## PENNSYLVANIA GAME COMMISSION

## STATE GAME LANDS No. 025 NEW 50' x 80' STORAGE BUILDING

State Game Lands #025 City of St. Marys Township Elk County

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#### PROJECT SPECIFICATIONS

The Contractor shall comply with the *Contract Terms and Conditions* provided with the Bid Documents including but not limited to the following:

**INSURANCE REQUIREMENTS** – In accordance with the *Contract Terms and Conditions*, the Contractor is required to have in place during the term of the Contract and any renewals or extensions thereof, the following types of insurance, issued by companies acceptable to the Commonwealth and authorized to conduct such business under the laws of the Commonwealth of Pennsylvania:

- A. **Worker's Compensation Insurance** for all of the Contractor's employees and those of any subcontractor, engaged in Work at the site of the project as required by law.
- B. **Builders Risk Insurance** the Contractor shall, until all physical on-site work is complete, maintain insurance on all insurable work included in the Contract against loss or damage by fire and lightning and those perils covered by the extended coverage endorsement. Insurable work includes work both interior and exterior of any building being constructed. The property insurance must include a Builder's Risk Policy or an installation floater that covers all risks. The risk of damage to the construction work is that of the Contractor and surety. No claims for such loss or damage will be recognized by the agency, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor. The Contractor and all subcontractors are required to produce certificates of insurance, naming the Commonwealth of Pennsylvania and Pennsylvania Game Commission as an additional insured.
- C. Public Liability and Property Damage Insurance to protect the Commonwealth, the Contractor, and any and all subcontractors from claims for damages for personal injury (including bodily injury), sickness or disease. accidental death and damage to property including the loss of use resulting from any property damage, which may arise from the activities performed under the Contract or the failure to perform under the Contract, whether such performance or non-performance be by the Contractor, by any subcontractor, or by anyone directly or indirectly employed by either. The minimum amounts of coverage shall be \$250,000 per person and \$1,000,000 per occurrence for bodily injury, including death, and \$250,000 per person and \$1,000,000 per occurrence for property damage. Such policies shall be occurrence rather than claims-made policies and shall not contain any endorsements or any other form designated to limit and restrict any action by the Commonwealth, as an additional insured, against the insurance coverage in regard to Work performed for the Commonwealth.

Prior to commencement of the Work under the Contract and at each insurance renewal date during the term of the Contract, the Contractor shall provide the Commonwealth with current certificates of insurance. These certificates or policies shall name the Commonwealth AND Pennsylvania Game Commission as additional insured and shall contain a provision that the coverage's afforded under the policies will not be cancelled or changed until at least thirty (30) days written notice has been given to the Commonwealth.

<u>**COMPLIANCE WITH LAW**</u> – The Contractor shall comply with all applicable federal and state laws and regulations and local ordinances in the performance of the Contract.

**WORKMANSHIP** - All Work shall be performed in a Workmanlike manner and all materials and labor shall be in strict and entire conformity with the Drawings and Specifications.

**INSPECTION AND CHANGES** - All Work is subject to inspection and acceptance by the Pennsylvania Game Commission. Any Work rejected as defective or unsuitable shall be removed and replaced with suitable Work and materials at the sole cost of the Contractor to the complete satisfaction of the Game Commission.

Changes shall be in accordance with the *Contract Terms and Conditions*.

**TEMPORARY SERVICES AND JOB CONDITIONS** - The Contractor shall be responsible for providing any and all temporary facilities necessary to execute and protect the Work. The Contractor shall accept all conditions as found upon examination of the site and shall coordinate, plan, and execute the Work accordingly. The Contractor shall cooperate in the arrangements of the Work as necessary to least affect the administration or operations of existing buildings, facilities, and infrastructure. The Contractor shall keep the Work site clean at all times.

<u>**PREVAILING WAGE**</u> – Prevailing minimum wages apply to this project. See *Contract Terms and Conditions* and attached Prevailing Wage Determination.

The Contractor and each Subcontractor shall file a statement each week and a final statement at the conclusion of the Work on the contract with the contracting agency, under oath, and in form satisfactory to the Secretary, certifying that workmen have been paid wages in strict conformity with the provisions of the contract as prescribed by this section or if wages remain unpaid to set forth the amount of wages due and owing to each workman respectively. The PA Labor and Industry "Weekly Payroll Certification for Public Works Projects" form shall be used. The initial and final Payroll Certifications shall be notarized.

**<u>PAYMENT TERMS</u>** - A schedule of values is provided with the bid. Payment will be made on a monthly basis upon satisfactory completion of items listed on the Schedule of Values and in accordance with the *Contract Terms and Conditions*.

All payments due to the Contractor shall be processed after all Work has been inspected and approved by an agent of the Pennsylvania Game Commission. Payment will not be made for Work that is not progressing satisfactorily or for unsuitable or defective Work. Payments may be withheld for failure to provide required documentation for the project including but not limited to required submittals / shop drawings and weekly submission of Certified Payrolls.

**<u>INVOICING</u>** – All Project invoices shall be submitted directly to:

Mr. Matthew Spotts, Architectural Designer Pennsylvania Game Commission 2001 Elmerton Avenue Harrisburg PA 17110 Office: 717-787-4250 Ext:73614 Email: <u>matspotts@pa.gov</u>

All invoices must be submitted in black and white with no color and shaded areas. Invoices must include the Purchase Order Number, Contractor's SAP Vendor Number, and the Contractor's name and address as listed on the Purchase Order. Payment items on invoices shall match the items on the Purchase Order. Failure to submit invoices that meet these requirements will result in a delay of payment.

**Please Note:** Vendors are reminded to **NOT** include employer identification numbers, Social Security Numbers, bank account information, or other personally identifiable information on their invoices. That information is uniquely tied to your SAP Vendor Number and, for security purposes, should not be explicitly stated on an invoice.

<u>CONTRACT TERM</u> - The Contract shall commence upon delivery of Purchase Order to Contractor and shall terminate on January 1, 2024. Contract time is of the essence of the Project. All Work must be completed and accepted by this date.

**EXCISE TAXES, PENNSYLVANIA SALES TAX** - The Commonwealth is exempt from all Excise Taxes. See *Contract Terms and Conditions.* 

**OFFSET PROVISION** - The Contractor agrees that the Commonwealth may set off the amount of any state liability or other debt of the Contractor or its subsidiaries that is owed to the Commonwealth and not being contested on appeal against any payments due the Contractor under this or any other contract with the Commonwealth.

**PERFORMANCE SECURITY / CONTRACT BONDS** – Within 10 days after award of the purchase order, the Bidder to whom the Contract is awarded, shall provide **Contract Performance Security** and a **Payment Bond** in a form acceptable to the Commonwealth for the amounts listed below and in accordance with the *Contract Terms and Conditions*.

A **Performance Bond** at one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions of the contract.

A **Payment Bond** in an amount equal to one hundred percent (100%) of the contract amount.

Performance and Payment Bonds shall be executed by a surety company authorized to do business in the Commonwealth and listed on the current U.S. Dept. of Treasury, Bureau of Fiscal Service, Department Circular 570 (https://fiscal.treasury.gov/surety-bonds/list-certified-companies.html). Bonds shall include a current Power of Attorney dated the same as the date of the bond. Bonds shall be made payable to the Commonwealth.

<u>GUARANTY / WARRANTY</u> – See *Contract Terms and Conditions* – all items are warranted for a period of one year following delivery by the Contractor and acceptance by the Commonwealth.

**HOLD HARMLESS PROVISION** - See *Contract Terms and Conditions* - The Contractor shall hold the Commonwealth harmless from and indemnify the Commonwealth against any and all third party claims, demands and actions based upon or arising out of any activities performed by the Contractor and its employees and agents under this Contract, provided the Commonwealth gives Contractor prompt notice of any such claim of which it learns.

#### ADDITIONAL PROVISIONS -

Contractor shall comply with the conditions listed below in accordance with the *Contract Terms and Conditions*:

- 1. Steel Products Procurement Act
- 2. Prohibition Against the Use of Certain Steel and Aluminum Products (Trade Practices Act)
- 3. **Reciprocal Limitations Act** The form GSPUR89 (*Reciprocal Limitations Act Requirements*) is attached. The Contractor shall complete the applicable portions of pages 3 and 4 of the form and submit the completed pages within two days after the bid opening.

Project Name:	New 50'X80' Storage Building- SGL #025
Awarding Agency:	PA Game Commission
Contract Award Date:	5/31/2023
Serial Number:	23-04313
Project Classification:	Building
Determination Date:	5/4/2023
Assigned Field Office:	Altoona
Field Office Phone Number:	(814)940-6224
Toll Free Phone Number:	
Project County:	Elk County

Project: 23-04313 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	8/1/2021		\$38.20	\$27.86	\$66.06
Asbestos & Insulation Workers	8/1/2022		\$39.55	\$28.51	\$68.06
Boilermakers	6/1/2016		\$40.90	\$27.61	\$68.51
Bricklayer	6/1/2021		\$29.92	\$21.81	\$51.73
Bricklayer	6/1/2022		\$30.97	\$22.71	\$53.68
Bricklayer	12/1/2022		\$31.62	\$23.06	\$54.68
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2021		\$30.77	\$16.89	\$47.66
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2022		\$32.05	\$17.87	\$49.92
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2023		\$33.01	\$18.41	\$51.42
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2024		\$33.97	\$18.95	\$52.92
Cement Finishers	6/1/2016		\$28.71	\$17.85	\$46.56
Cement Masons	6/1/2021		\$31.77	\$21.89	\$53.66
Drywall Finisher	6/1/2021		\$30.50	\$20.56	\$51.06
Drywall Finisher	6/1/2022		\$31.50	\$21.06	\$52.56
Electricians & Telecommunications Installation Technician	12/26/2021		\$45.86	\$29.29	\$75.15
Electricians & Telecommunications Installation Technician	12/26/2022		\$48.31	\$29.29	\$77.60
Elevator Constructor	1/1/2018		\$47.22	\$33.00	\$80.22
Elevator Constructor	1/1/2023		\$56.14	\$42.83	\$98.97
Glazier	9/1/2021		\$24.55	\$23.05	\$47.60
Glazier	9/1/2023		\$24.90	\$24.45	\$49.35
Iron Workers	6/1/2022		\$31.79	\$32.31	\$64.10
Iron Workers	6/1/2023		\$32.29	\$32.85	\$65.14
Laborers (Class 01 - See notes)	1/1/2021		\$20.73	\$18.28	\$39.01
Laborers (Class 01 - See notes)	1/1/2022		\$21.73	\$18.53	\$40.26
Laborers (Class 01 - See notes)	1/1/2023		\$22.98	\$18.53	\$41.51
Laborers (Class 01 - See notes)	1/1/2024		\$24.48	\$19.03	\$43.51
Laborers (Class 01 - See notes)	1/1/2025		\$25.98	\$19.53	\$45.51
Laborers (Class 02 - See notes)	1/1/2021		\$20.98	\$18.28	\$39.26
Laborers (Class 02 - See notes)	1/1/2022		\$21.98	\$18.53	\$40.51
Laborers (Class 02 - See notes)	1/1/2023		\$23.23	\$18.53	\$41.76
Laborers (Class 02 - See notes)	1/1/2024		\$24.73	\$19.03	\$43.76
Laborers (Class 02 - See notes)	1/1/2025		\$26.23	\$19.53	\$45.76
Laborers (Class 03 - See notes)	1/1/2021		\$21.53	\$18.28	\$39.81
Laborers (Class 03 - See notes)	1/1/2022		\$22.53	\$18.53	\$41.06
Laborers (Class 03 - See notes)	1/1/2023		\$23.78	\$18.53	\$42.31
Laborers (Class 03 - See notes)	1/1/2024		\$25.28	\$19.03	\$44.31
Laborers (Class 03 - See notes)	1/1/2025		\$26.78	\$19.53	\$46.31
Landscape Laborer	1/1/2018		\$17.60	\$16.48	\$34.08
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Operators (Class 01 - see notes)	7/1/2021		\$32.47	\$20.32	\$52.79

