

STRUCTURE OVER 20 FOOT SPAN

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS ARE LISTED BELOW AND ARE INCLUDED IN A SEPARATE DOCUMENT. THE LISTED SPECIAL PROVISIONS ARE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.

SPECIAL PROVISION: EXISTING BRIDGE INFORMATION FROM ODOT PROJECT (18)0002

DESIGN SPECIFICATIONS

THE PROPOSED PORTIONS OF THIS STRUCTURE FOR THE REHABILITATION DESIGN CONFORM TO THE 2020 ODOT BRIDGE DESIGN MANUAL AND THE FOLLOWING PUBLICATIONS BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS:

- AASHTO LRFD MOVEABLE HIGHWAY BRIDGE DESIGN SPECIFICATIONS, 3RD EDITION, 2023
- AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 10TH EDITION, 2024

DESIGN LOADING

DESIGN LOADING: HS20
FUTURE WEARING SURFACE (FWS) OF 0.00 KSF

FATIGUE AND MILITARY LOAD CASE IS NOT APPLICABLE.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

BRIDGE TRAFFIC RESTRICTIONS

NO VEHICULAR, PEDESTRIAN OR BICYCLE TRAFFIC SHALL BE PERMITTED ON A SIDE OF THE BRIDGE WITHOUT A FUNCTIONAL SPAN LOCK INSTALLED AND ENGAGED ON THAT HALF OF THE BRIDGE.

ITEM 202: PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

WORK UNDER THIS ITEM INCLUDES THE CAREFUL REMOVAL OF EXISTING SPAN LOCK ACTUATORS FROM LOR-6-0967, CHARLES BERRY MEMORIAL BRIDGE, IN LORAIN, OHIO.

REMOVALS SHALL INCLUDE BUT ARE NOT LIMITED TO:

- COMPONENTS TO BE REPLACED UNDER PAY ITEM: STRUCTURE: REPLACE SPAN LOCK ACTUATOR ASSEMBLY. – THESE ASSEMBLIES SHALL BE SHIPPED TO THE ORIGINAL MANUFACTURER FOR EVALUATION.
- ACTUATOR SHIM PACKS – ITEM 8, PART NUMBER G5224-401 ON ORIGINAL G&G STEEL, INC. SHOP DRAWING G5224-400 – RETAIN AND INCORPORATE INTO NEW WORK AS NEEDED.
- ¾” DIA. ACTUATOR FINISHED BODY BOLT, ASTM A449; HEAVY HEX NUT ¾-10, ASTM A563-DH; ¾” STRUCTURAL WASHER, PLAIN, ASTM F436 – TYPE 1; PARTS 4, 15 AND 19 ON ORIGINAL G&G STEEL, INC. SHOP DRAWING G5224-400 – RETAIN AND PROVIDE TO THE DEPARTMENT.

EXERCISE CARE TO NOT DAMAGE THE COMPONENTS OF THE SPAN LOCK TO REMAIN IN SERVICE. MAKE SURE THAT COMPONENTS TO REMAIN ON THE BRIDGE WHILE THE SPAN LOCK IS DISASSEMBLED ARE SECURE AND CANNOT FALL INTO THE RIVER.

ALL TOOLS, LABOR, MATERIALS AND EQUIPMENT NEEDED TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 202 – PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM 530 – SPECIAL: STRUCTURE: SPAN LOCK DAMAGE EVALUATION

WORK UNDER THIS ITEM INCLUDES THE EVALUATION OF BOTH DAMAGED SPAN LOCK ACTUATOR BY THE MANUFACTURER, RACO INTERNATIONAL, L.P.

THE CONTRACTOR SHALL SHIP THE EXISTING ACTUATOR ASSEMBLIES ONCE REMOVED FROM THE BRIDGE TO THE MANUFACTURER FOR DETAILED DAMAGE ASSESSMENT OF THE COMPONENT AND ASSOCIATED COMPONENTS. IT IS SUSPECTED THAT THE INTERNAL SCREWS HAVE BEEN BENT WITH POTENTIAL DAMAGE TO INTERNAL BEARINGS.

