidewalk and all incidentals at each location within 5 working days, including root and or tree removals.
- d. Materials: Portland Cement Concrete: Portland cement concrete shall be in conformance with Section 90 "Portland Cement Concrete" of the CSS for Class B Concrete. Curing Compound: shall be in conformance with Section 90 "Portland Cement Concrete" of the CSS. Asphalt Concrete: Asphalt concrete used shall be Type A, 2" medium in accordance with Section 39 of the CSS.

Aggregate base: AB shall be Class 2, 3/4" maximum grading, and shall conform to the provisions in Section 26, "Aggregate Bases", of the Standard Specifications and these special provisions.

- e. Measurement and Payment: The contract unit price paid, as shown in the Bid Schedule, for "Remove and Replace Concrete Sidewalk" shall include full compensation for performing all of the work listed above, complete in place, including traffic/pedestrian control/signage, and all incidentals as specified in theses Standard Specifications and these Special Provisions, 2007 City Design Standards, and as directed by the City Project Manager.

2.07 TREE REMOVAL

- a. Description: Trees identified to be removed by the City Project Manager shall be removed and disposed of, including roots and root ball. Contractor shall visit each tree removal location prior to submitting a bid to assess the tree sizes to be removed. Work shall also include any necessary import material required to backfill the root ball excavation to match existing grades if no tree is replanted. Contractor shall assume these trees are roughly 20-30 inches in diameter and 30-40 feet in height for bidding purposes.
- b. Material: Import material shall be free of all organic material and shall be of low clay content and shall be suitable for landscape planting area purposes.
- c. Submittals: Import material sample or data sheet.
- d. Measurement and Payment: The contract unit price paid, as shown in the Bid Schedule for "Tree Removal" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, for removing & disposing of trees, roots, root ball and furnishing, backfilling/compacting import material, complete in place as specified above and in the Standard Specifications and these Special Provisions, and as directed by the City Project Manager.

2.08 TREE INSTALLATION

- a. Description: Install new street trees as directed by the City Project Manager or Inspector at various locations per 2007 City Standard Detail L-16.
- b. Materials: 1). 15 gallon trees – tree species to be specified based on location, 2). potting soil or soil amendment, 3). tree stakes and ties, 4). Root barrier, 5). fertilizer, and 6). perforated drain pipe
- c. Submittals: Tree nursery name and location, potting soil or soil amendment and fertilizer tablet (recommended type and dose by manufacturer).
- d. Order of Work: Layout: Coordinate lay-out of plants with City Project Manager or Inspector for review and approval.
 - i) Plant Pit Excavation:
 - 1. Excavate pits to sizes as per City detail L-16 & L-19.
 - 2. Thoroughly scarify all sides of plant pits to remove "auger slick" and encourage root penetration.

ii) Set trees and shrubs in pit on tamped backfill base as per

Details:

Set plumb and face for best appearance. Thoroughly scarify all plant root balls to eliminate any circling roots and to encourage root growth. Set plant so root crown will level with or be slightly above surrounding grade after settlement.

iii) Backfilling:

1. Backfill mix for 1 gallon size and larger shall consist of amended soil with plant tabs added per manufacturer's recommendations.
2. Tamp backfill mix under and around root balls.
3. Flood plant pit when half backfilled; allow to drain.
4. Complete backfilling. Tamp as necessary, do not over compact.

iv) Watering:

1. Thoroughly water plants immediately after planting.
2. Construct water basins as per City details L-16 & L-19.

v) Finish Grade Restoration: Restore finish grades by hand raking. Dispose of excess subgrade soil.

- e. Measurement and Payment: The contract unit price paid, as shown in the Bid Schedule for "Tree Installation" shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, for furnishing and installing 15 gallon trees, including root barrier, potting soil, fertilizer, stakes and ties, perforated drain pipe, complete in place as specified above and in the Standard Specifications and these Special Provisions, and as directed by the City Project Manager.

END