REQUEST FOR PROPOSALS
(RFP)

Confederated Tribes of the Umatilla Indian Reservation

North Fork John Day Fish Habitat Enhancement Project
Department of Natural Resources

Hidaway Creek RM 1.3 Instream Technical Assistance Proposal Request
(Umatilla County, Oregon)

RFP No. 2026-04/411-024
DATE ISSUED: March 30, 2026

Administrative Contact: Julie A. Burke
541-429-7292 (Office & Fax)
Email: julieburke@ctuir.org

Technical Contact: John Zakrajsek
Email: johnzakrajsek@ctuir.org
541-429-7943 (Office & Fax)

Critical Dates:

Site Visit:	**Wednesday, April 8, 2026**, 10:00 AM local prevailing time
Question Submission deadline:	**Monday, April 13, 2026**, 2:00 PM
Proposal Submission Deadline:	**Wednesday, April 22, 2026** at 2:00 p.m. local prevailing time
Tentative Award Selection (est.):	**Tuesday, April 28, 2026**
Contract Award (est.):	**May 1, 2026**
Project Initiation (est.):	**May 18, 2026**
Project Completion:	**December 31, 2026**

Attachments
Attachment A – Cost Sheet
Attachment B – Camas Creek Geomorphic Assessment
Attachment C – CTUIR Data Requirements

PART I - GENERAL INFORMATION

1.1 Project Location and Purpose

The project area is located on private property owned and managed by Don Hartley and Karen Flagg approximately 8 miles west of Ukiah, Oregon in Township 5 South, Range 33 East, Sections 6 & 7.

