EXHIBIT A-4 – SCOPE OF SERVICES
Contract Amendment No. 4

Scope of Services

Based on recent project developments and in accordance with the County's request, the Biggs Cardosa Associates, Inc. (BCA) design team will provide additional project management, structural, roadway, right-of-way, and hydraulics engineering support.

In addition, since the original environmental analysis was conducted, minor changes have been made to the project, including construction of a new storm drain outlet and levee work within the creek channel and a maintenance access road. The 2011 Biological Assessment (BA) for the project will need to be supplemented to update the FESA consultation with the United States Fish and Wildlife Service to include these revised project elements. In addition, due to the passage of time, existing conditions have changed, and additional regulatory requirements exist. The BCA design team will continue working closely with the County on the NEPA revalidation and regulatory permitting process. We have progressed and/or completed the environmental engineering/permitting tasks and have assisted the County with the submittals to the regulatory agencies.

BCA will complete the extra scope of services through the completion of the following tasks:

Task 1 – Project Management

Task 1.1 – Work Plan

BCA will prepare a Work Plan as a first order of work after Notice to Proceed. A draft Work Plan with will be distributed within 2 weeks after NTP. A final Work Plan will be issued 1 week after receipt of comments from the County. The Work Plan will be updated as needed during the project to ensure that a technically sound, constructible and cost-effective set of construction documents are produced efficiently.

Deliverables:

- ✓ Draft and Final Work Plan

Task 1.2 – Coordination/Meetings/Administration

BCA will perform project management that includes supervision and scheduling of project staff, review of work prepared by staff and subconsultants, project coordination, quality assurance and control, monitoring the project schedule and budget, preparation of project deliverables, and attendance at meetings with the County and other agencies.

More specifically, we will coordinate with the County during the completion of the 100% PS&E design. We have included up to eight (8) focused coordination meetings via conference calls. It is assumed that no further PDT meetings will be held.

We will also continue to coordinate with County Regional Parks and Live Nation regarding the proposed improvements within the Glen Helen Regional Park.

We will continue to coordinate with the County regarding the High-Cost Bridge Agreement. We have assisted the County in addressing all Caltrans HBP comments and provided all supporting documentation to the County in support of the agreement.

Task 1.3 – Quality Assurance / Quality Control (QA/QC)

BCA has an established Quality Management System (QMS) that contains various Design Quality Control Procedures (DQCPs). Each DQCP deals with one element of design (such as drawings, calculations, quantities, reports, computer programs, etc.), clearly spelling out the procedures that all team members must follow to maintain proper quality for this project. The QMS is intended to ensure that reports, plans, studies, estimates, etc. are complete, accurate, checked, conform to standards, proofread to meet professional engineering practices, and of a quality acceptable to the client prior to submittal. After approval of the QMS by the County, BCA will set up a mandatory training meeting for all key personnel involved in the project to distribute the QMS, to review key elements and to stress the importance of Quality in our work product.

At all milestone submittals, our PS&E package will undergo two levels of QC checking:

- A Level 1 Check, which is a detailed line-by-line check of the deliverable. All checker comments are reconciled with the designer.
- A Level 2 Check, which is an inter-disciplinary check, where each discipline lead will review the plans of all other disciplines for conflicts or coordination elements with their plans. A Level 2 Check Meeting is then held for all discipline leads to exchange comments and reach resolution.

All our Quality Control checks will be documented. A copy of the signed documentation cover sheet will be included with each of our submittals to the County evidencing that the submittal has undergone our QC check.

Deliverables:

- ✓ Draft Project-Specific QMS
- ✓ Final Project-Specific QMS
- ✓ Quality Control and Quality Assurance forms

Task 1.4 – Quality Assurance / Quality Control (QA/QC)

BCA will prepare a Project Master Schedule in Microsoft Project format. The schedule will be updated monthly and the updates distributed with our Progress Reports. The schedule will have all relationships defined and the critical path and activity floats shown. See Exhibit C for the proposed project design schedule.

Deliverables:

- ✓ Project Master Schedule and updates

Task 1.5 – Progress Reports and Invoices

On a monthly basis, BCA will issue invoices and progress reports to the County detailing major items worked on during the billing period and percentage complete for each task, with substantiation for backup. We will establish and apply internal accounting methods and procedures acceptable to the County and Caltrans for documenting and monitoring contract costs.