Project: 23-04313 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 01 - see notes)	7/1/2022		\$34.17	\$20.62	\$54.79
Operators (Class 01 - see notes)	7/1/2023		\$35.87	\$20.92	\$56.79
Operators (Class 01 - see notes)	7/1/2024		\$36.87	\$21.42	\$58.29
Operators (Class 02 -see notes)	7/1/2021		\$27.85	\$20.32	\$48.17
Operators (Class 02 -see notes)	7/1/2022		\$29.55	\$20.62	\$50.17
Operators (Class 02 -see notes)	7/1/2023		\$31.25	\$20.92	\$52.17
Operators (Class 02 -see notes)	7/1/2024		\$32.87	\$21.42	\$54.29
Operators (Class 03 - See notes)	7/1/2021		\$26.30	\$20.32	\$46.62
Operators (Class 03 - See notes)	7/1/2022		\$27.00	\$20.62	\$47.62
Operators (Class 03 - See notes)	7/1/2023		\$28.70	\$20.92	\$49.62
Operators (Class 03 - See notes)	7/1/2024		\$29.70	\$21.42	\$51.12
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2016		\$23.65	\$16.77	\$40.42
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2022		\$26.60	\$20.62	\$47.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2023		\$28.30	\$20.92	\$49.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2024		\$29.30	\$21.42	\$50.72
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2016		\$22.65	\$16.77	\$39.42
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2022		\$25.60	\$20.62	\$46.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2023		\$27.30	\$20.92	\$48.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2024		\$28.30	\$21.42	\$49.72
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2016		\$22.20	\$16.77	\$38.97
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2022		\$25.15	\$20.62	\$45.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2023		\$26.85	\$20.92	\$47.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2024		\$27.85	\$21.42	\$49.27
Painters Class 6 (see notes)	6/1/2021		\$29.15	\$21.89	\$51.04
Painters Class 6 (see notes)	6/1/2022		\$29.50	\$22.82	\$52.32
Pile Driver Divers (Building, Heavy, Highway)	1/1/2021		\$54.75	\$20.10	\$74.85
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2021		\$36.50	\$20.10	\$56.60
Piledrivers	1/1/2022		\$37.60	\$20.50	\$58.10
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60

Project: 23-04313 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Plasterers	6/1/2021		\$30.69	\$19.09	\$49.78
Plasterers	6/1/2022		\$31.44	\$19.74	\$51.18
Plumbers and Steamfitters	6/1/2021		\$36.97	\$24.75	\$61.72
Plumbers and Steamfitters	6/1/2022		\$38.17	\$24.90	\$63.07
Plumbers and Steamfitters	6/1/2023		\$39.32	\$25.10	\$64.42
Pointers, Caulkers, Cleaners	6/1/2021		\$33.70	\$20.22	\$53.92
Pointers, Caulkers, Cleaners	6/1/2022		\$35.00	\$20.53	\$55.53
Pointers, Caulkers, Cleaners	12/1/2022		\$35.47	\$20.88	\$56.35
Roofers	6/1/2022		\$36.04	\$19.13	\$55.17
Sheet Metal Workers	7/1/2021		\$38.76	\$30.00	\$68.76
Sign Makers and Hangars	7/17/2021		\$29.49	\$23.90	\$53.39
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sprinklerfitters	4/1/2021		\$40.33	\$26.94	\$67.27
Sprinklerfitters	4/1/2022		\$42.29	\$27.48	\$69.77
Sprinklerfitters	4/1/2023		\$44.33	\$28.04	\$72.37
Stone Masons	6/1/2021		\$36.37	\$22.85	\$59.22
Stone Masons	6/1/2022		\$37.91	\$23.26	\$61.17
Stone Masons	12/1/2022		\$38.56	\$23.61	\$62.17
Terrazzo Finisher	6/1/2021		\$34.00	\$17.46	\$51.46
Terrazzo Finisher	6/1/2022		\$35.33	\$17.68	\$53.01
Terrazzo Finisher	12/1/2022		\$36.13	\$18.03	\$54.16
Terrazzo Mechanics	6/1/2021		\$33.30	\$19.71	\$53.01
Terrazzo Mechanics	6/1/2022		\$34.69	\$19.97	\$54.66
Terrazzo Mechanics	12/1/2022		\$35.49	\$20.32	\$55.81
Tile Finisher	6/1/2021		\$27.19	\$16.71	\$43.90
Tile Finisher	6/1/2022		\$28.35	\$16.99	\$45.34
Tile Finisher	12/1/2022		\$28.76	\$17.34	\$46.10
Tile Setter	6/1/2021		\$33.58	\$21.12	\$54.70
Tile Setter	6/1/2022		\$35.04	\$21.46	\$56.50
Tile Setter	12/1/2022		\$35.64	\$21.81	\$57.45
Truckdriver class 1(see notes)	1/1/2021		\$30.54	\$20.88	\$51.42
Truckdriver class 1(see notes)	1/1/2022		\$31.29	\$21.63	\$52.92
Truckdriver class 1(see notes)	1/1/2023		\$33.04	\$22.13	\$55.17
Truckdriver class 1(see notes)	1/1/2024		\$34.79	\$22.63	\$57.42
Truckdriver class 1(see notes)	1/1/2025		\$36.29	\$23.13	\$59.42
Truckdriver class 1(see notes)	1/1/2026		\$37.79	\$23.63	\$61.42
Truckdriver class 2 (see notes)	1/1/2021		\$31.00	\$21.18	\$52.18
Truckdriver class 2 (see notes)	1/1/2022		\$31.75	\$21.93	\$53.68
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18
Truckdriver class 3 (see notes)	1/1/2016		\$28.10	\$16.88	\$44.98

Project: 23-04313 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Window Film / Tint Installer	10/1/2019		\$25.00	\$2.63	\$27.63

Project: 23-04313 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter	1/1/2021		\$35.87	\$19.32	\$55.19
Carpenter	1/1/2022		\$36.85	\$19.84	\$56.69
Carpenter	1/1/2023		\$38.35	\$20.59	\$58.94
Carpenter	1/1/2024		\$39.85	\$21.34	\$61.19
Carpenter	1/1/2025		\$41.10	\$22.09	\$63.19
Carpenter	1/1/2026		\$42.35	\$22.84	\$65.19
Carpenter Welder	1/1/2021		\$36.82	\$19.32	\$56.14
Carpenter Welder	1/1/2022		\$37.80	\$19.84	\$57.64
Carpenter Welder	1/1/2023		\$39.85	\$20.59	\$60.44
Carpenter Welder	1/1/2024		\$41.35	\$21.34	\$62.69
Carpenter Welder	1/1/2025		\$42.60	\$22.09	\$64.69
Carpenter Welder	1/1/2026		\$43.85	\$22.84	\$66.69
Cement Finishers	1/1/2021		\$32.84	\$22.60	\$55.44
Cement Finishers	1/1/2022		\$33.14	\$23.80	\$56.94
Cement Finishers	1/1/2023		\$34.14	\$25.05	\$59.19
Cement Finishers	1/1/2024		\$35.14	\$26.30	\$61.44
Cement Finishers	1/1/2025		\$35.94	\$27.50	\$63.44
Cement Masons	1/1/2020		\$32.84	\$21.10	\$53.94
Electric Lineman	1/1/2018		\$55.43	\$22.48	\$77.91
Electric Lineman	8/29/2022		\$62.66	\$28.08	\$90.74
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2022		\$31.79	\$32.31	\$64.10
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2023		\$32.29	\$32.85	\$65.14
Laborers (Class 01 - See notes)	1/6/2021		\$26.90	\$24.80	\$51.70
Laborers (Class 01 - See notes)	1/6/2022		\$27.70	\$25.50	\$53.20
Laborers (Class 01 - See notes)	1/1/2023		\$29.95	\$25.50	\$55.45
Laborers (Class 01 - See notes)	1/1/2024		\$32.20	\$25.50	\$57.70
Laborers (Class 01 - See notes)	1/1/2025		\$33.70	\$26.00	\$59.70
Laborers (Class 01 - See notes)	1/1/2026		\$34.70	\$27.00	\$61.70
Laborers (Class 02 - See notes)	1/6/2021		\$27.06	\$24.80	\$51.86
Laborers (Class 02 - See notes)	1/6/2022		\$27.86	\$25.50	\$53.36
Laborers (Class 02 - See notes)	1/1/2023		\$30.11	\$25.50	\$55.61
Laborers (Class 02 - See notes)	1/1/2024		\$32.36	\$25.50	\$57.86
Laborers (Class 02 - See notes)	1/1/2025		\$33.86	\$26.00	\$59.86
Laborers (Class 02 - See notes)	1/1/2026		\$34.86	\$27.00	\$61.86
Laborers (Class 03 - See notes)	1/6/2021		\$27.45	\$24.80	\$52.25
Laborers (Class 03 - See notes)	1/6/2022		\$28.25	\$25.50	\$53.75
Laborers (Class 03 - See notes)	1/1/2023		\$30.50	\$25.50	\$56.00
Laborers (Class 03 - See notes)	1/1/2024		\$32.75	\$25.50	\$58.25
Laborers (Class 03 - See notes)	1/1/2025		\$34.25	\$26.00	\$60.25
Laborers (Class 03 - See notes)	1/1/2026		\$35.25	\$27.00	\$62.25
Laborers (Class 04 - See notes)	1/6/2021		\$27.90	\$24.80	\$52.70
Laborers (Class 04 - See notes)	1/6/2022		\$28.70	\$25.50	\$54.20
Laborers (Class 04 - See notes)	1/1/2023		\$30.95	\$25.50	\$56.45
Commonwealth of Pennsylvania	1		,	,0	Department of

Project: 23-04313 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 04 - See notes)	1/1/2024		\$33.20	\$25.50	\$58.70
Laborers (Class 04 - See notes)	1/1/2025		\$34.70	\$26.00	\$60.70
Laborers (Class 04 - See notes)	1/1/2026		\$35.70	\$27.00	\$62.70
Laborers (Class 05 - See notes)	1/6/2021		\$28.31	\$24.80	\$53.11
Laborers (Class 05 - See notes)	1/6/2022		\$29.11	\$25.50	\$54.61
Laborers (Class 05 - See notes)	1/1/2023		\$31.36	\$25.50	\$56.86
Laborers (Class 05 - See notes)	1/1/2024		\$33.61	\$25.50	\$59.11
Laborers (Class 05 - See notes)	1/1/2025		\$35.11	\$26.00	\$61.11
Laborers (Class 05 - See notes)	1/1/2026		\$36.11	\$27.00	\$63.11
Laborers (Class 06 - See notes)	1/6/2021		\$25.15	\$24.80	\$49.95
Laborers (Class 06 - See notes)	1/6/2022		\$25.95	\$25.50	\$51.45
Laborers (Class 06 - See notes)	1/1/2023		\$28.20	\$25.50	\$53.70
Laborers (Class 06 - See notes)	1/1/2024		\$30.45	\$25.50	\$55.95
Laborers (Class 06 - See notes)	1/1/2025		\$31.95	\$26.00	\$57.95
Laborers (Class 06 - See notes)	1/1/2026		\$32.95	\$27.00	\$59.95
Laborers (Class 07 - See notes)	1/6/2021		\$27.90	\$24.80	\$52.70
Laborers (Class 07 - See notes)	1/6/2022		\$28.70	\$25.50	\$54.20
Laborers (Class 07 - See notes)	1/1/2023		\$30.95	\$25.50	\$56.45
Laborers (Class 07 - See notes)	1/1/2024		\$33.20	\$25.50	\$58.70
Laborers (Class 07 - See notes)	1/1/2025		\$34.70	\$26.00	\$60.70
Laborers (Class 07 - See notes)	1/1/2026		\$35.70	\$27.00	\$62.70
Laborers (Class 08 - See notes)	1/6/2021		\$29.40	\$24.80	\$54.20
Laborers (Class 08 - See notes)	1/6/2022		\$30.20	\$25.50	\$55.70
Laborers (Class 08 - See notes)	1/1/2023		\$32.45	\$25.50	\$57.95
Laborers (Class 08 - See notes)	1/1/2024		\$34.70	\$25.50	\$60.20
Laborers (Class 08 - See notes)	1/1/2025		\$36.20	\$26.00	\$62.20
Laborers (Class 08 - See notes)	1/1/2026		\$37.20	\$27.00	\$64.20
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Operators (Class 01 - see notes)	1/1/2021		\$33.89	\$22.73	\$56.62
Operators (Class 01 - see notes)	1/1/2022		\$34.79	\$23.33	\$58.12
Operators (Class 01 - see notes)	1/1/2023		\$36.79	\$23.58	\$60.37
Operators (Class 01 - see notes)	1/1/2024		\$38.59	\$24.03	\$62.62
Operators (Class 01 - see notes)	1/1/2025		\$40.39	\$24.23	\$64.62
Operators (Class 02 -see notes)	1/1/2021		\$33.63	\$22.73	\$56.36
Operators (Class 02 -see notes)	1/1/2022		\$34.53	\$23.33	\$57.86
Operators (Class 02 -see notes)	1/1/2023		\$36.53	\$23.58	\$60.11
Operators (Class 02 -see notes)	1/1/2024		\$38.33	\$24.03	\$62.36
Operators (Class 02 -see notes)	1/1/2025		\$40.13	\$24.23	\$64.36
Operators (Class 03 - see notes)	1/1/2021		\$29.98	\$22.73	\$52.71
Operators (Class 03 - See notes)	1/1/2022		\$30.88	\$23.33	\$54.21
Operators (Class 03 - See notes)	1/1/2023		\$32.88	\$23.58	\$56.46
Operators (Class 03 - See notes)	1/1/2024		\$34.68	\$24.03	\$58.71
Operators (Class 03 - See notes)	1/1/2025		\$36.48	\$24.23	\$60.71
Operators (Class 04 - See notes)	1/1/2021		\$29.52	\$22.73	\$52.25