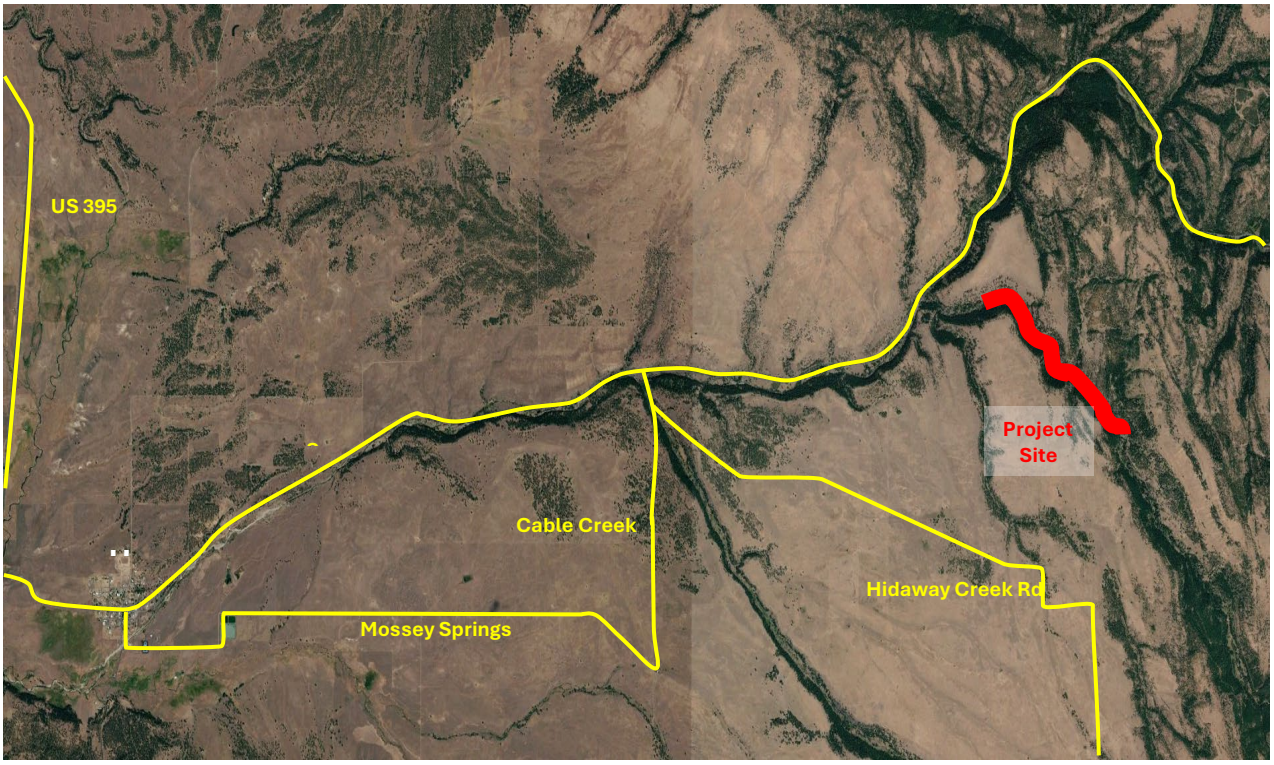

Figure 1. Area map for the Hidaway Creek Instream Project.

This effort's purpose is to improve stream and floodplain complexity for the benefit of native anadromous and resident species such as ESA threatened summer steelhead trout. Camas Creek basin was traditionally used by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Shoshone Bannok, and others as part of hunter-gatherer based societies. During the late 1800s and early 1900s, use transitioned to sheep and cattle grazing, dairy production, and timber harvest as Euro-American settlement became more dominant. The current Hidaway Creek RM 1.3 landowners previously managed the property for cattle grazing with limited timber harvest and, more recently, forest thinning. They are working to implement comprehensive management strategies that address the effects of past management and aim to improve conditions for ESA listed and non-listed native species.

In 2006, the landowners worked with Oregon Department of Fish and Wildlife (ODFW) to install riparian exclusion fencing along Hidaway Creek, followed by a similar effort with the CTUIR along Mud Creek. Restoration continued in 2021 with the placement of large wood structures in Hidaway Creek, where the CTUIR is now working to re-establish native vegetation, primarily sedge.

Building on previous outcomes, the project's second phase focuses on restoring large-scale physical processes to foster long-term, self-sustaining habitat recovery. Explicitly stated, objectives include:

- Increase floodplain connectivity to promote hydrologic and geomorphic processes that develop and maintain dynamically stable complex habitat.

- Increase instream and floodplain complexity through the use of native materials.

- Expand native plant communities to bolster stream and floodplain primary productivity, enhance flow retention, and provide critical stream shading.

Goals and objectives will be met within constraints imposed by upstream and downstream conditions, and while accounting for those imposed by the larger Hidaway Creek basin. Planning and design will be guided by process-based restoration approaches that address habitat limiting factors, ecosystem resilience, and climatic changes. This approach incorporates the CTUIR's First Foods policy and primary touchstones of the 2008 Umatilla River and Upland Visions. By doing so, it addresses limiting factors identified in the John Day River Restoration Strategy (CTWSRO, 2015) while maintaining consistency with the Mid-Columbia Steelhead Recovery Plan (NMFS, 2008), the Draft Columbia River Bull Trout Recovery Plan (USFWS, 2015), and the John Day Subbasin Plan (NPPC, 2005).

The CTUIR is requesting proposals for specified project elements described in detail in Part II of this RFP.

1.2 Scope of the RFP

This RFP describes the specific services to be contracted and provides information for preparation and submittal of proposals.

Geomorphic data collection and analysis and development of treatment alternatives will be directed and implemented by a qualified geologist, geomorphologist, or engineer with fish habitat restoration experience and necessary support staff. This may include field survey and data collection, compilation of available data and information (e.g., LIDAR, stream gage data, etc.), sediment budget/analyses, evaluation of existing stream and floodplain condition, and contributions to selecting preferred alternatives and specific treatments. The CTUIR will develop the remaining project documentation informed by geomorphic factors identified through this RFP, existing data, and additional technical input.

Optional engineering support will be directed and implemented by a qualified engineer with fish habitat restoration experience. This may include review of available data and information (e.g., LIDAR, site hydrology, etc.), technical input related to preferred alternatives, input related to design specifications, and assistance with AutoCad products. The contractor is expected to identify and resolve any discrepancies, clarify ambiguities, and address technical questions discovered during their initial evaluation of the project information.

