

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into this 8th day of October, 2015, by and between Town of Paradise Valley, hereinafter referred to as TOWN, and Dibble Engineering hereinafter (“Dibble”), whose principal place of business is located at 7500 North Dreamy Draw Drive, Suite 200, Phoenix, Arizona 85020.

WHEREAS, TOWN desires to employ Dibble to provide engineering services for the analysis of the Cherokee and Cheney Watersheds outlined in the Scope of Services dated October 1, 2015, attached, and support for the Town of Paradise Valley.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions herein contained, the parties agree as follows:

SECTION I – BASIC SERVICES

Dibble shall provide the basic services described in Exhibit “A,” the Scope of Work at the rate set forth in Attachment B of Exhibit “A” attached hereto and made a part hereof, and any other services reasonably required or incidental to performing the scope of work contemplated by this Agreement (hereinafter the “Scope of Services”).

SECTION II – ADDITIONAL SERVICES

If additional services are requested by TOWN, the Scope of Services within this Agreement may be modified, subject to mutual consent, by execution of an addendum by authorized representatives of both parties, setting forth the additional scope of services to be performed, the performance time schedule, and the compensation for such services.

SECTION III – COMPENSATION

Dibble will complete the proposed plan of work for the fee amounts and expenses reimbursements as described in Exhibit “A” attached hereto and made a part thereof, with the total fees and expenses to be paid to Dibble not to exceed \$420,051.

SECTION IV – INDEMNIFICATION

A. General

Each party hereto agrees to hold harmless the other party hereto from all damages, costs, or expenses in law and equity, including costs of suit resulting from its own negligent acts, errors, omissions or its own willful misconduct.

TOWN hereby acknowledges that Dibble has professional liability insurance for claims arising out of the performance of or failure to perform professional services, including, but not limited to the preparation of reports, designs, drawings and specifications.

SECTION V – INSURANCE REQUIRED

Dibble shall maintain, during the term of this contract, the following insurance:

<u>Coverage</u>	<u>Minimum Limits</u>
<u>General Liability</u> Comprehensive General Liability, Including: Premises and Operations Contractual Liability Personal-Injury Liability Independent Contractors Liability (if applicable)	\$500,000 Combined Single Limit, per occurrence and general aggregate
<u>Automotive Liability</u> Comprehensive Automobile Liability (including, owned, non-owned & hired autos)	\$500,000 Combined Single Limit, per occurrence
<u>Workers' Compensation & Employer's Liability</u> Workers' Compensation Insurance Employer's Liability	Statutory, \$1,000,000
<u>Professional Liability</u> Professional Liability Insurance	\$500,000 per claim and annual aggregate

SECTION VI – INDEPENDENT CONTRACTOR STATUS

Dibble shall be an independent contractor and shall have responsibility for and control over the details and means of providing the services under this Agreement.

SECTION VII – SUSPENSION OF WORK

TOWN may at any time, with fifteen (15) days written notice, suspend further work under this Agreement by Dibble. All such suspensions shall extend the time schedule for performance, and Dibble shall be paid for all services performed and reimbursable expenses incurred prior to the suspension date.

SECTION VIII – TERMINATION

Either party may terminate this Agreement at any time by giving thirty (30) days written notice to the other party of such termination. If this Agreement is terminated as provided herein, Dibble will be paid an amount which bears the same ratio to the total compensation as the services actually performed bears to the total services covered by this Agreement, less compensation previously paid.

SECTION IX – COMPLIANCE WITH LAW

Each party hereto will use reasonable care to comply with applicable laws in effect at the time the services are performed hereunder which, to the best of their knowledge, information and belief, apply to their respective obligations under this Agreement.

SECTION X – SUCCESSORS AND ASSIGNS

This Agreement shall be binding on the successors and assigns of the parties, but it shall not be assigned by either party without written consent of the other party.

SECTION XI – ATTORNEYS FEES

In the event that any judgment is entered in any action upon this Agreement, the party hereto against whom such judgment is rendered agrees to pay the amount equal to the reasonable attorneys fees of the prevailing party in such action and that such amount may be added to and made a part of such judgment.

SECTION XII – RECORDS

Records of Dibble's direct labor costs, payroll costs, and reimbursable expenses pertaining to the project covered by this Agreement will be kept on a generally recognized accounting basis and made available during normal business hours upon reasonable notice.

SECTION XIII – MISCELLANEOUS PROVISIONS

This Agreement is subject to the following general provisions:

- A. Any provision of this Agreement held to violate any law shall be deemed void, and all remaining provisions shall remain in full force and effect.
- B. This Agreement shall be interpreted under the laws of the State of Arizona. The parties agree that the proper jurisdiction and venue for any proceeding arising out of this Agreement shall be in the State of Arizona, County of Maricopa.
- C. This Agreement comprises a final and complete statement of the understandings between the parties and supersedes all other communications, representations or agreements, whether oral or written, relating to the subject matter of this Agreement.
- D. Any notices given pursuant to this Agreement shall be effective on the third business day after posting by first class mail, postage prepaid, to the address appearing immediately after the signatures below.
- E. This Agreement is subject to the provisions of ARS § 38-511 regarding conflicts of interest. The Town may cancel this Agreement without penalty or further obligations by the Town or any of its departments or agencies if any person significantly involved in initiating, negotiating, securing, drafting or creating the Agreement on behalf of the Town

or any of its departments or agencies, is at any time while the Agreement or any extension of the Agreement is in effect, an employee of any other party to the Agreement in any capacity or a consultant to any other party of the Agreement with respect to the subject matter of the Agreement.

F. **Foreign States**. In accordance with A.R.S. §35-391.06, Dibble certifies that it does not have “scrutinized business operations” in Sudan. In accordance with Ariz. Rev. Stat. §35-393.06, the offeror hereby certifies that the offeror does not have scrutinized business operations in Iran.

G. **Legal Workers**. If and to the extent A.R.S. §41-4401 is applicable to this Agreement, Dibble shall comply with laws regarding workers as follows:

Dibble warrants to TOWN that Dibble and all its sub-consultants will comply with all federal immigration laws and regulations that relate to their employees and that Dibble and all its sub-consultants now comply with the E-Verify Program under A.R.S. §23-214(A).

A breach of the foregoing warranty by Dibble shall be deemed a material breach of this Agreement that is subject to penalties up to and including termination of this Agreement.

TOWN retains the legal right to inspect the papers of any employee of Dibble or any sub-consultant who works on this Agreement to ensure that they or the sub-consultant is complying with the warranty given above.

TOWN may conduct random verification of Dibble and its sub-consultants employment records to ensure compliance with the warranty given above.

Dibble shall indemnify, defend and hold TOWN harmless for, from and against all losses and liabilities arising from any and all violations of the warranty given above.

IN WITNESS WHEREOF, the parties hereto have accepted, made and executed this Agreement upon the terms, conditions and provisions above stated, the day and year first above written.

DIBBLE ENGINEERING

By: _____

Name: Kevin W. Roberts, P.E.
Title: Principal
Address: 7500 North Dreamy Draw Drive
Suite 200
Phoenix, AZ 85020

TOWN OF PARADISE VALLEY

By: _____

Name: Kevin Burke
Title: Town Manager
Address: 6401 East Lincoln Dr.
Paradise Valley, AZ 85253

ATTEST:

Duncan Miller, Town Clerk

APPROVED AS TO FORM:

Andrew M. Miller, Town Attorney

SCOPE OF WORK

EXHIBIT "A"

October 1, 2015

Mr. Jim Shano, P.E., C.P.M.
Town of Paradise Valley
6401 East Lincoln Avenue
Paradise Valley, AZ 85253

**Re: Scope of Services
Watershed Studies**

Dear Mr. Shano:

Thank you once again for the opportunity to work with you and Mr. Knapp. I am personally excited to begin this important project which will help improve the safe management of stormwater throughout the Town, and to continue the outreach efforts that you have already begun.

The Scope of Services proposed in Attachment 'A' outlines the tasks that are needed, based on our review of the Request for Qualifications, our conversations with you, and our knowledge of Paradise Valley. We understand that this contract will be limited to the Cheney and Cherokee Wash watersheds only. We also understand that you plan to contract the study of the four other watersheds in the Town in coming years. Because this is the first study, it will set precedents for the engineering analysis, design and public outreach procedures used in subsequent watershed studies. Additionally, the development of documents such as the new stormwater design standards and potential funding sources will likely not be required in future study efforts.

Attachment 'B' shows the fee summary and manhours required to complete the tasks outlined in Attachment 'A'. Please review these documents and let me know if you have any comments or concerns. We are prepared to begin immediately after receiving a Notice to Proceed. Thank you once again for this opportunity!

Sincerely,
Dibble Engineering



Robert K. Haneline, P.E., LEED AP
Drainage & Flood Control Practice Leader



Kevin W. Roberts, P.E.
Principal

cc: Legal File

ATTACHMENT "A" – SCOPE OF SERVICES

Project Description

As a consequence of large storm events in recent months, the Town of Paradise Valley (Town) is seeking to conduct engineering studies of the Cheney and Cherokee Wash watersheds. The purpose of the studies is to analyze available hydrologic models of the watersheds, identify system-wide and localized flooding hazards, develop alternatives for making improvements, and creating a Capital Improvement Program (CIP) to help guide the Town's budgeting processes.

Additionally, the Town's current stormwater design criteria will be updated and a Public Information and Outreach (PIO) effort will be conducted to keep area stakeholders and residents informed, solicit input in the identification of flooding hazards and gauge the appropriateness of potential solutions.

To accomplish these goals, the following detailed Scope of Services describes the efforts needed:

TASK 1 – Project Management and Data Collection

TASK 1.1 – Project Management

Dibble Engineering (CONSULTANT) will manage the project on behalf of the Town. Project characteristics such as the project schedule, budget and invoices, staffing levels, quality assurance and quality control (QA/QC), public information and outreach (PIO) and presentations to the Town will be actively managed. Quality control reviews will be conducted continuously throughout the execution of the work, especially prior to delivery of any documents to the Town and/or stakeholders.

After receiving contract approval, CONSULTANT will conduct a kick-off meeting with the Town to discuss the scope of the project and Town requirements specific to the project. CONSULTANT will provide a Project Communications Plan at the project kickoff meeting, which will outline the points of contact, methods and frequency for communications with the project team and stakeholders.

