

March 25, 2021

Troy Tobiasson, *Sr. Project Manager*
Engineering Department
City of Goodyear, Arizona
14455 West Van Buren St, Suite D
Goodyear, AZ 85338

Re: Solicitation # 21-5785
Architectural and Engineering Services Proposal
Schematic Design through Construction Administration Phases
Goodyear Police Building Phase 2
Goodyear, Arizona

Dear Mr. Tobiasson,

Architekton offers this design team fee proposal for the Programming through Construction Documentation Phases services as defined in this fee proposal for the new Goodyear Police Building Phase 2 at the Goodyear Police Operations Building located at 11 N. 145th Ave. Goodyear, AZ 85338 (Parcel APN 500-10-732). It is understood the Construction Administration Phase services will be amended to this contract during the Guaranteed Maximum Price Negotiation Phase with the successful Construction Manager at Risk.

This proposal anticipates the City of Goodyear will procure the services of a Construction Manager at Risk (CMAR) for pre-construction and construction services. The design team will support the CMAR's role throughout the project.

This proposal is presented in three sections; the **Scope of the Project** section defines our understanding of the project, the services being offered are identified in the subsequent section, **Scope of Services**, and the fees requested for the services are identified in the **Compensation** section.

The design team members whose fees are included in this fee proposal are:

- **Architekton** will provide Architecture, Graphic Design, Interior Design, and design team management services
 - *If acceptable to the City, the Design team will use the Geotechnical report and ALTA survey that were prepared for the Goodyear Police Operations Phase 1 project as the basis for this project*
- **Dibble Engineering** will provide an updated limited site survey (topography, boundaries, and utilities), utility availability study report, and Civil Engineering Services
- **Moore/Swick Partnership** will provide Landscape Architecture Services
- **Henderson Engineers** will provide the mechanical, plumbing, electrical, fire protection, fire alarm system and low voltage systems engineering services (RCDD Designed Telecommunications Technology, Security and Audio-Visual Systems engineering as described in the attached Henderson Engineering fee proposal)
- **BDA Engineering** will provide the structural engineering services
- **Abacus** will provide cost estimating peer review of the CMAR's Schematic and Design Development cost estimates

- *It is the design team understanding the City of Goodyear does not require this project to achieve LEED Certification. However, sustainability strategies and Low Impact Design (LID) concepts will be considered and incorporated in the design.*

Scope of the Project

Based upon discussions with the City of Goodyear and prior to receiving or determining additional building program, it is the design teams understanding the anticipated building program could approach approximately 27,500 gross sf distributed between two floors. The project will relocate and plan for future growth of Police Administration, CID, Professional Standards, Volunteers, Office of the Chief, Quartermasters storage, Training and Shooting Range (8 lanes) so all police functions are in one building. Additional program spaces and future growth area will be determined during the Program Verification Phase.

The secured parking lot will be enlarged to provide as many parking stalls as feasible while still meeting Goodyear Code Requirements. The masonry wall around the lot will be altered and expanded to encompass the retention basin. The existing retention basin and drainage channels will be reshaped to serve the new offsite usage needs while maintaining the retention capacity per the City Codes. Exterior areas for officer training, calisthenics, a running track, and K-9 training will be provided. (see diagram below)

The project will be designed to meet the City of Goodyear current Facility Standards.



Our understanding is the construction Hard Cost budgeted for this project is approximately \$13,780,000. (26,000 sf x \$530/sf) The construction budget includes the hard construction cost of the building and site, built-in casework and finishes, kitchen equipment, and shooting range equipment.

The City has set aside an 8% construction cost contingency for an additional \$1,102,400. This amount will be administered by the City with the CMAR.

The city has set aside additional funding for Additional Project Construction costs for Permitting, City Construction Administration costs, SWPP/Erosion Protection, Construction Surveying, Materials testing, As built/redlines, General Conditions and some APS utility costs. This amount \$3,988,482.20 will be administered by the City.

The city has set aside additional funding for Furniture, Fixtures and Equipment (FFE) costs including Information Technology Equipment (IT) and a contingency. This amount \$2,190,317.22 will be administered by the City.

The City has set aside additional funding as a design contingency. This amount \$49,936.00.

Therefore, the Grand Total Project Costs NOT including Design Costs are budgeted at \$22,114,259.39.

Our recent experience in completing construction on several very similar projects is that the construction budget escalated to 2022 should be set at approximately \$530/gsf as noted above for the hard construction costs. We believe the budget will allow for approximately 26,000 gross square foot building program. Therefore, we will work with the City, the Goodyear Police Department key stakeholders and the CMAR to achieve the hard construction cost budget goals cited above. The Architekton design team will assist the city with the other budget components.

Scope of the Services

Project Management Services

Architekton will provide project management services as part of its role as the architect of record. Those services include developing and maintaining the project schedule, administering the design team contracts, coordinating the design team's work and project budget. Architekton will prepare the meeting agendas and subsequent meeting minutes during the design phase. The CMAR will provide them from the GMP development phase to the end of the construction.

It is assumed that once the CMAR is brought on board, they will participate in all design meetings with the stakeholders and City of Goodyear Engineering. They will develop a Baseline Budget from the approved program to determine the viability of the program. The design team will work with the CMAR throughout to coordinate the design within that framework.

Program Update and Verification Phase Services

It is understood that Program Update and Verification Phases services are being procured by the City of Goodyear under a separate contract. Architekton will work with the information received from that contract to begin this contract at the Schematic Design Phase.

Schematic Design Phase Services 15% Submittal

Site Survey

Architekton will work from the ALTA survey and as-built Civil drawings prepared from the Goodyear Police Operations phase 1 project. This fee proposal includes performing a Project Control Survey for use by the design team confirming project control for the site, the basis for elevation and the basis for coordinates. The proposal includes a Topographic Survey and Basemap to the limits shown in the attached Dibble Engineering Fee Proposal. If Goodyear engineering department required further survey information, then Architekton can provide that for an additional fee.

Site Utilities

Architekton will rely upon the as-built documentation from the Goodyear Police Operations Phase 1 for information on the availability of utilities to the site. This fee proposal does not include procuring additional site utility information. If it is discovered additional utility information is required, Architekton will work with the City to determine the best method to get that information and would then provide an additional fee proposal if necessary. See Attached fee proposal from Dibble Engineering for Civil engineering information used to develop this fee proposal.

Civil Engineering

See the attached Fee Proposal form Dibble Engineering for Civil Engineering and Utility assistance services included in this fee proposal.

Geotechnical Report

Architekton will use the Geotechnical Report prepared for Goodyear Police Operations phase 1 project for the Phase 2 work. This fee proposal does not include procuring an additional Geotechnical Report. If Goodyear engineering department deems a new report is necessary, then Architekton can provide that for an additional fee.

Architecture Services

Schematic Design Phase Services (30% Set)

Architekton anticipates providing Conceptual Design update services under a separate contract with Swan Architects and that an agreed upon conceptual design will be included in those services. The agreed upon concept plan will be developed into a concept site and floor plans for presentation and reviewed with the key stakeholders. From that presentation the approved concept site and floor plan will move forward to create the Schematic Design Submittal Documents. As a minimum, those documents will include the requirements defined by the AIA for Schematic Design deliverables.

In addition to the required deliverables, preliminary furniture layout a computer model and renderings will be provided to the City of Goodyear. It is assumed the schematic cost estimate will be prepared by the CMAR. While the City of Goodyear is reviewing the package and the CMAR is developing their cost estimate (three weeks), the design team will perform QAQC review of the document. Abacus will perform a peer review of the CMAR's Schematic Design Cost Estimate.

Design Development Phase Services (30% Construction Set)

The design team will prepare the design and site plan review submittal and achieve planning and zoning approval at the completion of this phase of the project. A formal Amended Site Plan per the Development Continuum including Due Diligence and Pre-Application Meetings are anticipated. They will also meet with the Building Safety Department to strategize any major points for the Code Compliance.

A series of Design Development Workshops will be scheduled with the CMAR and the City of Goodyear Stakeholders. The stakeholders will include key user group individuals, and key City of Goodyear maintenance personnel for the HVAC, electrical systems, lighting, IT, Security Systems, Access Control, A/V systems, Fire Protection systems, Building Safety Department, furniture, preferred furniture vendor, streets and traffic engineering, building and site maintenance. The Workshops will use the base approved BIM model, discuss the desired building/site system and its integration into the building/site.

After these workshops are complete, another workshop will occur with the CMAR and City of Goodyear project management to discuss construction costs and any controls needed to maintain the budget. The CMAR will prepare a construction Cost estimate from the Design Development (30% Completion set). Abacus will prepare a construction cost estimate from this set as well and reconcile it with the CMA. The Design Development set will be prepared and submitted. The deliverables will be, at a minimum, the requirements defined by the AIA for Design Development deliverables (30% Submittal).

Preliminary Construction Documents (60% Construction Set)

The design team will prepare the construction documents from the City of Goodyear approved Design Development submittal. The project will be prepared using Autodesk Revit but can be issued in other forms that City of Goodyear may require. The CMAR will prepare a construction Cost estimate from the Preliminary Construction Documents Set (60% Completion set). Abacus will prepare a construction cost estimate from this set as well and reconcile it with the CMA. The deliverables will be, at a minimum, the requirements defined by the AIA for Construction Document Drawings.

Final Construction Documents & GMP Development

The design team will prepare the final construction documents from the City of Goodyear approved 60% Construction Document submittal picking up the comments offered. The project will be prepared using Autodesk Revit but can be issued in other forms that City of Goodyear may require. A 90%-complete set of plans will be submitted to the City of Goodyear Building Safety Department for building permits as corrected to pick up their comments until a building permit is available for the CMAR to acquire (100%-complete construction documents). Architekton will work with the Goodyear Plan Reviewers to have the amended Site Plan and Building Permit Review to be completed at the same time.

The design team will work with the CMAR in their Guaranteed Maximum Price (GMP) development, answering requests for information, providing clarifications, and issuing revised documentation. The design team will review the GMP with the City of Goodyear and advise on any observed inaccuracies. A peer review of the GMP by Abacus is not included in this proposal but can be provided as an additional service.

Structural Engineering, Landscape Architecture, Mechanical, Plumbing, Electrical, Low Voltage Systems Engineering and limited Construction Cost Review Consultancy services are included. Proposals are attached and included.

Other Included Services:

Interior Design

Architekton will provide Interior Design services for the project. Our interiors team will assist the architecture team layout the appropriate space for each area considering furniture, clearances, and equipment. They will prepare up to three interior finish palettes for the City of Goodyear to discuss and review. The palettes will consider at a minimum floor, wall, ceiling, door, and window treatment finishes. They will include built-in casework designs and finishes, hardware finishes, light fixtures, fixed and loose furniture, and fabrics. The interior design team services are integrated with the architecture team throughout these phases of the project.