THE MANUFACTURER SHALL DISASSEMBLE THE COMPONENTS AND CATALOG THE DAMAGE NOTED DURING THE INSPECTIONS. THE MANUFACTURER SHALL DOCUMENT THE DAMAGE IN A REPORT WITH PHOTOS AND MAKE A RECOMMENDATION IF EACH ACTUATOR IS SALVAGEABLE. THE MANUFACTURER SHALL PROVIDE A QUOTE FOR THE COST OF REFURBISHMENT OF THE ACTUATORS. THIS INFORMATION SHALL BE PROVIDED TO THE DEPARTMENT WHICH WILL DECIDE WHETHER TO REPAIR EACH ACTUATOR OR NOT.

IF THE DEPARTMENT ELECTS TO NOT REPAIR AN ACTUATOR, IT SHALL BECOME PROPERTY OF THE CONTRACTOR. THE CONTRACTOR, HOWEVER, SHALL RETURN THE ACTUATOR TRUNNION BRACKETS TO THE DEPARTMENT.

THIS WORK SHALL INCLUDE ALL TOOLS, LABOR AND MATERIALS NECESSARY TO CONDUCT THE EVALUATION AND PROVIDE RECOMMENDATIONS.

PAYMENT SHALL BE MADE PER EACH UNDER ITEM SPECIAL – STRUCTURE: SPAN LOCK DAMAGE EVALUATION.

ITEM 530 – SPECIAL: STRUCTURE: REFURBISH SPAN LOCK ACTUATOR ASSEMBLY

WORK UNDER THIS ITEM INCLUDES THE REFURBISHING OF THE DAMAGED SPAN LOCK ACTUATORS BY THE MANUFACTURER, RACO INTERNATIONAL, L.P.

AFTER COMPLETION OF THE SPAN LOCK DAMAGE EVALUATION DESCRIBED ELSEWARE AND APPROVAL FROM ODOT, THE MANUFACTURER SHALL REFURBISH AN ACTUATOR REPLACING BENT, WORN OR OTHERWISE DAMAGED COMPONENTS OF THE ACTUATOR WITH NEW. THESE COMPONENTS COULD BE, BUT ARE NOT LIMITED TO, THE INTERNAL SCREW AND INTERNAL BEARINGS.

THE REFURBISHED ACTUATOR SHALL BE TESTED AT THE MANUFACTURER PRIOR TO RELEASE TO THE PROJECT SITE.

THE ACTUATOR SHALL BE SHIPPED TO THE PROJECT SITE, UNLOADED BY THE CONTRACTOR AND STORED AS DIRECTED BY THE BRIDGE SUPERINTENDENT.

THIS WORK SHALL INCLUDE ALL TOOLS, LABOR AND MATERIALS NECESSARY TO REFURBISH A DAMAGED SPAN LOCK ACTUATOR ASSEMBLY.

PAYMENT SHALL BE MADE PER EACH AT A UNIT PRICE OF \$1.00 UNDER ITEM SPECIAL – STRUCTURE: REFURBISH SPAN LOCK ACTUATOR. THIS WORK MAY INCLUDE REFURBISHMENT OF UP TO TWO ACTUATORS. A QUANTITY OF 40,000 IS CARRIED TO THE GENERAL SUMMARY FOR ESTIMATING PURPOSES.

ITEM 530 – SPECIAL: STRUCTURE: BRIDGE PERSONNEL TRAINING

WORK UNDER THIS ITEM INCLUDES PROVIDING TWO (2) 4-HOUR SESSIONS OF INSTRUCTION ON THE REPLACEMENT SPAN LOCK ACTUATORS FOR THE DEPARTMENT’S OPERATIONS AND MAINTENANCE PERSONNEL. THE INSTRUCTION IS TO INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING WITH RESPECT TO THE SPAN LOCKS:

- FUNCTION AND PURPOSE
- NORMAL OPERATION
- EMERGENCY OPERATION
- MANUAL OPERATION
- MAINTENANCE
- ADJUSTMENT
- TROUBLE SHOOTING
- REPAIR AND REPLACEMENT

DURING THE TRAINING PERIOD, UTILIZE THE COMPLETED OPERATING AND MAINTENANCE MANUALS, IN FINAL FORM, FOR THE PURPOSE OF FAMILIARIZING THE DEPARTMENT AND COUNTY OPERATING PERSONNEL WITH THEIR CONTENTS AND USEFULNESS.

