Reconnecting East Central Spokane

Washington State Department of Transportation, Eastern Region

PACKET A

Presented by:

DAVID EVANS AND ASSOCIATES INC.

February 14, 2024

Criteria 1

SR 520 land bridge under construction, Bellevue, WA

Qualifications/Expertise of Firms on Team

FIRMS' EXPERTISE, LOCATION, AND TEAM ORGANIZATION

David Evans and Associates, Inc. (DEA)

DEA is a multi-disciplinary firm that has delivered hundreds of transportation planning, design, environmental, and construction projects to WSDOT statewide for more than 20 years. Our breadth of project experience includes bridges and structures, urban roadways, state highways and freeways, interchanges, and roundabouts. With a local presence in Spokane since 1987, we are invested in the community. We have direct experience working with WSDOT locally through our involvement in the Eastern Region General Engineering Consultant (GEC) contract, as a sub to HDR. As community members, many DEA staff have participated in public meetings and placemaking sessions hosted by WSDOT. DEA has also performed over 100 contracts for the City of Spokane establishing relationships with key staff from critical stakeholders on this project.

DEA is highly qualified to develop innovative solutions for this project, as we developed designs of four land bridge designs in Washington State, part of the SR 520 Eastside Transit and HOV Design-Build project. These land bridges reconnected the communities of Medina, Hunts Point, Yarrow Point, Clyde Hill, and Bellevue that were bifurcated by the construction of SR 520. Additionally, DEA is currently working as the owner's representative for the Oregon Department of Transportation (ODOT) on the I-5, Rose Quarter CM/GC Project (RQ) which will construct two land bridges over I-5. Similar to this project, RQ seeks to reconnect neighborhoods separated during the construction of I-5 in the 1960's. We will leverage our lessons learned in unique aspects of land bridges related to structural, waterproofing, drainage, fire and life safety, urban design and landscaping features, as well as the tremendous opportunity to engage the public in the development of the design.

Role on Project: Project Management, Structures, Environmental, Survey, Roadway, Trails, Planning

Type of Expertise: Traffic/Transportation Planning Studies and Reports; Highway Design; Environmental Studies and Reports; Highway Safety; Hydraulics/Hydrology; Survey and Mapping; Landscape Architecture; Right-of-Way; Utilities; Structural Engineering; Construction Engineering; Illumination; Grant Writing; Crime Prevention Through Environmental Design (CPTED)

Years Providing this Expertise: 47

Total Employees Nationwide: 1,038
Total Employees WA/Greater CDA Area: 341

- Spokane, WA: 46
- Bellevue, WA: 93
- Everett, WA: 19
- Tacoma, WA: 46
- Olympia, WA: 14
- Seattle, WA: 14
- Woodinville, WA: 40
- Vancouver, WA: 38
- CDA Area, ID: 31

Evergreen Point Land Bridge over SR520 (DEA/HBB)

Hough Beck & Baird, Inc. (HBB)

Since 1990, HBB has provided landscape architecture, planning, and urban design services throughout the Pacific Northwest, with projects on both sides of the Cascades. They have worked on 240+ transportation and multimodal trail projects, 11 of which included major bridges or land bridges across state routes with significant trails, open space, and other pedestrian amenities. From planning through design and construction, HBB's work successfully incorporates community character, public safety, multimodal circulation, long-term maintenance, and low-impact development features. Through public outreach and design workshops with community stakeholders, team members, and clients, they distill a clear vision that informs the design process. This leads to an increased sense of ownership by community stakeholders and ultimately to the success of projects in celebrating the character of each community.

Role on Project: Urban Design/Landscape

Type of Expertise: Parks/Recreation Programming; Communications and Community Engagement; Public Event Planning and Facilitation; Creation of Visualizations and Collateral Materials; Collaborative Design Process; Site Analysis; Preliminary Engineering and Alternative Analysis; Park Design; Landscape Architecture; Urban Design; Identifying and Supporting Public Art Programs; Tribal Coordination for Design Integration; CPTED; Grant Programs; Construction Administration

Years Providing this Expertise: 34

Total Employees Nationwide: 20
Total Employees WA/Greater CDA Area: 20

- Seattle, WA: 20

HDR Engineering, Inc. (HDR)

HDR has been providing services to WSDOT since 1974. Their Spokane office has been particularly successful in providing a range of comprehensive services to the Eastern Region under the current GEC contract and has in-depth knowledge of the Spokane area. HDR has provided valuable staff augmentation during both the design and construction phases of projects. Their expertise has enabled them to be involved in several notable projects, such as providing traffic analysis for the North Spokane Corridor and improving the I-90/Barker Road interchange.

Role on Project: Roadway, Structures, Drainage, Utilities, Right-of-Way Acquisition, Archaeology/Cultural

Type of Expertise: Planning; Environmental; Permitting; Engineering; Communications; Traffic; ITS; Structures; Hydraulics; Utilities; Stormwater; Constructability; Right-of-Way Acquisition; Construction Management

Years Providing this Expertise: 107

Total Employees Nationwide: 11,300
Total Employees WA/Greater CDA Area: 479

- Spokane, WA: 48
- Bellevue, WA: 217
- Seattle, WA: 118
- Olympia, WA: 36
- Everett, WA: 38
- CDA Area, ID: 22

GeoEngineers, Inc. (GeoEngineers)

Founded in 1980, GeoEngineers is an employee-owned firm specializing in integrated geotechnical, environmental, and ecological solutions. GeoEngineers has a strong track record in providing geotechnical services for various transportation-related projects, including trails, bridges, roadways, and interstate projects. The firm is well-versed in WSDOT and AASHTO standards, co-authoring the WSDOT Geotechnical Design Manual. Locally, GeoEngineers' Spokane office has worked with agencies such as City of Spokane, Spokane County, and City of Spokane Valley for over 30 years.

Role on Project: Geotechnical

Type of Expertise: Geotechnical Engineering

Years Providing this Expertise: 43

Total Employees Nationwide: 440
Total Employees WA/Greater CDA Area: 276

- Spokane, WA: 32
- Redmond, WA: 110
- Tacoma, WA: 64
- Seattle, WA: 41
- Bellingham, WA: 20
- Kennewick, WA: 8
- CDA Area, ID: 1

CivTech, Inc. (CivTech)

Founded in 2002, CivTech provides traffic engineering, multimodal transportation planning, and transportation design services from offices in Washington, Arizona, and Texas. The firm is a Washington state-certified W/DBE with experience collaborating with WSDOT, including serving as a subconsultant under the WSDOT ER GEC to manage, guide, and prepare the North Spokane Corridor Interchange Justification Report Supplement Update and the Transportation Management Plan and Traffic Control Plans for US 395.

Role on Project: Traffic Services

Type of Expertise: Traffic Engineering/Analysis; Signing/Pavement Marking Design; Illumination; Traffic Control and Staging; Grant Writing; ITS Analysis and Design; Transportation Planning and Design

Years Providing this Expertise: 22

Total Employees Nationwide: 23
Total Employees WA/Greater CDA Area: 1

- Spokane, WA: 1

Ott-Sakai & Associates LLC (Ott-Sakai)

Ott-Sakai is comprised of former contractors who provide constructability reviews, production of construction schedules, and cost estimates for public agencies and design firms. Ott-Sakai has provided these services to WSDOT on some of their most significant projects, such as the SR 520 Bridge Replacement and HOV Design Build and Alaskan Way Viaduct and Seawall Replacement projects.

Role on Project: Constructability

Type of Expertise: Constructability Review; Construction Schedule; Cost Estimates; Risk Analysis

Years Providing this Expertise: 25

Total Employees Nationwide: 18
Total Employees WA/Greater CDA Area: 16

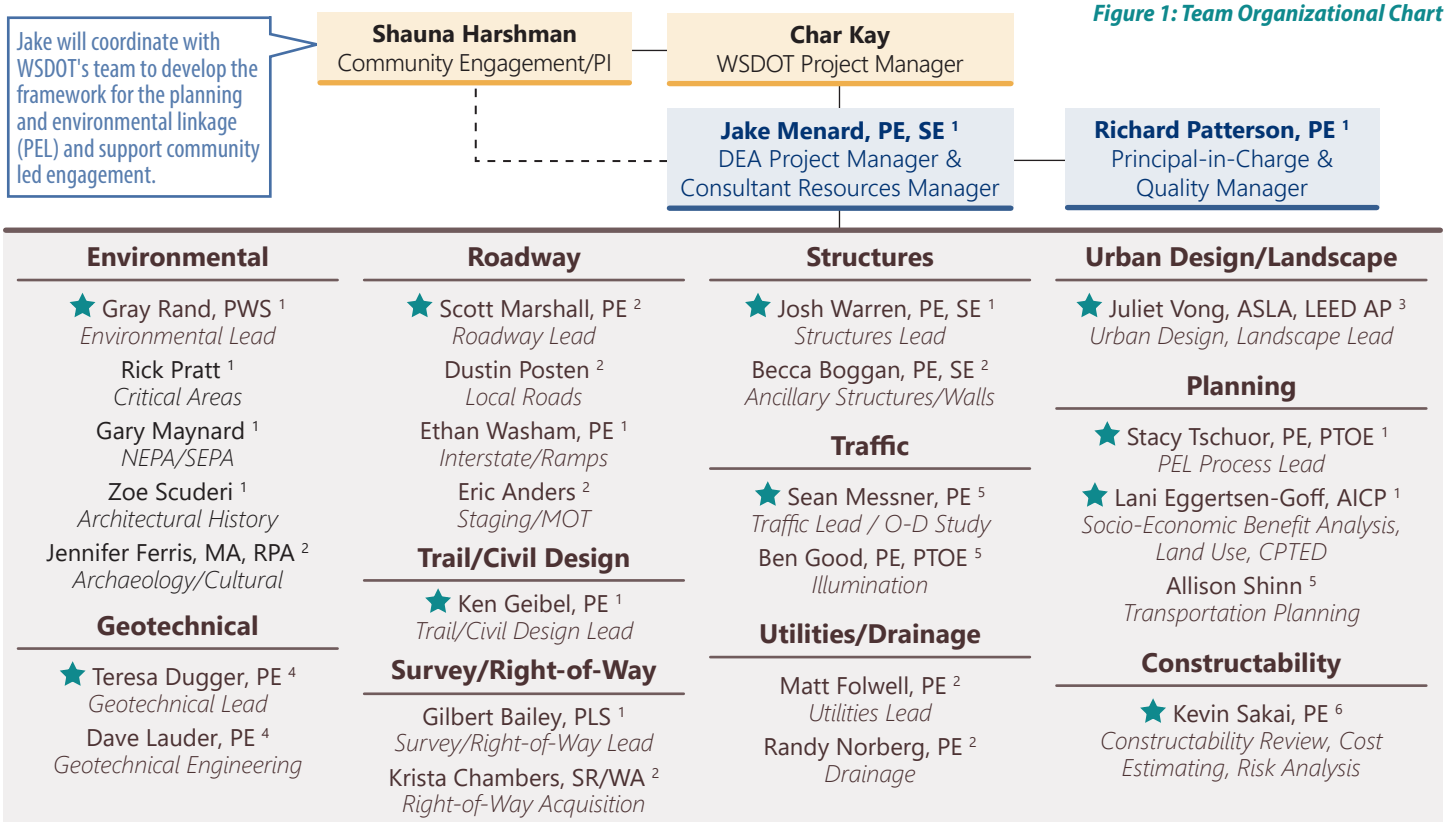
- Seattle, WA: 13
- Bellevue, WA: 2
- CDA Area, ID: 1

DEA will achieve the 16% DBE Goal with HBB, CivTech, and Ott-Sakai on the team, all of whom are Washington State Certified DBE firms.