Deliverables:

- ✓ Invoices with progress reports

Task 2 – Plans, Specifications and Estimates (PS&E)

The plans will be submitted at "four levels of design"; Preliminary Concept Plans - 35% stage, Preliminary PS&E - 65% stage, Preliminary PS&E - 95% stage, Final PS&E - 100% stage.

Task 2.1 – Preliminary Concept Plans - 35% stage

The 35% plan set will include the following:

- Typical Sections
- Plan and Profiles
- Utility Relocation Plans
- Traffic Handling/Stage Construction Plans
- Bridge General Plan
- Bridge Foundation Plan

The BCA design team will identify and document in fact sheets any design exceptions that we believe are required for the project. Fact sheets will be submitted to the County for concurrence.

The BCA design team will provide the County with a written survey request for any final ground shots necessary for utility coordination and to conform with the existing conditions including the completed Phase I construction.

A Structure Type Selection Report will be submitted with the 35% stage to document the basis of design and reasoning made to arrive at the selected alignment and bridge type.

Deliverables:

- ✓ Draft Design Exception Fact Sheets
- ✓ 35% Plans
- ✓ 35% Preliminary Construction Cost Estimate
- ✓ Structure Type Selection Report

Task 2.2 – Preliminary PS&E - 65% stage

The BCA design team will advance the preliminary engineering to the 65% level. The 65% design will address the 35% review comments and resolve further design issues in the PS&E package. This submittal will include the 65% plans, technical specifications and detailed construction cost estimate.

Drainage design will be a vital component for this final phase of the project since the proposed fill embankments for the entire grade separation project will modify the existing drainage patterns and will need to be addressed. Under this task, we will analyze local on-site and off-site peak flows tributary to the proposed roadway and bridge surface improvements. Peak discharges will be computed for 10-, 25- and 100-year storm events for roadway surfaces

tributary to existing and proposed storm drain inlets. The hydrology study will consist of a Rational Method analyses performed in accordance with the San Bernardino County Hydrology Manual. The hydrology study will include the preparation of an on-site hydrology map that will depict watershed boundaries; existing and/or proposed inlet locations; and hydrological data such as watershed area, nodal elevations, and flow path lengths. The peak flow rates computed as a part of the hydrology study will be included on the final hydrology map.

The BCA design team will then perform hydraulic analyses of proposed storm water flow inlets for the proposed roadway and bridge improvements as well as existing inlets within the project limits. The analyses will determine the size and location of inlets and drain lines required to manage storm water flows. Inlet analyses will use County and FHWA methodologies. Storm drain lines will use the Water Surface Profile Gradient (WSPG) software.

We will prepare a drainage report to present a narrative of the hydrologic and hydraulic assumptions, analyses, and designs required for the proposed on-site improvements. The design report will include summary tables of post-project condition hydrologic results. Summary tables will also be used to present the results of hydraulic analyses of sub-catchments and storm water conveyances within the extents of the project. The report will present the computed flow rates, proposed inlet geometrics, and hydraulic grade lines. The engineering calculations relevant to the hydrologic analysis and hydraulic design of the proposed drainage.

The 65% plan set will include the following drawings:

- Typical Sections
- Demolition Plans
- Plan and Profiles
- Construction Grading and Details
- Temporary Water Pollution/Erosion Control Plans and Details
- Drainage Plans, Profiles, Details and Quantity Sheets
- Utility Relocation Plans
- Street Lighting Plans and Details
- Traffic Handling/Stage Construction Plans
- Construction Area Signs
- Signing, Striping and Quantities
- Landscaping and Irrigation plans
- Complete Draft Bridge and Retaining Wall Plans
- Log of Test Borings

Draft technical specifications (Special Provisions) will be completed based on current Caltrans Standard Special Provisions and Standard Specifications.