Project: 23-04313 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 04 - See notes)	1/1/2022		\$30.42	\$23.33	\$53.75
Operators (Class 04 - See notes)	1/1/2023		\$32.42	\$23.58	\$56.00
Operators (Class 04 - See notes)	1/1/2024		\$34.22	\$24.03	\$58.25
Operators (Class 04 - See notes)	1/1/2025		\$36.02	\$24.23	\$60.25
Operators (Class 05 - See notes)	1/1/2021		\$29.27	\$22.73	\$52.00
Operators (Class 05 - See notes)	1/1/2022		\$30.17	\$23.33	\$53.50
Operators (Class 05 - See notes)	1/1/2023		\$32.17	\$23.58	\$55.75
Operators (Class 05 - See notes)	1/1/2024		\$33.97	\$24.03	\$58.00
Operators (Class 05 - See notes)	1/1/2025		\$35.77	\$24.23	\$60.00
Operators Class 1-A	1/1/2021		\$36.89	\$22.73	\$59.62
Operators Class 1-A	1/1/2022		\$37.79	\$23.33	\$61.12
Operators Class 1-A	1/1/2023		\$39.79	\$23.58	\$63.37
Operators Class 1-A	1/1/2024		\$41.59	\$24.03	\$65.62
Operators Class 1-A	1/1/2025		\$43.39	\$24.23	\$67.62
Operators Class 1-B	1/1/2021		\$35.89	\$22.73	\$58.62
Operators Class 1-B	1/1/2022		\$36.79	\$23.33	\$60.12
Operators Class 1-B	1/1/2023		\$38.79	\$23.58	\$62.37
Operators Class 1-B	1/1/2024		\$40.59	\$24.03	\$64.62
Operators Class 1-B	1/1/2025		\$42.39	\$24.23	\$66.62
Painters Class 1 (see notes)	6/1/2021		\$34.00	\$21.89	\$55.89
Painters Class 1 (see notes)	6/1/2022		\$34.45	\$22.82	\$57.27
Painters Class 2 (see notes)	6/1/2019		\$35.25	\$20.06	\$55.31
Painters Class 3 (see notes)	6/1/2021		\$36.25	\$21.89	\$58.14
Painters Class 3 (see notes)	6/1/2022		\$36.77	\$22.82	\$59.59
Painters Class 4 (see notes)	6/1/2019		\$28.20	\$20.06	\$48.26
Painters Class 5 (see notes)	6/1/2019		\$22.91	\$20.06	\$42.97
Pile Driver Divers (Building, Heavy, Highway)	1/1/2021		\$54.75	\$20.10	\$74.85
Pile Driver Divers (Building, Heavy, Highway)	1/1/2022		\$56.40	\$20.50	\$76.90
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2021		\$36.54	\$20.06	\$56.60
Piledrivers	1/1/2022		\$37.63	\$20.47	\$58.10
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$48.43	\$40.28	\$88.71
Truckdriver class 1(see notes)	1/1/2021		\$30.54	\$20.88	\$51.42
Truckdriver class 1(see notes)	1/1/2022		\$31.29	\$21.63	\$52.92
Truckdriver class 1(see notes)	1/1/2023		\$33.64	\$22.52	\$56.16
Truckdriver class 1(see notes)	1/1/2024		\$35.39	\$23.02	\$58.41
Truckdriver class 1(see notes)	1/1/2025		\$36.89	\$23.52	\$60.41

Project: 23-04313 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Truckdriver class 1(see notes)	1/1/2026		\$38.39	\$24.02	\$62.41
Truckdriver class 2 (see notes)	1/1/2021		\$31.00	\$21.18	\$52.18
Truckdriver class 2 (see notes)	1/1/2022		\$31.75	\$21.93	\$53.68
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18
Truckdriver class 3 (see notes)	1/1/2019		\$29.45	\$19.73	\$49.18

#### RECIPROCAL LIMITATIONS ACT REQUIREMENTS

Please Complete Applicable Portion of Pages 3 & 4 and Return with Bid.

NOTE: These Requirements Do Not Apply To Bids Under \$10,000.00

#### I. REQUIREMENTS

A. The Reciprocal Limitations Act requires the Commonwealth to give preference to those bidders offering supplies produced, manufactured, mined or grown in Pennsylvania as against those bidders offering supplies produced, manufactured, mined or grown in any state that gives or requires a preference to supplies produced, manufactured, mined or grown in that state. The amount of the preference shall be equal to the amount of the preference applied by the other state for that particular supply.

The following is a list of states which have been found by the Department of General Services to have applied a preference for in-state supplies and the amount of the preference:

	STATE	PREF	ERENCE
1.	Alaska	7%	(applies only to timber, lumber, and manufactured lumber products originating in the state)
2.	Arizona	5%	(construction materials produced or manufactured in the state only)
3.	Hawaii	10%	
4.	Illinois	10%	for coal only
5.	Iowa	5%	for coal only
6.	Louisiana	4%	meat and meat products
		4%	catfish
		10%	milk & dairy products
		10%	steel rolled in Louisiana
		7%	all other products
7.	Montana	5%	for residents *
		3%	for non-residents*
			*offering in-state goods, supplies, equipment and materials
8.	New Mexico	5%	
9.	New York	3%	for purchase of food only
10.	Oklahoma	5%	
11.	Virginia	4%	for coal only
12.	Washington	5%	(fuels mined or produced in the state only)
13.	Wyoming	5%	

**B**. The Reciprocal Limitations Act requires the Commonwealth to give preference to those bidders offering printing performed in Pennsylvania as against those bidders offering printing performed in any state that gives or requires a preference to printing performed in that state. The amount of the preference shall be equal to the amount of the preference applied by the other state for that particular category of printing.

The following is a list of states which have been found by the Department of General Services to have applied a preference for in-state printing and the amount of the preference:

	STATE	PREFERENCE
1.	Hawaii	15%
2.	Idaho	10%
3.	Louisiana	3%

- **4.** Montana 8%
- **5.** New Mexico 5%
- **6.** Wyoming 10%
- **C**. The Reciprocal Limitations Act, also requires the Commonwealth to give resident bidders a preference against a nonresident bidder from any state that gives or requires a preference to bidders from that state or exclude bidders from states that exclude nonresident bidders. The amount of the preference shall be equal to the amount of the preference applied by the state of the nonresident bidder. The following is a list of the states which have been found by the Department of General Services to have applied a preference for in-state bidders and the amount of the preference:

1.

2.

3.

4.

8.

#### STATE PREFERENCE

- 5% (supplies only)
- 5% (construction materials from Arizona resident dealers only)
- (for supply contracts only in excess of \$100,000.00) California 5%
- 10% (for supplies only) Connecticut 3%
- 5. Montana

Alaska

Arizona

- New Mexico 5% (for supplies only) 6.
- (under \$2,500,000.00) 7. South Carolina 2%
  - 1% (over \$2,500,000.00)
    - This preference does not apply to construction contracts nor where the price of a single unit exceeds \$10,000.
  - 2.5% West Virginia (for the construction, repair or improvement of any buildings
- 5% 9. Wyoming

STATE

#### PROHIBITION

- 1. New Jersev For supply procurements or construction projects restricted to Department of General Services Certified Small Businesses, New Jersey bidders shall be excluded from award even if they themselves are Department of General Services Certified Small Businesses.
- D. The Reciprocal Limitations Act also requires the Commonwealth not to specify, use or purchase supplies which are produced, manufactured, mined or grown in any state that prohibits the specification for, use, or purchase of such items in or on its public buildings or other works, when such items are not produced, manufactured, mined or grown in such state. The following is a list of the states which have been found by the Department of General Services to have prohibited the use of out-of-state supplies:

#### STATE PROHIBITION

- Only for printing and binding involving "messages of the Governor to the Legislature", all 1. Alabama bills, documents and reports ordered by and for the use of the Legislature or either house thereof while in session; all blanks, circulars, notices and forms used in the office of or ordered by the Governor, or by any state official, board, commission, bureau or department, or by the clerks of the supreme court . . ./and other appellate courts/; and all blanks and forms ordered by and for the use of the Senate and Clerk or the House of Representatives, and binding the original records and opinions of the Supreme Court . . . /and other appellate courts/
- Forest products only 2. Georgia
- 3. Indiana Coal
- 4. Michigan Printing
- 5. New Mexico Construction
- 6. Ohio Only for House and Senate bills, general and local laws, and joint resolutions; the journals and bulletins of the Senate and house of Representatives and reports, communications, and other documents which form part of the journals; reports, communications, and other documents ordered by the General Assembly, or either House, or by the executive department or elective state officers; blanks, circulars, and other work for the use of the executive departments, and elective state officers; and opinions of the Attorney General.
- Only for food for state institutions. **7.** Rhode Island

\*If the bid discloses that the bidder is offering to supply one of the above-listed products that is manufactured, mined, or grown in the listed state, it shall be rejected. Contractors are prohibited from supplying these items from these states.

#### **II. CALCULATION OF PREFERENCE**

In calculating the preference, the amount of a bid submitted by a Pennsylvania bidder shall be reduced by the percentage preference which would be given to a nonresident bidder by its state of residency (as found by the Department of General Services in Paragraph C\_above). Similarly, the amount of a bid offering Pennsylvania goods, supplies, equipment or materials shall be reduced by the percentage preference which would be given to another bidder by the state where the goods, supplies, equipment or materials are produced, manufactured, mined or grown (as found by the Department of General Services in Paragraphs A and B above).

#### THIS FORM MUST BE COMPLETED AND RETURNED WITH THE BID

#### **III. STATE OF MANUFACTURE**

All bidders must complete the following chart by listing the name of the manufacturer and the state (or foreign country) of manufacture for each item. If the item is domestically produced, the bidder must indicate the state in the United States where the item will be manufactured. This chart must be completed and submitted with the bid or no later than two (2) business days after notification from the Issuing Office to furnish the information. Failure to complete this chart and provide the required information prior to the expiration of the second business day after notification shall result in the rejection of the bid.

