

A G E N D A
GRANT COUNTY PUBLIC UTILITY DISTRICT
30 C Street SW – Commission Meeting Room
Ephrata, Washington
COMMISSION MEETING
Tuesday, June 28, 2022

An Executive Session may be called at any time for purposes authorized
by the Open Public Meetings Act

9:00 a.m. Commission Convenes

9:30 a.m. Reports from staff

12:00 Noon Lunch

1:00 p.m. Safety Briefing
Pledge of Allegiance
Attendance
Public requests to discuss agenda items/non-agenda items
Correspondence
Business Meeting

1. Consent Agenda

Approval of Vouchers

Meeting minutes of June 14, 2022

2. Regular Agenda

Motion authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract No. 430-11380 with MacKay & Sposito, Inc. (MSI), in an amount not-to-exceed \$5,000,000.00 and with a contract completion date of December 31, 2027. (3409)

3. Review Items For Next Business Meeting

Motion authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract No. 470-11429 with Maxim Crane, L.P., in an amount not-to-exceed \$1,117,867.00 and with a contract completion date of August 31, 2022. (xxxx)

4. Calendar

5. Reports from Staff (if applicable)

Adjournment

CONSENT AGENDA

Draft – Subject to Commission Review

REGULAR MEETING OF PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY

June 14, 2022

The Commission of Public Utility District No. 2 of Grant County, Washington, convened at 9:00 a.m. at Grant PUD's Main Headquarters Building, 30 C Street SW, Ephrata, Washington and via Microsoft Teams Meeting / +1 509-703-5291 Conference ID: 627 899 217# with the following Commissioners present: Judy Wilson, President; Tom Flint, Secretary; Terry Pyle, Commissioner (via Microsoft Teams) and Larry Schaapman, Commissioner. Nelson Cox was absent due to personal business.

The Commission convened to review vouchers and correspondence.

A round table discussion was held regarding the following topics: COVID response employee recognition; 2021 Wastewater Treatment Plant Outstanding Performance Award; troubleshooting of recent Cascade Valley outages; customer tree trimming request; request from Crescent Bar resident to partner with Grant PUD security to install cameras in boat launch parking areas due to recent break-ins; air monitoring partnering opportunities; follow-up on customer request for kayak launching area; request for workshop regarding maintenance and staffing requirements post fiber buildout completion anticipated in 2024; opinion of Commissioner Schaapman that associated tree trimming costs within the Grant PUD right of ways should be the responsibility of the customer; concerns with increase in new construction costs; request for improvements to itemized customer billing; request to consider modified scheduling for appointment one-on-ones and evaluations; Commissioner Pyle challenged the group to be thoughtful in the future, long term Grant PUD growth plan; kiosk update; and customer service representative local office coverage.

Randy Kono, Engineer V, provided a Quincy Transmission Improvements Update.

Ian Jones, Engineering Manager, presented a Construction Inspection and Construction Management Overview for Contract 430-11380.

Tom Dresser, Fish & Wildlife Manger, presented the Fish and Wildlife Report.

The Commission recessed at 12:00 p.m.

The Commission resumed at 1:00 p.m.

Motion was made by Mr. Flint and seconded by Mr. Pyle to excuse the absence of Commissioner Cox. After consideration, the motion was approved by unanimous vote of the Commission.

Public comment was received by Chris Anderson, Terry Anderson, and Ken Kernan of the Cascade Valley Community in Moses Lake, Washington. Each expressed frustration with multiple outages occurring recently.

Consent agenda motion was made Mr. Flint and seconded by Mr. Schaapman to approve the following consent agenda items:

Payment Number	121525	through	121916	\$11,535,449.15
Payroll Direct Deposit	197773	through	198519	\$2,068,984.41
Payroll Tax and Garnishments	20220601A	through	20220601B	\$907,503.09

Meeting minutes of May 24, 2022.

After consideration, the above consent agenda items were approved by unanimous vote of the Commission.

The Commissioners reviewed future agenda items.

The Commission calendar was reviewed.

Brett Lenz, Cultural Resources Manager, presented the Cultural Resources Program Report.

Chuck Allen, Senior Manager of External Affairs, and Annette Lovitt, Public Affairs Officer, provided the Community Engagement Activity Report.

Trade association and committee reports were reviewed.

An executive session was announced at 2:20 p.m. to last until 2:30 p.m. to review performance of a public employee with legal counsel present pursuant to RCW 42.30.110(1)(g). The executive session concluded at 2:30 p.m. and the regular session resumed.

An additional executive session was announced at 2:30 p.m. to last until 3:30 p.m. to review performance of a public employee pursuant to RCW 42.30.110(1)(g). The executive session concluded at 3:30 p.m. and the regular session resumed.

An additional executive session was announced at 3:30 p.m. to last until 4:05 p.m. to review performance of a public employee pursuant to RCW 42.30.110(1)(g). The executive session concluded at 4:05 p.m. and the regular session resumed.

There being no further business to discuss, the Commission adjourned at 4:05 p.m. on June 14th and reconvened on Tuesday, June 21st at 8:30 a.m. at the Ephrata Headquarters Building, 30 C Street SW, Ephrata, Washington for the purpose of holding a workshop and any other business that may come before the Commission with the following Commissioners present: Judy Wilson, Tom Flint, Terry Pyle and Larry Schaapman. A copy of the notice of adjournment was posted to the Grant PUD website.

An executive session was announced at 3:00 p.m. to last until 4:00 p.m. to review performance of a public employee with legal counsel present pursuant to RCW 42.30.110(1)(g). The executive session concluded at 2:30 p.m. and the regular session resumed.

An additional executive session was announced at 4:00 p.m. to last until 4:45 p.m. to review performance of a public employee with legal counsel present pursuant to RCW 42.30.110(1)(g). The executive session concluded at 3:30 p.m. and the regular session resumed.

There being no further business to discuss, the Commission adjourned at 4:45 p.m. on June 21st and reconvened on Friday, June 24th at 1:00 p.m. at the Ephrata Headquarters Building, 30 C Street SW, Ephrata, Washington for the purpose of holding an executive session and any other business that may come before the Commission with the following Commissioners present: Judy Wilson, Nelson Cox, Tom Flint, Terry Pyle and Larry Schaapman. A copy of the notice of adjournment was posted to the Grant PUD website.

There being no further business to discuss, the June 14, 2022 meeting officially adjourned at p.m. on June 24, 2022.

Judy Wilson, President

ATTEST:

ABSENT

Tom Flint, Secretary

Nelson Cox, Vice President

Terry Pyle, Commissioner

Larry Schaapman, Commissioner


REGULAR AGENDA


Motion was made by _____ and seconded by _____ authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract No. 430-11380 with MacKay & Sposito, Inc. (MSI), in an amount not-to-exceed \$5,000,000.00 and with a contract completion date of December 31, 2027.

MEMORANDUM

May 10, 2022

TO: Richard Wallen, General Manager/Chief Executive Officer

VIA: Jeff Grizzel, Chief Operations Officer
Ty Ehrman, P.E., Managing Director of Power Production 

FROM: Dale Campbell, P.E., Senior Manager of Power Production Engineering 

SUBJECT: Award of Contract No. 430-11380, Professional Services for Construction Management and Construction Inspection

Purpose: To request Commission award of Contract No. 430-11380, “Professional Services for Construction Management and Construction Inspection” to MacKay & Sposito, Inc. (MSI) of Kennewick, WA for a not to exceed contract price of \$5,000,000.00 with a contract completion date of December 31, 2027.

Discussion: The Power Production Engineering Department has identified several large construction projects budgeted in the next five years which will require construction inspector personnel. The projects currently identified for construction inspection support include Wanapum and Priest Rapids station service and substation switchgear replacement and Priest Rapids spillway post tension anchor installation. The Wanapum and Priest Rapids station service and substation switchgear is scheduled to start in September of this year at the Priest Rapids spillway post tension anchor installation is scheduled to start in 2025.

All of the projects are budgeted and the budgets include construction inspection support. The Priest Rapids spillway post tension anchor project will require a Quality Control Inspection Plan (QCIP) in accordance with the Federal Energy Regulatory Commission (FERC) license requirements. QCIPs typically require construction inspection staff and concrete testing oversight of construction contractors.

The proposals were opened on March 24th, 2022 in response to the District’s Request for Proposals posted on February 24th, 2022. Three (3) proposals were received. The proposals were reviewed and ranked by three District employees based on the evaluation criteria contained in the Request for Proposals. The evaluation team unanimously selected MSI as the highest-ranking company based on the evaluation criteria.

The District negotiated with MSI on the rate schedule and contract terms. MSI has agreed to a competitive rate schedule based on all the proposals received.

The District has received a high level of support from MSI since 2011. MSI has supported the District in construction of most of our relicensing compliance requirements such as the Priest Rapids fish bypass, Priest Rapids Hatchery rehabilitation, Wanapum fracture response, and our acclimation facilities. MSI is also currently supporting the District on the Priest Rapids Right Embankment Improvement Project.

Justification: Construction inspection and testing reduces the District’s risk. Successful completion of capital improvement projects is vital to the District’s ability to continue to provide low cost reliable electricity to the residents of Grant County. Construction inspectors on Grant County PUD projects have a track record of preventing poor quality construction and ensuring that construction conforms to plans and specifications. By heading off issues early, construction rework is held to a minimum and schedules are maintained.

Financial Considerations: The total not to exceed amount is \$5,000,000.00. The rate schedule provided in this contract was negotiated based on all the proposals received and similar current professional service contract rates. The funds for this contract were budgeted along with the direct capital costs.

Contract Specifics: Monthly payment will be based on the approved task authorizations. The Contract not to exceed amount is \$5,000,000.00.

Recommendation: Commission approval to award of Contract No. 430-11380, “Professional Services for Construction Management and Construction Inspection” to MacKay & Sposito, Inc. of Kennewick, WA for a not to exceed contract price of \$5,000,000.00 with a contract completion date of December 31, 2027.

Legal Review: See attached email(s).

AGREEMENT FOR PROFESSIONAL SERVICES

This Agreement, effective upon full execution, is by and between Public Utility District No. 2 of Grant County, Washington ("District") and MacKay and Sposito, Inc. ("Contractor");

R e c i t a l s :

The District desires to obtain construction management and construction inspection services; and

The District's Managing Director of Power Production believes this will provide cost savings to the District while assuring compliance with Contract specifications for various District construction projects; and

The Contractor, through an established review procedure, has been selected and is willing to provide services on the terms and conditions hereinafter stated.

NOW, THEREFORE, in consideration of the mutual covenants herein, the parties hereto agree as follows:

1. Scope of Services

Contractor shall provide general construction management and construction inspection services, including but not limited to the following: sampling, testing, transportation and monitoring of construction materials, including but not limited to fresh concrete, fresh grout, set concrete, set grout, concrete cores, aggregate, soils and water and paint. Inspection services will include working directly with other contractor personnel; monitoring and tracking construction procedures, methods, materials; monitoring construction safety and monitoring effects of construction activities on the environment, equipment and structures.

The construction projects covered by this professional services Contract are diverse in nature. The projects range from standard infrastructure development to one of a kind unique projects. The projects will involve work by all the trades.

The construction projects covered by this professional service Contract will require certified weld inspectors. The certified weld inspectors shall be certified for ultrasonic, magnetic particle, and radiograph non-destructive examination (NDE) practices according to the applicable American Welding Society (AWS) standards both in the field and laboratory.

Contractor shall provide current Certified Erosion & Sediment Control Leads (CESCL) to perform monitoring and inspections of construction sites. CESCL shall also maintain site logbooks and submit monthly Discharge Monitoring Reports (DMR) to the Department of Ecology as required.

Contractor shall provide electrical inspectors upon request. All electrical inspectors shall have a minimum of 10 years of experience in electrical construction.

Contractor shall provide Special Inspectors according to the definition in International Building Code (IBC) who are qualified persons registered with Washington Association of Building Officials (WABO). Special Inspectors with other credentials might be acceptable if their credentials are approved by the Grant County Building Department.

Contractor shall provide American Concrete Institute (ACI) Level 1 concrete technicians upon request.

Contractor shall provide National Ready Mix Concrete Association (NRMCA) Level 2 or equivalent concrete inspectors upon request. Civil inspectors with 15 or more years of concrete inspection experience will be considered equivalent to NRMCA Level 2.

All construction testing shall conform to American Society for Testing and Materials (ASTM) standards. Construction materials sampling and testing shall include, but not be limited to sampling and testing concrete, fine aggregate, coarse aggregate and soils. Concrete sampling and testing to include, but not be limited to sampling fresh concrete, measuring temperature, slump, flow, air content, density, sampling for cylinders and measuring compressive strength of cylinders. Grout sampling and testing to include, but not be limited to sampling fresh grout, measuring temperature, measuring flow, sampling for cubes and measuring compressive strength of cubes. Sampling hardened concrete by coring for samples. Cutting and preparing cored cylinders to measure density and measure compressive strength. Perform fine and coarse concrete aggregate sampling and testing. Concrete aggregate testing shall include, but not be limited to gradation and alkali-aggregate reaction tests. Soil sampling and testing shall include, but not be limited to sampling fine and coarse grained soils (cohesive and non-cohesive), sampling sands and gravels, and measuring moisture content and density of these listed materials.

The District will authorize the Contractor to perform specific tasks by means of a Task Authorization for Professional Services (Appendix "C") to be signed by both the District and the Contractor. Such authorization may be issued by the District Representative. The authorization will define the scope of the task, any time requirements and budget limitations.

The District makes no guarantee as to the actual amount of work to be done. The District reserves the right to suspend or terminate any authorized task at any time or to extend the Contract beyond the initial term by issuance of a Change Order in accordance with Section 5 to complete any work already initiated and/or authorized under the original term and scope of the Contract.

2. Independent Contractor

- A. The Contractor shall operate as, and have the status of, an independent Contractor and will not be an agent or employee of the District nor will it be entitled to any employee benefits provided by the District. All the Contractor's activities will be conducted at its own risk and be in compliance with all federal, state and local laws.
- B. The Contractor shall perform its services with the level of skill, care and diligence normally provided by and expected of professional persons performing services similar to or like those to be performed hereunder. Contractor understands that the District will be relying upon the accuracy, competency, credibility and completeness of the services provided by the Contractor hereunder and that the District and its customers will be utilizing the results of such services.

3. Term - Schedule

This Agreement shall remain in full force and effect until December 31, 2027 or until terminated pursuant to Section 17.

4. Compensation and Payment

- A. Compensation for services rendered and all reimbursable costs shall be per the rates set forth in Appendix "A", Rate Schedule, and Appendix "A-1", Subcontractor Rates, which

rates and costs shall not be subject to change until two years after the effective date of this Agreement. Any changes to rates and costs shall only be on a prospective basis and shall occur no more frequently than once every 12 months thereafter. Each such change shall not exceed the lesser of i.) 5% or ii.) the percentage increase in the Bureau of Labor Statistics Consumer Price Index (CPI-U) for the West Urban region occurring during the immediately preceding 12 month period for which CPI-U data is available. Contractor shall notify the District in writing at least 30 days prior to any such rate increase going into effect.

In no event however, shall the total amount paid to Contractor for services and all reimbursable costs exceed the sum of \$5,000,000.00 USD unless a Change Order authorizing the same is issued in accordance with Section 5 below.

- B. Contractor shall submit monthly invoices to the attention of:

Public Utility District No. 2
of Grant County, Washington
Attn: Accounts Payable
PO Box 878
Ephrata, WA 98823
Or AccountsPayable@gcpud.org

- C. Invoices shall include the Contract number and a detailed description of the work performed. Any Labor Categories or reimbursable expenses shall be included on the invoice (see Appendix "A" and "A-1").
- D. Payment will be made by the District upon completion of work following District approval of Contractor's invoices. Invoice shall be subject to the review and approval of the District. Invoice shall be in a detailed and clear manner supported by such information the District may require. The District will make payment to Contractor within 30 days after District's receipt and approval of said invoice.
- E. The District Representative may approve additional Contractor employees, personnel categories, and/or equipment rates to be added to the Rate Schedule and Subcontractor Rates, if applicable, provided that any additional employees have at least equivalent training and skills and are compensated at the same or lower rates than those listed on the current approved Rate Schedule and Subcontractor Rates for similar work. There shall be no change in the total Contract not to exceed amount. All additions must be approved in writing prior to performing services under the Contract.

5. Change Orders

Except as provided herein, no official, employee, agent or representative of the District is authorized to approve any change in this Contract and it shall be the responsibility of the Contractor before proceeding with any change, to satisfy itself that the execution of the written Change Order has been properly authorized on behalf of the District. The District's management has limited authority to approve Change Orders. The current level and limitations of such authority are set forth in District Resolution No. 8609 which may be amended from time to time. Otherwise, only the District's Board of Commissioners may approve changes to this Contract.

Charges or credits for the work covered by the approved changes shall be determined by written agreement of the parties and shall be made on Change Order form as reflected on Appendix "B".

When a change is ordered by the District, as provided herein, a Change Order shall be executed by the District and the Contractor before any Change Order work is performed. When requested, Contractor shall provide a detailed proposal for evaluation by the District, including details on proposed cost. The District shall not be liable for any payment to Contractor, or claims arising there from, for Change Order work which is not first authorized in writing. All terms and conditions contained in the Contract Documents shall be applicable to Change Order work. Change Orders shall be issued on the form attached as Appendix "B" and shall specify any change in time required for completion of the work caused by the Change Order and, to the extent applicable, the amount of any increase or decrease in the Contract Price.

6. Taxes

- A. Except for the Washington State retail sales and use taxes as may be levied upon the Contract, pursuant to RCW Chapters 82.08 and 82.12, the Contract Price includes and the Contractor shall have the full exclusive liability for the payment of all taxes, levies, duties and assessments of every nature due and payable in connection with this Contract or its employees and subcontractors performing work related to this Contract.
- B. Washington State retail sales tax and use taxes levied upon this Contract pursuant to RCW Chapters 82.08 and 82.12 are excluded from the rates and if applicable will be reimbursed as follows:
 - 1. If the Contractor has, or is required to have a valid Washington State sales tax identification number, the identification number shall be furnished to the District upon request. The Contractor shall make payment of any Washington State retail sales and use taxes due and Contractor shall be reimbursed by the District for the same. Contractor shall be solely responsible for any interest or penalties arising from late or untimely payment of said taxes.
 - 2. If the Contractor is not required to have a valid Washington State sales tax identification number, it shall notify the District of the same. In such event, the District, after receiving proper invoices from Contractor, shall make payment of said Washington State retail sales and use taxes levied upon this Contract to the Washington State Department of Revenue.

7. Hold Harmless and Indemnification

Contractor shall, at its sole expense, indemnify, save, and hold harmless the District, its officers, agents, and employees from all actual or potential claims or losses, including costs and legal fees at trial and on appeal, and damages or claims for damages to property or persons, suffered by anyone whomsoever, including the District, to the extent caused by any negligent act of or omission of the Contractor or its subcontractors, excluding damages caused by the negligence of the District, in the administration or performance of this Agreement or any subcontracts, and for which either of the parties, their officers, agents, or employees may or shall be liable. In situations where liability for damages arises from claims of bodily injury to persons or damage to property, this indemnity provision shall be valid and enforceable only to the extent of the negligence of the Contractor or its subcontractors. Contractor waives its immunity under industrial insurance, Title 51 RCW, to the extent necessary to effectuate this indemnification/hold harmless agreement.

Contractor's indemnification obligation shall not apply to liability for damages arising out of bodily injury to a person or damage to property caused by the negligence of the District or its agents or employees and not attributable to any negligent act or omission on the part of the Contractor. In the event of damages to a person or property caused by or resulting from the concurrent negligence of District or its agents or employees and the Contractor or its agents or employees, the Contractor's indemnity obligation shall apply only to the extent of the Contractor's (including that of its agents and employees) negligence.

Contractor acknowledges that by entering into this Contract with the District, it has mutually negotiated the above indemnity provision with the District. Contractor's indemnity and defense obligations shall survive the termination or completion of the Contract and shall remain in full force and effect until satisfied in full.

8. Insurance

- A. Prior to the commencement of any work under this Agreement, and at all times during the term of this Agreement, Contractor shall obtain and maintain continuously, at its own expense, a policy or policies of insurance with insurance companies rated A- VII or better by A. M. Best, as enumerated below. Any significant deductible, self-insured retention or coverage via captive must be disclosed and is subject to approval by the District's Risk Manager. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor and not recoverable under any part of this Contract.

Contractor Required Insurance

1. **General Liability Insurance:** Commercial general liability insurance, covering all operations by or on behalf of Contractor against claims for bodily injury (including death) and property damage (including loss of use). Such insurance shall provide coverage for:

- a. Premises and Operations;
- b. Products and Completed Operations;
- c. Contractual Liability;
- d. Personal Injury Liability (with deletion of the exclusion for liability assumed under Contract);
- e. Pollution Liability (sudden and accidental); and
- f. Such insurance shall not exclude coverage for action-over liability claims.

with the following **minimum limits:**

- g. \$1,000,000 Each Occurrence
- h. \$1,000,000 Personal Injury Liability
- i. \$2,000,000 General Aggregate (per project)
- j. \$2,000,000 Products and Completed Operations Aggregate

Commercial general liability insurance will include the District as additional insured on a primary and non-contributory basis for ongoing operations. A waiver of subrogation will apply in favor of the District.

2. **Workers' Compensation and Stop Gap Employers Liability:** Workers' Compensation Insurance as required by law for all employees. Employer's Liability Insurance, including Occupational Disease coverage, in the amount of **\$1,000,000 for Each Accident, Each Employee, and Policy Limit.** The Contractor expressly agrees to comply with all provisions of the Workers' Compensation Laws of the states or countries where the work is being performed, including the provisions of Title 51 of the Revised Code of Washington for all work occurring in the State of Washington.

If there is an exposure of injury or illness under the U.S. Longshore and Harbor Workers (USL&H) Act, Jones Act, or under U.S. laws, regulations or statutes applicable to maritime employees, coverage shall be included for such injuries or claims. Such coverage shall include USL&H and/or Maritime Employer's Liability (MEL).

3. **Automobile Liability Insurance:** Automobile Liability insurance against claims of bodily injury (including death) and property damage (including loss of use) covering all owned, rented, leased, non-owned, and hired vehicles used in the performance of the work, with a **minimum limit of \$1,000,000 per accident** for bodily injury and property damage combined and containing appropriate uninsured motorist and No-Fault insurance provision, when applicable.

Automobile liability insurance will include the District as additional insured on a primary and non-contributory basis. A waiver of subrogation will apply in favor of the District.

4. **Excess Insurance:** Excess (or Umbrella) Liability insurance with a **minimum limit of \$5,000,000 per occurrence and in the aggregate when combined with underlying primary limits.** This insurance shall provide coverage in excess of the underlying primary liability limits, terms, and conditions for each category of liability insurance in the foregoing subsections 1, 2 and 3. If this insurance is written on a claims-made policy form, then the policy shall be endorsed to include an automatic extended reporting period of at least five years.

Umbrella/Excess liability insurance will include the District as additional insured on a primary and non-contributory basis for ongoing operations. A waiver of subrogation will apply in favor of the District.