Consultant will provide a Critical Path Method (CPM) schedule for the project (assumed to be 10 months), which identifies the tasks needed to complete the work, the order of their completion, and the planned completion dates for each task and document submittal to the Town.

CONSULTANT will hold up to forty (40) weekly internal coordination meetings to ascertain the progress of the work, identify information needs, discuss upcoming milestone dates, and staffing needs to accomplish the work according to the project (assumed 10 month) schedule.

CONSULTANT will also manage the project labor and reimbursables budget, and will provide monthly invoices to the Town in accordance with the Town's invoicing requirements.

CONSULTANT will send the Town a weekly Project Status Update via email which is meant to continually keep the Town informed of the status of the project, any current challenges to be addressed, upcoming submittal milestones and any action that is required by the Town.



Town of Paradise Valley Watershed Studies
Attachment "A" – Scope of Services
October 1, 2015
Page 2

Please refer to page 29 for summaries of the project meetings and deliverables included in this scope of services.

TASK 1.2 – Coordination with the FCDMC, COP and COS

During the early phases of the project, and as needed throughout the project, CONSULTANT will coordinate with the Flood Control District of Maricopa County (FCDMC), City of Phoenix (COP) and City of Scottsdale (COS) to obtain helpful studies and data, explain the scope of the project, and inform them of any planned capital improvement projects that may require direct coordination with those agencies.

ASSUMPTIONS Task 1.2:

- Task assumes the conduct of one (1) coordination meeting where all agencies are in attendance.

TASK 1.3 – Data Collection

DIBBLE will request, review and document studies, data, as-built plans, and other documents pertinent to the project from public agencies, private utilities, and other stakeholders that may affect the study of the watersheds. This may include information on existing and proposed land use, parks and recreation, and character area designation and guidelines (HOAs, resorts and streetscapes), as applicable. CONSULTANT will also map these areas for each watershed to create an overlay be used to develop acceptability criteria for context sensitivity.

TASK 1.4 – Field Investigations – Cheney Watershed

A field investigation will be conducted for the Cheney Watershed whereby CONSULTANT will observe drainage infrastructure, general conditions of natural and designed wash corridors, visible topography, other public infrastructure and visual evidence of past flooding/erosion damage. Locations of known drainage problems, brought to our attention through the PIO process, will also be observed and documented. CONSULTANT will map these based on field generated GPS points to identify opportunities/constraints and develop criteria for compatibility with existing land forms and land uses.

TASK 1.5 – Field Investigations – Cherokee Wash Watershed

See Task 1.4, similarly applied to the Cherokee Wash watershed.

TASK 1.6 – Inventory of Existing Drainage Facilities

CONSULTANT will compile an inventory of the existing drainage facilities identified through the PIO process, field investigations, as visible on aerial photos or as shown on other record information, and as identified through our review of the available FLO-2D models. This will include Identifying drainage types such as historic and current natural and designed wash corridors, major basins, channels, washes, LID opportunities, etc. and mapping those features to be used to determine the effectiveness criteria for context sensitivity. The drainage facilities will be listed and described as well as shown on watershed maps. The maps will be developed using Geographic Information System (GIS) software and will be provided in digital form to the Town as a part of the Data Collection Report.



Town of Paradise Valley Watershed Studies
Attachment "A" – Scope of Services
October 1, 2015
Page 3

TASK 1.7 – Data Collection Report

A Data Collection Report will be provided to the Town which will include a listing of the information requested, information received, site photographs taken, and copies of watershed maps that graphically show the locations of the facilities. Electronic versions of the mapping will also be provided for the Town's use.

TASK 1.8 – Presentation of Project Results to the Town Council

Upon completion of the project, CONSULTANT will present the methods, conclusion and recommendations made as a result of the project. The presentation will be made at a council meeting of the Town's choosing.

TASK 2 – Public Information and Outreach

CONSULTANT will facilitate a thoughtful and comprehensive public engagement process that reflects the unique characteristics of this project and Town of Paradise Valley project stakeholders. The following public engagement approach was developed with input from the Town, as well as initial CONSULTANT research and preliminary understanding of desired public meetings and stakeholders and existing communication channels preferred by the Town:

TASK 2.1 – Refine Scope of Work, Project Schedule and Attend Kick off Meeting

CONSULTANT PIO team will prepare for and attend the project kick off meeting to discuss, review and comment on project milestones, scheduling and preparing for the first community open house and refine notification methods and logistics pertaining to the delivery of hard copy mailers, web site notifications, email blasts and/or social media notices.

TASK 2.2 - Prepare a Public Involvement & Communications Plan

CONSULTANT will prepare a brief Public Involvement Plan (PIP) that will detail the strategies and tools for informing the public through the life of the project as well as eliciting meaningful input regarding identified watersheds. The PIP will establish communication goals, identify key project stakeholders and levels of participation for each outreach event, and create a project “brand” by articulating clear and concise project goals and objectives and key messages. The PIP is a fluid document, which will be revisited periodically, allowing for mid-project adjustments when necessary.

TASK 2.3 – Develop Master Project Stakeholder Inventory and Contact Lists

Utilizing a shape file delineating the boundary of each watershed provided by the Town, CONSULTANT will define the notification area and create a comprehensive project stakeholder/property ownership contact identification matrix for each watershed. Names, addresses and parcel numbers of each contact will be identified and referenced throughout the course of the project.

A second, comprehensive project contact list for e-mail blasts and/or social media outreach will also be developed and referenced throughout the life of the project.

TASK 2.4 – Project Kick off Community Workshop & Open House

CONSULTANT will organize, schedule and attend an initial community workshop/open house meeting with Town Staff, project team members, desired stakeholders (such as elected officials or outside agencies), along with the community at large to discuss and identify overall project goals, objectives, challenges and concerns. The express intent of this first workshop is to provide for a broader, Town-wide outreach to inform all Paradise Valley residents about the goals and objectives of the project and introduce “watershed 101” educational concepts.

Sub-Task 2.4.1: Prepare Public Meeting Announcement/Notification Material – CONSULTANT will provide graphic design services to prepare one public meeting announcement in both color and black and white display

advertisement for e-mail dissemination, Town/project website display, hard copy mailer, newspaper print and social media outlets. Meeting announcement template/format utilized for this initial meeting notice will be utilized in future meeting notifications.

Sub-Task 2.4.2: Prepare and Facilitate Delivery of Meeting Notice Mailers – CONSULTANT will design, prepare and facilitate the mail delivery of hard copy community workshop announcements. Said announcements will be mailed via 1st class postage to approximately 6,000 property owners in the Town of Paradise Valley. Mailer template/format utilized for this initial meeting notice will be utilized in future meeting notifications.

Sub-Task 2.4.3: Preparation and Facilitation of Newspaper Advertisement - CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.4.4: Preparation and Facilitation of Press Release – CONSULTANT will draft a press release for dissemination to local media outlets. Town staff will be responsible for distributing the press release to desired media outlets.

Sub-Task 2.4.5: Preparation and Oversight of Public Meeting Presentation Materials – CONSULTANT will prepare materials intended for presentation and/or display at the community workshop. Task includes CONSULTANT preparation of an informal survey questionnaire form, general comment card and sign in sheets.

Sub-Task 2.4.6: Conduct Public Workshop/Open House – CONSULTANT will provide appropriate (assumed to be two) public engagement staff and the Project Manager to prepare, setup and attend the open house style public information meeting. This includes organizing the presentation of materials, room set up and tear down and providing light refreshments.

Sub-Task 2.4.7: Document Public Meeting Results – CONSULTANT will prepare one brief public meeting summary report to document the results of the outreach effort.

ASSUMPTIONS Task 2.4:

- Town staff will be responsible for uploading project documents to the Town's website for public outreach purposes. The CONSULTANT will provide the documents to be uploaded.
- Town staff will be responsible for posting meeting notification materials onto the Town website.
- In order to ensure that recipients receive emails from recognized Town email address and not be categorized into spam accounts, Town staff will be responsible for facilitating the e-mail blast of meeting notification materials to existing list serve recipients.
- Because CONSULTANT will not have access to the Town's social media accounts, Town staff will be responsible for distributing the press release to desired traditional media and social media outlets.
- All public meetings will be conducted at Town Hall.

- All printing, mailing and publication fees are not included under this Task and are identified as Other Direct Costs.

TASK 2.5 – Establish Dedicated Project Hotline

CONSULTANT will establish a dedicated phone number for use and publication through the life of the project to allow interested parties to call and voice their concerns, observations and suggestions regarding stormwater matters for this project. This project hotline will be managed by the CONSULTANT.

TASK 2.6 –Electronic Survey Phase 1: Hazard Identification

Utilizing the Survey Monkey, CONSULTANT will prepare and coordinate the roll out of phase one of the two-phase electronic survey.

CONSULTANT will collaborate with Town staff and Survey Monkey staff to specifically craft the survey instrument to solicit anecdotal information from Paradise Valley residents regarding their stormwater experiences that will aid the project team in identifying hazards. The hazard identification survey will likely:

- 1) Introduce the project and why it's significant to the community,
- 2) A series of multiple choice questions seeking input on a series of independent questions to identify relative importance of an issue or topic.
- 3) Use a single rating exercise to find out what's most important to community members in context to the project scope and focus,
- 4) Open ended comment box questions to highlight exactly where and what kind of issues they see in their community and even highlight what kind of improvements could make it better.
- 5) Visual preference/rating – present individual concepts ideas or solutions visually to increase impact and relevance and have users rate or select which image option they prefer. Concepts will be rated individually and not against each other.

Survey Monkey is configured to accommodate mobile devices, tablets and desktop platforms. With simple internet access, interested parties can complete the simple survey at their leisure. CONSULTANT will manually tabulate the results of the survey findings and report said findings into a summary report form to inform the data collection process.

TASK 2.7 – Project Electronic Newsletter #1

CONSULTANT will prepare the content and graphic design of the first of three project newsletters that will be delivered electronically to interested parties and posted on the Town website. Said newsletter will provide an overview of the project purpose, goals and objectives and timeline, notification of upcoming community meetings and outreach tasks.

CONSULTANT will prepare the contents of the newsletter in draft format for Town staff review and comment. CONSULTANT will prepare the final draft and deliver a PDF of the newsletter to Town staff for posting on the project website and dissemination to interested parties via e-mail blast or other electronic means.