ITEM NUMBER	NAME OF MANUFACTURER	STATE (OR FOREIGNCOUNTRY) OF MANUFACTURE

#### IV. BIDDER'S RESIDENCY

**A.** In determining whether the bidder is a nonresident bidder from a state that gives or requires a preference to bidders from that state, the address given on the first page of this invitation to bid shall be used by the Commonwealth. If that address is incorrect, or if no address is given, the correct address should be provided in the space below:

Correct Address:

- **B.** In order to claim the preference provided under Section I.B., Pennsylvania resident bidders must complete the following or have such information on file with the Issuing Office:
  - 1. Address of bidder's bona fide establishment in Pennsylvania at which it was transacting business on the date when bids for this contract/requisition were first solicited: \_\_\_\_\_
  - **2. a.** If the bidder is a corporation:
    - (1) The corporation is or is not incorporated under the laws of the Commonwealth of Pennsylvania.
      - (a) If the bidder is incorporated under the laws of the Commonwealth of Pennsylvania, provide date of incorporation: \_\_\_\_\_
      - (b) If the bidder is not incorporated under the laws of the Commonwealth of Pennsylvania, it must have a certificate of authority to do business in the Commonwealth of Pennsylvania from the Pennsylvania Department of State as required by the Pennsylvania Business Corporation Law (15 P.S. §2001). Provide date of issuance of certificate of authority: \_\_\_\_\_
    - (2) The corporation is or is not conducting business in Pennsylvania under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, it must register the fictitious name with the Secretary of the Commonwealth and the office of the prothonotary of the county wherein the registered office of such corporation is located as required by the Fictitious Corporate Name Act, as amended 15 P.S. §51 et seq. Corporate bidders conducting business under an assumed or fictitious name must provide date of registry of the assumed or fictitious name: \_\_\_\_\_
    - **b.** If the bidder is a partnership:
      - (1) The partnership is or is not conducting business in Pennsylvania under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, it must file with the Secretary of the Commonwealth and the office of the prothonotary the county wherein the principal place of business is located as required by the Fictitious Name Act of May 24, 1945, P.L. 967, as amended 54 P.S. §28.1. Partnerships conducting business under an assumed or fictitious name must provide the date of filing of the assumed or fictitious name with the Secretary of the Commonwealth: \_\_\_\_\_
      - (2) The partnership is or is not a limited partnership formed under the laws of any jurisdiction other than the Commonwealth of Pennsylvania. If the bidder is an Out-of-state limited partnership, it must register with the Pennsylvania Department of State as required by the Act of July 10, 1981, P.L. 237, as amended, 59 Pa. C.S.A. §503. Out-of-state limited partnerships must provide the date of registry with the Pennsylvania Department of State:
    - **c.** If the bidder is an individual:

He or she  $\Box$  is or  $\Box$  is not conducting business under an assumed or fictitious name. If the bidder is conducting business under an assumed or fictitious name, he or she must file with the Secretary of the Commonwealth and the office of the prothonotary in the county wherein the principal place of business is located as required by the Fictitious Name Act of May 24, 1945, P.L. 967, as amended, 54 P.S. §28.1. Individuals conducting business under an assumed or fictitious name must provide the date of filing of the assumed or fictitious name with the Secretary of the Commonwealth:

## **COMMONWEALTH OF PENNSYLVANIA**

#### DEPARTMENT OF LABOR AND INDUSTRY

**Bureau of Occupational and Industrial Safety** 



## UNIFORM CONSTRUCTION CODE

## **BUILDING PERMIT**

The plans and specifications for the building or structure named below have been reviewed by the Department of Labor and Industry and found to be in compliance with the Pennsylvania Construction Code Law (1999, November 10, P.L. 491, No. 45).

Permit Number	202300391
Permit Holder	PA GAME COMISSION ENGINEERING DIVISION
Address	2001 ELMERTON AVENUE HARRISBURG PA 17110-9797
Building/Structure Name	GAME COMMISSION STATE GAME LANDS 025 50" X 80" STORAGE
Building Address	1405 GLEN HAZEL RD SAINT MARYS 15857
Political Subdivision:	SAINT MARYS CITY
County:	ELK
Approved use and occupancy classification(s)	U
Approved construction type	VB
Plan code	BUILDING

This permit authorizes construction of the above named building or structure in accordance with the Pennsylvania Construction Code Act, its regulations and all plans and specifications approved by the Department. A copy of this permit shall be retained at the work site until the completion of all construction.

File Number Date Issued 548229 4/11/2023

Joseph C Mth

Joseph C. Martin Building Code Official

A highway access occupancy permit is required under S420 of the State highway Law (36 P.S.S 670-420) before driveway access to a commonwealth highway is permitted.

Department of Labor & Industry 651 Boas Street | Harrisburg, PA 17121 | 717.787.3806 | Fax 717.705.7261 | www.dli.state.pa.us. Auxiliary aids and services are available upon request to individuals with disabilities. Equal Opportunity Employer/Program

## Uniform Construction Code (UCC) INSPECTION LOG

THIS LOG MUST BE RETAINED AT THE CONSTRUCTION OR DEMOLITION SITE UNTIL THE COMPLETION OF ALL WORK AND MUST BE MADE AVAILABLE TO ALL DEPARTMENT CODE OFFICIALS, UPON REQUEST. All Inspections preceded by a "Y" must be performed in accordance with the approved construction documents and section 403.45 of the UCC before a "Certificate of Compliance or a Certificate of Occupancy and Use" will be issued. This document's only use is to inform the permit holder of required inspections and is to enable L&I staff to record the completion of these inspections during the course of the construction process. It is not intended to document the fulfillment of all required UCC obligations or establish the right to legally occupy the building or structure named below.

Drawing Index Number:	<u>202300391</u>
Building/Structure Name:	GAME COMMISSION
Address:	1405 GLEN HAZEL RD
	SAINT MARYS PA 15857

#### File Number: <u>548229</u>

Requests for inspections must be made in conformance with the Inspection Procedures Statement and should be directed to the inspector named below.

Inspector	: Michael Kulbacki (814)	375-5967 mkulback	i@pa.gov		
lf unavailabl	e, contact Central Office: 717	7-787-1291 jecole@pa.	gov		
REQUIRED	INSPECTION	INSPECTOR (PRINT)	INSPECTOR (SIGNATURE)	DATE ACCEPTED	
Y	Footing Environment				
	Foundation				
Y	Concrete Under Slab/Floor				
	Underground Plumbing				
	Underground Mechanical				
Y	Underground Electrical				
	Plumbing Rough-in				
	Mechanical Rough-in		n		
Y	Electrical Rough-in				
D	Framing				
	Insulation				
:	Fire Protection				
	Accessibility Final				
Y	Energy Final				
	Mechanical Final				
Y	Electrical Final				
	Plumbing Final				
Y	Building Final				
	Demolition Final				
	Alterations Final				
	Sign Final				
	Structure Final		nur numeruklur neere		

#### **TECHNICAL SPECIFICATIONS**

The following stipulations, specifications and description of work are defined and described as Technical Specifications and it is understood and agreed that everything herein contained is hereby made part of the contract. Wherever any feature of the work is not fully set forth in these Technical Specifications, it must be understood that the same shall be governed by the rules of the best prevailing practice for that class of work, as determined by the Game Commission's Representative.

These Technical Specifications and any drawings, maps and/or plans forming a part thereof, will cover the furnishing of all labor, technical assistance, equipment, tools and materials necessary to perform the design and construction work, as required under this contract.

Section 1	Summary of Work
Section 1	Summary of Work
Section 2	Submittals
Section 3	Framing Lumber and Carpentry
Section 4	Roof Trusses
Section 5	Excavation
Section 6	Metal Siding and Roof Panels w/snow guards
Section 7	Soffits and Fascia
Section 8	Doors
Section 9	Gutters and Downspouts
Section 10	Concrete
Section 11	Aggregate & stone
Section 12	Incidentals
Section 13	Electric Service Connection
Section 14	Lighting and Electric

#### **DRAWINGS**

The following drawings are included:

- CS-1 Cover Sheet & Building Site Plan
- A-1 Building Floor Plan
- A-2 Building Elevations, Sections, Details & Door Schedule
- A-3 Sections & Details
- E-1 Electrical Floor Plan, Schedules & Details

#### **TECHNICAL SPECIFICATION SECTION NO. 1 - SUMMARY OF WORK**

#### **1.1 – SCOPE OF PROJECT**

The intent of this project is to construct a new 50' x 80' x 14' pole building to serve as the Pennsylvania Game Commission (PGC) maintenance storage building. The new building is in City of St. Marys, Elk County on State Game Lands #025. The project consists of constructing/framing the pole building, pouring a concrete floor slab, installation of a trench drain system, installing metal roofing and siding panels, installing radiant insulation, doors and other building appurtenances including installing the electrical service, power distribution and lighting systems. There are no connections of any other utilities to the new building in this project.

#### 1.2 – WORK AREA

The work area for this project is on State Game Lands #025. The building site is in City of St. Marys, Elk County, mailing address 1405 Glen Hazel Road, St. Marys, PA 15857. The property is owned by the PGC

#### **1.3 – WORK HOURS**

The work hours at the project site are during regular PGC business hours which are Monday through Friday, 7:00AM to 3:30PM. Work during different hours must have prior written approval by the PGC. Requests for different working hours must be submitted in writing two days in advance.

#### 1.4 – ACCESS TO WORK AREA

Access to the work area is from a paved public road, Glen Hazel Road and accessed on gravel driveway. The Contractor may use any available space to store equipment or materials but must keep the access drive open to PGC vehicles.

#### **1.5 – SITE LAYOUT AND PREPARATION**

The PGC will stake out the four corners of the new building at the initial job conference for the project. The PGC will also provide a grade stake to mark the floor elevation during the initial job conference. The Contractor is responsible for any clearing and grubbing required for construction of the new building and installing the required utility systems and lines. The Contractor is also responsible for the stone parking area around the new building. The stone parking area to be finished graded after the new building is substantially complete.

#### **1.6 – PERMITS, LAWS AND REGULATIONS**

The Contractor shall procure and pay for all permits, licenses, inspections, conveniences, or other approvals necessary for the execution of the contract. The PGC will secure a building permit from the PA Department of Labor & Industry (L&I) for construction of this building. A copy of this permit will be provided to the contractor along with an inspection log checklist. The contractor shall notify the L&I inspector and coordinate with the PGC so that the required inspections take place, and the project is not unduly delayed. Local building code officials have no jurisdiction over this project.

The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property, the maintaining of surface passageways, safety measures, and/or other protective facilities.

All applicable Federal and State laws and regulations and regulations of all utilities, having jurisdiction over construction of the project shall apply to the contract throughout, and they shall be deemed to be included in the contract as a part, thereof, the same as though herein written out in full.

All regulations of the Occupational Safety and Health Act are in effect on this contract. It will be the Contractor's responsibility to make himself aware of all appropriate County, State and Federal regulations that apply to this contract.

Any violations incurred from improper execution of the above provisions shall be paid for by the Contractor. Loss of time on the project from such violations will not be tolerated.

#### **TECHNICAL SPECIFICATION SECTION NO. 2 - SUBMITTALS**

#### 2.1 – SECTION INCLUDES/CONTENT

- A. Included in this section of the specifications is a list of approvals required for all materials incorporated into the project. The Pennsylvania Game Commission reserves the right to require additional approvals if necessary. No material, equipment or supplies listed herein shall be incorporated into the work until the Contractor has obtained prior approval from the Department.
- B. Submittals required by each prime contract are indicated in the description of items to be submitted, Paragraph 2.8.

#### **2.2 - SUBMITTAL PROCEDURES**

- A. Comply with the following or resubmission will be required:
  - 1. Indicate contract number and specification section on each item submitted.
  - 2. Signify approval by stamp, initialing and dating each item prior to submission to the Designer.
- B. Items requiring testing shall be forwarded directly to the approved laboratory. The Contractor shall pay all costs associated with testing.
- C. Expedite critical materials, equipment and shop drawings, and other required submissions.
- D. Incomplete submissions will be returned for resubmission.
- E. Use of substitutions for materials or details shown on the contract drawings or called for in these specifications require written approval from the Department.

#### **2.3 - PRODUCT DATA**

A. Manufacturer's printed directions and manufacturer's standard specifications showing all dimensions, cuts, finishes, etc., as well as catalog cuts and ratings of all material will be required and shall be submitted in advance prior to application and/or installation.