5. **Professional Liability:** Contractor shall provide professional liability insurance with a **minimum limit of \$5,000,000 per claim.**

If such policy is written on a claims made form, the retroactive date shall be prior to or coincident with the Effective Date of this Agreement. Claims made form coverage shall be maintained by the Contractor for a minimum of three years following the termination of this Agreement, and the Contractor shall annually provide the District with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall

purchase an Extended Reporting Period Tail or execute another form of guarantee acceptable to the District to assure financial responsibility for liability for services performed.

If Contractor shall hire subcontractor for all operations and risk involving professional services exposure, this requirement may be satisfied by subcontractor's policies. Contractor shall impute the insurance requirements stated in this section to subcontractor by written contract or written agreement. Any exceptions must be mutually agreed in writing with the District.

- B. Evidence of Insurance - Prior to performing any services, and within 10 days after receipt of the Contract Award, the Contractor shall file with the District a Certificate of Insurance showing the Insuring Companies, policy numbers, effective dates, limits of liability and deductibles with a copy of the endorsement naming the District as an Additional Insured for each policy where indicated in Section A.

Failure of the District to demand such certificate or other evidence of compliance with these insurance requirements or failure of the District to identify a deficiency from the provided evidence shall not be construed as a waiver of the Contractor's obligation to maintain such insurance. Acceptance by the District of any certificate or other evidence of compliance does not constitute approval or agreement by the District that the insurance requirements have been met or that the policies shown in the certificates or other evidence are in compliance with the requirements.

The District shall have the right but not the obligation of prohibiting the Contractor or subcontractor from entering the project site until such certificates or other evidence of insurance has been provided in full compliance with these requirements. If the Contractor fails to maintain insurance as set forth above, the District may purchase such insurance at the Contractor's expense. The Contractor's failure to maintain the required insurance may result in termination of this Contract at the District's option.

- C. Subcontractors - Contractor shall ensure that each subcontractor meets the applicable insurance requirements and specifications of this Agreement. All coverage for subcontractors shall be subject to all the requirements stated herein and applicable to their profession. Contractor shall furnish the District with copies of certificates of insurance evidencing coverage for each subcontractor upon request.
- D. Cancellation of Insurance - The Contractor shall not cause any insurance policy to be canceled or permit any policy to lapse. Insurance companies or Contractor shall provide 30 days advance written notice to the District for cancellation or any material change in coverage or condition, and 10 days advance written notice for cancellation due to non-payment. Should the Contractor receive any notice of cancellation or notice of nonrenewal from its insurer(s), Contractor shall provide immediate notice to the District no later than two days following receipt of such notice from the insurer. Notice to the District shall be delivered by facsimile or email.

9. Assignment

Contractor may not assign this Agreement, in whole or in part, voluntarily or by operation of law, unless approved in writing by the District.

10. Records - Audit

- A. The results of all work and services performed by the Contractor hereunder shall become the property of the District upon completion of the work herein performed and shall be delivered to the District prior to final payment.
- B. Until the expiration of three years after final acceptance by District of all the work, Contractor shall keep and maintain complete and accurate records of its costs and expenses related to the work or this Contract in accordance with sound and generally accepted accounting principles applied on a consistent basis. To the extent this Contract provided for compensation on a cost-reimbursable basis or whenever such records may, in the opinion of the District, be useful in determining any amounts payable to Contractor or District (e.g., the nature of a refund, credit or otherwise), Contractor shall provide District access to all such records for examination, copying and audit.

11. Nondisclosure

Contractor agrees that it will not divulge to third parties excepting its employees and its subcontractors who have a need-to-know to perform the services, without the written consent of the District, any information obtained from or through District in connection with the performance of this Contract. Contractor further agrees that it will not, without the prior written consent of District, disclose to any third party any information developed or obtained by the Contractor in the performance of this Contract and, if requested by District, to require its employees and subcontractors, if any, to execute a nondisclosure agreement prior to performing any services under this Contract. Nothing in this section shall apply to:

- A. Information which is already in the Contractor's possession not subject to any existing confidentiality provisions,
- B. Information which, at the time of disclosure, is in the public domain by having been printed and published and available to the public libraries or other public places where such data is usually collected, and
- C. Information required to be disclosed by court order or by an agency with appropriate jurisdiction.

12. Public Records Act

The District is subject to the disclosure obligations of the Washington Public Records Act of RCW 42.56. The Contractor expressly acknowledges and agrees that any information Contractor submits is subject to public disclosure pursuant to the Public Records Act or other applicable law and the District may disclose Contractor's proposal and/or information at its sole discretion in accordance with its obligations under applicable law.

13. Applicable Law

Contractor shall comply with all applicable federal, state and local laws and regulations including amendments and changes as they occur. All written instruments, agreements, specifications and other writing of whatsoever nature which relate to or are a part of this Agreement shall be construed, for all purposes, solely and exclusively in accordance and pursuant to the laws of the State of Washington. Contractor shall not be responsible for any non-compliance with applicable laws to

the extent resulting from errors or deficiencies in drawings, plans, processes, specifications, or facilities furnished by the District or others on its behalf. The rights and obligations of the District and Contractor shall be governed by the laws of the State of Washington. Venue of any action filed to enforce or interpret the provisions of this Agreement shall be exclusively in the Superior Court, County of Grant, State of Washington or the Federal District Court for the Eastern District of Washington at the District's sole option. In the event of litigation to enforce the provisions of this Agreement, the prevailing party shall be entitled to reasonable legal fees in addition to any other relief allowed.

14. Subcontracts/Purchases

- A. The Contractor is authorized to enter into subcontracts and to make purchases of materials and equipment required for the work. Any material purchases shall be approved in advance by the District Representative and Procurement Officer.
- B. Whenever the cost for any single item of material is estimated to exceed \$5,000.00, the Contractor shall obtain three quotes and submit to the Procurement Officer for approval. These quotes shall be submitted for approval prior to purchasing the material. Approved material shall be invoiced at cost plus the percentage markup identified in Appendix "A". A copy of the invoice showing actual cost must be submitted with the Contractor's invoice to the District. In addition, if prevailing wages apply to the material purchase, a copy of the associated Intent to Pay Prevailing Wages and Affidavit of Wages Paid must be attached. In no event shall a material purchase of like items exceed \$15,000.00.
- C. Before entering into any subcontracts and throughout the duration of the Contract, the District Representative and Procurement Officer may request copies of the subcontractor agreements from the Contractor. Subcontracted work approved in accordance with this section shall be invoiced at cost plus the percentage markup identified in Appendix "A". A copy of the invoice showing actual cost must be submitted with the Contractor's invoice to the District. In addition, if prevailing wages apply to the services provided, a copy of the subcontractors Intent to Pay Prevailing Wages and Affidavit of Wages Paid must be attached in order for payment to be made for that particular work. In no event shall a labor subcontract exceed \$25,000.00.

15. Notices

Any notice or other communication under this Contract given by either party shall be sent via email to the email address listed below, or mailed, properly addressed and stamped with the required postage, to the intended recipient at the address and to the attention of the person specified below and shall be deemed served when received and not mailed. Either party may from time to time change such address by giving the other party notice of such change.

District
 Dale Campbell
 Public Utility District No. 2
 of Grant County, Washington
 PO Box D4
 14352 Highway 243 S Building 6
 Beverly, WA 99321
 (509) 754-5088, ext. 3157
 dcampbe@gcpud.org

Contractor
 MacKay and Sposito, Inc.
 Rob Palena
 1110 Osprey Pointe Blvd., Suite 105
 Pasco, WA 99301
 (509) 374-4248
 rpalena@mackaysposito.com

For purposes of technical communications and work coordination only, the District designates Dale Campbell as its representative. Said individual shall have no authority to authorize any activity which will result in any change in the amount payable to Contractor. Such changes, if any, must be by written Change Order issued in accordance with Section 5 to be valid and binding on the District.

16. Ownership of Work Product/Copyright

- A. All rights in the various work produced for or under this Agreement, including but not limited to study plans, results, drafts, charts, graphs, videos, summaries and any other forms of presentation, collectively referred to as "Work Product" shall belong to and be the exclusive property of the District. Contractor shall not use the Work Product outside the scope of this Contract without express written permission from the District.
- B. Contractor acknowledges and agrees that all services/work are specifically ordered under an agreement with Public Utility District No. 2 of Grant County, Washington, and shall be considered "work made for hire" and "Work Product" for purposes of copyright. All copyright interest in Work Product shall belong to and be the exclusive property of the District.
- C. Contractor shall attach and require each of its subcontractors to attach the following statement to all Work Product:

©. PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY, WASHINGTON. ALL RIGHTS RESERVED UNDER U.S. AND FOREIGN LAW, TREATIES AND CONVENTIONS.

THE ATTACHED WORK WAS SPECIFICALLY ORDERED UNDER AN AGREEMENT WITH PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY, WASHINGTON. ALL RIGHTS IN THE VARIOUS WORK PRODUCED FOR OR UNDER THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO STUDY PLANS AND STUDY RESULTS, DRAFTS, CHARTS, GRAPHS AND OTHER FORMS OF PRESENTATION, SUMMARIES AND FINAL WORK PRODUCTS, ARE THE EXCLUSIVE PROPERTY OF THE DISTRICT.
- D. Upon final acceptance or termination of this Agreement, Contractor shall immediately turn over to the District all Work Product. This does not prevent the Contractor from making a file copy for their records.

17. Termination

- A. District may, at any time, for any reason, terminate Contractor's services in connection with this Agreement, or any part thereof, by designating that portion of the services to be terminated. In case of termination pursuant to this Section A, District will make payment at the rates specified in this Agreement for services properly performed up to the date of termination. However, in no event shall Contractor be entitled to any other payment to or any anticipated fee or profit on unperformed work.
- B. In the event of Contractor's breach or abandonment of this Contract, the District may thereupon and without further notice, terminate this Agreement. The District without

waiving any other remedies available to it, may retain any monies otherwise due Contractor under this Agreement to the extent such sums are required to compensate District, in whole or in part, for any loss or damage caused by Contractor's breach or abandonment.

18. Non-Waiver

No waiver of any provision of this Agreement, or any rights or obligations of either Party under this Agreement, shall be effective, except pursuant to a written instrument signed by the Party or Parties waiving compliance, and any such waiver shall be effective only in the specific instance and for the specific purpose stated in such writing. The failure of either Party to require the performance of any term of this Agreement or the waiver of either Party of any breach under this Agreement shall not operate or be construed as a waiver of any other provision hereof, nor shall it be construed as a waiver of any subsequent breach by the other Party hereto.

19. Physical Security

If any performance under this Contract is to be conducted on District facilities or worksites, it shall be the responsibility of the Contractor to ensure that its employees and those of its Subcontractors are informed of and abide by the District's Security Policies as if fully set out herein a copy of which shall be provided to the Contractor by the District Representative at the preconstruction meeting or prior to beginning work. Without limiting the foregoing, Contractor and its employees shall be required to:

- A. Keep all external gates and doors locked at all times and interior doors as directed.
- B. Visibly display ID badges on their person at all times.
- C. Stay out of unauthorized areas or in authorized areas outside of authorized work hours, without express authorization from the District.
- D. Provide proper notification to the appropriate parties, and sign in and out upon entry and exit to secured locations. If unsure of who to notify, Contractor shall contact the District Representative.
- E. Immediately notify the District if any of Contractor's employees no longer need access or have left the Contractor's employment.
- F. Immediately report any lost or missing access device to the District Representative. A minimum charge will be assessed the Contractor in the amount of \$50.00 per badge and the fee for lost or non-returned keys may include the cost to re-key the plant facilities. The Contractor is strictly prohibited from making copies of keys.
- G. Not permit 'tailgating' through any controlled access point (i.e. person(s), authorized or unauthorized, following an authorized person through an entry point without individual use of their issued ID badge or key).
- H. Return all District property, including but not limited to keys and badges, to the District Representative when an individual's access to the facility is no longer needed.

The Contractor and any Subcontractors shall comply with the safety requirements of these Contract Documents and all District policies pertaining to COVID-19 located at <https://www.grantpud.org/for-contractors>.

20. Security, Safety Awareness Training, and Dam Safety Awareness Training

Prior to receiving access to any District facilities, all Contractors, Contractor's employees, subcontractors and subcontractor's employees, material suppliers and material supplier's employees, or any person who will be engaged in the work under this Contract that requires access to District facilities, shall be required to take and pass the District's Security and Safety Awareness training before being issued a security access badge to access District facilities. Under no circumstances will the failure of any Contractor or subcontractor employee to pass the required training, be grounds for any claim for delay or additional compensation.

The Safety and Security Awareness training is available online and is a 20-30 minute training. The training is located at: <https://www.grantpud.org/for-contractors>. All contractors and their employees are required to successfully complete Safety and Security Awareness training before coming onsite. The Security and Safety certificates should be emailed directly to SecurityTrainingCerts@gcpud.org.

District Representative shall ensure that Contractor's employees, subcontractor's and subcontractor's employees have completed and submitted the certificate of completion for the training in a timely manner to avoid any delay in execution of the work. All such certificates shall be submitted before any security access badges will be issued.

If applicable, Dam Safety Awareness Training is required for Contractors who are performing work in and around Priest Rapids and Wanapum Dams and are badged. The training is available online only and is a 20-30 minute training. Contractor shall ensure that its employees, Subcontractors and Subcontractor's employees have completed, passed and printed the certificate of completion for the training in a timely manner to avoid any delay in execution of the work. All such certificates shall be submitted to the District Representative before any security access badges will be issued.

21. 2008 Early Retirement Factors Acknowledgement

By executing this Contract, Contractor acknowledges that they are in compliance with RCW 41.50.139 regarding the 2008 early retirement factors per WAC 415-02-325. Contractors found to be in non-compliance shall be responsible for all penalties incurred.

22. Protected Information

The State of Washington, Federal Energy Regulatory Commission (FERC) and/or North American Reliability Corporation (NERC) has established regulations for the protection of sensitive plans, drawings and records defined as Security Sensitive Information (SSI), Critical Energy Infrastructure Information (CEII) and/or Bulk Electric System Cyber System Information (BCSI), reference Appendix "E". In accordance with the Revised Code of Washington (RCW), FERC and NERC regulations, and using them as guidance, the District has identified and designated certain information as SSI, CEII, and/or BCSI (hereinafter referred to collectively as "Protected Information"). Because of the sensitive nature of certain District Protected Information that could be used in this Contract, Contractor is bound by the terms and conditions set forth in the Non-Disclosure Agreement (NDA) executed at the time of this Agreement and included as Appendix "D".

23. Background Checks

The District reserves the right to conduct or to require Contractor to conduct criminal background checks on its employee(s) before the District will grant such individuals access to secure areas of District facilities or electronic access to Bulk Electric System Cyber Assets or Protected Information. Criminal background checks may be conducted in such depth as the District reasonably determines to be necessary or appropriate for the type of access to be granted.

In the event the District determines in its sole discretion that an individual is unsatisfactory to the District or fails to provide a background check as requested by the District, the District reserves the right to require the Contractor to remove such individual from the job site and/or to exclude such individual from having any access to SSI, Bulk Electric System Cyber Assets, CEII, or BCSI.

24. Qualification of Contractor's Access and Personnel Change Approval

The District reserves the right to deny any Contractor or employee thereof access to District facilities or Protected Information at the District's sole discretion. The District will be the sole judge of such effect. All Contractors and employees thereof shall be subject to the nondisclosure provisions of this Contract.

The District reserves the right to conduct or to require Contractor to conduct criminal background checks, provide an identity validation document (I-9, Social Security card, driver's license) and complete the District provided training for its employee(s) before the District will grant such individuals access to secure areas of District facilities. Criminal background checks may be conducted in such depth as the District reasonably determines to be necessary or appropriate for the type of access to be granted. Contractor shall execute one certification for each employee requiring a background check on the form provided by the District and attached hereto as Appendix "F". The cost of such background checks shall be borne by the Contractor. For access to Protected Information relating to Critical Infrastructure Protection, the District reserves the right to require a Non-Disclosure Agreement and a certificate of completion from the District-provided training for each employee before the District will grant access to such individuals.

In the event the District determines in its sole discretion that an individual or Contractor is unsatisfactory or fails to provide a background check as requested by the District, or fails to provide the information listed above, the District reserves the right to exclude such individual or Contractor from secure areas and/or from having any access to Protected Information.

25. Contractor Safety Requirements

The following applies if Contractor, or any of its sub-consultants, subcontractors, or suppliers of any tier, performs any activities on premises owned, leased, possessed, or controlled by the District. The Contractor Safety Requirements shall be required when applicable as determined by the District Representative based upon the scope of work. To the extent applicable, the Contractor shall ensure that all workers, sub-consultants, subcontractors, and suppliers comply with these requirements. In fulfilling these requirements, the Contractor shall also comply with material and equipment manufacturer instructions, and safety and health requirements in accordance with WAC 296-126-094 and this Agreement where applicable. If there are conflicts between any of the requirements referenced in the Contract Documents, the more stringent requirement shall prevail.

A. General

Initial/Warning Notice: Any District employee may notify the Contractor of any safety or health concern. The notice may be delivered verbally to any Contractor employee or subcontractor and the District employee shall notify the District Representative of the Notice. Written notification may be provided to the Contractor at the discretion of the District Representative. The notice shall have the same effect on the Contractor regardless of format or recipient. The Contractor shall take immediate action to mitigate the safety and health concerns identified in the District's notice.

- B. Stop Work Order: District employees also have the authority to immediately stop a work activity without issuing the Initial/Warning Notice. The District employee will immediately notify the District Representative of the Stop Work Order. The District Representative may direct the Contractor to stop work due to safety and health concerns. The Stop Work Order may cover all work on the Contract or only a portion of the work. After the District issues a Stop Work Order, the Contractor shall meet with District Representatives (as determined by the District Representative) to present a written statement outlining specific changes and/or measures the Contractor will make to work procedures and/or conditions to improve safety and health. A Stop Work Order can be rescinded only with the written approval of the District Representative.
 - 1. The Contractor shall not be entitled to any adjustment of the Contract price or schedule when the District stops a work activity due to safety and health concerns that occurred under the Contractor's, Subcontractor's, or supplier's control.
 - 2. The District's conduct does not alter or waive the Contractor's safety and health obligations.
 - 3. Contractor shall provide an onsite Safety Professional as directed by the District Representative based upon number and/or severity of identified safety infractions.
 - 4. Non-compliance with safety requirements could lead to termination of the contract in accordance with Section 17.
- C. The Contractor shall maintain an accurate record of, and shall immediately report to the District Representative all cases of near miss or recordable injury as defined by OSHA, damage to District or public property, or occupational diseases arising from, or incident to, performance of work under this Contract.
 - 1. The record and report shall include where the incident occurred, the date of the incident, a brief description of what occurred, and a description of the preventative measures to be taken to avoid recurrence, any restitution or settlement made, and the status of these items. A written report shall be delivered to the District Representative within five business days of any such incident or occurrence.
 - 2. In the event of a serious incident, injury or fatality the immediate group shall stop work. The Contractor/subcontractor shall secure the scene from change until released by the authority having jurisdiction. The Contractor shall collect statements of the crew/witnesses as soon as practical. The District reserves the right to perform an incident investigation in parallel with the Contractor. The Contractor, subcontractor, and their workers shall fully cooperate with the District in this investigation.
 - 3. All cases of death, serious incidents, injuries or other incidents, as determined by the District Representative, shall be investigated by the Contractor to identify all causes and to recommend hazard control measures. A written report of the investigation

- shall be delivered to the District Representative within 30 calendar days of any such incident or occurrence.
4. For situations that meet the reporting requirements of WAC 296-800, the Contractor shall self-report and notify the District Representative. The District Representative shall notify the District's Safety personnel.
- D. The Contractor/subcontractor shall conduct and document job briefings each morning with safety as an integral part of the briefing. The Contractor/Subcontractor shall provide an equivalent job briefing to personnel and/or visitors entering the job site after the original job briefing has been completed for work within their scope. Immediately upon request, the Contractor shall provide copies of the daily job briefing and any other safety meeting notes to the District Representative. The notes, at a minimum, shall include date, time, topics, and attendees and shall be retained by the Contractor for three years after completion of all work.
 - E. Job Site Reviews Performed by the District: The Contractor Site Representative or other lead personnel, if requested by the District, shall be required to participate in District job briefs and/or District job site reviews that pertain to other work being performed that may impact the Contractor's work.
 - F. Job Site Reviews Performed by Contractor: Each Contractor and Subcontractor shall perform and document weekly safety reviews of their work area(s) by a competent person as defined by WAC 296-62-020. Immediately upon request, the Contractor shall provide a copy of the documented job site review to the District Representative. Contractor and Subcontractor supervisors/foremen shall take immediate action to correct violations, unsafe practices, and unsafe conditions. The Contractor and Subcontractor shall be solely responsible to review and monitor the work area or location of all their employees during the performance of work.
 - G. Site Specific Safety Plan (SSSP): The Contractor shall prepare, implement, and enforce a SSSP for all work included in this Contract. The SSSP shall be delivered to and accepted by the District Representative prior to the start of any on-site work.
 1. The SSSP shall, at a minimum, identify and provide mitigation measures for any recognized hazards or conditions. Site and adjacent conditions shall be considered. All significant hazards, including unusual or unique hazards or conditions specific to the Contract work shall be identified and mitigated. The Contractor shall provide a clear delegation of authority for the work site(s). The Contractor shall identify, locate, and provide direction to the nearest emergency medical facilities. This shall include telephone numbers for emergency services in the area.
 2. The Contractor shall make available to all workers at the site(s) the SSSP and ensure that all workers are familiar with the content and requirements of the SSSP. Any subcontractors shall adhere to the Contractor's SSSP.
 3. Any emergent hazards not identified in the SSSP shall require a Job Hazard Analysis prior to starting work on the associated job.
 - H. District Rescue Team and Relation to Contractor Emergencies and Back Shift Operations When District Rescue Team is Not Present: Contractors shall be required to submit an Emergency Plan that covers first response and rescues. This is required to be submitted for approval by the District Representative prior to work starting. Contractors are

encouraged to familiarize themselves with District First Responder and Rescue Team capabilities. District Response Teams may not be available during all work hours and typically are not available on off-shifts, weekends, and District holidays. Contractors choosing not to provide their own response personnel must include a process that does not rely on the District in the event District Response Teams are not available.

- I. Contractor shall ensure all crew members, including Subcontractors, performing work are OSHA 10 certified.

Specialized Work

- J. Requirements for Contractor Representative Attendance at Safety Meetings: The Contractor Site Representative or other lead personnel, if requested by the District and necessary for Contractor's performance of the services, shall be required to attend the District monthly safety meeting. The above is a District requirement.
- K. Fabricated Lifting Devices: All fabricated lifting devices including materials handling and storage devices, below the hook lifting devices, cranes, derricks and rigging used in the work shall comply with the most current version of the applicable sections of WAC 296-24 Part D, ASME B30.30 Below the Hook Lifting Devices, ASME BTH-1 Design of Below the Hook Lifting Devices Part F and Part L and the District's Fabricating, Repairing, or Modifying Lifting Devices In-House Policy (SA111123B-APP). Where a conflict may exist between the standards, codes and District Policy, the stricter interpretation of the rules shall apply. At a minimum, lifting devices shall be designed with a factor of safety of 5 to the ultimate material strength. Devices shall be load tested to 200% of the rated working load. Devices carrying personnel shall be designed and the design shall be checked by licensed professional engineers. All custom designs shall be approved and load test witnessed and approved by the District Representative before they are permitted for use on District facilities. The above is the most stringent of WAC, ASME and District requirements.
- L. Crane Operator Certification Requirements – NCCCO: Contractor personnel who operate the District's cranes shall be certified under the National Commission for the Certification of Crane Operators (NCCCO) program. This includes but is not limited to overhead cranes, mobile cranes and boom trucks. Contractor shall be required to present current certification cards for approval by the District Representative prior to equipment operation. The above is a District requirement.
- M. Crane Inspections: Contractor personnel who perform crane inspections shall be certified under the National Commission for the Certification of Crane Operators (NCCCO) program. Inspectors shall be required to present a current certification card for approval by the District Representative prior to performing duties. The above is a District requirement.
- N. Rigging Inspections: Contractor personnel who perform rigging inspections or other lifting and handling of large components shall be certified under the National Commission for the Certification of Crane Operators (NCCCO) program. Riggers shall be required to present a current certification card for approval by the District Representative prior to performing duties. At the District Representative's discretion, a Millwright's card may be substituted for NCCCO certification after review and approval of the Millwright's rigging certification program. The above is a District requirement.

