

# Memorandum

**To:** Honorable Mayor and Members of the Council  
**From:** Alison Tymkiw, Senior Director - City Engineer, Transportation and Infrastructure  
**Date:** October 20, 2025  
**Re:** October 21, 2025 – Consent Agenda Item #4

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Your Honor and Members of the City Council,

The City Council Report for Consent Agenda Item #4 originally stated that the solar shade canopy at the City Hall parking lot would be 20 feet clear. However, by working with Solid Waste and the Fire Department, we can reduce the height to 16 feet in response to resident concerns. The attached revised City Council Report reflects this change.

# CITY COUNCIL REPORT



Meeting Date: October 21, 2025  
 General Plan Element: *Preservation & Environmental Planning*  
 General Plan Goal: *Achieve natural resource sustainability*

## ACTION

**Award Design-Build Manager, Construction Phase Services GMP 1 Contract for Bond Project 58, City Hall Solar.** Adopt Resolution No. 13499 authorizing Contract No. 2025-151-COS with Ameresco, Inc. in an amount not to exceed \$1,977,360 for Design-Build Manager (DBM) Construction Phase Services, Guaranteed Maximum Price No. One (GMP 1), for 2019 Bond Project 58 – Install Parasol Solar Shade Structure at City Hall Parking Lot.

## BACKGROUND

Contract No. 2024-054-COS previously authorized the design for solar at three sites, one of which was City Hall. The City is now ready to construct the facilities at City Hall. The other two sites, Eldorado Pool and Civic Center, are still in the design phase.

## ANALYSIS & ASSESSMENT

### Recent Staff Action

On April 2, 2024, Council approved the design phase contract and staff began design on the three sites simultaneously. The design for City Hall is now complete and the DBM has provided their GMP for construction.

On November 26, 2024, staff completed a Pre-Application submittal and met with Planning and Development Services staff. Project design then proceeded. The description for 2019 Bond Project 58 (the City Hall site) provided for the installation of a, "... PV parasol (high canopy) solar system creating a shaded parking area and public event space which complements the existing architecture." The high canopy as designed provides 16 feet clear below for high profile vehicles and the erection of tents and temporary structures below for events, consistent with the bond project scope description. Staff also presented the proposed design to the Scottsdale Environmental Advisory Commission at its August 20, 2025 meeting.

Action Taken \_\_\_\_\_



## RESOURCE IMPACTS

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### Available funding

Funding for this project was approved by voters in the 2019 bond. This contract will have a maximum contract amount of \$1,977,360, which is within the proposed project budget for the City Hall site.

### Staffing, Workload Impact

The contract administrator responsible for enforcement of all provisions of the contract is Roger Berna, Principal Project Manager, Transportation and Infrastructure.

## OPTIONS & STAFF RECOMMENDATION

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### Recommended Approach

Adopt Resolution No. 13499 authorizing Contract No. 2025-151-COS with Ameresco, Inc. in an amount not to exceed \$1,977,360 for Design-Build Manager, Construction Phase Services, Guaranteed Maximum Price No. One (GMP 1), for 2019 Bond Project 58 – Install Parasol Solar Shade Structure at City Hall Parking Lot.

### Proposed Next Steps

Upon Council approval, construction will begin immediately with the purchase of long lead components. Hard construction to be coordinated with Spring Training.

## RESPONSIBLE DEPARTMENT(S)

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Transportation and Infrastructure

## STAFF CONTACTS (S)

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Roger Berna, Principal Project Manager, [rberna@scottsdaleaz.gov](mailto:rberna@scottsdaleaz.gov), (480)312-7845.

## APPROVED BY

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*Alison Tymkiw*

Alison Tymkiw, Senior Director-City Engineer

(480)312-7760, [ATymkiw@scottsdaleaz.gov](mailto:ATymkiw@scottsdaleaz.gov)

10/20/25 16:11 MST

Date

## ATTACHMENTS

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1. Resolution No. 13499
2. Location Maps
3. Contract No. 2025-151-COS

RESOLUTION NO. 13499

A RESOLUTION OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AUTHORIZING CONTRACT NO. 2025-151-COS, A DESIGN-BUILD CONTRACT WITH AMERESCO, INC. IN AN AMOUNT NOT TO EXCEED \$1,977,360 FOR DESIGN-BUILD MANAGER (DBM) CONSTRUCTION PHASE SERVICES, GUARANTEED MAXIMUM PRICE ONE (GMP 1), FOR 2019 BOND PROJECT 58 – INSTALL PARASOL SOLAR SHADE STRUCTURE AT CITY HALL PARKING LOT.

WHEREAS, the City desires design-build services for construction of solar facilities at City Hall; and

WHEREAS, Ameresco, Inc. has been selected by the City to provide the requisite design-build services necessary to prepare the required documents and subsequent construction services through this contract; and

WHEREAS, Ameresco, Inc. is qualified to render the services desired by the City.

NOW THEREFORE BE IT RESOLVED by the Council of the City of Scottsdale as follows:

Section 1. The Mayor of the City of Scottsdale is authorized and directed to execute on behalf of the City of Scottsdale, Contract No. 2025-151-COS with Ameresco, Inc. in an amount not to exceed \$1,977,360 for design-build manager, construction phase services for GMP 1 for the 2019 Bond Projects 58 – Install Parasol Solar Shade Structure at City Hall Parking.

PASSED AND ADOPTED by the City Council of the City of Scottsdale this \_\_\_\_ day of \_\_\_\_\_, 2025

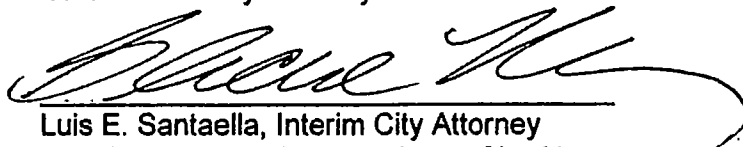
CITY OF SCOTTSDALE  
An Arizona municipal corporation

ATTEST:

\_\_\_\_\_  
Ben Lane, City Clerk

\_\_\_\_\_  
Lisa Borowsky, Mayor

APPROVED AS TO FORM:  
Office of the City Attorney

  
\_\_\_\_\_  
Luis E. Santaella, Interim City Attorney  
By: Shane C. Morrison, Assistant City Attorney





## ATTACHMENT 2

PROJECT TITLE BOND PROJECT 58  
CITY HALL LOCATION MAP

DEPT.	R.B.	DRAWN	DATE	SCALE	SHT.
CPM		RAH	9/25	NTS	1 OF 2







**CITY OF SCOTTSDALE**

**DESIGN-BUILD AGREEMENT  
CONSTRUCTION PHASE SERVICES  
PROJECT NO. 24SQ009  
Bond Project 59 – Civic Center Solar  
CONTRACT NO. 2025-151-COS**

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**THE CITY OF SCOTTSDALE**

**DESIGN-BUILD  
CONSTRUCTION SERVICES  
PROJECT NO. 24SQ009, CONTRACT NO. 2025-151-COS**

**THIS DESIGN-BUILD CONTRACT**, (the "Contract") entered this \_\_\_\_ day of \_\_\_\_\_, 2025, between the City of Scottsdale, an Arizona municipal corporation (the "City") and AMERESCO, INC., a Delaware corporation (the "Design-Build Manager" or "DBM").

**RECITALS**

- A.** The Mayor of the City of Scottsdale is authorized by provisions of the City Charter to execute contracts for construction services.
- B.** The City intends to design and construct City Hall Solar improvements, as more fully described in the Project Description, for Guaranteed Maximum Price One (GMP1) attached as Exhibit A and by reference made a part of this Contract. The street address or physical address of the construction site is 3939 N. Drinkwater Blvd., Scottsdale, Arizona.
- C.** To undertake the construction administration of this Project the City has assigned the appropriate personnel to manage and inspect the Project.

The Design-Build Manager (DBM) has represented to the City its ability to manage design services and to construct the Project. Based on these representations the City engages Ameresco, Inc. to provide these services and construct the Project.

Contract No. 2024-054-COS was previously executed between the City and the DBM for Preconstruction Services (the "Preconstruction Agreement"). A copy of the Preconstruction Agreement is on file in the offices of Transportation & Infrastructure. Those services may continue during the duration of this Contract.

**FOR AND IN CONSIDERATION** of the mutual covenants and conditions contained in this Contract, it is agreed by the City and the DBM as follows:

## ARTICLE 1 – THE DBM’S SERVICES AND RESPONSIBILITIES

1. The DBM will furnish any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all Work for the design and construction described in and reasonably inferable from this Contract. All Work will be performed in a professional and workmanlike manner and with the care and skill of a qualified DBM in Scottsdale, Arizona. The Work will be strictly performed in conformity with all legal requirements and Project Contract Documents as may be modified from time to time. It is not required that the services be performed in the sequence in which they are described in this Contract. If this Project is to be constructed in phases, the first phase is GMP 1, and the second phase is GMP2.

### 1.1. GENERAL SERVICES

- 1.1.1. The DBM's Representative will be available to the City and will have the necessary expertise and experience required to supervise the Work. The DBM's Representative must communicate regularly with the City but not less than once a day and must be vested with the authority to act on behalf of the DBM. The DBM's Representative may be replaced only with the written consent of the City, which consent will not be unreasonably withheld.
- 1.1.2. The City is a member of \$AVE cooperative purchasing group. \$AVE includes the State of Arizona, Maricopa County, many Phoenix metropolitan area municipalities, and many K-12 unified school districts. Under \$AVE Cooperative Purchasing Agreement, and with the concurrence of successful Respondents under this solicitation, a member of \$AVE may access a contract resulting from this solicitation issued by the City. By signing the DBM Contract, the Contractor agrees to allow other \$AVE members the ability to purchase their needs and "use" this contract for DBM requirements.

### 1.2. GOVERNMENT APPROVALS AND PERMITS

- 1.2.1. Unless otherwise provided, the DBM will make application for and obtain or assist the City in obtaining all necessary permits, approvals and licenses required for the prosecution of the Work from any governmental or quasi- governmental entity having jurisdiction over the Project. Fees for City Building Permits and City Encroachment Permits will be waived by the City. The DBM is specifically required to obtain the necessary environmental permits and/or file the necessary environmental notices. All environmental permits and licenses will be paid by the City in accordance with the provisions of Article 2.5. All other fees and licenses are the responsibility of the DBM.
  1. Scottsdale Revised Code, Chapter 31, Section 4, Division 3 prescribes the requirements for Building Permits. Permits must be obtained from the Development Services Office.
  2. Scottsdale Revised Code, Chapter 47, Section 3, Division 2 prescribes the requirements for Encroachment Permits. Permits must be obtained from the Development Services Office.



3. Transportation & Infrastructure Inspection must be notified before the beginning of Work, and CPM Inspection will represent the City for the purpose of inspecting the Work for conformance to Plans, Specifications and details as well as public safety requirements as authorized by City Code.
4. Development Fees applicable to the Contract will be pre-paid by the City.

The DBM will also obtain any reviews for all-necessary permitting, but the fees for the permitting will be paid by the City in accordance with Article 2.5.

The DBM is responsible for all other review and permit fees not specifically listed in Article 2.5.

The DBM is responsible for the cost of construction-related water meter(s), water and sewer taps, fire lines and taps, and all water bills on the Project meters until Substantial Completion of the Project. Arrangement for construction water is the DBM's responsibility. Construction water does not include "test water" required to complete new water line pressure tests.

- 1.2.2. Copies of all necessary permits and notices must be provided to the Contract Administrator before starting the permitted activity. This provision is not an assumption by the City of an obligation of any kind for any violation of the permit or notice requirements.
- 1.2.3. The DBM will be responsible for City plan review and making application for and obtaining permit(s) for building and demolition permits, but the fees will be paid by the City in accordance with Article 2.5. The DBM will also obtain any necessary regulatory or permitting related reviews for grading and drainage, water, sewer, and landscaping, but any fees will be paid by the City in accordance with Article 2.5. The DBM will be responsible for coordinating utility design work for permanent service to the Project and will ensure that the work takes place in a timely manner and does not impact the Project Schedule. Any utility design fees for permanent services to the Project will be paid by the City in accordance with Article 2.5.
- 1.2.4. The DBM will be responsible for all other review and permit fees not specifically listed in Article 2.5 below, or as qualified in the Preconstruction Agreement.
- 1.2.5. The DBM is responsible for the cost of construction related water meter(s), water and sewer taps, fire lines and taps, and all water bills on the project meters until Substantial Completion of the Project. Arrangements for construction water are the DBM's responsibility. Construction water does not include "test water" required to complete new water line pressure tests.
- 1.2.6. The Maricopa Association of Governments (M.A.G.) Standard Specification 107.12 is modified to read as follows: "The DBM, at his own expense, is responsible for the acquisition of any necessary temporary easements for construction purposes, storage, maintenance and refuse haul-off as indicated

upon the plans, which are required in addition to existing easements or rights of way secured by the City."

### **1.3. PRE-CONSTRUCTION CONFERENCE**

- 1.3.1.** Before beginning any Work, the Contract Administrator will schedule a Pre-Construction conference. The Parties have entered into a separate Pre-Construction Contract for Design Phase services establishing a fee the City will pay the DBM for all preconstruction services. The City will not request or obtain from the DBM a fixed price or Guaranteed Maximum Price (GMP) until after the City has entered into a written contract with the DBM for preconstruction services and a preconstruction fee.
- 1.3.2.** The purpose of this conference is to establish a working relationship between the DBM, utility firms, and various other City agencies. The agenda will include critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, the DBM Payment Requests and processing, coordination with the involved utility firms and/or utility companies (i.e. APS, SRP, SW Gas, etc.) and emergency telephone numbers for all representatives involved in the course of construction.
- 1.3.3.** At a minimum, attendees will include the DBM's Representative, who is authorized to execute and sign documents on behalf of the firm, the Job Superintendent, the Design Professional and the DBM's safety officer.
- 1.3.4.** The Notice to Proceed date will be established at the Pre-Construction conference.
- 1.3.5.** The DBM will provide a Baseline Project Schedule indicating duration, manpower, and equipment resources required to complete all major work activities. The City and the DBM will review the Baseline Project Schedule. It will be revised to the satisfaction of the Contract Administrator. No work will begin until the City accepts the Baseline Project Schedule.
- 1.3.6.** The DBM will provide a Schedule of Values (SOV) based on the Work and bids accepted from selected Subcontractors. These values must reflect the actual labor, time, materials, profit and overhead for the Work.

### **1.4. CONTROL OF THE WORK**

- 1.4.1.** The DBM will properly secure and protect all finished or partially finished Work, and will be responsible for the Work until the entire Contract is completed and accepted by the City. Any payment for completed portions of the Work will not release the DBM from this responsibility, however, he must turn over the entire Work in full accordance with these specifications before final settlement will be made of claims remaining unsettled at the time of final payment. In case of suspension of the Work for any cause, the DBM will be responsible for the Project and will take all precautions as may be necessary to prevent damage to the Project and will erect any necessary temporary structures, signs, or other facilities at no cost to the City.

- 1.4.2.** The DBM must provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit the DBM to complete the Work consistent with the Contract Documents, unless the Contract Documents provide that it is the responsibility of the City or a separate contractor.
- 1.4.3.** The DBM must perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. The DBM must at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.
- 1.4.4.** Survey stakes and marks required for the completion of the construction shown on the plans and described in the specifications will be furnished by the DBM.
- 1.4.5.** The DBM or the DBM's Representative or his designee must be present at the Work at all times that construction activities are taking place.
  1. All elements of the Work, such as concrete work, pipe work, etc., will be under the direct supervision of a foreman or his designated representative on the Site who must have the authority to take actions required to properly carry out that particular element of the Work.
  2. In the event of noncompliance with Article 8, the City may require the DBM to stop or suspend the Work in whole or in part.
- 1.4.6.** Where the Contract Documents have a requirement by the manufacturer that a particular product be installed or applied by an approved applicator, it is the DBM's responsibility to ensure the Subcontractor employed for the work is approved.
- 1.4.7.** The DBM must take field measurements and verify field conditions and carefully compare all field measurements and conditions and other information known to the DBM with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered must be immediately reported to the City.
- 1.4.8.** Before ordering materials or conducting work, the DBM and each Subcontractor must verify measurements at the Site and will be responsible for the correctness and accuracy of any measurements. No extra charge or compensation will be allowed because of differences between actual dimensions and the dimensions indicated on the drawings; differences, which may be found, will be submitted to the City for resolution before proceeding with the Work.
- 1.4.9.** The DBM must establish and maintain all building and construction grades, lines, levels, and benchmarks, and will be responsible for their accuracy and protection. This work must be performed or supervised by an Arizona licensed civil engineer or surveyor.
- 1.4.10.** Any person employed by the DBM or any Subcontractor who, in the opinion of the City, does not perform his work in a proper, skillful and safe manner or is intemperate or disorderly will at the written request of the City, be removed from

the Work by the DBM or Subcontractor employing the person, and will not be employed again in any portion of the Work without the written approval of the City. The DBM or Subcontractor will hold the City harmless from damages or claims which may arise out of or occur in the enforcement of this Article.

- 1.4.11.** The DBM assumes responsibility for the proper performance of the Work of Subcontractors and any acts and omissions in connection with their performance. Nothing in the Contract Documents is intended or considered to create any legal or contractual relationship between the City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.
- 1.4.12.** The DBM must coordinate the activities of all Subcontractors. If the City performs other work on the Project or at the Site with separate contractors under the City's control, the DBM agrees to reasonably cooperate and coordinate its activities with those of the separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.
- 1.4.13.** On a daily basis, the DBM will prepare a Contractor's Daily Report. The City's Transportation & Infrastructure Inspector will provide a sample report format to the DBM. The report will detail the activities that occurred during the course of the day, all equipment utilized, the number of hours operated and all personnel on the Site inclusive of Subcontractors. The Daily Reports must be submitted on a daily basis, unless otherwise arranged, to the City's CPM Inspector. The Daily Reports must also be made available to the Contract Administrator upon request. Failure to provide Daily Reports as arranged or requested above will result in the retention of monthly progress payments until the Reports are brought up to date.
- 1.4.14.** In the event of noncompliance with this Article 1.4, the City may require the DBM to stop or suspend the construction in whole or in part. Any suspension, due to the DBM's noncompliance will not be considered a basis for an increase in the Contract Price or extension of the Contract Time.

## **1.5. CONTROL OF THE WORK SITE**

- 1.5.1.** Throughout all phases of construction, including suspension of Work, the DBM must keep the Site reasonably free from debris, trash and construction wastes to permit the DBM to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, the DBM will remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work to permit the City to occupy the Project or a portion of the Project for its intended use.
- 1.5.2.** Dust Prevention. The DBM will take appropriate steps, procedures, or means required to prevent abnormal dust conditions due to his construction operations in connection with this Contract. The dust control measures will be maintained at all times during construction of the Project to the satisfaction of the City in

accordance with the requirements of the Maricopa County Health Department Air Pollution Control Regulations and City of Scottsdale Supplement to M.A.G. Standard Specifications together with applicable provisions of Federal and State Law.

- 1.5.3. Dust Control Coordinator.** At any City construction site of 5 acres or more of disturbed surface area, subject to a permit issued by a Control Officer requiring control of PM-10 emissions from dust generating operations, there must be at all times at the Site, at least one Dust Control Coordinator trained in accordance with the requirements of A.R.S. § 49-474.05 during primary dust generating operations. The Dust Control Coordinator must have full authority to ensure that dust control measures are implemented at the Site, including authority to conduct inspections, deploy dust suppression resources, and modify or shutdown activities as needed to control dust. The Dust Control Coordinator must be responsible for managing dust prevention and dust control on the Site, including the use of leaf blowers and street sweeping equipment. The Dust Control Coordinator must have a valid Dust Training Certification Identification Card readily accessible on the Site while acting as the Dust Control Coordinator.

The requirements described in the above paragraph do not apply if all of the following circumstances are present:

1. The area of disturbed surface area is less than 5 acres.
2. The previously disturbed areas are stabilized in accordance with the requirements of any applicable County rules.
3. The DBM with the Dust Control Permit provides notice of the acreage stabilized to the County Control Officer.

Any DBM holding a Dust Control permit issued by a County Control Officer, and who is required to obtain a single permit for multiple noncontiguous sites that is required to control PM-10 emissions from dust generating operations must have, on sites with greater than 1-acre of disturbed surface area, at least 1 individual who is designated by the Contractor as a Dust Control Coordinator. The Dust Control Coordinator must have a valid Dust Training Certification Identification Card readily accessible on the Site while acting as the Dust Control Coordinator. The Dust Control Coordinator must be present on Site at all times during primary dust generating activities that are related to the purposes for which the permit was issued.

A Subcontractor who is engaged in dust generating operations at a site that is subject to a Dust Control Permit that is issued by a County Control Officer and that requires the control of PM-10 emissions from dust generating operations must register with the County Control Officer. The Subcontractor must have its registration number readily accessible on the Site while conducting any dust generating operations.

- 1.5.4.** Only materials and equipment, which are to be used directly in the Work, will be brought to and stored on the Site by the DBM. When equipment is no longer required for the Work, it will be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of the DBM.

- 1.5.5.** The DBM is responsible for the cost to dispose of all waste products including excess earth material, which will not be incorporated into the Work under this Contract. The waste product will become the property of the DBM. The DBM will provide for the legal disposal at an appropriate off-site location of all waste products, debris, etc., and will make necessary arrangements for its disposal. Any disposal/dumping of waste products or unused materials must conform to applicable Federal, State and Local Regulations.
- 1.5.6.** The DBM will supervise and direct the Work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The DBM will employ and maintain on the Work a full-time competent and qualified supervisor or superintendent who will be at the Work, and who has been designated in writing by the DBM as the DBM's Representative at the Site. The Representative must have full authority to act on behalf of the DBM and all communications given to the Representative will be as binding as if given to the DBM. The Representative must be present on the Site at all times as required to perform adequate supervision and coordination of the Work. Where appropriate all Provisions of M.A.G., Section 105.5, will be applicable.
- 1.5.7.** In the event of abnormal weather conditions, such as windstorms, rainstorms, etc., the DBM will immediately inspect the work site and take all necessary actions to insure public access and safety are maintained.
- 1.5.8.** Damage to property at the Site: The DBM is responsible for any and all damage or loss to property at the Site, except to the extent caused by the acts or omissions of the City or its representatives, employees or agents and not carried by insurance. The costs and expenses incurred by the DBM under this Article will be paid as a Cost of the Work to the extent that these costs and expenses are in excess of or are not covered by required insurance, and to the extent of any deductibles, but will not increase the GMP.
- 1.5.9.** Damage to property of others: The DBM will avoid damage, as a result of the DBM's operations, to existing sidewalks, curbs, streets, alleys, pavements, utilities, adjacent property, the work of Separate Contractors and the property of the City. The DBM will repair any damage caused by the operations of the DBM. Repair costs will be paid as a Cost of the Work to the extent that these costs and expenses are in excess of or are not covered by required insurance, and to the extent of any deductible. Any repairs will not increase the GMP.
- 1.5.10.** Failure of the DBM to repair damage: If the DBM fails to begin the repair of damage to property as stated in Articles 1.5.8 and 1.5.9, and diligently pursue the repair, the City will give the DBM 10 days' written notice to begin the repairs. If the DBM fails to begin the repairs within the 10 day notice period, the City may elect to repair the damages with its own forces and to deduct from payments due or to become due to the DBM amounts paid or incurred by the City in correcting the damage.
- 1.5.11.** If applicable, the DBM will maintain American with Disabilities Act (ADA) and American National Standards Institute (ANSI) accessibility requirements during construction activities in an occupied building or facility. ADA and ANSI

accessibility requirements must include, but not be limited to, parking, building access, entrances, exits, restrooms, areas of refuge, and emergency exit paths of travel. The DBM is responsible for the coordination of all Work to minimize disruption to building occupants and facilities.

## **1.6. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

- 1.6.1.** Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the DBM proposes to conform to the information given and the design concept expressed in the Contract Documents.
- 1.6.2.** The DBM will review, approve, and verify that all submittals meet the intent of the Contract Documents. Six (6) copies of each Shop Drawing, Product Data, Sample, and any other similar submittals required by the Contract Documents, will be delivered to the Contract Administrator for review. The DBM will carry out these activities in a timely manner so as to cause no delay in the Work or in the activities of the City or of separate contractors. Deviations from the original specifications will be specifically noted on the submittal to the City and the City will be allowed 7 days to approve or reject any deviations.
- 1.6.3.** The DBM will perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, or similar submittals until the respective submittal has been approved by the City. All Work will be in accordance with approved submittals. The DBM will not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals by the City's approval.
- 1.6.4.** By approving, verifying and submitting Shop Drawings, Product Data, Samples and similar submittals, the DBM represents that the DBM has determined and verified materials, field measurements and any related field construction criteria, or will do so, and has checked and coordinated the information contained within these submittals with the requirements of the Work and of the Contract Documents.
- 1.6.5.** The DBM will not be relieved of responsibility for deviations from requirements of the Contract Documents unless the DBM has specifically informed the City in writing of the deviation at the time of submittal and the City has given written approval to the specific deviation.
- 1.6.6.** When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the City will be entitled to rely upon the accuracy and completeness of the calculations and certifications.
- 1.6.7.** Informational submittals upon which the City is not expected to take responsive action may be so identified in the Contract Documents.

## **1.7. QUALITY CONTROL, TESTING AND INSPECTION**

- 1.7.1. The City's Transportation & Infrastructure Construction Inspectors may be stationed on the work site to report to the Contract Administrator or his Designee as to the progress of the Work, the manner in which it is being performed, and also to report whenever it appears that material furnished or Work performed by the DBM fails to fulfill the requirements of the specifications and this Contract. The Construction Inspector may direct the attention of the DBM to any such failure as described above but the inspection will not relieve the DBM from any obligation to furnish acceptable materials or to provide completed construction that is in compliance with the Contract Documents in every particular.
- 1.7.2. In case of any dispute arising between the Construction Inspector and the DBM as to material furnished or the manner of performing the Work, the Construction Inspector will have the authority to reject materials or suspend the Work until the question and issue can be referred to and decided by the City. Construction Inspectors are not authorized to revoke, alter, enlarge, relax, or release any requirements of the specifications. Construction Inspectors will in no case act as foremen or perform other duties for the DBM or interfere with the management of the Work by the DBM.
- 1.7.3. Inspection or supervision by the Contract Administrator or Designee will not be considered as direct control of the individual workman and his work. The direct control will be solely the responsibility of the DBM.
- 1.7.4. The furnishing of any services for the City will not make the City responsible for or give the City control over construction means, methods, techniques, sequenced procedures or for safety precautions or programs or responsibility for the DBM's failure to perform the Work in accordance with Contract Documents.

## 1.8. MATERIALS TESTING

- 1.8.1. All materials used in the Work must be new and unused, unless otherwise noted, and must meet all quality requirements of the Contract Documents.
- 1.8.2. All construction materials to be used on the Work or incorporated into the Work, equipment, plant, tools, appliances or methods to be used in the Work may be subject to the inspection and approval or rejection by the City. Any material rejected by the City will be removed immediately and replaced in a manner acceptable to the City.
- 1.8.3. The procedures and methods used to sample and test material will be determined by the City. Unless otherwise specified, samples and tests will be made in accordance with the following: The standard methods of American Association of State and Highway Transportation Off Roads (AASHTO) or American Society for Testing and Materials (ASTM), and Maricopa Association of Governments (MAG) supplements.
- 1.8.4. The City will select a pre-qualified Independent Testing Laboratory and will pay for initial City Acceptance Testing.
  - 1. When the first and subsequent tests indicate noncompliance with the Contract Documents, the cost associated with that noncompliance will be



paid for by the DBM. The DBM's Contingency will be utilized for the cost of re-testing.

2. When the first and subsequent tests indicate noncompliance with the Contract Documents, all retesting will be performed by the same testing agency.

**1.8.5.** The DBM will cooperate with the selected testing laboratory and all others responsible for testing and inspecting the Work and will provide them access to the Work at all times upon reasonable advance notice.

**1.8.6.** All soils and materials testing will be performed by the DBM or its representatives and paid for by the City. The City will order tests and distribute test results for all construction areas. The City will be responsible for ordering testing and will distribute test results within 24 hours of receipt.

1. The City will pay for soils or materials testing as a separate line item in the Schedule of Values.
2. Other material testing: when the first and subsequent tests indicate noncompliance with the Contract Documents, the cost associated with that noncompliance will be paid for by the DBM. The Construction Contingency cannot be utilized for the cost of re-testing.

**1.8.7.** At the option of the City, materials may be approved at the source of supply before delivery is started.

**1.8.8.** Code compliance testing and inspections required by codes or ordinances, or by a plan approval authority, and which are made by a legally constituted authority, will be the responsibility of and will be paid by the DBM, unless otherwise provided in the Contract Documents.

## **1.9. PROJECT RECORD DOCUMENTS/AS-BUILTS**

**1.9.1.** During the construction period, the DBM will maintain at the jobsite a set of blue-line or blackline prints of the Construction Document drawings and Shop Drawings for Project Record Document purposes.

1. The DBM will mark these drawings to indicate the actual installation where the installation varies appreciably from the original Construction Documents. The DBM will give particular attention to information on concealed elements, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

- Dimensional changes to the drawings
- Revisions to details shown on drawings
- Depths of foundations below first floor
- Locations and depths of underground utilities
- Revisions to routing of piping and conduits
- Revisions to electrical circuitry

Actual equipment locations  
Duct size and routing  
Locations of concealed internal utilities  
Changes made by Contract Amendments  
Details not on original Contract Drawings

2. The DBM will mark completely and accurately Project Record Drawing prints of Construction Documents or Shop Drawings, whichever is the most capable of indicating the actual physical condition. Where Shop Drawings are marked, show cross-reference locations on the Construction Documents.
  3. The DBM will mark Project Record Drawing sets with red erasable colored pencil.
  4. The DBM will note Requests for Information (RFI) Numbers, Architects' Supplemental Information (ASI) Numbers and Contract Amendment Proposal Numbers, etc., as required to identify the source of the change to the Construction Documents.
  5. The DBM will at the time of Substantial Completion, submit Project Record Drawing prints and Shop Drawings to the City or its representative for review and comment.
- 1.9.2.** Immediately upon receipt of the reviewed Project Record Drawings from the City, the DBM will correct any deficiencies or omissions to the drawings and prepare the following for resubmission to the City:
1. A complete set of PDF electronic files of all Project Record Drawings will be prepared by the DBM in electronic format. Each drawing will be clearly marked with "As-Built Document." Files will be named consistent with the Plan Set Index.
  2. A complete set of As-Built Document reproducible mylars will be made by the DBM and delivered to the City as part of the Project closeout.
  3. The DBM's original redlined mark-up prints of the Project Record Drawings.

## **1.10. PROJECT SAFETY**

- 1.10.1.** The DBM Safety Program. The Site environment in which the DBM operates may on occasion present a potential safety and health hazard to any who may be on the job site. All Work must be performed in compliance with all applicable Federal, State and Local laws, ordinances, statutes, rules and regulations including Arizona Division of Occupational Safety and Health (ADOSH) policies and procedures. The DBM will be required to attend a City safety briefing session at the pre-construction meeting. The Contract Administrator, the designated Risk Management staff, and a DBM's representative will attend the session.

The DBM will provide a safe job site and work environment for the safety and health of employees and members of the general public and comply with all legal requirements including but not limited to the following:

Occupational Safety and Health Act (OSHA)  
Electrical Safe Work Practices Standards  
OSHA Personal Protective Equipment Standards  
National Fire Protection Association (NFPA) 70E Standard for Electrical Safety in the Workplace  
OSHA Fall Protection Standards  
OSHA Confined Space Entry  
All other applicable requirements of OSHA and local codes and agencies having jurisdiction.

Contractors that violate the aforementioned rules and regulations may be subject to job shutdown and or removal from City facilities.

- 1.10.2.** The City Safety Rules and Expectations: Risk Management Division makes available a packet that contains the City's OSHA compliance guidelines, emergency evacuation, the City's safety and health plan, and other safety information.
- 1.10.3.** Contractor Safety Tailgate Meetings: The DBM will conduct tailgate safety meetings regularly to ensure that safety on the job is given priority.
- 1.10.4.** Accident/Injury Procedure: The DBM will contact the Contract Administrator and the Risk Management Division within 24 hours of the occurrence of an accident or injury arising out of the DBM's Work under this Contract.
- 1.10.5.** Unsafe Acts: The DBM employees are encouraged to abate or remedy any unsafe act or condition, which may arise in the course of the DBM's Work under this Contract.
- 1.10.6.** Safety Audits: The City reserves the right to conduct safety audits at the job site and stop unsafe acts at any time. In addition, the City will be notified should any OSHA inspections occur at the City job site.
- 1.10.7.** The DBM recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent to the Site.
- 1.10.8.** The DBM assumes responsibility for implementing, monitoring, and documenting all safety precautions and programs related to the performance of the Work.
- 1.10.9.** The DBM will, before beginning construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents,

the DBM's Safety Representative will be an individual stationed at the Site who may have responsibilities on the Project in addition to safety.

- 1.10.10. The DBM must provide OSHA 300A Summary log information including total recordable cases, total case rates, and lost workday incident rates for the past 2 calendar years. This information can be compared to Bureau of Labor Statistics (BLS) rates to determine whether a contractor has below average or above average accident/injury rates. Bureau of Labor Statistics information can be obtained through Risk Management. The Safety Representative will make routine daily inspections of the Site and will hold weekly safety meetings with DBM's personnel, Subcontractors and others as applicable.
- 1.10.11. The DBM and Subcontractors will comply with all Legal Requirements relating to safety, as well as any City-specific safety requirements contained in the Contract Documents, provided that any City-specific requirements do not violate any applicable Legal Requirement.
- 1.10.12. The DBM will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to the Contract Administrator and, to the extent mandated by Legal Requirements, to all government or quasi-governmental authorities having jurisdiction over safety-related matters involving the Project or the Work.
- 1.10.13. The DBM's responsibility for safety under this Article 1.10 is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.
- 1.10.14. The DBM and Subcontractors must agree to provide to the City Material Safety Data Sheets for all substances that are delivered to the Site that come under OSHA Toxic and Hazardous Substances – Hazard Communication Standard, 29 CFR 1910.1200 Hazard Communication (reference Occupational Safety and Health Standards, Subpart Z Toxic and Hazardous Substances – Hazardous Communication Standard).

In conjunction with the Occupational Safety and Health Standards, Subpart Z Toxic and Hazardous Substances – Hazard Communication Standard, 29 CFR 1910.1200 Hazard Communication, the DBM and Subcontractors are informed of the presence of chemicals in the area where the Work requested will be performed. It is the responsibility of all selected Contractors to contact the City for specific information relative to the type of chemicals present and location of appropriate Material Safety Data Sheets.

Unless included in the Work, if the DBM encounters on-Site material which he reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by Public Health Laws, he will immediately stop work and report the condition to the City.

If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by Public Health Laws, the DBM will not resume work in the affected area until the material has been abated or rendered harmless. The DBM and the City may agree, in writing, to continue work in non-affected areas on-Site. An extension of Contract Time and an increase in the GMP may be granted in accordance with Article 5.