LUMP SUM PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE UNDER ITEM SPECIAL - STRUCTURE: BRIDGE PERSONNEL TRAINING. A LUMP SUM QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR ESTIMATING PURPOSES.

ITEM 530 – SPECIAL: STRUCTURE: BRIDGE OPERATIONAL PROGRAMMING

WORK UNDER THIS ITEM INCLUDES THE PROGRAMMING AND USE OF A ‘MAINTENANCE MODE’ WITHIN THE EXISTING PROGRAMMING CODE TO ASSIST IN THE INVESTIGATION OF THE SPAN LOCK INTERFERENCE ISSUES.

THE PROGRAMMING SHALL ALLOW THE CONTRACTOR TO OPERATE THE BRIDGE MACHINERY DURING OPENING AND CLOSING AT A VERY SLOW RATE, ALSO ALLOWING THE BRIDGE TO BE STOPPED INTERMITTENTLY FOR MONITORING AND MEASURING SPAN LOCK CLEARANCES.

ORIGINAL PROGRAMMING REQUIREMENTS ARE PROVIDED IN THE REHABILITATION PLANS. THESE AND THE AS-BUILT PLC SOFTWARE PROGRAM ARE INCLUDED THE SPECIAL PROVISION.

UPON COMPLETION OF THE TESTING, THE MAINTENANCE PROGRAMMING MODULE SHALL BE LEFT IN THE BRIDGE PROGRAMMING AND PROTECTED WITH A PASSWORD. THE PASSWORD SHALL BE FURNISHED TO ODOT PERSONNEL.

LUMP SUM PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE UNDER ITEM SPECIAL - STRUCTURE: BRIDGE OPERATIONAL PROGRAMMING.

ITEM 530 – SPECIAL: STRUCTURE: LOCK BAR INTERFERENCE INVESTIGATION

WORK UNDER THIS ITEM INCLUDES ALL TOOLS, LABOR AND MATERIALS NECESSARY TO INVESTIGATE THE CAUSE OF THE MULTIPLE LOCK BAR DAMAGE INCIDENTS.

THE PAY ITEM WILL ENCOMPASS THE FOLLOWING TASKS:

- UTILIZE MULTIPLE SITE VISITS – FOUR MINIMUM - AT DIFFERENT TEMPERATURES TO RECORD THE CLEARANCE BETWEEN THE LOCK BARS AND THE EAST SPAN WITH THE INTENT OF DETERMINING POTENTIAL CONDITIONS FOR INTERFERENCE.
- USE A TORQUE WRENCH ON THE LOCK BAR MANUAL DRIVES TO ESTABLISH THE DRIVING FORCES NEEDED.
- DOCUMENT ELECTRICAL AND MOTOR LOADS DURING LOCK BAR DRIVING AND EVALUATE FOR ABNORMALITIES
- REVIEW THE LOCK BAR CAMERA POSITIONING AND DETERMINE IF THERE WOULD BE BENEFIT TO ADDING A VISIBLE REFERENCE LINE TO ENSURE THE LOCK BAR IS SUFFICIENTLY RETRACTED OPPOSED TO THERE JUST BEING A VISIBLE GAP THAT GIVES THE OPERATOR ASSURANCE THAT IS RETRACTED ENOUGH TO LIFT.
- INVESTIGATE THE POSSIBILITY OF THE BRIDGE BEING WARPED, EXACERBATED BY DIFFERENTIAL TEMPERATURES OF THE NORTH AND SOUTH TRUSS ON WARM DAYS, AND ITS EFFECT ON THE LOCK BAR STRESSES WITH THE BRIDGE TWISTED AND CARRYING LIVE LOAD.
- INVESTIGATE THE SETTINGS ON THE SENSITIVITY BOXES SUPPLIED WITH THE SPAN LOCKS. THEY ARE PRESET BY THE MANUFACTURER TO ENSURE THAT THE SPAN LOCK THRUST IS LIMITED TO PREVENT THE SYSTEM FROM DAMAGING ITSELF. IF SET CORRECTLY, THE BOX TRIPS TO PREVENT DAMAGE.
- PROVIDE RECOMMENDATIONS TO PREVENT FURTHER INTERFERENCE BETWEEN THE LOCK BARS AND OTHER ELEMENTS OF THE BRIDGE. RECOMMENDATIONS MAY INCLUDE BUT ARE NOT LIMITED TO ADJUSTING SHIMS WITHIN RECEIVER SOCKETS OR AT REACTION POINTS.
- PREPARE A WRITTEN REPORT DETAILING THE FINDINGS OF THE INVESTIGATION AND PROVIDING THE DEPARTMENT RECOMMENDATIONS TO PREVENT FURTHER DAMAGING INCIDENTS TO THE SPAN LOCKS.

PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE LUMP AND INCLUDE ALL LABOR AND MATERIALS NEEDED TO PERFORM THE WORK. A LUMP SUM QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR ESTIMATING PURPOSES.

ITEM 530 – SPECIAL: STRUCTURE: LOCK BAR INTERFERENCE REMEDIATION

WORK UNDER THIS ITEM INCLUDES ALL TOOLS, LABOR AND MATERIALS NECESSARY TO IMPLEMENT SELECTED FINDINGS FROM THE CONTRACTOR’S LOCK BAR INTERFERENCE INVESTIGATION. THE INTERFERENCE INVESTIGATION FINDINGS SHALL BE DISCUSSED WITH THE DEPARTMENT AND THE DEPARTMENT WILL DIRECT THE CONTRACTOR MAKE THE APPROPRIATE ADJUSTMENTS TO THE BRIDGE TO PREVENT FURTHER INTERFERENCE INCIDENTS.

THE ADJUSTMENTS INCLUDE, BUT ARE NOT LIMITED TO:

- ADJUSTING THE FRONT AND REAR LIVE LOAD SHOES WITHIN TOLERANCES SPECIFIED IN THE ORIGINAL BRIDGE REHABILITATION DOCUMENTS.
- ADJUSTING SHIMS WITH THE RECEIVER SOCKETS AND LOCK BAR GUIDES TO IMPROVE ALIGNMENT.
- ADJUSTING THE SETTINGS ON THE SENSITIVITY BOXES TO PREVENT THE MOTORS FROM CONTINUING TO DRIVE THE LOCK BARS WHEN THEY ARE IN UNANTICIPATED CONTACT WITH THE BRIDGE.
- INTRODUCING REFERENCE LINE VISIBLE TO THE BRIDGE OPERATOR ON CAMERA TO ENSURE THE LOCK BARS ARE SUFFICIENTLY RETRACTED.

IT IS NOT THE INTENT OF THIS PAY ITEM TO ADJUST THE BRIDGE BEYOND SHIMMING THE LIVE LOAD REACTIONS SHOULD WARPING OF THE BASCULE LEAVES BE DETERMINED AS A CAUSE FOR THE LOCK BAR INTERFERENCE.

PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE LUMP AND INCLUDE ALL LABOR AND MATERIALS NEEDED TO PERFORM THE WORK.

DESIGN AGENCY



DESIGNER

ECS

REVIEWER

KAK 6/2/2025

PROJECT ID

123435

SHEET

P.03

TOTAL

7

ITEM 530 – SPECIAL: STRUCTURE: OPERATING MANUAL UPDATES

WORK UNDER THIS ITEM SHALL INCLUDE THE REVIEW OF EXISTING MANUALS AND POSTED OPERATING INSTRUCTIONS FOR THE LOR-6-0967 CHARLES BERRY BRIDGE AND UPDATING AS NEEDED FOR THE WORK PERFORMED IN THIS SPAN LOCK ACTUATOR REPLACEMENT PROJECT.