Team Organization

The DEA team is comprised of planning and technical experts with a long history of working together successfully. Our team will collaborate with WSDOT, key stakeholders, and the public to develop an innovative solution that achieves WSDOT's goal of reconnecting the east central Spokane community. Our team brings extensive experience using WSDOT procedures and executing contract requirements. The key personnel identified in the organizational chart (*Figure 1* on the following page) include task leaders and critical technical discipline leads. These individuals will play vital roles in the development of the project.

Figure 1: Team Organizational Chart



LEGEND: 1 - DEA 2 - HDR 3 - HBB 4 - GeoEngineers 5 - CivTech 6 - Ott Sakai ★ **Key Personnel:** Resumes are included under Criteria 3

SUBCONSULTANTS' HISTORY WORKING WITH DEA

DEA has not only composed a team of highly qualified professionals, but we have also built our team with cohesion in mind. DEA has worked with all of the subconsultants proposed on our team in the past, many of them on WSDOT projects. While limitations of the RFP require us to list only one collaborative project per subconsultant, it should be noted that we have worked with the firms on our team on multiple occasions. Our history providing successful projects as a team gives us an advantage in communication and efficiency, leading to better projects for WSDOT. *Figure 2* below identifies one key project where DEA has worked with each of our teaming partners in the past three years, as well as each firm's responsibility.

Figure 2: Projects with Subconsultants in the Last Three Years

Team Partner	Example Project Name	Firm Responsibilities		Start/End
HDR	Barker/BNSF Grade Separation, City of Spokane Valley	DEA:	Prime Consultant, Bridge, Signing and Pavement Markings, Survey, MOT, Right-of-Way Plans, BNSF Coordination	2017-2023
		HDR:	Roadway/Roundabout, Drainage, Utilities, BNSF Coordination	
HBB	Issaquah-Pine Lake Road SE Improvements Phase 1, City of Sammamish	DEA:	Prime Consultant, Survey, Traffic Analysis, Environmental, Drainage, Roadway, Utilities	2019-2023
		HBB:	Landscape Architecture, Urban Design, Wayfinding	
GeoEngineers	Rose Street Bridge, City of Walla Walla	DEA:	Prime Consultant, Roadway, Bridge, Utilities, Survey, Right-of-Way Plans, Hydraulics/ Drainage, Environmental, Construction Administration and Inspection	2019-2022
		GeoEngineers:	Geotechnical Exploration and Reports	
CivTech	Maple Street Bridge, City of Spokane	DEA:	Prime Consultant, Bridge Design	2022-2023
		CivTech:	Traffic Control and Pavement Marking	
Ott-Sakai	I-90, SH-41 Interchange, ITD	DEA:	Prime Consultant, Roadway, Bridge, Utilities, Survey, Right-of-Way Plans, Environmental, Traffic Analysis	2019-2022
		Ott-Sakai	Constructability, Cost Estimating, Scheduling, Risk Assessment, and Claims support	

AVAILABILITY OF KEY STAFF AND RESOURCES

Our proposed team members were carefully selected for their relevant expertise and availability to deliver this project within WSDOT's desired timeframe. All of our key staff have experience working with WSDOT and are committed to providing the actual staffing level required to successfully deliver this project. *Figure 3* below identifies the estimated available hours per month of our key staff for the duration of the contract.

Figure 3: Key Staff Availability

Key Personnel: Role	Hours Available per Month					
	2024	2025	2026	2027	2028	2029
Jake Menard: Project Manager/Consultant Resource Manager	80	90	120	140	160	160
Josh Warren: Structures Lead	60	120	120	160	160	160
Stacy Tschuor: Planning & Environmental Linkages (PEL) Process Lead	80	80	80	80	80	80
Ken Geibel: Civil/Trail Design	40	80	120	120	120	120
Lani Eggertsen-Goff: Socio-Economic Benefit Analysis, Land Use, CPTED	40	80	80	80	80	80
Gray Rand: Environmental Lead	40	80	120	120	120	120
Juliet Vong: Urban Design/Landscape Lead	80	80	120	120	120	120
Scott Marshall: Roadway Lead	60	90	140	140	160	160
Teresa Dugger: Geotechnical Lead	60	60	120	120	120	120
Sean Messner: Traffic Lead	60	80	80	80	80	80
Kevin Sakai: Constructability	80	80	80	80	80	80

FIRM'S RELEVANT PROJECTS

DEA

Client: Idaho Transportation Department (ITD)
Location: Post Falls, ID
Year Completed: 2022
Fee: $9,506,224
Services: Structural Design; Construction Staging/MOT; Traffic; Visualizations; Survey and Right-of-Way Plans/Acquisition; Environmental; Construction Engineering/Inspection

I-90, SH-41 INTERCHANGE RECONSTRUCTION

DEA designed the reconstruction of the interchange at I-90 and SH-41 from a partial cloverleaf to an offset single point urban interchange (SPUI). It included reconstruction and realignment of over one mile of I-90 to improve safety and mobility and accommodate the complicated construction phasing. To facilitate selection of the preferred interchange design, DEA facilitated a value planning study, which allowed the team to successfully develop an innovative design that maximized the project benefits while minimizing costs. Improvements on SH-41 extended from Seltice Way to 12th Avenue, including a realignment of the highway at the interchange (resulting in an IMR), four new interconnected signalized intersections, widening and turn lane additions throughout, six new bridges, a pedestrian bridge and two pedestrian tunnels. A new trail connection from Centennial Trail to the SH-41 Trail was provided that facilitates multimodal travel separated from the interchange operations improving safety. The project involved full acquisition of one parcel and partial acquisition of 17 parcels. There are 42 properties, many of them businesses that will either be impacted by temporary easements or access during construction. DEA's project manager, Jake Menard, went door to door and met with every property owner during design development along with ITD to keep them informed. The community engagement campaign led by Jake resulted in over 300 people attending two different public meetings. The public hearing was facilitated during the peak of the COVID-19 Pandemic and was held virtually. The value planning approach presented to the community fostered buy-in and support from the public and feedback led directly to the innovative design being implemented. Construction is being completed in seven phases to maintain traffic operations throughout the project in this complex urban corridor.

Client: City of Kennewick / WSDOT
Location: Kennewick, WA
Year Completed: 2023
Fee: $2,554,323
Services: Structural Design; Urban Roadway Design including Curb, Gutter, Sidewalk; Drainage; Traffic Operational Analysis; NEPA/SEPA; Public Engagement/Stakeholder Coordination; WSDOT Coordination/Approvals; Illumination; Utility Coordination/Relocation; Right-of-Way Plans; PS&E; Construction Engineering Support

US 395/RIDGELINE DRIVE GRADE SEPARATION

WSDOT and the City of Kennewick held two Value Engineering (VE) sessions to identify a preferred alternative to replace the at-grade intersection with a grade-separated interchange. DEA was selected to implement the recommendations from the VE study through the development of refined alternatives, survey, extensive public involvement, preliminary design, environmental documentation and approvals (NEPA/SEPA), right-of-way plans and acquisition, preparation of a public art plan, landscape architecture, preparation of Ad-Ready design documents, and assistance to WSDOT through construction via an Engineer of Record contract. The project included a highway overcrossing of Ridgeline Drive, addition of 3,000 feet of auxiliary lanes and ramp construction, construction of a ramp terminal roundabout, and a shoofly detour to maintain US-395 traffic during construction. These improvements required extensive ongoing partnering and coordination with WSDOT for numerous approvals, including Basis of Design, Interchange Justification Report (IJR), Plans for Approval, Right of Way Plans, Hydraulic Report, Traffic Analysis, Safety Analysis, Public Art Plan, Project Development Approval, and Ad-Ready PS&E documents.

Client: City of Spokane Valley
Location: Spokane Valley, WA
Year Completed: 2023
Fee: $3,171,275
Services: Bridge; Signing and Pavement Markings; Survey; MOT; Right-of-Way Plans; BNSF Coordination

BARKER ROAD/BNSF GRADE SEPARATION

DEA designed a new grade separation at Barker Road and the BNSF tracks to promote safety and mobility within the project corridor and enhance access to SR-290 for the surrounding industrial land. In collaboration with the City, DEA conducted an extensive alternatives analysis and evaluation to determine the safest configuration at the Barker/BNSF intersection. DEA led a multi-disciplined consultant team to conduct an extensive alternatives analysis. Using the principles of WSDOT practical design solutions, a double lane roundabout was selected for the intersection of SR-290 and Barker Road, to utilize a significant portion of the existing roadway facilities and minimize impacts to adjacent parcels. Key project elements included NEPA/SEPA approvals, right-of-way acquisition, WSDOT Intersection Plan for Approval, BNSF approvals, and coordination with Spokane County for future extension of roundabout to the north.

HBB

Client: WSDOT
Location: Puyallup, WA
Year Completed: 2024
Fee: $210,000
Services: Landscape Architecture; Urban Design; Public Art Coordination; Public Outreach Support; Tribal Coordination; Visualizations and Collateral Materials

TACOMA TO PUYALLUP REGIONAL TRAIL, STAGE 2A

HBB provided landscape architecture and urban design of trail amenities in support of the design-build procurement documents for the Tacoma to Puyallup Regional Trail – Stage 2a project. The route follows the new SR167 corridor through Puyallup . An alternatives analysis for the trail route was conducted and the final trail alignment selected to maximize the project goals of safety, connectivity, accessibility and equity. HBB led the urban design and public art coordination for the project, developing detailed design of overlooks, gateways, and a trail wayfinding signage system. Future phases of the project will extend the trail through Stage 2b and include an extensive interpretive experience along the trail corridor. Trail amenities were closely coordinated with the Puyallup Tribe of Indians to represent their story, art, language, and culture in the design of trail features and public art throughout the project.

Client: City of Renton
Location: Renton, WA
Year Completed: 2023
Fee: $230,000
Services: Landscape Architecture and Urban Design (Conceptual Design); Public Outreach Support; Visualizations and Collateral Materials

PHILIP ARNOLD PARK RENOVATION

Philip Arnold Park is located in the heart of the Renton Hill neighborhood. The park's numerous features have been in place for many years and are in need of upgrades and renovation. These features include a park shelter, a basketball court, pathways, a park building with restrooms, a playground, and parking areas. The park also includes a ball field for softball and little-league and two tennis courts. The natural areas incorporate a large grassed swale, groves of large trees, and a nearly unobstructed view to the north over the City of Renton and to the Seattle skyline beyond. HBB developed multiple design options for the park improvements that were subsequently narrowed to a final concept. Final park improvements included new picnic shelters for group gatherings and events, renovation of the basketball court, new park entry and wayfinding signs, a new playground, community gathering areas, open lawn space, and new loop trails to connect all the new park elements into the existing facilities to remain. Maintenance needs were taken into account throughout the design.

