AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

THORNTON FIRE STATION NO. 8 DESIGN SERVICES PROJECT NO. 23-103

This Professional Architectural and Engineering Services Agreement for the Thornton Fire Station No. 8 Design Services, Project No. 23-103 ("Agreement") is made and entered into this _____ day of _____, 2022, by and between the <u>City of Thornton</u>, a Colorado home rule municipality, whose address is 9500 Civic Center Drive, Thornton, CO 80229 ("Thornton"), and <u>TBD</u> whose principal place of business is located at Address TBD ("Consultant,) Hereafter, Thornton and Consultant collectively may be referred to as the "Parties" or individually as the "Party."

I. RECITALS

- A. Thornton requires Professional Architectural and Engineering (A/E) services in connection with the Thornton Fire Station No. 8 Design Services, Project No. 23-103 (the "Project").
- B. On or about Month Day TBD, 2023, Thornton selected Consultant as the most qualified firm to provide the services described in this Agreement.
- C. Consultant selected by Thornton represents that it has the requisite expertise and professional experience to perform the services this Project requires as described herein and Thornton needs during the term of this Agreement.

In consideration of the promises stated herein, the Parties agree as follows:

II. TERMS AND CONDITIONS

- A. <u>Definitions, Interpretation</u>. Capitalized terms not defined below shall have the meanings given them in the Contract Documents where they are defined. Further, otherwise consistent with the context, the singular shall include the plural and the plural shall include the singular. The titles of articles and sections used in this Agreement are primarily for convenience but may be used as aids in interpreting any provision herein.
 - 1. <u>Agreement</u> means the Agreement between Thornton and Consultant, including Amendments, Change Orders, and exhibits made part of the Agreement upon or after its execution.
 - 2. <u>Contract Documents</u> consist of those documents identified in the Agreement, and Change Orders and Amendments issued after execution of the Agreement.

- 3. <u>Day</u> in any Contract Document refers to a Calendar Day of twenty-four (24) hours measured from midnight to the next midnight (herein, a "Calendar Day").
- 4. <u>Drawings</u> are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Station to be constructed, generally including plans, elevations, sections, details, schedules, diagrams, and notes, also sometimes referred to as plans. The Drawings may contain Specifications, and the Specifications may contain Drawings.
- 5. <u>Commencement Date</u> is the designated date on which it becomes effective, but if no such date is designated, it is the date on which Thornton signs the Agreement.
- 6. <u>Including</u> shall, unless otherwise specifically stated, mean *including, but not limited to,* and words such as *hereby, herein,* and *hereunder* and words of similar importance shall be construed to refer to this Agreement in its entirety.
- 7. <u>Services</u> are the various elements identified and required by Consultant's General Scope of Services attached hereto as **Exhibit A** and other Contract Documents, and include the result of performing or providing all labor, services, and documentation necessary to produce, furnish, install, and incorporate all materials and equipment necessary to complete the Services in accordance with the Contract Documents.
- 8. <u>Specifications</u> are that part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to construction of the Station (the "Construction Work") and certain administrative details applicable thereto.
- 9. <u>Subconsultant</u> ("<u>Subconsultant</u>") is a person or entity retained by Consultant as an independent contractor to provide labor, materials, equipment, and/or services necessary to complete a specific portion of the Services; or any other party supplying labor and material or only labor for the Services under a separate contract or agreement with Consultant. Moreover, the terms "Subconsultant" and "Subcontractor" are interchangeable herein and will, at all times, have, express or convey the same meaning. The term does not include a Separate Consultant or a Separate Consultant's subcontractors.

B. Contract Documents.

1. The following documents, including all exhibits and attachments listed, contained, or referenced in this Agreement, by this reference are incorporated verbatim into this Agreement:

- a. Thornton Approved Amendments to this Agreement.
- b. This Agreement for Professional Consulting Services (together with Exhibits):
 - i. Exhibit A Consultant's General Scope of Services:
 - ii. Exhibit B Consultant's Personnel and Subconsultants Listing; and
 - iii. Exhibit C Schedule of Charges.
- c. Purchase Orders.
- 2. In the event there is a conflict between any of the above-listed documents, the provisions of the document listed first in order shall govern over those documents listed in descending order in subparagraph B.1 above after the first listed document
- 3. Service Provider may need additional documents to perform the required Services, or to clarify certain aspects of the Services, that are not listed in Section B.1 above. Such documents, unless specifically identified as such, are not Contract Documents. These documents, by way of example include, but are not limited to:
 - a. The Service Provider's Proposal;
 - b. Other Thornton policies and procedures as applicable.
- 4. Consultant shall perform the Services with the staff identified in the attached **Exhibit B**, unless otherwise authorized in writing by Thornton.
- C. **Project Description.** Service Provider shall provide the following:
 - 1. Professional design services, which for the preparation and completion of construction plans and specifications for bidding and construction of a new Thornton Fire Station No. 8 (the "Station").
 - 2. Construction Administration services, plus architectural, civil, geotechnical, landscape, structural, mechanical, plumbing, electrical, acoustical, Construction Administration, and other related services.
- D. <u>Consultant's Scope of Services</u>. Upon recipient of a written Notice to Proceed from Thornton, Consultant acknowledges that its scope of AE services includes furnishing all of the technical, administrative, professional, and other labor; all supplies and materials, equipment, printing, vehicles, local travel, office space and facilities, testing and analyses, calculations, and any other facilities or resources

required to perform and complete the Services described in the attached **Exhibit A** (Scope of Services).

E. <u>Term; Commencement and Termination Dates</u>. This Agreement shall commence on the date written above and shall terminate at such time when all of the Scope of Services in Exhibit A up to, and through the end of the Warranty Phase are complete, or upon Thornton providing Consultant with seven (7) Calendar Days advance written notice, whichever occurs first. In the event this Agreement is terminated by Thornton for convenience, Thornton shall issue a written Notice of Intent to Terminate and shall pay Consultant for all Services previously authorized and completed prior to the date of the Notice of Termination. Consultant shall not be entitled to profit or overhead on uncompleted Services. If, however, Consultant has substantially or materially breached the terms of this Agreement, Thornton shall have any remedy or right of set-off available at law and equity.

F. <u>Compensation.</u>

- 1. <u>Maximum Contract Liability</u>. In accordance with the Schedule of Charges as set forth in the attached **Exhibit C, Schedule of Charges**, Thornton agrees to the following:
 - a. <u>Professional A&E\Design Services</u>. Upon on appropriation, Thornton will pay Consultant a fixed fee for design services of TBD Dollars and (<u>\$TBD</u>.
 - b. <u>Construction Administration Services</u>. Thereafter, Thornton will pay Consultant a fixed fee for Construction Administration services a fixed fee of TBD Dollars **(\$TBD**)
 - c. The total Contract Maximum Liability for both services described in subsection a, and subsection b, together equals TBD Dollars and Twenty Cents (<u>\$TBD</u>).
- 2. <u>Invoicing</u>.
 - a. A detailed monthly invoice shall be submitted by Consultant, and sent in electronic format to <u>ap.invoices@ThorntonCo.gov</u>.
 - b. Invoices become due and payable thirty (30) Calendar Days after date of receipt by Thornton of a complete and correct invoice.
 - c. Invoices shall reference the Purchase Order Number assigned by Thornton and be itemized showing applicable charges.

- d. Each invoice will show the total amount from the date of the original Agreement, and any subsequently issued Purchase Orders and amendments that change the amount of the Agreement. In addition, invoices must include billing and payment summaries up to the date of the submitted invoice. Thornton reserves the right to withhold final payment until the Services are complete. Consultant shall not perform any Services without receiving a Purchase Order issued by Thornton.
- e. Consultant shall break down invoices by the phases specified in the Scope of Work. Each phase shall be further itemized by cost for each completed task performed for that phase. Consultants will only invoice Thornton for work that is performed to Thornton's satisfaction, or the percentage of work satisfactorily performed for that phase, unless Service Provider has Thornton's written approval in advance. Under no circumstances will Consultant submit an invoice for work for more than the total amount specified for any given phase. Furthermore, under no circumstances may Consultant bill or otherwise invoice for work not specifically authorized.

G. Changes to Consultant's Scope of Services, Terms and Conditions.

- 1. A change in Consultant's Scope of Services is any change or amendment of Services that is different from, or in addition to Consultant's General Scope of Services as defined in **Exhibit A** of this Agreement.
- 2. No change to the General Scope of Services or to other Contract Documents, including any request for additional compensation, shall be effective unless authorized by a written amendment executed by Thornton's City Manager ("Manager") or Manager's designee(s).
- 3. Except as expressly provided herein, no agent, employee, or representative of Thornton has the authority to change or modify, directly or by an implied course of action, the General Scope of Services or the terms of this Agreement.

H. Consultant's Personnel, Subcontracting.

 <u>Approval of Key Professionals</u>. Consultant shall perform the Services with the persons, personnel, Subconsultants and named entities identified in the attached **Exhibit B**, unless otherwise authorized in writing by Thornton. All of Consultant's key professional personnel identified in **Exhibit B** shall be assigned by Consultant or its Subconsultant (including any subsubconsultants) to perform the Services under this Agreement. If Thornton requires Consultant to identify certain Subconsultants, other entities, personnel or individuals ("Key Professionals") before the Agreement's commencement date for Thornton's review and acceptance, Consultant shall submit a list of Key Professionals, along with their résumés and Page 5 of 64 information, describing each one's abilities to perform their assigned tasks no later than thirty (30) Calendar Days before this Agreement's commencement date. If Thornton does not respond within fifteen (15) Calendar Days from receiving Consultant's list, all listed Key Professionals will be deemed approved by Thornton.

- 2. <u>Replacement of Key Professionals</u>. The Parties understand that Key Professionals will be engaged to perform their specialty services required by this Agreement, and Consultant and its Subconsultant shall retain Key Professionals for the term of this Agreement to the extent practicable and to the extent their specialties maximizes the quality of services performed hereunder. If Consultant decides to replace a Key Professional, they shall notify Thornton in writing of the changes it desires to make. Thornton will respond to Consultant regarding replacement of a Key Professional within fifteen (15) Calendar Days from the date Thornton receives Consultant's request. Consultant shall not replace any Key Professional without Thornton's written approval, which will not be withheld unreasonably.
- 3. <u>Performance by Key Professionals</u>. If, during the term of this Agreement, Thornton determines that a Key Professional's performance is unacceptable, they will notify Consultant and give Consultant the time that Thornton considers reasonable to correct such performance. Thereafter, if a Key Professional's performance is still unacceptable, Thornton will notify Consultant to reassign the Key Professional, and Consultant shall use its best efforts to obtain an adequate substitute within ten (10) Calendar Days from the date of the notice.
- 4. <u>Consultant's Subconsultants</u>.
 - Thornton's Approval Required. Consultant may retain and a. subcontract with Subconsultants listed in Exhibit B, Consultant's Personnel and Subconsultants Listing; however, Consultant shall not execute a final agreement with any other Subconsultant without obtaining written approval from Thornton first. For Thornton's approval, Consultant must submit a written description of the nature and extent of the Services a Subconsultant will provide, and the Subconsultant's name, address, professional experience and qualifications and any other important information. Thornton's approval of the Subconsultant shall not relieve Consultant of any obligations under this Agreement. Since Consultant's representations and professional qualifications are the consideration for Thornton to enter into this Agreement, Thornton, for any reason, has the right to reject any proposed Subconsultant it deems unqualified or unsuitable to perform the proposed Services, and to limit the number of Subconsultants retained by Consultant.

- b. Conflict of Interest Prohibited. No Consultant shall retain any Subconsultant to perform any Services under this Agreement if Consultant, by making a reasonable inquiry, knows or should know Subconsultant is connected with the sale or promotion of equipment or material used to perform any Services that would be a conflict of interest. However, in unusual circumstances, Thornton may waive in writing a conflict of interest provided Consultant has fully disclosed the conflict of interest beforehand. If at any time, the Consultant becomes aware of a potential conflict of interest, it shall immediately notify Thornton in writing of the potential conflict. The notification shall contain all pertinent information to fully and accurately describe the conflict of interest. Thornton, in its sole discretion, shall determine the existence of a conflict of interest and may terminate this Agreement in the event such a conflict exists after it has given Consultant written notice describing the conflict.
- 5. <u>Approval, Rejection of Consultant's Key Professionals, Personnel and</u> <u>Subconsultants</u>. Thornton may, in its reasonable discretion, approve or reject any person or persons at any time working for Consultant. No acceptance by Thornton of any Key Professional, Subconsultant, supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Thornton to reject defective work.
- 6. <u>Waiver</u>. Consultant shall be fully responsible to Thornton for all acts and omissions of its Subconsultant, Key Professionals and other persons performing or furnishing any Services on behalf of Consultant just as Consultant is responsible for Consultant's own acts and omissions. Any agreement between Consultant and its approved Subconsultant(s), Key Professionals and other persons must have a legally binding provision whereby they agree to waive all rights to make a claim of liability or payment against Thornton arising out of the performance of the Services under this Agreement. Nothing in the Contract Documents shall create any contractual relationship or obligation to pay any monies due to the same, except as the law may require.

I. Compliance with All Laws and Regulations.

- 1. All of the Services performed under this Agreement by Consultant shall comply with all applicable laws, rules, regulations, and codes of the United States and the State of Colorado and with the charter, ordinances, and rules and regulations of Thornton.
- 2. All applicable state and federal laws, county and city ordinances, and licenses and regulations of all authorities having jurisdiction over this Agreement and the Services shall apply to this Agreement throughout and

will be deemed to be included in this Agreement the same as though written out in full.