#### **2.4 - TESTS**

A. Submit required reports listing items tested, tests conducted and results obtained as specified.

#### **2.5 - CERTIFICATIONS**

A. Submit required certifications in written form identifying authorized representative, manufacturer, systems designer and other required data as specified.

#### 2.6 - WARRANTIES

A. Refer to Specifications for required warranties. Copies of proposed warranties specified for products shall accompany the designated submittal of that product.

#### 2.7 - OPERATION AND MAINTENANCE MANUALS

- A. Manual Format (Use 3-ring binder):
  - 1. Title page with the following information for each system covered:
    - a. Project Title and Contract Number (in capital letters)
    - b. Name of Company
    - c. Name of the individual to be called
    - d. Normal telephone numbers
    - e. Contractor's account number for project
  - 2. Index listing all sections of the Manual.
  - 3. Copies of all warranties for equipment or materials furnished in contract. (Index tabbed)
  - 4. Complete system circuit diagrams, block diagrams, copies of all approved shop drawings, which shall clearly illustrate how all the components relate and how they are interconnected and a point wiring diagram.
  - 5. Reports, testing analysis.
  - 6. Operating instructions and maintenance instructions for all equipment and finish materials furnished.
  - 7. All approved, shop drawings, descriptive data and any certifications.

#### 2.8 - SUBMITTALS LIST

- A. Abbreviations
- 1. Mfr for Manufacturer
- 2. Prod for Producer or Supplier
- 3. SHDR for Shop Drawings
- 4. DeDa for Descriptive Data or Catalog Cuts
- 5. Samp for Samples
- 6. Cert for Certification
- 7. Tests required Test Reports
- 8. Warr for Warranties

### SGL #025 New Storage Building Contract No. PGC-025-22-01

	GE	NERAL	CONST	RUCTIC	DN			
DESCRIPTION OF ITEMS	MFR	PROD	SHDR	DeDa	SAMP	CERT	TESTS	WARR
TO BE SUBMITTED		11102	211211	2.2.		• Litti	12010	
CONCRETE FOR	Х	Х		Х			Х	
FOOTINGS, SLABS &		11		11			11	
SIDEWALKS								
WOOD POLE BUILDING	Х	X		Х			Х	
FRAMING & ENGINEERIED	21	11		11			11	
LUMBER								
WOOD ROOF TRUSSES	X	Х	Х	Х		X		
EXPOSED FASTENER	X	X		X	X	X		X
METAL PANEL ROOFING	21				21	21		21
& SIDING SYSTEMS								
SNOW GUARDS	Х	X		X				
NEW SEAMLESS	X	X		X				
ALUMINUM GUTTERS &	Λ	Λ		Λ				
DOWNSPOUTING								
NEW ALUMINUM SOFFIT,	Х	X		X				
FASCIA & TRIMS	Δ			Δ				
RELFECTIVE THERMAL	X	X		X	<u> </u>			
INSULATION	Λ	Λ		Λ				
RIGID FOUNDATION	X	X		X				
INSULATION	Λ	Λ		Λ				
TRENCH DRAIN SYSTEM	Х	X	X	Х				
STEEL DOORS, FRAMES &	Х	X	Λ	X				X
HARDWARE	Λ	Λ		Λ				Λ
12' WIDE O.H. DOORS,	X	X		X				
MANUAL OPERATORS &	Λ	Λ		Λ				
HARDWARE								
SEALANTS	Х	X		X			X	
PROJECT SCHEDULE	Λ	Λ		X			Λ	
TROJECT SCHEDOLE				Λ				
		TRICA	L CONS	TDUCT	ION			
DESCRIPTION OF ITEMS	MFR	PROD	SHDR	DeDa	SAMP	CERT	TESTS	WARR
TO BE SUBMITTED	MITK	FROD	SUDK	DeDa	SAM	CEKI	ILSIS	WARK
	v	v		Х				
BATTERY BACK UP ILLUMINATED	Х	X		Λ				
EMERGENCY EXIT								
SINAGE WITH EXIT								
LIGHTING								
INTERIOR AND EXTERIOR	X	X		X				
LIGHTING FIXTURES AND	Λ			Λ				
CONTROLS								
WIRING DEVICES AND	X	X		X				
DUPLEX RECEPTACLES	Λ			Λ				
ELECTRICAL POWER	Х	X		Х				
CONDUCTORS & CONDUIT	Λ			Λ				
GROUNDING AND	Х	X		X				
BONDING ELECTRICAL	Λ			Λ				
SYSTEMS								
DIDITIVID							1	

### SGL #025 New Storage Building Contract No. PGC-025-22-01

HANGERS AND SUPPORTS	Х	Х	Х		
FOR ELEC. SYSTEMS					
PANELBOARD,	Х	Х	Х		
ELECTRICAL GEAR AND					
INDENTIFICATION FOR					
ELECTRICAL SYSTEMS					
PROJECT SCHEDULE			Х		

#### **TECHNICAL SPECIFICATION SECTION NO. 3 – FRAMING LUMBER AND CARPENTRY**

#### **3.1 - SCOPE**

This work is providing and installing the lumber and fasteners necessary to frame the building.

#### **3.2 - MATERIALS**

**A. Dimension Lumber** – The lumber used to frame the building should be of the sizes, spacing and arrangement shown on the Drawings. The lumber should conform to the following requirements.

- 1. Grading Agency Southern Pine Inspection Bureau, Inc. (SPIB)
- 2. Nominal sizes as indicated on the Drawings, S4S.
- 3. Moisture content S-dry or MC19
- 4. Structural Grade No. 2

**B. Engineered Lumber** – The engineered lumber including laminated veneer wood lumber (LVL), laminated wood strand lumber, and engineered lumber connectors should be of the sizes, spacing and arrangement shown on the Drawings.

**C. Treated Lumber** – Same as dimension lumber plus treatment by ACQ (waterborne preservative), 0.4 pcf retention in conformance with the American Wood Preservers Association (AWPA). Use category UC2 for interior construction not in contact with the ground, use category UC3b for exterior construction not in contact with the ground and use category UC4a for items in contact with the ground.

**D.** Plywood – Structural composite lumber made from wood veneers with grain primarily parallel to member lengths, evaluated and monitored according to ASTM D5456 and manufactured with an exterior-type adhesive complying with ASTM D2559. The plywood shall have at least 2,600 psi extreme fiber stress in bending.

**E. Wood Posts** – The wood posts to be glue laminated columns manufactured from #1 Southern Yellow Pine, with bottom 5'-0" of post being of treated lumber.

**E.** Fasteners – Of the sizes and type suited for the applications. Where rough carpentry is exposed to weather, in ground contact, in pressure-treated lumber, or in the area of high relative high humidity, provide fasteners of Type 304 stainless steel.

- 1. Nails, Brads and Staples: ASTM F1667
- 2. Power-Driven Fasteners: NES NER-272
- 3. Wood Screws: ASME B18.6.1
- 4. Lag Bolts: ASME B18.2.1(ASME B18.2.3.8M)
- 5. Bolts: Steel bolts complying with ASTM A307, Grade A (ASTM F568M, Property Class 4.6); with ASTM A563 hex nuts /washers where indicated.

#### **3.3 - PROCEDURE**

Construct the building frame according to the dimensions and layout shown on the Drawings. Install truss seats, girts and purlins as shown. Provide extra framing lumber around doors to provide the support necessary to install these items. Provide temporary bracing for the building frame to maintain the integrity of the building as construction progresses.

After construction is complete, remove all temporary bracing and waste lumber from the site.

#### **3.4 - MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for all framing lumber and carpentry including furnishing and erection of wood framing members, wood framing connectors and clips, anchors, fasteners as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

#### **TECHNICAL SPECIFICATION SECTION NO. 4 – ROOF TRUSSES**

#### **4.1 - SCOPE**

This work is providing and installing the wooden roof trusses for the new building as shown on the Drawings.

#### 4.2 – TRUSS DESIGN

**A. General Dimensions and Features** – The trusses have a 4:12 pitch and 2-foot overhangs. The trusses shall have a 50-foot span and are spaced on 4-foot centers. Trusses must include a spread web for light storage in the truss design.

**B. Design Loading** – The roof trusses must have a roof load rating of 42.5 lbs/ SF ground snow load (snow load factor of 0.7) and a wind load rating of 25 lbs/SF.

**C. Design Drawings and Calculations** – The design drawings and calculations for the trusses must be sealed and certified by a licensed professional engineer (valid Pennsylvania license). The drawings must be submitted for review by the PGC. The truss design shall conform with the applicable provisions of "National Design Specification for Stress-Grade Lumber and Its Fastenings" (National Forest Products Association) and "Design Specifications for Light Metal Plate Connected Wood Trusses" (TPI).

#### 4.3 - PROCEDURE

Conform to the manufacturer's recommendations for storing, handling, installing and bracing of the trusses. Provide adequate temporary bracing of the trusses during installation.

Provide adequate permanent bracing of the top chords, bottom chords, and web members of the trusses according to the manufacturer's recommendations. Install purlins for the roof panels on the top chord of the trusses. Secure the roof trusses to the building frame with galvanized steel hurricane ties or dimensional blocking.

After construction is complete, remove all temporary bracing and waste lumber from the roof trusses.

#### 4.4 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for all wood roof trusses including engineering design, manufacture, erection, and bracing as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

#### **TECHNICAL SPECIFICATION SECTION NO. 5 - EXCAVATION**

#### **5.1- SCOPE**

This work involves the drilling, hauling, and disposal of all materials encountered for construction of the building pole foundations, installation of drainage pipes and water lines and other utilities, as indicated on the Drawings, or designated by the Game Commission.

#### 5.2 - PROCEDURE

**A. General -** Follow all guidelines set forth in the Construction Industry Standards, OSHA 2207, of the Occupational Safety and Health Administration, U.S. Department of Labor. Protect the work, adjacent buildings, and property.

The Contractor is required to contact the PA One Call System at 8-1-1 or 1-800-242-1776 (outside PA) prior to excavation operations at the site.

During excavation operations, keep the top surface graded for drainage. Do not over-excavate because unauthorized excavation and replacement of materials in the over-excavated areas will not be measured and paid for. Replace over-excavated work with concrete, gravel, earth or other materials designated by, and at no additional cost to the Game Commission.

**B.** Excavation - Remove all materials to the limits shown on the Drawings or as necessary to construct the pole foundations for the new building and for installation of utility lines.

**C. Disposal** – Suitable excavated materials shall be used for backfilling of drainage pipes, utility lines and building pole foundations. The excavated materials will also be used to establish the finished grade around the new building. This project is intended to be a balanced cut/fill job and the Contractor will not be required to transport extra material off the site.

#### **5.3 - MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for all excavation of soils to the required depths for the construction of new storage building foundations, concrete slabs and sidewalks, storm water piping trenches and utility trenches as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

#### <u>TECHNICAL SPECIFICATION SECTION NO. 6 – METAL SIDING AND ROOF</u> <u>PANELS WITH SNOW GUARDS</u>

#### 6.1 - SCOPE

This work is providing and installing the metal siding & roof panels w/snow guards on the new building frame and roof trusses as shown on the Drawings. Snow guards must be installed in two rows staggered on the front of the building. Colors to be verified before ordering.

#### 6.2 – MATERIALS

**A. Siding and Roof Panels** – The siding and roof panels shall be fabricated from galvanized steel sheet with a minimum coating of 0.90 oz/SF. The roof panels shall be minimum **26-gauge** steel sheet stock capable of supporting the design roof loading. The roof panels shall be full length from ridge to eave. The ridge and eaves shall be fitted with continuous gaskets. The finish color of the roof panels and wainscoting is GREEN. The siding panels shall be minimum **26-gauge** steel stock with the same configuration and finish as the roofing panels except the finish color is BEIGE/BROWN/STONE.

**B.** Trim – Steel sheet stock prefabricated into ridge cap, end wall flashing, gable end trim, corners, dew drip caps, door jambs trim, cut edge trim and side wall flashing. The finish color will match the application it is associated with. The window and door jambs may be WHITE. Fascia and soffit trim color shall be GREEN.

