SECTION 323115 - SLIDING GATE OPERATOR SYSTEM

Use this Section in conjunction with Section 323113 when a motorized operator is required for sliding gate up to 1000 lbs and maximum 24 foot width. Operator and power and control wiring should be provided by the trade supplying the fence. Have the Electrical Designer provide a power source in the area of the console.

1. GENERAL
	* + 1. RELATED DOCUMENTS
				1. Detention Equipment: Section 111901.
				2. Wiring for Gate Systems: Section 260505.
				3. Chain Link Fence: Section 323113.
			2. REFERENCES
				1. Welding Standard: Welding shall conform to the provisions of the Code for Welding in Building Construction (AWS D1.0) of the American Welding Society.
			3. SYSTEM DESCRIPTION
				1. Description of System: The system shall allow motorized operation of the [**gate**][**gates**] by setting appropriate [**switch**][**switches**] on the control console or in the control cabinet in the <**Insert Location** >.

The description below is basically for 2 gates interlocked for a secured entrance through the fence. Modify description and add gate identification when more than 2 gates and/or separate control consoles are involved. Fill in gate numbers and modify and/or add subparagraphs to suit Project.

Electrically interlock gates to prevent unlocking of a gate if any companion gate is in an unlocked position. Only one gate can be in open position at any one time. Exception: A key operated interlock bypass switch allows a gate to be opened for maintenance without preventing operation of the companion gate. The key is non-removable when the interlock circuit is bypassed. A red indicating light illuminates indicating the bypass condition.

Interlock gates Nos. <**Insert Gate Designation**> and <**Insert Gate Designation**>.

Gate opening is initiated by setting the control switch to the OPEN position.

Gate is closed by setting the control switch to the CLOSE position:

A green indicating light illuminates when gate is completely closed and deadlocked. A red indicating light illuminates under all other conditions.

A STOP position on the control switch allows the gate to be stopped in any position.

Gate movement may be resumed in either direction by setting the control switch to the appropriate position.

Gate movement may be reversed in either direction of travel by setting the control switch to the appropriate position. The control system automatically stops the gate, pauses (adjustable time delay to avoid mechanical damage), then causes gate to travel in the opposite direction.

* + - 1. TEMPLATES
				1. Furnish required templates to the affected trades, to enable the fabricators to make proper provision for hardware without delaying job progress.
			2. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer’s installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 01330 does not apply to this Section.
				5. Submittal Packages: Submittals required by this section shall be submitted in packages as follows:

Submittals Package 1: Quality Assurance Package:

Submit within 30 days of contract award.

Submittals Package 2: Sliding Gate Operator System Package:

Submit no later than 30 days after receipt of approval of Submittals Package 1.

Submittals Package 3: Contract closeout submittals.

* + - * 1. Submittal Package: Submit shop drawings and product data, specified below, at the same time as a package.
				2. Shop Drawings: Show relationship of system with other Work. Include details of all major components. Include parts list showing manufacturers’ names and part numbers for the complete installation.
				3. Product Data:

Catalog sheets, specifications and installation instructions.

Detailed sequence of operations (format similar to Article 1.03 System Description).

Name, address and telephone number of nearest fully equipped service organization.

* + - * 1. Quality Control Submittals:

Test Report: System acceptance test report.

Certificate: Affidavit, signed by the Company Field Advisor and notarized, certifying that the system meets the contract requirements and is operating properly.

Company Field Advisor Data: Include:

Name, business address and telephone number of Company Field Advisor secured for the required services.

Certified statement from the Company listing the qualifications of the Company Field Advisor.

Services and each product for which authorization is given by the Company, listed specifically for this project.

* + - * 1. Contract Closeout Submittals:

Operation and Maintenance Data: Deliver two copies, covering the installed products, to the Director’s Representative. Include name, address and telephone number of nearest fully equipped service organization.

* + - 1. QUALITY ASSURANCE
				1. List of Completed Installations: If brand names other than those specified are proposed for use, furnish the name, address, and telephone number of at least 4 comparable installations which can prove the proposed products have operated satisfactorily for 2 years.
				2. Company Field Advisor: Secure the services of a Company Field Advisor for a minimum of [**8**]<**Insert Hours**> working hours for the following:

Render advice regarding installation and final adjustment of the system.

Witness final system test and then certify with an affidavit that the system is installed in accordance with the contract documents and is operating properly.

Train facility personnel on the operation and maintenance of the system (minimum of [**2**]<**Insert Number of Session**> [**one hour**]<**Insert Duration**> sessions).

* + - 1. DELIVERY
				1. Coordinate delivery of anchors and other accessories to be built into other Work, to avoid delay. Furnish instructions and templates as required for accurate location.
				2. Ship all prison lock keys direct from manufacturer, via Registered Mail, Restricted Delivery, Return Receipt Requested, to:

Insert Facility name and address below.

<**Deputy Superintendent for Administration**>

<**Name of Facility**>

<**Address and Zip Code of Facility**>

* + - 1. MAINTENANCE
				1. Spare Parts: Furnish the following and store at the site where directed:

One motor.

One reduction gear assembly.

One chain.

Two of each type limit switch.

Two of each type circuit breaker.

Two of each type light.

Special tools if required for the regular maintenance and minor repairs of the system.

Required amounts of recommended lubricants for 3 years of service.

1. PRODUCTS
	* + 1. SLIDING GATE OPERATOR SYSTEM
				1. Operator System: Folger Adam Co.’s Type “J” Electric Locking and Operating Device, or Tymetal Corp.’s Positive Locking Ultimate Sallyport System, including:

Locking which is accomplished by means of a keyless locking device, engaging gate at three places in the locking pilaster.

