

Agreement

Carson Water Subconservancy District (hereinafter "CWSD") and JE Fuller/Hydrology & Geomorphology, Inc. (hereinafter "JE FULLER") hereby enter into an agreement whereby JE FULLER will complete Stagecoach Area Drainage Masterplan Project (hereinafter "Project") in accordance with and subject to the following terms and conditions:

1) ASSIGNMENT

JE FULLER's assignment shall relate to the following product(s) or service(s):

Stagecoach Area Drainage Masterplan Project, which is further identified and described in attached Exhibits A, B & C. The compensation paid to JE FULLER for the Stagecoach Area Drainage Masterplan Project shall not exceed \$338,581.

2) **INDEMNITIES**

- (a) To the fullest extent permitted by law JE FULLER shall indemnify, hold harmless and defend, not excluding the CWSD's right to participate, the CWSD from and against all liability, claims, actions, damages, losses, and expenses, including, without limitation, reasonable attorneys' fees and costs, arising out of any alleged negligent or willful acts or omissions of JE FULLER, its officers, employees and agents.
- (b) CWSD will indemnify and hold JE FULLER harmless with respect to any claims or actions instituted by third parties which result from the use by JE FULLER of material furnished by CWSD or where material created by JE FULLER is substantially changed by CWSD. Information or data obtained by JE FULLER from CWSD to substantiate claims made in advertising shall be deemed to be "materials furnished by CWSD."
- (c) In the event of any proceeding against CWSD by any regulatory agency or in the event of any court action or self-regulatory action challenging any advertising prepared by JE FULLER, JE FULLER shall assist in the preparation of the defense of such action or proceeding and cooperate with CWSD and CWSD's attorneys. CWSD will reimburse JE FULLER any out-of-pocket costs JE FULLER may incur in connection with any such action or proceeding.
- (d) Neither party waives any right or defense to indemnification that may exist in law or equity.

3) **INSURANCE**

Unless otherwise required in this Agreement, the CWSD and JE FULLER shall, during the performance of the services as provided herein, maintain insurance of the types and amounts specified, and with insurers satisfactory to the other party as follows:

- a) Comprehensive General Liability including \$1,000,000 per occurrence for bodily injury and property damage; \$1,000,000 Products/Completed Operations Aggregate; \$2,000,000 General Aggregate over all interests.
- b) Comprehensive Automobile Liability including coverage for owned, non-owned, and hired vehicles: \$1,000,000 Bodily Injury, \$1,000,000 Property Damage.
- c) JE FULLER shall name CWSD as an additional insured and deliver a certificate to CWSD.

4) TERM OF AGREEMENT

- a) The term of this Agreement will commence on the date of the last signature executed hereon and will continue in full force and effect until <u>12/31/2024</u>, unless extended by written agreement of the parties.
- JE FULLER will submit monthly invoices with a description of activities preformed.
- c) In the event of termination of this Agreement, the rights, duties, and responsibilities of JE FULLER shall continue in full force during the period of notice.
- d) If circumstances arise that require a time extension to complete the project, the CWSD Board grants the General Manager authority to do so in a written notice to JE FULLER.



5) **PERFORMANCE**

Should JE FULLER fail to perform any of the services provided for in Exhibit "A", CWSD shall notify JE FULLER of such non-performance and allow thirty (30) days for JE FULLER to remedy the performance. If the performance has not been satisfied within thirty days, CWSD may withhold payment only for the services not performed in accordance with this Agreement.

6) SUPPLEMENTS TO AGREEMENT

The following Exhibits are an integral part of this Agreement:

- (a) Exhibit A JE FULLER Business Plan
- (b) Exhibit B JE FULLER Fee Table
- (c) Exhibit C JE FULLER Project Schedule

7) INDEPENDENT CONTRACTOR

JE FULLER acknowledges that it is furnishing the services contemplated by this Agreement hereto as an independent contractor, and not as an employee, or agent of CWSD or any of its affiliates.

