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**The Great Lakes Region 5 Standard Template**

**for**

**3D Imaging Services Statement of Work (SOW)**

**Prospectus & Non-Prospectus - Level Projects**

**Scan and Model Delivery Method**

**VERSION 4.0**

Released: 7/1/2013

**U.S. General Services Administration**

**Public Buildings Service**

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**Statement of Work**

**for**

**3D Imaging Services Contract**

**PROJECT IDENTIFICATION**

Project Name:

Project Number:

Region:

Building Name:

Building Address:

#

**TABLE OF CONTENTS**

[1 PROJECT DESCRIPTION 1](#_Toc285649904)

[1.1 Project Goals and Objectives 1](#_Toc285649905)

[1.1.1 GOALS 1](#_Toc285649906)

[1.1.2 OBJECTIVES 1](#_Toc285649907)

[1.2 Project Delivery Approach 1](#_Toc285649908)

[1.3 Reference Materials 2](#_Toc285649909)

[2 GENERAL REQUIREMENTS 3](#_Toc285649910)

[2.1 Site Safety Requirements 3](#_Toc285649911)

[2.1.1 Safety of Personnel and Property 3](#_Toc285649912)

[2.1.2 Use of Lasers 3](#_Toc285649913)

[2.2 Project Schedule 3](#_Toc285649914)

[2.3 Project Deliverables 3](#_Toc285649915)

[2.4 3D Imaging Execution Plan 4](#_Toc285649916)

[2.5 Data Backup and Retention 4](#_Toc285649917)

[2.6 Data Security and Ownership 4](#_Toc285649918)

[3 Deliverable Selection Matrix 6](#_Toc285649919)

[3.1 Coordinate Frame 6](#_Toc285649920)

[3.2 Deliverable Type 6](#_Toc285649921)

[3.2.1 Type 1 – 2D Drawings 6](#_Toc285649922)

[3.2.2 Type 2 – 3D Models 6](#_Toc285649923)

[3.2.3 Type 3 – Scan Data 7](#_Toc285649924)

[3.2.4 Type 4 – Raw Scan Data 7](#_Toc285649925)

[3.2.5 Type 5 – Presentation Data 7](#_Toc285649926)

[3.3 Level of Detail 8](#_Toc285649927)

[3.3.1 Scanning Level of Detail 8](#_Toc285649928)

[3.3.2 Model Level of Detail 8](#_Toc285649929)

[4 Object Level Requirements 9](#_Toc285649930)

[4.1 Element Clarifications 13](#_Toc285649931)

[5 ADMINISTRATION 14](#_Toc285649932)

[5.1 Submission, Review and Fee Table 14](#_Toc285649933)

[5.2 Travel 14](#_Toc285649934)

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# PROJECT DESCRIPTION

*[Provide an overall description of the project. Be as complete as possible. Identify the areas, surfaces and objects which need to be imaged.]*

## Project Goals and Objectives

### **GOALS**

*[List the (strategic) project goals here]*

### **OBJECTIVES**

*[Describe the overall project objectives then complete the Objective Matrix. For information on how to complete the objective matrix see* [*http://gsa.gov/bim*](http://gsa.gov/bim) *and refer to BIM Guide Series 03]*

Table 1 shows a high level overview of project objectives. Refer to section 4 for complete element by element explanations.

Table 1. Project Primary Objectives Matrix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Objective | ApproximateSq. Ft. | Coordinate Frame | Deliverable Type | Level of Detail*(scan / model)* |
|
| **Typical Exterior Space** | 650,000 | 1 | 3.1, 3.3 | Level 1 / LOD100 |
| **Typical Interior Space** | 250,000 | 3 | 2.2, 3.1, 3.3 | Level 3 / LOD200 |
| **Typical Construction Verification** | 150,000 | 3 | 2.2, 3.1, 3.3 | Level 3 / LOD200 |
| **Typical As-Built** | 350,000 | 3 | 2.2, 3.1, 3.3 | Level 3 / LOD500 |

**For definitions of terms used in Table 1 refer to Appendix A of this document.**

**SECONDARY OBJECTIVES:**

*[Describe any secondary objectives that the collected data will be used for. Secondary objectives include potential future applications of the 3D imaging data. Keep in mind that if the resolution requirements for the secondary objectives are more stringent than those for the primary objective, then the project costs could potentially be skewed towards achieving the requirements of the secondary objectives. ]*