J. <u>Confidentiality of Thornton's Information.</u>

- 1. Thornton will provide Consultant with reports and such other data as may be available to Thornton ("Project Information") and reasonably required by Consultant to perform the Services.
- 2. No Project Information shall be disclosed by Consultant to third parties without prior written consent of Thornton or pursuant to a lawful Court Order directing such disclosure.
- 3. All Project Information provided by Thornton to Consultant shall be returned to Thornton at the end of the Project upon Thornton's request. Consultant is otherwise authorized by Thornton to retain copies of Project Information at Consultant's expense.

K. Ownership, Use of Work Product.

- 1. All Services, data, drawings, designs, plans, reports, studies, computer programs (nonproprietary), computer input and output, analyses, tests, maps, surveys, aerial photography or any other materials ("Work Product") developed for this Project by Consultant are and shall be the sole and exclusive property of Thornton. Aerial photography supplied by Thornton to Consultant shall not be utilized by Consultant for any purpose other than the Project.
- 2. Consultant hereby transfers any copyright, trademark, or other intellectual property rights of Work Product to Thornton. However, any reuse of Work Product by Thornton without prior written authorization by Consultant other than for the specific intended purpose of this Agreement will be at Thornton's risk.
- 3. Consultant shall provide Thornton with ten (10) Calendar Days of advance written notice that it has Project Information and Work Product it intends to dispose of, during which time Thornton may take physical possession of such documents.

L. Compliance with Patent, Trademark and Copyright Laws.

1. Consultant warrants that all Services performed under this Agreement shall comply with all applicable patent, trademark, and copyright laws, rules, regulations, and codes of the United States. Consultant shall not utilize any protected patent, trademark, or copyright in performance of the Services

unless Consultant has obtained proper permission and all releases and other necessary documents. If Consultant specifies or uses any material, equipment, process, or procedure, that is protected, Consultant shall disclose such patents, trademarks, and copyrights in Consultant's deliverables.

2. Consultant releases, indemnifies, and holds harmless Thornton, its officers, agents, and employees from any and all claims, damages, suits, costs, expenses, liabilities, actions, or proceedings of any kind or nature whatsoever, including attorneys' fees and costs, of or by anyone whomsoever, in any way resulting from, or arising out of, directly or indirectly, the performance of Services under this Agreement which infringes upon any patent, trademark, or copyright protected by law.

III. GENERAL CONDITIONS

- A. Indemnification. To the fullest extent permitted by law, Consultant agrees to defend, indemnify and hold harmless Thornton, its officers, agents and employees, from and against all liability, judgments, damages or losses which arise out of, result from, or are in any manner connected with the Services to be performed under this Agreement, to the extent it is determined such liability, judgments, damages or losses were caused by the negligent acts, errors, or omissions of Consultant, any Subconsultant of Consultant, or any officer, employee or agent of Consultant, or anyone else employed directly or indirectly by any of them or anyone for whose acts any of them may be liable and will pay to Thornton any expenses incurred by reason of such liability, judgments, damages or losses, including, but not limited to, court costs and reasonable attorneys' fees incurred in defending or investigating such claims. Such payments on behalf of Thornton shall be in addition to any and all other legal remedies available to Thornton and shall not be considered Thornton's exclusive remedy.
- B. **Insurance.** Consultant agrees to procure and maintain in force during the term of this Agreement, at its own cost, the following coverages:
 - 1. <u>Workers' Compensation Insurance</u>. Workers' Compensation Insurance as required by the Labor Code of the State of Colorado and Employer's Liability Insurance. Statutory limits are required. Evidence of qualified self-insured status may be substituted.

2.	<u>Corr</u>	nmercial General Liability Insurance	(MINIMUM LIMITS)	
	a.	Each Occurrence	\$2,000,000	
	b.	Products/Completed Operations Aggregate	\$1,000,000	
	C.	Personal and Advertising Injury	\$1,000,000	
	d.	General Aggregate	\$2,000,000	

Page 9 of 64

- e. This policy shall include coverage protecting against bodily injury, property damage, and personal injury claims arising from the exposures of:
 - i. Premises-operations;
 - ii. Products and completed operations including materials designed, furnished, and/or modified in any way by Consultant;
 - iii. Independent subcontractors or Subconsultants;
 - iv. Contractual liability risk covering the indemnity obligations set forth in this Agreement; and
 - v. Where applicable, liability resulting from explosion, collapse, or underground exposures.
- f. If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination of this Agreement. The insurance shall provide for a retroactive date of placement prior to or coinciding with the effective date of this Agreement.

3.Professional Liability Insurance(MINIMUM LIMITS)a.Each Claim\$2,000,000b.Aggregate\$3,000,000

- c. If the above insurance is written on a claims-made form, it shall continue for three (3) years following termination of this Agreement. The insurance shall provide for a retroactive date of placement prior to or coinciding with the effective date of this Agreement.
- 4. <u>Automobile Liability Insurance</u>. Automobile Liability Insurance with minimum combined single limits for bodily injury and property damage of not less than five hundred thousand dollars (\$500,000) for any one (1) occurrence. This insurance will insure against bodily injury and/or property damage arising out of Consultant's operation, maintenance, use, loading or unloading of any auto including owned, non-owned, hired, and employee autos.
- 5. <u>Additional Insured</u>. Consultant shall name Thornton, its officers, agents, and employees as additional insureds with respect to the commercial general liability and auto liability coverages required herein. A Certificate of Insurance shall be completed and forwarded, along with the Additional Insured Endorsements, to Thornton by Consultant's Insurance Agent(s) as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect and shall be subject to review and

approval by Thornton **prior to commencement of any Services under this Agreement**.

6. <u>Certificates of Insurance</u>. The initial completed Certificates of Insurance and Additional Insured Endorsements shall include Consultant's e-mail address for future inquiries and updates, and shall be sent to:

> City of Thornton Jennifer Cahill, Construction Manager 9500 Civic Center Drive Thornton, CO 80229-4326

Subsequent Certificates of Insurance, along with the renewal Additional Insured Endorsements, indicating renewal of coverage(s) shall be sent to Thornton's Risk Management office at certificatesofinsurance@ThorntonCo.gov no later than thirty (30) Calendar Days prior to the expiration date and shall indicate "Renewal COI" and the Project Number in the e-mail subject line.

Thornton further reserves the right to request and receive a certified copy of any policy and any endorsement. Consultant agrees to execute any and all documents necessary to allow Thornton access to any and all required insurance policies and endorsements.

- 7. <u>Failure to Insure</u>. Failure on the part of Consultant or a Subconsultant to procure or maintain policies providing the required coverages, conditions, and minimum limits **shall constitute a material breach of Agreement upon which Thornton may immediately terminate this Agreement**, or at its discretion, Thornton may procure, or renew any such policy, or any extended reporting period, and may pay any and all premiums in connection therewith, and all monies so paid by Thornton shall be repaid by Consultant to Thornton upon demand, or Thornton may offset the cost of such premiums against any monies due or that become due to Consultant from Thornton.
- 8. <u>Other Insurance Requirements</u>.
 - a. From time to time, Thornton, by mutual agreement with Consultant, may require Consultant to obtain other insurance with varying limits against other insurable hazards relating to the Services.
 - b. Consultant shall procure and maintain and shall cause any Subconsultants to procure and maintain the minimum insurance coverages listed herein. Such coverages shall be procured and maintained with forms and insurers acceptable to Thornton. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant

pursuant to this Agreement. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

- c. Every policy required above shall be primary insurance and any insurance carried by Thornton, its officers, or its employees shall be excess and not contributory insurance to that provided by Consultant. Consultant shall be solely responsible for any deductible losses under the policies required above.
- d. Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure and maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.
- e. All policies shall include a provision that the coverages afforded under the policies shall not be canceled or materially changed prior to the natural termination date until at least thirty (30) Calendar Days prior written notice has been sent to Thornton. The Certificate(s) shall indicate the form used, if any, under which this provision is included.
- C. <u>Governmental Immunity.</u> The Parties understand and agree that Thornton, its officers, and its employees are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities and protections provided by the Colorado Governmental Immunity Act, C.R.S. 24-10-101 <u>et seq.</u>, as from time to time may be amended, or otherwise available to Thornton, its agents, officers, or employees.

D. Independent Contractor.

- 1. It is understood and agreed by and between the Parties that the status of Consultant shall be that of an independent contractor and of a person retained on a contractual basis to perform professional and/or technical services for limited periods of time and it is not intended, nor shall it be construed, that Consultant is an employee or officer of Thornton under Chapter VII of the City Charter, or Chapter 54 of the City Code, or for any purpose whatsoever.
- 2. Without limiting the foregoing, the Parties hereby specifically acknowledge that **Consultant** or any employee, agent or Subconsultant of Consultant is not entitled to unemployment insurance benefits unless unemployment compensation coverage is provided by Consultant or some other entity besides Thornton, that Consultant is not entitled to Workers' Compensation benefits from Thornton and that Consultant is obligated to pay federal and state income tax on any monies earned

pursuant to this Agreement. The Parties further acknowledge that the provisions of this paragraph are consistent with Consultant's insurance obligations which are set forth in this Agreement.

E. <u>Termination.</u>

- 1. <u>Termination for Convenience</u>.
 - a. Thornton shall have the right to terminate this Agreement at any time upon seven (7) Calendar Days advance written notice to Consultant ("Notice of Termination").
 - b. Should Thornton terminate this Agreement for convenience, in accordance with subsection E.1.a above, Thornton shall pay Consultant for all Services previously authorized and properly completed prior to the date of termination set forth in the Notice of Termination. Consultant shall not be entitled to profit or overhead on uncompleted Services.
 - c. In any event, the terms and conditions of this Agreement shall survive the termination date of the Agreement and continue until the Services are complete to Thornton's satisfaction.
- 2. <u>Termination for Cause</u>. Thornton shall have the right to terminate this Agreement immediately upon notice to Consultant if Consultant has materially breached the terms of this Agreement. In such event, Thornton shall pay Consultant for all Services previously authorized and completed prior to the date of termination in compliance with the terms of this Agreement and to Thornton's satisfaction, provided that there shall be no limitation of Thornton's right to exercise any and all available legal and equitable remedies.
- 3. <u>Termination for Non-Appropriation</u>. In the event that the Thornton City Council fails to appropriate funds for the continuation of this Agreement for any fiscal year beyond the initial fiscal year hereof, Thornton may terminate this Agreement without penalty as of the end of the fiscal year for which funding was appropriated and shall be released of further obligations.
- F. <u>Venue / Law / Statute Of Limitations.</u> This Agreement shall be governed by the laws of the State of Colorado, notwithstanding its choice of law principles. Any legal action concerning the provisions hereof shall be brought in the District Court, County of Adams, State of Colorado. Any action arising out of or relating to this Agreement or the Services asserted by Consultant against Thornton shall be brought within two (2) years from when the action accrued, pursuant to C.R.S. § 13-80-102(h).

G. <u>Notice</u>. Any notice or communication between Consultant and Thornton which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first class United States Mail, addressed as follows:

THORNTON: City of Thornton Attention: Contracts and Purchasing Director 9500 Civic Center Drive Thornton, CO 80229-4326

CONSULTANT: TBD Attention: TBD TBD TBD

- H. <u>Exhibits</u>. All documents marked and referred to as "Exhibits" in this Agreement are incorporated by this reference and are made a part of this Agreement.
- I. <u>Assignment of Agreement Not Permitted</u>. Consultant shall not be entitled to assign, pledge, or transfer its duties and rights, in whole or in part, under this Agreement, or any Services, or its rights to any payment from Thornton without the prior written consent of Thornton, which Thornton may withhold in its sole discretion. Any approved assignee of Consultant's interest in this Agreement for any Services shall execute a written acknowledgement in a form satisfactory to Thornton expressly agreeing to be bound by all of the terms of this Agreement. No assignment shall relieve Consultant of primary liability under this Agreement. In this regard, Consultant understands that the performance of the Scope of Services is considered personal services under this Agreement.
- J. <u>General Warranty</u>. Consultant will faithfully perform the Services required under this Agreement in accordance with standards of care, skill, training, diligence, and judgment provided by competent professionals who perform services of a similar nature as described in this Agreement.
- K. **No Waiver of Rights.** No assent, expressed or implied, to any breach of any one (1) or more of the terms and conditions of this Agreement shall be deemed to be or taken to be by Thornton a waiver of any subsequent breach of any such terms and conditions.
- L. <u>Inspection of Records.</u> In connection with the Services performed hereunder, Thornton and any of its duly authorized representatives shall have access to all of Consultant's and Subconsultant's books, documents, papers, and any other records of Consultant and Subconsultants that relate to the Services. Consultant further agrees that such records shall contain information concerning the personnel who performed the Services, the specific tasks they performed and the

hours they worked. Consultant shall retain these records for three (3) years after termination of this Agreement.

- M. <u>Conflict of Interest.</u> Consultant agrees that it and its subsidiaries, affiliates, Subconsultants, principals, or employees shall not engage in any transaction, activity, or conduct which would result in a conflict of interest. Consultant represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities, or conduct that would affect the judgment, actions, or Services of Consultant by placing Consultant's own interests, or the interest of any party with whom Consultant has a contractual arrangement, in conflict with those of Thornton. Thornton, in its sole discretion, will determine the existence of a conflict of interest and may terminate this Agreement in the event such a conflict. Consultant shall have twenty (20) Calendar Days after the notice is received to eliminate or cure the conflict of interest in a manner acceptable to Thornton.
- N. <u>Coordination of Services</u>. Consultant shall fully coordinate its Services with other consultants, contractors or other entities performing services on the Project that interfaces with or is affected in any way by Consultant's Services, and with any interested Thornton or other governmental agencies.
- O. <u>Non-Discrimination.</u> Consultant, its agents, employees, contractors, and Subconsultants shall not discriminate on the basis of race, color, creed, national origin, ancestry, age, gender, religion, or mental or physical disability in any policy or practice.
- P. <u>Advertising and Public Disclosures</u>. Consultant shall not include any reference to this Agreement or to the Services performed hereunder in any of its advertising or public relations materials without first obtaining the written approval from Thornton. Any oral presentation or written materials related to Consultant's Services shall include only presentation materials, Work Product, designs, renderings, and technical data that have been accepted by Thornton. Thornton shall be notified in advance of the date and time of any such presentations. Nothing herein, however, shall preclude the transmittal of any information to officials of Thornton, including without limitation, the Mayor or member or members of City Council.
- Q. <u>Other Project Work</u>. Consultant and its subsidiaries and affiliates shall not bid upon or otherwise attempt to perform any other work associated with this Project. Consultant shall require in its contracts with its Subconsultants that they and their subsidiaries or affiliates shall not bid upon or otherwise attempt to perform any work associated with this Project, other than the Services described in their written agreements, unless specifically approved in writing by Thornton.

