



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: May 17, 2021  
TO: James Nagelvoort, Director and City Engineer, Engineering & Capital Projects  
FROM: Cindy Crocker, Acting Deputy Director, Engineering & Capital Projects  
SUBJECT: Sole Source Agreement for Emergency Repair of Storm Drain at  
5604 Campanile Way

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Estimated Amount: \$1,500,000 (Not-to-Exceed)  
Contractor: Orion Construction  
Estimated Completion: December 31, 2022  
Recommended Action: Approve Sole Source Request

Pursuant to SDMC §22.3108 (a), "Exceptions to Advertisement and Competitive Award of Engineering & Capital Projects Contracts", this is to certify that a sole source agreement with the contractor named above is necessary and that strict compliance with a competitive process would be unavailing or would not produce an advantage, and soliciting bids or proposals would be undesirable, impractical or impossible for the following reasons:

JUSTIFICATION:

An initial report concerning a failing 24-inch corrugated aluminum pipe (CAP) storm drainpipe that is approximately 170 feet long causing a sinkhole at 5604 Campanile Way was submitted on March 16, 2017 to the Transportation and Stormwater Department (TSW) Stormwater Division. The site has been monitored on a regular basis.

Site investigations have been performed to determine the change in conditions of the failing drainpipe. The CAP shows deterioration showing corrosion and holes inside. The storm drainpipe just south of the sinkhole is completely plugged with sediment. Initially a sinkhole was formed approximately 110 feet away from the inlet and approximately 10 feet west of the home at 5614 Campanile Way. The current sinkhole dimensions are approximately 5 feet deep, 10 feet wide, and 17 feet long. The dimensions of the sinkhole have grown two feet wider since it was first reported in 2017 and has now moved within eight feet of the home (two feet closer) in the last four years.

The existing free-standing masonry wall adjacent to the sinkhole is now undermined and poses a safety hazard to both properties. It is also no longer safe to access the concrete slab that abuts the masonry wall since it has been undermined by the sinkhole. Bypass pumps setup at the property can only effectively convey an approximately one-year storm event resulting in the continual growth of the sinkhole adjacent to the properties.

As a result, the CAP needs to be quickly repaired to halt further slope failure and more importantly prevent risk to residents in the immediate area. This failure will continue to grow at a rapid rate unless the pipe is repaired.


The necessary repair is beyond the capabilities of TSW; therefore, it is requested this project be designated an emergency and a sole source contract be approved.

Additional information related to this request can be found in Enclosure 1.

AGREEMENT VALUE & DURATION:

Unless a modification to the agreement and this sole-source request is issued, the total fee for these services shall not exceed the amount noted above. The term of the agreement will be in effect from date of the agreement execution and shall not exceed the contract completion date noted above.

APPROVED BY:

  
\_\_\_\_\_  
James Nagelvoort, Director, Engineering & Capital Projects

Date: 5/19/21

Enclosure: 1. Memorandum from Kris McFadden, to James Nagelvoort dated March 12, 2021.

cc: Kris McFadden, Director, Transportation & Stormwater Department  
Myrna Dayton, Assistant Director, Engineering & Capital Projects  
Benjamin Battaglia, Deputy Director, Transportation & Stormwater Department  
Drew Kleis, Deputy Director, Transportation & Stormwater Department  
Luis Schaar, Deputy Director, Engineering & Capital Projects  
Carrie Purcell, Interim Deputy Director, Engineering & Capital Projects  
Nevien Antoun, Assistant Deputy Director, Engineering & Capital Projects  
Bethany Bezak, Assistant Deputy Director, Transportation & Stormwater Department  
Sumer Hasenin, Assistant Deputy Director, Transportation & Stormwater Department  
Abi Palaseyed, Assistant Deputy Director, Engineering & Capital Projects  
Jong Choi, Senior Civil Engineer, Engineering & Capital Projects  
Sara Dastgheibi, Senior Civil Engineer, Transportation & Stormwater Department  
Catherine Dungca, Senior Civil Engineer, Engineering & Capital Projects  
Chris Gascon, Senior Civil Engineer, Transportation & Stormwater Department  
Stephen Samara, Principal Contract Specialist, Engineering & Capital Projects  
Jeff Cramoline, Associate Civil Engineer, Engineering & Capital Projects

# City of San Diego

**CONTRACTOR'S NAME:** Orion Construction Corporation

**ADDRESS:** 2185 La Mirada Dr, Vista, CA 92081

**TELEPHONE NO.:** (706) 597-9660 **FAX NO.:** (760) 597-9661

**CITY CONTACT:** Celina Suarez, Contract Specialist, Email: [CSuarez@sandiego.gov](mailto:CSuarez@sandiego.gov)

Phone No. (619) 533-6678

J. Cramoline / A. Jaro / R. Dinjotian

## CONTRACT DOCUMENTS

**FINAL**



## FOR

**EMERGENCY DESIGN AND CONSTRUCTION SERVICES FOR:  
CAMPANILE WY STORM DRAIN REPLACEMENT**

**VOLUME 1 OF 1**

RFQ NO.: **K-18-1682-RFQ-3**

BID NO.: **K-22-2037-EMR-3**

SAP NO. (WBS/IO/CC): **B-21126**

CLIENT DEPARTMENT: **2114**

COUNCIL DISTRICT: **9**

PROJECT TYPE: **CA**

**ENGINEER OF WORK**

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:



\_\_\_\_\_  
For City Engineer

7/21/21

\_\_\_\_\_  
Date

Seal:





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## CITY OF SAN DIEGO, CALIFORNIA

### GENERAL

#### 1. DESCRIPTION OF WORK:

- 1.1. The Work involves furnishing all labor, materials, equipment, services, and other incidental works and appurtenances for the purpose of designing and constructing this emergency project at the direction of the City Engineer.
- 1.2. The Work consists of but is not limited to replacement of approximately 180 linear feet of 24-inch CAP storm drain with 24-inch RCP, as described in **Exhibit R** - Scope of Work, located next to 5604 Campanile Way, San Diego, CA 92115. Contractor will procure consultants to provide Civil services necessary to complete the required work for Design and Construction Support of the Campanile Wy Storm Drain Emergency Replacement, herein referred to as the Project. Sinkhole will be stabilized, and site restored. Consultant to be procured to develop revegetation plan. Revegetation plan and long-term maintenance and monitoring to be implemented after construction is completed.  
  
Harris and Associates to be retained as Engineer of Record to perform civil design services. Design will be completed within 66 working days.
- 1.3. This solicitation is for a "Time-and-Materials" contract in accordance with the provisions set forth in 7-3.7, "Agreed Prices" of The WHITEBOOK.
- 1.4. A time-and-materials contract provides for acquiring labor, material, equipment and services that shall be paid for in accordance with 2-8, "EXTRA WORK" of The GREENBOOK and WHITEBOOK and as modified by the Supplementary Special Provisions.
- 1.5. The Design-Builder agrees to provide the required services for the terms and conditions noted in this contract and its exhibits. The agreement and other terms and conditions are included in this Design-Build Contract, The GREENBOOK, The WHITEBOOK, and the Supplementary Special Provisions (SSP).
- 1.6. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in drafting the Project's preliminary design may not be eligible to participate in the competition with any Design-Build Entity. It is the responsibility of the Design-Build entity to obtain the required legal advice necessary to resolve such matters.

#### 2. CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:

- 2.1. **Prior** to the Award of the Contract or each Task Order, the Contractor must comply with the following registration requirements:
  - 2.1.1. This project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations (DIR). **Contractor and**

**Subcontractor Registration Requirements** for compliance with those requirements are outlined in are outlined in paragraph 7.9 of these “General Instructions.”

**2.1.2.** In addition, prior to award of the Contract or each Task Order, the Contractor and its Subcontractors and Suppliers **must** register with Prism®, the City’s web-based contract compliance portal at:

<https://pro.prismcompliance.com/default.aspx>.

**2.1.3.** The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.

**3. EQUAL OPPORTUNITY:** For the City’s Equal Opportunity Program requirements see Part 0 of the City of San Diego 2018 Whitebook and Exhibit I - Forms.

**3.1.** The Design-Builders are encouraged to take positive steps to diversify and expand their subcontractor solicitation base and to offer contracting opportunities to all eligible certified Subcontractors in accordance with the City’s EOCP requirements included in the Contract Documents.

**3.2. Design-Builder’s Work Force**

**3.2.1.** The Design-Builders shall submit with its Proposal a Work Force Report (EOC Form BB05) and prior to award of contract, the successful Design-Builder shall submit to the City’s EOCP office an updated Work Force Report or an Equal Employment Opportunity (EEO) Plan.

**3.2.2.** If under representations are noted in the Work Force Report when compared to County Labor Force Availability data, the Design-Builder shall submit an Equal Opportunity Plan. Any Equal Employment Opportunity Plan submitted shall include the elements as outlined in the EOCP Requirements included in The WHITEBOOK.

**3.2.3.** The specified Equal Opportunity Contracting Program (EOCP) forms are available for download from the City’s web site at:

<http://www.sandiego.gov/eoc/forms>

**4. CONTRACT TIME:** The Work, including the **120 Days** Plant Establishment period, shall be completed within **216 Working Days** from the date of issuance of the Notice to Proceed. Design shall be completed concurrent with construction and shall be completed within the first **66 Working Days** of the contract.

**5. CONTRACT PRICE:** The Engineer’s Estimate of the Contract Price is **\$1,500,000**. The Contractor shall not perform Work that exceeds the Engineer’s Estimate excluding

Allowances without prior written notice from the City that sufficient additional funding has been secured.

6. **LICENSE REQUIREMENT:** To be eligible for award of this contract, Prime contractor must possess the following licensing classification: **A**

- 6.1. **ADDITIONAL LICENSE REQUIREMENTS:** See Appendix S - Long Term Maintenance and Monitoring Agreement for **C-27** requirement.

7. **PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.

- 7.1. **Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.

- 7.1.1. Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.

- 7.1.2. The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.



- 7.2. Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720 – 1861.
- 7.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
- 7.3.1.** Contractor and their subcontractors shall also furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.
- 7.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 7.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on contractors and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.
- 7.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 7.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract."
- 7.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when

payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.

- 7.9. Contractor and Subcontractor Registration Requirements.** This project is subject to compliance monitoring and enforcement by the DIR. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
- 7.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
- 7.9.2.** By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration for themselves and all listed subcontractors to the City at the time of bid or proposal due date or upon request.
- 7.10. Stop Order.** For Contractor or its subcontractors engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractors or unregistered subcontractor(s) on ALL public works until the unregistered contractor or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.
- 7.11. List of all Subcontractors.** The Contractor shall provide the list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this Contract prior to any work being performed; and the Contractor shall provide a complete list of all subcontractors with each invoice. Additionally, Contractor shall provide the City with a complete list of all subcontractors (regardless of tier) utilized on this contract within ten working days of the completion of the contract, along with their DIR

registration numbers. The City shall withhold final payment to Construction Management Professional until at least thirty (30) days after this information is provided to the City.

**7.12. Exemptions for Small Projects.** There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Contractor shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

**7.12.1.** Registration. The Contractor will not be required to register with the DIR for small projects. (Labor Code section 1771.1)

**7.12.2.** Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Contractor will need to keep those records for at least three years following the completion of the Contract. (Labor Code section 1771.4).

**7.12.3.** List of all Subcontractors. The Contractor shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 8.11 above. (Labor code section 1773.3).

**8. REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") <a href="http://www.greenbookspecs.org/">http://www.greenbookspecs.org/</a>	2018	PWPI010119-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* <a href="https://www.sandiego.gov/ecp/edocref/greenbook">https://www.sandiego.gov/ecp/edocref/greenbook</a>	2018	PWPI010119-02
City of San Diego Standard Drawings* <a href="https://www.sandiego.gov/ecp/edocref/standarddraw">https://www.sandiego.gov/ecp/edocref/standarddraw</a>	2018	PWPI010119-03
Citywide Computer Aided Design and Drafting (CADD) Standards <a href="https://www.sandiego.gov/ecp/edocref/drawings">https://www.sandiego.gov/ecp/edocref/drawings</a>	2018	PWPI010119-04
California Department of Transportation (CALTRANS) Standard Specifications <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-05
CALTRANS Standard Plans <a href="https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications">https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications</a>	2018	PWPI030119-06
California Manual on Uniform Traffic Control Devices Revision 6 (CA MUTCD Rev 6) <a href="https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files">https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files</a>	2014	PWPI060121-10

Title	Edition	Document Number
<p><b>NOTE:</b> *Available online under Engineering Documents and References at:  <a href="https://www.sandiego.gov/ecp/edocref/">https://www.sandiego.gov/ecp/edocref/</a>            *Electronic updates to the Standard Drawings may also be found in the link above</p>		

**9. INSURANCE REQUIREMENTS:**

- 9.1.** All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
- 9.2.** Refer to sections within 5-4, "INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.

**10. SUBCONTRACTOR INFORMATION:**

**10.1. LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the **NAME** and **ADDRESS** of each Subcontractor who will perform work, labor, render services or who specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a **CONSTRUCTOR, CONSULTANT** or **SUPPLIER**. The Bidder shall state the **DIR REGISTRATION NUMBER** for all subcontractors and shall further state within the description, the **PORITION** of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions - Section 3-2, "SELF-PERFORMANCE", which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

Additionally, pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder shall provide the name, address, license number, DIR registration number of any Subcontractor - regardless of tier** - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract.



- 10.2. LISTING OF SUPPLIERS.** Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY), DIR REGISTRATION NUMBER** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.
- 11. SUBMITTAL OF "OR EQUAL" ITEMS:** See 4-6, "TRADE NAMES" in The WHITEBOOK and as amended in the SSP.
- 12. SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to the GREENBOOK and Special Provisions Section 3-2, "SELF-PERFORMANCE" which requires the Contractor to perform not less than the amount therein stipulated with its own forces. Failure to comply with these requirements shall render the Bid non-responsive and ineligible for award.
- 13. PLANS AND SPECIFICATIONS:** When provided by the City, questions about the meaning or intent of the Contract Documents relating to the scope of Work and technical nature shall be directed to the City's Project Manager prior to commencement of work. Interpretations or clarifications considered necessary by the City in response to such questions will be issued in writing. Oral and other interpretations or clarifications will be without legal effect. Any questions related to this proposal shall be addressed to the Engineering & Capital Projects Department, Contracts Division, 525 B Street, Suite 750, San Diego, CA 92101, Telephone No. (619) 533-3450.
- 14. SAN DIEGO BUSINESS TAX CERTIFICATE:** All Contractors, including Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor, before the Contract can be executed.
- 15. PROPOSAL FORMS:** The signature of each person signing may be in longhand or in electronic format as specified by the City. The Contractor shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.
- 15.1.** The Bidder, by submitting electronically, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this contract are true and correct.
- 16. CITY'S RIGHTS RESERVED:** The City reserves the right to cancel this request for proposal at any time, and further reserves the right to reject submitted proposals, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the

Contractor as a result of preparing its proposal shall be the sole responsibility of the Contractor.

**17. AWARD OF CONTRACT OR REJECTION OF PROPOSALS:**

**17.1.** This contract may be awarded to a contractor selected from the City's as-needed emergency contractors list or may be awarded to another contractor in case the list of available emergency contractors list is exhausted.

**17.2.** The City reserves the right to reject the proposal from the emergency list-selected contractor and request a proposal from the next contractor on the list when such rejection is in the best interests of the City.

**18. THE CONTRACT:** The Contractor shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance documents specified in 1-7.2, "Contract Bonds", and 5-4, "INSURANCE" within **3 Working Days** after receipt by the Contractor of a form of contract for execution unless an extension of time is granted to the Contractor in writing. Bonds shall be in amount of the Contract Price for the Work included in the Bid.

The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder. If the Contractor fails to enter into the contract as herein provided, the award may be annulled. An award may be made to the next contractor on the shortlist or in the case the emergency contractor's list is exhausted to any other responsive contractor on a sole-source basis who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.

**19. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:** The Contractor shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 3-9, "TECHNICAL STUDIES AND SUBSURFACE DATA", and the proposal forms. The signing of the Contract shall be conclusive evidence that the Contractor has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of Work, the quantities of materials to be furnished, and as to the requirements of the Contract Documents.

**20. CITY STANDARD PROVISIONS.** This contract is subject to the following standard provisions. See The WHITEBOOK for details.

**20.1.** The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.

**20.2.** The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.

**20.3.** The City of San Diego Municipal Code §22.3004 for Pledge of Compliance.

- 20.4.** The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.
- 20.5.** Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.
- 20.6.** The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).
- 20.7.** The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.
- 21. DESIGN SUBMITTALS:** The City's review of the Design-Builder's Design Submittals shall not relieve the Design-Builder from its responsibilities under the Contract, or be deemed to be an acceptance or waiver by City of any deviation from, or of the Design-Builder's failure to comply with, any provision or requirement of the Contract Documents, unless such deviation or failure has been identified as such in writing in the document submitted for acceptance by the Design-Builder and accepted by City. Where approval or acceptance by City is required, it is understood to be general approval only, and does not relieve the Design-Builder of responsibility for complying with all applicable laws and good professional practices as the Design-Builder shall be the Engineer of Record.
- 22. WRITTEN AUTHORIZATION:** Prior to performing any Professional Services in connection with the Project, the Contractor shall obtain from the City a written authorization to proceed. Further, throughout the term of this Contract, the Contractor shall immediately advise the City in writing of any anticipated change in the scope of services [**Section 1 - Description of Work**], compensation and rate schedule [**Exhibit M**], or Time Schedule [**Section 4 - Contract Time**] and shall obtain the City's written consent to the change prior to making any changes. In no event shall the City's consent be construed to relieve the Contractor from its duty to render all Professional Services in accordance with applicable laws and accepted industry standards.
- 23. PHASED FUNDING:** For Phased Funding Provisions, see Exhibit M.

**AGREEMENT  
FOR  
EMERGENCY DESIGN AND CONSTRUCTION SERVICES  
BETWEEN  
THE CITY OF SAN DIEGO  
AND  
ORION CONSTRUCTION CORPORATION**

---

This Phase-Funded Emergency Design and Construction Services Agreement (Agreement) is made and entered between THE CITY OF SAN DIEGO, herein called "City" and **ORION CONSTRUCTION CORPORATION** herein called "Contractor", for the purpose of designing (when required) and performing emergency construction services for **CAMPANILE WY STORM DRAIN REPLACEMENT**, Bid NO. **K-22-2037-EMR-3**, in the total amount of **(\$1,500,000)**, **consisting of an amount not to exceed \$400,000.00 for Phase I and \$1,100,000.00 for Phase II** at the direction of the City Engineer. The City and the Contractor are referred to herein as the "Parties."

**RECITALS**

- A. The City desires to construct the emergency project identified in Section 1, Description of Work.
- B. The City desires to contract with a single entity for Emergency Construction Services, as set forth in this agreement.
- C. The City had previously issued a Request for Qualifications (RFQ), via **K-18-1682-RFQ-3**, for on-call emergency construction services.
- D. In accordance with this RFQ, Contractors submitted Statements of Qualifications (SOQ) for these services from which the City established a pre-qualified list of the most highly qualified contractors to perform emergency construction services as directed by the City.
- E. In accordance with said RFQ, the Contractor submitted an SOQ and is prepared to enter into this agreement.
- F. The City has selected the Contractor from the City's list of on-call contractors to perform, either directly or with Subcontracts hereinafter defined, the design, engineering, and construction services set forth in this agreement and the Contract Documents.
- G. The Contractor is ready, willing, and able to perform the emergency design and construction services required as specified in the Scope of Work and Services section of this agreement and in accordance with the terms and conditions of this agreement and under the direction of the Engineer.

In consideration of the above recitals and the mutual covenants and conditions set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows:




## AGREEMENT

- A. The above referenced recitals are true and correct and are incorporated into this agreement by this reference.
- B. Exhibits, including the Phased Funding Schedule and Long term Maintenance and Monitoring Agreement, referenced in this agreement are incorporated into the Agreement by this reference.
- C. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances. (See WHITEBOOK, Section 7-3.10, Phased Funding Compensation).
- D. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- E. This agreement incorporates the Standard Specifications for Public Works Construction (The 2018 GREENBOOK), including those amendments set forth in the City of San Diego Supplement (The 2018 WHITEBOOK). All changes, additions, or both are stated herein and all other provisions remain unchanged.
- F. The Contractor shall comply with City's Equal Opportunity Contracting Program Requirements set forth in the Contract Documents. See The WHITEBOOK Part 0.
- G. The Contractor, including Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor, before the Agreement can be executed.
- H. The Contractor shall ensure that all Subcontractors complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section. The Contractor shall include in each subcontract agreement, language which requires Subcontractors to abide by the provisions of City Municipal Code §22.3004.
- I. The Contractor's attention is directed to the provisions of the State of California Labor Code §1776 (Stats. 1978, Ch. 1249). The Contractor shall be responsible for the compliance with these provisions by Subcontractors.
- J. This contract is effective as of the date the City issued the Contractor a written notice to proceed (NTP), or the date of the last signatory below, whichever occurred first.
- K. The Contractor shall complete the work to be performed under this agreement and shall achieve Acceptance within the allowed number of Working Days from the NTP as specified in the Notice of Award, unless authorized otherwise by the Engineer. Time is of essence for the completion of the Work and the Project has critical milestones to be met as listed in the Notice of Award.

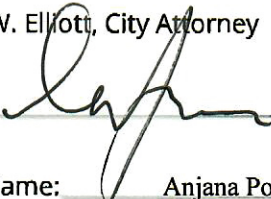
- L. During the final design process (if any), if the Contractor modifies the Project such that a revision of the environmental document is required, the Contractor shall be responsible for all work required for implementing a revision, including preparation of revised documentation and coordination with City staff. Work shall not proceed on the project until the environmental requirements are met to the satisfaction of the City. There shall be no additional time allowed in the contract for processing and approval of revised permit documents.
  
- M. Prior to NTP or as required by the City, the Contractor shall:
  - 1. File surety bonds with the City to be approved by the City in the amounts and for the purposes noted in the Notice Inviting Bids and
  - 2. Obtain the required insurance in accordance with 5-4, "INSURANCE" and any additional insurance as may be specified in the Supplemental Special Provisions.

**IN WITNESS WHEREOF**, this Agreement is executed by the City of San Diego, acting by and through its Mayor or designee, pursuant to the emergency contract provisions of City Charter 594 authorizing such execution, and by the Contractor.


**THE CITY OF SAN DIEGO**

By   
Print Name: Stephen Samara  
Principal Contract Specialist  
Purchasing & Contracting  
Public Works Division  
Date: 9/28/2021

**APPROVED AS TO FORM**

Mara W. Elliott, City Attorney  
By   
Print Name: Anjana Pottathil  
Deputy City Attorney  
Date: 11/8/2021

**CONTRACTOR**

By   
Print Name: Richard Dowsing  
Title: President of Orion Construction Corp  
Date: 8/19/2021  
City of San Diego License No.: B199002970  
State Contractor's License No. : 549309

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of San Diego

On 08/19/2021 before me, Richard Gregory Newhall - Notary Public  
(insert name and title of the officer)

personally appeared Richard Dowsing - Orion President,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_



(Seal)





**PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND**

---

**FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:**

**Orion Construction Corporation** \_\_\_\_\_, a corporation, as principal, and  
**Western Surety Company** \_\_\_\_\_, a corporation authorized to do  
business in the State of California, as Surety, hereby obligate themselves, their successors and assigns,  
jointly and severally, to The City of San Diego a municipal corporation in the sum of **One Million Five  
Hundred Thousand Dollars (\$1,500,000.00)** for the faithful performance of the annexed contract,  
and in the sum of **One Million Five Hundred Thousand Dollars (\$1,500,000.00)** for the benefit of  
laborers and materialmen designated below.

**Conditions:**

If the Principal shall faithfully perform the annexed contract with the City of San Diego, California, then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants, (iii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

The Surety expressly agrees that the City of San Diego may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal.

The Surety shall not utilize the Principal in completing the improvements and work specified in the Agreement in the event the City terminates the Principal for default.

**PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)**

Dated August 18, 2021

Approved as to Form

Orion Construction Corporation

Principal

By 

Richard Dowsing, President

Printed Name of Person Signing for Principal

Mara W. Elliott, City Attorney

By 

Deputy City Attorney

Date 11/8/2021

Western Surety Company

Surety

By 

Attorney-in-fact  
Lawrence F. McMahon

Approved:

By 

Stephen Samara  
Principal Contract Specialist  
Purchasing & Contracting  
Public Works Division

Date 9/28/2021

1455 Frazee Road, Suite 300

Local Address of Surety

San Diego, CA 92108

Local Address (City, State) of Surety

(619) 682-3510

Local Telephone No. of Surety

Premium \$14,760.00

Time surcharge included and subject to  
adjustment bond on final contract price.

Bond No. 30140603

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT** Civil Code § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA

County of San Diego }

On AUG 18 2021 before me, Maria Guise, Notary Public,  
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Lawrence F. McMahon  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~is~~ subscribed to the within instrument and acknowledged to me that he/~~she/it~~ executed the same in his/~~her/its~~ authorized capacity(~~ies~~), and that by his/~~her/its~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

Witness my hand and official seal.

Signature [Handwritten Signature]  
Signature of Notary Public Maria Guise



Place Notary Seal Above

**OPTIONAL**

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer is Representing: Surety Company

Signer's Name: \_\_\_\_\_

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner  Limited  General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: \_\_\_\_\_



Signer is Representing: \_\_\_\_\_

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Lawrence F Mc Mahon, Sarah Myers, Janice Martin, Christopher J Conte, Lilia De Loera, Individually**

of San Diego, CA, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

**- In Unlimited Amounts -**

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 16th day of July, 2021.



WESTERN SURETY COMPANY

*Paul T. Bruflat*  
Paul T. Bruflat, Vice President

State of South Dakota }  
County of Minnehaha } ss

On this 16th day of July, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires  
March 2, 2026



*M. Bent*  
M. Bent, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 18th day of August, 2021.



WESTERN SURETY COMPANY

*L. Nelson*  
L. Nelson, Assistant Secretary

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of San Diego

On 08/19/2021 before me, Richard Gregory Newhall - Notary Public  
(insert name and title of the officer)

personally appeared Richard Dowling - Orion President,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

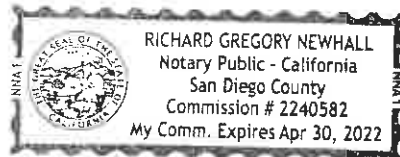
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_



(Seal)



**EXHIBIT A**

**DRUG-FREE WORKPLACE CERTIFICATION**

## **CONTRACTOR CERTIFICATION**

---

### **DRUG-FREE WORKPLACE**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 5-1.3, "Drug-Free Workplace", of the project specifications, and that;

This company\_has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

**EXHIBIT B**

**AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION**



## CONTRACTOR CERTIFICATION

---

### AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 5-1.2, "California Building Code, California Code of Regulations Title 24 and Americans with Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

**EXHIBIT C**

**CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

## **CONTRACTOR CERTIFICATION**

---

### **CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE**

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 5-1.4, ("Contractor Standards and Pledge of Compliance"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

**EXHIBIT D**

**EQUAL BENEFITS ORDINANCE CERTIFICATION**

## **CONTRACTOR CERTIFICATION**

---

### **EQUAL BENEFITS ORDINANCE CERTIFICATION**

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

**EXHIBIT E**

**PRODUCT ENDORSEMENT**

## **CONTRACTOR CERTIFICATION**

---

### **PRODUCT ENDORSEMENT**

I declare under penalty of perjury that I acknowledge and agree to comply with the provisions of City of San Diego Administrative Regulation 95.65, concerning product endorsement. Any advertisement identifying or referring to the City as the user of a product or service requires the prior written approval of the City.

**EXHIBIT F**

**AFFIDAVIT OF DISPOSAL**



**AFFIDAVIT OF DISPOSAL**

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

**WHEREAS**, on the \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_, the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

**Campanile Wy Storm Drain Replacement**

(Name of Project)

as particularly described in said contract and identified as Bid No. **K-22-2037-EMR-3**; SAP No. (WBS) **B-21126**; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**NOW, THEREFORE**, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

and that they have been disposed of according to all applicable laws and regulations.

Dated this \_\_\_\_\_ DAY OF \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_ Contractor

by

**ATTEST:**

State of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ DAY OF \_\_\_\_\_, 2\_\_\_\_\_, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared \_\_\_\_\_ known to me to be the \_\_\_\_\_ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

**EXHIBIT G**

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID  
UNDER 23 UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23  
UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

The bidder, being first duly sworn, deposes and says that he or she is authorized by the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

**EXHIBIT H**

**CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

**CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS**

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.
- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: Orion Construction Corporation

Certified By Richard Dowsing Title President  
Name

 Date 8/19/21  
Signature

**USE ADDITIONAL FORMS AS NECESSARY**

**EXHIBIT I**

**MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM**

## Mandatory Disclosure of Business Interests Form

### BIDDER/PROPOSER INFORMATION

<b>Legal Name</b>		<b>DBA</b>	
Orion Construction Corporation		Orion Construction Corporation	
<b>Street Address</b>	<b>City</b>	<b>State</b>	<b>Zip</b>
2185 La Mirada Drive	Vista	CA	92081
<b>Contact Person, Title</b>		<b>Phone</b>	<b>Fax</b>
Richard Dowsing, President		(760) 597-9660	(760) 597-9661

Provide the name, identity, and precise nature of the interest\* of all persons who are directly or indirectly involved\*\* in this proposed transaction (SDMC § 21.0103).

\* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction, the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and any philanthropic, scientific, artistic, or property interest in the transaction.

\*\* Directly or indirectly involved means pursuing the transaction by:

- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City,
- or directing or supervising the actions of persons engaged in the above activity.

<b>Name</b>	<b>Title/Position</b>
Richard Dowsing	President of Orion Construction Corporation
<b>City and State of Residence</b>	<b>Employer (if different than Bidder/Proposer)</b>
Encinitas, CA	
<b>Interest in the transaction</b>	
100% Ownership Interest in Orion Construction Corporation	

<b>Name</b>	<b>Title/Position</b>
<b>City and State of Residence</b>	<b>Employer (if different than Bidder/Proposer)</b>
<b>Interest in the transaction</b>	

### \* Use Additional Pages if Necessary \*

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Mayor or Designee with written notice is grounds for Contract termination.

Richard Dowsing, President



8/19/21

Print Name, Title

Signature

Date

**Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Mandatory Disclosure of Business Interests Form is submitted.**

# EXHIBIT J

## FORMS



## LIST OF SUBCONTRACTORS

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the GREENBOOK and Special Provisions Section 3-2, "SELF-PERFORMANCE", which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB <sup>ⓐ</sup>	WHERE CERTIFIED <sup>ⓑ</sup>	CHECK IF JOINT VENTURE PARTNERSHIP
Name: Harris & Associates, Inc. Address: 600 B Street Suite 2000 City: San Diego State: CA Zip: 92101 Phone: (619) 481-5000 Email: Frank.Lopez@weareharris.com	Designer	1000011113	N/A	Design Consultant	TBD - To Be Determined	N/A	N/A	N/A
Name: Land Surveying Consultants, Inc. Address: 318 State Place City: Escondido State: CA Zip: 92029 Phone: (760) 738-8804 Email: kbrewer@4lscinc.com	Constructor Consultant	1000008005	N/A	Survey Consultant	TBD - To Be Determined	N/A	N/A	N/A

- <sup>ⓐ</sup> As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |                                               |        |                                                |         |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |                                                |         |
- <sup>ⓑ</sup> As appropriate, Bidder shall indicate if Subcontractor is certified by:
- |                                                      |        |                                                  |          |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |                                                  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**LIST OF SUBCONTRACTORS**

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the GREENBOOK and Special Provisions Section 3-2, "SELF-PERFORMANCE", which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED	CHECK IF JOINT VENTURE PARTNERSHIP
Name: Helix Environmental Planning Address: 7578 El Cajon Blvd. City: La Mesa State: CA Zip: 91942 Phone: (619) 462-1515 Email: ShelbyH@helixepi.com	Constructor	1000015953	831496	Environmental Consultant	\$59,500.00	N/A	N/A	N/A
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								

- Ⓢ As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |                                               |        |                                                |         |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |                                                |         |
- Ⓣ As appropriate, Bidder shall indicate if Subcontractor is certified by:
- |                                                      |        |                                                  |          |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |                                                  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**NAMED EQUIPMENT/MATERIAL SUPPLIER LIST**

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES <b>(MUST BE FILLED OUT)</b>	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB	WHERE CERTIFIED
Name: Oldcastle Infrastructure - Curtis Mumford Address: 10441 Vine Street City: Lakeside State: CA Zip: 92040 Phone: (619) 240-8000 Email: Curtis.Mumford@oldcastle.com	Supplier	TBD - To Be Determined	Yes	Yes	N/A	N/A
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____						

- ① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- |                                               |        |                                                |         |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| Certified Minority Business Enterprise        | MBE    | Certified Woman Business Enterprise            | WBE     |
| Certified Disadvantaged Business Enterprise   | DBE    | Certified Disabled Veteran Business Enterprise | DVBE    |
| Other Business Enterprise                     | OBE    | Certified Emerging Local Business Enterprise   | ELBE    |
| Certified Small Local Business Enterprise     | SLBE   | Small Disadvantaged Business                   | SDB     |
| Woman-Owned Small Business                    | WoSB   | HUBZone Business                               | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB |                                                |         |

- ② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:
- |                                                      |        |                                                  |          |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego                                    | CITY   | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission               | CPUC   |                                                  |          |
| State of California's Department of General Services | CADoGS | City of Los Angeles                              | LA       |
| State of California                                  | CA     | U.S. Small Business Administration               | SBA      |

**The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.**

**DEBARMENT AND SUSPENSION CERTIFICATION**

**EFFECT OF DEBARMENT OR SUSPENSION**

To promote integrity in the City's contracting processes and to protect the public interest, the City shall only enter into contracts with responsible bidders and contractors. In accordance with San Diego Municipal Code §22.0814 (a): *Bidders and contractors* who have been *debarred* or *suspended* are excluded from submitting bids, submitting responses to requests for proposal or qualifications, receiving *contract* awards, executing *contracts*, participating as a *subcontractor*, employee, agent or representative of another *person* contracting with the City.

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s)

The names of all persons interested in the foregoing proposal as Principals are as follows:

NAME	TITLE
Richard Dowsing	President

**IMPORTANT NOTICE:** If Bidder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last names in full.


The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal, State or local agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal, State or local agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Contractor Name: Orion Construction Corporation

Certified By Richard Dowsing Title President  
 Name  
Signature Date 8/19/21

**NOTE:** Providing false information may result in criminal prosecution or administrative sanctions.

Names of the Principal individual owner(s)  
**FOR SUBCONTRACTORS/SUPPLIERS/MANUFACTURERS**

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of Names of the Principal Individual owner(s) for their subcontractor/supplier/manufacturers.

Please indicate if principal owner is serving in the capacity of **subcontractor**, **supplier**, and/or **manufacturer**:

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Harris & Associates, Inc. - Frank Lopez	Senior Director / Project Engineer
600 B Street Suite 2000	
San Diego, CA 92101	
(619) 481-5000	
Frank.Lopez@weareharris.com	

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Land Surveying Consultants, Inc. - Dale Keith Brewer	President
318 State Place	
Escondido, CA 92029	
(760) 738-8804	
kbrewer@4lscinc.com	

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE
Helix Environmental Planning - Shelby Howard	
7578 El Cajon Blvd.	
La Mesa, CA 91942	
(619) 462-1515	
ShelbyH@helixepi.com	

SUBCONTRACTOR                       SUPPLIER                       MANUFACTURER

NAME	TITLE

Contractor Name: Orion Construction Corporation

Certified By Richard Dowsing Title President

Name

  
 Signature

Date 8/19/21

**\*USE ADDITIONAL FORMS AS NECESSARY\***



**EQUAL OPPORTUNITY CONTRACTING (EOC)**

1200 Third Avenue, Suite 200 • San Diego, CA 92101

Phone: (619) 236-6000 • Fax: (619) 236-5904

**WORK FORCE REPORT**

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

NO OTHER FORMS WILL BE ACCEPTED

**CONTRACTOR IDENTIFICATION**

Type of Contractor:  Construction     Vendor/Supplier     Financial Institution     Lessee/Lessor  
 Consultant     Grant Recipient     Insurance Company     Other

Name of Company: Orion Construction Corporation

ADA/DBA: Orion Construction Corporation

Address (Corporate Headquarters, where applicable): 2185 La Mirada Drive

City: Vista County: San Diego State: CA Zip: 92081

Telephone Number: (760) 597-9660 Fax Number: (760) 597-9661

Name of Company CEO: Richard Dowsing

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_ Email: \_\_\_\_\_

Type of Business: General Contractor Type of License: Construction

The Company has appointed: Erika Aparicio - Human Resources Department

As its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: 2185 La Mirada Drive Vista, CA 92081

Telephone Number: (760) 597-9660 Fax Number: (760) 597-9661 Email: erika.aparicio@orionconstruction.com

- One San Diego County (or Most Local County) Work Force - Mandatory
  - Branch Work Force \*
  - Managing Office Work Force
- Check the box above that applies to this WFR.*

*\*Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.*

I, the undersigned representative of Orion Construction Corporation  
(Firm Name)

San Diego, Ca hereby certify that information provided  
(County) (State)

herein is true and correct. This document was executed on this 19<sup>th</sup> day of August, 2021

(Authorized Signature)

Richard Dowsing, President

(Print Authorized Signature Name)

**WORK FORCE REPORT - Page 2**

NAME OF FIRM: Orion Construction Corporation DATE: 08/13/2021

OFFICE(S) or BRANCH(ES): 2185 La Mirada Drive Vista CA 92081 COUNTY: San Diego

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black or African-American
- (2) Hispanic or Latino
- (3) Asian
- (4) American Indian or Alaska Native
- (5) Native Hawaiian or Pacific Islander
- (6) White
- (7) Other race/ethnicity; not falling into other groups

Definitions of the race and ethnicity categories can be found on Page 4

ADMINISTRATION OCCUPATIONAL CATEGORY	(1) Black or African American		(2) Hispanic or Latino		(3) Asian		(4) American Indian/ Nat. Alaskan		(5) Pacific Islander		(6) White		(7) Other Race/ Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
	Management & Financial					1	2			1		1		
Professional					1						2			
A&E, Science, Computer											5	2		
Technical														
Sales														
Administrative Support				3							1	1		
Services														
Crafts														
Operative Workers														
Transportation			8								2	1		
Laborers*			2								3			

\*Construction laborers and other field employees are not to be included on this page

Totals Each Column			10	3	2	2			1		14	4		
--------------------	--	--	----	---	---	---	--	--	---	--	----	---	--	--

**Grand Total All Employees**

**36**

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Non-Profit Organizations Only:

Board of Directors														
Volunteers														
Artists														

**WORK FORCE REPORT – Page 3**

NAME OF FIRM: Orion Construction Corporation

DATE: 08/13/2021

OFFICE(S) or BRANCH(ES): 2185 La Mirada Drive Vista CA 92081

COUNTY: San Diego

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- (1) Black or African-American
- (2) Hispanic or Latino
- (3) Asian
- (4) American Indian or Alaska Native
- (5) Native Hawaiian or Pacific Islander
- (6) White
- (7) Other race/ethnicity; not falling into other groups

Definitions of the race and ethnicity categories can be found on Page 4

TRADE OCCUPATIONAL CATEGORY	(1) Black or African American		(2) Hispanic or Latino		(3) Asian		(4) American Indian/ Nat. Alaskan		(5) Pacific Islander		(6) White		(7) Other Race/ Ethnicity	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
	Brick, Block or Stone Masons													
Carpenters														
Carpet, Floor & Tile Installers Finishers														
Cement Masons, Concrete Finishers														
Construction Laborers	3		27	1								11		
Drywall Installers, Ceiling Tile Inst														
Electricians														
Elevator Installers														
First-Line Supervisors/Managers														
Glaziers														
Helpers; Construction Trade														
Millwrights														
Misc. Const. Equipment Operators	1		13									14		
Painters, Const. & Maintenance			3											
Pipelayers, Plumbers, Pipe & Steam Fitters														
Plasterers & Stucco Masons														
Roofers														
Security Guards & Surveillance Officers														
Sheet Metal Workers														
Structural Metal Fabricators & Fitters														
Welding, Soldering & Brazing Workers														
Workers, Extractive Crafts, Miners														

Totals Each Column	4		43	1								25		
--------------------	---	--	----	---	--	--	--	--	--	--	--	----	--	--

**Grand Total All Employees** 73

Indicate By Gender and Ethnicity the Number of Above Employees Who Are Disabled:

Disabled														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--



## Work Force Report

### **HISTORY**

The Work Force Report (WFR) is the document that allows the City of San Diego to analyze the work forces of all firms wishing to do business with the City. We are able to compare the firm's work force data to County Labor Force Availability (CLFA) data derived from the United States Census. CLFA data is a compilation of lists of occupations and includes the percentage of each ethnicity we track (American Indian or Alaska Native, Asian, Black or African-American, Native Hawaiian or Pacific Islander, White, and Other) for each occupation. Currently, our CLFA data is taken from the 2010 Census. In order to compare one firm to another, it is important that the data we receive from the consultant firm is accurate and organized in the manner that allows for this fair comparison.

### **WORK FORCE & BRANCH WORK FORCE REPORTS**

When submitting a WFR, especially if the WFR is for a specific project or activity, we would like to have information about the firm's work force that is actually participating in the project or activity. That is, if the project is in San Diego and the work force is from San Diego, we want a San Diego County Work Force Report<sup>1</sup>. By the same token, if the project is in San Diego, but the work force is from another county, such as Orange or Riverside County, we want a Work Force Report from that county<sup>2</sup>. If participation in a San Diego project is by work forces from San Diego County and, for example, from Los Angeles County and from Sacramento County, we ask for separate Work Force Reports representing your firm from each of the three counties.

### **MANAGING OFFICE WORK FORCE**

Equal Opportunity Contracting may occasionally ask for a Managing Office Work Force (MOWF) Report. This may occur in an instance where the firm involved is a large national or international firm but the San Diego or other local work force is very small. In this case, we may ask for both a local and a MOWF Report<sup>1,3</sup>. In another case, when work is done only by the Managing Office, only the MOWF Report may be necessary.<sup>3</sup>

### **TYPES OF WORK FORCE REPORTS:**

Please note, throughout the preceding text of this page, the superscript numbers one <sup>1</sup>, two <sup>2</sup> & three <sup>3</sup>. These numbers coincide with the types of work force report required in the example. See below:

<sup>1</sup> One San Diego County (or Most Local County) Work Force – Mandatory in most cases

<sup>2</sup> Branch Work Force \*

<sup>3</sup> Managing Office Work Force

*\*Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.*

### **RACE/ETHNICITY CATEGORIES**

**American Indian or Alaska Native** – A person having origins in any of the peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

**Asian** – A person having origins in any of the peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**Black or African American** – A person having origins in any of the Black racial groups of Africa.