Upon discovery of hazardous substances or materials the DBM will comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions.

The DBM and all Subcontractors using chemicals on City property will use only the safest chemicals, with the least harmful ingredients. The chemicals will be approved for use by a City representative before bringing them on the property.

The DBM and all Subcontractors will make every attempt to apply approved chemicals with highly volatile organic compounds, outside of working hours. Adequate ventilation will be used at all times during the application of these approved chemicals.

#### **1.11. WARRANTY**

**1.11.1.** The provisions of M.A.G., Section 108.8 will apply with the following additional requirements:

1. Should the DBM fail to begin repairs or corrective work within 14 calendar days after receipt of written notice from the City, the City may perform the necessary work and the DBM agrees to reimburse the City for the actual cost.
2. The warranty period on any part of the Work so repaired or replaced will be extended for a period of 1 year from the date of the repair or replacement.
3. This warranty will not apply to damage caused by normal wear and tear or by acts beyond the DBM's control.

**1.11.2.** The DBM's warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work by persons other than the DBM or anyone for whose acts the DBM may be liable.

**1.11.3.** The DBM's warranty obligation will be the maximum allowed by the Arizona Registrar of Contractors.

**1.11.4.** Nothing in this warranty is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than those provided in this Article 1.11 or the Contract Documents. The DBM will provide the City with all manufacturers' warranties upon Substantial Completion.

#### **1.12. CORRECTION OF DEFECTIVE WORK**

- 1.12.1. The DBM agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Article 1.11 above, within a period of 1 year from the date of Substantial Completion of the Work or any portion of the Work, or within any longer period to the extent required by the Contract Documents. A Progress Payment, or partial or entire use or occupancy of the Project by the City will not constitute acceptance of the Work if not in accordance with the Contract Documents.
- 1.12.2. The DBM will take meaningful steps to begin correction of nonconforming Work subject to this Article 1.12. These measures include but are not limited to timely correction of the Work. If the DBM fails to initiate necessary measures for this Work within 7 days of receipt of written notice from the City, the City, in addition to any other remedies provided under the Contract Documents, may provide the DBM with written notice that the City will begin correction of any nonconforming Work with its own forces.
- 1.12.3. If the City does perform this corrective Work, the DBM will be responsible for all reasonable costs incurred by the City in performing the correction.
- 1.12.4. The DBM will immediately respond to any nonconforming Work that creates an emergency.
- 1.12.5. The 1 year period referenced in this Article 1.12 applies only to the DBM's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies the City may have regarding the DBM's other obligations under the Contract Documents.

### **1.13. Subcontractor and Major Supplier Selection**

The Parties have entered into a Preconstruction Agreement that contains Subcontractor and Major Supplier provisions. In selecting Subcontractors and Major Suppliers, the DBM will comply with the provisions in the Preconstruction Agreement. [For horizontal construction, as defined in A.R.S. §34-101(15), the DBM must self-perform not less than 45% of the Work as required by A.R.S. §34-605(G).]

## **ARTICLE 2 – THE CITY’S SERVICES AND RESPONSIBILITIES**

### **2.**

#### **2.1. DUTY TO COOPERATE**

The City will, throughout the performance of the Work, cooperate with the DBM and perform its responsibilities, obligations and services in a timely manner to facilitate the DBM's timely and efficient performance of the Work so as not to delay or interfere with the DBM's performance of its obligations under the Contract Documents. The City will furnish to the DBM a Computer Aided Drafting and Design (CADD) file or electronic format of the Construction Documents acceptable to the City, at no cost to the DBM.

#### **2.2. CONTRACT ADMINISTRATION**

**2.2.1.** The Construction Administration Supervisor will be responsible for providing City-supplied information and approvals in a timely manner to permit the DBM to fulfill its obligations under the Contract Documents.

**2.2.2.** The Contract Administrator will also provide the DBM with prompt notice if the Contract Administrator observes any failure on the part of the DBM to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the drawings and specifications. The Contract Administrator has the authority to authorize Change Orders up to the limits permitted by the City's Procurement Code.

### **2.3. THE CITY'S SEPARATE CONTRACTORS**

The City is responsible for all Work performed on the Project or at the Site by separate contractors under the City's control. The City will contractually require its separate contractors to cooperate with and coordinate their activities so as not to interfere with the DBM in order to enable the DBM to timely complete the Work consistent with the Contract Documents. The DBM agrees to reasonably cooperate and coordinate its activities with those of the separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

### **2.4. PERMIT REVIEW AND INSPECTIONS**

Approving specific parts of the Building Permit is the responsibility of the City's Transportation & Infrastructure. The City of Scottsdale Plan Review Division issues Certificates of Occupancy.

### **2.5. FURNISHING OF SERVICES AND INFORMATION**

**2.5.1.** The City will be responsible for the payment or waiver of the following:

1. City review and permit(s) fees for building, encroachment, and demolition permits.
2. City review fees for grading and drainage, water, sewer, and landscaping.
3. Utility design fees for permanent services.
4. Obtaining Clean Water Act Nationwide 404 Permits.
5. City Development Fees.
6. Environmental Permits and Licenses.

**2.5.2.** Unless expressly stated to the contrary in the Contract Documents, the City will provide, (at its own cost and expense) to the DBM, the following information:

1. To the extent available, surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;

2. Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the Project and enable the DBM to perform the Work;
3. A legal description and Street or Physical address of the Site;
4. To the extent available, as-built record or historical drawings of any existing structures at the Site;
5. To the extent available, environmental studies/reports and environmental impact statements describing the environmental conditions (including hazardous materials) known to exist at the Site;
6. To the extent available, Geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the Site.

The City will provide all City standards and guidelines, supplementary conditions and special provisions that will be included in the plans and specifications for the Project. These may include but are not limited to: disposal of surplus material, special security provisions, investigation of underground facilities, traffic controls and regulations, special quality control testing and termite treatment requirements.

The City is responsible for securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable the DBM to perform the construction. The City is further responsible for all costs, including attorneys' fees, incurred in securing these necessary agreements.

## **2.6. PROJECT MANAGEMENT SERVICES**

- 2.6.1. The City may contract separately with one or more Technical Consultants to provide project management assistance to the Project. The Technical Consultant's contract as well as other firms hired by the City will be furnished to the DBM. The DBM will not have any right however, to limit or restrict any contract modifications that are mutually acceptable to the City and the Technical Consultant.
- 2.6.2. The Technical Consultant services will augment the City staffing resources to effectively manage the objectives of the City and this Project with the goal of managing the key Project communication, cost and time parameters.
- 2.6.3. The Technical Consultant may provide preprogramming and design standards.
- 2.6.4. The City may contract with the Technical Consultant to provide some or all of the following services during the performance of the construction:
  1. Oversight of the construction: The City may hire Technical Consultants to assist it in oversight of the Construction Project. The Technical Consultants will:



2. Conduct Site visits at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed construction and to determine in general if the construction is being performed in accordance with the Construction Documents. The Technical Consultant will keep the City informed of progress of the construction, and will endeavor to guard the City against defects and deficiencies in the construction. The Technical Consultant may have authority to reject construction which does not conform to the Construction Documents and to require additional inspection or testing of the construction in accordance with Articles 1.7 and 1.8;
3. Review and recommend approval of the DBM's Payment Requests;
4. Interpret matters concerning performance under and requirements of the Contract Documents on written request of the City. The Technical Consultant's response to these requests will be made with reasonable promptness and within any time limits agreed upon;
5. Analyze, recommend and assist in negotiations of Change Orders;
6. Conduct inspections to determine Substantial Completion and Final Acceptance;
7. Receive and forward to the City for the City's review and records written warranties and related documents required by the Contract Documents and assembled by the DBM.

### **ARTICLE 3 – CONTRACT TIME**

3.

#### **3.1. CONTRACT TIME**

- 3.1.1. Contract Time will be 272 days as indicated in the Notice to Proceed (NTP).
- 3.1.2. Contract Time will start with the Construction Notice to Proceed (NTP) and end with Substantial Completion. The City will issue a NTP letter establishing the mutually agreed upon NTP date for this Contract.
- 3.1.3. Failure on the part of the DBM to adhere to the Project Schedule may be the basis for termination of this Contract by the City.
- 3.1.4. Each GMP amendment to this Contract will establish a separate construction NTP date, Performance Period and Substantial Completion date for the entire Project. The Performance Period(s) may be sequential or may run concurrently.
- 3.1.5. The DBM agrees that it will commence performance of the Work and achieve Performance Periods and the Contract Time.

**3.1.6.** All of the times stated in this Article 3 will be subject to adjustment in accordance with Article 5.

### **3.2. CONSTRUCTION SCHEDULE**

**3.3.** Each approved GMP proposal will include a Project Schedule as prescribed in Article 3.5 below with a Critical Path Method diagram construction schedule that will indicate the critical path activities and establish the Performance Period encompassed by the GMP. The DBM will maintain the construction schedule throughout the construction.

### **3.4. LIQUIDATED DAMAGES**

The DBM understands that if Substantial Completion is not attained within the Contract Time as adjusted, the City will suffer damages, which are difficult to determine and accurately specify. The DBM agrees that if Substantial Completion is not attained within the Contract Time as adjusted, the DBM will pay as liquidated damages the amounts specified in Section 108.9 of the M.A.G. Standard Specifications, incorporated in this Contract by reference. These amounts may be adjusted depending on the anticipated or actual loss caused by the delay and the difficulty of proof of loss.

### **3.5. PROJECT SCHEDULE**

**3.5.1.** The Project Schedule will be initially submitted at the start of this Contract as required by Article 1.3 and updated and maintained throughout the Contract Services. An updated Project Schedule will be part of the GMP amendment.

**3.5.2.** The Project Schedule will be revised as required by conditions and progress of the Contract Services, but the revisions will not relieve the DBM of its obligations to complete the Contract Services within the Contract Time(s), as these dates may be adjusted in accordance with the Contract Documents.

**3.5.3.** Updated Project Schedules will be submitted monthly to the City 5 days before the DBM's monthly payment Request.

1. The DBM will provide the City with a monthly status report with each Project Schedule detailing the progress of Construction, including whether (i) the construction is proceeding according to schedule, (ii) discrepancies, conflicts, or ambiguities exist in the Contract Documents that require resolution, and (iii) other items that require resolution so as not to jeopardize the ability to complete the construction as presented in the GMP and within the Contract Time(s).

2. With each Project Schedule submitted, the DBM will include a transmittal letter including the following:

- Description of problem tasks (referenced to field instructions, requests for information (RFIs), change order or claim numbers) as appropriate.
- Current and anticipated delays not resolved by approved change orders, including:

- Cause of the delay
- Corrective action and schedule adjustments to correct the delay
- Known or potential impact of the delay on other activities, milestones, and the date of Substantial Completion
- Changes in construction sequence
- Pending items and status including but not limited to:
  - Pending change orders
  - Time extension requests
  - Other items
- Substantial Completion date status:
  - If ahead of schedule, the number of days ahead
  - If behind schedule, the number of days behind
- Other project or scheduling concerns.

**3.5.4.** The City's review of and response to the Project Schedule is only for general conformance with the scheduling requirements of the Contract Documents. The review will not relieve the DBM from compliance with the requirements of the Contract Documents or be construed as relieving the DBM of its complete and exclusive control over the means, methods, sequences and techniques of executing the Contract Services.

**3.5.5.** The Project Schedule will include a Critical Path Method diagram schedule that will show the sequence of activities, the interdependence of each activity and indicate the path of critical activities.

The Critical Path Method diagram schedule will be in days and indicate duration, earlier and latest start and finish dates, and float times for all activities except critical activities and will be presented in a time scaled graphical format for the Project as a whole.

1. The activities making up the schedule will be of sufficient detail to assure that adequate planning has been done for proper execution of the Work and provides an appropriate basis for monitoring and evaluating the progress of the Work.
2. The Critical Path Method diagram construction schedule will be based upon activities, which would coincide with the schedule of values.
3. The Critical Path Method diagram schedule will show all submittals associated with each Work activity and the review time for each submittal.
4. The schedule will show milestones, including milestones for City-furnished information, and will include activities for City-furnished equipment and furniture, if any, when those activities are interrelated with the DBM's activities.
5. The schedule will include a critical path activity that reflects anticipated rain delay during the performance of the Contract. The duration will reflect the

average climatic range and usual industrial conditions prevailing in the locality of the Site. Weather data will be based on information provided by the National Weather Service or other approved source.

### **3.6. COST ESTIMATES**

Provisions pertaining to Cost Estimates may be found in the GMP Proposal, attached as Exhibit C.

### **3.7. CONSTRUCTION MANAGEMENT PLAN**

As a part of the Preconstruction Agreement the City has required the DBM to prepare a Construction Management Plan.

### **3.8. DESIGN SERVICES**

Design Services have been performed by the DBM in accordance with the Preconstruction Agreement.

## **ARTICLE 4 – CONTRACT PRICE**

4. The DBM agrees to do all Work for the design and construction of the improvements and to completely construct the improvements and install the material, as called for by this Contract free and clear of all claims, liens, and charges, in the manner and under the conditions specified within the time, or times, stated in the GMP, as may be amended from time to time, as stated in Exhibit C, attached and by reference made a part of this Contract.

### **4.1. CONTRACT PRICE**

- 4.1.1. The Contract Price is the Guaranteed Maximum Price of \$1,977,360, as stated in detail in the GMP Proposal attached as Exhibit C.
- 4.1.2. The Contract Price is subject to adjustments made in accordance with Article 5.
- 4.1.3. The DBM will be responsible for payment of all State of Arizona and City of Scottsdale transaction privilege (sales) taxes due on construction income, whether or not these taxes are specifically separated in the bid amount.
- 4.1.4. Unless otherwise provided in the Contract Documents, the Contract Price is considered to include all sales, use, consumer and other taxes throughout the term of this Contract, whether or not yet effective or merely scheduled to go into effect.
- 4.1.5. The DBM must secure and maintain, during the life of the Contract, State of Arizona and City of Scottsdale Transaction Privilege (sales) Tax Licenses.

To obtain a State of Arizona Privilege (Sales) Tax License Application, please go to the following website:  
[http://www.revenue.state.az.us/ADOR\\_Forms/70-79/74-4002\\_fillable.pdf](http://www.revenue.state.az.us/ADOR_Forms/70-79/74-4002_fillable.pdf)

To obtain a City of Scottsdale Transaction (Sales) Tax License Application, please go to the following website:  
<http://www.scottsdaleaz.gov/taxes/salestax.asp>

#### **4.2. RESPONSIBILITY FOR PRIVILEGE (SALES) TAXES**

The DBM is responsible for payment of all applicable State of Arizona and City of Scottsdale transaction privilege (sales) taxes due on construction income whether or not these taxes are specifically separated in the bid amount. The taxes are to be reported on either a progressive billing (accrual) basis or cash receipts basis, depending on the method chosen at the time application was made for the Privilege (sales) Tax License.

City Privilege (sales) tax exemptions/deductions may be applicable to certain projects. The DBM is advised to consider this as it prepares its bid. Please review, in detail, Sections 415, 465, and 110 of the Scottsdale Revised City Code, Appendix C to determine if exemptions/deductions are applicable. For tax guidance, please reference the City Code and other tax resources at the following website:

<http://www.scottsdaleaz.gov/taxes/>

The State of Arizona has similar exemptions, please reference A.R.S. Title 42 at the following website:

<http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp?Title=42>

For further questions regarding tax treatment, please contact the Arizona Department of Revenue at 602-255-2060 and the City of Scottsdale Tax & Audit Section at 480-312-2768.

#### **4.3. CONTINGENCIES AND ALLOWANCES**

Any Contingencies and Allowances as agreed upon between the City and the DBM will be as stated in the GMP.

#### **4.4. MARKUPS FOR CHANGES**

If the GMP requires an adjustment due to changes in the Work, the cost of these changes is determined by Article 5. The mark-ups that are to be allowed on these changes will be no greater than the mark-ups in the approved GMP, as stated in the Preconstruction Agreement.

#### **4.5. GUARANTEED MAXIMUM PRICE (GMP)**

**4.5.1.** At the end of the design phase or at a time determined by the City and as a part of the Work done under the Preconstruction Agreement, the City has requested the DBM to provide a GMP or series of GMPs if the DBM determines phased construction would be in the City's best interest. The approved GMP(s) is provided in Exhibit C, attached to this Contract.

**4.5.2.** The DBM guarantees to bring the completion of the design and construction of the Project within the GMP or the DBM alone will be required to pay the difference between the actual cost and the GMP.

1. Any buy out savings of the DBM's GMP at the conclusion of the selection of Subcontractors may be used during construction by the City as a City Project Construction Contingency.
2. Any savings realized during construction must be incorporated into the construction of the Project to fund additional scope items or will be returned to the City upon the City's request.

**4.5.3.** The GMP is composed of the following not-to-exceed cost reimbursable or lump sum amounts defined below:

1. The Contractor's Cost of the Work is a negotiated cost and is a not-to-exceed amount defined by the individual work items and their associated negotiated unit prices as a part of the hard construction work as defined in Article 13. It includes direct labor costs, subcontract costs, design fees, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, building and licensing permit fees, materials testing, General Conditions, and warranty of the work together with self-performed work that the DBM established in the Sub-Contractor Selection Plan. The Cost of Work does not include the DBM's Construction Fee, taxes, bonds or insurance costs.
2. DBM Construction Fee is a negotiated percentage or fixed fee that is proposed by the DBM for the project as defined in Article 13. It is for additional services and management of the DBM Project.
3. The General Conditions Costs are a negotiated amount of project supervision and other indirect costs according to construction terms. These costs are not reflected in other GMP items. Costs may include, but are not limited to, the following: Project Manager, Superintendent, Full-time General Foremen, workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.) and administrative office personnel. Other costs may include: temporary office, fencing and other facilities, office supplies, office equipment, minor expenses, utilities, vehicles, fuel, sanitary facilities, and telephone services at the site.
4. Bonds and Insurance are fixed percentages that will be applied to Cost of Work, and General Condition Costs as detailed in the GMP Proposal.
5. Taxes include all sales, use, consumer and other taxes which are legally enacted when negotiations of the GMP were concluded, whether or not yet effective or merely scheduled to go into effect. Taxes are actual costs and are a not-to-exceed reimbursable amount.
6. Indirect Costs include DBM Construction Fee, the DBM contractor management costs such as DBM staff, office space, phones, copiers, faxes, etc. and general requirements such as sweeping, temporary fencing,

permitting, licensing, and inspections. The General Conditions, DBM Construction Fee, Payment and Performance Bonds, Insurance, taxes, and permitting and licensing fees equal the DBM Indirect Costs.

7. The City's Project Contingency is defined in Article 13. It is to be used at the sole discretion of the City to cover any increases in Project costs that result from City directed changes or unforeseen site conditions. The City's Project Contingency will be added to the GMP amount provided by the DBM, the sum of which will be the full contract price for construction. Markups for the Construction Fee and taxes will be applied by the DBM at the time that the City's Project Contingency is used.
8. The Total Cost of Work, plus the DBM Indirect Costs plus the City's Project Contingency equals the Total GMP.
9. The GMP is cumulative. The amount of any GMP amendment will be negotiated separately and will reflect the DBM's risk from that point forward in the Project.

#### **4.6. GMP PROPOSAL**

The GMP Proposal will be that as stated in the Preconstruction Agreement, on file in the offices of Transportation & Infrastructure.

#### **4.7. GMP APPROVAL**

The approval of the GMP will be in accordance with the provisions of the Preconstruction Agreement, attached to this Contract as Exhibit B.

### **ARTICLE 5 - CHANGES TO THE CONTRACT PRICE AND TIME**

#### **5.**

##### **5.1. DELAYS IN THE WORK**

- 5.1.1. Delays may be compensable, concurrent, excusable or non-excusable, all as defined in Article 13.
- 5.1.2. If the DBM is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom the DBM is responsible, the Contract Times for performance may be reasonably extended by Change Order.
- 5.1.3. The DBM will request an increase in the Contract Time by written notice including an estimate of the probable effect of delay on progress of the Work. In the case of a continuing delay only one request is necessary.
  1. Written notice will be received within 14 days of the commencement of the cause of the delay.

2. If written notice is received more than 14 days after commencement of the cause of the delay, the period of delay will be considered to commence 14 days before the giving of any notice.

- 5.1.4. By way of example and subject to the Force Majeure provisions of Article 11.8, events that may entitle the DBM to an extension of the Contract Time include acts or omissions of the City or anyone under the City's control (including separate contractors), Acts of God or public enemy, changes in the Work, Differing Site Conditions, Hazardous Conditions, unusual delay in transportation, and excessive inclement weather conditions not reasonably anticipated, war or other national emergency making performance temporarily impossible or illegal, or strikes or labor disputes not brought about by any act or omission of the DBM.
- 5.1.5. If excessive inclement weather conditions are the basis for a request for additional Contract Time, these requests will be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.
- 5.1.6. It is understood, however, that permitting the DBM to proceed to complete any Work, or any part of the Work, after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of the City of any of its legal rights in this Contract.
- 5.1.7. In the event that the DBM sustains damages as a result of expenses incurred by a delay for which the City is responsible, the DBM and the City will negotiate to determine the amount of these damages. This provision is made in compliance with Arizona Revised Statutes § 34-609(E) and is effective only if the delay caused by the City is unreasonable under the circumstances and was not within the contemplation of the parties. This provision will not be construed in a way to void any provisions of the Pre-Construction Agreement pertaining to notice of delays, arbitration or other settlement provisions applicable to disputes or provisions relating to liquidated damages.
- 5.1.8. In addition to the DBM's right to a time extension for those events stated in this Article 5.1, the DBM may also be entitled to an appropriate adjustment of the Contract Price, provided, however, that the Contract Price will not be adjusted for those events stated in this Article that are beyond the control of both the DBM and the City, including the events of war, acts of terrorism, floods, labor disputes (but not including DBM's own work force and those of its subcontractors), earthquakes, epidemics, excessive inclement weather conditions not reasonably anticipated, and other Acts of God.

## 5.2. DIFFERING SITE CONDITIONS

- 5.2.1. If the DBM encounters a Differing Site Condition(s), the DBM may be entitled to an adjustment in the Contract Price or Contract Time(s) to the extent the DBM's cost or time of performance are the direct result of a Differing Site Condition(s).
- 5.2.2. Upon encountering a Differing Site Condition, the DBM will provide prompt written notice to the City of the condition, which notice will not be later than 7



days after the condition has been encountered. The DBM must give the City's Contract Administrator written notice of and an opportunity to observe, such condition before disturbing or altering the Differing Site conditions. The failure of the DBM to give written notice and make the Claim as required by this Article and Article 7.1.5 shall constitute a waiver by the DBM of any rights arising out of or relating to such Differing Site Conditions. The DBM will, to the extent reasonably possible, provide notice before the Differing Site Condition has been substantially disturbed or altered. (Final costs must be submitted within thirty (30) days after notice is received by the City, unless extended by written agreement of the parties.)

- 5.2.3.** In order for the DBM to obtain any additional compensation or time extensions for Differing Site Conditions, the DBM must demonstrate that it encountered a material difference at the Site, as defined in Article 13, that required it to expend additional cost or time. The DBM will also establish that it actually and reasonably relied upon the representations found in the Contract Documents concerning the Site conditions.

### **5.3 APPLICATION FOR EXTENSION OF TIME**

- 5.3.1** If performance by the DBM is delayed for a reason set forth in Article 5, the DBM may be allowed a reasonable extension of time in conformance with this Article. Before the DBM's time extension request may be considered, the DBM shall notify the City of the condition which allegedly has caused or is causing the delay, and shall submit a written application to the City identifying:

1. Liquidated damage assessment rate, as specified in the Contract;
2. Original total GPM;
3. The original Contract start date and completion date;
4. Any previous time extensions granted (number and duration);
5. The extension of time requested.

- 5.3.2** In addition, the application for extension of time shall set forth in detail;

1. The nature of each alleged cause of delay in completing the Work; and
2. The date upon which each such cause of delay began and ended and the number of dates attributable to each such cause; and
3. A statement that the DBM waives all claims except for those delineated in the application, and the particulars of any claims which the DBM does not agree to waive. For time extensions for Substantial Completion and final completion payments, the application shall include a detailed statement of the dollar amounts of each claim item reserved; and
4. A statement indicating the DBM's understanding that the time extension is granted only for purposes of permitting continuation of Contract performance

and payment for Work performed and that the City retains its right to conduct an investigation and assess liquidated damages as appropriate in the future.

#### **5.4 ERRORS, DISCREPANCIES AND OMISSIONS**

- 5.4.1** If the DBM observes errors, discrepancies or omissions in the Contract Documents, it will promptly notify the City and arrange for clarification. The DBM will provide a copy of the notice to the City Contract Administrator.
- 5.4.2** If the DBM proceeds with the Work affected by the errors, discrepancies or omissions, without receiving any clarifications, it does so at its own risk. Adjustments involving these circumstances made by the DBM before receiving clarification will be at the DBM's risk.

#### **5.5 THE CITY REQUESTED CHANGE IN WORK**

- 5.5.1** The City reserves the right to make, at any time during the progress of the Work, any alterations as may be found necessary or desirable.
- 5.5.2** Any alterations and changes will not invalidate this Contract nor release the surety, and the DBM agrees to perform the Work as altered, in the same manner as if it has been a part of the original Contract Documents. The DBM will notify the surety of the changes and will assure that the alterations and changes are adequately covered by the surety bond.
- 5.5.3** Upon receipt of a request for Change in Work, the DBM will prepare a proposal in significant detail, using the rates and markups established in the Contract Documents as a basis of the Contract Price adjustment. The DBM's proposal will include a detailed description of any schedule impact.
- 5.5.4** Legal Requirements: The Contract Price or Contract Times will be adjusted to compensate the DBM for the effects of any changes in the Legal Requirements enacted after the date of the Contract or the date of the GMP affecting the performance of the Work.

#### **5.6 CHANGE ORDERS**

- 5.6.1** In accordance with Scottsdale Revised Code § 2-200 and any related Rules and Procedures, the City and the DBM will negotiate in good faith and as expeditiously as possible the appropriate adjustments for a Change Order. Upon reaching an agreement, the parties will prepare and execute an appropriate Change Order reflecting the terms of the adjustment. The change in Work may or may not include an adjustment in the Contract Price or Contract Time.
- 5.6.2** All changes in Work authorized by Change Orders will be performed under the conditions of the Contract Documents. The decision to issue Change Orders rests solely with the City and any decision to issue a Change Order must be promptly complied with by the DBM, subject to the provisions of Article 5.4. The Contract Administrator has the authority to authorize Change Orders up to the limits permitted by the City's Procurement Code.

- 5.6.3** The execution of a Change Order by the DBM shall constitute conclusive evidence of the DBM's agreement to the ordered changes in work, this Contract as thus amended, the Contract Price, and the time for performance by the DBM. The DBM, by executing the Change Order, waives and forever releases any claim against the City for any additional time or compensation for matters relating to, arising out of, or resulting from the work included within or affected by the executed Change Order of which the DBM knew or should have known.

## **5.7 UNILATERAL DETERMINATION OF CHANGE ORDER VALUE**

If no mutual agreement occurs between the City and the DBM, the change in Contract Price, if any, shall be derived by determining the reasonable actual costs incurred or savings achieved, resulting from revisions to the Work. Such reasonable actual costs or savings shall include a component for direct job site overhead and profit, but shall not include home-office overhead or other indirect costs and components. The calculation of actual costs shall conform to the markup schedule in Article 5.11.2 below. Any such costs or savings shall be documented in the format and with such content and detail as the City requires. The DBM shall promptly submit such documentation and other backup as the City may require in evaluating the actual costs incurred.

## **5.8 ADDITIONAL CHANGE ORDER COST REQUIREMENTS**

DBM's or Subcontractor's submittals shall include the cost of materials, sales tax, and the cost of all transport. The cost of items listed shall be directly related to the Change Order. Indirect costs not specifically related to the Change Order shall not be considered. DBM's or Subcontractor's Direct Labor Costs shall be limited to the hourly rate of directly involved workmen, employer contributions toward DBM standard benefits, pensions, unemployment or social security (if any), and employer costs for paid sick and annual leave. DBM's or Subcontractor's Overhead shall include license fees, bond premiums, supervision, wages of timekeepers and clerks, incidentals, home and field office expense, and vehicle expense directly related to the Project, and all other direct Project expenses not included in the DBM's material, direct labor, and equipment costs.

- 5.8.1** The allowance for overhead and profit shall be limited to the following schedule:

1. For the DBM, for any work performed by the DBM's own forces, fifteen (15%) percent of the Subtotal of Costs to the DBM.
2. For the DBM, for any work performed by his Subcontractor, six (6%) percent of the amount due to the Subcontractor.
3. For each Subcontractor or Sub-subcontractor involved, for any work performed by their own forces, fifteen (15%) of their materials and direct labor costs.
4. For each Subcontractor, for work performed by his Sub-Subcontractor(s), six (6%) percent of the amount due to the Sub-subcontractor.

## **5.9 LIMITATION OF COMPENSABLE ITEMS**

**5.9.1** For Change Orders, the total cost or credit to the City shall be based on the following schedule:

1. DBM's Materials Costs.
2. DBM's Direct Labor Costs.
3. DBM's Equipment Costs (includes owned/rented equipment).
4. Applicable Subcontractor Costs.
5. Subtotal of Costs to the DBM.
6. DBM's Overhead and Profit.
7. Total Cost or Credit to the City.

#### **5.10 FIELD ORDERS**

**5.10.1** The City has authority to initiate Field Orders that do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Field Orders will be imposed by written order and will be binding on the City and the DBM. The DBM will carry out the written orders promptly.

**5.10.2** Field Orders will not involve an adjustment in the Contract Price or Contract Times unless or until an adjustment becomes a Change Order.

**5.10.3** The DBM may make minor changes in Work; provided, however that the DBM will promptly inform the City, in writing, of any changes and record the changes, if appropriate, on the Project Record Documents maintained by the DBM.

#### **5.11 CONTRACT PRICE ADJUSTMENTS**

**5.11.1** The increase or decrease in Contract Price resulting from a Change in the Work will be determined by one or more of the following methods:

1. Unit prices stated in the Agreement or as subsequently agreed to between the parties;
2. A mutually agreed upon and accepted lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by the City; and
3. Costs, fees and any other markups.

**5.11.2** The markups that will be allowed on these changes will be no greater than the markups outlined in the approved GMP as shown on Exhibit C.

**5.11.3** If an increase or decrease cannot be agreed to as stated in Article 5.6.1.(1) through 5.6.1.(3) above, the cost of the Change of the Work will be determined

by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit. The DBM will maintain a documented, itemized accounting evidencing the expenses and savings associated with these changes.

**5.11.4** If unit prices are included in the Contract Documents or are subsequently agreed to by the parties, but application of the unit prices will cause substantial inequity to the City or the DBM because of differences in the character or quantity of the unit items as originally contemplated, the unit prices will be equitably adjusted.

**5.11.5** If the City and DBM disagree upon the amount to be paid, whether the DBM is entitled to be paid for any services required by the City the amount to be paid, other disagreements over the Scope of Work, proposed changes to the Work, or the time required to complete the work, the City and the DBM will resolve the disagreement in compliance with Article 7 of this Contract.

1. As part of the negotiation process, the DBM will furnish the City with a good faith estimate of the costs to perform the disputed services or the additional time required in accordance with the City's interpretations.
2. If the parties are unable to agree and the City expects the DBM to perform the services in accordance with the City's interpretations, the DBM will proceed to perform the disputed services, conditioned upon the City issuing a written order to the DBM (i) directing the DBM to proceed and (ii) specifying the City's interpretation of the services that are to be performed.

**5.11.6** Emergencies: In any emergency affecting the safety of persons or property, the DBM will act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price or Contract Time(s) resulting from emergency work will be determined as provided in this Article 5.

## **ARTICLE 6 – PROCEDURE FOR PAYMENT**

**6.** For and in consideration of the faithful performance of the Work required to be done in the Contract Documents, and in accordance with the directions of the City to its satisfaction, the City agrees to pay the DBM the actual Cost of the Work and any applicable costs for general conditions, insurance, bonding, and taxes, but no more than the GMP as adjusted by any Change Orders or Contract Modifications. Payment for the specific Work under this Contract will be made in accordance with payment provisions of this Article 6.

### **6.1. GMP PAYMENT REQUEST**

**6.1.1.** At the Pre-construction conference described in Article 1.3, the DBM will submit for the City's review and approval a Schedule of Values. The Schedule of Values will be based on bids accepted from successful Subcontractors, include values for all items, including professional fees, cost of construction, indirect costs, and the construction fee, that comprise the GMP or the City allowances, and serve as the basis for monthly progress payments made to the DBM throughout the Work.

- 6.1.2.** The DBM will pay all sums due to Subcontractors or Suppliers for services or materials within 7 calendar days after the DBM has received payment from the City.
- 6.1.3.** At least 5 working days before the date established for a Construction Payment Request, the DBM will submit an updated Project Schedule and meet with the Construction Administration Supervisor to review the progress of the construction, as it will be reflected on the Construction Payment Request. The DBM Payment Request will constitute the DBM's representation that the Work has been performed consistent with the Contract Documents, has progressed to the point indicated in the DBM Payment Request, and that title to all Work will pass to the City free and clear of all claims, liens, encumbrances, and security interests upon incorporation of the Work into the Project.
- 6.1.4.** The DBM Payment Request may request payment for equipment and materials not yet incorporated into the Project if construction progress is in reasonable conformance with the approved schedule.
  - 1. For equipment and materials properly stored at the Site, the equipment and materials will be protected by suitable insurance, and the City will receive the equipment and materials free and clear of all liens and encumbrances.
  - 2. For materials and equipment stored off the Site, the City must approve the storage. The material and equipment must be stored within Maricopa County and be accessible for the City's inspection. Title to the materials and equipment must protect the City's interest and will include applicable insurance, bonding, storage and transportation to the Site.
  - 3. The City will be named as an Additional Insured on all insurance required for stored materials or equipment.
- 6.1.5.** The DBM will submit Payment Requests in a format acceptable to the City on dates established by the City and the DBM. This submittal will include, as a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any deliverables submitted, and the Subcontractors' actual request for payment plus similar narrative and listing of their work.
- 6.1.6.** Payment for services negotiated as a fixed unit price will be made in accordance with actual measured quantities completed during the preceding month as itemized on the Schedule of Values and stated in Exhibit C. Payments for these services negotiated as a lump sum will be made in accordance with the percentage of the services completed during the preceding month as itemized on the Schedule of Values in Exhibit C. Those services negotiated, as a not-to-exceed fee will be paid in accordance with the actual costs of the service expended during the preceding month. The City will review payment requests and make recommendations for approval or denial within 7 calendar days after the City's receipt of each properly submitted and accurate Construction Payment Request, but in each case less the total of payments previously made, and less amounts properly withheld as retention under Article 6.2.3. Payment Requests will be considered approved and certified for payment after 7 days unless before

that time, the Contract Administrator issues a specific finding setting forth in detail those items in the Request for Payment that are not approved for payment.