- O. Cord Covers to High Traffic Areas: Contractors shall be required to protect all electrical cords, air lines, hydraulic hoses, water hoses, and other cords, hose, cables, and pipes to prevent them from being driven over or creating tripping or other hazards including at a minimum but not limited to utilizing cord covers in high traffic areas and installing temporary barriers when necessary to prevent foot or vehicle traffic. The above is a District requirement.
- P. Energized Vault Work: All work that takes place regarding underground electrical installations shall comply with the most current version of WAC 296-45 which includes all types of electrical vaults and manholes. When this work involves installing, removing, terminating or switching, personnel must do so without entering the energized vault. To further clarify, all live line tools placed in the energized vault must be properly tested and comply with the requirements set forth in the most current version of WAC 296-45. The above is a Code requirement.
- Q. Scaffold Design, Erection and Inspection: All scaffold work shall comply with the most recent version of WAC 296-874. The Contractor shall ensure all scaffolds are designed by a qualified person and constructed according to that design. Only qualified personnel shall erect, move, dismantle and/or alter scaffolds. Qualified erectors shall be supervised by a competent person. Scaffold inspections shall be performed by a competent person before each work shift and after anything occurs that could affect the scaffold's structural integrity. The above is a Code requirement.
- R. Involvement in Job Briefs by Others/Involvement of Others in Contractor's Job Briefs: When work completed by the Contractor will or may affect work being completed by other contractors or by District staff, the Contractor shall ask for a representative from the other contractor or District staff to participate in the Contractor's daily job brief for the purpose of informing the other party of safety hazards that may be encountered as a result of the affected work. Job brief discussion shall include hazards that the other contractor or District staff may encounter as part of the Contractor's work, mitigation measures, clearance points and boundaries, effects that equipment taken out of service or put back into service could have on other parties, Personal Protective Equipment (PPE) requirements and contingency plans. The above is a District requirement.
- S. Temporary Traffic Control: When work activities occur within or adjacent to District access roads, the Contractor shall follow the guidelines for Temporary Traffic Control Planning as specified in the current Manual on Uniform Traffic Control Devices. The plan shall be reviewed and approved by the District Representative prior to implementation. The above is a Code requirement.
- T. Contractor Hazardous Materials Communication: Due to the age of the District facilities there are known materials used in construction that are now classified as hazardous materials such as lead and asbestos. The District Representative shall provide the Contractor with a list of the known hazards in the work area. This list is not comprehensive. The Contractor shall be aware of possible hazards. If the Contractor identifies a possible hazardous material such as lead, asbestos, SF-6 residue and/or hexavalent chromium, all work in that area must stop until the material is tested and identified. The Contractor shall notify the District Representative immediately upon identification of possible hazardous material.

1. If the material is identified as non-hazardous, work may resume once the materials status has been communicated to the District Representative and Contractor's employees.
2. If the material is a hazardous substance, proper protocols compliant with regulation must be followed. The above is a Code requirement.

U. Caution and Danger Barriers:

1. Caution Tape or Rope - Yellow will be used to demarcate areas with low safety hazards. Contractor employees may enter the barricade area only after identifying the hazard enclosed by the Caution barrier tape/rope.
2. Danger Tape or Rope – Red will be used to demarcate areas of imminent danger. An employee may not enter the area barricaded with Danger barrier tape/rope without consent of the barricade attendant or tape holder.

Contractors that will be introducing hazards as part of their work must barricade the hazardous area to prevent employees from entering the area in accordance with District Policy SA121200-POL. The above is a Code requirement.

V. Confined Spaces: Contractor shall comply with District Policy SA111103-POL. The purpose of a Permit-Required Confined Space Program is to ensure safe practices are utilized prior to and during all construction work activities in confined spaces at District work locations. The District's program is designed to prevent personal injuries, illness, and fatalities in confined spaces. As an employer, the District has developed and implemented this document to meet the written program requirements specified in OSHA regulation 29 CFR 1926 subpart AA and WAC 296-809, the Confined Spaces in Construction Standard. The above is a Code requirement.

W. Qualified Electrical Worker: For purposes of complying with Washington State law and the District's Electrical Safety Program, a Qualified Electrical Worker is defined according to the definition in WAC 296-45. The above is a Code requirement.

X. Authorized Employee: For purposes of complying with Washington State law and the District's Electrical Safety Program, an Authorized Employee is defined according to the definition in WAC 296-45. The above is a Code requirement.

Y. Hot Work Permits and Fire Watch Requirements: Contractors shall follow District Hot Work Policy.

Controlling Electrical Hazards

1. All energized electrical work over 50 volts requires an "Energized Electrical Work Permit".
2. The "Energized Electrical Work Permit" can be obtained from District Representative.
3. The "Energized Electrical Work Permit" must be filled out by Contractor that will be doing the work and approved by the Plant Manager or designee prior to the commencement of work except in the case of an emergency. The permit must be posted in the area that the work is being performed. Upon completion of the

energized electrical work the permit will be given to the District Representative who will retain it on file for one year.

4. Safe work practices and appropriate PPE are required when doing energized electrical work related to testing, troubleshooting, and/or electrical measurements.
5. Contractor employees doing energized electrical work are required to wear fire-resistant (FR) work clothes including under garments and use appropriate PPE for the rated level of electrical hazard.
6. Contractor employees shall not reach blindly into areas that might contain live parts.
7. Contractor employees shall not enter spaces containing live parts unless the illumination in that space is sufficient to allow the work to be performed safely.
8. Contractor employees shall not wear conductive articles of jewelry or clothing (such as, but not limited to watches, rings, bracelets, necklaces, exposed keys, clothes with conductive threads, metal headgear and metal eyeglass frames) when working on or near energized and exposed electrical conductors or circuit parts.
9. To prevent accidental contact with live parts, conductive material, tools and equipment (such as, but not limited to metal pipes, tubes, hoses, tapes, pulling lines, tools, chains, ladders and scaffolding) shall not be used while working on energized and exposed electrical conductors or circuit parts.
10. Contractor employees working on energized and exposed electrical conductors or circuit parts shall use protective shields, barriers, or barricades and observe all safety boundaries that have been established.

The above is a combination of Code and District requirements.

Hydroelectric Facility Work Requirements

- Z. Use of Smoke Eaters When Welding in the Plant: Contractors performing welding activities in the hydroelectric facilities shall provide containment, mechanical ventilation, local exhaust systems and filtration as necessary to prevent visible accumulation of welding fumes and smoke. The above is a District requirement.
- AA. Flash Protection during Welding Activities: Contractor shall provide screens in any areas where welding activities occur to protect others from the welding glare. The screens shall be positioned approximately two feet above the floor, without restricting ventilation. The screens shall be painted with paint that absorbs ultraviolet radiation. The above is a District requirement.
- BB. Excavation near Toe of Dam: For excavations near the toe of the dam (embankments and concrete structures), the Contractor shall submit the information required in the technical specifications and shown on the drawings in accordance with submittal requirements and schedule outlined in the Contract Documents.

Where required by the drawings and/or technical specifications, the Contractor shall prepare and submit a Temporary Construction Emergency Action Plan (TCEAP) for review and approval by the District in accordance with the outline and schedule provided in the Contract Documents. The TCEAP will also be subject to approval by the Federal Energy Regulatory Commission (FERC). The above is a District requirement.

- CC. Cofferdam: For cofferdams used to dewater work areas, the Contractor shall submit the information required in the technical specifications and shown on the drawings in accordance with the submittal requirements outlined in the Contract Documents.

Where required by the drawings and/or technical specifications, the Contractor shall prepare and submit a Temporary Construction Emergency Action Plan (TCEAP) for review and approval by the District in accordance with the outline and schedule provided in the Contract Documents. The TCEAP will also be subject to approval by the Federal Energy Regulatory Commission (FERC). The above is a District requirement.

- DD. Forebay/Tailrace – Boat Use: Prior to performing any work on the water within the Priest Rapids Project, the Contractor will notify the appropriate Control Room (Wanapum 509-754-5007 or Priest Rapids 509-754-5006) whichever is closer. The check in procedure shall include the caller's name, company, number of people on the boat, and location of the work. Once the work is complete and the Contractor is ready to leave the reservoir, he/she must again notify the appropriate Control Room and check out. The above is a District requirement.

- EE. Barge/Vessel Stability and Anchorage: The Contractor shall provide to the District Representative a detailed barge and vessel plan for accomplishing in-water work 10 days prior to beginning in-water work. This plan shall address the following information at a minimum:

1. Details on the anchoring, temporary mooring, assembly and disassembly of the barge/vessels to be used.
2. Details regarding the planned use of cranes or other equipment on the barges/vessels and the methods for placing this equipment on the barges/vessels.
3. Barge/vessel safety and emergency plans.
4. Detailed calculations prepared and sealed by a Professional Naval Architect for any significant water-based work activities which include, as applicable, barge/vessel mooring and anchoring systems, removal or demolition of underwater features, installation of temporary or permanent underwater materials and installation and removal of formwork or falsework. The above is a District requirement.

- FF. Working Over Or Adjacent To Water: All work that takes place over or adjacent to water, regardless of type, shall comply with the most recent version of WAC 296-155-235. This includes the lifesaving skiff requirement. To further clarify, the lifesaving skiff requirement shall be in effect regardless of any and all implemented fall protection systems. Additionally, this lifesaving skiff shall not be used for any other activities. The above is a Code requirement.

GG. Personnel Lifting Over Water: When the work involves lifting personnel over water, special attention should be given to the requirements within the most recent version of WAC section 296-155-55300 which discusses fall protection requirements, personnel flotation device requirements, and the rescue skiff requirement. The above is a District requirement.

HH. Priest Rapids Dam Deck Restrictions and Access:

1. All Contractors working on the Priest Rapids powerhouse intake deck and/or the spillway bridge shall comply with Washington State Department of Transportation (WSDOT) publication "Work Zone Traffic Control Guidelines for Maintenance Operations" M 54-44. Personal protective wear shall comply with WSDOT publication "Safety Procedures and Guidelines Manual" M 75-01.
2. The Contractor may use the powerhouse intake and spillway bridge decks for access to the right (west) side of the dam upon coordination with the District and other contractors that may be working in the area. The Contractor will not be allowed to use either deck for staging or setup of equipment and cranes unless otherwise specifically arranged with the District.
3. Powerhouse intake deck, if used for staging and setup subject to Item 2 above, shall be cleared for emergency gantry crane access within 15 minutes of notification.
4. Transformer deck may be used for setup and access to the work site. Only materials to be used during any one day may be stored on the transformer deck. No electrical outages of overhead lines will be given in that area and Contractor must comply with all electrical safety codes, including grounding all cranes parked on the transformer deck. The Contractor shall submit a request for a Hot Line Hold when work is required near energized high-voltage overhead lines and there is the possibility of accidental contact or violation of the applicable Minimum Approach Distance. The Contractor shall submit a request for a Hot Line Hold a minimum of three days before the start of the work. Conductor voltage above the deck is 230,000 volts. Only hydraulic "squirt" boom cranes may be used in that area. Contractor shall clear materials and equipment as necessary to provide bulkhead crane access to the end of the deck within 12 hours of notification.
5. At the Contractor's option, it may retain the services of a professional structural engineer registered in the state of Washington, to determine the actual as-built load capacity of the decks and spillway bridge for the purpose of setting a crane on the decks and hoisting loads with the same in-lieu of complying with the original design loads specified above. A minimum impact factor of 20% shall be used. The maximum concrete tensile stress shall be less than the cracking stress.

Should the Contractor choose to determine the actual load capacity of the existing structure, the engineer's calculations, with his/her registration stamp and signature thereon, shall be submitted to the District for review and approval. The loads and resulting stresses shall be provided for each proposed crane setup. The Contractor shall take all responsibility and assume all liability for damage to the deck resulting from loads applied in excess of the original design loads specified above. The Contractor shall ensure these loadings are not exceeded.

6. The Contractor has the option of decking over wheel gate slots, bulkhead slots, and draft tube slots during construction at the Contractor's expense.

In the event of an emergency, the intake wheel gate slots shall be fully accessible within 15 minutes of notification by the plant operator. The Contractor shall provide a contact list of staff to the Priest Rapids control room of personnel who will respond in the event of an emergency. The Contractor shall maintain enough staff onsite 24 hours a day, 7 days a week to remove all necessary equipment and decking if the wheel gate slots are blocked and the intake bulkheads are not installed.

The Contractor shall coordinate with the District Representative to provide access to the intake gate slots and draft tube gate slots.

7. Contractor shall not be entitled to any claims for delays or damages due to any of the deck blockage restrictions specified in these Contract Documents.

The above is a combination of Code and District requirements.

II. Wanapum Dam Deck Restrictions and Access:

1. All contractors working on the Wanapum powerhouse intake deck and/or the spillway bridge shall comply with Washington State Department of Transportation (WSDOT) publication "Work Zone Traffic Control Guidelines for Maintenance Operations" M 54-44. Personal protective wear shall comply with WSDOT publication "Safety Procedures and Guidelines Manual" M 75-01.
2. The Contractor may use the powerhouse intake and spillway bridge decks for access to the right (west) side of the dam upon coordination with the District and other contractors that may be working in the area. The Contractor will not be allowed to use either deck for staging or setup of equipment and cranes unless otherwise specifically arranged with the District.
3. Powerhouse intake deck, if used for staging and setup subject to Item 2 above, shall be cleared for emergency gantry crane access within 15 minutes of notification.
4. Transformer deck may be used for setup and access to the work site. Only materials to be used during any one day may be stored on the transformer deck. No electrical outages of overhead lines will be given in that area and Contractor must comply with all electrical safety codes, including grounding all cranes parked on the transformer deck. The Contractor shall submit a request for a Hot Line Hold when work is required near energized high-voltage overhead lines and there is the possibility of accidental contact or violation of the applicable Minimum Approach Distance. The Contractor shall submit a request for a Hot Line Hold a minimum of three days before the start of the work. Conductor voltage above the deck is 230,000 volts. Only hydraulic "squirt" boom cranes may be used in that area. Contractor shall clear materials and equipment as necessary to provide bulkhead crane access to the end of the deck within 12 hours of notification.

5. At the Contractor's option, it may retain the services of a professional structural engineer registered in the state of Washington, to determine the actual as-built load capacity of the decks and spillway bridge for the purpose of setting a crane on the decks and hoisting loads with the same in-lieu of complying with the original design loads specified above. A minimum impact factor of 20% shall be used. The maximum concrete tensile stress shall be less than the cracking stress.
6. The Contractor has the option of decking over wheel gate slots, bulkhead slots, and draft tube slots during construction at the Contractor's expense.

In the event of an emergency, the intake wheel gate slots shall be fully accessible within 15 minutes of notification by the plant operator. The Contractor shall provide a contact list of staff to the Wanapum control room of personnel who will respond in the event of an emergency. The Contractor shall maintain enough staff onsite 24 hours a day, 7 days a week to remove all necessary equipment and decking if the wheel gate slots are blocked and the intake bulkheads are not installed.

The above is a combination of Code and District requirements.

- JJ. Equipment Grounding Under Power Plant Overhead Power Lines: When working under energized lines with cranes, man lifts or other telescoping equipment, the equipment must be properly grounded. This includes concrete pump trucks and associated concrete trucks while discharging concrete underneath energized transmission lines. All vehicles being refueled must also be properly grounded while fuel transfer is in progress under energized lines. The above is a combination of Code and District requirements.

- KK. Power Plant Personal Protective Equipment: A hard hat, eye protection, and high visibility clothing are required for all personnel in the power plants, with exceptions noted below. Hearing protection is required in the power plant erection bays and in areas designated and marked through signage as hearing protection required areas.

PPE listed above is not required in administrative areas, rest rooms and break areas unless hazards are present due to construction work or other activity. In these cases, the crew foreman or supervisor will determine and post the level of PPE required in the work area. The above is a District requirement.

- LL. Clearance, Tagging and Lock Out/Tag Out: All employees and contractors are required to follow the appropriate clearance, tagging and/or lockout/tagout procedures. For work occurring at Power Production facilities, the "Hydro Switching and Clearance Tag Out System" policy shall be followed. For work occurring on the electric system, Power Delivery's "Switching and Clearance Procedure" shall be followed. No work will be performed on or around any hazardous energy source without a clearance or Lock Out/Tag Out, dependent on the location of the work. All affected personnel must receive clearance training. Failure to comply with the appropriate policy or procedures will result in removal from the project. The above documents are a combination of Code and District requirements and are not to be assumed all-encompassing. All other regulatory safety requirements established by the state of Washington shall be met.

- MM. Tying in Equipment to 600 V Plant Electrical System:

1. Apprentices or Trainee Contractors will not be allowed to plug into the District's 600 V wall receptacles.
2. Operations shall be notified when plugging in or unplugging 600 V wall receptacles.
3. All personnel will be required by the District to wear 8 Cal/cm² AR long sleeve shirts, long pants, safety glasses and clean leather gloves while plugging into 600 V receptacles.
(As recommended by NFPA 70E).

Note: The preferred method is to de-energize the circuit before disconnecting and connecting, even though the receptacles and plugs may be rated for load breaking.

4. WAC 296-45 requirements for training of Qualified Electrical Workers
 - a. The District will require all the electrical Contract employees who will be plugging in the 600 Volt plugs to be trained accordance with WAC 296-45.
 - b. The Contractor will be required to maintain the training records and submit to the District employee qualifications as requested, including:
 - Electrical license (01 License)
 - ResumeThe above is a combination of Code and District requirements.
 - Training records

NN. Energized Work Permits (District Policy HY010100 – Electrical Safety Program):

Whenever possible, equipment must be de-energized to eliminate the risk of Shock Hazard or Arc Flash.

If there is a special circumstance where live electrical work is required, a specific safe work procedure for that work must be developed and approved before starting any work. Each work area is assigned to complete a list equipment in this category and develop an action plan to address. Live work shall only be performed by personnel that are certified and authorized to work at the rated voltage level.

Contractors must follow Energized Work Procedures for Power Production and Power Delivery. Contractors performing work for Power Production must follow the Electrical Safety Program. For Power Delivery, Contractors must follow the Switching and Clearances Handbook (SOP-OPS-002-SWCL). The above is a combination of Code and District requirements.

OO. Drilling, Cutting, Excavating Above Cables/Conduits

When penetrating work (drilling, cutting, excavating) will be greater than 1.5 inches into surfaces which may conceal electrical conduits or cables, the contractor will follow District Electrical Safety Program requirements, which is available on the Grant PUD Contractor

Training website: <https://www.grantpud.org/for-contractors>. The above is a combination of Code and District requirements.

PP. Arc Flash Protection Requirements for Power Plants and Wanapum Maintenance Center:

Electrical work performed in District power plants and the Wanapum maintenance center must comply with the District Power Production Electrical Safety Program, which is available on the Grant PUD Contractor Training website: <https://www.grantpud.org/for-contractors>. Specifically, these requirements must be followed:

1. A risk assessment must be performed before any work is performed within the Limited Approach Boundary (LAB) or Arc Flash Boundary (AFB) of energized equipment with any power equal to or greater than 50 volts.
2. If the risk assessment in item 1) above requires an energized electrical work permit, the contractor shall complete the permit and submit to the plant manager for approval prior to performing work.
3. The minimum arc rated clothing shall be worn and working distances observed according to incident energy information listed on the equipment label.
4. Contractor personnel shall wear a minimum of 8 Cal/cm² anytime that work is being performed within the Limited Approach Boundary (LAB) or Arc Flash Boundary (AFB) of energized equipment.
5. Unqualified persons shall not cross any Approach Boundary or taped off work area at any time unless escorted by a Qualified Electrical Worker and shall only do so with adequate PPE. Qualified Electrical Workers without the adequate PPE shall not cross any Approach Boundary or taped off work area at any time.

For District power production facilities other than power plants and the Wanapum maintenance center, the District power production electrical safety program does not apply and WAC 296-45 arc flash protection measures must be followed. The above is a combination of Code and District requirements.

QQ. Foreign Material Exclusion Policy

Contractors performing work on critical equipment in District power plants must comply with the District's Foreign Material Exclusion Policy, which will be made available to the Contractor by the District Representative at the pre-work conference.

IN WITNESS WHEREOF, the Contractor and the District have executed this Agreement each by its proper respective officers and officials thereunto duly authorized the day and year first above written.

Public Utility District No. 2
of Grant County, Washington

MacKay and Sposito, Inc.

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

**APPENDIX “A”
RATE SCHEDULE**

DIRECT EXPENSES:

Classification	Straight Time Hourly Rate	OT Hourly Rate
Vice President QA/QC	\$200.00	\$260.00
Project Coordinator II	\$118.00	\$153.40
Project Coordinator I	\$108.00	\$140.40
Administrative Manager	\$124.00	\$161.20
Administrative Assistant	\$86.00	\$111.80
Clerical	\$76.00	\$98.80
Program Manager	\$200.00	\$260.00
Senior Construction Manager	\$166.00	\$215.80
Construction Manager	\$150.00	\$195.00
Construction Inspector V	\$175.00	\$227.50
Construction Inspector IV	\$150.00	\$195.00
Construction Inspector III	\$128.00	\$166.40
Construction Inspector II	\$119.00	\$154.70
Construction Inspector I	\$106.00	\$137.80
Travel Rate	\$70.00	\$91.00

Straight Time: Straight time is defined as work performed during the assigned shift period. Normally, the assigned shift is 8-10 hours each day. The regular work week is Monday through Sunday. Hourly rates shall not be charged to and from normally assigned work locations.

Overtime: Time worked beyond 40 hours in a work week (Monday through Sunday) is considered overtime. All work performed on District Holidays is considered overtime.

Fixed hourly billing rates shall be in US Dollars and include all i) payroll, payroll taxes and fringe benefits; ii) all reproduction and printing costs including electronic media; iii) communications costs including all phones, faxes, internet, postage, shipping, delivery, couriers; iv) computer, software, printers, scanners, office machines and related costs of operations including consumables; v) insurance costs; vi) indirect and overhead burden; and vii) profit.

REIMBURSABLE EXPENSES:

Reimbursable expenses are those reasonable and necessary costs incurred on or directly for the District's project, including necessary transportation costs, meals and lodging. Any actual expenses in non-US dollars will be converted using the conversion tables at www.x-rates.com for the applicable period. Reimbursement will be subject to the following limitations:

Meals and Incidental Expenses: Meals and incidental expenses will be limited to the Federal Per Diem rate for meals and incidentals established for the location where lodging is obtained. The current rate for all Grant County locations is \$59.00 per day. Federal Per Diem guidelines which includes the meal breakdown and Federal Per Diem rates for other locations can be found at www.gsa.gov.