Client: Sound Transit
Location: Bellevue, WA
Year Completed: 2023
Fee: $55,000
Services: Landscape Architecture and Urban Design (Conceptual Design)

EAST LINK – OVERLAKE VILLAGE STATION AND REDMOND TECHNOLOGY STATION

HBB provided preliminary landscape architecture services for this project in support of Sound Transit's design-build procurement documents. The Overlake Village Station included the conceptual design of a significant pedestrian bridge over SR 520 to reconnect communities across the highway to the station area. HBB provided an analysis of several alternatives for an ADA accessible pedestrian ramp from the bridge to the station entry plaza. A drop-off/pickup area was also included in the conceptual design. The Redmond Technology Station includes the conceptual design of an at-grade transit center for multimodal transportation connectivity. A later stage of work included a new pedestrian underpass from the station area to the adjacent office district. Significant trees were identified for preservation surrounding both sites. Opportunities for gathering areas, enhanced pedestrian amenities, and public art were identified on the conceptual plans.

SR 520, Eastside Transit and HOV Design-Build: DEA's designers collaborated with the HBB landscape and urban design team to integrate green space, trails, and urban design features, based on community input, on the 92nd Avenue Land Bridge over SR 520.

HDR

Client: WSDOT
Location: Spokane Valley, WA
Year Completed: 2023
Fee: $667,000
Services: Roadway Geometrics; Traffic Analysis; Signing and Striping; Drainage Design; Illumination; Pavement Design; Geotechnical; Construction Staging

I-90/BARKER ROAD SOUTH INTERCHANGE IMPROVEMENT

Scott Marshall led HDR in designing improvements for the I-90 interchange to enhance safety and mobility at the ramp terminals. The collaboration with the City of Spokane Valley and WSDOT led to the replacement of the existing signalized intersection with alternative traffic control devices. This upgrade resulted in an improved level of service, enhanced pedestrian access, the addition of bio-infiltration ponds, and the accommodation of freight truck traffic traveling through the intersection. HDR's work was completed in accordance with WSDOT standards and requirements.

Client: City of Spokane Valley
Location: Spokane Valley, WA
Year Completed: 2023
Fee: $1,250,000
Services: Roadway/Roundabout Design; Utilities; Traffic Analysis; Signing and Striping; Drainage Design; Pavement Design; Geotechnical; Construction Staging

BARKER ROAD/BNSF GRADE SEPARATION

As a sub to DEA, HDR developed six new alternatives for an effective and safe grade-separated crossing and assisted the City in quickly securing WSDOT approval for a multi-lane roundabout, allowing the project to proceed on schedule. HDR completed the PS&E package, including WSDOT-compliant alignment, profiles, typical sections, paving, site preparation, drainage, and utility plans. HDR also prepared a WSDOT Type A hydraulic report documenting the stormwater treatment and disposal methods within the WSDOT and City right-of-way.

Client: WSDOT
Location: Mason County, WA
Year Completed: 2022
Fee: $1,070,000
Services: Roadway Engineering; Hydraulic Design

OLYMPIC/NORTHWEST REGION 27 FISH PASSAGE TASK AB

This project includes report development for 27 crossings located in the Olympic and Northwest regions that are set to move into hydraulic design in the 2025-27 biennium. HDR gathered existing conditions data, developed project design parameter templates and scoping-level hydraulics and structural reports, conducted site reviews for each crossing, and performed hydraulic design. Scott Marshall developed roadway conceptual alternatives, typical roadway sections, and MOT options for several crossings.

GeoEngineers

Client: WSDOT / City of Liberty Lake
Location: Liberty Lake, WA
Year Completed: 2023
Fee: $86,400
Services: Geotechnical Engineering

I-90/KRAMER PARKWAY UNDERCROSSING

GeoEngineers completed a geotechnical investigation for the I-90/ Kramer Parkway Undercrossing project located in Liberty Lake, Washington. The project included the construction of a new overpass bridge spanning I-90 and associated improvements including a signalized intersection, new roundabout, and stormwater infiltration facilities. The project increases connectivity across I-90 between the north and south sides of Liberty Lake. Based on their subsurface exploration program and analyses, they provided cost-effective recommendations for the proposed bridge foundation system, retaining walls, and roadway improvements. They also assisted the design team in developing stormwater management recommendations within a documented Ecology groundwater monitoring site.

Client: City of Spokane Valley
Location: Spokane Valley, WA
Year Completed: 2024
Fee: $144,015
Services: Geotechnical Engineering

PINES ROAD UNDERPASS

GeoEngineers provided geotechnical engineering recommendations to support the design and construction of the proposed Pines Road Underpass to improve vehicle and pedestrian movement around an active BNSF rail line. Improvements include the construction of two railroad bridges to the east of the current on-grade crossing, realignment of Pines Road, a bridge to pass below the new railroad bridges, retaining walls, a new roundabout and pedestrian trail, and stormwater management. GeoEngineers oversaw a multi-phase exploration program to evaluate shallow and deep soil and groundwater conditions. The GeoEngineers team provided recommendations based on subsurface exploration, laboratory testing, and engineering analyses for driven piles, abutment and retaining wall foundations, sign and illumination poles, pavement design, and stormwater management.

CivTech

Client: City of Spokane
Location: Spokane, WA
Year Completed: 2023
Fee: $36,200
Services: Traffic Control Design; Signing/ Pavement Marking Design

MAPLE STREET BRIDGE REHABILITATION

CivTech was responsible for the preparation of the pavement marking and traffic control designs as part of the Maple Street Bridge Rehabilitation project in Spokane, Washington. The City of Spokane received federal funding to repair the deck and expansion joints on the Maple Street bridge. CivTech coordinated with the City and WSDOT to define appropriate detour routes to expedite the construction duration of the project. The federally-funded project required additional reporting to meet WSDOT and FHWA criteria.

Client: WSDOT
Location: Spokane, WA
Year Completed: 2023
Fee: $50,900
Services: Traffic Control Design; Transportation Management Plan; WSDOT, FHWA, and Stakeholder Coordination

US 395/NORTH SPOKANE CORRIDOR IJR

CivTech assisted WSDOT with an update to the North Spokane Corridor IJR. Throughout the updating process, CivTech provided guidance, coordinated the multi-jurisdictional agency team, and oversaw transportation modeling efforts, including the VISUM, Synchro, HCS, and VISSIM analyses, which document the measures of effectiveness of the project. The firm also provided post-processing and balancing of the project's 2025 and 2040 traffic volumes and the VISSIM analysis update.

Ott-Sakai

Client: WSDOT
Location: Seattle, WA
Year Completed: 2023
Fee: $1,000,000
Services: Construction Schedules; Constructability Reviews; Program Packaging Strategies; Cost Estimating

ALASKAN WAY VIADUCT AND SEAWALL REPLACEMENT

Ott-Sakai provided guidance directly to WSDOT on contract packaging, method of procurement strategies, constructability review of plans, cost estimates, and construction schedules for working day durations for this $1B program. They also attended risk sessions and value engineering workshops. Their assistance in this work led to a successful delivery of a very complex project in Downtown Seattle.

Client: WSDOT
Location: Seattle, WA
Year Completed: 2022
Fee: $1,000,000
Services: Construction Scheduling; Address Constructability Issues During Design

SR 520, MONTLAKE PROJECT

The Montlake Project will improve transportation for both motorized and non-motorized travel along the corridor with a new SR 520 eastbound bridge over Union Bay. This project also builds a new, three-acre land bridge covering the highway in Montlake that will include regional transit stops and open green space. East of the land bridge, a bicycle and pedestrian bridge will be constructed over SR 520.

Criteria 2

DEA's 3D Rendering of I-90, SH-41 Interchange in Post Falls, ID

Qualifications of Proposed Project Manager

Jake Menard, PE, SE

- Multi-disciplinary project manager with proven success delivering innovative, context-sensitive design solutions
- More than 20 years of experience delivering projects meeting WSDOT and AASHTO standards

PROJECT EXPERIENCE

Jake Menard will serve as our team's Project Manager and Consultant Resource Manager. As a senior associate, he has the authority to execute contracts and commit resources needed for the project on behalf of DEA. He has more than 22 years of experience managing and delivering multi-discipline transportation projects, with an emphasis on structures. He is an expert at developing and implementing innovative and collaborative approaches to managing designs, bringing together multiple disciplines, owners, affected property owners, and stakeholders to achieve common goals and successful projects. Jake began his career at WSDOT and utilizes this experience to develop PS&E packages meeting federal aid, WSDOT, and WSDOT LAG Manual Standards. As a consultant, he has extensive experience working on WSDOT and locally-sponsored, federally-funded projects that have improvements within WSDOT right-of-way. As a result, Jake has the expertise and understanding of how to develop federally funded WSDOT projects effectively that meet the agency's goals, while collaboratively working with the various departments within WSDOT and other stakeholders to obtain timely approvals.

WSDOT: SR 520 Eastside Transit and HOV Design-Build, Bellevue, WA | 2010–2016

Jake's Role: Structures Discipline Lead

Jake led the design for four land bridges over SR 520, each incorporating unique amenities and landscape features, in coordination with Juliet Vong from HBB, to enhance the surrounding communities.

This $365M, 2.75-mile roadway improvement design-build project reduced transit and HOV travel times and enhanced reliability, mobility, access, and safety for transit and HOVs in rapidly growing areas along the SR 520 corridor. Jake managed a group of structural engineers responsible for designing and providing construction engineering support on four land bridges over SR 520, one vehicular bridge, four pedestrian bridges, three pedestrian tunnels, eight fish passage structures, custom retaining walls (soldier pile, soldier pile tieback, tangent shaft tieback), soil nail and custom cast-in-place walls, and sign structures. **Jake coordinated closely with Juliet Vong from HBB throughout the urban design process to accommodate the amenities and landscape features into the structural design.**

ITD: I-90, SH-41 Interchange, Post Falls, ID | 2017–2022

Jake's Role: Project Manager

Jake facilitated the value planning sessions to gather effective and meaningful input and propel the decision-making process for the preferred interchange design and utilized the results of that process to communicate with and obtain community buy-in on the project.

This $78M project includes reconstruction of the interchange at I-90 and SH-41, which will address the safety and mobility issues through the area. Improvements on SH-41 extend from Seltice Way to Mullan Avenue. The project includes ramp modifications and local road improvements as necessary to be compatible with the new interchange. **Jake led the a value planning study, which successfully developed an innovative design that maximized the project benefits while minimizing costs**. DEA's tasks include preliminary survey; interchange alternatives and roadway design; traffic/interchange analysis; value engineering study and report; Interchange Modification Report (IMR); Type, Size, and Location (TS&L) Report for three bridges; project charter/concept modifications report; environmental services; final survey and right-of-way plans; and Final Design/PS&E.