- 6.1.7. The DBM agrees at its own proper cost and expense, to do all construction, as called for by this Contract free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified within the time, or times, stated in this Contract.
- 6.1.8. The Schedule of Values will be submitted as prescribed in this Contract, and subject to adjustment in accordance to this Contract and will serve as the basis for monthly progress payments made to the DBM throughout the construction.
- 6.1.9. The DBM will submit to the City on the monthly anniversary of the construction NTP date beginning with the first month after the construction NTP date the "Construction Payment Request".
- 6.1.10. All bonds and insurance required for stored materials will be in the City's name.

## 6.2. PAYMENT OF GMP

- 6.2.1. The City will make payment in accordance with A.R.S. § 34-609. Payment will be made no later than 14 days after the DBM's Payment Request is certified and approved by the City's Contract Administrator, less amounts properly retained under Article 6.2.3 below. The DBM will pay all sums due to the Subcontractors and Suppliers for services and materials within 7 days after the DBM has received payment from the City.
- 6.2.2. The City will pay the DBM all amounts properly due. If the City determines that the DBM is not entitled to all or part of a DBM's Payment Request, it will notify the DBM in writing within 7 days after the date the DBM Payment Request is received by the City. The notice will indicate the specific amounts the City intends to withhold, the reasons and contractual basis for the withholding, and the specific measures the DBM must take to rectify the City's concerns. The DBM and the City will attempt to resolve the City's concerns. If the parties cannot resolve these concerns, the DBM may pursue its rights under the Contract Documents, including those under Article 7 of this Contract.
- 6.2.3. Retention of Progress Payments.
  - 1. The City will retain 10% of each DBM Payment Request amount, provided, however, that when 50% of the Work has been completed by the DBM, on DBM's request one-half of the amount retained, including any substituted securities, will be paid to the DBM if the DBM is making satisfactory progress on the Contract, and there is no specific cause or claim requiring a greater amount to be retained. After the Contract is 50% completed, no more than 5% of the amount of any subsequent progress payments may be retained if the DBM is making satisfactory progress on the Contract. If, however, the City determines that satisfactory progress is not being made on the Contract, the City may reinstate the 10% retention for all remaining progress payments.

2. In lieu of retention, the DBM may provide an assignment of time certificates of deposit (CDs) from a bank licensed by the State of Arizona, securities guaranteed by the United States, securities of the United States, the State of Arizona, Arizona counties, Arizona municipalities, and Arizona school districts, or shares of savings and loan institutions authorized to transact business in Arizona. Securities deposited in lieu of retention must be deposited into a separate account with a bank having a branch located in the City of Scottsdale. CDs and Securities will be assigned exclusively for the benefit of the City of Scottsdale in accordance with the City's form of Retainage Escrow Agreement.

### **6.3. SUBSTANTIAL COMPLETION**

- 6.3.1. Substantial Completion will be for the entire Project unless a partial Substantial Completion is identified in the approved GMP schedule and stated in the Notice to Proceed (NTP) letter. Substantial Completion will be in accordance with its definition in Article 13, and with the criteria in the Notice to Proceed.
- 6.3.2. Before notifying the City in accordance to Article 6.3.3 below, the DBM will inspect the Work and prepare and submit to the City a comprehensive list of items to be completed or corrected. The DBM will proceed promptly to complete and correct items on the list. Failure to include an item on the list does not alter the responsibility of the DBM to complete all Work in accordance with the Contract Documents.
- 6.3.3. The DBM will notify the City when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is substantially complete.
- 6.3.4. Within 5 days of the City's receipt of the DBM's notice, the City and the DBM will jointly inspect the Work to verify that it is substantially complete in accordance with the requirements of the Contract Documents.
- 6.3.5. If the Work is substantially complete, the City will prepare and issue a Certificate of Substantial Completion that will state (i) the date of Substantial Completion of the Work or portion of the Work, (ii) the remaining items of Work that have to be completed within 30 calendar days before Final Acceptance, (iii) provisions (to the extent not already provided in the Contract Documents) establishing the City's and the DBM's responsibility for the Project's security, maintenance, utilities and insurance pending Final Acceptance and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion.
- 6.3.6. The City, at its option, may use a portion of the Work which has been determined to be substantially complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items in Article 6.3.5 above, (ii) the DBM and the City have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) the City and DBM agree that the City's use or occupancy will not interfere with the DBM's completion of the remaining Work.



- 6.3.7. Punch List Preparation:** A minimum of 30 days before Substantial Completion the DBM, in conjunction with the City, will prepare a comprehensive list of Punch List items, which the City may edit and supplement. The DBM will proceed promptly to complete and correct the Punch List items. Failure to include an item on the Punch List does not alter the responsibility of the DBM to complete all Work in accordance with the Contract Documents. Warranties required by the Contract Documents will not begin until the date of Final Acceptance unless otherwise provided in the Contract Documents. Seven (7) days before the City issues its Final Acceptance Letter, the DBM will deliver to the City all Operation and Maintenance Manuals necessary for the City to assume responsibility for the operation and maintenance of that portion of the Work.
- 6.3.8.** Upon Substantial Completion of the entire Work or, if applicable, any portion of the Work, the City will release to the DBM all retained amounts relating, as applicable, to the entire Work or completed portion of the Work, not to exceed two and one half times (2.5) the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion.
- 6.3.9. Final Acceptance:** Upon receipt of written notice that the Work or identified portions of the Work are ready for final inspection and acceptance, the City and DBM will jointly inspect to verify that the remaining items of Work have been completed as described in Article 6.3.5, including items on the Punch List. Upon verification that the items have been satisfactorily completed, the City will issue a Final Acceptance Letter.

#### **6.4. FINAL PAYMENT**

- 6.4.1.** After receipt of a final payment request from the DBM, and provided that the DBM has completed all of the Work in conformance with the Contract Documents the City will make final payment 14 days after the City has issued its Final Acceptance Letter.
- 6.4.2.** At the time of submission of its final DBM Payment Request, the DBM will provide the following information:
1. An affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect the City's interests;
  2. A general release executed by the DBM waiving, upon receipt of final payment by the DBM, all claims, except those claims previously made in writing to the City and remaining unsettled at the time of final payment; and
  3. Consent of the DBM's surety, if any, to final payment.

#### **6.5. EXTENSION OF TIME FOR FINAL PERFORMANCE**

In the event the DBM is delayed in performing any task, which at the time of the delay is then critical, or which during the delay becomes critical, as the sole and exclusive result of any act or omission by the City, or someone acting on the City's behalf, or by City

authorized Change Orders, unusually severe weather not reasonably anticipatable, fire, or other Acts of God, occurring without the fault or negligence of the DBM, the date for achieving Substantial Completion, or, as applicable, final completion, will be appropriately adjusted by the City upon the written claim of the DBM to the City filed in full compliance with the Contract Documents. A task is critical within the meaning of this Article if the task is on the critical path of the most recently approved Progress Schedule so that a Delay in performing the task will Delay the ultimate completion of the Project. ANY CLAIM FOR AN EXTENSION OF TIME BY THE DBM MUST STRICTLY COMPLY WITH THE REQUIREMENTS OF ARTICLE 7 BELOW. IF THE DBM FAILS TO MAKE SUCH CLAIM AS REQUIRED IN THIS ARTICLE, ANY CLAIM FOR AN EXTENSION WILL BE WAIVED AND SHALL BE DISMISSED.

## **6.6. PAYMENTS TO SUBCONTRACTORS OR SUPPLIERS**

**6.6.1.** The DBM will pay its Subcontractors or Suppliers within 7 calendar days after receipt of each progress payment from the City unless otherwise agreed by the DBM and the Subcontractor or Supplier. The DBM will pay for the amount of Work performed or materials supplied by each Subcontractor or Supplier as accepted and approved by the City with each progress payment. In addition, any reduction of retention by the City to the DBM will result in a corresponding reduction to Subcontractors or Suppliers who have performed satisfactory work. The DBM will pay Subcontractors or Suppliers the reduced retention within 7 calendar days of the payment of the reduction of the retention to the DBM. No Contract between the DBM and its Subcontractors and Suppliers may materially alter the rights of any Subcontractor or Supplier to receive prompt payment and retention reduction in this Contract.

**6.6.2.** If the DBM fails to make payments in accordance with these provisions, the City may take any of one or more of the following actions, and the DBM agrees that the City may take these actions:

1. Hold the DBM in default under this Contract;
2. Withhold future payments including retention until proper payment has been made to Subcontractors or Suppliers in accordance with these provisions;
3. Reject all future offers to perform work for the City from the DBM for a period not to exceed 1 year from Substantial Completion date of this Project; or
4. Terminate this Contract.

**6.6.3.** If the DBM's payment to a Subcontractor or Supplier is in dispute, the DBM and Subcontractor or Supplier agree to submit the dispute to any of the following dispute resolution processes within 14 calendar days from the date any party gives notice to the other: (a) binding arbitration; (b) a form of alternative dispute resolution (ADR) agreeable to all parties, or (c) a City of Scottsdale facilitated mediation. When the disputed claim is resolved through ADR or otherwise, the DBM and Subcontractor or Supplier agree to implement the resolution within 7 calendar days from the resolution date.

**6.6.4.** Should the City fail or delay in exercising or enforcing any right, power, privilege, or remedy under this Article, this failure or delay will not be considered a waiver, release or modification of the requirement of this Article or of any of the terms or provisions of this Contract.

**6.6.5.** The DBM will include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Contract.

## **6.7. RECORD KEEPING AND FINANCE CONTROLS**

**6.7.1.** Records of the DBM's direct personnel payroll, reimbursable expenses pertaining to this Project and records of accounts between the City and the DBM will be kept on a generally recognized accounting basis. From the effective date of this Contract and until 3 years after the date of final payment by the City of Scottsdale to the DBM, the City, its authorized representative, or the appropriate federal or state agencies, reserve the right to audit the DBM's records to verify the accuracy and appropriateness of all pricing data, including data used to negotiate Contract Documents and any Change Orders or Contract Modifications. The City of Scottsdale or its authorized representative will have access, during normal working hours, to all necessary DBM and Subcontractor facilities, and will be provided adequate and appropriate workspace, in order to conduct audits in compliance with the provisions of this Article. The City of Scottsdale will give the DBM or Subcontractor reasonable advance notice of intended audits.

The City reserves the right to decrease the Contract Price or payments made on this Contract if, upon audit of the DBM's records, the audit discloses the DBM has provided false, misleading, or inaccurate cost and pricing data.

**6.7.2.** The DBM will include similar provisions in all of its agreements with Subconsultants and Subcontractors providing services under the Contract Documents to ensure the City, its authorized representative, or the appropriate federal or state agencies, have access to the Subconsultants' and Subcontractors' records to verify the accuracy of cost and pricing data.

**6.7.3.** The City reserves the right to decrease the Contract Price or payments made on this Contract if the above provision is not included in Subconsultant's and Subcontractor's contracts, and one or more Subconsultants or Subcontractors do not allow the City to audit their records to verify the accuracy and appropriateness of pricing data.

**6.7.4.** If an audit discloses overcharges, of any nature, by the DBM to the City in excess of 1% of the total contract billings, the actual cost of the City's audit will be reimbursed to the City by the DBM. Any adjustments or payments which must be made as a result of any audit or inspection of the DBM's invoices or records will be made within a reasonable amount of time (not to exceed 90 days) from presentation of the City's findings to the DBM. This audit provision includes the right to inspect personnel records as required by Article 11.36.

## **ARTICLE 7 – CLAIMS AND DISPUTES**

**7.**

**7.1. REQUESTS FOR CONTRACT ADJUSTMENTS AND RELIEF**

- 7.1.1.** If either the DBM or the City believes that it is entitled to relief against the other for any event arising out of or related to the Work, the party will provide written notice to the other party of the basis for its claim for relief. The claims shall set forth in detail all known facts and circumstances supporting the claim; final costs associated with any claim upon which notice has been given must be submitted in writing to the City within thirty (30) days after notice has been received.
- 7.1.2.** The notice will, if possible, be made before incurring any cost or expense and in accordance with any specific notice requirements contained in applicable Articles of this Contract.
- 7.1.3.** Written notice will be given within a reasonable time, not to exceed (ten) (10) calendar days, after the occurrence creating the claim for relief or after the claiming party reasonably should have recognized the event or condition creating the request, whichever is later.
- 7.1.4.** Notice will include sufficient information to advise the other party of the circumstances creating the claim for relief, the specific contractual adjustment or relief requested and the basis of the request. ANY NOTICE OF CLAIM NOT FILED WITH THE CITY WITHIN SUCH TIME AND IN COMPLIANCE WITH THE PRECEEDING PROVISIONS SHALL BE CONSIDERED TO HAVE BEEN WAIVED AND SHALL BE DISMISSED.
- 7.1.5.** In the event the Contractor seeks to make a claim for an increase in the Contract Price, as a condition precedent to any liability of the City therefore, unless emergency conditions exist, the DBM shall strictly comply with the requirements of this section and such claim shall be made by the DBM before proceeding to execute any work for which a claim is made. Failure to comply with this condition precedent shall constitute a waiver by the DBM of any claims for compensation.
- 7.1.6.** The DBM must continue its performance under this contract regardless of the existence of any claims by the DBM.
- 7.1.7.** In a claim by the DBM against the City for compensation in excess of the Contract sum, any liability of the City to the DBM shall be strictly limited and computed in accordance with the Contract documents and shall in no event include indirect costs (such as home office overheads or consequential damages of the DBM or any estimated costs or damages).

**7.2. DISPUTE AVOIDANCE AND RESOLUTION**

- 7.2.1.** The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, the DBM and the City each commit to resolving their disputes or disagreements

in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

- 7.2.2. The DBM and the City will first attempt to resolve disputes or disagreements at the field level through discussions between the DBM's Representative and the Contract Administrator.
- 7.2.3. If a dispute or disagreement cannot be resolved through the DBM's Representative and Contract Administrator, the DBM's Senior Representative and the City's Senior Representative, upon the request of either party, will meet as soon as conveniently possible, but in no case later than 30 days after the request is made, to attempt to resolve the dispute or disagreement.
- 7.2.4. Before any meetings between the Senior Representatives, the parties will exchange relevant information that will assist the parties in resolving their dispute or disagreement. Should the Parties' Senior Representatives be unable to resolve the dispute or disagreement, either Party may file an action in the Maricopa County Superior Court.
- 7.2.5. Duty to Continue Performance. Unless provided to the contrary in the Contract Documents, the DBM will continue to perform the Work and the City will continue to satisfy its payment obligations to the DBM pending the final resolution of any dispute or disagreement between the DBM and the City.

### 7.3. REPRESENTATIVES OF THE PARTIES

- 7.3.1. Contract Administrator, Senior Representative, and Construction Administration Supervisor.

- 1. The City designates the individual listed below as its Senior Representative ("The City's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Article 7.2.3:

Alison Tymkiw, Senior Director -City Engineer  
Transportation & Infrastructure  
7447 E. Indian School Road, Suite 205  
Scottsdale, Arizona 85251

The City designates the individual listed below as its Contract Administrator, which individual has the authority and responsibility set forth in Article 7.2.2:

Roger Berna, Contract Administrator  
Transportation & Infrastructure  
7447 E. Indian School Road, Suite 205  
Scottsdale, Arizona 85251

The City designates the individual listed below as its Construction Administration Supervisor, which individual has the responsibilities described in Article 13 and as authorized by the Contract Administrator:

Scott Turner, Construction Administration Supervisor

Transportation & Infrastructure  
7447 E. Indian School Road, Suite 205  
Scottsdale, Arizona 85251

**7.3.2. DBM's Representatives.**

1. The DBM designates the individual listed below as its Senior Representative ("The DBM's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Article 7.2.3:

Ron Haxton, Senior Vice President  
2355 E. Camelback Rd, Suite 410  
Phoenix, AZ 85016

2. The DBM designates the individual listed below as its DBM's Representative, which individual has the authority and responsibility set forth in Article 7.2.2:

Daniel Navarro, Project Manager  
2355 E. Camelback Rd, Suite 410  
Phoenix, AZ 85016

**ARTICLE 8 – SUSPENSION, TERMINATION AND CANCELLATION**

**8.**

**8.1. THE CITY'S RIGHT TO STOP WORK**

- 8.1.1. The City may, at its discretion and without cause, order the DBM in writing to stop and suspend the Work. Immediately after receiving this notice, the DBM will discontinue advancing the Work specified under this Contract. The suspension may not exceed 180 consecutive days.
- 8.1.2. The DBM may seek an adjustment of the Contract Price or Contract Time if its cost or time to perform the Work has been adversely impacted by any suspension or stoppage of the Work by the City.
- 8.1.3. If the City suspends the Work for 181 consecutive days or more, this suspension will be considered a termination of convenience.

**8.2. TERMINATION FOR CONVENIENCE**

- 8.2.1. Upon receipt of written notice to the DBM, the City has the right to terminate this Contract or abandon any portion of the Project for which services have not been performed by the DBM.
  1. The DBM will estimate the value of the Work it has completed and submit its appraisal to the City for evaluation. The City will have the right to inspect the Work to appraise the Work completed.
  2. The DBM will receive compensation for services performed to the date of any termination as stated in Article 6.4 of this Contract and the fee will be paid in accordance with Article 6.4.2 and will be an amount mutually agreed upon by the DBM and the City. If there is no mutual agreement, the final determination will be made in accordance with Article 7.

3. The DBM will not be entitled to anticipated profit or anticipated overhead, but is entitled to recover apportioned profit and overhead proportional to the amount of the Work completed. In no event will the fee exceed that stated in Article 6.1 of this Contract or as amended.
4. The City will make the final payment within 60 days after the DBM has delivered the last of the partially completed items and the final fee has been agreed upon.
5. If the City terminates this Contract in accordance with this Article and proceeds to design and construct the Project through its employees, agents or third parties, the City's rights to use the work product will be as stated in Article 8.4.5 of this Contract.

**8.2.2.** Upon termination during construction services, the DBM will proceed with the following obligations:

1. Stop Work as stated in the notice.
2. Place no further subcontracts or orders.
3. Terminate all subcontracts to the extent they relate to the work terminated.
4. Assign to the City all right, title and interest of the DBM under the subcontracts terminated, in which case the City will have the right to settle or to pay any termination settlement proposal arising out of those terminations.
5. Take any action that may be necessary for the protection and preservation of the property related to the contract that is in the possession of the DBM and which the City has or may acquire an interest.
6. Comply with the requirements of Article 6.4.2. (1), (2) and (3).

**8.2.3.** The DBM will submit complete termination inventory schedules no later than 60 days from the date of the notice of termination.

**8.2.4.** The City will pay the DBM the following:

1. The direct value of its completed Work and materials supplied as of the date of termination; and
2. The reasonable costs and expenses attributable to the termination; and
3. The DBM will be entitled to profit and overhead on completed Work only, but will not be entitled to anticipated profit or anticipated overhead. If it appears the DBM would have sustained a loss on the entire Work had the Project been completed, the DBM will not be allowed profit and the City will reduce the settlement to reflect the indicated rate of loss.

- 8.2.5.** The DBM will maintain all records and documents for 3 years after final settlement. These records will be maintained and subject to auditing as prescribed in Article 6.6.

### **8.3. CANCELLATION FOR CAUSE**

- 8.3.1.** The City may also cancel this Contract or any part of this Contract with 7 days' notice for cause in the event of any default by the DBM, or if the DBM fails to comply with any of the terms and conditions of this Contract. Unsatisfactory performance, despite a reasonable opportunity to cure, as judged by the Contract Administrator, and failure to provide the City, upon request with adequate assurances of future performance will all be causes allowing the City to cancel this Contract for cause. In the event of cancellation for cause, the City will not be liable to the DBM for any amount, and the DBM will be liable to the City for any and all damages sustained by reason of the default, which gave rise to the cancellation.

### **8.4. THE CITY'S RIGHT TO PERFORM AND CANCEL FOR CAUSE**

- 8.4.1.** If the DBM persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Suppliers or Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time, as these times may be adjusted, or (vi) perform material obligations under the Contract Documents, then the City, in addition to any other rights and remedies provided in the Contract Documents or by law, will have the rights stated in Articles 8.4.3, 8.4.4 and 8.4.5 below.

In the event the DBM is in violation of any Federal, State, County or City law, regulation or ordinance, the City may cancel this Contract immediately upon giving notice to the DBM.

In the event the City cancels this Contract or any part of the services of this Contract, the City will notify the DBM in writing, and immediately upon receiving this notice, the DBM will discontinue advancing the Work under this Contract and proceed to close all operations.

- 8.4.2.** If the City provides the DBM with a written order to correct deficiencies to provide adequate maintenance of traffic, adequate cleanup, adequate dust control, or to repair damage resulting from abnormal weather conditions, and the DBM fails to comply in the time frame specified, the City may have the Work accomplished by other sources at the DBM's expense.
- 8.4.3.** Upon the occurrence of an event stated in Article 8.4.1 above, the City will provide written notice to the DBM that it intends to cancel the Contract unless the problem cited is cured, or commenced to be cured, within 7 days of the DBM's receipt of the notice.



1. If the DBM fails to cure, or undertake reasonable efforts to cure the problem, then the City will give a second written notice to the DBM of its intent to cancel within an additional 7 day period.
  2. If the DBM, within this second 7 day period, fails to cure, or undertake reasonable efforts to cure the problem, then the City may declare the Contract cancelled for cause by providing written notice to the DBM of the declaration.
- 8.4.4.** Upon declaring the Contract cancelled in accordance with Article 8.4.3.(2) above, the City may enter upon the premises and take possession of all materials and equipment, for the purpose of completing the Work.
- 8.4.5.** Upon termination, cancellation or abandonment, the DBM will deliver to the City all drawings, special provisions, field survey notes, reports, and estimates, entirely or partially completed, in any format, including but not limited to written or electronic media, together with all unused materials supplied by the City. Use of incomplete data will be the City's sole responsibility and at its sole risk.
- 8.4.6.** The DBM will appraise the Work it has completed and submit its appraisal to the City for evaluation.
- 8.4.7.** If through any cause, the DBM fails to fulfill in a timely and proper manner its obligations under this Contract, or if the DBM violates any of the covenants, Contracts, or stipulations of this Contract, the City may withhold any payments to the DBM for the purpose of setoff until the exact amount of damages due the City from the DBM is determined by a court of competent jurisdiction.
- 8.4.8.** In the event of any cancellation, the DBM will not be entitled to receive any further payments under the Contract Documents for disputed work until the Work is finally completed in accordance with the Contract Documents. At that time, the DBM will only be entitled to be paid for Work performed and accepted by the City before its default.
- 8.4.9.** If the City's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then the DBM will be obligated to pay the difference to the City. These costs and expense will include not only the cost of completing the Work, but also losses, damages, costs and expense, including reasonable attorneys' fees and expenses, incurred by the City in connection with the procurement and defense of claims arising from the DBM's default.
- 8.4.10.** If the City improperly cancels the Contract for cause, the cancellation for cause will be converted to a termination for convenience in accordance with the provisions of Article 8.2.

## **ARTICLE 9 – INSURANCE AND BONDS**

### **9.**

#### **9.1. INSURANCE REQUIREMENTS**

- 9.1.1. At the same time as execution of this Contract, the DBM will furnish the City of Scottsdale a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona.
- 9.1.2. The DBM, Subcontractors and Subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property, which may arise from or in connection with the performance of the Work by the DBM, his agents, representatives, employees, or Subcontractors.
- 9.1.3. The insurance requirements are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract.
- 9.1.4. The City in no way warrants that the minimum limits contained in this Contract are sufficient to protect the DBM from liabilities that might arise out of the performance of the Contract services under this Contract by the DBM, his agents, representatives, employees, Subcontractors or Subconsultants, and the DBM is free to purchase any additional insurance as may be determined necessary.
- 9.1.5. Claims Made. In the event any insurance policies required by this Contract are written on a "claims made" basis, coverage shall continue uninterrupted throughout the term of this Contract by keeping coverage in force using the effective date of this Contract as the retroactive date on all "claims made" policies. The retroactive date for exclusion of claims must be on or before the effective date of this Contract, and can never be after the effective date of this Contract. Upon completion or termination of this Contract, the "claims made" coverage shall be extended for an additional three (3) years using the original retroactive date, either through purchasing an extended reporting option; or by continued renewal of the original insurance policies. Submission of annual Certificates of Insurance, citing the applicable coverages and provisions specified herein, shall continue for three (3) years past the completion or termination of this Contract.

## 9.2. MINIMUM SCOPE AND LIMITS OF INSURANCE

The DBM will provide coverage and with limits of liability not less than those stated below.

### 9.2.1. Commercial General Liability - Occurrence Form

**Commercial General Liability:** DBM must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than \$2,000,000 for each occurrence, \$2,000,000 Products and Completed Operations Annual Aggregate, and a \$2,000,000 operations, independent contractors, products completed operations, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

**9.2.2. Automobile Liability - Any Auto or Owned, Hired and Non-Owned Vehicles**

**Vehicle Liability:** DBM must maintain Business/Automobile Liability insurance with a limit of \$1,000,000 each accident on DBM owned, hired, and non-owned vehicles assigned to or used in the performance of the DBM's work or services under this Contract. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

**9.2.3. Workers' Compensation and Employers Liability**

**Insurance:** DBM must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of DBM employees engaged in the performance of work or services under this Contract and must also maintain Employers' Liability insurance of not less than \$500,000 for each accident, \$500,000 disease for each employee and \$1,000,000 disease policy limit.

**9.2.4. Professional Liability**

**Professional Liability:** If the Contract is the subject of any professional services or work performed by the DBM, or if the DBM engages in any professional services or work adjunct or residual to performing the work under this Contract, the DBM must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the DBM, or anyone employed by the DBM, or anyone whose acts, mistakes, errors and omissions the DBM is legally liable, with a liability limit of \$1,000,000 each claim and \$2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage will extend for 3 years past completion and acceptance of the work or services, and the DBM, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

If there is no Professional Liability work or service as a part of this Contract, the City will waive the Professional Liability insurance requirement in writing.

**9.2.5. Builders' Risk Insurance (Course of Construction)** The DBM bears all responsibility for loss to all Work being performed and to buildings under construction. Unless waived in writing by the City of Scottsdale, the DBM will purchase and maintain in force Builders' Risk-Installation insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss or Open Perils policy form, completed value at replacement cost equal to the GMP and all subsequent modifications. The DBM's Builders' Risk-Installation insurance must be primary and not contributory; and waive all rights of subrogation against the City of Scottsdale, its officer, officials and employees.

1. Builders' Risk-Installation insurance must name the City of Scottsdale, the DBM and all tiers of Subcontractors as Insureds as respects their insurable

interest at the time of loss. It must contain a provision that this insurance will not be canceled or materially altered without at least 30 days advance notice to the City. The DBM is also required to give the City 30 days advance written notice of the coverage termination for this project. The City must also be named as a Loss Payee under Builders' Risk-Installation coverage.

2. Builders' Risk-Installation insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk-Installation insurance must provide coverage from the time any covered property comes under the DBM's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any project property or equipment is in transit, off site, or while on site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.
3. The DBM must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builder's Risk-Installation insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Contract.

The DBM will be responsible for any and all deductibles under these policies and the DBM waives all rights of recovery and subrogation against the City under the DBM-provided Builders' Risk-Installation insurance described above.

4. The Builders' Risk insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City. Builders' Risk insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.
5. All rights of subrogation are, by this Contract, waived against the City of Scottsdale, its officers, officials, agents and employees.

### **9.3. SELF-INSURED RETENTIONS**

- 9.3.1. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

### **9.4. OTHER INSURANCE REQUIREMENTS**

The policies are to contain, or be endorsed to contain, the following provisions:

**9.4.1. Coverage Terms and Required Endorsements.**

1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the DBM including the City's general supervision of the DBM; Products and Completed operations of the DBM; and automobiles owned, leased, hired, or borrowed by the DBM.
2. The DBM's Insurance must contain broad form contractual liability coverage and must not exclude liability arising out of explosion, collapse, or underground property damage hazards ("XCU") coverage.
3. The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the DBM, even if those limits of liability are in excess of those required by this Contract.
4. The DBM's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any Insurance or self-insurance maintained by the City, its officers, officials, agents, and employees must be in excess of the coverage provided by the DBM and must not contribute to it.
5. The DBM's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
6. Coverage provided by the DBM must not be limited to the liability assumed under the indemnification provisions of this Contract.
7. The policies must contain a waiver of subrogation against the City, its officers, officials, agents, and employees for losses arising from Work performed by the DBM for the City.
8. The DBM, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Contract for a minimum period of 3 years following completion and acceptance of the Work. The DBM must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Contract insurance requirements, including naming the City of Scottsdale, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.
9. Workers' Compensation and Employers Liability Coverage: The insurer must agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, and volunteers for losses arising from Work performed by the DBM for the City.

**9.5. SUBCONSULTANT'S AND SUBCONTRACTOR'S INSURANCE**

Unless the DBM's Subconsultants and Subcontractors can provide the same level of coverage as detailed in Article 9.2 and name the City and the DBM as Additional Insureds, the DBM's certificates must include all Subcontractors and Subconsultants as insureds under its policies or the DBM must maintain separate certificates and endorsements for each Subcontractor and Subconsultant. All coverages for Subcontractors and Subconsultants must be in the amounts shown in Article 9.2. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk-Installation coverage.

#### **9.6. NOTICE OF CANCELLATION**

If the DBM receives notice that any of the required policies of insurance are materially reduced or cancelled, it will be the DBM's responsibility to provide prompt notice to the Contract Administrator of same to the City, unless such coverage is immediately replaced with similar policies. Each insurance policy required by the insurance provisions of this Contract must provide the required coverage and must not be suspended, voided, canceled by either party, reduced in coverage or in limits except until after 30 days written notice has first been given, by certified mail, return receipt requested to:

The City of Scottsdale Risk Management Office  
7447 E. Indian School Road, Suite 225  
Scottsdale, Arizona 85251

#### **9.7. ACCEPTABILITY OF INSURERS**

Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with an A. M. Best's rating of no less than B++6. The City in no way warrants that the above required minimum insurer rating is sufficient to protect the DBM from potential insurer insolvency.

#### **9.8. VERIFICATION OF COVERAGE**

**9.8.1.** The DBM must furnish the City Certificates of Insurance (ACORD form or equivalent approved by the City) and with original endorsements effecting coverage as required by this Contract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Any policy endorsements that restrict or limit coverages must be clearly noted on the Certificate of Insurance.

**9.8.2.** All certificates and endorsements are to be received and approved by the City before Work commences except for Builders' Risk Insurance, which will be received and approved as provided in Article 9.2.5. Each insurance policy required by this Contract must be in effect on or before the earlier of commencement of Work under the Contract Documents or the signing of this Contract. Failure to maintain the insurance policies as required by this Contract or to provide evidence of renewal is a material breach of this Contract.

- 9.8.3.** All certificates of insurance required by this Contract must be sent directly to the City of Scottsdale, Transportation & Infrastructure. **The project number and project description must be included on the Certificates of Insurance.** The City reserves the right to require complete, certified copies of all insurance policies required by this Contract, at any time.

## **9.9. APPROVAL**

Any modification or variation from the insurance requirements in this Contract must be approved by the Scottsdale Risk Management Office, whose decision is final. This action will not require a formal contract modification, but may be made by administrative action.

## **9.10. BONDS AND OTHER PERFORMANCE SECURITY**

- 9.10.1.** Before execution of this Contract, the DBM must provide a Performance Bond and a Payment Bond, each in an amount equal to the full amount of the GMP stated in this Contract. The form of the bonds must be in substantially the same form as Exhibits C and D, which are attached to this Contract.
- 9.10.2.** Each bond must be executed by a surety company or companies holding a Certificate of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance. A copy of the Certificate of Authority must accompany the bonds. The Certificate must have been issued or updated within 2 years before the execution of this Contract.
- 9.10.3.** The bonds must be made payable and acceptable to the City of Scottsdale.
- 9.10.4.** The bonds must be written or countersigned by an authorized representative of the surety and the bonds must have attached a certified copy of the Power of Attorney of the signing official.
1. If 1 Power of Attorney is submitted, it must be for twice the total GMP amount.
  2. If 2 Powers of Attorney are submitted, each must be for the total GMP amount. Personal or individual bonds are not acceptable.
- 9.10.5.** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract Documents, the DBM must promptly furnish a copy of the bonds or permit a copy to be made.
- 9.10.6.** All bonds submitted for this Project must be provided by a company which has been rated "A-or better" by the A.M. Best Company.

## **ARTICLE 10 – INDEMNIFICATION**

### **10.**

#### **10.1. THE DESIGN-BUILD MANAGER'S GENERAL INDEMNIFICATION**

To the fullest extent permitted by law, the DBM, its successors, assigns and guarantors, must defend, indemnify and hold harmless the City of Scottsdale, its agents, representatives, officers, directors, officials and employees from and against all allegations, demands, proceedings, suits, actions, claims, damages, losses, expenses, including but not limited to, reasonable attorney fees, court costs, and the cost of appellate proceedings, and all claim adjusting and handling expense, investigation and litigation, for bodily injury or personal injury (including death), or loss or damage to tangible or intangible property caused, or alleged to be caused, in whole or in part, related to, arising from or out of, or resulting from any acts, omissions, negligence, recklessness, or intentional wrongful conduct to the extent caused by the DBM or any of its owners, officers, directors, agents or employees performing Work or Services under this Contract, including but not limited to, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and any injury or damages by any of the DBM employees. This indemnity includes any claim or amount arising out of, or recovered under, the Worker's Compensation Law or arising out of the failure of the DBM to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. It is the specific intention of the parties that the City shall, in all instances, except for Claims arising solely from the negligent or willful acts or omissions of the City, be indemnified by the DBM from and against any and all claims. It is agreed that the DBM will be responsible for primary investigation, defense, and judgment costs where this indemnification is applicable. In consideration of the award of this Contract, the DBM agrees to waive all rights of subrogation against the City, its officers, agents, representatives, directors, officials, and employees for losses arising from the work performed by the Architect for the City.

Insurance provisions in this Contract are separate and independent from the indemnity provisions of this Article and will not be construed in any way to limit the scope and magnitude of the indemnity provisions. The indemnity provisions of this Article will not be construed in any way to limit the scope and magnitude and applicability of the insurance provisions.

## **10.2. INTELLECTUAL PROPERTY**

- 10.2.1.** The DBM must pay all royalties and license fees associated with its performance of services.
- 10.2.2.** The DBM must defend any action or proceeding brought against the City based on any claim that the Work, or any part of it, or the operation or use of the Work or any part of it, constitutes infringement of any United States patent or copyright, now or subsequently issued. The City will give prompt written notice to the DBM of any action or proceeding and will reasonably provide authority, information and assistance in the defense of any action or proceeding. The DBM will indemnify and hold harmless the City from and against all damages and costs, including but not limited to attorneys' fees and expenses awarded against the City or the DBM in any action or proceeding. The DBM agrees to keep the City informed of all developments in the defense of these actions.
- 10.2.3.** If the City is enjoined from the operation or use of the Work, or any part of the Work, as the result of any patent or copyright suit, claim, or proceeding, the DBM must at its sole expense take reasonable steps to procure the right to operate or use the Work. If the DBM cannot so procure this right within a



reasonable time, the DBM must promptly, at the DBM's option and at the DBM's expense, (i) modify the Work so as to avoid infringement of any patent or copyright or (ii) replace the Work with Work that does not infringe or violate any patent or copyright.