TASK 2.8 – CHEROKEE WATERSHED PUBLIC OPEN HOUSE #1: HAZARD IDENTIFICATION

CONSULTANT will organize and schedule an open house meeting specifically tailored to residents and property owners within the Cherokee Watershed. CONSULTANT will work with Town Staff, project team members, desired stakeholders (such as elected officials or outside agencies), along with the community at large to discuss and identify overall project goals, requests and concerns. The intent of this open house is to provide an opportunity to solicit anecdotal feedback and identify known hazards and potential mitigation techniques from residents and/or property owners within the Cherokee watershed area.

Sub-Task 2.8.1: Prepare Public Meeting Announcement/Notification Material – CONSULTANT will provide graphic design services to prepare one public meeting announcement in the form of both a color and black and white display advertisement for e-mail dissemination, Town/project website display, hard copy mailer, newspaper print and social media outlets.

Sub-Task 2.8.2: Prepare and Facilitate Delivery of Meeting Notice Mailers – CONSULTANT will design, prepare and facilitate the mail delivery of hard copy community workshop announcements. Said announcements will be mailed via 1st class postage to approximately 2,000 property owners in the Cherokee watershed area.

Sub-Task 2.8.3: Preparation and Facilitation of Newspaper Advertisement - CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.8.4: Preparation and Facilitation of Press Release – CONSULTANT will draft a press release for dissemination to local media outlets. Town staff will be responsible to distributing the press release to desired media outlets.

Sub-Task 2.8.5: Preparation and Oversight of Public Meeting Presentation Materials – CONSULTANT will prepare materials intended for presentation and/or display at the community workshop. Task includes CONSULTANT preparation of an informal survey questionnaire form, general comment card and sign in sheets.

Sub-Task 2.8.6: Conduct Public Workshop/Open House – CONSULTANT will provide appropriate (assumed to be two) public engagement staff person and the Project Manager to prepare, setup and attend the open house style public information meeting. This includes organizing the presentation of materials, room set up and tear down and providing light refreshments.

Sub-Task 2.8.7: Document Public Meeting Results – CONSULTANT will prepare one public meeting summary report to document the results of the outreach effort.

ASSUMPTIONS Task 2.8:

- Town staff will be responsible for creating and maintaining a project link on the Town website.
- Town staff will be responsible for posting meeting notification materials onto the Town website.
- In order to ensure that recipients receive emails from recognized Town email address and not be categorized into spam accounts, Town staff will be responsible for facilitating the e-mail blast of meeting notification materials to existing list serve recipients.
- Because CONSULTANT will not have access to the Town's social media accounts, Town staff will be responsible for distributing the press release to desired social media outlets.
- All public meetings will be conducted at Town Hall.
- All printing, mailing and publication fees are not included under this Task and are identified as Other Direct Costs.

TASK 2.9 - CHENEY WATERSHED PUBLIC OPEN HOUSE #1: HAZARD IDENTIFICATION

CONSULTANT will organize and schedule an open house meeting specifically tailored to residents and property owners within the Cheney Watershed. CONSULTANT will work with Town Staff, project team members, along with any other stakeholders desired by the project team (such as elected officials or outside agencies) to discuss and identify overall project goals, requests and concerns. The intent of this open house is to provide an opportunity to solicit anecdotal feedback and identify known hazards and potential mitigation techniques from residents and/or property owners within the Cheney watershed area.

Sub-Task 2.9.1: Prepare Public Meeting Announcement/Notification Material – CONSULTANT will provide graphic design services to prepare one public meeting announcement in the form of both a color and black and white display advertisement for e-mail dissemination, Town/project website display, hard copy mailer, newspaper print and social media outlets.

Sub-Task 2.9.2: Prepare and Facilitate Delivery of Meeting Notice Mailers – CONSULTANT will design, prepare and facilitate the mail delivery of hard copy community workshop announcements. Said announcements will be mailed via 1st class postage to approximately 2,000 property owners in the Cherokee watershed area.

Sub-Task 2.9.3: Preparation and Facilitation of Newspaper Advertisement - CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.9.4: Preparation and Facilitation of Press Release – CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will

facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.9.5: Preparation and Oversight of Public Meeting Presentation Materials – CONSULTANT will prepare materials intended for presentation and/or display at the community workshop. Task includes CONSULTANT preparation of an informal survey questionnaire form, general comment card and sign in sheets. Task does not include the preparation of an on-site electronic survey or interactive presentation.

Sub-Task 2.9.6: Conduct Public Workshop/Open House – CONSULTANT will provide appropriate (assumed to be two) public engagement staff person and the Project Manager to prepare, setup and attend the open house style public information meeting. This includes organizing the presentation of materials, room set up and tear down and providing light refreshments.

Sub-Task 2.9.7: Document Public Meeting Results – CONSULTANT will prepare one public meeting summary report to document the results of the outreach effort.

ASSUMPTIONS Task 2.9:

- Town staff will be responsible for creating and maintaining a project link on the Town website.
- Town staff will be responsible for posting meeting notification materials onto the Town website.
- In order to ensure that recipients receive emails from recognized Town email address and not be categorized into spam accounts, Town staff will be responsible for facilitating the e-mail blast of meeting notification materials to existing list serve recipients.
- Because CONSULTANT will not have access to the Town's social media accounts, Town staff will be responsible for distributing the press release to desired social media outlets.
- All public meetings will be conducted at Town Hall.
- All printing, mailing and publication fees are not included under this Task and are identified as Other Direct Costs.

TASK 2.10 – Electronic Survey Phase 2: Alternatives Analysis

Utilizing the Survey Monkey survey platform, CONSULTANT will prepare and coordinate the roll out of phase two of the two phase electronic survey.

CONSULTANT will collaborate with Town staff to develop the survey instrument that is intended to solicit anecdotal information from Paradise Valley residents regarding their stormwater experiences that will aid the project team in evaluating and prioritizing various alternatives. The alternatives analysis survey will likely:

- 1) Re-introduce the project and let people know where the Town is in the planning process, talk about phase 1 input and how it has shaped what is being presented in this new(second) survey

- 2) Priorities – often use a refined set of priorities and ask people to individually rank them once again so we can focus the engagement based on their responses using indicators, unique questions or strategies.
- 3) Alternatives or scenarios – presentation of individual solutions or options to individually evaluate the identified need. These can be presented using single images, reviewed and ranked individually. The CONSULTANT team in turn can manually define performance indicators (derived from the priority ranking) to manually indicate how each scenario or alternative performs better or worse than today.
- 4) Additional questions – to further refine implementation options of the alternative.

Survey Monkey is configured to accommodate mobile devices, tablets and desktop platforms. With simple internet access, interested parties can complete the survey at their leisure. CONSULTANT will manually tabulate the results of the survey findings and report said findings into a summary report form to inform the data collection process.

TASK 2.11 – Project Electronic Newsletter #2

CONSULTANT will prepare the content and graphic design of the second of three project newsletters that will be delivered electronically to interested parties and posted on the project link on the Town website. Said newsletter will provide an overview of the project purpose, project findings to date, and a description of the alternatives being evaluated.

CONSULTANT will prepare the contents of the newsletter in draft format for Town staff review and comment. CONSULTANT will prepare the final draft and deliver a PDF of the newsletter to Town staff for posting on the project website and dissemination to interested parties via e-mail blast or other electronic means.

TASK 2.12 – CHEROKEE WATERSHED PUBLIC OPEN HOUSE #2: ALTERNATIVES ANALYSIS

CONSULTANT will organize and schedule a second open house meeting specifically tailored to residents and property owners within the Cherokee Watershed. CONSULTANT will work with Town Staff, project team members, along with any other stakeholders desired by the project team (such as elected officials or outside agencies) to discuss and identify overall project goals, requests and concerns. The intent of this open house is to provide an opportunity for residents to learn about the various alternatives being considered and rank/prioritize their preferences among the alternatives. CONSULTANT will utilize the Audience Response Technology function to facilitate polling among meeting participants whereby real-time results will be displayed and participants can focus their observations on the priorities identified by the meeting participants.

Sub-Task 2.12.1: Prepare Public Meeting Announcement/Notification Material – CONSULTANT will provide graphic design services to prepare one public meeting announcement in the form of both a color and black and white display advertisement for e-mail dissemination, Town/project website display, hard copy mailer, newspaper print and social media outlets.

Sub-Task 2.12.2: Prepare and Facilitate Delivery of Meeting Notice Mailers – CONSULTANT will design, prepare and facilitate the mail delivery of hard copy community workshop announcements. Said announcements will be mailed via 1st class postage to approximately 2,000 property owners in the Cherokee watershed area.

Sub-Task 2.12.3: Preparation and Facilitation of Newspaper Advertisement - CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.12.4: Preparation and Facilitation of Press Release – CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.12.5: Preparation and Oversight of Public Meeting Presentation Materials – CONSULTANT will prepare materials intended for presentation and/or display at the community workshop. Task includes CONSULTANT preparation of an informal survey questionnaire form, general comment card and sign in sheets.

Sub-Task 2.12.6: Conduct Public Workshop/Open House – CONSULTANT will provide one senior staff person to prepare, setup and attend the open house style public information meeting. This includes organizing the presentation of materials, room set up and tear down and providing light refreshments.

Sub-Task 2.12.7: Document Public Meeting Results – CONSULTANT will prepare one public meeting summary report to document the results of the outreach effort.

ASSUMPTIONS Task 2.12:

- Town staff will be responsible for creating and maintaining a project link on the Town website.
- Town staff will be responsible for posting meeting notification materials onto the Town website.
- In order to ensure that recipients receive emails from recognized Town email address and not be categorized into spam accounts, Town staff will be responsible for facilitating the e-mail blast of meeting notification materials to existing list serve recipients.
- Because CONSULTANT will not have access to the Town's social media accounts, Town staff will be responsible for distributing the press release to desired social media outlets.
- All public meetings will be conducted at Town Hall.
- All printing, mailing and publication fees are not included under this Task and are identified as Other Direct Costs.

TASK 2.13 – CHENEY WATERSHED PUBLIC OPEN HOUSE #2: ALTERNATIVES ANALYSIS

CONSULTANT will organize and schedule a second open house meeting specifically tailored to residents and property owners within the Cheney Watershed. CONSULTANT will work with Town Staff, project team members, along with any other stakeholders desired by the project team (such as elected officials or outside agencies) to discuss and identify overall project goals, requests and concerns. The intent of this open house is to provide an opportunity for residents to learn

about the various alternatives being considered and rank/prioritize their preferences among the alternatives. CONSULTANT will utilize the Audience Response Technology function to facilitate polling among meeting participants whereby real-time results will be displayed and participants can focus their observations on the priorities identified by the meeting participants.