- R. <u>**Time is of the Essence.</u>** The Parties agree that in the performance of the terms and requirements of this Agreement by Consultant that time is of the essence.</u>
- S. <u>Inurement</u>. The rights and obligations of the Parties set forth herein shall inure to the benefit of and be binding upon the Parties and their respective successors and assigns permitted under this Agreement.
- T. <u>Headings</u>. The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.
- U. <u>Joint Venture</u>. If Consultant is a Joint Venture, participants shall be jointly and severally liable to Thornton for the performance of all duties and obligations of Consultant set forth in this Agreement.
- V. <u>Taxes and Licenses</u>. Consultant shall promptly pay, when they are due, all taxes, excises, license fees, and permit fees of whatever nature applicable to the Services, and shall take out and keep current all required municipal, county, state, or federal licenses required to perform the Services. Consultant shall furnish Thornton, upon request, duplicate receipts or other satisfactory evidence showing or certifying to the proper payment of all required licenses and taxes. Consultant shall promptly pay, when due, all bills, debts, and obligations it incurs performing the Services, and will allow no lien, mortgage, judgment, or execution to be filed against land, facilities, or improvements owned by Thornton.
- W. <u>Severability</u>. In the event any of the provisions, or applications thereof, of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity and enforceability of the remaining provisions, or applications thereof, shall not be affected.
- X. **No Third Party Beneficiaries.** The enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement, shall be strictly reserved to Thornton and Consultant and nothing contained in this Agreement shall give or allow any such claim or right of action by any other or third person on such Agreement. It is the express intention of Thornton and Consultant that Subconsultants and any other persons other than Thornton or Consultant receiving any benefits from this Agreement shall be deemed to be incidental, and not intended, beneficiaries only.
- Y. <u>Electronic Signatures and Electronic Records</u>. The Parties consent to the use of electronic signatures. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically by the Parties in the manner specified by any applicable City regulation, rule, and/or ordinance. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy

of a document bearing an electronic signature, on the grounds that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

Z. Entire Agreement. The Parties acknowledge and agree that the provisions contained herein constitute the entire Agreement and that all representations made by any officer, agent, or employee of the respective Parties unless included herein are null and void and of no effect. No alterations, amendments, changes, or modifications to this Agreement, except those that are expressly reserved herein, shall be valid unless they are contained in an instrument, which is executed by the Parties with the same formality as this Agreement.

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Page 17 of 64

This Agreement is expressly subject to and will not become effective or binding on Thornton until it is fully approved and executed by Thornton.

APPROVED AS TO LEGAL FORM: Tami Yellico, City Attorney	CITY OF THORNTON, COLORADO:
By: Michael J Hickman Senior Assistant City Attorney	Kimberly Newhart Finance Director
ATTEST:	CITY OF THORNTON, COLORADO:
Kristen N. Rosenbaum, City Clerk	Sean Saddler, PE Support Services Director
ATTEST FOR FIRM SIGNATURE:	TBD:

(If corporation)	IBD:
Signature	Signature
Print Name	Print Name
Title	Title

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Page 19 of 64

EXHIBIT A

CONSULTANT'S GENERAL SCOPE OF SERVICES

I. GENERAL DESCRIPTION

Consultant shall provide the Services in this Scope of Services for all architectural and engineering ("A/E") services necessary for the creation and completion of construction documents ("Construction Documents") for the Thornton Fire Station No. 8 ("Station"). Consultant shall provide the architectural, civil, structural, mechanical, electrical, technology, plumbing, structural plans, platting process and annexation documents, landscaping, irrigation and geotechnical report to provide all the necessary information required by the authorities having jurisdiction ("AHJs") to issue permits and required by the City of Thornton ("Thornton") to maintain compatible systems. These new plans are to conform to the unique properties of the Project site located between Holly Street and Monaco Street at East 153rd Avenue in Brighton, Colorado, Adams County Parcel numbers 0157108001001 & 157108000010 (the "Project Site"). Consultant shall conduct their own site investigation by contracting with a geotechnical engineering firm to perform soils testing and produce a geotechnical report for the Station. Consultant and Subconsultants shall interpret and comprehend the geotechnical report to assist in the creation of the drawings and determine foundation system. Consultant shall provide comprehensive specifications covering all details of the building components and systems as a document separate from plans in CSI Master Format. Final Construction Documents shall contain information compliant to International Building Code, National Electrical Code, International Fire Code, National Fire Protection Agency (NFPA), American with Disabilities Act (ADA), International Energy Conservation Code, National Institute for Occupational Safety and Health (NIOSH), Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), Thornton Building Department Building Code Amendments, City of Thornton Standards and Specifications for the Design and Construction of Public Improvement and all other applicable local, state and federal codes and regulations required for obtaining all permits necessary for construction from AHJs.

Thornton requires specific components and systems within the drawings and specifications to provide continuity of operations, materials, spaces and systems preferred by Thornton. These specific requirements will necessitate the Consultant to conduct programming meetings and review Thornton documentation to thoroughly define and understand the specific requirements and provide for them within the Pre-Design and Preliminary Design deliverable packages and incorporated into the final Construction Documents. A document outlining some of Thornton's preferences will be made available to the awarded Consultant which shall be observed and included in the final design. The Consultant shall provide acceptance from Thornton Staff for any preferences submitted to the Consultant that cannot be accommodated. Consultant shall conduct interviews with Thornton's preferred systems providers and provide all coordination and design efforts necessary to accommodate the infrastructure and preparation for IT cabling, audio-visual, access control, security cameras and alarm, and building automation system.

Through the Consultant's plat services, Consultant shall fully assist Thornton with the processes to formally annex the property from Adams County. A title commitment shall be provided by Thornton however all other documentation and associated activities for an approved plat shall be provided by the Consultant. The Site will include a west parcel for acquisition by another entity and an east parcel with a central tract for an existing oil well. The Station shall be located on the east-central portion of the east parcel for the build-out of Monaco Pkwy. The Station shall be oriented to accommodate future City facilities on the west side of the east parcel. See Figure 1 for general location of Station on the Project Site.



Figure 1: General Location of Thornton Fire Station No. 8

The design for the Station shall include 2 apparatus bays with a training wall and negative air-pressure vestibule entries. Support rooms shall include a work room, bunker gear room, EMS storage room and decontamination ("decon") room. The apparatus bays shall include drive-through bays as an add-alternate. A mezzanine shall be positioned over the support rooms with roof access, mechanical room(s) and proximal training wall. The house side of the Station shall have four (4) bunk rooms with two (2) additional bunk rooms as add alternates, a crew office captain/lieutenants' office, fitness room, kitchen with exterior patio access, day room, dining room, storage closets, IT room, laundry and two (2) full restrooms. The plan shall include an additional full bath, with dual entries from living and apparatus bay and a half bath, both as add alternates. See Table 1 for room square footage minimum and maximum requirements.

Section	Room Identification	Minimum	Maximum
Detail		Square	Square
Contami	nated / Red & Transition / Yellow Zones		
2.1	Apparatus Bays, x2	2400	2460
2.2	Bunker Gear Room	280	290
2.3	Decon Room	125	140
2.4	Work Room	260	270
2.5	EMS Storage Room	40	50
2.6	Vestibules, x2	70	90
2.7	Mezzanine	800	825
2,8	Full Bath, dual entry (add alternate)	160	180
Clean / G	Green Zones		
3.1	Crew Office	250	270
3.2	Captain/Lieutenants' Office	150	160
3.3	Full Restroom, x2	160	180
3.3a	Half Bath (add alternate)	80	90
3.4	Kitchen	340	350
3.5	Day Room	390	410
3.6	Dining Room	250	260
3.7	IT Room	60	70
3.8	Laundry	110	120
3.9	Bunk Rooms, x4	460	480
3.9a	Bunk Rooms, x2 (add alternate)	230	240
3.10	Fitness Room	900	910
3.11	Storage	30	35
3.12	Circulation	645	665
	Subtotal Base Square Footage	7,720	8,035
	Subtotal Add Alternate Square Footage	470	510
	Total Square Footage with Add Alternates	8,190	8,435

Table1: Station Room Identification

II. PROJECT DESCRIPTION

1. EXTERIOR AND SITE

Consultant shall clad the exterior of the Station to complement the existing neighborhood so as to not appear atypical to the existing community. Flat roof areas shall be specified as white, EPDM, 60 mil minimum with walking pads to all mechanical equipment and 90 mil shall be indicated as an add alternate. All roof surfaces shall be equipped with interior access ladders for ease in accessing differences in roof elevation or passage over parapets. Interior roof hatches shall be a minimum of 30" in width. Exterior wall, roof access ladders shall not be permitted. Pitched roofs, if designed, shall include rated anchors for tie-off. No skylights shall be permitted. Mechanical equipment shall be

screened, or concealed by parapet walls, with area between access doors and screen for foot traffic to pass by. Hose bib(s) and electrical receptacle(s) shall be placed in proximity to the mechanical unit(s) for maintenance use. All roof area drainage, including overflow drains, shall be piped to storm drain. No downspouts shall discharge within 10' of building perimeter nor discharge across or at pedestrian walkways. Interior stormwater pipe notes shall indicate requirements for Contractor to camera all lines prior to Construction Substantial Completion. Open downspouts are required with mesh screening to 8' above grade. North elevation downspouts and north-sloped roofs shall include heat tape.

Underground utilities in pipes or conduit shall incorporate swing joints, plumbing void system or other methods to accommodate possible movement due to soil expansion or settlement. New utility trenches shall have water cutoff seals to prevent conveyance of ground water toward the building foundation. On-site hydrant with concrete surround shall be located near drive for operational use by Fire personnel. Anti-syphon, hose bibs and electric receptacles in locked housings shall be centrally located on each exterior elevation of the Station. Two (2), 1 1/2" conduits shall be routed to existing parking locations for future installation of Electric Vehicle Charging Stations. Four (4) 4" conduits and two (2) associated pull-boxes, located West and East of Monaco Street, shall be designed to provide communication services the Station. Security Cameras shall be mounted at the exterior of the Station for internal monitoring at the Crew and Captain/Lieutenants' Offices. Exterior entrance access control keypads shall be coordinated and designed by the Consultant. Access control system shall be Hirsche Velocity system. Security camera and access control systems shall be provided by Surveillance 1, Inc.

New foundation walls at perimeter shall incorporate an impervious cover affixed to the foundation walls to prohibit water infiltration adjacent to the foundations. If Consultant recommends perimeter drains within the design, perimeter drains shall be daylighted and provide cleanouts at all directional changes with Contractor requirements to camera all lines prior to Construction Substantial Completion. All exterior paving adjacent to the Station entries shall be structural and mix-designs shall be specified to withstand deicing materials. Bollards, if utilized within the final design, shall be vehicular impact rated and non-lighted. Crawl spaces shall be equipped with humidity readers monitored by Building Automation System (BAS). BAS provider shall be Control Solutions, Inc.

To ensure positive drainage away from the building, grading at perimeter of building shall be at minimum 10 to 1 slope except at lead sidewalks approaching doorways. If landscaping beds are proposed, they shall conform to Naturally Thornton requirements, <u>https://www.thorntonco.gov/thornton-parks/Pages/naturally-thornton.aspx</u> and City of Thornton Standards and Specifications for the Design and Construction of Public Improvement. In-ground plantings and planter beds with associated irrigation shall be kept a minimum of 10' away from the perimeter of the structure. No in-ground up-lighting shall be permitted. Concrete surround at on-site hydrant. Thornton's water conservation staff members will review all landscaping for best water conservation practices and request modifications to assist in a low water consumption design.

Site shall include three flag poles with integral electrical wiring to top light operated by photocell. Center pole shall be taller than other poles to post the American flag. Architect to space flag poles to accommodate 3'x5' flags. Building monument shall be included in the design with typical signage for Thornton Fire District. No in-ground lighting shall be included in the final design, rather the luminaries used to illuminate the monument will need to be affixed to the monument itself.

Twelve (12) parking stalls shall be designed to accommodate shift changes at the Station. Outlets for vehicle use (diesel trucks) shall be planned at the perimeter of parking lot and be adequately spaced to allow ease of use and prevent damage. All light pedestals shall include an outlet at post. Light post bases shall be specified with mix design to withstand deicer. 6' minimum sidewalk from parking area to House entrance.

A patio proximal to the kitchen shall be included in the final design, sized to accommodate an eight-person table, 2 lounge chairs, grill and smoker. Gas line and electrical required for grill and connected to manual shut-off system. A patio cover shall be included as an add alternate. An 16'x16' concrete slab shall also be provided and accessed from the Fitness Room. All slabs at entries to Station shall be structural slabs at door swing.

Site design shall also include two similarly clad structures removed from the Station. Trash enclosure to be of block construction and have minimum, interior dimensions of 8'x7' with two pre-finished precision series, metal panel doors at longer side. A three-foot break in the wall shall be included for crew access without opening metal doors. The second enclosure shall house a generator sized to back-up the entire Station's systems in the event of an outage. Generator enclosure shall conform to Utility company requirements, as well as other AHJs and generator shall be Contractor Provided Contractor Installed. Consultant responsible for all design coordination of these two distal structures.