1.3 Project Timeline

The Hidaway Creek RM 1.3 investigation will occur during 2026 with a final design developed by December 31, 2026. This will be a collaborative effort whereby the selected contractor develops relevant information, works with CTUIR staff to identify final treatments, and provides supplemental information to support the design.

1.4 Closing Date for Proposal Submissions and Proposal Opening

The closing date for submissions will be **April 22, 2026, 2PM** prevailing local time. Proposals received after the specified time will not be considered. Contractors must email their proposals as a PDF attachment to:

Julie Burke
Email: julieburke@ctuir.org

The subject line of the email shall clearly state "**Hidaway Creek Instream Technical Assistance Proposal Request.**"

1.5 In Writing

Proposals shall be prepared by printer or typewriter. No oral, handwritten, or telephone proposals will be accepted.

1.6 Necessary Information

Proposals must contain all information requested in the RFP. The CTUIR will not consider additional information submitted after the Closing Date and may reject incomplete proposals.

1.7 Cost of Proposals

The CTUIR shall not be liable for any expenses incurred by Contractors in either preparing or submitting Proposals, evaluation/selection, or contract negotiation process, if any.

1.8 Request for Clarification

Contractors may submit a written request for clarification via email by 2:00 PM **April 13, 2026**. Questions regarding the RFP or request for clarification shall be emailed to the RFP technical contact. The CTUIR will not consider any requests submitted after the time period specified above.

1.9 Response to Requests for Clarification

Responses to questions will be provided no later than COB **April 14, 2026**.

1.10 Proposals Constitute Firm Offers

Submission of a Proposal constitutes Contractor's affirmation that all terms and conditions of the Proposal constitute a binding offer that shall remain firm for a period of ninety (90) days from the Closing Date.

1.11 Signature Required; Proposer Affirmations

An authorized representative of the Contractor must sign the original Proposal Manually (then scanned) or by electronic signature. Contractor's signature and submission of a signed Proposal in response to the RFP constitute Contractor's affirmation that the Contractor agrees to be bound by the terms and conditions of the RFP and by all terms and conditions of the Contract awarded.

1.12 Type of Contract

The CTUIR shall execute a Subcontract for A&E Services.

1.13 Confidential Information

Proposals are confidential until the evaluation and selection process has been completed and the CTUIR has issued a notice of tentative award. Any information a Contractor submits in response to the RFP that the Contractor considers a trade secret or confidential proprietary information, and Contractor wishes to protect from public disclosure, must be clearly labeled with the following:

"This information constitutes a trade secret or confidential proprietary information and is not to be disclosed except in accordance with applicable public disclosure laws."

1.14 Requests for Further Clarification of Proposals

The CTUIR may request additional clarification from Contractors on any portion of the Proposal.

1.15 Cancellation of RFP

The CTUIR may cancel this RFP at any time upon finding that it is in the CTUIR's best interest to do so.

1.16 Rejection of Proposals

The CTUIR may reject a particular Proposal or all Proposals upon finding that it is in the CTUIR's best interest to do so.

1.17 Tentative Award and Contract Negotiations

The CTUIR will provide a written tentative award notice to the responsible Contractor whose proposal is deemed to be most advantageous and of best value towards meeting the project objectives. The CTUIR will enter into negotiations with the responsible Contractor on the following contract terms: (a) Contract tasks; (b) Staffing; (c) Performance Schedule; and (d) A maximum, not to exceed contract price, which is consistent with the Proposal and fair and reasonable to the CTUIR, taking into account the estimated value, scope, complexity, and nature of the services to be provided. The CTUIR may also negotiate the statement of work and, at its discretion, add to the scope of services based on a Contractor's recommendations (but still within the scope of this RFP) or reduce the scope of services.

Final award will be contingent upon successful negotiation of a contract within 14 days after the tentative award.

The CTUIR may terminate negotiations if they fail to result in a contract within a reasonable time. The CTUIR will then enter into negotiations with the next responsible Contractor, and if necessary, the third responsible Contractor. If the second or third round of negotiations fails to result in a contract, the CTUIR may formally terminate the solicitation.