8) **OWNERSHIP**

Any reports, histories, studies, tests, manuals, instructions, photographs, negatives, blue prints, plans, maps, data, system designs, computer code (which are intended to be considered under this Agreement), or any other documents or drawings, prepared, or in the course of preparation, by JE FULLER (or its subcontractors) in performance of its obligations under this Agreement shall be the exclusive property of CWSD and all such materials shall be delivered into CWSD's possession by JE FULLER upon completion, termination, or cancellation of this Agreement. JE FULLER shall not use, willingly allow, or cause to have such materials used for any purpose other than performance of JE FULLER's obligations under this Agreement without the prior written consent of CWSD.

9) **AGREEMENT TERMINATION**

- (a) Termination Without Cause. Any discretionary or vested right of renewal notwithstanding, this Agreement may be terminated upon written notice by mutual consent of both parties or unilaterally by either party without cause.
- (b) Cause Termination for Default or Breach. A default or breach may be declared with or without termination. This Agreement may be terminated by either party upon written notice of default or breach to the other party as follows:
 - (1) If JE FULLER fails to provide or satisfactorily perform any of the conditions, work, deliverables, goods, or services called for by this Agreement within the time requirements specified in this Agreement or within any granted extension of those time requirements; or
 - (2) If any State, county, city, or federal license, authorization, waiver, permit, qualification or certification required by statute, ordinance, law, or regulation to be held by JE FULLER to provide the goods or services required by this Agreement is for any reason denied, revoked, debarred, excluded, terminated, suspended, lapsed, or not renewed; or
 - (3) If JE FULLER becomes insolvent, subject to receivership, or becomes voluntarily or involuntarily subject to the jurisdiction of the bankruptcy court; or
 - (4) If CWSD materially breaches any material duty under this Agreement and any such breach impairs JE FULLER's ability to perform; or
- (c) Time to Correct. Termination upon declared default or breach may be exercised only after service of formal written notice and the subsequent failure of the defaulting party within thirty (30) calendar days of receipt of that notice to provide evidence, satisfactory to the aggrieved party, showing that the declared default or breach has been corrected.
- (d) Winding Up Affairs Upon Termination. In the event of termination of this Agreement for any reason, the parties agree that the provisions of this Section survive termination:



- (1) The parties shall account for and properly present to each other all claims for fees and expenses and pay those which are undisputed and otherwise not subject to set off under this Agreement. Neither party may withhold performance of winding up provisions solely based on nonpayment of fees or expenses accrued up to the time of termination;
- (2) JE FULLER shall satisfactorily complete work in progress at the agreed rate (or a pro rata basis if necessary) if so requested by the CWSD;
- (3) JE FULLER shall execute any documents and take any actions necessary to effectuate an assignment of this Agreement if so requested by the CWSD; and
- (4) JE FULLER shall preserve, protect, and promptly deliver into CWSD possession all information in accordance with Section 8, Ownership.

10) RIGHTS UPON TERMINATION

Upon termination of this Agreement, JE FULLER shall transfer, assign and make available to CWSD or CWSD's representative, all property and materials in their possession or control belonging to and paid for by CWSD, subject, however, to any rights of third parties of which JE FULLER has informed CWSD.

11) **BREACH REMEDIES.**

Failure of either party to perform any obligation of this Agreement shall be deemed a breach. Except as otherwise provided for by law or this Agreement, the rights and remedies of the parties shall not be exclusive and are in addition to any other rights and remedies provided by law or equity, including but not limited to actual damages. If the court awards reasonable attorney's fees to the prevailing party, in an amount to be determined by the Court.

The parties acknowledge or agree that the contract was written and agreed by both parties.

Prior to the initiation of any litigation the parties agree to mediate.

12) PUBLIC RECORDS

Pursuant to NRS 239.010, information or documents received from JE FULLER may be open to public inspection and copying. CWSD has a legal obligation to disclose such information unless a particular record is made confidential by law. JE FULLER may label specific parts of an individual document as a "trade secret" or "confidential" in accordance with NRS 333.333, provided that JE FULLER thereby agrees to indemnify and defend CWSD for honoring such a designation. The failure to so label any document that is released by CWSD shall constitute a complete waiver of any and all claims for damages caused by any release of the records.