2. CONTAMINATED / RED & TRANSITION / YELLOW ZONES

The areas of the Station where carcinogens and toxins may readily contaminate air and surfaces will be considered the Contaminated or Red Zone. These areas shall be

comprised of the Apparatus Bays, Decontamination Room, Bunker Gear Room, Work Room and Mezzanine. The areas where fire personnel have addressed contaminates and hazards have been extensively minimized shall be known as the Transition or Yellow Zones and are comprised of the EMS storage, Vestibules, and dual-entry bathroom (add alternate). These zones shall create a buffer between the Red and Green Zones of the Station.

2.1. Apparatus Bays

The Station shall require two (2) apparatus bays of equal size and overall construction. Design shall include an add-alternate within the design for these bays to be "drive-through" bays with motorized, overhead (OH) doors on two sides enabling the apparatus to enter and exit without backing up. The Apparatus Bays shall not face north nor shall it be subject to shade allowing for snow and ice buildup. OH door operators shall be equipped with extenders at both tracks of each OH door to accommodate the height of apparatus bumpers. Fire personnel shall be able to manually open the OH doors in the event of power outage or motor failure. All design of OH door opening shall include indicator lights at each side of the OH door opening, programmed to indicate door void of opening to maneuver the apparatus. The bays shall measure, at a minimum, 80' deep and 20' wide. The design shall also include an operator extender which will extend the frequency of the OH door operators, allowing an OH door to initiate opening at a further distance from the Station. A training wall shall be incorporated into the design of the Apparatus Bays with sufficient height, anchors, and break-away openings to perform typical fire drill procedures, including technical rescue training. No mechanical, electrical or plumbing systems shall be located on the training wall. Apparatus bays shall include full-length trench drains, parallel and centrally located in the floor of each Apparatus bay with a prominent, positive slope, extending to the perimeter of the engine truck, to promote drainage. Steps shall be taken by the Consultant to ensure the concrete in Apparatus Bays shall be delivered to the Owner, aesthetically appealing, functional and damage free. No center, roof support shall be permitted between Apparatus Bays. The roof shall clear-span both Apparatus Bays. First-In Fire Alerting system shall be designed and installed by Low Voltage Incorporated (LVI) and incorporated into the Consultants plans and specifications. Consultant shall coordinate all design information with LVI. All Apparatus Bays shall be equipped with a building exhaust system and Plymovent vehicle exhaust removal system by Complete Air Systems. Consultant shall coordinate all design information with Complete Air Systems. Dropped from the ceiling, over-head, compressed air and electrical connections suitable for regular operations and apparatus (medic requires specialty plug) charging shall be provided within the design. Owner requires a two hose bibs at the Apparatus Bays: one shall be located between the apparatus OH doors with a 1 ¹/₂" NH fitting and a

second opposite the first. Two (2) monitors are required at the OH doors for firealerting display. Owner prefers clerestory windows in addition to LED lighting to allow for natural light within the Apparatus Bays during the day. Consultant shall allow wall space for a 9'x6' engineer's map within the Apparatus Bays. A charging station shall be incorporated into the design within the perimeter of the Apparatus Bays to accommodate various types of batteries for operations. The fire waterline shall enter the Station within the Apparatus Bays and be readily accessible for training Fire personnel. Lighting within the Apparatus Bays shall be dimmable or photocell operated during the day and red night lighting compatible with alerting system with timer for night operations. Consultant shall design entry space between the living area and Apparatus Bay with airlock entryway, or vestibule, to assist in preventing air infiltration and conditioned air loss. DB shall give special attention to mitigate the air pollution at living guarters and other "clean" areas adjacent to the Apparatus Bays. Secured mechanical rooms and closets shall be located on the mezzanine for mechanical, electrical and plumbing systems and large enough to accommodate a small table and shelves for use by Building Maintenance staff.

- Walls: Block to roof deck with internal block wall for training purposes. Training Wall to include a minimum of two (2) training window openings and wall anchors above windows, both sides. No building systems nor fixtures shall be included at training wall surfaces.
- Ceiling: Exposed metal joist and deck, primed and painted. All systems and building components to be designed for maximum clearance within apparatus bays. Ceiling to be clear span with no posting at center of Apparatus Bays.
- Floor: Finished concrete sloped to central trench drain at each Apparatus Bay with 4", waterborne traffic line paint (per AASHTO MP 24) for guidance in apparatus entry/exit. Floor adjacent to training wall shall include grooved finish for ladder placement during training. Concrete at Apparatus Bay shall be considered a finished floor and documented within final construction documents to ensure an unblemished finish by the Contractor.
- Stairs/Guardrail: Metal grate stairs shall be provided within the design to access the mezzanine including metal handrail continuous to guardrail at mezzanine floor. Guardrail shall be hinged for open access at overhead beam location for removal when utilizing hoist to transport large loads.
- Openings: Aluminum storefront windows.

36" minimum for all man doors.

Hollow metal frame and metal doors for all yellow and red zones with;

Full glass at Vestibules;

Page 26 of 64

	No glass at EMS Storage; and Quarter glass at all other support rooms. Two interior access doors at vestibule from House. One exterior man door for access to Apparatus Bays Two (2), 14'x14" minimum, overhead (OH) doors for Vehicle Entry mounted at maximum height to provide maximum clearance for apparatus with two glass panels. OH door opener to be Chamberlain or Liftmaster and include raised sensors to detect bumper height of apparatus. OH door opener to include frequency extender to ensure operation from Station further approach. Apparatus Bay to be designed accessing natural light, eliminating need for LED lighting during days when natural light is adequate. <i>Add-Alternate: Additional OH doors to accommodate Drive</i>
Specialties:	<i>Thru Bays, same requirements as above.</i> Room ID signage without sleeve. Backplates required if
Millwork:	mounted on glass. Stainless steel, built-in shelves for various types of battery storage and charging.
Alerting System:	Framed engineers' map, approximate size is 9'x6' First-In by WestNet including audio and visual alerting components.
Electrical/LV:	 Linear lighting at sides and center of Apparatus Bays. Red night lighting compatible with alerting system with timer for night operations. Hose reel receptacles at sides and center of Apparatus Bays for maintenance. Electrical plugs at sides and center of Apparatus Bays for medic unit and apparatus connection with break-away disconnect. Indicator lights programmed to door height for apparatus secure passage. Two (2) WAPs mounted 10' AFF at block wall surface. Electrical compatible with various types of battery storage and charging. Electrical and Low Voltage to Accommodate all Owner
Plumbing/HVAC:	 Provided FF&E. Consultant to Coordinate. Accessible fire riser for training use. Compressed air at sides and center of Apparatus Bays. Radiant tube heaters at sides and center of Apparatus Bays. Destratification fans mounted below radiate tube heaters. Plymovent Exhaust system for vehicle exhaust. 1 1/2" hose bib between overhead doors with NK fitting. Standard hose bib opposite OH doors.

Page 27 of 64

Carbon Monoxide and Nitrogen Dioxide controller to building exhaust system.

2.2. Bunker Gear Room

Walls: Ceiling: Floor: Openings:	Block to Deck Exposed metal joist and deck, primed and painted. Finished concrete sloped to central floor drain(s). 36" minimum hollow metal door and frame with quarter light glazing.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Electrical/LV:	LED light fixtures with vacancy sensor switch. Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
HVAC:	Exhaust fan with CO/Nox controller; Duct to Exterior for Gear Dryer
CPCI:	20 Jumbo, wall mounted, gear lockers with two shelves per unit and integrated electrical raceway.
OPCI:	Gear Dryer: FH6G Express 6

2.3. Decontamination ("Decon") Room

Walls:	Block to Deck.
Ceiling:	Exposed metal joist and deck, primed and painted.
Floor:	Finished concrete sloped to central floor drain. 12" high concrete pedestal for extractor.
Openings:	36" minimum hollow metal door and frame with quarter light glazing.
Specialties:	Bobrick B-239, 36" Utility Shelf with Hooks and Mop/Broom Holders.
	Room ID signage without sleeve. Backplates required if mounted on glass.
Electrical/LV:	LED light fixtures with vacancy sensor switch.
	Electrical to Accommodate all Owner Provided FF&E.
	Consultant to Coordinate.
HVAC/Plumbing:	Stainless Steel, deep, double sink with dual sideboards, hand and foot operated valves for pot-filler style faucet. Eyewash station.
	3'x3' mop sink with wall service faucet.
	Large capacity trench drain compatible with Extractor.
OPCI:	Extractor: Unimac 30lb Capacity Hard Mount Washer (Model No. UN-UCT030QN0GXU70B000) with 8" steel washer base frame.
	Commercial Washer and Dryer.

Page 28 of 64

2.4. Work Room

Walls: Ceiling: Floor: Openings:	Block to deck Exposed metal joist and deck, primed and painted. Finished concrete sloped to central floor drain. 36" minimum hollow metal door and frame with quarter light glazing.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Millwork:	Stainless steel millwork (uppers & lowers) with stainless steel countertop, roll out shelves at lower cabinets, integrated sink and undercabinet lighting. Minimum 12 linear feet.
Electrical/LV:	LED light fixtures with vacancy sensor switch. Quadplex receptacles at mechanical rooms. Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
HVAC/Plumbing:	Deep basin sink at millwork integrated into countertop. Exhaust fan with CO/Nox controller; Plumbing for air lines, retractable reel and air hose regulator
CPCI:	to Work Room from mezzanine for compressor. Ingersoll Rand compressor with drain, model no. 2475N5-V, 80 GAL, 5 HP 480 V / 3 PHASE

2.5. EMS Storage Room

Walls:	Block to deck. Sealed at ceiling surface above.
Ceiling:	Exposed metal joist and deck, primed and painted.
Floor:	Finished concrete sloped to central floor drain.
Openings:	36" minimum hollow metal door and frame with no glazing.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Millwork:	40 LF minimum, 18" deep shelving for medical supply storage.

2.6. Vestibules

Walls:	Drywall over metal Frame or approved other.
Ceiling:	Drywall.
Floor:	Polished concrete.
Openings:	(2) 36" minimum hollow metal door and frame full light glazing.

2.7. Mezzanine and Mechanical Rooms

Walls:	Block to roof deck with intermittent block wall for training purposes including a minimum of two (2) training window openings and wall anchors above windows, both sides. No systems nor fixtures shall be included at training wall surfaces.
	Metal Framed or block to roof deck at Mechanical Rooms. Plywood/OSB from floor to finished ceiling or bottom of deck.
Ceiling:	Exposed metal joist and deck, primed and painted with hoist beam and hoist to supply mezzanine. Ceiling to include minimum 30" wide (minimum) roof hatch
Floor:	with safety post at mezzanine for maintenance access. Finished concrete with housekeeping pads and sloped to floor drain(s) at Mechanical Room(s).
Stairs/Guardrail:	Metal grate stairs shall be provided within the design to access the mezzanine including metal handrail continuous to guardrail at mezzanine floor. Guardrail shall be hinged for open access at overhead beam location for removal when utilizing hoist to transport large loads.
Openings:	 Hollow metal, dual, 36" minimum (6' total opening) for all man doors to mechanical rooms or closets. (2) break-away training windows at training wall, framed in 3/8" galvanized metal plate. 30" wide (minimum) roof hatch with safety post
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Conveying Systems:	Provide 2 Ton Capacity Electric Chain Hoist With Trolley, Single Speed Hoist, Harrington Model (N)Erm020I-L/S, Or Equal.
Electrical/LV:	LED light fixtures with vacancy sensor switch. Quadplex, convenience receptacles and data port at all mechanical rooms.
HVAC/Plumbing:	Electrical to Accommodate all Owner Provided FF&E. Plumbing for air lines to Work Room from mezzanine for operation of compressor.
CPCI:	Floor drain at Mechanical Room(s). Ingersoll Rand compressor with drain, model no. 2475N5-V, 80 GAL, 5 HP 480 V / 3 PHASE
OPOI:	72"x30 Table at Mechanical Room(s). (4) 48"x24"x72" Shelves.

2.8. Full Restroom

As an Add Alternate, one full restroom shall allow for dual entry from both the Apparatus Bay and the House.

Minimum Size: Walls:	160 SF; Moisture-Resistant Coated Block to roof deck or FRP over Drywall over Metal Framing. Shower Walls to be Stainless Steel to Accommodate Decon Operations.
Ceiling:	Painted drywall.
Floor:	Polished Concrete, Sloped to Shower Floor Drain.
Openings:	(1) hollow metal door and frame with no glazing – Red Zone Opening.
	(1) Solid Wood Door with Hollow Metal Frame – Green Zone Opening.
Specialties:	(2) Room ID signage without sleeve. Backplates required if mounted on glass.
	Bobrick Trash Receptacle. Refer to Preferences Document. Paper Towel, Toilet Paper, Seat Cover Dispensers. Refer to Preferences Document.
Millwork:	Quartz Countertop w/ Plastic Laminate Cabinetry at Vanity. Plastic Laminate Storage Cabinetry above Toilet.
Electrical/LV:	LED Luminaries with Vacancy Sensor Switch. Exhaust Fan with Maximum CFM and minimal Sone Rating.
HVAC/Plumbing:	Zurn or Sloan Automatic Flush Valves at Toto or Zurn Toilets. Delta or Other Faucets.
OPCI:	Floor Drain Sink and Shower Soap Dispensers. Refer to Preference Document.

3. CLEAN / GREEN ZONES

The House side of the Station shall be considered the Clean or Green Zone and all design efforts shall be made to keep this area free from contaminates.

3.1. Crew Office

The Crew Office shall be equipped with a solid surface countertop with abovecounter shelving and base cabinets utilized for general storage and four workstations for crews during shifts. Countertop and readily-accessible electrical shall be able to accommodate radio storage, including raceways for antenna at roof. Additional floor space is necessary for a full size copier/printer and wall space for two 55" monitors for the Westnet First-In fire alerting system display and television.

