

Third Street Work Plan

STAGE 1: PROJECT MANAGEMENT, OUTREACH, AND FUNDING

TASK 1: PROJECT MANAGEMENT

1. **General Project Management:** BKF will manage the design team as well as track progress, the consultant team schedule and deliverables, and the consultant team budget. BKF will be responsible for documenting all design decisions and maintaining an official record of all documents and communications associated with this contracted phase of the project. BKF will submit monthly progress reports identifying tasks completed, contracted budget status, and issues or out of scope items status.
 - a. **Schedule Control:** BKF will prepare and maintain a detailed delivery schedule in accordance with the City's desired timeline for design completion. The schedule will include key milestones and agency review periods and updated at a minimum on a monthly basis for distribution at the coordination meetings.
 - b. **Monthly Invoices and Progress Reports:** BKF will prepare monthly progress reports with our invoices. The report will include work accomplished during the reporting period, work anticipated during the next reporting period, issues, and progress schedule.
 - c. **Coordination:** BKF will lead the consultant and project management team throughout the duration of the Project, ensuring that work is well coordinated and progresses based on the Project Schedule and other agreed upon commitments. The project team, led by BKF, includes the following:
 - i. **BKF Engineers** – Civil Engineering, Land Surveying, Grant Funding, Project Management
 - ii. **SERA Architects** – Outreach, Urban Design, Landscape Design
 - iii. **Kittelson & Associates** – Traffic Engineering
 - iv. **Haley & Aldrich** – Geotechnical & Environmental
 - v. **Civilis Consultants** – Business Resiliency
 - vi. **The Pacific Resources Group** - Arborist
 - d. **Meetings:** BKF will facilitate project meetings as noted herein and will document each meeting with agendas and minutes. We will establish an ongoing action log to track open coordination items to ensure that all issues are addressed throughout the design process.
2. **Quality Control/Quality Assurance:** BKF will perform an independent quality control review of the team's documents prior to submittal.

Deliverables:

- Monthly Progress Reports
- Project Schedule
- Meeting Agendas and Minutes

TASK 2: OUTREACH

1. **Technical Advisory:** BKF will facilitate Technical Advisory Committee (TAC) coordination. The TAC will be formed by the City and will consist of project stakeholders from affected agencies.
 - a. **Initial Agency Outreach:** The consultant team will contact agencies affected by the project to confirm their requirements as they pertain to the proposed improvements. BKF will meet with agencies to present options, obtain feedback, coordinate relocations and potential upgrades to their facilities. At a minimum, we will coordinate with the following agencies:

- i. ODOT
 - ii. ODEQ
 - iii. McMinnville Water & Light
 - iv. Comcast
 - v. Hunter Communications
 - vi. Zply Fiber
 - vii. Gas
 - viii. NW Natural
 - ix. Railroad Owner/Operator
- b. **Technical Advisory Committee (TAC) Meetings:** The team, as required, will participate in up to seven (7) TAC meetings to review various deliverables and discuss technical issues related to the project.
2. **Community Engagement:** SERA will facilitate Project Advisory Committee (PAC) coordination. The PAC will be formed by the City and will consist of project stakeholders.
- a. **Project Advisory Committee (PAC) Meetings:** The team, as required, will participate in up to seven (7) PAC meetings to review and solicit feedback on various deliverables, design issues, and process questions over the course of the project.
 - b. **City Council Meetings:** The team, as required, will participate in up to three (3) City Council sessions to review and solicit feedback on milestone deliverables.
 - c. **Website Updates:** The team will provide content for project website updates in conjunction with milestone deliverables.
 - d. **Community Forums:** SERA will prepare for and facilitate up to three (3) forums with community members to coincide with project kick-off, the conclusion of 15% Design, and the conclusion of 30% Design. Team members will participate, as required.
3. **Business Resiliency:** Phase 1 business resiliency will focus on bringing tools to the table for the business owner, property owner and community stakeholder around: a) surviving and thriving during road construction; b) leveraging the street for maximum return upon completion; and c) informing how street design decisions can impact brand, visitation, and sales in the district. These toolkits will be provided in the format of in-person presentations to the group, because business and property owners that collaborate and work in concert during street improvement construction are more likely to survive and thrive during periods of restricted access. Deliverables will be in the form of video presentations (recording to be completed by the City), and slide decks, heavy on visual case studies, typically between 125 to 150 slides. Phase 1 will be focused on understanding and quantifying the consumer building blocks of the district, planning in advance for the impacts that road construction might have on various types of businesses, the fundamentals of operating in a lower sales environment, generating ideas for building sales per square foot during the project through the lens of an advanced Main Street toolkit they will be implementing after the project is completed. The field work and study completed during Phase 1 can be used to create an optional add-on memo for the City of McMinnville to identify the types of future phase assistance and grant programs that should be a part of later stage design and engineering to help businesses in areas such as improving conversion rate, inventory planning, omni-channeling, discussions with Landlords, etc. Phase 1 work will include:
- a. **Project Launch Workshop:** For the entire downtown community, provide an overview of the design process, the PAC, the timeline, and framework for tackling business and property owner resiliency downtown during construction. (As needed, Civilis can also add economic perspective/content to support any existing work around parking, role of the road, etc.) Project Launch content will include:
 - i. Timeline overview.
 - ii. Introduce shared vocabulary for how Main Street economics function. (Civilis)
 - iii. Overview of district economic stages, including how preliminary design work supports economics and district experience (Civilis)
 - iv. Introduction to Tools for Transition Districts (3rd St during construction) (Civilis)
 - v. Introduction to Tools for Mature Districts (3rd St before/after construction)
 - vi. What businesses and owners should be thinking about now (Civilis)