Lodging: Lodging will be billed at cost, including applicable taxes, not to exceed 200% of the Federal Per Diem maximum lodging rate for the location where the work is being performed. The current federal maximum lodging rate for all Grant County locations is \$96.00. The District Representative may increase this limit in writing when circumstances require.

Rental Housing: With the prior approval of the District's Representative, Contractor or its employees may rent a house on a long-term basis and pay costs associated with the housing rental in accordance with Section 301-11 of the Federal Travel Regulations. Rental will be reimbursed on an actual cost basis not to exceed the allowable daily lodging rate. Contractor shall submit a copy of the rental housing agreement and receipts for all allowed expenses to the District with its invoice. Contractor and its employees shall be responsible for all other obligations, including but not limited to maintenance, any damage they cause to the property, or costs in excess of what would have been incurred using standard lodging which arise under or by virtue of the rental agreement and shall indemnify and hold harmless the District therefrom.

During the establishment of a new rental agreement, the District shall reimburse the Contractor for both first and last months' rent at the time those costs are incurred. Refundable deposits (damage, pet, etc.) are not eligible for reimbursement by the District. During the last month of the rental agreement, no lodging costs shall be invoiced to the District, due to the prepayment at the time of establishment of the rental agreement.

Recreational Vehicle (Camper/Trailer): Use of a recreational vehicle is authorized at a daily rate of 60% of the standard lodging rate. This will be reimbursed at the daily rate with no receipts required. This rate covers all expenses related to use including mobilization, parking fees, fees for connection, use, and disconnection of utilities, electricity, gas, water and sewage, bath or shower fees, and dumping fees which may be considered a lodging cost.

Travel: Air travel (at coach class or equivalent), airport shuttles, etc. billed at cost. Ground transportation by privately owned vehicle, if utilized, billed at the Internal Revenue Service mileage rate for privately owned vehicles in effect at the time of travel. Expenses for a rental car, at cost, in the ratio of one mid-size class rental car for each three Contractor's personnel directly engaged in performance of the work at the prevailing rental rates then in effect. Rental car options such as refueling fees, GPS, collision & liability insurance, etc. will not be reimbursed by the District unless such options are approved in advance by the District Representative. **Appropriate insurance coverage should be included in the Contractor's insurance policies.**

Sub-consultants/Subcontractors: Services requested by the District, verifiable by applicable supporting documentation or at specified rates, will be reimbursed to Contractor at cost plus a maximum handling charge of 10%. See Appendix A-1.

Materials: Materials necessary for the work to be performed, verifiable by applicable supporting documentation, shall be reimbursed to Contractor at cost plus 15%.

Other: All other expenses will be based on actual costs and include appropriate documentation.

Reimbursable expenses must be accompanied by receipts for airfare, hotel, and rental car, and any other support documentation as the District may require.

APPENDIX “A-1”
SUBCONTRACTOR RATES

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ATLAS SERVICES & FEES

The following estimate of services is provided using Atlas standard rates and estimated quantities based on our experience on similar projects and historical averages. Services provided in excess of 8.0 hours per day, outside of normal business hours (M-F 7am to 4pm), or on Saturdays, Sundays, and holidays will be invoiced at 1.5 x the indicated rate. Site time is invoiced as a 3.0 hour minimum in 30-minute increments thereafter. Service requests must be received the prior day by 3pm to avoid 'Short Notice Fee'. Reports are distributed using Atlas E-Reports System unless requested otherwise. Special handling of reports and/or invoices will be invoiced at the indicated 'Project Management' rate. Billing time is portal to portal.

CODE	ITEM	RATE	UNIT
SOILS TESTING & INSPECTION			
33380	Soils Field Density Technician D2922/6938	\$65	HR
92684	Proctor 0698, D1557/T99, T180	\$210	EA
92801	Sieve - Coarse & Fine C117, C136/T11, T27	\$95	EA
66610	Subgrade Inspector	\$90	HR
91240	Test Supplies and Equipment	\$35	EA
33340	Sample Pick Up	\$59	HR
CONCRETE TESTING & INSPECTION			
33040	Concrete Inspector	\$69	HR
33140	Epoxy Bolt/Dowel Inspector	\$69	HR
92243	Concrete Cylinders C39/T22	\$25	EA
91240	Test Supplies and Equipment	\$35	EA
33080	Cylinder Ack Up	\$59	HR
MASONRY TESTING & INSPECTION			
33200	Masonry Inspector	\$69	HR
92270	Cube Compressive Strength – Grout/Mortar/Gypsum	\$35	EA
92414	Grout Prisms C1019	\$45	EA
92171	CMU Compressive Strength (Prism Grouted) (Set of 3)	\$325	EA
91240	Test Supplies and Equipment	\$35	EA
33080	Cylinder Ack Up	\$59	HR
STEEL TESTING & INSPECTION			
77510	Structural Steel Inspector	\$85	HR
77620	Ultrasonic Inspection	\$95	HR
77120	Fab Shop Inspection	\$85	HR
91240	Test Supplies and Equipment - Structural Steel	\$35	EA
91240	Test Supplies and Equipment – Ultrasonic	\$35	EA
33160	Fireproofing Inspector	\$69	HR
92351	Fireproofing Density Sample E605	\$40	EA
92081	Bond Test of Fireproofing E736	\$55	EA
ASPHALT TESTING & INSPECTION			
33020	Asphalt Field Density Technician D2922	\$65	HR
91240	Test Supplies and Equipment	\$35	EA
33060	Coring	\$225	HR
92018	Bulk Specific Gravity, Diameter, Thickness D2726/T166	\$65	EA
92009	Asphalt Content- Ignition Method D6307/T308	\$175	EA
92594	Mechanical Analysis D5444	\$95	EA
92747	Specific Gravity - Theoretical Max (Rice) D2041/T209	\$125	EA
MISCELLANEOUS ITEMS			
88206	Project Manager	\$85	HR
88130	Summary Inspection Report	\$250	HR

NOTE:

Atlas rates include the use of all of our testing equipment during performance of our services.



Quality Coating Inspection and Consulting Inc.
721 Brickyard Blvd.
Sedro Woolley, Washington 98284 Phone: 360-990-2499
Email: sonny@qcic2com
www.qualitycoatingsinspection.com

RATES: NACE CERTIFIED COATINGS INSPECTOR

Effective: January 1, 2022

ONSITE INSPECTION: \$95 per hour

All hours worked exceeding forty hours in a work week are considered overtime and are billed at one and one-half times the regular hourly rate. QCIC work week begins on Monday and ends on Sunday. Federally recognized holidays are paid at double time and one half (2.5). Each inspection is based on an 8-hour visit. Inspectors shall be paid an 8-hour minimum for each day worked.

FAILURE ANALYSIS: \$110 per hour

This includes all hours associated with the investigation. i.e. onsite time, travel, investigation, research, and report writing. Any required lab work will be invoiced at actual costs+ 15%.

TRAVEL TIME HOURS: Inspectors use their personal vehicles to commute to and from the job location. Travel time is billed at half rate when 8-hour onsite has been exceeded (Travel time + onsite time). Hours accumulated during travel are not counted as work hours so do not count as overtime hours. The travel hours are determined using MapQuest. Per Diem is paid during travel of "away locations" (See Per Diem below).

VEHICLE MILEAGE: Miles driven to and from the job, including any miles related to the project will be billed at the most current IRS rate at time of invoicing.

EXPENCES: Tool calibration (only if required in specification), consumables such as salt tests, or any required lab work will be billed at cost + 15%.

PER DIEM: Quoted per project and based on GSA rates. Per Diem will be paid on any job location which would consume more monetary budget in travel time and mileage than the daily GSA per diem allowance. These jobs are considered "Away Locations". Per Diem is not charged if meals and lodging are provided.

MOBE/DE-MOBE: As demonstrated above, inspectors are paid portal to portal

QCIC will provide the necessary tools to perform the coatings or failure inspections, inspection forms, phone, photo documentation and the inspector's vehicle.



REIMBURSABLE RATES & TERMS

The following rates and terms will apply to all work to be performed on a time and material basis. The billing rates for labor shown below are inclusive of all wages and salaries, payroll taxes and insurance, employee benefits, small tools (initial value less than \$1,000) and consumables, overhead, and profit.

<u>Classification</u>	<u>ST Rate</u>	<u>OT Rate</u>
Superintendent	\$96.67/hr.	\$140.34/hr.
Foreman	\$71.54/hr.	\$103.85/hr.
QC & SSHO Personnel	\$87.00/hr.	\$126.30/hr.
Project Manager	\$125.67/hr.	\$182.44/hr.
Technical Consultant	\$125.67/hr.	\$182.44/hr.
Hydroelectric Specialist	\$175.00/hr.	\$175.00/hr.

Other costs associated with the work hereunder will be reimbursed as follows:

- Overtime rates will apply to all hours worked beyond 40 hours in a work week.
- Travel time and standby time (due to delays by others) will be invoiced as straight-time or overtime depending on work hours accumulated that week.
- Minimum charge is eight hours plus applicable travel, per diem and other direct charges.
- Precision Tool Box @ \$200/day or \$1,000/week.
- Turbine Tool Module @ \$550/day or \$2,750/week.
- HCMS Pick-Up Truck @ \$200/day or \$600/week.

APPENDIX "B"
CHANGE ORDER
NO. ____

Pursuant to Section 5, the following changes are hereby incorporated into this Contract:

- A. Description of Change:
- B. Time of Completion: The revised completion date shall be _____.
 OR
 The completion date shall remain _____.
- C. Contract Price Adjustment: As a result of this Change Order, the not to exceed Contract Price shall remain unchanged (be increased/decreased by the sum of \$_____ plus applicable sales tax). This Change Order shall not provide any basis for any other payments to or claims by the Contractor as a result of or arising out of the performance of the work described herein. The new total revised maximum Contract Price is \$_____, including changes incorporated by this Change Order.
- D. Except as specifically provided herein, all other Contract terms and conditions shall remain unchanged.

Public Utility District No. 2
of Grant County, Washington

MacKay and Sposito, Inc.

Accepted By: _____

Accepted By: _____

Name of Authorized Signature
Title

Name of Authorized Signature
Title

Date: _____

Date: _____

APPENDIX “C”
TASK AUTHORIZATION FOR
PROFESSIONAL SERVICES

Contract No.:	430-11380	Task Authorization No.:		Amendment No.:	
Project Name:					

The Scope of Services covered by this authorization shall be performed in accordance with all the terms and conditions in the above referenced Contract Documents which are incorporated herein by this reference.

The District hereby requests and authorizes the Contractor to perform the following services:

Sample Only

Compensation is to be paid in accordance with and subject to the limitations in Section 4.A of the Contract Documents. In addition, the total cost of the above described work shall not exceed \$_____ without advance amendment of this Task Authorization by the District.

Public Utility District No. 2
of Grant County, Washington

MacKay and Sposito, Inc.

Approved for District

Accepted by Contractor

By: _____

By: _____

Print Name: _____

Print Name: _____

Title: District Representative

Title: _____

Date: _____

Date: _____

APPENDIX "D"
NON-DISCLOSURE AGREEMENT

This Non-Disclosure Agreement ("NDA") is entered into on the date shown on the signature page between Public Utility District No. 2 of Grant County, Washington ("District"), and MacKay and Sposito, Inc., ("Contractor"), sometimes collectively referred to as the "Parties."

RECITALS

The District has identified and designated certain information as confidential. For purposes of this Agreement, "Protected Information" includes:

- District customer information protected under RCW 19.29A, Consumers of Electricity;
- District employee information;
- District vendor information;
- All technical and business information or material that has or could have commercial value or other interest in the business or prospective business of the District;
- All information and material provided by the District which is not an open public record subject to disclosure under RCW 42.56, Public Records Act;
- All information of which unauthorized disclosure could be detrimental to the interests of the District or its customers, whether or not such information is identified as Protected Information; and
- Any information identified and designated by the District as Security Sensitive Information (SSI), Critical Energy Infrastructure Information (CEII), and/or Critical Infrastructure Protection (CIP) Protected Information in accordance with the State of Washington, Federal Energy Regulatory Commission (FERC) and/or North American Reliability Corporation (NERC), which have established regulations for the protection of sensitive plans, drawings, and records defined as SSI, CEII, and/or CIP Protected Information. SSI, CEII, and CIP Protected Information are further defined in Appendix "E".

Because of the sensitive nature of such information that may be provided to the Contractor, Contractor must execute and deliver this NDA to the District prior to receiving such Protected Information from the District.

NOW, THEREFORE, the Parties agree as follows:

1. **Incorporation by Reference.** The recitals set forth above are incorporated herein as if fully set forth.
2. **Protected Information Disclosure.** All information and drawings that are disclosed by the District to the Contractor, which are designated as confidential, SSI, CEII, and/or CIP Protected Information, shall be protected hereunder as Protected Information.
3. **Non-Disclosure.** Subject to the provisions of Section 4 and unless the parties agree otherwise, this non-disclosure obligation shall survive the termination of this NDA. Contractor shall not disclose or disseminate Protected Information and shall:

- A. Restrict disclosure of Protected Information solely to its agents and employees with a need to know and not disclose such Protected Information to any others; and
 - B. Advise and require all of its officers, agents, employees, representatives, prospective and successful subcontractors, consultants and employees thereof with access to the Protected Information to execute an NDA in this same form with the District prior to allowing them access to the Protected Information; and
 - C. Use the Protected Information provided hereunder only for purposes directly related to performance of the work Contract 430-11380.
 - D. In the event third parties attempt to obtain the Protected Information by legal process, the Contractor agrees that it will not release or disclose any Protected Information until the District has received notice of the legal process and has been given reasonable opportunity to contest such release of information and/or to assert the confidentiality privilege.
4. **Ownership and Return of Protected Information.** All Protected Information shall remain the property of the District. Contractor is responsible for safeguarding and returning all Protected Information or shall certify, by signed, statement delivered to the District, the destruction of all original Protected Information provided along with any copies made by the Contractor. Such delivery shall be to the District, Attention: Lori Englehart-Jewell, PO Box 878, Ephrata, WA 98823.
5. **Compliance Audit.** The District may audit Contractor's compliance with this NDA.
6. **Applicable Law.** This NDA is made under, and shall be construed according to, the laws of the State of Washington and the Federal Energy Regulatory Commission regulations. Venue for any action brought pursuant to this NDA shall, at the District's option, be in Grant County Superior Court, Grant County, Washington or in the United States District Court for the Eastern District of Washington.
7. **Assignment.** This NDA may not be assigned.
8. **Violations.** Contractor understands and agrees that the District is providing the Protected Information to Contractor in reliance upon this NDA, and Contractor will be fully responsible to the District for any damages or harm caused to the District by a breach of this NDA by Contractor or any of its officers, directors, agents, employees, subcontractors, consultants or affiliates. Contractor acknowledges and agrees that a breach of any of its promises or agreements contained herein will result in irreparable injury to the District for which there will be no adequate remedy at law, and the District shall be entitled to apply for equitable relief, including injunction and specific performance, in the event of any breach or threatened breach or intended breach of this NDA by Contractor. Such remedies, however, shall not be deemed to be the exclusive remedies for any breach of the Agreement but shall be in addition to all other remedies available at law or in equity. In addition to injunctive relief, civil or criminal penalties may be imposed for each violation of this NDA.
9. **Attorney's Fees.** In the event it is necessary for the District to utilize the services of an attorney to enforce any of the terms of this NDA, it shall be entitled to compensation for its reasonable attorney's fees and costs. In the event any legal action becomes necessary to enforce the provisions of the NDA, the substantially prevailing party shall be entitled to reasonable attorney's fees and costs in addition to any other relief allowed, regardless of whether the dispute is settled by trial,

trial and appeal, arbitration, mediation, negotiation or otherwise, and regardless of whether suit is formally filed.

- 10. **Corporate Authority; Binding Signatures.** The individual executing this NDA on behalf of Contractor warrants that he or she is an authorized signatory of the entity for which they are signing, and have sufficient institutional authority to execute this NDA.
- 11. **Electronic Signatures.** Signatures transmitted electronically shall be deemed valid execution of this NDA, binding on the parties.
- 12. **Effective Date and Term.** This NDA shall become effective immediately and remain in full force and effect until Contractor has returned all Protected Information to the District provided, however, the obligations contained in Section 3 shall survive the termination of this NDA.

CONTRACTOR: Company Name: _____

Address: _____

Phone: _____

Email: _____

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX “E”

DEFINITIONS OF PROTECTED INFORMATION

Definition of Critical Infrastructure Protection (CIP)

Pursuant to section 215 of the Federal Power Act (FPA), the Federal Energy Regulatory Commission (FERC) approved the Critical Infrastructure Protection (CIP) Reliability Standards. The CIP Reliability Standards require certain users, owners, and operators of the Bulk-Power System to comply with specific requirements (CIP-002 through CIP-014) to safeguard critical cyber assets. Penalties for non-compliance with NERC CIP can include fines, sanctions or other actions against covered entities.

Definition of Critical Energy Infrastructure Information (CEII)

The Critical Energy Infrastructure Information (CEII) guidelines of the Federal Energy Regulatory Commission (FERC) define CEII as specific engineering, vulnerability, operational or detailed design information about proposed or existing critical energy infrastructure (physical or virtual) that relates to the production, generation, transportation, transmission or distribution of energy, could be useful to a person planning an attack on critical infrastructure, is exempt from mandatory disclosure, and gives strategic information beyond the location of the critical infrastructure. 18 CFR §388.113 and RCW 42.56.520.

Definition of Bulk Electric System Cyber System Information (BCSI)

The North American Electric Reliability Corporation (NERC) has been designated by the FERC, through the Energy Policy Act of 2005, to establish and enforce standards and requirements for the reliable operation of the Bulk Electric System. The Bulk Electric System includes the District’s electrical generation resources, transmission lines, and interconnections with neighboring electric systems. Information related to the District’s Bulk Electric System Cyber Systems (BCS) is required to be protected due to the sensitive security nature of such information, and the need to protect public safety (hereinafter referred to as “CIP Protected Information”). BCSI generally (not exclusively) is defined as information about the BCS that could be used to gain unauthorized access or pose a security threat to the BCS and affect the reliable operations of the Bulk Electric System. The District is required to protect this information including, but not limited to, network topology/diagrams; floor plans for computing centers; equipment layouts; security configuration information and other information as defined in the NERC standards. FERC Order No. 706, issued January 18, 2008; 18 CFR Part 40; and RCW 42.56.070.

Definition of Security Sensitive Information (SSI)

Security Sensitive Information is those portions of records assembled, prepared, or maintained to prevent, mitigate, or respond to criminal or terrorist acts, which are acts that significantly disrupt the ability of the District to fulfill its mission and goals and that manifest an extreme indifference to human life, the public disclosure of which would have a substantial likelihood of threatening public safety. SSI includes: (a) Specific and unique vulnerability assessments or specific and unique response or deployment plans, including compiled underlying data collected in preparation of or essential to the assessments, or to the response or deployment plans; (b) Records not subject to public disclosure under federal law that are shared by federal or international agencies, and information prepared from national security briefings provided to state or local government officials related to domestic preparedness for acts of terrorism; and (c) Information regarding the infrastructure and security of computer and telecommunications networks, consisting of security passwords, security access codes and programs, access codes for secure software applications, security and service recovery plans, security risk assessments, and security test results to the extent that they identify specific system vulnerabilities.

Bulk Electric System (BES)

Unless modified by the lists shown below, all Transmission Elements operated at 100 kV or higher and Real Power and Reactive Power resources connected at 100 kV or higher. This does not include facilities used in the local distribution of electric energy. Inclusions:

- I1 - Transformers with the primary terminal and at least one secondary terminal operated at 100 kV or higher unless excluded by application of Exclusion E1 or E3.
- I2 – Generating resource(s) including the generator terminals through the high-side of the step-up transformer(s) connected at a voltage of 100 kV or above with: a) Gross individual nameplate rating greater than 20 MVA. Or, b) Gross plant/facility aggregate nameplate rating greater than 75 MVA.
- I3 - Blackstart Resources identified in the Transmission Operator's restoration plan
- I4 - Dispersed power producing resources that aggregate to a total capacity greater than 75 MVA (gross nameplate rating), and that are connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage of 100 kV or above. Thus, the facilities designated as BES are: a) The individual resources, and b) The system designed primarily for delivering capacity from the point where those resources aggregate to greater than 75 MVA to a common point of connection at a voltage of 100 kV or above.
- I5 –Static or dynamic devices (excluding generators) dedicated to supplying or absorbing Reactive Power that are connected at 100 kV or higher, or through a dedicated transformer with a high-side voltage of 100 kV or higher, or through a transformer that is designated in Inclusion I1 unless excluded by application of Exclusion E4.

Bulk Electric System (BES) Cyber Asset

A Cyber Asset that if rendered unavailable, degraded, or misused would, within 15 minutes of its required operation, misoperation, or non-operation, adversely impact one or more Facilities, systems, or equipment, which, if destroyed, degraded, or otherwise rendered unavailable when needed, would affect the reliable operation of the Bulk Electric System. Redundancy of affected Facilities, systems, and equipment shall not be considered when determining adverse impact. Each BES Cyber Asset is included in one or more BES Cyber Systems



APPENDIX “F”
BACKGROUND CHECK/IDENTITY VERIFICATION BY CONTRACTOR/VENDOR

Contractor Name: _____ Date: _____

Contract Number: _____ Procurement Officer: _____

Project Manager: _____

In accordance with NERC Reliability Standards CIP 002-011, we are providing Public Utility District No. 2 of Grant County, Washington certification of background checks performed on personnel who will require authorized Unescorted Physical Access and/or Electronic Access to District High or Medium Impact BES Cyber Systems, and their associated EACMS and PACS.

Accordingly, we certify that:

1. A background check has been conducted on the following employee(s) that includes a seven year criminal history records check, a current residence check and a residence check at other locations where, during the seven years immediately prior to the date of the criminal history records check, the employee has resided for six consecutive months or more; and the assessment of the employee is consistent with the safe and efficient performance of the services and meets the minimum standard for criminal checks as set forth by the attached Evaluation Criteria.

2. Employment eligibility identity verification has been completed to ensure employee is legally permitted to work in the United States. (Citizenship, Federal I-9 form verification)

Employee Name	Background Check Completion Date	Indicate Pass (P) or Fail (F)	Identity Verification Completion Date	PRA Completion Date (District use only)

(Do not send actual background check documents)

Name of company where background check was performed: _____

Certified by: _____

Title: _____

Phone No.: _____

Email: _____

Return this form to: CIPDocuments@gcpud.org

*****Access will not be granted until this Background Check has been completed and training taken*****

These are sub-sections of the “Grant County PUD Personnel Risk Assessment Program” relevant to Vendor(s) and/or Contractor(s). For the complete program please contact rcstaff@gcpud.org

Evaluation Criteria:

Contractors with physical or electronic access to District High or Medium Impact BES Cyber Systems and their associated EACMS and PACS, shall certify a background check was met using the following criteria:

Whether the individual has ever been convicted of any of the following FELONIES:

Murder

Kidnapping

Manslaughter

Fraud, theft, and/or robbery

Criminal sexual conduct

Arson

Whether the individual has ever been convicted of the following MISDEMEANORS:

Violence related

Honesty related

Whether the individual has ever been convicted of a single misdemeanor, other than minor traffic offenses, which are generally defined as traffic offenses that did not involve property damage and/or personal injury.