13) **NOTICES**

Any notice pursuant to this Agreement will be addressed to the following parties:

Attn.: Edwin James Carson Watershed Subconservancy District 777 E William Street, Suite 209 Carson City, NV 89701 Attn.: Mike Kellogg JE Fuller/Hydrology & Geomorphology, Inc. 8400 S. Kyrene Rd., Ste. 201 Tempe AZ 85284

14) **FORCE MAJEURE**

Neither party shall be held responsible for any delay or failure in performance of any part of this Agreement to the extent such delay or failure is caused by fire, flood, explosion, war, embargo, government requirement, civil or military authority, act of God, pandemic or other similar causes beyond its control and without the fault or negligence of the delayed or non-performing party. The affected party will notify the other party in writing within ten (10) days after the beginning of any such cause that would affect its performance. Notwithstanding, if a party's performance is delayed for a period exceeding thirty (30) days from the date the other party receives notice under this paragraph, the non-affected party will have the right, without any liability to the other party, to terminate this agreement.



15) **HEADINGS**

Headings in this Agreement are for convenience only and are not intended to be used in interpreting or construing the terms, covenants, and conditions of this Agreement.

16) ENTIRE AGREEMENT

This Agreement constitutes the whole agreement between the parties with respect to the subject matter contained herein, and there are no terms other than those contained herein. No modification or amendment of this Agreement shall be valid unless in writing and signed by the parties hereto.

17) **SEVERABILITY**

Each provision of this Agreement shall be considered separable and if for any reason any provision or provisions herein are determined to be invalid, unenforceable, or illegal under any existing or future law, such invalidity, unenforceability or illegality shall not impair the operation of or affect those portions of this Letter that are valid, enforceable and legal.

18) **GOVERNING LAW**

This Agreement shall be interpreted in accordance with the laws of the State of Nevada pertaining to contracts made and performed entirely therein. If the above accords with the parties' understanding and agreement, kindly indicate consent hereto by signing in the place provided below.

Accepted and Agreed on beha Carson Water Subconservand		Accepted and Agreed on bo JE Fuller/Hydrology & Geo	
Signature	 Date	Signature	Date
Edwin D. James		Mike Kellogg	
General Manager		Vice President	



EXHIBIT A - Business Plan

DATE December 7, 2022

TO Ed James, Director

Carson Water Subconservancy District

FROM Mike Kellogg, PG, CFM, GISP

JE Fuller Hydrology & Geomorphology, Inc.

RE Stagecoach Area Drainage Master Plan – Business Plan

Introduction

The following is a Business Plan (BP) for the Stagecoach Area Drainage Master Plan (SADMP). It is the project team's understanding that the overall vision for the project is to identify and quantify the flood hazard risk within the Stagecoach community and its surrounding area located north of the Carson River, and to develop flood risk mitigation alternatives. Residents and stakeholders will be informed of the project and have the opportunity to engage and provide input throughout the project through a public outreach process that is defined in this Plan. The major task headings for the Plan were selected to be in compliance with the FEMA Mapping Activity Statement (MAS) and Mapping Information Platform (MIP) activities.

Project Goals

- 1. Define flood hazards for the 5-year, 24-hour storm.
- 2. Define flood hazards for the 25-year, 24-hour storm.
- 3. Define flood hazards for the 100-year, 24-hour storm.
- 4. Define flood hazards for the 100-year, 6-hour storm.
- 5. Identify flood hazard mitigation alternatives for both the 25-year, 24-hour, and 100-year, 24-hour (or 100-year, 6-hour if it controls) storms to minimize the impact of flooding.
- 6. Assist Carson Water Conservancy District (CWSD) with Benefit/Cost Analysis (BCA) consistent with current accepted FEMA methodologies.
- 7. Communicate the project goals and analysis results through a series of community outreach meetings.
- 8. Present the project results to the CWSD Board and Lyon County Commissioners.