- b. **3rd Street/Downtown Quantification:**
- i. **Small Format Group Interviews:** Over two days, conduct a series of small group interviews (2-6 people per interview), working with the City and McMinnville Downtown Association (MDA) to select a mix of attendees by vertical market (restaurants, retailers, service, property owners, etc.), by geography (businesses near each other), and/or characteristics (long-time business, new business, serves locals, serves tourists, etc.). The team may also host a public sector meeting (an elected, public safety, development staffer, local non-profit, chamber of commerce) and a resident meeting (people who live nearby, and an age mix as well as long-time/new resident) as well. The team will need the City and the MDA's assistance to set up these meetings, identify appropriate groupings, and choose a venue. Generally, these are attended by only the Consultant and one other person from either the City or the MDA so that it is a relaxed conversation. Findings from this work relevant to road projects will be filtered back to the team by Civilis.
 - ii. **District/Street Assessment & Secret Shopper:** Consultant will review and document business mix, ground floor execution, property types, mix of uses, consumer patterns, and customer/shopping observations to identify opportunities for collaboration, for mitigation of sales loss during construction, and for improving customer traffic during closures. This assessment includes informal talks with business owners/staff while on the ground, as well as interviews with City staff and the downtown association. Consultant will review relevant marketing, press, economic development efforts provided by the City so assessment will not duplicate previous work.
- c. **3rd Street 30% Design Forum and Resiliency Toolkit:** This workshop will present the results of the PAC work, the design and engineering ideas to 30%, and the resiliency toolkit findings and recommendations for the owners of businesses and property on the street. Laying the groundwork for community support very early! This will be a team presentation. Content will include:
- i. 30% Design
 - ii. Process Overview for Design
 - iii. 3rd Street/Downtown Resiliency
 - Advance planning for business/property owners
 - Construction mitigation and how it relates to resiliency efforts
 - Tools During Construction (Focus on driving traffic and elevating sales per square foot)
 - Tools Post Construction (Focus on advanced commercial tools and balancing local/tourist economy)

Deliverables:

- Meeting Presentation Materials
- Website Content
- Business Resiliency Toolkit - Phase 1 Business Resiliency: Two Presentation Videos (filmed by City of McMinnville) and Slide Decks.

TASK 3: FUNDING SUPPORT

1. **Funding Support Prospecting:** BKF will prospect for funding opportunities for McMinnville. This includes finding all viable federal, state, and local funding opportunities. As grants are vetted and determine to be a strong fit, the Grant Team will assemble a funding matrix with clear deliverables such as the grant due date, match requirements, and all other relevant conditions and criteria for a successful application. Once a suitable grant or grants are found, the Team will reassess next steps to proceed with the chosen application.
2. **Funding Support - Grant Application Package:** The objective of this task is to support the City's efforts in acquiring grants to fund project construction. Our scope anticipates:

- a. **Coordination:** We will meet with staff to create a plan which includes all deliverables and due dates. The plan will call-out expectations of both parties, as required to submit a complete application package prior to the grant deadline. This step will set the City up for future applications that they can submit after the contractual relationship has ended and all materials will be the property of the McMinnville.
- b. **Grant Writing:** Through the prospecting process, BKF's Grant Team will assist the City in identifying one (1) grant for which to apply. We will write the application on the City's behalf with 3 to 4 revisions (back and forth between BKF and the City) to help ensure the most successful application possible.

STAGE 2: PROJECT INITIATION/DATA COLLECTION

TASK 1: SURVEYS

1. **Collect and Review Record Documents:** Collect and review plans, drawings, reports, and other documentation provided by the City. Additionally, the team will research and collect available records from the public utilities (McMinnville Water & Light, NW Natural, telephone, cable and fiber companies).
2. **Field Review:** Meet with the City and perform a site assessment of the entire project area to understand topographic, boundary, and utility constraints. We will develop a photographic inventory of the corridor to document constrained and opportunity areas.
3. **Utility Locating:** BKF's in-house utility locators will perform utility investigation services using standard industry acceptable methods to determine the approximate horizontal position and depth of detectable underground utility lines within the designated area (see attached Limits of Work). BKF's field crews will use a combination of water-based paint and pin flags to mark the results of our investigation on the ground surface. BKF crews may opt to use the Ground Penetrating Radar (GPR), if the soil conditions will return a good signal to attempt to locate utility lines with no tracer wires. Individual field conditions will dictate the thoroughness of our subsurface utility investigation. BKF will perform a reasonable effort to determine the location of the existing underground utility lines; however, due to technical limitations of today's most modern equipment, no guarantee (expressed or implied) can be made. Irrigation lines, empty conduits, and abandoned utilities will not be located.
4. **Topographic Survey:** BKF will establish project control on site. Project horizontal control will be based on the North American Datum of 1927 as referenced to local survey control. Vertical survey control will be based on the National Geodetic Vertical Datum of 1929 as referenced to local benchmarks in the area.

The established control system will be used to provide 3D laser scanning services of the project area. The limits of the scanning are within the right of way and up to the building face(s) along Third Street between NE Adams Street and NE Johnson street and the supplemental areas as shown on the attached survey limits exhibit. Scanning will be comprised of 50-foot cross sections of the roadway, identified visible site features, roadways, pavements, striping, evidence of significant traveled ways, trees 6" and greater at breast height, utility location markings, and visible utility infrastructure. Inverts of gravity flow utilities and pipe sizes and types will be gathered and added to the survey.

Field work will be performed during regular business hours with BKF having access to the building space as needed. If necessary, BKF will make reasonable accommodations with existing tenants to minimize business interruptions.

Mapping - BKF will produce the mapping in a reproducible hard copy and electronic format. The signed and stamped hardcopy topographic map will be an instrument of service. Electronic mapping will be completed in an AutoCAD format and can be transferred and used by other team consultants for their work, as a courtesy.

- d. The mapping is to be compiled at 1" = 20', and will also indicate individual spot elevations at various locations throughout the site. BKF will take a series of photographs of all topographic features and utility structures and paint for future reference and documentation of current field conditions encountered during the time of our survey.

5. **Right of Way Survey:** BKF will provide preliminary boundary research of Third street right of way between NE Adams Street and NE Johnson Street in McMinnville Oregon. Additional boundary efforts will include the supplementary areas shown on the attached survey limits exhibit. Research will include documents easily locatable in the public record. Preliminary title reports provided by the client will be reviewed and easements in the area will be mapped. BKF anticipates no more than 40 easements to be mapped in the project area.

A preliminary boundary model will be assembled from the documents uncovered during the boundary research process. The preliminary model will be used for field calculations to BKF field staff in locating boundary evidence on site.

BKF field staff will utilize the preliminary boundary documentation to locate evidence of the boundary in the field. Evidence may include survey monumentation, lines of occupation, and existing topographic features on site. Measurements will be taken of the evidence and placed on the project control system for analysis.