"During our work together on the I-90, SH-41 IC, Jake proved himself capable of communicating clearly with the public and adapting to new formats during COVID-19. He worked diligently to complete materials on time and provided thoughtful reviews. His efforts provided meaningful opportunities for stakeholders to engage, and given the chance, I'd work with him again." -- Megan Jahns, Public Information Officer, ITD Districts 1 & 2

WSDOT: US 395, SR 290 Interchange Ramp SB, Spokane, WA | 2022-Current

Jake's Role: Project Manager

This project will provide PS&E documents for the Northbound on-ramp at the US 395/SR 290 (Trent Avenue) Interchange as part of the North Spokane Corridor project. The nearly 900-foot-long ramp bridge will be a four-span curved steel plate girder bridge founded on drilled shaft foundations. The project was procured through the WSDOT Eastern Region GEC contract, where Jake serves as the Deputy ERM and works closely with WSDOT and Scott Marshall, the ERM from HDR. **Jake has taken a lead role in working with the DEA/HDR team and collaborating with WSDOT HQ Bridge and the WSDOT ER design staff to successfully deliver the project**. The project is on target to be completed in late 2024. Jake was involved in scoping, developing the Work Plan, and is helping to coordinate the design effort every step of the way.

Through delivery of this project, Jake has developed a close working relationship with WSDOT Project Manger, Sharron Mathews. Jake provided a seamless experience integrating the bridge design into MicroStation and ProjectWise software improving coordination with Sharron and her team.

FAMILIARITY WITH STATE & FEDERAL REGULATIONS & PROCEDURES

Jake has been delivering transportation projects in Washington for 22 years. For the first four years of his career, he worked for the WSDOT Bridge and Structures Office. While at WSDOT he received agency training in project delivery, bridge design, PS&E preparation, bridge inspection, and bridge load rating. Since becoming a consultant, he has also been providing PS&E for WSDOT projects and local agency projects utilizing WSDOT Local Agency Guidelines. He has expertise with and routinely uses the WSDOT BDM, WSDOT GDM, WSDOT Design Manual, WSDOT LAG Manual, WSDOT Standard Specifications and General Special Provisions, WSDOT Plans Preparation Manual, WSDOT Bridge Inspection Manual, AASHTO Bridge Design Specifications, AASHTO Manual for Bridge Evaluation, and AASHTO Guide Manual for Bridge Element Inspection.

PROFESSIONAL LICENSES/ ACCREDITATIONS:

- Professional Engineer, WA #42801, 2006
- Structural Engineer, WA #42801, 2013

Jake's Project Management Strategies

Minimize Impacts: Successfully minimizing impacts starts with identifying the project's constraints. On similar projects, Jake has leveraged his depth of understanding of the environmental and right-of-way acquisition processes, roadway, structural, and temporary traffic control design, as well as construction means and methods to identify constraints quickly and efficiently. Jake will work with WSDOT and leverage DEA's team of experts to identify and balance competing constraints to find the optimal solution that minimizes the overall project impacts.

Collaboration with WSDOT Staff: Jake will provide a collaborative and inclusive experience for Char and WSDOT. He will lead by example and expect his team to contribute to this experience. His team-oriented attitude and strong communication skills will facilitate consideration of all discipline design challenges. When decisions need to be made with WSDOT's input, Jake will work with Char to involve the right WSDOT staff and have the opportunity to influence key decisions based on their needs or impacts to their responsibilities.

Foster Innovation: Jake is committed to developing innovative design concepts that result in substantial cost savings. Under Jake's leadership and coordination with ITD on the I-90, SH-41 Interchange project, the innovative offset SPUI design concept implementation yielded a savings of over $35M from the previously developed EIS interchange concept. Additionally, Jake worked with his team to develop the SPUI concept on ITD's US-95, JCT SH-53 Interchange, which saved $6.8M from the initial interchange concept and allowed ITD to fund the project much sooner than initially planned. Jake will put what's best for the project and WSDOT first, especially when impactful innovations are identified, even if the timing is not ideal along the path of project development.

Public Involvement/Stakeholder Outreach: Jake has a unique ability to communicate complex technical issues in a way that non-engineers can easily understand. He enjoys interacting with the communities, community officials, and stakeholder groups to seek input and obtain buy-in on project features. Jake demonstrated this outward-facing communication with the ITD District 1 Public Information Officer and the public involvement consultant on the I-90, SH-41 Interchange, which included two public meetings, a public hearing, numerous stakeholder meetings, a value planning workshop with 25+ participants from key stakeholders, and face-to-face meetings with affected property owners.

MANAGEMENT OF SCHEDULE, SCOPE, BUDGET, AND CHANGES

Schedule Management

SR 520 Eastside Transit: As a design-build project, the design was fast-tracked and many elements were on concurrent schedules among disciplines completed within 1 year. Jake's management and close coordination allowed for the successful delivery of structures plans and specifications concurrently with roadway, drainage, architectural, and illumination designs. He used Microsoft Project to track the structures deliverables and coordinate with other discipline deliverables.

I-90, SH-41: When the project scope and definition was greatly expanded, Jake took quick action to re-evaluate the schedule and maintain critical path items that required modifications, such as permitting due to change in the area of potential effect. With Jake's leadership, this resulted in minimal schedule impacts.

US 395, SR 290: The DEA-HDR team has been diligent about meeting deadlines throughout the project. We helped develop the schedule with WSDOT to stay on-track with every deliverable.

Scope Management

SR 520 Eastside Transit: The contractor looked for opportunities to optimize the design throughout the project. Jake worked closely with the builder to identify when concepts and modifications to the design resulted in out-of-scope work. Utilizing project change forms to document potential changes, schedule and budget impacts allowed the design-build team to quickly assess if the change would benefit the overall project.

I-90, SH-41: With extremely complex maintenance of traffic, the initial plan was to develop the design without an intermediate design submittal (60% submittal)—typical for ITD projects. As the design progressed, additional complexities in the traffic control and interchange geometrics noted during final design development prompted Jake and ITD to add a 60% submittal improving the overall project quality and provided more time for ITD reviews.

US 395, SR 290: The scope of work is appropriately detailed to set expectations up front. Jake's approach in providing a comprehensive scope of work helps WSDOT and the DEA team clearly identify if/when scope creep becomes an issue.

Budget Management

SR 520 Eastside Transit: Jake developed detailed workload projections to help manage the team of structural engineers from five firms to keep resources allocated in a way that was consistent with the expected budgetary constraints.

I-90, SH-41: An additional submittal was added along with a change to the project funding. These changes had budgetary impacts that were easily justified and resulted in a supplemental agreement to appropriately account for the associated increased level of effort.

US 395, SR 290: Jake worked diligently with WSDOT to validate the needs of the project and provided detailed backup for the level of effort determined. This has positioned the team and WSDOT for success on budget expectations. Jake routinely checks in with Bill Meeks, WSDOT ER consultant liaison, and escalates any issues that could potentially impact the project budget. His trust-based relationship and regular check-ins with Bill have kept the project budget on-track throughout the delivery.

Change Management

SR 520 Eastside Transit: WSDOT initiated a change to the 84th land bridge intersection that significantly modified the features on top of the 84th land bridge. Jake worked closely with WSDOT and the task forces involved to develop schedules and budgets to accommodate these changes and fit them within the schedule.

I-90, SH-41: Jake held regular one-on-one meetings with ITD's project manager to escalate possible changes. On this project, one of the subconsultants underwent a significant change in leadership and lost a lot of staff as a result. Jake worked with ITD and the subconsultant to establish a recovery plan to keep the work going during the project delivery, while maintaining appropriate staffing and expectation.

US 395, SR 290 Interchange: Jake maintains a Potential Change log to identify potential changes, allowing Bill Meeks to proactively work with WSDOT staff to head off potential impacts to the project. To date, only one change order has been necessary and was a mutually agreed upon for the betterment of the design and will result in construction cost savings well beyond the cost of the additional services.

Criteria 3

HBB and DEA designed this covered viewpoint area on the Evergreen Point Land Bridge over SR 520 in Medina, WA

Key Team Members Qualifications

Josh Warren, PE, SE
Structures Lead

Professional Engineer, Civil/Structural: WA #58156

Josh has more than 22 years of experience in bridge design, engineering, and inspection. He has served as a project manager or structures task lead on large and small multidisciplinary projects, and has experience implementing architectural features into structure design. He has prepared design documents and performed construction management/inspection services on new and reconstruction projects for bridges, highways, and municipal streets in urban and rural environments. His design experience includes steel and pre-stressed girder bridges, pedestrian bridges and tunnels, box culverts, and retaining walls.

RELEVANT EXPERIENCE

WSDOT, I-405 Renton to Bellevue, 2022-Current, Structures Task Manager: Created the bridge concept, led final design for the I-405 over May Creek bridge replacements, and provided design support for the Eastrail Trail Pedestrian bridge crossing SB I-405. Collaborated closely with the Contractor and WSDOT's bridge architect to incorporate the project architectural elements into the bridge design including abutment textures and decorative fencing.

City of Walla Walla, 5th Avenue Bridge Replacement, 2023, Structures Design Lead: Led the structures design and provided technical guidance for the prefabricated truss selection, abutment and micro-pile foundation design, and anchorage design for the existing channel retaining walls. Helped the team develop bridge aesthetic concepts allowing the City to make an informed decision to use a weathering steel prefabricated arch bridge.

City of Walla Walla, Rose Street Bridge Replacement, 2023, Structures Design Lead: Led the structure selection process, PS&E design, and engineering services during construction. Working closely with the City, DEA developed a replacement concept that preserved the adjacent bridge structures and existing bridge abutment walls to prevent any permanent impacts to the Mill Creek Channel.

WSDOT/PUBLIC AGENCY FAMILIARITY

Josh has over 22 years of experience delivering federal-aid projects to AASHTO Standards. He has been the structural engineer-of-record on several bridges in WA state. Through that experience he has developed comprehensive knowledge of WSDOT Bridge Design Manual, Design Manual, Standard Specifications, and Plans Preparation Manual. He is familiar with developing specifications that meet federal-aid standards.

Stacy Tschuor, PE, PTOE
PEL Process Lead

Professional Engineer, Civil: CO, UT
Professional Traffic Operations Engineer, #2216

Stacy has 27 years of experience in traffic engineering with a focus on transportation planning and multimodal operations. Her project experience includes pre-NEPA and Planning and Environmental Linkages (PEL) studies for transportation corridors and networks. With extensive knowledge of both design and operations, she is able to provide transportation projects with a keen understanding of the effects of design treatments on traffic operations and multimodal connectivity during the project planning phase, when key decisions are being made.

RELEVANT EXPERIENCE

ITD, SH-44, I-84 to Star Road PEL, 2023-Current, PEL Task Lead: Leading the project PEL process for a ten-mile highway corridor, including agency coordination, public outreach, alternatives evaluation, and documentation of planning-level decisions. The highway serves as main street through an established yet growing community and residents are actively engaged in the project and have mixed opinions on improvement alternatives.