**10.2.4.** Articles 10.2.2 and 10.2.3 above will not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright (i) relating solely to a particular process or product of a particular manufacturer specified by the City and not offered or recommended by the DBM to the City or (ii) arising from modifications to the Work by the City or its agents after acceptance of the Work.

**10.2.5.** The obligations contained in this Article 10.2 will constitute the sole agreement between the parties relating to liability for infringement or violation of any patent or copyright.

## **ARTICLE 11 – GENERAL PROVISIONS**

### **11.**

#### **11.1. MARSHALING YARD**

The DBM is advised to contact the City of Scottsdale Development Services to determine the requirements for obtaining a permit for marshaling areas it proposes to use. Marshaling areas must be fenced. The DBM must obtain written approval from the property owner for marshaling area use. The approval must contain any requirements, which are a condition of this approval. Marshaling yard requirements according to M.A.G. Subsection 107.6.1 and City of Scottsdale Supplemental Specifications will apply.

#### **11.2. CONTRACT DOCUMENTS**

**11.2.1.** Contract Documents are as defined in Article 13.

**11.2.2.** The Contract Documents form the entire Contract between the City and the DBM. No oral representations or other contracts have been made by the parties except as specifically stated in the Contract Documents.

**11.2.3.** In the event of any inconsistency, conflict, or ambiguity between or among the Contract Documents, the Contract Documents will take precedence in the order in which they are listed in the definition of Contract Documents in Article 13. As to drawings and plans, given dimensions will take precedence over scaled measurements, and large scale plans over small-scale plans. Contract specifications will take precedence over contract plans.

**11.2.4.** The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Time(s) for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

**11.2.5.** The Preconstruction Agreement, the Plans, Standard Specifications and Details, Special Provisions, Performance Bond, Payment Bond, Certificates of Insurance, Change Orders, and Contract Modifications (if any) are by reference made a part of this Contract.

**11.2.6. Work Product.**

1. All work products (electronically or manually generated) including but not limited to: cost estimates, studies, design analyses, original mylar drawings, Computer Aided Drafting and Design (CADD) file diskettes, and other related documents which are prepared or procured in the performance of this Contract (collectively referred to as documents) are to be and remain the property of the City and are to be delivered to the City before the final payment is made to the DBM. In the event these documents are altered, modified or adapted without the written consent of the DBM or the Subconsultants, which consent the DBM or the Subconsultants will not unreasonably withhold, the City agrees to hold the DBM and the Subcontractors harmless to the extent permitted by law from the legal liability arising out of the City's alteration, modification or adoption of the documents.
2. The copyrights, patents, trade secrets or other intellectual property rights associated with the ideas, concepts, techniques, inventions, processes or works of authorship developed, created by the DBM, its Subcontractors or personnel, during the course of performing this Contract or arising out of the Project will belong to the DBM.

**11.3. AMENDMENTS**

The Contract Documents may not be changed, altered, modified, or amended in any way except in writing signed by a duly authorized representative of each party.

**11.4. TIME IS OF THE ESSENCE**

The City and DBM mutually agree that time is of the essence with respect to the dates and times contained in the Contract Documents.

**11.5. MUTUAL OBLIGATIONS**

The City and DBM commit at all times to cooperate fully with each other, and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

**11.6. COOPERATION AND FURTHER DOCUMENTATION**

The DBM agrees to provide all documents, as the City will reasonably request to implement the intent of the Contract Documents.

**11.7. ASSIGNMENT**

Neither the DBM nor the City will, without first obtaining the written consent of the other assign, transfer or sublet any portion of this Contract or part of the Work or the obligations required by the Contract Documents.

**11.8. FORCE MAJEURE**

Neither party will be responsible for delays or failures in performance resulting from acts beyond their control. These acts will include, but not be limited to, riots, acts of war, acts of terrorism, epidemics, governmental regulations imposed after the fact, fire, communication line failures, or power failures.

**11.9. FUNDS APPROPRIATION**

If the City Council does not appropriate funds to continue this Contract and pay for required charges, the City may terminate this Contract at the end of the current fiscal period. The City agrees to give written notice to the DBM at least 30 days before the end of its current fiscal period and will pay the DBM for all approved charges incurred through the end of this period.

**11.10. CONSTRUCTION METHODS**

If the City provides the DBM with a written order to provide adequate maintenance of traffic, clean-up, dust control or to correct deficiencies or damage resulting from abnormal weather conditions, and the DBM fails to comply in the time frame specified, the City may have Work accomplished by other sources at the DBM's expense.

**11.11. UTILITY RELOCATIONS FOR CONSTRUCTION METHODS**

If any utility is relocated or rebuilt to accommodate the DBM's construction methods and available equipment, the expense will be borne by the DBM.

**11.12. DAMAGED UTILITIES DURING CONSTRUCTION**

Any utilities damaged during construction will be replaced at the DBM's expense as required of the M.A.G. Standard Specifications.

**11.13. THIRD PARTY BENEFICIARY**

The Contract Documents will not be construed to give any rights or benefits to anyone other than the City and the DBM, and all duties and responsibilities undertaken in accordance with the Contract Documents will be for the sole and exclusive benefit of the City and the DBM and not for the benefit of any other party.

**11.14. GOVERNING LAW**

The Contract and all Contract Documents will be considered to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions. Any action to enforce any provision of this Contract or to obtain any remedy with respect to this Contract will be brought in the Superior Court, Maricopa County, Arizona. Such action must be filed, tried and remain in this Court for any and all proceedings. For this purpose, each party

expressly and irrevocably consents to the jurisdiction and venue of this Court, and DBM hereby waives its right to have such action removed to Federal District Court.

**11.15. SEVERABILITY**

If any provision of the Contract Documents or the application of them to any person or circumstance is invalid, illegal or unenforceable to any extent, the remainder of the Contract Documents and the application of them will not be affected and will be enforceable to the fullest extent permitted by law. In accordance with the provisions of ARS § 41-194.01, should the Attorney General give notice to the City that any provisions of the Contract violates state law or the Arizona Constitution, or that it may violate a state statute or the Arizona Constitution, and the Attorney General submits the offending provision to the Arizona Supreme Court, the offending provision(s) shall be immediately severed and struck from the Contract and the City and the Contractor shall, within 10 days after such notice, negotiate in good faith to resolve any issues related to the severed provision(s).

**11.16. LEGAL REQUIREMENTS**

The DBM will perform all Work in accordance with all Legal Requirements and will provide all notices applicable to the Work as required by the Legal Requirements.

**11.17. INDEPENDENT CONTRACTOR**

The DBM is and will be an independent contractor and not an employee or agent of the City.

**11.18. THE CITY'S RIGHT OF CANCELLATION**

All parties to this Contract acknowledge that this Contract is subject to cancellation by the City of Scottsdale as provided by the provisions of Section 38-511, Arizona Revised Statutes.

**11.19. SURVIVAL**

All warranties, representations and indemnifications by the DBM will survive the completion or termination of this Contract.

**11.20. COVENANT AGAINST CONTINGENT FEES**

The DBM warrants that no person other than a bona fide employee working solely for the DBM has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee. For breach or violation of this covenant, the City of Scottsdale will have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, or otherwise recover the full amount of any commission, percentage, brokerage, or contingent fee, together with costs and attorney's fees.

**11.21. SUCCESSORSHIP**

The DBM and the City agree that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs and assigns. This Contract will extend to and be binding upon the DBM, its successors and assigns, including any individual, company, partnership or other entity with or into which the DBM will merge, consolidate or be liquidated, or any person, corporation, partnership or other entity to which the DBM sells its assets.

**11.22. ATTORNEYS' FEES**

In the event either party brings any action for any relief, declaratory or otherwise, arising out of this Contract, or on account of any breach or default, the prevailing party will be entitled to receive from the other party reasonable attorneys' fees and reasonable costs and expenses, determined by the court sitting without a jury, which will be considered to have accrued on the commencement of any action and will be enforceable whether or not the action is prosecuted to judgment.

**11.23. HEADINGS**

The headings used in this Contract, or any other Contract Documents, are for ease of reference only and will not in any way be construed to limit or alter the meaning of any provision.

**11.24. COOPERATIVE USE OF CONTRACT**

In addition to the City of Scottsdale, this Contract may be extended for use by other municipalities, government agencies, and governing bodies, including the Arizona Board of Regents, and political subdivisions of this State. Any such usage by other entities must be in accord with the ordinances, charter, and/or rules and regulations of the respective entity and the approval of the Contractor.

**11.25. NO WAIVER**

The failure of either party to enforce any of the provisions of the Contract Documents or to require performance of the other party of any of the provisions of this Contract will not be construed to be a waiver of these provisions, nor will it affect the validity of the Contract Documents, or the right of either party to enforce each and every provision.

**11.26. NOTICE**

All notices or demands required to be given, in accordance with the terms of this Contract, will be given to the other party in writing, delivered by hand or registered or certified mail, at the addresses stated below, or to any other address as the parties may substitute by written notice given in the manner prescribed in this Article. Notice given by facsimile or electronic mail (e-mail) will not be considered adequate notice.

To the City:

Transportation & Infrastructure  
City of Scottsdale  
7447 E. Indian School Road, Suite 205  
Scottsdale, Arizona 85251

Copy to:

Scott Trner,  
Construction Administration Supervisor  
Transportation & Infrastructure  
City of Scottsdale  
7447 E. Indian School Road, Suite 205  
Scottsdale, Arizona 85251meresco

To The Design-Build Manager:

Ameresco, Inc  
2355 E. Camelback Rd, Suite 410  
Phoenix, AZ 85016

#### **11.27. EQUAL EMPLOYMENT OPPORTUNITY**

During the performance of this Contract the DBM will comply with all provisions of Executive Order 11246 of September 24, 1965, and the rules, regulations and relevant orders of the Federal government's Affirmative Action guidelines to ensure that employees or applicants applying for employment will not be discriminated against because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The DBM will include the forms of this provision in all contracts and subcontracts for work performed under this Contract, including supervision and oversight. The DBM will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The DBM agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

The DBM will, in all solicitations or advertisements for employees placed by or on behalf of the DBM, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

#### **11.28. NO PREFERENTIAL TREATMENT OR DISCRIMINATION**

In accordance with the provisions of Article II, Section 36 of the Arizona Constitution, the City will not grant preferential treatment to or discriminate against any individual or group on the basis of race, sex, color, ethnicity or national origin.

#### **11.29. ADDITIONAL CITY RIGHTS REGARDING SECURITY INQUIRIES**

**11.29.1.** In addition to the foregoing, the City reserves the right to: (1) require an employee/prospective employee of the DBM to provide fingerprints and execute any other documentation as may be necessary to obtain criminal justice information pursuant to A.R.S. § 41-1750(G)(4); (2) act on newly acquired information whether or not the information should have been previously discovered; (3) unilaterally change its standards and criteria relative to the acceptability of the DBM's employees or prospective

employees; and, (4) object, at any time and for any reason, to an employee

of the DBM performing work (including supervision and oversight) under this Contract.

- 11.29.2.** Terms of this Provision Applicable to all of DBM's Contracts and Subcontracts: The DBM will include the terms of this provision for employee background and security checks and screening in all contracts and subcontracts for work performed under this Contract, including supervision and oversight.
- 11.29.3.** Materiality of Security Inquiry Provisions: The Security Inquiry provisions of this Contract, as stated above, are material to the City's entry into this Contract and any breach by the DBM may, at the City's sole option and unfettered discretion, be considered to be a breach of contract of sufficient magnitude to terminate this Contract. Termination will subject the DBM to liability for its breach of contract.

### **11.30. HAZARDOUS MATERIALS**

- 11.30.1.** Upon discovery of hazardous substances, as defined in Article 13, the DBM will comply with all applicable laws/ordinances and regulations and take all appropriate health and safety precautions.
- 11.30.2.** Unless included in the Work, if the DBM encounters onsite or as material to be incorporated in the Work, any material which he reasonably believes to contain asbestos, polychlorinated biphenyl (PCB), or other hazardous substances or materials regulated by public health laws, he will immediately stop work and report the condition to the City.
- 11.30.3.** If the material is found to contain asbestos, PCB or other hazardous substances or materials regulated by public health laws, the DBM will not resume work in the affected area until the material has been abated or rendered harmless. The Construction Administration Supervisor and the DBM will determine how best to abate or render harmless the hazardous substance or materials. The DBM and the City may agree, in writing, to continue work in non-affected areas on-Site.
- 11.30.4.** An extension of Contract Time may be granted in accordance with Article 5.
- 11.30.5.** The DBM will comply with all applicable laws, ordinances and regulations and take all appropriate health and safety precautions upon discovery.
- 11.30.6.** Despite the preceding provisions of this Article 11.29, the City is not responsible for Hazardous Conditions introduced to the Site by the DBM, Subcontractors or anyone for whose acts they may be liable. The DBM will indemnify, defend and hold harmless the City and the City's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those Hazardous Conditions introduced to the Site by the DBM, Subcontractors or anyone for whose acts they may be liable.



**11.31. TRAFFIC CONTROL**

- 11.31.1.** Complete street closures will not be permitted unless specified in the Special Provisions. The timing and sequence of street closures will be approved by the appropriate municipal Traffic Engineering Director or designee at least 2 weeks before the closure. This approval is necessary to provide coordination with other roadway projects and special events.
- 11.31.2.** Adequate barricades and lighted warning signs will be installed and maintained by the DBM throughout the duration of the Project. All traffic control will be in accordance with the most recent City of Scottsdale Traffic Control Manual or as per the approved barricade plan unless otherwise specified in the Special Provisions.
- 11.31.3.** The DBM will submit a construction schedule and a barricade plan to the appropriate municipal Traffic Engineering Director (or designee) for approval or modification at least 72 hours before construction is initiated.
- 11.31.4.** The DBM will comply with all provisions of the most recent City of Scottsdale Traffic Barricade Manual and any other traffic control provisions as may be provided in the technical specifications or in the approved barricade plan.

**11.32. MATERIAL SOURCE**

- 11.32.1.** No material source has been designated by the City for use on this Project. MAG Specification, Section 106 will apply as will Arizona Department of Transportation (ADOT) Standard Specifications 1982, Section 106.1, 106.2, 106.7 & 106.8, which outline controls and Section 1001 1, 2, & 4 concerning approval of Contractor Furnished Source and supplemental agreements in regards to environmental analysis and the liability for materials testing costs.
- 11.32.2.** The DBM and Subcontractor furnished material sources situated in the 100-year flood plain of any stream or watercourse, and located within 1.0 mile upstream and 2.0 miles downstream of any highway structure or surfaced roadway crossing will not be allowed.
- 11.32.3.** A DBM and Subcontractor furnished source will be defined as a material source, which are neither an ADOT furnished source nor a commercial source, as defined in this Contract.
- 11.32.4.** A commercial source will be defined as a material source in which the owner or producer has been, for at least one year, regularly engaged during regular business hours on a regular basis in the processing and selling of sand, rock, ready mixed Portland cement concrete, asphaltic concrete and other similar products normally produced and sold to all parties. The company will have an Arizona retail sales tax license.
- 11.32.5.** The location of any new material source or existing non-commercial material source proposed for use on this Project will be reviewed by the appropriate agency having flood plain management jurisdiction over the area of proposed source location. The DBM and Subcontractor will obtain a letter from the

agency addressed to the Contract Administrator certifying that the proposed source location conforms to the conditions of this Contract and the applicable Standard Specifications.

### **11.33. FAMILIARIZATION WITH APPLICABLE LAWS**

The DBM will familiarize himself with the nature and extent of the Contract Documents, work to be performed, all local conditions, and all applicable federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

### **11.34. NATIVE PLANTS**

The DBM will take whatever steps, procedures or means necessary to remove, move, displace and save all native plants within the contract work area in accordance with the City of Scottsdale's Ordinance No. 1438, Native Plants, and all applicable state and county statutes, ordinances, codes and other policy requirements and recognized methods, procedures, techniques and equipment for protection, salvage, and handling of all plants to be moved from the construction area. This is not a pay item unless specified upon the schedule of Bid items.

### **11.35. ENDANGERED HARDWOODS**

Any construction, building addition or alteration project which is financed by monies of this State or its political subdivisions will not use endangered tropical hardwood unless an exemption is granted by the Director of the State of Arizona, Department of Administration. The Director will only grant an exemption if the use of endangered tropical hardwood is considered necessary for historical restoration or to repair existing facilities and the use of any substitute material is not practical. Any lease-purchase agreement entered into by this State or its political subdivisions for construction will specify that no endangered tropical hardwood may be used in the construction unless the Director grants an exemption. As used in this Article, "endangered tropical hardwood" includes ebony, lauan, mahogany or teak hardwood.

### **11.36. HOURS OF WORK**

**11.36.1.** All building construction and associated work will be restricted to the applicable summer or winter hours. Construction activity will include any work requiring the use of manually operated or power assisted tools or equipment and vehicles used to excavate, erect or deliver materials associated with construction. Summer hours begin May 1 and end on October 15. No work may begin before 5:00 a.m. or continue after 7:00 p.m., Monday through Friday. No work will begin on Saturday or Sunday before 7:00 a.m. or continue after 7:00 p.m. Sunday work may be conducted only if the DBM demonstrates, in writing to the building official, justifiable cause for the Sunday work.

**11.36.2.** Winter hours begin October 16 and end on April 30. No work will begin before 7:00 a.m. or continue after 5:00 p.m., Monday through Friday. No work may begin on Saturday or Sunday before 8:00 a.m. or continue after

5:00 p.m. Sunday work may be conducted only if the DBM demonstrates, in writing to the building official, justifiable cause for the Sunday work.

- 11.36.3.** The City may establish other times of work as necessary based on the geographical location of the jobsite in relation to surrounding occupancies, buildings and structures.
- 11.36.4.** The DBM must submit a written request to the Building Official for a variance from the required work hours at least 7 days before the date for which the variance is desired. Variances will not be granted for more than 30 days at a time. A new application must be made for each additional variance. The DBM must notify adjacent property owners of the intended work and the duration of the requested variance. Proof of notification must be presented to the building official before the variance can be granted.
1. The application for the variance must demonstrate justifiable cause why the work must be done outside the prescribed time period (e.g. pouring concrete during "summer hours"). A variance will not be granted based solely on convenience or for work that can be completed during daytime construction hours.
  2. The application for a variance must state the construction permit number, the address of the work, type of work, time period of the work, and the duration of the variance.

**11.37. COMPLIANCE WITH FEDERAL LAWS**

- 11.37.1.** The DBM understands and acknowledges the applicability to it of the American with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. The DBM agrees to comply with these laws in performing this Contract and to permit the City to verify compliance. The DBM will also comply with A.R.S. § 34-301, "Employment of Aliens on Public Works Prohibited", and A.R.S. § 34-302, as amended, "Residence Requirements for Employees". The DBM will include the terms of this provision in all contracts and subcontracts for work performed under this Contract, including supervision and oversight.
- 11.37.2.** Under the provisions of A.R.S. § 41-4401, the DBM warrants to the City that the DBM and all its subcontractors will comply with all Federal Immigration laws and regulations that relate to their employees and that the DBM and all its subcontractors now comply with the E-Verify Program under A.R.S. § 23-214(A).
- 11.37.3.** A breach of this warranty by the DBM or any of its subcontractors will be considered a material breach of this Contract and may subject the DBM or Subcontractor to penalties up to and including termination of this Contract or any subcontract.
- 11.37.4.** The City retains the legal right to inspect the papers of any employee of the DBM or any subcontractor who works on this Contract to ensure that the DBM or any subcontractor is complying with the warranty given above.

- 11.37.5.** The City may conduct random verification of the employment records of the DBM and any of its subcontractors to ensure compliance with this warranty. The DBM agrees to indemnify, defend and hold the City harmless for, from and against all losses and liabilities arising from any and all violations of these statutes.
- 11.37.6.** The City will not consider the DBM or any of its subcontractors in material breach of this Contract if the DBM and its subcontractors establish that they have complied with the employment verification provisions prescribed by 8 USCA § 1324(a) and (b) of the Federal Immigration and Nationality Act and the E-Verify requirements prescribed by A.R.S. §23-214(A). The "E-Verify Program" means the employment verification pilot program as jointly administered by the United States Department of Homeland Security and the Social Security Administration or any of its successor programs.
- 11.37.7.** The provisions of this Article must be included in any contract the DBM enters into with any and all of its subcontractors who provide services under this Contract or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.
- 11.37.8. Compliance with Americans With Disabilities Act**

The DBM acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. The DBM will provide the services specified in this Contract in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. The DBM agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Contract and further agree that any violation of this prohibition on the part of the DBM, its employees, agents or assigns will constitute a material breach of this Contract.

#### **11.38. DATA CONFIDENTIALITY**

- 11.38.1.** As used in this Contract, data means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by or obtained by the DBM in the performance of this Contract.
- 11.38.2.** The parties agree that all data, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the DBM in connection with the DBM's performance of this Contract is confidential and proprietary information belonging to the City.

**11.38.3.** The DBM will not divulge data to any third party without first obtaining the written consent of the City. The DBM will not use the data for any purposes except to perform the services required under this Contract. These prohibitions will not apply to the following data provided the DBM has first given the required notice to the City:

1. Data, which was known to the DBM before its performance under this Contract unless the data was acquired in connection with Work performed for the City;
2. Data which was acquired by the DBM in its performance under this Contract and which was disclosed to the DBM by a third party, who to the best of the DBM's knowledge and belief, had the legal right to make the disclosure and the DBM is not otherwise required to hold the data in confidence; or
3. Data, which is required to be disclosed by virtue of law, regulation, or court order to which the DBM is subject.
4. In the event the DBM is required or requested to disclose data to a third party, or any other information to which the DBM became privy as a result of any other contract with the City, the DBM will first notify the City, as stated in this Article, of the request or demand for the data. The DBM will give the City sufficient facts so that the City can be given an opportunity to first give its consent or take any action that the City may consider appropriate to protect the data or other information from disclosure.
5. Unless prohibited by law, within 10 days after completion of services for a third party on real or personal property owned or leased by the City, the DBM will promptly deliver a copy of all data to the City. All data will continue to be subject to the confidentiality agreements of this Contract.
6. The DBM assumes all liability for maintaining the confidentiality of the data in its possession and agrees to compensate the City if any of the provisions of this Article are violated by the DBM, its employees, agents or subconsultants. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Article will be considered to cause **irreparable harm that justifies injunctive relief in court.**

#### **11.39. TAXES AND INDEMNIFICATION**

The fee listed in this Contract includes any and all taxes applicable to the activities authorized by this Contract. The City will have no obligation to pay additional amounts for taxes of any type. DBM and all subcontractors shall pay all Federal, state and local taxes applicable to its operation and any persons employed by the DBM, except as may be otherwise provided in this Contract. DBM shall, and require all subcontractors to hold the City harmless from any responsibility for taxes, damages and interest, if applicable, contributions required under Federal, and/or state and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security and Worker's Compensation.

**11.40. CONFLICT OF INTEREST**

- 11.40.1.** To evaluate and avoid potential conflicts of interest, the DBM will provide written notice to the City, as provided in this Article, of any Work or Services performed by the DBM for third parties that may involve or be associated with any real property or personal property owned or leased by the City. The notice will be given 7 business days before commencement of the Project by the DBM for a third party, or 7 business days before an adverse action as defined below. Written notice and disclosure will be sent to the City Senior Representative identified in Article 7.3.1.1.
- 11.40.2.** Actions that are considered to be adverse to the City under this Contract include but are not limited to:
  - 1. Using data as defined in this Contract acquired in connection with this Contract to assist a third party in pursuing administrative or judicial action against the City;
  - 2. Testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against the City; and
  - 3. Using data to produce income for the DBM or its employees independently of performing the services under this Contract, without first obtaining the written consent of the City.
- 11.40.3.** The DBM represents that except for those persons, entities and projects identified to the City, the Services to be performed by the DBM under this Contract are not expected to create an interest with any person, entity, or third party project that is or may be adverse to the interests of the City.
- 11.40.4.** The DBM's failure to provide a written notice and disclosure of the information as stated in this Article on Conflicts of Interest will constitute a material breach of this Contract.

**11.41. COMMENCEMENT OF STATUTORY LIMITATION PERIOD AND STATUTE OF REPOSE**

- 11.41.1.** Before Final Completion: As to acts or failures to act occurring before the relevant date of Final Completion, any applicable statute of limitations will commence to run and any alleged cause of action will be considered to have accrued in any and all events not later than the date of Final Completion.
- 11.41.2.** Between Punch List Preparation and Final Completion: As to acts or failures to act occurring between the relevant date of Punch List Preparation and before Final Completion, any applicable statute of limitation will commence to run and any alleged cause of action will be considered to have accrued in any events not later than the date of Final Completion.
- 11.41.3.** After Completion: As to acts or failures to act occurring after the date of Final Completion, any applicable statute of limitations will commence to run and any alleged cause of action will be considered to have accrued in any and all

events not later than the date of any correction of Work or failure to correct Work by the DBM, or the date of actual commission of any other act or failure to perform any duty or obligation by the DBM or the City, whichever occurs last.

**11.41.4. Statute of Repose:** The time period for the applicable Statute of Repose will begin to run at the time specified in Arizona Revised Statute § 12-552 as it is amended or renumbered from time to time.

**11.42. NO BOYCOTT OF ISRAEL**

By submitting a quote/proposal/bid and/or entering into a contract with the City, the vendor/company certifies that they are not currently engaged in and agrees for the duration of the Contract to not engage in a boycott of Israel as defined in A.R.S. § 35-393.

**11.43. CONTRACTOR WARRANTS AND CERTIFIES THAT IT DOES NOT CURRENTLY, AND AGREES FOR THE DURATION OF THE CONTRACT THAT IT WILL NOT, USE:**

- 1) The forced labor of ethnic Uyghurs in the People's Republic of China.
- 2) Any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.
- 3) Any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

If Contractor becomes aware during the term of the Agreement that the Contractor is not in compliance with this paragraph, the Contractor shall notify the City within five business days after becoming aware of the noncompliance. Failure of Contractor to provide a written certification that the Contractor has remedied the noncompliance within one hundred eighty (180) days after notifying the public entity of its noncompliance, this Contract shall terminate unless the Term of this Contract shall end prior to said one hundred eighty (180) day period.

**ARTICLE 12 – BENCHMARKS**

**12. CERTIFICATION OF BENCHMARKS**

In compliance with the City's Design Standards & Policies Manual (DS&PM), Sections 9-1.1 and 9-1.301, it is the City's intent that the DBM must use both horizontal and vertical benchmarks with City of Scottsdale published values for any survey on all public works projects. These published values are available for public use at the following website: <http://eservices.scottsdaleaz.gov/landsurvey/>. AT LEAST 1 HORIZONTAL AND 1 VERTICAL BENCHMARK MUST MATCH THE NORTHING, EASTING OR ELEVATION VALUES PUBLISHED ON THE CITY'S WEBSITE. The DBM must sign and submit with this Contract, the Certificate of Use attached and by reference made a part of this Contract.

**ARTICLE 13 – DEFINITIONS**

"Addenda" – means written or graphic instruments issued before the submittal of the GMP Proposal(s), which clarify, correct or change the GMP Proposal(s) requirements.

"Allowance" – means an agreed amount by the City and the DBM for items which may be required to complete the scope of work.

"Alternate Systems Evaluations" – means alternatives for design, means and methods or other scope of work considerations that are evaluated using value engineering principles and have the potential to reduce construction costs while still delivering a quality and functional Project that meets City requirements.

"As-Built Document" – "As-built" in construction is equivalent to "as-is." Drawings deemed "as-built" are final drawings that include all changes made during the actual construction process. These drawings represent the actual existing constructed conditions as opposed to designs or a proposed condition. The As-Built Documents should be per Arizona Revised Statutes §32-152.

"Blueline or Blackline Prints" – Prints that allows comparison of document versions to show what has been revised.

"Change Order" – means a written order to the DBM executed by the City after execution of this Contract, directing a change in the Work. A Change Order may include a change in the Contract Price (other than a change attributable to damages to the DBM for delay as provided in Article 5 hereof) or the time for the DBM's performance, or any combination thereof. Where there is a lack of total agreement on the terms of a Change Order or insufficient time to execute a bilateral change, the City may also direct a change in the Work in the form of a Construction Change Directive, which will set forth the change in the Work and the change, if any, in the contract amount or time for performance, for subsequent inclusion in a Change Order; Construction Change Directives shall include a not-to-exceed preliminary price, against which the DBM may begin billing (subject to the requirements for pay applications provided elsewhere herein) as the work is performed. Change Orders must comply with the provisions of Rule 2-200.1 of the City's Procurement Code.

"The City" – means the City of Scottsdale, an Arizona municipal corporation. Regulatory activities handled by the City of Scottsdale Development Services, Planning and Fire Departments or any other City department are not subject to the responsibilities of the City under this Contract.

"The City's Senior Representative" – means the person designated in Article 7.3.1.1.

"Claim" – means a written request for either payment of additional monies or extension of contract time, submitted in accordance with the terms of this Contract or applicable law.

"Construction Administration Supervisor" – means a City employee who coordinates the daily construction activities with the DBM, performs quality control inspections, enforces project plans and specifications and adopted City codes and ordinances. He will also carry out any other assignments authorized by the Contract Administrator.

"Construction Change Directive" – means an alternate mechanism for directing the DBM to perform additional work under the Contract when time and/or cost of the work is not in agreement between the City and the DBM. During the pendency of a resolution of the price and/or time adjustments between the City and the DBM, the DBM may not suspend work and will comply with



the Construction Change Directive. Construction Change Directives must comply with the provisions of Rule 2-200.1 of the City's Procurement Code.

"Construction Documents" – means the plans, specifications and drawings prepared by the DBM's design professional after correcting for permit review requirements and incorporating addenda and approved Change Orders, or Contract Modifications.

"Construction Fee" – means the DBM's administrative costs, home office overhead, and profit, whether at the DBM's principal or branch offices for the construction phase. This includes the administrative costs and home office costs and any limitations or exclusions that may be included in the General Conditions for the construction phase.

"City's Project Contingency" – means a fund to cover cost growth during the Project used at the discretion of the City usually for costs that result from the City's direct changes or unforeseen site conditions. The amount of the City's Contingency may be set solely by the City and will be in addition to the project costs included in the DBM's GMP packages. Use and management of the City's Contingency is described in Article 4.4.3.7. The City's Contingency is an amount to cover changes initiated by the City, which may be incorporated into the GMP as an allowance at the City's discretion.

"Contract" – means this written document signed by the City and the DBM covering the design and construction of the Project, and including other documents itemized and referenced in or attached to and made a part of this Contract.

"Contract Administrator" – means the person designated in Article 7.3.1.1.

"Contract Amendment" – means a written order signed by an authorized representative of the City and which approves changes in the scope of work, in the total compensation or time allowed for completion of services or modifications to other contract terms consistent with S.R.C. Sec. 2-200.

"Contract Documents" – means the following items and documents in descending order of precedence executed by the City and the DBM: (i) all written Contract modifications, addenda and Change Orders; (ii) this Design-Build Construction Contract, including all exhibits and attachments; (iii) the Preconstruction Agreement, including all exhibits and attachments; (iv) written Supplementary Conditions; (v) Construction Documents; (vi) DBM's GMP Proposal(s), GMP Plans and Specifications.

"Contract Time(s)" – means the Day(s) as stated in Article 3 subject to adjustment in accordance with this Contract.

"Cost of the Work" – means the direct costs necessarily incurred by the DBM in the proper performance of the Work. The Cost of the Work will include direct labor costs, subcontract costs, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, building permit fees, Design Fee, materials testing, profit and related items. The Cost of Work does not include the DBM's Construction Fee, taxes, bonds, or insurance costs.

Critical Path Method is a schedule in the form of precedents, networks and time sequences. The critical path method is a project management planning and control technique implemented on computers. The critical path is the series of activities and tasks in the Project that have no built-

in slack time. Any task in the critical path that takes longer than expected will lengthen the total time of the Project.

“Day(s)” – mean calendar days unless otherwise specifically noted in the Contract Documents.

“Delay” – means an unanticipated event or interference with the progress of a critical path work activity being performed at the time that causes the completion date of the project to be extended. Delays may be caused by the City, the DBM, third parties or Force Majeure events. Delays may be excusable, compensable, non-compensable or concurrent.

“Delay, Compensable” – means delay that results from the City’s actions or inactions that entitle the DBM to both a time extension and delay damages.

“Delay, Concurrent” – means 2 or more delays, within the same timeframe, both of which would independently impact the Project’s critical path. If one delay is caused by the City and the other by the DBM, the DBM will generally be entitled to an excusable, non-compensable time extension; to the degree the delays may “overlap.”

“Delay, Excusable” – means an unforeseeable delay caused by an event beyond the control and without the fault or negligence of the DBM (including its suppliers and subcontractors). Excusable delays may be compensable or non-compensable, depending upon whether the terms of the contract or the law allows recovery of delay costs. Unless otherwise shown, it will generally be presumed that these delays are non-compensable.

“Delay, Non-Excusable” – means a delay within the control of the DBM, its suppliers and subcontractors, or a delay resulting from a risk taken by the DBM under the terms of the Contract. The DBM will not be due any time extension or delay damages, and may be responsible for paying to the City, actual or liquidated damages for the delay.

“Deliverables” – means the work products prepared by the DBM in performing the Scope of Work described in this Contract. Some of the major deliverables to be prepared and provided by the DBM during the design phase may include, but are not limited to: Construction Management Plan, Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, cost estimates, construction market surveys, cash flow projections, GMP Proposals, Subcontractor procurement plan, Subcontractor contracts, Subcontractor bid packages, Supplier agreements, and others as indicated in this Contract or required by the Project Team.

“Design Build” – means a project delivery method in which:

- (a) There is a single contract for design services and construction services, except that instead of a single contract for design services and construction services, the agent may elect separate contracts for preconstruction services and design services during the design phase, for construction and design services during the construction phase and for any other construction services.
- (b) Design and construction of the project may be either:
  - i. Sequential with the entire design complete before construction commences.
  - ii. Concurrent with the design produced in two or more phases and construction of some phases commencing before the entire design is complete.
- (c) Finance services, maintenance services, operations services, preconstruction services and other related services may be included.

"Design Build Manager (DBM)" – means Ameresco, Inc., as the firm, corporation, or other approved legal entity selected by the City to provide design and construction services as detailed in this Contract, and with whom the City has entered into a Contract to do the work.

"Design Fee" – means the amount paid to DBM for the production of complete construction documents and specifications approved and permitted by the City of Scottsdale.

"DBM's Representative" – means the person designated in Article 7.3.2.2.

"DBM's Senior Representative" – means the person designated in Article 7.3.2.1.

"Design Fee" – means the DBM's administrative costs, home office overhead and profit, whether at the DBM's principal or branch offices for the design phase. This includes the administrative costs and home office costs and any limitations or exclusions that may be included in the General Conditions for the design phase.

"Design Services" – means all professional services to be performed or procured by the DBM to provide the required Project design under this Contract and any subsequent amendments.

"Differing Site Conditions" – means compliance with M.A.G. Standard Specifications Subsection 102.4.