The preliminary model along with the measured field evidence will be combined to produce an evidence-based boundary of the right of way along Third Street. The boundary will be incorporated with topographic mapping to create an overall base map. We will research right of way information to prepare a right of way map for the project. Using the right of way map, our team will create a preliminary base map including topographic features, utility, and preliminary right of way information that will be based on existing as-builts, right of way and easement maps as provided by the City. Individual properties within the project area will be identified by tax assessor number only and located approximately for reference only. We will add addresses to the City as provided by the City.

6. **Geotechnical Background Study:** Consultant will review available documents and summarize findings in email format.
 - a. Review readily available geologic, groundwater, and soil survey maps that cover the project vicinity. Review pavement data collected by the City.
 - b. Conduct a reconnaissance of the project alignments.
7. **Opportunities & Constraints:** SERA will prepare a diagram for the project area to record potential design opportunities and associated constraints. A draft version of the diagram will include input from other members of the consultant team and will be reviewed with the PMT, TAC, and PAC before being finalized.
8. **Urban Forest Assessment:** Pacific Design Resources (PDR) will prepare an urban forest assessment including the following elements
 - a. Coordinate with the design team following documentation of existing conditions and development of conceptual design to provide preliminary recommendations of trees to remove and replace or retain.
 - b. Site assessment for all trees within the project area to identify trees recommended for removal or retention. Identify potential paving modifications to support tree health.
 - c. Research suitable replacement street trees and work with design team to design street improvements to best accommodate both existing and replacement trees.
 - d. Prepare a memorandum summarizing recommendations for tree removal or preservation based on existing and proposed conditions including:

- i. Evidence of sidewalk and pavement buckling.
 - ii. Age
 - iii. Health
 - iv. Proximity to existing and proposed improvements (e.g., utilities)
- 9. **Existing Streetscape Amenities Inventory:** BKF will prepare an inventory (mapped and photographed) of all existing streetscape amenities (e.g., public art, planters, commemorative plaques, etc.) and prepare a catalog of these features for discussion with the PAC, MDA, and community about potential repurposing.

Deliverables:

- BKF will generate an RCP [Recap File] containing the scan locations.
- An Autodesk .DWG file containing the topographic, boundary, and utility mapping.
- A .PDF file containing the base mapping stamped by an Oregon Licensed Land Surveyor.
- Draft and final preliminary geotechnical report
- Urban Forest Assessment
- Inventory of Existing Streetscape Amenities
- Opportunities & Constraints Diagram

TASK 2: UTILITY AUDIT

1. **Utility Inventory:** Based on the records research and survey completed with Task 1, BKF will compile a comprehensive inventory of documented utilities present within the project area including:
 - a. Electric power
 - b. Natural gas
 - c. Water supply and distribution
 - d. Sewer and wastewater
 - e. Telecommunications (telephone, cable, internet)
 - f. Street lighting
 - g. Stormwater management
2. **Utility Coordination:** In conjunction with TAC activities, BKF will coordinate with outside utilities companies to ensure that all existing facilities, both underground and overhead, are identified accurately during the design phase. This includes:
 - a. Contacting local agencies companies informing them of the project and requesting their facility drawings if necessary.
 - b. Determining the disposition of existing improvements that may be impacted.
 - c. Working with the City to develop strategies as to the intent and cost sharing for any improvement or modification to existing systems
 - d. Coordinate with utility providers and relevant stakeholders to gather additional information and address any concerns or conflicts.
3. **Utility Condition & Capacity Assessment:** Through coordination with the utility agencies, we will assess concerns related to the condition of the existing utilities such as signs of deterioration, leaks, corrosion, or other potential issues that may require attention or replacement. Additionally, we will document concerns regarding the capacity and performance of the utilities to accommodate the existing and future needs of the downtown area. This is based on coordination with agencies only, we have not included scope to perform condition assessment, calculations, or modeling with this task.
4. **Integration and Coordination:** Assess the coordination and integration of different utility systems to identify potential conflicts, overlapping infrastructure, or inefficiencies. Evaluate the alignment of utility infrastructure with the existing roadway design and any planned future modifications.
5. **Documentation:** BKF will prepare a memorandum summarizing the findings of the utility audit. We will recommend further study options (e.g., CCTV, etc.) as appropriate.

Deliverables:

- Utility Audit Memorandum

TASK 3: ENVIRONMENTAL

1. **Hazardous Materials Corridor Study:** Consultant shall prepare a Hazardous Materials Corridor Study (HMCS) of the Third Street Improvement Project. The HMCS will attempt to identify potential sources of contamination that could impact the Project. The HMCS will review the records listed below and make conclusions based on the data. Consultant's work conducted for the HMCS will be performed within the Project APE (Area of Potential Effect) and according to generally accepted environmental procedures as outlined in the American Association of State Highway and Transportation Officials (AASHTO) Special Committee on Environment, Archaeology and Historic Preservation's Hazardous Waste Guide for Project Development, dated 1990; the Oregon Department of Transportation (ODOT) Hazmat Program Manual, dated July 2020, and ODOT's Hazardous Materials Corridor Study report template.

While the scope of services for the HMCS is similar to a Phase I Environmental Site Assessment, the HMCS should not be considered compliant with American Society for Testing and Materials (ASTM) E1527-21 or the All Appropriate Inquiries rule. The planned scope of services for the HMCS is as follows:

- a. Review available federal and state environmental databases to identify sites that could potentially impact the project, using the minimum search radii established in ASTM E1527-21.
 - b. Review physical setting sources for the Project including a current U.S. Geological Survey (USGS) 7.5-minute topographic map (as available) and readily available geologic, hydrologic, and soil information.
 - c. Review historical information for information regarding land use in the APE to at least 1940 including one or more of the following resources: Sanborn Fire Insurance Maps, historical aerial photographs, reverse city directories, historic property ownership/occupancy records, and building permits.
 - d. Review regulatory file information for sites that may impact the APE, including previous environmental reports and federal and state environmental records for hazardous waste generators, documented leaking or permitted underground storage tanks (USTs), sites with known or suspected releases, landfill sites, as available.
 - e. Conduct a visual reconnaissance of the APE and adjoining properties from public rights-of-way and other areas accessible to the general public. Consultant will not enter private property or contact the property owners without a permit of entry supplied, signed, and approved by the City.
 - f. Prepare a draft HMCA report summarizing the information obtained through the scope of services defined above; the HMCA report will include a description of field observations, information from state and federal environmental databases, historic land use, a scaled map showing the location of identified potential sources of contamination, copies of historic data, copies of state and federal databases, and other relevant documentation. The HMCS report will include opinions and conclusions about the conditions observed in and adjacent to the APE, a completed Initial Site Assessment Checklist according to AASHTO and ODOT guidance; photographs documenting APE observations, and recommendations for additional studies or investigations, as appropriate. The report will also include conclusions that identify specific sources of contamination that could impact the APE or the proposed construction work. The final report will be developed based upon the Client's review comments.
2. **Geophysical Survey:** Consultant shall subcontract with a geophysical survey contractor to conduct a geophysical survey of select portions of the APE based on the results of the HMCS and additional preliminary research conducted by others (e.g., surveys, historical documentation provided by the City). The geophysical survey will include ground penetrating radar and magnetometer surveys to evaluate suspect locations for underground storage tanks (USTs), former UST cavities, and/or historical tunnels present within the effective range of the equipment used, which is typically 5 to 7 feet below ground