Sub-Task 2.13.1: Prepare Public Meeting Announcement/Notification Material – CONSULTANT will provide graphic design services to prepare one public meeting announcement in the form of both a color and black and white display advertisement for e-mail dissemination, Town/project website display, hard copy mailer, newspaper print and social media outlets.

Sub-Task 2.13.2: Prepare and Facilitate Delivery of Meeting Notice Mailers – CONSULTANT will design, prepare and facilitate the mail delivery of hard copy community workshop announcements. Said announcements will be mailed via 1st class postage to approximately 2,000 property owners in the Cherokee watershed area.

Sub-Task 2.13.3: Preparation and Facilitation of Newspaper Advertisement - CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.13.4: Preparation and Facilitation of Press Release – CONSULTANT will design, prepare and facilitate a display advertisement for intended print in the Paradise Valley Independent newspaper. CONSULTANT will facilitate the submission of the advertisement into the Paradise Valley Independent to run one time prior to the public meeting date.

Sub-Task 2.13.5: Preparation and Oversight of Public Meeting Presentation Materials – CONSULTANT will prepare materials intended for presentation and/or display at the community workshop. Task includes CONSULTANT preparation of an informal survey questionnaire form, general comment card and sign in sheets.

Sub-Task 2.13.6: Conduct Public Workshop/Open House – CONSULTANT will provide one senior staff person to prepare, setup and attend the open house style public information meeting. This includes organizing the presentation of materials, room set up and tear down and providing light refreshments.

Sub-Task 2.13.7: Document Public Meeting Results – CONSULTANT will prepare one public meeting summary report to document the results of the outreach effort.

ASSUMPTIONS Task 2.13:

- Town staff will be responsible for creating and maintaining a project link on the Town website.
- Town staff will be responsible for posting meeting notification materials onto the Town website.

- In order to ensure that recipients receive emails from recognized Town email address and not be categorized into spam accounts, Town staff will be responsible for facilitating the e-mail blast of meeting notification materials to existing list serve recipients.
- Because CONSULTANT will not have access to the Town's social media accounts, Town staff will be responsible for distributing the press release to desired social media outlets.
- All public meetings will be conducted at Town Hall.
- All printing, mailing and publication fees are not included under this Task and are identified as Other Direct Costs.

TASK 2.14 – Project Electronic Newsletter #3

CONSULTANT will prepare the content and graphic design of the third of three project newsletters that will be delivered electronically to interested parties and posted on the project link on the Town website. Said newsletter will provide an overview of the project purpose, project findings to date, and a description of the project findings and recommendations.

CONSULTANT will prepare the contents of the newsletter in draft format for Town staff review and comment. CONSULTANT will prepare the final draft and deliver a PDF of the newsletter to Town staff for posting on the project website and dissemination to interested parties via e-mail blast or other electronic means.

TASK 2.15 – Additional Focus Group/HOA/Community Meetings

CONSULTANT will prepare for and attend up to four (4) supplemental HOA/community meetings as needed over the course of the project. CONSULTANT will assist the project team with the facilitation and preparation of each meeting as dictated by project need and political desire.

TASK 2.16– Project Coordination Meetings

CONSULTANT PIO Team will participate in up to three (3) project coordination meetings with Town staff, CONSULTANT team or other interested parties as needed over the course of the project. It is anticipated that project coordination meetings will be held at Town offices.

TASK 3 – Modeling and Hazard Identification (Cheney Watershed)

CONSULTANT will review, verify, and refine FLO-2D models provided by the FCDMC for use in identifying flood hazards in the Cheney watershed in Town of Paradise Valley. Model results will be used to assess wash stability, erosion hazards, and sediment yield potential. Results will also be used to help inform stakeholders on relative risk and related levels of protection.

TASK 3.1 – Review FLO-2D Model for Completeness

CONSULTANT will review portions of the FLO-2D model(s) for the Lower Indian Bend Wash Area Drainage Master Study (LIBW) completed by the FCDMC within the Cheney Wash watershed in the Town of Paradise Valley. The review will determine if infrastructure and other features that potentially affect flow conditions of storm runoff are incorporated into the model(s) adequately to assess flood hazards. If features are found to be missing, CONSULTANT will incorporate features into the model(s), and rerun.

This review will evaluate areas with previously identified flood hazards, either by stakeholders or by FCDMC as part of the LIBW study. The review will also employ the FLO-2D model to identify areas where flow depths exceed a value (to be identified with the Town). For instance, CONSULTANT will identify areas that flow with depths greater than 18 inches and create an inventory of these flow paths. Those locations will then be compared to aerial photographs to ascertain if they can be labeled as washes for the Town's records.

TASK 3.2 – Verification of FLO-2D Model Results

CONSULTANT will review model results in areas within the Cheney Watershed with previously identified flood hazards both before and after the incorporation of any additional features as part of Task 3.1. Verification of results will consider flow directions, velocities, and depth for reasonableness. CONSULTANT will coordinate with the Town to identify the best approach to compare the results of the provided FLO-2D models with other appropriate methods for determining peak flow rates in watersheds and localized subwatersheds, such as:

- Rational Method calculations
- HEC-1 calculations using DDMSW
- Regionally appropriate Regression Equations

If results are found to be outside what could be considered reasonable for the given site specific conditions, additional revisions to the model(s) will be made to the FLO-2D models.

ASSUMPTIONS (TASK 3.2):

- CONSULTANT will conduct one (1) round of revisions to the FCDMC's FLO-2D model.

TASK 3.3 – Erosion Hazard, Sedimentation Analyses

CONSULTANT will assess erosion hazard and sediment yield potential in the Cheney Watershed using FCDMC's DDMSW software, and the guidance provided in Section 11 (Sedimentation) of the FCDMC's most current version of the Drainage Design Manual – Hydraulics. This method for analyzing erosion and sedimentation will be the same as that used by the FCDMC on both the Lower Indian Bend Watershed and Middle Indian Bend Watershed Studies.

The analyses will evaluate scour potential and sediment yield at locations where the FLO-2D model indicates erosive velocities in concentrated flow areas. These locations will then be checked against the watershed-based soil grain size distribution information to identify areas where erosion and sedimentation will likely occur.

The results will be included in the Flood Hazard Identification Report.

TASK 3.4 – Wash Stability Analyses

CONSULTANT will assess wash stability, in areas identified in the Cheney Watershed as likely being classified as washes during Task 3.1, using FCDMC's DDMSW software, and the guidance provided in the FCDMC's Drainage Design Manual – Hydraulics. The analyses will evaluate lateral migration potential, and the results will be included in the Flood Hazard Identification Report.

ASSUMPTIONS (TASKS 3.3 & 3.4):

- Grain size distribution analyses for representative locations in Cheney Wash will not be provided by FCDMC. An allowance for three (3) soil sample analyses for the Cheney Watershed is therefore included in the fee (attachment 'B') for more information.

TASK 3.5 – Develop Flow Depth/Risk Graphics for Public Meeting

CONSULTANT will provide analyses results of the Cheney Watershed and technical support as necessary to the public involvement and outreach (PIO) team to inform the creation of a flow depth vs. risk graphic for the public meetings. Technical support will be based on the FLO-2D model results generated for Tasks 3.1 and 3.2.

Flow depth/risk graphics will be provided for up to three (3) storm event return periods (to be determined, but assumed to be the 10-year, 50-year and 100-year events). Graphics will be developed at enough locations within the Cheney Watershed to represent the majority of flood hazard areas within the watershed.

TASK 3.6 – Establish Levels of Protection/Risk Tolerance

CONSULTANT will provide analyses results of the public involvement and outreach (PIO) efforts to inform the conversation with Town staff, elected officials, residents, and other stakeholders in an effort to gage risk tolerance for various storm reoccurrence intervals. In support of these efforts to gage risk tolerance, CONSULTANT will provide information based on the FLO-2D model results generated for Tasks 3.1 and 3.2, and on the river mechanics analyses

performed for Tasks 3.3 and 3.4 which will help illustrate the magnitude of risk and the possible repercussions of managing flooding at various levels of protection. These tools may include:

- Graphics showing the extent of inundation at various storm reoccurrence intervals
- Statistical information indicating the percentages of watershed areas that are inundated
- Statistical information indicating the number and percentages of structures that are inundated

Please note that this task applies to both the Cheney and Cherokee Wash Watersheds (Tasks 3 & 4).

TASK 3.7 – Develop Hazards Identification Memorandum

CONSULTANT will compile the results of the analyses completed for Tasks 3.1 through 3.6 in a brief Cheney Watershed Flood Hazard Identification Memorandum. The memorandum will be submitted to the Town upon completion of the modeling and hazard identification task.

CONSULTANT will address all comments provided by the Town during the review of the Flood Hazard Identification Memorandum.

TASK 4 – Modeling and Hazard Identification (Cherokee Wash Watershed)

TASK 4.1 – Review FLO-2D Model for Completeness

CONSULTANT will review portions of the FLO-2D model(s) for the Lower Indian Bend Wash Area Drainage Master Study (LIBW) completed by the FCDMC within the Cherokee Wash Watershed in the Town of Paradise Valley. The review will determine if infrastructure and other features that potentially affect flow conditions of storm runoff are incorporated into the model(s) adequately to assess flood hazards. If features are found to be missing, CONSULTANT will incorporate features into the model(s), and rerun.

This review will evaluate areas with previously identified flood hazards, either by stakeholders or by FCDMC as part of the LIBW study. The review will also employ the FLO-2D model to identify areas where flow depths exceed a value (to be identified with the Town). For instance, CONSULTANT will identify areas that flow with depths greater than 18 inches and create an inventory of these flow paths. Those locations will then be compared to aerial photographs to ascertain if they can be labeled as washes for the Town's records.

TASK 4.2 – Verification of FLO-2D Model Results

CONSULTANT will review model results in areas within the Cherokee Wash Watershed with previously identified flood hazards both before and after the incorporation of any additional features as part of Task 4.1. Verification of results will consider flow directions, velocities, and depth for reasonableness. CONSULTANT will coordinate with the Town to identify the best approach to compare the results of the provided FLO-2D models with other appropriate methods for determining peak flow rates in watersheds and localized subwatersheds, such as:

- Rational Method calculations
- HEC-1 calculations using DDMSW
- Regionally appropriate Regression Equations

If results are found to be outside what could be considered reasonable for the given site specific conditions, additional revisions to the model(s) will be made to the FLO-2D models.