The City of Goodyear will supply a furniture vendor and a furniture budget in the Design Development Phase. Architekton will lay out the furniture based upon project requirements, stakeholder discussions and the approved design. Architekton will review the City of Goodyear's furniture vendor's selection of the furniture (from their City of Goodyear standard systems) that was based upon the approved design. Architekton will coordinate the selected furniture systems power/data, colors, and fabrics to work with the overall interior design. Architekton will coordinate the installation of the furniture with the furniture vendor at move in.

Graphic Design and Wayfinding

Architekton will provide Graphic Design services for the project. Our graphic designer will assist the architecture team layout the appropriate location and messaging for each area of the building including room identification, wayfinding, and code compliance. They will also provide signage design services for the exterior wayfinding and building identification. They will work with the City of Goodyear graphic standards and prepare up to three graphics concepts for the City to discuss and review. The City of Goodyear will select one for further development into the complete graphics documents.

The CMAR will supply a Signage subcontractor in the time sensitive stages of construction. Architekton will review and eventually approve their shop drawings that were based upon the signage drawings in the Construction Documents. Architekton will assist the Sign Subcontractor locating the signs in the field during construction.

Construction Administration (Not included in this fee proposal)

Construction Administration services will be an amendment to this contract to be executed after the GMP for the project has been approved by the City of Goodyear. Fees for those services will be negotiated at that time.

The design team will provide construction administrations services for the project as follows:

- Kick-off meeting with project team
- Weekly construction site meetings/including site progress review/ questions answered/ photo documentation
- Submittal Reviews
- Responses to Requests for Information (RFI's)
- Additional Supplemental Information as needed (ASI's)
- Change Order Request reviews
- Pay Application Reviews if required by the City of Goodyear
- Punch List Operations
 - Ongoing punch list with CMAR

- Final Punch List
- Completed Punch list confirmation (1 visit)
- Close out Documentation Review
 - CMAR Supplied Close out documents as required by their contract will be reviewed by the design team for accuracy
- As-built Document Review/Submittal
 - Revit model will be updated with each RFI or ASI that required graphic documentation
 - The CMAR will also keep record changes on their field set (electronically) their changed sheets will be coordinated with the set provided by the Design Team
 - The final BIM model and exported dwg/pdf set will be submitted to the City of Goodyear with those changes
- 23-month Warranty Walk-through

Just before the two-year warranty period expires; the design team will walk the site and building with the City of Goodyear to document any warranty work that must be addressed by the CMAR before the warranty expires.

Compensation

The design fees are presented in lump sum amounts below. The individual fee proposals from each consultant are attached to this proposal including Architekton's services. I have included fee development spreadsheet from each consultant to identify the number of hours for each team member who will be assigned to the project in each phase of the work. Their proposal narratives define the services that will be included in each phase as Architekton has done above. The fees are provided in lump sum format and a phase-by-phase format on the next page (Schematic Design, Design Development, and Construction Documents. Construction Administration fees are not included in this proposal and will be negotiated when the GMP is approved.)

Total Design Services Fees this Amendment:

Architekton (Architecture, Project Management)	\$ 566,050.00
Dibble Engineering (Civil Engineering)	46,147.00
Moore/Swick Partnership (Landscape Architecture)	10,680.00
BDA Engineering (Structural Engineering)	96,900.00
Henderson Engineering (Mechanical and Plumbing)	106,755.00
Henderson Engineering (Electrical)	79,235.00
Henderson Engineering (Low Voltage Systems)	36,560.00
Abacus (Cost Estimating)	47,407.12
Total Fees	\$ 989,734.12
City of Goodyear Design Contingency	49,936.00
Total Fees & Goodyear Design Contingency	\$ 1,039,670.12

There are Allowances identified as well. These services may or may not become necessary, or the City of Goodyear may want to procure these services through their own resources. Reimbursable expense allowance is for expenses allowed and approved by the City of Goodyear (direct costs for: mileage, printing, postage, and deliveries)

Allowances

Reimbursable Allowance (direct costs: printing, sample board materials, postage, and deliveries)	\$ 9,000.00
Total Allowance	\$ 9,000.00

Please see that attached proposed schedule for the design services. It is anticipating an April 2021 start, but it can be reset to the actual date determined by the City of Goodyear.

**Goodyear Police Operations Building Phase 2
Architekton Design Team - Schedule**

	Start	Finish
Programming Phase		
Schematic Design Phase (11 weeks)	April 5, 2021	June 25, 2021
Design Development (12 weeks)	June 28, 2021	September 17, 2021
Construction Documents (15 weeks)	September 20, 2021	December 31, 2021
Permitting/GMP Development (20 weeks)	January 3, 2022	May 20, 2022
Construction (60 weeks)	May 23, 2022	July 17, 2023

We look forward to working with the City of Goodyear, Goodyear Police Department and CMAR on this critical project. Please do not hesitate to contact me at my office if you have any questions regarding this proposal.

Sincerely,



Michael Rosso, RA

Architect | Principal

ARCHITEKTON

Attachments:

Architekton Man-hour fee spreadsheet
 Dibble Engineering Proposal Narrative & Man-hour fee spreadsheet
 Moore/Swick Partnership Proposal Narrative & Man-hour fee spreadsheet
 BDA Engineering Proposal Narrative & Man-hour fee spreadsheet
 Henderson Engineers Proposal Narrative & Man-hour fee spreadsheet
 Abacus Proposal Narrative & Man-hour fee spreadsheet
 Project Schedule

Goodyear Police Operations Building Phase 2 Design Team Fee Schedule per Phase							
Design Team Member		Programming	Schematic Design	Design Development	Construction Documents	Construction Administration	Total
Architekton	Architecture		\$ 138,840.00	\$ 145,570.00	\$ 281,640.00	NIC	\$ 566,050.00
Dibble	Civil-Survey-Utilities		\$ 19,595.00	\$ 12,827.00	\$ 13,725.00	NIC	\$ 46,147.00
Moore Swick	Landscape		\$ 2,760.00	\$ 3,480.00	\$ 4,440.00	NIC	\$ 10,680.00
BDA	Structural		\$ 15,600.00	\$ 15,750.00	\$ 65,550.00	NIC	\$ 96,900.00
Henderson M&P	Mechanical Plumbing		\$ 12,780.00	\$ 29,565.00	\$ 64,410.00	NIC	\$ 106,755.00
Henderson Electrical	Electrical		\$ 12,000.00	\$ 20,085.00	\$ 47,150.00	NIC	\$ 79,235.00
Henderson Low Voltage	Low Voltage Systems		\$ 4,605.00	\$ 13,095.00	\$ 18,860.00	NIC	\$ 36,560.00
Abacus	Cost Consulting		\$ 9,596.96	\$ 20,783.92	\$ 17,026.24		\$ 47,407.12
Sub-Total			\$ 215,776.96	\$ 261,155.92	\$ 476,915.00	\$ -	\$ 989,734.12
Owner's Contingency	Added Design Services						\$ 49,936.00
Total Fees & Owner Contingency							\$ 1,039,670.12

Allowances							
Geotechnical Report	Soils Report NIC						
Reimbursable Expenses	Printing, Sample Boards, Postage and Deliveries (Only as approved by COG)						\$ 9,000.00
Total							\$ 9,000.00
Grand Total Fees and Allowances							\$ 1,048,670.12

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Architekton

	Michael Rosso	Glenn Wollenhaupt	Miles Roberts	Ryan Grabe	Joey Childress	Alyssa Robinson	Nickie Abel	
Phase	Project Manager	Project Architect	BIM Manager	Designer & Graphics	Technician	Interior Architect	Administrator	Hours per Task
Schematic Design Phase								Hours per Task
Schematic Design Services	100	300	100	46	400	136	4	1086
Total Hours this phase	100	300	100	46	400	136	4	1086
Fee Rate per personnel	\$ 170.00	\$ 160.00	\$ 150.00	\$ 120.00	\$ 90.00	\$ 125.00	\$ 80.00	Fee Per Phase
Fee per Phase	\$ 17,000.00	\$ 48,000.00	\$ 15,000.00	\$ 5,520.00	\$ 36,000.00	\$ 17,000.00	\$ 320.00	\$ 138,840.00
Design Development Phase								Hours per Task
Design Development Services	100	340	100	40	420	130	4	1134
Total Hours this phase	100	340	100	40	420	130	4	1134
Fee Rate per personnel	\$ 170.00	\$ 160.00	\$ 150.00	\$ 120.00	\$ 90.00	\$ 125.00	\$ 80.00	Fee Per Phase
Fee per Phase	\$ 17,000.00	\$ 54,400.00	\$ 15,000.00	\$ 4,800.00	\$ 37,800.00	\$ 16,250.00	\$ 320.00	\$ 145,570.00
Construction Documents Phase								Hours per Task
Construction Documents	140	420	160	110	840	360	6	2036
Permitting and GMP	40	40	20	5	60	80	2	247
Total Hours this phase	180	460	180	115	900	440	8	2283
Fee Rate per personnel	\$ 170.00	\$ 160.00	\$ 150.00	\$ 120.00	\$ 90.00	\$ 125.00	\$ 80.00	Fee Per Phase
Fee per Phase	\$ 30,600.00	\$ 73,600.00	\$ 27,000.00	\$ 13,800.00	\$ 81,000.00	\$ 55,000.00	\$ 640.00	\$ 281,640.00
Construction Administration Phase								Hours per Task
Construction Administration Services								0
Total Hours this phase	0	0	0	0	0	0	0	0
Fee Rate per personnel	\$ 170.00	\$ 160.00	\$ 150.00	\$ 120.00	\$ 90.00	\$ 125.00	\$ 80.00	Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees								Total Hours
Total Hours per Personnel	\$ 380.00	\$ 1,100.00	\$ 380.00	\$ 201.00	\$ 1,720.00	\$ 706.00	\$ 16.00	4503
Fee Rate per personnel	\$ 170.00	\$ 160.00	\$ 150.00	\$ 120.00	\$ 90.00	\$ 125.00	\$ 80.00	Total Fee
Grand Total Fees per Personnel	\$ 64,600.00	\$ 176,000.00	\$ 57,000.00	\$ 24,120.00	\$ 154,800.00	\$ 88,250.00	\$ 1,280.00	\$ 566,050.00

March 1, 2021

Michael Rosso RA
464 S. Farmer Ave. Suite 101
Tempe, AZ 85281

**RE: Goodyear Police Building – Phase 2
145th Avenue & Van Buren, Goodyear
Survey & Civil Engineering Services Proposal**

Mike,

Thank you for the opportunity to submit this proposal to provide survey and civil engineering services. This proposal has been prepared based on our understanding of the project as described in the Project Understanding and Scope of Work sections. We look forward to partnering with your team for a successful project.

PROJECT UNDERSTANDING:

Project summary

- Site is partially developed with the Phase 1 Police Station including a large campus retention basin. Area of impact is approximately 4.5 acres, refer to attached exhibit.