surface. Specific locations of suspect USTs, former UST cavities, and/or historical tunnels have not been determined. Therefore, we have assumed up to 5 days of subcontracted geophysical survey services. We have also assumed that the City will issue a street use permit, if needed, at no cost to the Consultant. We have also assumed that traffic control will not be required during the geophysical survey, and that the City will coordinate and provide access to the survey areas.

- 3. Natural Resources:** We understand that the Third Street Improvement project will include possible removal of mature trees along Third Street. Consultant will conduct an initial site visit and desktop review of existing databases to identify federally listed rare, threatened, and endangered species within the Project Area using the United States Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) online tool. Based upon migratory birds identified as potentially seasonally present in the area, and an evaluation of existing habitat conditions, Consultant will prepare a memorandum that outlines the various identified species, and whether the species would be expected to be present.

Under NEPA, transportation projects that do not individually or cumulatively have significant environmental effects are classified as categorical exclusions (CEs). Consultant will complete a NEPA evaluation of the project to review for significant environmental impacts. Consultant will subcontract to Archaeological Services, LLC to prepare an analysis and reporting of significant cultural resources impact under Section 106. Consultant's services will be to review existing mapping for environmental and natural resources within the limits of the project, review stormwater and other improvements as a result of the project that may result in net effects. Consultant anticipates the performance of the NEPA work will result in No Effect for natural resources, and possibly cultural resources (depending on the results of the cultural resources survey). Consultant will prepare a finding of No Effect Letter, complete a NEPA checklist, conduct a site visit and coordinate with agencies for review.

- 4. Cultural Resources:** The project is still in its early design stages and funding sources have not been fully secured. It is possible that funding may come at least in part from a federal grant or other federal sources, which would trigger the project's review under Section 106 of the National Historic Preservation Act of 1966. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties, including archaeological sites, that are listed on, or are eligible for listing on the National Register of Historic Places (NRHP).

Essential to the Section 106 process is an inventory effort to document any historic properties that may be affected by the proposed project. The following scope is intended to carry out the cultural resource inventory of the proposed project's APE.

Preliminary background research indicated that nearly the entirety of the project area falls within the NRHP-listed McMinnville Downtown Historic District, which was listed in 1987 and is centered on Third Street between Adams Street and the railroad tracks that cross Third Street in the eastern end of the project area. In addition, an extensive historic resource inventory was carried out in 1981, and updated in 1984, which evaluated most of the buildings within the study area and determined there were 58 contributing buildings to the historic district and 8 that were non-contributing.

In addition to the built environment, the project has the potential to affect below ground, archaeological resources. Over time several historic artifacts have been found on frontage and in the ROW of the downtown representing historic businesses and populations from the late 19th and early 20th centuries. In addition, there are community stories of underground tunnels intersecting throughout the downtown that were used for both infrastructure and human navigation. Lastly, the town's location on the South Yamhill River just upstream from its confluence with the North Yamhill River also makes the city an area of high probability for pre-contact Indigenous archaeology.

Oregon state law prohibits archaeological excavation on non-federal municipal land without a permit granted by the Oregon SHPO. This estimate includes the cost of applying for and obtaining an archaeological excavation permit from SHPO.

Consultant will conduct a cultural resources survey, including the following:

- a. Consultation as needed with the Client, the Oregon State Historic Preservation Office (SHPO), and interested Tribes.
- b. Background research and literature review. This research will examine the historical development of the project area, the archaeological data for the region, and any previous cultural resource investigations within a 0.5-mile radius of the project area. Focus will be paid to the potential for the presence of underground tunnels in the downtown area and any cultural resources associated with them. Sources for the background research will include but not be limited to files held by the City, SHPO, historic maps, materials available from libraries, historical museums and other local resources provided by the City as well as online materials.
- c. Prepare an Oregon SHPO permit application, if needed by the project.
- d. Conduct a cultural resources survey of the project area. The survey will consist of:
 - i. A systematic surface investigation of the entire APE. This pedestrian survey will focus on documenting the built environment, assessing the potential for archaeological remains and determining if and where subsurface investigations may be carried out, given the largely paved nature of the project APE.
 - ii. If an Oregon SHPO permit is obtained, then the project will also include a subsurface investigation within the APE. Subsurface testing will entail the excavation of up to twenty (20) shovel test probes (STPs), at the discretion of the Field Director. STPs are circular holes measuring approximately 40 cm (16 inches) in diameter and taken to a minimum depth of 60 cm (24 inches) below the ground surface, barring an impasse. All excavated site matrix will be screened through nested ¼" and ⅛" mesh over a tarp and the STP will be patched in accordance with City standards upon completion. Any artifacts identified during fieldwork will be re-buried at the project area. Selective auger testing may be used to sample deeper soils. If shovel test probing is unfeasible due to the impervious nature of the project area, ASCC may monitor geo-technical borings to assess the soils and their potential for containing archaeological remains.
- e. In-field analysis, GIS mapping, and documentation of any cultural resources identified during the survey.
- f. Complete any necessary archaeological site inventory forms.
- g. Provide recommendations regarding the project's potential to adversely impact cultural resources, particularly those that are listed on, or considered eligible for listing on the National Register of Historic Places (NRHP), or those that that are on the McMinnville Historic Resources Inventory.