Deliverables

All Deliverables and Submittals for the project will be provided to the Client Team in digital format. A submittal for each task will be provided to the Client Team for review and approval and will include supporting digital data.

Study Area

The study area is approximately 70 square miles and is located immediately east of Dayton Valley and north of the Carson River (Figure 1).

Consultant Team

The Consultant Team is comprised of: JE Fuller/Hydrology & Geomorphology (JEF) who will serve as Prime and Lumos & Associates (LA) as Subconsultant.

Project Manager: Mike Kellogg (JEF) (480) 222-5712
 Project Engineer: Richard Waskowsky (JEF) (480) 222-5702

Client Team

The Client Team is comprised of Lyon County and the Carson Water Subconservancy District. Lead contacts are listed below.

•	Carson Water Subconservancy District: Ed James	(775) 887-7456
•	Lyon County: Andrew Haskin	(775) 463-6591 x1480
	David Bruketta	(775) 246-6220 x3
•	Lyon County Engineer: Damon McAlister (Farr West Engineering)	(775) 853-7262

Business Plan

Task 1. TOPOGRAPHIC DATA COLLECTION

Task 1.1. General Data Collection

JEF will coordinate with Lyon County and the Carson Water Subconservancy District (CWDS) to collect, organize, and review pertinent data, reports, and plans for the SADMP. Data may include, but will not be limited to:

- Historical aerial photography
- Historical topography
- Geologic mapping
- NRCS soils mapping
- Photographs and video of documented flooding, erosion, and sedimentation
- Drainage reports
- Previous studies
- Computer modeling
- Land Use
- Rainfall and stream gage records
- NOAA Atlas 14 rainfall statistics

Task 2. SURVEY DATA COLLECTION

Task 2.1. LiDAR Acquisition

JEF will subcontract for the acquisition of new LiDAR mapping. It is anticipated that the contract will be with Quantum Spatial, Inc. Figure 2 shows the extent of new LiDAR needed. The final digital product from Quantum Spatial will be:

- Classified Return .las files
- Bare Earth DEMs
- Technical Data Report

Task 2.2. Terrain

JEF will develop a baseline terrain for the study area from the new LiDAR mapping.

Task 3. HYDROLOGIC DATA COLLECTION

Task 3.1. Upper Watershed Model Development

JEF will develop the base 2D model assuming existing conditions. Topography will be derived from the baseline terrain developed from the LiDAR (Task 2.0).

- Software. JEF will develop a rainfall/runoff hydrologic and hydraulic model for the Upper
 Watershed Area using the most updated version of the FLO-2D PRO software package
 developed by FLO-2D Software, Inc. The version used at the onset of the modeling effort will be
 used consistently throughout the project.
- Grid Size. The maximum grid size for the Upper Watershed Modeling will be between 20- and 40-feet. The tributary flow pattern of the Upper Watershed area is ideal for a larger grid size

- model, which will allow for shorter run times and more efficient development of the upstream hydrology. The grid elevations will be determined by converting the LiDAR data (and other supplemental survey data as necessary) into a gridded raster dataset at the same cell size as the 2D model. Depending on the number of grids, multiple 2D model domains may be necessary.
- Rainfall. JEF will obtain rainfall data/distributions for the 5-year, 25-year, and 100-year 24-hour storms, and the 100-year, 6-hour storm. Rainfall hyetographs will be developed with close coordination with the Client Team and will be sourced from the Nevada Department of Transportation (NDOT) to be consistent with the adjacent Dayton Valley and South Dayton Valley ADMPs. Precipitation depths will be determined using NOAA Atlas 14 precipitation frequency estimates.
- Rainfall Losses. Infiltration losses will be computed using the statewide Green-Ampt parameters recently developed by the Nevada Department of Transportation¹. The input parameters will be verified against similar parameters from applicable past-projects.
- Floodplain Cross-Sections. Floodplain cross-sections will be established throughout the model area based on preliminary 2D model results. The cross-sections will be aligned as perpendicular to the direction of flow as possible. The project team will coordinate with Client Team regarding the desired locations of floodplain cross-sections.
- Outflow Hydrographs. Hydrographs at the downstream boundary will be applied at the upstream boundary of the model for the Detailed Watershed Area. Scripts will be developed to automate this hydrograph application.