## Project Delivery Approach

*[Provide a summary explanation of overall sequencing of how the project and the required 3D imaging effort are broken down into various parts, if applicable. Explain how the 3D imaging efforts will integrate into the larger design project and the expectation for support after the initial data is collected.]*

## Reference Materials

*[List all EXISTING information to be provided to the 3D image servicer for reference, such as existing building documentation, building preservation plans, environmental assessments/EIS reports, and/or other relevant surveys and studies etc.]*

# GENERAL REQUIREMENTS

## Site Safety Requirements

### Safety of Personnel and Property

The safety of all equipment operators, surveyors and other servicer personal is the sole responsibility of the 3D Imaging Provider. The servicer must provide proof of adequate liability coverage upon request of the GSA and must present a safety plan in advance of any activity that may place any person or property at risk.

The 3D Imaging Provider is to ensure that every reasonable precaution is taken to protect both their employees and any other individuals who are affected by their work. This includes providing and ensuring that proper safety equipment is used at all times.

### Use of Lasers

If the 3D imaging system uses a laser, the system must be in compliance with the regulations for lasers and laser products issued by the Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration. When using a laser 3D imaging system, the U. S. Department of Labor, Occupational Safety & Health Administration or state or local standards and regulations on exposure to laser hazards should be followed (whichever governing body has jurisdiction).

The service provider will provide GSA with documentation on whether the 3D imaging system(s) used are eye safe or no. Even if eye safe, information regarding direct viewing through optical devices must be posted around the site, and personnel working around the site must be informed.

The use of non-eye-safe lasers is discouraged and only permitted where eye-safe device can not accomplish the necessary data collection (e.g., long distance scanning). If non-eye-safe lasers are to be used prior written approval from GSA must be obtained and a complete laser control plan developed that conforms at a minimum to the OSHA Technical Manual Section III Chapter 6 guidelines.

## Project Schedule

A proposed schedule is to be submitted with the 3D Imaging Execution Plan. This schedule must reflect what is best for the larger design and/or construction project. The final approval of all on-site activities will come directly from GSA. On-site work must not interfere with security or construction activities.

## Project Deliverables

All 3D imaging project shall be delivered to GSA on USB hard drives. These drives become property of GSA at time of delivery. These drive(s) are to contain all data acquired for the project as well as installers for any software required to display the data (no cost software only e.g. Leica TruView software).

## 3D Imaging Execution Plan

It is required that a preliminary Execution Plan be submitted within 30 days of contract signing and a final Execution Plan be submitted no less than 7 days prior to commencement of on-site data capturing. The final plan must include at a minimum:

* General overview of the servicer’s approach to the project.
* Proposed workflow chart for all stages highlighting the process to be used.
* Plan view layouts highlighting proposed instrument locations and areas of coverage.
* Make and model of imaging equipment to be used.
* List of all data producing software to be used (include version numbers)
* Exact dates and times that servicer’s staff will be on site. This should include time for setup and breakdown.
* List of GSA supplied items. For example lockup area, power, heat, escorting personnel.
* Major equipment to be brought onsite especially any lift large powered equipment such as lifts.
* Clear scheduling plan showing what areas of the site the servicer will be working in on which dates. This plan must be clear and easily understandable as it may be used for informing tenets of imaging activities.
* Safety information for specific imaging equipment being used, if applicable.

The final 3D Imaging Execution Plan is to be delivered to, reviewed, and approved by the GSA Project manager prior to the commencement of any 3D imaging efforts.

## Data Backup and Retention

It is the sole responsibility of the 3D imaging service provider to maintain and actively backup all data being collected and processed by them. At minimum differential daily backups must be maintained at all times. Should data loss occur the servicer will take necessary steps to maintain project deliverable timing at their own expense.

For a period no less than 1 year after the conclusion of 3D imaging activities the servicer shall maintain and make available upon request the acquired and processed data. This includes; raw data from the capture device, processed or registered data and, if applicable, any generated model data.

## Data Security and Ownership

PBS shall have ownership of and rights to all data contained in BIMs and other deliverables developed and provided by the 3D Imaging Service Provider in accordance with the applicable provisions of the contract, including relevant clauses detailed under FAR 52.227 and GSA Order 3490.1

All 3D, 4D, 3D Imaging and Building Information Modeling-related information are considered to be Sensitive But Unclassified (SBU). SBU documents provided under contract are intended for use by authorized users only. In support of the contracted requirements, GSA will require vendors to exercise reasonable care when handling documents and data relating to SBU building information. Dissemination of any information provided for, generated by, and resulting from BIM projects is only allowed to authorized users. It is the responsibility of the person or firm disseminating the information to assure that the recipient is an authorized user and to keep records of recipients. Valid identification for non-Government users is required to receive SBU building information. For qualifying forms of identification, refer to GSA Order 3490.1.