"Field Order" – means a written field directive prepared and signed by the City, directing a change in work that may or may not include an adjustment in contract price and or contract time.

"Final Acceptance" – means the completion of all the Work as prescribed in Article 6.3.9.

"General Conditions Costs" – means costs incurred by the DBM during the construction phase and includes but is not limited to the following types of costs: (i) payroll costs for project manager or construction manager but not both for Work conducted at the site; (ii) payroll costs for the superintendent and full-time general foremen; (iii) payroll costs for other management personnel resident and working on the site; (iv) workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.); (v) administrative office personnel; (vi) costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses; (vii) utilities, fuel, sanitary facilities and telephone services at the site; (viii) costs of consultants not in direct employ of the DBM or Subcontractors, fees for permits and licenses, and some administrative personnel who may work at the home office. Charges for some home office administrative personnel may be included in General Conditions if agreed upon by both DBM and City.

"GMP Plans and Specifications" – means the documents used to establish the GMP and made part of this Contract by reference.

"Guaranteed Maximum Price" or "GMP" – means the sum of the maximum Cost of the Work as given in the GMP proposal, including design and construction; the DBM's Construction Fee; General Conditions; Taxes, Payment and Performance Bonds, Insurance Costs; permit and licensing fees; sales tax, DBM Indirect Costs, and Project Contingency.

"Guaranteed Maximum Price (GMP) Proposal" – the offer or proposal of the DBM submitted on the prescribed form stating the GMP prices for the entire Work (which includes design and

construction, DBF Construction Fee, General Conditions, Taxes, Bonds, Insurance, Permit and License Fees, Sales Tax, DBM Indirect Costs, and Project Contingency) or portions of the Work to be performed during the construction phase or portions of the Work to be performed throughout all phases.

"Hazardous substance" means:

- (a) Any substance designated pursuant to sections 311(b)(2)(A) and 307(a) of the clean water act.
- (b) Any element, compound, mixture, solution or substance designated pursuant to section 102 of CERCLA.
- (c) Any hazardous waste having the characteristics identified under or listed pursuant to section 49-922.
- (d) Any hazardous air pollutant listed under section 112 of the federal clean air act (42 United States Code section 7412).
- (e) Any imminently hazardous chemical substance or mixture with respect to which the administrator has taken action pursuant to section 7 of the federal toxic substances control act (15 United States Code section 2606).
- (f) Any substance which the director, by rule, either designates as a hazardous substance following the designation of the substance by the administrator under the authority described in subdivisions (a) through (e) of this paragraph or designates as a hazardous substance on the basis of a determination that such substance represents an imminent and substantial endangerment to public health.

"Indirect Costs" - include the DBM Construction Fee, the DBM contractor management costs such as DBM staff, office space, phones, copiers, faxes, etc., and general requirements such as sweeping, temporary fencing, and permitting, licensing, and inspections. The General Conditions, the DBM Construction Fee, Payment and Performance Bonds, Insurance, Taxes, and Permitting and Licensing Fees equal the DBM Indirect Costs.

"Informational Submittals" – Submittals are required (common with construction projects) for the architect and engineer to verify that the correct products and quantities will be installed on a project.

"Legal Requirements" – means all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-governmental entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

"Liquidated Damages" – means an amount the DBM will pay as required in Article 3.3.

"Must" and "will" as used in this Contract are mandatory.

"Payment Request" – means a monthly progress payment request, which is based on a monthly estimate of the dollar value of the Work completed.

"Preconstruction Agreement" – means that certain agreement entered into by the City and the DBM to cover preconstruction and design services. The Agreement is Contract No. 2024-054-COS, and is dated the 2<sup>nd</sup> day of April, 2024, a copy of which is filed in the offices of Transportation & Infrastructure.

"Preconstruction Services" – means advice given during the design phase. It will include the following services: all design services, project scheduling, appraisal of grading, drainage, street

lighting and landscaping, installation of water and sewer lines to the boundaries of the building envelopes, construction of streets within the boundaries of the Premises, and installation of conduit for placement of "dry utilities" to the boundaries of the building envelopes, evaluation of costs and benefits of alternative systems and distribution approaches; recommendations for efficiency and cost effectiveness; and resolution of constructability problems; GMP preparation; and Subcontractor bid phase services. Preconstruction Services have been contracted for between the City and the Design-Build, as required by A.R.S. § 34-603(C)(1)(c).

"Product Data" – means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the DBM to illustrate materials or equipment for some portion of the Work.

"Professional Certification" – Professional certification is a designation which indicates that a person is qualified to perform a job or task. Professional certification can be trade certification or professional designation.

"Project" – means the Work to be completed in the execution of this Contract as described in the Recitals above and in Exhibit A attached.

"Project Budget" – means a sum not to exceed Two Million Four Hundred Fifty Two Thousand Five Hundred Sixty and No/100 Dollars (\$2,452,560), for the costs of design, construction, construction management and all other related costs for the Project.

"Project Record Documents" – means the documents created pursuant to Article 1.9.

"Project Record Drawing Prints" – Set of current design drawings used by construction contractor for reference during construction. These drawings are typically marked up during the construction process, and are used to develop the subsequent "As-Built" drawings.

"Project Schedule" – means a schedule as prescribed in Article 3.5.

"Punch List" – means those minor items of Work to be completed before Final Acceptance, which do not prevent the Project from being used for the purpose for which it is intended and which will not prevent the issuance of a Certificate of Occupancy.

"Samples" – means physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

"Savings" – means the difference between the Guaranteed Maximum Price and the Final Cost of the Work (including DBM's Fee). One Hundred Percent (100%) of savings will accrue to the City, unless otherwise agreed in the itemization of the Guaranteed Maximum Price.

"Schedule of Values (SOV)" – means the Document specified in the construction phase, which divides the Contract Price into pay items, so that the sum of all pay items equals the Contract Price for the construction phase Work, or for any portion of the Work having a separate specified Contract Price. The SOV may or may not be output from the Progress Schedule depending on whether the Progress Schedule is cost-loaded or not.

"Shop Drawings" – mean drawings, diagrams, schedules and other data specially prepared for the Work by the DBM, subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

"Site" – means the land or premises on which the Project is located generally described as the approximately southwest corner of Benny Gonzalez Way and N. 75<sup>th</sup> Street (City Hall) and located at 3939 N. Drinkwater Blvd., City of Scottsdale, Arizona. The DBM will include in its contract with subcontractors the street or physical address of the construction site.

"Specifications" – means those sections of the Contract Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain applicable administrative details.

"Subcontractor" or "Subconsultant" – means a person or firm having a direct contract with the DBM or any other person or firm having a contract with the DBM at any tier, who undertake to perform a part of the construction phase Work for which the DBM is responsible, and includes materialmen and suppliers. All Subcontractors must be selected in accordance with the selection plan set forth in Article 1.11 of the Preconstruction Agreement.

"Substantial Completion" – means when the Work, or when an agreed upon portion of the Work, is sufficiently complete so that the City can occupy and use the Project or a portion of it for its intended purposes. This may include, but is not limited to: (i) approval by the City Fire Marshall and local authorities (Certificate of Occupancy); (ii) issuance of elevator permit; (iii) demonstration to the City that all systems are in place, functional, and displayed to the City or its representative; (iv) installation of all materials and equipment; (v) the City review and acceptance of all systems; (vi) the City review and acceptance of draft O&M manuals and record documents; (vii) the City operation and maintenance training is completed; (viii) HVAC test and balance completed (provide a minimum 30 days before projected substantial completion); (ix) completion of Punch List items; (x) completed landscaping and site work; and (xi) final cleaning.

"Supplier" – means a manufacturer, fabricator, supplier, distributor, material man or vendor having a direct contract with the DBM or any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by the DBM or any Subcontractor.

"Work" – means the entire design and completed construction or the various separately identifiable parts of the design and construction, required to be furnished. Work includes and is the result of completing the design work, performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Contract Documents for the construction phase.

(SIGNATURES ON NEXT PAGE)

THE CITY OF SCOTTSDALE

PROJECT NO. 24SQ009, CONTRACT NO. 2025-151-COS

This Contract has been properly executed by the parties above named, on the date and year written above, to be retained by the City Clerk.

The Design-Build Manager (DBM) agrees that this Contract, as awarded, is for the stated work and understands that payment for the total work will be made on the basis of the indicated amount(s), in accordance with the terms and conditions of the Contract.

DESIGN-BUILD MANAGER

\_\_\_\_\_  
Ron Haxton

Its: Senior Vice President

THE CITY OF SCOTTSDALE

ATTEST:

\_\_\_\_\_  
Lisa Borowsky, Mayor

\_\_\_\_\_  
Ben Lane, City Clerk

\_\_\_\_\_  
Alison Tymkiw  
Senior Director - City Engineer

\_\_\_\_\_  
George R. Woods  
Risk Management Director

\_\_\_\_\_  
Contract Administrator

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Luis E. Santaella, Interim City Attorney  
By: Shane C. Morrison, Assistant City Attorney

**EXHIBIT A**

**PROJECT DESCRIPTION**

Scope of work anticipated under this Contract include the following:

- Install solar PV carports at the City Hall site based on the Electrical Permit Drawings - City of Scottsdale, City Hall\_ Electrical Permit Drawings\_08.18.25 and the Structural Permit Drawings - City of Scottsdale \_City Hall Canopy \_Structural Permit Drawings\_06.26.25 submitted with proposal attached as Exhibit C.



**EXHIBIT B**

**PRECONSTRUCTION AGREEMENT 2024-054-COS dated 4/2/2024  
CONTRACT IS ON FILE AT TRANSPORTATION &  
INFRASTRUCTURE**

<https://eservices.scottsdaleaz.gov/cityclerk/DocumentViewer/Show/c32b9b19-928b-4bd9-8619-360bcf143e6c>

**EXHIBIT C**

**SUBMITTAL REQUIREMENTS FOR THE GMP**

**GMP submittal, one copy for review.**

Two (2) copies will be requested by Transportation & Infrastructure prior to contract execution.

**Exhibits Contents:**

1. Scope of Work
  2. Summary of the GMP
  3. Schedule of Values – summary spreadsheet and backup documents
  4. List of Plans and Specifications used for GMP Proposal
  5. List of clarification and assumptions
  6. Subcontractor Bids on Subcontractor Letterhead
  7. Project Schedule
- A. Scope of Work will consist of a brief description of the work to be performed by DBM and major points that the DBM and the City must be aware of pertaining to the scope. (normally one paragraph is sufficient.)
- B. A summary of the GMP with a total for each of the components of the GMP as listed in its definition in Article 13 as shown in the table below:
- C. The General Conditions are costs incurred by the DBM during the construction phase. General Conditions includes, but is not limited to the following types of costs: payroll costs for project manager or construction manager, but not both, payroll costs for the superintendent and full-time general foremen, payroll costs for management personnel working on the site, workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean- up, etc.), administrative office personnel, costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses, utilities, fuel, sanitary facilities and telephone services at the Site, costs of liability insurance premiums not included in labor burdens for direct labor costs, costs of bond premiums, costs of consultants not in the direct employ of the DBM or Subcontractors, fees for permits and licenses allowed in the contract. Charges for some home office administrative personnel may be included in General Conditions if agreed upon by both DBM and City.
- D. Schedule of Values – spreadsheet with the estimated bid or cost organized by subcontract categories, allowances, bid contingency, general conditions costs, taxes, bonds, insurances, and the DBM's construction phase fee. The supporting document for the spreadsheet must be provided in an organized manner that correlates with the schedule of values.

**Exhibit C**

The attached backup information consists of the subcontractor bids, and clarification assumptions.

<b>GMP SUMMARY</b>		
	<b>COST OF THE WORK - DIRECT COSTS</b>	<b>AMOUNT</b>
A	Sub-Contractors' Cost of the Work (Labor, Materials, Equipment, Warranty, Insurance, Profit)	\$793,052
B	CMAR Self-Performed Cost of the Work (Labor, Materials, Equipment, Warranty)	\$304,102
C	<b>Total Cost of the Work (A+B)</b>	<b>\$1,097,154</b>
	<b>INDIRECT COSTS</b>	<b>AMOUNT</b>
D	General Conditions (Negotiated Amount)	\$474,442
E	<b>Total Cost of the Work + General Conditions Fee (C+D)</b>	<b>\$1,571,596</b>
F	CMAR Construction Fee (% of E or Negotiated Fixed Fee)	\$188,592
G	Payment and Performance Bonds (On E. Total Cost of the Work + General Conditions Fee)	\$20,402
H	Insurance (Additional CMAR's Insurance not provided in the Total Cost of the Work)	\$16,322
I	<b>Subtotal Direct + Indirect Costs (E+F+G+H)</b>	<b>\$1,796,912</b>
J	Taxes (Actual Reimbursable limited by Not to Exceed)	\$688
K	<b>Project Subtotal (I+J)</b>	<b>\$1,797,600</b>
L	<b>CITY'S PROJECT CONTINGENCY (As determined by the City)</b>	<b>\$179,760</b>
M	<b>TOTAL GMP (Not to Exceed) (K+L)</b>	<b>\$1,977,360</b>

- E. A list of the Plans and Specifications with latest issuance date including all addenda used in preparation of the GMP proposal. The plans used for the GMP must be date stamped and signed by CMAR, Design Consultant, and Project Manager using the format below.

<b>Plans Used for Preparation of GMP No.</b>	
<u>DBM</u>	Date
Scottsdale_City Hall_Electrical_Permit Drawings_	08.18.25
Structural Permit Drawings - City of Scottsdale_City Hall	06.26.25
Design Consultant	Date
Project Manager	Date

EXHIBIT D

STATUTORY PERFORMANCE BOND

PURSUANT TO TITLE 34, CHAPTER 6,  
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, \_\_\_\_\_ (hereinafter called the Principal) as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_ with its principal office in the City of \_\_\_\_\_, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Scottsdale, County of Maricopa, State of Arizona in the amount of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the City of Scottsdale, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2024 for Bid No. (bid number), Project No. (project number), (project name), which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such, that if the Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the contract during the original term of the contract and any extension of the contract, with or without notice to the surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the provisions of Title 34, Chapter 6, Arizona Revised Statutes, and all liabilities on this Bond shall be determined in accordance with the provisions of Title 34, Chapter 6, Arizona Revised Statutes, to the extent as if it were copied at length in this Contract. The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a Judge of the Court. The performance under this bond is limited to the construction to be performed under the contract and does not include any design services, preconstruction services, financial services, maintenance services, operations services or any other related services included in the contract.

**Exhibit D**

WITNESS our hand the \_\_\_\_\_ day of \_\_\_\_\_, 2024

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
BY:

\_\_\_\_\_  
SURETY (SEAL)

\_\_\_\_\_  
AGENCY OF RECORD

\_\_\_\_\_  
AGENCY ADDRESS

EXHIBIT E

STATUTORY PAYMENT BOND

PURSUANT TO TITLE 34, CHAPTER 6,  
OF THE ARIZONA REVISED STATUTES

(Penalty of this bond must be 100% of the Contract Amount)

KNOW ALL MEN BY THESE PRESENTS:

That, \_\_\_\_\_ (hereinafter called the Principal) as Principal, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of \_\_\_\_\_ with its principal office in the City of \_\_\_\_\_, (hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Scottsdale, County of Maricopa, State of Arizona in the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_\_), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the City of Scottsdale, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2024 for Bid No. (bid number), Project No. (project number), (project name), which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, the condition of this obligation is such that if the Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the provisions of Title 34, Chapter 6, of the Arizona Revised Statutes, and all liabilities on this Bond shall be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 6, Arizona Revised Statutes, to the same extent as if they were copied at length in this Contract.

The prevailing party in a suit on this Bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a Judge of the Court.

WITNESS our hands the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
BY:

**Exhibit E**

\_\_\_\_\_  
SURETY (SEAL)

\_\_\_\_\_  
AGENCY OF RECORD

\_\_\_\_\_  
AGENCY ADDRESS

**CITY OF SCOTTSDALE PUBLISHED BENCHMARKS**

**CERTIFICATE OF USE**

**CONTRACT NAME:**

**CONTRACT NO.:**

**PROJECT NO.:**

To the City of Scottsdale:

In compliance with the City of Scottsdale's Design Standards & Policies Manual (DS&PM), Sections 9-1.1 and 9-1.301, it is the City's intent that the \_\_\_\_\_ must use both horizontal and vertical benchmarks with City of Scottsdale published values for any survey on all public works projects. Those published values are available for public use at the following City website: <http://eservices.scottsdaleaz.gov/landsurvey/>. **AT LEAST ONE HORIZONTAL AND ONE VERTICAL BENCHMARK MUST MATCH THE NORTHING, EASTING AND/OR ELEVATION VALUES PUBLISHED ON THE CITY OF SCOTTSDALE'S WEBSITE.**

Having read and understood Sections 9-1.1 and 9-1.301 of the DS&PM, and as a Land Surveyor registered in the State of Arizona, I certify that we will be using the following City of Scottsdale horizontal and vertical datum to perform the topographic survey for the above named contract and project. These benchmarks will be **shown** on the cover sheet of the design and construction plans.

Benchmark No. 1:

Horizontal datum:

Vertical datum:

GPS Point: \_\_\_\_\_

GPS Point: \_\_\_\_\_

N: \_\_\_\_\_

Elevation: \_\_\_\_\_

E: \_\_\_\_\_

Benchmark No. 2:

Horizontal datum:

Vertical datum:

GPS Point: \_\_\_\_\_

GPS Point: \_\_\_\_\_

N: \_\_\_\_\_

Elevation: \_\_\_\_\_

E: \_\_\_\_\_

Certified By: \_\_\_\_\_

(Seal in Area Below)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_



September 11, 2025

Roger Berna  
Principal Project Manager | City of Scottsdale

**Re: Proposal for Ameresco's Guaranteed Maximum Price to Construct Solar Photovoltaic Carport Canopies over the City Hall parking lot for the City of Scottsdale.**

Dear Roger,

On behalf of the Ameresco, Inc. (Ameresco) team, thank you for the opportunity to extend our partnership and provide the City of Scottsdale with renewable energy solutions at the City of Scottsdale City Hall.

Ameresco is proposing a Guaranteed Maximum Price (GMP) for a turnkey installation of solar photovoltaic (PV) carport arrays at the City of Scottsdale's City Hall parking lot.

## Scope of Work

### General

- Install solar PV carports at the City Hall site based on the Electrical Permit Drawings - *City of Scottsdale\_City Hall\_Electrical\_Permit Drawings\_08.18.25* and the Structural Permit Drawings - *City of Scottsdale\_City Hall Canopy\_Structural Permit Drawings\_06.26.25* submitted with this proposal.
- The point of interconnection (POI) for the solar pv system will be at the City Hall SES on the exterior of the building.
- The scope is based on using the Hanwha Q.Peak XL 595W solar PV modules for installation.
  - Array 1 - 10ft T-canopy structure at the Northeast area of the parking lot will consist of 147 modules total.
  - Array 2 - 20ft superstructure canopy will consist of 340 modules total.
- The scope is based on using the Chint Power Systems (CPS) inverters for the quantity and string configuration shown in the electrical permit drawings.

### Structural

- City Hall Surface Parking Lot
  - Installation of (2) new solar PV canopies and modules.
  - Canopy 1 – 10' leading edge on Carport Canopies.
  - Canopy 2 – 20' leading edge on superstructure canopy
  - HSS steel used for columns of structures

- Drilled pier foundations for columns
- Columns to grade level.
- Wide-Flange I-Beam frames
- G90 galvanized steel used for purlin members, end caps, and strapping

## **Electrical**

- Installation of PV modules and DC string wiring to inverter locations
- Install inverters and AC output circuits
- Provide and install conduit / wires for DAS
- Trench / bore underground conduit for inverter feeders
- Provide and install AC equipment as shown with underground conduit / wire
- Trench / bore underground for AC feeders with conduit / wire
- Provide and install canopy grounding
- Install under-canopy lighting with conduit and wire
- Provide convenience infrastructure and power pedestals
- Provide infrastructure for future EV chargers
- Utility interconnection agreements

Ameresco's proposal is also based upon the following list of Assumptions & Clarifications, Inclusions, and Exclusions.

## Assumptions & Clarifications

### General

- All purlin members, end caps, sad rods, and strapping to be G90 galvanized
- Frames and bolts to be painted one coat primer followed by one finish coat Aristoshield product of City of Scottsdale's choice of one color
- Assume wide-flange I-beam frames and use of pre-punched CEE purlins
- 10-foot minimum clear height and 7 deg tilt angle shown on drawings for canopy 1
- 20-foot minimum clear height and 5 deg tilt angle shown on drawings for canopy 2
- Assume wet set design, bolted beam to column connection for the surface parking lot
- Removal of planter area and (1) tree at the central parking area to install the new solar canopy is included
- Installation of equipment rack located in parking lot where existing planter is located as shown in attached drawings
- Canopy lighting to utilize existing lighting circuit in the parking area
- To interconnect the solar PV systems, a temporary utility power interruption is typically required. Interconnection typically takes no more than 8 to 10 hours and will be coordinated well in advance with City of Scottsdale to minimize any possible disruption

### Design

- Electrical and Structural Engineering for photovoltaic system and structural canopies scope of work
- Lighting levels will meet all applicable code requirements using new, surface-mounted lights under the carport
- The proposed systems and interconnections will be approved by the Authority Having Jurisdiction (AHJ) and the utility

### Pricing

- Due to volatility in module supply chain, the proposed Hanwha Q.Peak XL 595W modules may not be available once the vendor's available stock is exhausted. In this scenario, Ameresco will work with the City of Scottsdale to identify alternate modules with comparable specifications
- Prices for materials and labor are consistent with recent market pricing including approximate spikes in commodities costs, with the assumption that further commodity (e.g., modules, steel, and copper) will not increase more than 2% for modules and 5% for metals from the date of this proposal



- Any increase of solar module costs of 2% or more will be added to the final cost
  - Any increase in metals of 5% or more will be added to the final cost
- Construction pricing is based on the construction schedule provided but assumes that complete and unfettered access is provided to the City Hall parking lot for the entire duration
- Price assumes 1 mobilization / 2 phase for installation
- Most of the tax is excluded, since solar PV systems are tax exempt from Arizona Transaction Privilege Tax
- This proposal is valid for 30 days from the date of submission.
- We assume that steel procurement and fabrication will occur in year 2025
- Standard soil conditions
- Normal construction hours Monday-Friday, 40-hour work week
- Assume wet set column installation
- Assume drilled shaft foundation
- NEMA3R PV electrical gear mounted on carport steel columns or on grade / parking lot
- Assume material storage and laydown yards to be on site during construction
- Assume EMT conduit above ground and PVC Sch 40 (Sch 80 where required)
- All feeder conductors are assumed to be aluminum. DC string wiring and conductors smaller than #6AWG to be CU
- To interconnect the solar PV systems, a temporary utility power interruption is typically required. Interconnection typically takes no more than 8 to 10 hours and will be coordinated well in advance the City to minimize any possible disruption
- Phased construction in the parking lots to be coordinated with the City based on the attached phasing plan that has been discussed during project development
- Non prevailing wage and no apprenticeship participation
- Pricing and Inclusions/Exclusions based on Permit Drawings provided in proposal


## Inclusions and Exclusions

### Inclusions

- All engineering for turnkey installation of solar PV
- Surveying and private locating
- Geotechnical studies

- Allowance for required permits
- Procurement and installation of modules
- Procurement and installation of all structures and racking
- Procurement and installation of electrical components required for solar operation
- Procurement and installation of DAS, weather, and inverter communications
- Landscape and irrigation repair at planter areas under canopies
- Temporary construction fencing
- Tree and brush removal
- Commissioning of installed systems
- 10' Minimum clear height on T-Canopies. 20' Minimum clear height on City Hall High Canopy
- Under canopy lighting fixtures.
- Demo of existing light pole bases
- Columns to be HSS Steel. Beams to be Wide Flange
- Steel finish of beams and columns to include (1) coat of rust inhibitive primer and (1) coat of Alkyd Enamel or Water Based Top Coat
- Removal of foundation spoils
- AHJ required special inspections and testing
- Construction safety precautions in compliance with Ameresco and OSHA safety standards
- Direct management of the design, pre-construction, construction, including direct onsite management of subcontractors
- Ten (10) year Inverter Warranty
- Twelve (12) year product warranty and twenty-five (25) year linear performance warranty from module manufacturer.
- Maintain or exceed code-minimum lighting levels

## Exclusions

- Building-level electrical upgrades
  - Utility-interconnection upgrades
  - Module level rapid shutdown devices
  - Lightning protection
- 

- Aesthetic design elements and or architectural enhancements on structures such as stonework, stucco, or similar finishes
- HSS Type Steel used in structure, other than columns. Pricing include HSS Steel for the vertical column components only
- Powder-coated steel finish
- Clearing and grubbing / grading
- Civil Engineering and Construction Elements: Grading, Drainage, SWPPP
- Removal/remediation of existing hazardous material including removal of contaminated soils
- Damage to underground utilities not marked by Blue Stake and private locating
- Prevailing Wages
- ADA compliance upgrades under solar canopies as enforced by the AHJ
- Overtime, weekend, or after-hours work
- CCTV / Security Camera additions or repair
- Electric vehicle (EV) charging equipment
- Concrete abutment or raised piers at column bases
- Upgrades resulting from planning and zoning review
- Fire suppression and Fire sprinklers
- Waterproof decking and/or rain gutters
- Parking lot restriping
- Parking lot resurfacing of asphalt
- Relocation of existing underground facilities/utilities
- Painting of electrical conduit
- Significant increases in commodity cost due to but not limited to tariffs and changes in market conditions such as labor, PV modules, steel, aluminum, copper: Metals 5% and Modules 2%
- Delays in construction and/or commissioning due to extended lead times of material and/or equipment
- Module washing and cleaning
- Pest, Bird, and wildlife exclusion and mitigation devices
- Bollards or parking stops except as required by code
- Additional temporary parking or parking shuttling services



- Backup generator during shutdowns
- Hard drilling
- Spread footers or alternative foundations
- Facilities Study (FaS) or Detailed Study Requirements for APS Interconnection
- Permitting Fees

### **Guaranteed Maximum Price (GMP)**

Ameresco's Guaranteed Maximum Price (GMP) for a turnkey installation of solar photovoltaic (PV) carport arrays at the City of Scottsdale (City) City Hall as described in the above Scope of Work is \$1,797,600.

Ameresco is committed to partnering with the City of Scottsdale. We are proud of the work summarized in this document and are excited to move forward with the City in implementing this work. Should you have any questions or require additional information, please feel free to contact me directly at 480.499.9155 or at [dhunter@ameresco.com](mailto:dhunter@ameresco.com).

Respectfully,

Daniel Hunter, MBA, CEM, FMP  
Senior Business Development Manager  
Ameresco, Inc.

Enclosed as Attachments:

- *GMP Summary*
- *City of Scottsdale City Hall – Permit Drawings*
- *City of Scottsdale City Hall – Implementation Schedule*
- *Manufacturer Cutsheets*
- *Subcontractor Bids*

Project: Scottsdale City HallkW DC: 290Date: 9/9/2025

TASK NUMBER	DESCRIPTION	LINE TOTALS (\$)
<b>10.00</b>	<b>Module</b>	<b>\$ 132,282</b>
10.01	Modules	\$ 124,209
10.02	Module Shipping / Freight	\$ 1,863
10.03	Module Warranty	\$ 6,210
<b>20.00</b>	<b>Inverter</b>	<b>\$ 22,608</b>
20.01	Inverter	\$ 20,706
20.02	Inverter Shipping	\$ 867
20.03	Inverter Warranty	\$ 1,035
<b>30.00</b>	<b>General Conditions</b>	<b>\$ 474,442</b>
30.01	Project Coordination / Administration / Legal	\$ 51,561
30.02	Director / Program Management	\$ 30,510
30.03	Project Management	\$ 84,750
30.04	Field Construction Management	\$ 194,360
30.11	Travel	\$ 19,508
30.12	Toilets	\$ 5,885
30.13	Dumpsters	\$ 5,547
30.14	Job Trailer	\$ 6,936
30.15	Office Materials	\$ 2,519
30.16	Printing	\$ 2,060
30.17	Software / Licensing	\$ 2,875
30.18	Temporary Lighting	\$ 46,350
30.19	Temporary Fencing	\$ 16,616
30.20	Material Storage	\$ 4,966
<b>40.00</b>	<b>Permitting</b>	<b>\$ 36,724</b>
40.01	Conditional Use Permit	\$ -
40.02	Building Permit	\$ -
40.10	Payment and Performance Bond	\$ 20,402
40.11	Insurance	\$ 16,322
<b>50.00</b>	<b>Project Engineering</b>	<b>\$ 65,313</b>
50.02	Project Engineering	\$ 39,863
50.03	Architectural Engineering	\$ 25,450
<b>60.00</b>	<b>Civil Construction</b>	<b>\$ 65,497</b>
60.02	Light Pole / Bollard Removal / Concrete Demo	\$ 9,200
60.03	Tree Removal	\$ 25,500
60.04	Post-Construction Site Repair	\$ 12,898
60.05	Landscaping Replanting	\$ 11,945
60.06	Civil Warranty	\$ 5,954
<b>70.00</b>	<b>Structural</b>	<b>\$ 336,182</b>
70.01	Structural Sub LS	\$ 310,601
70.02	Structural Engineering	\$ 9,500
70.03	Bonding	\$ 5,210
70.08	Structural Warranty	\$ 10,871
<b>80.00</b>	<b>Electrical</b>	<b>\$ 414,576</b>
80.01	Electrical Sub LS	\$ 378,138
80.14	Light Fixtures	\$ 23,203
80.21	Electrical Warranty	\$ 13,235
<b>90.00</b>	<b>Monitoring and Control</b>	<b>\$ 19,646</b>
90.01	Monitoring System	\$ 19,074
90.02	Monitoring Warranty	\$ 572
<b>110.00</b>	<b>Testing, Inspection, and Commissioning</b>	<b>\$ 41,050</b>
110.01	Structural Special Inspections	\$ 15,300
110.03	Testing and Commissioning	\$ 25,750
	<b>LINE TOTALS</b>	<b>\$ 1,571,596</b>

<b>GMP Totals</b>				
A	Direct Costs - Subcontractors' Cost of Work (\$):	=	\$	793,052
B	Direct Costs - DBM Self Performed Cost of the Work (\$):	=	\$	304,102
C	Total Costs of the Work (A+B) (\$):	=	\$	1,097,154
D	General Conditions (\$):	=	\$	474,442
E	Total Cost of the Work + General Conditions Fee (C+D) (\$):	=	\$	1,571,596
F	DBM Construction Fee (\$):	=	\$	188,592
G	Payment and Performance Bonds (\$):	=	\$	20,402
H	Insurance (\$):	=	\$	16,322
I	Subtotal Direct + Indirect Costs (E+F+G+H) (\$):	=	\$	1,796,912
J	Taxes (\$):	=	\$	688
K	Project Subtotal (I+J)(\$):	=	\$	1,797,600
L	CITY'S PROJECT CONTINGENCY (\$):	=	\$	179,760
M	TOTAL GMP (K+L) (\$):	=	\$	1,977,360



	Max. Hourly Rate
<b>AMERESCO DESIGN-PHASE SERVICES BILLABLE RATES</b>	
Senior Project Manager / Senior Associate / Senior Discipline Staff	\$250.00
Project Architect or Engineer / Project Manager	\$215.00
Associate Staff / Discipline Staff	\$180.00
Technical Staff / CADD Operators	\$105.00
Draftsman	\$95.00

<b>PARK N SHADE (CARPORT CONTRACTOR AND STRUCTURAL ENGINEERING SERVICES)</b>	
Principal / Senior Associate	\$275.00
Project Engineer	\$185.00
Structural Special Inspection	\$125.00
Drafting REVIT	\$150.00

<b>DELTA DIVERSIFIED ELECTRICAL CONTRACTORS</b>	
Superintendent	\$110.00
Lead Foreman	\$95.00
Journeyman	\$85.00
Apprentice	\$65.00
Project Manager	\$150.00
APM and PE	\$110.00

<b>MCCALMONT ENGINEERING</b>	
Sr. Licensed Professional Engineer	\$300.00
Licensed Professional Engineer	\$275.00
Senior Electrical Engineer	\$250.00
PV Energy Engineer	\$200.00
Project Manager	\$200.00
Designer/Drafter	\$175.00

<b>SAECO (GEOTECH, ENVIRONMENTAL SERVICES)</b>	
Principal Engineer/Geologist/Environmental Scientist	\$225.00
Senior Project Manager/Engineer/Geologist/Environmental Scientist	\$195.00
Project Manager/Engineer/Geologist/Environmental Scientist	\$140.00
Senior Staff Engineer/Geologist/Environmental Scientist/Sr. Special Inspector	\$95.00
Staff Engineer/Geologist/Environmental Scientist/Special Inspector	\$80.00
Civil Inspector	\$115.00
Technical Illustrator/CAD Operator	\$75.00
Geotechnical/Environmental/Laboratory Assistant	\$65.00
Materials Supervisor	\$100.00
Senior Materials Technician (ATTI, ACI)	\$78.00
Materials Technician	\$68.00
Report Preparation/Dispatch	\$75.00
NDT and Special/Steel Inspector	\$95.00
Core-Drilling (1-technician crew)	\$100.00
Sample Runner (No Trip Charge)	\$50.00

<b>SOLAR VISUALS (ARCHITECTURAL RENDERINGS AND MODELING)</b>	
Senior Modeler	\$150.00
CADD Modeler	\$125.00