**C. Sealants and Fasteners** – Manufacturer's standard type exterior sealants and gaskets, ring shank nail fasteners w/neoprene washers, galvanized to ASTM A153, finished to match exposed siding. Screw fasteners, cadmium plated self-tapping, hex head with washer and soft neoprene sealing ring finished to match metal roof surface.

**D. Snow Guards** – The snow guards are to be "Snow Defender 4500" w/16-gauge Type 304 Stainless Steel and EPDM Rubber Sealer. Color to match roof panels GREEN.

#### 6.3 – PROCEDURE

The roofing and siding panels are to be sized to the proper dimensions for installation. Install the roofing and siding panels with the recommended spacing and type of fasteners. The Contractor is responsible for the correct spacing of the purlins and girts to support the roof and siding panels. Siding panels are to be installed with the corrugations running vertically. Cut "custom" panels at the site for gable ends if necessary. The Contractor should shear or use snips to cut siding and roof panels to minimize the potential to damage the protective coatings on the panels.

Install the wainscoting and flashing for the building followed by the siding panels. Install finish trim sections where needed on the siding and roof panels. Make sure all edges and ends are properly sealed with gaskets or sealants. After construction is complete, remove all waste pieces of roof and siding panels, trim and fasteners from the site.

#### 6.4 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for metal panel roofing and siding systems including, flashings, transitions, moldings, snow guards, fasteners, and sealants as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Lump Sum. No separate measurement or payment for the snow guards.

#### **TECHNICAL SPECIFICATION SECTION NO. 7– SOFFITS AND FASCIA**

#### 7.1 - SCOPE

This work is providing and installing the soffits and fascia at the roof overhangs for the new building as shown on the Drawings.

#### 7.2 – MATERIALS

**A. Soffits** – The soffits shall be preformed, pre-painted aluminum alloy (minimum 0.019 inch thick sheet stock) formed to a V-groove section, fully perforated surface and finish GREEN color.

**B.** Fascia – Fascia shall be preformed, pre-painted aluminum alloy (minimum 0.019 inch thick sheet stock) with plain surface and finish color to be GREEN.

C. Nails – Aluminum; use prefinished green nails for soffits and fascia.

**D.** Trim – J-channel and angles of the same material and finish as soffit and fascia.

**E. Sealant** – Silicone, single component, solvent curing, clear color.

#### 7.3 - PROCEDURE

Install J-channel on top wall girt before metal siding panels and trim are installed. Secure soffit sections in J-channel and nail to 2"x6" fascia on the roof edges. Install trim sections and apply sealant as necessary to the soffits and fascia.

#### 7.4 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for aluminum soffits and fascia at roof overhangs, including trims, fasteners and sealant as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

#### **TECHNICAL SPECIFICATION SECTION NO. 8 – DOORS**

#### **8.1 - SCOPE**

This work is providing and installing the man doors and garage doors in the new building as shown on the Drawings. Doors are expected to have the necessary thresholds and/or weather-stripping/caulk as needed to provide for a tight seal.

#### 8.2– MATERIALS

**A. General** – Refer to the door schedule on the drawings for details of hinge and swing requirements, sizes and lockset hardware. All locks (interior and exterior) are to be keyed alike. Manufacturers are quoted for hardware, locksets, gaskets, closers, etc. for the doors to set standards for performance and finish; other manufacturers are acceptable provided that their products are the same level of quality.

**B. Insulated Steel Entry Doors -** The steel entry doors in the new building shall have the following features and characteristics. These doors are listed as Type 1 or Type 2 on the door schedule. The doors shall be supplied with vertical narrow vision panel light. Ceco Door Products Medallion Series conform to the following specifications, but other manufacturers are acceptable.

- 1. Entry doors are galvannealed 18 gage steel flush 3'-0"x 7'-0" panel w/insulated core conforming to ANSI A250.8-03
- 2. Pre-hung units with galvannealed 16 gage (minimum) steel double rabbet frame (knock down)
- 3. Factory applied baked on primer with a factory or field applied white enamel finish coat on door and frame applied according to the manufacturer's instructions
- 4. Doors are 1-3/4" thick full flush with honeycomb core
- 5. Equipped with Precision 2108 x 4908A panic exit device trim and lever handle with 630 satin stainless steel finish
- 6. Satin finish stainless steel hinges
- 7. Equipped with Stanley D-4550-HCS-689-SN door closer.
- 8. Equipped with Rockwood K1050 (10"x34") kick plates (one side) with 630 satin stainless steel finish
- 9. Equipped with weather tight gaskets
- 10. Equipped with aluminum mill finish threshold
- 11. Equipped with National Guard Products C607DKB nylon brush seal.
- 12. Dormakaba Best Access products 12E72 rim cylinder with 613 satin chrome finish. Permanent cores to be Cormax Patented.
- 13. Cores and keys delivered directly to PA Game Commission.

**C. Garage Doors** – The garage doors in the new building shall have the following features and characteristics.

- 1. Clopay, Wayne Dalton, Overhead Door or Garage Commercial steel 12'-0" x 12'-0" doors with min R-7 insulated cores.
- 2. Factory applied primer with white finish coat on door
- 3. Torsion spring
- 4. Lock included
- 5. Equipped with 21" x 13" (approx.) windows w/black frames (3 min)
- 6. Professional installation by manufacturer's representative

#### 8.3 – SUBMITTALS

Submit a catalog cut and other information for the steel entry doors, garage doors and accessories from the manufacturers to the PGC for review and approval before ordering any materials.

#### 8.4 - PROCEDURE

Install the steel entry doors and frames according to the manufacturer's instructions. All steel surfaces of the doors and frames are to be factory primed and a factory or field painted finish. The finish coat of the steel doors and frames shall be a white outdoor grade enamel. The garage door tracks, torsion springs and garage doors are to be installed by a manufacturer's representative.

#### 8.5 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for all new man doors, door frames, door hardware, overhead garage doors, operating hardware and keying as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Each, for each type of door.

## **TECHNICAL SPECIFICATION SECTION NO. 9 – GUTTERS AND DOWNSPOUTS**

#### 9.1 - SCOPE

This work is providing and installing gutters and downspouts for the new building. Gutters must run the entire length of the front and back eaves of the new building. A downspout and concrete splash block must be installed at all four corners of the new building. The gutters, downspouts and splash blocks are not shown on the Drawings.

#### 9.2 – MATERIALS

**A. Gutters** – Aluminum K Style .032 gauge with baked on **GREEN** finish. Gutter shall be seamless for the length of the roof. Gutter shall be standard 5-inch width.

**B.** Downspouts – Aluminum .024 gauge with baked on GREEN finish and 3-inch by 4-inch cross section minimum.

C. Hangers and Brackets – K-style hidden hanger w/screw or recommended by gutter and downspout manufacturer.

**D.** Splashblocks – Precast concrete, approx. 36" long and 12" wide (min).

#### 9.3 - PROCEDURE

Submit a catalog cut or other information for the concrete splash blocks, gutter and downspout from the manufacturer to the PGC for review and approval before ordering any materials.

Install gutters on the roof eaves of the new building. Secure the gutters to the fascia with hidden hangers. Install downspout drop sections and end caps at the ends of the roof eaves. Connect downspout sections to the gutters and run the downspout along the edge of the building to the splash blocks at ground level away from building.

#### 9.4 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for aluminum rain gutter and downspout system, hangers, fasteners, and sealants as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Lump Sum for the gutters, downspouts and concrete splash blocks.

# **TECHNICAL SPECIFICATION SECTION No. 10 – CONCRETE**

#### 10.1 - SCOPE

This work is furnishing all materials, plant, and equipment, and performing all labor for the manufacture, transporting, placing, finishing, patching, curing, and testing of concrete to be placed under the Contract. Concrete is to be used for the pole footings and the floor slabs of the new building. Concrete slabs are to be constructed for the rear doorway and front apron. The Contractor shall protect all concrete against injury until final inspection and acceptance by the Game Commission.

Except as herein qualified, matters pertaining to measuring, placing and testing of concrete; materials used; construction of formwork; concrete finishing; curing of concrete; detailing, fabricating and placing of reinforcing and accessories shall be governed by the following codes and regulations:

- (a) Building Code Requirements for Reinforced Concrete (ACI 318)
- (b) Current "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315)
- (c) Current "Recommended Practice for Measuring, Mixing, and Placing Concrete" (ACI 304)
- (d) All matters in connection with concrete work, not otherwise specified, shall conform to the applicable sections of the Pennsylvania Department of Transportation Specification Publication 408.

## **10.2 - TESTING AND CERTIFICATIONS**

Obtain all concrete from a PennDOT approved source. Submit a concrete mix design for each supplier to the Game Commission for approval 3 days prior to placing concrete.

One set of four (4) standard test cylinders for each day's pour shall be taken and forwarded to an approved laboratory for testing. Two (2) cylinders shall be tested at he age of seven (7) days and two (2) cylinders tested at the age of twenty-eight (28) days. Three (3) copies of tabulated results of such tests shall be forwarded to the Game Commission for approval and distribution. All costs in connection with tests of concrete shall be borne by the Contractor.

Provide product information, and/or original certifications for the following items: cement, admixtures, aggregates, preformed expansion joint filler, epoxy bonding compound, joint seal material, and curing compound.

## **10.3 - COMPOSITION**

Concrete shall be composed of Portland cement, water, fine and coarse aggregates and approved admixtures, all well mixed and brought to the proper consistency.

- 1. Concrete shall be Class A and shall develop a minimum compressive strength of 3,300 psi in twenty-eight (28) days.
- 2. Concrete shall be obtained from a batch plant currently approved by the Pennsylvania Department of Transportation (PennDOT) or the Department.
- 3. Ready-mixed concrete shall be mixed and delivered in accordance with ASTM Designation C94.

# **10.4 - MATERIALS**

All materials shall be obtained from sources listed in PennDOT Bulletin 14 or PennDOT Bulletin 15 as applicable.

A. Cement - Cement shall be one of the following types:

- (1) Normal Strength Air-Entraining Portland Cement, Type IA or Type IIA, conforming to ASTM Designation C150. Synthetic fiber reinforcing should be added to the cement to meet ASTM C1609/C1609M. The fiber reinforcing shall meet ASTM C 1116/C 1116M for macro-chopped strands.
- (2) Normal Strength Air-Entraining Portland Blast Furnace Slag Cement, Type IS-A, conforming to ASTM Designation C595. Synthetic fiber reinforcing should be added to the cement to meet ASTM C1609/C1609M. The fiber reinforcing shall meet ASTM C 1116/C 1116M for macro-chopped strands.

**B.** Admixtures - Approved types of admixtures meeting ASTM Designation C260, increasing the plasticity and workability of the concrete may be used.

**C. Water** - Water for concrete shall be clean and free from injurious amounts of oil, acid, alkali, organic matter, or other deleterious substances.

**D. Aggregates** - Aggregates for concrete of normal weight shall conform to "Specifications for Concrete Aggregates" (ASTM C33).

**E. Preformed Expansion Joint Filler** - Preformed expansion joint filler shall be of the size shown on the Drawings, shall be gray in color, and shall conform with the requirements of AASHTO M153, Type 1, sponge rubber. Joint filler shall be solid sponge rubber, and no reprocessed material will be accepted. Joint filler made of numerous pieces of sponge rubber which adhere to each other will not be acceptable. The material shall be stored as recommended by the manufacturer.

**F. Sealant (Isolation Joint)** -Joint sealant for top of isolation joint around precast trench drain and at all other joint locations as applicable to be high performance, self-leveling, 1- part polyurethane sealant with accelerated curing capacity to meet ASTM c-920, type S, Grade P, Class 25 by Sikaflex or approved equal. (**Gray**).

**G. Curing Compound** - The curing compound shall be clear or translucent containing a red fugitive dye conforming to the requirements of AASHTO M148, Type 1-D, and must not affect water in any respect to injure fish life or impair or be detrimental to water for human consumption. The curing compound shall be stored as recommended by the manufacturer.

#### **10.5 – PREPARATION OF AREAS TO RECEIVE CONCRETE**

For pole footings, excavate to the proper depth and grade. Remove any organic material from the areas to receive concrete.