**Native Hawaiian or Pacific Islander** – A person having origins in any of the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

**White** – A person having origins in any of the peoples of Europe, the Middle East, or North Africa.

**Hispanic or Latino** – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.

---

**Exhibit A: Work Force Report Job Categories – Administration**

Refer to this table when completing your firm's Work Force Report form(s).

**Management & Financial**

Advertising, Marketing, Promotions, Public Relations, and Sales Managers

Business Operations Specialists

Financial Specialists

Operations Specialties Managers

Other Management Occupations

Top Executives

**Professional**

Art and Design Workers

Counselors, Social Workers, and Other Community and Social Service Specialists

Entertainers and Performers, Sports and Related Workers

Health Diagnosing and Treating Practitioners

Lawyers, Judges, and Related Workers

Librarians, Curators, and Archivists

Life Scientists

Media and Communication Workers

Other Teachers and Instructors

Postsecondary Teachers

Primary, Secondary, and Special Education School Teachers

Religious Workers

Social Scientists and Related Workers

**Architecture & Engineering, Science, Computer**

Architects, Surveyors, and Cartographers

Computer Specialists

Engineers

Mathematical Science Occupations

Physical Scientists

**Technical**

Drafters, Engineering, and Mapping Technicians

Health Technologists and Technicians

Life, Physical, and Social Science Technicians

Media and Communication Equipment Workers

**Sales**

Other Sales and Related Workers

Retail Sales Workers

Sales Representatives, Services

Sales Representatives, Wholesale and Manufacturing

Supervisors, Sales Workers

**Administrative Support**

Financial Clerks

Information and Record Clerks

Legal Support Workers

Material Recording, Scheduling, Dispatching, and Distributing Workers

Other Education, Training, and Library Occupations

Other Office and Administrative Support Workers

Secretaries and Administrative Assistants

Supervisors, Office and Administrative Support Workers

**Services**

Building Cleaning and Pest Control Workers

Cooks and Food Preparation Workers

Entertainment Attendants and Related Workers

Fire Fighting and Prevention Workers

First-Line Supervisors/Managers, Protective Service Workers

Food and Beverage Serving Workers

Funeral Service Workers

Law Enforcement Workers

Nursing, Psychiatric, and Home Health Aides

Occupational and Physical Therapist Assistants and Aides

Other Food Preparation and Serving Related Workers

Other Healthcare Support Occupations

Other Personal Care and Service Workers

Other Protective Service Workers

Personal Appearance Workers

Supervisors, Food Preparation and Serving Workers

Supervisors, Personal Care and Service Workers

Transportation, Tourism, and Lodging Attendants

**Crafts**

Construction Trades Workers

Electrical and Electronic Equipment Mechanics,  
Installers, and Repairers

Extraction Workers

Material Moving Workers

Other Construction and Related Workers

Other Installation, Maintenance, and Repair  
Occupations

Plant and System Operators

Supervisors of Installation, Maintenance, and Repair  
Workers

Supervisors, Construction and Extraction Workers

Vehicle and Mobile Equipment Mechanics, Installers,  
and Repairers

Woodworkers

**Operative Workers**

Assemblers and Fabricators

Communications Equipment Operators

Food Processing Workers

Metal Workers and Plastic Workers

Motor Vehicle Operators

Other Production Occupations

Printing Workers

Supervisors, Production Workers

Textile, Apparel, and Furnishings Workers

**Transportation**

Air Transportation Workers

Other Transportation Workers

Rail Transportation Workers

Supervisors, Transportation and Material Moving  
Workers

Water Transportation Workers

**Laborers**

Agricultural Workers

Animal Care and Service Workers

Fishing and Hunting Workers

Forest, Conservation, and Logging Workers

Grounds Maintenance Workers

Helpers, Construction Trades

Supervisors, Building and Grounds Cleaning and  
Maintenance Workers

Supervisors, Farming, Fishing, and Forestry Workers

## **Exhibit B: Work Force Report Job Categories-Trade**

### **Brick, Block or Stone Masons**

Brickmasons and Blockmasons

Stonemasons

### **Carpenters**

### **Carpet, floor and Tile Installers and Finishers**

Carpet Installers

Floor Layers, except Carpet, Wood and Hard Tiles

Floor Sanders and Finishers

Tile and Marble Setters

### **Cement Masons, Concrete Finishers**

Cement Masons and Concrete Finishers

Terrazzo Workers and Finishers

### **Construction Laborers**

### **Drywall Installers, Ceiling Tile Inst**

Drywall and Ceiling Tile Installers

Tapers

### **Electricians**

### **Elevator Installers and Repairers**

### **First-Line Supervisors/Managers**

First-line Supervisors/Managers of Construction

Trades and Extraction Workers

### **Glaziers**

### **Helpers, Construction Trade**

Brickmasons, Blockmasons, and Tile and Marble Setters

Carpenters

Electricians

Painters, Paperhangers, Plasterers and Stucco

Pipelayers, Plumbers, Pipefitters and Steamfitters

Roofers

All other Construction Trades

### **Millwrights**

Heating, Air Conditioning and Refrigeration Mechanics and Installers

Mechanical Door Repairers

Control and Valve Installers and Repairers

Other Installation, Maintenance and Repair Occupations

### **Misc. Const. Equipment Operators**

Paving, Surfacing and Tamping Equipment Operators

Pile-Driver Operators

Operating Engineers and Other Construction Equipment Operators

### **Painters, Const. Maintenance**

Painters, Construction and Maintenance

Paperhangers

### **Pipelayers and Plumbers**

Pipelayers

Plumbers, Pipefitters and Steamfitters

### **Plasterers and Stucco Masons**

### **Roofers**

### **Security Guards & Surveillance Officers**

### **Sheet Metal Workers**

### **Structural Iron and Steel Workers**

### **Welding, Soldering and Brazing Workers**

Welders, Cutter, Solderers and Brazers

Welding, Soldering and Brazing Machine Setter, Operators and Tenders

### **Workers, Extractive Crafts, Miners**

**EXHIBIT K**

**SUPPLEMENTARY SPECIAL PROVISIONS**

## SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

1. The **2018 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
2. The **2018 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
  - a) General Provisions (A) for all Construction Contracts.
  - b) General Provisions (B) for Design-Build and Multiple Award Construction Contracts.

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### PART 0 – EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

#### SECTION A – GENERAL REQUIREMENTS

**0-12 CONTRACT RECORDS AND REPORTS.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall maintain records of all subcontracts and invoices from your Subcontractors and Suppliers for work on this project. Records shall show name, telephone number including area code, and business address of each Subcontractor, Supplier, and joint venture partner, and the total amount actually paid to each firm. Project relevant records, regardless of tier, may be periodically reviewed by the City.
2. You shall retain all records, books, papers, and documents pertinent to the Contract for a period of not less than 5 years after Notice of Completion and allow access to said records by the City's authorized representatives.
3. You shall submit the following reports using the City's web-based contract compliance (Prism® portal):
  - a) **Monthly Payment.** You shall submit Monthly Payment Reporting by the 10<sup>th</sup> day of the subsequent month. Incomplete and/or delinquent reporting may cause payment delays, non-payment of invoices, or both.
4. The records maintained under item 1, described above, shall be consolidated into a Final Summary Report, certified as correct by an authorized representative of the Contractor. The Final Summary Report shall include all subcontracting activities and be sent to the EOCP Program Manager prior to Acceptance. Failure to comply may result in assessment of liquidated damages or withholding of retention. The City will review and verify 100% of subcontract participation reported in the Final Summary Report prior to approval and release of final retention to you. In the event your Subcontractors are owed money for completed Work, the City may authorize payment to subcontractor via a joint check from the withheld retention.

**SECTION 1 – GENERAL, TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS**

**1-2 TERMS AND DEFINITIONS.** To the “WHITEBOOK”, items 56, 69, and 102, DELETE in their entirety and SUBSTITUTE with the following:

- 56. **Notice of Completion (NOC)** - A document recorded with the County of San Diego to signify that the Contract Work has been completed and accepted by the City.
- 69. **Punchlist** - A list of items of Work or corrections generated after a Walk-through that is conducted when you consider that the Work and Services are complete, and as verified by the Owner. The Punchlist may be completed in phases if defined in the Contract.
- 102. **Walk-through** - An inspection the City uses to verify the completion of the Project or phase of the Project and to generate a Punchlist prior to Acceptance.

To the “WHITEBOOK”, item 54, “Normal Working Hours”, ADD the following:

The **Normal Working Hours** are **7:00 AM to 5:00 PM**.

To the “WHITEBOOK”, ADD the following:

- 108. **Acceptance** – When all of the Contract Work, including all Punchlist items, is deemed officially complete by the City Asset Owning Department or Deputy City Engineer.
- 109. **Occupancy** – When the Owner deems a building is ready for use, the Owner will issue a certificate of Occupancy in writing.
- 110. **Substantial Completion** – When all Contract Work is deemed complete by the Contractor in writing, and as verified by the Owner. Substantial Completion may be completed in phases if defined in the Contract.

**1-7.1.3 Requests for Information (RFI).** To the “WHITEBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

- 1. Should You discover a conflict, omission, errors in the Contract Documents, differences with existing field conditions, or have any questions concerning interpretation or clarification of Contract Documents, or when you propose deviations to the standards or design, you shall submit a Request for Information (RFI) to the City regarding your question or clarification within **1 Working Day**.
- 2. Your RFI shall meet the following requirements:
  - a) All RFIs, whether by You or your Subcontractor or supplier at any tier, shall be submitted by You to the City.
  - b) RFIs shall be numbered sequentially.

- c) You shall clearly and concisely set forth the single issue for which interpretation or clarification is sought, indicate Specification Section numbers, Contract Drawing numbers, and details, or other items involved, and state why a response is required from the City.
  - d) RFIs shall be submitted within **1 Working Day** in order that they may be adequately researched and answered before the response affects any critical activity of the Work.
  - e) Should You believe that a response to an RFI causes a change to the requirements of the Contract, You shall, before proceeding, give written notice to the City, indicating that You believe that City response to the RFI to be a Change Order. Failure to give such written notice within **5 Working Days** of receipt of the City's response to the RFI shall waive Your right to seek additional time or cost.
3. The City will respond to RFIs within **5 Working Days** unless the City notifies You in writing that a response will take longer. The **5 Working Days** shall begin when the RFI is received and dated by the City. Responses from the City will not change any requirement of the Contract unless so noted by the City in the response to the RFI. The City will not issue a Change Order for Extra Work or additional time when the issue raised in the RFI was due to your fault, neglect, or any unauthorized deviations from the project design or specifications.
4. If You proceed in resolving a conflict, omission, or any error in the Contract Documents without sending the City an RFI in accordance with the requirements stated above, the City may require You to remove such work at Your cost or back charge You the cost to remove this work.

**1-7.2**

**Contract Bonds.** To the "WHITEBOOK", item 1, DELETE in its entirety and SUBSTITUTE with the following:

- 1. Before execution of the Contract, file payment and performance bonds with the City to be approved by the Board in the amounts and for the purposes noted. Bonds shall be executed by a responsible surety as follows:
  - a) If the Work is being funded with state or local money, consistent with California Code of Civil Procedure §995.670, the Surety shall be an "admitted surety" authorized by the State of California Department of Insurance to transact surety insurance in the State.
  - b) If the Work is being funded with federal money, the Surety shall be listed in the U.S. Treasury Department Circular 570 and shall be in conformance with the specified Underwriting Limitations.

To the "WHITEBOOK", item 2, subsection "a", subsection "i", DELETE in its entirety and SUBSTITUTE with the following:

- i. A "Payment Bond" (Materials and Labor Bond) is optional. If no bond is submitted, no payment shall be made until 35 Calendar Days after Acceptance and any lien requirements have been fulfilled. If a bond is submitted, progress payments shall be made in accordance with these Specifications.



To the "WHITEBOOK", item 2, subsection "d", DELETE in its entirety and SUBSTITUTE with the following:

- d) For Contracts over \$100,000:
  - i. A "Payment Bond" (Materials and Labor Bond) for 100% of the Contract Price to satisfy claims of material Suppliers and of mechanics and laborers employed on the Work. You shall maintain the bond in full force and effect until Acceptance and until all claims for materials and labor are paid and shall otherwise comply with the Government Code.
  - ii. A "Faithful Performance Bond" for 100% of the Contract Price to guarantee faithful performance of Work, within the time prescribed and in a manner satisfactory to the City, that materials and workmanship shall be free from original or developed defects.

To the "WHITEBOOK", item 7, DELETE in its entirety and SUBSTITUTE with the following:

- 7. You shall require the Surety to mail its standard "Bond Status" form to the Engineer at the following address:  
 Deputy Director  
 Construction Management and Field Engineering Division  
 9573 Chesapeake Drive San Diego, CA 92123

**SECTION 2 - SCOPE OF THE WORK**

**2-8 EXTRA WORK.** To the "WHITEBOOK", ADD the following:

- 2. Compensation for "Time-and-Material" emergency Contracts.
  - a) You will be compensated for staff charges directly associated with the project.
  - b) Any invoiced off-site work shall include a summary of work.
  - c) Mark up for off-site work shall be the same as on-site work.

**SECTION 3 - CONTROL OF THE WORK**

**3-3 SUBCONTRACTORS.** To the "WHITEBOOK", ADD the following:

- 6. When a Subcontractor fails to prosecute a portion of the Work in a manner satisfactory to the City, you shall remove such Subcontractor immediately upon written request of the City, and shall request approval of a replacement Subcontractor to perform the Work in accordance with California Public Contract Code (PCC), Subletting and Subcontracting, Section 4107, at no added cost to the City.

**3-10 SURVEYING.** To the "GREENBOOK" and "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**3-10 SURVEYING (DESIGN-BUILD).**

### 3-10.1

#### General.

1. You shall provide all required site layout not specified in this section.
2. Unless surveying services are provided by the City, only the Design Firm, not the Contractor, shall be allowed to hire a Licensed Land Surveyor or a Registered Civil Engineer authorized to practice land surveying within the State of California to provide all surveying services needed for the design, and if requested by the City, also for the construction activities required for the completion of the Project. Surveying services include, but are not limited to: land, aerial, topographic and construction.
3. If requested by the City, the Design Firm shall submit a letter to the City's Project Manager identifying the Licensed Land Surveyor or the Registered Civil Engineer authorized to practice land surveying within the State of California that will be performing the design and/or construction phase survey services for the Project.
4. Where applicable, notify the City in writing at least 2 Working Days prior to requesting survey services to be provided by the City.
5. The Design Firm is responsible for performing and meeting the accuracy of surveying standards adequate for design and construction through the Design Firm's Licensed Land Surveyor or Registered Civil Engineer authorized to practice land surveying within the State of California.
6. All Survey Services deliverables shall be submitted per the City's CADD Standards and pertinent Public Works Department Engineering Deliverable specifications.  
<https://www.sandiego.gov/ecp/edocref/drawings>
7. All Survey Services and deliverables which reveal non-compliance with the requirements of the Construction Documents and standards shall be corrected as deemed necessary by the City at the Design-Builder's expense.
8. Where Survey Services are provided by the City, all construction survey stakes, control points, and other survey related marks shall be preserved for the duration of the Project. If any construction survey stakes, control points, or other survey related marks are lost or disturbed and need to be replaced, such replacement shall be performed at the Design-Builder's expense.
9. The City's Land Survey Section (LSS) shall be notified a minimum of 2 Working Days (large projects may require more) before any ground is to be disturbed within the City of San Diego (concrete, asphalt, or dirt). The LSS may need to inspect the site and provide monumentation information.

### 3-10.2

#### Monument Perpetuation.

1. Monument Perpetuation, including mark-outs, will be performed by the City Public Works Engineering Support & Technical Services Division's (ES&TS), Land Survey Section (LSS), unless otherwise noted. You are responsible for requesting the coordination of these services.

2. If at any time a monument will be destroyed or covered, such monument shall be perpetuated in accordance with state law. Inform the LSS, via project Resident Engineer, if any monument will be destroyed or covered during any construction activity.

**3-10.3 Line and Grade.**

1. The Work shall conform to the lines, elevations, and grades shown on the Plans. Three consecutive points set on the same slope shall be used together so that any variation from a straight grade can be detected. Any such variation shall be reported to the City's PM. In the absence of such report, the Surveyor shall be responsible for any error in the grade of the Work.
2. Grades for underground conduits will be set at the surface of the ground. The Design-Builder shall transfer them to the bottom of the trench.

**3-10.4 Topographic and Monument Survey – Preliminary Design.**

1. Topographic field survey shall include all existing ground surface topography, fencing, hardscape, utilities, roadway surface, and curb returns within the delineated mapping limit. Monument survey shall include the sufficient collection of existing record survey monuments to perform right-of-way (ROW) analysis along within subject mapping limits.
2. Unless otherwise specified, the Land Surveyor shall adhere to Section 3 of the Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys (Effective February 23, 2016).

<https://www.nsp.us.com/page/ALTANSPSStandards>

3. Horizontal Control shall be based on the CCS83 Zone 6, 1991.35 epoch, U.S. Survey Feet per Record of Survey Map No. 14492 (ROS 14492). It is required to tie into a first order monument per ROS 14492 unless a first order monument no longer exists within a three-mile radius. Horizontal control measurements shall be collected in conformance with the local standard of practice.
4. Vertical Control shall be based on NGVD29 per benchmarks in the City of San Diego Bench Book. Non 1970 adjusted and 1970 adjusted benchmarks listed with an asterisk (\*) in the City Benchmark book are not to be used together for Vertical Control – common adjustment sets are to be used.
5. All topographic field survey data shall be collected using conventional survey methods utilizing total station instrumentation.
6. Deliverables.
  - a) Horizontal and Vertical Control.
    - i. Completed Calibration sheet as provided indicating the monuments used to establish the Basis of Bearings and Vertical Benchmark held to control this survey.

- b) Field Data.
  - i. Data collected as points and break lines to define a proper DTM if requested outside of aerial mapping.
  - ii. Includes utilities collected on surface as required.
  - iii. Includes Horizontal control points from ROS 14492 used to define the Basis of Bearings and Vertical control Benchmark(s) to establish elevation.
  - iv. Includes record monument points.
  - v. Data collector project files.
  - vi. Raw (unedited) data file.
  - vii. Project file.
  - viii. Point comma delimited text file formatted.
- c) Topography.
  - i. Create and deliver a complete ASCII coordinate list (.txt/.doc etc.) of all field collected survey points.
    - The contours produced from the surface digital terrain model (dtm) shall meet or exceed ASPRS 90 standards where 68% ( $1\sigma$ ) of the contours tested fall within  $1/3$  contour interval. Any point tested that is more than  $3\sigma$  out shall be regarded as a blunder. These standards closely parallel the familiar National Map Accuracy Standards.
- d) Records Research.
  - i. All public or private records acquired to determine the City's ROW in the project area delivered in digital or hardcopy format with any markups and City Records as acquired.
    - City records may include but are not limited to GIS scope plots, sewer and water sheets, loose leaf survey notes, Tie Point sheets, dedication or vacation drawings, easement drawings, benchmark list, and etc.
    - After initial search of City records by the Surveyor, they may request City assistance to search for hard to find records.
- e) Survey Monument Measurements.
  - i. All found monuments located within, or near, the survey limits shall be searched and measured. Sufficient additional monuments to control all boundaries extending from the survey limits shall be tied (i.e. block corners, Points of Curve

etc.) to the next available survey monument past the survey limits.

- All Monuments found shall be described with details as to what was found along with identifying number.

**3-10.5 Monument Search, Field Boundary Survey and Boundary Analysis – Right-of-Way (ROW) Mapping.**

1. The monument survey, for each designated site, shall be of sufficient coverage and quality for a Right-of-Way boundary analysis performed and provided in conformance with City CADD standards.
2. Surveyor shall deliver to the City all requested survey information and CADD data, as specified below, upon completion of the Monument Survey and Boundary Analysis.
3. Unless otherwise specified, the Land Surveyor shall adhere to Section 3 of the Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys (Effective February 23, 2016).  
<https://www.nspss.com/page/ALTANSPPStandards>
4. Field monument survey to be performed and provided in conformance with City CADD standards.
5. Field Measurements shall be collected in conformance the local standard of practice.
6. Horizontal Control shall be based on the CCS83 Zone 6, 1991.35 epoch, U.S. Survey Feet units, per City of San Diego Record of Survey Map No. 14492 (ROS 14492). All Project survey control shall be based upon field-tied measurements to a Horizontal First Order monument as shown on ROS 14492. Where existing First Order monument cannot be recovered or located within a 3-mile radial distance from the project site a Horizontal Second-Order Monument may be used as Project survey basis. The Project vertical control datum shall be based on NGVD29 per benchmarks identified in the City of San Diego Vertical Control Bench Book (Bench Book). All Project benchmarks shall be selected from a common Bench Book source group:
  - a) Benchmarks with elevations updated per U.S.C.G.S adjustment of 1970, identified with an asterisk (\*).
  - b) Benchmarks not adjusted per the 1970 adjusted values (non-asterisked identifiers).
7. Deliverables.
  - a) Horizontal and Vertical Control.
    - i. Completed Calibration sheet indicating the monuments used to establish the Basis of Bearings and Vertical Benchmark held to control this survey.

- b) Field Data.
  - i. Complete, Correct CADD file in conformance with City CADD Standards and industry standards.
    - Includes Horizontal control points from ROS 14492 used to define the Basis of Bearings and Vertical control Benchmark(s) to establish elevation.
    - Includes Monument points covering the area of work.
  - ii. Data collector project files.
    - Raw (unedited) data file.
    - Project file.
    - Point comma delimited text file.
- c) Records Research.
  - i. If requested, all public or private records acquired to determine the City's ROW in the project area delivered in digital or hardcopy format with any markups and City Records as acquired.
  - ii. City records may include but are not limited to GIS scope plots, sewer and water sheets, loose leaf survey notes, Tie Point sheets, dedication or vacation drawings, easement drawings, benchmark list, and etc.
- d) Boundary Ties
  - i. All monuments within the survey limits shall be searched and tied if found. Sufficient additional monuments to control all boundaries extending from the survey limits shall be tied (i.e. Block Corners, Points of Curve etc.) to the next available survey monument past the survey limits.
    - All Monuments found shall be described details as to what was found along with identifying number.

**3-10.6 Field Monument Survey and Topographic Utility Survey.**

1. The right-of-way monumentation survey data shall be provided to the City.
2. Surveyor shall perform a right-of-way monument survey and existing utility survey (locating feature centers). Surveyor shall also collect ground surface topography over any aerial obscured areas.
3. Unless otherwise specified, the Land Surveyor shall adhere to Section 3 of the Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys (Effective February 23, 2016).  
<https://www.nspss.com/page/ALTANSPPStandards>
4. Field Measurements shall be collected in conformance with the local standard of practice.

5. Project Horizontal and Vertical Control.
  - a) The Horizontal and Vertical Control for this project shall be based on the same datum, basis of bearing, calibration and benchmark as used for the Aerial Survey.
  - b) Horizontal Control Shall be based on the CCS83 Zone 6, 1991.35 epoch, U.S. Survey Feet per ROS 14492. It is required to tie into a first order monument per ROS 14492 unless a first order monument no longer exists within a three-mile radius.
  - c) Vertical Control shall be based on NGVD29 per benchmarks in the City of San Diego Bench Book. Non 1970 adjusted and 1970 adjusted benchmarks listed with an asterisk (\*) in the City Benchmark book are not to be used together for Vertical Control – common adjustment sets are to be used.
  - d) If adjacent City projects have been found and are included in the research packages, measurements to a minimum of 3 common control or ROW points shall be made for evaluation and consistency between projects. These projects can be used for establishing common horizontal or vertical control, joining or adding to existing data, and/or as an inventory of survey monuments for search purposes.

6. Deliverables.

- a) Horizontal and Vertical Control.
  - i. Completed Calibration sheet indicating the monuments used to establish the Basis of Bearings and Vertical Benchmark held to control this survey. The horizontal and vertical control shall be set by the Surveyor that is issued the first Notice to Proceed.
- b) Field Data.
  - i. Data collected as points and break lines to define a proper DTM beyond the identified mapping limits if requested.
  - ii. Include utilities collected on surface as required.
  - iii. Include horizontal control points from ROS 14492 to define the Basis of Bearings and Vertical control Benchmark(s) to establish elevation.
  - iv. Include Monument points covering the area of work.
  - v. Data collector project files.
    - Raw (unedited) data file.
    - Project file.
    - Point data text file in “comma delimited format”.

- vi. CADD File.
  - A digital design file displaying all field work, existing right-of-way monuments, and utility feature data per City CADD standards. The design file shall be complete, correct, and free of duplicate elements.
  - The following data shall be included in the electronic mapping file: Name of Design/Engineering Firm and/or Surveyor doing the project, Company Logo (if available), Name of project, Work order number, Date & Scale.
  - Include right-of-way monument elements.
  - Use appropriate levels and attributes for all elements to meet City of San Diego CADD Standards.
- c) Topography
  - i. Create and deliver a complete ASCII coordinate list (.txt/.doc etc.) as a result of the geometry report of the final .ALG file.
  - ii. Use appropriate levels and attributes for all elements to meet City of San Diego CADD Standards.
- d) Records Research.
  - i. If requested, all public or private records acquired to assist with right-of-way monument collection.
  - ii. City records may include but are not limited to GIS scope plots, sewer and water sheets, loose leaf survey notes, Tie Point sheets, dedication or vacation drawings, easement drawings, benchmark list, and etc.
  - iii. After initial search of City records by the Surveyor, they may request City assistance to search for hard to find records.
- e) Right-of-Way Monument Survey Locations
  - i. All monuments within the survey limits shall be searched and located if found. Sufficient additional monuments to control all boundaries extending from the survey limits shall be located to facilitate LSS ROW Mapping (i.e. block corners, points of curve, and etc.).
    - All found survey monuments shall describe the character and identifying reference marks.
    - City survey notes and City drawings can be provided, as applicable.
- f) The appropriate City of San Diego cell library (V8 City existing.cel), font resource file (V8 City font.rsc), color table (V8 City color.tbl), line style (V8 City Line style.rsc), level scheme, and seed file parameters are to be used for placement of all elements in the design files, with strict



adherence to "Working Units" and seed file "Global Origin". Base map level schemes are attached. A CD containing the most current version of the above seed files, cell libraries and font resource files will be provided, if needed, upon request.

### **3-10.7 Construction Survey/Staking.**

1. Construction staking surveying shall be performed with the standards customarily adhered to by an experienced and competent land surveying firm using the degree of care and skill ordinarily exercised by reputable professionals practicing in the same field of service in the State of California. Where approval by the City is required, it is understood to be general approval only and shall not relieve the Design Firm of their responsibility to comply with all applicable laws, codes, and good consulting practices.
2. Field Measurements shall comply with the local standards of practice. All construction staking with a gradient of less than 1.5% shall be performed by a total station survey instrument. Gradients less than 0.2% shall require a level run prior to construction, and all said services shall be performed by the Surveyor.
3. The following are minimum requirement guidelines for various types of staking:
  - a) Limits of work 50-foot maximum interval.
  - b) Limits of Demolition 50-foot maximum interval.
  - c) Rough grade stakes 50-foot maximum interval.
  - d) Finish grade stakes 50-foot maximum interval.
  - e) Slope staking at 50-foot maximum interval.
  - f) Contour staking @ 50-foot maximum interval.
  - g) Curb stakes with offset to face of curb, and grade to top of curb with 50-foot maximum interval.
  - h) Storm drain at 50-foot maximum interval where grade exceeds 1%.
  - i) Sewer lines at 50-foot maximum interval where grade exceeds 1%.
  - j) Water lines at 50-foot' maximum interval offset to near curb face (no grades - minimum cover).
  - k) Dry utilities at 50-foot maximum interval where grade exceeds 1%.
  - l) Construction staking involving horizontal and vertical curves shall be staked at 25-foot maximum intervals, and further densification for deltas on applicable curb returns and pipe joints.
  - m) Storm Drain inlet stakes shall be on face of curb produced, and on string line grade.

- n) Walls staked at footing breaks, with station interval of 25-foot maximum intervals.
- o) Buildings – offsets to outside face of wall.
- p) Bridge abutments and bents on opposing sides.

**3-13.1 Completion.** To the “GREENBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

1. You shall submit a written assertion that the Work has been completed and is ready for Owner Acceptance. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Engineer will set forth in writing the date the Work was completed. This will be the date that you are relieved from responsibility to protect and maintain the Work and to which liquidated damages will be computed.

**3-13.1.1 Requirements Before Requesting a Walk-through.** To the “WHITEBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

**3-13.1.1 Requirements Before Requesting Substantial Completion.**

1. The following items are required prior to requesting a Substantial Completion:
  - a) Remove temporary facilities from the Site.
  - b) Thoroughly cleaning the Site and removing all mark outs and construction staking.
  - c) Provide completed and signed Red-lines in accordance with 3-7.3 “Redlines and Record Documents”.
  - d) Provide all material and equipment maintenance and operation instructions and/or manuals.
  - e) Provide all tools which are permanent parts of the equipment installed in the Project.
  - f) Provide and properly identify all keys for construction and all keys for permanent Work.
  - g) Provide all final Special Inspection reports required by the applicable building Code.
  - h) Provide all items specified to be supplied as extra stock. Wrap, seal, or place in a container all items as necessary to allow for storage by the City for future use. Verify the specified quantities.
  - i) Ensure that all specified EOCP and certified wage rate documentations covering the Contract Time have been submitted.
  - j) If the Work includes installing an irrigation system, provide the spare parts for the proposed irrigation system as specified in the Special Provisions.

- k) If the Work includes sewer and storm drain installations, the inspection shall include televising in accordance with 306-18, "VIDEO INSPECTION".
- l) If the Work includes a Plant Establishment Period, Work in accordance with 801-6, "MAINTENANCE AND PLANT ESTABLISHMENT" shall be completed prior to requesting Substantial Completion, unless approved otherwise by the Owner.
- m) Notify the Engineer to arrange a final inspection of permanent BMPs installed.

**3-13.1.2 Walk-through and Punchlist Procedure.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall notify the Engineer 15 Working Days in advance of date of anticipated Substantial Completion to allow time for Engineer to schedule a Walk-through.
2. After you complete the requirements in 3-13.1.1, "Requirements Before Requesting Substantial Completion" and when you consider that the Work is Substantially Complete, you will notify the Engineer in writing that the Project is Substantially Complete and request a Walk-through. The Engineer will review your request and determine if the Project is ready for a Walk-through, by verifying whether you have completed all items as required by 3-13.1.1, "Requirements Before Requesting Substantial Completion". Within 7 Working Days, the City will either reject your request for a Walk-through in writing or schedule and conduct a Walk-through inspection. The Engineer shall facilitate the Walk-through.
3. The following documents shall be provided at the time of your Walk-through request: As-Built markup, Plans, specifications, technical data such as submittals and equipment manuals, draft final payment, warranties, material certifications, bonds, guarantees, maintenance service agreements, and maintenance and operating manuals.
4. Written warranties, except manufacturer's standard printed warranties, shall be on a letterhead addressed to you. Warranties shall be submitted in the format described in this section, modified as approved by the City, to suit the conditions pertaining to the warranty. Lack of submitting these items will delay start of Walk-through.
5. The Engineer will provide you with the Punchlist within 15 Working Days after the date of the Walk-through. The City shall not provide a preliminary Punchlist.
6. If the Engineer finds that the Project is not Substantially Complete as defined herein, the Engineer will terminate the Walk-through and notify you in writing.
7. If, at any time during the Engineer's evaluation of the corrective Work required by the Punchlist, the Engineer discovers that additional corrective Work is required, the Engineer may include that corrective Work in the Punchlist.

8. You shall remain solely responsible for the Project Site until the Project is completely operational, all Punchlist items have been corrected, all operation and maintenance manuals have been approved, all necessary warranty letters have been received, and the work is formally accepted by the City.
9. The Engineer shall meet with you within 5 Working Days of notification that all Punchlist items are corrected. You shall complete the Punchlist within 30 Working Days and Working Days will continue to be counted until Acceptance of the Project.

**3-13.2 Acceptance.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall provide the completed, signed, and stamped DS-563 to the Engineer prior to Acceptance.
2. You shall deliver the final As-builts and final billing prior to Acceptance.
3. You shall assemble and deliver to the Engineer a Final Summary Report and Affidavit of Disposal prior to Acceptance.
4. Acceptance shall occur after all of the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, you have fully performed the Contract, the Engineer will recommend to the City Engineer that your performance of the Contract be accepted. You shall receive notification of Acceptance in writing from the Owner and counting of working days shall cease and Warranty begins.
5. Retention can be released 35 Calendar Days after NOC. Submit your request for retention to the Resident Engineer and they will mail to you a "Release of Claims" form which shall be completed and returned before the retention will be released.

**3-13.3 Warranty.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. You shall warranty and repair all defective materials and workmanship for a period of 1 year. This call back warranty period shall start on the date the Work was accepted by the City unless the City has Beneficial Use or takes Occupancy of the project earlier (excluding water, sewer, and storm drain projects).
2. You shall warranty the Work free from all latent defects for 10 years and patent defects for a period of 4 years.
3. The warranty period for specific items covered under manufacturers' or suppliers' warranties shall commence on the date they are placed into service at the direction of the Engineer in writing.
4. All express warranties from Subcontractors, manufacturers', or Suppliers', of any tier, for the materials furnished and Work performed shall be assigned, in writing, to the City, and shall be delivered to the Engineer prior to the Acceptance of your performance of the Contract.

5. Replace or repair defective materials and workmanship in a manner satisfactory to the Engineer after notice to do so from the Engineer and within the time specified in the notice. If you fail to make such replacements or repairs within the time specified in the notice, the City may perform the replacement or repairs at your expense. If you fail to reimburse the City for the actual costs, your Surety shall be liable for the cost.
6. Items that shall be warrantied free from defective workmanship and materials for a period longer than 1 year are as follows:

<b>Specified Item</b>	<b>Minimum Warranty Period</b>
Detectable Warning Tile Construction	3 Years of Manufacturer's Warranty
All Work Under SECTION 500 – PIPELINE REHABILITATION	3 Years
Fiber Optic Interconnect Cables	2 Years
Luminaires*	10 Years of Manufacturer's Warranty
LED Signal Modules	3 Years of Manufacturer's Warranty
Field Devices Associated with 700-6.3, "Adaptive Control Note"	See 700-6.3.9, "Warranty"

\* Provide documentation verifying that the induction luminaire models being offered for the Project are covered by the 10-year warranty.

7. If installed, you shall provide the City and property owner a copy of the manufacturer's warranty for private sewer pumps, including the alarm panel and all other accessories.
  - a) You shall involve the manufacturer in the installation and startup as needed to secure any extended warranty required.
  - b) Nothing in here is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than set forth in this section or the Contract Documents.
  - c) The warranty shall include all components. The form of the warranty shall be approved by the Engineer in accordance with 3-13.3.2, "Warranty Format Requirements".
8. If, during the warranty period, any item of the Work is found to be Defective Work, you shall correct it promptly after receipt of written notice from the City to do so. The warranty period shall be extended with respect to portions of the Work corrected as part of the warranty requirements.

## SECTION 4 - CONTROL OF MATERIALS

**4-3.6 Preapproved Materials.** To the "WHITEBOOK", ADD the following:

3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

## SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES

**5-4 INSURANCE.** To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**5-4 INSURANCE.**

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

**5-4.1 Policies and Procedures.**

1. You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.
4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided, and the City has approved all required insurance.
5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

**5-4.2 Types of Insurance.**

**5-4.2.1 Commercial General Liability Insurance.**

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.

2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

<u>General Annual Aggregate Limit</u>	<u>Limits of Liability</u>
Other than Products/Completed Operations	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

**5-4.2.2 Commercial Automobile Liability Insurance.**

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").
2. All costs of defense shall be outside the limits of the policy.

**5-4.3 Rating Requirements.** Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.

**5-4.3.1 Non-Admitted Carriers.** The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

**5-4.4 Evidence of Insurance.** Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its

behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

**5-4.5 Policy Endorsements.**

**5-4.5.1 Commercial General Liability Insurance.**

**5-4.5.1.1 Additional Insured.**

1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of:
  - a) Ongoing operations performed by you or on your behalf,
  - b) your products,
  - c) your Work, e.g., your completed operations performed by you or on your behalf, or
  - d) premises owned, leased, controlled, or used by you.
4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
  - a) Ongoing operations performed by you or on your behalf,
  - b) your products, or
  - c) premises owned, leased, controlled, or used by you.

**5-4.5.1.2 Primary and Non-Contributory Coverage.** The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

**5-4.5.1.3 Project General Aggregate Limit.** The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.



**5-4.5.2 Commercial Automobile Liability Insurance.**

**5-4.5.2.1 Additional Insured.** Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

**5-4.6 Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.

**5-4.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.

**5-4.8 Notice of Changes to Insurance.** You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.

**5-4.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.

**5-4.10 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).**

1. For Contracts with required engineering services (e.g., Design-Build, preparation of engineered Traffic Control Plans (TCP), and etc) by you, you shall keep or require all of your employees or Subcontractors, who provide professional engineering services under this contract, Professional Liability coverage with a limit of **\$1,000,000** per claim and **\$2,000,000** annual aggregate in full force and effect.
2. You shall ensure the following:
  - a) The policy retroactive date is on or before the date of commencement of the Project.
  - b) The policy will be maintained in force for a period of 3 years after completion of the Project or termination of this Contract, whichever occurs last. You agree that for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.

3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
  - a) Certify this to the City in writing and
  - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth above.

**5-4.11 Workers' Compensation Insurance and Employers Liability Insurance.**

1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.
2. Limits for this insurance shall be not less than the following:
 

<u>Workers' Compensation</u>	<u>Statutory Employers Liability</u>
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit
3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.

**5-4.11.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

**5-10.2.1 Public Notice by Contractor.** To the "WHITEBOOK", items 2 and 3, DELETE in its entirety and SUBSTITUTE with the following:

2. No less than 5 Working Days in advance of Project construction activities and utility service interruptions, you shall notify all critical facilities, businesses, institutions, property owners, residents, or any other impacted stakeholders within a minimum 300-foot (90 m) radius of the Project. Verbal and written notifications shall be sent to critical facilities (including but not limited to police stations, fire stations, hospitals, and schools). A copy of written notifications sent to any critical facility shall also be sent to the Resident Engineer. You shall keep records of the people contacted, along with the dates of notification, and

shall provide the record to the Engineer upon request. You shall identify all other critical facilities that need to be notified.

3. Furnish and distribute public notices in the form of door hangers using the City's format to all occupants and/or property owners along streets:
  - a) Where Work is to be performed at least Working 5 Working Days before starting construction or survey activities or impacting the community as approved by the Resident Engineer.
  - b) Within 5 Working Days of the completion of your construction activities where Work was performed, you shall distribute public notices in the form of door hangers, which outlines the anticipated dates of Asphalt Resurfacing or Slurry Seal.
  - c) 72 hours in advance of the scheduled resurfacing.

**5-13 ELECTRONIC COMMUNICATION.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Virtual Project Manager shall be used on this Contract.
2. You shall post all communications addressed to the Engineer concerning construction including RFIs, submittals, daily logs including the Weekly Statement of Working Days (WSWD), Storm Water, and transmittals to the Virtual Project Manager (VPM) website established for the Projects. This shall not supersede any Federal requirements.
3. Maintain a list of scheduled activities including planned and actual execution dates for all major construction activities and milestones defined in the approved Schedule.
4. Review and act on all communications addressed to you in the VPM project website.
5. A user's guide to the VPM system is available on the City's website and shall be provided to you at the Pre-construction Meeting. Refer to the VPM training videos and forms at the location below:  
  
<https://www.sandiego.gov/ecp/edocref/>
6. Submit the Sensitive Information Authorization Acknowledgement Form and VPM User Agreement located in the VPM user's guide at the Pre-construction Meeting.

**5-15.1 General.** To the "WHITEBOOK", item 10, DELETE in its entirety and SUBSTITUTE with the following:

10. You shall ensure that construction staff have the required Hazardous Waste Operations and Emergency Response (HAZWOPER) certification for construction activities that have encountered flammable liquids or other

hazardous substances. Construction staff shall include: City Engineers, City Laboratory Technicians, and City staff that perform onsite inspections.

- a) If your Work encounters flammable liquids or other hazardous substances, you shall be responsible for scheduling training for all construction staff to attend and for submitting verification to the Engineer that construction staff have the required HAZWOPER certification prior to continuing that Work in that area. You shall maintain the HAZWOPER certifications annually until the construction activities triggering the requirement is complete, as approved by the Resident Engineer.

## SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK

**6-1.1 Construction Schedule.** To the “GREENBOOK”, paragraph (1), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

After notification of award of the Contract and prior to the start of any Work, you shall submit your proposed Cost Loaded Construction Schedule to the Engineer at the pre-construction meeting.

To the “WHITEBOOK”, item 1, subsection “e”, “s”, and “h”, DELETE in their entirety and SUBSTITUTE with the following:

- e) Monthly progress payments are contingent upon the submittal of an updated Schedule to the Engineer. The Engineer may refuse to process the whole or part of any monthly payment if you refuse or fail to provide an acceptable schedule.
- s) Submit an updated cash flow forecast with every pay request (for each Project ID or WBS number provided in the Contract) showing periodic and cumulative construction billing amounts for the duration of the Contract Time. If there has been any Extra Work since the last update, include only the approved amounts.
  - i. Refer to the Sample City Invoice materials in **Exhibit R – Sample City Invoice** and use the format shown.
- h) Your Schedule shall include 7 Working Days for the Engineer to schedule and conduct a Walk-through inspection and 15 Working Days for the generation of the Punchlist. You shall Work diligently to complete all Punchlist items within 30 Working Days after the Engineer provides the Punchlist.

**6-1.1.2 Contracts More Than \$500,000 In Value.** To the “WHITEBOOK”, item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. Provide the Schedule to the Engineer in accordance with 6-1.1, “Construction Schedule” and 6-1.2, “Commencement of the Work”.

To the "WHITEBOOK", item 2, DELETE in its entirety.