The efforts required above shall continue throughout the entire term of the contract and for whatever specific time thereafter as may be necessary. Authorized users should store electronic information in a password protected (non-public) environment. Necessary record copies for legal purposes (such as those retained by the architect, engineer, or contractor) must be safeguarded against unauthorized use for the term of retention. Documents no longer needed shall be destroyed (such as after contract award, after completion of any appeals process of completion of the work). Destruction shall be done by burning or shredding hardcopy, and/or physically destroying CD’s, deleting and removing files from the electronic recycling bins, and removing material from computer hard drives using a permanent erase utility or similar software. A written Agreement of Disposal must be provided to the GSA upon contract completion.

3D Imaging data is to be maintained for a period of 1 year from completion of acquisition prior to its removal from the service providers system.

For further detail, refer to GSA Order 3490.1, FAR 52.227, and other relevant data ownership and rights regulations.

# Deliverable Selection Matrix

## Coordinate Frame

Coordinate Frame – A hierarchical system of scale in which each scan is registered per the following criteria:

* Level 1: Total project area. Coordinate Frame: Local coordinate frame (coordinate frame used by the local jurisdiction) or the State Plane Coordinate Frame. The control network should be tied to this coordinate frame.
* Level 2: Subsection of Level 1 (e.g., building). Coordinate Frame: Local coordinate frame (coordinate frame used by the local jurisdiction) or project coordinate frame
* Level 3: Subsection of Level 2 (e.g., floor level). Coordinate Frame: Project coordinate frame or instrument coordinate frame.
* Level 4: Subsection of Level 03 (e.g., room or artifact). Coordinate Frame: Instrument coordinate frame.

For further information see GSA BIM Guide Series 03, Section 2.3.1 at <http://gsa.gov/bim>

## Deliverable Type

Deliverable Type – The service provider shall prepare and submit the deliverables in the formats listed below. One objective may require several deliverable types.

### Type 1 – 2D Drawings

The GSA PBS CAD standards apply for all cases of this deliverable. The PBS CAD standards can be found at the GSA website: <http://gsa.gov>

* Type 1.1 = Plans
* Type 1.2 = Sections
* Type 1.3 = Elevations
* Type 1.4 = Details

Submit two sets of large paper drawings to the COTR (Contracting Officer’s Technical Representation) and the regional representative of the project; submit two additional electronic copies of the same drawings in “.dwg” format.

### Type 2 – 3D Models

Surface model must adhere to the GSA PBS CAD standards while object models must adhere to GSA BIM Guides found at <http://gsa.gov/bim> and GSA Region 5 BIM Standards.

* Type 2.1 = Surface Model
* Type 2.2 = Object Model. Specifications of an object model may include component information (e.g., wall, column), relationships between components, space information (e.g. , rooms), and attributes (e.g., wall material)

In most cases scanning is done in preparation for a design and construction project. All model data is to be completed in a format which will support the goals of the design and construction project.

 Surface models may be created in any CAD platform and translated to the platform required by the design project.

Object Models must be created in a file format which is compatible with the need s of the design and construction project. Translations from non-native platforms are only permitted when the full fidelity of the object model is preserved.

### Type 3 – Scan Data

* Type 3.1 = Registered point cloud
* Type 3.2 = Published point cloud data to a web based viewing platform
* Type 3.3 = Conversion of point cloud data to a ASCII format

The point cloud data shall be reduced in size, to filter noise and redundant data to the maximum extent possible without compromising the accuracy and resolution of the model. Submitted media will become the property of the U. S. government upon delivery to the COTR. Due to the size of the deliverables, hard drives may be submitted to the GSA

### Type 4 – Raw Scan Data

These data are the data from individual scans that have not been registered or filtered. The data is from a single scan as exported by the instrument software. At a minimum, the documentation for these files should contain the date of the scan, the location of the scan, the instrument used, the instrument settings, and operator name.