Task 4. HYDRAULIC DATA COLLECTION

Task 4.1. Hydraulic Model Development

JEF will develop the base 2D model assuming existing conditions.

- Software. JEF will develop a rainfall/runoff hydrologic and hydraulic model for the Detailed Watershed Area using the most updated version of the FLO-2D PRO software package developed by FLO-2D Software, Inc. The version used at the onset of the modeling effort will be used consistently throughout the project.
- Grid Size. The maximum grid size for the 2D modeling will be between 10 and 20-feet. The smaller grid size of 10-feet may be used if model stability and runtimes allow. This size should be adequate to represent road-side ditches and other major hydraulic structures within the modeling area. The grid elevations will be determined by converting the LiDAR data (and other supplemental survey data as necessary) into a gridded raster dataset at the same cell size as the 2D model. Depending on the number of grids, multiple 2D model domains may be necessary.
- Rainfall. The rainfall durations and distributions for the 5-year, 25-year, and 100-year 24-hour storms and the 100-year, 6-hour storm that were developed for Task 4.1 will be incorporated into the detailed model. The NOAA Atlas 14 Rainfall depths will be spatially varied across the 2D domain based on the NOAA atlas 14 dataset.
- Rainfall Losses. The same rainfall loss methodology applied in Task 3.1 will be applied to the detailed model.

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¹ https://geohub-ndot.hub.arcgis.com/datasets/NDOT::greenandampt-statsgo2/explore?location=38.459798%2C-116.965921%2C7.58

- Inflows. Outflow hydrographs from Task 3.1 will be incorporated into the 2D model as inflow hydrographs. The inflow hydrograph locations will be at the model boundary between the Upper Watershed and Detailed 2D models.
- Impervious Area. Impervious area will be estimated based on general assumptions on a zoning-level basis. Any rock outcrop areas identified in the NRCS soil survey will also be included.
- Land Use/Friction Losses. Any existing datasets that identify surface characteristics will be incorporated into the model. In areas without existing data, a n-value dataset will be generated based on major surface characteristics (e.g., roads, natural desert, developed parcels, etc.).
- Obstructions to Storage and flows. Volumetric and flow obstructions will be modeled from existing datasets (e.g., building footprints) using the area reduction factor (ARF) input data file. Other flow obstructions (such as berms) should be captured in the project LiDAR mapping but may be modified as necessary using the FLO-2D Levee file and cell elevation adjustments.
- Culverts. Hydraulic rating curves for larger, regional culverts (greater than 24 inches) will be
 developed from the field assessment data (Task 5.2) and available as-builts. The rating curves
 will be incorporated into the model as hydraulic structures. Given the historical problem with
 sedimentation and debris, a clogging factor will likely be used in when developing the hydraulic
 rating curves. Culverts smaller than 24 inches may be added if initial results indicate they are
 necessary.
- Floodplain Cross-Sections. Floodplain cross-sections will be established throughout the model area based on preliminary 2D model results. The cross-sections will be aligned as perpendicular to the direction of flow as possible. The project team will coordinate with Lyon County regarding the desired locations of floodplain cross-sections.
- Model Verification. A preliminary existing conditions model will be reviewed by County staff (Engineering, Road Maintenance, etc.) to verify the model is appropriately representing the locations and magnitude of flooding compared with historical flooding accounts. The preliminary results will also be compared with historical drainage complaints and damage reports provided by the Client Team.

Task 4.2. Geomorphic Assessment

JEF will conduct a geomorphic assessment of the study area to identify and classify the various landforms. Initial reconnaissance of the study area indicated the presence of the following landforms: mountain, alluvial fan, alluvial plain, and playa. Each of these landforms pose a different type of flood risk, thus need to be identified and assessed. This task will include a delineation of each identified landform type. This task will also include an historical flowpath assessment to evaluate how flowpaths have changed within the period of record.