For concrete slabs, place and compact #2A coarse aggregate as shown on the Drawings. Place rigid foam insulation panels and vapor barrier. Install the splash boards on the outside edges of the building to act as forms.

#### **10.6 - JOINTS AND EMBEDDED ITEMS**

Place preformed expansion joint filler around the poles and in the expansion joint as shown on the Drawings. Place trench drains, drainage pipes and utility sweeps. All joint materials and embedded items shall be clean and free of dust, grit, mud, oil or grease, and shall be held firmly in place to avoid displacement during concreting.

#### **10.7 - FORMWORK**

Forms shall conform to the shapes, lines, grades, and dimensions of the concrete as called for on the Drawings. They shall be sufficiently tight to prevent leakage of mortar and shall be properly braced or tied together to maintain the desired position and shape during and after placing concrete. Forms shall be removed in such a manner as to assure the complete safety of the structure.

#### **10.8 - CONCRETE PLACEMENT**

**A. Depositing** - Concrete shall be deposited in the presence of a representative of the Game Commission.

In all cases, concrete shall be deposited as nearly as practicable in its final position and not allowed to flow in a manner to permit or cause segregation and loss of slump. Once concreting is started, the operation shall be carried on continuously until the placing of the panel or section is completed. Concrete shall be placed in continuous, approximately horizontal layers, the depths of which generally shall not exceed twenty (20) inches.

All conveying equipment shall be of such size and design as to insure a practically continuous flow of concrete at the forms. Free falls of more than four (4) feet are not permitted.

Any concrete that has been contaminated by foreign matter or which has become so stiff that proper placing can not be assured, shall be wasted.

If unfavorable weather conditions exist, the Game Commission may order the work stopped, either before concreting has started or after it is in progress, until a suitable formwork or covering is set up on the site to protect fresh concrete from rain, hail, snow, or other unfavorable conditions.

**B.** Consolidation - Concrete shall be consolidated by vibration so that concrete is thoroughly worked around the reinforcement, around embedded items, and into corner of forms, eliminating all air or stone pockets which may cause honey-combing, pitting, or planes of weakness. Internal vibrators shall be of the largest size and the most powerful that can be properly used in the work, as described in Table 5.1.4 of ACI 309, and they shall be operated by competent workers. Vibrators shall not be used to transport concrete within the forms and shall not be attached to the reinforcing bars to consolidate concrete. Vibrators shall be inserted and withdrawn at points approximately eighteen (18) inches apart. At each insertion, the duration shall generally be between five (5) and fifteen (15) seconds, sufficient to consolidate concrete, but not sufficient to cause segregation. A spare vibrator shall be kept at the job site during all concrete placing operations. Before continuing the placement operations, any displacement of reinforcement, forms, or embedded items because of placement or vibration shall be corrected. Concrete which has been segregated by over vibration shall be removed and discarded. Proper care shall be used to ensure that the vibrators does not penetrate or disturb layers which have partially hardened. If directed by the Game Commission, exposed form surfaces shall be spaded in addition to vibration to minimize bubbles in concrete surface.

# **10.9 - REMOVAL OF FORMS AND REPAIR OF CONCRETE**

**A. Removal of Forms -** Forms shall be removed as soon as practicable to avoid delay in curing and to enable earliest repair of surface imperfections. The time of form removal shall be based on the effect on the concrete; there shall be no damage to the concrete, due either to the removal of support or to the form stripping operation. Forms shall be carefully removed to avoid injury to the concrete, and satisfactorily repair any concrete so damaged. Forms shall not be removed until twenty-four (24) hours has elapsed from concrete placement except when specifically authorized by the Game Commission. During cold weather, forms shall be kept in place for five (5) days, unless otherwise authorized by the Game Commission. The Contractor shall accept full responsibility for any damage to concrete incurred by stripping too early.

**B. Repair of Concrete** - Repair of concrete shall be performed by skilled workers and in the presence of a representative of the Game Commission. Repairs shall be completed within 48 hours after removal of forms. When directed by the Game Commission, the Contractor shall repair or remove and replace any concrete that does not meet the requirements of any portion of this Technical Specification. Any concrete which is not satisfactorily repaired shall be removed and replaced.

#### **10.10 - TOLERANCES**

The concrete surfaces and reinforcing steel shall conform to the tolerance limits listed in the following tables. Permissible surface irregularities for the various classes of concrete surface finish as specified in "Finishing Concrete" section of these specifications are defined as "Finishes," and are to be distinguished from tolerances as described herein. The Contractor shall establish and maintain, in an undisturbed condition and until final completion and acceptance of the Project, sufficient control points and benchmarks to be used for reference purposes to check tolerances. Concrete work that exceeds the tolerance limits specified shall be satisfactorily remedied or removed and replaced by and at the expense of the Contractor.

CONCRETE TOLERANCES		
Variation from established	Change in 10 feet	1/4 inch
lines	Maximum permissible	1 inch
Variation from the plumb in	In 10 feet	1/4 inch
lines and surfaces	In 20 feet	3/8 inch
	In 40 feet	3/4 inch
Variation from the level or	In 10 feet	1/4 inch
from the grades indicated on	In 20 feet	3/8 inch
the Drawings for top of walls	In 40 feet	3/4 inch
Variation in thickness of slabs	Minus	1/4 inch
and walls	Plus (Walls)	1/2 inch
	Plus (Slabs)	
		No limit
Footings:		1/2:1
(1) Variation of dimensions in	Minus	1/2 inch
Plan	Plus	2 inches
(2) Misplacement or	Not more than	2 inches
Eccentricity		
(3) Reduction in thickness	Minus	5% of thickness

**NOTE:** No abrupt changes in line, grade or dimension will be permitted for any of the conditions listed above. Variations in thickness will be permitted only as "spot" conditions and shall not extend over large areas.

Reinforcement steel shall be fabricated in accordance with the fabricating tolerances given in ACI 315 and shall be placed conforming to the tolerance limits listed in the following table:

REINFORCEMENT STEEL TOLERANCES		
Variation for Protective	With 2-inch cover	1/4 inch
Covering	With 3-inch cover	1/2 inch
Variation from indicated		1/2 inch
spacing for individual bar		
Variation from lap	Minus	0 inch
-	Plus	No limit

#### **10.11 - FINISHING CONCRETE**

**A. General** - Allowable deviations from plumb or level and from alignment, grades, and dimensions shown on the Drawings and as specified in Section 7.10 are defined as "tolerances," and are to be distinguished from finishes as described herein. Finishing shall be completed immediately after removing the forms.

**B.** Formed Surfaces - All formed concrete surfaces shall be treated as described below by a skilled concrete finisher.

Holes shall be filled, and defective areas repaired immediately after form removal. Fins and irregularities shall be removed or corrected. There shall be no conspicuous offsets, bulges or misalignment of concrete.

**C. Unformed Surfaces** - All unformed surfaces shall be finished in accordance with the following requirements by a skilled concrete finisher:

Immediately after vibration is completed, the surface shall be leveled and screeded sufficiently to produce an even, uniform texture.

Floating shall be done by hand or power-driven equipment. Floating shall not start until some stiffening has taken place in the surface concrete and the moisture film or "shine" has disappeared. The floating should work the concrete no more than necessary to produce a surface that is uniform in texture and free of screed marks. Any necessary cutting or filling of surface to prevent irregularities should be done during the floating operations. Joints and edges shall be finished with edging tools at this time.

After floating is completed, apply a light steel trowel finish to the top surface of the floor slab concrete. Light surface pitting and light trowel marks are not objectionable. For the doorway ramps and front apron slab; apply a light broom finish for traction.

# **10.12 - CURING AND PROTECTION**

**A. General** - After finishing operations are completed, the concrete shall be membrane cured. A minimum of seven (7) consecutive days of curing and protection shall be required. The following definitions of air temperature and curing temperature are specified below, as they will be mentioned frequently in this section:

Air Temperature - The measured temperature in the shade, not in the direct rays of the sun, and away from artificial heat.

**Curing Temperature -** The temperature of the air immediately adjacent to concrete. Where concrete is not covered by forms or other protective coverings, or where protective coverings are considered inadequate, the curing temperature will be considered as being not more than the air temperature. During cold weather, the curing temperature is the temperature inside the forms, protective coverings or housings. The curing temperature for the first 24-hour period after placing concrete will be considered as not more than the temperature of the concrete at the time of its placement in the forms.

**B. Insulation** - High-low thermometers shall be provided and an accurate daily record of air and curing temperatures maintained during cold weather. These temperatures shall be submitted daily to the Game Commission. Curing temperatures shall be taken on the surface of the concrete and at representative locations on structures.

Adequate care shall be provided so that at any time during the curing period the curing temperature does not fall below 50°F. Any day during which the curing temperature drops below 50°F but remains above 35°F, will not be considered as day as a curing day and the duration of the curing period shall be extended accordingly. If at any time during the curing period, the curing temperature falls below 35°F, the contractor shall core and test the concrete at his own expense. The concrete shall be considered satisfactory and acceptable if the strength and durability requirements of Section 7.3.1 are met.

In moderate weather, when the forecasted air temperature is expected to be between 35°F and 50°F, in addition to membrane curing, insulated blankets shall be furnished and placed over concrete and forms.

During cold weather, when the forecasted air temperature is expected to be 35°F or lower, cure shall be by the methods prescribed for curing in moderate weather, and in addition, furnish and install canvas covered frames or some type of approved housing that will completely enclose the fresh concrete and forms. Also, sufficient approved heating apparatus (preferably steam equipment) shall be furnished to maintain the temperature of air surrounding the fresh concrete between 50°F and 80°F, for seven (7) days. Concrete covers shall be kept moist during the curing period. After seven (7) days, the temperature shall gradually be lowered within the housing to the outside temperature over a period of 72 hours. When heating apparatus is required, special care shall be provided to prevent the concrete from drying. Combustion heaters shall not be used during the first 24 hours unless adequate precautions are taken to prevent exposure of the concrete to exhaust gases which contain carbon dioxide. Arrangements shall be made for heating, covering, insulating, or housing the concrete work, in advance of placement, and they

shall be adequate to maintain the required temperature without injury to the concrete due to concentration of heat.

Changes in air temperature immediately adjacent to the concrete during and immediately following the curing period shall be kept as uniform as possible, not exceeding five (5) degrees Fahrenheit in any one (1) hour or 50°F in any 24-hour period.

**C. Membrane Curing** - Finishing of the concrete surfaces shall be completed prior to the application of curing compound.

Curing compound shall be applied in two (2) coats, each coat covering 300 square feet of concrete surface per gallon. A pressure tank type spraying equipment shall be used, which shall provide continuous agitation of the compound during coating operations. Do not use ordinary orchard-type hand sprays. In order to insure thorough and complete coverage of the concrete surfaces, the first coat shall be applied by moving the spray gun back and forth in one direction, and the second coat immediately thereafter by moving the spray gun at right angles to the direction of the first coat.

The first coat shall be applied immediately after finishing operations are completed. The second coat shall be applied immediately after the first coat has set.

**D. Protection** - All concrete shall be protected against injury until final inspection and acceptance by the Game Commission.

During the curing period, the concrete shall be protected from damaging mechanical disturbances, such as load stresses, heavy shock, and excessive vibration. All finished concrete surfaces shall be protected from damage by construction equipment, materials or methods, by application of curing procedures, and by rain or running water.

Until final inspection and acceptance by the Game Commission, the Contractor shall repair, or remove and replace any damaged concrete at no additional cost to the Game Commission.

# **10.13 - MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for all cast in place concrete including furnishing of concrete, forms, all labor, and equipment for mixing, placing, curing, finishing, repairing and forming and all laboratory and field tests as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Cubic Yards, measured by the average end area method or by the three-dimensional volume method, as applicable.

# **TECHNICAL SPECIFICATION SECTION NO. 11 - AGGREGATE**

## 11.1 - SCOPE

This work is providing a subbase for concrete slabs, backfilling around the completed foundation work with #2A coarse aggregate, #57 coarse aggregate and AASHTO #10 stone as shown on the Drawings. Work also includes stone around perimeter of building and parking area.