Gate movement from the closed position that is impossible except by electric or mechanical means.

Lock openings in the locking pilaster that are completely closed when the gate is an open position.

Gate movement not less than 30 feet per minute.

Emergency operation by manual crank operation, from an emergency release column secured with a prison deadlock.

Electric heating element for gear box, with thermostatic control, to ensure proper operation of the system to minus 20 degrees Fahrenheit.

* + - * 1. Finishes: Galvanize entire operator system except track, rollers and drive assembly.

Galvanizing process shall conform to:

ASTM A 123 for plain and fabricated material and assembled products.

ASTM A 153 for iron and steel hardware.

Stamp galvanized items with galvanizer’s name, weight of coating, and applicable ASTM number.

Thoroughly clean all steel prior to sending it to the galvanizer the entire assembly. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1 “Solvent Cleaning”. Remove steel mill stamp, loose mill scale, loose rust, weld slag and spatter, and other detrimental material in accordance with SSPC SP-2 “Hand Tool Cleaning”, SSPC SP-3 “Power Tool Cleaning”, SSPC SP-6 “Commercial Blast Clean” or SSPC SP-7 “Brush-Off Blast Cleaning”.

Do not ship the entire assembly from the fabricating shop to the galvanizer prior to QA inspection and approval by the State or designated inspection laboratory that the assembly is in conformance with the Contract Documents.

Delete article below if material is included in Section 323114.

* + - 1. CONTROL CONSOLE

Get information for blanks in paragraph below from electrical designer.

* + - * 1. Control console shall be suitable for connection to a < **Insert Value Here** > ampere, < **Insert Value Here** > wire, < **Insert Value Here** > volt, < **Insert Value Here** > phase, 60 Hz circuit.
				2. Enclosure:

Hoffman Engineering Co.’s sloping front pushbutton enclosure, Type 12, hole arrangement as detailed on drawings.

\*\*\*\*\*\* [OR] \*\*\*\*\*\*

Hoffman Engineering Co.’s Style PBA sloping front, hole arrangement as detailed on drawings.

* + - * 1. Circuit Breaker: Potter & Brumfied W28 series.
				2. Indicating Lights: Industrial Devices Inc 1091QM SUPER-BRITE series LEDs.
				3. Heavy-Use Sliding Gate Control Switch: 3 position Rotary Drum with legend plate (CLOSE - STOP - OPEN), maintained position; Allen-Bradley’s Bulletin 350 series with ball lever handle.
				4. Key Operated Interlock Bypass Switch: Schneider Electric, Harmony Class 9001 Type K, key non-removable when interlock circuit is bypassed, legend plate INTERLOCK BYPASS, contact blocks. Furnish three keys.
			1. ACCESSORIES
				1. System shall include all accessories required to perform the functions summarized in Article 1.3 System Description and indicated on the drawings.
			2. KEYING

See Hardware Specifications Writer For keying requirements.

* + - * 1. Key locks as specified and incorporate in the submittal for approval.

Key change shall be different from changes previously used at this Facility.

Record key change to avoid future unintended duplication.

Key emergency release columns alike with 7 keys total.

1. EXECUTION
	* + 1. INSTALLATION
				1. Install the Work of this Section in accordance with the Company’s printed instructions unless shown otherwise on drawings.

Power and control wiring and details of control station enclosure must be shown on drawings. (Details available from previous projects).

* + - 1. FIELD QUALITY CONTROL
				1. Preliminary System Test:

Preparation: Have the Company Field Advisor adjust the completed system and then operate it long enough to assure that it is performing properly.

Run a preliminary test for the purpose of:

Determining whether the system is in a suitable condition to conduct the acceptance test.

Checking and adjusting equipment.

Training facility personnel.

* + - * 1. System Acceptance Test:

Preparation: Notify the Director’s Representative at least three working days prior to the test so arrangements can be made to have a Facility Representative witness the test.

Make the following test:

Test each system function step by step as summarized under Article 1.03 System Description.

Supply all equipment necessary for system adjustment and testing.

Submit written report of test results signed by Company Field Advisor and the Director’s Representative.

END OF SECTION 323115

IMPORTANT!!!! Don’t forget to edit the “Quality Assurance Submittal Form” which follows on the next 2 pages. Headers and footers will have to edited as well. (Double click in the header to open the header/footer edit window

**QUALITY ASSURANCE SUBMITTAL FORM**

A. Manufacturer’s Qualification Data:

 Provide below the names, addresses and Facility contacts of 4 similar projects where manufacturer’s equipment and hardware has been in operation, which can prove the proposed products have operated satisfactorily for 2 years.

 *{Sliding Gate System}*

 Manufacturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- |
| 1) | 2) |
| 3) | 4) |

Make sure to edit the type of gate.

*{Sliding Gate System}*

 Manufacturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- |
| 1) | 2) |
| 3) | 4) |

B. Installation Qualification Data:

a. Provide the name, business address, and telephone numbers of the installation company.

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b. Provide name of person supervising installation and completion of Work of this Section.

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c. Provide names, addresses and Facility contacts of 4 similar projects this person has supervised which can prove the proposed products have operated satisfactorily for 2 years.

|  |  |
| --- | --- |
| 1) | 2) |
| 3) | 4) |

d. Attach written verification from the manufacturer that the person supervising the work is trained and qualified in the installation of the accepted gate and detention products.

C. Technical Advisor’s Qualifications Data:

a. Provide name, business address and telephone numbers of technical advisor(s) for each Gate System.

|  |
| --- |
|  |

 b. Attach written certification from gate systems equipment and detention hardware manufacturers that advisor is technically qualified in design, installation and servicing of products.

END OF FORM