Grading & Drainage

- Retention will be provided for the 100-year, 6-hour rainfall event utilizing the existing south retention basin. This retention basin will be reshaped to accommodate the proposed site improvements and may be designed to retain water at an increased depth of 3-feet in order to maximize the available land/surface area for site development.
- Analysis will be performed to confirm the contributing area to the retention basin and calculate the new required volume, additional drywells may be required.
- The channel parallel to 145th Avenue adjacent to the phase 2 site may be piped in a culvert due to the grade differential between the building proposed finish floor and the existing 145th Avenue.
- Off-site flows are not expected

Existing/proposed utilities:

- Fire service will be provided with a connection to the public main within the adjacent 145th Avenue or a connection to the on-site 8-inch stub provided as a part of phase 1
- Domestic water service will be provided with connection to the public main within the adjacent 145th Avenue
- Sanitary sewer service will be provided with connection to the on-site 6-inch stub provided as a part of phase 1
- 2 additional on-site fire hydrants are expected
- On-site fire line is already looped therefore a new loop is not required
- Utility relocations are not expected
- Off-site utility improvements are not expected

Adjacent roadway infrastructure:

- Adjacent roadway, 145th Avenue is fully developed, roadway improvements are not expected

Parcel summary

- Replat/Lot Combo/Easements new or abandonment are not expected



CONDITIONS:

- Architect will provide electronic files (AutoCAD) of the proposed site and building improvements for use as the basis of the civil design
- Previously prepared/Client provided Geotechnical Report with recommendations for pavement sections and percolation rates to complete the civil design for this project
- Submittals will be made via pdf documents and printing if required will be done by others or reimbursed at cost to Dibble
- Submittal and review fees will be paid by Owner/Architect at the time of submittal
- Dibble does not expect to participate in the programming phase
- City of Goodyear Site Plan submittal is expected to be the SD submittal package. City of Goodyear requires an extensive Site Plan submittal package, this increased effort on the front end is reflected in the fee distribution.
- Site plan changes after SD phase may require additional services request, site plan changes after DD phase will require additional services request
- Meetings and construction phase site observations are as noted in each section. Should the required meeting attendance exceed the expected number of meetings additional compensation will be requested.
- Dibble does not expect to participate in the Programming phase beyond providing topographic survey services

DESIGN STANDARDS/PERMITTING AGENCY

Design will conform to the following Authorities Having Jurisdiction (AHJ).

- City of Goodyear

Design will be reviewed and permitted by the following AHJ(s)

- City of Goodyear

SCHEDULE:

- Dibble is prepared to begin immediately and will conform to the project schedule as stipulated by the Owner/Architect

SCOPE OF SERVICES:**1.0 Schematic Design Phase****1.1 Topographic Survey****Project Control**

Dibble will perform Project Control Survey services including:

- Dibble will confirm the project control for the site
- Basis of Elevation: Elevations shall be tied to the City of Goodyear datum
- Basis of Coordinates: Coordinates (Northing and Easting) shall be based upon the City of Goodyear datum

Topographic Survey & Basemap Preparation

Dibble will perform Topographic Survey & Basemap services including:

- Prepare design ready AutoCAD base file including existing utilities and existing site features based on available utility as-built and quarter section drawings as well as conventional topographic survey. Limits of survey are per the attached exhibit.

2.0 Schematic Design Phase

2.1 Schematic Design Documents

Dibble will prepare Schematic Design documents including:

- Develop on-site plans including site demolition plan, civil site plan, grading & drainage plan, and utility plan
- Develop design of horizontal control of the site elements of the project including walls, hardscape, drives, and drainage features
- Develop design of water, sewer, and fire protection services
- Develop design of storm water conveyance and above ground retention facilities
- Develop draft drainage, water, and sewer reports
- Coordinate dry utilities by acquiring design plans from design team and illustrating dry utility alignment on civil plans, for reference only
- Coordination with Owner, Architect, Plumbing Engineer & Landscape Architect

2.2 Meetings & Coordination

- 3 ea. - 1 hour virtual meetings

3.0 Design Development Phase

3.1 Design Development Documents

Dibble will prepare Design Development documents including:

- Refine on-site plans including site demolition plan, civil site plan, grading & drainage plan, utility plan, cross sections, and details
- Refine design of horizontal control and vertical design & control of the site elements of the project including walls, hardscape, drives, and drainage features
- Refine design of water, sewer, and fire protection services
- Refine design of storm water conveyance and above ground retention facilities
- Refine draft drainage, water, and sewer reports
- Coordinate dry utilities by acquiring design plans from design team and illustrating dry utility alignment on civil plans, for reference only
- Coordination with Owner, Architect, Plumbing Engineer & Landscape Architect

3.2 Meetings & Coordination

- 3 ea. - 1 hour virtual meetings

4.0 Construction Document Phase

4.1 90% Construction Documents

Dibble will prepare Construction Documents including:

- Refine on-site plans including site demolition plan, civil site plan, grading & drainage plan, utility plan, cross sections, and details
- Refine design of horizontal control and vertical design & control of the site elements of the project including walls, hardscape, drives, and drainage features
- Refine the design of water, sewer, and fire protection services
- Refine design of storm water conveyance and above ground retention facilities
- Prepare pre-final drainage, water, and sewer reports
- Coordinate dry utilities by acquiring design plans from design team and illustrating dry utility alignment on civil plans, for reference only
- Coordination with Owner, Architect, Plumbing Engineer & Landscape Architect

4.2 100% Construction Documents

Dibble will prepare Construction Documents including:

- Finalize on-site plans including site demolition plan, civil site plan, grading & drainage plan, utility plan, cross sections, and details
- Finalize design of horizontal control and vertical design & control of the site elements of the project including walls, hardscape, drives, and drainage features
- Finalize the design of water, sewer, and fire protection services
- Finalize design of storm water conveyance and above ground retention facilities
- Prepare final drainage, water, and sewer reports
- Coordinate dry utilities by acquiring design plans from design team and illustrating dry utility alignment on civil plans, for reference only
- Coordination with Owner, Architect, Plumbing Engineer & Landscape Architect

4.3 Storm Water Management Plan

Dibble will prepare a Storm Water Management Plan including:

- Prepare the SWMP (Storm Water Management Plan) in cooperation with the Contractor meeting the requirements of ADEQ and the City of Goodyear

4.4 Meetings & Coordination

- 4 ea. - 1 hour virtual meetings

4.5 Permitting

Dibble will perform Permitting services including:

- Coordinate AHJ provided civil review comments and meet with AHJ staff to resolve civil comments
- Respond/address City civil comments
- Prepare civil permit resubmittal
- Assist Owner/ Contractor in acquiring civil construction permits
- Respond to bidding Contractor/Sub-Contractor civil related questions

5.0 Construction Phase Services (Not Included in Proposal)

ALLOWANCE/SUB-CONSULTANTS

6.0 Fire Flow Test (allowance)

- Fire flow test for building fire flow calculations

EXCLUSIONS:

Unless noted otherwise within the Scope of Services the following services are excluded from this proposal

- Cost of permits or fees
- Survey Services including: Replat/Lot Combinations, ALTA survey, legal descriptions & exhibits
- Traffic study/Traffic impact analysis/Signal design
- Roadway signing & striping design
- Sub-surface exploration (utility pot-holing)
- Environmental investigations
- Geotechnical investigation
- Pavement section design & percolation tests (To be provided by Geotechnical Engineer)
- Design of off-site/public street, sidewalk, water, or sewer improvements
- Floodplain analysis/modification/permitting, 404 permitting, off-site hydrology/hydraulics study
- Electrical design, natural gas design, structural design including walls, landscaping, and irrigation design
- Construction staking/Construction inspection
- As-built survey
- Certification of finish floor elevation
- NOI (Notice of Intent) application by contractor

FEES:

1.0	<u>Programming Phase</u>	\$ 3,930
1.1	Topographic Survey	\$ 3,930
2.0	<u>Schematic Design Phase</u>	\$ 15,665
2.1	Schematic Design Documents	\$ 14,564
2.2	Meetings & Coordination	\$ 1,101
3.0	<u>Design Development Phase</u>	\$ 12,827
3.1	Design Development Documents	\$ 11,924
3.2	Meetings & Coordination	\$ 903
4.0	<u>Construction Document Phase</u>	\$ 13,725
4.1	90% Construction Documents	\$ 7,271
4.2	100% Construction Documents	\$ 2,406
4.3	Storm Water Management Plan	\$ 736
4.4	Permitting	\$ 2,240
4.5	Meetings & Coordination	\$ 1,072
5.0	<u>Construction Phase Services (NIC)</u>	
	Subtotal	\$ 46,147

STANDARD BILLING RATES (January 1, 2021)

Project Manager	198.00
QA/QC Manager	192.00
Project Engineer (PE)	169.00
Assistant Project Engineer (EIT)	137.00
Designer	123.00
Land Surveyor (RLS)	192.00
Survey Technician	123.00
Survey Crew	198.00
Administrative Assistant	84.00

ADDITIONAL SERVICES:

If the Consultant/Engineer is required to perform services in addition to those outlined in the Scope of Work, by reason of substantial changes ordered by the Owner or Architect or for any reason beyond the Consultant's/Engineer's control, they are to receive compensation for such services. Compensation for additional services not included in the Scope of Work for the basic services shall be based on time expended. Additional services must be approved by the Owner prior to the start of such work.

Invoices will be submitted monthly based on the percentage of the survey and civil engineering services that are complete. These invoices will be due and payable upon receipt and will be considered past due if not paid within seven days after Client's receipt of payment from the Owner.

If you have any questions, please feel free to call us at (602) 957-1155.

Sincerely,

Jeffrey L. McBride PE
Vice President, Land Development

Dibble

If this proposal including the attached back-up documents is acceptable, please so indicate by signing and dating below. The return of this signed document shall serve as our notice to proceed with this project.