1.18 Protest of Tentative Award SelectionA notification of tentative award to the responsible bidder will be sent to all Contractors that submitted a Proposal in response to this RFP. A Contractor who claims to have been adversely affected by the selection of a competing Contractor shall have seven (7) calendar days after receiving the notice of selection to submit a written protest of the selection to the RFP contact listed in Part 1.4. The CTUIR will not consider protests submitted after the date established in this Part. The protest must specify the grounds upon which the Protest is based.

1.19 Award

After expiration of the seven (7)-calendar day selection protest period and resolution of all protests, the CTUIR will proceed with final award.

1.20 Investigation of References

The CTUIR reserves the right to investigate the references and past performance of any Contractor with respect to its successful performance of similar services, compliance with RFP and contractual obligations, and its lawful payment of suppliers, sub-Contractors, and employees. The CTUIR may postpone award or execution of the contract after the announcement of the apparent successful Contractor in order to complete its investigation. The CTUIR reserves the right to reject any proposal at any time prior to the execution of any resulting contract.

1.21 Amendments

The CTUIR reserves the right to amend the resulting Contract from this RFP. Amendments could include but are not limited to, changes in the statement of work, extension of time and consideration changes for the Contractor. All amendments shall be in writing and signed by all approving parties before becoming effective. Only the CTUIR has the final authority to execute changes, notices or amendments to Contract.

1.22 Tour of Site

See Table 1 for Critical dates and site tour information. Site Tour scheduled for **April 8, 2026, Wednesday at 10:00 PM PST,** contact John Zakrajsek, (541) 429-7293. The property is privately owned, thus, access to the site will only be available at this time. Due to soft ground conditions the site won't be accessible by truck or car, thus, contractors are encouraged to bring suitable offroad vehicles (ATV's or side by sides). If contractors do not have such a vehicle The CTUIR will provide transportation. Due to the potential for higher flows, waders are advisable.

Directions to Project Site: From Ukiah, Oregon head east on SR 244 for approximately 6 miles. Turn right onto Cable Creek Road and left on to Hidaway Creek Springs Road after several hundred yards. Continue for 2.8 miles to a wire gate on your left

Interested Contractors will meet Project Technical contact at the SR244/Cable Creek Road junction (45.158483 / -118.841966) approximately 4.9 miles east of Ukiah, OR (Figure 1). The group will travel by truck or car to the offload point. Contractors are encouraged to attend to inform their proposal.

If site conditions aren't suitable for visitation (high water, deep snow, etc.) a Teams meeting will be held to review the project and provide information.

Microsoft Teams meeting
https://teams.microsoft.com/meet/26850351693879?p=GMBF5ZkhP1blA4JTlB
Meeting ID: 268 503 516 938 79
Passcode: F4xa6ah2

Contractors are encouraged to forward contact information to CTUIR's Technical Contact, John Zakrajsek, prior to May 1, 2026 COB to enable coordination for the site tour.

PART II - SERVICES AND MATERIALS TO BE PROVIDED

2.1 Scope of Work

The CTUIR is accepting proposals for design support and treatment selection based on relevant data for a fish habitat restoration project on Hidaway Creek, a tributary of Camas Creek, approximately 8 miles east of Ukiah, Oregon.

This RFP provides the specific services to be contracted, information concerning the preparation and submittal of proposals, an explanation of how proposals will be evaluated, and terms and conditions of the contract that may be awarded as a result of the RFP. Proposals must demonstrate a thorough review of provided data. Contractors are expected to identify and resolve any discrepancies, clarify ambiguities, and address technical questions discovered during their initial evaluation of the project information.

The scope of work includes the following in Table 1.