Individual is not currently awaiting adjudication on any criminal charge other than minor traffic offenses, which, again, are generally defined as traffic offenses that did not involve property damage and/or personal injury.

In the event the individual has been convicted of a felony or misdemeanor, the Contractor shall not assign such individual to a District location without first discussing such conviction with the District and obtaining the approval of the District’s PRA Committee for such assignment in accordance with the District’s Personnel Risk Assessment Program. The District reserves the right to refuse the assignment of an individual who does not pass the above Evaluation Criteria after review and consideration of the extenuating circumstances by the District’s PRA Committee.

FOR GRANT PUD USE ONLY

If Background Check failed enter date of PRA Committee Review: _____ Pass ____ Fail ____
(Check one)

Signature of PRA Committee member: _____

For Commission Review – 06/28/2022

Motion was made by _____ and seconded by _____ authorizing the General Manager/CEO, on behalf of Grant PUD, to execute Contract No. 470-11429 with Maxim Crane, L.P., in an amount not-to-exceed \$1,117,867.00 and with a contract completion date of August 31, 2022.

XXXX

MEMORANDUM

Date 6/13/22

TO: Richard Wallen, General Manager/Chief Executive Officer

VIA: Jeff Grizzel, Chief Operations Officer
Ty Ehrman, P.E., Managing Director of Power Production *Dale Campbell* acting Managing Director
Dale Campbell, P.E., Senior Manager of Power Production Engineering *Dale Campbell*
Jason Michelbook, Manager of Mechanical Engineering *Jason Michelbook*

FROM: Tristan Poteet, Mechanical Engineer *TP*

SUBJECT: Award of Contract 470-11429 Purchase of Tracked Crane

Purpose: To request Commission approval to award Contract 470-11429, Purchase of Tracked Crane to Maxim Crane, L.P. for a not to exceed price of \$1,117,867.00 and contract completion date of August 31, 2022.

Discussion:

Award of this contract would supply a new 90-ton hydraulic-boom tracked mobile crane for use at Power Production facilities, replacing an existing 90-ton wheeled crane. The purpose of this purchase is to improve reliability, increase capabilities, and reduce risk to Power Production.

Power Production staff utilize mobile cranes for many maintenance, repair, and construction tasks each year at each dam and small hydro facility. These tasks include, among others:

- Spillway gate inspection, maintenance, repairs, and modifications.
- Annual fish ladder maintenance.
- Fish bypass maintenance and repairs.
- Diver support.
- Heavy materials handling, loading, and unloading.
- Small hydro maintenance, inspection, repairs.
- Generating unit bulkheading in cases where the gantry cranes are unavailable or out of service.

Discussions regarding modernizing the Power Production mobile crane fleet have been underway for at least three years, due to several noted deficiencies with the current set of cranes. The current cranes range in age between 16 and 31 years old and have been experiencing breakdowns at an increasing rate. Breakdowns lead to significant expense in both lost productive labor hours, and repair costs.

In addition to increasing reliability issues, Power Production has been left reliant on crane rentals to perform certain tasks in the years since two older American truck cranes were deemed unfit for use and sent to surplus. These cranes were even older than the ones currently in use and lacked some critical safety features. The removal of these cranes meant the loss of capability to do certain tasks, such as unwatering the Right Bank Fish Ladder at Priest Rapids for annual maintenance. To fill the gap, the District has rented cranes to perform the work each year, at varying expense and schedule impact.

Due to the capability gaps with the current fleet, the District is currently reliant upon being able to obtain a rental crane or Contractor on a short timetable in the event of certain emergent issues, such as a problem with a spillway gate trunnion or a problem requiring unwatering of the Priest Rapids fish ladder out of season. It can be very difficult and costly to obtain a rental crane on short notice. Inability to address issues such as these in a timely manner could result in significant reliability or regulatory consequences for the District.

Finally, new cranes carry significantly enhanced safety functionality compared to the legacy machines that the District currently operates. New safety features include enhanced operator controls and load indication systems. New cranes are compliant with the most recent State and Federal regulations and industry guidelines.

Award of this contract would provide a new 90 ton tracked crane that would functionally replace the District's current Grove RT890E 90 ton crane that has been the most troublesome member of the fleet. This crane is a key piece of equipment as it is relied upon heavily every year for Priest Rapids fish ladder work and for Priest Rapids spillway work. The new crane would eliminate the need for yearly crane rentals for the Priest Rapids fish ladder work and would negate many other potential needs for mobile crane rentals. The new 90 crawler would also allow for access to the spillway trunnions at each dam, which currently cannot be accessed with the current crane fleet.

Contract 470-11429 was posted and advertised for Sealed Bids. Bids were due and were opened on May 26th, 2022 in response to the District's Request for Bids posted on May 5th, 2022. No compliant bids were received.

Maxim Crane did attempt to provide a Bid for the Contract, but it was non-compliant as the required bid bond or bid deposit was not included with the sealed bid. The crane proposed for supply in the bid from Maxim Crane meets all of the District's performance and technical specifications, and the bid was less than the Engineer's Estimate of \$1,300,000.

District staff determined that in light of the District receiving no compliant bids on the contract, the District could still choose to award a contract based upon the language of RCW 54.04.080:

RCW 54.04.080 states, *"The commission may procure materials in the open market, have its own personnel perform the work or negotiate a Contract for such work to be performed by others, in lieu of readvertising, if it receives no bid."*

The very significant current supply chain challenges for heavy equipment are the motivation for pursuing the usage of the above RCW language, as delaying contract award will nearly certainly increase costs and significantly delay delivery of the equipment.

Justification:

The immediate benefit to the District is threefold: improving mobile crane reliability and safety, expanding capabilities, and decreasing the need to rely on costly crane rentals. This will allow for more efficient, timely completion of scheduled work tasks on highly important Dam equipment and reduces risks related to breakdowns and crane rentals. Additionally, safety will be improved through new safety features present on the new crane that are not present on the cranes that the District currently operates.

Crane rentals and the associated costs and schedule risks will be eliminated or greatly diminished. In the past, a crane rental has been needed each year to accomplish Priest Rapids fish ladder maintenance. This would no longer be required once the new crane is onsite. Dam equipment reliability will be improved due to increased ability to perform inspections and maintenance due to the new capabilities. The District will be better able to respond to emergent work without seeking a rental crane.

The District's crane needs are in several cases very specific and there are limitations related to the size and weight of a crane that can operate safely on the dam structures. A track crane of the 90-ton capacity range is the most versatile type of crane that can meet the District's lifting needs while also not overloading concrete structures.

Waiting to procure a new crane will only increase the cost and the risk to the District. As time goes on, more and more maintenance will be required of the existing workhorse cranes, and the cost of a new machine will also increase. Additionally, the yearly crane rental costs will continue to be incurred until a new crane is purchased.

Due to current market conditions, heavy construction equipment is very hard to obtain. Lead times are currently long and highly variable, and pricing is also frequently increasing. Additionally, the District's requirements for this crane are specialized due to unique structures and worksites. It is in the District's best interest to obtain a crane meeting the technical specifications without delay.

Financial Considerations:

The contract total is \$1,117,867.00. The total cost to the District will be this contract price plus routine maintenance on the new crane. The routine maintenance is expected to be equivalent, or less, than the current crane that this will be replacing. Annual expenses relating to crane breakdowns and repairs are expected to be drastically reduced with the new crane, as compared to the crane it is replacing.

For the Priest Rapids Right Bank Fish Ladder alone, the District has had to spend between \$30,000 and \$50,000 annually for a crane rental to complete maintenance. This cost is likely to increase in the future due to continuing supply chain and availability issues in the market. Procuring the new crane would eliminate this cost.

The price is fair and reasonable as it is competitive and comparable to the current market price for a similarly sized hydraulic boom tracked crane. Training for District staff and delivery of the crane to the District's Wanapum Maintenance Center is included in the contract total.

The funds for this purchase were budgeted in 2022 as part of a capital project to modernize and upgrade the Power Production Mobile Crane Fleet (IN321, PID 103641).

Contract Specifics:

Unfortunately, a qualified bid for this contract was not received at the time of bid opening. However, Maxim Crane did attempt to provide a bid for a crane that would meet the entirety of the District's technical and performance specifications. The crane proposed is currently available and the total cost is less than the Engineer's Estimate.

Review of the situation by the District's Procurement staff and General Counsel determined that in light of the District receiving no compliant bids on the contract, the District could choose to award a contract to Maxim Crane based upon the language of RCW 54.04.080. The pertinent section of the RCW is copied below:

RCW 54.04.080 states, *"The commission may procure materials in the open market, have its own personnel perform the work or negotiate a Contract for such work to be performed by others, in lieu of readvertising, if it receives no bid."*

A quote was secured from Maxim Crane, in full accordance with the Technical Specifications that were listed in the Bid Document 470-11429.

Expected completion of the contract would be August 31, 2022.

Recommendation: Commission approval to award Contract 470-11429, Purchase of Tracked Crane, to Maxim Crane, L.P. for a not to exceed price of \$1,117,867.00 and contract completion date of August 31, 2022.

Legal Review: See attached e-mail(s).



Maxim Crane Works
6654 NE 47th Ave
Portland, OR 97218
TEL: (509) 539-0034

GTCQ22-JA045

BUYER'S NAME & ADDRESS:		BUYER'S CONTRACT NO:	DATE OF CONTRACT
GCPUD Wanapum Dam Beverly, WA Attn: Tristan Poteet			18-May-22
Email: tpoteet@gcpud.org Cell: 509-830-0321			
SELLER'S NAME & ADDRESS:		SELLER'S REFERENCE NO:	
Tadano America Corporation 4242 West Greens Road Houston, TX 77066		800-177	
COMMODITY	QTY	UNIT PRICE	TOTAL PRICE
Tadano 2022 Model GTC900 (90 US ton rough terrain crane) Base machine including all standard equipment as outlined in attached standard equipment list. SN 800-177	1	\$1,024,367.00	\$1,024,367.00
3-5 day orientation on site & WA State Certification included	1	Included	Included
12 Month Standard Warranty	1	Included	Included
		SALES TAX FREIGHT SUB-TOTAL AMOUNT DUE:	Plus Applicable Sales Tax \$93,500.00 \$1,117,867.00
DELIVERY TERMS FOB Richlands, VA		TIME OF SHIPMENT In stock and ready to ship SUBJECT TO PRIOR SALE	
POINT OF SHIPMENT Richlands, VA		DESTINATION Washington	
INSURANCE Buyer's responsibility upon receipt of delivery orders.		PAYMENT TERMS Balance due prior to release	
SPECIAL NOTES			
<i>This quote expires in 30 days</i>			
<i>Allow 6-8 weeks for 800mm clamp on poly pads</i>			

THE GENERAL TERMS AND CONDITIONS ON THE FOLLOWING PAGE HEREOF, INCLUDING A PROVISION FOR ARBITRATION, CONSTITUTE AN INTEGRAL PART OF THIS CONTRACT, AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HERETO SHALL BE GOVERNED EXCLUSIVELY BY THE TERMS HEREOF.

ACCEPTED AND CONFIRMED BY:

(SELLER)
TADANO AMERICA CORPORATION

BY: _____

Ken Butz
Vice President, Sales

DATE: _____

(BUYER)
Maxim Crane Works

BY: _____

Sam Pirtz

F.O.B.:

FACTORY, RICHLANDS, VA 24641

Quotation No:

DESCRIPTION	List Price	CONFIGURATION PRICE
TADANO MANTIS MODEL GTC-900		
90 TON TELE-BOOM CRAWLER CRANE		
STANDARD CRANE		
90 Ton lift capacity 5 section 37.7ft - 141.1ft full power telescopic boom Cummins QSB8.7 310 HP Tier 4f/Stg V Diesel Engine Standard Cab with A/C, Heat, Engine Monitoring, tilts to 20 degrees Tadano AML-C LMI System with North American (ft - lbs) Load Charts, automatic switching charts for 0.5°, 1.5°, 2.5°, and 4° slope, and 3 color light bar TADANO HelloNet Telematics Video Camera Monitor - 3 closed circuit cameras - winch, rear, and right side view Work Lights - 3 halogen work lights with remote controls Main Winch with grooved drum, cable follower, drum rotation & 3rd wrap indicator 695ft, 19mm diameter rotation resistant wire rope Auxiliary Winch with grooved drum, cable follower, drum rotation & 3rd wrap indicator 475ft, 19mm diameter rotation resistant wire rope Hydraulic Extendable Undercarriage with 3 track width zones & OPTI-WIDTH™ 35.4in (900mm) 3-Bar Semi grouser track shoes 45,000 lb rear counterweight with radio control removal system 20,000 lb carbody counterweight Storage box mounted to Carbody Counterweight Crane access walkways and folding upper handrail system Hydraulic Oil - ISO VG32 - Mineral Based Oil Standard Tadano Mantis Blue/White Paint		
<input checked="" type="checkbox"/> CRANE VALUE PACKAGE		Included
Standard Crane 33.1 ft / 58.1 ft bi-fold jib offsets 3.5°, 25°, and 45° Auxiliary Boom Head 90 Ton Quick Reeve Hook Block 8.8 Ton Headache Ball		
OPTIONAL EQUIPMENT		
BOOM ATTACHMENTS		
<input type="checkbox"/> HEAVY LIFT JIB		-
8.2 ft jib offsets at 3.5° and 30°		
<input checked="" type="checkbox"/> REMOVAL OF BI-FOLD JIB		Removed
HOISTING AND RIGGING		
<input type="checkbox"/> NON SUPPLY OF 90T (82t) QUICK REEVE HOOK BLOCK (MUST CHOOSE 55T or 20T)		-
Six 495mm steel sheaves, swivel hook & safety latch		
<input checked="" type="checkbox"/> 55T(50t) QUICK REEVE HOOK BLOCK		Included
Three 19.5" steel sheaves, swivel hook & safety latch		
<input checked="" type="checkbox"/> 22T(20t) QUICK REEVE HOOK BLOCK		Included
One 19.5" steel sheaves, swivel hook & safety latch		
<input type="checkbox"/> 3rd DRUM WITH CONTROLLED FREE FALL		-
Option includes, winch, mounting, wire rope, additional A2B switch and controls		
17,500 lbs bare drum line pull		
<input type="checkbox"/> STEEL SHEAVES IN BOOM HEAD		-
Replace standard nylon sheaves in boom head with steel sheaves		
TOOLS AND ATTACHMENTS		
<input checked="" type="checkbox"/> HYDRAULIC CARBODY JACKING SYSTEM FOR TRACK FRAME REMOVAL		Included
Four single stage hydraulic cylinder jacks with load holding valves and control valving and operating control pendant. Provides a total of 2'10" of ground clearance while on jacks		
<input type="checkbox"/> HYDRAULIC TOOL CIRCUIT*		-
Provides 5 gpm or 10 gpm at 2,500 psi through a 50' twin hose reel with quick disconnect fittings		
<input type="checkbox"/> HIGH FLOW HYDRAULIC TOOL CIRCUIT*		-
Provides 45 gpm (170 l/min) at 4,800 psi (330 bar) with hydraulic quick disconnect fittings at the front of the upper		
<input type="checkbox"/> WORK PLATFORM: WP-750		-
36in x 72in (0.9m x 1.8m), all steel, welded two-person, 750lb capacity		
Mounts to boom head or 33.1ft jib		
<input type="checkbox"/> DC EMERGENCY BACKUP HYDRAULICS FOR WORK PLATFORM*		-
Allows lowering of work platform to the ground		
TRACK OPTIONS		
<input checked="" type="checkbox"/> 31.5" (800mm) 3 bar semi grouser track shoes		Included
(Replaces standard shoe)		
<input type="checkbox"/> 31.5"(800mm) FLAT STEEL TRACK SHOES		-
(Replace 800mm Standard shoe)		
<input type="checkbox"/> 35.4"(900mm) FLAT STEEL TRACK SHOES		-
(Replace 800mm Standard shoe)		
<input checked="" type="checkbox"/> 31.4"(800mm) POLYURETHANE CLAMP-ON TRACK PAD		Included
(Shipped loose for field installation)		

<input type="checkbox"/> 35.4"(900mm) POLYURETHANE CLAMP-ON TRACK PAD (Shipped loose for field installation)	-
COLD WEATHER KIT OPTIONS	
<input checked="" type="checkbox"/> Cummins engine coolant heater, 120 VAC	Included
<input checked="" type="checkbox"/> Cummins oil pan heater with thermostat, 120 VAC	Included
<input checked="" type="checkbox"/> Hydraulic tank heater with thermostat, Qty 2 x 120 VAC	Included
<input checked="" type="checkbox"/> Fuel tank heater with thermostat, Qty 2 x 120 VAC	Included
<input type="checkbox"/> Battery Blankets with thermostat, Qty 2 x 8D, 120 VAC	-
<input type="checkbox"/> Central Wiring of all components to load center with breaker disconnect for circuits with main plug connection (wired for 220V/240V supply)	-
<input type="checkbox"/> Webasto Thermo Pro90 engine coolant heater & 7 day timer	-
OTHER OPTIONS	
<input checked="" type="checkbox"/> ANEMOMETER	Included
Boom Mounted Anemometer with digital display in cab	
<input type="checkbox"/> AIRCRAFT WARNING LIGHT	-
Boom Tip mounted 24V Red Warning Light	
<input type="checkbox"/> FOPS	-
Operator Cab Falling Object Protection System; ISO 3449 Level II compliant	
<input checked="" type="checkbox"/> AUTOMATIC LUBRICATION SYSTEM	Included
Lubricates slewing bearing and boom butt pin	
<input type="checkbox"/> 360 DEGREE HOUSE LOCK	-
Mechanical house lock actuated from operator cab	
<input type="checkbox"/> RADIO REMOTE CONTROL PACKAGE	-
Full crane hydraulic function control, engine start/stop, engine RPM hi/lo, E-stop	
<input type="checkbox"/> HELLO DATA LINK*	-
Remote iPad viewing of AML-C and crane parameters(Bluetooth)	
<input type="checkbox"/> BARGE CHARTS - 2.5"	-
2.5" List/Trim; includes selector switch to toggle between standard chart/barge chart	
<input type="checkbox"/> BARGE CHARTS - 4.0"	-
4" List/Trim; includes selector switch to toggle between standard chart/barge chart	
<input type="checkbox"/> AML-C DATALOGGER	-
Provides continuous log of LMI system; Data can be easily downloaded and managed.	
<input type="checkbox"/> CAB BEACON LIGHT	-
Cab Roof Mounted Rotating Orange Warning Light	
<input type="checkbox"/> DIESEL AIR INTAKE SHUTOFF SYSTEM*	-
Includes: Air Intake Shutoff Valve with 24V Solenoid, Modified charge air	
AIRCRAFT WARNING LIGHT	-
Boom Tip mounted 24V Red Warning Light	

*Engineering work required. Contact TMC for lead time.

TOTAL	\$1,024,367.00
Freight	\$93,500.00
Sub-Total less taxes	\$1,117,867.00

Non-Cancellable Order -- net 30 Days

EFFECTIVE: 15 MAY 2021

12 months / 1500 hr

TAC LIMITED WARRANTY

STANDARD WARRANTY PERIOD

Tadano America Corporation (hereinafter referred to as "TAC") 4242 West Greens RD., Houston, Texas 77066 USA warrants that each new hydraulic crane manufactured by TADANO, LTD. and/or its subsidiary companies including TADANO LTD. Rough Terrain Cranes, Truck Cranes, Truck Mounted Cranes, TADANO Faun GmbH All Terrain Cranes, Tadano Demag GmbH All Terrain Cranes, Crawler Cranes and TADANO Mantis Telescopic Crawler Cranes (hereinafter collectively referred to as "TADANO") shall be free, under normal use and maintenance, from defects in material or workmanship for a period of 12 months from the date of the delivery or placement into service by the first user or the first 1,500 operating hours, whichever occurs first. For TADANO crane sales that are eligible for warranty coverage beyond 12 months / 1,500 hours please see the original manufacturer's sales agreement.

WARRANTY TERMS

During the warranty period specified above, any defect in material or workmanship in any warranted item in a TADANO hydraulic crane not excluded below shall be repaired or replaced with new or functionally operative parts at TAC's option without charge by TAC or any authorized TAC distributor located within the United States of America, Canada, Mexico or other areas of TAC's responsibility.

Pursuant to the Contract of Purchase, this Limited Warranty is governed by, and should be construed in accordance with, Texas law.

EXCLUSIONS AND LIMITATIONS

1. The warranties contained herein shall not apply to:

- A. Any defect which was caused (in TAC's sole judgment) by other than normal use and service of the hydraulic crane, or by any of the following: (I) accident (II) misuse or negligence (III) overloading (IV) lack of reasonable and proper maintenance (V) improper repair or installation (VI) unsuitable storage (VII) unauthorized alteration or modification (VIII) natural calamities or (IX) vandalism.
- B. Any parts or accessories installed on the hydraulic crane which are covered under separate warranties of the manufacturer and which warranty is supported by that manufacturer's own distributor, distributor, or service network. Including but not limited to Engines, Tires, etc. The terms of those component manufacturers may vary.
- C. Any repair performed (I) by other than an authorized TAC repair facility or (II) with parts or supplies not manufactured or supplied by TAC or TADANO.
- D. Any hydraulic crane whose identification numbers or marks have been altered or removed or whose hour meter has been altered or tampered with in any way.
- E. Consumable items such as wiper blades, fuses, light bulbs, belts, batteries, brake pads, clutch disks and wire rope. Normal maintenance services and parts or supplies used on or in connection with normal recommended maintenance, including but not limited to, adjustments, lubrication services, tightening nuts, bolts and screws, replacement of filters, gaskets, packings, o-rings, fluids, and general engine tune up which are a part of the required or recommended pre-delivery inspection or are part of the required periodic inspections and services.
- F. Wear and deterioration of appearance due to use and exposures such as discoloration of painted or plated surfaces.
- G. Any hydraulic crane on which any of the required or recommended periodic inspection services have been performed using any inappropriate or substandard parts and supplies including, but not limited to: tune-up parts, coolant filters, engine oil filters, air filters, hydraulic oil filters, fuel filters, desiccant canisters or air driers, urea filters, exhaust catalyst, lubricants and other fluids.

H. Any hydraulic crane which purchaser has failed to promptly provide to TAC the machine "Delivery Report". The Delivery Report must be completed and returned to TAC before warranty action can be taken or claims honored.

I. Any crane on which unapproved equipment and/or fabricated devices have been installed.

2. Parts replaced under this warranty must be sourced from Tadano America, and are warranted for the remainder of the warranty period of the hydraulic crane.

3. TADANO reserves the right to make changes in the design and improvement without incurring any obligation to incorporate such improvements in any products which have been shipped from its factory premises or which are in the hands of distributors or customers.

4. Operations of the hydraulic crane beyond its rated capacity will void all warranty coverage.

LIMITED RESPONSIBILITY

The purchaser's remedy for any non-conforming hydraulic crane or part thereof is hereby limited to repair or replacement (at TAC's sole option) of any such non-conforming crane or crane parts. The foregoing shall constitute the sole and exclusive remedy of any purchaser of a TADANO hydraulic crane and the sole exclusive responsibility of TADANO and TAC, its distributor, AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. TADANO and TAC, neither assume nor authorize any person to assume for them any other obligation or responsibility in connection with this hydraulic crane warranty.