ASSUMPTIONS (TASK 4.2):

- CONSULTANT will conduct one (1) round of revisions to the FCDMC's FLO-2D model.

TASK 4.3 – Erosion Hazard, Sedimentation Analyses

CONSULTANT will assess erosion hazard and sediment yield potential in the Cherokee Wash Watershed using FCDMC's DDMSW software, and the guidance provided in Section 11 (Sedimentation) of the FCDMC's most current version of the *Drainage Design Manual – Hydraulics*. This method for analyzing erosion and sedimentation will be the same as that used by the FCDMC on both the Lower Indian Bend Watershed and Middle Indian Bend Watershed Studies.

The analyses will evaluate scour potential and sediment yield at locations where the FLO-2D model indicates erosive velocities in concentrated flow areas. These locations will then be checked against the FCDMC's watershed-based soil grain size distribution information to identify areas where erosion and sedimentation will likely occur.

TASK 4.4 – Wash Stability Analyses

CONSULTANT will assess wash stability, in areas in the Cherokee Wash Watershed identified as likely being classified as washes during Task 4.1, using FCDMC's DDMSW software, and the guidance provided in the FCDMC's *Drainage Design Manual – Hydraulics*. The analyses will evaluate lateral migration potential, and the results will be included in the Flood Hazard Identification Report.

ASSUMPTIONS (TASK 4.3 & 4.4):

- Grain size distribution analyses for representative locations in Cherokee Wash will not be provided by FCDMC. An allowance for three (3) soil sample analyses for the Cherokee Wash Watershed is therefore included in the fee (attachment 'B') for more information.

TASK 4.5 – Develop Flow Depth/Risk Graphics for Public Meeting

CONSULTANT will provide analyses results of the Cherokee Wash Watershed and technical support as necessary to the public involvement and outreach (PIO) team to inform the creation of a flow depth vs. risk graphic for the public meetings. Technical support will be based on the FLO-2D model results generated for Tasks 4.1 and 4.2.

Flow depth/risk graphics will be provided for up to three (3) storm event return periods (to be determined but assumed to be the 10-year, 50-year and 100-year events). Graphics will be developed at enough locations within the Cherokee Wash Watershed to represent the majority of flood hazard areas within the watershed.

TASK 4.6 – Develop Hazards Identification Memorandum

CONSULTANT will compile the results of the analyses completed for Tasks 4.1 through 4.6 in a brief Cherokee Wash Watershed Flood Hazard Identification Memorandum. The memorandum will be submitted to the Town upon completion of the modeling and hazard identification task.

CONSULTANT will address all comments provided by the Town during the review of the Flood Hazard Identification Memorandum.

TASK 5 – Alternatives Analyses and Preliminary Design (Cheney Watershed)

TASK 5.1 – Drainage and Evaluation Criteria

CONSULTANT will develop drainage criteria for the watershed management alternatives. In coordination with the Town, up to three levels of protection with performance metrics will be selected for each alternative location, based on each location's unique flooding issues, design constraints and opportunities, and the public tolerance for risk identified in Tasks 3 and 4. Based on input from the Town and public outreach efforts, CONSULTANT will also develop evaluation criteria unique to each watershed that represent the project objectives from multiple relevant perspectives. Such criteria may include, but are not limited to:

- Effectiveness in accomplishing the flood management goals
- Likely disruption to the public
- Right-of-way and easement requirements
- Context sensitivity in The Town of Paradise Valley
- Low Impact Development opportunities
- Likely construction costs
- Operations and Maintenance (O&M) requirements

These criteria will be presented to the Town for review and acceptance prior to alternatives development.

TASK 5.2 – Potential Alternatives

CONSULTANT will develop potential approaches and alternatives to collect and dispose of runoff according to the established drainage criteria (see task 5.1). Potential alternatives development will include consideration of critical planning opportunities and constraints identified through the data collection effort. CONSULTANT will provide potential approaches and alternatives seed ideas to the Town staff in a coordination meeting. Representatives from all impacted Town departments will be invited to participate in this meeting and encouraged to provide input and concerns on the potential alternatives. The potential alternatives will be developed with the project goals in mind. They will include:

- System-wide solutions, such as large storm drains, wash improvements and regional detention/retention basins
- Localized solutions, such as street improvements and rear yard drainage outlets
- Non-structural solutions, such as improved stormwater design guidelines and Low Impact Development incentives

The Town's comments will be documented and used to screen the potential alternatives for further analysis.

TASK 5.3 – Alternatives Evaluation

In order to gage the number of flood hazard areas to be evaluated for improvement, CONSULTANT will review the FCDMC's Lower Indian Bend Wash Study (once received). Based on this, CONSULTANT will coordinate with the Town to extrapolate a total number of flood hazard areas from both the Cheney and Cherokee Wash Watersheds that likely require drainage

improvements. For the purpose of deriving a fee for Tasks 5.3 and 6.3, this agreement assumes three (3) flood hazard areas per watershed with a total number not to exceed six (6) flood hazard areas. However, this distribution (three per watershed) may be revised as needed. The FCDMC has preliminarily indicated that they have identified two (2) flood hazard areas in the Cheney Watershed.

For each flood hazard area, the potential alternatives will be screened to a maximum of 3 alternatives, each with a unique level of protection. The FLO-2D models developed in Task 3 will be run with the appropriate storm return period for each level of protection. Preliminary improvements will be developed for each alternative and modeled within FLO-2D to determine the impacts of residual surface runoff. The advantages and disadvantages of each alternative will also be identified for comparison purposes. For each alternative, CONSULTANT will provide:

- A plan view sketch of the improvements, showing:
 - Publicly available aerial imagery
 - Publicly available right-of-way and/or property line information (GIS)
 - Publicly available structure footprint information (GIS)
 - Important utility crossings using information obtained from utility owners and publicly available GIS sources
 - Dimensions, notes and other information needed to schematically describe the improvements

TASK 5.4 – Operations and Maintenance Recommendations

Long term operations and maintenance requirements for each alternative will be developed for comparison purposes. This will include a summary of methods and materials necessary for effective long term operation.

Additionally, operations and maintenance information will be provided for stormwater management and flood control features that currently exist within the Town. These recommendations will be intended for both Town maintenance staff and local residents.

TASK 5.5 – Estimated Costs

Immediate and life-cycle costs will be developed for comparison purposes for each alternative and level of protection. Whenever possible, recent bid tabulation data will be used for cost estimating. Probable construction costs will be reviewed internally by Dibble CM.

TASK 5.6 – Matrix Evaluation

The alternatives will then be evaluated using a matrix evaluation process that measures each alternative against the evaluation criteria that was established in Tasks 5.1 & 6.1. This provides a quantitative method for comparing the weighted advantages of each alternative to the others. The results of the analysis will be presented in the draft Alternatives Analysis Report and the Town staff will be given the opportunity to review the Alternatives Analysis Report and modify or confirm the matrix evaluation results. The results of the Town's review, the results of the Public Open

Houses (Tasks 2.12 and 2.13), and the identification of the selected alternatives for each flood hazard area, will be incorporated into the Final Alternatives Analysis Report.

TASK 5.7 – Alternatives Analysis Report

CONSULTANT will prepare a draft and final Alternatives Analysis Report that documents the alternatives formulation, analyses, and selection processes. The final Alternatives Analysis Report will contain a description of the selected alternative and appendices.

CONSULTANT will address all comments provided by the Town during the review of the Alternatives Analysis Report.

ASSUMPTIONS (TASK 5):

- Up to three (3) copies of each draft Cheney Watershed Alternatives Analysis Report will be provided for the Town's review and comment.
- Up to three (3) copies of each final Cheney Watershed Alternatives Analysis Report will be provided for the Town's use, as well as an electronic version in pdf format.

TASK 6 – Alternatives Analyses and Preliminary Design (Cherokee Wash Watersheds)

TASK 6.1 – Drainage and Evaluation Criteria

CONSULTANT will develop drainage criteria for the watershed management alternatives. Up to three levels of protection with performance metrics will be selected for each alternative location, based on each location's unique flooding issues, design constraints and opportunities, and the public tolerance for risk identified in Tasks 3 and 4. Based on input from the Town and public outreach efforts, CONSULTANT will also develop evaluation criteria unique to each watershed that represent the project objectives from multiple relevant perspectives. Such criteria may include, but are not limited to:

- Effectiveness in accomplishing the flood management goals
- Likely disruption to the public
- Right-of-way and easement requirements
- Context sensitivity in The Town of Paradise Valley
- Low Impact Development opportunities
- Likely construction costs
- Operations and Maintenance (O&M) requirements

These criteria will be presented to the Town for review and acceptance prior to alternatives development.

TASK 6.2 – Potential Alternatives

CONSULTANT will develop potential approaches and alternatives to collect and dispose of runoff according to the established drainage criteria (see task 6.1). Potential alternatives development will include consideration of critical planning opportunities and constraints identified through the data collection effort. CONSULTANT will provide potential approaches and alternatives seed ideas to the Town staff in a coordination meeting. Representatives from all impacted Town departments will be invited to participate in this meeting and encouraged to provide input and concerns on the potential alternatives. The potential alternatives will be developed with the project goals in mind. They will include:

- System-wide solutions, such as large storm drains, wash improvements and regional detention/retention basins
- Localized solutions, such as street improvements and rear yard drainage outlets
- Non-structural solutions, such as improved stormwater design guidelines and Low Impact Development incentives

The Town's comments will be documented and used to screen the potential alternatives for further analysis.

TASK 6.3 – Alternatives Evaluation

In order to gage the number of flood hazard areas to be evaluated for improvement, CONSULTANT will review the FCDMC's Lower Indian Bend Wash Study (once received). Based on this, CONSULTANT will coordinate with the Town to extrapolate a total number of flood hazard areas from both the Cheney and Cherokee Wash Watersheds that likely require drainage improvements. For the purpose of deriving a fee for Tasks 5.3 and 6.3, this agreement assumes four (4) flood hazard areas

per watershed with a total number not to exceed eight (8) flood hazard areas. However, this distribution (four per watershed) may be revised as needed.