Table 1. Tasks for the Hidaway Creek Instream Technical Assistance Proposal Request

Task #	Task
1	Quantify and qualify sediments
2	Review stream channel and floodplain condition and potential
3	Provide treatment alternatives and treatments
4	Meetings
5	Optional – Permit consultation
6	Optional – Engineering support

The project design will prioritize process-based restoration strategies to address key habitat limiting factors and achieve significant ecological uplift for fishery resources. BPA's Restoration Review Team (RRT) will provide design reviews beginning at the 15% stage. Compliance will be managed through the BPA Habitat Improvement Program (HIP) IV programmatic ESA consultation process, and the restoration team will incorporate HIP IV conservation measures into every phase of construction.

2.2 Project Tasks and Milestones

The scope of work will require completing the tasks outlined in Section 2.3 and Table 2. The selected contractor will be responsible for data collection and site assessment, including conducting a topographic survey and processing 2021 LiDAR data. These efforts will generate an existing-condition surface to support the hydraulic modeling required for project planning. Project area features (constructed floodplain ponds, structures, channels, etc.), will also be surveyed. Design alternatives will be developed and evaluated with selection of a preferred alternative that improves fish habitat opportunities, enhances floodplain connectivity, improves channel/floodplain processes and function, and is constructible at a reasonable cost. Existing project data compiled by the CTUIR will be provided to the contractor to initiate the assessment and refine additional data collection needs. These reports include site assessment information, monitoring data, and 2021 LIDAR data.

The Contractor is solely responsible for providing all equipment and personnel for the completion of surveys. The CTUIR maintains the ownership of all work products collected for the purpose of project design and implementation under this proposal. All horizontal and vertical positions should be based on data gathered from Global Positioning System (GPS) receivers using positions generated from real time kinematic corrections from established project survey reference control points. GIS data will follow the guidelines established in CTUIR GIS Standards & Requirements document (Attachment C).

Project planning includes scoping, communication with partners, development of alternatives and concepts, and selection of a preferred alternative. The preferred alternative will be further developed through an iterative process, as outlined in Table 2, with design intervals of 15, 30, 60, 80, and 100%. Requirements of the ESA will be completed through the BPA HIP IV process with review by the BPA Restoration Review Team (RRT) and will begin with the 15% Conceptual Design and continue through Final Design. A draft Basis of Design Report (BDR) will be developed at the 30% design stage and submitted to the RRT as well as project partners. Review comments will be considered and incorporated into the 60% Preliminary Design.

2.3 TASKS

Anticipated tasks for the conceptual development and analysis include:

Task 1: Quantify and qualify current and future sediments within and moving through the project site. Set sediment delivery within the lens of past fire events and larger scale geomorphic processes.

Task 2: Review stream channel and floodplain morphology, existing condition, and potential given existing site management with consideration of upstream and downstream effects.

Task 3: Based on data collection and analysis, and other relevant data, provide input regarding treatment alternatives, final treatments, and methods of implementation to improve short and long-term site stability and recovery.

Task 4: Attend up to four meetings including two on-site visits (a project kick-off meeting and a proposed treatment selection meeting) with the remaining two sessions conducted via video conference.

Task 5: Optional – Permit Consultation may include one call to discuss data or treatments with permitting staff (BPA or the Services).

Task 6: Optional – Engineering Support may include data analysis (e.g. LIDAR, site hydrology, etc.), development of technical deliverables, consultation on treatment alternatives, input on design specifications, and comprehensive AutoCAD support.

2.4 Deliverables and Timeline

Table 2. Required Project Milestone Details.

Title	Brief Description and Completion Date	Responsible Party
Site Tour and Kick Off Planning Meeting	Conduct site visit with the team. **(May 18, 2026).** Project scoping, review efforts to date, and refine geomorphic data and collection	CTUIR, Consulting firm
Compile Site Data	Exchange data and information with consulting firm that supports geomorphic analysis **(June 1, 2026).**	CTUIR, Consulting firm
Field survey, data collection	Collect data (geomorphic, topographic, etc.). Evaluate existing condition **(June 25, 2026).**	Consulting firm
Design Meeting	Conduct site visit with the team. Review geomorphic data analysis, select preferred alternative. **(August 17, 2026).**	CTUIR, Consulting firm
Design Meeting	Review proposed treatment recommendations **(October 19, 2026).**	Consulting firm, and CTUIR, BPA RRT
Design Meeting	Review draft Basis of Design Report **(November 16, 2026).**	Consulting firm, CTUIR. BPA RRT.
Permit Meeting	Optional – Respond to permitting entity questions **(December 31, 2026)**	Consulting firm, CTUIR. Permitting entity.