In no event shall TADANO and/or its subsidiary companies be responsible for direct, indirect, incidental, special consequential, punitive, or exemplary damages, or for any delay or any economic or commercial loss in performance of this warranty.

Tadano America Corporation, 4242 West Greens Rd., Houston Texas 77066 IS THE PRIMARY DISTRIBUTOR OF TADANO HYDRAULIC CRANES IN THE UNITED STATES OF AMERICA, CANADA, AND MEXICO.

THIS WARRANTY IS IN LIEU OF ALL WARRANTIES, OBLIGATIONS OR RESPONSIBILITIES OF AUTHORIZED TAC/TADANO HYDRAULIC CRANE DISTRIBUTORS EXPRESSED OR IMPLIED. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION OF THE LIMITED WARRANTY EXPRESSED HEREIN.

PURCHASER RESPONSIBILITY

This warranty requires proper maintenance and periodic inspections of the hydraulic crane as indicated in the operators manual furnished with each new hydraulic crane. The cost of routine or required maintenance and services is the responsibility of the purchaser. The purchaser is required to keep documented evidence that these services were performed.

The coverage for the TAC limited Warranty will also be contingent on a pre-delivery inspection being performed by TAC or its Authorized Distributor.

The hydraulic crane warranty may be subject to cancellation if the above required inspections and services are not performed and submitted to TAC.

HYDRAULIC CRANES WITH KNOWN, FAILED, OR DEFECTIVE PARTS MUST BE IMMEDIATELY REMOVED FROM SERVICE. The purchaser must give TAC written notice of any claims for breach of this Limited Warranty within 30 days after retail purchaser's discovery of the defect.

The customer and/or the distributor must give TAC formal written notice within 30 days of warranty expiration if any outstanding warranty defect exist where repairs are not completed. Lacking formal written notice of existing defect within the 30 day period before or following the warranty expiration, later notices or claims may be rejected as untimely. It is therefore in the customer's best interest to carry out thorough periodic inspections, especially at the expiration of warranty.

Manufactured by TADANO, LTD. and/or its subsidiary companies
Distributed by TADANO AMERICA CORPORATION
4242 West Greens RD.
Houston, TX 77066



6654 NE 47th Ave
Portland, OR 97218

SAMANTHA PIRTZ

509-539-0034

SPirtz@maximcrane.com

May 23, 2022

Grant County PUD
Contract Documents 470-11429
Bid For: Purchase of Tracked Crane
Bid Opening – May 26, 2022

To Whom it may concern

Maxim Crane Works is a Factory Dealer for Tadano America and has a full Service shop which has the ability to Fully Service and Maintain all Tadano Cranes and other types of equipment.

Sam Pirtz –
Area Sales for PNW Region
509-539-0034
spirtz@maximcrane.com

Nearest Maxim Facility

Maxim Crane Works
6654 NE 47th Ave
Portland, OR 97218
503-288-8100

Maxim Crane Works
1124 112th St E
Tacoma, WA 98445

GENERAL DATA

CRANE CAPACITY	90 ton at 10 feet (81.6t at 3.0m)
BOOM	5-section, 37' 8" – 141' 1" (11.5 m – 43.0 m)
DIMENSION	
Overall Length	45' 11" (14.00 m)
Overall Width (tracks extended)	17' 10" (5.42 m)
Overall Width (tracks retracted)	11' 9" (3.59 m)
Overall Width (tracks removed)	9' 8" (2.95 m)
Overall Height (working)	13' 1" (3.97 m)
MASS	
Gross Vehicle Mass (Standard Equipment Package)	180,171 lb (81,724 kg)
Maximum Counterweight	Upper = 45,000 lb (20,411 kg) Carbody = 20,000 lb (9,070 kg)
PERFORMANCE	
Travel Speed	0.7 mph (1.1 km/hr)/ 2.1 mph (3.4 km/hr)
Gradeability	78%

CRANE SPECIFICATION

MODEL	CAPACITY
GTC-900	90 ton at 10 feet (81.6t at 3.0m)

BOOM

5-section full power telescoping boom with 2 extension modes. System consists of two double acting hydraulic cylinders with load holding valves and extension and retraction cables.

- Retracted Length: 37' 8" (11.5m)
- Extended Length: 141' 1" (43.0 m) • Extension Time: 161 s
- Elevating Angles: -1.5° to 81.5° • Elevating Time: 83 s
- Max Lifting Height: 138' (42.1m)
- Boom Head: Six, 19.5 inch (495 mm) diameter cast nylon main sheaves on heavy-duty roller bearings. Two, 17.5" (445 mm) diameter lead in sheaves on heavy-duty roller bearings. Designed for quick reeving of head and load block.

AUXILIARY BOOM HEAD

Quick reeve, single 17.5 inch (445 mm) diameter high-strength sheave mounted on a heavy-duty roller bearing. Allows single part reeving.

COUNTERWEIGHT

6 piece counterweight design. Three upper counterweight configurations

- "A" Configuration = 15,000lb (6,804 kg)
- "A+" Configuration = 22,500lb (10,206 kg)
- "B" Configuration = 30,000lb (13,608 kg)
- "C" Configuration = 45,000lb (20,411 kg)
- Two carbody counterweights, 10,000lb (4535 kg) each

WINCHES

Planetary geared two-speed winch includes a hydraulic motor, multi-disc internal brake and counterbalance valve. Drum rotation indicator is included (complete winch performance specs on Page 3)

- Main Winch
 - Rope Diameter and Length: 3/4 in x 695 ft (19mm x 212m)
 - Single line pull: 19,830 lb (88.2 kN)(first layer)
 - Single line speed: 368 ft/min (112.2 m/min)(4th layer)
- Auxiliary Winch
 - Rope Diameter and Length: 3/4 in x 480 ft (19mm x 146m)
 - Single line pull: 19,830 lb (88.2 kN)(first layer)
 - Single line speed: 368 ft/min (112.2 m/min)(4th layer)

TRAVEL

Each side frame contains a pilot controlled, two-speed track drive with hydraulic axial piston motor and parking brake. Travel system provides skid steering and counter rotation.

- Travel speed - Low: 0.7 mph (1.1 km/hr) High: 2.1 mph (3.4 km/hr)
- Gradeability (unladen): 78%
- Unladen Ground Pressure: 11.8 psi (0.81 kg/cm²)

SWING

Gear motor driving a planetary gear reducer with a shaft mounted pinion, external gear shear ball slew bearing bolted to the superstructure and the carbody allows the superstructure to rotate 360°

- Swing Speed: 0 - 2.2 rpm
- Swing Parking Brake: Spring applied failsafe brake with hydraulic release that is controlled from the operators cab
- Swing Service Brake: Hydraulically applied, controlled through foot actuated pedal
- House Lock System
 - 4-position house lock (boom over front, rear or either side). Actuated from the operator's cab.

LOAD MOMENT INDICATOR

TADANO AML-C Rated Capacity Limiter and Anti-Two Block system

- OPTI-WIDTH™ - OPTIMAL lifting performance at any track WIDTH
- Control function shutdown. Audible and visual warnings
- LCD screen provides a continuous display of working boom length, boom angle, working load radius, tip height, swing position, parts-of-line (operator set), machine track configuration, relative load moment, maximum permissible load and actual load.
- Anti-two block weight allows quick reeving of hook block
- Operator configurable working range limits with automatic soft stop.

FRAME

The frame is an all-steel, welded structure, precision machined to accept attachment of the boom and swing components.

OPERATORS CAB

Fully-enclosed, air conditioned all-steel modular cab with lockable sliding door, acoustical lining, anti-slip floor and tinted safety glass.

- Cab tilts 20°.
- Rear view, winch view and right side view video cameras
- Three remote control work lights.
- Grab bars and steps are located for easy access to the cab.
- Defroster, heater, circulating fan
- 2-speed windshield wiper, top glass wiper
- Six-way adjustable fabric seat with headrest, seat belt
- Dome light
- Dry-chemical fire extinguisher
- Four-way electronic armrest mounted joysticks control swing, main winch, auxiliary winch, boom hoist and boom extend. Foot pedals control the travel and swing service brake functions. Swing brake pedal is hydraulic.
- Selectable modes for Fine Control and Travel. Travel function can be operated by foot pedals or joystick.
- Seat termination switch immediately disable all hydraulic functions as the operator rises from the seat. Functions can also be disabled by switch on console.
- Dash instrumentation: tachometer, hour meter, fuel gauge, and DEF level gauge. Indicators are provided for crane level, swing position, load moment, drum rotation, air filter restriction, engine oil temperature and pressure, hydraulic oil temperature and level, and hydraulic and air filter restriction, and low voltage.

ENGINE

- Make/ Model: Cummins B6.7
- Type: 6 Cylinder, Water cooled, 4 Cycle
- Aspiration: Turbocharged and Aftercooled
- Max. Output: 310 hp (231 kW) @ 2200 RPM
- Max Torque: 950 Lb-ft (1288 N-m) @ 1500 RPM
- Piston Disp: 6.7 L
- Emission Cert: U.S. EPA Tier 4f, Euromot Stage V
- Alternator: 70 amp

ELECTRICAL SYSTEM

24 VDC

FUEL SYSTEM

- Capacity: 85 gallon (321 liter)
- Filtration: Inline fuel/water separator and engine mounted fuel filter

SIDE FRAMES

Two welded steel side frames are paired with a track group. The side frames extend and retract hydraulically and are controlled from the cab.

- Track Rollers: Two top and thirteen bottom sealed rollers on each track frame Idler: Oil filled, self lubricating with spring type tensioner
- Track Shoes: 35.4 inch (900 mm), 3-bar semi grouser

HYDRAULIC SYSTEM

- Hydraulic Pumps: Two high pressure, variable axial piston pumps with load sense and power limiting control for crane functions. One axial piston pump for swing function. One gear pump for cooling loop.
- Directional Valves: Multiple pressure and flow compensated valves with integrated relief valves controlled by electrical signals.
- Pump output: 154 gpm (582 l/min) @ 2200 RPM engine speed. 5,000 psi (345 bar) maximum pressure
- Reservoir: 227 gallon (861 liter) capacity, spin-on filler/ breather, sight gauge, cleanout, and sump drain.
- Filtration: Three 5 micron, full flow tank mounted return filters with electrical clogging indicator. 3 micron pilot oil in-line pressure filter
- Diagnostic Ports: Provided for system, load sense, and pilot pressure

OPTIONAL EQUIPMENT

- Jibs
 - o Heavy lift jib
 - Total Length: 8.2ft (2.5 m) • Offset Angles: 3.5° & 30°
 - Max. Lifting Height: 148.6 ft (45.3 m)
 - o Main jib
 - Total Length: 33.1 ft (10.1m) • Offset Angles: 3.5°, 25° & 45°
 - Max. Lifting Height: 173.6 ft (52.9 m)
 - o Fly jib
 - Total Length: 58.1ft (17.7m) • Offset Angles: 3.5°, 25° & 45°
 - Max. Lifting Height: 198.0ft (60.4 m)
- Hook blocks
 - 90 ton (81.6t) quick reeve hook block – Six, 19.5 in (495mm) steel sheaves, swivel hook and safety latch
 - 55 ton (50t) quick reeve hook block – three, 19.5 in (495mm) steel sheaves, swivel hook and safety latch
 - 22 ton (20t) quick reeve hook block – one, 19.5 in (495mm) steel sheave, swivel hook and safety latch
- Overhaul ball – 8.8 ton (8t) with swivel hook & safety latch
- 360 degree house lock. Actuated from the operator's cab.
- Track Shoes: 31.5 inch (800 mm) steel flat or 3-bar semi grouser shoes. 35.4 inch (900 mm) steel flat shoes
- Auger: Hydraulic auger boom package includes auger motor, hoses, fasteners, and stowage bracket assembly mounted to the 2nd stage section of boom for variable radius drilling.
- Tool Circuit: Provides 5 gpm (23 l/min) and 10 gpm (45 l/min) at 2,500 PSI (176 bar) through a 50 foot (15.2m) twin hose reel with quick disconnect fittings to operate open center tools.
- High Flow Tool Circuit: Provides 45 gpm (170 l/min) at 4800 PSI (330 bar)
- Carbody Jack System: Includes carbody mounted jacks, valves, electric control pendant, and auto-level raise system.
- Free Fall Hoists: Winches are available in controlled free fall configurations.
- Cold Weather Packages: Cold weather options are available for operation to -40°C (Consult factory for application support)
- Work Platform: Model WP750 – 36 in x 72 in (0.9m x 1.8m) , all steel, welded, two person platform with maximum capacity of 750 lbs (340 kg).
- Full function Radio remote control package
- Boom mounted anemometer with cab display
- Automatic central lubrication system.

MAIN WINCH AND AUXILIARY WINCH PERFORMANCE

Wire Rope: 3/4 in diameter rotation resistant. Line pulls are not based on wire rope strength.

Rope Layer	Max Line Pull (lb)	High Line Speed (ft/min)	Normal Line Speed (ft/min)	Pitch Dia (in)	Layer (ft)	Total (ft)
1	19,828	290.3	172.5	15.0	112.2	112.2
2	17,962	316.2	187.9	16.6	122.3	234.5
3	16,411	342.1	203.7	18.2	132.2	366.7
4	15,107	368.0	219.1	19.7	142.4	509.1
5	14,006	394.3	234.5	21.3	152.2	661.2
6	13,039	420.2	249.9	22.9	162.4	823.6

MACHINE WEIGHTS

	LB	KG
Standard Crane with 5 section - 141.1 ft boom, full counterweight, 2 winches with wire rope, auxiliary nose sheave and 35.4 inch 3-bar semi grouser track shoes,	175,066	79,409
Standard Crane with 5 section - 141.1 ft boom, auxiliary winch with wire rope and 35.4 inch 3-bar semi grouser track shoes (Counterweight removed)	110,066	49,925
Standard Crane with auxiliary winch with wire rope (Counterweight and track frames removed)	76,221	34,573

OPTIONAL EQUIPMENT

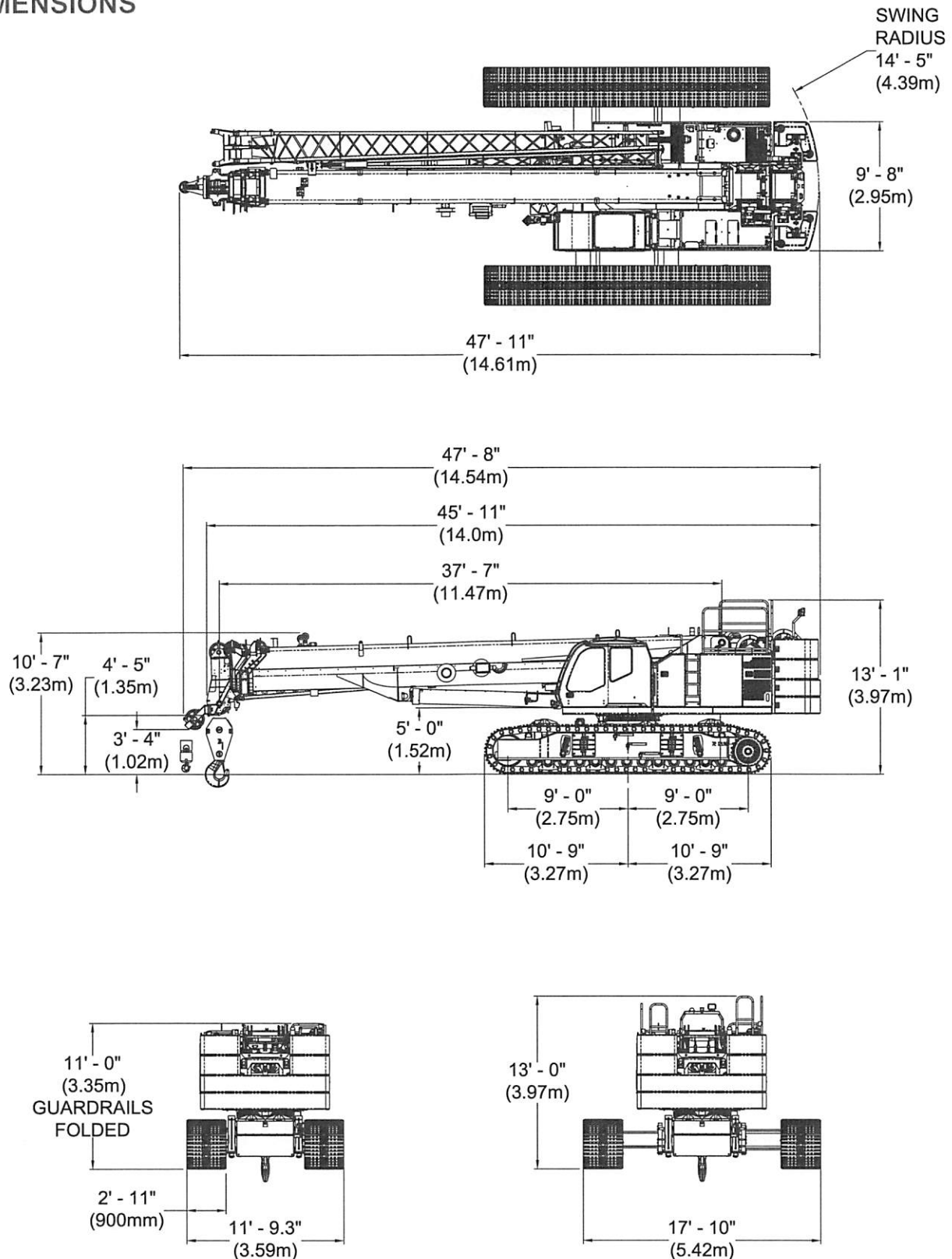
	LB	KG
Heavy Lift Jib - 8.2 ft (2.5m)	972	441
Jib Base - 33.1 ft (10.1 m)	2,030	921
Jib Tip - 24.7 ft (7.5m)	750	340
Auxiliary Nose Sheave	105	48
90 ton (81.6t) hook block - six sheave	1,442	654
55 ton (50t) hook block - three sheave	1,395	633
22 ton (20t) hook block - one sheave	655	297
8.8 ton (8t) Overhaul Ball	295	134
Carbody Jacks	3,774	1,712
Track Frame with 900mm 3-bar semi-grouser track shoe	19,140	8,682
Track Frame with 800mm flat steel track shoe	18,980	8,609

GTC-900

90 Ton Telescopic Boom Crawler Crane

SPECIFICATION SHEET NO. TMC-DI-734-09-06/20

DIMENSIONS



TRANSPORT DIMENSIONS**Transport Plan (no carbody jacks)**

Item	Weight		Dims (L x W x H)	Trailer		
	Lbs	Kg		1	2	3
Crane (with 2 winches, Boom, wire rope, aux nose sheave)	110,066	49,925	44' 11" x 11' 6" x 11' 0"	X		
Counterweight A - 1 piece	15,000	6,804	9' 8" x 3' 5" x 3' 8"		X	
Counterweight B - 1 piece	15,000	6,804	9' 8" x 3' 8" x 1' 6"		X	
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"		X	
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"		X	
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"			X
Jib base section	2,030	921	34' 8" x 4' 10" x 3' 0"			X
Jib point	750	340	25' 9" x 2' 5" x 2' 5"			X
Hook Block - 90 USton	1,385	628	5' 2" x 2' 0" x 1' 6"			X
Headache Ball - 8.8 USton	440	200	2' 5" x 0' 11" x 0' 11"			X
Miscellaneous Items (Crate)	500	227	4' 0" x 3' 0" x 3' 0"			X
Total Net Weight on Trailer (Lbs)				110066	43750	26355

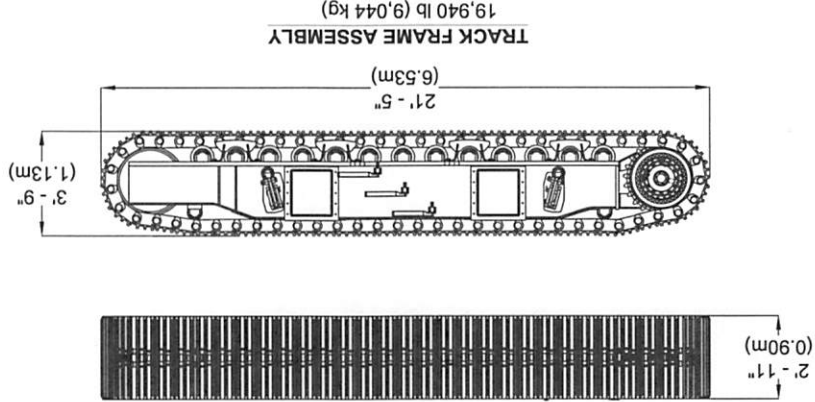
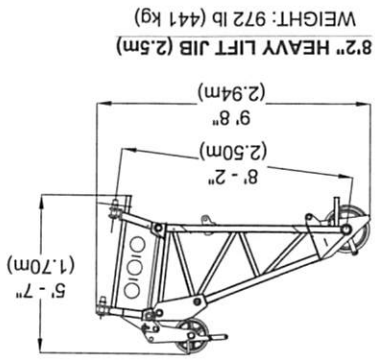
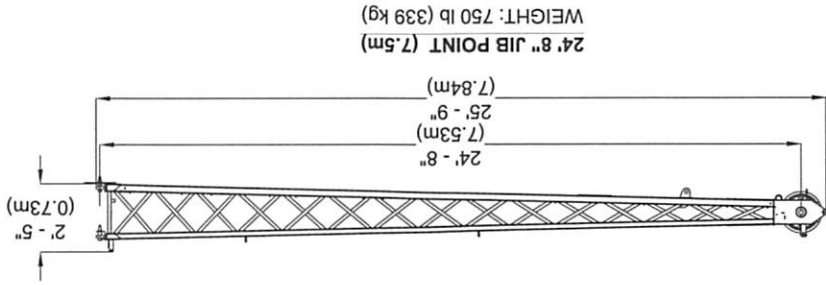
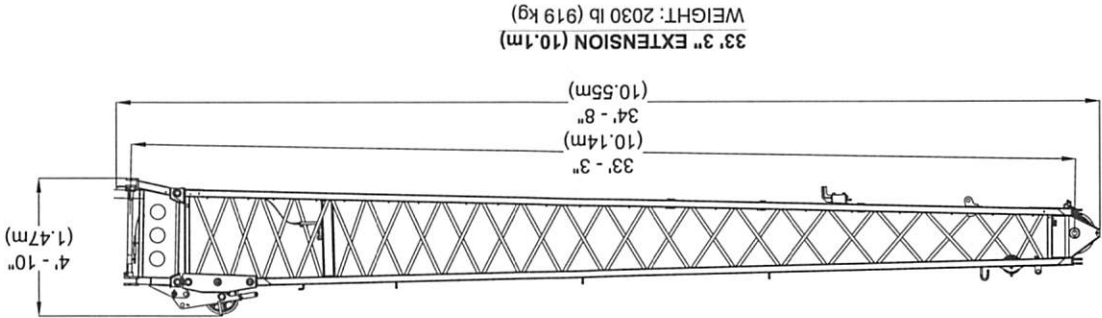
Transport Plan (with carbody jacks - tracks removed - 3 trailers)