**6-1.2 Commencement of the Work.** To the "WHITEBOOK", ADD the following:

5. You shall submit a Cost Loaded Construction Schedule in accordance with 6-1.1, "Construction Schedule" at the scheduled pre-construction meeting.
6. If a Cost Loaded Construction Schedule is not provided, the pre-construction meeting will still be held. The Contract Time shall commence at issuance of the NTP, but you shall be limited to the following activities until the Cost Loaded Construction Schedule has been submitted to the Resident Engineer with no exceptions taken:
  - a) Mobilization of your trailers, associated utility setup, and grading for trailer area.
  - b) Permit Procurement.
  - c) Fencing and temporary utilities for your storage areas.
  - d) Submittal of anticipated critical path submittals.

**6-1.5.2 Excusable Non-Compensable Delays.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**6-1.5.2 Excusable Non-Compensable and Concurrent Delays.**

1. The City shall only issue an extension of time for Excusable Delays that meet the requirements of 6-4.2, "Extensions of Time" for the following circumstances:
  - a) Delays resulting from Force Majeure.
  - b) Delays caused by weather.
  - c) Delays caused by changes to County, State, or Federal law.
2. When a non-excusable delay is concurrent with an Excusable Delay, you shall not be entitled to an extension of Contract Time for the period the non-excusable delay is concurrent with the Excusable Delay.
3. When an Excusable Non-Compensable Delay is concurrent with an Excusable Compensable Delay, you shall be entitled to an extension of Contract Time, but shall not be entitled to compensation for the period the Excusable Non-Compensable Delay is concurrent with the Excusable Compensable Delay.

**6-4.2 Extensions of Time.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The Contract Time shall not be modified except by Change Order.

2. You shall notify the City in writing within **1 Working Day** after the occurrence and discovery of an event that impacts the Project Schedule.
  - a) If you believe this event requires a Change Order, you shall submit a written Change Order request with a report to the City that explains the request for Change Order within **5 Working Days**. The Change Order request must include supporting data, a general description of the discovery, the basis for extension, and the estimated length of extension. The City may grant an extension of time, in writing, for the Change Order request if you require more time to gather and analyze data.
3. The Engineer shall not grant an extension of Contract Time in accordance with 6-1.5, "Excusable Delays" unless you demonstrate, through an analysis of the critical path, the following:
  - a) The event causing the delay impacted the activities along the Project's critical path.
  - b) The increases in the time to perform all or part of the Project beyond the Contract Time arose from unforeseeable causes beyond your control and without your fault or negligence and that all project float has been used.
4. Any modifications to the Contract Time will be incorporated into the weekly document that the Engineer issues that stipulates the Contract Time. If you do not agree with this document, submit to the Engineer for review a written protest supporting your objections to the document within **30 Calendar Days** after receipt of the statement. Your failure to file a timely protest shall constitute your acceptance of the Engineer's weekly document.
  - a) Your protest will be considered a claim for time extension and shall be subject to 2-10.1, "Claims".

**6-4.4 Written Notice and Report.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Your failure to notify the Resident Engineer within **1 Working Day** OR provide a Change Order request within **5 Working Days** after the event, in accordance with 6-4.2, "Extensions of Time", will be considered grounds for refusal by the City to consider such request if your failure to notify prejudices the City in responding to the event.

**ADD:**

**6-6.1.1 Environmental Document.**

1. The City of San Diego has prepared a **Notice of Exemption** for **Campanile Wy Storm Drain Replacement, B-21126**, as referenced in the Contract Appendix.

You shall comply with all requirements of the **Notice of Exemption** as set forth in **Exhibit L**.

2. Compliance with the City's environmental document shall be included in the Contract Price.

## **SECTION 7 – MEASUREMENT AND PAYMENT**

**7-3.1 General.** To the “GREENBOOK” and “WHITEBOOK”, paragraph (8), DELETE in its entirety and SUBSTITUTE with the following:

If, within the time fixed by law, a properly executed notice to stop payment is filed with the City, due to your failure to pay for labor or materials used in the Work, all money due for such labor or materials will be withheld from payment in accordance with applicable laws.

To the “WHITEBOOK”, ADD the following:

1. Unless specified otherwise, the Contract Price includes use, consumer, and other taxes mandated by applicable legal requirements.
2. As provided in §7105 of the California Public Contract Code, if the Contract is not financed by revenue bonds, you are not responsible for the cost of repairing or restoring damage to the Project when damage was proximately caused by an act of God, in excess of 5% of the Contract Price, if the following occur:
  - a) The Project damaged was built in accordance with the Contract requirements.
  - b) There are no insurance requirements in the Contract for the damages.
3. COST OVERRUN NOTIFICATION: You shall promptly notify the City in writing of any potential cost overruns. Cost overruns shall include, but are not limited to the following:
  - a) Where the total cost for the performance of the scope of services defined in Section 1 - Description of Work appears that it may be greater than the maximum compensation for this Contract.

**7-3.2 Partial and Final Payment.** To the “WHITEBOOK”, item 1, DELETE in its entirety and SUBSTITUTE with the following:

1. The Final Payment, which is the release of Retention, shall be paid to you after you have successfully submitted the following required documents:
  - a) An affidavit that payrolls and bills for materials, equipment, and other indebtedness connected with the Work for which the City or the City's property might be responsible for or encumbered by.
  - b) A certificate evidencing that insurances required by the Contract Documents shall remain in force after Final Payment is currently in

effect and shall not be canceled or allowed to expire until at least a 30 Calendar Days prior written notice has been given to the Engineer.

- c) Consent of Surety to Final Payment.
- d) If required by the Engineer, other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, claims, and security interests or encumbrances arising out of the Contract Documents. If a Subcontractor refuses to furnish a release or waiver required by the City, you may furnish a bond satisfactory to the Engineer to indemnify the City against such lien.
- e) If required in the Contract Documents, the successful completion and submittal of the required reports such as construction demolition, waste recycling, and hydrostatic discharge reports.
- f) Required EOCP Final Summary Report in accordance with Section 0-12, "Contract Records and Reports", record drawings, operations manuals, test reports, warranty documentation, and UL labels shall be submitted before requesting the release of retention.
- g) Acceptance of the completed Project by the asset owning Department.

To the "WHITEBOOK", ADD the following:

- 2. Submit an invoice for payment after you successfully complete the required documents and the City will pay the invoice within 30 Calendar Days. The City will pay 6% annually for late retention payments.

**7-3.2.1 Application for Progress Payment.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

- 3. The City shall not pay progress or partial payments until you submit to the Engineer an acceptable updated Schedule. It is solely your responsibility to prepare and submit the Schedule updates.

**7-3.2.2 Amount of Progress Payments.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

- 1. The City will pay 6% annually for late progress payments.
- 2. Progress payments will be considered "late" if the following occur:
  - a) The City does not pay the contractor within 30 Calendar Days from receipt of an undisputed and properly submitted invoice. A properly submitted payment invoice means that the City has approved for payment the entire invoice amount or if the Resident Engineer has not disputed any portion of the application within 7 Calendar Days of the date of submission.
  - b) The application for payment does not require signing of a Contract Change Order.



3. The Engineer may withhold payment for any of the following reasons:
  - a) Defective or incomplete Work.
  - b) Not providing an updated and accurate Cost Loaded Construction Schedule in accordance with 6-1.1, "Construction Schedule".
  - c) Stop notices, wage orders, or other withholdings required by Applicable Law. Your failure to comply with 5-3.3, "Payroll Records" and the Contractor Registration and Electronic Reporting System requirements of the Contract Documents.
  
4. The Engineer may back charge the contract for any of the following reasons:
  - a) Defective or incorrect Work not remedied.
  - b) Damage to City property or a third party's property that was caused by you.
  - c) Liquidated Damages.

**7-3.2.3 Waiver of Claims at Final Payment.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Your acceptance of Final Payment constitutes a waiver of affirmative Claims by you, except those previously made in writing and identified as unsettled at the time of Final Payment.

**7-3.2.4 Withholding of Payment and Back Charge.** To the "WHITEBOOK", DELETE in its entirety.

**7-3.5.1 General.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Unit Bid prices shall not be subject to adjustment regardless of quantity used, or if none is used, for the following Bid items:
  - a) imported backfill
  - b) shoring
  - c) water services
  - d) house connection sewers
  - e) water pollution control items
  
2. Upon discovery and prior to the Work, you shall notify the Resident Engineer if there is a change in Bid item quantity that increases the total Contract Price by 5% or \$100,000 or more, whichever is less.

**7-3.11 Compensation Adjustments for Price Index Fluctuations.** To the "WHITEBOOK" ADD the following:

5. This Contract is not subject to the provisions of The "WHITEBOOK" for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

**7-4.3 Markup.** To the "WHITEBOOK", item 4, DELETE in its entirety and SUBSTITUTE with the following:

4. When a Subcontractor is performing Extra Work, the allowance for overhead and profit shall be applied to the labor, materials, and equipment costs of the Subcontractor as follows:
  - a) Regardless of the number of a Subcontractor's tasks for Extra Work, you may only apply 10% for the first \$50,000 of the Subcontractor's portion of accumulated total cost then 5% for any remaining costs. You shall not apply 10% to any costs after the first \$50,000 of accumulated total costs from performing Extra Work.
  - b) If the accumulated costs of single or subsequent tasks exceed the \$50,000 threshold, you shall instead only apply 5% to any amounts in excess of the \$50,000.
  - c) Regardless of the number of hierarchical tiers of Subcontractors, you may only markup a Subcontractor's Work once.

## **SECTION 302 – ROADWAY SURFACING**

**302-4.5 Scheduling, Public Convenience and Traffic Control.** To the "GREENBOOK", paragraphs (1) and (2), DELETE in its entirety and SUBSTITUTE with the following:

1. In addition to the requirements of Part 6, you shall comply with the following:
  - a) At least 5 Working Days prior to commencing the Work, you shall submit your proposed Schedule to the Engineer for approval.
  - b) Based upon the approved schedule, you shall notify residents and businesses of the Work and post temporary "No Parking" signs 72 hours in advance.
  - c) Requests for changes in the approved Schedule shall be submitted to the Engineer for approval at least 3 Working Days before the street is scheduled to be sealed.

## **SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION**

**303-5.1.1 General.** To the "WHITEBOOK", ADD the following:

7. For the purposes of this section, the terms "walk" and "access ramp" shall be synonymous with "sidewalk" and "curb ramp and pedestrian ramp", respectively.

## SECTION 306 – OPEN TRENCH CONDUIT CONSTRUCTION

**306-3.3**      **Removal and Abandonment of Existing Conduits and Structures.** To the “WHITEBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

For 6 inch (152.4 mm) and larger conduits, abandoned pipe shall be filled with sand or CLSM in accordance with 201-6, “CONTROLLED LOW STRENGTH MATERIAL (CLSM)”.

**306-8.9.2.3**      **Allowable Leakage.** To the “GREENBOOK”, DELETE in its entirety and SUBSTITUTE with the following:

1.      For prefabricated pressure pipe testing requirements, refer to prefabricated gravity pipe pressure testing requirements in 306-7.8.2, “Pressure Testing and Leakage Inspection”.

## SECTION 600 - ACCESS

**600-1**      **GENERAL.** To the “WHITEBOOK”, item 5, DELETE in its entirety and SUBSTITUTE with the following:

5.      You shall notify Environmental Services Department via email ([trash@sandiego.gov](mailto:trash@sandiego.gov)) of street closures affecting the regular scheduled solid waste collection at least 3 Working Days prior to the street closure. Include your business name and phone number, days of closure, time of scheduled closure, and date of anticipated street reopening in the notification.
  - a)      You shall verify waste collection schedules via the Environmental Services website at:  
  
<http://www.sandiego.gov/environmental-services/collection/index.shtml>
  - b)      You shall comply with the following requirements for trash, recycling, and yard waste collection:
    - i.      Provide advance written notice to every property affected by blocked public right of way.
    - ii.      Coordinate the relocation of trash, recycling, and yard waste containers to an accessible public street for the City's waste collection crews on collection day.
    - iii.      When necessary, relocate the containers from the blocked streets to the accessible public right of way before the City's collection vehicles arrive to assist with collection on existing schedules. Return the containers to their point of origin to ensure the accuracy of inventory assignment by address.
  - c)      If the City's crews are unable to provide the citizens with the mandated services due to your failure to comply with these specifications, you shall collect trash, recyclables, and yard waste on the City's schedule

and deliver to the City's designated locations. If you fail to perform this Work, you shall incur additional costs for the City to reschedule pick up of an area.

**SECTION 601 - TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES**

**601-2.1.4 Traffic Control for Resurfacing and Slurry Sealing.** To the "WHITEBOOK", item 3, subsection "d", DELETE in its entirety and SUBSTITUTE with the following:

- d) Place "NO PARKING - TOW-AWAY ZONE" signs 72 hours in advance of the scheduled slurry sealing. Reschedule street block segments which are not completed by the last posted Working Day. If a Work delay of 48 hours or more occurs from the originally scheduled Work date, remove the "NO PARKING - TOW-AWAY ZONE" signs for a minimum of 24 hours, then reset and re-post for the appropriate Work date.

**601-3.5.1 General.** To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. Temporary "No Parking" and "No Stopping" signs shall be installed 72 hours before enforcement. Temporary "No Parking" and "No Stopping" signs shall be installed and removed as specified in the Special Provisions. Signs shall indicate specific days, dates, and times of restrictions. If violations occur, call Police Dispatch 619-531-2000 to enforce the Tow-Away notice.

**601-3.6 Channelizing Devices.** To the "WHITEBOOK", item 4, Barricades, ADD the following:

- h) You shall place "OPEN TRENCH" signs (C27(CA)) on Type 3 Barricade within the construction Work zone, ahead of any Work areas with open trenches that are greater than 3 inches in depth, in accordance with California MUTCD SECTION 6F.103 (CA). The barricades shall be placed in a continuous manner and shall prevent pedestrian, vehicular, and biker access to the open trench area.

**SECTION 1001 - CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)**

**1001-1 GENERAL.** To the "WHITEBOOK", ADD the following:

7. Based on a preliminary assessment by the City, this Contract is subject to **WPCP**.

**EXHIBIT L**

**NOTICE OF EXEMPTION**

**NOTICE OF EXEMPTION**

(Check one or both)

TO: <u>  X  </u> Recorder/County Clerk	FROM: City of San Diego
P.O. Box 1750, MS A-33	Engineering & Capital Projects Department
1600 Pacific Hwy, Room 260	525 B Street, Suite 750, MS 908A
San Diego, CA 92101-2400	San Diego, CA 92101
 <u>      </u> Office of Planning and Research	
1400 Tenth Street, Room 121	
Sacramento, CA 95814	

**Project Name:** 5604 Campanile Way Emergency Storm Drain Repair

**Project No. / WBS No.:** B-21126.02.06

**Project Location-Specific:** The project is sited within an easement located along the side yard of the single-family residence located at 5604 Campanile Way in the College Community Planning Area (Council District 9).

**Project Location-City/County:** San Diego/San Diego

**Description of Nature and Purpose of the Project:** A recent visual inspection of the condition of the existing 24-inch diameter corrugated aluminum pipe (CAP) storm drain, revealed evidence of severe deterioration and failure which has resulted in the development of a sinkhole which, in turn, has impacted an existing free-standing wall and concrete slab. Because this portion of the property is no longer safe to access, immediate repair of the storm drain is necessary to halt further damage and prevent risk to adjacent residences.

The project will replace approximately 180 linear feet of failing 24-inch diameter CAP storm drain with 24-inch diameter reinforced concrete pipe (RCP) storm drain. The excavations would occur above the current alignment of the pipe. The project will also backfill and stabilize the sinkhole (17'x10' area; 5 feet deep) and repair the damaged masonry wall and concrete slab. The project area is primarily located within developed and landscaped areas, impacts to biological resources are not anticipated. Revegetation of areas disturbed by project work will be initiated within 90 days of project completion and will be completed in accordance with the City's Landscape Standards.

**Name of Public Agency Approving Project:** City of San Diego

**Name of Person or Agency Carrying Out Project:** City of San Diego  
 Engineering & Capital Projects Department  
 Contact: Jerry Jakubauskas; Phone: (619) 533-3755  
 525 B Street, Suite 750 (MS 908A), San Diego, CA 92101

**Exempt Status: (CHECK ONE)**

- ( ) Ministerial (Sec. 21080(b)(1); 15268);
- ( ) Declared Emergency (Sec. 21080(b)(3); 15269(a));
- (X) Emergency Project (Sec. 21080(b)(4); 15269 (b)(c))
- ( ) Categorical Exemption:
- ( ) Statutory Exemption:

**Reasons why project is exempt:** The emergency repairs are required in order to protect public health, safety and property. This determination is supported by the expert opinion of the City Engineer. The City of San Diego conducted an environmental review which determined that the project meets the statutory exemption criteria set forth in CEQA State Guidelines, Section (SEC. 21080(b)(4); 15269 (b)(c)), which allows for actions necessary to prevent or mitigate an emergency.

**Lead Agency Contact Person:** Jerry Jakubauskas

**Telephone:** (619) 533-3755

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project?  
 Yes  
 No

It is hereby certified that the City of San Diego has determined the above activity to be exempt from CEQA

*Carrie Purcell*

\_\_\_\_\_  
Carrie Purcell, Assistant Deputy Director

July 16, 2021

\_\_\_\_\_  
Date

Check One:

- Signed by Lead Agency  
 Signed by Applicant

Date Received for Filing with County Clerk or OPR:

**EXHIBIT M**

**PHASE FUNDING PROVISIONS**



## **PHASED FUNDING PROVISIONS**

### **1. PRE-AWARD**

- 1.1.** Within 10 Working Days of the Notice of Intent to Award, the Contractor must contact the Project Manager to discuss fund availability for each phase and shall also submit the following:
  - 1.1.1.** Construction Cost Loaded Schedule in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK" and 7-3, "PAYMENT."
- 1.2.** Contractor's failure to perform any of the following may result cancelling the award of the Contract:
  - 1.2.1.** Meeting with the City's Project Manager to discuss the Phased Funding Schedule.
  - 1.2.2.** Agreeing to a Phased Funding Schedule within thirty days of meeting with the City's Project Manager.

### **2. POST-AWARD**

- 2.1.** Do not start any construction activities for the next phase until the Notice to Proceed (NTP) has been issued by the City. The City will issue a separate NTP for each phase.
- 2.2.** The City may issue the NTP for a subsequent phase before the completion of the preceding phase.

## PHASED FUNDING SCHEDULE AGREEMENT

The particulars left blank below, such as the total number of phases and the amounts assigned to each phase, will be completed with funding specific information from the Pre-Award Schedule and Construction Cost Loaded Schedule submitted to and approved by the City.

**BID NUMBER: K-22-2037-EMR-3**

**CONTRACT TITLE: CAMPANILE WY STORM DRAIN REPLACEMENT**

**CONTRACTOR: ORION CONSTRUCTION CORPORATION**


Funding Phase	Phase Description	Phase Start	Phase Finish	Not-to-Exceed Amount
1	Work to be completed in Phase 1 to include the development of design plans to replace 180 LF of 24-inch CAP with 24-inch RCP. This shall include, but is not limited to bonds, WPCP Development, engineering design through final stamped and signed plans.	NTP	August 31, 2021	\$400,000.00
2	Work to be completed in Phase 2 to include the implementation of the design plans. Work will include but is not limited to replacement 180 LF of 24-inch CAP with 24-inch RCP. Site to be subsequently restored. Revegetation plan implementation and LTMM to be completed after construction.	September 1, 2021	Project Completion	\$1,100,000.00
<b>Contract Total</b>				<b>\$1,500,000.00</b>

**Notes:**

- 1) WHITEBOOK section 7-3.10, "Phased Funding Compensation" applies.
- 2) The total of all funding phases shall be equal to the TOTAL BID PRICE as shown on BID SCHEDULE 1 - PRICES.
- 3) This PHASED FUNDING SCHEDULE AGREEMENT will be incorporated into the CONTRACT and shall only be revised by written modifications to the CONTRACT.

**CITY OF SAN DIEGO**

PRINT NAME: Jayna Straughn  
**Construction Senior Engineer**

Signature:   
Date: 8/30/2021


PRINT NAME: Jong Choi  
**Design Senior Engineer**

Signature:   
Date: 9/13/2021

**CONTRACTOR**

PRINT NAME: Richard Dowsing

Title: President

Signature:   
Date: 8/19/2021

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of San Diego

On 08/19/2021 before me, Richard Gregory Newhall - Notary Public  
(insert name and title of the officer)

personally appeared Richard Dowsing - Orion President  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature



(Seal)



**EXHIBIT N**

**CONTRACTOR'S AND DESIGNER'S COMPENSATION RATE SCHEDULE**



**City of San Diego Emergency Project -  
Campanile Wy Storm Drain Replacement**

**COMPENSATION RATE SCHEDULE**

<b>ORION CONSTRUCTION</b>			
<b>Title/Classification</b>	<b>Standard Rate (\$)/hour</b>	<b>Overtime Rate (\$)/hour</b>	<b>Double-time Rate (\$)/Hour</b>
Superintendent	140	176	212
Foreman	115	146	187
Operator Group 8	108	139	170
Group 1 Oiler/Grade Checker	98	112	126
Truck Driver	88	99	110
Laborer/Pipelayer	86	110	134
Carpenter	89	113	137
Mechanic	91	115	139
Apprentice Operator	89	100	111
Apprentice Laborer	47	70	93
Project Manager	175	N/A	N/A
Project Staff Engineer	125	N/A	N/A
Engineering Project Director	220	N/A	N/A
Engineer (PE) QA/QC	190	N/A	N/A
PM/Design Engineer	190	N/A	N/A
Sr. CADD Tech	125	N/A	N/A
CADD Tech	100	N/A	N/A
Admin/Office	85	N/A	N/A
Environmental Engineer/SWPPP Coordinator	175	N/A	N/A

State of California  
California State Transportation Agency

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Department of Transportation  
Division of Construction

# Labor Surcharge and Equipment Rental Rates



Effective April 1, 2021 through March 31, 2022



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FOR DOUBLE-SIDED PRINTING

**USER'S GUIDE  
FOR LABOR SURCHARGE AND EQUIPMENT RENTAL RATES  
April 1, 2021 - March 31, 2022**

Equipment Rental Rates are available on the Internet at:

<http://www.dot.ca.gov/programs/construction/equipment-rental-rates-and-labor-surcharge>

Miscellaneous Equipment Rental Rates are available on the Internet at:

<http://www.dot.ca.gov/programs/construction/miscellaneous-equipment-rental-rates-and-labor-surcharge>

The miscellaneous listing is updated daily.

## Changes

**Books are no longer available in hard copy and should be downloaded from the internet and printed.**

Changes to the equipment rates in the April 1, 2021 book are the result of: 1) fuel costs decreased; 2) interest rates decreased; 3) Producers' Price Index increased; 4) increase in sales tax; and 5) no change in freight (F.O.B.) rates.

## Labor Surcharge

The labor surcharge compensates the contractor for statutory payroll items stipulated by various governmental agencies. The six items included are worker's compensation, social security, Medicare, Federal unemployment insurance, State unemployment insurance, and State training taxes. The general rate is an average of the job classifications common to Caltrans projects. The labor surcharges in the April 1, 2021 book are the result of some changes in worker's compensation rates. The rates were derived from using the pure premium rate approved by the Insurance Commissioner effective January 1, 2021 and increasing it by the historical statewide average expense. In the calculation of the labor surcharge for overtime work, the worker's compensation is not included on the premium portion of overtime, as provided by worker's compensation regulations.

The surcharge percentage to be applied to the actual wages paid as provided in Section 9-1.04B [9-1.03A(1b)] of the *Standard Specifications* will be **10 percent for regular time (RT) and 10 percent for overtime (OT).**

Exceptions to the general rate are listed below. These classifications were chosen because of high worker's compensation insurance costs. Forward questions, regarding worker's compensation rating and proper labor surcharge usage, to the rental rate personnel in the Division of Construction.

A

## EXCEPTIONS

<u>Type of Work Performed</u>	<u>Labor Surcharge Percent</u>	
	RT	OT
Concrete Construction - Bridge.....	10	10
Drilling .....	12	12
Fence & Guardrail Construction .....	10	10
Erection of structural metal for metal bridges, excluding sign bridge .....	13	12
Landscape Gardener .....	10	10
Mobil Crane & Hoist Service.....	12	12
Painting Steel Structures or Bridges .....	13	12
Pile Driving, not including drilled, cast-in-place concrete piles .....	17	16
Sign Erection or Repair .....	13	12
Wrecking & Demolition .....	12	12

An appropriate labor surcharge will be established by the Division of Construction for work that is determined by the resident engineer to be covered by Longshoreman and Harbor Worker’s Act.

## Background

By the authority described in Section 9-1.04 [9-1.03A] of the *Standard Specifications*, compensation for work paid by force account is determined to be the total of the direct equipment costs (rental rate) plus a 15 percent markup for all overhead not included as direct costs. The direct costs include fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance, depreciation, storage, cost of facilities capital, overhaul and all incidentals. The labor costs required to provide the above listed items are also included. The operator cost is not included in the equipment rate.

The calculated rate represents the cost of owning and operating the equipment, which is likely to be lower than the rate charged by a rental yard. The rental yard rate may include additional overhead and profit as well as a premium for short-term rentals. In certain situations, factors are applied to the calculated rates to provide ownership-only rates for delay situations or operating-only rates for overtime situations. The rates are calculated using factors for the direct cost items described above. The factors represent an average and are applied to all makes and models of equipment within the class. **All rates are hourly, unless stated otherwise.**

## Overtime and Multiple Shifts

Certain equipment costs are fixed on an annual basis, no matter how many hours are worked. Once an estimate of the costs and hours of use is made, a rate can be determined. When more than the estimated number of hours are worked (Overtime or Multiple Shift), a duplication of payment occurs on the fixed cost portion of the equipment rate.

In order to avoid this duplication, Caltrans uses a reduced rate for the Overtime or Multiple Shift situations. The definition of Overtime or Multiple Shift periods is:

**Overtime hours occur after the equipment has worked at force account, eight hours per day (or after the daily equivalent of forty hours per week for special work schedules - 4/10 or 9/80). Multiple shift hours will be paid at the same rate as overtime hours.**

The hours shown on the Daily Extra Work Bill will determine when the Overtime and Multiple Shift is to be used. **When the hours worked on force account are eight or less, straight time rates will be used.** When the hours worked on force account are more than eight, Overtime and Multiple Shifts rates will be used. Saturday, Sunday or holiday work will be paid at the overtime rate except in those cases where these days are considered working days in the special provisions.

Be advised the computed overtime rates are no longer rounded and now equal the product of the straight time rate and overtime factor. The Overtime and Multiple Shift Factors are recalculated annually to reflect changes in the operating costs.

## Delays

As described in Section 8-1.07C [8-1.09] of the *Standard Specifications*, the Delay Factor may be applied to the equipment rental rate. The Delay Factor may be the basis for compensation for idle equipment time on an excusable delay. The factor has been calculated to include the ownership costs without including operating costs. The Delay Factor recovers all the contractor's non-operating costs in an eight-hour day. If payment is made for equipment on an excusable delay, it is limited to eight hours per day or forty hours per week maximum.

The NONOP class for non-operated items and the TRAFc class for traffic safety devices have been separated from traditional "rolling stock" equipment when calculating the Delay Factor. These classes are comprised of items whose depreciable lives are related to the number of uses per year, rather than the number of hours per year. Accordingly, the reasonable compensation for the contractor's actual loss has been estimated to equal the cost of facilities capital. **It should be recognized that these items must be out of service before the Delay Factor is applied. For example, if work behind K-rail is delayed, the K-rail should be paid straight time until it is no longer controlling traffic.**

Any use of this factor must have the prior approval of the resident engineer. The Delay Factor is recalculated annually to reflect changes in the operating costs.

## Use of Daily Extra Work Bill

Identification codes and rates are intended to be used with the Department's Internet change order billing system. The class is abbreviated using a 5-digit alpha-code, the make (manufacturer), a 4-digit alpha-code, and the code a 7-digit alpha-numeric code. All three codes must be used to define the equipment when using the automated pay system. Since the majority of items are described by per hour rates, each line has an entry for hours with an allowable maximum of 24. Special items with other than hourly rates should be appropriately checked and then entered in the Regular Hours column. For example, 50 Traffic Cones used 3 days (converts to 1.5, 100-cone-days) requires 1.5 be entered in the Regular Hours column. Note that any entry in the Delay Factor column will automatically apply the Delay Factor to every equipment entry on the current report.

Whenever an identification code cannot be found or the rate for a particular date of work performed is not available, updated information should be requested from the resident engineer. It is the resident engineer's responsibility to establish rates for equipment not found in the *Labor Surcharge and Equipment Rental Rates* publication. Support for this determination is available from both District and Headquarters Construction Offices. **Rates are regularly superseded during contract periods, so avoid the use of old publications or expired rates.**

The equipment is presented with a standard configuration capable of performing work commonly encountered on Caltrans projects. Special attachments or accessories are described under the classification heading in the *Labor Surcharge and Equipment Rental Rates* publication. Attachments other than those described by these remarks will be paid only upon direction of the resident engineer.



# EQUIPMENT RENTAL RATE

NOTE--THE FOLLOWING RATES ARE IN EFFECT FROM APRIL 1, 2021 THROUGH MARCH 31, 2022

## ATTACHMENTS

TRACTOR ATTACHMENTS -including power control units and accessories necessary to provide a functional attachment. Dozer blades are included in the standard configuration for both crawler and heavy, rubber tire tractors.

Rippers are listed from R1 to R8 and Winches for logging or towing are listed from S1 to S5. Equipment model groups are as follows:

1. Case 300 Thru 800 Series, Cat D-2 thru D-4, Deere 400 & 450, Dresser TD-7, TD-8 and TD-9, Fiat-Allis FD-5 Thru FD-7, Komatsu D21E Thru D37P, Liebherr PR711 & PR721.
2. Case 1150, Cat D-5, Deere 750, Dresser TD-12, Fiat-Allis FD9 & 10, Komatsu D58P, Liebherr PR731.
3. Case 1450 and 1550, Cat D-6, Deere 850, Dresser TD-15, Komatsu D63PE Thru D68P, Liebherr PR741.
4. Cat D-7 & 814, Dresser TD-20, Fiat-Allis 14 & FD14, Komatsu D83P, Terex 82-30
5. Cat D-8 & 824, Dresser TD-25, Fiat-Allis FD20 Komatsu D135A, Terex 82-40 Michigan 280, Raygo CHD 17 & CD-500.
6. Cat D-9 & 834, Fiat-Allis FD30, Raygo CHD 24 & CD 800.
7. Cat D-10, Dresser TD-40, Fiat-Allis FD40, Komatsu 375, Michigan 380, Raygo CDH 30.
8. Cat D-11, Fiat-Allis FD50, Komatsu 475

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Clam action bucket 1 CY & Less	<b>C1</b>	\$4.32
Clam action Over 1 CY to 2 CY	<b>C2</b>	\$7.59
Clam action Over 2 CY to 3.5 CY	<b>C3</b>	\$10.99
Clam action Over 3.5 CY to 5 CY	<b>C4</b>	\$15.67
Clam action bucket Over 5 CY	<b>C5</b>	\$21.66
Ripper on No. 1 models	<b>R1</b>	\$2.60
Ripper on No. 2 models	<b>R2</b>	\$3.40
Ripper on No. 3 models	<b>R3</b>	\$5.67
Ripper on No. 4 models	<b>R4</b>	\$6.41
Ripper on No. 5 models	<b>R5</b>	\$10.52
Ripper on No. 6 models	<b>R6</b>	\$16.63
Ripper on No. 7 models	<b>R7</b>	\$19.29
Ripper on No. 8 models	<b>R8</b>	\$32.15
Winch on No. 1 models	<b>S1</b>	\$3.08
Winch on No. 2 models	<b>S2</b>	\$4.60
Winch on No. 3 models	<b>S3</b>	\$6.09
Winch on No. 4 models	<b>S4</b>	\$7.82
Winch on No. 5 models	<b>S5</b>	\$13.69
Lift gate	<b>TG</b>	\$0.89
Pump, water truck only	<b>TP</b>	\$6.11
Winch, truck	<b>TW</b>	\$0.33
Gas welding hose per 15.2 m (50 lf)	<b>WH</b>	\$0.02
Elec welding lead per 30.5 m (100 lf)	<b>WL</b>	\$0.19

## AIR COMPRESSOR

[ AIRCP ]

**DELAY FACTOR = 0.14**

**OVERTIME FACTOR = 0.87**

All types of self contained units, regardless of power (gas, diesel and lpg) or type of compression (reciprocating, screw and vane). The listed rates include 15.2 meters (50 lineal feet) of hose, all hose whips, fittings, couplings and any compressor attachments. Listed in accordance with mfr's rated capacity in liters per second (cubic feet per minute) at 7 bar (100 psi).

### PORTABLE

[ PORT ]

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	19 (40)	<b>000-004</b>	\$4.46
19 (40)	76 (160)	<b>004-016</b>	\$16.60
76 (160)	118 (250)	<b>016-025</b>	\$18.17
118 (250)	212 (450)	<b>025-045</b>	\$32.11
212 (450)	354 (750)	<b>045-075</b>	\$52.62
354 (750)	566 (1200)	<b>075-120</b>	\$77.75
566 (1200)	708 (1500)	<b>120-150</b>	\$100.84

## AIR DRILLS, CRAWLER

[ AIRDL ]

**DELAY FACTOR = 0.49**

**OVERTIME FACTOR = 0.57**

All types, pneumatically propelled, including attachments. Expendable carbon drill steel, bits and shanks shall be paid by separate invoice. Rated in accordance with the cylinder bore diameter in millimeters(inches).

### CRAWLER DRILLS

[ CLR ]

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	100 (4)	<b>0-4</b>	\$26.77
100 (4)	& Over	<b>5</b>	\$27.41

## AIR TOOLS

[ AIRTO ]

**DELAY FACTOR = 0.61**

**OVERTIME FACTOR = 0.42**

All types including paving breakers, clay spades and diggers, sinker rock drills, trench diggers, sheeting/spike drivers, backfill tampers and hand held grinding tools. Expendable drill steel, bits and breakers points, grinding wheels and shanks shall be paid by separate invoice. Rated by tool weight in kilograms (pounds), determined in accordance with the mfr's specifications.

### AIR TOOLS

[ ATOL ]

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	4.5 (10)	<b>0-10</b>	\$0.45
4.5 (10)	9.1 (20)	<b>10-20</b>	\$0.49
9.1 (20)	13.6 (30)	<b>20-30</b>	\$0.88
13.6 (30)	18.1 (40)	<b>30-40</b>	\$1.03
18.1 (40)	27.2 (60)	<b>40-60</b>	\$1.12
27.2 (60)	& Over	<b>60</b>	\$1.58

**ASPHALT DIKE & SHOULDER PAVERS [ ASDSP ]**

**DELAY FACTOR = 0.11 OVERTIME FACTOR = 0.91**

Includes all attachments, accessories and automatic grade and line control.

**A.C. DIKE COMPANY [ ACDC ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
No. 1	<b>4050</b>	\$72.20
No. 2	<b>4052</b>	\$58.54
Nos. 43, 44	<b>4054</b>	\$78.00

**ASPHALT PAVING COMPANY [ APCO ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
E-1	<b>4000</b>	\$98.11
E-2, E3	<b>4002</b>	\$175.51

**BLAW-KNOX [ B-K ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
RW-35 / 38	<b>4075</b>	\$68.64
RW-85	<b>4077</b>	\$36.00
RW-95	<b>4079</b>	\$57.72
RW-100	<b>4081</b>	\$99.90
RW-195D	<b>4083</b>	\$137.51

**DELTA [ DLTA ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
DC-1	<b>4095</b>	\$138.45

**ASPHALT PAVERS [ ASPAV ]**

**DELAY FACTOR = 0.17 OVERTIME FACTOR = 0.87**

Includes all attachments, accessories and automatic grade and line control.

**BARBER-GREENE [ B-G ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BG 220	<b>0805</b>	\$86.70
BG 225	<b>0810</b>	\$94.05
BG 240	<b>0815</b>	\$102.13
BG 245	<b>0820</b>	\$111.76
BG 260	<b>0825</b>	\$131.34
BG 260B	<b>0826</b>	\$169.28
BG 265	<b>0830</b>	\$148.45
RT 435, 4wd	<b>0905</b>	\$109.80
RT 445, 4wd	<b>0925</b>	\$106.67
RT 455, 4wd	<b>0945</b>	\$104.76
RT 455, 4wd, 10-20' screed	<b>0955</b>	\$108.45
RT 465, 4wd	<b>0965</b>	\$138.39
SA 125	<b>1419E</b>	\$82.84
SB 131	<b>1420</b>	\$102.56
SB 140	<b>1425</b>	\$126.81
SA 141	<b>1430</b>	\$87.34
SA 145	<b>1432</b>	\$109.41
SA 150	<b>1435</b>	\$138.21

SB 170 **1440** \$140.22

**BLAW-KNOX [ B-K ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
PF-22	<b>1490</b>	\$38.93
PF-35	<b>1550</b>	\$69.31
PF-115	<b>1750</b>	\$110.34
PF-120H	<b>2010</b>	\$100.89
PF-171	<b>2090</b>	\$153.28
PF-180	<b>2100</b>	\$67.45
PF-180H	<b>2204</b>	\$160.98
PF-200	<b>2250</b>	\$160.03
PF-200, 18' screed	<b>2252</b>	\$162.88
PF-220	<b>2300</b>	\$162.59
PF-400A	<b>2350</b>	\$141.74
PF-500	<b>2404</b>	\$176.39
PF-500, 18' screed	<b>2406</b>	\$179.45
PF-510, 18' screed	<b>2407</b>	\$186.17
PF-3172, 18' screed	<b>2408</b>	\$154.02
PF-3200	<b>2410</b>	\$206.94
PF-5510	<b>2415</b>	\$216.90

**CATERPILLAR [ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
AP-200	<b>2420</b>	\$43.01
AP-800	<b>2430</b>	\$110.31
AP-1050	<b>2431</b>	\$172.25
AP-1000	<b>2435</b>	\$168.99
AP-1000 4wd	<b>2436</b>	\$174.90
AP-1055B	<b>2438</b>	\$216.94
AP-1055D	<b>2438D</b>	\$272.64
AP-1200	<b>2440</b>	\$140.56

**CEDAR RAPIDS [ CEDR ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BSF-2H	<b>2550</b>	\$91.29
BSF-3R	<b>2600</b>	\$99.96
CR-351	<b>2668A</b>	\$144.38
CR-351 4wd	<b>2668B</b>	\$149.09
CR-361R (RUBBER TRACK)	<b>2668R</b>	\$178.00
CR-431	<b>2669</b>	\$121.56
CR-551	<b>2670</b>	\$194.64
CR-461	<b>2672</b>	\$192.54
CR-561	<b>2674</b>	\$204.47

**LAYTON [ LYTN ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
F-525	<b>2680</b>	\$21.84
D-550	<b>2682</b>	\$24.29
H-500B	<b>2684</b>	\$7.05



**ASPHALT WINDROW PICKUP MACHINE [ ASPWP ]****DELAY FACTOR = 0.08 OVERTIME FACTOR = 0.94**

Includes all attachments and accessories.

<b>ATHEY [ ATHY ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
7-11	<b>5000</b>	\$88.96
<b>BARBER-GREENE [ B-G ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
BG-610H	<b>5100</b>	\$62.58
<b>CATERPILLAR [ CAT ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
WE-601B	<b>5200</b>	\$69.42
<b>CLARK'S WELDING COMPANY [ CLAR ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
500	<b>5300</b>	\$52.93
601	<b>5304</b>	\$48.28
Lincoln 660	<b>5305</b>	\$94.23
<b>C.M.I. [ CMI ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
851	<b>5405</b>	\$87.71

**AUGERS, CRAWLER MOUNTED [ AUGCL ]****DELAY FACTOR = 0.28 OVERTIME FACTOR = 0.75**

Includes carrier, attachments and accessories with up to 6.1 meters(20 feet) of auger flights. Consumable bits or tips to be paid by separate invoice.

<b>BAYSHORE [ BYSH ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
8400 TD limited access	<b>1500</b>	\$112.09
<b>TEXOMA [ TXMA ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
TAURUS	<b>2010</b>	\$231.63
700CL	<b>2100</b>	\$131.91
<b>WATSON [ WATS ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
2000CM	<b>2500</b>	\$101.57
2500CM	<b>2505</b>	\$156.76
3000CM	<b>2510</b>	\$177.83
3100CM	<b>2515</b>	\$184.72

**AUGERS, HORIZONTAL [ AUGHZ ]****DELAY FACTOR = 0.27 OVERTIME FACTOR = 0.76**

Includes all attachments and accessories with up to 9.1 meters(30 feet) of auger flight, track and/or pipe pusher. Consumable bits or tips shall be paid by separate invoice. Power unit is included.

<b>AKKERMAN [ AKMN ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
360	<b>5000</b>	\$106.22
420 series 1250	<b>5002</b>	\$109.03
<b>AMERICAN AUGER [ AMAU ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
36-350	<b>5014</b>	\$27.87
<b>BORZALL [ BORZ ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
2300-10	<b>5040</b>	\$9.39
4265-10	<b>5042</b>	\$13.05
<b>DITCH WITCH [ D-W ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
2510	<b>5040</b>	\$44.11

**AUGERS, TRUCK MOUNTED [ AUGTK ]****DELAY FACTOR = 0.22 OVERTIME FACTOR = 0.81**

Includes truck/carrier, all attachments and accessories with up to 6.1 meters(20 feet) of auger flight. Consumable bits or tips shall be paid by separate invoice.