Deliverables:

- Draft and Final HMCS report.
- Final geophysical survey.
- Draft and Final MTBA memorandum.
- Draft and Final letter and NEPA checklist
- Draft and Final cultural resources survey report

TASK 4: MEETINGS

1. **Kickoff Meeting:** BKF and the subconsultant team will meet with City Staff at City offices to review the project schedule, review project goals, and identify critical path items.
2. **Progress Meetings:** BKF and subconsultants, as necessary, will meet with the City in-person and/or virtually to update on project progress and answer questions. Progress meetings will be held bi-weekly during this phase. At least two of the progress meetings shall be utility Coordination Meetings and one shall be an Emergency Services Meeting. We anticipate six (6) progress meetings during this phase.
3. **Weekly Meetings:** BKF's Project Manager will meet with the City weekly to provide status updates and coordinate project details. We anticipate these meetings will be approximately 30 minutes, conducted virtually. We anticipate twelve (12) weekly meetings during this phase.

STAGE 3: 15% DESIGN

TASK 1: CONCEPT DESIGN VALIDATION

1. **Plan Line:** Based on the surveys, BKF will prepare a plan line study “strip map” of the entire project corridor based on the concept plan geometrics. While the concept plan evaluated a typical block, we will apply the concept design to each block within the project area. We will identify constraints and conflicts of the concept plan based on the existing topography and underground infrastructure. We will prepare a high-level assessment of opportunities to mitigate challenges to the implementation of the concept plan.
2. **Draft 15% Design Layouts:** In coordination with BKF and the consultant team, SERA will prepare a design layout package to encompass each of the nine blocks in the project area. These layouts will graphically illustrate the location of key landscape / streetscape elements as well as supporting text and precedent images to convey design intent.
3. **Turning Movements:** BKF will perform a circulation analysis using digital automated software (AutoTURN) to confirm that the proposed layout can accommodate the required vehicles.
4. **Parking Management Support:** Kittelson shall support the Team with the parking strategy for the Project. Kittelson completed a preliminary parking assessment for the City in 2022 with the purpose of identifying existing parallel parking inefficiencies and provide planning-level strategies to increase on-street parking supply. The team will continue to build on the strategies provided within the context of the 3rd Street project, to help mitigate potential loss of on-street parking due to the streetscape improvements both during (construction-related) and after construction (permanent).
 - a. Construction parking mitigation – Kittelson will coordinate with the Team during development of the construction staging/phasing plans to understand impacts to existing parking during construction. Kittelson will work with the Team and City to identify feasible off-site parking opportunities (i.e. surface parking lots and/or other under-utilized street parking) and develop suggestions for wayfinding and signage for those parking areas. Kittelson assumes that the City or others will coordinate with owners of private parking lots to assess feasibility and any necessary agreements.
 - b. Permanent parking impacts – Kittelson will work with the Team to identify appropriate dimensions for on-street parking and apply to the design of each block face to maximize on-street parking opportunities. Kittelson will explore specific mitigation strategies building on the strategies developed in 2022 where loss of on-street parking cannot be avoided.

Kittelson will prepare exhibits as needed to inform opportunities and strategy discussions, and coordinate with the Team through meetings and correspondence. A brief memorandum expanding on the 2022 study will be prepared by Kittelson, if needed for documentation purposes.

5. **Street Lighting Evaluation:** Kittelson shall complete a computerized photometric analysis and preliminary light pole layout using AGi32 analysis software. A summary memorandum with supporting street lighting layout figures and AGi32 analysis files will be provided in electronic format to Agency for review. We assume the Project will include new street lighting on NE Third Street from NE Adams Street to NE Johnson Street. The street lighting evaluation will rely on the previously completed concept design and

input from Agency staff to identify specific pole and luminaire types to be used. The lighting evaluation will include and summarize each of the following steps, if applicable:

- a. Summarize and confirm target lighting levels for segments, intersections, and pedestrian crossings with Agency.
- b. Confirm the street light pole type and luminaire type to be used for design. Based on the type, Kittelson will identify a range of specific manufacturers and models through coordination with lighting vendors.
- c. Develop a photometric analysis and preliminary light pole layout that meets the target lighting levels and summarize results.
- d. Summarize findings in a draft memorandum and provide AGI analysis files to Agency for review.
- e. Update analysis and findings to address any comments provided by Agency and submit final memorandum.

Analysis will be performed and summarized for the following areas:

- f. Horizontal illuminance calculations at all intersections in the study area on NE 3rd Street between NE Adams Street and NE Johnson Street.
 - i. Assume horizontal illuminance analysis for up to ten (10) intersections.
 - g. Horizontal illuminance calculations along all road segments between intersections.
 - h. Vertical illuminance calculations at existing and proposed marked crosswalks at uncontrolled intersections or midblock locations.
 - i. Agency will confirm the locations of crosswalks at NTP.
 - i. For scoping purposes, we assume vertical illuminance calculations at up to eighteen (18) crosswalk locations.
6. **Alternatives Analysis:** Prior to preparing the 15% design documents, we will evaluate key alternatives related to:
- a. **Street Tree Preservation:** Based on their prior work along the corridor, the consulting arborist will advise the team regarding potential impacts of the streetscape project on street trees, including proposed modifications, construction activities, and changes to utilities.
 - b. **Pavement Surface Options:** We will evaluate different pavement surface options, considering factors such as durability, aesthetics, cost, and sustainability. We will assess the suitability of various materials, including asphalt, concrete, permeable pavers, standard pavers, or other potential surface treatments.
 - c. **Raised vs. Not Raised Crosswalks:** The team will analyze the need for raised crosswalks within the streetscape project area, considering pedestrian safety, traffic volume, and design speed. We will consider factors such as accessibility, drainage, maintenance, and integration with surrounding design elements.
 - d. **Stormwater Management:** Recommend appropriate stormwater management practices and design elements to ensure compliance with regulatory standards and minimize environmental impact.

Deliverables:

- Parking Management Memorandum
- Street Lighting Memorandum
- Alternatives Analysis Summary

TASK 2: 15% DESIGN PLANS

1. **Update Plan Line:** Based on the alternatives analysis, stakeholder feedback, and City comments, BKF will prepare a final base plan for the team's use in preparing the 15% plans.