ODOT, I-5 Boone Bridge Replacement, 2023-Current, PEL Task Lead: Leading the project PEL process, including development of the project Purpose and Need, alternatives development and evaluation, FHWA coordination, and project recommendations.

CDOT, Santa Fe (US 85) PEL Study, 2022, Alternatives Evaluation Task Lead: Led the planning process with alternatives evaluation considering multimodal safety and operations, and constraints of the tight urban environment. Agency and community engagement in the PEL process led to a focus on pedestrian and bicyclist improvements to reduce the impacts of the highway as a barrier to multimodal travel and improved connectivity to adjacent light rail stations.

WSDOT/PUBLIC AGENCY FAMILIARITY

Stacy has managed and/or led the planning efforts for dozens of state DOTs and local agencies for major transportation corridors, interchanges, and networks for over 25 years. Stacy has been CDOT and FHWA Colorado Division's partner in the development and completion of the PEL process since the first PEL study in Colorado in 2008 and is currently utilizing that experience to benefit multiple PEL studies in Idaho and Oregon. She recently supported CDOT with the development of a PEL Study Alternatives Evaluation Guidance document and contributed to the updated CDOT NEPA Manual.

Ken Geibel, PE
Civil/Trail Design Lead
Professional Engineer, Civil: WA #34271

Throughout his 32-year career, Ken has successfully managed the design and development of complex projects for cities, counties, universities, airports, and many other clients throughout the region including WSDOT and the City of Spokane. From conceptual design through construction documents, Ken provides exceptional technical design and experienced oversight to take a project from the initial concept phase through final design plans and construction. His intuitive understanding and ease of communicating options in design development, implementation phasing, project sequencing, facilitates informed decision making that results in a successful project delivery. Ken brings expertise in roadway and highway design; bicycle, pedestrian, and trail projects; recreational facilities, sewer and water management and distribution systems; and stormwater management systems.

RELEVANT EXPERIENCE

City of Spokane, Spokane Parks Aquatic Facilities, 2008-2012, Lead Civil Engineer: Provided civil engineering services for the replacement of six aquatics facilities within established City parks, including Liberty Park located in the East Central neighborhood. Assisted with site selection options, neighborhood involvement meetings, conceptual and final design including site layout, overall site and pool deck grading and drainage, and utility relocations and extension.

Deer Heights LLC, US 2, Deer Heights Roundabout, 2018-2020, Project Manager: Managed this new multi-lane roundabout that was designed to accommodate traffic generated by the rapidly expanding commercial and residential areas within Spokane and Airway Heights. Located on US 2, the project required the design meet WSDOT design standards. Ken led the multi-jurisdictional coordination, which included WSDOT, City of Airway Heights, and the City of Spokane, throughout the design and construction process.

Spokane Tribe, Spokane Tribe Economic Project (STEP) Main Entry Roundabout, 2016-2021, Project Manager: Responsible for project management, design documentation, and PS&E for bidding for a new dual-lane roundabout on US 2 that serves as main access point to the STEP 280-acre development in accordance with WSDOT standards.

WSDOT/PUBLIC AGENCY FAMILIARITY

Ken has been delivering civil and transportation projects in Washington State his entire career. He has experience with the WSDOT Design Manual, WSDOT LAG Manual, WSDOT Standard Specifications and General Special Provisions, WSDOT Plans Preparation Manual, AASHTO A Policy on Geometric Design of Highways and Streets, AASHTO Roadside Design Guide, Manual on Uniform Traffic Control Devices, AASHTO Bike Guide, and City of Spokane Design Standards.

Lani Eggertsen-Goff, AICP
Socio-Economic, Land Use, CPTED
American Institute of Certified Planners

Lani has managed land use and permitting work for road, trail, and transit projects for numerous state and local governments. She is experienced in the application of regulations and guidance and is familiar with all aspects of municipal organizations, land use regulations, and project development. As the former Salt Lake City Housing Director, Lani led the creation of Neighborhood Action Strategies for location selections of three Homeless Resource Centers, two HUD Consolidated Plans, and facilitated multi-departmental efforts for affordable housing. Her expertise includes project management, coordinating with community members, elected/appointed officials, and agencies.

RELEVANT EXPERIENCE

Seattle DOT, West Seattle Ballard Link Extension DEIS, 2021-2022, Task Lead: Led DEA team working with 90+ SDOT Environmental Leads for review of the DEIS. Consolidated over 1,500 comments and assisted SDOT Environmental with submittal to Sound Transit.

UDOT and Utah Transit Authority, Provo to Salt Lake Front Runner Environmental Study Report, 2006-2008, Task Lead: The ESR covered a new 45-mile commuter rail line on existing rail-bed. Coordinated with consulting staff and subconsultants on the Land Use and Farmlands sections, wrote and reviewed supporting technical documents, coordinated meetings with staff, subconsultants, and client staff, and prepared for public meetings.

MDT, North Fork Flathead Road Corridor Study, Montana State Highway in Flathead County, 2009, Project Manager: Study examined potential needs and issues associated with improving HWY 486 along a 13-mile stretch of roadway adjacent to Glacier National Park. The study documented resource agency and public information meetings, existing conditions analysis, and improvement options in a corridor study document.

WSDOT/PUBLIC AGENCY FAMILIARITY

Lani has managed and/or led the planning and community engagement efforts for Montana, Idaho, and Utah state DOTs, the Utah Transit Agency, Sound Transit, and many local government agencies for over 25 years. Lani served as staff for cities of Homer and Kenai; the Kenai Peninsula Borough, Alaska; and Salt Lake City, Utah, most recently serving as the Director for Housing and Neighborhood Development for SLC, prior to joining DEA. Her work on two early pre-NEPA corridor projects for Libby and North Fork Flathead Road will translate well to WSDOT's processes. She recently supported Seattle DOT with the management of nearly 1500 comments to Sound Transit for a complex DEIS in the heart of Seattle.

Gray Rand, PWS
Environmental Lead
Professional Wetland Scientist: #2039

Gray has 29 years of experience in wetlands, wildlife, and stream studies and specializes in Environmental Impact Statements (EISs), Environmental Assessments (EAs), Biological Assessments (BAs), and Documented Categorical Exclusions (DCEs), and is very familiar with NEPA/SEPA requirements. Gray has prepared more than 40 BAs and ESA evaluations to WSDOT standards. His has additional expertise in wildlife biology and wetland ecology with significant training in fish biology and application of GIS for natural resource analysis.

RELEVANT EXPERIENCE

WSDOT, Olympic Region Fish Passage Support, Grays Harbor Bundle, 2019-2023, Environmental Lead: Led the permitting and environmental compliance tasks related to replacing five fish passage barriers in Grays Harbor County along US 12 and SR 8.

ITD, I-90, SH-41 Interchange, 2017-2022, Environmental Lead: Provided environmental resource summary, wetland and waters of the U.S. delineation report, ESA No Effect Letter, historic and cultural resources report, built environment report, and NEPA Categorical Exclusion document. Coordinated multiple subconsultants to perform the required scope of work. Work involved extensive coordination with ITD and resource agencies.

WSDOT, SR 202 Evans Creek and Patterson Creek and Tributaries Fish Passage Reconstruction, 2018-2019, Lead Biologist: Led a number of technical reports for this WSDOT design build project that included the reconstruction four fish passage crossings on SR 202 east in Redmond. Work included completing a Wetland and Stream Verification Report, Aquatic Resources Assessment Report, Wetland and Stream Impact and Mitigation Report, and NEPA/ESA Verification Update.

WSDOT/PUBLIC AGENCY FAMILIARITY

Gray has decades of experience with environmental permitting and navigating the NEPA/SEPA process. He thoroughly understands not only the permitting process, but also the WSDOT Environmental Manual. He is a Qualified Senior BA Author and certified Lead Fish Moving Biologist with WSDOT.

Juliet Vong, ASLA, LEED AP
Urban Design/Landscape Lead
Landscape Architect: WA #857
LEED Accredited Professional: BD+C #10122293

Juliet's 27 years of experience in landscape architecture, planning, and urban design gives her a solid foundation for creating a thoughtful, innovative project that is responsive the community's interests. Juliet has worked on numerous projects for WSDOT and was the lead landscape architect for the final design of three land bridges over SR 520 that included trail connectivity, open space and enhanced landscape. Her focus on planning and design of public spaces gives her an invaluable perspective on project development with expertise in urban design, sustainable technologies, graphic presentations, and public involvement programs.

RELEVANT EXPERIENCE

WSDOT, Tacoma to Puyallup Regional Trail, 2021-Current, Lead Landscape Architect: Responsible for all the pedestrian amenities and public art coordination along the Tacoma to Puyallup Trail. Pedestrian amenities include paving and site furnishings for overlooks and gateways, designing a project-specific wayfinding signage system, and supporting the development of public art concepts for wall, paving, and pedestrian railing treatments. Project included extensive collaboration with the Puyallup Tribe of Indians and other key partners.

WSDOT, SR 520 Eastside Corridor Transit & HOV, 2010-2014, Lead Landscape Architect: Developed final design for landscape and urban design improvements along the regional shared-use path, integrated stormwater facilities, freeway corridor landscape, and the development of three lidded open space areas designed to reconnect the communities that were originally bisected by the original freeway construction.

City of Mercer Island, Aubrey Davis Park Master Plan, 2018-2019, Project Manager: Led the planning team to develop a new master plan for Aubrey Davis Park, regional trail, and open spaces that span across I-90 through the limits of Mercer Island. Project included extensive public outreach and engagement with the general public, as well as specialized focus groups with key community members and organizations most affected by the project. Final master plan considered safety and accessibility improvements, expanding the trail network, reconnecting communities across the freeway land bridges, new programming and public art opportunities, and a vegetation management plan.

WSDOT/PUBLIC AGENCY FAMILIARITY

Juliet has worked on 25 transportation, transit, and multimodal trail projects within WSDOT right-of-way and is familiar with WSDOT manuals, standard practices, and other requirements. She has specific expertise developing custom design elements (site furnishings, seat walls, planters, paving and wall treatments, wayfinding signage) that require a special approval process through WSDOT's Design Manual (Chapter 950). She has worked with WSDOT during all phases of project development, from alternative analysis and public outreach to final design and construction administration support.

Scott Marshall, PE
Roadway Lead
Professional Engineer, Civil: WA #41397

Scott is a civil engineer and project manager with over 23 years of expertise in transportation engineering. He has extensive knowledge in various areas of project development and management, including rural, urban, highway, and interstate roadway design. In addition, he is skilled in drainage design, bridge and culvert hydraulics, right-of-way plan preparation, and cross-disciplinary stakeholder coordination. Scott's expertise also includes single and multi-lane roundabouts, bridge and culvert hydraulic modeling and scour analysis, right-of-way and utility plan design and preparation, water, sewer, and stormwater system design, site grading and drainage, alternative alignment analyses, stormwater conveyance and treatment facilities, and retaining wall design.