<u>Deliverables:</u>

- ✓ Draft Drainage Report

- ✓ Final signed Design Exception Fact Sheets
- ✓ 65% Plans
- ✓ Draft Technical Special Provisions
- ✓ 65% Engineer's Construction Cost Estimate

Task 2.3 – Preliminary PS&E - 95% stage

This task includes preparation of the final construction documents and will include addressing the 65% Submittal Review Comments, preparing the 95% PS&E and submitting 95% PS&E.

During the 95% submittal, BCA will perform an independent check of the structural plans, calculations and quantity calculations. We will perform detailed take-offs of rebar quantities (including an independent check of these quantities). We will also perform an independent check of the specifications.

We will combine technical special provisions with County's "boiler plate" to create the final specification document.

In the 95% PS&E stage, the BCA design team will address any remaining review comments and finalize any outstanding design issues in the PS&E package. We will prepare the final plans, technical specifications and construction cost estimate. All design activities will be completed. The PS&E package will be prepared for a final County and Caltrans review.

Deliverables:

- ✓ Final Drainage Report
- ✓ 95% Checked Plans
- ✓ Independently Checked Specifications (Technical Special Provisions combined with boiler plates)
- ✓ 95% Engineer's Construction Cost Estimate
- ✓ Structural Calculations and Quantity Calculations
- ✓ Independent Structural Calculations and Quantity Calculations

Task 2.4 - 100% PS&E stage

During the 100% PS&E stage, the BCA design team will update the Final PS&E submittal with signed technical specifications, plans, and the final engineer's estimate per the latest Caltrans 2023 Construction Contract Standards. The anticipated revisions include the following:

1. *Roadway Typical Sections* (including upgrading the Midwest Guardrail System)

2. *Roadway Plan and Profile* (including revising the type of crash cushion that is MASH compliant and listed as an approved material)

3. *Grading* (based on the design changes for the MGS, crash cushion, rock slope protection)

4. *Rock Slope Protection Design* (The new design requirement is no longer based on the California Bank and Shore per Caltrans requirement, but uses the Federal Highway Administration design standards.)

5. *Stage Construction* (based on the design changes and limits of grading, RSP)

6. *Traffic Handling* (including upgrading temporary crash cushions, signs, and the most recent MUTCD)

7. *Signing and Striping Plans*

8. *Structural Plans* (including updating all standard plan callouts and associated details, revising deck and soffit reinforcement per BDM 9.4, updating barrier details to be MASH compliant, and revising rock slope protection details)

9. *Roadway and Drainage Plans* (to account for the County's WQMP and basin design as well as the proposed drainage design (by others) within the Old Dominion parcel)

The County will provide the updated boiler plate specifications (revised per the Caltrans 2023 Construction Contract Standards) for incorporation into the final specifications.

This task also includes re-engaging the independent check team specifically with regards to the updates made per the latest Caltrans 2023 Construction Contract Standards.

Deliverables:

- ✓ One (1) 22x34 set of original stamped and signed drawings on Mylar
- ✓ One (1) 11x17 stamped and signed copy of the final plans
- ✓ One (1) set of final specifications (boiler plates + technical special provisions) with signed cover sheet
- ✓ One (1) electronic copy signed plans (in pdf format) and final specifications (in Word and pdf formats)
- ✓ One (1) copy of the Engineer's Construction Cost Estimate
- ✓ 4-Scale Bridge Deck Contour Plans

Task 3 – Geotechnical Investigations and Reports

Preparation of Geotechnical Exploration Plan: Prior to start of any field work, the BCA design team will prepare a Geotechnical Exploration Plan for the geotechnical investigation and include a map of our proposed exploration locations. This Geotechnical Exploration Plan will be submitted for County approval.

We anticipate the following drilling program:

Design Element	No. of Borings	Approximate Depth
Bridge Piers	3	120 feet
Bridge Abutments	2	80 feet
Additional Ped UC	1	80 feet
Embankment	2	30 feet
Pavement	2	5 feet

Boreholes will be drilled using a truck-mounted drill rig. Spoils generated from the borehole excavations will be mixed with cement and water and used to backfill the boreholes. Spoils, if generated, will be stored in drums onsite, tested for contaminants, and then removed from the site.