2. **Final 15% Design Layouts:** The Draft 15% Design Layouts will be reviewed with the PMT, TAC, PAC, City Council, MURAC, and broader community (Community Forum #2) and will then be finalized based on input.
3. **15% Plans:** Based on the results of the validation phase, our team will work to refine the preliminary design. We will provide the following documents:
 - a. Title Sheet
 - b. General Notes, Key Map, etc.
 - c. Survey Control Sheet
 - d. Existing and Proposed Right-of-Way and Easements,
 - e. Typical Sections
 - f. Existing Conditions
 - g. Street Layout and Plan
 - h. Grading & Drainage
 - i. Utility Relocation
 - j. Stormwater Management
 - k. Signing and Striping
 - l. Street Lighting (pole locations only)
 - m. Traffic Signals (basic pole and equipment layout only)
4. **15% Cost Estimate:** The team will develop a rough order of magnitude opinion of probable cost that can be used in soliciting funding opportunities for the corridor improvements. The estimate will be based on the plans using 2021 Oregon Standard for Specifications and Construction. The estimate will account for escalation and allow for adjustments to the escalation rate and construction timeline.

Deliverables:

- 15% Plans
- 15% Cost Estimate

TASK 3: MEETINGS

1. **Progress Meetings:** BKF and subconsultants, as necessary, will meet with the City in-person and/or virtually to update on project progress and answer questions. Progress meetings will be held monthly during this phase. We anticipate seven (7) progress meetings during this phase.
2. **Weekly Meetings:** BKF's Principal-in-Charge will meet with the City weekly to provide status updates and coordinate project details. We anticipate these meetings will be approximately 30 minutes, conducted virtually. We anticipate fourteen (14) weekly meetings during this phase.

STAGE 3: 30% DESIGN

TASK 1: REPORTS

1. **Stormwater Hydrology/Hydraulics Report:** BKF will review potential changes to drainage patterns related to modifications to Third Street that could alter drainage or the rate of runoff. We will prepare preliminary calculations to size new storm drain piping and evaluate the locations and sizing of potential green infrastructure components.
2. **Basis of Design:** A basis of design memorandum will be prepared to document the design approach and identify areas where design exceptions to standards may be needed.
3. **Streetscape Plan (Report):** With input from the consultant team, SERA will prepare a Draft Streetscape Plan that records the key decisions and design features of the project through 30% Design. This document will build on that prepared for the Concept Plan in capturing the community's interest in the project. This

Report will be a summation of the 30% Design Plans that will include the illustratives, plan views, and renderings - and could include the technical work and cost forecast as appendices.

Deliverables:

- Reports, as noted

TASK 2: 30% DESIGN PLANS

1. **30% Plans:** The objective of this task is to develop the design to a 30% level to establish a basis of design and cost estimate that will support the grant funding procurement. We will provide the following documents:
 - a. Title Sheet
 - b. General Notes, Key Map, etc.
 - c. Survey Control Sheet
 - d. Existing and Proposed Right-of-Way and Easements,
 - e. Typical Sections
 - f. Existing Conditions
 - g. Street Layout and Plan
 - h. Grading & Drainage
 - i. Utility Relocation
 - j. Stormwater Management
 - k. Illustrative Landscape Features and Plantings
 - l. Signing and Striping
 - m. Street Lighting
 - n. Traffic Signals (basic pole and equipment layout only)
 - o. Construction Staging Plans
 - p. Project Phasing Plans
2. **Streetscape Renderings:** SERA will prepare up to five (5) renderings of the streetscape to illustrate design intent, key elements, and/or specific locations within the project area.
3. **30% Cost Estimate:** The team will develop a rough order of magnitude opinion of probable cost that can be used in soliciting funding opportunities for the corridor improvements. The estimate will be based on the plans using 2021 Oregon Standard for Specifications and Construction.

Deliverables:

- 30% Plans
- 30% Cost Estimate

TASK 3: MEETINGS

1. **Progress Meetings:** BKF and subconsultants, as necessary, will meet with the City in-person and/or virtually to update on project progress and answer questions. Progress meetings will be held monthly during this phase. We anticipate four (4) progress meetings during this phase.
2. **Contractors Round Table:** The team, as required, will participate in a discussion with invited contractors to discuss potential options for construction phasing and staging. SERA will document these options in a series of diagrams for review with the PMT, TAC, PAC, CC, MURAC, and the Community (at Community Forum #3).
3. **Weekly Meetings:** BKF's Project Manager will meet with the City weekly to provide status updates and coordinate project details. We anticipate these meetings will be approximately 30 minutes, conducted virtually. We anticipate eight (8) weekly meetings during this phase.

OPTIONAL SERVICES

We propose to evaluate the following services after submittal of the 15% deliverables in coordination with the City and design team.

OPTIONAL TASK 1: TRAFFIC ANALYSIS MEMORANDUM

1. **Draft Traffic Analysis Report:** Kittelson shall prepare a Traffic Analysis Report that summarizes available pertinent traffic information to use in preparing the Project design. Consultant shall collect two-hour weekday peak period traffic counts to include pedestrian counts and truck percentages.

Both morning (7am-9am) and afternoon (4pm-6pm) peak periods will be collected and analyzed for the following study intersections:

- a. NE Adams Street (OR99W) & NE Third Street
- b. NE Baker Street (OR99W) & NE Third Street
- c. NE Johnson and NE Third Street
- d. NE Adams Street (OR99W) & NE 2nd Street
- e. NE Baker Street (OR99W) & NE 2nd Street
- f. NE Three Mile Lane & SE 1st Street
- g. NE Adams Street (OR99W) & NE 5th Street
- h. NE Baker Street (OR99W) & NE 5th Street
- i. NE Lafayette Avenue & NE 5th Street

Afternoon (4pm-6pm) peak period only will be collected and analyzed for the following intersections:

- c. NE Cows Street & NE Third Street
- d. NE Davis Street & NE Third Street
- e. NE Evans Street & NE Third Street
- f. NE Ford Street & NE Third Street
- g. NE Galloway Street & NE Third Street
- h. NE Irvine Street & NE Third Street

Consultant shall obtain, review and summarize crash data from ODOT for the study intersections listed above on Third Street only and the roadway segments between intersections.

Consultant shall develop anticipated year of opening and design year (twenty (20) years after opening) traffic volume forecasts using the current travel demand model for the region. Estimates will be prepared for expected traffic diversions from Third Street to the other study intersections (i.e., 2nd Street and 5th Street) due to reductions in throughput capacity on Third Street.

Using existing and future traffic volumes, Consultant shall evaluate levels of service during the PM peak hour at the fifteen (15) intersections listed, and during the AM peak hour for the nine (9) intersections listed. Recommendations will be made for intersection control, signal phasing, and any lane configuration changes needed to meet City of McMinnville and/or ODOT level of service standards.