Item	Weight		Dims (L x W x H)	Trailer		
	Lbs	Kg		1	2	3
Crane (with 2 winches, Boom, wire rope, aux nose sheave, Tracks removed)	75,359	34,182	44' 11" x 9' 8" x 10' 1"	X		
Left Track Frame	19,325	8,766	2' 11" x 3' 0" x 3' 9"		X	
Right Track Frame	19,475	8,834	2' 11" x 3' 0" x 3' 9"			X
Counterweight A	15,000	6,804	9' 8" x 3' 5" x 3' 8"		X	
Counterweight B - 1 piece	15,000	6,804	9' 8" x 3' 8" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"		X	
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"		X	
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"	X		
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"	X		
Jib base section	2,030	921	34' 8" x 4' 10" x 3' 0"			X
Jib point	750	340	25' 9" x 2' 5" x 2' 5"		X	
Hook Block - 90 USton	1,385	628	5' 2" x 2' 0" x 1' 6"		X	
Headache Ball - 8.8 USton	440	200	2' 5" x 0' 11" x 0' 11"			X
Miscellaneous Items (Crate)	500	227	4' 0" x 3' 0" x 3' 0"			X
Total Net Weight on Trailer (Lbs)				95359	43960	44945

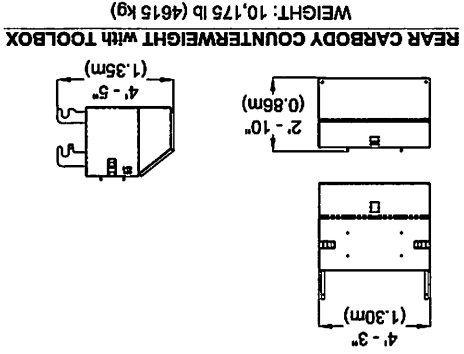
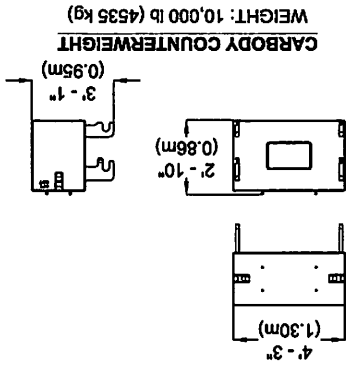
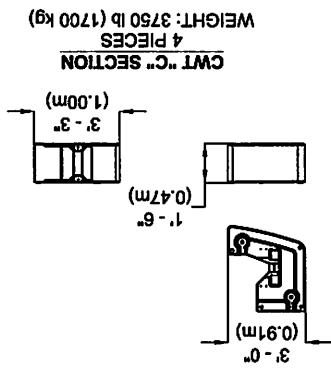
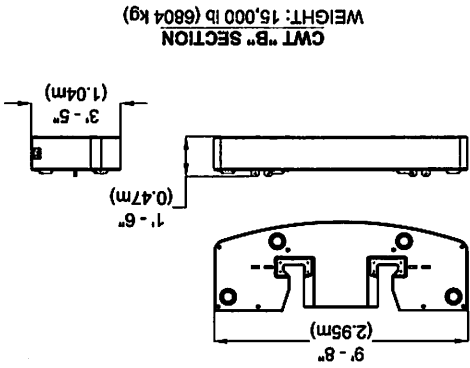
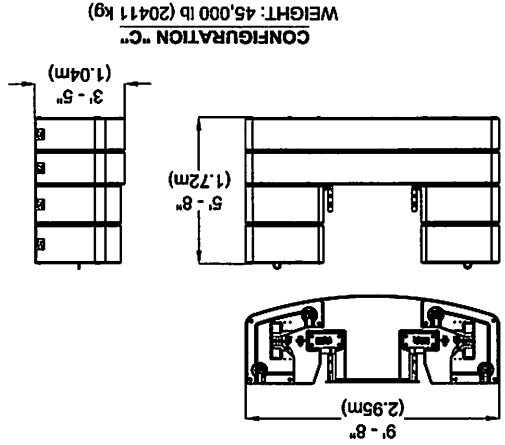
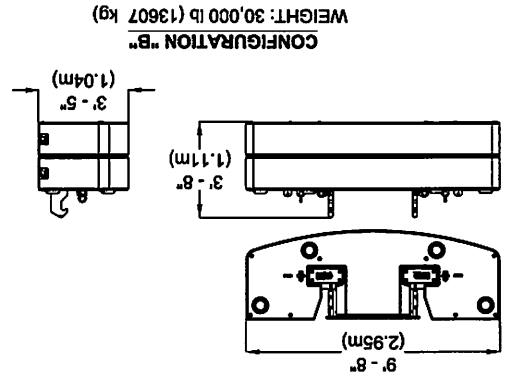
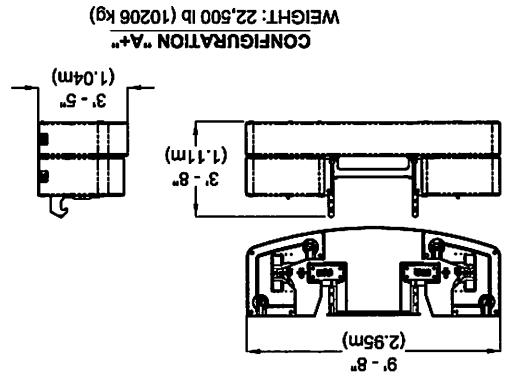
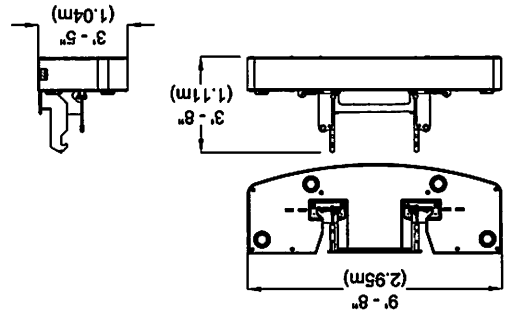
Transport Plan (with carbody jacks - tracks removed - 4 trailers)

Item	Weight		Dims (L x W x H)	Trailer			
	Lbs	Kg		1	2	3	4
Crane (with 2 winches, Boom, wire rope, aux nose sheave, Tracks removed)	75,359	34,182	44' 11" x 9' 8" x 10' 1"	X			
Left Track Frame	19,325	8,766	2' 11" x 3' 0" x 3' 9"		X		
Right Track Frame	19,475	8,834	2' 11" x 3' 0" x 3' 9"			X	
Counterweight A	15,000	6,804	9' 8" x 3' 5" x 3' 8"		X		
Counterweight B - 1 piece	15,000	6,804	9' 8" x 3' 8" x 1' 6"			X	
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X	
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"		X		
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"			X	
Counterweight C - 1 piece	3,750	1,701	3' 0" x 3' 3" x 1' 6"		X		
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"				X
Counterweight - Carbody - 1 piece	10,000	4,536	3' 2" x 4' 3" x 2' 8"				X
Jib base section	2,030	921	34' 8" x 4' 10" x 3' 0"			X	
Jib point	750	340	25' 9" x 2' 5" x 2' 5"		X		
Hook Block - 90 USton	1,385	628	5' 2" x 2' 0" x 1' 6"		X		
Headache Ball - 8.8 USton	440	200	2' 5" x 0' 11" x 0' 11"			X	
Miscellaneous Items (Crate)	500	227	4' 0" x 3' 0" x 3' 0"			X	
Total Net Weight on Trailer (Lbs)				75359	43960	44945	20000

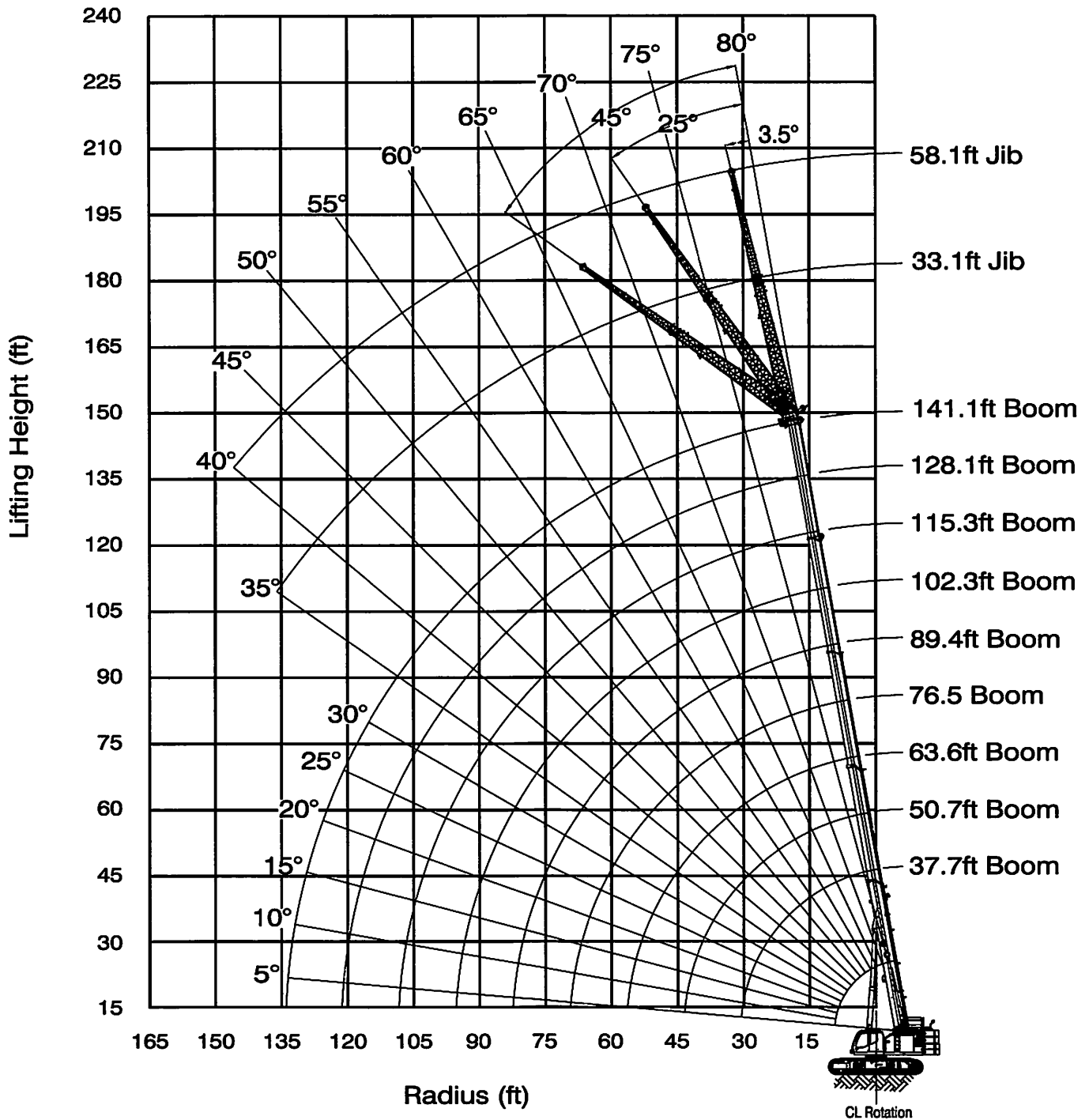
TRANSPORT DIMENSIONS



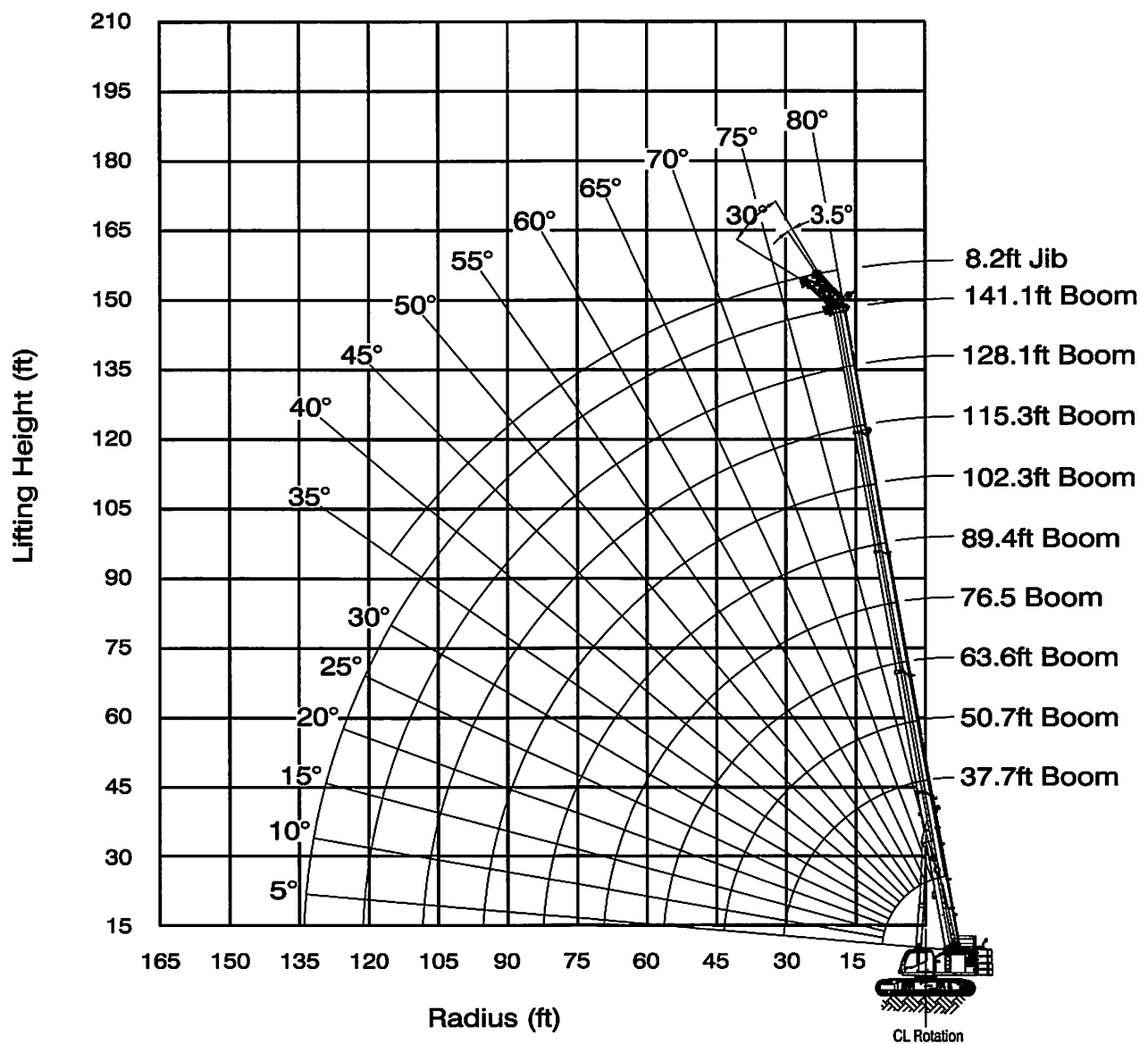
TRANSPORT DIMENSIONS



WORKING RANGE DIAGRAM



WORKING RANGE DIAGRAM - HEAVY LIFT JIB



LOAD CHARTS

LOADS IN lb x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360° UP TO 0.5° SLOPE 45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT										
RADIUS (ft)	MAIN BOOM LENGTH (ft)									RADIUS (ft)
	37.7	50.7	63.6	76.5	89.4	102.3	115.3	128.1	141.1	
10	180.0	111.6	98.6	96.1						10
12	160.6	111.6	97.2	96.1						12
15	140.3	111.6	95.5	76.9	75.5	32.1				15
20	113.8	110.2	81.7	69.5	61.7	37.2	37.2			20
25	79.1	76.5	68.9	58.4	51.8	37.2	36.3	34.8	28.8	25
30	59.9	57.4	55.8	50.1	44.4	37.2	36.2	34.4	28.8	30
35		45.2	43.8	43.6	38.5	35.5	33.5	31.8	27.1	35
40		37.4	36.2	35.7	33.8	31.2	29.5	28.2	24.7	40
45			34.8	29.5	29.5	27.7	26.3	25.1	22.7	45
50			30.0	24.9	24.9	24.8	23.6	22.5	20.5	50
55			26.2	22.9	21.2	22.2	21.3	20.3	18.5	55
60				21.4	18.2	19.2	19.2	18.5	16.9	60
65				20.2	15.8	16.8	17.4	16.8	15.4	65
70					13.7	14.7	15.3	15.3	14.1	70
75					12.0	12.9	13.5	14.0	12.9	75
80					10.6	11.4	12.1	13.2	11.9	80
85						10.3	11.4	12.5	11.0	85
90						9.7	10.8	11.3	10.1	90
95						9.2	10.3	10.2	9.3	95
100							9.8	9.3	8.6	100
105							9.3	8.5	7.7	105
110								7.7	7.0	110
115								7.0	6.3	115
120								6.5	5.7	120
125									5.1	125
130									4.6	130
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360° UP TO 4° SLOPE 45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT										
RADIUS (ft)	MAIN BOOM LENGTH (ft)									RADIUS (ft)
	37.7	50.7	63.6	76.5	89.4	102.3	115.3	128.1	141.1	
10	145.4	110.5	77.1	59.6						10
12	143.1	110.5	77.1	59.6						12
15	111.9	103.0	77.1	59.6	46.9	32.1				15
20	80.4	71.9	72.1	59.2	46.9	36.9	31.0			20
25	61.8	53.1	57.2	50.9	43.8	36.9	31.0	26.0	18.0	25
30	49.2	40.6	44.9	43.2	38.3	34.3	31.0	26.0	18.0	30
35		35.3	36.4	35.2	33.8	30.4	28.1	26.0	18.0	35
40		28.6	35.7	29.3	28.3	27.2	25.2	23.5	18.0	40
45			30.9	25.2	24.0	24.3	22.7	21.2	18.0	45
50			27.2	23.5	20.5	20.9	20.6	19.3	17.3	50
55			24.5	22.0	17.8	18.2	18.4	17.7	15.8	55
60				20.8	15.5	16.0	16.1	16.2	14.5	60
65				19.4	13.6	14.1	14.3	14.6	13.4	65
70					11.9	12.4	12.8	13.8	12.4	70
75					10.6	11.1	12.1	12.8	11.4	75
80					9.8	10.5	11.5	11.6	10.6	80
85						9.9	10.9	10.6	9.6	85
90						9.5	10.4	9.6	8.7	90
95						9.2	9.9	8.8	7.9	95
100							9.2	8.1	7.1	100
105							8.6	7.4	6.5	105
110								6.8	5.9	110
115								6.3	5.3	115
120								5.5	4.8	120
125									4.2	125
130									3.6	130
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

MAIN BOOM with TRACKS RETRACTED, OVER THE FRONT/REAR UP TO 0.5° SLOPE 45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT										
RADIUS (ft)	MAIN BOOM LENGTH (ft)									RADIUS (ft)
	37.7	50.7	63.6	76.5	89.4	102.3	115.3	128.1	141.1	
10	180.0	111.6	98.6	96.1						10
12	160.6	111.6	97.2	96.1						12
15	140.3	111.6	95.5	76.9	75.5	32.1				15
20	114.7	110.2	81.7	69.5	61.7	37.2	37.2			20
25	90.5	88.8	68.9	58.4	51.8	37.2	36.3	34.8	28.8	25
30	65.5	67.9	59.3	50.1	44.4	37.2	36.2	34.4	28.8	30
35		53.2	51.6	43.6	38.5	35.5	33.5	31.8	27.1	35
40		43.2	41.7	38.4	33.8	31.2	29.5	28.2	24.7	40
45			36.2	34.1	29.9	27.7	26.3	25.1	22.7	45
50			34.6	29.3	26.7	24.8	23.6	22.5	20.5	50
55			30.3	25.1	24.0	22.3	21.3	20.3	18.5	55
60				21.6	21.6	20.2	19.2	18.5	16.9	60
65				20.2	18.8	18.3	17.5	16.8	15.4	65
70					16.5	16.7	16.0	15.3	14.1	70
75					14.6	15.3	14.6	14.1	12.9	75
80					12.9	13.7	13.4	13.2	11.9	80
85						12.2	12.3	12.5	11.0	85
90						11.0	11.4	11.8	10.1	90
95						9.9	10.4	11.2	9.3	95
100							9.8	10.7	8.6	100
105							9.3	10.2	8.0	105
110								9.3	7.4	110
115								8.6	6.9	115
120								7.9	6.4	120
125									5.9	125
130									5.5	130
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

MAIN BOOM with TRACKS RETRACTED, OVER THE SIDE UP TO 1.5° SLOPE 45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT										
RADIUS	MAIN BOOM LENGTH (ft)									RADIUS
(ft)	37.7	50.7	63.6	76.5	89.4	102.3	115.3	128.1	141.1	(ft)
10	*	*	*	*						10
12	*	*	*	*						12
15	*	*	*	*	*	*				15
20	62.7	59.1	*	*	*	*	*			20
25	46.1	43.3	41.2	40.7	*	*	*	34.8	28.8	25
30	36.1	36.8	36.2	33.6	31.0	31.6	31.8	31.1	28.2	30
35		29.9	30.2	30.3	24.6	25.4	25.7	25.7	25.3	35
40		24.9	25.3	25.5	20.0	20.8	21.6	22.7	21.4	40
45			21.5	21.7	17.1	18.2	19.7	19.4	18.3	45
50			18.6	18.8	15.5	16.7	17.7	16.7	15.7	50
55			16.4	16.5	14.2	15.3	15.5	14.5	13.6	55
60				14.5	13.1	14.1	13.6	12.6	11.7	60
65				13.0	12.1	12.5	12.0	11.0	10.2	65
70					11.2	11.2	10.6	9.7	8.9	70
75					10.5	10.0	9.5	8.5	7.7	75
80					9.6	8.9	8.4	7.5	6.7	80
85						8.1	7.5	6.6	5.9	85
90						7.3	6.8	5.9	5.1	90
95						6.7	6.1	5.2	4.4	95
100							5.5	4.5	3.6	100
105							4.9	3.9	3.0	105
110								3.4	2.3	110
115								2.8	1.8	115
120								2.4	*	120
125									*	125
130									*	130
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

MAIN BOOM with TRACKS FULLY EXTENDED - 360° UP TO 1.5° SLOPE 0 MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT										
RADIUS (ft)	MAIN BOOM LENGTH (ft)									RADIUS (ft)
	37.7	50.7	63.6	76.5	89.4	102.3	115.3	128.1	141.1	
10	180.0	111.6	98.5	96.1						10
12	150.0	111.6	97.2	91.3						12
15	93.5	86.5	80.7	74.2	67.9	32.1				15
20	55.2	51.2	48.2	47.3	44.7	37.2	37.2			20
25	37.9	37.4	36.2	33.7	31.8	31.5	30.6	30.8	28.4	25
30	28.3	29.3	29.8	29.9	24.1	25.2	26.6	24.8	22.3	30
35		23.0	23.5	23.7	21.3	22.4	22.2	20.0	17.9	35
40		18.5	19.1	19.4	19.0	18.8	18.1	16.4	14.6	40
45			15.8	16.1	16.2	15.7	15.0	13.7	12.0	45
50			13.3	13.6	13.8	13.2	12.6	11.4	9.9	50
55			11.4	11.6	11.8	11.3	10.7	9.6	8.2	55
60				10.0	10.2	9.7	9.1	8.1	6.8	60
65				8.7	8.9	8.4	7.8	6.9	5.6	65
70					7.8	7.2	6.7	5.8	4.5	70
75					6.9	6.3	5.8	4.8	3.6	75
80					6.1	5.5	5.0	4.0	0.0	80
85						4.8	4.3	3.2	*	85
90						4.1	3.6	2.4	*	90
95						3.7	2.9	*	*	95
100							2.3	*	*	100
105							1.9	*	*	105
110								*	*	110
115								*	*	115
120								*	*	120
125									*	125
130									*	130
PARTS OF LINE	12	8	8	6	6	4	4	4	2	PARTS OF LINE