We will collect bulk samples of near-surface subgrade soils, and small disturbed and relatively undisturbed samples of deeper soils for classifying and determining strength of soils. The small disturbed and relatively undisturbed soil samples will be collected using split-spoon samplers at a vertical interval of 5 feet, alternating between the Standard Penetration Test (SPT) sampler and the Modified California Drive (MCD) sampler. Soil samples will be logged during the field investigation, secured in their containers or collected in plastic bags, and transported to the laboratory for testing.

Laboratory Testing: Field logs of the boreholes will be reviewed to select representative soil samples for laboratory testing. Various laboratory tests will be performed on soil samples to determine or derive their physical and engineering characteristics. Anticipated laboratory tests include: grain size, direct shear, collapse potential, soil corrosion, compaction and R-value tests. Lab tests will be conducted in general accordance with ASTM standards or California Test methods.

Geotechnical Engineering Analyses: Observations from the field investigation and results of the laboratory testing will be used to characterize subsurface soils and conditions and create idealized soil profiles. The BCA design team will determine earthquake design parameters in accordance with Caltrans design standards, will assess liquefaction potential, and will estimate seismically-induced settlement. We will provide foundation recommendations for the proposed bridge, roadway embankment and pavement.

Geotechnical Design Report (GDR): The GDR will provide geotechnical recommendations to support the design of embankments, earthwork and remedial grading. The GDR effort includes conducting subsurface investigations, including exploratory borings, to characterize geologic and geotechnical conditions for the project. The information collected during subsurface explorations will be used as a basis to develop recommendations that support both the design and construction of the project. The GDR will be prepared in accordance with Caltrans guidelines dated December 2006.

Preliminary Foundation Report (PFR): The PFR will contain preliminary foundation recommendations for the proposed bridge and will be prepared in general accordance with the Caltrans Guidelines for Structures Foundation Reports dated December 2009.

Final Foundation Report (FR): The FR will address all review comments on the PFR and will contain foundation design and construction recommendations in accordance with Caltrans guidelines. The BCA design team will prepare Log of Test Boring sheets for inclusion into the Final PS&E.

Pavement Design Report: The BCA design team will develop pavement structural sections in accordance with Caltrans pavement design method using Traffic Indices provided by the County. Corrosivity of in-situ soils will be determined and material types for buried drainage pipes will be recommended. The Pavement Design Report will be an abbreviated version of a typical Caltrans Materials Report per Caltrans Highway Design Manual Topic 114 dated May 2012.

Deliverables:

- ✓ Geotechnical Exploration Plan
- ✓ Geotechnical Design Report

- ✓ Preliminary and Final Foundation Reports
- ✓ Pavement Design Report

Task 4 – Hydrology/Hydraulics Report

The BCA design team will amend the Final Hydraulics Report to include the updated rock slope protection (RSP) longitudinal extents and toe down details. We will also determine how the RSP will tie into the drainage outlet RSP and/or the USACE levee.

Based on the Water Quality Management Plan (WQMP) and basin design provided by the County, changes to the storm drain design are required. The BCA design team will design the grading for the basins, redesign the driveway on the west side of Glen Helen Parkway and realign the storm drain systems. Changes to the storm drain design north of the proposed bridge were required due to Old Dominion's drainage system design within their development project.

Deliverables:

- ✓ Amendment to Final Hydraulics Report (in pdf format)
- ✓ Updated Drainage Plans as part of the 100% PS&E submittal

Task 5 – Right-Of-Way Engineering Support

Task 5.2 – Right-Of-Way Engineering

The BCA design team will prepare the right of way requirements map exhibits with the corresponding matrix identifying the Assessor's Parcel Number (APN), name of owners, type of acquisition, and areas in square feet.

- Permanent Takes
- Temporary Construction Easements (TCE)
- Transportation Easement (assumed one R/W easement) for Parks Property to operate and maintain the proposed water quality features, bioswales, and storm drain lines

Based on our preliminary investigations and meeting with County of the number parcels impacted by the Project, we have identified the following APNs the Right of Way Requirement Map will include:

1. 0348-161-01
2. 0349-181-02 (Alternate APN: 0349-181-34)
3. 0349-183-11

Deliverables:

- ✓ Right-Of-Way Requirements Map Exhibit

Task 6 – Utility Notification and Relocation

It is our understanding that the County will be responsible for utility research, potholing, and coordination with utilities, including any relocation required. The County will provide the utility base mapping, including reflecting relocation locations provided by utility companies. The County will also develop and update the Utility Matrix throughout the project.