<b>ATLANTIC [ ATLN ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
LDH-80	<b>5000</b>	\$171.59
LDH-100	<b>5005</b>	\$143.48
LLDH-80	<b>5010</b>	\$181.79
LLDH-120	<b>5015</b>	\$194.46
<b>CALWELD [ CALW ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
150-A	<b>5050</b>	\$91.30
200	<b>5052</b>	\$109.89
4500LH	<b>5054</b>	\$182.22
<b>HUGHES [ HUGH ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
EZ 112	<b>5070</b>	\$60.13
EZ 120	<b>5071</b>	\$67.86
LDH-100	<b>5072</b>	\$111.45
LDH-80	<b>5074</b>	\$109.96
LLDH-120	<b>5076</b>	\$161.92
LLDH-80	<b>5078</b>	\$149.62

<b>P.D.E.</b>	[ PDE ]		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
M -100	<b>5084</b>	\$40.74	
M-400 with hammer	<b>5085</b>	\$32.59	

<b>TEXOMA</b>	[ TXMA ]		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
Economatic 115	<b>5087</b>	\$91.88	
Super Economatic	<b>5089</b>	\$92.34	
80	<b>5090</b>	\$129.00	
270	<b>5093</b>	\$93.06	
330	<b>5095</b>	\$97.13	
330 with hammer	<b>5095B</b>	\$107.95	
500 with hammer	<b>5096B</b>	\$109.74	
600	<b>5097</b>	\$115.54	
700	<b>5099</b>	\$177.72	

<b>WATSON</b>	[ WATS ]		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
1000	<b>6010</b>	\$78.23	
2000	<b>6012</b>	\$143.49	
3000	<b>6014</b>	\$171.87	

<b>BITUMINOUS DISTRIBUTORS</b>	[ BITDT ]
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**DELAY FACTOR = 0.14**      **OVERTIME FACTOR = 0.88**  
 Includes all equipment for handling bituminous materials under pressure.  
 Includes pumps, spray bars and other attachments and accessories.

<b>TRAILER MOUNTED</b>	[ TLMD ]		
Does not include towing unit. Capacity rated in liters (U.S. gallons).			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	1136 (300)	<b>0-300</b>	\$6.83

<b>TRUCK MOUNTED</b>	[ TRMD ]		
Including truck. Capacity rated in liters (U.S. gallons).			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	3028 (800)	<b>00-08</b>	\$68.02
3028 (800)	5299 (1400)	<b>08-14</b>	\$84.99
5299 (1400)	6831 (1800)	<b>14-18</b>	\$87.10
6831 (1800)	11355 (3000)	<b>18-30</b>	\$89.01
11355 (3000)	15140 (4000)	<b>30-40</b>	\$93.04

<b>BROOMS &amp; SWEEPING EQUIPMENT</b>	[ BRMSW ]
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**DELAY FACTOR = 0.15**      **OVERTIME FACTOR = 0.86**  
 Includes all attachments and accessories with brooms of any type. Includes broom wear.

<b>BROOMS - MOUNTED &amp; TOWED</b>	[ MTTD ]		
Includes traction, PTO or engine driven.			
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
ALL	<b>ALL</b>	\$28.66	

<b>BROOMS - SELF PROPELLED</b>	[ SFPR ]		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
ALL	<b>ALL</b>	\$41.94	

<b>SWEEPERS - SELF PROPELLED,</b>	[ SWSP ]		
<b>PICK UP</b>			
Rated in accordance with hopper size in cubic meters (cubic yards).			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	2.3 (3.0)	<b>0-3</b>	\$97.06
2.3 (3.0)	4.6 (6.0)	<b>3-6</b>	\$129.60
4.6 (6.0)	6.9 (9.0)	<b>6-9</b>	\$150.67

<b>BRUSH CHIPPING &amp; SHREDDING MACHINES</b>	[ BRUCP ]
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**DELAY FACTOR = 0.08**      **OVERTIME FACTOR = 0.93**  
 Includes all attachments, accessories and power unit. Rated in accordance with the cutter head width in millimeters(inches)

<b>BRUSH CHIP &amp; SHRED</b>	[ BCSM ]		
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	230 (9)	<b>00-09</b>	\$28.56
230 (9)	300 (12)	<b>09-12</b>	\$44.32
300 (12)	405 (16)	<b>12-16</b>	\$43.79

<b>COMPACTORS, HAND GUIDED</b>	[ COMHG ]
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**DELAY FACTOR = 0.20**      **OVERTIME FACTOR = 0.81**  
 Includes pan, vibrating plate, rammer and jumping jack type compactors(gas or diesel). Includes all attachments and accessories. Listed in accordance with the weight in kilograms(pounds)

<b>COMPACTORS</b>	[ COMP ]		
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	113 (250)	<b>0-250</b>	\$3.78
113 (250)	& Higher	<b>250</b>	\$9.32

**CONCRETE MIXERS [ CONMX ]**

**DELAY FACTOR = 0.12 OVERTIME FACTOR = 0.89**

**STATIONARY OR PORTABLE [ SORP ]**

Rated by Mfr's capacity in cubic meters (sacks or cubic feet).

OVER	TO	Code	Rate
0	0.10 (3.5)	<b>0-3.5</b>	\$2.03
0.10 (3.5)	0.17 (6.0)	<b>03.5-6</b>	\$2.97
0.17 (6.0)	0.31 (11)	<b>06-11</b>	\$3.83
0.31 (11)	0.45 (16)	<b>11-16</b>	\$5.45

**TRANSIT MIX [ TRMX ]**

PTO type, including carrier. Rated by Mfr's capacity in cubic meters (cubic yards).

OVER	TO	Code	Rate
6.4 (9)	7.6 (10)	<b>09-10</b>	\$142.56
7.6 (10)	9.2 (12)	<b>10-12</b>	\$141.70

**CONCRETE PUMPS [ CONPM ]**

**DELAY FACTOR = 0.17 OVERTIME FACTOR = 0.86**

Includes truck/carrier or self powered trailer mounted units. Including attachments, accessories and hoses.

**ELBA [ ELBA ]**

Model	Code	Rate
K-8020	<b>1000</b>	\$89.35

**MAYCO [ MACO ]**

Model	Code	Rate
C-30HD	<b>1020</b>	\$16.19
LST-30/60S	<b>1024</b>	\$27.60

**SCHWING [ SHWG ]**

Model	Code	Rate
BPA-1000	<b>1050</b>	\$33.01
WP-1000X	<b>1052</b>	\$44.52
WP-1250X	<b>1054</b>	\$57.58
900-1200 w/28 m boom	<b>1055</b>	\$90.72
900-1200 w/32 m boom	<b>1057</b>	\$106.51
BPL 1200 w/36 m boom	<b>1058</b>	\$113.17

**THOMSEN [ THOM ]**

Model	Code	Rate
A-3.75 w/ mixer	<b>1070</b>	\$21.62
A-7	<b>1072</b>	\$18.98
11 pump w/28 m boom	<b>1078</b>	\$111.85
12 pump w/32 m boom	<b>1082</b>	\$118.97
14 pump w/36 m boom	<b>1084</b>	\$162.74

**CONCRETE SLIPFORM PAVERS [ CONSF ]**

**DELAY FACTOR = 0.19 OVERTIME FACTOR = 0.85**

Includes all attachments and accessories. Detached, independently powered finished bridges or spray/tyne machines are not included.

**C.M.I. [ CMI ]**

Model	Code	Rate
SF-250	<b>2002</b>	\$152.95
SF-350 series 2	<b>2004</b>	\$246.87
SF-550	<b>2006</b>	\$328.27

**GOMACO [ GOMA ]**

Model	Code	Rate
GP-2000	<b>2020</b>	\$154.86
GP-2500	<b>2022</b>	\$173.17
GP-3500	<b>2024</b>	\$247.29

**CONCRETE VIBRATORS [ CONVB ]**

**DELAY FACTOR = 0.33 OVERTIME FACTOR = 0.67**

Includes all attachments and accessories. Includes vibrator motor but independent power, whether air or electric, shall be paid as a separate item.

**CONCRETE VIBRATORS [ CVIB ]**

Model	Code	Rate
Each Vibrating Head	<b>EVHD</b>	\$1.01

**CURB EXTRUSION MACHINES [ CRBEX ]**

**DELAY FACTOR = 0.23 OVERTIME FACTOR = 0.82**

Self propelled for asphalt or concrete curb and gutter section. Includes attachments, accessories and molds. Rated by Mfr's maximum width recommendations in millimeters (inches).

**CURB EXTRUSION MACHINE [ CEM ]**

OVER	TO	Code	Rate
0	460 (18)	<b>0-18</b>	\$32.39
460 (18)	& Over	<b>18 PLUS</b>	\$93.40

**CONCRETE BARRIER SLIPFORM PAVERS [ CRBSF ]**

**DELAY FACTOR = 0.20 OVERTIME FACTOR = 0.85**

Includes all attachments, accessories and barrier or curb molds.

**C.M.I. [ CMI ]**

Model	Code	Rate
SF-175	<b>3000</b>	\$113.37

**CURBMASTER [ CURB ]**

Model	Code	Rate
CMT-800	<b>3020</b>	\$70.69

<b>GOMACO</b>	<b>[ GOMA ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
GT-6000-(78&90)	<b>3040</b>	\$78.94	
COMMANDER II	<b>3045</b>	\$90.42	
COMMANDER III	<b>3050</b>	\$124.69	

<b>MILLER FORMLESS</b>	<b>[ MILL ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
M-7500	<b>3063</b>	\$92.48	
M-8100	<b>3065</b>	\$130.38	
M-8800	<b>3067</b>	\$165.12	

<b>ELECTRIC GENERATORS &amp; LIGHT PLANTS</b>	<b>[ ELGEN ]</b>
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**DELAY FACTOR = 0.13                      OVERTIME FACTOR = 0.88**  
 Rates are for gas or diesel power and alternating or direct current.

<b>GENERATOR</b>	<b>[ GEN ]</b>		
Rated in accordance with Mfr's output in kilowatts.			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	1	<b>000-001</b>	\$0.76
1	3	<b>001-003</b>	\$1.75
3	7.5	<b>003-008</b>	\$3.63
7.5	15	<b>008-015</b>	\$8.15
15	25	<b>015-025</b>	\$12.76
25	50	<b>025-050</b>	\$13.00
50	100	<b>050-100</b>	\$23.10
100	200	<b>100-200</b>	\$46.18
200	300	<b>200-300</b>	\$77.93
300	400	<b>300-400</b>	\$106.60
400	500	<b>400-500</b>	\$133.79

<b>LIGHTS</b>	<b>[ LITE ]</b>		
Includes trailer, pole and generator.			
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
2 Light Set	<b>2 LIGHT</b>	\$3.87	
4 Light Set	<b>4 LIGHT</b>	\$8.04	

<b>ELECTRIC POWERED HAND TOOLS</b>	<b>[ ELTOL ]</b>
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**DELAY FACTOR = 0.62                      OVERTIME FACTOR = 0.42**  
 Includes electric powered, hand held tools not listed elsewhere in this book.  
 Expendable bits, blades, discs, wheels, etc. shall be paid by separate invoice.  
 Rated in accordance with Mfr's suggested retail price.

<b>TOOLS</b>	<b>[ TOOL ]</b>		
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
450	600	<b>045-060</b>	\$0.32
600	800	<b>060-080</b>	\$0.42
800	1000	<b>080-100</b>	\$0.53

<b>FORK LIFT TRUCKS</b>	<b>[ FKLFT ]</b>
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**DELAY FACTOR = 0.22                      OVERTIME FACTOR = 0.79**  
 Includes attachments and accessories. Listed in accordance with the Mfr's maximum rated capacity in kilograms(pounds).

<b>FORK LIFT TRUCKS</b>	<b>[ FLT ]</b>		
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
454 (1000)	1814 (4000)	<b>010-040</b>	\$27.99
1814 (4000)	2722 (6000)	<b>040-060</b>	\$37.25
2722 (6000)	3629 (8000)	<b>060-080</b>	\$42.05
3629 (8000)	5443 (12000)	<b>080-120</b>	\$57.96
5443 (12000)	7258 (16000)	<b>120-160</b>	\$61.34
7258 (16000)	9072 (20000)	<b>160-200</b>	\$71.98
9072 (20000)	11340 (25000)	<b>200-250</b>	\$71.59
11340 (25000)	13608 (30000)	<b>250-300</b>	\$78.78
13608 (30000)	18144 (40000)	<b>300-400</b>	\$101.01
18144 (40000)	22680 (50000)	<b>400-500</b>	\$122.11
22680 (50000)	34020 (75000)	<b>500-750</b>	\$167.15

<b>GRADERS</b>	<b>[ GRADR ]</b>
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**DELAY FACTOR = 0.12                      OVERTIME FACTOR = 0.90**  
 Includes ripper and scarifier attachments and all accessories. Electronic blade control and specialty cutting tools shall be paid separately.

<b>BLADE-MOR</b>	<b>[ BMOR ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
727	<b>2173</b>	\$24.19	
747	<b>2178</b>	\$34.82	

<b>CATERPILLAR</b>	<b>[ CAT ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	
120G 87V serial	<b>2685</b>	\$65.79	
130G 74V serial	<b>2695</b>	\$72.92	
12E 99E serial	<b>2710</b>	\$46.00	
12F 73G serial	<b>2768</b>	\$69.70	
12F 13K serial	<b>2826</b>	\$54.01	
12F 89H serial	<b>2884</b>	\$54.48	
12G 61M serial	<b>2890</b>	\$74.62	
12H	<b>2895</b>	\$85.85	
14E 72G serial	<b>3174</b>	\$71.90	
14G	<b>3180</b>	\$111.21	
14H	<b>3185</b>	\$122.82	
140 14U serial	<b>3250</b>	\$72.89	
140G 72V serial	<b>3260</b>	\$80.67	
140H	<b>3265</b>	\$86.45	
143H	<b>3267</b>	\$96.68	
16 49G serial	<b>3290</b>	\$93.89	
16 49G800 serial	<b>3348</b>	\$137.42	
16 G93U serial	<b>3360</b>	\$154.77	
16H	<b>3380</b>	\$164.31	

160H	<b>3385</b>	\$101.61
163H	<b>3390</b>	\$107.03

**JOHN DEERE [ DEER ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD-570A	<b>3890</b>	\$43.34
JD-570B	<b>3892</b>	\$50.43
JD-670	<b>3900</b>	\$56.11
JD-670A	<b>3905</b>	\$61.87
JD-670CH	<b>3907</b>	\$80.75
JD-770	<b>3910</b>	\$63.78
JD-770A, 770A-H	<b>3915</b>	\$74.89
JD-770B	<b>3916</b>	\$81.84
JD-772CH	<b>3930</b>	\$98.21

**GALION [ GALN ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
A-400E	<b>4940</b>	\$60.54
T-400A	<b>4980</b>	\$57.99
T-500C	<b>5150</b>	\$67.25
T-500L	<b>5204</b>	\$66.65
T-500M	<b>5210</b>	\$69.14

**KOMATSU [ KOMA ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
GD 505A-2	<b>8980</b>	\$63.27
GD 515A-1	<b>8986</b>	\$65.81
GD 605A-2	<b>9000</b>	\$69.81
GD 615A-1	<b>9005</b>	\$76.39
GD 625A-1C	<b>9007</b>	\$99.03
GD 655A-2	<b>9010</b>	\$77.52

**HAMMERS, DEMOLITION & PILE [ HAMMR ]**

**DELAY FACTOR = 0.23      OVERTIME FACTOR = 0.80**  
Includes attachments, accessories and power unit. Does not include carrier.

**ABI [ ABI ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
HVR-60	<b>0100</b>	\$35.45

**AMERICAN PILE DRIVING [ APE ]**

**EQUIPMENT**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
150	<b>0010</b>	\$152.00
180	<b>0050</b>	\$207.95
200/500	<b>0060</b>	\$232.83
300 VIBRO	<b>0075</b>	\$257.91
400B VIBRO	<b>0085</b>	\$414.10

**ALLIED STEEL & TRACTOR [ AS&T ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
800	<b>0300</b>	\$56.38
HYRAM 720	<b>0310</b>	\$6.27
HYRAM 725	<b>0320</b>	\$12.05
HYRAM 730	<b>0330</b>	\$14.48
HYRAM 740	<b>0340</b>	\$20.69
HYRAM 750	<b>0350</b>	\$22.83
HYRAM 77	<b>0360</b>	\$9.36
HYRAM 770	<b>0370</b>	\$22.69
HYRAM 780	<b>0380</b>	\$37.32
HYRAM 790	<b>0390</b>	\$48.34
HYRAM 88	<b>0400</b>	\$15.73

**DELMAG [ DELM ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
D-12	<b>0500</b>	\$23.68
D-16	<b>0510</b>	\$34.37
D-22	<b>0520</b>	\$54.65
D-30	<b>0530</b>	\$40.48
D-30-32	<b>0540</b>	\$60.03
D-36-32	<b>0560</b>	\$78.05
D46-32	<b>0570</b>	\$92.05
D62-22	<b>0580</b>	\$150.43
D100-13	<b>0590</b>	\$237.38

**FOSTER [ FOST ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
1700	<b>0600</b>	\$127.56
4030	<b>0630</b>	\$178.94
FNV-1800	<b>0660</b>	\$107.78
FNV-4150	<b>0693</b>	\$229.39

**HYDRAULIC POWER SYS [ HPSI ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
150	<b>0420</b>	\$90.34
260	<b>0430</b>	\$142.97
300	<b>0440</b>	\$171.70

**I.C.E. [ ICE ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
44-50	<b>0450</b>	\$216.63
216	<b>0460</b>	\$78.01
416L	<b>0470</b>	\$129.44
812	<b>0480</b>	\$202.67

**KENT [ KENT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
KHB10G	<b>0700</b>	\$19.56
KHB 15G	<b>0710</b>	\$28.53
KHB 30G	<b>0750</b>	\$30.87
KHB 40G	<b>0760</b>	\$50.73

<b>NPK</b>	[ <b>NPK</b> ]		<b>TUNKER</b>	[ <b>TUNK</b> ]
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u> <u>Rate</u>
4XE	<b>0795</b>	\$15.97	40.01	<b>1400</b> \$164.57
6XA	<b>0800</b>	\$13.49	40.05	<b>1450</b> \$164.57
H-10XB	<b>0810</b>	\$34.69	60.05	<b>1460</b> \$142.70
H-12X	<b>0815</b>	\$35.82		
H-16X	<b>0820</b>	\$32.55	<b>VULCAN</b>	[ <b>VULC</b> ]
H-20X	<b>0840</b>	\$35.99	<u>Model</u>	<u>Code</u> <u>Rate</u>
H4X,HXA	<b>0860</b>	\$11.50	1	<b>1500</b> \$26.65
H7X	<b>0880</b>	\$14.40	010	<b>1520</b> \$38.55
			100C	<b>1540</b> \$40.66
<b>OKADA</b>	[ <b>OKAD</b> ]		2300	<b>1560</b> \$137.97
<u>Model</u>	<u>Code</u>	<u>Rate</u>	80C	<b>1580</b> \$31.38
UB-5	<b>0900</b>	\$8.03	<b>HYDRAULIC CRANES &amp; EXCAVATORS, [ HCECL ] CRAWLER MOUNTED</b>	
UB-8	<b>0950</b>	\$15.82	<b>DELAY FACTOR = 0.18</b>	<b>OVERTIME FACTOR = 0.84</b>
<b>RAMMER</b>	[ <b>RAMR</b> ]		Includes all attachments and accessories required for lifting or digging. Pavement breaker or compactor attachments are not included.	
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<b>BANTAM</b>	[ <b>BANT</b> ]
S-84	<b>1000</b>	\$32.16	<u>Model</u>	<u>Code</u> <u>Rate</u>
S-86	<b>1050</b>	\$34.79	C 266	<b>0680</b> \$79.90
<b>STANLEY</b>	[ <b>STAN</b> ]		C 366	<b>0690</b> \$92.55
<u>Model</u>	<u>Code</u>	<u>Rate</u>	C 744	<b>1075</b> \$60.54
MB250	<b>1100</b>	\$6.38	<b>CASE</b>	[ <b>CASE</b> ]
MB2900	<b>1120</b>	\$24.35	<u>Model</u>	<u>Code</u> <u>Rate</u>
MB4900	<b>1140</b>	\$43.14	9030B	<b>0100B</b> \$92.10
MB550	<b>1160</b>	\$10.06	9040	<b>0110</b> \$92.18
MB800	<b>1180</b>	\$14.87	9060B	<b>0120B</b> \$192.78
<b>TELEDYNE</b>	[ <b>TELD</b> ]		40E E-Boom	<b>1600</b> \$73.36
<u>Model</u>	<u>Code</u>	<u>Rate</u>	40E Y-Boom	<b>1601</b> \$73.73
950X	<b>1190</b>	\$33.63	50E	<b>1602</b> \$92.83
TB1025	<b>1195</b>	\$36.97	125B	<b>1602H</b> \$75.26
TB1425X	<b>1200</b>	\$35.43	170C	<b>1602N</b> \$104.79
TB2225X	<b>1220</b>	\$66.18	220B	<b>1602R</b> \$134.36
TB425	<b>1240</b>	\$14.46	880B Y-Boom	<b>1609</b> \$52.34
TB825X	<b>1260</b>	\$24.85	980B	<b>1615</b> \$81.10
<b>TRAMAC</b>	[ <b>TRMC</b> ]		1080	<b>1615E</b> \$71.07
<u>Model</u>	<u>Code</u>	<u>Rate</u>	1080B	<b>1615J</b> \$72.59
BRH1100	<b>1300</b>	\$37.99	1280	<b>1616</b> \$97.17
BRH125	<b>1310</b>	\$11.82	1280B	<b>1616E</b> \$91.42
BRH250	<b>1320</b>	\$13.12	<b>CATERPILLAR</b>	[ <b>CAT</b> ]
BRH400	<b>1330</b>	\$12.46	<u>Model</u>	<u>Code</u> <u>Rate</u>
BRH620	<b>1340</b>	\$25.23	304 CR	<b>0200</b> \$29.49
BRH750	<b>1350</b>	\$22.34	305C CR	<b>0250</b> \$40.28
BRV950	<b>1360</b>	\$23.52	308E2 CR SB	<b>0270</b> \$46.37
			308DCR	<b>0271</b> \$40.86
			312	<b>0300</b> \$47.82
			312C	<b>0300C</b> \$58.28

312CL	<b>0300CL</b>	\$58.46	EL 200B	<b>1654E</b>	\$70.62
314CL CR	<b>0302CLR</b>	\$59.39	E 240	<b>1655</b>	\$83.63
315L	<b>0305</b>	\$57.90	EL 240	<b>1656</b>	\$85.02
320	<b>0310</b>	\$76.24	E 300	<b>1657</b>	\$104.89
320BL	<b>0312</b>	\$80.38	E 300B	<b>1657B</b>	\$116.39
320C	<b>0312C</b>	\$91.03	EL 300	<b>1658</b>	\$106.70
320CL	<b>0312CL</b>	\$103.04	EL 300B	<b>1658B</b>	\$118.33
320L	<b>0315</b>	\$77.61	<b>JOHN DEERE</b>	<b>[ DEER ]</b>	
321C LCR	<b>0320R</b>	\$112.03	<u>Model</u>	<u>Code</u>	<u>Rate</u>
321D LCR	<b>0321R</b>	\$109.89	225D LC	<b>1575D</b>	\$103.79
322L	<b>0325</b>	\$95.19	330C LC	<b>1600C</b>	\$147.19
325	<b>0330</b>	\$100.63	450LC	<b>1645</b>	\$180.11
325BL	<b>0335</b>	\$118.14	490	<b>1660</b>	\$39.92
325L	<b>0340</b>	\$105.05	490E	<b>1660E</b>	\$50.69
328D LCR	<b>0343DR</b>	\$136.00	690A	<b>1685</b>	\$55.69
330BL	<b>0345</b>	\$144.81	690B	<b>1695</b>	\$68.37
330CL	<b>0345CL</b>	\$157.21	690C	<b>1697</b>	\$63.02
330D L	<b>0345DL</b>	\$186.94	690D	<b>1697D</b>	\$65.96
330L	<b>0350</b>	\$132.59	690E LC	<b>1697ELC</b>	\$76.01
336EL	<b>0351E</b>	\$176.58	790	<b>1698</b>	\$79.39
336F	<b>0351F</b>	\$176.26	790D	<b>1698D</b>	\$84.56
345BL	<b>0355</b>	\$186.16	790E LC	<b>1698ELC</b>	\$92.97
350L	<b>0360</b>	\$197.71	792	<b>1699</b>	\$93.94
375L	<b>0365</b>	\$313.21	890	<b>1700</b>	\$126.91
205	<b>1617</b>	\$32.76	890A	<b>1705</b>	\$115.98
211	<b>1617E</b>	\$48.56	892D LC	<b>1708</b>	\$107.78
213	<b>1617H</b>	\$53.43	990	<b>1720</b>	\$138.21
215	<b>1618</b>	\$54.26	992D LC	<b>1722</b>	\$156.32
215B LC	<b>1619E</b>	\$60.87	30	<b>1725</b>	\$19.07
215C	<b>1619F</b>	\$67.04	50	<b>1730</b>	\$30.42
215D	<b>1619G</b>	\$74.39	70	<b>1735</b>	\$27.90
225	<b>1620</b>	\$77.38	200LC	<b>1745</b>	\$87.20
225LC	<b>1621</b>	\$77.88	<b>DROTT</b>	<b>[ DROT ]</b>	
225D LC	<b>1622</b>	\$97.64	<u>Model</u>	<u>Code</u>	<u>Rate</u>
227	<b>1623</b>	\$80.77	35D E boom	<b>1835</b>	\$55.59
229	<b>1625</b>	\$104.93	35D Y boom	<b>1845</b>	\$55.98
231D	<b>1630</b>	\$119.83	40D E boom	<b>1930</b>	\$69.90
231DLC	<b>1635</b>	\$121.32	40D Y boom	<b>1965</b>	\$74.77
235	<b>1640</b>	\$123.67	50D	<b>2005</b>	\$90.53
235B	<b>1642</b>	\$137.55	<b>FIAT-ALLIS</b>	<b>[ F-A ]</b>	
235 Front Shovel	<b>1645</b>	\$132.94	<u>Model</u>	<u>Code</u>	<u>Rate</u>
235B Front Shovel	<b>1647</b>	\$148.05	FE 18	<b>9000</b>	\$50.13
235C	<b>1648</b>	\$156.55	FE 20 HD	<b>9010</b>	\$63.30
235DLC	<b>1649</b>	\$162.08	FE 20 LC	<b>9020</b>	\$59.67
245	<b>1650</b>	\$208.28	FE 28	<b>9030</b>	\$83.92
245B	<b>1650B</b>	\$229.64	FE 40 L	<b>9040</b>	\$143.98
245 Front Shovel	<b>1652</b>	\$219.44			
245B Front Shovel	<b>1652B</b>	\$244.26			
E 180	<b>1653</b>	\$65.03			
EL 180	<b>1654</b>	\$66.11			

<b>GRADALL</b>			<b>[ GRAD ]</b>			<b>KOBELCO</b>			<b>[ KOBL ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>
G 660	<b>0150</b>	\$67.85	SK200LC MARK III	<b>4687</b>	\$76.47	K 903B	<b>4688</b>	\$35.67			
G 660B	<b>0160</b>	\$86.22	K 904D	<b>4693</b>	\$38.65	K 904E	<b>4694</b>	\$40.70			
G 660C	<b>0170</b>	\$86.93	K 904 Mark II	<b>4694A</b>	\$40.55	K 905	<b>4695</b>	\$43.69			
G 880B	<b>0210</b>	\$92.70	K 905A LC	<b>4697</b>	\$47.14	K 907C	<b>4700</b>	\$63.18			
G 880C	<b>0215</b>	\$88.83	K 907D	<b>4702</b>	\$67.95	K 907D	<b>4702</b>	\$67.95			
G 1000	<b>0230</b>	\$145.46	K 907 LC	<b>4704</b>	\$68.66	K 909A	<b>4710</b>	\$87.96			
XL4200	<b>0260</b>	\$92.65	K 909 LC	<b>4711</b>	\$90.38	K 912A	<b>4712</b>	\$104.19			
XL5200	<b>0280</b>	\$112.71	K 914	<b>4715</b>	\$124.66	K 916	<b>4717</b>	\$139.58			
			SK270LC MARK IV	<b>4720</b>	\$108.90	SK400LC MARK IV	<b>4725</b>	\$192.47			
<b>HITACHI</b>			<b>[ HIT ]</b>			<b>KOEHRING</b>			<b>[ KOEH ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>
UH 07LC	<b>2630</b>	\$65.54	366 post 1980	<b>4752</b>	\$108.39	466E	<b>4990</b>	\$124.89			
UH 062	<b>2660</b>	\$70.86	566	<b>5160</b>	\$135.87	666, 666E	<b>5225</b>	\$171.97			
UH 172	<b>2695</b>	\$128.36	866, 866E	<b>5235</b>	\$201.69	6611	<b>6000</b>	\$40.59			
UH 122	<b>2750</b>	\$85.68	6614	<b>6005</b>	\$49.83	6612	<b>6010</b>	\$48.46			
EX 150	<b>2797</b>	\$60.27	6620	<b>6015</b>	\$69.23	6625	<b>6020</b>	\$84.29			
EX 200 LC	<b>2800</b>	\$73.32	6633	<b>6029</b>	\$119.67	6644	<b>6040</b>	\$159.00			
EX 270 LC	<b>2806</b>	\$107.88									
EX 300LC-2	<b>2807</b>	\$127.17									
EX 300LC-3	<b>2807A</b>	\$130.46									
EX 330LC-5	<b>2807B</b>	\$151.07									
EX 370-5	<b>2807F</b>	\$150.58									
EX 400 LC	<b>2808</b>	\$168.42									
EX 450LC-5	<b>2808K</b>	\$208.00									
EX 550LC	<b>2809</b>	\$245.53									
EX 700	<b>2810</b>	\$293.98									
EX 750-5	<b>2815</b>	\$331.91									
EX 1100	<b>2880</b>	\$382.00									
<b>HYUNDAI</b>			<b>[ HYUN ]</b>			<b>KOMATSU</b>			<b>[ KOMA ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>
200LC	<b>2950</b>	\$73.04	PC 120-5	<b>9485</b>	\$51.99	PC 150-1	<b>9490</b>	\$46.63			
210LC-3	<b>2952C</b>	\$90.32	PC 150-3	<b>9495</b>	\$57.46	PC 200 LC-2	<b>9500</b>	\$58.25			
280LC	<b>2960</b>	\$108.19	PC 200-5	<b>9504</b>	\$75.67	PC 200 LC-3	<b>9505</b>	\$70.34			
290LC	<b>2970</b>	\$112.69	PC 200 LC-5	<b>9506</b>	\$76.81	PC 220 LC-2	<b>9510</b>	\$75.14			
450LC	<b>3010</b>	\$169.23	PC 220 LC-3	<b>9515</b>	\$87.22	PC 220 LC-5	<b>9516</b>	\$94.14			
			PC 220 LC-6	<b>9516F</b>	\$102.18	PC 220 LC-7	<b>9516G</b>	\$110.15			
			PC 280 LC-3	<b>9517</b>	\$98.54	PC 300 LC-1, LC-2	<b>9520</b>	\$96.98			
<b>INTERNATIONAL</b>			<b>[ INTL ]</b>								
<u>Model</u>	<u>Code</u>	<u>Rate</u>									
630	<b>4250</b>	\$51.76									
640 HD	<b>4260</b>	\$68.22									
650 HD	<b>4280</b>	\$77.17									
<b>KATO</b>			<b>[ KATO ]</b>								
<u>Model</u>	<u>Code</u>	<u>Rate</u>									
HD450 VII	<b>3050</b>	\$49.29									
HD700 VII LC	<b>3060</b>	\$71.34									
HD1250 VII LC	<b>3080</b>	\$119.96									



PC 300 LC-3	9525	\$115.79	<b>MASSEY FERGUSON</b>	[ M-F ]	
PC 300 LC-5	9526	\$131.46	<u>Model</u>	<u>Code</u>	<u>Rate</u>
PC 300 LC-6	9526A	\$142.95	MF 450D	6245	\$41.49
PC 300 LC-7	9526B	\$162.07	MF 450S	6250	\$44.49
PC 360 LC-3	9527	\$132.20			
PC 400 LC-1	9530	\$131.72	<b>MITSUBISHI</b>	[ MITS ]	
PC 400 LC-3	9535	\$154.46	<u>Model</u>	<u>Code</u>	<u>Rate</u>
PC 400 LC-5	9536	\$172.97	MS 090	6290	\$29.57
PC 400 LC-6	9537	\$195.29	MS 180-3	6295	\$56.46
PC 600 LC-6	9539	\$271.76	MS 180 LC-8	6296	\$63.83
PC 650-1	9540	\$241.20	MS 230 LC-3	6300	\$73.60
PC 650-1 Front Shovel	9550	\$255.22	MS 240 LC-8	6305	\$79.57
PC 650-3	9552	\$256.11	MS 280-2	6310	\$90.11
PC 750-6	9555	\$327.82	MS 380-2	6320	\$126.45
PC 1000-1	9560	\$390.13	MS 450-8	6330	\$145.64
PC 1000 LC-1	9565	\$402.02	<b>NORTHWEST</b>	[ NW ]	
PC 1100 LC-6	9575LC	\$450.73	<u>Model</u>	<u>Code</u>	<u>Rate</u>
<b>LINK-BELT</b>	[ L-B ]		35 DH	6335	\$113.69
<u>Model</u>	<u>Code</u>	<u>Rate</u>	45 DH	6340	\$124.31
LS 1600	5390	\$30.75	55 DH	6345	\$132.04
LS 2650	5395	\$42.83	55 DH Series II	6360	\$224.32
LS 2700C II	5398	\$58.19	<b>P&amp;H</b>	[ P&H ]	
2700 QUANTUM	5399	\$64.37	<u>Model</u>	<u>Code</u>	<u>Rate</u>
LS 2800	5400	\$50.39	H 750	6628	\$54.34
LS 2800A	5402	\$58.25	H 1250	6630	\$91.13
LS 2800A PL	5404	\$50.50	H 1750	6635	\$113.64
LS 2800 PL	5405	\$47.79	H 2500	6645	\$145.60
LS 2800B	5410	\$63.67	HS 2500	6650	\$150.17
LS 3400	5475	\$84.44	<b>TAKEUCHI</b>	[ TAKU ]	
LS 3400C II	5477	\$89.93	<u>Model</u>	<u>Code</u>	<u>Rate</u>
LS 4300	5660	\$106.58	TB 15	7686	\$12.59
LS 4300C II	5662	\$117.28	TB 025	7686A	\$21.20
LS 4800	5750	\$122.81	TB 045	7686E	\$35.09
LS 4800 PL	5755	\$110.09	TB 070	7686H	\$36.15
LS 5400	5805	\$142.41	TB 10S	7688	\$10.03
LS 5800	5810	\$148.35	TB 35S	7690	\$19.86
LS 5800A	5812	\$156.55	TB 68S	7692	\$28.82
LS 5800C II	5814	\$163.79	TB 800	7695	\$14.03
LS 6400	5820	\$219.67			
LS 7400	5830	\$217.89			
LS 7400A	5840	\$266.31			

**HYDRAULIC CRANES & EXCAVATORS, [ HCESP ]  
SELF PROPELLED.**

**DELAY FACTOR = 0.14                      OVERTIME FACTOR = 0.88**

Includes all attachments and accessories required for lifting or digging.  
Pavement breaker or compactor attachments are not included.

<b>BUCYRUS-ERIE</b>		
<b>[ B-E ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
300C/SP	<b>1670</b>	\$65.46
320C	<b>1672</b>	\$65.64
360C	<b>1678</b>	\$65.97

<b>BADGER</b>		
<b>[ BAGR ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
4425/30	<b>1565</b>	\$88.28
4435	<b>1570</b>	\$97.95
4435B	<b>1573</b>	\$99.09
4435C	<b>1573C</b>	\$108.31
4445	<b>1574</b>	\$135.81
4450	<b>1575</b>	\$104.44
4450B	<b>1577</b>	\$110.51
4455	<b>1579</b>	\$136.50

<b>CASE</b>		
<b>[ CASE ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
40E E-Boom, Cruz Air	<b>1685</b>	\$56.39
40E Y-Boom, Cruz Air	<b>1687</b>	\$56.60
40F E-Boom, Cruz Air	<b>1687H</b>	\$58.55
40F Y-Boom, Cruz Air	<b>1687K</b>	\$59.37
45 E-Boom, Cruz Air	<b>1688</b>	\$72.95
45 Y-Boom, Cruz Air	<b>1689</b>	\$77.53
45B E-Boom, Cruz Air	<b>1689H</b>	\$77.17
45B Y-Boom, Cruz Air	<b>1689K</b>	\$77.88
880R E-Boom	<b>1690</b>	\$50.70
880R Y-Boom	<b>1695</b>	\$50.82
1085 E-Boom, Cruz Air	<b>1696E</b>	\$58.45
1085 Y-Boom, Cruz Air	<b>1696Y</b>	\$58.74
1085B Y-Boom, Cruz Air	<b>1696Z</b>	\$65.71
1285 E-Boom, Cruz Air	<b>1697E</b>	\$73.64
1285 Y-Boom, Cruz Air	<b>1697Y</b>	\$73.78
3330 Low Profile	<b>1698E</b>	\$30.15
3330B	<b>1698H</b>	\$30.38

<b>CATERPILLAR</b>		
<b>[ CAT ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
206	<b>1699</b>	\$40.77
212	<b>1699E</b>	\$52.14
214	<b>1699H</b>	\$56.34
224	<b>1699J</b>	\$69.37

<b>GRADALL</b>		
<b>[ GRAD ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
G 3WD, 4x4	<b>0110</b>	\$84.78

<b>GROVE</b>		
<b>[ GROV ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>
24	<b>3820</b>	\$32.14
36	<b>3830</b>	\$52.47
68	<b>3850</b>	\$60.83
1012	<b>3870</b>	\$73.09
2535	<b>3880</b>	\$96.05
RT-48	<b>4030</b>	\$55.48
RT-49	<b>4115</b>	\$55.75
RT-58	<b>4285</b>	\$56.95
RT-418	<b>4354</b>	\$70.70
RT-420	<b>4356</b>	\$70.70
RT-422	<b>4358</b>	\$70.70
RT-500D	<b>4359</b>	\$97.54
RT-525	<b>4360</b>	\$65.68
RT-525B	<b>4362</b>	\$68.45
RT-525C	<b>4363</b>	\$84.66
RT-527.5	<b>4365</b>	\$66.49
RT-528B	<b>4370</b>	\$68.45
RT-528C	<b>4372</b>	\$85.14
RT-60	<b>4520</b>	\$66.32
RT-60S	<b>4540</b>	\$68.18
RT-515	<b>4606</b>	\$65.58
RT-518	<b>4607</b>	\$67.45
RT-520	<b>4608</b>	\$68.91
RT-522	<b>4609</b>	\$68.18
RT-522C	<b>4609G</b>	\$83.03
RT-625	<b>4630</b>	\$74.31
RT-630	<b>4635</b>	\$74.31
RT-630B	<b>4637</b>	\$79.69
RT-635	<b>4640</b>	\$84.35
RT-65 S	<b>4700</b>	\$89.03
RT-740	<b>4710</b>	\$99.65
RT-745	<b>4715</b>	\$126.86
RT-75 S	<b>4720</b>	\$94.80
RT-755	<b>4725</b>	\$107.46
RT-760	<b>4727</b>	\$155.55
RT-865	<b>4730</b>	\$132.77
RT-865B	<b>4732</b>	\$182.00
RT-875	<b>4735</b>	\$163.40
RT-980	<b>4750</b>	\$158.69
RT-990	<b>4760</b>	\$183.47
RT-9100	<b>4790</b>	\$235.72

<b>KOMATSU</b>			<b>[ KOMA ]</b>			<b>P&amp;H</b>			<b>[ P&amp;H ]</b>		
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>
PW 210-1	<b>9580</b>	\$93.89				OMEGA 14	<b>5790</b>	\$60.77			
<b>LINK-BELT</b>			<b>[ L-B ]</b>			OMEGA 15	<b>5792</b>	\$60.77			
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	OMEGA 18	<b>5794</b>	\$61.18			
HSP 15	<b>5500</b>	\$63.50	OMEGA 25	<b>5795</b>	\$81.80	OMEGA 20	<b>5796</b>	\$61.84			
HSP 18	<b>5505</b>	\$63.50	OMEGA 23	<b>5796E</b>	\$64.50	OMEGA 30	<b>5796J</b>	\$84.15			
HSP 20	<b>5510</b>	\$69.30	OMEGA 35	<b>5796P</b>	\$85.08	OMEGA 40	<b>5797</b>	\$114.68			
HSP 22	<b>5530</b>	\$70.66	OMEGA 45	<b>5797E</b>	\$116.34	OMEGA 50	<b>5797J</b>	\$117.68			
HSP 25	<b>5535</b>	\$75.29	OMEGA 60	<b>5798</b>	\$121.02	OMEGA 65	<b>5799</b>	\$143.00			
HSP 8015	<b>5538</b>	\$73.89	OMEGA 114	<b>5799C</b>	\$69.35	OMEGA 114D	<b>5799G</b>	\$67.46			
HSP 8018	<b>5538E</b>	\$73.89	OMEGA 118	<b>5799Q</b>	\$70.81	OMEGA 118D	<b>5799S</b>	\$67.60			
HSP 8018XL	<b>5538G</b>	\$89.70	OMEGA 120	<b>5799U</b>	\$72.40	OMEGA 120D	<b>5799W</b>	\$68.28			
HSP 8018C	<b>5538H</b>	\$67.59	OMEGA 122	<b>5799X</b>	\$73.36	OMEGA 122D	<b>5799Y</b>	\$68.84			
HSP 8025	<b>5538P</b>	\$77.16	OMEGA 125	<b>5799Z</b>	\$73.72	OMEGA 128	<b>5799ZA</b>	\$72.19			
HSP 8025 S	<b>5538PF</b>	\$78.32	R 150	<b>5890</b>	\$51.76	R 150-1	<b>5910</b>	\$51.28			
HSP 8030	<b>5538Q</b>	\$88.41	R 180	<b>5975</b>	\$52.08	R 200	<b>6060</b>	\$52.39			
HSP 8035	<b>5538R</b>	\$129.02	OMEGA S-15	<b>6062</b>	\$84.46	OMEGA S-18	<b>6063</b>	\$84.46			
HSP 8040	<b>5538S</b>	\$129.15	OMEGA S-20	<b>6064</b>	\$86.93	S-35	<b>6064E</b>	\$118.72			
HSP 8050	<b>5538T</b>	\$131.22	<b>PETTIBONE</b>			<b>[ PET ]</b>					
HSP 8055	<b>5538V</b>	\$117.88	<u>Model</u>	<u>Code</u>	<u>Rate</u>	16 MK P Series	<b>6500</b>	\$56.52			
HSP 8060	<b>5539</b>	\$144.35	20 MK P Series	<b>6580</b>	\$57.13	25	<b>6740</b>	\$53.30			
<b>LORAIN</b>			<b>[ LORN ]</b>			25 MK P Series	<b>6750</b>	\$57.89			
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>	29 MK P Series	<b>6880</b>	\$58.89			
LRT 15H	<b>5730</b>	\$64.84	30	<b>6900</b>	\$53.30	30 MK P Series	<b>6903</b>	\$59.85			
LRT 15U	<b>5735</b>	\$66.09	30 SC, 30 SC P Series	<b>6910</b>	\$82.85	60 SC	<b>6990</b>	\$88.96			
LRT 18U	<b>5740</b>	\$66.52	60 SC P Series	<b>6995</b>	\$94.96	70	<b>7100</b>	\$94.22			
LRT 35U	<b>5745</b>	\$97.16	70 SC	<b>7165</b>	\$94.44	70 SC P Series	<b>7170</b>	\$100.16			
LRT 40U	<b>5750</b>	\$97.76	80 MK P Series	<b>7250</b>	\$93.26						
LRT 150	<b>5755</b>	\$64.13									
LRT 150D	<b>5756</b>	\$79.10									
LRT 180	<b>5760</b>	\$64.11									
LRT 180D	<b>5760D</b>	\$79.10									
LRT 200	<b>5765</b>	\$63.99									
LRT 200D	<b>5765D</b>	\$79.26									
LRT 220	<b>5767</b>	\$66.29									
LRT 230	<b>5768</b>	\$70.76									
LRT 230D	<b>5768D</b>	\$79.28									
LRT 250	<b>5769</b>	\$70.79									
LRT 250D	<b>5769D</b>	\$79.28									
LRT 275	<b>5770</b>	\$70.79									
LRT 275D	<b>5770D</b>	\$79.28									
LRT 330	<b>5772</b>	\$90.79									
LRT 400	<b>5773</b>	\$104.27									
LRT 450	<b>5774</b>	\$107.32									
LRT 500	<b>5775</b>	\$110.24									
LRT 550	<b>5790</b>	\$115.34									

80 SC P Series **7260** \$94.60

**R.O. PRODUCTS [ ROP ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
MC 5A	<b>8005</b>	\$33.68
MC 50B	<b>8175</b>	\$53.66
MC 50C	<b>8260</b>	\$54.96

<b>HYDRAULIC CRANES &amp; EXCAVATORS, TRUCK MTD. W/ CARRIER</b>	<b>[ HCETD ]</b>
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**DELAY FACTOR = 0.13 OVERTIME FACTOR = 0.89**

Includes truck/carrier. Includes all attachment and accessories required for lifting or digging. Pavement breaker or compactor attachments are not included.