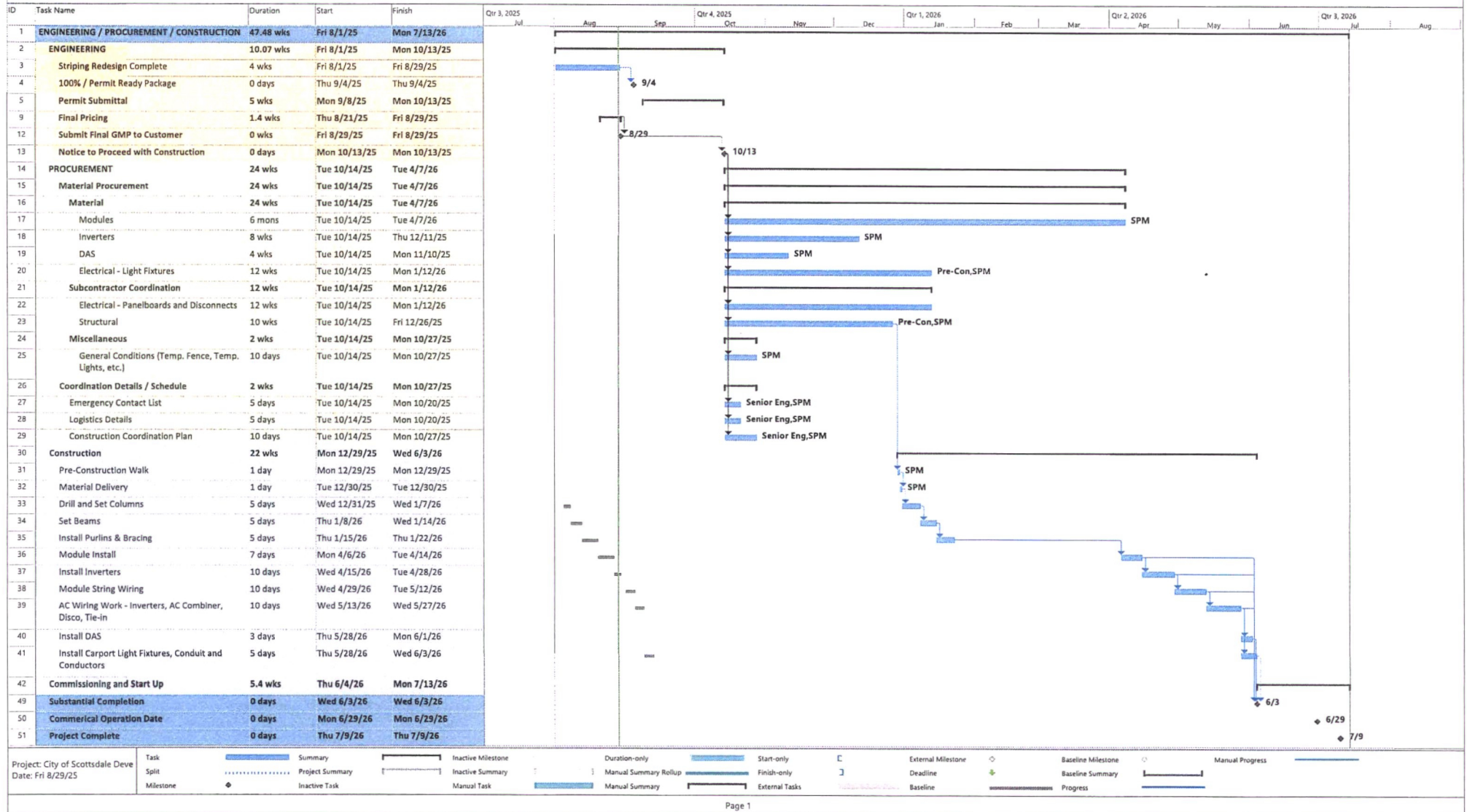
<b>IMEG (SURVEYING SERVICES, INFRASTRUCTURE DESIGN AND PLANNING)</b>	
--	--

Senior Client Executive/ Senior Market Director / VP	\$300.00
Client Executive / Market Director	\$285.00
Project Executive	\$240.00
Senior Project Manager 2	\$230.00
Senior Project Manager 1	\$210.00
Engineer of Distinction / Landscape Architect of Distinction / Planner of Distinction	\$230.00
Senior (Engineer / Landscape Architect / Planner) 3	\$220.00
Senior (Engineer / Landscape Architect / Planner) 2	\$205.00
Senior (Engineer / Landscape Architect / Planner) 1	\$185.00
Project (Engineer / Landscape Architect / Planner) 2	\$175.00
Project (Engineer / Landscape Architect / Planner) 1	\$165.00
Graduate (Designer / Surveyor) 2	\$135.00
Graduate (Designer / Surveyor) 1	\$115.00
Senior Land Surveyor 3	\$180.00
Senior Land Surveyor 2	\$170.00
Senior Land Surveyor 1	\$160.00
Project Surveyor 2	\$150.00
Project Surveyor 1	\$145.00
Designer of Distinction	\$190.00
Senior (Designer / Crew Chief) 3	\$180.00
Senior (Designer / Coordinator / Crew Chief) 2	\$170.00
Senior (Designer / Coordinator / Crew Chief) 1	\$160.00
(Project Designer / Senior Technician / Crew Chief) 2	\$145.00
(Project Designer / Senior Technician / Crew Chief) 1	\$140.00
Designer 2 / Technician 4	\$130.00
Designer 1 / Technician 3	\$115.00
Design Technician 2 / Technician 2	\$110.00
Design Technician 1 / Technician 1 / Intern	\$100.00
Senior Construction Administrator	\$165.00
Construction Administrator	\$145.00
GIS System Architect	\$130.00
GIS Analyst	\$120.00
Senior Virtual Design Coordinator	\$150.00
Virtual Design Coordinator	\$140.00
Senior Virtual Design Technician	\$130.00
Virtual Design Technician	\$105.00
Administrative Assistant	\$95.00

# Exhibit A, Contract 2025-151-COS, Page 11 of 43



## CITY OF SCOTTSDALE SOLAR PROJECTS AT CITY HALL, CIVIC CENTER, & ELDORADO POOL BOND PROJECT 58, 59 & 41



LUMINAIRE SCHEDULE						
TYPE	STATUS	QTY	MANUFACTURER	MODEL NUMBER	DESCRIPTION	INPUT
A	NEW	16	LITHONIA LIGHTING	VOPCK LED V4 P1 40K 70CR TSM MVOLT	SURFACE-MOUNTED, WET LOCATION LISTED, LED LUMINAIRE WITH AUTOMATIC DIMMING	LED 3,778 LUMENS 4000K CCT 70 CRI 277 VAC 27 WATTS

GENERAL NOTES

- EXISTING LIGHTING CIRCUITS SHOWN ON THIS PLAN ARE BASED ON AS-BUILT ELECTRICAL PLANS AND LIMITED SITE OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY SOURCE AND VOLTAGE OF ALL EXISTING LIGHTING CIRCUITS PRIOR TO COMMENCEMENT OF WORK, AND NOTIFY MCCALMONT ENGINEERING IF FIELD CONDITIONS DIFFER FROM WHAT IS REPRESENTED ON THIS LIGHTING PLAN.
- MCCALMONT ENGINEERING IS NOT RESPONSIBLE FOR ENGINEERING OF EXISTING CIRCUITS.
- ALL EMERGENCY LIGHTING SHALL REMAIN INTACT, UNLESS NOTED OTHERWISE.
- THE OUTDOOR LIGHTING SYSTEMS SHALL BE INSTALLED WITH AUTOMATIC LIGHTING CONTROLS IN ACCORDANCE WITH CLIENT'S REQUIREMENTS.
- LUMINAIRE LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EACH NEW LUMINAIRE IN FIELD, BUT SHALL NOT LOCATE ANY LUMINAIRES MORE THAN 5 FEET FROM LOCATION INDICATED ON THIS PLAN WITHOUT WRITTEN APPROVAL OF ENGINEER OF RECORD.
- LUMINAIRE TYPES, QUANTITIES, AND LOCATIONS ARE BASED ON PHOTOMETRIC ANALYSIS PERFORMED BY CONTRACTOR'S SUB-CONSULTANT. MCCALMONT ENGINEERING TAKES NO RESPONSIBILITY FOR THIS LIGHTING DESIGN AND THE RESULTING ILLUMINATION LEVELS. MCCALMONT ENGINEERING IS ONLY RESPONSIBLE FOR SPECIFYING CIRCUITS AND CONTROLS TO SUPPORT THE DESIGN.

KEYNOTES

- PROVIDE AND INSTALL NEW LUMINAIRE ON THE UNDERSIDE OF THE SOLAR CANOPY, SEE LUMINAIRE SCHEDULE FOR PART NUMBER AND DESCRIPTION.
- ALL NEW LUMINAIRES SHALL BE CONNECTED TO EXISTING PARKING LOT LIGHTING CIRCUITS SERVING THE AREA. THE CIRCUITS SHOWN ON THE PLANS ARE BASED ON AS-BUILT PLANS AND/OR PANEL SCHEDULE PHOTOS. CONTRACTOR SHALL FIELD VERIFY CORRECT CIRCUIT NAMES.
- EXTEND EXISTING LIGHTING CIRCUITS AND CONDUIT TO NEW FIXTURES AS INDICATED. EACH EXTENSION SHALL BE MADE OF THE FOLLOWING:
  - 0.75" CONDUIT
  - (3) #10 THIN-2 CU CONDUCTORS
- EXISTING LIGHT POLE TO BE REMOVED. A TOTAL OF 3 POLES AND 4 LUMINAIRE HEADS SHALL BE REMOVED BY THIS PROJECT. RESULTING IN A LOAD REDUCTION OF APPROXIMATELY 1000 WATTS. NEW ADDED LIGHTING LOAD IS ONLY 432 WATTS, RESULTING IN A NET LOAD DECREASE OF 568 WATTS. CONTRACTOR TO CONFIRM EXISTING LOAD PRIOR TO INSTALLATION TO ENSURE NEW LIGHT LOAD IS BELOW EXISTING LOAD.

AMERESCO  
Green • Clean • Sustainable  
2375 EAST CAMELBACK ROAD,  
SUITE 400  
PHOENIX, AZ, 85016  
480.499.9200  
www.ameresco.com

McCalmont  
Engineering  
1624 DELL AVENUE  
CASPABELL, CA 95008  
408.871.9600  
www.mccalmont.net

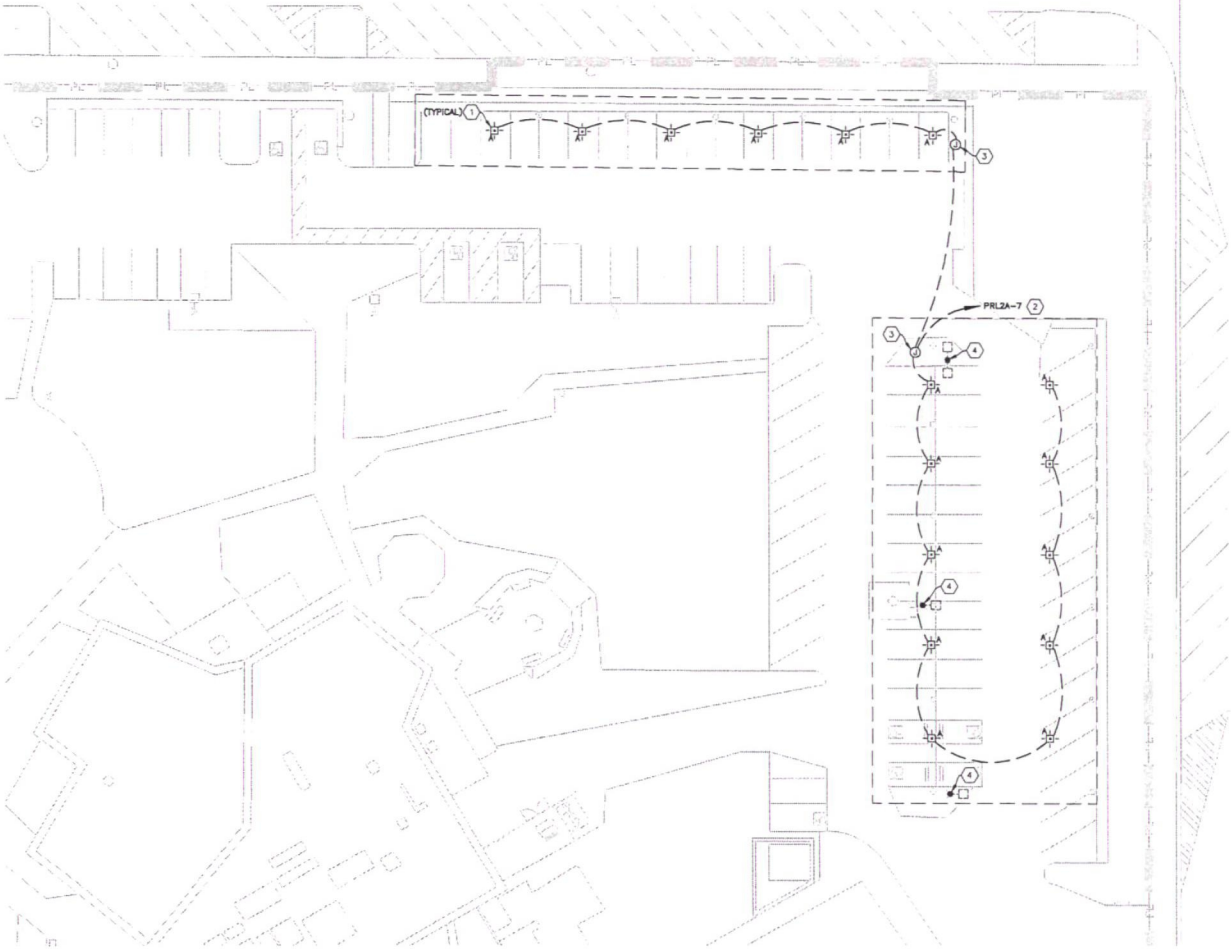
CITY OF SCOTTSDALE CITY HALL  
3939 N DRINKWATER BLVD  
SCOTTSDALE, AZ 85251  
PHOTOVOLTAIC INSTALLATION



REVISIONS  
REVISION NO. 1  
REVISION DESCRIPTION  
DATE  
BY  
PERMIT SUBMITTAL  
08/15/2022

DRAWING TITLE  
LIGHTING LAYOUT

PROJECT NO. 1009370  
DRAWING NUMBER E-522



22 LIGHTING LAYOUT

0'-0" 20'-0" 40'-0"  
SCALE: 1" = 20'-0"

NOTICE: THE DESIGNS SHOWN AND DESCRIBED HERE INCLUDING ALL TECHNICAL DRAWINGS, GRAPHICS AND MODELS ARE PROPRIETARY AND CANNOT BE COPIED, DUPLICATED OR COMMERCIALY EXPLOITED, IN WHOLE OR IN PART, WITHOUT THE EXPRESS WRITTEN PERMISSION OF AMERESCO

REV24.0

NOTICE: THE DESIGNS SHOWN AND DESCRIBED HERE INCLUDING ALL TECHNICAL DRAWINGS, GRAPHICS AND MODELS ARE PROPRIETARY AND CANNOT BE COPIED, DUPLICATED OR COMMERCIALY EXPLOITED, IN WHOLE OR IN PART, WITHOUT THE EXPRESS WRITTEN PERMISSION OF MCCALMONT ENGINEERING



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**McCalmont Engineering**  
1624 DELL AVENUE  
CAMPBELL, CA 95008  
408.871.9600  
www.mccalmont.net

**CITY OF SCOTTSDALE CITY HALL**  
3939 N DRINKWATER BLVD  
SCOTTSDALE, AZ 85251  
PHOTOVOLTAIC INSTALLATION



DESIGN A 100000  
DESIGN BY: J. BLUMBERG  
DESIGNED BY: J. BLUMBERG  
REVISIONS: 1.0  
DATE: 08/15/2025

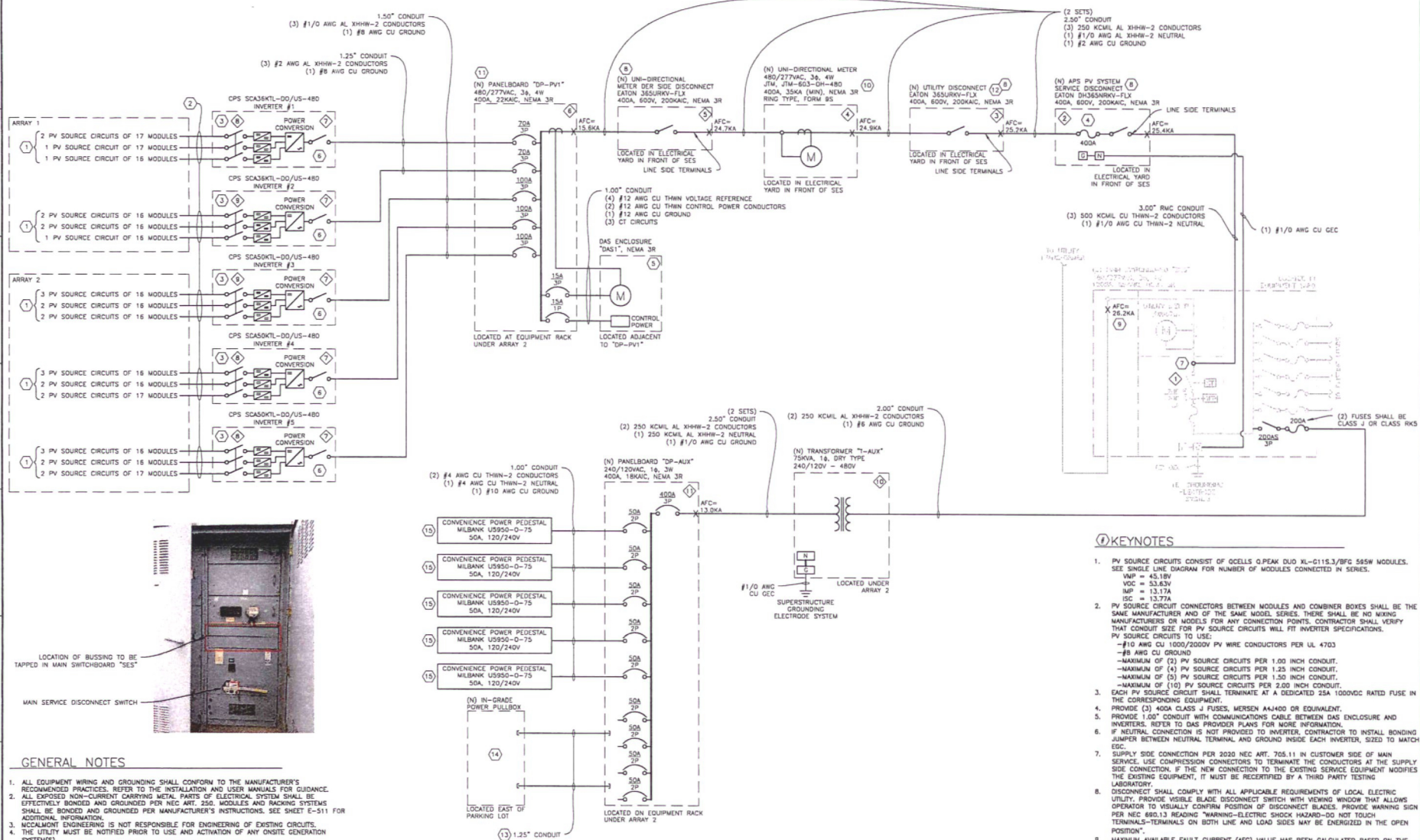
PERMIT SUBMITTAL  
DATE: 08/15/2025

DRAWING TITLE

**SINGLE LINE DIAGRAM**

PROJECT NO. 1009370

DRAWING NUMBER E-601



LOCATION OF BUSSING TO BE TAPPED IN MAIN SWITCHBOARD "SES"

MAIN SERVICE DISCONNECT SWITCH

#### GENERAL NOTES

- ALL EQUIPMENT WIRING AND GROUNDING SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED PRACTICES. REFER TO THE INSTALLATION AND USER MANUALS FOR GUIDANCE.
- ALL EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL SYSTEM SHALL BE EFFECTIVELY BONDED AND GROUNDING PER NEC ART. 250. MODULES AND RACKING SYSTEMS SHALL BE BONDED AND GROUNDING PER MANUFACTURER'S INSTRUCTIONS. SEE SHEET E-511 FOR ADDITIONAL INFORMATION.
- MCALMONT ENGINEERING IS NOT RESPONSIBLE FOR ENGINEERING OF EXISTING CIRCUITS.
- THE UTILITY MUST BE NOTIFIED PRIOR TO USE AND ACTIVATION OF ANY ONSITE GENERATION SYSTEM(S).
- ALL PLACES, LABELS AND WARNINGS CAN BE FOUND ON CORRESPONDING LABELS AND WARNINGS SHEET(S).
- CONNECTORS SHALL BE TORQUED PER DEVICE LISTING OR MANUFACTURER'S RECOMMENDATION. SEE THE MANUFACTURER'S INSTALLATION MANUAL FOR THE SPECIFIC TORQUE VALUES.
- CONNECTORS SHALL BE MARKED WITH PERMANENT MARKING PANT AFTER TORQUING.
- INTERRUPTING CURRENT RATINGS (KAC) FOR EQUIPMENT SUCH AS PANELBOARDS, SWITCHBOARDS, AND FUSIBLE DISCONNECTS ARE BASED ON MAXIMUM FAULT CURRENT CONTRIBUTION FROM THE UTILITY SERVICE OR UPSIDE MAIN TRANSFORMER.
- NEW DISCONNECT PROTECTION DEVICES SHALL HAVE THE SAME INTERRUPTING CURRENT RATING (KAC) AS THE RATINGS OF THE PANELBOARD OR SWITCHBOARD IN WHICH THEY ARE LOCATED.
- CONTRACTOR SHALL VERIFY THE TERMINALS AND BONDING RAILS OF PROVIDED ELECTRICAL EQUIPMENT ARE APPROPRIATE TO ACCOMMODATE THE SIZE OF THE SPECIFIED CONDUCTORS.
- CONTRACTOR MAY INCREASE CONDUIT SIZE WHILE ENSURING CONNECTED ENCLOSURES/EQUIPMENT ARE CAPABLE OF ACCOMMODATING LARGER CONDUIT SIZES THAN LISTED.
- SEE SECTION 3 ON SHEET E-000 FOR APPROPRIATE CONDUIT TYPES DEPENDING ON THE INSTALLATION LOCATION OF THE CORRESPONDING CONDUCTORS.
- WHEN SOLAR INVERTERS ARE CONNECTED TO A GROUND-WYE TRANSFORMER, DRAWINGS MAY SPECIFY 3-PHASE, 4-WIRE PANELBOARDS AND SWITCHBOARDS REGARDLESS OF THE PRESENCE OF A NEUTRAL CONDUCTOR.

REV24.0

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#### 01 SINGLE LINE DIAGRAM

SCALE: NTS

SYSTEM SUMMARY	
TOTAL MODULES	487
MODULE POWER	583W
TOTAL PV DC SYSTEM SIZE	288.77KWDC
TOTAL PV AC SYSTEM SIZE	222.00KWAC

#### LEGEND

- ⬡ LABELS AND WARNINGS IDENTIFICATION
- ⬢ KEYNOTE IDENTIFICATION

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SUITE 400  
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www.ameresco.com

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Engineering  
1624 DELL AVENUE  
CAMPBELL, CA 95008  
408.871.9500  
www.mccalmont.net

MOUNTING: SURFACE		PANELBOARD										PANEL VOLTAGE: 240/120			
BUS (AMPS): 400A		"DP-AUX"										PHASE & WIRE: 1PH/3W			
BANKS: 100A BUCB															
AIC RATING: 18,000 A															
CRIT		CB		LOAD		PHASE		LOAD		CB		CRIT			
NO.	CODE	TRIP	POLE	DESCRIPTION	VA	A	B	VA	DESCRIPTION	TRIP	POLE	CODE	NO.		
1	3	50	2	CONVENIENCE POWER	4000	4000	4000		SPARE FOR FUTURE EVCS	50	2	1	1		
2	3			PEDESTAL	4000							1	2		
3	3				4000										
4	3	50	2	CONVENIENCE POWER	4000	4000	4000		SPARE FOR FUTURE EVCS	50	2	1	3		
5	3			PEDESTAL	4000							1	4		
6	3				4000										
7	3	50	2	CONVENIENCE POWER	4000	4000	4000		SPARE FOR FUTURE EVCS	50	2	1	5		
8	3			PEDESTAL	4000							1	6		
9	3				4000										
10	3	50	2	CONVENIENCE POWER	4000	4000	4000		SPARE FOR FUTURE EVCS	50	2	1	7		
11	3			PEDESTAL	4000							1	8		
12	3				4000										
13	3	50	2	CONVENIENCE POWER	4000	4000	4000		SPARE FOR FUTURE EVCS	50	2	1	9		
14	3			PEDESTAL	4000							1	10		
15	3				4000										
16	3	50	2	CONVENIENCE POWER	4000	4000	4000					1	11		
17	3			PEDESTAL	4000							1	12		
18	3				4000										
19	3				4000										
20	3				0										
21	3														
22	3														
TOTAL CONNECTED VA:					24000	24000	24000	CONNECTED KVA					48.0		
TOTAL CONNECTED AMPS:					200.0	200.0	200.0	CONNLKVA (CODE 1)					0.0		
										CONNLKVA (CODE 2)					0.0
										CONNLKVA (CODE 3)					40.0
										CONNLKVA (CODE 4)					0.0
										FEEDER DEMAND KVA:					28.0
										FEEDER DEMAND AMPS:					120.0





**CAUTION LABELS**

ALL LABELS SHALL BE WEATHER RESISTANT, SUITABLE FOR THE ENVIRONMENT, REFLECTIVE, RED BACKGROUND, WHITE LETTERING AND MINIMUM 3/8 IN. LETTER HEIGHT.

**CAUTION: SOLAR ELECTRIC SYSTEM**

"CAUTION: SOLAR ELECTRIC SYSTEM" LABEL PLACED ADJACENT TO MAIN SERVICE DISCONNECT.

**WARNING: PHOTOVOLTAIC POWER SOURCE**

"WARNING: PHOTOVOLTAIC POWER SOURCE" LABELS ON DC RACKWAYS AND EQUIPMENT. PLACE THESE LABELS EVERY 10 FT. AND ON CHANGES IN DIRECTION.

**EQUIPMENT INFORMATION AND LOCATION**

EQUIPMENT NUMBERS CORRESPOND WITH NUMBERS ON LABELS AND WARNINGS

1. MAIN SWITCHBOARD "SES"
2. APS PV SYSTEM SERVICE DISCONNECT
3. UTILITY DISCONNECT
4. UNI-DIRECTIONAL METER
>
5. UNI-DIRECTIONAL METER DER SIDE DISCONNECT
6. PANELBOARD "DP-PV"
7. INVERTERS #1 - #5
8. COMBINER BOX (MAX 17-MODULE STRING)
9. COMBINER BOX (MAX 16-MODULE STRING)
10. TRANSFORMER "T-AUX"
11. PANELBOARD "DP-AUX"

**APS LABELS AND WARNINGS**

NOTE:  
PLAQUES SPECIFIC TO APS REQUIREMENTS SHALL HAVE LETTERS ENGRAVED ON A METAL OR PLASTIC PLAQUE. PLAQUES SHALL HAVE A BLACK BACKGROUND WITH WHITE ENGRAVED LETTERING. ATTACH PLAQUE USING OUTDOOR RATED ADHESIVE OR WITH RIVETS OR SCREWS WHILE MAINTAINING ENCLOSURE RATING.

PLAQUES SHALL BE AT LEAST 1" IN HEIGHT AND 3-1/2" IN WIDTH UNLESS SPECIFIED OTHERWISE. PLEASE REFER TO THE APS INTERCONNECTION & INCENTIVE EQUIPMENT LABELS - ANSI DOCUMENT FOR LABELING REQUIREMENTS

**NEC LABELS AND WARNINGS**

NOTE:  
PLAQUES SHALL HAVE LETTERS ENGRAVED ON A METAL OR PLASTIC PLAQUE. PLAQUES SHALL HAVE A RED BACKGROUND WITH WHITE ENGRAVED LETTERING. ATTACH PLAQUE USING OUTDOOR RATED ADHESIVE OR WITH RIVETS OR SCREWS WHILE MAINTAINING ENCLOSURE RATING.

UNLESS OTHERWISE SPECIFIED ALL LETTERING HEIGHT FOR LABELS AND WARNING SHALL BE 3/16 INCH. FONT TYPE TO BE ARIAL.

**WARNING**  
THIS EQUIPMENT IS CONNECTED TO THE SUPPLY SIDE OF THE SERVICE DISCONNECT

**WARNING**  
PV SYSTEM DISCONNECT IS CONNECTED TO THE SUPPLY SIDE OF THE SERVICE DISCONNECTING MEANS. FOLLOW LOCKOUT/TAGOUT PROCEDURE PRIOR TO WORKING ON THIS DEVICE.

**WARNING: 2 SOURCES OF POWER**  
2ND SOURCE IS A PHOTOVOLTAIC SYSTEM

MAXIMUM AC OPERATING CURRENT 286A  
OPERATING VOLTAGE 480VAC

**PV SYSTEM DISCONNECT**

PHOTOVOLTAIC SYSTEM CIRCUITS ONLY  
NO ADDITIONAL CIRCUITS ALLOWED

BACKFEEDS APS PV SYSTEM METER  
DISCONNECT LOCATED IN EQUIPMENT YARD

BACKFEEDS SWITCH LOCATED AT SES IN  
EQUIPMENT YARD

**PHOTOVOLTAIC SYSTEM UTILITY DISCONNECT SWITCH**

**APS PV SYSTEM SERVICE DISCONNECT**

**UTILITY DISCONNECT**

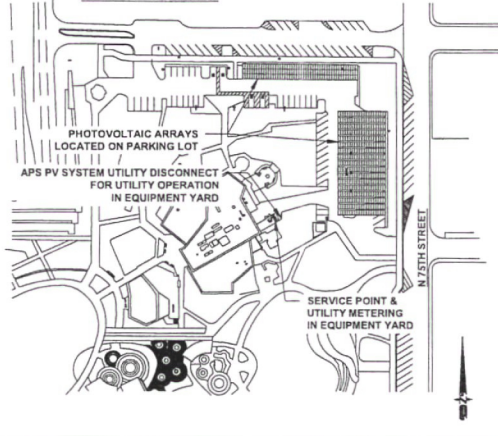
**UNI-DIRECTIONAL METER DER SIDE DISCONNECT**

LOCATED AT THE SERVICE DISCONNECT

**CAUTION**

POWER TO THIS FACILITY IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECTS LOCATED AS SHOWN:

E BENNIE GONZALEZ WAY



NOTE:  
MAPS LOCATED OUTDOORS SHALL BE ENGRAVED LETTERS ON A METAL OR PLASTIC PLAQUE. MAPS LOCATED INDOORS MAY BE LAMINATED PRINTS. MAPS SHALL HAVE A RED BACKGROUND WITH WHITE LETTERING AND ATTACHED USING A SUITABLE ADHESIVE OR WITH RIVETS OR SCREWS WHILE MAINTAINING ENCLOSURE RATING.

LABEL IN SCALE 1:1

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**DC DISCONNECT**

**WARNING**  
- ELECTRIC SHOCK HAZARD -  
DO NOT TOUCH TERMINALS  
TERMINALS ON BOTH LINE AND LOAD SIDES MAY  
BE ENERGIZED IN THE OPEN POSITION

MAXIMUM SYSTEM VOLTAGE 914VDC

MAXIMUM SYSTEM VOLTAGE 971VDC

**WARNING**  
Maximum available  
fault current  
amps

COMPLIANCE SIGNS (#AWE-28847, 5" X 3.5")  
CONTRACTOR SHALL FILL IN AVAILABLE FAULT CURRENT (AFC) VALUE FOR EACH PANELBOARD, SWITCHBOARD AND SWITCHGEAR, USING VALUES SHOWN ON SINGLE LINE DIAGRAM(S)

**WARNING**  
Arc Flash Hazard.  
Appropriate PPE Required.  
Failure To Comply Can Result in Death or Injury.  
Refer to NFPA 70 E.

BRADY #94913

**EMERGENCY CONTACT INFORMATION**

24 HOUR EMERGENCY CONTACT

NAME:

PHONE NUMBER:

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www.mccalmont.net

CITY OF SCOTTSDALE CITY HALL  
3939 N DRINKWATER BLVD  
SCOTTSDALE, AZ 85251  
PHOTOVOLTAIC INSTALLATION



PROJECT: A 100001  
DESIGNED BY: E. BENNIE GONZALEZ  
PROJECT NUMBER: 100001  
REV: 10/20/2024  
DATE: 10/20/2024

REV	DESCRIPTION	DATE
1	PERMIT SUBMITTAL	10/20/2024

DRAWING TITLE

LABELS AND  
WARNINGS

PROJECT NO. 1009370

DRAWING NUMBER  
E-901



TERMS AND ABBREVIATIONS	
ABBRV	TERM
AI	NUMERICAL QUANTITIES WHEN ENCLOSED IN PARENTHESES
AR	ARCHITECT
AB	ANCHOR BOLT
AR	ARCHITECT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CB	CALIFORNIA BUILDING CODE
CA	CALIFORNIA
CD	CONTRACT DOCUMENTS
CC	CONSTRUCTION JOINT
CL	CLEAR
CMU	CONCRETE MASONRY UNIT
CL	CLEAR
DL	DEAD LOAD
DM	DIMENSION
EA	EACH
EL	ELEVATION
EQ	EQUAL
EXT	EXTERIOR
EW	EACH WAY
FF	FINISH FLOOR ELEVATION
FL	FLOOR
FT	FOOTING
GA	GAUZE
GC	GENERAL CONTRACTOR
GSN	GENERAL STRUCTURAL NOTES
HORZ	HORIZONTAL
HSC	HOLLOW STRUCTURAL SECTION MOMENT OF INERTIA
INT	INTERNATIONAL BUILDING CODE
IDP	INSIDE DIAMETER
KIP	ONE THOUSAND POUNDS
KL	STEEL ANGLE
LB	POUND
LL	LIVE LOAD
LLB	LONG LEG BACK TO BACK
LLH	LONG LEG HORIZONTAL
LV	LONG LEG VERTICAL
LH	LONG SIDE HORIZONTAL
LV	LONG SIDE VERTICAL
MCJ	MASONRY CONTROL JOINTS
MCH	MECHANICAL
MAN	MANUFACTURER
NA	NOT APPLICABLE
NIS	NOT TO SCALE
O.C	ON CENTER
PERP	PERPENDICULAR
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
Q	QUALITY ASSURANCE
QA	QUALITY CONTROL
REQD	REQUIRED
RF	REQUEST FOR INFORMATION
SI	SQUARE INCH
SP	SPECIFICATION
STD	STANDARD
TAB	TOP AND BOTTOM
TYP	TYPICAL
UN	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/C	WATER TO CEMENT RATIO
WO	WITHOUT
WIND	WIND LOAD

2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC)	
DESIGN LOADS:	
1. ROOF:	
DEAD LOAD (UNRECOVERABLE)	12 PSF
2. WIND LOAD:	
RISK CATEGORY	1
BASIC WIND SPEED, V	95 MPH
EXPOSURE CATEGORY	C
IMPORTANCE FACTOR, I <sub>w</sub>	1.0
MEAN ROOF HEIGHT, h <sub>m</sub>	25 FT
G <sub>z</sub>	0.65
K <sub>z</sub>	0.65
K <sub>e</sub>	0.65
ENCLOSURE CLASSIFICATION	OPEN BUILDING
3. SEISMIC LOADS:	
RISK CATEGORY	1
IMPORTANCE FACTOR, I <sub>w</sub>	1.0
SEISMIC SITE CLASS, S <sub>s</sub>	1.0
DIAMETER	0.087
SDS	0.204
S <sub>1</sub>	0.197
SEISMIC DESIGN CATEGORY	1
BASIC SEISMIC FORCE RESISTING SYSTEM (S FRAME STRUCTURE)	1
C <sub>s</sub>	1.25
C <sub>d</sub>	1.25
C <sub>m</sub>	1.03
C <sub>e</sub>	0.888
BASE SHEAR, V	0.133W
BASIC SEISMIC FORCE RESISTING SYSTEM	1
STRUCTURAL STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE	1
R <sub>s</sub>	3.0
R <sub>t</sub>	3.0
R <sub>e</sub>	3.0
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## SHEET NOTES

- a. FOR STRUCTURE LOCATIONS REFERENCE PROJECT SITE PLAN. COLUMN SPACING AND LOCATIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT OR PROFESSIONAL RESPONSIBLE FOR SITE PLAN.
- b. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS, ELEVATIONS WHERE SHOWN ARE TO BE USED AS AN AID AND SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- c. FOR ADDITIONAL INFORMATION, REFERENCE GENERAL STRUCTURAL NOTES.