Minimum Size:	250 SF;
Walls:	Painted Drywall over Metal Frame to Deck. Painted Surface
	to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling:	Painted drywall or Acoustical Ceiling Tile.

Page 31 of 64

Floor:	Polished concrete. Aluminum storefront windows.
Openings:	Specialties: Room ID signage without sleeve. Backplates required if mounted on glass.
Furnishings:	Window Coverings with 5% Openness Factor Shade.
Millwork:	Quartz Countertop w/ Plastic Laminate Cabinetry and Shelving.
Electrical/LV:	First-In Alerting System Components. Consultant to Coordinate.
	Conduit and electrical to roof for radio communications. Consultant to Coordinate.
	2'x2' LED Flat Panel Luminaries with Vacancy Sensor Switch.
	Minimum of (5) Below-Counter, Quadplex Receptacles and
	Data ports at desk wall(s). Minimum of (5) ,Above-Counter Duplex Receptacles with integrated micro-USB.
	Single Duplex Receptacle and Data Port dedicated for floor copier/printer/scanner.
	(2) Single Duplex Receptacles and Data Ports dedicated for monitors.
	(1) Above-Counter Quadplex, Receptacle dedicated for fire radio charging and storage.
	Electric, fiber and coax for two (2) 55" monitors.
	Under-shelf lighting with Dimming Capabilities. WAPs mounted at ceiling as necessary.
	Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
OPOI:	Mid-size, floor copier/scanner. (4) Desktop computers.
	(2) .55" Monitors for Media and Security Cameras Motorola Fire Radios and Charging Unit.

3.2. Captain/Lieutenants' Office

A single office shall be provided for use by senior crew personnel during shifts. The office shall include a u-shaped desk with base cabinetry, above-counter shelving and a solid surface countertop. The desk shall be large enough to accommodate separate operational materials for three shifts.

Minimum Size:	150 SF;
Walls:	Painted Drywall over Metal Frame to Deck. Painted Surface to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling:	Painted drywall or Acoustical Ceiling Tile.
Floor:	Polished concrete.
Openings:	Aluminum storefront windows. Solid Wood Door with Hollow Metal Frame.

Page 32 of 64

Specialties:	Room ID signage with sleeve. Backplates required if mounted on glass.
Furnishings: Millwork:	Window Coverings with 5% Openness Factor Shade. Quartz Countertop w/ Lower Plastic Laminate Cabinetry with Locking Hardware and Shelving Above Countertop.
Electrical/LV:	First-In Alerting System Components. Consultant to Coordinate. 2'x2' LED Flat Panel Luminaries with Vacancy Sensor
	Switch. Minimum of (5) Below-Counter, Quadplex Receptacles and Data ports at desk wall(s).
	Minimum of (3) ,Above-Counter Duplex Receptacles with integrated micro-USB.
	Single Duplex Receptacle and Data Port dedicated for desktop copier/printer/scanner.
	(2) Single Duplex Receptacles and Data Ports dedicated for monitors.
	(1) Above-Counter Quadplex, Receptacle dedicated for fire radio charging and storage.
	Electric, fiber and coax for two (2) 55" monitors. Under-Shelf Llighting with Dimming Capabilities.
	WAPs mounted at ceiling as necessary. Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
OPOI:	Mid-size, desktop copier/scanner. (3) Desktop computers. (2) .55" Monitors for Media and Security Cameras Motorola Fire Radios and Charging Unit. Task and Guest Chairs.

3.3. Full Restroom

Two full restrooms shall include a toilet, vanity cabinet with solid surface countertop and integrated, undermount sink and roman shower, deep enough to all for doorless entry.

Minimum Size:	160 SF;
Walls:	Large Scale Tile with Dark Epoxy Grout over Drywall over Metal Framing to Deck.
Ceiling:	Painted drywall.
Floor:	Polished concrete.
Openings:	Solid Wood Door with Hollow Metal Frame.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
	Four (4), Bobrick, Clothing Hooks: (3) at Wall Surface, (1)
	at Shower. Refer to Preferences Document.
	Bobrick Trash Receptacle. Refer to Preferences Document.
	Page 33 of 64

	Paper Towel, Toilet Paper, Seat Cover Dispensers. Refer
	to Preferences Document.
Millwork:	Quartz Countertop w/ Plastic Laminate Cabinetry at Vanity.
	Plastic Laminate Storage Cabinetry above Toilet.
Electrical/LV:	LED Luminaries with Vacancy Sensor Switch.
	Exhaust Fan with Maximum CFM and minimal Sone Rating.
HVAC/Plumbing:	Zurn or Sloan Automatic Flush Valves at Toto or Zurn
C C	Toilets.
	Delta or Other Faucets.
	Trench Drains at Shower Entry.
	Shower Faucet to be 80" Minimum.
OPOI:	Sink and Shower Soap Dispensers. Refer to Preference
	Document.

3.3a Half Bath

A Half Bath shall be provided as an Add Alternate with toilet, wet urinal and solid surface countertop and integrated, undermount sink.

80 SF; Large Scale Tile with Dark Epoxy Grout over Drywall over Metal Framing to Deck.
Painted drywall.
Polished concrete.
Solid Wood Door with Hollow Metal Frame.
Room ID signage without sleeve. Backplates required if mounted on glass.
Bobrick Trash Receptacle. Refer to Preferences Document.
Paper Towel, Toilet Paper, Seat Cover Dispensers. Refer
to Preferences Document.
Quartz Countertop Vanity.
Plastic Laminate Storage Cabinetry above Toilet.
LED Luminaries with Vacancy Sensor Switch.
Exhaust Fan with Maximum CFM and minimal Sone Rating.
Zurn or Sloan Automatic Flush Valves at Toto or Zurn
Toilets.
Delta or Other Faucets.
Sink and Shower Soap Dispensers. Refer to Preference Document.

3.4. Kitchen

A Kitchen shall be provided large enough to accommodate 3 shifts, including two (2) each microwaves and dishwashers and three (3) each pantry cabinets and refrigerators, plastic-laminate base and upper cabinetry with stainless steel countertops throughout. The large gas range shall include manual shut-off for both

gas and electric. Design to accommodate a large kitchen island with seating at non-kitchen side.

Minimum Size: Walls:	340 SF; Painted Drywall over Metal Frame to Deck. Painted Surface to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling:	Painted drywall or acoustical ceiling tile.
Floor:	Polished concrete.
Openings:	Aluminum storefront windows.
Finishes:	Full Height Tile Backsplash.
Furnishings:	Window Coverings with 5% Openness Factor Shade
Millwork:	Stainless Steel Countertop w/ Base and Upper Plastic- Laminate Cabinetry. Cabinetry to include (3) 30" Pantry
	Cabinets for each Fire Shift. Height of Upper Cabinetry to Accommodate Commercial Coffee Maker.
Electrical/LV:	First-In Alerting System Components. Consultant to
	Coordinate.
	2'x2' LED Luminaries with Dimming Capabilities.
	Under-cabinet lighting with Dimming Capabilities.
	Manual Ignitor Shut Off at Range.
	Electrical to Accommodate all Owner Provided FF&E.
	Consultant to Coordinate.
HVAC/Plumbing:	2-Bowl, Deep-Basin, Stainless Steel Sink Equipped with 3/4 HP Disposal.
	Delta or Other Faucets.
	Manual Gas Shut Off at Range.
	Water line for Ice Makers at Refrigerators and Commercial
	Coffee Maker.
	Plumbing to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
CPCI:	Stainless Steel Hood, or similar.
OPCI:	(1) Blue Star Range, RNB484GV2 with Casters or Similar.
01 01.	(2) Dishwashers.
	(2) Microwaves
	(3) Refrigerators.
OPOI:	3-Burner, Commercial Coffee Maker.
-	,

3.5. Day Room

A Day Room shall be designed to provide an area of respite between emergency calls. Day Room shall be large enough to accommodate six (6) recliners and an 82" television connected to audio visual devices (sound system, PC, Camera, etc.). Millwork to be provided below television to accommodate AV equipment. Day Room to be adjacent to Kitchen.

Minimum Size: 390 SF;

Walls:	Painted Drywall over Metal Frame to Deck. Painted Surface to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling:	Painted drywall or acoustical ceiling tile.
Floor:	Polished concrete.
Openings:	Aluminum storefront windows.
Furnishings:	Window Coverings with 5% Openness Factor Shade
Millwork:	12LF of Quartz Countertop w/ Plastic Laminate Cabinetry
	and Shelving below Television to Accommodate AV
	Equipment and personal computer.
Electrical/LV:	First-In Alerting System Components. Consultant to
	Coordinate.
	2'x2' LED Luminaries with Dimming Capabilities.
	(5) Floor Box Receptacles with Mini USB (between
	recliners).
	WAPs mounted at ceiling as necessary.
	Fiber, Cable and Electrical to Accommodate all Owner
0.5.01	Provided FF&E. Consultant to Coordinate.
OPOI:	(6) Dream Seat Recliners.
	(5) Side Tables (between recliners).
	Audio Visual Equipment.
	Personal computer.

3.6. Dining Room

3.7.

Dining Room to be large enough to accommodate a 4'-6''x10' Dining Table and (8) Chairs. .Kitchen to be adjacent to Kitchen.

Minimum Size: Walls:	250 SF Painted Drywall over Metal Frame to Deck. Painted Surface to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling: Floor: Openings:	Painted drywall or Acoustical Ceiling Tile. Polished concrete. Aluminum storefront windows.
Electrical/LV:	First-In Alerting System Components. Consultant to Coordinate.
OPOI:	LED Luminaries with Dimming Capabilities. (1) 4'-6"x10' Dining Table. (8) Chairs
IT Room	
Minimum Size:	60 SF
Walls:	Plywood/OSB from Floor to 8' Height over Full-Height
Ceiling: Floor: Openings:	Drywall Open to Structure. Polished Concrete. Solid Wood Door with Hollow Metal Frame. Card reader for entry. Consultant to Coordinate Hardware.

Page 36 of 64

Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Plumbing: Electrical/LV:	None. Plumbing runs to be void of this room; High bay LED light fixtures with Vacancy Sensor Switch. Quadplex Receptacles at all walls and suspended at top of rack. Consultant to Coordinate. Data for card reader entry; Raceways for radio antenna at roof. Consultant to coordinate. Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
HVAC/Plumbing:	Redundant ductless split system. Plumbing runs to be void of this room.
CPCI:	(2) 2' server racks centrally located, perpendicular to wall.Patch Cables.
OPOI:	Network Equipment (Servers, Routers, Switches, UPS, etc.)

3.8. Laundry Room

Laundry to accommodate 8 LF of plastic-laminate base and upper cabinetry with solid-surface countertop and (1) 24" wide utility cabinet, 3x3 mop sink and (2) stackable, full-size washer and dryers.

Minimum Size: Walls: Ceiling: Floor: Openings:	110 SF Smooth FRP over Drywall over Metal Framing. Painted drywall or acoustical ceiling tile. Polished Concrete. Solid Wood Door with Hollow Metal Frame.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Millwork:	Stainless Steel Countertop w/ Plastic Laminate Cabinetry and Shelving. Cabinetry to include (3) 30" Pantry Cabinets for each Shift. Height of Millwork Cabinetry to Accommodate Commercial Coffee Maker.
Electrical/LV:	LED Luminaries with Occupancy Sensor. Electrical to Accommodate all Owner Provided FF&E. Consultant to Coordinate.
HVAC/Plumbing:	Faucets. Terrazzo Mop Sink w/ Delta or Other, Wall-Mounted Service Faucet.
OPCI:	Plumbing to Accommodate all Owner Provided FF&E.Consultant to Coordinate.(2) Large Capacity, Stackable Washer and Dryers with Stacking Kits.

3.9. Bunk Rooms

Bunk Rooms shall be provided with enough storage to accommodate three personnel shifts, including plastic laminate, platform bed with three (3) drawers and four (4) plastic-laminate wardrobe closets, the fourth being utilized by substitute fire personnel. A solid surface desk shall be provided with an overhead cabinet for storage with undercabinet lighting. Two other Bunk Rooms shall be provided as an add alternate to the design.

Minimum Size: Walls:	115 SF; Painted Drywall over RC Chanel over Metal Framing with Batt Insulation to Roof Deck.
Ceiling: Floor:	Painted Drywall. Polished Concrete.
Openings:	Operable Windows. Solid Wood Door with Hollow Metal Frame.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Furnishings:	Dual Window Coverings with 5% Openness Factor Shade and Black-Out Shade.
Millwork:	Quartz Countertop w/ Metal Supports. 24"x12"x24 Plastic-Laminate Cabinet above Desk 24"x24"x 96" Plastic-Laminate Wardrobe Cabinets. with Locking Hardware. (3) Lock Cylinders Identical to Storage Drawers. Plastic-Laminate Platform and Headboard to Accommodate Twin XL Mattress with Three (3) Storage Drawers and
Electrical/LV:	 Locking Hardware. Headboard to Include Quartz Top. First-In Alerting System Components. Consultant to Coordinate. (1) Above-Counter, Duplex Receptacle and Data Port at desk wall. One Bunk Room will require an Additional Data Port dedicated to Desk Phone. (1) Dedicated Duplex Receptacle, Coax, Data Connections for Television. LED Luminaries with Switch. Under-Cabinet Lighting with Switch. Reading Light at Headboard with Switch. Ceiling Fan with Dual Switches at Entry and Headboard.
OPOI:	Extra Long, Twin Mattress, (1) Task Chair.

3.9a Add Alternate Bunk Rooms, x2

Two bunk rooms shall be provided within the design as an add alternate. See 3.9 description.