**BUCYRUS-ERIE [ B-E ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
25 XC	<b>1360</b>	\$79.98
30 XC	<b>1370</b>	\$80.61
40 C	<b>1475</b>	\$72.33
60 XC	<b>1590</b>	\$129.94
65 C	<b>1592</b>	\$112.46
90 XC	<b>1600</b>	\$140.91

**BADGER [ BAGR ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
300 Hydro-Scopic	<b>0550</b>	\$55.06
460 Hydro-Scopic	<b>0555</b>	\$67.54
666 Hydro-Scopic	<b>0560</b>	\$99.25
888 Hydro-Scopic	<b>0600</b>	\$104.71

**BANTAM [ BANT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
T 744 Teleskoop	<b>1285</b>	\$64.64
T 888	<b>1310</b>	\$93.43
T 888B	<b>1315</b>	\$108.76

**DEVAULT [ DVUT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
TK 15-10	<b>1900</b>	\$47.72

**GRADALL [ GRAD ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
G 3W	<b>0120</b>	\$66.88
G 660	<b>0170</b>	\$65.00
G 660B	<b>0180</b>	\$84.38
G 660C	<b>0190</b>	\$82.00
G 800	<b>0210</b>	\$56.41
G 880B	<b>0220</b>	\$92.39
G 880C	<b>0230</b>	\$89.54
G 1000	<b>0240</b>	\$99.08

**GROVE [ GROV ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
TD 520	<b>2221</b>	\$98.63
TD 522	<b>2223</b>	\$98.63
TD 525	<b>2224</b>	\$99.50
TMS 250	<b>2850</b>	\$92.88
TMS 250A	<b>2860</b>	\$93.35
TMS 250B	<b>2870</b>	\$93.35
TMS 250C	<b>2875</b>	\$128.85
TMS 300	<b>2922</b>	\$111.05
TMS 300B	<b>2923</b>	\$127.78
TMS 760	<b>3180</b>	\$195.65
TMS 865	<b>3378</b>	\$146.55
TM 875	<b>3380</b>	\$169.76
TMS 875	<b>3385</b>	\$170.63
TM 890	<b>3387</b>	\$186.74
TM 1075	<b>3390</b>	\$154.17

**HIAB [ HIAB ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
100 AW	<b>3850</b>	\$43.12
1165	<b>3852</b>	\$40.31
170 thru 174	<b>3854</b>	\$38.88
175 thru 177	<b>3855</b>	\$39.03
550, 5501	<b>3857</b>	\$41.58
650	<b>3859</b>	\$42.43

**KOEHRING [ KOEH ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
4460 Teleskoop	<b>4400</b>	\$64.99
4465 Teleskoop	<b>4405</b>	\$66.17
4470 Teleskoop	<b>4410</b>	\$76.93
4475 Teleskoop	<b>4415</b>	\$78.08

**LINK-BELT [ L-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
HTC 14	<b>4505</b>	\$90.50
HTC 25	<b>4507</b>	\$90.50
HTC 35	<b>4509</b>	\$100.01
HTC 50	<b>4510</b>	\$132.22
HTC 50W	<b>4520</b>	\$127.19
HTC 814	<b>4530</b>	\$119.18
HTC 814XL	<b>4531</b>	\$123.98
HTC 822 S	<b>4532</b>	\$111.08
HTC 825	<b>4535</b>	\$103.63
HTC 825 S	<b>4536</b>	\$112.10
HTC 830	<b>4537</b>	\$121.04
HTC 835	<b>4539</b>	\$127.56
HTC 835XL	<b>4539C</b>	\$144.24
HTC 840	<b>4539E</b>	\$147.59
HTC 850	<b>4539G</b>	\$152.52

HTC 855	<b>4539H</b>	\$133.65	T-300A	<b>5665</b>	\$107.06
HTC 860	<b>4539J</b>	\$155.14	OMEGA T-400	<b>5666M</b>	\$132.14
HTC 1040	<b>4540</b>	\$145.19	OMEGA T-450	<b>5669</b>	\$133.79
HTC 1050	<b>4545</b>	\$147.53	T-600 XL	<b>5670</b>	\$153.87
HTC 1055	<b>4550</b>	\$137.21	OMEGA T-500	<b>5680</b>	\$133.77
HTC 1060	<b>4555</b>	\$152.00	OMEGA T-650	<b>5745</b>	\$180.15
HTC 11100	<b>4600</b>	\$266.35	T-750	<b>5780</b>	\$127.28

**LORAIN**

[ LORN ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
MCH 140	<b>4942</b>	\$105.89
MCH 150	<b>4946</b>	\$98.88
MCH 180	<b>4947</b>	\$98.88
MCH 300	<b>4953</b>	\$115.75
MCH 350	<b>4955</b>	\$93.09
MCH 400	<b>4957</b>	\$126.66
MCH 500	<b>4960</b>	\$101.91

**MANITEX**

[ MANX ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
1161	<b>4980</b>	\$46.19
1770	<b>4985</b>	\$76.86
2284	<b>4990</b>	\$79.52
2592	<b>4995</b>	\$81.38

**NATIONAL**

[ NATL ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Ser 4/400, 11.3 m (37') boom	<b>4983</b>	\$43.02
Ser 4/400, 14.0 m (46') boom	<b>4984</b>	\$43.21
Ser 4/400, 16.8 m (55') boom	<b>4985</b>	\$43.38
Ser 5/500A/B, 14.3 m (47') boom	<b>4986</b>	\$48.03
Ser 5/500A/B, 17.1 m (56') boom	<b>4987</b>	\$48.62
Ser 6/600, 14.3 m (47') boom	<b>4989</b>	\$47.54
Ser 6/600, 17.1 m (56') boom	<b>4990</b>	\$47.89
856	<b>4995</b>	\$48.37
856B	<b>4996</b>	\$47.56
875	<b>4997</b>	\$49.08
875B	<b>4998</b>	\$50.45
Series 85	<b>4999</b>	\$44.45

**P&H**

[ P&H ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
ALPHA 100 ton	<b>5000</b>	\$247.31
CN T-280	<b>5005</b>	\$132.22
T-150	<b>5290</b>	\$96.54
T-180	<b>5380</b>	\$96.96
T-200	<b>5470</b>	\$97.47
T-250	<b>5560</b>	\$113.72
CN T-250	<b>5561</b>	\$134.49
OMEGA T-250	<b>5570</b>	\$108.29
OMEGA T-300	<b>5580</b>	\$111.41
OMEGA T-350	<b>5585</b>	\$112.59

**PITMAN**

[ PIT ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Hydralift HL 40 thru 95	<b>6670</b>	\$39.27
Hydralift HL 100 thru 170	<b>6675</b>	\$42.35
HL 857	<b>6685</b>	\$47.12
HL 1200, 1545-T2 or 1580	<b>6695</b>	\$49.41
POLECAT	<b>6697</b>	\$50.41
PELICAN	<b>6699</b>	\$53.16

**R.O. PRODUCTS**

[ ROP ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
TC-40	<b>6860</b>	\$40.19
TC-50	<b>6862</b>	\$41.72
TC-70	<b>6864</b>	\$43.05
TC-80	<b>6866</b>	\$43.08
TC-85	<b>6868</b>	\$42.62
TC-110	<b>6870</b>	\$46.45
TC-120	<b>6872</b>	\$47.08
TC-125	<b>6874</b>	\$46.71
TC-145	<b>6876</b>	\$49.54
TC-150	<b>6878</b>	\$47.99

**HYDRAULIC CRANES & EXCAVATORS, [ HCETG ]  
TRUCK MTD. LESS CARRIER.**

**DELAY FACTOR = 0.10                      OVERTIME FACTOR = 0.92**

Includes all lifting and digging attachments and accessories. Truck/carrier to be paid separately. Pavement breaker or compactor attachments are not included.

**BUCYRUS-ERIE**

[ B-E ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
H-3 series two	<b>1000</b>	\$39.19
H-5 series two	<b>1300</b>	\$46.40

**GALION**

[ GALN ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
125 P	<b>1970</b>	\$47.26
150 P	<b>1980</b>	\$57.14

**GROVE**

[ GROV ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
TM 100C	<b>2020</b>	\$67.27
TM 200C	<b>2040</b>	\$55.04

**HYDRAULIC PERSONNEL LIFTS & [ HYLFT ]  
AERIAL WORK PLATFORMS**

**DELAY FACTOR = 0.22 OVERTIME FACTOR = 0.79**

Includes self propelled and power take off(PTO) units whether gas, diesel or electric. Rates for any truck or carrier mounted units shall pay for the truck separately. Reach is rated by Mfr's maximum extension in meters(feet).

<b>BOOM TYPE</b>		<b>[ BOOM ]</b>	
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	7.6 (25)	<b>00-24</b>	\$15.05
7.6 (25)	15.2 (50)	<b>25-49</b>	\$36.07
15.2 (50)	22.9 (75)	<b>50-74</b>	\$51.16

<b>SCISSOR TYPE</b>		<b>[ SCIS ]</b>	
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	6.1 (20)	<b>00-20</b>	\$16.44
6.4 (21)	9.1 (30)	<b>21-30</b>	\$19.93
9.4 (31)	15.2 (50)	<b>31-50</b>	\$29.68

**LOADERS, CRAWLER [ LDRCL ]**

**DELAY FACTOR = 0.12 OVERTIME FACTOR = 0.90**

Includes all attachments and accessories excluding clam-action buckets and backhoe(see attachment class).

<b>CASE</b>		<b>[ CASE ]</b>	
<u>Model</u>		<u>Code</u>	<u>Rate</u>
350B		<b>2370</b>	\$32.40
450B		<b>2610</b>	\$29.81
455B		<b>2620</b>	\$31.52
455C		<b>2620A</b>	\$35.01
1155D		<b>3555</b>	\$60.92
1155E		<b>3556</b>	\$67.28
1450		<b>3560</b>	\$66.87
1450B		<b>3565</b>	\$74.19
1455B		<b>3568</b>	\$75.07

<b>CATERPILLAR</b>		<b>[ CAT ]</b>	
<u>Model</u>		<u>Code</u>	<u>Rate</u>
259D		<b>2159</b>	\$39.45
289D		<b>2189</b>	\$41.78
299D2		<b>2199A</b>	\$51.65
931B		<b>3735</b>	\$33.42
931C		<b>3735C</b>	\$35.55
931 LGP		<b>3740</b>	\$31.50
931B LGP		<b>3745</b>	\$34.49
935B		<b>3845</b>	\$39.84
935C		<b>3845C</b>	\$42.34
939C		<b>3900</b>	\$60.78
943		<b>4130</b>	\$51.75
943 LGP		<b>4135</b>	\$48.71
951C 86J 1992 serial		<b>4200</b>	\$45.53
951C 86J 2598 serial		<b>4210</b>	\$50.71

951C LGP 86J 2598 ser	<b>4215</b>	\$51.53
953	<b>4220</b>	\$69.75
953 LGP	<b>4230</b>	\$64.97
955L 85J 6247 serial	<b>4675</b>	\$64.60
955L 85J 13X10129 ser	<b>4680</b>	\$70.19
955L LGP 85J 13X10129	<b>4685</b>	\$70.53
963	<b>4690</b>	\$96.30
963 LGP	<b>4693</b>	\$87.14
973	<b>4695</b>	\$148.88
973 LGP	<b>4698</b>	\$122.71
977K	<b>5014</b>	\$74.50
977K 11K serial	<b>5092</b>	\$78.69
977L 11K 3919 serial	<b>5170</b>	\$92.00
977L 11K 5083 serial	<b>5180</b>	\$100.85
977L 14X serial	<b>5185</b>	\$105.07
977L LGP	<b>5190</b>	\$104.74
983	<b>5248</b>	\$142.80
983B	<b>5265</b>	\$154.07

<b>JOHN DEERE</b>		<b>[ DEER ]</b>	
<u>Model</u>		<u>Code</u>	<u>Rate</u>
JD 350C		<b>5420</b>	\$34.24
JD 450C (4 speed PS)		<b>5805</b>	\$34.34
JD 455D		<b>5807</b>	\$36.19
JD 455E		<b>5809</b>	\$36.62
JD 455G		<b>5809A</b>	\$45.37
JD 555		<b>5810</b>	\$38.82
JD 555A		<b>5812</b>	\$42.93
JD 555B		<b>5814</b>	\$42.17
JD 555G		<b>5814A</b>	\$61.74
JD 655		<b>5815</b>	\$61.56
JD 655B		<b>5817</b>	\$71.07
JD 755		<b>5820</b>	\$57.74
JD 755A		<b>5822</b>	\$72.16
JD 755B		<b>5824</b>	\$81.97
JD 855		<b>5830</b>	\$109.13

<b>DRESSER</b>		<b>[ DRES ]</b>	
<u>Model</u>		<u>Code</u>	<u>Rate</u>
100E (PS)		<b>9000</b>	\$35.65
100G		<b>9005</b>	\$41.35
125E (PS)		<b>9010</b>	\$44.03
125G		<b>9015</b>	\$50.15
175C (PS)		<b>9020</b>	\$88.27
200		<b>9025</b>	\$101.90
250C (PS)		<b>9030</b>	\$103.28
250E (PS)		<b>9035</b>	\$119.05

**KOMATSU****[ KOMA ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
D 53S-16	<b>7878</b>	\$58.61
D 53S-17	<b>7878A</b>	\$70.94
D 55S-2	<b>7900</b>	\$59.81
D 55S-3	<b>7978</b>	\$59.81
D 57S-1	<b>8000</b>	\$81.81
D 65S-6	<b>8017</b>	\$78.67
D 66S-1	<b>8020</b>	\$111.09
D 75S-2	<b>8056</b>	\$85.41
D 75S-3	<b>8060</b>	\$106.88
D 75S-5	<b>8061</b>	\$159.06
D 155S-1	<b>8080</b>	\$210.00

**LOADERS, RUBBER TIRE****[ LDRRT ]****DELAY FACTOR = 0.12****OVERTIME FACTOR = 0.89**

Includes all attachments and accessories. Clam-action buckets, 4WD and backhoes are excluded unless otherwise noted.

**ALLIS-CHALMERS****[ A-C ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
710C	<b>0747</b>	\$33.16
714B	<b>0750</b>	\$32.30
714C w/ backhoe	<b>0752</b>	\$34.70
715B w/ backhoe	<b>0765</b>	\$34.13
715C w/ backhoe	<b>0767</b>	\$34.94

**CASE****[ CASE ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
W-11	<b>1365</b>	\$31.13
W-11B	<b>1368</b>	\$37.90
W-18	<b>1444</b>	\$52.48
W-18 9213140 serial	<b>1450</b>	\$55.78
W-18B	<b>1460</b>	\$60.21
W-20	<b>1472</b>	\$55.90
W-20B	<b>1480</b>	\$56.64
W-20C	<b>1482</b>	\$60.97
W-30	<b>1565</b>	\$83.51
480B	<b>1636</b>	\$26.41
480B w/ backhoe	<b>1640</b>	\$27.66
480C	<b>1650</b>	\$34.12
480C w/ backhoe	<b>1660</b>	\$35.60
480D	<b>1662</b>	\$38.25
480D w/ backhoe	<b>1664</b>	\$40.10
480E w/ backhoe	<b>1666</b>	\$32.77
480E LL	<b>1667</b>	\$31.62
480F w/ backhoe	<b>1668</b>	\$34.00
480F LL	<b>1669</b>	\$32.33
480LL	<b>1677</b>	\$38.29
570L XT 4WD	<b>1690</b>	\$37.17

580B w/ backhoe	<b>1705</b>	\$34.71
580C	<b>1710</b>	\$27.58
580C w/ backhoe	<b>1715</b>	\$29.39
580D	<b>1717</b>	\$28.86
580D w/ backhoe	<b>1720</b>	\$31.23
580 Super D	<b>1725</b>	\$31.51
580 Super D w/ backhoe	<b>1727</b>	\$33.92
580 Super E	<b>1731</b>	\$32.37
580 Super E w/ backhoe	<b>1735</b>	\$34.98
580K w/ backhoe	<b>1739</b>	\$35.25
580K 4WD w/ backhoe	<b>1740</b>	\$36.29
580 Super K w/ backhoe	<b>1742</b>	\$38.94
580L w/ backhoe	<b>1743</b>	\$39.19
580 Super L 4WD w/ backhoe	<b>1744</b>	\$45.53
590 Turbo w/ backhoe	<b>1745</b>	\$47.59
590 Super L 4WD w/ backhoe	<b>1746</b>	\$49.88
621	<b>1750</b>	\$64.23
721	<b>1752</b>	\$78.04
821	<b>1754</b>	\$95.47
680E w/ backhoe	<b>1840</b>	\$44.75
680G w/ backhoe	<b>1850</b>	\$43.46
680H w/ backhoe	<b>1852</b>	\$46.20
680K w/ backhoe	<b>1854</b>	\$50.38
680L w/ backhoe	<b>1856</b>	\$51.06
680L 4WD w/ backhoe	<b>1857</b>	\$51.82
780 w/ backhoe	<b>1864</b>	\$57.26
780B w/ backhoe	<b>1866</b>	\$61.46
780C w/ backhoe	<b>1867</b>	\$62.56
780D w/ backhoe	<b>1868</b>	\$63.28
780D 4WD w/ backhoe	<b>1869</b>	\$64.59

**CATERPILLAR****[ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
415F2	<b>1850F2</b>	\$45.30
416 w/ backhoe	<b>1860</b>	\$35.24
416 Series II w/ backhoe	<b>1860A</b>	\$35.46
416B 4WD w/ extend-a-hoe	<b>1861A</b>	\$43.68
416C 4WD w/ backhoe	<b>1861C</b>	\$45.31
416D w/ backhoe	<b>1861D</b>	\$40.71
416D 4WD w/ backhoe	<b>1861D4</b>	\$41.76
420D w/ backhoe	<b>1861M</b>	\$45.64
420D 4WD w/ backhoe	<b>1861M4</b>	\$46.69
420E	<b>1861N</b>	\$55.18
420F2	<b>1861N2</b>	\$65.46
426 w/ backhoe	<b>1862</b>	\$39.84
426 Series II w/ backhoe	<b>1862A</b>	\$40.05
426C w/ backhoe	<b>1862C</b>	\$49.89
426C 4WD w/ backhoe	<b>1862C4</b>	\$51.24
428 w/ backhoe	<b>1864</b>	\$39.81
428 Series II w/ backhoe	<b>1864A</b>	\$40.03
430D	<b>1865D</b>	\$55.33

430E	<b>1865E</b>	\$58.53	IT 12	<b>2472</b>	\$38.33
436 w/ backhoe	<b>1866</b>	\$43.39	IT 12B	<b>2472B</b>	\$44.64
436 Series II w/ backhoe	<b>1866A</b>	\$43.56	IT 14F	<b>2473</b>	\$51.75
446 w/ backhoe	<b>1868</b>	\$56.21	IT 18	<b>2474</b>	\$48.95
446B w/ backhoe	<b>1868B</b>	\$62.15	IT 18B	<b>2475</b>	\$55.35
446D	<b>1868D</b>	\$64.58	IT 28	<b>2476</b>	\$59.20
450E	<b>1869E</b>	\$77.84	IT 28B	<b>2477</b>	\$64.26
910	<b>1870</b>	\$37.59	IT 28F	<b>2477G</b>	\$74.46
910E	<b>1870E</b>	\$44.25	IT 28G	<b>2478</b>	\$77.56
916	<b>1885</b>	\$50.13	IT 38G	<b>2480</b>	\$89.33
920	<b>1894</b>	\$45.86	IT 62G	<b>2482</b>	\$122.88
926	<b>2065</b>	\$58.75	<b>CLARK</b>	<b>[ CLRK ]</b>	
926E	<b>2067</b>	\$63.57	<u>Model</u>	<u>Code</u>	<u>Rate</u>
928G	<b>2070G</b>	\$76.21	35C	<b>2484</b>	\$46.78
930 41K serial	<b>2088</b>	\$56.16	45C	<b>2486</b>	\$54.68
930G	<b>2088G</b>	\$90.38	55C	<b>2488</b>	\$66.02
936	<b>2100</b>	\$71.29	75C	<b>2491</b>	\$86.24
936E	<b>2110</b>	\$77.72	125B	<b>2492</b>	\$110.96
936F	<b>2120</b>	\$80.75	275B	<b>2496</b>	\$192.69
938F	<b>2130</b>	\$82.48	275C	<b>2497</b>	\$210.63
938G	<b>2130G</b>	\$93.25			
950 90A serial	<b>2228</b>	\$60.16	<b>JOHN DEERE</b>	<b>[ DEER ]</b>	
950 31K & 81J serial	<b>2270</b>	\$72.47	<u>Model</u>	<u>Code</u>	<u>Rate</u>
950B	<b>2272</b>	\$89.18	JD-210C	<b>2485</b>	\$29.64
950E	<b>2300</b>	\$94.90	JD-210C w/ backhoe	<b>2490</b>	\$29.70
950F	<b>2301</b>	\$99.91	JD-210LE	<b>2495</b>	\$38.96
950F Series II	<b>2303</b>	\$103.46	JD-310A w/ backhoe	<b>2504</b>	\$31.14
950G	<b>2310</b>	\$111.21	JD-310B w/ backhoe	<b>2506</b>	\$31.81
950H	<b>2310H</b>	\$129.07	JD-310C w/ backhoe	<b>2507</b>	\$35.02
950M	<b>2310M</b>	\$151.93	JD-310D w/ backhoe	<b>2507D</b>	\$39.46
962G	<b>2320G</b>	\$121.65	JD-310E w/ backhoe	<b>2507E</b>	\$40.40
966C	<b>2340</b>	\$106.04	JD-310SE w/ backhoe	<b>2507F</b>	\$45.23
966D	<b>2350</b>	\$117.03	310G	<b>2507G</b>	\$41.45
966E	<b>2360</b>	\$129.25	JD-315SE w/ backhoe	<b>2507H</b>	\$45.84
966F	<b>2361</b>	\$132.07	JD-410 w/ backhoe	<b>2508</b>	\$34.05
966G	<b>2362</b>	\$148.48	JD-410B w/ backhoe	<b>2508B</b>	\$34.73
966H	<b>2362H</b>	\$172.95	JD-410C w/ backhoe	<b>2508C</b>	\$40.76
966K	<b>2362K</b>	\$177.05	JD-410D w/ backhoe	<b>2508D</b>	\$48.54
970F	<b>2370</b>	\$155.21	JD-410E w/ backhoe	<b>2508E</b>	\$50.96
972G	<b>2372G</b>	\$165.56	410G	<b>2508G</b>	\$52.08
972M	<b>2372M</b>	\$195.52	410J 4WD	<b>2508J</b>	\$60.16
980B	<b>2376</b>	\$134.64	410K	<b>2508K</b>	\$64.33
980C	<b>2378</b>	\$164.69	JD-444	<b>2510</b>	\$45.27
980F	<b>2381</b>	\$169.75	JD-444C	<b>2515</b>	\$47.20
980G	<b>2382</b>	\$187.13	JD-444D	<b>2520</b>	\$48.61
980H	<b>2382H</b>	\$204.67	JD-444E	<b>2521</b>	\$52.79
988 87A6868 serial	<b>2398</b>	\$164.58	JD-500C w/ backhoe	<b>2592</b>	\$44.21
988B 50W serial	<b>2436</b>	\$236.23	JD-510 w/ backhoe	<b>2620</b>	\$40.92
992B 25K serial	<b>2460</b>	\$293.65	JD-510B w/ backhoe	<b>2625</b>	\$39.52
992C	<b>2470</b>	\$451.50	JD-510C w/ backhoe	<b>2630</b>	\$46.57



JD-510D w/ backhoe	<b>2630D</b>	\$55.17	FR 35	<b>3052</b>	\$208.70
JD-544B	<b>2660B</b>	\$56.11	<b>FORD</b>	[ <b>FORD</b> ]	
JD-544C	<b>2660C</b>	\$57.67	<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD-544D	<b>2660D</b>	\$56.61	545C	<b>3054</b>	\$31.97
JD-544E	<b>2660E</b>	\$62.62	650 w/ backhoe	<b>3056</b>	\$35.29
JD-544G	<b>2660G</b>	\$69.08	655A w/ backhoe	<b>3056F</b>	\$39.50
544J	<b>2660J</b>	\$90.45	655C w/ backhoe	<b>3056G</b>	\$43.37
544K	<b>2660K</b>	\$100.99	750 w/ backhoe	<b>3057</b>	\$46.19
JD-610B w/ backhoe	<b>2690</b>	\$45.19	755 w/ backhoe	<b>3061</b>	\$49.22
JD-610C w/ backhoe	<b>2691</b>	\$51.45	755B w/ backhoe	<b>3063</b>	\$55.99
JD-624E	<b>2700</b>	\$75.01	755A w/ backhoe	<b>3065</b>	\$54.66
JD-624G	<b>2700G</b>	\$84.98	A-62	<b>3114</b>	\$48.11
JD-624H	<b>2700H</b>	\$93.05	A-64	<b>3116</b>	\$58.39
JD-644B	<b>2710</b>	\$77.57	A-66	<b>3118</b>	\$76.10
JD-644C	<b>2715</b>	\$80.40	<b>FURUKAWA</b>	[ <b>FURU</b> ]	
JD-644D	<b>2717</b>	\$83.02	<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD-644E	<b>2719</b>	\$89.85	FL 320A	<b>3120M</b>	\$107.56
JD-644G	<b>2719B</b>	\$102.21	FL 330	<b>3120S</b>	\$117.33
JD-644H	<b>2719H</b>	\$109.57	<b>HOUGH</b>	[ <b>HOUG</b> ]	
644J	<b>2719J</b>	\$121.73	<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD-710B w/ backhoe	<b>2720</b>	\$57.77	H65C	<b>3578</b>	\$74.76
JD-710C w/ backhoe	<b>2721</b>	\$64.19	H-90E	<b>3884</b>	\$129.46
JD-710D w/ backhoe	<b>2722</b>	\$69.95	H-100C	<b>3954</b>	\$152.19
JD-710D 4WD w/ backhoe	<b>2722D</b>	\$71.83	<b>INTERNATIONAL</b>	[ <b>INTL</b> ]	
710G	<b>2722G</b>	\$74.29	<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD-744H	<b>2723</b>	\$149.15	260A	<b>2260</b>	\$34.17
744J	<b>2723J</b>	\$176.20	260A w/ backhoe	<b>2270</b>	\$35.78
JD-844	<b>2725</b>	\$143.56	270A w/ backhoe	<b>2280</b>	\$39.42
<b>DRESSER</b>	[ <b>DRES</b> ]		280A w/ backhoe	<b>2285</b>	\$48.45
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<b>J C B</b>	[ <b>J C B</b> ]	
510B	<b>2310</b>	\$44.08	<u>Model</u>	<u>Code</u>	<u>Rate</u>
510C	<b>2310C</b>	\$58.89	214S w/ backhoe	<b>4430</b>	\$47.36
515B	<b>3517</b>	\$57.24	215S w/ backhoe	<b>4435</b>	\$52.04
515C	<b>3517C</b>	\$69.67	217S w/ backhoe	<b>4440</b>	\$55.23
520B	<b>3519</b>	\$66.20	3C 1550 2WD w/ hoe	<b>4448</b>	\$33.81
520C	<b>3519C</b>	\$83.04	3D 1700 4WD w/ hoe	<b>4450</b>	\$45.17
530	<b>3520</b>	\$92.79	1400B w/ backhoe	<b>4455</b>	\$38.30
530C	<b>3520C</b>	\$101.22	1550B w/ backhoe	<b>4457</b>	\$43.85
540	<b>3530</b>	\$127.69	1600B w/ backhoe	<b>4458</b>	\$50.49
550	<b>3540</b>	\$127.73	1700B w/ backhoe	<b>4459</b>	\$51.51
<b>FIAT-ALLIS</b>	[ <b>F-A</b> ]		<b>KAWASAKI</b>	[ <b>KAWA</b> ]	
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<u>Model</u>	<u>Code</u>	<u>Rate</u>
545B	<b>3042</b>	\$54.06	60Z IV	<b>4300</b>	\$65.06
745C	<b>3046</b>	\$106.08	65Z IV	<b>4310</b>	\$72.67
FR 10	<b>3049H</b>	\$57.15	KSS 80Z II	<b>4330</b>	\$93.32
FR 10B	<b>3049I</b>	\$62.20	80Z III	<b>4335</b>	\$108.55
FR 20	<b>3050</b>	\$120.09	80Z IV	<b>4340</b>	\$110.54
FR 30	<b>3051</b>	\$157.00			
FR 20B	<b>3051B</b>	\$133.66			

85Z IV	<b>4345</b>	\$138.75
90Z III	<b>4350</b>	\$153.60
90Z IV	<b>4355</b>	\$157.55
95Z IV-2	<b>4360</b>	\$202.29

**KOMATSU [ KOMA ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
W 120-3	<b>4520</b>	\$109.04
W 180-1	<b>4525</b>	\$154.56
WA 200-1	<b>4536</b>	\$61.64
WA 250-1	<b>4537</b>	\$84.39
WA 300-1	<b>4538</b>	\$80.44
WA 320-1	<b>4539</b>	\$98.79
WA 350-1	<b>4540</b>	\$94.99
WA 380-1	<b>4541</b>	\$117.70
WA 380-3	<b>4541C</b>	\$117.74
WA 400-1	<b>4542</b>	\$113.29
WA 420-3	<b>4543C</b>	\$135.36
WA 450-1	<b>4544</b>	\$140.82
WA 450-2	<b>4544B</b>	\$158.57
WA 450-3	<b>4544C</b>	\$161.07
WA 470-1	<b>4545</b>	\$154.71
WA 500-1	<b>4546</b>	\$187.01
WA 600-1	<b>4550</b>	\$275.29
WB 140-2 4WD	<b>4700</b>	\$49.83
WB 150-2 4WD	<b>4710</b>	\$57.44

**MASSEY FERGUSON [ M-F ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
MF 44C	<b>5143</b>	\$58.25
MF 50H Series S	<b>5150</b>	\$34.51
MF 50H Series S, 4WD	<b>5152</b>	\$35.18
MF 50HX Series S	<b>5154</b>	\$37.22
MF 50HX Series S, 4WD	<b>5156</b>	\$38.06
MF 55C	<b>5170</b>	\$74.78
MF 60 w/ backhoe	<b>5171</b>	\$36.52
MF 60H Series S w/ hoe	<b>5172</b>	\$39.40
MF 66C	<b>5174</b>	\$95.55
MF 80 w/ backhoe	<b>5182</b>	\$52.16
MF 88	<b>5184</b>	\$151.71
640	<b>6000</b>	\$34.70
650	<b>6010</b>	\$37.18

**NEW HOLLAND [ NHND ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
545D	<b>0100</b>	\$33.27
575E w/ backhoe	<b>0110</b>	\$46.88
655D w/ backhoe	<b>0120</b>	\$42.16
655E w/ backhoe	<b>0130</b>	\$50.48
675D 4WD w/ backhoe	<b>0140</b>	\$48.69
675E 4WD w/ backhoe	<b>0150</b>	\$57.73

<b>TEREX</b>	<b>[ TERX ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
70C	<b>7938</b>	\$136.12
72-61	<b>8036</b>	\$167.12
72-71B	<b>8055</b>	\$218.07
72-81	<b>8080</b>	\$258.02

<b>VOLVO-MICHIGAN-EUCLID</b>	<b>[ VME ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
175B	<b>6186</b>	\$137.36
175C	<b>6186C</b>	\$157.67
275B	<b>6330</b>	\$175.02
275C	<b>6330C</b>	\$210.63
L-70C	<b>9570C</b>	\$71.01
L-90	<b>9575</b>	\$85.14
L-120	<b>9595</b>	\$110.50
L-120C	<b>9595C</b>	\$114.48
L-150C	<b>9598C</b>	\$142.59
L-160	<b>9600</b>	\$148.56
L-180C	<b>9602C</b>	\$160.39
L-190	<b>9605</b>	\$172.73
L-250G	<b>9606G</b>	\$261.94

<b>LEADS, PILE DRIVING</b>	<b>[ LEADS ]</b>
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**DELAY FACTOR = 0.47      OVERTIME FACTOR = 0.60**

<b>FIXED</b>	<b>[ FIXD ]</b>		
Includes headblock, taper top, tip sled and connector, foot yoke, foot yoke sheave, intermediate flights, and all attachments and accessories. Rated in accordance with height of the lead measured in meters (linear feet)			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	16.8 (55) (w/o spotter)	<b>0100</b>	\$20.47
16.8 (55)	32.0 (105) (w/o spotter)	<b>0200</b>	\$26.09
over	32.0 (105) (w/o spotter)	<b>0300</b>	\$32.68
0	16.8 (55) (w/ spotter)	<b>1100</b>	\$34.62
16.8 (55)	32.0 (105) (w/ spotter)	<b>1200</b>	\$41.31
over	32.0 (105) (w/ spotter)	<b>1300</b>	\$48.96

<b>SWINGING</b>	<b>[ SWNG ]</b>		
Includes headblock, taper top, tip sled and connector, foot yoke, foot yoke sheave, intermediate flights, and all attachments and accessories. Rated in accordance with the height of the lead measured in meters (linear feet).			
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	16.8 (55) (w/o spotter)	<b>0400</b>	\$13.57
16.8 (55)	32.0 (105) (w/o spotter)	<b>0500</b>	\$18.89
over	32.0 (105) (w/o spotter)	<b>0600</b>	\$25.48
0	16.8 (55) (w/ spotter)	<b>1400</b>	\$27.72
16.8 (55)	32.0 (105) (w/ spotter)	<b>1500</b>	\$34.10
over	32.0 (105) (w/ spotter)	<b>1600</b>	\$41.76

**NON-OPERATED EQUIPMENT (DAILY [ NONOP ] RATES)**

**DELAY FACTOR = 0.56                      OVERTIME FACTOR = 1.00**

Note various units for different items. The following allowance is entered on the extra work bill by using the (unit listed x number of days) in the hours worked column. The following list is limited to items with long estimated lives. Additional traffic related items such as cones and barricades, are still listed under TRAFIC in this publication. Other non-operated items with short estimated lives should be treated as materials and should not be "rented". Non rented items are 1) intended to be job specific (amortized over the life of the project) and 2) have an estimated life measured by number of uses rather than a length of time.

**MISCELLANEOUS                      [ MISC ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Casing, 450 mm dia, per 0.3 m (Casing, 18" dia, per lf)	<b>0120</b>	\$0.04
Casing, 650 mm dia, per 0.3 m (Casing, 26" dia, per lf)	<b>0130</b>	\$0.06
Casing, 900 mm dia, per 0.3 m (Casing, 36" dia, per lf)	<b>0140</b>	\$0.09
Casing, 1800 mm dia, per 0.3 m (Casing, 72" dia, per lf)	<b>0150</b>	\$0.21
Casing, 2400 mm dia, per 0.3 m (Casing, 96" dia, per lf)	<b>0160</b>	\$0.26
Casing, 2700 mm dia, per 0.3 m (Casing, 108" dia, per lf)	<b>0170</b>	\$0.29
Casing, 3000 mm dia, per 0.3 m (Casing, 120" dia, per lf)	<b>0180</b>	\$0.39
Pile, all depths "H" pile, per 45.0 kg (Pile, all depths "H" pile, per hundred-weight)	<b>0190</b>	\$0.04
Pipe, 250-300 mm dia, per 0.3 m (Pipe, 10-12" dia, per lf)	<b>0200</b>	\$0.02
Plate, 22 mm thick, per 9.3 sm (Plate, 7/8" thick, per 100 sf)	<b>0210</b>	\$1.24
Plate, 25 mm thick, per 9.3 sm (Plate, 1" thick, per 100 sf)	<b>0220</b>	\$1.42
Plate, 38 mm thick, per 9.3 sm (Plate, 1.5" thick, per 100 sf)	<b>0230</b>	\$2.12

**SCAFFOLDING, SHORING,                      [ SSWF ]**

**FALSEWORK**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Metal form, 1.8 m x3.0 m, per 14.6 m (Metal form, 6x10 box culvert, per 48 lf)	<b>0310</b>	\$43.23
Metal form, 2.4 m x3.7 m, per 15.2 m (Metal form, 8x12 box culvert, per 50 lf)	<b>0320</b>	\$47.91
Metal form, 2.1 m x4.3 m, per 15.2 m (Metal form, 7x14 box culvert, per 50 lf)	<b>0330</b>	\$52.65
Metal form, type 25 barrier, per 3.0 m (Metal form, type 25 barrier, per 10 lf)	<b>0340</b>	\$2.63
Metal form, type 26 barrier, per 3.0 m (Metal form, type 26 barrier, per 10 lf)	<b>0350</b>	\$2.78
Metal form, type 27 barrier, per 3.0 m (Metal form, type 27 barrier, per 10 lf)	<b>0360</b>	\$2.40
Metal form, type 50 barrier, per 3.0 m (Metal form, type 50 barrier, per 10 lf)	<b>0370</b>	\$2.59
Metal form, 1.8 m x 3.7 m girder panel, per 0.1 sm ( 6x12 girder panel, per sf)	<b>0380</b>	\$0.16

Metal form, all heights paving, per 3.0 m (Metal form, all heights paving, per 10 lf)	<b>0390</b>	\$0.04
Scaffolding, 1.5 m section, per section (Scaffolding, 5' section, per section)	<b>0410</b>	\$0.54
Scaffolding, 3.0 m section, per section (Scaffolding, 10' section, per section)	<b>0420</b>	\$1.20
Scaffolding, 4.6 m section, per section (Scaffolding, 15' section, per section)	<b>0430</b>	\$1.59
Scaffolding, bottom/top section, per 1.5 m section (per 5 ft section)	<b>0440</b>	\$0.75
Scaffolding, 2.1 m high, rolling (Scaffolding, 7' high, rolling)	<b>0450</b>	\$1.13
Scaffolding, spider staging, plus air compressor	<b>0460</b>	\$24.06
Shoring, 1.1 m deep x 2235 mm wide, per section (Shoring, 3.5' deep x 88" wide trench, per section)	<b>0510</b>	\$1.24
Shoring, 1.2 m deep x 3.7 m wide box, per 7.3 m (Shoring, 4' deepx12' wide trench box, per 24')	<b>0515</b>	\$11.38
Shoring, 1.5 m deep x 2235 mm wide, per section (Shoring, 5' deep x 88" wide trench, per section)	<b>0520</b>	\$1.30
Shoring, 2.1 m deep x 1397 mm wide, per section (Shoring, 7' deep x 55" wide trench, per section)	<b>0530</b>	\$1.15
Shoring, 2.1 m deep x 2235 mm wide, per section (Shoring, 7' deepx88" wide trench, per section)	<b>0540</b>	\$1.38
Shoring, 2.4 m deep x 4.6 m wide, per 3.0 m (Shoring, 8' deepx15' wide trench box, per 10')	<b>0550</b>	\$9.39
Shoring, 2.4 m deep x 2.4 m max width, per 7.3 m(8' deep x 8' max width trench box, per 24' )	<b>0560</b>	\$18.51
Shoring, 3.0 m deep x 2.4 m max box, per 4.9 m (Shoring, 10' deepx8' max trench box, per 16')	<b>0570</b>	\$16.62
Shoring, 3.0 m deep x 2.4 m max box, per 7.3 m (Shoring, 10' deepx8' max trench box, per 24')	<b>0580</b>	\$23.12
Wood, 50 mm x255 mm, per 30.5 m (Wood, 2"x10", per 100 lf)	<b>0605</b>	\$0.16
Wood, 50 mm x305 mm, per 30.5 m (Wood, 2"x12", per 100 lf)	<b>0610</b>	\$0.20
Wood, 100mm x100mm, per 30.5 m (Wood, 4"x4", per 100 lf)	<b>0615</b>	\$0.13
Wood, 100 mm x150 mm, per 30.5 m (Wood, 4"x6", per 100 lf)	<b>0620</b>	\$0.19
Wood, 100 mm x205 mm, per 30.5 m (Wood, 4"x8", per 100 lf)	<b>0625</b>	\$0.27
Wood, 100 mm x305 mm, per 30.5 m (Wood, 4"x12", per 100 lf)	<b>0630</b>	\$0.41
Wood, 150 mm x305 mm, per 30.5 m (Wood, 6"x12", per 100 lf)	<b>0635</b>	\$0.68
Wood, 150 mm x455 mm, per 30.5 m (Wood, 6"x18", per 100 lf)	<b>0640</b>	\$1.09
Wood, 205 mm x405 mm, per 30.5 m (Wood, 8"x16", per 100 lf)	<b>0645</b>	\$1.34
Wood, 305 mm x455 mm, per 30.5 m (Wood, 8"x18", per 100 lf)	<b>0650</b>	\$1.51

Wood, 305 mm x305 mm, per 30.5 m (Wood, 12"x12", per 100 lf)	<b>0655</b>	\$1.31
Wood form, type 27 barrier, per 2.4 m (Wood form, type 27 barrier, per 8 lf)	<b>0660</b>	\$0.28
Wide flange beam, all depths, per 45 kg (Wide flange beam, all depths, per hundred wt.)	<b>0670</b>	\$0.04

<b>TANK</b>	<b>[ TANK ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
Tank, metal, 0-2270 liters (0-600 gallons)	<b>0710</b>	\$0.74
Tank, metal, 2270-4540 liters (600-1200 gal)	<b>0720</b>	\$1.00
Tank, metal, 4540-9840 liters (1200-2600 gal)	<b>0730</b>	\$2.49
Tank, metal, 22 710 liters (6000 gallons)	<b>0740</b>	\$5.01
Tank, metal, 28 390 liters (7500 gallons)	<b>0750</b>	\$6.29
Tank, metal, 30 280 liters ( 8000 gallons)	<b>0760</b>	\$6.66
Tank, metal, 37 850 liters (10000 gallons)	<b>0770</b>	\$7.39

<b>TRAFFIC SAFETY</b>	<b>[ TRAF ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
Crash cushion barrel, filled, each	<b>0810</b>	\$1.21
K-rail, temporary concrete barrier, per 6.1 m (20 lf)	<b>0820</b>	\$0.48

<b>PAVEMENT GRINDERS, DIAMOND BLADES</b>	<b>[ PGDIA ]</b>
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**DELAY FACTOR = 0.09      OVERTIME FACTOR = 0.92**  
Includes water (but not water truck or trailer), coolant, cutting compounds and all attachments and accessories. Replacement blades are included in the rates listed below.