CONFORM ANY UPDATES TO THE MANUALS AS DESCRIBED IN THE SPECIAL PROVISION “GENERAL SPECIFICATION FOR BRIDGE MACHINERY” DATED JUNE 2017 INCLUDED ODOT PROJECT (18)0002 SECTION 1.E. AND SECTION 1.F.

PROVIDE AN OPPORTUNITY FOR DEPARTMENT PERSONNEL TO OFFER FINAL REVIEW COMMENTS ON ANY PROPOSED CHANGES AND AMENDMENTS.

PAYMENT FOR THE ABOVE-DESCRIBED WORK SHALL BE MADE AT THE CONTRACT BID PRICE LUMP AND INCLUDE ALL LABOR AND MATERIALS NEEDED TO PERFORM THE WORK. A LUMP SUM QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR ESTIMATING PURPOSES.

ITEM 530 – SPECIAL: STRUCTURE: REPLACE SPAN LOCK ACTUATOR ASSEMBLY

WORK UNDER THIS ITEM INCLUDES THE FURNISHING, INSTALLATION, ADJUSTING, PAINTING, TESTING AND PLACE IN OPERATION NEW SPAN LOCK ACTUATORS ON LOR-6-0967, CHARLES BERRY MEMORIAL BRIDGE, IN LORAIN, OHIO.

THE ACTUATORS SHALL MATCH INFORMATION PROVIDED ON DRAWING 22650-MD, REVISED JANUARY 9, 2019, PAGE 338 OF THE “OPERATING AND MAINTENANCE MANUAL – MECHANICAL OPERATING AND SUPPORT SYSTEMS” FOR ODOT PROJECT (18)0002.

ADDITIONAL REFERENCE SHALL BE MADE TO “OPERATING AND MAINTENANCE MANUAL – MECHANICAL OPERATING AND SUPPORT SYSTEMS”; SPECIAL PROVISION “690E98400 SPECIAL, MISC.: SPAN LOCK MACHINERY”; AND THE CONTRACT DRAWINGS FROM THE REFERENCED PROJECT.

THE INTENT OF THE PROJECT IS TO REPLACE THE SPAN LOCK ACTUATORS ONLY, RETAINING THE OTHER COMPONENTS LISTED IN THE ORIGINAL CONSTRUCTION SPAN LOCK MACHINERY SPECIAL PROVISION AND SHOWN IN THE CONTRACT DRAWINGS AND THE SHOP DRAWINGS IN THE OPERATING AND MAINTENANCE MANUAL.

THE ACTUATOR SHALL INCLUDE THE FOLLOWING EQUIPMENT AND CHARACTERISTICS:

0	I	Supply Voltage	480V AC / 3 Phase / 60 Hz
1	B	Motor / Gearbox	1800 RPM RACO Motor (4 Pole) with Inline Gearbox
2	N	Rod Speed	1.6 in/sec.
3	T7M7	Thrust	8,333 lbs - EC 750
4	Z	Stroke	22.0 inches
5	Z	Lead	6.35 mm ACME Screw, Single Thread
6	Q	Mounting	Trunnion Pins with Brackets (Horizontal)
		Handwheel	36mm Hex Nut with Mechanical Disengage & Electrical Interlock Switch
		Brake	IP65 Power Release Brake Type L with Electrical Interlock and Mechanical Disengage
7	Z	Motor Protection	TENV (IP65) Class F Insulation with Thermal Protection + Tropical Proof
		Rod Cover	Flexible Accordion-Style Rod Cover (vent to rear of actuator)
8	Y	Accessories	EPS 06 - Electronic Positioning Sensor
			(24 VDC Power Supply is Included)
9	I	Electronics	Without
			(Existing PMR should be used)
10	N	Special	Tropical Proof Internal Protection; Sealed Assembly Seams; Macropoxy; IP65 Motor;
		Equipment	Brake Houisng Heater; Special 1.5"- 6 x 2.12" Threaded Junction Piece
			Mobilith SHC 460 Grease
		Accessory Housing	Lateral Accessory Housing "D" (Steel)