JEF will conduct a historical flow path assessment. The purpose of this task is to determine the historical preferred flow path of the major wash corridors within Detailed Model Area. The assessment will be conducted using historical aerial photography and topography (as available). The results of the assessment will aid in better understanding the present flooding issues and help in calibrating the 2-dimenstional models (Task 3.1 and Task 4.1).

Task 4.3. Sedimentation Engineering

Flooding-related sedimentation and debris accumulation have historically been problematic within the study area. JEF will conduct sedimentation engineering tasks to identify the areas potentially impacted

by sedimentation and quantify sedimentation rates. JEF will also perform sediment transport or yield computations to support the alternative assessments.

Task 4.4. Field Assessment and Verification

JEF will conduct a field assessment of the project area to verify surface features, culverts, land use, and preliminary results of the existing conditions modeling. Up to 16 sediment samples will be collected for the Sedimentation Engineering task. Samples will be collected either by bulk collection or pebble count. Grain size distribution for bulk collected samples will be determined by mechanical sieve laboratory procedures. Lab analysis will be conducted by a local geotechnical lab facility.

Task 5. FLOODPLAIN MAPPING

Task 5.1. Flood Hazard Classification

JEF will define flood hazard risk to pedestrians (children), vehicles, and buildings using the depth-velocity relationship outlined in the United States Bureau of Reclamation (USBR) Technical Memorandum 11 (TM 11) (1988). The analysis will be conducted for the 5-year, 25-year, and 100-year flood events. The results will be hazard classification exhibits for pedestrians, impacted buildings and roadway locations for each flood event.

Task 5.2. Mitigation Alternatives Development

JEF will work closely with Lyon County in developing flood mitigation alternatives.

- 25-Year Flood Mitigation Alternative. The Consultant Team will develop a series of alternatives for areas (up to 12) with significant flood and sedimentation risk. This Task will include a priority list of projects to reduce flood risk.
- 100-Year Flood Mitigation Alternative. The Consultant Team will develop a series of alternatives for areas (up to 12) with significant flood and sedimentation risk. This Task will include a priority list of projects to reduce flood risk.
- Phasing Assessment Alternative. JEF will assess the results and develop a recommended phasing plan for the alternatives. Up to three additional 2D models may be created to aid in developing the recommended phasing plan.
- Off-Site 15% Design Plans. LA will prepare 15% preliminary engineering drawings for alternatives concepts. Per coordination discussions, LA anticipates that for each of these washes we will need to develop 15% schematic grading designs and cost estimates for both the 25-year, 24-hour storm event and the controlling 100-year storm (24-hour or 6-hour) event to allow Lyon County the ability to decide the level of protection they want to achieve and the cost to reach that level of protection. These improvements would be sited to retain/detain off site flows and sediment to mitigate downstream impacts to the developed areas.

The schematic plans will include:

- The drawings will be prepared on 11"x17" format sheets at a standard engineering scale.
- Plan view grading plans for basins
- Development of preliminary grading quantity estimates
- Plan view layout of piping
- Plan and profile concepts for channels to understand grading impacts

This task includes review meetings with JEF and the Client Team. It is assumed that there will be one round of comments between the Client Team and the Consultant Team.

• Life Cycle Cost Estimates. LA will prepare life cycle cost estimates for the facilities to account for annual maintenance and future replacement costs of the proposed facilities, based upon the 15% design plans. LA will provide these for all conceptual designs.

Task 5.3. Technical Report

JEF will draft a technical report encompassing all hydrologic, hydraulic, and design tasks and submit to the Client Team for review. One round of revisions is anticipated to address Client Team comments. Final digital copies of all models and model output will be provided to the Client Team.

Upon approval of the final technical report, JEF will draft a separate Executive Summary document.

Task 5.4. MIP Submittal

JEF will collect, organize, format, and submit the project data to the FEMA MIP.

Task 5.5. BCA Assistance

JEF will assist CWSD in developing the benefit/cost analysis consistent with current acceptable FEMA methodologies.