* Raw data for each scan in individual files.
* Raw data must be the original data from the instrument and not manipulated in any way.
* Digital photographs taken by the instrument (if applicable)

### Type 5 – Presentation Data

Contractor shall submit a minimum of (10) presentation quality images, derived from the scan, for the final submission.  The images shall be a combination of overall areas (such as site, building, etc.) and concentrated areas showing elements such as piping and walls in detail.  They shall be high quality rendering suitable for publication.  If applicable, some images may demonstrate conflicted area between scanning areas and 3D model.

## Level of Detail

### Scanning Level of Detail

|  |  |  |
| --- | --- | --- |
| Level of Detail | Tolerancemm (in) | Minimum Artifact Size (resolution) mm x mm (in x in) |
| Level 1 | ±51 ( ± 2 ) | 152x152 ( 6x6 ) |
| Level 2 | ±13 ( ± 1/2 ) | 25x25 ( 1x1 ) |
| Level 3 | ±6 ( ± 1/4 ) | 13x13 ( 1/2x1/2 ) |
| Level 4 | ±3 ( ± 1/8 ) | 13x13 (1/2x1/2) |

**Tolerance** – The allowable dimensional deviation in the deliverable from truth (truth being a measurement obtained by some other means), in the specified coordinate frame. An example of tolerance is: Point cloud: the distance between two points in a point cloud as compared to the true distance between the same two points in the actual scene should be less than or equal to the specified tolerance.

**Minimum Artifact Size** – The dimensions of the smallest recognizable feature.

### Model Level of Detail

When required to model from scan one of the following Level of Details will be required.

|  |  |  |
| --- | --- | --- |
| Level | Type | Suitable Down-Stream Use of Model |
| LOD100 | Conceptual / Massing  | Early pre-design efforts |
| LOD200 | Approximate Geometry | Schematic Design / Design Development |
| LOD300 | Precise Geometry | Construction Documents |
| LOD400 | Fabrication Level\* | Fabrication and Assembly |
| LOD500 | As-Built | Record Drawings |

\*LOD400 is included only to maintain consistency in BIM standards and should never be listed as a scanning deliverable.

# Object Level Requirements

The table in this section outlines specific items to be captured by the scan and modeling efforts of this project. These represent the minimum that will be accepted. Objects checked for scanning or modeling must exist within the supplied cloud or model to the extent they fall within the specified Level of Detail. (e.g. For scanning, plumbing fixtures is checked and LOD 1 is selected; sinks will be visible but faucets need not be.)

The items which are checked represent only the data to be collected and modeled. When an item such as G1010 Site Clearing is selected it is the responsibility of the scan and modeling teams to provide the necessary data to produce the final construction documents not the documents themselves. A Level 2 Scan for G1010 would be a scan showing all objects on the specified site with a size larger than ½” x ½” x ½” it would **not** identify what items are to be cleared.

Unless otherwise specified a checked object are to be completed to the scan / model level specified without undertaking any removal (temporary or otherwise) of building elements to obtain line-of-site. If the object is obscured by building elements (e.g. dropped ceilings) there are not required unless otherwise noted. It is required that care in planning be taken to ensure that the data collection takes place at the optimum time for the larger project goals.