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## KEYNOTES

- 5 DO NOT SPICE PURLINS AT SUPPORTS AT CANTILEVER ENDS.  
6 16 GAUGE END CAP WITH 3 LEGS EACH END OF STRUCTURE.  
7 BEAM FLANGE BRACES AS SHOWN ON PLANS. REFERENCE DETAIL 4/54.1  
FOR MORE INFORMATION.  
8 PURLIN BLOCKING AS SHOWN ON PLAN (1) MINIMUM AT SPANS LESS  
THAN 20 FEET. REFERENCE DETAIL 1/55.2.  
9 BEAM SPICE PER DETAIL 7/54.2. CONTRACTOR MAY PROPOSE NEW  
LOCATIONS FOR ERECTION PREFERENCES IN AN RFI FORMAT.  
10 SEE DETAIL 1/55.2 FOR PURLIN SIZE. EXACT LOCATION WITH SOLAR  
PANEL MANUFACTURER'S SPECIFICATIONS. SEE DETAIL 1/54.1 FOR MORE  
INFORMATION ON SECTION.  
11 BEAM TO BEAM BRACES PER DETAIL 4/54.2.



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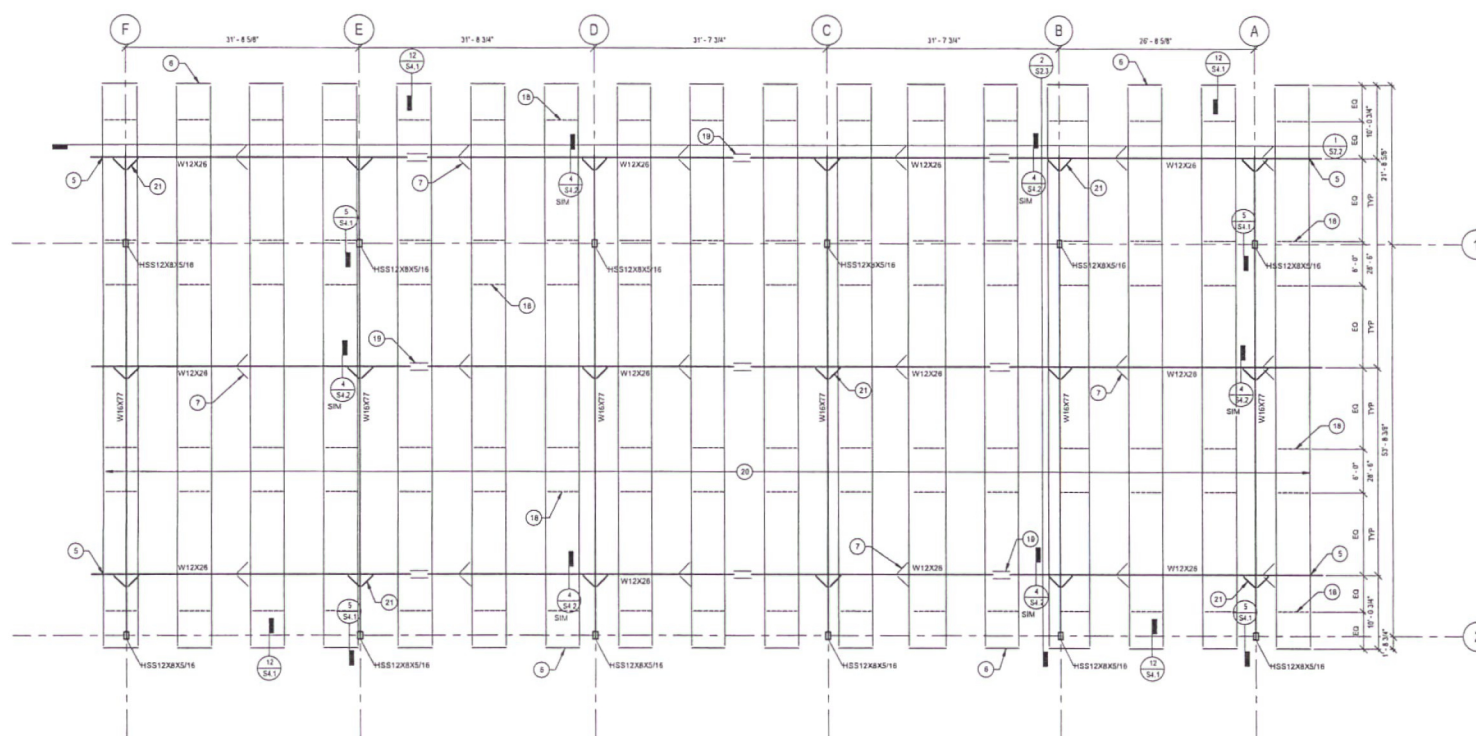
SEALS AND SIGNATURES

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DRAWING TITLE  
CANOPY  
FRAMING PLANS

PROJECT NO.	250232
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DRAWING NUMBER	S2.1
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1 SUPER STRUCTURE FRAMING PLAN  
1/10 SCALE



SHEET NOTES

- a. FOR STRUCTURE LOCATIONS REFERENCE PROJECT SITE PLAN.
- b. COLUMN SPACING AND LOCATIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT OR PROFESSIONAL RESPONSIBLE FOR SITE PLAN.
- c. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS, ELEVATIONS WHERE SHOWN ARE TO BE USED AS AN AID AND SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- d. FOR ADDITIONAL INFORMATION, REFERENCE GENERAL STRUCTURAL NOTES.

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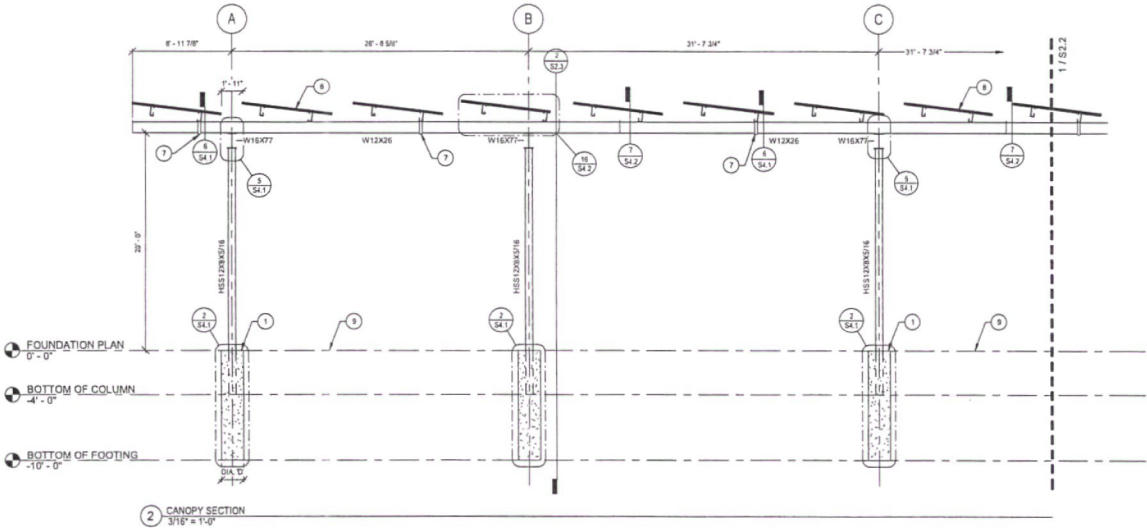
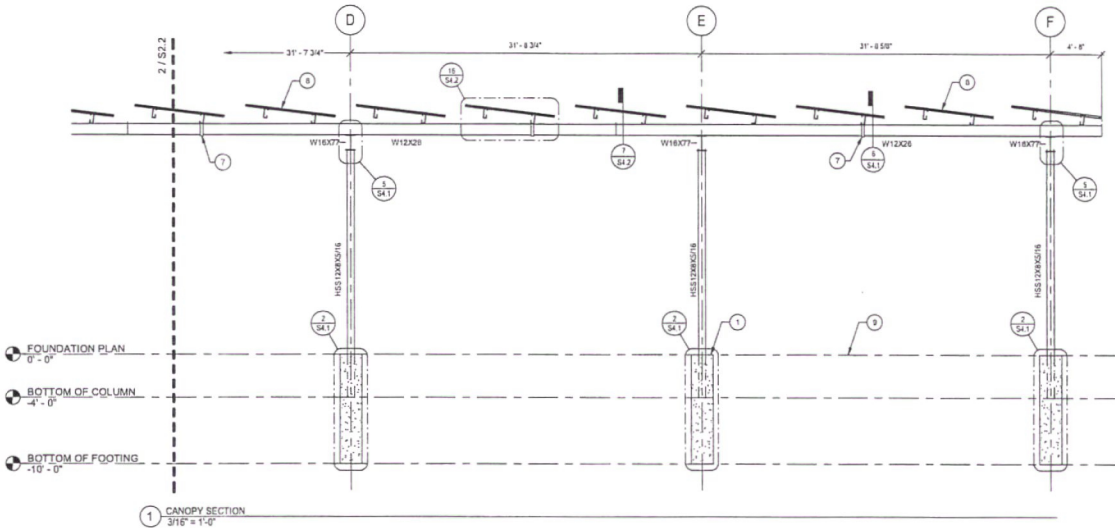
KEYNOTES

- 1. DRILLED CONCRETE PILE FOOTING. FOR DIAMETER AND EMBEDMENT OF FOOTING SEE FOUNDATION PLAN AND SECTION ON THIS SHEET. SEE DETAIL S24.1 FOR REINFORCING AND STEEL COLUMN ANCHORAGE.
- 7. BEAM FLANGE BRACES AS SHOWN ON PLANS. REFERENCE DETAIL S24.1 FOR MORE INFORMATION.
- 8. PV MODULES BY OTHERS. ATTACH PER DETAILS.
- 9. FINISHED GRADE. FINISHED GRADE IS DEFINED AS THE LOWEST ADJACENT FINISHED GRADE WITHIN 5 FEET OF THE STRUCTURAL COLUMN.

PANEL MODEL	LENGTH	WIDTH
Q PEAK USD XL-G1115.38FG	86.93'	44.83'

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DRAWING TITLE  
CANOPY SECTION

PROJECT NO. 250232  
DRAWING NUMBER S2.2

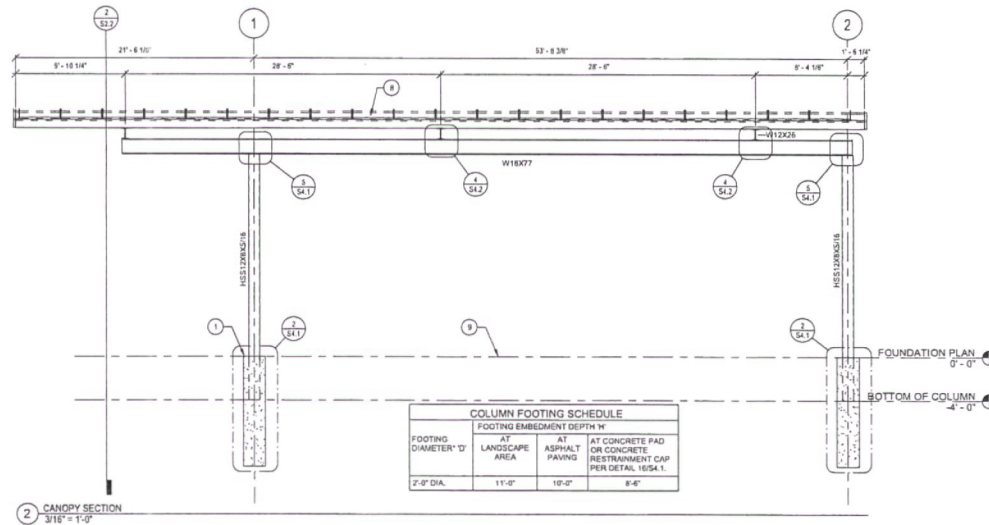
## SHEET NOTES

- a. FOR STRUCTURE LOCATIONS REFERENCE PROJECT SITE PLAN. COLUMN SPACING AND LOCATIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT OR PROFESSIONAL RESPONSIBLE FOR SITE PLAN.
- b. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONS, ELEVATIONS WHERE SHOWN ARE TO BE USED AS AN AD AND SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- c. FOR ADDITIONAL INFORMATION, REFERENCE GENERAL STRUCTURAL NOTES.

## KEYNOTES

1. DRILLED CONCRETE POLE FOOTING FOR DIAMETER AND EMBEDMENT OF FOOTING SEE FOUNDATION PLAN AND SECTION ON THIS SHEET. SEE DETAIL 354.1 FOR REINFORCING AND STEEL COLUMN ANCHORAGE.
2. PV MODULE BY OTHERS. ATTACH PER DETAILS.
3. FINISHED GRADE. FINISHED GRADE IS DEFINED AS THE LOWEST ADJACENT FINISHED GRADE WITHIN 5 FEET OF THE STRUCTURAL COLUMN.

PANEL MODEL	LENGTH	WIDTH
Q PEAK DUO XL-G115.38FG	89.83'	44.83'



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DRAWING TITLE  
CANOPY SECTION

PROJECT NO. 250232

DRAWING NUMBER  
S2.3

SHEET NOTES

- A. FOR STRUCTURE LOCATIONS REFERENCE PROJECT SITE PLAN. COLUMN SPACING AND LOCATIONS SHALL BE COORDINATED WITH PROJECT ARCHITECT OR PROFESSIONAL RESPONSIBLE FOR SITE PLAN.
- B. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. DIMENSIONAL ELEVATIONS WHERE SHOWN ARE TO BE USED AS AN AID AND SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION.
- C. FOR ADDITIONAL INFORMATION, REFERENCE GENERAL STRUCTURAL NOTES.

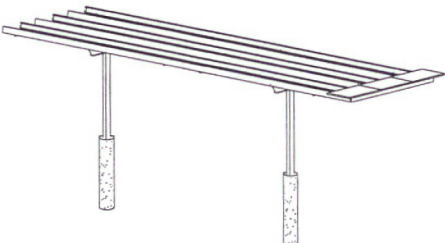
PV PANEL INFORMATION

- A. CONTRACTOR TO VERIFY PANEL INFORMATION PRIOR TO FABRICATION AND ERECTION.
- B. THE PANEL INFORMATION BELOW AND IN THE PLANS WAS PROVIDED BY THE OWNER DURING THE DESIGN PHASE AND PRIOR TO THE START OF CONSTRUCTION. ALL PANEL INFORMATION INDICATED IN THESE DRAWINGS IS FOR REFERENCE ONLY AND SHALL BE VERIFIED WITH THE OWNER, THE ELECTRICAL DRAWINGS AND THE GENERAL CONTRACTOR PRIOR TO FABRICATION AND PRIOR TO CONSTRUCTION.
- C. THE OWNER IS TO PROVIDE A PANEL CAPABLE OF SUPPORTING IN MAJOR IN WHICH IS INTENDED BY THESE DRAWINGS (I.E. SUPPORTED BY SHORT END, DUAL SUPPORTS, ETC). SUBMIT PANEL SPEC SHEETS FOR REVIEW PRIOR TO PURCHASING ANY PANELS.
- D. THE PANEL MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE PANELS INCLUDING ALL ITS COMPONENTS. PHOTOVOLTAIC PANELS AND ITS COMPONENTS SHALL BE DESIGNED TO SUPPORT PANEL WEIGHT PLUS SNOW, WIND, OR SEISMIC LOADING, WHICHEVER COMBINATION PRODUCES THE MOST SEVERE CONDITION IN ACCORDANCE WITH THE BUILDING CODE.

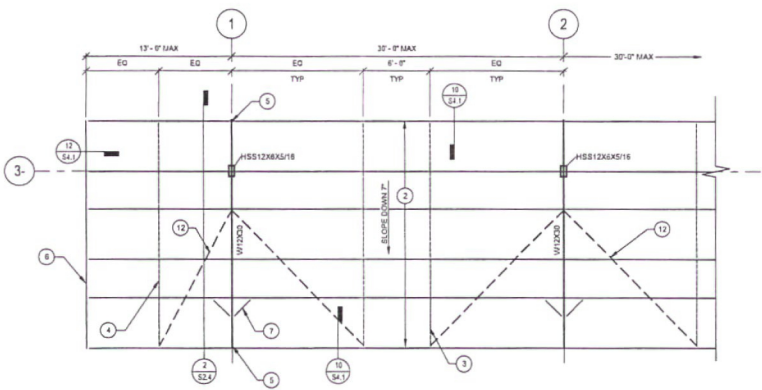
PANEL MODEL	LENGTH	WIDTH
Q PEAK DUO XL-G11S 38FG	86.83"	44.83"

KEYNOTES

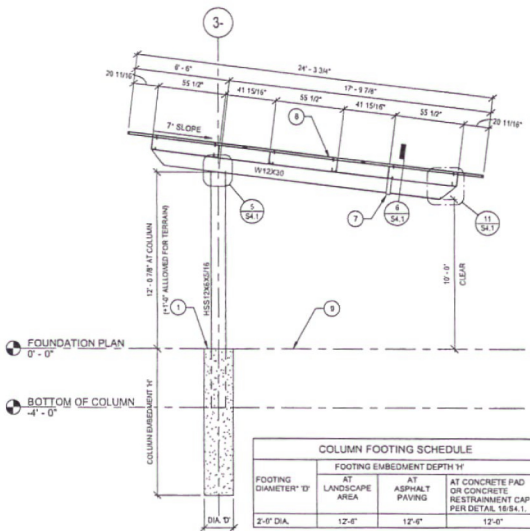
1. DRILLED CONCRETE POLE FOOTING, FOR DIAMETER AND EMBEDMENT OF FOOTING SEE FOUNDATION PLAN AND SECTION ON THIS SHEET. SEE DETAIL 254.1 FOR REINFORCING AND STEEL COLUMN ANCHORAGE.
2. C10X3.3X14 GAUGE (MIN. 85 KSI) COLD FORMED STEEL PURLINS. TYPICAL. COORDINATE EXACT LOCATION WITH SOLAR PANEL MANUFACTURER SPECIFICATIONS. SEE DETAIL 554.1 FOR MORE INFORMATION ON SECTION.
3. SAG ROD AS SHOWN ON PLANS. (1) MINIMUM AT SPANS LESS THAN 18'-0" AND (2) MINIMUM AT SPANS LESS THAN 27'-0". REFERENCE DETAIL 1054.1.
4. (1) SAG ROD REQUIRED BETWEEN SUPPORT AND CANTILEVER END AS SHOWN. REFERENCE DETAIL 1054.1. SAG ROD NOT REQUIRED WHERE CANTILEVER IS LESS THAN 9'-0".
5. DO NOT SPLICE PURLIN AT SUPPORT AT CANTILEVER ENDS.
6. 16 GAUGE END CAP WITH 2" LEGS EACH END OF STRUCTURE.
7. BEAM FLANGE BRACES AS SHOWN ON PLANS. REFERENCE DETAIL 654.1 FOR MORE INFORMATION.
8. PV MODULE BY OTHERS. ATTACH PER DETAILS.
9. FINISHED GRADE. FINISHED GRADE IS DEFINED AS THE LOWEST ADJACENT FINISHED GRADE WITHIN 5 FEET OF THE STRUCTURAL COLUMN.
12. DIAGONAL SAG ROD BRACING AS SHOWN. ATTACH PER DETAILS 1054.1 AND 1454.1.



3 PANEL - 7 DEG  
3/16" = 1'-0"



1 3 PANEL - 7 DEG - FRAMING PLAN  
3/16" = 1'-0"



2 3 PANEL 7 DEG SECTION  
1/4" = 1'-0"

COLUMN FOOTING SCHEDULE		
FOOTING EMBEDMENT DEPTH 14"		
FOOTING DIAMETER 12"	AT LANDSCAPE AREA	AT ASPHALT PAVING
2'-0" DIA.	12'-0"	12'-0"
		AT CONCRETE PAD OR CONCRETE RESTRAINTMENT CAP PER DETAIL 1054.1.
		12'-0"

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DRAWING TITLE  
3 PANEL  
STRUCTURE  
PLANS

PROJECT NO. 250232

DRAWING NUMBER  
S2.4





FOOTING SCHEDULE				
STRUCTURE	FOOTING SIZE (LENGTH x WIDTH x THICKNESS)	FOOTING ECCENTRICITY "e"	FOOTING REINFORCING	CONCRETE STRENGTH
SUPER STRUCTURE	18'-0" x 5'-0" x 2'-0"	0'-0"	#5 AT 17" O.C. EACH WAY TOP AND BOTTOM	2,500 PSI
3 RAIL	18'-0" x 5'-0" x 2'-0"	1'-0"	#5 AT 17" O.C. EACH WAY	2,500 PSI

	FOOTING DIAMETER "D"	RESTRAINED EMBEDMENT "Y"	MINIMUM RESTRAINT CAP LENGTH "L"		
			MIN ASPHALT THICKNESS 2"	MIN ASPHALT THICKNESS 2 1/2"	MIN ASPHALT THICKNESS 3"
SUPER STRUCTURE	2'-0" DIA.	SEE PLANS	8'-6"	5'-3"	4'-6"
3 PANEL	2'-0" DIA.	SEE PLANS	8'-6"	6'-0"	5'-0"

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SEALS AND SIGNATURES

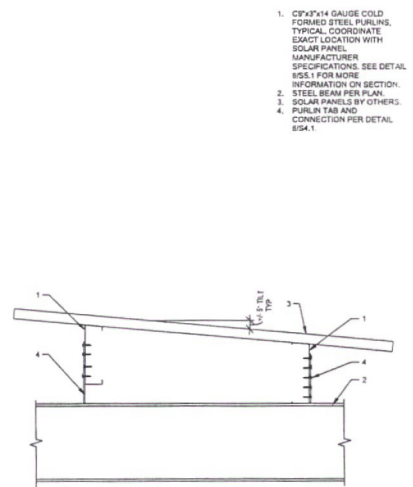
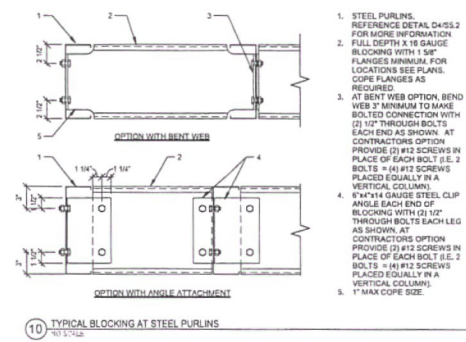
  
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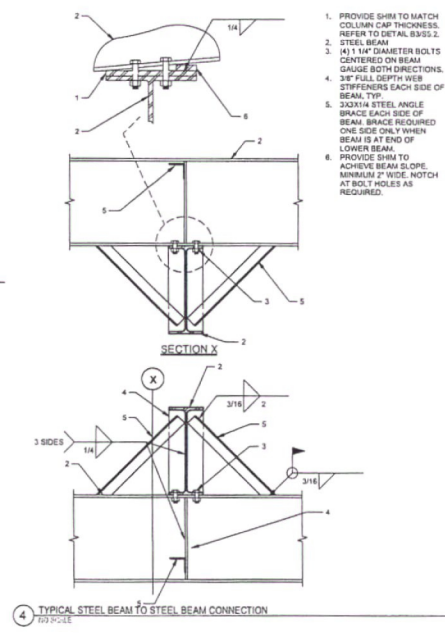
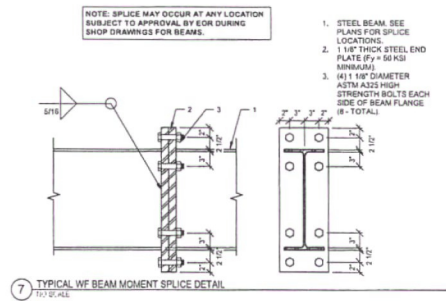
DRAWING TITLE  
**SOLAR CANOPY  
DETAILS**

PROJECT NO. 250232

DRAWING NUMBER  
**S4.2**



**16 TYPICAL PURLIN TO STEEL BEAM CONNECTION**  
10/1/2025





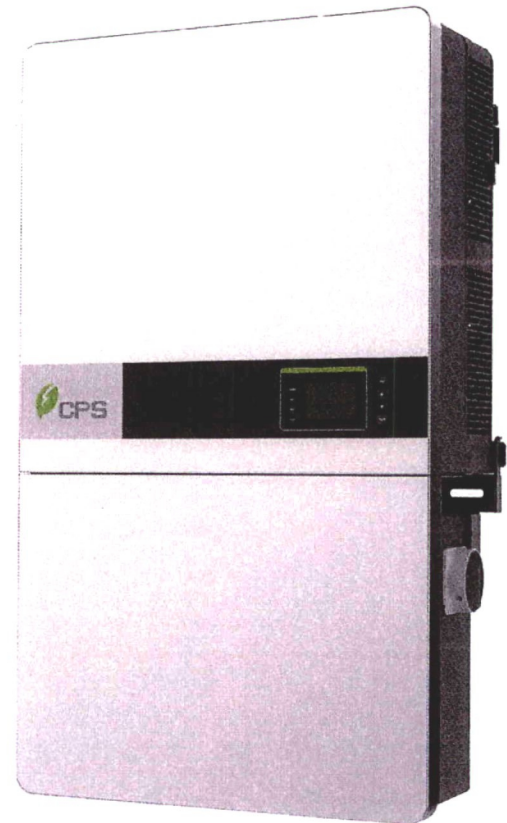
## 50/60 kW, 1000 Vdc String Inverters for North America

The CPS 50/60 kW three-phase string inverters are designed for ground mount, rooftop and carport applications. The units are high performance, advanced, and reliable inverters designed specifically for the North American environment and grid. High efficiency at 98.8% peak and 98.5% CEC, wide operating voltages, broad temperature ranges, and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications.

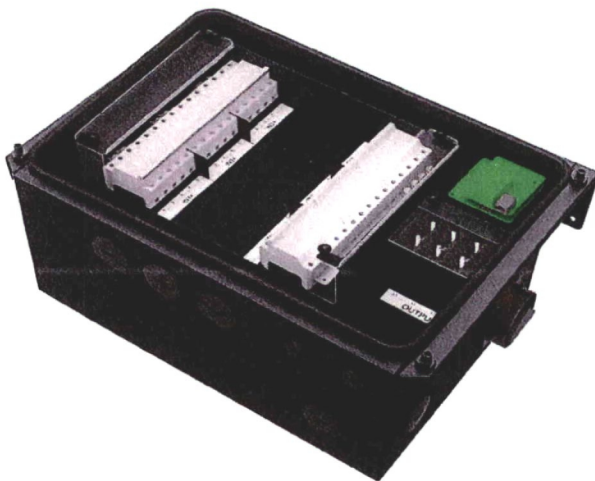
The CPS 50/60KTL products ship with either the Standard wire box or the Rapid Shutdown wire box, each fully integrated and separable with touch-safe fusing, monitoring, and AC and DC disconnect switches. The integrated PLC transmitter in the Rapid Shutdown wire box enables PVRSS certified module-level rapid shutdown when used with APS RSD-S-PLC/RSD-D products. The CPS FlexOM Gateway enables monitoring, controls, and remote product upgrades.

### Key Features

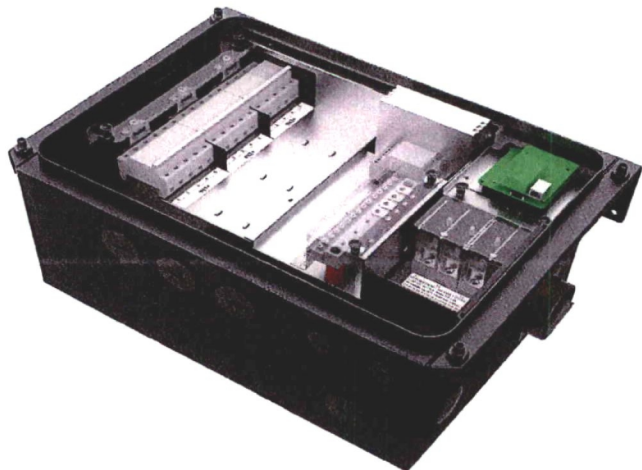
- PVRSS certified for rapid shutdown
- 55 & 66 kVA rating allows max rated active power @  $\pm 0.91$  PF
- Selectable max. AC apparent power of 50/55 kVA and 60/66 kVA
- UL-1699B compliant arc-fault circuit protection
- 15-90° mounting orientation for low profile roof installs
- Optional FlexOM Gateway enables remote firmware upgrades
- Integrated AC and DC disconnect switches
- 3 MPPTs with 5 inputs each for maximum flexibility
- NEMA Type 4X outdoor rated enclosure
- UL 1741-SA certified to CA Rule 21, including SA8 - SA18
- UL 1741-SB and IEEE 1547-2018 certified
- Separable wire-box design for fast service
- Standard 10-year warranty with extensions up to 20 years



CPS SCA50KTL-DO/US-480  
CPS SCA60KTL-DO/US-480



50/60KTL Standard Wire Box



50/60KTL Rapid Shutdown Wire Box





Model name	CPS SCA50KTL-DO/US-480	CPS SCA60KTL-DO/US-480
<b>DC Input</b>		
Max. PV power	90 kW (33 kW per MPPT)	
Max. DC input voltage	1000 Vdc	
Operating DC input voltage range	200-950 Vdc	
Startup DC input voltage / power	330 V / 80 W	
Number of MPPTs	3	
MPPT voltage range for Pnom @ PF>0.99	480-850 Vdc	540-850 Vdc
Max. PV short circuit current <sup>1</sup>	163.2 A (54.4 A per MPPT)	
Number of DC inputs	15 inputs, 5 per MPPT	
DC disconnection type	Load-rated DC switch	
DC surge protection	Type II MOV	
<b>AC Output</b>		
Rated AC output power @ PF>0.99 to ±0.91 <sup>2</sup>	50 kW	60 kW
Max. AC apparent power (selectable <sup>3</sup> )	50 / 55 kVA	60 / 66 kVA
Rated output voltage	480 Vac	
Output voltage range <sup>4</sup>	422-528 Vac	
Grid connection type	3Φ / PE / N (neutral optional)	
Max. AC output current @ 480 Vac	60.2 A (@ 50 kVA) / 66.2 A (@ 55 kVA)	72.2 A (@ 60 kVA) / 79.4 A (@ 66 kVA)
Rated output frequency	60 Hz	
Output frequency range <sup>4</sup>	57-63 Hz	
Power factor	>0.99 (±0.8 adjustable)	
Current TRD @ rated load	< 3%	
Max. fault current contribution (1 cycle RMS)	64.1 A (1.06/0.88 PU)	
Max. OCPD rating	125 A	125 A
AC disconnection type	Load-break rated AC switch	
AC surge protection	Type II MOV	
<b>System and Performance</b>		
Topology	Transformerless	
Max. efficiency	98.8%	
CEC efficiency	98.5%	
Standby / night consumption	< 1 W	
<b>Environment</b>		
Enclosure protection degree	NEMA 4X	
Cooling method	Variable speed cooling fans	
Operating temperature range <sup>5</sup>	-22°F to 140°F (-30°C to 60°C)	
Non-operating temperature range	-40°F to 158°F (-40°C to 70°C)	
Operating humidity	0-100%	
Operating altitude	13123 ft / 4000 m (derating from 9843 ft / 3000 m)	
Audible noise	<60 dBA @ 1 m and 77°F (25°C)	
<b>Display and Communication</b>		
User interface and display	LCD+LED	
Inverter monitoring	SunSpec, Modbus RS485	
Site-level monitoring	CPS FlexOM Gateway (1 per 32 inverters)	
Modbus data mapping	CPS	
Remote diagnostics / firmware upgrade functions	Standard / (with FlexOM Gateway)	
<b>Mechanical</b>		
Dimensions (H × W × D)	39.4 × 23.6 × 10.24 in (1000 × 600 × 260 mm)	
Weight	Inverter: 123.5 lb (56 kg) Wire box: 33 lb (15 kg)	
Mounting / installation angle <sup>6</sup>	15 to 90 degrees from horizontal (vertical or angled)	
AC termination	M8 stud type terminal block (wire range: #6-3/0 AWG CU/AL; lugs not supplied)	
DC termination <sup>7</sup>	Screw clamp, negative busbar (RSD version <sup>7</sup> ), wire range: #14-#6 AWG CU	
Fused string inputs (5 per MPPT)	RSD <sup>7</sup> and Standard wire box: 20 A or 25 A fuses provided (fuse values up to 30 A acceptable)	
<b>Safety</b>		
Certifications and standards	UL 1741-SA/SB Ed. 3, UL 1699B, UL 1998, CSA-C22.2 NO.107.1-01, IEEE 1547-2018, FCC Part 15	
Selectable grid standards	IEEE 1547a-2014, IEEE 1547-2018 <sup>8</sup> , CA Rule 21, ISO-NE, HECO	
Smart-grid features	Volt-RideThru, Freq-RideThru, Ramp-Rate, Specified-PF, Volt-VAR, Freq-Watt, Volt-Watt	
<b>Warranty</b>		
Standard	10 years	
Extended terms	15 and 20 years	

1) The sum of parallel-connected PV module short-circuit currents.

2) Active power derating begins at PF = ±0.91 to ±0.80 when max AC apparent power is set to 55 or 66 kVA.

3) Inverters are factory set to 50 kVA and 60 kVA by default. Contact CPS to enable the higher kVA setting.

4) The "output voltage range" and "output frequency range" may differ according to the specific grid standard.

5) Active power derating begins at 40°C when PF = ±0.9 and MPPT≥V<sub>min</sub>; at 45°C when PF = 1 and MPPT≥V<sub>min</sub>; and at 50°C when PF = 1 and MPPT≥700 Vdc.

6) Shade cover accessory required for installation angles of 75 degrees or less.

7) RSD wire-box only includes fuses and fuse holders on the positive polarity.

8) Firmware version 17.0 or later required.



AZ LIC C-11 070436 R-11 033589 A-17 103249  
 ELECTRICAL CONTRACTORS 425 W. GEMINI DRIVE, TEMPE, ARIZONA 85283 PHONE: (480) 831-0532 FAX: (480) 838-1268



May 30, 2025

G.C.

Mike Telford  
 Ameresco  
 2375 E. Camelback Rd, Suite 400  
 Phoenix, AZ 85016

Subject: City of Scottsdale Solar – City Hall  
 Electrical Proposal

We respectfully present our proposal to supply material, equipment and labor for Solar installation at City of Scottsdale City Hall site. Based on various documents of IFP and 100% permit submittal drawings.