#### **11.2 - APPLICABLE PUBLICATIONS**

AASHTO T 27 - Standard Method of Test for Sieve Analysis of Fine and Coarse Aggregates.

Pub. 408 - Specifications, Pennsylvania Department of Transportation.

Bulletin 14 - Aggregate Producers, Pennsylvania Department of Transportation.

#### **11.3 - MATERIALS**

Aggregate used for the subbase of concrete slabs shall be Type C, #2A coarse aggregate, as specified in Section 703.2 of Pub. 408.

AASHTO #10 stone shall also be used to backfill around installed water lines, electric conduit and drainage pipes.

Obtain aggregates from a source listed in Bulletin 14.

#### **11.4 - PROCEDURE**

Place aggregates and stone in the dry, and not on frozen ground for concrete slab foundations. Conduct aggregate placement operations in such a way that the permanent structures are not damaged.

At concrete slab foundations, place stone in loose layers not exceeding 4 inches in depth and compact each layer with mechanical tampers or other approved means. If working clearances permit, place stone in loose layers not exceeding 8 inches in depth and compact each layer with rollers, tracked vehicles or other approved equipment. After compacting to the required thickness shown on the Drawings, accurately shape the foundation bed by a template to provide uniform contact for concrete placement.

For the backfill around the foundation drain pipes, place #57 coarse aggregate as soon as practicable after the drain pipes are in place. Compaction of this material is not required.

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For backfill of electric conduit and drainpipes, place AASHTO #10 stone in the bottom of the excavated trenches. Shape the stone as necessary to provide uniform contact around the pipes and conduits. After the conduits and pipes are installed, place AASHTO #10 stone over the pipes to provide a cushion before placing compacted backfill.

## **11.5 - MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for providing all aggregates and the placement and compacting of aggregates to the required depths for the construction of new building foundations, concrete aprons and slabs and utility trenches as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work. Aggregate used for replacing caved-in-material, and material excavated beyond the established payment lines will not be measured and paid for.

A. Unit of Measurement: Tons, measured by the weight slips from stone supplier, as applicable for the three types of aggregate used for the project.

#### **TECHNICAL SPECIFICATION SECTION NO. 12– INCIDENTALS**

#### 12.1 - SCOPE

This work is to furnish and install a precast trench drain system, below slab extruded polystyrene insulation and building thermal envelope insulation.

#### **12.2 - MATERIALS**

#### A. Precast Trench Drain System -

- 1. System requirements: Provide a trench drain system of prefabricated modular pre-sloped components. The system shall incorporate a frame when required to carry the specified load. Gratings shall comply with the load requirements of AASHTO or DIN/EN loading. Integral frames which extend onto the concrete slab shall include consolidation vent ports which help minimize air entrapment under the frame when proper vibration techniques are used. Frames which extend onto the concrete slab shall include anchoring studs which secure the frame into the surrounding concrete. Anchoring studs shall be a minimum of 0.5 inch in diameter and shall extend at least 3 inches from the frame. The anchor studs shall be Fiberglass systems shall either include surface veil or gel coat on the media bearing surface with a UV inhibitor package.
- 2. Provide Polycast 600 trench drain systems manufactured by Hubbell Power Systems, Inc., 3621 Industrial Park Drive, Lenoir City, TN 37771, Website <u>www.polycastdrain.com</u>, or approved equal. Install in accordance with the manufacturer's installation guide.
- 3. Top of trench drain grating shall be minimum of 3 inches lower than perimeter elevation of floor slab.

#### B. Rigid Foam Panels -

The insulation panels to be installed under the floor slab and along masonry foundation walls shall be rigid foam (extruded polystyrene) panels conforming to ICC ES 96-24 and ASTM C578. All panels shall be 2 inches thick R-10. Panels to be installed along the vertical edges of the floor slab shall be 1/2 –inch thick.

- **C. Building Envelope Insulation** The insulation to be installed on the exterior envelope of the building of the unheated spaces shall be Prodex 48-inch insulation or an approved equal conforming to the following characteristics:
  - 1. Blanket structure 5 layers, aluminum foil, polyethylene backing, closed cell polyethylene foam, polyethylene backing, aluminum foil
  - 2. Nominal thickness 13/64-inches (5mm)
  - 3. Perm Rating Less than 0.1 according to ASTM E96
  - 4. Noise reduction 19dba impact noise (IRAM 4063)
  - 5. Flame Spread Index 25 or less (ASTM E84-10)
  - 6. Smoke Developed Index 45 or less (ASTM E84-10)

7. Insulating Value – R-14

This foil faced insulation shall also be installed on top of the roof purlins and below the metal roofing of the building.

**D. Pipe Bollard** -The metal pipe bollards installed along the front elevation of the building as indicated on Floor Plan shall be 6" diameter x 5'0" long (top of bollard to extend min. 36" above concrete) galvanized steel pipe filled with concrete. Mound concrete fill at top and slope concrete at base of bollard as required to prevent standing water. Apply (2) coats of acrylic enamel paint, YELLOW.

**E. Sealant (Isolation Joint)** – Joint sealant for top of isolation joint around precast trench drain to be high performance, self-leveling, 1- part polyurethane sealant with accelerated curing capacity to meet ASTM c-920, type S, Grade P, Class 25 by Sikaflex or approved equal. (Gray).

**F. Fire Extinguishers:** 20 lbs. ABC fire extinguishers fully charged and tested shall be furnished and installed by the PGC, not in contract.

# 12.3– SUBMITTALS

Submit a catalog cut and other manufacturers information for all trench drain components and gratings with frames, fiberglass batt insulation and rigid panel insulations to the PGC for review and approval before ordering any materials. Refer to submittal specification section for submission requirements

# **12.4 – PROCEDURE**

Install all incidentals and building components in accordance with the manufacture's product specifications, applicable 2015 International Building Code provisions, and shop drawings.

# **12.5 – MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for all incidental building systems and components including trench drain system and rigid panel insulation as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Lump Sum

# **TECHNICAL SPECIFICATION SECTION No. 13 – ELECTRIC POWER SUPPLY CONNECTION**

Separation of Contract, to be awarded separate with "Contract 2".

## **13.1 - SCOPE**

This work is furnishing and installing a new underground 200-amp electric service from an existing 75KVA Padmont transformer location on site to the new Storage Building. Work shall include all required conduit and sweeps, installing a 200-amp main electrical distribution panel, meter socket, service grounding, service entry conductors and electrical hardware to complete installation.

Furnish and install new electrical conductors in conduit with expansion joints including all electrical accessories for new underground electrical service. All underground electrical work shall be installed in full compliance with the NEC. This work shall include all rough and final wiring required for connection of new conductors to new electrical service panel and meter socket electrical equipment.

#### **13.2 – MATERIALS**

A. Conduit - Conduit shall be as indicated below and on Site Plan w/expansion joint and securing straps where needed. Any sweep elbows to be 36" minimum.

1. Electric service shall be 3" minimum Schedule 80 PVC.

**B. Service Conductor** – Four #250 kcmil conductors electric provider approved. Comply with service detail on Drawing E-1.

C. Meter Socket – The meter socket shall be a self-contained, outdoor type, weatherproof construction, UL listed with a painted finish enclosure. The meter socket shall be mounted to electric company specifications and to have the following features.

- 1. 4 terminal, ring-less, socket suitable for plug-in meter
- 2. Approximate physical dimensions: 11.0"W x 15.5"H x 4.5"D

D. Service Line – 4/0 XHHW-2 Aluminum Building Wire 600 V, to meet UL 44 and ASTM standards B800 and B801.

E. Grounding Rods – 8-foot long grounding rod(s) and connecting cable

G. Warning Tape – Complies to NEC 300.5(D)3.

H. Conduit Bedding – AASHTO #10 stone; refer to section 5 of the Technical Specifications.

## 13.3 – SUBMITTALS

Submit a catalog cut and other information for new electrical service components, conductors, and accessories from the manufacturers to the PGC for review and approval before ordering any materials.

#### **13.4 - PROCEDURE**

The PGC will have a work order number with the Electric Company (W.P.P.Co), West Penn Power- FirstEnergy Corp. Please notify them and PGC representatives three weeks prior to when the electric service connections will be made to schedule time to install and energize the electric lines. The PGC will contact and pay any fees (if any) for an electrical inspector to certify that the meter socket/associated work meet the electric company's requirements.

The Contractor is responsible for installing electrical components for the new underground electrical service including, service entrance conductors, grounding rod(s), meter socket, conduits, and fittings from stub up, and all electrical accessories and hardware associated with this work. In certain circumstances, the electric company mandates the conductors to be installed by their service technicians at no cost or a varying cost based on linear feet of wire.

All conduit is to be trenched to meet building code depth to a minimum of 3' deep and bedded in 12" depth of AASHTO #10 aggregate.

# **13.5 - MEASUREMENT AND PAYMENT**

This price and payment shall constitute full compensation for the installation of a new overhead electrical service connection and supporting electrical service electrical gear and components to the building, including all new underground electrical circuitry supporting site electrical requirements as specified and shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

A. Unit of Measurement: Lump Sum.

# <u>TECHNICAL SPECIFICATION SECTION NO. 14 – LIGHTING AND ELECTRIC</u> Separation of Contract, to be awarded separate with "Contract 2".

# 14.1 - SCOPE

This work is providing and installing the components of the lighting and electric power distribution systems for the new building as shown on the Drawings. Refer to section 14 of these technical specifications for installing the electric service connection and new electrical distribution panel to be installed.

#### 14.2 – GENERAL

The drawings are indicative of the character and scope of the electrical work and are not intended to show all the details. The actual location of all wiring, switches and light fixtures shall be determined at the site. The Contractor shall investigate the structural and finish conditions affecting the work and arrange all work accordingly to insure the electric and other building components are installed correctly.

All work shall be manufactured, tested and installed accordance with the National Electric Code (NEC), the International Building Code (IBC) 2018 and all applicable local codes. The Contractor shall furnish a fire underwriter's certificate of inspection covering the work installed under this specification.

#### 14.3 – MATERIALS

**A. Wire** – THHN or THHW AWG #12/2 copper wire with ground. All electrical wiring must be in conduit where or metal clad (MC) flexible shielded, may be used.

**B. Outlet and Junction Boxes** – PVC with threaded ports for conduit fittings and molded ears with holes for surface mounting; type FS as manufactured by Carlon. Provide polished metal cover plates for switches and receptacles.

**C. Switches** – Rated for 20 amps (or more if required by equipment manufacturer), 120/277 and as manufactured by Hubbell, Bryant, Arrow-Hart, GE, P&S or Leviton.

**D. Lighting Fixtures** – The lighting fixture schedule is shown on the drawings.

**E. Bulbs** – Install as recommended by the lighting fixture manufacturer.

**F. Conduit** – Conduit shall be Schedule 40 PVC rigid non-metallic conduit conforming to NEMA TC-2 and UL651. Conduit fittings shall conform to NEMA TC-3 and UL514b. MC cable wiring may be used if desired.

## 14.4 - PROCEDURE

The installation of every component in the electrical system must be performed according to the National Electric Code (NEC).

Mount lighting fixtures and receptacles in the locations as shown on the Drawings.

Use conduit in all portions of the building. Secure the conduit to the roof trusses or other framing members with clamps approved by the manufacturer. Conduit must be extended and connected to all the outlet boxes. Use solvent cement for all conduit joints and connections. Pull wire through conduit without stripping insulation from the wires.

Install the light fixtures and switches in properly sized boxes. Make the required conductor and ground connections. Install the light bulbs in the fixtures.

Coordinate mounting locations of future overhead garage door openers/lifting devices (not in contract) with PGC staff for installation for receptacles to provide electrical power to future openers.

#### 14.5 - MEASUREMENT AND PAYMENT

This price and payment shall constitute full compensation for new electrical power distribution systems, outlets, lighting fixtures and controls as specified or shown and as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, accessories, disposal of waste and related work.

- A. Unit of Measurement: Lump Sum, for each task listed in the bid schedule.
- B. The electric service connection and installation of underground circuitry from existing service panel at crew headquarters building panelboard will be measured and paid for according to Section 14 of these Technical Specifications.