Name (Print), Title

Signature
Architekton

Date



Site Exhibit/Limits of Survey



Goodyear Police Operations Building Phase 2 Fee Development Sheet Architekton Design Team - Dibble Engineering						
	Shannon Mauck***	Vince Gibbons*	Kurt Baldwin	Liana Gayalda	John Leach**	
Programming Phase	Project Manager***	QA/QC*	Project Engineer (PE)	Assist Eng. (EIT)	Designer**	Hours per Task
Topographic Survey	11	4			8	23
Total Hours this phase	11	4	0	0	8	23
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Fee Per Phase
Fee per Phase	\$ 2,178.00	\$ 768.00	\$ -	\$ -	\$ 984.00	\$ 3,930.00
Schematic Design Phase						Hours per Task
Civil Engineering - Schematic	13	2	25	26	40	106
Total Hours this phase	13	2	25	26	40	106
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Fee Per Phase
Fee per Phase	\$ 2,574.00	\$ 384.00	\$ 4,225.00	\$ 3,562.00	\$ 4,920.00	\$ 15,665.00
Design Development Phase						Hours per Task
Civil Engineering - Design Development	8	0	17	18	48	91
Total Hours this phase	8	0	17	18	48	91
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Fee Per Phase
Fee per Phase	\$ 1,584.00	\$ -	\$ 2,873.00	\$ 2,466.00	\$ 5,904.00	\$ 12,827.00
Construction Documents Phase						Hours per Task
Civil Engineering - Construction Documents	9	2	18	18	28	75
Permitting & GMP Development Assistance	3	0	9	0	4	16
Total Hours this phase	12	2	27	18	32	91
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Fee Per Phase
Fee per Phase	\$ 2,376.00	\$ 384.00	\$ 4,563.00	\$ 2,466.00	\$ 3,936.00	\$ 13,725.00
Construction Administration Phase						Hours per Task
Civil Engineering - Construction Administration						0
Total Hours this phase	0	0	0	0	0	0
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees						Total Hours
Total Hours per Personnel	44	8	69	62	128	311
Fee Rate per personnel	\$ 198.00	\$ 192.00	\$ 169.00	\$ 137.00	\$ 123.00	Total Fee
Grand Total Fees per Personnel	\$ 8,712.00	\$ 1,536.00	\$ 11,661.00	\$ 8,494.00	\$ 15,744.00	\$ 46,147.00



March 1, 2021

Mr. Mike Rosso, RA, Principal
ARCHITEKTON
464 S. Farmer Avenue, Suite 101
Tempe, Arizona 85281

**Re: Goodyear Police Department Operations Building – Phase II
Goodyear, Arizona**

Dear Mike,

the MOORE / SWICK partnership is pleased to submit this proposal to provide Landscape Architectural services on the above referenced project.

From our review of the information that you sent to our office, our experience working with Architekton on similar projects for different municipalities throughout Arizona, we feel we have a clear understanding of the goals and objectives for this project:

Architekton is interested in hiring *the MOORE / SWICK partnership* to provide Landscape Architectural services from Design through Construction Administration for the 24,000 s.f. Phase II expansion of the existing Goodyear Police Department Operations Building. All designs and plans will be prepared in accordance with the City of Goodyear's Landscape Ordinance.

To meet those goals, we propose the following Scope of Services:

SCOPE OF SERVICES:

1. Schematic Design:

Meet via internet video conferencing with representatives of the City, the Architect, and the Design Team to review all project information prepared to date and finalize all goals, objectives, schedules, and budgets for the project.

Prepare a reproducible Site Plan from Site Plans and Grading and Drainage Plans provided by the Architect and Civil Engineer in digital format.

Visit the project site to identify existing opportunities and constraints and evaluate their potential impact on the design.



Prepare a plan illustrating the conceptual layout of all proposed landscape elements including all trees, shrubs, ground covers, accent plants, turf areas, and the stabilized decomposed granite running track.

Meet via internet video conferencing with representatives of the City, the Architect, and the Design Team to coordinate and review the Schematic Design package.

Subtotal	\$2,760.00
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2. Design Development:

Prepare Design Development landscape plans based on further design thinking and incorporating the review comments on the Schematic Design package.

Prepare outline specifications based on M.A.G. Uniform Standard Specifications for Public Works Construction and the City of Goodyear's supplements for all proposed landscape and irrigation work.

Meet via internet video conferencing with representatives of the City, the Architect, and the Design Team to coordinate and review the Design Development package.

Subtotal	\$3,480.00
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3. Construction Documents:

Prepare 90% Landscape and Irrigation Construction Documents and Specifications incorporating the review comments on the Design Development package.

Meet via internet video conferencing with representatives of the City, the Architect, the Design Team, and the CMAR to coordinate and review the Construction Document package.

Prepare 100%, City approved Landscape and Irrigation Construction Documents and Specifications with the necessary notes and details for bidding, permitting and the installation of the approved design.

Provide clarifications to the CMAR's and Subcontractor's inquiries during the Bidding / GMP process. Prepare addenda as required.

Subtotal	\$4,440.00
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4. Construction Administration Services: Not included in Contract

FEE AND PAYMENT SCHEDULE:

1. Our fee for providing the services described above shall be a lump sum of **\$10,680.00**. We will invoice Architekton on a monthly basis for services rendered.
2. Reimbursable Expenses: We will provide Architekton with one pdf file of plans and specifications for each submittal, and will provide copies of our receipts for any additional expenses as back-up to our invoices.

We thank you for the opportunity to submit this proposal and look forward to working with you on this project.

If you should have any questions or require additional information, please notify our office.

Sincerely,

Gregory P. Swick, PLA, General Partner
the MOORE / SWICK partnership

Date

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Moore-Swick Landscape Architects

	Sr Landscape Architect	Landscape Architect	Landscape Designer	Sr Irrigation Designer	Irrigation Designer	
Schematic Design Phase						Hours per Task
Landscape Architecture - Schematic	8	16		0	0	24
Total Hours this phase	8	16		0	0	24
Fee Rate per personnel	\$ 175.00	\$ 85.00		\$ 95.00		Fee Per Phase
Fee per Phase	\$ 1,400.00	\$ 1,360.00	\$ -	\$ -	\$ -	\$ 2,760.00
Design Development Phase						Hours per Task
Landscape Architecture - Design Development	8	20		4	0	32
Total Hours this phase	8	20	0	4	0	32
Fee Rate per personnel	\$ 175.00	\$ 85.00		\$ 95.00		Fee Per Phase
Fee per Phase	\$ 1,400.00	\$ 1,700.00	\$ -	\$ 380.00	\$ -	\$ 3,480.00
Construction Documents Phase						Hours per Task
Landscape Architecture - Construction Documents	4	20		16		40
Permitting & GMP Development Assistance	2	2				4
Total Hours this phase	6	22	0	16	0	44
Fee Rate per personnel	\$ 175.00	\$ 85.00		\$ 95.00		Fee Per Phase
Fee per Phase	\$ 1,050.00	\$ 1,870.00	\$ -	\$ 1,520.00	\$ -	\$ 4,440.00
Construction Administration Phase						Hours per Task
Landscape Architecture - Construction Administration						0
Total Hours this phase	0	0	0	0	0	0
Fee Rate per personnel	\$ 175.00	\$ 85.00		\$ 95.00		Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees						Total Hours
Total Hours per Personnel	22	58	0	20	0	100
Fee Rate per personnel	\$ 175.00	\$ 85.00		\$ 95.00		Total Fee
Grand Total Fees per Personnel	\$ 3,850.00	\$ 4,930.00	\$ -	\$ 1,900.00	\$ -	\$ 10,680.00



7047 East Greenway Parkway
Suite 250
Scottsdale, AZ 85254
480-398-7729

Project Understanding

This project is the phase two of the Goodyear Police Building, adding onto the phase one building that BDA designed. This project will provide a new connection at the southwest corner of the existing building and then bridge over that access road to a new building across the road. Structurally, the building will be a steel framed construction. The second level and the bridge will be steel composite construction. To accommodate building movement, we will suggest an expansion joint on the north end of the bridge.

Services To Be Provided

Schematic Design – BDA will provide schematic framing and foundation plans that define the structural system, including the structural depth at each level. The foundation plan will note the location of the foundations to support the building. BDA will coordinate with the architectural drawings.

Design Development – BDA will continue with the approved schematic documents and generate framing and foundation plans incorporating any revisions necessary from the schematic level drawings. The design development set will also include framing and foundation details. During this phase, the lateral load resisting system will be defined. BDA will coordinate this process with the architectural drawings and any mechanical drawings that may be available.

Construction Documents – This phase will continue the design process using the design development documents, along with any required revisions. This phase will see the generation of the final construction documents, including the details required for construction for both the gravity load resisting system and the lateral load resisting system. The 90 percent set will be the final design drawings and the complete coordination set. BDA will coordinate our drawing set with the architectural and mechanical drawings. The 100 percent set will include the revisions and additional detailing defined in the coordination process. This phase will also include the review and editing of the Architekton supplied specification sections.

Permitting – This phase will involve the digital plotting of the construction documents, the preparation of the final structural calculations and the development of any required City of Goodyear forms. This phase will also include addressing any permit review comments and the reissuance of the final plans and calculations.

GMP Development Assistance to the CMAR and City of Goodyear – BDA will provide any assistance in the development of the GMP. We will provide responses to comments and questions to allow the CMAR to develop a final GMP for the City.

Construction Administration – Services not included in this contract

J. Greg Brickey, SE
Principal Designer

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - BDA Design

	Greg Brickey	Megan Greene	Dan Coates	Jimmy Jankowicz	Steve Daniels	Jonathan Kreisler	
Schematic Design Phase							Hours per Task
Code Research/Schematic Design	16		4		4		24
Schematic Design Documents	24			60		20	84
Administrative and Billing	4	12					16
Total Hours this phase	44	12	4	60	4	20	124
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Fee Per Phase
Fee per Phase	\$ 6,600.00	\$ 600.00	\$ 400.00	\$ 6,000.00	\$ 500.00	\$ 1,500.00	\$ 15,600.00
Design Development Phase							Hours per Task
Design Development/Coordination	28				8		36
Document Preparaton				64		16	64
Administrative and Billing		11					11
Specification Review	16						16
Total Hours this phase	44	11	0	64	8	16	127
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Fee Per Phase
Fee per Phase	\$ 6,600.00	\$ 550.00	\$ -	\$ 6,400.00	\$ 1,000.00	\$ 1,200.00	\$ 15,750.00
90% Construction Documents Phase							Hours per Task
Design/Coordination	140				20		160
Document Preparation				284		60	284
Administrative and Billing		16					16
Total Hours this phase	140	16	0	284	20	60	460
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Fee Per Phase
Fee per Phase	\$ 21,000.00	\$ 800.00	\$ -	\$ 28,400.00	\$ 2,500.00	\$ 4,500.00	\$ 57,200.00
100% Construction Documents Phase							Hours per Task
Design/Coordination	8				6	8	14
Document Preparation				36			36
Administrative and Billing		8					8
Permitting	4						
GMP Development	8						
Total Hours this phase	20	8	0	36	6	8	70
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Fee Per Phase
Fee per Phase	\$ 3,000.00	\$ 400.00	\$ -	\$ 3,600.00	\$ 750.00	\$ 600.00	\$ 8,350.00
Construction Administration Phase							Hours per Task
Shop Drawing/Submittal Review							0
Field Coordination							0
Administrative and Billing							0
Total Hours this phase	0	0	0	0	0	0	0
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees							Total Hours
Total Hours per Personnel	248	47	4	444	38	104	781
Fee Rate per personnel	\$ 150.00	\$ 50.00	\$ 100.00	\$ 100.00	\$ 125.00	\$ 75.00	Total Fee
Grand Total Fees per Personnel	\$ 37,200.00	\$ 2,350.00	\$ 400.00	\$ 44,400.00	\$ 4,750.00	\$ 7,800.00	\$ 96,900.00

AGREEMENT FOR PROFESSIONAL SERVICES

Date: March 1, 2021

(Proposal is valid for 30 days)

Client

Architekton
464 S. Farmer Avenue, Suite 101
Tempe, AZ 85281
Contact: Mike Rosso

Project

Goodyear Police Building Phase 2
Goodyear, AZ

Henderson Project Number: 2150001498

Project Description and Scope of Services - MEP

Henderson Engineers, Inc. (Henderson) will provide mechanical, electrical, plumbing, fire protection ("M/E/P/FP") drawings and specifications. Henderson's specific scope of services is set forth in the following Scope of Services.