Task 6. HOLD PUBLIC EVENTS

The project technical team will work with Lyon County to secure a venue for two public outreach meetings. The meetings will be an open house format.

Public Meeting #1: Open House Educational and Input Meeting located in Lyon County near the initiation of the study. The Consultant Team will work with the Client Team to complete the following:

- Location research, availability, confirmation, and set-up
- Development and review of speaker and content order
- Development of Boards
- Development of feedback handout
- Advertising (assuming some assistance by the County)
- Press Release development and distribution (assuming majority of this will be conducted by the County)
- Website correspondence management (assuming some assistance by the County)
- Compilation of input from residents

Public Meeting #2: Informational Public Meeting located in Lyon County near the conclusion of the study. The Consultant Team will work with the Client Team to complete the following:

- Location research, availability, confirmation, and set-up
- Development and review of speaker and content order
- Development of Boards
- Public input reporting
- Advertising (assuming some assistance by the County)

- Press Release development and distribution (assuming majority of this will be conducted by the County)
- Website correspondence management

JEF staff will prepare for and attend the following meetings at the conclusion of the project where the project results and alternatives will be presented:

- CWSD Monthly Board Meeting
- Lyon County Monthly Commissioners Meeting

Task 7. Contractor Project Management and Meetings

JEF will prepare for and attend progress meetings as requested by Lyon County and/or CWSD.

JEF will invoice CWSD monthly for work completed. A progress report will be included with each invoice.

Project Administration

<u>Stakeholder Coordination</u>. It is anticipated that multiple stakeholders may be involved in the project, including but not limited to:

- Bureau of Land Management
- Carson Water Subconservancy District
- Local Irrigation Districts
- Local Ranchers/Farmers

It is anticipated that the Lyon County will assist JEF with identifying and coordinating with local stakeholders for data collection efforts and to obtain right-of-entry for the Field Assessment task.

Contract Type. The project contract type will be lump-sum.

Project Schedule. The project tasks will be completed per the schedule in Attachment A.

Project Fee. A project fee table is included as Attachment B.

EXCLUSIONS, LIMITATIONS, AND ASSUMPTIONS

The following are exclusions, limitations, and assumptions associated with this Business Plan:

- USGS LiDAR data identified in Figure 2 will be available at no cost
- Preparation of FEMA submittals for floodplain revisions are not included
- All data will be available at no cost (with the exception of LiDAR mapping data)
- A geotechnical report is not included
- Environmental Permitting is not included
- Storm Water Pollution Prevention Plan is not included
- Final construction plans are not included
- Landscape Plans are not included

- The Client Team will assist in locating documentation regarding existing easements and property information
- The Client Team will pay for any meeting venue rental fees