INCLUDED WITH THE ACTUATORS ARE NEW TRUNNION SUPPORTS, SHIM PACKS, IF NEEDED, AND NEW FINISHED BOLTS AS SHOWN IN ORIGINAL G&G STEEL, INC. SHOP DRAWING SERIES G5224-400. ALSO REPLACE THE EXTERNAL LIMIT SWITCHES FOR THE SPAN LOCKS AS DESCRIBED IN THE EXISTING PLANS AND AS-BUILT MANUALS.

IT IS THE PROJECT INTENT TO RETAIN THE ACTUATOR HEAD ASSEMBLY, LOCK BAR, LOCK BAR GUIDE ASSEMBLY, LOCK BAR RECEIVER, ETC.

THE DEPARTMENT SHALL MAKE PAYMENT PER EACH.

THE EACH BID PRICE FOR ITEM “STRUCTURE: REPLACE SPAN LOCK ACTUATOR ASSEMBLY” SHALL COVER THE COST OF FURNISHING ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY FOR THE MANUFACTURING, ERECTING, TESTING, ADJUSTING, LUBRICATING, PAINTING AND ALL INCIDENTAL WORK FOR A COMPLETE INSTALLATION OF THE REPLACEMENT SPAN LOCK ACTUATORS.

SUBMIT TO THE ENGINEER A DETAILED BREAKDOWN OF COSTS UNDER THIS ITEM. THE ENGINEER WILL EVALUATE THIS BREAKDOWN, AND SHALL HAVE THE AUTHORITY TO REVISE THE BREAKDOWN AS, IN THEIR JUDGEMENT, MAY BE REQUIRED TO MAKE THE VARIOUS COMPONENTS OF WORK CONFORM TO THEIR TRUE VALUES.

THE CONTRACTOR AGREES THAT THE DETAILED BREAKDOWN SHALL NOT BECOME EFFECTIVE UNTIL IT HAS BEEN APPROVED BY THE ENGINEER.

THE APPROVED DETAILED BREAKDOWN WILL BE USED AS A BASIS OF PAYMENT FOR THE PROGRESS PAYMENTS. THE PROGRESS PAYMENTS FOR ITEM “STRUCTURE: REPLACE SPAN LOCK ACTUATOR ASSEMBLY” SHALL BE MADE IN ACCORDANCE WITH OHIO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, DEPARTMENT STANDARD PAYMENT PRACTICES AND IN THE FOLLOWING MANNER:

- 1) UPON COMPLETION OF SHOP FABRICATION, SHOP INSPECTION, SHOP TESTING, DELIVERY AND STORAGE OF MATERIALS AND ACCEPTANCE OF SUCH BY THE DEPARTMENT, THE CONTRACTOR WILL BE PAID 30% OF THE BID PRICE FOR THE EACH ITEM.
- 2) UPON COMPLETION OF THE SPAN LOCK ACTUATOR INSTALLATION, ALIGNMENT, BOLTING AND PROTECTION OF MATERIALS DURING CONSTRUCTION AND ACCEPTANCE OF SUCH BY THE DEPARTMENT, THE CONTRACTOR WILL BE PAID 20% OF THE BID PRICE FOR THE ITEM.
- 3) UPON COMPLETION OF THE SPAN LOCK ACTUATOR INSPECTION AND FIELD TESTING AT THE END OF THE CONSTRUCTION AND FINAL ACCEPTANCE OF SUCH BY THE DEPARTMENT, THE CONTRACTOR SHALL BE PAID 40% OF THE BID PRICE FOR THE ITEM.
- 4) UPON COMPLETION OF TRAINING AND ACCEPTANCE OF APPROVED UPDATES TO THE OPERATING AND TRAINING MANUALS, THE CONTRACTOR WILL BE PAID THE REMAINING 10% OF THE BID PRICE FOR THE ITEM.