Vehicle queuing shall also be evaluated to determine appropriate storage for turn lanes, where applicable, and potential impacts on adjacent crosswalks and intersections. Left turn phasing analysis will be conducted per Agency guidelines to determine the most appropriate phasing type at each signalized intersection. Results of the analysis will be used to support any necessary signal approval requests.

Twenty-four (24) hour vehicular tube counts will be obtained on each of the four legs of the NE Third Avenue & NE Evans Street intersection. Traffic signal warrants will be evaluated for the intersection to inform the appropriate recommendation for intersection control to optimize traffic design for the Third Street corridor. Signal warrant analysis will be performed for the other existing signalized and unsignalized intersections on Third Street utilizing the peak hour traffic counts and extrapolating to develop 24-hour volume profiles based on the tube count data collected for Third Street.

Consultant shall prepare a draft Traffic Analysis Report summarizing the results of the findings. Consultant shall prepare a final Traffic Analysis Report based on draft review comments from Agency.

The Traffic Analysis Report will include the following elements:

- a. Project Purpose
 - b. Analysis of the most recent five (5) year crash history along the corridor
 - c. Crash rate for the entire Project section
 - d. Identification of the top 10% Safety Priority Index System (“SPIS”) sites
 - e. Identification of the Functional Classification of the project area roadways in accordance with the McMinnville Transportation System Plan (for City-owned intersections) and/or Oregon Highway Plan and Highway Design Manual (for ODOT-owned intersections).
 - f. Provide the posted speed
 - g. Provide the Annual Average Daily Traffic Volume (“AADT”) for Current Year and Design Year
 - h. Provide the truck percentage
 - i. Summary of existing, opening year, and 20-year traffic volumes at the study intersections.
 - j. Summary of levels of service at the study intersections under existing, opening year, and 20-year traffic volume scenarios at the study intersections.
 - k. Intersection control and lane configuration recommendations, along with vehicle queue storage and left-turn phasing requirements. Summary of signal warrants at the study area intersections on Third Street.
2. **Final Traffic Analysis Report:** Kittelson will update the draft report as required and prepare the Final Traffic Analysis Report.

OPTIONAL TASK 2: ODOT APPROVAL REQUESTS

1. **ODOT Approval Requests:** Kittelson shall prepare documentation of various Project traffic elements at the NE Adams Street and NE Baker Street (OR99W) & NE Third Street intersections for review and approval by ODOT, including:
 - a. Preliminary Signal Operations Design (PSOD) forms for signals with modifications requiring ODOT approval will be submitted with the 30% submittal. PSOD forms are anticipated for the following intersection:
 - i. NE Baker Street (OR99W) & NE Third Street
 - b. State Traffic-Roadway Engineer (STRE) or Region Traffic Engineer (RTE) approval requests will be required for any of the following:
 - i. Textured/colored crosswalks
 - ii. New/modified signals
 - iii. Roadway illumination
 - iv. Bike lane markings
 - c. Up to four (4) STRE or RTE approval requests with associated documentation will be prepared by Kittelson for submittal by ODOT for approval.

OPTIONAL TASK 3: PRELIMINARY GEOTECHNICAL ENGINEERING

1. **Preliminary Geotechnical Engineering:** Consultant will conduct a preliminary geotechnical investigation focusing on evaluating pavement conditions, general infiltration characteristics, and subsurface soil conditions along NE Third Street between NE Adams Street and NE Johnson Street. Consultant will evaluate the subsurface and pavement conditions at the site and provide preliminary geotechnical design recommendations and support the 30 percent design effort for the projects. Additional geotechnical work will be completed to provide recommendations for signal pole foundations and more detailed infiltration recommendations once the 30 percent design approach has been approved. The work will be conducted in general conformance with City standards and Oregon Department of Transportation's (ODOT's) Geotechnical and Pavement design manuals. Specifically, Consultant will provide the following services.
 - a. Review readily available geologic, groundwater, and soil survey maps that cover the project vicinity. Review pavement data collected by the City.
 - b. Conduct a reconnaissance of the project alignments.
 - c. Mark the proposed exploration locations in the field and notify the "One Call" service for public utility locates.
 - d. Prepare traffic control plans for and provide traffic control during completion of field explorations.
 - e. Work with project team and the City project manager to obtain permits for geotechnical work in the ROW.
 - f. Complete the following exploratory work to characterize as-built pavement and subsurface soil and groundwater conditions.
 - i. Complete up to 15 pavement cores at approximately 150 to 250 feet on center. Conduct dynamic cone penetrometer (DCP) testing at eight to ten core locations through the underlying base rock and soil subgrade to depths up to 3 feet below grade to evaluate pavement subgrade strength. Advance up to six borings to 10 feet below grade adjacent to select cores to characterize subsurface soils. Complete two infiltration tests in borings along the alignment at a depth of 2 to 3 feet below the existing grade.
 - ii. Maintain a log of the materials encountered in the explorations and collect select soil samples for laboratory testing.
 - iii. Patch the pavement at the coring and boring locations with ready-mixed concrete or cold-mix asphalt patches.
 - iv. **(Optional Service)** Complete up to 10 additional pavement cores as noted above.
 - g. Conduct a program of laboratory testing on select soil samples. The actual quantity and type of tests run will be based on the materials collected, though for budgeting purposes include up to:
 - i. 8 percent fines determinations (percent passing the No. 200 sieve),
 - ii. 30 moisture content and/or density determinations, and
 - iii. 2 Atterberg Limits determinations.
 - h. Conduct preliminary engineering analyses to evaluate possible pavement design and rehabilitation options and infiltration characteristics at the site.
 - i. Prepare a geotechnical report summarizing the results of the subsurface exploration and laboratory testing programs, and presenting our preliminary recommendations and conclusions.
 - j. Provide project management and support for our work, including coordination of Haley & Aldrich staff and subcontractors, invoicing, email and telephone communications with the project team, other incidental administrative services required for the project, and attendance at up to 2 project meetings.

OPTIONAL TASK 4: BUSINESS RESILIENCY SUPPLEMENTAL MEMORANDUM

1. **Resiliency Strategies & Sample Tactical Approaches:** Civilis will prepare a writeup summarizing broad strategies to support 3rd St during construction, with a range of tactical ideas to help the private sector. Actionable tactics will include ideas that can be implemented right away, through to tactics that should be

implemented just before or during construction. It will include ideas for both the private and public sector to help mitigate the impacts of construction on property and business owners. The intent is to give the City a range of options they can begin prioritizing and implementing together with their business community, as well as options for the private sector to begin working on individually. The memo is meant to help foster a next step collaboration that elevates the projects and efforts of most interest to the private sector, so projects get done and positive relationships are built.