- 26,000 sf two story addition onto the southwest corner of the existing Goodyear Police operations building in the Goodyear Municipal courts complex
- Relocate police administration, CID, Professional Standards, Volunteers. Office of the Chief, Quartermasters storage, Training and Shooting Range so all police functions are in one building.

- Enlarge secured parking lot and possibly reshape the existing retention basin and channels to the basin.
- **Tap into the existing building systems that were set up during phase 1 work (verify will work with proposed addition).**
- This scope is also based on:
 - o Goodyear Police Operations Phase 1 project plans
 - o The Conceptual design for the Goodyear Police Building phase 2 project
 - o The changes to the Goodyear Police Building phase 2 plan (Goodyear PB_P2_notes) based on new leadership direction and proposed future expansion needs
- **Construction** Budget \$12,500,000 (does not include FFE or design costs), shooting range HVAC design by others.

Scope of Services - Technology

Henderson will provide design services and construction drawings and specifications for telecommunications infrastructure for the Goodyear Police Operations Facility- Phase II. The telecommunications infrastructure shall include copper and/or fiber optic cabling; racks/cabinets; terminations and patch panels; faceplates and outlets; cable supports; and requirements for testing and labeling of the infrastructure. Henderson will specify a Wireless LAN and layout access points based on a grid layout. Henderson has assumed that network electronics, including general use network switches, servers, PC's, copier/printers, and telephone systems shall be designed and/or provided by Others.

Systems will be designed to comply with current Goodyear Standards

Basic Scope of Services - Technology

Henderson shall provide the following under the terms of this Agreement:

Deliverables:

- Written description of telecom infrastructure systems for Schematic Design.
- One line telecom infrastructure documents for design development plans.
- One set of construction document review drawings at 2 levels of completion. Henderson will request from Architekton and the City of Goodyear to invite and include IT in the 50% (for budgetary planning) and 90% (finalizing) reviews
- One set of reproducible construction drawings and specifications.

Coordination services:

- Attendance at approximately 1 project design meeting in Goodyear. Meetings via tele/video conference as required. Henderson will request from Architekton and the City of Goodyear to invite and include IT in design meetings.
-
- Coordination of technology design with architect, M/E/P/FP, structural and civil design consultants.

Limited Construction Phase Services consisting of:

- Response to questions during bidding.
- Response to code review comments.
- Review of submittals for compliance with the Contract Documents including up to (2) reviews of each submittal (e.g. shop drawing, product data item, sample and similar submittal) by the Contractor. Submittal reviews beyond this number will be invoiced based on hourly rates as set forth herein.
- Response to contractor written Requests for Information (RFIs) during course of construction.
- Construction observation visits to job site to determine in general if the work observed is being performed in a manner indicating that the work, when fully completed, will be in accordance with the Contract Documents. HEI will not make exhaustive or continuous on-site inspections to check the quality or quantity of the work. (1 trip with 1 designer.)

Exclusions

The following are not provided by Henderson under the terms of this Agreement:

- Design of extension of CATV and telecommunications utilities and/or utility pathways to any site
- Design of extension of CATV and telecommunications utilities and/or utility pathways to within 5' of the building
- Design or coordination of the relocation of any existing data or technology service, component, or device
- Design of any active telephone or data component, other than network switches to support IP-Enabled security devices and Wi-Fi.
- Design of any audio-visual system or components
- Design of any system related to emergency response, dispatch, or 911 service

- Design of any radio or RF systems
- See "Excluded Services" for additional items not included.

SCOPE OF SERVICES - SECURITY

Henderson will provide design services and construction drawings and specifications for the electronic security system and infrastructure. The electronic security systems shall include access control, detention control, video surveillance, and intrusion detection systems. Henderson has assumed that the electronic physical security systems for this building shall be designed as extensions of the existing systems (Camera systems should use the City standard Motorola Avigilon IP-based system, eliminating the need to design network switches. Physical door access needs to tie into existing RS2 system). Henderson has assumed that any dispatch, radio, 911 and/or E911 components, systems and/or equipment shall be designed by Others.

Systems will be designed to comply with current Goodyear Standards

BASIC SERVICES - Security

Henderson shall provide the following under the terms of this Agreement:

Deliverables:

- Written description of security systems for Schematic Design.
- One line security documents for design development plans.
- One set of construction document review drawings at 2 levels of completion.
- One set of reproducible construction drawings and specifications.

Coordination services:

- Attendance at approximately 2 project design meetings.
- Coordination of security design with architect, M/E/P/FP, structural and civil design consultants.

Limited Construction Phase Services consisting of:

- Response to questions during bidding.
- Response to code review comments.
- Review of submittals for compliance with the Contract Documents including up to (2) reviews of each submittal (e.g. shop drawing, product data item, sample, and similar submittal) by the Contractor. Submittal reviews beyond this number will be invoiced based on hourly rates as set forth herein.
- Response to contractor written Requests for Information (RFIs) during course of construction.
- Construction observation visits to job site to determine in general if the work observed is being performed in a manner indicating that the work, when fully completed, will be in accordance with the Contract Documents. Henderson will not make exhaustive or continuous on-site inspections to check the quality or quantity of the work. (Maximum of 2 trips with 1 designer.)

Exclusions

The following are not provided by Henderson under the terms of this Agreement:

- Design of any system related to emergency response, dispatch, or 911 service
- Design of any radio or RF systems
- Design of any audio-visual system or components
- See "Excluded Services" for additional items not included.

SCOPE OF SERVICES - Audio-video

Henderson will provide design services and construction drawings and specifications for audio-video (AV) systems for the Goodyear Police Operations Facility. The AV system shall include displays, video conference equipment, AV cabling; racks/cabinets; terminations and patch panels; faceplates and outlets; cable supports; and requirements for testing and labeling of the infrastructure.

Systems will be designed to comply with current Goodyear Standards

Basic Scope of Services - Audio-video

Henderson shall provide the following under the terms of this Agreement:

Deliverables:

- Written description of AV systems for Schematic Design.
- One line AV systems documents for design development plans.
- One set of construction document review drawings at 2 levels of completion.
- One set of reproducible construction drawings and specifications.

Coordination services:

- Attendance at approximately 1 project design meeting in Goodyear. Meetings via tele/video conference as required.
- Coordination of AV design with architect, M/E/P/FP, structural and civil design consultants.

Limited Construction Phase Services consisting of:

- Response to questions during bidding.
- Response to code review comments.
- Review of submittals for compliance with the Contract Documents including up to (2) reviews of each submittal (e.g. shop drawing, product data item, sample, and similar submittal) by the Contractor. Submittal reviews beyond this number will be invoiced based on hourly rates as set forth herein.
- Response to contractor written Requests for Information (RFIs) during course of construction.
- Construction observation visits to job site to determine in general if the work observed is being performed in a manner indicating that the work, when fully completed, will be in accordance with the Contract Documents. Henderson will not make exhaustive or continuous on-site inspections to check the quality or quantity of the work. (1 trip with 1 designer.)

Exclusions

The following are not by Henderson under the terms of this Agreement:

- Design or coordination of the relocation of any existing data or technology service, component, or device
- Design of any system related to emergency response, dispatch, or 911 service
- Design of any radio or RF systems
- See "Excluded Services" for additional items not included.

Services and Fee Detail

Fee Type	Progressively Billed	Fixed Fee
Schematic Design		
Design Development		Refer to attached spreadsheet
Construction Documents		Refer to attached spreadsheet
Permitting		Refer to attached spreadsheet
Construction Administration		Refer to attached spreadsheet
Total Henderson Professional Services Fee		Refer to attached spreadsheet
Reimbursable Expenses Multiplier		1.05

When accepted by Client this Proposal for Engineering Services and its attachments shall become a binding Agreement between the parties and shall make it subject to the Scope of Services and Terms and Conditions, which are incorporated by this reference. Henderson is authorized to begin performance upon its receipt of a copy of this Agreement signed by Client. If Henderson proceeds at the direction of Client and Agreement is not signed, or altered within ten (10) business days, then it is agreed that terms of Agreement are accepted by Client.

Accepted for Client:

By (signature):

Print Name:

Title:

Date:

Accepted for Henderson Engineers, Inc.

By (signature):

Print Name: Omid Mottahed

Title: Principal

Date: March 1, 2021

SCOPE OF SERVICES

Only services marked with an "X" are included in the Scope of Services.
Services not marked can be provided as Additional Services if requested. Services not listed are excluded.

Disciplines included in Scope of Services (See following sections for specific tasks):

- ☒ Mechanical
- ☒ Electrical
- ☒ Plumbing
- ☒ Fire protection (performance Specs)
- ☐ Refrigeration
- ☐ Acoustics
- ☐ Audio-Visual
- ☐ Security
- ☐ Architectural lighting
- ☐ Telecom
- ☐ Broadcast
- ☐ Energy Modeling

Document Submittals:

- ☒ Schematic Design
- ☒ Design Development
- ☒ Construction Documents Review – 50%
- ☒ Construction Documents Review – 90%
- ☒ Issue for Permit
- ☒ Issue for Bid
- ☒ Issue for Construction

Specifications Format:

- ☐ Specifications on drawings
- ☒ MasterFormat book specifications

BIM:

- ☐ Develop BIM Execution Plan
- ☐ Export Clash Detection Views
- ☐ Perform Clash Detection
- ☐ Host BIM Coordination Meetings

Compliance Documentation:

Refer to Energy Modeling section for services relating to performance path energy code compliance.

- ☒ ASHRAE 90.1 or IECC Energy Code compliance form completion for MEP systems (prescriptive path only).
- ☐ Mall or landlord forms
- ☐ Permit application forms
- ☐ Refrigeration energy code calculations

LEED™:

Refer to Energy Modeling section for services relating to building simulation for building certification programs.

- ☒ Design to the requirements of a LEED rating system is excluded.

WELL™ Building Standard:

Refer to Acoustics section for services relating to acoustics services relating to WELL rating system requirements.

- ☒ Design to the requirements of a WELL rating system is excluded.

Concept Design Phase:

Refer to Meetings and Travel Time for additional services included within this phase.