For each flood hazard area, the potential alternatives will be screened to a maximum of 3 alternatives, each with a unique level of protection. The FLO-2D models developed in Task 3 will be run with the appropriate storm return period for each level of protection. Preliminary improvements will be developed for each alternative and modeled within FLO-2D to determine the impacts of residual surface runoff. The advantages and disadvantages of each alternative will also be identified for comparison purposes.

TASK 6.4 – Operations and Maintenance Recommendations

Long term operations and maintenance requirements for each alternative will be developed for comparison purposes. This will include a summary of methods and materials necessary for effective long term operation.

Additionally, operations and maintenance information will be provided for stormwater management and flood control features that currently exist within the Town. These recommendations will be intended for both Town maintenance staff and local residents.

TASK 6.5 – Estimated Costs

Immediate and life-cycle costs will be developed for comparison purposes for each alternative and level of protection. Whenever possible, recent bid tabulation data will be used for cost estimating. Probable construction costs will be reviewed internally by Dibble CM.

TASK 6.6 – Matrix Evaluation

The alternatives will then be evaluated using a matrix evaluation process that measures each alternative against the evaluation criteria that was established in Tasks 5.1 & 6.1. This provides a quantitative method for comparing the weighted advantages of each alternative to the others. The results of the analysis will be presented in the draft Alternatives Analysis Report and the Town staff will be given the opportunity to review the Alternatives Analysis Report and modify or confirm the matrix evaluation results. The results of the Town's review, the results of the Public Open Houses (Tasks 2.12 and 2.13), and the identification of the selected alternatives for each flood hazard area, will be incorporated into the Final Alternatives Analysis Report.

TASK 6.7 – Alternatives Analysis Report

CONSULTANT will prepare a Preliminary and Final Alternatives Analysis Report that documents the alternatives formulation, analysis, and selection process. The Final Alternatives Analysis Report will contain a description of the selected alternative and appendices.

CONSULTANT will address all comments provided by the Town during the review of the Alternatives Analysis Report.

ASSUMPTIONS (TASK 6):

- Up to three (3) copies of each draft Cherokee Wash Watershed Alternatives Analysis Report will be provided for the Town's review and comment.
- Up to three (3) copies of each final Cherokee Wash Watershed Alternatives Analysis Report will be provided for the Town's use, as well as an electronic version in pdf format.

TASK 7 – Capital Improvement Plan

TASK 7.1 – Develop Prioritization Factors and CIP Formatting with Town

CONSULTANT will lead the efforts for the project stakeholders to identify the factors which will be used to rank the project alternatives developed in Tasks 5 and 6. These prioritization factors may include such items as capital costs, project drainage benefit, disruption to the public, and proximity to important public use facilities. Justifications for the factors will be documented. Development of the factors will occur at a meeting of the Town's choosing and with the stakeholders that Town has identified.

CONSULTANT will also solicit input from the Town on the format of the CIP information to be developed, with the goal of making it easily included into the Town's overall CIP documents.

TASK 7.2 – Prioritize Projects

Based on the factors identified in Task 7.1, CONSULTANT will develop a list of the capital improvement projects, prioritized to fit the goals of the prioritization process and the project overall.

TASK 7.3 – Evaluate Funding Source Opportunities

CONSULTANT will research, identify, evaluate and make recommendations regarding the potential methods the Town can use to fund stormwater capital improvement projects, operations and maintenance, and future planning and design. Such sources may include general obligation bonding, stormwater fees, stormwater utilities, available grants and loans, improvement districts, etc.

CONSULTANT will address all comments provided by the Town during the review of the Capital Improvement Plan Report.

ASSUMPTIONS (TASK 7):

- Up to three (3) copies of a draft Capital Improvement Memorandum will be provided for the Town's review and comment.
- Up to three (3) copies of a final Capital Improvement Memorandum will be provided for the Town's use, as well as an electronic version in pdf format.

TASK 8 – Stormwater Design Standards

TASK 8.1 – Update Stormwater Design Requirements

CONSULTANT will revise the Town's Stormwater Manual to reflect the current Best Management Practices for managing stormwater, incorporate changes the Town has identified, and better reflect the need to proactively manage stormwater to protect private and public properties in the Town.

The revisions recommended by the CONSULTANT will reflect the results of the Town's efforts in determining its level of risk tolerance and the preferred level of protection (see tasks 3.5, 4.5, 5.4 and 6.4) to be incorporated into future development within the Town.

TASK 8.2 – Low Impact Development Standards

CONSULTANT will develop Low Impact Development (LID) standards for the Town to consider adopting as part of the updated Stormwater Manual. The LID guidelines will use information from national and regional best practices to develop customized approach and policy guidelines for the Town.

TASK 8.3 – Develop Updated Detention/Retention Standards

In conjunction with the update to the Town's Stormwater Manual, CONSULTANT will recommend revisions to detention/retention requirements on future development projects. The new standards will recognize the uniqueness of the Town's two major topographic regions: Hillside and Flat Land. The goals that will guide the development of the new standards will be discussed at the project kickoff. The CONSULTANT will review the adjacent agency and FCDMC detention/retention requirements to estimate compatibility with those agency's requirements.

TASK 8.4 – Develop Operations and Maintenance Guidelines

CONSULTANT will include a section in the revised Stormwater Design Standards that outline proper operations and maintenance (O&M) procedures specifically for the stormwater best management practices discussed in the standards. Such O&M procedures will be intended for public agency (Town of Paradise Valley) and private property owners where stormwater features reside.

CONSULTANT will address all comments provided by the Town during the review of the Stormwater Design Standards.

ASSUMPTIONS (TASK 8):

- Up to three (3) copies of the draft Stormwater Design Standards will be provided for the Town's review and comment.
- Up to three (3) copies of the final Stormwater Design Standards will be provided for the Town's use, as well as an electronic version in pdf format.

Summary of Stakeholder and Public Meetings

Following is a summary of the meetings included in this scope of services:

- Project Kickoff Meeting
- Project Kickoff Community Workshop & Open House
- Cherokee Watershed Public Open House #1: Hazard Identification
- Cheney Watershed Public Open House #1: Hazard Identification
- Cherokee Watershed Public Open House #2: Alternatives Analysis
- Cheney Watershed Public Open House #2: Alternatives Analysis
- Focus Group/HOA/Community Meeting

Summary of Project Deliverables

Following is a summary of the documents that will be provided to the Town:

- (1) Project Communications Plan
- (1) Project Critical Path Method Schedule
- (1) Map (GIS format) and description of the Town's drainage infrastructure (Task 1.6)
- (1) Data Collection Report (Task 1.7)
- (1) Public Involvement & Communication Plan (Task 2.2)
- (5) Public Meeting Announcement/Notification Materials (Tasks 2.4.1, 2.8.1, 2.9.1, 2.12.1 and 2.13.1)
- (5) Public Meeting Notice Mailers (Tasks 2.4.2, 2.8.2, 2.9.2, 2.12.2 and 2.13.2)
- (5) Newspaper Advertisements (Tasks 2.4.3, 2.8.3, 2.9.3, 2.12.3 and 2.13.3)
- (5) Press Releases (Tasks 2.4.4, 2.8.4, 2.9.4, 2.12.4 and 2.13.4)
- (5) Public Meeting Presentation Materials (Tasks 2.4.5, 2.8.5, 2.9.5, 2.12.5 and 2.13.5)
- (5) Public Meeting Results (Tasks 2.4.7, 2.8.7, 2.9.7, 2.12.7 and 2.13.7)
- (2) Electronic Survey Results Reports (Tasks 2.6 and 2.10)
- (2) Project Electronic Newsletters (Tasks 2.7 and 2.11)
- (2) Flood Hazard Identification Memoranda (Tasks 3.7 and 4.6)
- (2) Sets of Flow Depth/Risk Graphics (Tasks 3.5 and 4.5)
- (2) Alternatives Evaluation Criteria Memoranda (Tasks 5.4 and 6.1)
- (2) Potential Alternatives Memoranda (Tasks 5.5 and 6.2)
- (2) Alternatives Analysis Reports (Tasks 5.7 and 6.7)
- (1) Prioritization Factors and Capital Improvement Plan Memorandum (Task 7)
- (1) Stormwater Design Standards Report (Task 8.1)



Town of Paradise Valley Watershed Studies
Attachment "A" – Scope of Services
October 1, 2015
Page 28

Additional Services

Tasks which are not specifically identified herein or are specifically identified as additional services are considered Additional Services for purposes of this contract. Town may request that CONSULTANT perform Additional Services. However, CONSULTANT is not obligated to perform requested Additional Services unless 1) a modification to this contract has been fully executed setting forth the scope, schedule and fee for such Additional Services; or, 2) NTP in writing from the Town is received stating Additional Services to be completed with a not to exceed amount while modification is being processed.

END SCOPE OF SERVICES



7500 North Dreamy Draw Drive
Suite 200
Phoenix, Arizona 85020
phone 602.957.1155
fax 602.957.2838
www.dibblecorp.com

ATTACHMENT "B" – FEE

CONSULTANT will perform the services described in Attachment 'A' for an hourly not-to-exceed fee of **\$420,051**, as shown below and in the Fee Summary following this page.