[Complete the chart below, adding items as needed. You may also wish to remove unused columns to shorten the table. 4 common examples are filled out for reference]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Uni. II Class** | **Element** | **Typical Exterior Space** **Scan / Model** | **Typical Interior Space****Scan / Model** | **Typical Construction Verification Scan** | **Typical As-Built Scan / Model** |  |
| **Scan** | **Model** | **Scan** | **Model** | **Scan** | **Model** | **Scan** | **Model** | **Scan** | **Model** |
| A – Substructure –A10 – Foundations  |
| A1010 | Standard Foundations | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| A1020 | Special Foundations | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| A1030 | Slab on Grade | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| A – Substructure – A20 – Basement Construction |
| A2010 | Basement Excavation |  |  |  |  | **X** |  |  |  |  |  |
| A2020 | Basement Walls |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| B – Shell – B10 – Superstructure  |
| B1010 | Floor Construction |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| B1020 | Roof Construction |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| B – Shell – B20 – Exterior Enclosure |
| B2010 | Exterior Walls | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| B2020 | Exterior Windows | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| B2030 | Exterior Doors | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| B – Shell – B30 – Roofing |
| B3010 | Roof Coverings | **X** | **X** |  |  |  |  | **X** | **X** |  |  |
| B3020 | Roof Openings | **X** | **X** |  |  | **X** |  | **X** | **X** |  |  |
| C – Interiors – C10 – Interior Construction |
| C1010 | Partitions |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| C1020 | Interior Doors |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| C1030 | Fittings |  |  | **X** |  |  |  | **X** |  |  |  |
| C – Interiors – C20 – Stairs  |
| C2010 | Stair Construction |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| C2020 | Stair Finishes |  |  | **X** |  |  |  | **X** |  |  |  |
| C – Interiors – C30 – Interior Finishes |
| C3010 | Wall Finishes |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| C3020 | Floor Finishes |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| C3030 | Ceiling Finishes |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D – Services – D10 – Conveying  |
| D1010 | Elevators & Lifts |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D1020 | Escalators & Moving Walks |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D1030 | Other Conveying Systems |  |  |  |  |  |  | **X** | **X** |  |  |
| D – Services – D20 – Plumbing  |
| D2010 | Plumbing Fixtures |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D2020 | Domestic Water Distribution |  |  | **X** |  | **X** |  | **X** | **X** |  |  |
| D2030 | Sanitary Waste |  |  | **X** |  | **X** |  | **X** | **X** |  |  |
| D2040 | Rain Water Drainage |  |  | **X** |  | **X** |  | **X** | **X** |  |  |
| D2090 | Other Plumbing Systems |  |  |  |  | **X** |  | **X** | **X** |  |  |
| D – Services – D30 – HVAC  |
| D3010 | Energy Supply |  |  | **X** |  | **X** |  | **X** | **X** |  |  |
| D3020 | Heat Generating Systems |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D3030 | Cooling Generating Systems |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D3040 | Distribution Systems |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D3050 | Terminal & Package Units |  |  |  |  | **X** |  | **X** | **X** |  |  |
| D3060 | Controls & Instrumentation |  |  |  |  |  |  | **X** |  |  |  |
| D3070 | Systems Testing & Balancing |  |  |  |  |  |  |  |  |  |  |
| D3090 | Other HVAC Systems & Equipment |  |  |  |  |  |  |  |  |  |  |
| D – Services – D40 – Fire Protection |
| D4010 | Sprinklers |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D4020 | Standpipes |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D4030 | Fire Protection Specialties |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D4090 | Other Fire Protection Systems |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D – Services – D50 – Electrical  |
| D5010 | Electrical Service & Distribution |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| D5020 | Lighting and Branch Wiring |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| D5030 | Communications & Security |  |  |  |  |  |  | **X** |  |  |  |
| D5090 | Other Electrical Systems |  |  |  |  |  |  |  |  |  |  |
| E – Equipment & Furnishings – E10 – Equipment |
| E1010 | Commercial Equipment |  |  | **X** | **X** | **X** |  | **X** | **X** |  |  |
| E1020 | Institutional Equipment |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| E1030 | Vehicular Equipment |  |  |  |  |  |  |  |  |  |  |
| E1090 | Other Equipment |  |  |  |  |  |  |  |  |  |  |
| E – Equipment & Furnishings – E20 – Furnishings |
| E2010 | Fixed Furnishings |  |  | **X** | **X** |  |  | **X** | **X** |  |  |
| E2020 | Movable Furnishings |  |  |  |  |  |  | **X** |  |  |  |
| F – Special Construction & Demo – F10 – Special Construction |
| F1010 | Special Structures |  |  |  |  |  |  |  |  |  |  |
| F1020 | Integrated Construction |  |  |  |  |  |  |  |  |  |  |
| F1030 | Special Construction Systems |  |  |  |  |  |  |  |  |  |  |
| F1040 | Special Facilities |  |  |  |  |  |  |  |  |  |  |
| F1050 | Special Controls & Instrumentation |  |  |  |  |  |  |  |  |  |  |
| F – Special Construction & Demo – F20 – Selective Building Demo |
| F2010 | Building Elements Demolition |  |  |  |  |  |  |  |  |  |  |
| F2020 | Hazardous Components Abatement |  |  |  |  |  |  |  |  |  |  |
| G – Building Sitework – G10 – Site Preparation |
| G1010 | Site Clearing | **X** | **X** |  |  |  |  |  |  |  |  |
| G1020 | Site Demolition & Relocations |  |  |  |  |  |  |  |  |  |  |
| G1030 | Site Earthwork | **X** | **X** |  |  |  |  |  |  |  |  |
| G1040 | Hazardous Waste Remediation |  |  |  |  |  |  |  |  |  |  |
| G – Building Sitework – G20 – Site Improvements |
| G2010 | Roadways | **X** | **X** |  |  |  |  |  |  |  |  |
| G2020 | Parking Lots | **X** | **X** |  |  |  |  |  |  |  |  |
| G2030 | Pedestrian Paving | **X** | **X** |  |  |  |  |  |  |  |  |
| G2040 | Site Development | **X** | **X** |  |  |  |  |  |  |  |  |
| G2050 | Landscaping | **X** | **X** |  |  |  |  |  |  |  |  |
| G – Building Sitework – G30 – Site Civil / Mech Utilities |
| G3010 | Water Supply & Distribution Systems |  |  |  |  |  |  |  |  |  |  |
| G3020 | Sanitary Sewer Systems |  |  |  |  |  |  |  |  |  |  |
| G3030 | Storm Sewer Systems |  |  |  |  |  |  |  |  |  |  |
| G3040 | Heating Distribution |  |  |  |  |  |  |  |  |  |  |
| G3050 | Cooling Distribution |  |  |  |  |  |  |  |  |  |  |
| G3060 | Fuel Distribution |  |  |  |  |  |  |  |  |  |  |
| G3090 | Other Civil/Mechanical Utilities |  |  |  |  |  |  |  |  |  |  |
| G – Building Sitework – G40 – Site Electrical Utilities |
| G4010 | Electrical Distribution |  |  |  |  |  |  |  |  |  |  |
| G4020 | Site Lighting |  |  |  |  |  |  |  |  |  |  |
| G4030 | Site Communications & Security |  |  |  |  |  |  |  |  |  |  |
| G4090 | Other Electrical Utilities |  |  |  |  |  |  |  |  |  |  |
| G – Building Sitework – G50 – Other Site Construction |
| G5010 | Service Tunnels |  |  |  |  |  |  |  |  |  |  |
| G5090 | Other Site Systems & Equipment |  |  |  |  |  |  |  |  |  |  |