OPTIONAL TASK 5: ONGOING GRANT FUNDING SUPPORT

1. **Grant Compliance and Management:** From start to finish, BKF will maintain regular and consistent communication with the City, keeping them informed on the status of their application and the decision-making process. When grants require post-award compliance, the Grant Team will provide continued reporting, administration, close out report, and/or management on our client's behalf.

OPTIONAL TASK 6: POTHOLING

1. **Pothole Support:** BKF will coordinate utility potholing efforts as follows:
 - a. **Utility Potholing:** For utilities identified as being in close proximity to future improvements, we will employ potholing to attempt to identify their location. BKF will retain a licensed general engineering contractor to identify the utility type, material composition, and depth of existing utilities that may be affected by the proposed improvements. The contractor shall pothole the area as identified by BKF to determine the type of utility and its precise horizontal location and depth. Within hardscape areas the pothole will be backfilled with a slurry mixture and topped with hot mix asphalt patch or repaired with a new concrete surface per the City of McMinnville standard requirements. We have estimated a total of 30 potholes as part of this project. This number is subject to change based on the conditions uncovered during the utility location and mapping process.
 - b. **Administration and Monitoring:** BKF will prepare an exhibit that shows the approximate location of each pothole (up to a total of 30), and coordinate with the potholing contractor as necessary. We will meet the potholing contractor on-site to confirm the locations of each pothole, and help monitor the progress of the potholing activities throughout each day. We have budgeted for ten (10) half days of monitoring pothole activities. We have assumed that the contractor will complete three (3) potholes per day.
 - c. **Field Survey:** BKF field crew will verify the locations of each of the 30 pothole locations as noted by the contractor's surface markings.

OPTIONAL TASK 7: GEOPHYSICAL SURVEY (SUPPLEMENTAL ACCESS AREAS)

1. **Geophysical Survey:** Consultant shall subcontract with a geophysical survey contractor to conduct a geophysical survey of select portions of the additional APE in the supplemental access areas (alleys)

DESIGN ASSUMPTIONS AND SCOPE QUALIFICATIONS

BKF Engineers' services are limited to those expressly set forth in the scope. We understand that BKF will have no other obligations or responsibilities for the project except as provided in this proposal letter, or as otherwise agreed to in writing. BKF will provide the scope of services consistent with, and limited to, the standard of care applicable to such services. Any participation in non-adversarial procedures, or other right to repair items, is considered as additional services. For the scope of work identified, we have assumed the following:

1. **City Provided Information:** City will provide the following services:
 - a. City will make available any existing record drawings (as-built) of the existing project area.
 - b. Right of Way Maps/Title Reports: A current title report(S) or right of way maps for the roadway will be provided by the City.
2. **Existing Utilities:** Unless otherwise indicated or provided by others, any existing utilities identified on BKF's drawings/plans are based on information obtained by BKF, or provided to BKF, and may not be accurately documented in their horizontal location or vertical profile. Other utilities may be present that were not disclosed.
3. **Postponements:** If the execution of the scope of work is delayed more than one year BKF reserves the right to adjust our billing rates to be consistent with our normal schedule of charges in the year work actually commences. Rates to be evaluated yearly after notice to proceed.
4. **Private Improvements:** we have not included scope for improvements outside of public right of way.
5. **Survey Limitations:**
 - a. Traffic control is not included as part of this task order.
 - b. Client will provide access to project areas.
 - c. No more than 20 easements are anticipated to be mapped.
 - d. Alley Ways not included in the mapping of this project.
6. **Mapping:** We have not included time to prepare additional items not contained in the mapping scope of work. Additional mapping services such as the following are not included:
 - a. Surveys of individual properties (topo/boundary)
 - b. Acquisition plat and legal descriptions;
 - c. Right of entry plats
 - d. Temporary construction easement plats and legal descriptions
 - e. Record of survey to delineate right of way and monuments either prior to or post construction
 - f. Monument preservation survey
 - g. Private easement documents,
 - h. Quit claims,
 - i. Right of way dedications
 - j. Other items not specifically listed in this proposal
7. **Construction Support:** This project includes preliminary design only, we can prepare a separate scope for final design as well as bidding and construction support services once a scope of work and schedule is determined.
8. **Meetings:** Meeting time requested beyond what we have budgeted is not included in this proposal.
9. **Drawings:** All drawings will be prepared in AutoCAD format. We will submit copies of all drawings in both electronic and paper format.
10. **Building Information Modeling (BIM):** We have not included time to convert civil 3D design or existing conditions AutoCAD files into BIM model files.
11. **Civilis Work Product:** Civilis Consultants contributions to this Agreement contain original business resiliency content, frameworks, and case studies that will be used in service to work for the City of McMinnville. As such, all work products of the Consultant which result from this Agreement (collectively, the "Work Products") are the exclusive property of the Consultant, which retains all common law, statutory, and other reserved rights, including copyrights, in and to Work Products. Work Products include, but are not limited to all data, information in any form, documents, drawings, photographs, recordings, research, analysis and any other work subject to intellectual property laws and doctrines. Consultant grants to City of McMinnville non-exclusive right to use, reproduce and distribute Work Products for the intended uses and purposes contained in this Agreement. Presentation content recorded by the City of McMinnville will not be made publicly available, but may be used for the purposes contained in this Agreement as well as for future education and training for downtown business owners.
12. **Geotechnical:**
 - a. Field work will be performed during normal business hours.

- b. If contaminated soils are encountered, then additional charges will be incurred for equipment decontamination, testing, and soil disposal.
 - c. If needed, the City will issue a street use permit at no cost to the Consultant.
 - d. City to provide traffic estimates and heavy truck distribution and percentages for each road segment.
- 13. Environmental:** Work scope was developed based on the assumption that a NEPA categorical exclusion would apply for this project. If initial research indicates a greater level of survey (such as an Environmental Assessment) is needed to determine a No Effect finding, a separate work scope and budget would be provided to the Client.
- 14. Cultural Resources:** The level of effort for curation preparation and the number of boxes required for transfer depends on the volume of artifacts that may be collected, which cannot be ascertained prior to conducting fieldwork. Therefore, we have assumed 40 hours for this task.