RELEVANT EXPERIENCE

WSDOT, Eastern Region GEC Services, 2018-Current, Project Manager: Provides staff augmentation and engineering teams to cater to the specific needs of Eastern Region projects, including preliminary engineering, structural engineering, and construction management. Projects consist of the North Spokane Corridor, I-90/Barker Road South Interchange, I-90/SR 902 Medical Lake Interchange, and US 195 PCCP Rehabilitation, as well as construction management support task orders.

WSDOT/City of Spokane Valley, I-90/Barker Road Interchange Improvement, 2018-2022, Project Manager: Managed the design and utility coordination, facilitated a public open house, and delivered project on schedule and within budget. Team used existing project data and coordinated concurrent review and approval of both north and south interchange projects resulting in reduced review time and instances of conflicting comments.

City of Spokane Valley, Barker Road/BNSF Grade Separation, 2017-2023, Roadway Task Lead: Worked closely with DEA, the City, and WSDOT to come up with six new alternatives for a grade-separated crossing, which included a multi-lane roundabout. Revised design resulted in savings of over $18M. Team completed the PS&E package, including WSDOT-compliant alignment profiles, typical sections, paving, site preparation, drainage, and utility plans.

WSDOT/PUBLIC AGENCY FAMILIARITY

Scott has been working closely with WSDOT Eastern Region for more than seven years. He is highly skilled in managing the development of preliminary and final designs through design plans for both WSDOT and local agencies. Scott has extensive experience working with state departments of transportation and public works specifications in Washington, Idaho, Montana, and Colorado, as well as with the Standard Specifications for Construction of Roads and Bridges on Federal highway projects.

Teresa Dugger, PE
Geotechnical Lead
Professional Engineer, Civil: WA #37984

Teresa has more than 25 years of experience providing geotechnical services on a variety of transportation projects throughout the Pacific Northwest. She oversees the exploration and laboratory testing programs, analyses, report preparation, and construction monitoring elements of geotechnical evaluations on transportation projects. Teresa's experience includes public-sector facilities, including vehicle, rail, and pedestrian bridges; retaining walls; hot-mix asphalt and Portland cement concrete pavements; embankments; traffic signals; and soundwalls. She has provided recommendations for shallow and deep foundations for bridges; seismic studies and evaluation of liquefaction susceptibility; temporary and permanent shoring systems; slope stabilization studies; and embankment and road evaluations.

RELEVANT EXPERIENCE

City of Spokane, Post Street Bridge Replacement, 2023, Associate Geotechnical Engineer: Oversaw geotechnical engineering services during the validation phase of the project. Provided recommendations for design and construction of proposed replacement bridge and abutment walls, based on review of existing information, subsurface exploration and analytical testing of soil samples, and engineering analyses.

Coeur d'Alene Tribe of Indians, Bureau of Indian Affairs 501 and 507 Bridge Repair, 2021, Associate Geotechnical Engineer: Provided geotechnical engineering services to support design of two bridge repair projects. Oversaw subsurface exploration program, conducted geotechnical laboratory testing, and performed engineering analysis. Provided recommendations for design and construction of evaluating feasible bridge foundation alternatives, abutment walls, and seismic design parameters.

Franklin County, Muse Road Bridge Replacement, 2023, Associate Geotechnical Engineer: Provided a geotechnical engineering evaluation to provide recommendations for foundation design and construction based on subsurface exploration, laboratory testing and engineering analyses. Evaluation included recommendations for driven piles that extended through an upper compressible soil layer to mitigate bridge settlement concerns.

WSDOT/PUBLIC AGENCY FAMILIARITY

Teresa has provided recommendations on hundreds of road and bridge projects that incorporate and meet the WSDOT Geotechnical Design Manual, WSDOT Bridge Manual, AASHTO LRFD design guidelines, and municipal regulatory codes. She brings a strong understanding of eastern Washington geology and understands WSDOT, AASHTO, and FHWA design procedures. Locally, Teresa oversees the on-call contract with the City of Spokane for geotechnical design services, giving her a strong understanding of local geology and design practices.

Sean Messner, PE
Traffic Engineering Lead
Professional Engineer, Civil: WA #53470

An experienced civil engineer and project manager with nearly 20 years of experience, Sean has extensive expertise in traffic engineering design, analysis, operations, signing/marking, illumination, and intelligent transportation system (ITS) maintenance. Sean has worked on transportation projects with many local agencies and jurisdictions, including WSDOT, City of Spokane, City of Spokane Valley, and SRTC.

RELEVANT EXPERIENCE

WSDOT, North Spokane Corridor IJR Update, 2022-Current, Traffic Lead: Assisting WSDOT with an update to the IJR, providing guidance and coordinating the multi-jurisdictional agency team through the update process. Oversees transportation modeling efforts, including VISUM, Synchro, HCS, and VISSIM analyses, and serves as the project manager for the post-processing and balancing of the project's 2025 and 2040 traffic volumes and the VISSIM analysis update. Also serves as the WSDOT project manager by coordinating directly with WSDOT Eastern Region Traffic Engineering staff and the WSDOT NSC office staff, including leading meetings with WSDOT staff, FHWA staff, and agency stakeholders.

WSDOT, US 395 Rehab Transportation Management Plan (TMP) & Traffic Control Plans (TCP), Hatch Road to Hamilton Road, 2023, Traffic Control Lead: Included development of a TMP and TCPs in support of the construction efforts for the grind and overlay of pavement along the US 395 corridor between Hatch Road and Hamilton Road. Led the development of the TMP and the TCPs, including the development of a queuing model for the work zone. Project required extensive coordination with WSDOT and Spokane County for detours.

ITD, I-90 Wolf Lodge to Cedars, 2023-2024, Traffic Lead: Included development of traffic control plans, illumination design, ITS design, and utility plan development and coordination in support of the construction efforts for the grind, overlay, and median barrier replacement project along I-90 between the Wolf Lodge and the Cedars maintenance facility.

WSDOT/PUBLIC AGENCY FAMILIARITY

Sean is extremely familiar with the WSDOT Traffic Manual, WSDOT Design Standards, WSDOT Design Manual, WSDOT LAG Manual, WSDOT Standard Specifications and GSPs, AASHTO guides, MUTCD, and WSDOT protocol for traffic evaluations and designs. Sean understands the Federal Highway Administration (FHWA) standards and processes for providing project plans, specifications, and estimates meeting FHWA requirements. Having worked on several projects within the City of Spokane, Sean understands the City's GSPs and requirements for design and construction projects, as demonstrated with the Maple Street project.

Kevin Sakai, PE
Constructability & Estimating
Professional Engineer, Civil: WA #33051

Kevin has 28 years of experience in the construction management of transportation infrastructure. He has experience as a construction project manager on large projects transportation projects in the region. Kevin has served as a construction specialist providing CPM schedules, estimating, and constructability input for high profile projects, such as the Alaskan Way Viaduct and Seawall Replacement Program, Replacement of the SR 520 floating bridge, Spokane Street Viaduct, and others.

RELEVANT EXPERIENCE

WSDOT, Alaskan Way Viaduct and Seawall Replacement Program, 2008-2022, Constructability: Provided guidance on contract packaging, method of procurement strategies, constructability review off plans, provided cost estimates, provided construction schedules for working day durations, attending risk sessions and value engineering work sessions.

WSDOT, SR 520 Bridge Replacement and HOV Program, 2010-Current, Constructability: Provides guidance on contract packaging, method of procurement strategies, constructability review off plans, provided cost estimates, provided construction schedules for working day durations, attending risk sessions and value engineering work sessions.

WSDOT, Puget Sound Gateway Corridor, 2018-Current, Constructability: Provides guidance on contract packaging, method of procurement strategies, constructability review off plans, provided cost estimates, provided construction schedules for working day durations, attending risk sessions and value engineering work sessions.

WSDOT/PUBLIC AGENCY FAMILIARITY

Kevin has worked with WSDOT in various capacities throughout his career. First as an inspector and office engineer as an employee of WSDOT, then as an engineer/project manager as a contractor working on WSDOT projects, then as a consultant assisting with cost estimating/construction schedules/constructability reviews. As a result, Kevin is very familiar with WSDOT and public agencies regulations and procedures.

Criteria 4

Historical image of Liberty Park prior to construction of the Interstate system (photo credit: National Park Service)

Firm's Project Management System

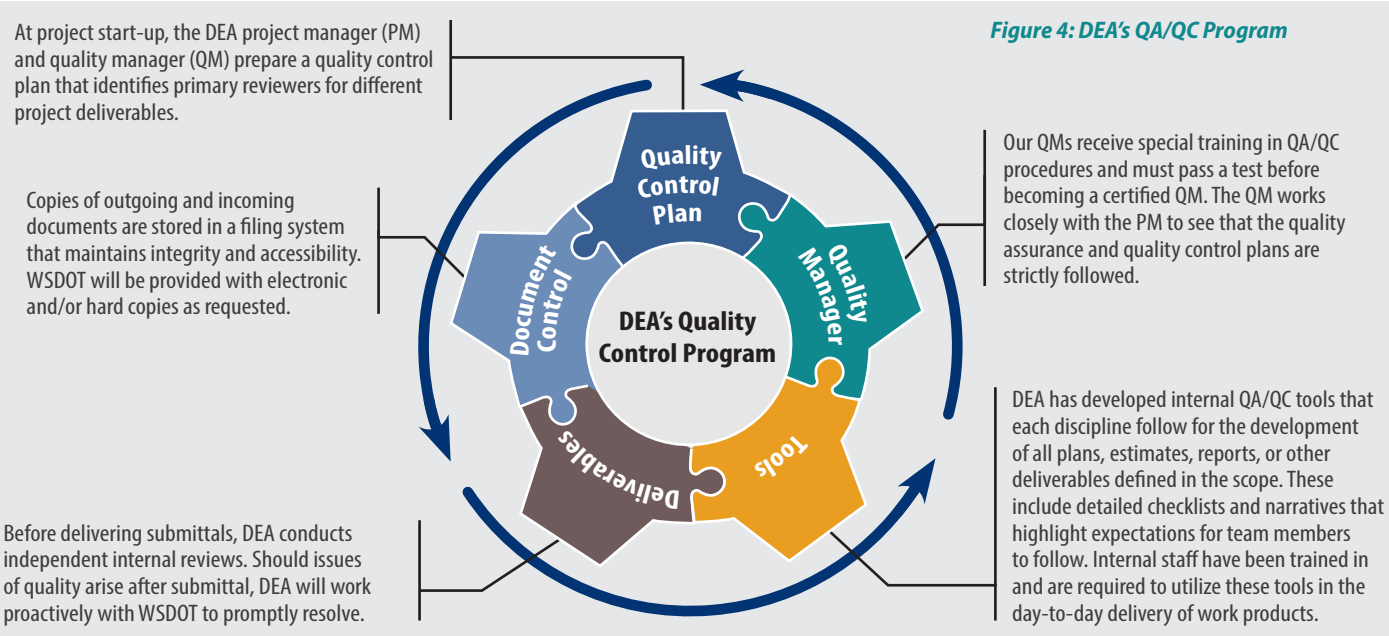
QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) PROCESSES

As the quality assurance manager, Richard Patterson will be responsible for making available the most experienced personnel and resources to complete quality-related tasks under this contract. He will manage the implementation of DEA's QC program so that all work products are completed to an established level of quality. Both Jake and Richard will work together to meet WSDOT's quality expectations for the project. Jake will have day-to-day responsibility for developing and maintaining project schedules and preparing work products that are completed on time and on budget.