## Element Clarifications

*[Element by element clarifications will be listed here. These should always begin with the Uniformat number and may also reference a particular phase. Below are some examples]*

B1010 & B1020 – Dropped ceiling tiles are to be temporally removed to reveal framing elements at time of scan. All tiles must be removed and replaced in the same day. Any damaged tiles are to be replaced with matching tiles at provider’s expense.

C3010, C3020 & C3030 – Basic modeling only, exact finishes not required.

D5020 – Lighting only, no wiring.

#

# ADMINISTRATION

***[Remove this entire section if being bid as part of a larger A-E services contract]***

## Submission, Review and Fee Table

The table below provides the schedule for 3D Imaging service provider’s submissions and the GSA review periods as described in the Scope of Services under Sections 3 and 4 above, and itemizes the total negotiated fee amount by stage, phase and submission as the basis for monthly progress payments.

*[Edit the table as follows:*

* *Enter the stages, phases and submissions in the same sequence as they appear in the Scope of Services at Sections 3 and 4.*
* *For each submission, enter the duration in calendar days (in the Duration column) and the milestone from which the duration will be counted (in the After column). Enter the duration in calendar days allowed for the GSA review (in the Review Period column).*
* *After the fee is negotiated and before contract award, enter in the Fee Amount column the agreed-upon fee amount for each phase and submission. Subtotal these at each stage. The total fee amount at the bottom of the table must equal the total negotiated fee.]*

|  |  |  |  |
| --- | --- | --- | --- |
| Stage/Phase/**Submission** | **Submission Due Within** | **Review Period\*** | **Fee Amount** |
| **Duration\*** | **After** |
| Phase #1 |  |  |  |  |
| Phase #2 |  |  |  |  |
| Phase #3 |  |  |  |  |
| Phase #4 |  |  |  |  |
| Phase #5 |  |  |  |  |
| **TOTAL CONTRACT AMOUNT** |  |  |  |  |

## Travel

*[Edit this section as necessary to provide a definitive basis for negotiating non-reimbursable travel costs, based on the geographic and other circumstances of the project.* *Ensure that the SOW specifies # of trips/meetings and locations in order for provider to calculate fee and travel expense.]*

Unless otherwise indicated in the Scope of Services sections, the service provider is responsible for travel costs to support the requirements contained in this Statement of Work, including all progress meetings, presentations (including OCA and Commissioner), workshops, reviews, and site visits. The service provider shall assume all travel will be within the vicinity of the project site. If trips/meetings are required or deleted subsequent to award, costs or credits will be negotiated and this contract will be modified accordingly.