3.10. Fitness Room

The Fitness Room shall be designed large enough to accommodate required physical fitness equipment. Overhead Door to be provided with adjacent, 16'x16', slab-on-grade concrete pad to allow outdoor workouts. Design efforts shall include noise mitigation emitting from Fitness Room use to adjacent rooms or throughout the House.

Minimum Size: Walls:	900 SF; Sealed Block Wall or Painted Drywall over RC Chanel over Metal Framing with Batt Insulation to Roof Deck.
Ceiling: Floor:	Exposed metal joist and deck, primed and painted. Athletic Flooring with Thornton Fire Department Maltese Cross. Slab isolation to mitigate sound reverberation throughout Station.
Openings:	Aluminum storefront windows. Solid Wood Door with Full Glazing and Hollow Metal Frame. 12' x 14' OH Door.
Specialties:	Room ID signage without sleeve. Backplates required if mounted on glass.
Furnishings: Millwork:	Window Coverings with 5% Openness Factor Shade 6 LF of Quartz Countertop w/ Plastic Laminate, Lower Cabinetry for Storage.
Electrical/LV:	 First-In Alerting System Components. Consultant to Coordinate. LED Luminaries with Occupancy Sensor. WAPs mounted at ceiling as necessary. Low Voltage and Electrical to Accommodate all Owner Provided FF&E and Audio-Visual Equipment. Consultant to Coordinate.
HVAC/Plumbing:	(4) Destratification Fans at Ceiling.(1) Elkay Drinking Fountain/Bottle Filler Combination Unit.
OPOI:	 Fitness Equipment, Including but Not Limited To: (1) Stair Stepper (1) Treadmill (1) Recumbent Bike (1) Cable Machine (1) Half Calf Machine (1) Power Cage (1) Leg Extension/Curl Machine (1) Squat Rack (1) Numbbells and Rack (1) Kettlebells and Rack (1) Bluetooth Connector and Sound System

3.11. Storage

Page 39 of 64

Minimum Size: Walls: Ceiling: Floor: Openings: Specialties: Millwork: Electrical/LV:	 110 SF; Painted Drywall over Metal Framing to Roof Deck. Painted Drywall or Open to Deck. Polished Concrete. Solid Wood Door with Hollow Metal Frame. Room ID signage without sleeve. Backplates required if mounted on glass. (5) 18" Depth, Adjustable Shelves. (1) Duplex Receptacle. LED Luminaries with Occupancy Sensor.
3.12. Circulation	
Minimum Size:	645 SF;
Walls:	Painted Drywall over Metal Frame to Deck. Painted Surface to Extend 6" above Acoustical Ceiling Tile Grid, if Applicable.
Ceiling:	Painted drywall or Acoustical Ceiling Tile.
Floor:	Polished Concrete.
Openings:	Aluminum Storefront Windows and Doors as Applicable.
Electrical/LV:	First-In Alerting System Components. Consultant to
	Coordinate.
	LED Luminaries as Necessary.
	WAPs mounted at ceiling as necessary. Electrical to Accommodate all Owner Provided FF&E.
	Consultant to Coordinate.
HVAC/Plumbing:	Plumbing to Accommodate all Owner Provided FF&E.
	Consultant to Coordinate.
OPCI:	Ice Machine, or Similar.
	Hand Sanitizer Dispensers throughout Station.

4. Building Equipment and Systems

Thornton standardizes specific equipment, systems, and products and the Consultant shall incorporate the standards into the design. The list of standardized equipment, building systems, and products shall include, but is not limited to, the following items. Through programming and needs assessment exercises with Thornton's staff, the Consultant shall determine if there are other standardized building systems and equipment requirements.

4.1. Site

- 4.1.1. (4) 4" Conduits to (2) pull boxes located in ROW at west and east side of Monaco Parkway
- 4.1.2. Mix designs to withstand deicing materials.
- 4.2. Openings

- 4.2.1. Door Hardware
 - 4.2.1.1. Best Locks 7 pin, G Keyway, Antimicrobial Finish, L-Privacy, N-Passage, D-Storeroom. CPOI. Consultant to Coordinate.
 - 4.2.1.2. ADA Access Panels Touchless;
 - 4.2.1.3. Coordinate hardware with Hirsche Velocity Access Control System. Consultant to Coordinate;
- 4.3. Specialties
 - 4.3.1. 32"x32" Bronze Dedication Plaque.
- 4.4. Plumbing
 - 4.4.1. Toilet fixtures Zurn or Toto, Automatic Flush, No Waterless Urinals;
 - 4.4.2. Faucets Delta;
 - 4.4.3. Bath/Locker Room Partitions and Benches Full-depth phenolic;
 - 4.4.4. Drinking Fountain/Bottle Filler Combination Unit;
 - 4.4.5. Exterior Hose Bibs within Keyed, Lock Box.
- 4.5. Electrical
 - 4.5.1. 480, 3 Phase;
 - 4.5.2. Lighting LED, Verbatim 2x2 flat panels or equivalent.
 - 4.5.3. Dimmable lighting throughout.
 - 4.5.4. (4) 4" conduits at site to Station for LV utility use.
 - 4.5.5. Secured Exterior Electrical Receptacles.
- 4.6. Plumbing/HVAC
 - 4.6.1. Carrier, High Efficiency RTU(s) with 5 degree set points throughout Station.
 - 4.6.2. IT Room to be redundant, ductless cooling system, set to cool to between sixty-eight (68) and seventy (70) degrees max, humidity forty-five percent (45%) to fifty-five percent (55%);
 - 4.6.3. BAS Honeywell Jace unit BacNet, Niagara interface tied through Supervisor AX system, preferred Subcontractor is Control Solutions, Inc.;
 - 4.6.4. VAV units to be labeled at visual surface and unit (grid or access panel)
 - 4.6.5. Isolation valves at each wet area identified by Thornton. Consultant to coordinate.
 - 4.6.6. Vehicle exhaust system to be coordinated with HVAC Subcontractor. Provider is Airpro.

- 4.6.7. Fire alerting system is First-In by Westnet. Provider is Low Voltage Incorporated.
- 4.7. Communications
 - 4.7.1. IT structured cable Systemax GigaSPEED Cat 6A Blue, Orange Cat 6A Systemax jacks, Systemax Cat 6A patch panels and cable management. Wall mount 2' height racks;
 - 4.7.2. Phones IP Phone system shall be Cisco 7945 or Cisco 7965;
 - 4.7.3. Data Raceways by Electrical Subcontractor, 2-Gang J-Box with Reducer;
 - 4.7.4. Cable trays throughout;
 - 4.7.5. American Datapath to be included in Competitive Bidding Process by Contractor.
 - 4.7.6. Antenna Raceways by Electrical Subcontractor. (1) at Crew Office and (1) at IT Room. Provider is BearCom Industries.
 - 4.7.7. (4) 4" conduits at site to Station for LV utility use.
- 4.8. Safety and Security
 - 4.8.1. Security VideoEdge Camera System;
 - 4.8.2. Fire alarm Edwards panels;
 - 4.8.3. BDA System, as necessary. CPCI. Consultant to coordinate testing and installation information in Construction Documents;
 - 4.8.4. Access Control Hirsch Prox Card Readers and Velocity panels, Exterior Scramble Pads for All Locations. Provider is Surveillance One.

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III. DESIGN REQUIREMENTS

1. GENERAL DESIGN REQUIREMENTS FOR PRE-DESIGN PHASE (PROGRAMMING AND SCHEMATIC DESIGN)

1.1 Consultant shall prepare within fifteen (15) Calendar Days of the Notice of Award or issuance of Purchase Order, a critical path design schedule ("Design Schedule") in accordance with the requirements herein. The Design Schedule shall show the activities of Thornton, Consultant, Subconsultants, and Thornton's third-party consultants, necessary to meet Thornton's design requirements. Consultant's Design Schedule shall represent activities as the number of days after PO issuance with Pre-Final deliverables being issued to the AHJs a maximum of three-hundred (300) Calendar Days after PO issuance.

All meetings identified in this Scope of Services shall be represented within Consultant's schedule, as well as the Pre-Design, Preliminary Design and Pre-Final deliverable package dates and associated deliverable review meetings. Design Schedule shall include forecasted milestones for the dates the first and second version of Construction Documents shall be submitted to the Thornton Building Department for permit review. The second version of Construction Documents shall be made available to the pre-qualified General Contractors (GCs) for bidding purposes and this bid set of Construction Documents shall be forecasted on the schedule as a milestone.

The Design Schedule shall be reviewed minimally monthly, with the level of detail for each update reflecting the information then available. If an update indicates a previously submitted Design Schedule will not be met, Consultant shall provide a corrective recovery plan of action to Thornton in writing. Time is of the essence and all efforts shall be made by the Consultant to successfully implement the Project Design Schedule with no variations. If no variations are requested by the Consultant, Thornton shall assume the latest Design Schedule is current and valid.

During all meetings, new issues, comments, closure of old issues, responsible party and associated dates shall be recorded, organized and electronically provided to Thornton as agenda items and meeting minutes for follow-up and closure by the Consultant. Accurate sign-in sheets shall accompany all meeting minutes noting attendees. Meeting minutes shall be routed to meeting attendees by Consultant within four (4) Calendar Days of the meeting.

1.2 Consultant shall facilitate a Project kick-off meeting with Thornton's staff for the Project. During the meeting, Consultant shall have prepared a detailed description of how the Project goals will be accomplished and a review of the Design Schedule.

1.3 Consultant shall review Thornton's Project requirement documentation and conduct data gathering to obtain information to understand the desired outcome of the Project and to develop the actions necessary to fulfill the requirements.

Programming meetings shall be facilitated by the Consultant, as necessary, with the available user groups within the City of Thornton, including but not limited to: operational user group, Building Maintenance, Community Services, Information Technology, Thornton Fire Department and any other Thornton departments. These meetings shall be facilitated by the Consultant to obtain needs from the various user groups, understand the functionality after construction, understand the interpretation of the codes governing construction of the Station and identify the specific requirements for components and systems within the Project. The Consultant shall facilitate as many user interviews during this task as they deem necessary for design deliverable packages. The Consultant shall document the requests of each user group in a Design Request Log and provide a status update to Thornton on each request within four (4) Calendar Days of the meeting. If a user's request cannot be accommodated within the Project, the Consultant shall present alternate solutions within the Project and facilitate a discussion with Thornton prior to formalizing any solution within the design.

1.4 Consultant and Subconsultants, as determined by the Consultant, shall meet at the Project Site and review the existing field conditions. Thornton's staff and other designated representatives may be present during this review. Consultant is responsible for documenting the existing conditions of the Project Site for use during the Project.

1.5 Consultant shall obtain utility information to accurately depict existing utility locations, depths and points. Consultant shall determine whether the level of accuracy provided is adequate to meet state laws related to the location of underground utilities (i.e. Senate Bill 18-167); if it is not, Consultant shall be responsible for establishing such accuracy through other appropriate means such as surveying and potholing.

1.6 Consultant shall provide necessary field surveys using Thornton's control points to identify existing features necessary to accurately complete the design of the Project. The survey shall be performed by a licensed surveyor registered to practice surveying in the State of Colorado. The survey shall show all features within a thirty-foot (30') minimum of the Project Site's proposed work area.

1.7 Consultant shall obtain necessary studies, such as a Geotechnical Investigation, Water Quality Investigation for Detention, etc. The Geotechnical Investigation and resulting report shall be based on a sufficient number of geotechnical borings or pits to determine soil properties and make recommendations on the design of the applicable elements including, but not limited to, pavement design, structure foundations, expansive soil detailing, retaining structures, pipe bedding, backfill, grading, compaction, and waterproofing if applicable. Thornton reserves the right to have a third-party consultant review the Geotechnical Report and related Construction Documents. 1.8 Consultant shall provide a traffic study if required by Thornton's Traffic Engineer to identify the traffic impact to vehicular and pedestrian operations and safety. Refer to City of Thornton Standards and Specifications for the Design and Construction of Public and Private Improvements for additional information.

1.9 Consultant shall plan and provide any required traffic control for the survey, testing, or design process for field activities, which interfere with vehicular, bicycle, or pedestrian traffic operations within existing roadways, sidewalks, trails, or parking areas. Traffic control operations will be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) as well as the American Traffic Safety Services Association's ATSSA Guide for Work Area Traffic Control. Consultant shall submit its traffic control plan to Thornton's Traffic Engineer for approval and obtain the necessary permit(s). Any investigations in other jurisdictions requiring Traffic Control Permits shall be obtained from the governing agency.

1.10 Consultant shall determine all permit requirements and initiate applications for permits for construction of the Project. Consultant shall initiate meetings with Thornton's Building, Fire Prevention, and Infrastructure Engineering Departments and other AHJs to obtain preliminary information of code requirements.

1.11 Thornton may provide internet-based periodic updates to the public. The Consultant shall furnish Thornton with graphic presentation materials for the updates throughout the Pre-Design Phase of the Project.

1.12 Room numbering on drawings, equipment schedules, finish schedules, etc., shall be coordinated early in design phase to correlate with final wayfinding and room numbering system implemented when the buildings are occupied.

1.13 Consultant shall prepare architectural and engineering designs, produce appropriate Pre-Design Drawings, and shall be representative of approximately thirty percent (30%) of final Construction Documents.