2.5 Team Competencies

The following are expected minimum consultant team competencies. One person might fill more than one role, and it is expected that proposals will include additional competencies as required.

- Geologist, Geomorphologist, or Engineer

PART III - PROPOSAL REQUIREMENTS

3.1 Required Proposal Components

For the purpose of this RFP, prospective contractors will submit a proposal package (maximum 40 pages) to the Administrative Contact (see Section 1.4) that includes the following components:

A. Cover letter

B. Executive summary

C. Proposed method of task completion

a. Describe proposed methods, approach, and expected deliverables to assess geomorphic conditions within the context of site and basin hydrology, sediment, and topography that address project goals and objectives. Creative and innovative approaches and alternatives are encouraged.

b. Include the development of baseline and potential conditions.

c. Explain how the requirements for BPA's HIP will be informed by investigation products.

D. Qualifications and experience

a. Company background and available resources: Provide information regarding areas of specific expertise and types of services offered by the company and technical staff that relate directly to this scope of work. Describe experience and expertise within the region related to collecting and analyzing relevant data to improve habitat conditions for salmon and steelhead.
b. Design team: Provide a description of the specific design team members and their qualifications, relevant to determining geomorphic factors associated with improving natural river design. Staff biographies for each member should be included and demonstrate experience in geomorphic assessments and identifying treatments to improve stream and floodplain function and habitat restoration driven by habitat limiting factors and fishery life history requirements.
c. Project examples: Identify and describe a minimum of three studies or design projects that are similar to the proposed project, which has been successfully completed within the past five years.

E. Project Schedule

a. Provide a detailed project schedule consistent with meeting milestones and dates identified in Table 2.
b. Modifications to the timeline within the stated initiation and completion dates for improved effectiveness and/or efficiency are encouraged.

F. Price Quote

a. Provide a project budget that details hours and rates for each primary design team member to complete the proposal tasks.
b. Include costs for all subcontractors.

G. References

a. Provide at least three client references.
b. Include contact information (names, physical and email addresses, phone numbers), project type, general project actions, and cost.

PART IV -REVIEW AND SELECTION

Proposal selection will be completed through a quality-based selection process (QBS) by a review team. The criteria to be evaluated and weighted are: 1) Adequacy of Technical Proposal, 2) Personnel and Company Qualifications, 3) Costs, and 4) Indian Preference.

a. **Adequacy of Technical Proposal**: (150 points) 35%
   - Proposal content and applicability of the approach and methodologies for addressing and completing tasks and milestones in Section III (100)
   - Creative, efficient, and/or novel approaches presented (30)
   - Development of conceptual plan and alternatives (25)
   - Adequacy of proposed modeling and data analysis methods (25)

b. **Personnel and Company Qualifications**: (150 points) 35%
   - Technical experience of principal project staff related to the project performance (50)
   - Experience in developing and engineering similar passage design projects (50)
   - Educational qualifications related to the project performance (20)

c. **Cost:** (100 points) 23%
   Design cost and value will be considered for addressing all questions and completion of all tasks described in Section 2

d. **Indian Preference**: 30-points (7%)
   Must meet these factors in order to secure Indian Preference status;
   - Membership in a Federally recognized Tribe;
   - Indian Ownership of 51% or more;
   - Indian Control;
   - Indian Management;
   - Financing obtained by Indian person; and,
   - Equipment obtained by Indian person.

The CTUIR will issue a contract agreement to the responsible Contractor whose proposal is deemed to be most advantageous and of best value toward meeting the project objectives. The contract negotiated will be based on fair and reasonable compensation for the services required.