Task 7 – NEPA Revalidation / Regulatory Permit Applications

Task 7.a – NEPA Revalidation

The previous NEPA Revalidation was completed in December 2017. A NEPA Revalidation will be required for the project to confirm that the existing environmental analysis, including technical reports and NEPA Categorical Exclusion, is still valid. If required, we will gather information regarding any minor revisions to the project and/or existing conditions and will use this to complete data to support the NEPA Revalidation. We will coordinate as needed with the County and Caltrans for review and approval of the NEPA Revalidation. We have assumed up to two rounds of review, including one County review and two Caltrans reviews, will be sufficient to obtain approvals.

Deliverables:

- ✓ One electronic copy of supporting documentation leading to NEPA Revalidation by Caltrans

Task 7.b – Regulatory Permitting

Updated and new environmental documents are required. A 404 permit from U.S. Army Corps of Engineers (USACE), 401 Water Quality Certification from the Santa Ana Regional Water Quality Control Board (SARWQCB), and a Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife (CDFW) are required. The previous regulatory 404 and 401 permits/certifications were issued in 2017 and are now expired. Additionally, the County received a letter from CDFW that authorized the County to proceed with the project in accordance with Fish and Game Code (FGC) 1602 (a)(4)(D) and that authorization has since expired. The BCA design team will renew or prepare new permit notifications/applications, as applicable, and will coordinate with the County for review and submittal to the regulatory agencies. We will attend one site visit with regulatory agencies, if requested. We will coordinate as needed with the County and regulatory agencies to obtain regulatory approvals.

Deliverables:

- ✓ One electronic copy of the CWA 404 Nationwide Permit Notification, CWA 401 Water Quality Certification Application, and California Fish and Game Code 1602 Streambed Alteration Notification packages reviewed and approved by County and Resource Agency staff as complete for processing.

Task 7.c – Aquatic Resources Delineation

The BCA design team previously delineated jurisdictional waters of the United States (U.S.), as defined by the USACE, State Water Resources Control Board, and California Department of Fish and Wildlife (CDFW) as part of the permitting process. The USACE now requires an Aquatic Resources Delineation be submitted along with the CWA 404 Nationwide Permit Notification.

We will identify jurisdictional boundaries in an Aquatic Resource Delineation report. The report will summarize the location of wetlands and other waters under jurisdiction of the USACE, Regional Water Quality Control Board (RWQCB), and CDFW within and immediately adjacent to the project area. The report will include a summary of impacts for vegetation communities within jurisdictional areas. The report will be used to assist the design team in avoiding impacts to jurisdictional areas, provide the jurisdictional information necessary for the supporting project environmental documentation, and support the applications for regulatory permit authorizations.

Deliverables:

- ✓ One electronic copy of the Aquatic Resources Delineation approved by the County, Caltrans, and USACE

Task 7.d – GIS Digitizing and Mapping

The BCA design team will perform incidental GIS services to re-create GIS linework from CAD conversions provided by County staff, that reflect pdfs of historic biological reports completed by the previous biological subconsultant in 2011-12.

Deliverables:

- ✓ GIS polygons / linework

Task 7.e – Supplemental Biological Assessment

The Biological Assessment (BA) for the project was completed in 2011, and a Biological Opinion (BO) was issued that same year. A supplemental BA memorandum is required for additional changes made to the project to support the Caltrans NEPA process. We will prepare a supplemental BA memorandum to support this process. The memorandum will summarize changes to the project, existing conditions, impacts, and mitigation.

Deliverables:

- ✓ One electronic copy of Supplemental BA Memorandum approved by the County, Caltrans, and USFWS

Task 7.f – San Bernardino Kangaroo Rat Surveys

The BCA design team will conduct protocol level San Bernardino Kangaroo Rat surveys for the project. We will conduct a Phase One Site Assessment and will prepare a summary report. We will also conduct a trapping survey if needed, including five days of trapping with four trap lines. We will request authorization to trap from the USFWS prior to the survey. We currently possess a valid USFWS Recovery Permit issued under Section 10(a)(1)(A) for the San Bernardino kangaroo rat.