<b>CONCUT</b>	<b>[ CCUT ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
BC-38 (136 blades)	<b>0500</b>	\$174.43
BC-244 (187 blades)	<b>0505</b>	\$216.60
BC-1268 (48 blades)	<b>0510</b>	\$67.40

<b>CUSHION CUT</b>	<b>[ CUCT ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
HG-130A (127 blades)	<b>0600</b>	\$167.98
PC-390(171 blades)	<b>0610</b>	\$259.53

<b>PENHALL</b>	<b>[ PENH ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
G-38 (172 blades)	<b>0800</b>	\$329.49

<b>TARGET</b>	<b>[ TARG ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
CG-65 (41 blades)	<b>0900</b>	\$104.05
PRM-3804 (170 blades)	<b>0905</b>	\$362.37

<b>PAVEMENT GRINDERS, TUNGSTEN- CARBIDE BITS</b>	<b>[ PGT-C ]</b>
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**DELAY FACTOR = 0.12      OVERTIME FACTOR = 0.90**  
Includes water (but not water truck or trailer), coolant, cutting compounds and all attachments and accessories. Replacement bits or tips are included in the rates listed below.

<b>BARBER-GREENE</b>	<b>[ B-G ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
RX-20	<b>0100</b>	\$170.30
RX-30	<b>0105</b>	\$270.33
RX-40B	<b>0110</b>	\$312.30
RX-50	<b>0115</b>	\$367.37
RX-80B	<b>0120</b>	\$609.53

<b>CATERPILLAR</b>	<b>[ CAT ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
PM-800	<b>0200</b>	\$476.22
PR-105	<b>0201</b>	\$83.67
PR-275	<b>0205</b>	\$228.09
PR-450	<b>0210</b>	\$332.09
PR-750	<b>0215</b>	\$483.50
PR-750B	<b>0216</b>	\$507.69
PR-1000	<b>0220</b>	\$664.50

<b>C.M.I.</b>	<b>[ CMI ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
PR-275 RT	<b>0150</b>	\$216.57
PR-375	<b>0155</b>	\$275.53
PR-450	<b>0160</b>	\$315.56
PR-525	<b>0165</b>	\$338.74
PR-500FL	<b>0170</b>	\$371.87
PR-750	<b>0175</b>	\$466.27
PR-800-7	<b>0177</b>	\$510.03
PR-1000	<b>0180</b>	\$563.40

<b>INGERSOLL-RAND</b>	<b>[ I-R ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
MW-175	<b>0280</b>	\$94.99
MW-250	<b>0285</b>	\$102.95
MW-250C	<b>0286</b>	\$124.10
MT-6520 (crawler)	<b>0300</b>	\$306.81
MW-6520	<b>0305</b>	\$221.98
MW-6520HC	<b>0310</b>	\$283.42
MT-7000	<b>0315</b>	\$387.58

**WIRTGEN****[ WIRT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
300VC	<b>0380</b>	\$37.15
1000VC	<b>0390</b>	\$142.00
1900DC	<b>0395</b>	\$327.83
2000VC	<b>0400</b>	\$318.64
2100VC	<b>0402</b>	\$411.15
2200VC	<b>0405</b>	\$534.51
3500VC	<b>0410</b>	\$547.07
4200VC	<b>0420</b>	\$564.50

**PUMPS, WATER HOSE****[ PUMWA ]****DELAY FACTOR = 0.36 OVERTIME FACTOR = 0.68**

Centrifugal and diaphragm types (including submersibles). Rate includes power (gas, diesel or electric generator), 7.6 meters(25 lineal feet) of suction hose, 15.2 meters (50 lineal feet) of discharge hose, foot valve and all fittings, attachments and accessories.

**A PUMP****[ APMP ]**

Listed by Mfr's rated capacity measured in thousands of liters per minute (thousands of gallons per hour) at 3.0 meters (10 feet) of suction head.

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	0.6 (10)	<b>000-010</b>	\$3.30
0.6 (10)	1.3 (20)	<b>010-020</b>	\$5.01
1.3 (20)	1.9 (30)	<b>020-030</b>	\$6.05
1.9 (30)	3.2 (50)	<b>030-050</b>	\$21.50
3.2 (50)	7.9 (125)	<b>050-125</b>	\$25.73
7.9 (125)	15.8 (250)	<b>125-250</b>	\$30.56

**INLET-SUCTION HOSE****[ INHS ]**

Additional 7.6 meter (25 foot) lengths of suction hose shall be paid based on the inside hose diameter in millimeters (inches).

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	60 (2.5)	<b>0-2.5</b>	\$0.07
60 (2.5)	80 (3)	<b>2.5-3.5</b>	\$0.13
80 (3)	100 (4)	<b>3.5-4</b>	\$0.18
100 (4)	150 (6)	<b>4-6</b>	\$0.29

**OUTLET-DISCHARGE HOSE****[ OUHS ]**

Additional 15.2 meter (50 foot) lengths of discharge hose shall be paid based on the inside hose diameter in millimeters (inches).

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	60 (2.5)	<b>0-2.5</b>	\$0.05
60 (2.5)	90 (3.5)	<b>2.5-3.5</b>	\$0.10
90 (3.5)	100 (4)	<b>3.5-4</b>	\$0.15
100 (4)	150 (6)	<b>4-6</b>	\$0.20

**ROLLERS, TANDEM STEEL WHEELS****[ ROL-2 ]****DELAY FACTOR = 0.11****OVERTIME FACTOR = 0.91**

Includes all attachments and accessories.

**BOMAG****[ BMAG ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW-4AS	<b>1150</b>	\$22.82
BW-6AS	<b>1155</b>	\$24.38
BW-10AS	<b>1160</b>	\$41.43
BW-12AS	<b>1165</b>	\$42.18

**DRESSER****[ DRES ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
S3-5B	<b>2500</b>	\$29.80
S8-12A	<b>2520</b>	\$39.37
S10-14A	<b>2525</b>	\$40.11

**FERGUSON****[ FERG ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
3-5 ton	<b>4048</b>	\$18.16
3-5A	<b>4048A</b>	\$19.30
4-6A	<b>4142A</b>	\$19.44
5-8 ton	<b>4236</b>	\$43.17
5-8A	<b>4240</b>	\$33.35
8-12 ton	<b>4424</b>	\$34.47
8-12B	<b>4424B</b>	\$36.68
8-12A	<b>4430</b>	\$34.30
10-14 ton	<b>4450</b>	\$35.34
10-14A	<b>4455</b>	\$34.81
10-14B	<b>4455B</b>	\$37.22

**GALION****[ GALN ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
4-6 ton roll-o-static	<b>4650</b>	\$28.42
S4-6A, S4-6B	<b>4670</b>	\$30.88
5-8 ton roll-o-static	<b>4800</b>	\$33.11
S5-8A	<b>4820</b>	\$35.81
8-10.5 ton roll-o-static	<b>4988</b>	\$33.74
S8-10.5A	<b>5000</b>	\$36.48
8-12 ton roll-o-static	<b>5176</b>	\$34.04
S8-12A	<b>5190</b>	\$37.11

**HYSTER****[ HYST ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
C 330A 3-5 ton	<b>6520</b>	\$30.65
C 330B 3-5 ton (Hypac)	<b>6520B</b>	\$24.04
C 330A 4-6 ton	<b>6525</b>	\$31.95
C 330B 4-6 ton (Hypac)	<b>6526</b>	\$26.09
C 340A 5-8 ton	<b>6530</b>	\$37.22
C 340A 8-10 ton	<b>6540</b>	\$37.76
C 340B 5-8 ton	<b>6545</b>	\$33.58

C 340C 5-8 ton (Hypac)	<b>6546</b>	\$36.07
C 340B 8-10 ton	<b>6548</b>	\$34.27
C 340C 8-10 ton (Hypac)	<b>6549</b>	\$36.53
C 350B 8-12 ton	<b>6710</b>	\$38.62
C 350B 10-14 ton	<b>6740</b>	\$39.10
C 350C 8-12 ton	<b>6750</b>	\$35.50
C 350C 10-14 ton	<b>6755</b>	\$36.18
C 350D 8-12 ton	<b>6757</b>	\$36.92

**INGRAM [ INGM ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
4-6 ton FB	<b>6900</b>	\$23.31
5-6.5 ton FB	<b>6965</b>	\$24.80
8-12 ton HB	<b>7175</b>	\$34.46
10-14 ton HB	<b>7275</b>	\$35.05

**REXNORD [ RXND ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
3-5 ton	<b>8566</b>	\$22.15
4-6 ton	<b>8572</b>	\$22.71
5-8 ton	<b>8578</b>	\$50.02
7-10 ton	<b>8584</b>	\$50.21
8-12 ton	<b>8590</b>	\$50.55
10-14 ton	<b>8596</b>	\$50.88

**ROLLERS, RUBBER TIRE, SELF PROPELLED [ ROLRT ]**

**DELAY FACTOR = 0.16 OVERTIME FACTOR = 0.86**  
Includes all attachments and accessories.

**BUFFALO-BOMAG [ B-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW 20R	<b>2624</b>	\$37.21

**CATERPILLAR [ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
PS 110	<b>3460</b>	\$38.78
PS 130	<b>3465</b>	\$38.21
PS 180	<b>3470</b>	\$40.35
PS 200B	<b>3480</b>	\$50.85

**DYNAPAC [ DYPC ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
CP 15	<b>3500</b>	\$37.21
CP 21	<b>3510</b>	\$46.44
CP 27	<b>3520</b>	\$59.66

**GALION [ GALN ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
3500	<b>4310</b>	\$37.81
P 3000	<b>4315</b>	\$35.02
P 3500A	<b>4320</b>	\$38.41

**HYSTER [ HYST ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
C 530A	<b>5401</b>	\$37.99
C 550A	<b>5494</b>	\$42.53

**ROLLER-TAMPING, SEGMENTED, SHEEPSFOOT, SELF PROPELLED [ ROTAM ]**

**DELAY FACTOR = 0.10 OVERTIME FACTOR = 0.92**  
Includes all attachments and accessories.

**BUFFALO-BOMAG [ B-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
K 300	<b>1630</b>	\$74.56
K 301	<b>1635</b>	\$84.41
K 401	<b>1638</b>	\$100.76

**CATERPILLAR [ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
815	<b>2300</b>	\$88.08
815B	<b>2310</b>	\$131.25
815F	<b>2320</b>	\$143.28
825B	<b>2500</b>	\$147.56
825C	<b>2510</b>	\$194.42
835	<b>2700</b>	\$187.32

**RAYGO [ RAGO ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
30	<b>6490</b>	\$73.04
45	<b>6500</b>	\$110.82
RAM PAK 45	<b>6505</b>	\$119.10

**REXNORD [ RXND ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
3-30	<b>7120</b>	\$88.12
3-35 PACTOR	<b>7127</b>	\$108.90
3-45 PACTOR	<b>7130</b>	\$138.60
3-50, 3-50A PACTOR	<b>7140</b>	\$153.07
3-55, 3-55B PACTOR	<b>7150</b>	\$186.00

**ROLLERS-TAMPING, SEGMENTED, [ ROTAT ]  
SHEEPSFOOT, TOWED**

**DELAY FACTOR = 0.45                      OVERTIME FACTOR = 0.63**

Includes all attachments and accessories. Listed by drum dimensions in millimeters (feet) in either direction. The first digit is the diameter and the second digit is the length of each drum.

**SINGLE DRUM UNIT                      [ ADRU ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
1220 mm x1220 mm (4'X4') & under	<b>4X4</b>	\$1.92
over 1220 mm (4') - not over 1520 mm (5')	<b>4X5</b>	\$2.17
over 1520 mm (5')	<b>5</b>	\$3.93

**DOUBLE DRUM UNIT                      [ DDRU ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
1220 mm x1220 mm (4'X4') & under, each	<b>4X4</b>	\$4.63
over 1220 mm (4') - not over 1520 mm (5'), each	<b>4X5</b>	\$14.02
over 1520 mm (5'), each	<b>5</b>	\$25.85

**ROLLERS, VIBRATORY, SELF [ ROVIB ]  
PROPELLED**

**DELAY FACTOR = 0.17                      OVERTIME FACTOR = 0.85**

Includes all attachments and accessories.

**BUFFALO-BOMAG                      [ B-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW 210	<b>2060</b>	\$57.56
BW 210A	<b>2070</b>	\$59.51
BW 213	<b>2080</b>	\$58.64
BW 214	<b>2090</b>	\$60.34

**BOMAG                                      [ BMAG ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW 35	<b>0700</b>	\$6.30
BW 60, 60S	<b>0800</b>	\$9.58
BW 65, 65S	<b>0900</b>	\$6.69
BW 75, 75S	<b>1000</b>	\$10.71
BW 85T	<b>1200</b>	\$19.02
BW 90	<b>1300</b>	\$12.40
BW 100AD-3	<b>1325C</b>	\$31.63
BW 120AD	<b>1350</b>	\$32.02
BW 142PD	<b>1359</b>	\$37.57
BW 151AD	<b>1365</b>	\$54.13
BW 170AD, D	<b>1380</b>	\$46.99
BW 172AD, D	<b>1385</b>	\$47.45
BW 202AD	<b>1400</b>	\$74.03

**BROS                                        [ BROS ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
VM 255	<b>2023</b>	\$47.65
VM 268, VM 268H	<b>2024</b>	\$58.73
VM 278	<b>2025</b>	\$89.09

**CASE                                        [ CASE ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
50B	<b>2228</b>	\$6.83
W 251	<b>2400</b>	\$22.65
252, W 252	<b>2405</b>	\$29.16
752, W 752	<b>2450</b>	\$51.33
1102, W 1102	<b>2500</b>	\$67.22
1102D, W 1102D	<b>2505</b>	\$68.74
602D	<b>2510</b>	\$46.24
752B	<b>2520</b>	\$54.18

**CATERPILLAR                              [ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
CB 54	<b>7000</b>	\$92.50
CS 56	<b>7020</b>	\$101.66
CB 64	<b>7400</b>	\$107.47
CB 214	<b>8025</b>	\$28.26
CB 214B	<b>8026</b>	\$29.44
CB 224	<b>8030</b>	\$29.33
CB 224B	<b>8031</b>	\$31.25
CB 224C	<b>8031C</b>	\$32.02
CB 224E	<b>8031E</b>	\$34.72
CB 314	<b>8035</b>	\$30.97
CP 323 padfoot drum	<b>8040</b>	\$50.40
CS 323 smooth drum	<b>8042</b>	\$48.75
CB 414	<b>8045</b>	\$48.59
CS 431	<b>8050</b>	\$44.92
CS 431B	<b>8051</b>	\$61.17
CP 433 padfoot drum	<b>8055</b>	\$51.20
CP 433B padfoot drum	<b>8056</b>	\$67.30
CP 433E	<b>8056E</b>	\$82.13
CS 433 smooth drum	<b>8060</b>	\$51.23
CS 433B smooth drum	<b>8061</b>	\$64.44
CB 434	<b>8062</b>	\$56.27
CB 434D	<b>8062D</b>	\$69.01
CB 514	<b>8065</b>	\$61.60
CB 534	<b>8067</b>	\$78.93
CB 534C	<b>8067C</b>	\$77.59
CB 534D OR XW	<b>8067D</b>	\$98.54
CS 551	<b>8070</b>	\$85.45
CP 553 padfoot drum	<b>8075</b>	\$90.08
CS 553 smooth drum	<b>8080</b>	\$86.63
CP 563 padfoot drum	<b>8082</b>	\$92.89
CS 563 smooth drum	<b>8083</b>	\$89.15
CS 563C	<b>8083C</b>	\$94.71
CB 614	<b>8085</b>	\$96.10
CB 634	<b>8095</b>	\$95.02
CB 634C	<b>8095C</b>	\$96.44





SP 56DD	<b>4035</b>	\$68.46	<b>RAYGO</b>	<b>[ RAGO ]</b>	
SP 56DH	<b>4037</b>	\$92.29	<u>Model</u>	<u>Code</u>	<u>Rate</u>
SPF 56	<b>4040</b>	\$70.29	1-36 REBEL	<b>4805</b>	\$13.29
SPF 56B	<b>4050</b>	\$73.13	2-36 ROMPER	<b>4810</b>	\$29.03
SPF 56DH	<b>4080</b>	\$93.75	2-66 RANGER	<b>4820</b>	\$75.03
SPF 56DHB	<b>4090</b>	\$97.55	2-84 RANGER	<b>4830</b>	\$103.77
SP 60	<b>4100</b>	\$116.24	220A RASCAL	<b>4840</b>	\$43.87
SP 84	<b>4105</b>	\$96.96	320A RASCAL	<b>4876</b>	\$53.05
SP 60DD	<b>4110</b>	\$137.93	320S RASCAL	<b>4890</b>	\$50.38
SPF 60	<b>4120</b>	\$142.49	400A RASCAL	<b>5010</b>	\$52.67
SPF 60B	<b>4130</b>	\$150.28	404B RUSTLER	<b>5110</b>	\$57.91
SPF 60C	<b>4132</b>	\$130.96	410A RASCAL	<b>5150</b>	\$56.16
SPF 84	<b>4133</b>	\$98.63	600A RASCAL	<b>5220</b>	\$70.93
SPF 84B	<b>4134</b>	\$102.98	4000 RASCAL	<b>5235</b>	\$76.89
SD 40D	<b>4138</b>	\$50.73	4200 RASCAL	<b>5236</b>	\$82.73
SD 40F w/ blade	<b>4138FB</b>	\$52.21	4404 RUSTLER	<b>5236E</b>	\$30.71
SD 70	<b>4139</b>	\$58.03	<b>RAMMAX</b>	<b>[ RAMX ]</b>	
SD 100	<b>4140</b>	\$74.53	<u>Model</u>	<u>Code</u>	<u>Rate</u>
SD 100D	<b>4140D</b>	\$89.79	P 33/24	<b>4605</b>	\$17.68
SD 100F	<b>4140F</b>	\$90.33	P 33/24 w/ remote	<b>4606</b>	\$16.99
SD 115D	<b>4141D</b>	\$110.68	P 51	<b>4625</b>	\$67.48
SD 150D	<b>4143D</b>	\$119.32	S 51	<b>4630</b>	\$34.75
<b>KOEHRING-BOMAG</b>	<b>[ KOBO ]</b>		P 47	<b>5290</b>	\$34.00
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<b>SAKAI</b>	<b>[ SAKI ]</b>	
BW 120AC	<b>4168E</b>	\$31.56	<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW 120AD	<b>4169</b>	\$31.99	SV 70	<b>8025</b>	\$53.19
BW 121AD	<b>4193</b>	\$28.71	SV 70D	<b>8026</b>	\$55.48
BW 130AD	<b>4193E</b>	\$33.78	SV 91	<b>8050</b>	\$79.33
BW 140AD	<b>4194</b>	\$52.39	SV 91D	<b>8051</b>	\$81.26
BW 141AC	<b>4194B</b>	\$52.26	SV 200D	<b>8060</b>	\$40.53
BW 141AD	<b>4194E</b>	\$47.28	<b>TAMPO</b>	<b>[ TAMP ]</b>	
BW 142D	<b>4194H</b>	\$36.21	<u>Model</u>	<u>Code</u>	<u>Rate</u>
BW 172	<b>4212</b>	\$44.66	RP 16D (HD)	<b>5990</b>	\$50.78
BW 172D	<b>4212E</b>	\$47.19	RP 28D	<b>5995</b>	\$67.69
BW 213D	<b>4237</b>	\$74.39	RP 48D	<b>6110</b>	\$87.34
BW 214D	<b>4238</b>	\$91.48	RP 58D	<b>6115</b>	\$80.65
BW 215D	<b>4240</b>	\$89.90	RS 16 (HD)	<b>6170</b>	\$47.97
BW 217D	<b>4242</b>	\$113.16	RS16A (HD)	<b>6180</b>	\$49.88
BW 220D	<b>4250</b>	\$84.23	RS 16D (HD)	<b>6185</b>	\$50.37
<b>MIKASA</b>	<b>[ MIKA ]</b>		RS 28C	<b>6315</b>	\$63.67
<u>Model</u>	<u>Code</u>	<u>Rate</u>	RS 28D	<b>6320</b>	\$64.86
MDR 7DW	<b>4404</b>	\$7.83	RS 58D	<b>6327</b>	\$79.22
MDR 9G	<b>4405</b>	\$11.31	RS 156A	<b>6340</b>	\$53.29
MDR T38S	<b>4407</b>	\$7.97	RS 166A	<b>6350</b>	\$69.84
MRV 10GA	<b>4409</b>	\$12.80	RS 188A	<b>6370</b>	\$88.68
			RS 210	<b>6400</b>	\$69.12

**WACKER [ WACK ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
R 900	<b>7850</b>	\$19.49
R 1000	<b>7855</b>	\$31.35
W 55T	<b>7860</b>	\$10.06
W 74L, W 74T	<b>7880</b>	\$9.94
W 74	<b>7890</b>	\$9.61
W 75	<b>7900</b>	\$10.04
WDH 84	<b>7910</b>	\$14.04
WDH 86-110	<b>7912</b>	\$17.65
WHK 90, WHK 90L	<b>7915</b>	\$17.18

**SHOVELS & CRANES CRAWLER [ S&CCL ]****DELAY FACTOR = 0.19 OVERTIME FACTOR = 0.85**

Includes all attachments and accessories when used as a crane, clamshell, dragline or for pile driving (not including leads or driving equipment).

**LINK-BELT [ L-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
LS 78	<b>4702</b>	\$63.23
LS 78 pipeliner	<b>4724</b>	\$65.17
LS 98	<b>4826</b>	\$70.99
LS 98 pipeliner	<b>4852</b>	\$76.95
LS 98A	<b>4924</b>	\$72.04
LS 108B	<b>4980</b>	\$81.01
LS 108D	<b>4981</b>	\$106.44
LS 118	<b>4998</b>	\$116.10
LS 218H	<b>5010</b>	\$194.13
LS 318	<b>5012</b>	\$116.00
LS 338	<b>5020</b>	\$126.85
LS 518	<b>5124</b>	\$187.07

**MANITOWOC [ MTWC ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
222EX (WEST)	<b>5600</b>	\$233.97
2900 WC	<b>5764</b>	\$102.60
3000 W	<b>5812</b>	\$126.83
3900B (100 ton)	<b>6036</b>	\$168.77
3900 W VICON series 2	<b>6132</b>	\$226.21
4000 W VICON	<b>6180</b>	\$203.52
4100 W VICON series 1	<b>6196</b>	\$310.14
4100 W VICON series 2	<b>6198</b>	\$319.15
4600 VICON series 1	<b>6328</b>	\$467.79
4600 VICON series 3	<b>6332</b>	\$525.88

**P&H [ P&H ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
535	<b>7716</b>	\$101.58
550	<b>7748</b>	\$107.43
670 WLC	<b>7892</b>	\$126.19

**SHOVELS & CRANES, TRUCK MOUNTED [ S&CTK ]****DELAY FACTOR = 0.22 OVERTIME FACTOR = 0.82**

Includes truck/carrier. Includes all attachments and accessories when used as a crane, clamshell, dragline or for pile driving (leads and driving equipment not included).

**AMERICAN HOIST & DERRICK [ AMHD ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
5470	<b>1015</b>	\$105.68
5530	<b>1080</b>	\$185.16
7450	<b>1130</b>	\$100.54
7460	<b>1140</b>	\$144.48
7530	<b>1170</b>	\$161.85
8460	<b>1178</b>	\$206.29
8470	<b>1179</b>	\$330.09

**LINK-BELT [ L-B ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
HC 48A	<b>4332</b>	\$62.67
HC 108B	<b>4960</b>	\$74.84
HC 108C	<b>4970</b>	\$111.63
HC 138	<b>4992</b>	\$82.14
HC 138A	<b>4995</b>	\$177.95
HC 218	<b>5050</b>	\$107.05
HC 218A	<b>5051</b>	\$176.97
HC 228H	<b>5054</b>	\$220.14
HC 238A, 238B	<b>5065</b>	\$181.53

**P&H [ P&H ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
440 TC	<b>7240</b>	\$79.25
650A TC	<b>7720</b>	\$111.69
670 TC	<b>7790</b>	\$115.13
790 TC	<b>7880</b>	\$106.57
8115A TC	<b>7950</b>	\$146.38

**SANBLASTING EQUIPMENT [ SANBL ]****DELAY FACTOR = 0.52 OVERTIME FACTOR = 0.53**

Includes helmets, gauntlets, 30.5 meters(100 feet) of hose, pot, all control valves, nozzles and other attachments and accessories. Rated in accordance with the capacity of the pot measured in kilograms(pounds)of sand.

**REMOTE CONTROL ONLY [ REMC ]**

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
45 (100)	159 (350)	<b>010-035</b>	\$1.67
159 (350)	272 (600)	<b>035-060</b>	\$2.21
272 (600)	454 (1000)	<b>060-100</b>	\$2.24
454 (1000)	680 (1500)	<b>100-150</b>	\$2.81
680 (1500)	907 (2000)	<b>150-200</b>	\$3.13

**SAWS, CHAIN AND EARTH AUGER [ SAWCH ]  
ATTACHMENT**

**DELAY FACTOR = 0.12                      OVERTIME FACTOR = 0.87**

Hand held type, one or two man, gas, air or electric powered including all attachments and accessories. Blades, chains and tips shall be paid separately. Saws which cost less than \$500 are considered minor tools and are no longer listed. Rated in accordance with Mfr's kilowatts (horsepower).

**SAWS [ SAW ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
>3.7 (5)      30 amps @ 120V	<b>5-HP</b>	\$2.49

**SAWS, CONCRETE AND MASONRY [ SAWCO ]**

**DELAY FACTOR = 0.16                      OVERTIME FACTOR = 0.84**

Self powered gas, air or electric powered. Includes water ( but not water truck or trailer), coolant, cutting compounds and all attachments and accessories. Saw blades or abrasive discs shall be paid in accordance with the following sawkerf codes.

**SINGLE & MULTI-BLADE [ ABOP ]**

**OPERATION**

Listed in accordance with Mfr's rated kilowatts (horsepower).

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	7.5 (10)	<b>0-10</b>	\$3.06
7.5 (10)	14.9 (20)	<b>10-20</b>	\$6.82
14.9 (20)	24.6 (33)	<b>20-33</b>	\$13.54
24.6 (33)	33.6 (45)	<b>33-45</b>	\$15.61
33.6 (45)	48.5 (65)	<b>45-65</b>	\$18.99

**BLADE SAWKERF [ ABSK ]**

The following allowance is entered on the extra work bill by using the length x depth per blade.

<u>UNITS</u>	<u>Code</u>	<u>Rate</u>
Rate /blade/ 30.5 m (100 lin ft) / 25 mm (inch) depth	<b>100*/IN</b>	\$18.00
Rate/blade/ 0.3 m (lin ft) / 25 mm (inch) depth	<b>LF-INDE</b>	\$0.18

**SCRAPERS, SELF PROPELLED [ SCRSP ]**

**DELAY FACTOR = 0.14                      OVERTIME FACTOR = 0.88**

Includes all attachments and accessories.

**CATERPILLAR [ CAT ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
613	<b>1395</b>	\$61.69
613B	<b>1400</b>	\$69.56
613C	<b>1402</b>	\$87.42
615	<b>1415</b>	\$120.36
615C	<b>1416</b>	\$131.70
621B cushion hitch	<b>1680</b>	\$152.76
623B	<b>1700</b>	\$157.82
623E	<b>1702</b>	\$187.75
623F	<b>1703</b>	\$197.09
627B push pull	<b>1770</b>	\$202.04

627E non push-pull	<b>1772</b>	\$216.57
627E push-pull	<b>1773</b>	\$220.98
631C 67M5012 serial	<b>2170</b>	\$173.66
631D	<b>2180</b>	\$216.42
631E	<b>2185</b>	\$238.47
633C non cushion hitch	<b>2305</b>	\$169.38
633C cushion hitch	<b>2315</b>	\$169.14
633C 66M693 serial	<b>2320</b>	\$178.75
633D	<b>2330</b>	\$225.63
637 cushion, non-push-pull	<b>2375</b>	\$255.47
637 non-cushion, push-pull	<b>2410</b>	\$257.58
637D non push-pull	<b>2460</b>	\$313.80
637D push-pull	<b>2470</b>	\$317.47
639D	<b>2475</b>	\$326.53
637E	<b>2476</b>	\$344.62
637E push-pull	<b>2477</b>	\$349.65
641B non cushion hitch	<b>2620</b>	\$215.42
641B cushion hitch	<b>2655</b>	\$255.62
651B non cushion hitch	<b>2935</b>	\$260.82
651B cushion hitch	<b>2970</b>	\$263.10
651E	<b>2975</b>	\$327.88
657B non cushion, non p-p	<b>3360</b>	\$411.20
657B cushion, push-pull	<b>3370</b>	\$417.22
657E non push-pull	<b>3375</b>	\$489.91
657E push-pull	<b>3380</b>	\$507.52
660B	<b>3470</b>	\$241.15
666B	<b>3600</b>	\$382.29

**JOHN DEERE**

**[ DEER ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD 760A	<b>3845</b>	\$61.25
JD 762	<b>3860</b>	\$76.05
JD 762A	<b>3865</b>	\$79.97
JD 762B	<b>3866</b>	\$94.27
JD 860A	<b>3920</b>	\$90.23
JD 860B	<b>3930</b>	\$94.76
JD 862	<b>3940</b>	\$112.79
JD 862B	<b>3942</b>	\$138.76

**INTERNATIONAL**

**[ INTL ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
412B	<b>5631</b>	\$77.13
431B	<b>5637</b>	\$150.43
433B	<b>5643</b>	\$218.52

<b>TEREX</b>	<b>[ TERX ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
S 11EB	<b>8245</b>	\$61.55
S 23E 33TOT-H-93SH, elev	<b>8250</b>	\$145.60
S 24 49LOT-76SH serial	<b>8260</b>	\$185.74
S 24B 023-024 serial	<b>8270</b>	\$225.98
S 24C	<b>8275</b>	\$246.34

<b>WABCO</b>	<b>[ WAB ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
101F	<b>8570</b>	\$70.28
101G	<b>8575</b>	\$71.53
111A	<b>8640</b>	\$67.12
222G	<b>8700</b>	\$131.78
222H	<b>8704</b>	\$149.37

<b>TRACTORS, CRAWLER</b>	<b>[ TRACC ]</b>
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**DELAY FACTOR = 0.15**      **OVERTIME FACTOR = 0.87**  
 Includes all attachments and accessories such as dozer blade and power control blocks when needed, but does not include backhoe, winch or ripper units listed elsewhere in this schedule.

<b>CASE</b>	<b>[ CASE ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
350	<b>1820</b>	\$28.15
350B	<b>1825</b>	\$30.05
450	<b>1868</b>	\$24.44
450B	<b>1869</b>	\$27.95
450C	<b>1869E</b>	\$31.42
475	<b>1870</b>	\$40.68
550	<b>2000</b>	\$32.83
650	<b>2100</b>	\$38.74
850	<b>2128</b>	\$32.88
850B	<b>2130</b>	\$35.64
850C	<b>2135</b>	\$39.16
850D	<b>2140</b>	\$41.39
1150B	<b>2250</b>	\$49.38
1150C	<b>2255</b>	\$54.52
1150D	<b>2257</b>	\$56.11
1150E	<b>2258</b>	\$58.13

<b>CATERPILLAR</b>	<b>[ CAT ]</b>	
<u>Model</u>	<u>Code</u>	<u>Rate</u>
D-3	<b>2340</b>	\$28.55
D-3B	<b>2345</b>	\$31.68
D-3 LGP	<b>2350</b>	\$29.15
D-3B LGP	<b>2355</b>	\$32.84
D-3B SA	<b>2370</b>	\$35.28
D-3C	<b>2380</b>	\$33.68
D4C Series III	<b>2450</b>	\$43.27
D-4D	<b>2655</b>	\$34.44

D-4E direct drive	<b>2660</b>	\$36.29
D-4E power shift	<b>2665</b>	\$37.49
D-4H	<b>2670</b>	\$47.30
D-4H LGP	<b>2675</b>	\$47.31
D-4H Series II	<b>2680</b>	\$48.41
D-4E SA	<b>2772</b>	\$43.69
D-4E LGP power shift	<b>2780</b>	\$37.68
D-4E LGP direct drive	<b>2782</b>	\$37.68
D-4G XL	<b>2790XL</b>	\$44.06
D-5	<b>3194</b>	\$49.60
D-5B power shift	<b>3206</b>	\$52.60
D-5B SA	<b>3325</b>	\$57.16
D-5B LGP	<b>3345</b>	\$55.09
D-5C	<b>3346</b>	\$46.91
D-5H	<b>3347</b>	\$63.00
D-5H Series II	<b>3348</b>	\$66.67
D-5H LGP	<b>3350</b>	\$65.82
D-6C direct drive	<b>3645</b>	\$64.19
D-6C power shift	<b>3688</b>	\$64.79
D-6C LGP	<b>3710</b>	\$67.14
D-6D	<b>3720</b>	\$74.68
D-6D SA	<b>3725</b>	\$83.66
D-6D LGP	<b>3730</b>	\$75.14
D-6H	<b>3732</b>	\$84.79
D-6H Series II	<b>3733</b>	\$89.04
D-6H LGP	<b>3735</b>	\$89.03
D-6M LGP	<b>3745</b>	\$83.12
D-6N XL	<b>3755</b>	\$85.71
D-6R DS	<b>3800</b>	\$94.51
D-6R XL	<b>3815</b>	\$99.21
D-7G	<b>4180</b>	\$112.77
D-7G LGP	<b>4200</b>	\$108.93
D-7G SA	<b>4210</b>	\$118.89
D-7H	<b>4215</b>	\$116.31
D-7H Series II	<b>4216</b>	\$125.02
D-7H LGP	<b>4220</b>	\$122.33
D-8K	<b>4858</b>	\$148.65
D-8L	<b>4862</b>	\$179.29
D-8L SA	<b>4863</b>	\$192.97
D-8N	<b>4864</b>	\$161.35
D-8R	<b>4870</b>	\$177.81
D-8T	<b>4880</b>	\$223.16
D-9H	<b>5160</b>	\$197.63
D-9L	<b>5165</b>	\$237.49
D-9N	<b>5170</b>	\$203.81
D-9R	<b>5175</b>	\$239.31
D-10	<b>5220</b>	\$364.33
D-10N	<b>5225</b>	\$295.23
D-10R	<b>5227</b>	\$329.98
D-11N	<b>5230</b>	\$461.13

<b>JOHN DEERE</b>	<b>[ DEER ]</b>		FD 40	<b>6061E</b>	\$241.78
<u>Model</u>	<u>Code</u>	<u>Rate</u>	<b>KOMATSU</b>	<b>[ KOMA ]</b>	
JD 350C	<b>5360</b>	\$31.36	<u>Model</u>	<u>Code</u>	<u>Rate</u>
JD 350D	<b>5365</b>	\$35.10	D 21P-6	<b>7965</b>	\$34.31
JD 400G	<b>5405</b>	\$29.73	D 31A-16	<b>7970</b>	\$29.98
JD 450C	<b>5474</b>	\$31.71	D 31A-17	<b>7972</b>	\$33.01
JD 450D	<b>5476</b>	\$32.94	D 31E-17	<b>7976</b>	\$34.36
JD 450E	<b>5478</b>	\$33.39	D 31E-18	<b>7977</b>	\$36.59
JD 450G	<b>5479</b>	\$36.32	D 31P-16	<b>7980</b>	\$30.34
JD 450J LT/LGP	<b>5479J</b>	\$44.71	D 31P-17	<b>7981</b>	\$33.69
JD 550	<b>5480</b>	\$35.83	D 31P-17B	<b>7981E</b>	\$35.32
JD 550A	<b>5481</b>	\$38.83	D 58E-1	<b>8003</b>	\$66.86
JD 550B	<b>5483</b>	\$37.66	D 58P-1	<b>8003H</b>	\$74.27
JD 550G	<b>5484</b>	\$42.39	D 65E-6	<b>8070</b>	\$77.07
JD 650G	<b>5484A</b>	\$47.44	D 65E-7, E-8	<b>8072</b>	\$86.15
JD 650H LGP	<b>5484H</b>	\$51.10	D 65P-6	<b>8080</b>	\$79.62
JD 750	<b>5485</b>	\$56.12	D 65P-7 / D 65P-8	<b>8082</b>	\$89.39
JD 750B	<b>5486</b>	\$61.56	D 68P-1	<b>8083</b>	\$98.54
JD 750 LGP	<b>5487</b>	\$58.86	D 68E-1	<b>8085</b>	\$93.70
JD 750B LGP	<b>5488</b>	\$74.95	D 83E-1	<b>8087</b>	\$114.85
JD 850	<b>5490</b>	\$73.36	D 83P-1	<b>8088</b>	\$116.14
JD 850B	<b>5491</b>	\$84.57	D 85P-18	<b>8090</b>	\$123.88
JD 850 LGP	<b>5492</b>	\$77.79	D 85A-18	<b>8114</b>	\$107.67
JD 850B LGP	<b>5495</b>	\$91.26	D 85E-12	<b>8120</b>	\$94.24
<b>DRESSER</b>	<b>[ DRES ]</b>		D 85E-18	<b>8140</b>	\$117.33
<u>Model</u>	<u>Code</u>	<u>Rate</u>	D 135A-1	<b>8150</b>	\$150.77
TD 7E	<b>9100</b>	\$32.66	D 155A-1	<b>8160</b>	\$174.56
TD 7G	<b>9102</b>	\$36.34	D 155A-2	<b>8161</b>	\$174.13
TD 8E	<b>9105</b>	\$39.86	D 375A-1	<b>8175</b>	\$277.17
TD 8G	<b>9107</b>	\$42.94	D 375A-2	<b>8176</b>	\$308.96
TD 12	<b>9110</b>	\$57.41	D 455A-1	<b>8180</b>	\$340.12
TD 12 LGP	<b>9115</b>	\$65.58	D 475A-2	<b>8186</b>	\$484.52
TD 15C	<b>9120</b>	\$81.26	<b>TRACTORS, HEAVY [ TRACH ]</b>		
TD 15E	<b>9122</b>	\$98.73	<b>DELAY FACTOR = 0.15 OVERTIME FACTOR = 0.87</b>		
TD 15C LGP	<b>9125</b>	\$78.60	Includes all attachments and accessories such as dozer blade, power control units and push blocks, when needed, but does not include backhoe, winch or ripper units listed elsewhere in this schedule.		
TD 20E	<b>9130</b>	\$108.46	<b>CATERPILLAR</b>	<b>[ CAT ]</b>	
TD 20G	<b>9135</b>	\$132.36	<u>Model</u>	<u>Code</u>	<u>Rate</u>
TD 20G LGP	<b>9137</b>	\$139.47	814	<b>1400</b>	\$103.98
TD 25E	<b>9139</b>	\$154.21	814B	<b>1410</b>	\$153.73
TD 25G	<b>9140</b>	\$192.64	824B	<b>1720</b>	\$167.92
<b>FIAT-ALLIS</b>	<b>[ F-A ]</b>		824C	<b>1730</b>	\$206.38
<u>Model</u>	<u>Code</u>	<u>Rate</u>	834B	<b>2010</b>	\$311.89
10C	<b>6043</b>	\$63.67			
10C LGP	<b>6044</b>	\$64.50			
14C	<b>6048</b>	\$80.25			
FD 20	<b>6056</b>	\$115.08			
21C	<b>6060</b>	\$132.70			
FD 30	<b>6060E</b>	\$155.68			
31	<b>6061</b>	\$210.98			

**TRACTORS, RUBBER TIRE, [ TRACS ]  
INDUSTRIAL, FARM & SKID STEER**

**DELAY FACTOR = 0.12 OVERTIME FACTOR = 0.89**

**37.3 kW (50 HP) OR LESS [ <50 ]**

Including, but not limited to the following:  
Bobcat--440B, 443B, 450, 453, 542B, 543B, 553, 742B, 743B,  
753, 763, 773, 1840, 7753

Case-- 1818, 1825, 1835C, 1838  
Deere-- 3375, 4475, 5200, 5575, 6675, 7775  
Ford-- L250, L454, L455, L553, L555, L781  
Gehl-- SL3310, SL3410, SL3725, SL3825, SL4525, SL4625  
Hydra-Mac-- 1300, 1600, 1700D  
JCB-- 165Robot, 165Robot Ser II  
Massey-Ferguson-- MF30E  
Mahto-- LS70, LS75, L933  
Mustang-- 920, 920E, 921, 930A, 930AE, 940, 940E, 910, 911,  
2040  
New Holland-- 1220, 1320, 1620, 1920, 2120, 3415, 3930, L250,  
L255, L465, LX465, LX485, L565, LX565, LX665  
Ramrod-- 230B, 300B, 584B, 784B, 550, 750, 1350, 1550  
Thomas-- T-82, T-83, T-83S, T-103, T-132, T-133, T-133S  
Trak-- 1300HD, 1300C, 1300CX, 1500C

<u>Model</u>	<u>Code</u>	<u>Rate</u>
with loader or dozer	<b>A</b>	\$25.35
auger, w/ or w/o loader or dozer	<b>B</b>	\$25.79
backhoe, w/ or w/o loader or dozer	<b>C</b>	\$27.42

**OVER 37.3 kW (50 HP) [ >50 ]**

Including, but not limited to the following:  
Bobcat-- 853, 863, 873, 943, 953, 980  
Case-- 1845C  
Deere-- 5300, 5400, 6200, 6300, 6400, 8875  
Ford-- L783, L785, 250C, 260C  
Gehl-- SL5625, SL6625, SL6635  
Hydra-Mac-- 1850, 2650, 2650D  
JCB-- 185Robot  
Massey-Ferguson-- MF40E, MF50EX  
Mustang-- 960, 2060  
New Holland-- 4630, 5030, 5640, 6640, 7740, 7840, 8240, 8340,  
L865, LX865, LX885, 345D, 545D  
Ramrod-- 1750, 1950  
Thomas-- T-173HL, T-173HLS, T173HLS II, T-203HD, T-  
233HD  
Trak-- 1700HD, 1700C, 1700CX, 1700XHP

<u>Model</u>	<u>Code</u>	<u>Rate</u>
with loader or dozer	<b>A</b>	\$34.04
auger, w/ or w/o loader or dozer	<b>B</b>	\$34.61
backhoe, w/ or w/o loader or dozer	<b>C</b>	\$36.30

**TRAFFIC CONTROL & SAFETY DEVICES [ TRAF A ]  
(HOURLY RATES)**

**DELAY FACTOR = 0.36 OVERTIME FACTOR = 0.70**

**CHANGEABLE MESSAGE SIGN [ CMSN ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Generator	<b>GEN1</b>	\$14.29
Generator w/ cell remote	<b>GEN2</b>	\$15.63
Solar	<b>SOL1</b>	\$10.40
Solar w/ cell remote	<b>SOL2</b>	\$11.75

**FLASHING ARROW SIGN [ FLAS ]**

Including supplies, replacements and servicing.