**Inclusions:**

- Appropriate conduit and aluminum or copper conductors as necessary
  - PVC underground, EMT outside above ground, IMC above ground where exposed to physical damage
  - Spare conduits where noted
- Provide necessary panelboards, breakers, disconnects, cable limiters and interconnection materials. Includes engaging NRTL services for relisting/testing
- Provide associated concrete pads and bollards for electrical equipment
- Provide appropriate and required grounding and bonding
  - Structures and Purlins
  - Electrical equipment
- Provide all PV and equipment labeling
- Make safe and take down of light poles x (3)
- Provide all required excavation as necessary
  - Boring for majority of feeder runs
  - Traditional excavation for short cuts
- Provide associated concrete and asphalt sawcut, removal, and patch back
- Install (16) carport canopy fixtures, furnished by Others
- Install all inverters, DAS, and weather station; furnished by Others
  - Provide BELDEN comm cabling between DAS and inverters.
  - Terminate BELDEN cable at inverters and DAS
  - Initial energization of DAS, verify modbus addresses are online, CT's polarity correct. Full commissioning by Others
- Install Canopy module wiring, canopy modules furnished and mounted by Others
  - Testing of all strings for proper polarity and voltage

- Provide (5) power pedestals, associated transformer, panel, conduit, and conductors. Tie in to existing 200A source.
- Commissioning assistance
- Conexes for storage of Ameresco furnished materials
  - Including fork lift and receipt of pallets
- (1) site visit to address any cold commissioning items
- (1) site visit to address any hot commissioning items
- All required electrical testing
- All scope related rentals, lifts, equipment
- 2 year workmanship warranty

**Exclusions:**

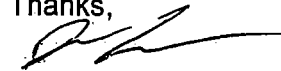
- Permit fee
- Tax Reimbursement
- Bond Fee (Add 1% if required)
- Utility Company charges and development fees
- Engineering Fees
- Full Commissioning, includes personnel onsite for assistance only
- Canopy Light fixtures procurement
- Items referenced as furnished by Others
- Prevailing Wage
- Fencing
- Structure Scope
- Site demolition (DDE to demo light poles only)
- Concrete light pole base demolition

AC Material	\$82,500.00
AC Labor	\$29,900.00
DC Material	\$5,000.00
DC Labor	\$17,100.00
DAS	\$5,400.00
Balance	\$24,000.00
Underground	\$108,000.00
GC's and Rentals	\$78,000.00
<b>Total Cost:</b>	<b>\$349,900.00</b>

**Bond Adder (if required)      \$3,500.00**

If you should have any questions, please contact our office at (480) 831-0532.

Thanks,



Jason Brown

Project Manager

(480) 215-2158



August 28th, 2025

**Ameresco**

Attn: Mike Telford

Re: Solar Support Canopies: Scottsdale City Hall - 3939 N Drinkwater Blvd. Scottsdale, AZ

We are pleased to propose the following:

Installation of steel solar canopy structures per Ameresco Layout (487 QCell 595 Watt Modules)

Engineering	\$ 9,500.00
Materials/Labor	\$ 295,110.00
Performance Bond	\$ 5,210.00
<b>Total</b>	<b>\$ 309,820.00*</b>

\*Sales Tax Excluded

**The above includes:** All material (Wide Flange Frames, pre-punched CEE purlins, end caps, sag rods, solar module mounting hardware), **structural engineering**, shop drawings, fabrication, freight, painted column/beam, installation of steel canopies, and installation of solar modules. Material sizes to be determined by PNS structural engineering. All purlin members, end caps, sag rods, and strapping to be G90 galvanized. Frames and Bolts to be painted one coat primer followed by one finish coat *Aristoshield* product. This job is bid as Non Prevailing Wage and no apprenticeship participation project. (Canopies to accommodate QCell 595 Watt Modules). Assuming HSS Columns and Wide-Flange I-Beam frames and use of Pre-Punched CEE Purlins. 10' Clear height on normal canopies w/ 7° tilt, 20' on superstructure w/ 5° tilt, 30' spacing between columns w/ 13' overhang at ends of canopies. Module spacing to be 1/2" around the entire module. Assuming wet set design, bolted beam to column connection. \*\*Price assumes 1 mobilization/ 2 phases for entire installation\*\* Module installation includes 4 Stainless steel bolts stacks w/ 1 Wiley DSK-14 WEEB washer per module.

**Not included in the above are:** Permitting or Permit fees, special inspection fees, site survey or topographic survey, general conditions (fencing, dumpsters, toilets, private location, performance bond, recycling of module packaging, etc.), solar panels, light pole or light pole base removal, lighting, concrete bollards/pedestals, fire suppression, tree or tree stump removal, landscaping, soil testing fees, removal of contaminated soils, sprinklers, and methane gas mitigation. Buyer to assume all liability for damage to underground utilities not marked by Blue Stake and Private Locating. Buyer to assume responsibility for private locating of underground lines not covered by Blue Staking. Buyer to sign driller consent form prior to drilling. If hard drilling is required (> 35 minutes per hole), a \$450 an hour charge will be assessed. If a spread footing or casing is required, an additional charge will be assessed based upon time and material not to exceed \$3,800/each. Additional concrete required beyond 110% of spec due to non-standard hole sizes will be charged on material only basis (assume \$175/yd). If slurry is required, ParknShade will discuss amount and plan of action with Ameresco prior to ordering (assume \$155/yd). Any changes to the helioscope design/ layout are not covered in this quote.

Price good for 30 days. Any increase of material costs of 10% or more after 30 days will be added to the final bid.

Terms of Payment: 30% Down Upon Ordering Material  
30% due upon pouring of footings  
Balance Due net 30 from completion

Sincerely,

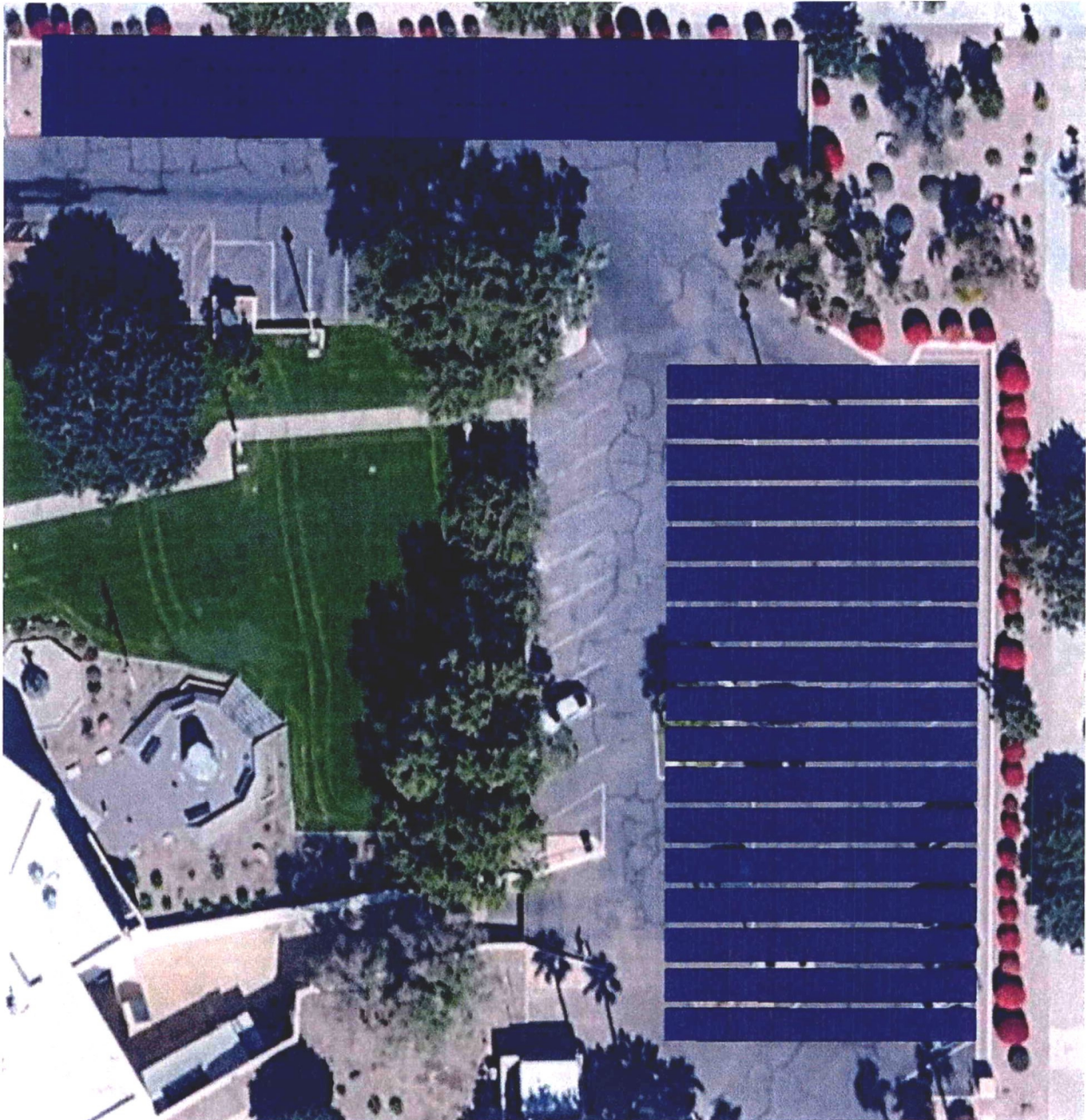
Travis Bailey  
Phone: 520-730-9948  
Park n' Shade of Tucson Inc  
AZ License #185180

Accepted by \_\_\_\_\_

Date: \_\_\_\_\_

**Park 'N Shade • 8359 W. Tangerine Road Marana, Arizona 85658**  
**Tucson: 520-531-9224 • Phoenix: 480-575-1680 • Fresno: 520-668-9345 • Fax : 520-682-1276**  
**License Numbers : AZ - 185180 • CA - 965404 • NM - 378612 • NV - 0079988**





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**License Numbers : AZ - 185180 • CA - 965404 • NM - 378612 • NV - 0079988**



## PV Commissioning & Close Out Plan

Presented by  
Ameresco, Inc.  
2375 E Camelback Rd, Ste 400  
Phoenix, AZ85016

*The commissioning & close out plan shown and described here is proprietary and cannot be copied, duplicated or commercially exploited – in whole or in part – without the express written permission of Ameresco.*



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## 1. Overview

### 1.1. Abbreviations & Definitions

Cx	Commissioning
ESCO	Energy Services Company
PT	Performance Test
PV	Photovoltaic
IP	Initial Proposal
kW	Kilowatt
kWh	Kilowatt hour
M&V	Measurement and Verification
MW	Megawatt
MWh	Megawatt-hour
NFPA	National Fire Protection Association
O&M	Operations and Maintenance
PFT	Pre-Functional Test
PM	Project Manager
EM	Engineering Manager
SCADA	Supervisory Control and Data Acquisition
SF	Square Feet
SOW	Scope of Work
VAC	Volt Alternating Current

### 1.2. Commissioning & Close Out Overview

Commissioning is a Quality Assurance & Quality Control (QA/QC) process which verifies that the owner's project requirements and expectations have been achieved. It also verifies that specified components and the system as a whole, have been properly installed through testing. Commissioning activities for this project were developed in accordance with the following industry standards:

- a. International Electrotechnical Commission (IEC) 62446- Grid Connected PV Systems-Minimum requirements for System Documentation, Commissioning Tests and Inspections
- b. National Electrical Manufacturing Association (NEMA)
- c. American Society for Testing & Materials (ASTM) E2848-13 – Standard Test Method for Reporting Photovoltaic Non-Concentrator System Performance

*Note: The listed standards are utilized to produce project specific equipment commissioning sheets.*

The purpose of the Commissioning plan is to establish a quality-oriented methodology for verifying and documenting that the Project is mechanically, electrically and structurally constructed in accordance with the Scope of Work, Industry Standards and the Contract Documents. The plan will identify what equipment and systems will be commissioned and to what level they will be commissioned. It will also identify parties involved in the commissioning process, their roles and responsibilities regarding inspections, tests, analyses, and required deliverables.

Close Out is another facet of the QA/QC process, where drawing revisions, specifications, installed



equipment, change orders and field changes are recorded and archived during construction. Construction Close Out is necessary to retain an accurate trail of all applicable activities related to the construction project involving any and all phases.

The Ameresco Project Manager (PM) will be the primary point of contact during construction, as well as be responsible for redirecting Commissioning and Close Out documentation as necessary. The documents herein will be provided to the contractors during the bidding and Pre-Construction phase.

Substantial Completion will depend upon, among other things, the successful completion of a series of Offline and Live Commissioning Activities. This document describes the relevant Commissioning procedures, inspections and documentation in detail.

Contractor personnel, with the assistance of the equipment manufacturer(s) as needed, will perform a complete commissioning of the DC and AC system equipment. All testing and commissioning will be conducted in accordance with the manufacturer's specifications. The contractor's technician or engineer shall initial any inspection or test completed, in addition to photo documentation of the inspection or test, while not under the supervision of the Ameresco PM.

### **1.3. Commissioning Scope/Objectives**

Commissioning can be defined as "the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the project intent". Upon completion of this commissioning plan, the project has met the Capacity Test requirements for Mechanical and Substantial Completion as described in the contractual agreements. This means that the facility has been made ready for initial operations and all adjustment and testing has been successfully completed in accordance with the appropriate contract exhibits.

### **1.4. Safety**

- a. During the planning and execution of the processes and procedures described in this commissioning plan, safety will be considered the number one priority. All personnel will use thinking compliance and exercise conservative decision making when performing procedures. Conservative decision-making means when faced with a decision, personnel, environmental and equipment safety have precedence over all other considerations.
- b. All personnel participating in the commissioning process must be familiar with all the safety regulations pertaining to the work being performed including working in or around high-voltage equipment as dictated by OSHA, the corporate safety manual, site specific safety manual and local codes and must also have a complete understanding of the equipment's features and functions.
- c. Contractor will ensure that lock-out tag-out procedures are in place before Project energization. All locks and signage will be in place prior to energization of the applicable Equipment.
- d. Contractor will maintain qualified personnel on each Site during operational hours until Commissioning is completed. Personnel will be trained on inverter operation, substations and Interconnection Facilities, and emergency shutdown procedures.

- e. Appropriate personal protection equipment will be worn per manufacturers' recommendations and those recommendations made by the Arc Flash Hazard Analysis and permanent arc flash labeling installed by the contractor.

## 2. Commissioning Team: Roles & Responsibilities

### 2.1. Commissioning Team Members

As the general contractor for the project, Ameresco will serve as the Commissioning Authority. Ameresco personnel will schedule, coordinate, witness, record, report, and direct all commissioning activities both on and off the project site to assure optimal compliance with the design intent. All commissioning activities will be performed by qualified technical and engineering personnel from Ameresco and the various equipment and systems providers' factory trained engineers and/or startup technicians. The Commissioning & Close Out Team members are listed in the table below.

**Table 2.1: Commissioning & Close Out Team Members**

Contractor	Company	Team	Position
General	Ameresco	Construction	Construction Director
	Ameresco		Project Manager
	Ameresco	Engineering	Engineering Manager
	Ameresco		Project Development Engineer
	Ameresco	O&M/M&V	M&V Regional Manager
	Ameresco		Commissioning Agent
Electrical	TBD		TBD
Commissioning (Third Party)	Sunsystem Technology or Other		TBD

### 2.2. Roles & Responsibilities: Ameresco

#### a. Construction Team

##### **Construction Director (CD)**

The Construction Director will oversee all of the Commissioning & Close Out activities related to construction. The CD will ensure that the Construction Team is following the Commissioning & Close Out Process as defined herein. The CD will ensure that the Project Manager completes all required Commissioning & Close Out Deliverables, in addition to all of the Punchlist Items.

##### **Project Manager (PM)**

The Project Manager will be responsible for developing, implementing and managing the Project Schedule for commissioning activities. The PM will make all decisions regarding

procurement and scheduling with input from the Client, Construction Director, Engineering Manager, Commissioning Agent and Project Development Engineer(s).

The PM is responsible for overseeing all documentation as described in *section 3.3*. The PM will coordinate with all parties to see that tests and inspections are handled in such a way as to ensure both quality and safety. The PM will also be responsible for contracting with specialty/professional testing companies (i.e., those that perform transformer testing or other large AC distribution equipment) and scheduling their activities. The PM will direct those firms regarding distribution of their reports. The PM will compile all test documentation described in *section 3.3* and submit to the Commissioning Agent for his approval.

The PM will also be responsible for overseeing the completion of the Ameresco PV Punchlist, obtaining all the appropriate signatures when complete.

**b. Engineering Team**

**Engineering Manager (EM)**

The Engineering Manager will ensure the Commissioning Agent, M&V Regional Manager and Project Development Engineer review the required documentation and have input into the Close Out Compliance Review and Ameresco Punchlist. The EM will make final decisions pertaining to the commissioning process.

**Project Development Engineer (PDE)**

The Project Development Engineer will work alongside the Commissioning Agent to review as-builts and Commissioning reports to determine if the project was constructed as the design intended.

**c. O&M/M&V Team**

**M&V Regional Manager (MVRM)**

The M&V Regional Manager will serve as the Close Out Authority and sign off on the Ameresco PV Punchlist. The M&V Regional Manager will determine if the Close Out documentation is assembled by the Construction Team is complete. Any necessary revisions or additions will be documented via the Ameresco Punchlist.

**Commissioning Agent (CA)**

The Commissioning Agent will be responsible for reviewing all commissioning documentation to ensure compliance with the design intent. The Commissioning Agent will direct the Project Manager to take Corrective Action when necessary to rectify any field or design issues. These issues will be documented via the Ameresco Punchlist.

### 3. Commissioning Process

#### 3.1. The Commissioning Process: Purpose & Best Practices

The Commissioning Process consists of electrical tests and inspections performed to confirm that facility systems and components have been installed in accordance with specifications and drawings, checked out in accordance with manufacturer's requirements and are ready for operation.

The Commissioning Process begins when the prerequisites to perform the specific testing have been satisfied. This generally means that physical installation has been completed in accordance with design drawings and manufacturer's specifications and the conditions for testing can be established. For example, DC Megger Testing may commence when construction of the array is complete and the DC home runs (whips) have been installed up to the associated inverter but not yet terminated. It is best practice for the required Turnover Documents to be completed during construction, especially once the modules have been installed (i.e. Module Serial Mapping, String Wiring Diagram, O&M Data Form etc). Specific commissioning test prerequisites are stated in each of the commissioning procedures.

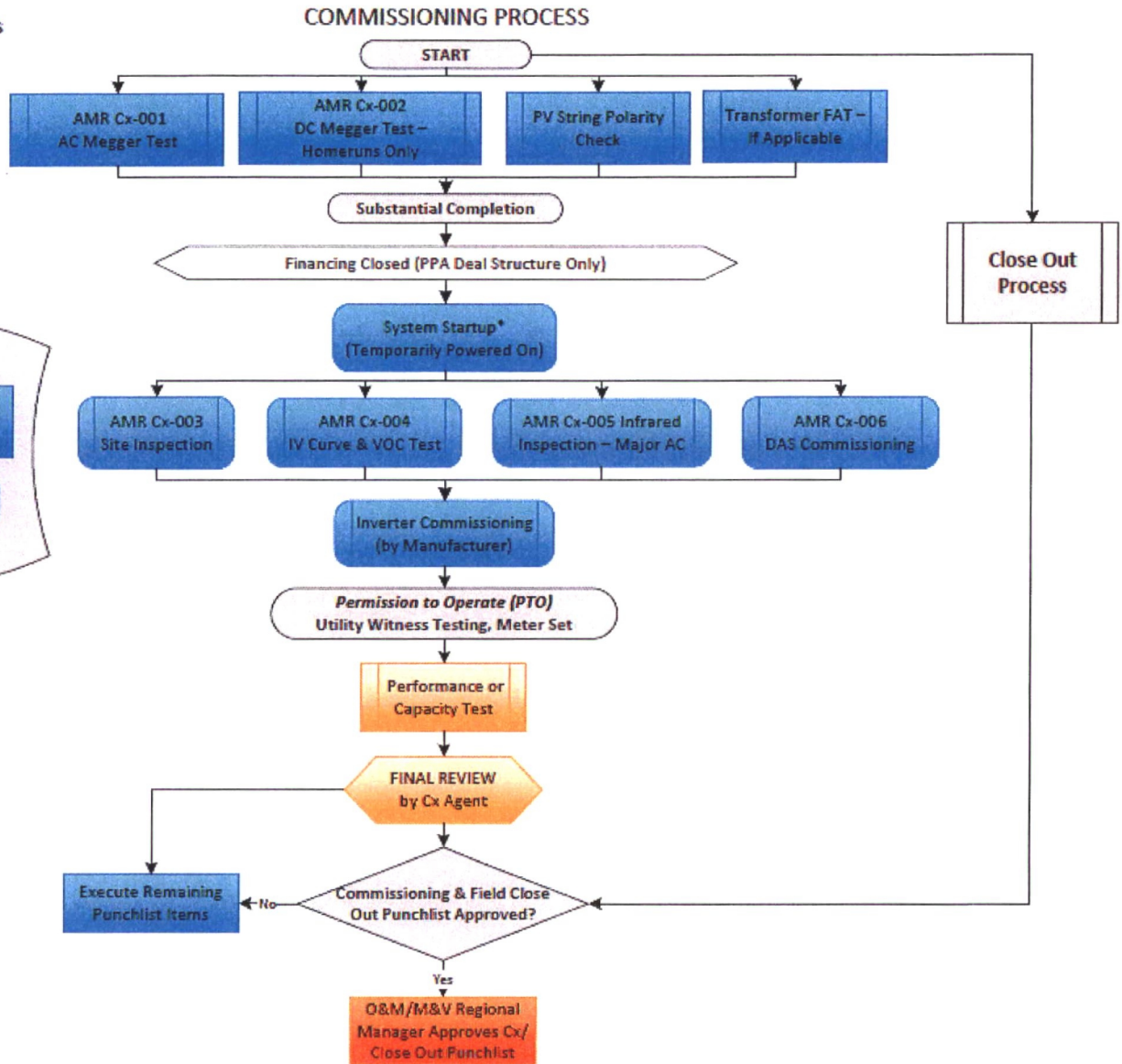
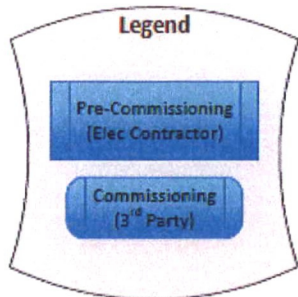
Portions of the commissioning testing are completed prior to initial energization, these are described in this document as **Pre-Commissioning Activities** and can be performed prior to the Mechanical Completion milestone and System Startup. The remaining **Commissioning Activities** are performed when backfeed electrical power is available to support the outstanding tests. Several of these tests can be performed within a 12hr period and with utility approval these tests can be performed prior to the Utility Witness Test. *With utility approval*, **System Startup** can commence to allow these tests to be performed. **System Startup** is the act of temporarily energizing the PV System, typically for a period not longer than 12 hrs (one full day of sun). This allows the Commissioning Team to diagnose any potential system issues prior to the Utility Witness Test, saving the utility, customer and field team additional trips for testing. Once the Utility Witness Test is complete and the utility has given Permission to Operate (PTO), the Capacity Test can be performed. Note that the Capacity Test will take at least three days and continue until at least 480 data points are obtained above 200 W/m<sup>2</sup> are collected, with at least 250 data points above 500 W/m<sup>2</sup>. Due to the extensive time the PV System is required to be energized for the Capacity Test, it is recommended that the Commissioning Team plan for this to be completed after the Utility Witness Test.

The results of the commissioning tests are evaluated to confirm that the component or system meets the established acceptance criteria by the Commissioning Agent. If deficiencies are discovered they are either corrected during the test and the test is re-performed, or the deficiency is documented via the Punchlist Items on each Commissioning Procedure. All Punchlist Items must either be corrected onsite or added to the Ameresco Punchlist.



### 3.2. Commissioning Process: Flow Chart

#### Roles & Responsibilities



\*Verify with the utility if the PV System can be temporarily powered to perform the Commissioning Activities prior to Utility Witness Testing. PV System shall be powered off once the Commissioning Activities are complete.

### 3.3. Final Deliverables: Submittals & Test Documentation

The following deliverables are required to complete the Commissioning Process.

**Table 3.3 Commissioning Final Deliverables: Submittals & Documentation**

Type	Test/Inspection or Submittal, Reference Name	Deliverable	Responsible Party
Pre-Commissioning	AC Megger Test, AMR Cx-001	AMR Test Form	Electrical Subcontractor
		AC Cable Insulation Resistance Datasheet	
	DC Megger Test, AMR Cx-002	AMR Test Form	
		DC Cable Insulation Resistance Datasheet	
	PV String Polarity Check	All PV Strings shall be checked for polarity prior to closing inverter fuse holders.	
	Transformer Factory Acceptance Test (FAT)	FAT from Supplier	
Commissioning	Site Inspection, AMR Cx-003	Site Inspection Checklist/AMR Test Form (pdf)	Commissioning (Third Party) Subcontractor
		Site Photo Journal – can be integrated into final report. Photos requested in AMR Cx-003 & AMR Cx-006	
	IV Curve Test, AMR Cx-004	IV Curve Test Report (pvapx file)	
	Infrared Inspection, AMR Cx-005	AMR Test Form (pdf)	
		Infrared Photos (zip file)	
	DAS Commissioning, AMR Cx-006	<b>Point to Point Testing</b> Confirm all sensors are communicating to onsite DL	
		<b>DAS Commissioning Checklist</b> Includes terminal resistor setting and inverter modbus address programming	
	Inverter Commissioning	Commissioning Report	Inverter Manufacturer
	Performance Test or Capacity Test (AMR Cx-007)	If Capacity Test is required deliverables are the Final Test Report, Calculation Workbook, & PVSyst Energy Model	Ameresco

*Note: Responsible Parties shall be defined in the Contract and Subcontractor SOW.*

### 3.4. Bid & Pre-Construction Meetings

The Commissioning Plan, Deliverables and Schedule shall be discussed during the Pre-Bid and Pre-Construction Meetings.

- Pre-Bid Meeting Goal: Establish an understanding of the Commissioning SOW for each contractor.
- Pre-Construction Meeting Goal: Establish roles and responsibilities and key points of contact.

### 3.5. Pre-Commissioning Activities

Mechanical Completion AMR Cx Test Procedures describe the methodology used to ensure constructed facility meets the design and code intent. The Test Procedures were created as fillable forms and include

relevant datasheets for onsite documentation during testing. The checklists and data sheets will be subject to review and approval of the CA.

The Service Provider is subject to change. Ultimate review and approval lies with Ameresco.

Pre-Commissioning includes the following activities:

Test/Inspection	Reference Document	Service Provider
AC Megger Test*	AMR Cx-001	Electrical Subcontractor
DC Megger Test*	AMR Cx-002	
PV String Polarity Check	-	
Transformer Factory Acceptance Test (FAT)	-	

*\* All Megger Tests on DC and AC cables will be carried out during the construction process and before terminations are made. Any Owner approved splices must be complete before any testing commences.*

### 3.6. Commissioning Activities

After the Pre-Commissioning Activities are complete, the system can be temporarily turned on (with utility approval). Safety is paramount at this stage. Contractor is to ensure that all safety protocol is being followed per the individual Test Procedures.

Commissioning includes the following activities:

Test/Inspection	Reference Document	Service Provider
Site Inspection	AMR Cx-003	Commissioning (Third Party) Subcontractor
IV Curve & VOC Test	AMR Cx-004	
Infrared Inspection	AMR Cx-005	
DAS Commissioning	AMR Cx-006	
Inverter Commissioning	-	Inverter Manufacturer
Performance or Capacity Test	AMR Cx-007	Ameresco



## 4. Close Out Process

### 4.1. Close Out: Purpose & Best Practices

The Close Out Process is critical to maintaining accurate records of construction for O&M and M&V purposes over the life of the system. Close Out includes finalizing the Punchlist, finishing and submitting all paperwork (as-built drawings, data packages, guarantees and warranties, installed equipment information, etc.). All contractual obligations must be complete for the Construction Phase to conclude and transition to the owner and/or the asset manager.

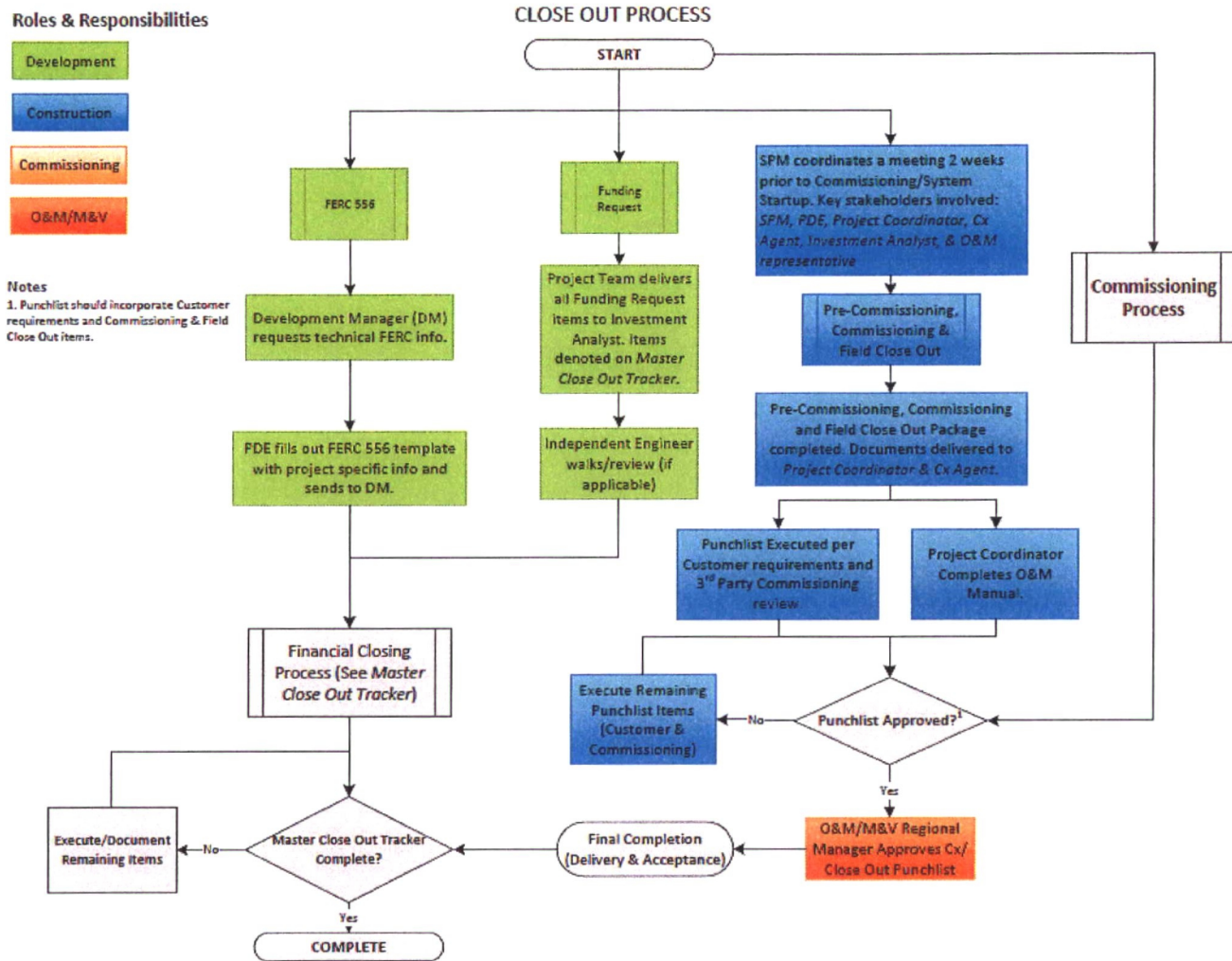
Close Out begins with the assembly of all required Final Deliverables as described in *section 4.3*. As-Built Redlines are sent to the PDE for review and completion by the EOR(s). The Turnover Documents and O&M Manual Form are used by the Commissioning Agent to complete the O&M Manual. After notification from the PM the PDE, MVRM and CA will review all documentation, referred to as the *Close Out Compliance Review*. Any necessary additions or changes will be documented via the Punchlist.

The PM will also perform a walkdown with the Client to add any additional items to the Punchlist. This can be completed at any time after Mechanical Completion and is not included in the Close Out Process in *section 4.2*.

Close Out is not considered complete until all Punchlist items have been addressed and are completed. Once complete the Ameresco PM, Client and Regional M&V Manager sign off on the Punchlist. This signals the last step of the Construction Phase is complete and the Contractor can invoice for Final Completion.



## 4.2. Close Out Process: Flow Chart



## 4.3. Final Deliverables: Submittals & Documentation

The following tables describe each Close Out deliverable with regard to the responsible party.

Table 4.3.1: Close Out Deliverables: ELECTRICAL CONTRACTOR

Type	Test/Inspection or Submittal, Reference Name	Deliverable
Close Out	Record Dwgs	Construction Dwg Redlines <sup>1</sup>
		DAS Communication Map
		String Wiring Diagram <sup>2</sup>
	Turnover Documents/Confirmation Email	Contractor shall confirm in writing if any equipment submittals have changed since the procurement phase. If said equipment changes during construction, contractor will send updated equipment submittals.

1. Construction Dwg Redlines shall be recorded on the Construction Dwgs relevant to the particular trade (electrical field changes shall be redlined on the Electrical Drawing Sheets). Electrical changes redlined by the contractor on a structural or conceptual drawing will NOT be accepted.

2. The String Wiring Diagram can be included with the Construction Dwg Redlines.

**Table 4.3.2: Close Out Deliverables: AMERESCO PROJECT MANAGER**

Document	Deliverable
Punchlist	-
Final Inspections	Final Building/Electrical Inspections, Special Inspection Reports
O&M Manual	O&M Manual Field Form
Training	Training Manual
SC & D&A Certificate	Substantial Completion Certificate
	Delivery & Acceptance Certificate
Change Orders	Executed Change Orders

**Table 4.3.3: Close Out Deliverables: PROJECT DEVELOPMENT ENGINEER/CX AGENT**

Test/Inspection or Submittal, Reference Name	Deliverable
Interconnection Agreement	Executed Interconnection Agreement
Field RFIs	Any RFIs
Energy Models & Shade Analysis	PVSyst Report (pdf & project file), Shade Analysis Report
Flash Test Data	-

#### 4.4. O&M Manuals & Warranties

The O&M Manual contains the information required for operation, maintenance and decommissioning of a PV System. It includes the following information:

- Description of the work performed
- Maintainable equipment list
- Maintainable equipment data sheets
- Details of each maintainable piece of equipment including manufacturer, model number, and any sub-type information such as paint color
- Module serial map
- Module flash test data
- All relevant safety information (MSDS, etc.)
- Textural maintenance information or reference to manufacturer's literature that has this information
- Manufacturer and supplier contact details
- Guarantee / Warranty information
- Commissioning & Close Out Plan

To assemble the O&M Manual, first the O&M Manual Form, Turnover Documents and necessary photos are assembled by the Construction Team. Once complete PM sends the relevant information to the CA to

create a draft of the O&M Manual. After the draft is reviewed by the Ameresco PM, the O&M Manual can be completed unless revisions are required.

## 5. Training

Ameresco provides on-site training to the maintenance facility team responsible for executing emergency shutdown procedures when necessary. The local maintenance facility team should only execute emergency shutdown procedures when absolutely necessary (electrical infrastructure work, other construction activities requiring LOTO, etc.). In the event of a fire the local Fire Department will perform the emergency shutdown. Operations and Maintenance should only be performed by qualified personnel.