Deliverables:

- ✓ One electronic copy of the Site Assessment and Survey Reports

Task 7.g – Coastal California Gnatcatcher Surveys (Optional)

The BCA design team will conduct protocol level surveys for the project following the USFWS's 1997 Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey

Guidelines. We will notify the agencies of the intent to survey, conducting nine focused surveys, and provide a report within one week of the final survey and to the USFWS within 45 days. We currently possess a valid USFWS Recovery Permit issued under Section 10(a)(1)(A) for the Coastal California Gnatcatcher.

Deliverables:

- ✓ One electronic copy of the Presence/Absence Survey Report

Task 7.h – Rare Plant Surveys (Optional)

We will perform focused plant surveys for special-status plants with potential to be in the project area in the season immediately prior to construction. The surveys will comply with standard and accepted protocols following the 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. If special-status species are present, we will submit an avoidance and minimization plan detailing the measures to be implemented to minimize impacts on non-listed plants and protective avoidance measures to be implemented to ensure complete avoidance of take of state-listed sensitive species. Up to three surveys will be performed during the typical blooming period to ensure proper identification. We will summarize the results of the surveys in a memorandum for the project file.

Deliverables:

- ✓ One electronic copy of the Rare Plant Survey report

Task 7.i – Additional Regulatory Agency Coordination Services (Optional)

The BCA design team will assist the County with additional regulatory agency coordination services within the not-to-exceed fee limit under this task. We will prepare the specific scope of work and fee for each task and will wait for County approval prior to starting any work.

Task 8 – Updated Habitat Enhancement Plan / Habitat Mitigation and Monitoring Plan

Site surveys were conducted in 2016 and the HEP/HMMP was submitted to the County in September of 2017. Because several years have passed, we will conduct a follow up site visit to confirm that existing conditions are similar to those discussed in the 2017 HEP/HMMP. If warranted, the BCA design team will update the report to reflect minor changes to existing conditions and will coordinate for review and approval by the County, Caltrans, and regulatory agencies. We will also prepare updated mapping to refine on-site mitigation areas. We will ensure the plan reflects avoidance, minimization and compensatory mitigation acreages required in the 2022 Caltrans revalidation, BO update, and 2022-23 permitting effort.

Deliverables:

- ✓ One electronic copy of the updated HEP/HMMP approved by the County, Caltrans, CDFW, USACE, and USFWS

Task 9 – Water Quality Management Plan (WQMP) and Storm Water Pollution Prevention Plan

The County will prepare the water quality management plan for managing the stormwater runoff that flows from the developed site after construction is completed. The County will

coordinate and provide the basin design to the BCA design team for incorporation into the project plans.

Preliminary Stormwater Pollution Prevention Plan (SWPPP): A qualified SWPPP Developer (QSD) will prepare a comprehensive, project site specific Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board (SWRCB) DWQ Construction General Permit and the Regional Water Quality Board requirements including:

1. Collecting and reviewing all relevant technical studies, documents and background information.

2. Evaluating and documenting the risk assessment for the project site.

3. Identifying potential pollutant sources and developing appropriate best management practices (BMP).

4. Preparing a SWPPP that includes the following items:

    a. Project description

    b. Site analysis

    c. Best Management Practices (BMP) selection including:

        i. Pre-construction Control Practices

        ii. Erosion Control BMPs

        iii. Soil Stabilization BMPs

        iv. Sediment Control BMPs

        v. Wind Erosion BMPs

        vi. Non-Storm Water BMPs

        vii. Post-construction BMPs

    d. Waste Management and Disposal

    e. Construction Site Monitoring Program (CSMP)

    f. Reporting Requirements

    g. Appendix containing all required forms and required documentation

Deliverables:

- ✓ Draft and Final Storm Water Pollution Prevention Plan

Task 10 – Advertising Support

The BCA design team will attend the pre-bid meeting and provide assistance to the County as required during advertising and bidding. The scope as presented in the RFP is incorporated herein by reference.