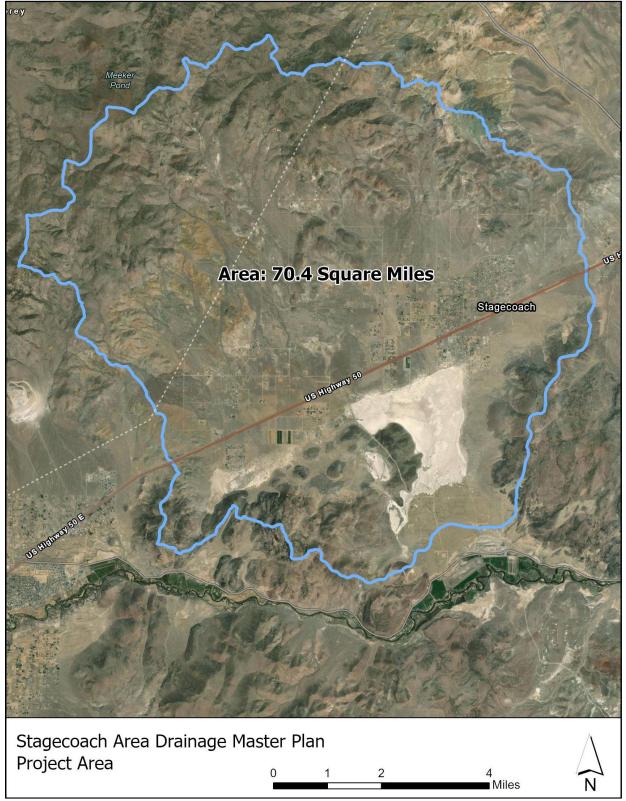


Figure 1. Stagecoach ADMP project area

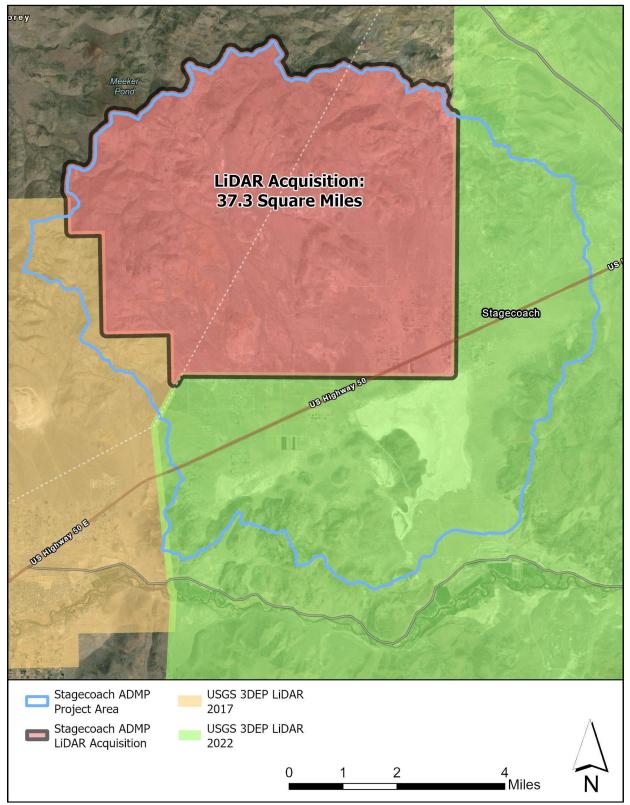


Figure 2. LiDAR acquisition area

EXHIBIT B - Project Schedule

ATTACHMENT A – PROJECT SCHEDULE

			2022						2023	m								202	4		
TASKS	Task Start	Task Start Task End	DEC	NAL	FEB	MAR	APR	MAY	Nor	Jnr	AUG	SEP	D0	NON	DEC	NAL	FEB	MAR	APR	MAY	NOC
1. Topogrpahic Data Collection	12/21/2022	6/30/2024																			
2. Survey Data Collection	12/21/2022	4/30/2023																			
3. Hydrologic Data Collection	1/1/2023	4/30/2023																			
4. Hydraulic Data Collection	3/1/2023	9/30/2023																			
5. Floodplain Mapping	9/1/2023	4/30/2024																			
6. Hold Public Events	1/1/2023	6/30/2024																			
7. Contractor Project Management	12/21/2022	6/30/2024																			
						-		-			-				-		-	-			

EXHIBIT C - Fee Table

ATTACHMENT B – FEE TABLE

TASK	TASK DESCRIPTION	L	ABOR FEE		DIRECT XPENSES	TOTAL FEE	
1	Topographic Data Collection	\$	5,100.00	\$	-	\$	5,100.00
2	Survey Data Collection	\$	5,950.00	\$	39,576.00	\$	45,526.00
3	Hydrologic Data Collection	\$	32,300.00	\$	-	\$	32,300.00
4	Hydraulic Data Collection	\$	63,750.00	\$	4,370.00	\$	68,120.00
5	Floodplain Mapping	\$	142,850.00	\$	-	\$	142,850.00
6	Hold Public Events	\$	29,025.00	\$	5,460.00	\$	34,485.00
7	Contractor Project Management and Meetings	\$	10,200.00	\$	-	\$	10,200.00
Notes: \$39	5,576 direct expense is the LiDAR acquisition fee.						
				ТО	TAL FEE	\$	338,581.00