Load chart data is for reference, load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

8.2 ft JIB with TRACKS EXTENDED - 360° UP TO 0.5° SLOPE											
45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT											
RADIUS (ft)	MAIN BOOM LENGTH (ft)										RADIUS (ft)
	37.7		102.3		115.3		128.1		141.1		
	3.5°	30°	3.5°	30°	3.5°	30°	3.5°	30°	3.5°	30°	
10	47.8	36.8									10
12	45.9	35.8									12
15	43.3	34.7									15
20	39.9	33.2	29.7	28.1							20
25	37.4	32.3	26.9	25.8	28.0	26.6	28.2				25
30	35.7	32.2	23.4	22.6	24.6	23.5	25.5	24.2	23.3		30
35	35.1	32.2	20.6	20.0	21.8	21.0	22.9	21.8	23.3	22.4	35
40			18.4	17.9	19.6	19.0	20.6	19.8	21.4	20.4	40
45			16.5	16.1	17.7	17.2	18.8	18.1	19.6	18.8	45
50			14.9	14.7	16.1	15.7	17.2	16.6	18.0	17.3	50
55			13.6	13.4	14.8	14.5	15.8	15.4	16.6	16.1	55
60			12.4	12.3	13.6	13.3	14.6	14.2	15.4	15.0	60
65			11.4	11.3	12.6	12.4	13.5	13.2	14.3	14.0	65
70			10.6	10.5	11.7	11.5	12.6	12.4	13.0	13.1	70
75			9.8	9.7	10.8	10.7	11.8	11.6	11.9	12.0	75
80			9.1	9.0	10.1	10.0	11.0	10.9	10.9	11.0	80
85			8.5	8.4	9.5	9.4	10.4	10.2	10.0	10.1	85
90			7.9	7.9	8.9	8.8	9.7	9.7	9.1	9.2	90
95			7.4		8.4	8.3	9.2	9.1	8.4	8.4	95
100			7.0		7.9	7.9	8.7	8.6	7.7	7.8	100
105					7.5		7.9	8.0	7.1	7.1	105
110					7.1		7.1	7.2	6.4	6.5	110
115					6.8		6.5	6.5	5.7	5.8	115
120							5.8		5.1	5.1	120
125							5.3		4.4	4.5	125
130									3.8		130
135									3.2		135
140									2.7		140
PARTS OF LINE	4	4	2	2	2	2	2	2	2	2	PARTS OF LINE

Load chart data is for reference, load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

LOADS IN lb x 1000

33.1 ft JIB with TRACKS EXTENDED - 360° UP TO 0.5° SLOPE 45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT																
RADIUS (ft)	MAIN BOOM LENGTH (ft)															RADIUS (ft)
	37.7			102.3			115.3			128.1			141.1			
	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	
10	14.6															10
12	14.6															12
15	14.6															15
20	14.6															20
25	14.6	14.6		14.6												25
30	14.6	14.3	11.9	14.6			14.6									30
35	14.6	13.2	11.2	14.6	14.6		14.6			14.6			13.5			35
40	14.6	12.2	10.7	14.6	14.6		14.6	14.6		14.6			13.5			40
45	13.7	11.4	10.2	14.6	13.7	11.1	14.6	13.7		14.6	13.5		13.5			45
50	12.5	10.8	9.9	13.5	12.7	10.8	13.8	12.7	10.9	14.0	12.7	10.9	13.5	12.5		50
55	11.6	10.3	9.8	12.4	11.7	10.5	12.8	11.8	10.6	13.0	11.9	10.7	13.0	11.8	10.7	55
60	10.8	10.0		11.4	10.8	10.3	11.8	11.0	10.3	12.1	11.1	10.4	12.1	11.1	10.3	60
65				10.6	10.1	9.9	11.0	10.3	10.0	11.3	10.4	10.0	11.3	10.4	9.9	65
70				9.9	9.4	9.2	10.3	9.7	9.4	10.6	9.9	9.5	10.6	9.9	9.4	70
75				9.2	8.8	8.7	9.6	9.1	8.9	9.9	9.3	9.0	10.0	9.3	8.9	75
80				8.6	8.3	8.2	9.0	8.6	8.4	9.3	8.8	8.5	9.5	8.8	8.5	80
85				8.0	7.8	7.7	8.5	8.1	8.0	8.8	8.3	8.1	8.9	8.4	8.1	85
90				7.6	7.4	7.3	8.0	7.7	7.5	8.3	7.9	7.7	8.5	8.0	7.8	90
95				7.1	6.9	6.9	7.6	7.3	7.2	7.9	7.5	7.4	8.1	7.6	7.4	95
100				6.7	6.6	6.5	7.2	6.9	6.8	7.5	7.2	7.0	7.7	7.3	7.1	100
105				6.3	6.2		6.8	6.6	6.5	7.1	6.8	6.7	7.3	7.0	6.8	105
110				6.0	5.9		6.5	6.3	6.2	6.8	6.5	6.4	7.0	6.7	6.5	110
115				5.7	5.6		6.1	6.0	6.0	6.5	6.3	6.2	6.7	6.4	6.3	115
120				5.4	5.4		5.9	5.7		6.2	6.0	5.9	6.1	6.1	6.0	120
125				5.2			5.6	5.5		5.9	5.8	5.7	5.6	5.9	5.8	125
130							5.4	5.3		5.7	5.6		5.0	5.4	5.6	130
135							5.2	5.1		5.3	5.3		4.5	4.9	5.0	135
140							5.0			4.8	5.0		4.0	4.4		140
PARTS OF LINE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

LOAD CHARTS

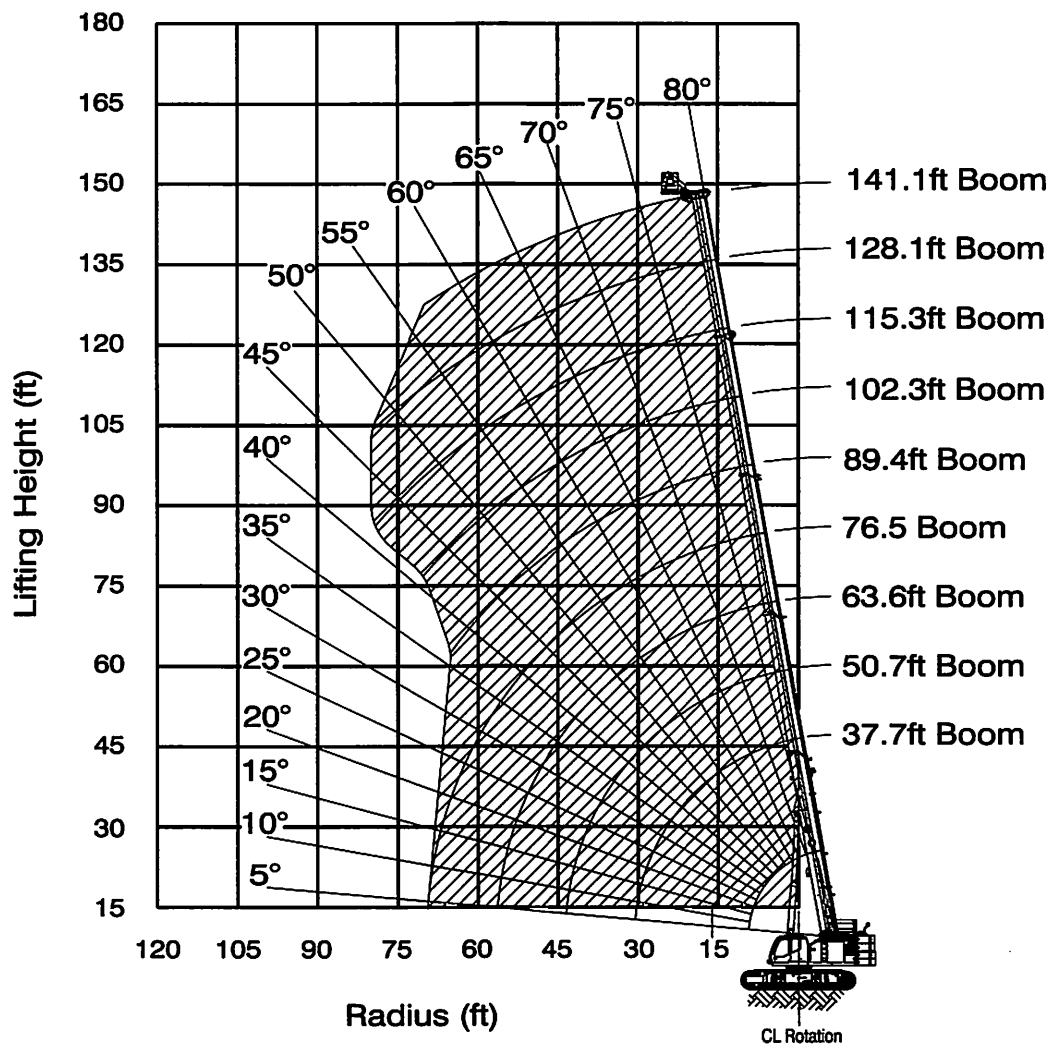
LOADS IN lb x 1000

58.1 ft JIB with TRACKS EXTENDED - 360° UP TO 0.5° SLOPE																
45,000 lb MAIN COUNTERWEIGHT AND 20,000 lb CARBODY COUNTERWEIGHT																
RADIUS (ft)	MAIN BOOM LENGTH (ft)															RADIUS (ft)
	37.7			102.3			115.3			128.1			141.1			
	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	3.5°	25°	45°	
10																10
15																15
20	9.9															20
25	9.9															25
30	9.9															30
35	9.9			7.5												35
40	9.1	8.1		7.5			7.2			6.9						40
45	8.3	7.6		7.5			7.2			6.9			6.7			45
50	7.6	7.1		7.5			7.2			6.9			6.7			50
55	7.1	6.7	5.7	7.5	7.5		7.2	7.2		6.9			6.7			55
60	6.6	6.2	5.4	7.5	7.3		7.2	7.2		6.9	6.9		6.7			60
65	6.1	5.8	5.2	7.5	7.0	5.6	7.2	7.1		6.9	6.9		6.7	6.7		65
70	5.8	5.4	4.9	7.5	6.8	5.4	7.2	6.9	5.4	6.9	6.9		6.7	6.7		70
75	5.4	5.1	4.7	7.4	6.5	5.2	7.2	6.6	5.3	6.9	6.7	5.3	6.7	6.7		75
80	5.2	4.8	4.6	7.1	6.2	5.1	7.2	6.4	5.2	6.9	6.5	5.2	6.7	6.6	5.2	80
85	4.9	4.7		6.8	6.0	5.0	6.9	6.1	5.0	6.9	6.2	5.0	6.7	6.3	5.1	85
90				6.5	5.7	4.8	6.7	5.9	4.9	6.9	6.0	4.9	6.7	6.1	5.0	90
95				6.1	5.5	4.7	6.4	5.7	4.8	6.6	5.8	4.8	6.7	5.9	4.8	95
100				5.8	5.3	4.6	6.0	5.5	4.7	6.3	5.6	4.7	6.4	5.7	4.8	100
105				5.4	5.2	4.5	5.7	5.3	4.6	5.9	5.4	4.6	6.0	5.6	4.7	105
110				5.1	5.0	4.5	5.4	5.1	4.5	5.6	5.3	4.5	5.8	5.4	4.6	110
115				4.8	4.7	4.4	5.1	5.0	4.4	5.4	5.1	4.5	5.5	5.2	4.5	115
120				4.6	4.5	4.3	4.9	4.7	4.3	5.1	4.9	4.4	5.2	4.9	4.4	120
125				4.3	4.3	4.3	4.6	4.5	4.3	4.8	4.7	4.3	5.0	4.7	4.3	125
130				4.1	4.1	4.1	4.4	4.3	4.2	4.6	4.5	4.3	4.8	4.5	4.3	130
135				3.9	3.9		4.2	4.1	4.1	4.4	4.3	4.2	4.5	4.3	4.2	135
140				3.7	3.7		4.0	3.9	3.9	4.2	4.1	4.0	4.4	4.2	4.1	140
145				3.5	3.5		3.8	3.7		4.0	3.9	3.9	4.2	4.0	3.9	145
150				3.4			3.7	3.6		3.9	3.7	3.7	3.7	3.8	3.8	150
160							3.4	3.3		3.6	3.5		2.9	3.4	3.5	160
170										3.0	3.2		2.1	2.5	3.3	170
180													1.5	1.7		180
190													0.9			190
PARTS OF LINE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	PARTS OF LINE

Load chart data is for reference. load charts supplied in the crane cab shall be used for lift planning.

WP750 WORK PLATFORM ON MAIN BOOM RANGE CHART FOR MANTIS MODEL GTC-900

as originally manufactured and equipped by Tadano Mantis Corporation



Notes:

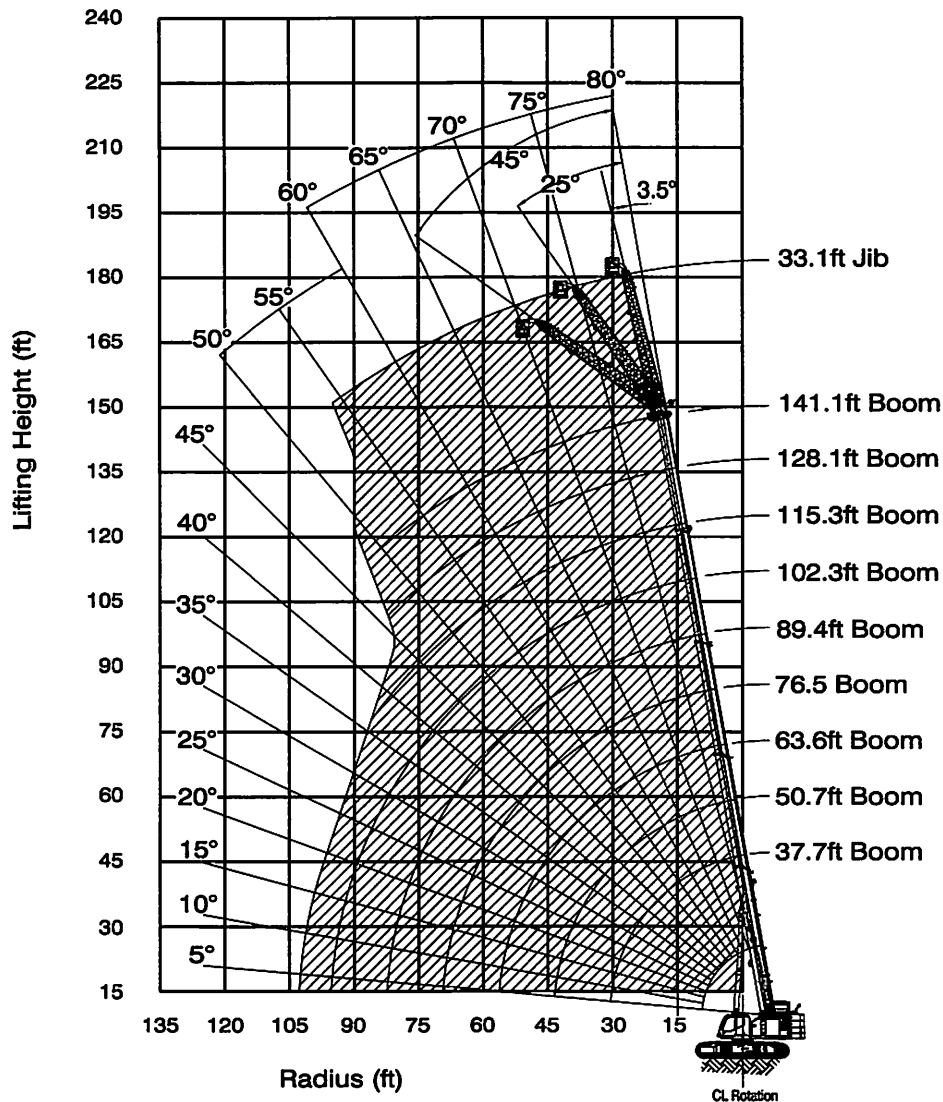
1. It is permissible to leave the jibs stowed on the boom while operating with Work Platform mounted to the main boom.
2. The hook block(s) must be removed when using the Work Platform

WARNING: Lifting a load during Work Platform operation is not allowed.

WARNING: Travelling the crane with person(s) in the Work Platform is not allowed.

WP750 WORK PLATFORM ON MAIN JIB RANGE CHART FOR MANTIS MODEL GTC-900

as originally manufactured and equipped by Tadano Mantis Corporation



Shaded Area is Allowable Operating Range

Limits of operation:

Maximum load capacity = 750 lb

Maximum radius when mounted on jib = 100 ft

Maximum occupancy = 2 persons

Notes:

1. It is permissible to leave the jib section stowed on the boom while operating with Work Platform mounted to the 33.1 ft (10.1m) jib.
2. The hook block(s) must be removed when using the Work Platform

WARNING: Lifting a load during Work Platform operation is not allowed.

WARNING: Travelling the crane with person(s) in the Work Platform is not allowed.

PLEASE READ, UNDERSTAND, AND FOLLOW THE MANUALS FURNISHED WITH THE CRANE AS WELL AS THE CAPACITY LIMITATIONS AND GENERAL CONDITIONS LISTED BELOW PRIOR TO OPERATION OF THE CRANE. FAILURE TO DO SO MAY RESULT IN AN ACCIDENT.

Performance of this TADANO MANTIS crane as manufactured by Tadano Mantis Corporation applies only to machines as originally equipped by the manufacturer and in a properly maintained condition. Capacities given are maximum covered by the manufacturer's warranty and are based on a freely suspended load with NO allowance for factors as out-of-level operation (beyond the limits specified on the charts), supporting surface conditions, hazardous surroundings, experience of personnel, etc. The operator shall establish practical working loads based on prevailing operating conditions, such as, but not limited to the above.

The crane meets the requirements of ASME B30.5. Structure and Stability have been tested in accordance with SAE J1063 and SAE J765, respectively.

Maximum admissible wind velocity for working with telescopic boom and jibs is 20 mph. Consult TADANO MANTIS for ratings at higher wind speeds.

Side pull on boom is extremely dangerous and must be avoided.

DO NOT exceed manufacturers maximum specified reeving.

Boom angle/boom length relationships given are an approximation of the resulted load radius, which should be an accurate measurement. Boom height dimensions are measured from ground to center of lower boom head sheave.

It is permissible to attempt to telescope boom with a load within the limits of rated capacities. However, boom angle system hydraulic pressure, and/or boom lubrication may affect operation.

It is permissible to travel with loads within the rated capacity of the crane. Travel speeds should be greatly reduced to reflect terrain limitations and minimize dynamic loads applied to the crane structure.

Lifting capacities are shown in lbs x 1000.

The weight of load handling devices such as hook blocks, slings, etc., must be considered as part of the load and must be deducted from the lifting capacities.

The lifting capacities for the telescopic boom apply to a crane with no jibs or other optional equipment stowed or mounted on the crane.

The working radius is the horizontal distance from the center of rotation to the center of the freely suspended, non-oscillating load.

Lifting capacities are for reference only. Load charts supplied with the crane should be used for lift planning.

The above remarks are for basic information only and the operator's manual must be consulted before operating this crane. All data and performances refer to the standard crane. The addition of optional and other non-standard equipment may affect the performance of the crane.

Load moment indicating and anti-two block systems are operator aids and must never be used in lieu of job site lift planning calculations by the operator which must take into account ground conditions, weather and all other environmental factors prevailing at the time of the lift. Specifications are subject to change at any time without prior notice. Illustrations and photographs may show optional equipment. Supersedes all previous issues.

RCW 54.04.080

Bids—Deposit—Low bidder claiming error—Contract—Bond—Definitions.

Any notice inviting sealed bids shall state generally the work to be done, or the material to be purchased and shall call for proposals for furnishing it, to be sealed and filed with the commission on or before the time named therein. Each bid shall be accompanied by a certified or cashier's check, payable to the order of the commission, for a sum not less than five percent of the amount of the bid, or accompanied by a bid bond in an amount not less than five percent of the bid with a corporate surety licensed to do business in the state, conditioned that the bidder will pay the district as liquidated damages the amount specified in the bond unless he or she enters into a contract in accordance with his or her bid and furnishes the performance bond within ten days from the date on which he or she is notified that he or she is the successful bidder. A low bidder who claims error and fails to enter into a contract is prohibited from bidding on the same project if a second or subsequent call for bids is made for the project.

At the time and place named, the bids shall be publicly opened and read, and the commission shall canvass the bids, and may let the contract to the lowest responsible bidder upon the plans and specifications on file, or to the best bidder submitting his or her own plans or specifications; or if the contract to be let is to construct or improve electrical facilities, the contract may be let to the lowest bidder prequalified according to the provisions of RCW 54.04.085 upon the plans and specifications on file, or to the best bidder submitting his or her own plans and specifications: PROVIDED, That no contract shall be let for more than fifteen percent in excess of the estimated cost of the materials or work. The commission may reject all bids and readvertise, and in such case all checks shall be returned to the bidders. The commission may procure materials in the open market, have its own personnel perform the work or negotiate a contract for such work to be performed by others, in lieu of readvertising, if it receives no bid. If the contract is let, all checks shall be returned to the bidders, except that of the successful bidder, which shall be retained until a contract is entered into and a bond to perform the work furnished, with sureties satisfactory to the commission, in an amount to be fixed by the commission, not less than twenty-five percent of the contract price, in accordance with the bid. If the bidder fails to enter into the contract and furnish the bond within ten days from the date at which he or she is notified that he or her [she] is the successful bidder, his or her check and the amount thereof shall be forfeited to the district.

The commission shall, by resolution, define the term "same kind of materials, equipment, and supplies" with respect to purchase of items under the provisions of RCW 54.04.070.

The term "construction or improvement of any electrical facility" as used in this section and in RCW 54.04.085, shall mean the construction, the moving, maintenance, modification, or enlargement of facilities primarily used or to be used for the transmission or distribution of electricity at voltages above seven hundred fifty volts, including structures directly supporting transmission or distribution conductors but not including site preparation, housing, or protective fencing associated with but not included in a contract for such construction, moving, modification, maintenance, or enlargement of such facilities.

The commission shall be the final authority with regard to whether a bid is responsive to the call for bids and as to whether a bidder is a responsible bidder under the conditions of his or her bid. No award of contract shall be invalidated solely because of the failure of any prospective bidder to receive an invitation to bid.

[1996 c 18 § 12; 1972 ex.s. c 41 § 1; 1971 ex.s. c 220 § 3; 1955 c 124 § 3. Prior: 1951 c 207 § 3; 1931 c 1 § 8, part; RRS § 11612, part.]