DEA's QA/QC program includes a detailed, cross-discipline peer review of final deliverables. A team of senior staff not otherwise assigned to the project completes the review. This provides a cross-check to apply DEA's standards of quality uniformly. This proven QC program and process are a key factor in DEA's ability to consistently deliver successful projects, which has led to a very high percentage of repeat clients. Our project team adheres to this QC program throughout the delivery of each project and includes the elements illustrated in *Figure 4* below.

DEA also performs periodic, random audits on projects over $100,000. During these checks, the auditor looks for demonstrated application of DEA's QA/QC program.

Figure 4: DEA's QA/QC Program



TRACKING SYSTEM(S) TO MONITOR THE PROJECT'S BUDGET & SCOPE

Monitoring Project Scope and Budget: DEA uses the Solomon accounting system for budget tracking and invoicing. Budget tracking and scope monitoring are performed simultaneously on a weekly basis for the duration of all projects. With Solomon, Jake has access at any time to project charges, which are updated weekly, and he is able to track hours by individual work elements to monitor conformance with budgets. Monthly invoice reports are produced in a format consistent with WSDOT's requirements.

Earned Value Reports (EVRs): To monitor a project's budget and progress simultaneously, DEA utilizes Solomon output to generate EVRs. The EVR shows Jake the differential between the percentage complete and the percentage of expenditure on each individual work element, or on the project as a whole. The EVR is prepared in a Microsoft Excel workbook format and can include graphical and chart components. When the EVR identifies a variance, Jake will investigate and determine whether a problem exists. Our project managers also update a Cost-to-Complete (CTC) form for each of their projects on a monthly basis. The CTC tool provides a budget status summary of tasks by defined Work Breakdown Structure (WBS), showing the overall project budget status.

Jake will actively monitor scope and inform WSDOT's project manager, Char, about any potential out-of-scope work. The Scope Change Log is used to track potential out-of-scope work and to estimate schedule and budget impacts for discussion with Char, who will then provide direction to approve the scope change, delete the out-of-scope work, or defer the work until a later date.

The Scope Change Log is routinely used by DEA on all WSDOT projects. Jake most recently used it to track potential scope changes with Bill Meeks on the US 395/Trent Interchange task order through the Eastern Region GEC. The log facilitates discussions and awareness of potential changes and has avoided out-of-scope work on the project to date.

SCHEDULING PROGRAM/PROCESS

Jake will actively track the project schedule throughout the course of the project and use it as an additional project management tool. The process for developing the schedule starts during the project set-up phase. Jake will work with WSDOT and the project team to identify appropriate time frames for each work task and develop milestone dates for deliverables. Jake is responsible for maintaining a current schedule, typically on a monthly basis, and informing WSDOT and the design team about possible schedule changes. He will recommend appropriate actions to bring the project back on schedule if deviations occur.

While DEA primarily uses Microsoft Project for design task scheduling, Jake will be able to accommodate any type of scheduling software that the Eastern Region desires to use for this project. Some recent examples of Microsoft Project software used on projects Jake has worked on include:

- WSDOT: US 395 (NSC) / SR 290 (Trent Ave) Interchange Ramp Design
- ITD: I-90, SH-41 Interchange
- City of Spokane: Maple Street Bridge Rehabilitation

DEA also has Primavera Software and can utilize that for design task scheduling, if preferred.

DEA's proven project delivery process for planning, startup, implementation, and project closeout is highlighted in *Figure 5* on the following page.

PROCESS FOR INTERACTING WITH INTERNAL PROJECT TEAM

As part of the Work Plan, DEA will collaborate with WSDOT Eastern Region to develop a communication plan that establishes lines of communication in addition to the upward reporting/downward direction of project responsibilities. This is important to understand who has the authority to make decisions about specific aspects of each project. Additionally, the communication plan will establish frequency of communication based on WSDOT's preferences.

With our team's past collaborative work experience, we are confident that we can maximize the program's delivery efficiency. DEA is committed to a team-oriented approach that builds trust by keeping communications open among all team members and stakeholders, holding each other accountable, and streamlining the design process to efficiently manage and deliver the project.

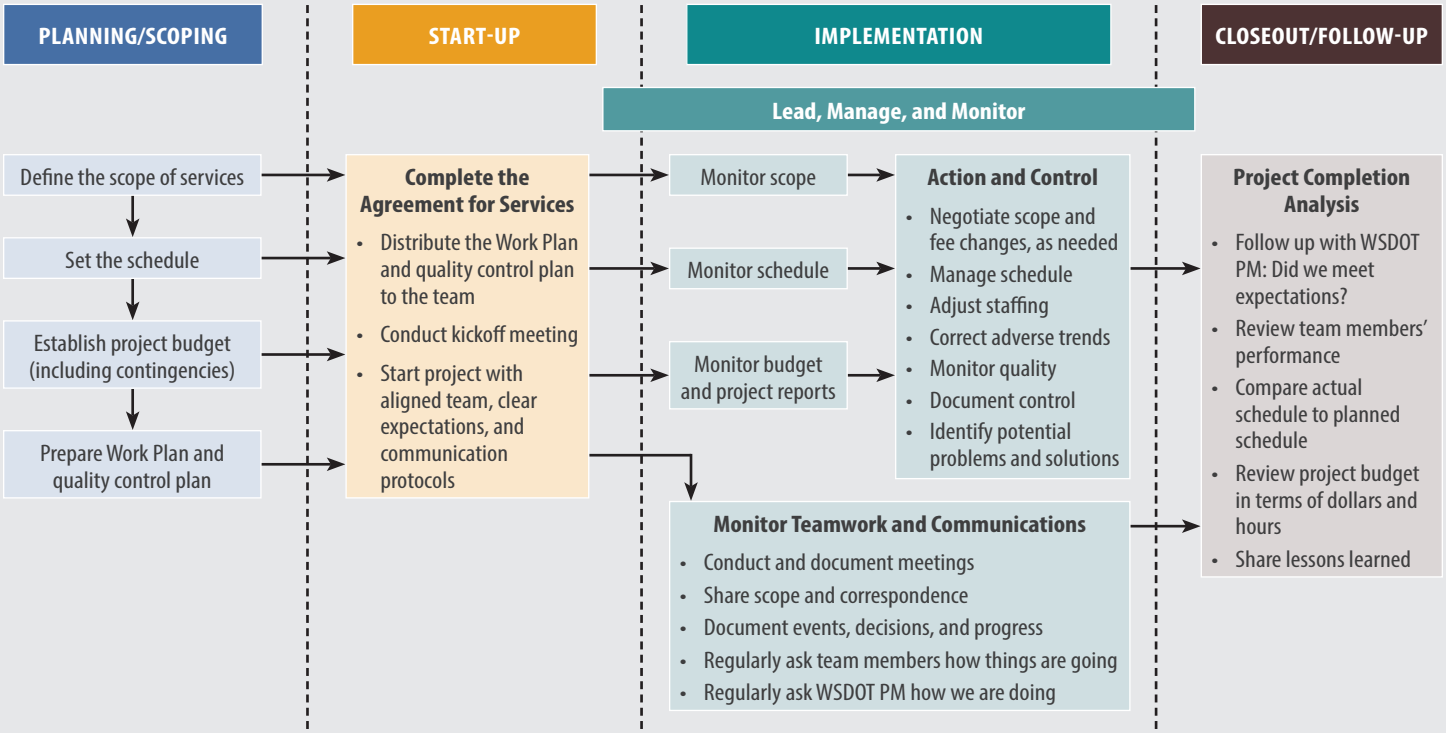
Team building, and ultimately trust building, is one of the most important aspects of successful projects and is the first step in our project approach. We foster this trust through scoping meetings that discuss the desired project outcomes and facilitate relationships. It is critical that a clear scope and common goals are openly articulated and owned by the entire design team. Furthermore, the goals, objectives, and design criteria must be further expanded and refined to incorporate the entire team's definition for success.

INTERACTION WITH WSDOT AND/OR STAKEHOLDERS

Firm's Ability to Provide Interaction with WSDOT and/or Stakeholders: The DEA team has earned the trust of the Eastern Region and the local community through past projects. Our team will successfully complete project delivery by building trust and relationships with the local community, regulatory agencies, and stakeholders that WSDOT identifies in the review process. We will do this by involving the proper representatives at the beginning of the project, and creating a clear vision for project success and desired outcomes. We will develop a clear process for stakeholders and regulatory agencies to review and comment on proposed designs at critical periods in the design process. The PEL process and project advisory committee (PAC) will provide a structured forum to interact with both WSDOT and stakeholders regularly on this project.

Example Interaction with Agency/Owner: The Columbia River Crossing project provides a great example of our interaction with the WSDOT and other agencies. The scope of the project required a tremendous coordination effort that included working with more than 30 consultants, project sponsors, local planning agencies, adjacent cities, communities, and other stakeholders. The large number of agencies involved (two departments of transportation, two metropolitan planning organizations, two transit districts, two cities, and others) necessitated a high level of attention to both local and regional decision-making and the public process used to support those decisions. As part of our approach, several distinct working groups were established to address specific issues. Affected agencies were represented at three levels: daily coordination with project staff, joint meetings of supervising staff to provide oversight and direction, and periodic meetings of a council of elected officials to review and approve major project milestones.

Figure 5: DEA's Project Delivery Process



PLANNING/SCOPING
The Work Plan establishes objectives, constraints, features, technical basis, budgets, schedules, organization, contracting strategy, and management approach for each assignment.

START-UP
DEA's PM and WSDOT's PM initiate the project and provide a unified message to set the project up for success. The production team is given clear direction on the expectations for the execution of the work.

IMPLEMENTATION
DEA PMs actively monitor and manage work flow and quality by:
- Monitoring independent, critical path, and relevant activities
- Watching for trends
- Being proactive, anticipating problems, and identifying and reversing adverse trends
- Listening and communicating with WSDOT
- Documenting

CLOSEOUT/FOLLOW-UP
- Was the project a success?
- What made it so?
- What can we learn from this project that should or should not be used again?
- How can we learn from this project experience to help us improve overall service to WSDOT?

Criteria 5

Existing Liberty Park Site - East Central Spokane

Project Delivery Approach

WORK PLAN

Key DEA staff develop a detailed Work Plan for every project. This Work Plan provides the entire team a road map for deliverables, budget, schedule, staffing, and communication protocols, as well as other elements necessary for project success.

Staff Involved in Development of Work Plan

The initial draft Work Plan is assembled by DEA's Project Manager, Principal-in-Charge, Quality Manager, Project Accountant, and Project Assistant. The final Work Plan is modified as needed after the project kickoff meeting, incorporating input from WSDOT and the project team.