- ☐ Energy benchmarking
- ☐ Climate analysis
- ☐ Electrical system options analysis
- ☐ Rule-of-thumb major equipment size estimates
- ☐ Utility main size estimates
- ☐ Preliminary design narratives

Schematic Design Phase:

Refer to Meetings and Travel Time for additional services included within this phase.

- ☒ Basis of design narratives
- ☒ Construction document sheet index
- ☒ Major equipment sizing and location plan
- ☒ Preliminary equipment room sizing
- ☒ Chase sizing estimates (based on rules of thumb)
- ☒ Plenum space allocation analysis
- ☒ Preliminary site plan showing utility connection points
- ☒ HVAC zoning plan
- ☒ HVAC Controls system integration philosophy
- ☐ Define lighting level criteria
- ☐ Establish preliminary sanitary/storm invert elevation
- ☐ Create as-built drawings of existing conditions

Design Development Phase:

Refer to Meetings and Travel Time for additional services included within this phase.

- ☐ Demolition drawings
- ☒ Electrical single-line Diagrams
- ☒ Mechanical single-line Diagrams
- ☒ HVAC load calculations
- ☒ Ventilation calculations
- ☒ Air balance calculations
- ☐ Incorporate smoke evacuation concept (concept provided by 3rd party code consultant). Excludes rational analysis.
- ☒ Equipment cut sheets
- ☒ Equipment plans
- ☒ Interior lighting design services

- Refer to Energy Compliance Documentation section for associated scope.
- Refer to Architectural Lighting section for associated scope.
- Items not marked will be provided by the architect, owner or other 3rd party consultant and will not be signed/sealed by Henderson.
 - ☐ Normal lighting layout
 - ☐ Emergency lighting layout
 - ☒ Coordinate lighting layout with a separate specialty lighting designer
 - ☐ Normal lighting selection/specification
 - ☐ Emergency lighting selection/specification
 - ☒ Coordinate lighting selection/specification with separate specialty lighting design
 - ☒ Lighting controls
 - ☒ Lighting circuiting
- ☒ Exterior façade lighting design services
 - Refer to Energy Compliance Documentation section for associated scope.
 - Refer to Architectural Lighting section for detailed information on associated scope.
 - Items not marked will be provided by the architect, owner or other 3rd party consultant and will not be signed/sealed by Henderson.
 - ☐ Normal lighting layout
 - ☐ Emergency lighting layout
 - ☒ Coordinate lighting layout with a separate specialty lighting designer
 - ☐ Normal lighting selection/specification
 - ☐ Emergency lighting selection/specification
 - ☒ Coordinate lighting selection/specification with separate specialty lighting design
 - ☒ Lighting controls
 - ☒ Lighting circuiting
- ☒ Exterior site lighting design services
 - Refer to Energy Compliance Documentation section for associated scope.
 - Refer to Architectural Lighting section for detailed information on associated scope.
 - Items not marked will be provided by the architect, owner or other 3rd party consultant and will not be signed/sealed by Henderson.
 - ☐ Normal lighting layout
 - ☐ Emergency lighting layout
 - ☒ Coordinate lighting layout with a separate specialty lighting designer
 - ☐ Normal lighting selection/specification
 - ☐ Emergency lighting selection/specification
 - ☒ Coordinate lighting selection/specification with separate specialty lighting design
 - ☒ Lighting controls
 - ☒ Lighting circuiting
- ☒ Device layout (for a single typical room)

- ☒ Zone terminal unit layout
- ☒ Preliminary equipment and lighting schedules
- ☒ Two line duct/pipe mains in/out chases
- ☒ Typical floor section
- ☒ Details
- ☒ Specifications table of contents
- ☒ HVAC control diagrams, sequence of operations and initial setpoint matrix
- ☒ HVAC control system performance specification only (in notes on equipment schedule)
- ☒ Roof drain riser location and slope height requirement
- ☐ Dust Collection equipment plan
- ☒ Specialized exhaust equipment plan

Construction Document Phase:

Refer to Meetings and Travel Time for additional services included within this phase.

- ☒ HVAC Piping plans
- ☒ HVAC duct plans
- ☒ Electrical power plans
- ☒ Interior lighting plans
- ☒ Exterior facade lighting plans
- ☒ Exterior site lighting plans
- ☒ Plumbing piping plans
- ☒ Plumbing riser diagram
- ☒ Final specifications
- ☒ Final calculations
- ☒ Final schedules
- ☒ Final details
- ☒ Final HVAC control sequences and setpoint matrix
- ☒ Drawings for rough-in box and conduit for Voice/Data/POS Outlets.
 - ☐ Layout provided to Henderson by others.
 - ☒ Layout **not** provided to Henderson (see "Telecom" for detailed services)
- ☒ Drawings for rough-in box and conduit for security and/or audio-visual devices.
 - ☐ Layout provided to Henderson by others.
 - ☒ Layout **not** provided to Henderson (see "Telecom" for detailed services)
- ☐ Extension of utility services to area of work
- ☒ Generator power design
 - System Purpose*
 - ☐ Healthcare EPSS (NEC Art. 517)
 - ☒ Emergency (NEC Art. 700)
 - ☒ Legally Required (NEC Art. 701)
 - ☒ Standby (NEC Art. 702)
 - Installation Type*
 - ☒ Permanently installed
 - ☐ Temporary/Portable installation
- ☐ Design for UPS / back-up power

- ☒ Lightning protection performance specification
- ☐ Dust Collection plans
- ☒ Specialized exhaust system plans (Evidence, Armory, etc.)

Coordination Services

Consultants' deliverables must be provided to Henderson at least 5 working days prior to any Henderson deliverable issue date influenced by the consultant content. Refer to Meetings and Travel Time for additional services included within this phase.

- ☒ Coordinate lighting design provided by architect, owner, or 3rd party lighting consultant
- ☐ Coordinate with IT, security, AV consultant
- ☐ Coordinate with food service consultant
- ☐ Coordinate with 3rd party commissioning agent
- ☐ Coordinate with 3rd party code consultant
- ☐ Coordinate with 3rd party medical equipment consultant

Bid/Negotiation Phase

Refer to Meetings and Travel Time for additional services included within this phase.

- ☒ Respond to Bidder Questions
- ☐ Bid Review and Analysis

Limited Construction Administration Services

Refer to Meetings and Travel Time for additional services included within this phase.

- ☐ Participate in weekly construction conference calls. Presuming [#] week(s) in schedule and [#] hour(s) per call.
- ☒ Respond to construction RFI's within 5 business day(s) of receiving construction RFI at Henderson.
- ☒ Review submittals within 5 business day(s) of receiving submittals at Henderson. (maximum of 2 review(s) per submittal)
- ☒ Review O&M manual within 5 business day(s) of receiving O&M manual at Henderson. (maximum of 2 review(s)) for general inclusion of all required items.
- ☒ Review Test & Balance report within 5 business day(s) of receiving report at Henderson. (maximum of 2 review(s))
- ☐ Review contractor as-built drawings (including up to [#] review(s) of each system). Reviews limited to adherence to owner required format and general knowledge of the project.
- ☐ Prepare record drawings to include all issued addendums, change orders requiring drawing updates, and construction RFI's requiring drawing updates.
- ☐ Review and comments on [#] cost estimate(s). Reviews limited to comments on quantities and general system level costs based on past experience. Review is contingent on adequate

back-up documentation from contractor/ estimator.

Studies:

- ☐ MEP existing conditions analysis
- ☐ Opinion of probable construction cost
- ☐ Opinions of probable luminaire cost
- ☐ Fault-current study
- ☐ Electrical coordination study
- ☐ Arc flash study
- ☐ Computational Fluid Dynamics (CFD) fire modeling
- ☐ Smoke control rational analysis report. Excludes fire modeling.
- ☐ Lightning protection risk analysis
- ☐ Infection Control Analysis

Fire Protection:

- ☒ Fire Alarm layout with performance specification
- ☐ Fire Alarm design drawings with wiring, voltage drop and battery calculations
- ☒ Fire Sprinkler performance specification only (No sprinkler layout)
- ☐ Fire Sprinkler drawings with sprinkler layout and performance specification
- ☐ Fire Sprinkler design drawings with sprinkler locations, pipes and hydraulic calculations
- ☐ Fire Pump design

Architectural Lighting:

- ☐ Interior architectural lighting design services
- ☐ Exterior façade architectural lighting design services
- ☐ Exterior site architectural lighting design services
- ☐ Coordination Meetings: [#] in-town, [#] out-of-town.
- ☐ Design intent narrative
- ☐ Lighting Concept Design
- ☐ Lighting layout documents
- ☐ Light fixture cut sheets
- ☐ Lighting control intent diagrams
- ☐ Lighting Calculations
- ☐ Development of custom luminaires
- ☐ Full or partial scale lighting mockups
- ☐ Lighting photometric calculations
- ☐ Lighting detail sketches
- ☐ On-site aiming of lighting fixtures: [#] site visit(s)
- ☐ On-site programming: [#] site visit(s)

Audio-Visual:

- ☐ AV system design
 - ☐ Conference rooms
 - ☐ Classrooms
 - ☐ Ballroom/large meeting rooms
 - ☐ Restaurant and bars

- ☐ Sound masking system design
- ☐ Television distribution design
- ☐ Public address system design
- ☐ Digital signage system design
- ☐ IPTV (internet protocol television) design
- ☐ A/V Systems Commissioning
- ☐ Master Planning
- ☐ System Programming

Security:

- ☐ Access control system design
- ☐ Emergency/blue light phone system design
- ☐ Intrusion detection system design
- ☐ Video surveillance system design

Telecom:

- ☐ Interior structured cabling system design
- ☐ Outside plant structured cabling system design
- ☐ Wi-Fi system design ("HEAT" mapping)
- ☐ Wi-Fi system design (grid layout)
- ☐ Network system specification
- ☐ Telephone system specification

Acoustics:

- ☐ On-site acoustical assessment of existing spaces:
[#] site visit(s)
- ☐ Environmental noise assessment: [#] site visit(s)
- ☐ MEP systems noise control guidelines
- ☐ Recommendations for noise criteria
- ☐ Recommendations for natural sound reinforcement
- ☐ Review MEP systems documents relating to noise
- ☐ Review architectural documents relating to acoustics
- ☐ Recommendations for sound isolation
- ☐ Recommendations for sound retarding doors and/or operable partitions

Broadcast:

- ☐ Venue broadcast prewire
- ☐ Venue broadcast control rooms design
- ☐ Sports complex broadcast design
- ☐ Post-production (edit suite) design
- ☐ Mobile unit design
- ☐ Television studio design
- ☐ Broadcast system commissioning: [#] site visit(s)

Energy Modeling:

- ☐ Benchmarking and climate analysis
- ☐ Conceptual Design phase – Simple Box modeling
- ☐ Conceptual Design phase – Energy Model Massing studies. Includes up to 3 alternatives
- ☐ Schematic Design phase Load Reduction energy modeling
- ☐ Schematic Design phase HVAC System Selection energy modeling
- ☐ Schematic Design phase LEED v4: IP credit Integrative Process modeling
- ☐ Design Development phase energy modeling
- ☐ Contract Document phase – Rating system energy modeling
 - ☐ LEED v4: EA credit Optimize Energy Performance
 - ☐ Other Rating System: _____
- ☐ Contract Document phase – energy code performance path compliance modeling
 - ☐ ASHRAE 90.1 / IECC energy code
 - ☐ California Title 24 Part 6 energy code
- ☐ As-Built Energy Modeling. (not calibrated)
- ☐ Post-occupancy / calibrated energy modeling
- ☐ Shading analysis
- ☐ Life Cycle Cost Analysis (LCCA / LCA). Completed with First Cost and O&M Costs by others.