1.14 Based on input from Thornton and from thorough knowledge of Thornton's budget, site investigations and analyses performed independently by Consultant during the Pre-Design Phase, Consultant shall prepare and submit to Thornton a Pre-Design Report including, at a minimum, the following:

1.14.1 At a minimum, schematic drawings to include a code compliance plan, site plan, structural plan, landscape plan, floor plan(s) inclusive of room names and approximate square footages, annexation documents;

1.14.2 Outline of Specifications with anticipated materials and equipment identified;

 1.14.3 Estimate of probable design and construction cost of design. Thornton requires that an "Owner's Contingency" of no less than twenty percent (20%) be reserved and carried as a separate line item in all estimates. Thornton's Contingency is in addition to and separate from any Design Page 45 of 64 Contingency identified by the Consultant. Should the estimates prepared for the Pre-Design Report exceed Thornton's approved budget, Consultant shall prepare a list of possible design alternates to bring the design back within budget;

1.14.4 Preliminary land survey drawings;

1.14.5 Copies of all studies conducted during the Pre-Design Phase including, but not limited to, the Geotechnical Investigation Report obtained by the Consultant. Consultant shall discuss and summarize results and recommendations from studies for each alternative being investigated;

1.14.6 Recommendation on or results of environmental studies required for construction of the Project, and possible findings. Should Consultant determine that any environmental studies will be required, Consultant, in consultation with Thornton, shall coordinate the services of a qualified environmental consultant (hired by Thornton) to provide the necessary services;

1.14.7 Summary of all national and local codes and standards applicable to the Construction Work; and

1.14.8 Recommendation as to whether a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) is required, plans showing any necessary modifications, and administration of the process.

1.14.9 Renderings of the building with three different types of cladding for Thornton Executive Management's consideration.

1.15 Consultant shall submit one (1) electronic file of the final Pre-Design Report in .pdf format to Thornton. Pages of the .pdf shall be named to the page numbers of the drawings. Thornton requires a minimum of fourteen (14) Calendar Days to review the documents. Consultant and Subconsultants shall facilitate a Pre-Design review meeting with Thornton. Consultant shall record comments of all reviewers and distribute minutes to all attendees within four (4) Calendar Days of meeting closure. Consultant shall revise the draft Pre-Design Report to reflect the comments and submit the final Pre-Design Report within fourteen (14) Calendar Days following the Pre-Design review meeting.

2. GENERAL DESIGN REQUIREMENTS FOR PRELIMINARY DESIGN PHASE (DESIGN DEVELOPMENT)

2.1 It is Thornton's intent to conduct one (1) neighborhood notification meeting during the Preliminary Design Phase. Thornton will prepare and distribute notices for the neighborhood notification meeting. Consultant shall produce graphic presentation materials and prepare a presentation to attendees, as approved by Thornton. Consultant shall document the proceedings of the meeting and shall assist Thornton in addressing and resolving concerns.

2.2 Upon completion of the Preliminary Design Phase, Thornton may conduct one (1) City Council meeting for the Project during the design process. The Consultant shall prepare an agenda, graphic presentation materials and facilitate a presentation for City Council members based on the selected design. The Consultant shall document the proceedings of the meeting and route to Thornton's Construction Manager within four (4) Calendar Days and shall assist Thornton in addressing and resolving Council Members' concerns within fourteen (14) Calendar Days.

2.3 Consultant, and Subconsultants shall attend progress meetings with Thornton's staff during Preliminary Design to exchange and share information during preparation of the Preliminary Design Report. These meetings are to be identified and facilitated by the Consultant.

2.4 Consultant shall facilitate meetings with utility and communication providers and coordinate design documents as requested by Thornton and providers.

2.5 Consultant shall assist Thornton in soliciting and procuring and prequalifying a GC for construction of the Project, including recommending prospective GCs. The Consultant shall prepare and submit information to be incorporated with Thornton's standard construction contract documents at the conclusion of the Preliminary Design Phase including, at a minimum, the following:

2.5.1 A brief description (one [1] paragraph) of the Project that adequately depicts the Construction Work to be completed, which will be used in the Solicitation for Bids of Thornton's standard construction contract documents;

2.5.2 An estimate of the number of consecutive Calendar Days that will be required for completion of construction of the Station, which will be included in the construction contract. The estimate shall take into account average weather conditions for the time of the year which construction is anticipated to take place. The estimate shall consider any intermediate milestones, such as identifying GC submittal dates of shop drawings for issuance of permit, and construction phasing that may be necessary to complete the construction;

2.5.3 A summary of recommended modifications to the conditions (General, Special and other Conditions) of the construction contract for construction of the Station according to Project designs. The General Conditions of the construction agreement will not be edited. The summary shall include, at a minimum, the milestones of the critical path schedule to be provided by the GC, a list of other outside vendors and/or agencies the GC will be required to coordinate with, any special insurance requirements, language for unique conditions such as assignment of pre-purchased materials or equipment to the GC, a calculation for recommended liquidated damages to be imposed if the GC should fail to complete construction of the Station within the Page 47 of 64

specified contract time, bid item descriptions including measurement and payment information, and an estimate of the time required for the review of shop drawings and submittals;

2.5.4 Bidding requirements and bidding forms; and

2.5.5 Participation in pre-qualifying GCs such as, but not limited to, prequalification interviews, Statement of Qualification review, and recommendation of successful pre-qualifying GCs.

2.6 Thornton does not require minimum LEED certification for construction of the Project. Thornton requires the plans to reflect the necessary space for equipment and structure calculations for future photovoltaic utility goals of state government and utility providers. The City of Thornton is an advocate of sustainable building structures and building processes throughout the life cycle of its structures. The Consultant and Subconsultants shall propose sustainable or "green" construction components when feasible, identify resource-saving design elements within the final design of the Project and provide a report on all components associated with sustainable design practices.

2.7 Consultant shall expand on survey information provided in the Pre-Design Report to provide information necessary for the design and construction of the Project. This information shall be shown on the Drawings and shall include, but not be limited to, the following:

2.7.1 Fully described benchmark utilized for vertical control, including the specific datum or origin of the bench-mark. Provide the specific datum of any USGS information (i.e. NAVD 88, NGVD 29 etc.). More than one (1) control point must be used to develop the horizontal control for the Project. The control points utilized for horizontal control must be completely described to allow the points to be found by an individual who is unfamiliar with the area;

2.7.2 Piped facilities stationing for any gravity pipe system shall begin at the low end, which shall be station 0+00. The stationing shall terminate at each "invert out" and recommence at each "invert in" at each manhole; and

2.7.3 Streets shall begin stationing with 0+00 wherever practical. Stationing shall be Project Control Line (or Center Line) stationing with adequate offsets identified. Drawings shall provide adequate reference to the Project Control Line, including stationing and offsets for any grade lines which are non-parallel to the Project Control Line.

2.8 Consultant shall update the estimate of probable design and construction cost for construction of the Station. The estimate shall be based on a work breakdown structure describing finite elements of the design and Construction Work broken down into Construction Division, General Conditions and Costs and Fees. Should the updated estimate exceed the approved budget, Consultant shall

prepare a list of possible design alternates or revisions to bring the design back within budget. Thornton will either approve the inclusion of the alternates or revisions and/or amend the budget prior to commencing with the next phase of design.

2.9 Consultant shall prepare architectural and engineering designs and specifications to produce Preliminary Drawings and shall be representative of approximately seventy percent (70%) of final Construction Documents. Thornton also requires Drawings to be prepared and provided to Thornton in CAD format for use by Thornton's suppliers and vendors.

2.10 Consultant shall perform a thorough coordination review of all Drawings and Specifications. All discrepancies shall be corrected. A copy of the reviewed Drawings and Specifications shall be provided to Thornton with the Preliminary Drawing Package.

2.11 The Drawings shall schematically show, at a minimum, all existing and proposed features both above and below the ground including, but not limited to, roads, sidewalks, trails, fences, gates, utilities, signs, fixtures, floodplains, floodways, landscaping, plantings, structures, mechanical, electrical, plumbing photometric (exterior and Station) and other building systems. Drawings for Project shall be prepared in CAD.

2.12 The Preliminary Drawing sheets shall include, but not be limited to, the following:

2.12.1 A Title Sheet, a location map, Thornton's project name and project number, issue block with dates and revision number, summary of applicable codes and standards, Drawing Index, sheet number block, space for professional stamp, name, street address, phone, and e-mail address of Consultant, Design Professional and all Subconsultants;

2.12.2 Civil drawings, including horizontal control, site layout, pavement and jointing, site signage, utilities, erosion control, fire access, plat, grading/drainage, sewer and stormwater;

2.12.3 Landscape drawings depicting anticipated types of vegetation and groundcover, hard surfaces, retaining walls and fencing. Detailed Irrigation notes that specify requirements regarding manufacturer, make and model of major irrigation components;

2.12.4 Architectural drawings including code plan, site plan, floor plans, reflective ceiling plan, roof plan, interior and exterior elevations, building sections and building mock-up. Schedules, including Equipment, windows, doors, hardware, finishes, bathroom fixtures, etc.;

2.12.5 Structural drawings with foundation, framing and roofing plans;

2.12.6 Mechanical drawings including equipment layout, ducting with supply and return, thermostat placement, exhaust units, unit heaters and supportive load calculations. Variable Air Volume zoning to be identified, if applicable to Project;

2.12.7 Plumbing drawings based on proven load calculations for gas, water and sewer. Drawings shall identify size of water tap as well as piping distribution for all plumbing utilities;

2.12.8 Electrical drawings supported by electrical load calculations and inclusive of a photometric plan for both interior (Station) and exterior lighting;

2.12.9 Special Inspection schedule per International Building Code; and

2.12.10 All disciplines shall prepare plans and sections for aboveceiling/below floor coordination overlays for all facilities, pipe routing, equipment and fixtures interference, installation sequence and clearance coordination, and maintenance access coordination.

2.13 Preliminary technical Specifications shall describe the elements of Construction Work proposed and shall be as detailed as possible at this phase of the design. Provide manufacturers' cut sheets of proposed major Equipment. All technical Specifications shall be coordinated with the requirements of the Design-Build Documents and shall not repeat or conflict with any information contained in the Design-Build Documents.

2.13.1 The Technical Specifications shall not make any generalized blanket references to City of Thornton Standards and Specifications, to CDOT Specifications, or to other national standards. If any sections of these standards and specifications are to be included by reference, the Project Technical Specifications shall cite specific chapters and/or paragraphs of the reference standards.

2.13.2 The City of Thornton Standards and Specifications for the Design and Construction of Public and Private Improvements are intended to be the minimum standards acceptable on private development projects and do not necessarily represent the technical requirements Thornton wishes to achieve on a particular Thornton project. No references nor footnotes to the City of Thornton's Standards and Specifications shall be acceptable within the specifications or on the plans.

2.14 Consultant shall prepare a schedule of all furnishings, fixtures and Equipment ("FF&E") necessary to outfit a completely operational workspace at the Project Site. The list may include, but not necessarily be limited to, furniture (exterior and interior), generators, hoists, filing systems, mirrors, fax, copy and print equipment, audio/visual equipment, communications equipment such as radios, voice/data, and public address systems, kitchen and lab casework and equipment,

maintenance equipment, marker boards, bulletin boards, artwork and bathroom fixtures. The list shall identify whether responsibility for procurement and installation of each item is the GC's scope or it is Thornton's responsibility. If procurement and installation is the responsibility of Thornton, Consultant shall also identify on the Construction Documents all coordination issues between GC's scope and Thornton's FF&E scope including, but not limited to: structural reinforcing, blockouts, backing and blocking, power requirements, mechanical requirements, plumbing requirements, early access to the space by Thornton's other vendors, and scheduling requirements. Consultant shall prepare detailed Specifications for all FF&E. FF&E that will be purchased by Thornton's Purchasing Staff will be done through cooperative agreements to maximize purchasing power. Consultant shall be responsible for coordinating and assisting Thornton's Purchasing Staff and vendors in furniture layout and color selection, including finishing colors and fabrics.

2.15 Thornton's maintenance material stock or "attic" stock of five percent (5%) of quantity installed is required to be provided for all interior finishes including, but not limited to, interior flooring, tile, wall protectants and coverings, base, acoustical ceiling tiles and paint. Consultant shall provide information for the attic stock within the Construction Documents.

2.16 Consultant shall submit one (1) electronic file of the final Preliminary Design deliverables to Thornton, in .pdf format. Thornton requires a minimum of fourteen (14) Calendar Days to review the documents. Pages of the .pdf shall be named to the page numbers of the drawings. Consultant and Subconsultants shall attend a Preliminary Review Meeting with Thornton. Consultant shall record comments of interested parties and distribute minutes to all attendees within two (2) Calendar Days of meeting closure. Consultant shall revise the draft Pre-Design Report and survey to reflect the comments and submit the final Pre-Design Report and survey within fourteen (14) Calendar Days following the Preliminary Review Meeting.

3. GENERAL DESIGN REQUIREMENTS FOR PRE-FINAL DESIGN PHASE (ISSUED FOR PERMITS)

3.1 Based on comments received at the Preliminary Design Review Meeting, Consultant shall prepare Pre-Final Drawings and Specifications. The Drawings and Specifications from this Pre-Final Design Phase shall be representative of approximately ninety-five percent (95%) of final Construction Documents and ninety-five percent (95%) design complete.

3.2 Consultant and Subconsultants shall attend progress meetings during the Pre-Final Design Phase to discuss previously undiscovered conditions or concerns arising during the Pre-Final Design Phase. These meetings are to be identified and facilitated by the Consultant.

3.3 Consultant shall identify and utilize an individual or individuals on its staff to perform an independent quality control check of the Drawings and Specifications

to assure the Pre-Final documents are clear and complete and to assure functional coordination of the varied systems and components. This individual shall not have had a role in the development of the documents to assure an independent review. The quality control check shall be comprehensive and shall include, at a minimum, checking dimensions, sizes, details, sections, and elevation references, coordination between the architectural and engineering disciplines, consistency of Drawings and Specifications, reviewing designs for compatibility of materials and equipment, coordinating references within technical Specifications to other sections and to the Drawings, constructability, conflicts between Subconsultant designs, and future maintenance access. Consultant shall submit the comments from the independent quality control check to Thornton with the Pre-Final deliverables.