Task 11 – Construction Support (*Optional*)

It is assumed that the County will hire a Resident Engineer/Construction Manager to provide construction inspection services, and to act as a liaison to the County regarding construction related matters. Work performed beyond the budget for this task will be performed on a time and materials basis. We will provide engineering construction support including:

- Attend preconstruction meeting and up to three (3) construction progress meetings, as required.
- Review falsework and shop drawings.
- Answer clarification questions pertaining to the plans and special provisions, if needed.
- Prepare Contract Change Orders, if needed.
- Review contractor RFI's (Request for Information) and provide written response.
- Prepare as-built record drawings that reflect change orders, accommodations, and adjustments to all improvements constructed. The basis of the revisions shown on the record plans will be a red mark construction set of plans provided by the project Resident Engineer.

Task 12 – California Endangered Species Act Consultation

An incidental take permit from CDFW in accordance with FGC 2081 is required. The San Bernardino Kangaroo Rat (SBKR) has received additional protections under the California Endangered Species Act (CESA). Under CESA, if the project results in the 'take' of a state threatened, endangered, or candidate species, consultation with the CDFW is required. SBKR critical habitat is present in the project area and was listed as an endangered species under CESA in February of 2022. We will prepare an Incidental Take Permit (ITP) application and will coordinate with the County for review and resubmittal of the ITP application to CDFW. We will coordinate as needed with the County and CDFW to obtain the ITP from CDFW.

Deliverables:

- ✓ One electronic copy of the CESA Incidental Take Permit package approved by the County and accepted as complete by CDFW

Task 13 – USACE 408 Permit

The BCA design team will assist the County in addressing the United States Army Corps of Engineers (USACE) geotechnical and structural review comments dates 4/5/2018 and 5/2/2018, respectively/ This includes developing. Independently checking, and processing for approval with the USACE detailed plans and calculations for the outlet structure. It is assumed that the County will address all of the hydraulic/hydrology and environmental comments.

Deliverables:

- ✓ Responses to the 2018 USACE comments including all of the requested backup information

ASSUMPTIONS

The following assumptions were made in generating this scope of work:

1. The County will secure all right-of-way and temporary/permanent easements required for the project. The County will also complete the right-of-way certification process with Caltrans.
2. The County will provide the right of way base files in Autocad format.
3. The County will prepare all plat maps and legal descriptions required for the project.
4. Per the County's direction, our scope does not include verification the accuracy of the right of way, property and parcel boundaries provided by the County.
5. It is also our understanding that we will not need to order the Preliminary Title Reports for the County.
6. Project design will remain the same as the 95% design plans that reflect additional upland drainage, 408 permitted outfall feature, and paved access road.
7. Conditions will remain approximately the same as they were during previous site surveys, and substantial alterations to analysis and mapping will not be required.
8. There will be no substantial alterations to the existing environment.
9. Up to eight (8) rounds of review, including two (2) County reviews, two (2) Caltrans reviews, two (2) USFWS reviews, and two (2) CDFW reviews will be sufficient to obtain approvals on the updated HEP/HMMP.
10. Up to five (5) rounds of review, including one (1) County review, two (2) Caltrans reviews, and two (2) USFWS reviews, will be sufficient to obtain approvals on the Supplemental BA Memorandum.
11. Up to six (6) rounds of review, including two (2) County reviews, two (2) Caltrans reviews, and two (2) USACE reviews, will be sufficient to obtain approvals on the Aquatic Resources Delineation.
12. Up to six (6) rounds of review per permit application, including two (2) County reviews, two (2) Caltrans reviews, and two (2) reviews by each respective agency, will be sufficient to obtain approvals on the regulatory permits, including the ITP.
13. Up to two rounds of comments on each of the deliverables, one from the County and one from USACE, will be sufficient to obtain approvals.
14. USACE environmental documentation required for the 408 permit will be completed by the County.
15. The updated rock slope protection layout and thickness recommendations will be included in an Amendment to the Final Hydraulic Report, and will be incorporated into the bid documents (i.e. plans and quantities). However, the modifications to the rock slope protection are not anticipated to require additional hydraulic modeling and analysis efforts.
16. One round of County comments will be provided on the Amendment to the Final Hydraulic Report.