Meetings and Travel Time

These numbers include the numbers for meetings and observations referenced elsewhere in the document.

- ☐ Perform [#] initial site observation visit(s) with report.
- ☒ Attend 3 design coordination meetings.
- ☐ Attend [#] pre-bid meeting(s).
- ☐ Attend [#] bid opening meeting(s).
- ☐ Attend [#] on-site construction meeting(s).
- ☒ Perform 3 construction site observation visits with report for MEP only.

Additional Services

The services listed under Scope of Services which are not checked may be considered additional services.

Additional services shall be provided only upon authorization by the Client and shall be paid for by the Client as hereinafter provided. Fees will be invoiced on a time and expense basis for any Additional Services authorized in writing by the Client, and will be invoiced separately at the following standard hourly rates. Other additional services may include, but are not limited to:

- Modifications to base building utilities or utility improvements to space.
- Evaluation of substitutions.
- Value engineering.
- Responses to construction RFIs where such information is available to the contractor.
- Services made necessary due to default or insufficient work of a contractor.
- Envelope compliance documentation based on architect's proposed design.
- BIM Renderings.
- Design of theatrical/stage lighting.
- Photorealistic renderings of lighting designs.
- Under-slab or underground package for submittals or permit.
- Equipment procurement packages.
- Siphonic Storm Systems design.
- Foundation Drainage design.
- Preparation for, and attendance at, a dispute resolution proceeding or legal proceeding, except where the Consultant is party thereto.
- Design of broadcast lighting.
- Storm water design.
- Documentation of, or modification to, base building utilities within tenant space which services other spaces.
- Street lighting.
- Solar hot water system design.
- Photovoltaic power system design.
- Lightning protection design.
- Wind power system design.
- Mock-ups.
- Daylighting modeling or design.
- Computational fluid dynamics (CFD) modeling applications not explicitly listed elsewhere.
- Preparation or modification of BIM model for the purpose of integration into computer maintenance management system (CMMS).
- Involvement in Water Management Program.

Assumptions

Basis of Proposal

The Scope of Services above is based on the information provided to Henderson as of the date of this proposal. Changes to the scope, changes in conditions, additional information, or redesigns may necessitate additional services.

Plan documents

Plans are generally coordinated with other disciplines but minor clashes may still exist. It is the expectation of Henderson that an installation contractor will be retained to cross check final equipment and component dimensions once they have completed the submittal process. Specifications and/or details will include some accessories that are not shown on plans due to scale limitations. Plumbing plans cover components within 5'-0" outside of the building and do not include foundation drainage.

BIM Assumptions

Definition of BIM Model

Building Information Model (Model) is a digital representation of physical and functional characteristics of a facility. A Model is a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle; defined as existing from earliest conception to demolition.

Level of Development (LOD):

In general terms, systems covered by this scope of work are graphically represented within the Model as a specific system, object, or assembly with approximate quantities, size, shape, location, and orientation (LOD 300 as defined by AIA Document G202-2013). Model content is limited to show the routing and installation intent of building systems and is generally coordinated with the architectural design and design of other consultants. Final coordination is the responsibility of the installation contractor.

Authorized Uses are Limited to the Following:

The Model is suitable for general clash detection with other consultants' elements and systems. If the Model is used to generate quantity take offs for cost estimating purposes, there is no guarantee of completeness or accuracy. When conflicts arise, the contract documents take precedence over the Model. The Model may be used to show ordered, time-scaled appearance of majority of detailed architectural and other consultants' elements and systems. The Model and its content may only be used as stated above and only for this Project. It may not be used for any other purpose without first obtaining Henderson's written permission.

Copyright and Distribution:

Henderson is not transferring its copyrights or other rights in the Model or the Model content. The Client will be given a license to use the Model for the Authorized Uses listed above. The recipient may not distribute the Model or the content of the Model, to any other person or entity, including contractors or other consultants on the Project, nor may it be shared with anyone within the Client's organization who does not have a need to access it for the listed uses on this project without the written consent of Henderson.

BIM Execution Plan (BEP)

As soon as is practicable, but in no event later than thirty (30) days after the execution of the Contract between the Owner and the Construction Manager, all Project Participants shall meet, confer and use their best efforts to agree upon the terms of or modifications to a BIM Execution Plan. In the event of a conflict between this contract and the BEP, this contract shall control unless all parties agree in writing to adopt the BEP.

Facility Management Integration Excluded

The Model will be used to represent the design intent for reference on this Project only. The Model is not intended to be used for data integrated into a Computerized Maintenance Management System (CMMS). It is not intended to be used for ongoing operations. This service use can be provided as an additional service.

Level of Assumed Reliability

Unless otherwise stated in the agreed BEP, the reliability of existing objects is assumed to be Level 0 as defined below.

- Level 0 – Object location is based on as-built information. Henderson is not responsible for accuracy of assumed object locations.

- Level 1 – Object location is based on Radar scanning, Lidar scanning, or Photogrammetry identified information. Henderson is entitled to rely on provided information with the assumption that scanned objects are within 6 inches of their indicated location. Properties of and data associated with scanned objects are not verified.
- Level 2 – Object location is based on Level 1 plus physical verification of object properties.

Expert Witness

Expert witness services and other services related to legal proceedings are explicitly excluded from this Agreement.

Hygrothermal Analysis

Hygrothermal Analysis services and other services related to vapor barriers are explicitly excluded from this Agreement.

Fee Details

All Compensation to be in US Dollars net of tax

Reimbursable Expenses

Client shall reimburse Henderson, at the multiplier listed in the Fee Detail, for reimbursable expenses necessarily incurred by Henderson in relation to the Project. Reimbursable expenses include, but are not limited to:

- a. Reproductions, plots, postage, handling, and delivery of Project related documents and electronic media requested by the Client or Owner
- b. Travel expenses including, but not limited to, airfare, lodging, meals, airport parking, and car rental
- c. Overnight delivery, handling, and postage charges
- d. Local delivery, handling, and postage charges
- e. Automobile mileage, required to meet Project meeting requirements and site visit requirements, calculated at the current published IRS standard mileage rate.

Local Tax

Sales, excise, and/or other local tax ("Local Taxes") will be applied when required by law. Any Local Taxes are in addition to, and are not included in, the stated fee. Any necessary Local Taxes will be billed to Client and are payable within thirty days of the invoice.

HOURLY RATE SCHEDULE - \$ per hour

Core Rates

Principal	195
Department Director	165-175
Senior PM / Engineer / Designer	165
Lead PM / Engineer / Designer	145
Engineer / Designer III	135
Engineer / Designer II	120
Engineer / Designer I	110
Site Observation Specialist	105-110
BIM/CADD Technician	85-90
Administrative Specialist	85

Special Rates

Senior Fire Code Consultant	170
Fire Code Consultant	150
Senior Broadcast Designer	170
Senior / Lead Acoustical Consultant	145-165
Acoustical Consultant	110-125
Senior Architectural Lighting Designer	125-166
Architectural Lighting Designer	110-115
Construction Manager	145
Electrical Systems / Eng. Manager	145
Commissioning Manager / Agent	135
Commissioning Technician	110-120
Estimator	135
Certified Energy Manager	135
Project Developer / Coordinator	110

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Henderson Engineers Mechanical & Plumbing

	Marcus Sanchez	Elyse Cocco	Evan Kelly	Eric Gagnon	QA team	Nicholas Christopherson	Sue Pataray	
	PRINCIPAL/ Mechanical PE	Project Manager	Mechanical Designer/Drafter	Plumbing Designer/Drafter	Mech & Plum Quality Assurance	BIM Technician	Admin Specialist	Hours per Task
Schematic Design Phase								
Mechanical & Plumbing Engineering - SD	6	16	30	20	10	10	4	96
Total Hours this phase	6	16	30	20	10	10	4	96
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 135.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ 1,170.00	\$ 2,320.00	\$ 3,600.00	\$ 2,700.00	\$ 1,750.00	\$ 900.00	\$ 340.00	\$ 12,780.00
Design Development Phase								Hours per Task
Mechanical & Plumbing Engineering - DD	8	25	84	80	10	10	10	227
Total Hours this phase	8	25	84	80	10	10	10	227
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 135.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ 1,560.00	\$ 3,625.00	\$ 10,080.00	\$ 10,800.00	\$ 1,750.00	\$ 900.00	\$ 850.00	\$ 29,565.00
Construction Documents Phase								Hours per Task
Mechanical & Plumbing Engineering - CD	8	40	185	140	20	10	8	411
Mechanical & Plumbing Engineering - Permitting & GMP	6	10	20	20	10	8	8	82
Total Hours this phase	14	50	205	160	30	18	16	493
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 135.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ 2,730.00	\$ 7,250.00	\$ 24,600.00	\$ 21,600.00	\$ 5,250.00	\$ 1,620.00	\$ 1,360.00	\$ 64,410.00
Construction Administration Phase								Hours per Task
Mechanical & Plumbing Engineering - CA								0
Total Hours this phase	0	0	0	0	0	0	0	0
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 135.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees								Total Hours
Total Hours per Personnel	28	91	319	260	50	38	30	816
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 135.00	\$ 175.00	\$ 90.00	\$ 85.00	Total Fee
Grand Total Fees per Personnel	\$ 5,460.00	\$ 13,195.00	\$ 38,280.00	\$ 35,100.00	\$ 8,750.00	\$ 3,420.00	\$ 2,550.00	\$ 106,755.00

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Henderson Engineering (Electrical & Fire)