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Roof mounted	<b>RM</b>	\$0.92
Trailer mounted	<b>TM</b>	\$3.18

**TRAFFIC CONTROL & SAFETY DEVICES [ TRAF C ]  
(DAILY RATES)**

**DELAY FACTOR = 0.72 OVERTIME FACTOR = 1.00**

Includes supplies and servicing. The following allowance is entered on the extra work by using days instead of hours worked. Crash cushion barrels and K-rail sections are now listed with Non-Operated items[NONOP].

**(1) BARRICADES [ 1BAR ]**

(A) 750 mm to 900 mm high & 600 mm to 900 mm wide (30 to 36 inches high & 24 to 36 inches wide)

(B) 1500 mm high by 1200 mm wide min. (60" high by 48" wide min.)

<u>Model</u>	<u>Code</u>	<u>Rate</u>
each with flasher	<b>A1</b>	\$0.51
each without flasher	<b>A2</b>	\$0.26
each	<b>B3</b>	\$1.16

**(2) TRAFFIC CONES [ 2TC ]**

Lost or destroyed are no longer paid on invoice.

<u>Model</u>	<u>Code</u>	<u>Rate</u>
450 mm (18") high, per 100	<b>A100</b>	\$9.26
700 mm (28") high, per 100	<b>B100</b>	\$16.07
700 mm (28") high w/ refl sleeve, per 100	<b>D100</b>	\$24.90
1,050 mm (42") high w/ refl sleeve, per 100	<b>E100</b>	\$41.41

**(3) PORTABLE DELINEATOR [ 3DEL ]**

Lost or destroyed are no longer paid on invoice.

<u>Model</u>	<u>Code</u>	<u>Rate</u>
per 100	<b>100</b>	\$26.36

**(4) ILLUMINATED SIGNS [ 4SIG ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
incl 900 mm x900 mm (3'x3') sign & batteries	<b>12V</b>	\$6.45

**(5) FLASHING BEACON [ 5BEA ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
portable 12 volt	<b>12V</b>	\$6.58

**(6) FLAG/SIGN STAND [ 6FSS ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
incl sign, stand & 3 flags	<b>EACH</b>	\$2.97

**(7) DELINEATOR DRUM [ 7DDR ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
Del. drum w/ base per 100	<b>100</b>	\$65.69

**TRAILERS, EQUIPMENT, LOW BED [ TRAIL ]**

**DELAY FACTOR = 0.43 OVERTIME FACTOR = 0.65**

Includes all attachments and accessories related to hauling. The rates cover drop deck type with and without folding/removable gooseneck or oscillating trunion. Pilot vehicles are extra. Listed in accordance with number of axles and tires per axle. Includes jeeps, booster axles, and dollies. All loads shall be hauled legally or within Caltrans Permit Policy.

**LOW BED A [ LB-A ]**

Model	Code	Rate
2 axle		
4 Tires per axle	<b>100</b>	\$15.29
8 Tires per axle	<b>200</b>	\$19.28

**LOW BED B [ LB-B ]**

Model	Code	Rate
3 axle		
4 Tires per axle	<b>300</b>	\$20.53
8 Tires per axle	<b>400</b>	\$23.80

**LOW BED C [ LB-C ]**

Model	Code	Rate
4 axle		
4 Tires per axle	<b>500</b>	\$32.93
8 Tires per axle	<b>600</b>	\$40.86

**LOW BED D [ LB-D ]**

Model	Code	Rate
6 axle		
8 Tires per axle	<b>700</b>	\$65.46

**TRAILERS, EQUIPMENT, TILT BED [ TRAIT ]**

**DELAY FACTOR = 0.43 OVERTIME FACTOR = 0.65**

Includes all attachments and accessories related to hauling. Pilot vehicles are extra. Listed in accordance with the Mfr's rated capacity in tonnes(tons).

**TILT BED 1 AXLE [ TB-1 ]**

OVER	TO	Code	Rate
0	1.8 (2)	<b>00-02</b>	\$0.81
1.8 (2)	3.6 (4)	<b>02-04</b>	\$0.87

**TILT BED 2 AXLES [ TB-2 ]**

OVER	TO	Code	Rate
3.6 (4)	5.4 (6)	<b>04-06</b>	\$1.44
7.3 (8)	9.1 (10)	<b>08-10</b>	\$4.48
9.1 (10)	10.9 (12)	<b>10-12</b>	\$5.16
10.9 (12)	12.7 (14)	<b>12-14</b>	\$5.81
12.7 (14)	14.5 (16)	<b>14-16</b>	\$6.45
14.5 (16)	16.3 (18)	<b>16-18</b>	\$6.24
16.3 (18)	18.1 (20)	<b>18-20</b>	\$6.02
18.1 (20)	20.0 (22)	<b>20-22</b>	\$6.90
20.0 (22)	22.7 (25)	<b>22-25</b>	\$6.71

**TRENCHING MACHINES [ TRENC ]**

**DELAY FACTOR = 0.12 OVERTIME FACTOR = 0.90**

Includes all attachments and accessories. When used, tungsten carbide tips shall be replaced by separate invoice.

**BOBCAT [ BCAT ]**

Model	Code	Rate
T 116	<b>2000</b>	\$12.07
T 135	<b>2010</b>	\$27.89
T 136	<b>2020</b>	\$28.21
T 208	<b>2030</b>	\$6.26
3022	<b>2040</b>	\$28.66

**CASE [ CASE ]**

Model	Code	Rate
TL 70	<b>9051</b>	\$5.08
TL 100	<b>9053</b>	\$7.32
TL 120	<b>9055</b>	\$8.83
TL 200	<b>9070</b>	\$9.00
16+4	<b>9120</b>	\$13.09
25+4	<b>9170</b>	\$18.13
25 + 4 XP	<b>9171</b>	\$22.98
30+4 standard	<b>9224</b>	\$25.66
DH 4	<b>9255</b>	\$34.43
DH 4B	<b>9256</b>	\$37.79
DH 5	<b>9257</b>	\$33.27
DH 5 QUAD	<b>9259</b>	\$34.24
DH 7	<b>9261</b>	\$39.34
360	<b>9263</b>	\$27.73
ROAD RUNNER 380	<b>9277</b>	\$37.44
TF 300	<b>9374</b>	\$17.37
TF 700	<b>9398</b>	\$23.21
TF 800	<b>9405</b>	\$30.17
TF 1000	<b>9460</b>	\$35.34
760	<b>9465</b>	\$36.64

**DITCH WITCH [ D-W ]**

Model	Code	Rate
R 30	<b>5390</b>	\$23.43
R 36D	<b>5400</b>	\$28.93
R 40	<b>5432</b>	\$30.45
R 65	<b>5556</b>	\$31.23
R 100	<b>5565</b>	\$76.60
V 30	<b>5618</b>	\$22.28
1410	<b>5620</b>	\$9.15
1420	<b>5625</b>	\$9.81
1500	<b>5630</b>	\$6.79
1620	<b>5635</b>	\$12.79
1810	<b>5640</b>	\$13.15
2020	<b>5645</b>	\$16.56

2200	5650	\$15.62
2300	5660	\$23.55
2310	5662	\$24.75
3210	5670	\$26.90
3210 Combo	5675	\$27.76
3500	5676	\$31.72
4010	5677	\$40.51
4010 Combo	5678	\$31.60
5010	5679	\$31.56
6510	5680	\$37.73
6510 Combo	5685	\$40.77

**MIDMARK [ MDMK ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
300 A	7945	\$23.24
321	7950	\$24.49
400 A	7955	\$29.74
440	7960	\$37.51

**VERMEER [ VERM ]**

<u>Model</u>	<u>Code</u>	<u>Rate</u>
CC-135	8350	\$83.11
M 220	8380	\$15.49
M 455 / M455A	8480	\$36.82
M 475	8570	\$39.02
M 475A	8571	\$44.09
M 485	8580	\$42.86
M 495	8585	\$69.11
T 300B, T 300A	8718	\$24.08
T 400C, T 400B, T 400A	8781	\$52.85
T 600D, C, B, A	8842	\$76.29
T 650	8843	\$128.83
T 800B, T 800A, T800	8870	\$122.38
T 800C	8871	\$133.47
T 850	8875	\$237.82
V 430	8950	\$27.52
V 430A	8951	\$30.95
V 434 / M 434	9000	\$26.53
V 440	9015	\$29.54
V 450	9017	\$35.03
V 454	9020	\$30.30
V 1550	9025	\$14.49

**TRUCK, TRUCK TRAILERS, EXCL. [ TRUCK ]  
DUMP TRUCKS & EQPT TRAIL**

**DELAY FACTOR = 0.12 OVERTIME FACTOR = 0.88**

Includes all attachments and accessories related to hauling, with and without trailers as needed. Includes water trucks, freight trucks and passenger vehicles, including 4wd option. Listed by Mfr's Gross Vehicle Weight in Kilograms(pounds). For tractor-trailer units, the gross vehicle weight of the cargo carrying unit or units will control. In the case of water trucks, the tank capacity expressed in kilograms (pounds) of water plus 20%, will determine the gross vehicle weight. For attachment allowance, see attachment class.

<b>TRUCKS</b>		<b>[ T&amp;TT ]</b>	
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
CARS , LIGHT TRUCKS			
31 75 (7000)	5443 (12000) No small pickups	00-06	\$25.14
5443 (12000)	9072 (20000)	06-12	\$28.46
9072 (20000)	12701(28000)	12-20	\$36.92
12701 (28000)	16330 (36000)	20-28	\$39.12
16330 (36000)	21773 (48000)	28-36	\$44.60
21773 (48000)	27216 (60000)	36-48	\$59.78
27216(60000) & Over		48-60	\$65.72
		60	\$73.97

**TRUCKS, OFF-HIGHWAY [ TRUOF ]**

**DELAY FACTOR = 0.22 OVERTIME FACTOR = 0.80**

Includes all attachments and accessories. Includes end dump, belly dump and earthmover types. Listed in accordance with Mfr's rated capacity in tonnes (tons). In the case of earthmover types, rated by Mfr's volumetric capacity, a factor of 1.4 tonnes per cubic meter (1-1/2 tons per cubic yard) of struck capacity shall be used.

<b>TRUCK OFF-HIGHWAY</b>		<b>[ TRU ]</b>	
<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
9.1 (10)	13.6 (15)	10-15	\$45.39
16.3 (18)	20.0 (22)	18-22	\$81.39
20.0 (22)	24.5 (27)	22-27	\$101.51
24.5 (27)	29.0 (32)	27-32	\$116.15
29.0 (32)	36.3 (40)	32-40	\$157.46
36.3 (40)	49.9 (55)	40-55	\$232.71
49.9 (55)	60.8 (67)	55-67	\$261.52



**WELDING EQUIPMENT**

[ WELD ]

DELAY FACTOR = 0.20

OVERTIME FACTOR = 0.83

**ARC WELDING MACHINES**

[ AWM ]

Diesel, gas or electric powered. Includes helmets, holders, cable and all attachments and accessories. Rate capacity in amps.

<u>OVER</u>	<u>TO</u>	<u>Code</u>	<u>Rate</u>
0	250	<b>0-250</b>	\$5.14
250	500	<b>250-500</b>	\$9.86
over	500	<b>500</b>	\$10.41

**GAS WELDING OUTFIT**

[ GWO ]

Includes regulator, 7.6 meters (25 feet) of hose, torch, goggles, lighter and attachments and accessories. Gas and rod shall be paid separately.

<u>Model</u>	<u>Code</u>	<u>Rate</u>
ALL	<b>ALL</b>	\$0.29

**TRUCKS, DUMP, ON-HIGHWAY**

[ TRUON ]

DELAY FACTOR = 0.18

OVERTIME FACTOR = 0.83

Includes all end dump, side dump and belly dump types; including all attachments and accessories.

**TRUCK ON-HIGHWAY**

[ TRUN ]

<u>Model</u>	<u>Code</u>	<u>Rate</u>
2 axles	<b>2AXL</b>	\$50.64
3 axles	<b>3AXL</b>	\$66.97
4 axles	<b>4AXL</b>	\$75.98
5 axles	<b>5AXL</b>	\$84.36



**RANGE OF HOURLY RATES:**

**Applicable to Campanile Way Emergency Storm Project  
for the City of San Diego**

**Effective April 12, 2021 thru December 31, 2021**

**ENGINEERING SERVICES**

**HOURLY RATE**

Project Directors	\$285
Project Managers	\$245
Project Engineers	\$185
Senior Technical Support	\$175
Technical Support	\$145
Administration	\$110

**Notes:** Rates are subject to adjustment due to promotions during the effective period of this schedule. A new rate schedule will become effective January 1, 2022 and on the 1st of January every year thereafter. Unless otherwise indicated in the cost proposal, hourly rates include most direct costs such as travel, equipment, computers, communications and reproduction (except large quantities such as construction documents for bidding purposes).

All subconsultant charges are subject to a 10% markup.

April 23, 2021

Mr. Chris Arnold  
Orion Construction  
2185 La Mirada Drive  
Vista, CA 92081

**Subject: Letter Proposal/Agreement to Provide Biological Consulting Services for the 5604 Campanile Way Emergency Storm Drain Repair Project**

Dear Mr. Arnold,

HELIX Environmental Planning, Inc. (HELIX) is submitting this letter proposal/ agreement (Agreement) to Orion Construction (Client) to provide biological consulting services for the 5604 Campanile Way Emergency Storm Drain Repair Project (project) located in the City of San Diego (City), San Diego County, California.

## SCOPE OF SERVICES

Task 1 Existing Conditions Assessment. HELIX will conduct a field assessment of the project area to map vegetation, assess the potential for jurisdictional resources to occur, and document existing conditions within the project study area. The proposed project study area includes the storm drain repair work area and a 50-foot buffer around the repair area. The existing conditions assessment will be completed prior to the start of construction, and the biologist and/or contractor will notify the City staff of any sensitive resources that were identified prior to the start of construction. Following completion of the field survey, HELIX will provide shapefiles, including the vegetation mapping information, to Client for incorporation into the project's construction drawings. Shapefiles shall follow City standards. A letter report will be submitted to the City Resident Engineer (RE), Project Manager (PM), and Engineering & Capital Projects (ECP) Biologist summarizing the field assessment observations.

Task 2 Biological Construction Monitoring. HELIX will provide biological construction monitoring during the emergency repairs of the project, which will include the following tasks to be carried out by HELIX:

- Conduct a single-day pre-construction nesting bird survey if removal of habitat in the proposed area of disturbance must occur during the raptor or general avian breeding season (January 15 – August 31 for raptors, February 1 – September 15 for

general avian species) within 10 calendar days prior to the start of construction activities. HELIX will submit a brief e-mail to the City RE, PM, ECP Biologist, and Client describing the survey methods and results, a description of the survey area, results of the survey, and additional field data collected during the survey. This task assumes that no active nests will be found during the survey. In the event that an active nest is found within a potential impact area, HELIX will notify the Client immediately and recommend additional actions via e-mail correspondence. This task does not include implementation of nesting bird avoidance measures in the event that an active nest is found. HELIX can provide these and other services in an augment to this Agreement.

- Help ensure that all construction activities and staging areas are restricted to the approved repair area.
- The biologist will be on-site to monitor construction activities to help ensure that construction does not encroach into biologically sensitive areas beyond the approved limits of disturbance. Specifically, the biologist will:
  - Attend a pre-construction meeting prior to the start of excavation activities,
  - Assist the contractor to delineate the boundaries of work area,
  - Monitor construction or staging activities occurring adjacent to sensitive areas observed during the existing conditions assessment,
  - Spot check monitor construction activities that do not occur adjacent to sensitive resources approximately twice weekly,
  - Verify that the area outside the established limits of disturbance remains free of trash, parking, or other construction-related activities.
  - Submit CSVr weekly via e-mail to the City RE, PM, ECP Biologist, and Client.

For cost estimate purposes, a six-week construction monitoring period has been assumed with a total of 15 site visits (120 hours of Biologist time) including attendance at one pre-construction meeting and biological construction monitoring. Monitoring will be conducted full time when construction or staging occurs near sensitive biological or aquatic resources, followed by twice weekly half days for spot checks for the remainder of repairs. If additional monitoring is required, additional authorization would be required in an augment to this Agreement.

Task 3 Post-Construction Biological Resources Letter Report. Following completion of emergency repair activities, HELIX will conduct a survey of the area to determine project impacts. Disturbance areas will be measured using a Global Positioning System (GPS) to map the final project impacts. Post-construction photographs will be taken to document final site

conditions. HELIX will prepare a draft biological resources letter report (one electronic pdf copy) within 30 days after the completion of the emergency construction project documenting impacts. The biological resources letter report will be consistent with the City of San Diego's Biology Survey Requirements and submitted directly to the Engineering and Capital Projects Department staff. This report will include a summary of work performed and impacts that resulted from work. HELIX will revise the draft post-construction biological resources letter report to address up to one round of minor comments from the City. If major revisions or more than one round of revisions are needed, additional authorization may be required. A final biological resources letter report (one electronic pdf copy) will be submitted within 10 business days upon receipt of Engineering and Capital Projects Department comments on the draft biological resources letter report, along with GPS shapefiles of impacts to vegetation communities and sensitive biological resources.

### ***Optional Tasks***

Task 4 Revegetation Plan. HELIX will prepare a revegetation plan for the project, consistent with the City of San Diego's Biology Guidelines and Landscape Standards and prepared in the form of D-sheets. The revegetation plan sheet will include notes for the maintenance and monitoring schedule, success criteria, protection of biological resources, seasonal restrictions, brush management zones, a detailed map of planting areas, and a plant legend. HELIX will revise the draft revegetation plan to address up to one round of minor comments from the City. If major revisions or more than one round of revisions are needed, additional authorization may be required. HELIX will send a final version of the revegetation plan, including GIS shapefiles, to the City following completion of the one round of revisions.

Task 5 Revegetation Monitoring and Reporting. HELIX will monitor site preparation and the installation of plant and seed material in the revegetation area. Installation monitoring will include attendance at one pre-construction meeting and monitoring of the site during the installation period. Specifically, HELIX will:

- Help ensure that installation personnel understand the project requirements and limitations;
- Inspect plant and seed material prior to installation;
- Conduct a survey for nesting raptors and nesting birds if site preparation/installation activities occur during the nesting season (January 15 – August 31) and if there are more than seven days between site activities and the start of revegetation work;
- Monitor the manner in which the plant and seed material is installed;
- Conduct one installation monitoring visit for approximately six hours, assuming one day for installation.
- Attend a site meeting with the City following installation (if required).

Following the completion of the installation, HELIX will prepare a brief installation memo to document the completed work and start of the 120-day Plant Establishment Period (PEP). The memo will include a summary of the site preparation and installation activities, including any changes during implementation. The memo will also include a figure depicting the revegetation area and representative photos of the work. HELIX will provide a copy of the installation memo to Client to review prior to sending to the City.

Following installation, a HELIX biologist will monitor (twice a month) maintenance activities conducted by the maintenance crews during the initial 120-Day PEP. HELIX will submit a monitoring memo to client following each site visit. Upon successful completion of the PEP, HELIX will prepare a brief letter to the Client confirming that the site has met the PEP criteria and that the 25-month monitoring period has begun. The 25-month monitoring period will begin following authorization by the City. HELIX will conduct a total of eight site inspections during the 25-month maintenance and monitoring period. HELIX will submit quarterly monitoring memos to the Client.

A summary letter report will be prepared at the end of the 25<sup>th</sup> month. The letter report will present the results of the maintenance and monitoring effort to date and provide recommendations that may be necessary to help ensure project success. The reports will include botanical observations (i.e., estimates of percent cover of native and non-native species) and a summary of whether the revegetation effort is meeting the required success standards. The reports also will recommend remedial measures that may be required. This task assumes two rounds of revisions based on comments from the City. A total of two meetings with the City are assumed as part of this task: one at the beginning of the 25-month monitoring period and one at the end.

HELIX will also coordinate and attend a sign-off walk with the City following the completion of the final monitoring report.

## **ASSUMPTIONS AND LIMITATIONS**

The following assumptions and limitations are a material component of this agreement.

- Client will provide HELIX with current available digital baseline data and project plans for producing all maps and graphics, which should be submitted in one of the following formats: .dxf, .dwg (AutoCAD), .dgn (Microstation), .shp (ArcView shapefiles), .gdb (ArcGIS geodatabase) or .kmz (Google Earth). In some cases, .pdf files will be acceptable.
- Costs associated with public meetings, biological surveys not specifically described above, cultural resources monitoring, landscape drawings, irrigation plans, identification of mitigation site(s), California Environmental Quality Act processing, technical studies and reports, and/or restoration implementation and maintenance (“additional work”) are not included within the scope of services required of HELIX under this Agreement.

## SCHEDULE

HELIX will work with Client in a timely and professional manner in accordance with the Terms and Conditions attached and incorporated herein by reference as Exhibit A. These Terms and Conditions are a material part of this Agreement.

## COST ESTIMATE AND PAYMENT PROCEDURES

HELIX submits this cost estimate not to exceed \$29,000 for Tasks 1-3 or \$59,500 if Client authorizes Optional Tasks 4 and 5. A breakdown of costs by tasks is provided in the table below. All work shall be invoiced on a time-and-materials basis pursuant to Exhibit B, Schedule of Fees. Payment terms are net 30 days pursuant to the Terms and Conditions referenced herein.

<u>Task</u>	<u>Task Name</u>	<u>Cost</u>
1	Existing Conditions Assessment	\$7,000
2	Construction Monitoring	16,000
3	Post-Construction Biological Letter Report	6,000
4	Revegetation Plan ( <i>Optional Task</i> )	11,000
5	Revegetation Monitoring and Reporting ( <i>Optional Task</i> )	<u>19,500</u>
<b>Subtotal without Optional Tasks</b>		<b>\$29,000</b>
<b>TOTAL with Optional Tasks</b>		<b>\$59,500</b>

## EXECUTION OF AGREEMENT

This quote is good for 30 days from the date of this letter. This Agreement will become a contract upon HELIX's receipt of this original, including any Exhibits, signed by an authorized representative of Client.

We look forward to working with you on this project. If you have any questions concerning this Agreement, please call Benjamin Rosenbaum or me at (619) 462-1515.

Sincerely,

Shelby Howard  
Vice President

Enclosures: Exhibit A, Terms and Conditions  
Exhibit B, Schedule of Fees

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I hereby authorize HELIX to begin work in accordance with this Agreement (including the Optional Tasks, unless specifically excluded by notation and initials by the tasks, above) and the attached Terms and Conditions and Schedule of Fees.

**ORION CONSTRUCTION**

A \_\_\_\_ corporation, OR a \_\_\_\_ limited liability company, OR a \_\_\_\_ general partnership or limited partnership (select one).

Signed by: \_\_\_\_\_ Printed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

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To expedite Agreement processing, please provide the following information for this contract:

<u>Project Manager</u>	<u>Accounts Payable</u>
Name: _____	Contact/Name: _____
Address (if different from p.1) _____ _____	Address (if different from p.1) _____ _____
Phone: _____	Phone: _____
Fax: _____	Fax: _____
Email: _____	Email: _____

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**5604 Campanile Way Emergency Storm Drain Repair**

Please mail or fax (619-462-0552) to Kanika McDougall, Controller.

If using your own contract format, please attach and return with this Agreement.



The following Terms and Conditions are made a part of the letter agreement/proposal (Agreement) between HELIX and Client and supersede any conflicting Terms and Conditions proposed by Client, unless HELIX agrees to such Terms and Conditions in writing.

**ARTICLE 1. SCOPE OF WORK AND STANDARD OF PERFORMANCE**

HELIX will perform the work outlined in the Agreement and any services approved by Client under Article 3 (the Services). HELIX will strive to perform the Services in a manner consistent with that level of care and skill ordinarily exercised by reputable members of HELIX's profession practicing at the time under similar conditions in the geographic area of Client's project. HELIX makes no other representation, expressed or implied, nor no other warranty or guarantee under this Agreement or in any report, opinion or document provided hereunder.

**ARTICLE 2. COMPENSATION**

Client agrees to pay HELIX compensation for the Services in accordance with the rates set forth in Exhibit B. HELIX shall invoice Client monthly or as otherwise agreed. Client agrees to pay HELIX within thirty (30) days of the date of invoice. If payment is not paid when due, then such sum shall bear interest at 1½ percent per month on the unpaid balance, not to exceed the maximum legal rate of interest.

**ARTICLE 3. CHANGES AND ADDITIONAL WORK**

Client may request or HELIX may recommend or request, verbally or in writing, a change in the scope in excess of or in addition to the Services ("additional work"). As soon as practical after such request or recommendation, HELIX shall forward to Client a proposal of the costs for such additional work and any adjustment to the payment schedule and time for performance. Client shall approve or disapprove the proposal, in writing. If approved, HELIX shall perform the extra work in accordance with the Terms and Conditions herein.

Notwithstanding the foregoing, however, if Client verbally approves the extra work and HELIX has performed the same, then Client agrees to pay HELIX the amount and pursuant to the payment schedule as set forth in its proposal.

**ARTICLE 4. LIMITATION OF LIABILITY**

Recognizing the relative risks and benefits of the project for which the Services are being performed, Client agrees to limit the liability of HELIX, its directors, officers, employees, agents and subcontractors for any and all injuries, claims, losses, expenses or damages (including incidental or consequential damages) arising out of or in any way related to the Services or the project hereunder, to the lesser of (a) fifty thousand dollars (\$50,000) or (b) the total compensation for the Services hereunder. Such liability includes HELIX's negligence, errors or omissions, strict liability and breach of contract or warranty. Any claim against HELIX hereunder shall be brought within one (1) year of the completion of the Services herein.

**ARTICLE 5. TERMINATION**

Either party may terminate this Agreement, either in whole or in part, without cause, by giving the other party thirty (30) days written notice. In such event, Client will pay HELIX for all work performed by it prior to the notice of termination.

In the event of a default, the non-defaulting party shall give the defaulting party ten (10) days' written notice of default. "Default" includes Client's failure to pay HELIX sums due, including additional work pursuant to Article 3. The defaulting party's failure to cure the breach within said ten- (10-) day period shall constitute a material breach of this Agreement and termination of the Agreement.

**ARTICLE 6. SUSPENSION OF WORK**

Client may suspend the Services, in whole or in part, by giving HELIX reasonable, written notice specifying the work to be suspended. Upon receipt of notice, HELIX shall suspend the work requested and Client shall pay for all Services through the date of suspension and any costs incurred by HELIX in suspending the work.

Thereafter, Client may notify HELIX of its intent to recommence the suspended Services. HELIX will promptly provide Client with any adjusted costs and schedule and, upon Client approval, HELIX shall recommence the Services previously suspended.

**ARTICLE 7. PROPRIETARY INFORMATION**

HELIX agrees not to disclose to any third person, nor use for the benefit of anyone other than Client, any data, records, financial information or other confidential or proprietary information, marked as such in writing, arising out of or related to the performance of the Services (Proprietary Information). Client similarly agrees not to disclose to any third person, nor use for the benefit of anyone, Proprietary Information of HELIX.

**ARTICLE 8. COMPLIANCE WITH LAWS**

HELIX shall comply with and observe applicable federal, state and local laws, ordinances, rules, and regulations having jurisdiction over HELIX or the performance of the Services in effect during the term of this Agreement.

**ARTICLE 9. FORCE MAJEURE**

Client will grant extensions of time and increase the compensation to HELIX to the extent that HELIX's performance hereof is delayed due to an uncontrollable force. The term "uncontrollable force" shall mean any cause beyond the control of HELIX making it impracticable or unable to perform such obligation, including but not limited to natural catastrophes, restraint by court order or public authority and action or nonaction by, or inability to obtain the necessary authorizations or approvals from, any governmental agency or authority which, by exercise of due diligence, HELIX (a) could not reasonably have been expected to obtain or (b) has been unable to overcome. HELIX will notify Client immediately of any such delay or anticipated delay, and Client will extend the date of performance for a period equal to the time lost by reason of the delay and will make an equitable adjustment to the compensation in Article 2.

## ARTICLE 10. INSURANCE

HELIX maintains the following insurance: (a) Workers' Compensation insurance – statutory limits; (b) Comprehensive Automobile Insurance – combined bodily injury and property damage limit of one million dollars (\$1,000,000) each occurrence; (c) Comprehensive General Liability Insurance – combined bodily/personal injury and property damage limit of one million dollars (\$1,000,000); (d) Professional Liability & Contractors Pollution Legal Liability – limit of one million dollars (\$1,000,000) each occurrence; (e) Excess Umbrella Liability – limit of two million dollars (\$2,000,000) each occurrence. Upon Client's request, HELIX will furnish evidence that such insurances are in effect. If additional coverage or increased limits of liability is desired, Client may make such request prior to the start of work. HELIX will attempt to obtain the requested coverage or limits, and Client agrees to pay for any additional costs of insurance within ten (10) days of the date of invoice.

## ARTICLE 11. AVAILABILITY OF LAND, DATA AND DIFFERING SITE CONDITIONS (for contracts involving field or construction services)

Client shall furnish the site or obtain access to any site not owned by Client. Client shall notify HELIX of any encumbrances or restrictions specifically related to use of the site with which HELIX must comply in performing the Services. Client will obtain in a timely manner and pay for any fees or charges associated with site access or the encumbrances. Client shall furnish HELIX with a current legal description of the lands upon which the Services are to be performed and Client's interest therein as necessary for giving notice of or filing a mechanic's lien against such lands.

HELIX may rely upon the accuracy of the data contained in Reports and Drawings furnished to it by Client or Client's engineer. Reports and Drawings are defined as (a) reports of explorations and tests of subsurface conditions at or contiguous to the site that have been used by the engineer in documents provided to HELIX; and (b) drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (including underground facilities) that Client or Client's engineer has used in preparing documents provided to HELIX.

If HELIX believes that any subsurface or physical conditions at or contiguous to the site that are uncovered or revealed either (a) is of such a nature as to establish that data on which HELIX is entitled to rely as provided above is materially inaccurate; or (b) is of such a nature as to require a change in the contract; or (c) differs materially from that shown or indicated in documents provided to HELIX by Client or others; or (d) is of an unusual nature and differs materially from conditions ordinarily encountered in work of the character provided for in this contract, then HELIX shall promptly, after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any work in connection therewith (except in the event of an emergency), notify Client or its engineer in writing about such conditions. Thereafter, Client or Client's engineer will investigate the conditions. If the existence of the differing site conditions causes an increase in HELIX's cost of or time required for performance of the work, HELIX will receive an equitable adjustment to the contract price and schedule.

HELIX will not be responsible for any hazardous environmental conditions uncovered or revealed at the site. If such conditions are encountered, HELIX shall immediately stop all work and notify Client or Client's engineer. HELIX shall not be required to resume work in connection with such conditions until Client has obtained any required permits and advised HELIX in writing of such conditions and any affected area is or has been rendered safe for the resumption of work; or has specified any special conditions under which such work may be resumed safely; and HELIX shall receive an adjustment to the contract schedule and price accordingly.

## ARTICLE 12. GOVERNING LAW AND ARBITRATION

This Agreement shall be governed by, and construed in accordance with, the laws of the State of California. Any controversy or claim arising out of or relating to this Agreement shall be settled by binding arbitration administered by and pursuant to the Commercial Rules of the American Arbitration Association then in effect. Any such proceedings shall take place in San Diego, California. In any action or proceeding hereunder, the prevailing party shall be entitled to recover attorneys' fees, filing fees, expert witness fees and other costs of arbitration or suit.

## ARTICLE 13. NOTICES

Any notice from one party to another shall be in writing and delivered personally, by facsimile or by United States mail, registered or certified, return receipt requested, postage fully pre-paid, to the addresses as set forth in the Agreement to the attention of the signatory of this Agreement.

Any notice shall be deemed delivered upon personal service or, if mailed, on the delivery date or attempted delivery date shown on the return receipt. If any party changes its address, such party shall notify the other party as provided in this article.

## ARTICLE 14. MISCELLANEOUS

**14.1 Successors and Assigns:** This Agreement is binding upon and shall inure to the benefit of the parties and their respective successors-in-interest, assigns and transferees. Neither party can assign this Agreement without the prior written consent of the other party.

**14.2 Counterparts:** This Agreement may be signed in two or more counterparts, each of which shall constitute an original, but all of which shall be one in the same document.

With the Agreement, these Terms and Conditions and any attached Exhibits constitute the complete and entire contract between the parties and supersedes any previous communications, representations or agreement, whether oral or written, with respect to the subject matter hereof.

**CONSULTING SERVICES**

Consulting services performed by HELIX typically include, but are not necessarily limited to, office, field, meetings, hearings and travel time. Consulting services for expert witness review, deposition, and/or testimony will be provided at one and one-half times our professional rates.

**DIRECT COSTS**

Certain identifiable direct costs will be charged to the project at cost plus ten percent. Examples of direct costs include subconsultants, vehicle or equipment rentals, airplane and train fares, parking, per diem and lodging, mileage, communications, reproduction, and supplies. A 4-wheel drive premium will be charged at \$25 per project day. There will be additional charges for plotting, color printing, aerial photographs and GPS services.

**PAYMENT**

Invoices will be submitted monthly. Payment on invoices is due within thirty days of receipt. If payment is not paid when due, then such sum shall bear interest at 1 ½ % per month on the unpaid balance, not to exceed the maximum legal rate of interest.

**PROFESSIONAL RATES**

Current hourly rates for consulting services:

Principal	\$225-250
Principal Acoustician	\$180-205
Principal Biologist	\$190-225
Principal Landscape Architect	\$160-190
Principal Permitting Specialist	\$170-220
Principal Planner	\$200-235
Principal Regulatory Specialist	\$190-225
Senior Project Manager I-III	\$150-200
Senior Air Quality Specialist	\$155-180
Senior Environmental Specialist	\$130-170
Senior Fisheries Scientist	\$200-230
Senior Noise/Air Quality Specialist	\$150-180
Noise/Air Quality Specialist	\$115-145
Environmental Specialist I-III	\$85-125
Environmental Compliance Analyst	\$70
Environmental Compliance Specialist	\$75-125
Project Manager I-III	\$120-175
Assistant Project Manager	\$100-120
Archaeology Field Director	\$110
Staff Archaeologist	\$80-115
Senior Archaeologist	\$120-170
Architectural Historian	\$100-130
Environmental Planner I-III	\$95-120
Environmental Analyst	\$65-75
Landscape Architect	\$110-125
Senior Landscape Architect	\$130-160
Landscape Planner I-III	\$95-115
Sr. Scientist	\$130-165
Biologist I-V	\$85-130
Assistant Biologist	\$60
Senior GIS Specialist	\$125-165
GIS Specialist I-III	\$75-120
Graphics	\$115
Technical Editor	\$90-100
Operations Manager	\$105- 120
Word Processor I-III	\$65-85
Clerical	\$60-75

*Rates are subject to change on a yearly basis*

**MARTIN & LIBBY  
CHARGE RATES BY CLASSIFICATION**

I. Structural Engineering Consulting/Design

A. Professional Staff	
1. Principal	205.00/hour
2. Sr. Project Engineer	160.00/hour
3. Project Engineer	130.00/hour
4. Design Engineer	105.00/hour
B. Technical Staff	
1. Chief Drafter	90.00/hour
2. Drafter	75.00/hour
3. Technician	75.00/hour
C. Administrative Staff	
1. Secretary	60.00/hour

II. Charges for Reimbursable Expenses

- A. Out-of-pocket expenses shall be billed at 1.15 times cost
- B. Retrieval of records from firm's archives shall be billed at \$150 per file
- C. Travel and living expenses shall be based on first class accommodations and rates. All expenses shall be billed at 1.15 times cost.
- D. The amount of any sales, excise, value added or gross receipts tax that may be imposed shall be reimbursed at 1.15 times the amount of the tax.
- E. Time of personnel expended in travel, portal-to-portal shall be billed at the regular rate.

III. Charges for Additional Services Provided by Others

- A. Services shall be billed at 1.15 times cost to the Engineer.
- B. These services may include design professional services and nonprofessional services.

IV. This schedule of charge rates and conditions is subject to revision biannually effective the first of January and July of each year. Unless otherwise agreed in advance in writing, the revised schedule will automatically supersede this schedule.

**RATE SCHEDULE  
2021**

Compensation for professional Land Surveying, Engineering and Mapping Services for work performed on a time and materials basis will be charged at the following rates:

<b>OFFICE</b>	<b>CODE</b>	<b>HOURLY RATE</b>
Principal Surveyor (PLS)	P-1	\$ 135.00
Project Manager	O-1	125.00
Survey Calculations	O-2	115.00
Draftsman (Computer-Aided Drafting)	O-3	110.00
Clerical	C-1	50.00
<b>FIELD SURVEY</b>		
Principal Surveyor (PLS)	P-1	\$ 135.00
One-person Survey Crew	S-1	175.00
Two-person Survey Crew	S-2	275.00
Three-person Survey Crew	S-3	325.00
Travel Time (Two-person Survey Crew)	TT	125.00

**SERVICE CENTER:**

*Unless noted otherwise, the following items will be charged at cost plus 15%:*

- A. Travel, Lodging and Per Diem costs;
- B. Blue print and printing expenses;
- C. Filing fees, Plan check fees, Title Company Costs when advanced by Land Surveying Consultants, Inc.
- D. Delivery costs including UPS, Federal Express, Express Mail, and Messenger Services.

**LAND SURVEYING CONSULTANTS, INC.:**

BY:  TITLE: President DATE: 04-19-2021  
Dale Keith Brewer

**CLIENT APPROVAL:**

BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**CONSULTING SERVICES**

Consulting services performed by HELIX typically include, but are not necessarily limited to, office, field, meetings, hearings and travel time. Consulting services for expert witness review, deposition, and/or testimony will be provided at one and one-half times our professional rates.

**DIRECT COSTS**

Certain identifiable direct costs will be charged to the project at cost plus ten percent. Examples of direct costs include subconsultants, vehicle or equipment rentals, airplane and train fares, parking, per diem and lodging, mileage, communications, reproduction, and supplies. A 4-wheel drive premium will be charged at \$25 per project day. There will be additional charges for plotting, color printing, aerial photographs and GPS services.

**PAYMENT**

Invoices will be submitted monthly. Payment on invoices is due within thirty days of receipt. If payment is not paid when due, then such sum shall bear interest at 1 ½ % per month on the unpaid balance, not to exceed the maximum legal rate of interest.