Attachment A: Cost Sheet
Confederated Tribes of the Umatilla Indian Reservation
Department of Natural Resources FISHERIES PROGRAM

Project Title/Number: Hidaway Creek Instream Technical Assistance,
RFP No. 2026-04/411-024 Date: _____

Task #	Work Item	Units	# of Units	Unit Cost	Total Cost
1	Quantify and qualify current and future sediments within and moving through the project site.	LS	1		
2	Review stream channel and floodplain morphology, existing condition, and potential existing site management with consideration of upstream and downstream affects.	LS	1		
3	Provide geomorphic input regarding final treatment selection and implementation methods to improve short- and long-term site stability and recovery.	LS	1		
4	Meetings	EA	4		
5	Optional – Permit Consultation	LS	1		
6	Optional – Engineering Support	LS	1		
				Total Project Cost	

The Proposal should include staff, salary, equipment and other needs within each Task.

Attachment B

Camas Creek Geomorphic Assessment

Available at John Day River Basin > Reports and Data > File Share
Password – ctuirfish123jd

ATTACHMENT C: GIS Standards and Requirements

The CONTRACTOR shall provide the TRIBES with a digital copy of all finished products that include geographic information; this includes but is not limited to surveys, aerial imagery and data developed in support of Tribal projects. All geographic information shall be delivered in a digital, georeferenced format compatible with ArcGIS desktop version 10.5.1. Metadata shall be included with all deliverables. The TRIBES use ESRI ArcGIS software as its standard GIS platform, SQL server as its primary database software and Windows as its operating system. GIS files being created for delivery to CTUIR shall be prepared in conformance with the requirements outlined in this schedule.

If attribute information are collected in addition to geographic positions the CONTRACTOR shall provide a digital data dictionary file that has been approved by the persons responsible for the contract for CTUIR in terms of expected content and format. The data dictionary file must describe all the associated attribute information. Included in the data dictionary must be a definition of each table and each column within the table. The table definition must include the purpose, structure, and a list of any associated features. The column definition must include the data type, data precision, and a brief description of each of the values that may be included in the column (including an explanation of any abbreviations or codes that are utilized). If an extensive number of abbreviations or codes will be utilized to populate a column, a separate domain list shall be provided. All domain list values must be accompanied by a description especially in the case of abbreviations. The preferred delivery format for all GIS attribute tables is a comma delimited, ASCII text file format with all column headings specified.

Data Collection Standards.

1. Survey Data Standards. CONTRACTOR shall:

    i. use known Tribal survey monuments if working within the reservation boundary,
    ii. meet a minimum level or accuracy for all survey work (1/100th of a foot), and
    iii. submit all survey points with an attached attribute description for all of the points.

2. GPS Data Standards. CONTRACTOR shall ensure:
    i. all geographic features collected have a unique identification which associates it with its attribute information in an associated table,

    ii. all attribute tables have a digital data dictionary file,

    iii. horizontal coordinates are documented and meet a minimum level of accuracy as is appropriate for the scope of work.

    To determine appropriateness, the following guidelines shall be used:

        a. Survey Grade are the most accurate and most commonly used in situations where accuracy is essential (engineering applications, property boundary determinations, etc.), as such they are the preferred method. They typically provide true positional accuracy within a centimeter in the horizontal direction and elevation accuracies within 10 centimeters.

        b. Mapping Grade receivers are most commonly used by GIS professionals for gathering data for inventories, resource mapping, environmental management and infrastructure management. This method is permissible if Survey Grade cannot be provided. Mapping Grade must be differentially corrected GPS to reduce positional errors. Differential correction is the process of improving fixed positions utilizing data from a base station. With differential correction, horizontal accuracies from one to two meters can be achieved, while vertical accuracy is around 3 meters.

        c. Recreational Grade are the least accurate units, and are not permitted without express authorization from the TRIBES' Office of Information Technology. This is typically used for outdoor recreational activities, these receivers can have up to 20 meters in positional error.