3.4 Thornton may engage independent consultants to perform a separate peer review. Consultant shall supply all necessary calculations, analyses, and other documents, and cooperate fully with any such independent peer review. Consultant shall engage a commissioning agent, on Thornton's behalf, to review mechanical, electrical, plumbing or other special system designs and to monitor the construction and testing of such systems. Alternatively, Thornton may choose to pursue additional services from the Subconsultant(s) to provide commissioning services. Consultant shall cooperate fully with Thornton's third-party commissioning agent or Subconsultant performing commissioning of equipment and systems.

3.5 If required, Consultant shall obtain and prepare the application for a National Pollutant Discharge Elimination System (NPDES) permit.

3.6 Consultant shall submit one (1) electronic copy of the Pre-Final Drawings and Specifications to Thornton and to the Thornton Building, Fire Prevention, and Infrastructure departments, and other AHJs for permit review. Pages of the .pdf shall be named to the page numbers of the drawings.

3.6.1 Consultant shall make document revisions noted by Thornton's Building, Fire Prevention, and Infrastructure departments and re-submit Construction Documents as many times necessary to allow construction of the Project and for obtaining permits. All modifications originating from the AHJ shall be identified to make a record of the changes. Drawing changes shall be shown encircled with "clouds." Specification changes shall show new information in italics and deleted information shall be shown in strikethrough text. All versions of re-submitted documents shall be provided to Thornton in electronic .pdf format.

3.6.2 The second set of revision documents delivered to the AHJs, shall be distributed to prequalified GCs and facilitated by the Consultant.

3.7 As required, Consultant shall provide a plat representing improvements to the Site for permanent record with Adams County.

3.8 Consultant shall provide all versions of Construction Documents submitted to the AHJs and returned from AHJs to Thornton for record.

3.9 Consultant shall prepare a pre-final estimate of probable design and construction cost for the Project ("Pre-Final Estimate"). The Pre-Final Estimate shall be based on a work breakdown structure describing finite elements of the design and Construction Work broken down into materials, labor, equipment, general conditions costs, and Fees. The work breakdown structure shall also be broken down into phases that include design, mobilization, construction, close-out and warranty. The work breakdown structure shall be further broken down by major elements of design and Construction Work that correspond to the various Thornton requires that an "Owner's trades and specification sections. Contingency" of no less than twenty percent (20%) of the contract budget be reserved and carried as a separate line item in all estimates. Should the updated Pre-Final Estimate exceed the approved budget. Consultant shall prepare a list of possible design alternates or revisions to bring the design back within budget. Thornton will either approve the inclusion of the alternates or revisions and/or amend the budget prior to commencing with the next phase of design.

4. GENERAL DESIGN REQUIREMENTS FOR FINAL DESIGN (ISSUED FOR CONSTRUCTION)

4.1 Consultant shall review all shop drawings until final approval from the Consultant is granted for the issuance of permits from all AHJs.

4.2 The Consultant shall attend a Pre-Bid Conference and shall provide assistance to Thornton in responding to inquiries by the prospective bidders during the bidding period.

4.2.1 Consultant shall review bids and assist in determining successful bidders.

4.2.2 Consultant shall recommend GC for award, and recommendation shall be taken into consideration by Thornton when awarding construction of the Project to a GC.

4.3 Consultant shall modify all Construction Documents in response to prequalified GC's inquiries. All modifications originating from the pre-qualified GCs shall be identified to make a record of the changes. Drawing changes shall be shown encircled with "clouds." Specification changes shall show new information in italics and deleted information shall be shown in strikethrough text. These revisions shall be coordinated with AHJs, Thornton's Construction Manager and all Subconsultants to assure all documents are coordinated among all design disciplines, to assure the revisions do not negatively impact functionality of the Station, and to assure code compliance is not affected. Revisions shall be memorialized in an Addendum and shall be recorded in an Addendum narrative letter. Addendum shall also be noted in the revisions block of the drawings with a delta associated to the Addendum and/or Technical Specifications, and by clouding the drawing elements being revised. A formal Addendum shall be issued by Thornton to the pre-qualified GCs, assisted by the Consultant.

4.4 Should the final Construction Documents exceed the approved construction budget, Consultant shall participate in value-engineering efforts with the General Contractor and prepare a list of possible design alternates or revisions to bring the design back within budget at no additional cost to Thornton. Thornton will either approve the inclusion of the alternates or revisions and/or amend the budget prior to commencing with the next phase of design.

4.5 After all revisions from pre-qualified GCs, Consultant shall finalize the Construction Documents and prepare "Issued for Construction" documents. Documents issued for construction shall be provided to Thornton as follows:

4.5.1 Consultant shall submit one (1), stamped, full size original copy and one (1), stamped, original hardcopy set of the Specifications;

4.5.2 Consultant shall submit one (1), stamped, one-half size original copy;

4.5.3 Consultant shall submit drawing files in CAD format compatible with Thornton's CAD system; and

4.5.4 Consultant shall submit drawing files in .pdf format. Pages of the .pdf shall be named to the page numbers of the drawings.

5. GENERAL DESIGN REQUIREMENTS FOR CONSTRUCTION (CONSTRUCTION ADMINISTRATION)

5.1 Consultant shall participate in construction of the Project (the "Construction Phase") until Initial Acceptance (as defined in the Thornton City Code) of the Station is granted to the GC. Consultant is responsible for monitoring and correcting design errors during the Warranty Period.

5.2 The Consultant shall attend the Pre-Construction Meeting for the Project Site and provide assistance to Thornton in responding to inquiries by the GC during the Pre-Construction Meeting.

5.3 The Consultant shall attend a weekly site meeting for construction of the Station with the GC and Thornton.

5.4 The Consultant shall conduct weekly field walks, and Subconsultants shall conduct a minimum of two (2) field walks during construction. Walks shall be to observe and inspect the GC's work and interpretation of the drawings and Technical Specifications. The Consultant and Subconsultants shall submit a report for all field observations performed while on-site to assure themselves and Thornton that the Construction Work is proceeding in accordance with the intent of the Contract Documents.

5.5 The Consultant shall review the GC's proposed submittal schedule and comment on totality of submittal items and review times proposed. The Consultant and GC shall negotiate until mutually acceptable submittal items and review times are established. The Consultant and/or Subconsultant shall complete submittal review within ten (10) Calendar Days so as not to delay construction. All subsequent reviews shall be completed by the Consultant until submittal is approved by Consultant and/or Subconsultant(s). Administration, distribution and maintaining records of submittal packages to Subconsultants is the sole responsibility of the Consultant.

5.6 The Consultant's Subconsultant (Structural Engineer) shall be required to inspect any foundations and steel structures and provide a certified letter stating that the Construction Work is acceptable based on the design. This letter shall be received by Thornton a minimum of one (1) week prior to final inspection by the Building Department.

5.7 The Consultant shall promptly respond to Requests For Information (RFIs) issued by Thornton, the GC, subcontractors, testing agencies, commissioning agent, building department, or other entities within four (4) Calendar Days so as to not delay construction. Consultant shall indicate to Thornton whether a cost adjustment will be associated with the RFI. Administration and distribution of RFIs to Subconsultants is the sole responsibility of the Consultant.

5.8 The Consultant shall issue supplemental instructions to Thornton or their designated representative when an ambiguous condition requiring clarification is discovered in the Contact Documents. The Consultant shall prepare documents providing clarification and/or correcting errors or omissions in the Contract Documents at no charge to Thornton. Consultant shall prepare and submit a Plan Review Form and consolidated set of drawings and Technical Specifications as is required by the Thornton Building Department. Consultant shall prepare a Proposal Request to issue to the GC when such items may have a cost or schedule impact.

5.9 The Consultant shall provide change order consultation as it relates to Change Order Requests submitted by the GC, including but not limited to, review of change order requests for impacts on schedule, quality, constructability, aesthetics, functionality, and proposed change order pricing. Change order consultation may also be necessary for discretionary changes requested by Thornton.

5.10 The Consultant shall review and certify the GCs' Pay Applications within seven (7) Calendar Days of receipt. Consultant's review shall include, but not be limited to, determining if percent completion of Construction Work represented on the Pay Application is valid and if quality of the Construction Work is in conformance with Construction Documents.

5.11 Consultant and Subconsultants shall participate in a punch walk of the completed Project. Consultant shall be responsible for verifying the completed Project for compliance of the "For Construction" set of drawings and Technical Specifications, or latest compiled ASI drawings and Technical Specifications. Items found out to be of poor quality, out of standard practice, or non-conforming to the drawings and Technical Specifications shall be placed on a punch list formatted on the Consultant and Subconsultant's letterhead for the GC to correct. Administration and coordination of punch list items by Subconsultants is the sole responsibility of the Consultant. Consultant shall provide punch lists to Thornton within four (4) Calendar Days of walk date so as to not delay closeout of the Station Construction Project.

Consultants and Subconsultants shall participate in a walk of the Project to confirm all punch list items have been corrected and addressed in a satisfactory manner. A written letter of acceptance on letterhead and signed by the Consultant and Subconsultants shall indicate the Consultant and Subconsultants agree item is of quality and complies with standards within the industry.

5.12 Consultant and Subconsultants shall participate in a walk of the Project during the Warranty Phase, without additional compensation, if issues with the systems, building components or design is problematic for Thornton. Consultant shall provide a corrective approach to remedy all problematic systems, building components or latent design defects to Thornton within four (4) Calendar Days of walk date so as to not delay resolution. Administration and coordination of punch list items by Subconsultants is the sole responsibility of the Consultant.

5.13 Consultant shall participate in a walk of the Project, without additional compensation, at the end of the Warranty Phase and shall be responsible to resolve all issues with the systems, building components or design that is problematic for Thornton. Consultant shall provide a corrective approach to remedy all problematic systems, building components or latent design defects to Thornton within four (4) Calendar Days of walk date so as to not delay resolution. Administration and coordination of punch list items by Subconsultants is the sole responsibility of the Consultant.

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Page 57 of 64

EXHIBIT B

CONSULTANT'S KEY PERSONNEL AND SUBCONSULTANTS LISTING PROJECT TEAM

DISCIPLINE OR JOB CATEGORY	FIRM NAME
Architect (Prime)	TBD
Geotechnical Engineering	TBD
Landscape Architect	TBD
Civil Engineering	TBD
Traffic Engineering	TBD
Irrigation Designer	TBD
Structural Engineering	TBD
Mechanical Engineering (Non-Live Fire Areas)	TBD
Plumbing Engineer	TBD
Electrical Engineering	TBD
Communications *	TBD
Acoustical Engineering	TBD
Cost Estimating	TBD
Interior Design	TBD
Specification Writer(s)	TBD
Other	TBD
Other	TBD
Other	TBD

* Communications includes all Low Voltage systems, such as but not limited to, Access Control, Alerting, Audio/Visual Systems, Security and Technology

Page 59 of 64

EXHIBIT B CONTINUED

CONSULTANT'S PERSONNEL AND SUBCONSULTANTS LISTING <u>KEY PERSONNEL</u>

	A	RCHITECTURE – TBD	
NA	ME	NAME	NAME
TBD		TBD	TBD
TBD		TBD	TBD
	CIVI	L ENGINEERING - TBD	
NA	ME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD
	MECHAN	IICAL ENGINEERING – TBD	
NA	ME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD
	PLUME	SING ENGINEERING - TBD	
	ME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD
	ELECTR	ICAL ENGINEERING - TBD	
	ME	JOB TITLE	HOURLY RATE
TBD			TBD
TBD		TBD	TBD
	STRUCT	URAL ENGINEERING – TBD	
NA	ME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD

Page 60 of 64

EXHIBIT B CONTINUED

CONSULTANT'S PERSONNEL AND SUBCONSULTANTS LISTING CONTINUED

LANDSCAPE ARCHITECTURE - TBD			
NAME	JOB TITLE	HOURLY RATE	
TBD	TBD	TBD	
TBD	TBD	TBD	
GEOTEC	HNICAL ENGINEERING - TBD		
NAME	JOB TITLE	HOURLY RATE	
TBD	TBD	TBD	
TBD	TBD	TBD	
ACOUS	STICAL ENGINEERING - TBD		
NAME	JOB TITLE	HOURLY RATE	
TBD	TBD	TBD	
TBD	TBD	TBD	
COMMUNICATIONS DESIGN / ENGINEERING (INCLUDES ACCESS CONTROL, ALERTING, AUDIO/VISUAL, SECURITY, TECHNOLOGY) – TBD			
NAME	JOB TITLE	HOURLY RATE	
TBD	TBD	TBD	
TBD	TBD	TBD	
INTERIOR DESIGN – TBD			
NAME	JOB TITLE	HOURLY RATE	
TBD	TBD	TBD	
TBD	TBD	TBD	

EXHIBIT B CONTINUED

CONSULTANT'S PERSONNEL AND SUBCONSULTANTS LISTING CONTINUED

		COST ESTIMATING – TBD	
	NAME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD
SPECIFICATIONS – TBD			
	NAME	JOB TITLE	HOURLY RATE
TBD		TBD	TBD
TBD		TBD	TBD

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Page 62 of 64

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Page 63 of 64

EXHIBIT C

SCHEDULE OF CHARGES

Project is fixed fee and will be paid on a monthly basis upon receipt of an approved invoice. Monthly payments shall be based upon the percent complete of each phase described below, with exceptions as noted: Reimbursable expenses associated with the Project will be paid at cost with no additional fee:

	DESIGN FEES	
DESIGN PHASE	DESCRIPTION	AMOUNT
Phase 1	Pre-Design (Schematic Design)	\$ TBD
Phase 2	Preliminary Design (Design Development)	\$ TBD
Phase 3	Pre-Final Design (Permit Documents)	\$ TBD
Phase 4	Final Design (Construction Documents)	\$ TBD
	Subotal:	\$ TBD
Phase 5	Construction (Construction Administration)	\$ TBD
	Total:	\$ TBD
	Reimbursable Expenses (at Cost)	\$ TBD
	Mileage (at current IRS Rate)	\$ TBD

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Page 64 of 64