	Omid Mottahed	Elyse Cocco	Javier Porras	Matthew Mylan	QA team	Nicholas Christopherson	Sue Pataray	
Schematic Design Phase	PRINCIPAL/ Electrical PE	Project Manager	Electrical Designer/Drafter	Fire Designer/Drafter	Electrical Quality Assurance	BIM Technician	Admin Specialist	Hours per Task
Electrical Engineering - Schematic	6	16	36	10	10	10	4	92
Total Hours this phase	6	16	36	10	10	10	4	92
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 120.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ 1,170.00	\$ 2,320.00	\$ 4,320.00	\$ 1,200.00	\$ 1,750.00	\$ 900.00	\$ 340.00	\$ 12,000.00
Design Development Phase								Hours per Task
Electrical Engineering - Design Development	8	25	80	15	10	10	10	158
Total Hours this phase	8	25	80	15	10	10	10	158
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 120.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ 1,560.00	\$ 3,625.00	\$ 9,600.00	\$ 1,800.00	\$ 1,750.00	\$ 900.00	\$ 850.00	\$ 20,085.00
Construction Documents Phase								Hours per Task
Electrical Engineering - Construction Documents	8	40	180	20	20	10	20	298
Electrical Engineering - Permitting & GMP	6	10	20	10	10	8	10	74
Total Hours this phase	14	50	200	30	30	18	30	372
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 120.00	\$ 175.00	\$ 90.00	\$ 90.00	Fee Per Phase
Fee per Phase	\$ 2,730.00	\$ 7,250.00	\$ 24,000.00	\$ 3,600.00	\$ 5,250.00	\$ 1,620.00	\$ 2,700.00	\$ 47,150.00
Construction Administration Phase								Hours per Task
Electrical Engineering - CA								0
Total Hours this phase	0	0	0	0	0	0	0	0
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 120.00	\$ 175.00	\$ 90.00	\$ 85.00	Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grand Total Fees								Total Hours
Total Hours per Personnel	28	91	316	55	50	38	44	622
Fee Rate per personnel	\$ 195.00	\$ 145.00	\$ 120.00	\$ 120.00	\$ 175.00	\$ 90.00	\$ 85.00	Total Fee
Grand Total Fees per Personnel	\$ 5,460.00	\$ 13,195.00	\$ 37,920.00	\$ 6,600.00	\$ 8,750.00	\$ 3,420.00	\$ 3,740.00	\$ 79,085.00

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Henderson Engineering Low Voltage Systems (Telecom, Security, AV)

	Mark Maurer (Sec)	Benjamin Thirakul (AV)	Ulric Velimirovic (IT)				
Schematic Design Phase							Hours per Task
Low Voltage Systems Engineering - Schematic	7	13	16				36
Total Hours this phase	7	13	16				36
Fee Rate per personnel	\$ 165.00	\$ 130.00	\$ 110.00				Fee Per Phase
Fee per Phase	\$ 1,155.00	\$ 1,690.00	\$ 1,760.00				\$ 4,605.00
Design Development Phase							Hours per Task
Low Voltage Systems Engineering - Design Development	19	36	48				103
Total Hours this phase	19	36	48				103
Fee Rate per personnel	\$ 165.00	\$ 130.00	\$ 110.00				Fee Per Phase
Fee per Phase	\$ 3,135.00	\$ 4,680.00	\$ 5,280.00				\$ 13,095.00
Construction Documents Phase							Hours per Task
Low Voltage Systems Engineering - Construction Documents	20	40	56				116
Low Voltage Systems Engineering - Permitting & GMP	8	12	12				32
Total Hours this phase	28	52	68				148
Fee Rate per personnel	\$ 165.00	\$ 130.00	\$ 110.00				Fee Per Phase
Fee per Phase	\$ 4,620.00	\$ 6,760.00	\$ 7,480.00				\$ 18,860.00
Construction Administration Phase							Hours per Task
Low Voltage Systems Engineering - CA							0
Total Hours this phase							0
Fee Rate per personnel	\$ 165.00	\$ 130.00	\$ 110.00				Fee Per Phase
Fee per Phase	\$ -	\$ -	\$ -				\$ -
Grand Total Fees							Total Hours
Total Hours per Personnel	54	101	132				287
Fee Rate per personnel	\$ 165.00	\$ 130.00	\$ 110.00				Total Fee
Grand Total Fees per Personnel	\$ 8,910.00	\$ 13,130.00	\$ 14,520.00				\$ 36,560.00

ABACUS

Abacus Project Management, Inc.
3030 N. Central Avenue, Suite 803
Phoenix, AZ 85012
800 518 0876
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Goodyear Police Phase 2 – Scope / Fee Narrative

Understanding of Project (excerpted from e-mail from Michael Rosso dated February 10, 2021)

We understand this project is referred to as Goodyear Police Phase 2. The project is understood to be a 24,000 Sq. Ft. two story addition located on the southwest corner of the existing Goodyear Police operations building in the Goodyear Municipal courts complex. We understand the scope to include the following elements:

- Relocate police administration, CID, Professional Standards, Volunteers. Office of the Chief, Quartermasters storage, Training and Shooting Range so all police functions are in one building.
- Enlarge secured parking lot.
- Possibly reshape the existing retention basin and channels to the basin.

We also understand that the intent is for this Phase 2 work to tap into the existing building systems that were set up during phase 1 work (verify will work with proposed addition).

The delivery method for this project is understood to be Construction Manager at Risk (CM@R), with a Construction Budget \$12,500,000 (does not include FFE or design costs)

Architekton (CLIENT) has requested Cost Estimating Services from Abacus to include single peer review cost reviews of the CM@R cost estimates at each of the following milestones:

- Schematic Design

In addition, CLIENT has also requested detailed Cost Estimating Services from Abacus for a single, detailed cost estimate at each of the following milestones:

- Design Development (30%)
- Construction Documents (60%)

Understanding of Scope of Service and Approach:

Our Cost Estimating Deliverables will be reflective of the level detail contained in the design drawings, specifications and pricing information received from the CM@R Contractor. We will require approximately 10-business days for the completion of each Peer Review Cost Estimate from the date we receive the required design documents, specification and pricing information from the CM@R Contractor....and a signed contract or purchase order.

Schematic Design (SD) Phase: Based upon receipt of appropriate schematic design documents from the CLIENT and all necessary pricing information and cost estimates from the CM@R Contractor, Abacus will review the documents to familiarize ourselves with the intent and level of completion. At that point, we will prepare a peer review of the cost estimate received from the Contractor. This will include a review of their unit pricing, mark-ups, approach and methodology and some limited spot checking of quantity / area take-offs. We will not complete a full, independent 3rd party cost estimate and area take-offs.

- Deliverable will be a final peer review cost report reflective of the level of detail contained in the schematic design documents and presented in a format acceptable to the Client. This report will offer our professional opinion of the accuracy and completeness of the Contractor's cost estimate at the Schematic Design Phase.

30% Design Development (DD) Phase: Based upon receipt of appropriate DD documents from the Architect, Abacus will review the documents to familiarize ourselves with the intent and level of completion. At that point, we will prepare a detailed quantity / area take-off and apply appropriate unit pricing to arrive at a complete Opinion of Probable Cost for the DD package.

- Deliverable will be a completed DD level estimate reflective of the level of detail contained in the DD documents and presented in a format acceptable to the Client.

ABACUS

60% Construction Document (CD) Phase: Based upon receipt of appropriate CD documents from the Architect, Abacus will review the documents to familiarize ourselves with the intent and level of completion. At that point, we will prepare a detailed quantity / area take-off and apply appropriate unit pricing to arrive at a complete Opinion of Probable Cost for the 60% CD package.

- Deliverable will be a completed 60% CD level estimate reflective of the level of detail contained in the 60% CD documents and presented in a format acceptable to the Client.

Proposed Lump Sum Fee – Schematic Design Phase:

• Peer Review Cost Estimate:	\$9,596.96
• Reimbursable Allowance (Printing, Mileage etc.):	\$250.00

	\$9,846.96

Proposed Lump Sum Fee – 30% Design Development Phase:

• Detailed Cost Estimate:	\$20,783.92
• Reimbursable Allowance (Printing, Mileage etc.):	\$250.00

	\$21,033.92

Proposed Lump Sum Fee – 60% Construction Documents Phase:

• Detailed Cost Estimate:	\$17,026.24
• Reimbursable Allowance (Printing, Mileage etc.):	\$250.00

	\$17,276.24

Grand Total: \$48,157.12

Reimbursable Expenses:

- Printing of Drawings and Specs at each milestone requiring Estimating; cost + 10%
- Mileage will be billed at .56 per mile traveled

ABACUS

Hourly Rates are as follows (2021 rates shown):

-Principal:\$195.84
-Project Director:\$174.42
-Senior Cost Estimator:\$159.12
-Cost Estimator:\$143.82
-MEP Estimator:.....\$143.82
-Administrative Support:.....\$73.44

Personnel:

Abacus will assign Dan Ergle, Sr. Cost Estimator to this project. As needed, our estimating team will be supported by Project Principal, Adam Brill and administrative staff throughout the project.

Additional Services:

If applicable, the following would be considered Additional Services:

- Site Visits
- Additional Options / Schemes and Alternatives
- Additional Milestone Estimates beyond those identified above
- Cost Reconciliation Services
- Value Engineering Services

No Additional Services would be incurred without both parties first reaching written agreement.

Goodyear Police Operations Building Phase 2
Fee Development Sheet
Architekton Design Team - Abacus Project Management

	Adam Brill	Dan Ergle	Arno and George	Christy McLean	n/a	n/a	
Schematic Design Phase	Principal	Sr. Cost Estimator	MEP Cost Estimator	Admin	n/a	n/a	Hours per Task
Peer Review of CMAR SD Cost Estimate							0
Total Hours this phase	4	40	16	2	0	0	62
Fee Rate per personnel	\$ 195.84	\$ 159.12	\$ 143.82	\$ 73.84	\$ -	\$ -	Fee Per Phase
Fee per Phase	\$ 783.36	\$ 6,364.80	\$ 2,301.12	\$ 147.68	\$ -	\$ -	\$ 9,596.96
Design Development Phase (30%)							Hours per Task
Detailed DD Cost Estimate							0
Total Hours this phase	1	100	32	1	0	0	134
Fee Rate per personnel	\$ 195.84	\$ 159.12	\$ 143.82	\$ 73.84	\$ -	\$ -	Fee Per Phase
Fee per Phase	\$ 195.84	\$ 15,912.00	\$ 4,602.24	\$ 73.84	\$ -	\$ -	\$ 20,783.92
Construction Documents Phase (60%)							Hours per Task
Detailed CD Cost Estimate							0
Total Hours this phase	1	80	28	1	0	0	110
Fee Rate per personnel	\$ 195.84	\$ 159.12	\$ 143.82	\$ 73.84	\$ -	\$ -	Fee Per Phase
Fee per Phase	\$ 195.84	\$ 12,729.60	\$ 4,026.96	\$ 73.84	\$ -	\$ -	\$ 17,026.24
Grand Total Fees							Total Hours
Total Hours per Personnel	6	220	76	4	0	0	
Fee Rate per personnel	\$ 195.84	\$ 159.12	\$ 143.82	\$ 73.84	\$ -	\$ -	Total Fee
Grand Total Fees per Personnel	\$ 1,175.04	\$ 35,006.40	\$ 10,930.32	\$ 295.36	\$ -	\$ -	\$ 47,407.12