3. Georeferencing.
    i. Survey grade information must be georeferenced to the approved coordinate system as adopted by the Oregon Legislature in the Oregon Revised Statute 93.330:

    Oregon State Plane North
    Projection: Lambert_Conformal_Conic
    False_Easting: 8202099.737533
    False_Northing: 0.000000
    Central_Meridian: -120.500000
    Standard_Parallel_1: 44.333333
    Standard_Parallel_2: 46.000000
    Latitude_Of_Origin: 43.666667
    Linear Unit: Foot (0.304800)

    Geographic Coordinate System: GCS_North_American_1983
    Angular Unit: Degree (0.017453292519943299)
    Prime Meridian: Greenwich (0.000000000000000000)
    Datum: D_North_American_1983
    Spheroid: GRS_1980
    Semimajor Axis: 6378137.000000000000000000
    Semiminor Axis: 6356752.314140356100000000
    Inverse Flattening: 298.257222101000020000

    ii. Geographic data including data other than survey grade information, such as CAD, GIS, Aerial Imagery, and Photography must be georeferenced using the following coordinate system:

    NAD83 UTM Zone 11 North
    Projection: Transverse_Mercator
    False_Easting: 500000.000000
    False_Northing: 0.000000
    Central_Meridian: -117.000000
    Scale_Factor: 0.999600
    Latitude_Of_Origin: 0.000000
    Linear Unit: Meter (1.000000)

    Geographic Coordinate System: GCS_North_American_1983
    Angular Unit: Degree (0.017453292519943299)
    Prime Meridian: Greenwich (0.000000000000000000)
    Datum: D_North_American_1983
    Spheroid: GRS_1980

iii. All aerial photography and satellite imagery must be georeferenced and orthographically rectified unless otherwise authorized by the TRIBES' Office of Information Technology.

Data Development Requirements.

1. All intersecting lines shall be processed to remove overshoots and undershoots.

2. Zero length segments shall be removed.

3. Different feature types shall not share a common line segment. Snapping shall be set such that lines intersect.

4. All block definitions (CAD) shall be provided.

5. Equivalent CAD or ERSI symbol sets shall be provided.

6. A project report (metadata) shall be provided.

7. A detailed layer list shall be provided.

Data Delivery Requirements:

1. Vector Data – points, polygons and lines (parcels, roads, streams, buildings, etc.) – shall be delivered in the following formats:
    i. ESRI Shape file format,

    ii. ESRI File Geodatabase format,

    iii. CAD data. Electronic files of all developed CAD data as georeferenced DWG files shall be provided including a PDF of survey or as-built with layers referenced.

2. Raster Data

    i. remote sensing imagery shall be delivered as TIFF

    ii. Photos as jpg

3. Lidar Data – CTUIR follows the Oregon Airborne Lidar Data Standard. All Lidar data collections must meet those standards. Contractor shall provide:
    i. LAS files, containing classification values.
    ii. Intensity grid
    iii. Highest hits grid
    iv. Bare earth digital terrain model as a DEM.

v. Surveyed benchmark coordinates used as reference and error evaluation.

4. Metadata. Accompanying the final GIS delivery shall be a sufficient level of metadata regarding the project files to allow a reasonable understanding of the source, accuracy, modifications to, and applicability of the data provided. All submitted metadata shall follow Federal Geographic Data Committee (FGDC) Standards specified in *Content Standard for Digital GeoSpatial Metadata (FGDC-STD-001-1998)* (FGDC 1998). The FGDC Standards can be found at https://www.fgdc.gov/metadata/geospatial-metadata-standards All metadata should be submitted in text (*.txt), Microsoft Word (*.doc), or the ESRI compatible XML format (as compiled through ArcCatalog).

Minimum metadata standards for geographic information. The CONTRACTOR shall:

i. Provide a purpose statement identifying the project for which the data was created,
ii. identify the original source of the data,
iii. identify the creator of the data,
iv. indicate the date that the data was input into a GIS system,
v. provide confidence of attribution data,
vi. provide positional confidence of the object location (horizontal and vertical),
vii. identify hardware used to collect and process the data,
viii. identify software used to collect and process the data,
ix. identify the name of the data dictionary file.

For questions concerning these requirements please contact the GIS Program at the Confederated Tribes of the Umatilla Indian Reservation.