<u>Category</u>	<u>Fee</u>
Professional Services Labor	\$401,085
Direct Expenses	\$10,966
<u>Allowances</u>	<u>\$8,000</u>
Total Contract Amount	\$420,051

Attachment B - FEE SUMMARY

FIRM:	Dibble Engineering	CONTRACT NO.:	TBD
PROJECT:	Paradise Valley Watershed Studies	PROJECT NO.:	TBD
DATE:	August 1, 2015	New Contract:	X

FEE PROPOSAL SUMMARY

DIBBLE LABOR

Classification	Manhours	Billing Rate	Labor Costs
1 Principal Engineer	218	\$ 185.00	\$ 40,330
2 QA/QC Manager	104	\$ 155.00	\$ 16,120
3 Senior Engineer	730	\$ 155.00	\$ 113,150
4 Project Engineer	156	\$ 145.00	\$ 22,620
5 Assistant Project Engineer (EIT)	552	\$ 115.00	\$ 63,480
6 Designer	212	\$ 110.00	\$ 23,320
7 Public Engagement Leader	94	\$ 190.00	\$ 17,860
8 Public Engagement Specialist	221	\$ 145.00	\$ 32,045
9 Principal Landscape Architect	4	\$ 185.00	\$ 740
10 Senior Landscape Architect	160	\$ 155.00	\$ 24,800
11 Landscape Architect	32	\$ 125.00	\$ 4,000
12 Landscape Designer	130	\$ 75.00	\$ 9,750
13 Technician	346	\$ 95.00	\$ 32,870

TOTAL HOURS :	2,959
---------------	-------

a. Total Dibble and Subconsultant Labor: \$ 401,085

REIMBURSEABLE EXPENSES

Description	Cost
1 Survey Monkey Platinum	\$ 1,000
2 Project Hotline	\$ 480
3 Paradise Valley Independent Display Ads	\$ 1,500
4 Printing & Postage	\$ 7,700
5 Mileage	\$ 286

b. Sub-Total Reimbursable Expenses: \$ 10,966

OUTSIDE SERVICES & SUB-CONSULTANTS (included in Labor shown above)

Firm	Cost
1 Michael Baker International	\$ 114,755
2 Logan Simpson Design	\$ 52,210

c. Sub-Total for Sub-Consultants \$ 166,965

e. TOTAL BASE FEE: \$ 412,051

ALLOWANCES

Description	Cost
1 Soil Sample Testing Allowance	\$ 3,000.00
2 Utility Potholes Allowance	\$ 5,000.00
3	\$ -

d. Sub-Total Allowances: \$ 8,000.00

e. Total Estimated Cost to Consultant: \$ 420,051

f. TOTAL CONTRACT FEE: \$ 420,051
--

Signature

Date

VICE-PRESIDENT

Title

Attachment 'B' - MANHOURS and FEE

FIRM: Dibble Engineering	CONTRACT NO.: TBD	PROJECT NO.: TBD
PROJECT: Paradise Valley Watershed Studies	New Contract: <input checked="" type="checkbox"/>	
DATE: August 1, 2015		

DIBBLE ESTIMATED MANHOURS														
PHASE / TASK	Principal Engineer	QA/QC Manager	Senior Engineer	Project Engineer	Assistant Project Engineer (EIT)	Designer	Public Engagement Leader	Public Engagement Specialist	Principal Landscape Architect	Senior Landscape Architect	Landscape Architect	Landscape Designer	Technician	TOTAL
1 - Project Management and Data Collection														
1.1 Project Management	60	40	-	-	-	-	6	16	-	20	-	-	-	142
1.2 Coordination with FCDMC, COP, COS	8	-	12	-	-	8	-	-	-	-	4	-	-	32
1.3 Data Collection	2	-	8	4	4	-	-	-	-	-	-	8	-	26
1.4 Field Investigations - Cheney	-	-	16	-	16	-	-	-	-	8	-	-	-	40
1.5 Field Investigations - Cherokee	-	-	16	-	16	-	-	-	-	8	-	-	-	40
1.6 Inventory of Existing Drainage Facilities	-	-	4	-	-	16	-	-	-	-	-	-	-	20
1.7 Presentation of Project Results to Council	2	-	24	-	-	8	-	-	-	-	-	-	-	34
1.8 Data Collection Report	4	-	16	-	-	8	-	-	-	2	-	-	-	30
Subtotals	76	40	96	4	36	40	6	16	-	38	4	8	-	364
2 - Public Information and Outreach														
2.1 Refine Scope of Work, Project Schedule and Attend Kick off Meeting	-	-	-	-	-	-	4	4	-	-	-	-	-	8
2.2 Prepare a Public Involvement & Communications Plan	1	-	1	-	-	-	2	4	-	-	-	-	2	10
2.3 Develop Master Project Stakeholder Inventory and Contact Lists	-	-	-	-	-	-	1	2	-	-	-	-	6	9
2.4 Project Kickoff Community Workshop & Open House	8	-	-	-	-	-	8	24	4	10	-	-	24	78
2.5 Establish Dedicated Project Hotline	-	-	-	-	-	-	-	1	-	-	-	-	2	3
2.6 Electronic Survey Phase 1: Hazard Identification	1	-	1	-	-	-	8	26	-	-	-	-	36	72
2.7 Project Electronic Newsletter #1	1	-	1	-	-	-	2	8	-	-	-	-	8	20
2.8 Cherokee Watershed Public Open House #1: Hazard Identification	8	-	-	-	-	-	10	24	-	10	-	-	32	84
2.9 Cheney Watershed Public Open House #1: Hazard Identification	8	-	-	-	-	-	8	24	-	10	-	-	28	78
2.10 Electronic Survey Phase 2: Alternatives Analysis	1	-	1	-	-	-	8	26	-	-	-	-	36	72
2.11 Project Electronic Newsletter #2	1	-	1	-	-	-	2	6	-	-	-	-	8	18
2.12 Cherokee Watershed Public Open House #2: Alternatives Analysis	8	-	-	-	-	-	8	22	-	10	-	-	24	72
2.13 Cheney Watershed Public Open House #2: Alternatives Analysis	8	-	-	-	-	-	8	20	-	10	-	-	20	66
2.14 Project Electronic Newsletter #3	1	-	1	-	-	-	1	6	-	-	-	-	8	17
2.15 Additional Focus Group/HOA/Community Meetings	8	-	-	-	-	-	8	8	-	-	-	-	-	24
2.16 Project Coordination Meetings	8	-	8	-	-	-	10	-	-	-	-	-	-	26
Subtotals	62	-	14	-	-	-	88	205	4	50	-	-	234	657

Attachment 'B' - MANHOURS and FEE

FIRM:	Dibble Engineering	CONTRACT NO.:	TBD
PROJECT:	Paradise Valley Watershed Studies	PROJECT NO.:	TBD
DATE:	August 1, 2015	New Contract:	X

3 - Cheney Modeling & Hazards Identification														
3.1	Review FLO-2D Model for Completeness	-	4	8	8	24	-	-	-	-	-	-	-	44
3.2	Verification of FLO-2D Model Results & Revisions	-	4	8	16	40	-	-	-	-	-	-	-	68
3.3	Erosion Hazard, Sedimentation Analyses	-	-	-	24	16	-	-	-	-	-	-	-	40
3.4	Wash Stability Analyses	-	-	-	16	8	-	-	-	-	-	2	4	30
3.5	Develop Flow Depth/Risk Graphics for Public Meetings (2)	-	-	4	-	20	-	-	-	-	-	4	-	32 60
3.6	Establish Levels of Protection/Risk Tolerance	-	-	4	-	16	-	-	-	-	-	-	-	20
3.7	Develop Hazards Identification Memorandum	-	8	12	12	12	-	-	-	-	4	-	-	8 56
	Subtotals	-	16	36	76	136	-	-	-	-	4	6	4	40 318
4 - Cherokee Wash Modeling & Hazards Identification														
4.1	Review FLO-2D Model for Completeness	-	4	8	8	24	-	-	-	-	-	-	-	44
4.2	Verification of FLO-2D Model Results	-	4	8	16	40	-	-	-	-	-	-	-	68
4.3	Erosion Hazard, Sedimentation Analyses	-	-	-	24	16	-	-	-	-	-	-	-	40
4.4	Wash Stability Analyses	-	-	-	16	8	-	-	-	-	-	2	4	30
4.5	Develop Flow Depth/Risk Graphics for Public Meetings (2)	-	-	4	-	20	-	-	-	-	-	4	-	28 56
4.6	Develop Hazards Identification Memorandum	-	12	20	12	16	-	-	-	-	2	-	-	4 66
	Subtotals	-	20	40	76	124	-	-	-	-	2	6	4	32 304
5 - Cheney Alternatives Analyses														
5.1	Drainage and Evaluation Criteria	2	-	8	-	-	-	-	-	-	4	-	-	14
5.2	Potential Alternatives	6	-	22	-	-	8	-	-	-	-	-	-	36
5.3	Alternatives Evaluation	8	-	128	-	104	40	-	-	-	8	-	4	4 296
5.4	Operations and Maintenance Recommendations	2	-	6	-	-	6	-	-	-	2	-	8	24
5.5	Estimated Costs	-	-	18	-	-	-	-	-	-	2	-	8	28
5.6	Matrix Evaluation	4	-	8	-	-	-	-	-	-	-	-	-	12
5.7	Hazards Identification and Alternatives Analysis Report	6	12	32	-	24	32	-	-	-	4	4	12	- 126
	Subtotals	28	12	222	-	128	86	-	-	-	20	4	32	4 536

Attachment 'B' - MANHOURS and FEE

FIRM: Dibble Engineering	CONTRACT NO.: TBD	PROJECT NO.: TBD
PROJECT: Paradise Valley Watershed Studies	New Contract: <input checked="" type="checkbox"/>	
DATE: August 1, 2015		

6 - Cherokee Wash Alternatives Analyses														
6.1 Drainage and Evaluation Criteria	2	-	8	-	-	-	-	-	-	-	4	-	-	14
6.2 Potential Alternatives	6	-	22	-	-	8	-	-	-	-	-	-	-	36
6.3 Alternatives Evaluation	8	-	128	-	104	40	-	-	-	8	-	4	4	296
6.4 Operations and Maintenance Recommendations	2	-	6	-	-	6	-	-	-	2	-	8	-	24
6.5 Estimated Costs	-	-	18	-	-	-	-	-	-	2	-	8	-	28
6.6 Matrix Evaluation	4	-	8	-	-	-	-	-	-	-	-	-	-	12
6.7 Hazards Identification and Alternatives Analysis Report	6	12	24	-	24	32	-	-	-	4	4	12	-	118
Subtotals	28	12	214	-	128	86	-	-	-	20	4	32	4	528
7 - Capital Improvement Plan														
7.1 Develop Prioritization Factors and CIP Formatting with Town	4	-	4	-	-	-	-	-	-	4	-	-	-	12
7.2 Prioritize Projects	4	-	4	-	-	-	-	-	-	4	-	-	-	12
7.3 Evaluate Funding Source Opportunities	4	-	32	-	-	-	-	-	-	2	-	-	-	38
Subtotals	12	-	40	-	-	-	-	-	-	10	-	-	-	62
8 - Stormwater Design Standards														
8.1 Update Stormwater Design Requirements	4	4	40	-	-	-	-	-	-	-	-	-	-	48
8.2 Low Impact Development Guidelines	2	-	-	-	-	-	-	-	-	12	-	50	32	96
8.3 Update Detention/Retention Requirements	2	-	16	-	-	-	-	-	-	-	-	-	-	18
8.4 Develop Operations and Maintenance Guidelines	4	-	12	-	-	-	-	-	-	4	8	-	-	28
Subtotals	12	4	68	-	-	-	-	-	-	16	8	50	32	190