**PROFESSIONAL RATES**

Current hourly rates for consulting services:

Principal	\$225-250
Principal Acoustician	\$180-205
Principal Biologist	\$190-225
Principal Landscape Architect	\$160-190
Principal Permitting Specialist	\$170-220
Principal Planner	\$200-235
Principal Regulatory Specialist	\$190-225
Senior Project Manager I-III	\$150-200
Senior Air Quality Specialist	\$155-180
Senior Environmental Specialist	\$130-170
Senior Fisheries Scientist	\$200-230
Senior Noise/Air Quality Specialist	\$150-180
Noise/Air Quality Specialist	\$115-145
Environmental Specialist I-III	\$85-125
Environmental Compliance Analyst	\$70
Environmental Compliance Specialist	\$75-125
Project Manager I-III	\$120-175
Assistant Project Manager	\$100-120
Archaeology Field Director	\$110
Staff Archaeologist	\$80-115
Senior Archaeologist	\$120-170
Architectural Historian	\$100-130
Environmental Planner I-III	\$95-120
Environmental Analyst	\$65-75
Landscape Architect	\$110-125
Senior Landscape Architect	\$130-160
Landscape Planner I-III	\$95-115
Sr. Scientist	\$130-165
Biologist I-V	\$85-130
Assistant Biologist	\$60
Senior GIS Specialist	\$125-165
GIS Specialist I-III	\$75-120
Graphics	\$115
Technical Editor	\$90-100
Operations Manager	\$105- 120
Word Processor I-III	\$65-85
Clerical	\$60-75

*Rates are subject to change on a yearly basis*

**EXHIBIT O**  
**LOCATION MAP**

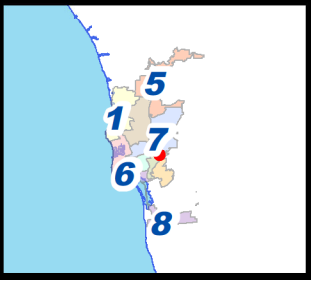


**Campanile Wy S/D Replacement**


SENIOR ENGINEER  
Jong Choi  
619-533-5493

PROJECT MANAGER  
Jeff Cramoline  
619-533-3156

FOR QUESTIONS ABOUT THIS PROJECT  
Call: 619-533-4207  
Email: [engineering@sandiego.gov](mailto:engineering@sandiego.gov)



**Legend**

 Area of Work



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**EXHIBIT P**

**CONTRACTOR'S NOTES FOR EMERGENCY PROJECTS**

**CONTRACTOR'S NOTES**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LICENSED LAND SURVEYOR OR LICENSED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA SHALL FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR ANY EARTHWORK, DEMOLITION OR SURFACE IMPROVEMENTS. IF DESTROYED, A LICENSED LAND SURVEYOR SHALL REPLACE SUCH MONUMENT(S) WITH APPROPRIATE MONUMENTS. WHEN SETTING SURVEY MONUMENTS USED FOR RE-ESTABLISHMENT OF THE DISTURBED CONTROLLING SURVEY MONUMENTS AS REQUIRED BY SECTIONS 6730.2 AND 8771 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILLED WITH THE COUNTY SURVEYOR. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF SAN DIEGO FIELD SURVEY SECTION SHALL BE NOTIFIED IN WRITING AT LEAST 7 DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPLACING AND VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
  
2. CONSTRUCTION STORM WATER PROTECTION NOTES
  - a. TOTAL SITE DISTURBANCE AREA:  0.02  (ACRES)
  
  - b. HYDROLOGIC UNIT/WATERSHED: PUEBLO SAN DIEGO / San Diego Bay WMA
  
  - c. HYDROLOGIC SUBAREA NAME & NO: Point Loma & 908.1
  
  - d. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE
    - MWPCP
  
    - WPCP  
THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100
  
    - WPPP  
THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100 AND CONSTRUCTION GENERAL PERMIT ORDER 2009-0009-DWQ AS AMENDED BY ORDER 2010-0014-DWQ AND 2012-0006-DWQ  
TRADITIONAL: RISK LEVEL 1  2  3   
LUP: RISK TYPE 1  2  3
  
  - e.  CONSTRUCTION SITE PRIORITY
    - ASBS  HIGH  MEDIUM  LOW

3. ALL ADVANCE METERING INFRASTRUCTURE (AMI) DEVICES ATTACHED TO THE WATER METER OR LOCATED IN OR NEAR WATER METER BOXES, COFFINS, OR VAULTS SHALL BE PROTECTED AT ALL TIMES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. CONTRACTOR TO EXCAVATE AROUND WATER METER BOX (CITY PROPERTY SIDE) TO DETERMINE IN ADVANCE, THE EXACT SIZE OF EACH SERVICE BEFORE TAPPING MAIN.
5. CITY FORCES, WHERE CALLED OUT SHALL MAKE PERMANENT CUTS & PLUGS, CONNECTIONS, ETC. EXISTING MAINS SHALL BE KEPT IN SERVICE IN LIEU OF HIGH-LINING.
6. STORM DRAIN INLETS ARE TO REMAIN FUNCTIONAL/OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.
7. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IMMEDIATELY IF A ONE FOOT VERTICAL SEPARATION (FROM OUTSIDE PIPE WALL TO OUTSIDE PIPE WALL) BETWEEN SEWER AND WATER MAINS CANNOT BE MAINTAINED.
8. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER IMMEDIATELY IF A 6-INCH VERTICAL SEPARATION (FROM OUTSIDE PIPE WALL TO OUTSIDE PIPE WALL) BETWEEN UTILITIES OTHER THAN SEWER AND WATER MAINS CANNOT BE MAINTAINED.
9. CONTRACTOR TO MAINTAIN A MINIMUM 3' OF COVER OVER TOP OF WATER MAIN.
10. CONTRACTOR SHALL RESTORE ALL TRENCHES ON THE PAVEMENT WORKED BY CITY FORCES AFTER FINAL CONNECTION.
11. CONTRACTOR SHALL PROVIDE A 1-FOOT SAND CUSHION OR A MINIMUM 6-INCH SAND CUSHION WITH 1-INCH NEOPRENE PAD FOR ALL CROSSINGS WHERE VERTICAL CLEARANCE BETWEEN CROSSINGS IS 1-FOOT OR LESS.
12. POTHOLE ALL UTILITIES THAT CROSS PROPOSED WATER MAIN BEFORE TRENCHING
13. WHEN APPLICABLE, EXISTING UTILITY CROSSING AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT EXACT.
14. FOR COORDINATION OF THE SHUTDOWN OF TRANSMISSION MAINS (16 INCHES OR LARGER), CONTACT THE CITY'S SENIOR WATER DISTRIBUTION OPERATIONS SUPERVISOR AT (616) 524-7438. FOR COORDINATION OF THE SHUTDOWN OF DISTRIBUTION MAINS (LESS THAN 16 INCHES), CONTACT THE CITY'S WATER OPERATIONS DISTRICT MANAGER AT (619) 527-3945.

## EXHIBIT Q

### ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION

## Protecting AMI Devices in Meter Boxes and on Street Lights

The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **All AMI devices shall be protected per Section 402-2, "Protection", of the 2018 Whitebook.**

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

- A. Endpoints, see Photo 1:

**Photo 1**



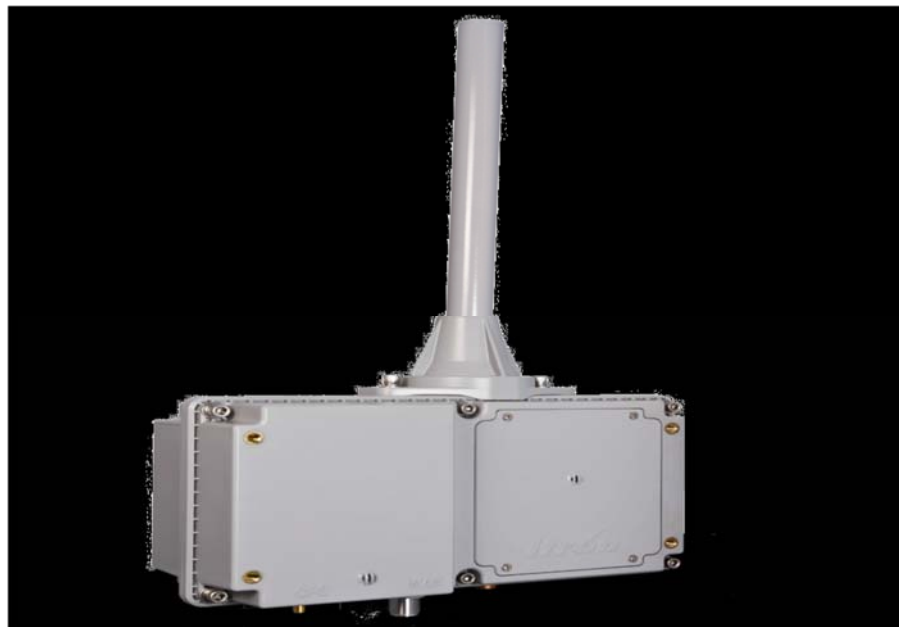
B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:



---

Network Devices, see Photo 3:

**Photo 3**



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:

**Photo 4**



The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

**The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document**

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

**Photo 5**

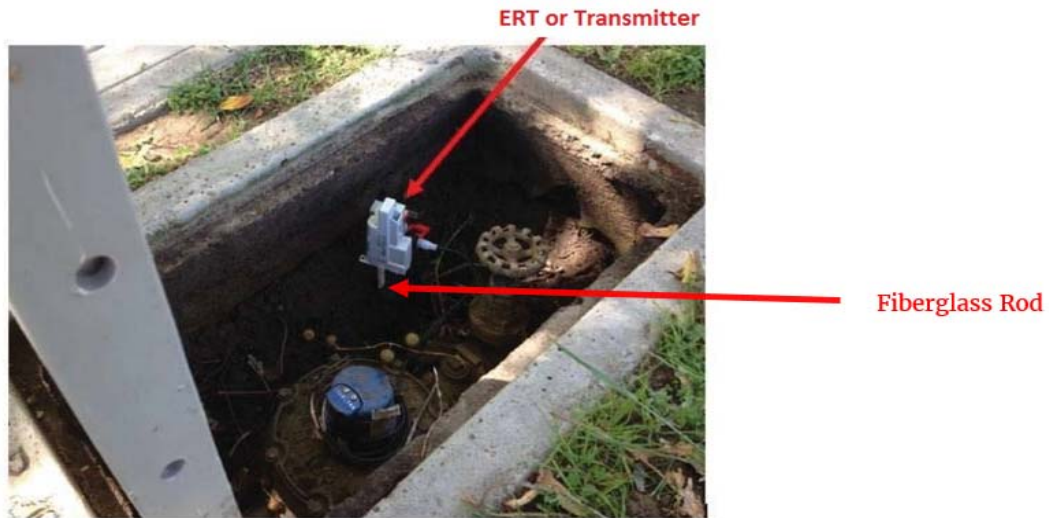


Photo 6 below is an example of disturbance that shall be avoided:

**Photo 6**





**You are responsible when working in and around meter boxes.** If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:

**Photo 7**



Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.**

Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

**Photo 8**



**Network Device**

**Photo 9**



**If you encounter any bad installations, disconnected/broken/buried endpoints, or inadvertently damage any AMI devices or cables, notify the Resident Engineer immediately. The Resident Engineer will then immediately contact the AMI Project Manager, Arwa Sayed, at (619) 362-0121.**

**EXHIBIT R**

**SAMPLE CITY INVOICE**



## EXHIBIT S

### SCOPE OF WORK

## SCOPE OF WORK

- 1. SCOPE OF WORK:** The Work consists of but is not limited to replacement of approximately 180 linear feet of 24-inch CAP storm drain with 24-inch RCP, as described in Exhibit TBD- Scope of Work, located next to 5604 Campanile Way, San Diego, CA 92115. Contractor will procure consultants to provide Civil services necessary to complete the required work for Design and Construction Support of the Campanile Wy Storm Drain Emergency Replacement, herein referred to as the Project. Sinkhole will be stabilized, and site restored after construction is completed. Consultant to be procured to develop revegetation plan. Revegetation plan and long-term maintenance and monitoring to be implemented to be implemented after construction is completed.

Harris and Associates to be retained as Engineer of Record to perform civil design services. Design will be completed within 66 working days.

- 1.1. System Hydraulics Evaluation & Design:** Consultant will prepare design plans and specifications for construction. The designer of record will also prepare an evaluation of the current hydrology and drainage area to confirm any design modifications to the existing storm drain system. The new storm drainpipe sizes must be in accordance with City of San Diego Drainage Design Manual, dated 2017.

**Deliverables:** Final plans and specifications signed by the engineer of record.

- 1.2. Project Close Out & As-Builts:** Consultant to provide as-built plans, supporting documents, and project files to the City as requested.

**Deliverables:** The deliverables for this task as-built drawings and other documents final consultant documents shall be delivered four weeks after project completion.

- 2. ESTIMATED CONSTRUCTION COST:** The construction cost for this project is Not-to-exceed: \$1,500,000.00.

- 3. LOCATION OF WORK:** The location of the Work is as follows:

5604 Campanile Way, San Diego, CA 92115

- 4. CONTRACT TIME:** The Contract Time for completion of the Work, including the Plant Establishment Period, shall be completed within **215 Working Days** from the date of issuance of the Notice to Proceed, which includes 66 Working Days for the Design to be completed. Design can be completed concurrent with construction.

**Exhibit T**  
**LONG-TERM MAINTENANCE AND MONITORING AGREEMENT**

## LONG-TERM MAINTENANCE AND MONITORING AGREEMENT

This **25-Month Long-Term Maintenance and Monitoring Agreement (LTMMA)** is made and entered into by and between the City of San Diego (City), a municipal corporation, and **ORION CONSTRUCTION CORPORATION** (Contractor), who may be individually or collectively referred to herein as a “Party” or the “Parties.”

### RECITALS

- A. Concurrent with execution of this LTMMA, the Parties entered into a general contract (Construction Contract) for the construction of **Campanile Wy Storm Drain Replacement**, WBS/IO number **B-21126**, Bid No. **K-22-2037-EMR-3**.
- B. In accordance with the Construction Contract, the Contractor shall enter into this LTMMA with the City for the purpose of implementing and fulfilling long-term maintenance requirements in accordance with the City of San Diego Municipal Code and the Contract Documents for the specified element(s) of **Campanile Wy Storm Drain Replacement** (Maintenance Requirements).
- C. The Contractor is ready and willing to fulfill its maintenance requirements in accordance with the terms of this LTMMA.

NOW, THEREFORE, in consideration of the above recitals and the mutual covenants and conditions set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby set forth their mutual covenants and understandings as follows:

### INTRODUCTORY PROVISIONS

- A. **Recitals Incorporated.** The above referenced Recitals are true and correct and are incorporated into this LTMMA by this reference.
- B. **Exhibits Incorporated.** All Exhibits and Attachments referenced in this LTMMA are incorporated into this LTMMA by this reference.
- C. **Contract Term.** This LTMMA shall be effective upon completion of the Plant Establishment Period (PEP) as described in **Section 6-1.1** of **Exhibit K – Supplementary Special Provisions** and **Section 802** of the 2018 GREENBOOK AND WHITEBOOK and it shall be effective until the completion of the Work as described below.
- D. **Terms and Conditions.** This LTMMA is subject to the terms and conditions of the Construction Contract included in the 2018 GREENBOOK, WHITEBOOK, and Special Provisions (**Part 0, Part 1, and Part 8**) except as otherwise stated in this LTMMA.



**E. Partial Release of Payment Bond and Performance Bond.**

- 1. Performance of Contract in Two Phases.** There are two separate phases of Work to be performed by the Contractor under this Contract. The first phase covers the Work involved in the original agreement as described in this agreement (“Phase 1 Work”). The second phase covers the work involved in the long-term maintenance of the Re-vegetation/Restoration Area after Phase 1 Work has been completed (“Phase 2 Work”).
- 2. Bond Handling for Contract Phases.** The Payment Bond and the Performance Bond covering Phase 1 Work on this Contract shall remain in full force and effort until completion of that phase is certified. The original Payment Bond and the original Performance Bond covering Phase 1 Work on this Contract shall continue in full force and effort for Phase 2 Work, however the value of each bond may be reduced as follows:

  - i. Completion by the Contractor of all Phase 1 Work shall be evidenced solely by the City Engineer affirming in writing that to the best of their knowledge that all Phase 1 Work has been completed by the Contractor in strict conformity with all City-approved plans and revisions, and that the Phase 1 Work completed by the Contractor meets all applicable standards (“Notice of Completion”).
  - ii. Upon issuance by the City Engineer of the Notice of Completion for Phase 1 Work, the Payment Bond for this Project, and the Performance Bond for this Project, may be partially released, and thereby reduced for the Work performed under Phase 1. The remaining payment and performance bond will cover the full cost of Phase 2 Work on this Project, which will be the amount specified in “Section 4: COMPENSATION” in Section 4.1 of this LTMMA.
- 3. No Partial Release Upon Default.** No Partial Performance Bond Release and Reduction shall be given to the Contractor if the Performance Bond and/or this Agreement is in default on Phase 1 Work.

## SECTION 1 - MAINTENANCE CONTRACT SUMMARY

- 1.1. General.** The Contractor shall fulfill the Project's Maintenance Requirements (Work) as identified in the scope of work attached as **Exhibit A** in a manner satisfactory to the City.

The Contractor shall provide all equipment, labor, and materials necessary to perform the **Work** as described in **Exhibit A**, at the direction of the City.

- 1.2. Schedule of Work.** The Contractor shall follow the Schedule of Work (Schedule) for the maintenance and monitoring period provided in the Plans.

After receiving notification from the City, the Contractor shall create a comprehensive Schedule of Work (Schedule) for performance of this LTMMA for the City's approval. The Schedule shall include routine work, inspection, and infrequent operations such as repairs, fertilization, aerification, watering, and pruning.

The City will approve the Schedule prior to the commencement of the Work. The City may require the Contractor to revise the Schedule. The Contractor shall not revise the Schedule unless the revisions have received the prior written approval of the City.

- 1.3. Commencement of Work & Maintenance Period.** This LTMMA shall commence when the City approves of the Work of the Plant Establishment Period and sends notice of the approval to the Contractor in accordance with **Part 8, Section 802** of the Construction Contract and shall continue for **25** months. A copy of the approval form is attached as **Exhibit B**.

- 1.4. License.** The Contractor shall hold the following licenses in good standing:

1.4.1. **C-27** State Contractor's License.

1.4.1.1. Alternatively, the Contractor shall retain the services of a Subcontractor with a **C-27** State Contractor's License.

1.4.2. Pest Control Advisor's License.

1.4.2.1. Alternatively, the Contractor shall retain the services of a licensed Pest Control Advisor.

1.4.3. Registration with the County Agriculture Commission.

1.4.4. Qualified Applicator's Certificate for Category B. This shall apply to any person supervising the use of pesticides, herbicides, or rodenticides.

1.4.5. City of San Diego Business License.

Prior to performing the Work, the Contractor shall complete and submit to the City the License Data Sheet. **See Exhibit C.**

- 1.5. Hours of Performance.** The Contractor shall perform the Work between the hours of 6:00 a.m. and 6:00 p.m., Monday through Friday (Working Hours). The City may, in its sole discretion, grant permission to the Contractor to perform Work during non-Working Hours. Maintenance functions that generate excess noise (operations of power equipment which would cause annoyance to area residents for example) shall not begin before 7:00 a.m.

## SECTION 2 - ADMINISTRATION

- 2.1. Contract Administrator. Engineering & Capital Projects Department, Contracts Division** is the Contract Administrator for the LTMMA. The Contractor shall perform the Work under the direction of a designated representative of the Engineering & Capital Projects Department. The City will communicate with the Contractor on all matters related to the administration of this LTMMA and the Contractor's performance of the Work rendered hereunder. When this LTMMA refers to communications to or with the City, those communications shall be with the City, unless the City or this LTMMA specifies otherwise. Further, when this LTMMA requires an act or approval by City, that act or approval will be performed by the City.
- 2.2. Local Office.** The Contractor shall maintain a local office with a company representative who is authorized to discuss matters pertaining to this LTMMA with the City and shall promptly respond and be available during Normal Working Hours. A local office is one located in San Diego County that can be reached by telephone and facsimile. An answering service in conjunction with a company email address for the designated company representative may fulfill this requirement. A mobile telephone shall not fulfill the requirement for a local office. All calls to the Contractor from the City shall be returned within a 1-hour period.
- 2.3. Emergency Calls.** The Contractor shall have the capability to receive and to respond immediately to calls of an emergency nature. The City shall refer emergency calls to the Contractor for immediate disposition. The Contractor shall provide the City with a 24 hour emergency telephone number for this purpose.
- 2.4. Staffing.** The Contractor shall furnish supervisory and working personnel capable of promptly accomplishing all Work required under this LTMMA on schedule and to the satisfaction of the City.
- 2.5. Contractor Inspections.** The Contractor shall perform inspections of the Work site and shall prepare and submit to the City a Punchlist and dates of correction. The Punchlist shall include a comprehensive report of Work performed at the Work site to ensure 100% cover.

## SECTION 3: WORK SITE MAINTENANCE

- 3.1. Use of Chemicals.** The Contractor shall submit to the City for approval sample labels and MSDS for all chemical herbicides, rodenticides, and pesticides proposed for use under this LTRMC. Materials included shall be limited to chemicals approved by the State of California Department of Agriculture.

The use of any chemical shall be based on the recommendations of a licensed pest control advisor. Annual PCA Pesticide Recommendations are required for each pesticide proposed to be used for the Work site covered by this LTRMC. The use of chemicals shall conform to the current San Diego County Department of Agriculture regulations.

No chemical herbicide, rodenticide, or pesticide shall be applied until its use is approved, in writing, by City as appropriate for the purpose and area proposed.

The Contractor shall submit a monthly pesticide use report to the City along with the Contractor's invoices for payment. This report shall include a statement of all applications of

herbicides, rodenticides, and pesticides, detailing the chemical used, undiluted quantity, rate of application, applicator's name, and the date and purpose of the application. For months in which no pesticides are applied, state "No Pesticide Used" on the report.

- 3.2. Irrigation Water.** The Contractor shall diligently practice water conservation, including minimizing run-off or other waste. The Contractor shall turn off irrigation systems, if any, during periods of rainfall and at such other times when suspension of irrigation is desirable to conserve water and to remain within the guidelines of good horticultural landscape maintenance practices in accordance with the instructions from the Project Biologist. The Contractor's failure to properly manage and conserve water may result in deductions from the monthly payment to be made to the Contractor or other penalties under this LTMMA.

If the Contractor causes excessive use or waste of irrigation water, the estimated cost of that water shall be deducted from the monthly payment. Further, any monetary fines or other damages assessed to City for the Contractor's failure to follow water conservation regulations imposed by the City, the Public Utilities Department of the City of San Diego, and, where appropriate, the State of California, the County Water Authority, or other legal entities shall be solely the responsibility of the Contractor and may be deducted from the monthly payment to be made to the Contractor under this LTMMA.

- 3.3. Payment for Water.** The Contractor shall pay for the water used in the maintenance of the Work site and this cost is included in the price of this LTMMA.
- 3.4. Satisfactory Progression.** If the Revegetation/Restoration Area is not progressing towards the required performance criteria, as defined in the Scope of Work, in accordance with the Work Schedule, and as determined by City, the City may accordingly adjust monthly payments to the Contractor.

#### **SECTION 4: COMPENSATION**

- 4.1. Maximum Compensation.** The compensation for this LTMMA shall not exceed **\$200,000.00**.
- 4.2. Method of Payment and Reports.** The payments will be made monthly in direct proportion that each month bears to the total value of the Contract Price. As conditions precedent to payment, the Contractor shall submit a detailed invoice and report of maintenance Work performed every month. The Contractor's failure to submit the required reports or certified payrolls as described in the Construction Contract shall constitute a basis for withholding payment by the City.

**4.3. Final Payment.** The Contractor shall not receive final payment until the following conditions have been completed to the City's satisfaction:

- 1.3.1. The item(s) of the Work subject to this maintenance coverage as specified in **Exhibit A** (Maintenance Items) have been determined to be in compliance with the Construction Contract and this LTMMA.
- 1.3.2. The Contractor has provided to the City a signed and notarized Affidavit of Disposal, a copy of which is attached to the Construction Contract, stating that all brush, trash, debris, and surplus materials resulting from the Work have been disposed of in a legal manner.
- 1.3.3. The Contractor has provided a final work summary report to the City.
- 1.3.4. The Contractor has performed comprehensive and successful testing and checks of the Maintenance Items.

## **SECTION 5: BONDS AND INSURANCE**

**5.1. Contract Bonds.** Prior to the commencement of Work, the Contractor, at its sole cost and expense, shall provide the following bonds issued by a surety authorized to issue bonds in California satisfactory to the City:

- 1.1.1. A Payment Bond (Material and Labor Bond) in an amount not less than the Contract Price for this Bid item, to satisfy claims of material suppliers and mechanics and laborers employed by it on the Work. The Payment Bond shall be maintained by the Contractor in full force and effect until the Work is accepted by City and until all claims for materials and labor are paid, and shall otherwise comply with the California Civil Code.
- 1.1.2. A Performance Bond in an amount not less than the Contract Price for this bid item to guarantee the faithful performance of all Work within the time prescribed in a manner satisfactory to the City and to guarantee all materials and workmanship will be free from original or developed defects. The Performance Bond shall remain in full force and effect until performance of the Work is completed as set forth in this LTMMA.

**5.2. Insurance.** The Contractor shall maintain insurance coverage as specified in **Section 5-4, "INSURANCE"** of the Construction Contract at all times during the term of this LTMMA.

The Contractor shall not begin the Work under this LTMMA until they have complied with the following:

- 1.2.1. Obtain insurance certificates reflecting evidence of insurance:
  1. Commercial General Liability
  2. Commercial Automobile Liability
  3. Worker's Compensation

1.2.2. Confirm that all policies contain the specific provisions required in **Section 5-4, "INSURANCE"**.

The Contractor shall submit copies of any policy upon request by the City.

The Contractor shall not modify any policy or endorsement thereto which increases the City's exposure to loss for the duration of this LTMMA.

## **SECTION 6: MISCELLANEOUS**


- 6.1. Illness and Injury Prevention Program.** The Contractor shall comply with all the mandates of Senate Bill 198 and shall specifically have a written Injury Prevention Program on file with the City in accordance with all applicable standards, orders, or requirements of California Labor Code, Section 6401.7. This Program shall be on file prior to the performance of any Work.
- 6.2. City Standard Provisions.** This LTMMA is subject to the same standard provisions and Contractor Certification requirements as the Construction Contract.
- 6.3. Taxpayer Identification Number.** I.R.S. regulations require the City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide services or products to the City. This information is necessary to complete Form 1099 at the end of each tax year. As such, the Contractor shall provide the City with a Form W-9 upon execution of this LTMMA.
- 6.4. Assignment.** The Contractor shall not assign the obligations under this LTMMA, whether by express assignment or by sale of the company, nor any monies due or to become due, without the City's prior written approval. Any assignment in violation of this section shall constitute a Default and is grounds for immediate termination of this LTMMA, at the sole discretion of City. In no event shall any putative assignment create a contractual relationship between the City and any putative assignee.
- 6.5. Independent Contractors.** The Contractor and any Subcontractors employed by Contractor shall be independent contractors and not agents of the City. Any provisions of this LTMMA that may appear to give the City any right to direct the Contractor concerning the details of performing the Work, or to exercise any control over such performance, shall mean only that the Contractor shall follow the direction of the City concerning the end results of the performance.
- 6.6. Covenants and Conditions.** All provisions of this LTMMA expressed as either covenants or conditions on the part of the City or the Contractor shall be deemed to be both covenants and conditions.
- 6.7. Jurisdiction and Venue.** The jurisdiction and venue for any suit or proceeding arising out of or concerning this LTMMA, the interpretation or application of any of its terms, or any related disputes shall be the County of San Diego, State of California.

- 6.8. Successors in Interest.** This LTMMA and all rights and obligations created by it shall be in force and effect whether or not any Parties to this LTMMA have been succeeded by another entity and all rights and obligations created by this LTMMA shall be vested and binding on any Party's successor in interest.
- 6.9. Integration.** This LTMMA and the exhibits, attachments, and references incorporated into this LTMMA fully express all understandings of the Parties concerning the matters covered in this LTMMA. No change, alteration, or modification of the terms or conditions of this LTMMA, and no verbal understanding of the Parties, their officers, agents, or employees shall be valid unless made in the form of a written change agreed to in writing by both Parties or by an amendment to this LTMMA agreed to by both Parties. All prior negotiations and agreements shall be merged into this LTMMA.
- 6.10. Counterparts.** This LTMMA may be executed in counterparts, which when taken together shall constitute a single signed original as though all Parties had executed the same page.
- 6.11. No Waiver.** Any failure of either the City or the Contractor to insist upon the strict performance by the other of any covenant, term, or condition of this LTMMA, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this LTMMA, shall constitute a waiver of any such breach or of such covenant, term, or condition. No waiver of any breach shall affect or alter this LTMMA, and each and every covenant, condition, and term hereof shall continue in full force and effect to any existing or subsequent breach.
- 6.12. Severability.** The unenforceability, invalidity, or illegality of any provision of this LTMMA shall not render any other provision of this LTMMA unenforceable, invalid, or illegal.
- 6.13. Signing Authority.** The representative for each Party signing on behalf of a corporation, partnership, joint venture or governmental entity hereby declares that authority has been obtained to sign on behalf of the corporation, partnership, joint venture, or entity and agrees to hold the other Party or Parties hereto harmless if it is later determined that such authority does not exist.

IN WITNESS WHEREOF, this Contract is executed by the City of San Diego, acting by and through its Engineering & Capital Projects Department Director pursuant to the emergency contract provisions of City Charter §94 authorizing such execution, and by contractor.

Dated this 30th day of September, 2021.

THE CITY OF SAN DIEGO

By:   
Mayor or designee

I HEREBY CERTIFY I can legally bind **ORION CONSTRUCTION CORPORATION** and that I have read this entire contract, this 19<sup>th</sup> day of August, 2021.

By: 

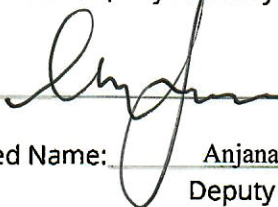
Printed Name: Richard Dowsing

Title: President

I HEREBY APPROVE the form of the foregoing Contract this

8th day November of 2021.

Mara W. Elliott, City Attorney

By:   
Printed Name: Anjana Pottathil  
Deputy City Attorney



## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of San Diego

On 08/19/2021 before me, Richard Gregory Newhall - Notary Public  
(insert name and title of the officer)

personally appeared Richard Dowling - Orion President,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

(Seal)



## EXHIBIT A

### SCOPE OF WORK

- I. **Location of Work.** The location of the Work to be performed (Revegetation Area) is shown on the Project Location Map .
- II. **Description of Work.** The Contractor shall maintain and monitor the Revegetation/Restoration Area during the Monitoring Program in accordance with this Contract. The Revegetation/Restoration Area shall meet the success criteria specified in the Plan at each of the milestones listed in the Schedule for the maintenance and monitoring period. The Work includes complete landscape maintenance consisting of irrigation, pruning, shaping and training of trees, shrubs, and ground cover plants; fertilization; weed control; control of all plant diseases and pests; and trash removal, and all other maintenance listed in this Contract and as required to maintain the Revegetation Area in a useable condition and to maintain the plant material in a healthy and viable state.

The Work also includes biological monitoring of the Revegetation/Restoration Area according to the schedule and methods specified in the Revegetation/Restoration Plan. The monitoring work shall include all reporting tasks specified in the Plan.

- III. **Method of Performing Work.**

- A. **Irrigation.** Irrigation shall be applied to container and salvaged plants in accordance with instructions from the Project Biologist. Irrigation delivery techniques and schedules will vary depending on the availability of a sprinkler irrigation system and weather patterns. Failure of an existing irrigation system to provide full and proper irrigation shall not relieve Contractor of the responsibility to provide adequate irrigation with full and proper coverage of all areas subject to this LTMMMA.

1. In areas where an automatic sprinkler system is installed, Contractor shall periodically inspect the operation of the system for any malfunction. The maximum interval between inspections shall not exceed 7 Calendar Days. The Contractor shall maintain all sprinkler systems in such a way as to guarantee proper coverage and full working capability, and shall make whatever adjustments may be necessary to prevent excessive run-off into streets, rights-of-way, or other areas not meant to be irrigated. The cost of wasted water may be charged to Contractor.
2. All areas not adequately covered by a sprinkler system shall be irrigated by a portable irrigation method in accordance with instructions from the Project Biologist. The Contractor shall furnish all hoses, nozzles, sprinklers, etc. necessary to accomplish this supplementary irrigation. The Contractor shall exercise due diligence to prevent water waste, erosion, and detrimental seepage into existing underground improvements and to existing structures.

3. Irrigation shall be accomplished as follows:
  - a) Turf (if any) shall be irrigated Monday through Friday, as required, to maintain acceptable growth, viability and health, and to encourage deep rooting, in accordance with instructions from the Project Biologist. Additional irrigation shall be performed in the event of unusually hot/dry weather conditions (as are present during Santa Ana conditions, or other times of low humidity or high winds, or during a prolonged high temperature period during summer months).
  - b) Landscaped improved banks and slopes (if any) shall be irrigated Monday through Friday as required to maintain acceptable growth, viability and health, and to encourage deep rooting, in accordance with instructions from the Project Biologist.
  - c) Shrub beds (if any) shall be irrigated as required to maintain acceptable growth, viability and health, and to encourage deep rooting, in accordance with instructions from the Project Biologist. Shrub areas shall be irrigated at a rate which keeps surface runoff to a minimum. The irrigation rate shall be adjusted to the needs of shrub types, seasons and weather conditions.
  - d) Planted and seeded areas shall be irrigated as required to maintain acceptable growth, viability and health, and to encourage deep rooting, in accordance with instructions from the Project Biologist. Planted and seeded areas shall be irrigated at a rate which keeps surface runoff to a minimum. The irrigation rate shall be adjusted to the needs of plant types, seasons and weather conditions.
4. **Maintenance of Irrigation System.** The Contractor shall keep controller and valve boxes (if any) clear of soil and debris and shall maintain the irrigation system at no additional cost to City, including replacement, repair, adjustment, raising or lowering, straightening and any other operation required for the continued proper operation of the system from the "cold" side of the water meter throughout the Revegetation/Restoration Area. The Contractor shall also be responsible for maintaining the painted surfaces of irrigation and lighting controller cabinets as well as the corresponding automatic irrigation battery numbers on the lids of the automatic control valve boxes (if any). The Contractor shall be responsible for light bulb replacements in controller cabinets as necessary.
  - a) Repair or replacement includes: sprinkler system laterals (piping), sprinkler mains (pressure lines), vacuum breakers, sprinkler control valves, sprinkler controllers, sprinkler heads, sprinkler caps, sprinkler head risers, valve covers, boxes and lids (including electrical pull boxes and lids), valve sleeves and lids, quick coupler valves and hose bibs. Any replacement shall conform to the type and kind of existing system. Any deviation shall be approved in writing by City.

- b) The Contractor shall repair irrigation systems which are damaged or altered in any way, including by acts of God, vandalism, vehicular damage, or theft.

5. **Operation of Automatic Irrigation Controllers.** Where the operation of automatic irrigation controllers is required as part of this LTRMC, the Contractor shall:

- a) Not duplicate any coded City key furnished by City for access and operation of the controller;
- b) Surrender all keys furnished by City, promptly at the end of the term of this LTRMC, or at any time deemed necessary by City to prevent serious loss to City;
- c) protect the security of City's property by keeping controller cabinet and building doors locked at all times; and
- d) refrain from using premises behind locked doors for storage of materials, supplies, or tools except as approved by City.

**B. Pruning Shrubs and Ground Cover Plants.** The Contractor shall prune all shrubs and ground cover plants growing in the Revegetation Area as required to:

- 1. Maintain plant growth viability and health, and to encourage deep rooting, in accordance with instructions from the Project Biologist.
- 2. Prevent encroachment of passage ways, walks, streets, or view of signs; and
- 3. Prevent encroachment in any manner deemed objectionable by the City.

The Contractor shall remove dead or damaged limbs with sharp pruning tools, with no stubs remaining. The Contractor shall seal any pruning cut which exceeds 2 inches in diameter with an approved pruning paint when required by the City. The Contractor shall perform pruning to permit plants to grow naturally in accordance with their normal growth characteristics except where box hedging is required by the City. The Contractor shall not shear, hedge, or severely prune plants, unless authorized by the City. The Contractor shall not use growth regulators.

**C. Tree Maintenance.** The Contractor shall maintain all trees and container plants in the revegetation area in accordance with instructions from the Project Biologist. The Contractor shall perform pruning in accordance with instructions from the Project Biologist, when necessary. The Contractor shall not top trees.

- 1. **Potential Hazards.** The Contractor shall notify the City within 24 hours of any tree that shows signs of root heaving or leaning, or is in any manner a potential safety hazard. The Contractor shall immediately reestablish trees and shrubs that are uprooted due to storms, if possible. If trees or shrubs cannot be reestablished, Contractor shall remove them immediately (including roots) and fill the holes until replacement planting is complete.
- 2. **Replacement.** The Contractor shall completely remove and replace trees lost due to Contractor's faulty maintenance or negligence, as determined by the City. The Contractor shall replace trees in kind and size as determined by the

City. If there is a difference in value between the tree lost and the replacement tree, the City will deduct the difference from payment to be made under this LTMMA. The City shall determine the value of the tree lost using the latest International Society of Arboriculture (I.S.A.) guidelines for value determination.

3. **Staking.** The Contractor shall securely stake any newly planted trees and other trees needing support with two “lodge pole” type stakes placed on opposite sides of the tree outside the root ball and secured to the tree with at least two flexible rubber tree ties. The Contractor shall regularly inspect tree ties and stakes and reposition them as necessary to ensure against girdling and abrasion.

**D. Fertilization.** The Contractor shall fertilize the Revegetation Area as necessary in accordance with instructions from the Project Biologist. Contractor shall submit to City Material Safety Data Sheets and a schedule of application showing the site, date, and approximate time of fertilizer application (Fertilizer Schedule). The Fertilization Schedule, regardless of its intensity, timing, or the number of sites covered daily or weekly, shall not excuse Contractor from performing any other Work regularly required under this LTMMA. All fertilization shall first be approved by the Project Biologist.

1. The Contractor shall notify the City at least 48 hours before beginning any fertilization. Fertilizer shall be delivered to the site only in the original unopened containers bearing the manufacturer’s guaranteed analysis. Damaged packages shall not be accepted. The Contractor shall furnish to the City with duplicate signed, legible copies of all certificates and invoices for all fertilizer to be used for this LTMMA. The invoices shall state the grade, amount and quantity received. Both the copy to be retained by the City and the Contractor’s copy shall be signed by the City, on site, before any fertilizer may be used.
2. Fertilizers, if necessary, shall be applied at the direction of the Project Biologist and according to manufacturer’s product specifications.
3. If deemed necessary by the City to achieve required results, the Contractor shall apply other materials as directed by the City, including:
  - a) iron chelate;
  - b) soil sulfur;
  - c) gypsum; or
  - d) surfactant enzymes such as Sarvon or Naiad.
4. The Contractor shall adequately irrigate the fertilized area(s) immediately following the application of fertilizers and/or amendments to force fertilizer material to rest directly on the soil surface. Drip irrigated areas shall be adequately hand watered using quick coupler valves and hoses to dissolve fertilizer.

- E. Weed Removal.** The Contractor shall completely remove weeds from the Revegetation Area, including all turf grass areas, shrub and ground cover areas, planters, tree wells, and cracks in paved areas, including sidewalks, parking lot, gutters and curbs, as shown on the Work Schedule. For the purposes of this Section, "Weed" means any undesirable or misplaced plant. The Contractor shall control Weeds by manual, mechanical, or chemical methods. The City or Project Biologist may restrict the use of chemical weed control in certain areas.

Weed removal in areas with native habitat shall be in accordance with **Section 802 of the Whitebook.**

- F. Disease and Pest Control.** The Contractor shall regularly inspect the Revegetation Area for the presence of disease and insect or rodent infestation. The Contractor shall notify the City within 4 Calendar Days if disease or insect or rodent infestation is discovered. In its notice to the City, the Contractor shall identify the disease, insect, or rodent and specify the control measures to be taken. Upon approval of the City, the Contractor shall implement the approved control measures, exercising extreme caution in the application of all sprays, dusts, or other materials utilized. The Contractor shall continue the approved control measures until the disease, insect, or rodent is controlled to the satisfaction of the City.

1. All individuals who supervise the mixing and application of herbicides, pesticides, and rodenticides on behalf of the Contractor shall possess valid Qualified Applicators Certificate for Category B issued to them by the State Department of Food and Agriculture.
2. The Contractor shall utilize all safeguards necessary during disease, insect or rodent control operations to ensure safety of the public and the employees of the Contractor, in accordance with current standard practices accepted by the State of California Department of Food and Agriculture. If the Contractor is unable to control the pest or disease, a pest control company will be hired and the cost shall be deducted from Contractor's monthly payment.

- G. Plant Replacement.** Except as provided in **Section H** below, the Contractor shall notify the City within 4 Calendar Days of the loss of plant material due to any cause.

1. The Contractor shall, at no cost to the City, replace any tree, shrub, ground cover, or other plant which is damaged or lost as a result of Contractor's faulty maintenance or negligence. The size and species of replacement plant materials shall be as directed by the City.
2. If so directed by the City, the Contractor shall replace any plant damaged or lost that is not a result of the Contractor's faulty maintenance or negligence. The size and species of replacement plant materials shall be as directed by City. The City will pay for materials and labor outside of warranty.
3. The City may determine that certain plants should be replaced in order to ensure maximum ecological health and overall aesthetic appearance of planting in the Revegetation Area. When the City determines such

replacement should occur, Contractor shall replace the plants as directed by the City. The City will pay for materials and labor outside of warranty.

- H. **Damage Reports.** The Contractor shall notify the City within 24 hours of any damage to the Work Area caused by accident, vandalism, or theft.
  
- I. **Litter.** The Contractor shall promptly dispose of all trash and debris at an appropriate City disposal site. The Contractor shall pay any and all fees associated with the disposal of debris or trash accumulated under the terms of this LTMMA. The Contractor understands that disposal of refuse at City landfills is subject to a fee and that the Refuse Disposal Division can be contacted at (619) 573-1418 for fee information.
  - 1. **Contractor Generated Litter.** The Contractor shall promptly remove all debris generated by the Contractor's pruning, trimming, weeding, edging and other Work required by this LTMMA. Immediately after working in streets, park walks, gutters, driveways, and paved areas, the Contractor shall clean them in accordance with all applicable laws.
  - 2. **Third Party Generated Litter.** Upon discovery, the Contractor shall remove all litter, including bottles, glass, cans, paper, cardboard, fecal matter, leaves, branches, metallic items, and other debris, from the Work site.
  
- J. **Monitoring.** The Project Biologist will oversee all maintenance operations and conduct qualitative and quantitative biological monitoring of the Revegetation Area according to the schedule and methods described in the Revegetation Plan. The Project Biologist will be responsible for preparing and submitting monitoring reports according to the schedule and instructions in the Revegetation Plan. The Project Biologist shall meet all requirements specified in **Section 802 of the Whitebook**.
  
- K. **Final Site Cleanup.** Prior to completion of the LTMMA, all temporary irrigation materials, BMP's, and signs shall be removed from the site and properly disposed of.

**EXHIBIT B**

**INSERT A COPY OF THE ENGINEER'S FIELD NOTIFICATION WHICH ACCEPTS THE PLANT ESTABLISHMENT PERIOD (PEP) AND ESTABLISHES THE COMMENCEMENT DATE OF THE MONITORING PROGRAM, SEE THE 2018 WHITEBOOK, SECTION 802**



**EXHIBIT C  
LICENSE DATA SHEET**

**State Contractor License Classification and Number:** 549309

**Name of License Holder:** Orion Construction Corporation

**Expiration Date:** 11/30/2022

**City of San Diego Business License Number:** B199002970

**Expiration Date:** 03/31/3022