2959

Attachment 'B' - MANHOURS and FEE

FIRM: Dibble Engineering	CONTRACT NO.: TBD	PROJECT NO.: TBD
PROJECT: Paradise Valley Watershed Studies	New Contract: <input checked="" type="checkbox"/>	
DATE: August 1, 2015		

DIBBLE ESTIMATED FEE BY TASK														
Personnel Rates (Incl. O.&P.)	\$ 185.00	\$ 155.00	\$ 155.00	\$ 145.00	\$ 115.00	\$ 110.00	\$ 190.00	\$ 145.00	\$ 185.00	\$ 155.00	\$ 125.00	\$ 75.00	\$ 95.00	
TASK	Principal Engineer	QA/QC Manager	Senior Engineer	Project Engineer	Assistant Project Engineer (EIT)	Designer	Public Engagement Leader	Public Engagement Specialist	Principal Landscape Architect	Senior Landscape Architect	Landscape Architect	Landscape Designer	Technician	TOTAL
1 - Project Management and Data Collection														
1.1 Project Management	\$ 11,100	\$ 6,200	\$ -	\$ -	\$ -	\$ -	\$ 1,140	\$ 2,320	\$ -	\$ 3,100	\$ -	\$ -	\$ -	\$ 23,860
1.2 Coordination with FCDMC, COP, COS	\$ 1,480	\$ -	\$ 1,860	\$ -	\$ -	\$ 880	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ -	\$ -	\$ 4,720
1.3 Data Collection	\$ 370	\$ -	\$ 1,240	\$ 580	\$ 460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600	\$ -	\$ 3,250
1.4 Field Investigations - Cheney	\$ -	\$ -	\$ 2,480	\$ -	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ 5,560
1.5 Field Investigations - Cherokee	\$ -	\$ -	\$ 2,480	\$ -	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ 5,560
1.6 Inventory of Existing Drainage Facilities	\$ -	\$ -	\$ 620	\$ -	\$ -	\$ 1,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,380
1.7 Presentation of Project Results to Council	\$ 370	\$ -	\$ 3,720	\$ -	\$ -	\$ 880	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,970
1.8 Data Collection Report	\$ 740	\$ -	\$ 2,480	\$ -	\$ -	\$ 880	\$ -	\$ -	\$ -	\$ 310	\$ -	\$ -	\$ -	\$ 4,410
Subtotals	\$ 14,060	\$ 6,200	\$ 14,880	\$ 580	\$ 4,140	\$ 4,400	\$ 1,140	\$ 2,320	\$ -	\$ 5,890	\$ 500	\$ 600	\$ -	\$ 54,710
2 - Public Information and Outreach														
2.1 Refine Scope of Work, Project Schedule and Attend Kick off Meeting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 760	\$ 580	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,340
2.2 Prepare a Public Involvement & Communications Plan	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 380	\$ 580	\$ -	\$ -	\$ -	\$ -	\$ 190	\$ 1,490
2.3 Develop Master Project Stakeholder Inventory and Contact Lists	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 190	\$ 290	\$ -	\$ -	\$ -	\$ -	\$ 570	\$ 1,050
2.4 Project Kickoff Community Workshop & Open House	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520	\$ 3,480	\$ 740	\$ 1,550	\$ -	\$ -	\$ 2,280	\$ 11,050
2.5 Establish Dedicated Project Hotline	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 145	\$ -	\$ -	\$ -	\$ -	\$ 190	\$ 335
2.6 Electronic Survey Phase 1: Hazard Identification	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 1,520	\$ 3,770	\$ -	\$ -	\$ -	\$ -	\$ 3,420	\$ 9,050
2.7 Project Electronic Newsletter #1	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 380	\$ 1,160	\$ -	\$ -	\$ -	\$ -	\$ 760	\$ 2,640
2.8 Cherokee Watershed Public Open House #1: Hazard Identification	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,900	\$ 3,480	\$ -	\$ 1,550	\$ -	\$ -	\$ 3,040	\$ 11,450
2.9 Cheney Watershed Public Open House #1: Hazard Identification	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520	\$ 3,480	\$ -	\$ 1,550	\$ -	\$ -	\$ 2,660	\$ 10,690
2.10 Electronic Survey Phase 2: Alternatives Analysis	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 1,520	\$ 3,770	\$ -	\$ -	\$ -	\$ -	\$ 3,420	\$ 9,050
2.11 Project Electronic Newsletter #2	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 380	\$ 870	\$ -	\$ -	\$ -	\$ -	\$ 760	\$ 2,350
2.12 Cherokee Watershed Public Open House #2: Alternatives Analysis	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520	\$ 3,190	\$ -	\$ 1,550	\$ -	\$ -	\$ 2,280	\$ 10,020
2.13 Cheney Watershed Public Open House #2: Alternatives Analysis	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520	\$ 2,900	\$ -	\$ 1,550	\$ -	\$ -	\$ 1,900	\$ 9,350
2.14 Project Electronic Newsletter #3	\$ 185	\$ -	\$ 155	\$ -	\$ -	\$ -	\$ 190	\$ 870	\$ -	\$ -	\$ -	\$ -	\$ 760	\$ 2,160
2.15 Additional Focus Group/HOA/Community Meetings	\$ 1,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,520	\$ 1,160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,160
2.16 Project Coordination Meetings	\$ 1,480	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ 1,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,620
Subtotals	\$ 11,470	\$ -	\$ 2,170	\$ -	\$ -	\$ -	\$ 16,720	\$ 29,725	\$ 740	\$ 7,750	\$ -	\$ -	\$ 22,230	\$ 90,805

Attachment 'B' - MANHOURS and FEE

FIRM:	Dibble Engineering	CONTRACT NO.:	TBD
PROJECT:	Paradise Valley Watershed Studies	PROJECT NO.:	TBD
DATE:	August 1, 2015	New Contract:	X

	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
3 - Cheney Modeling & Hazards Identification														
3.1	Review FLO-2D Model for Completeness	\$ -	\$ 620	\$ 1,240	\$ 1,160	\$ 2,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,780
3.2	Verification of FLO-2D Model Results & Revisions	\$ -	\$ 620	\$ 1,240	\$ 2,320	\$ 4,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,780
3.3	Erosion Hazard, Sedimentation Analyses	\$ -	\$ -	\$ -	\$ 3,480	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,320
3.4	Wash Stability Analyses	\$ -	\$ -	\$ -	\$ 2,320	\$ 920	\$ -	\$ -	\$ -	\$ -	\$ 250	\$ 300	\$ -	\$ 3,790
3.5	Develop Flow Depth/Risk Graphics for Public Meetings (2)	\$ -	\$ -	\$ 620	\$ -	\$ 2,300	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ -	\$ 3,040	\$ 6,460
3.6	Establish Levels of Protection/Risk Tolerance	\$ -	\$ -	\$ 620	\$ -	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,460
3.7	Develop Hazards Identification Memorandum	\$ -	\$ 1,240	\$ 1,860	\$ 1,740	\$ 1,380	\$ -	\$ -	\$ -	\$ -	\$ 620	\$ -	\$ 760	\$ 7,600
	Subtotals	\$ -	\$ 2,480	\$ 5,580	\$ 11,020	\$ 15,640	\$ -	\$ -	\$ -	\$ -	\$ 620	\$ 750	\$ 300	\$ 40,190
4 - Cherokee Wash Modeling & Hazards Identification														
4.1	Review FLO-2D Model for Completeness	\$ -	\$ 620	\$ 1,240	\$ 1,160	\$ 2,760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,780
4.2	Verification of FLO-2D Model Results	\$ -	\$ 620	\$ 1,240	\$ 2,320	\$ 4,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,780
4.3	Erosion Hazard, Sedimentation Analyses	\$ -	\$ -	\$ -	\$ 3,480	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,320
4.4	Wash Stability Analyses	\$ -	\$ -	\$ -	\$ 2,320	\$ 920	\$ -	\$ -	\$ -	\$ -	\$ 250	\$ 300	\$ -	\$ 3,790
4.5	Develop Flow Depth/Risk Graphics for Public Meetings (2)	\$ -	\$ -	\$ 620	\$ -	\$ 2,300	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ -	\$ 2,660	\$ 6,080
4.6	Develop Hazards Identification Memorandum	\$ -	\$ 1,860	\$ 3,100	\$ 1,740	\$ 1,840	\$ -	\$ -	\$ -	\$ -	\$ 310	\$ -	\$ 380	\$ 9,230
	Subtotals	\$ -	\$ 3,100	\$ 6,200	\$ 11,020	\$ 14,260	\$ -	\$ -	\$ -	\$ -	\$ 310	\$ 750	\$ 300	\$ 38,980
5 - Cheney Alternatives Analyses														
5.1	Drainage and Evaluation Criteria	\$ 370	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 620	\$ -	\$ -	\$ 2,230
5.2	Potential Alternatives	\$ 1,110	\$ -	\$ 3,410	\$ -	\$ -	\$ 880	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,400
5.3	Alternatives Evaluation	\$ 1,480	\$ -	\$ 19,840	\$ -	\$ 11,960	\$ 4,400	\$ -	\$ -	\$ -	\$ 1,240	\$ -	\$ 300	\$ 39,600
5.4	Operations and Maintenance Recommendations	\$ 370	\$ -	\$ 930	\$ -	\$ -	\$ 660	\$ -	\$ -	\$ -	\$ 310	\$ -	\$ 600	\$ 2,870
5.5	Estimated Costs	\$ -	\$ -	\$ 2,790	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 310	\$ -	\$ 600	\$ 3,700
5.6	Matrix Evaluation	\$ 740	\$ -	\$ 1,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,980
5.7	Hazards Identification and Alternatives Analysis Report	\$ 1,110	\$ 1,860	\$ 4,960	\$ -	\$ 2,760	\$ 3,520	\$ -	\$ -	\$ -	\$ 620	\$ 500	\$ 900	\$ 16,230
	Subtotals	\$ 5,180	\$ 1,860	\$ 34,410	\$ -	\$ 14,720	\$ 9,460	\$ -	\$ -	\$ -	\$ 3,100	\$ 500	\$ 2,400	\$ 72,010