Elements of the Proposed Work Plan

PROJECT DESCRIPTION

This is a description of the overall project, including work to be completed within each discipline. This description is as detailed as possible at the beginning of the project and provides a basic project purpose and need and descriptions of anticipated structural, roadway, temporary traffic control, utility, right-of-way, landscaping, and other work elements.

PROJECT PHASING

This section will outline phasing of the project from a budgetary and program level standpoint. The phasing could involve a planning phase, various levels of design phases, funding application phase, and construction phases.

STAFFING PLAN

This will identify appropriate points of contact for WSDOT and the DEA team. It will generally reference the project organizational chart, but include more detail on production staff engaged in the project.

COMMUNICATION PROTOCOLS

This will include a directory of key staff for WSDOT, the DEA team, and key stakeholders. In addition to the directory, communication protocols will provide clear direction on which team members are appropriate to communicate within the team, to WSDOT, and externally to the community and stakeholders. This is critical to communicating the appropriate message on behalf of the project. Interdisciplinary coordination protocols will also be included in this section to provide a framework to make sure all disciplines are considering constraints and issues from adjoining disciplines to avoid miscommunication and reduce conflicts.

WORK BREAKDOWN STRUCTURE (WBS)

The WBS identifies the key work tasks and clearly identifies who is responsible for each task. It also outlines how they will be tracked from a scope, budget, and deliverable perspective.

SCOPE OF WORK AND DELIVERABLES

The scope of work is summarized along with key deliverables to provide a quick reference to clarify expectations for all team members. The scope will include appropriate detail to provide a complete road map for the execution of all tasks. This section will include a deliverable tracking spreadsheet to provide a quick reference for due dates and review timelines and assignments. The spreadsheet will outline critical WSDOT approvals and how each task feeds into these milestones.

DESIGN SCHEDULE

The project baseline schedule will be summarized. As the project evolves, newer versions of the schedule will be published for transparency at all levels.

BUDGET CONTROL PROCESS

Earned Value Reporting: The project manager uses Earned Value Reporting monthly to track cost and schedule by way of projecting the cost to complete each task using estimated percent completion. It is also used to identify and mitigate undesirable budget trends, such as out-of-scope work being undertaken.

Change Management: DEA will prepare a Potential Change Order (PCO) log to document issues that arise that may or may not be clearly addressed in the scope of work or agreement. This log helps to keep track of

items that DEA's project manager will discuss with the WSDOT Agreement Administrator regularly. This exchange of information in an open and honest way is the cornerstone of effective change management.

QUALITY MANAGEMENT

The quality management plan will include target dates and expected review periods for WSDOT staff to plan for. A more detailed description of the quality management plan is provided in Section 4.

INVOICING PLAN

The invoicing plan will provide guidance to DEA's accounting staff to create the proper invoice structure that is compliant with the design contract and meets the client's preferences. We know WSDOT Eastern Region's expectations for invoicing through our experience on the GEC. Our invoices will capture labor from first to last of the month, include progress reports, and be thoroughly checked for rates, fees, and overhead in compliance with our approved ANTE table and ICR. Firmwide, we will continue to proactively submit annual ANTE table and ICR to avoid delays. We will set expectations for all our subconsultants to comply with the same timelines and format and diligently obtain invoices from them for inclusion with DEA's invoices. We will provide a Diversity Management and Compliance System contact that will track compliance with our DBE project commitments and the prompt payment requirements.

Addressing Contingencies

DEA project managers develop project scopes of work that define the work product thoroughly in order to minimize contingencies. DEA will work with WSDOT to identify the highest risk tasks and how to best mitigate them. This may involve more tight constraints on the scope, or it could include more conservative labor estimates (contingency), or a mutually agreed upon approach to track the issue and address it through effective project management and change management protocols. The Work Plan includes planning, staffing, and protocols to minimize potential issues. Typical project contingencies include:

- Scope Contingencies (optional tasks that can be utilized if needed)
- Cost Contingencies (management reserve funds)
- Schedule Contingencies (strategically setting project schedule to place the lesser risk tasks on the critical path and provide more schedule flexibility for higher risk tasks.

APPROACH TO RESOLVING ISSUES

Minimizing Issues through Implementing DEA's Cultural Drivers

Minimizing issues throughout project development requires a multi-faceted approach. At DEA, we use our cultural drivers to guide our behaviors when working with our team and clients to minimize potential issues. These cultural drivers are a set of six commitments that DEA has established to create authentic, meaningful relationships; effective solutions; and superior client experiences. **The DEA Difference** (*Figure 6*) is the application of our focus on clarity of expectations, effective communication, accountability, collaboration and teamwork, initiative and creativity, and trust. These drivers play a pivotal role in minimizing potential issues that could arise on the project within the DEA team, with WSDOT, and with stakeholders.

Figure 6: The DEA Difference

Minimizing Issues through Technical Excellence

Comprehensive Knowledge of Design Resources

The DEA team's familiarity with all applicable WSDOT, AASHTO, and City of Spokane Design Manuals, Standards and codes will minimize rework and resubmittals.

Submittals Compliant with WSDOT Delivery Expectation Matrix

DEA will request a "completeness review" by WSDOT at the beginning of review cycles to avoid missing or difficult to find information prior to reviews. This avoids wasting WSDOT reviewer time if expected submittal elements are missing.

Clearly Communicate Technical Solutions

Our team will conduct over-the-shoulder (OTS) reviews to discuss technical approach with reviewers and use web meetings to enhance engagement by non-local reviewers. This will result in high-quality, easy-to-follow deliverables.

Obtain Preapproval of Design Variances or Deviations

Early in the project, we will evaluate potential variances/deviations that may be required for work that does not meet WSDOT standards. By providing WSDOT adequate time and background information to review, it results in improved success of obtaining approvals and avoids surprises late in the design process.

Strategic Involvement of Key Subject Matter Experts

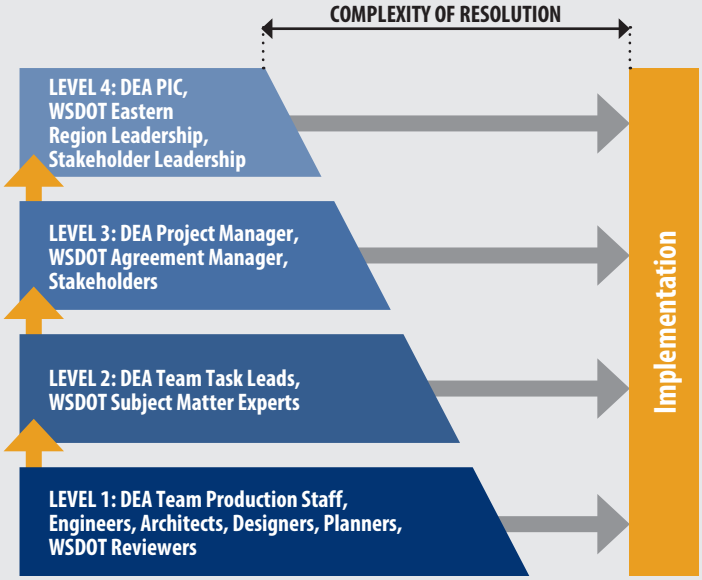
We know when to engage key subject matter experts (SMEs) to participate in developing solutions. We will leverage their knowledge early to guide solutions to be more easily approved, thus avoiding surprises during deliverable reviews.

Success Story of Early Involvement from WSDOT SMEs: The US 195/Colfax N. Fork Palouse River Roundabout Design project had a very aggressive schedule and required preliminary design approval within three months. To successfully accommodate that, DEA and HDR strategically involved WSDOT's HQ roundabout SME (Brian Walsh) and ER Traffic Engineer (Glenn Wagemann) at the onset of concept development. This led to the development of a unique roundabout that met all expectations and was approved with minimal comments.

Issue Escalation and Resolution

While minimizing issues is of utmost importance, issues always arise in project delivery. When faced with issues, the first step is to establish protocols for resolution and identify who is involved in developing and implementing the resolution. The escalation ladder is a primary tool that will be used to identify the path needed to obtain resolution. **Resolution of issues at the lowest level will be emphasized as it generally results in the shortest duration and least complexity of resolution to implement.** More complex issues require escalation to the appropriate level. For stakeholders and other external groups, resolution will generally start at a higher level to provide the appropriate control of project messaging (proposed at Level 2). The sample escalation ladder shown in *Figure 7* will be modified with the WSDOT Agreement Manager prior to the kickoff meeting.

Figure 7: Issue Escalation Ladder



Stakeholder Strategy

Community outreach and participation are essential elements in all large-scale public projects. Managing the flow of information, assuring its accuracy and timeliness, and receiving and responding to public input are vital tasks in maintaining public support and accomplishing the project goals. While the project as a whole is widely supported by the community, public involvement during the planning and design process will be critical to capturing and addressing neighborhood issues and achieving a successful project embraced by the community.

Working with WSDOT's public involvement coordinator we will develop a public involvement plan that fits the size and complexity of this project. The plan should balance the need for broad public and agency outreach at specific milestones with a grassroots, targeted outreach effort.

We will utilize a Project Advisory Committee (PAC) to provide a forum to address issues with the key stakeholders. This PAC will be comprised of volunteers, residents, business owners, community leaders, City staff, and project staff. The PAC will provide guidance, expertise, and knowledge of the community needs and goals throughout the project. Issue resolution will be one of the primary functions of the PAC regarding the project interface with the public and stakeholders.

DEA proposes to implement the Planning and Environmental Linkages (PEL) process into the first phase of this project. The PEL process will provide

an effective and collaborative means of minimizing and resolving potential stakeholder issues by strategically including them in the planning process to develop consensus and document key decisions. The PEL process is described in more detail in the following "Key Issues & Critical Milestones" section.

BREAKDOWN OF WORK TASKS

The DEA team will utilize WSDOT's Master Deliverable list to guide the breakdown of tasks during final scoping of the project. In collaboration with Eastern Region staff, we will add appropriate subtasks and unique tasks relevant to a land bridge project, as needed. *Figure 8* represents our assumptions for the work breakdown structure for the main tasks, along with identifying WSDOT vs. Consultant responsibilities for the associated tasks. In conversations with WSDOT, it is our understanding that some of the Phase 2 tasks may be performed by WSDOT. Our team has the capacity and expertise to perform these tasks, but we will work with WSDOT during final scoping and future scoping of Phase 2 to develop a division of work that best fits WSDOT's availability and desire to perform future work on the project.

Figure 8: Breakdown of Anticipated Project Tasks

PROJECT PHASE	TASK NO.	TASK DESCRIPTION	TASK RESPONSIBILITY	
			DEA TEAM	WSDOT
Phase 1 Tasks	1.0	**Project Management**	●	●
	2.0	**Community Engagement**		
	2.1	Community Meeting Planning and Logistics		●
	2.2	Community Meeting Graphics and SME Support	●	
	2.3	Stakeholder Coordination	●	●
	3.0	**Surveying**	●	
	4.0	**PEL Process**	●	●
	5.0	**Urban Design and Landscaping**	●	
	6.0	**Alternatives Development**	●	
	7.0	**Land Bridge TS&L Report**	●	
Phase 2 Tasks	8.0	**Preliminary Design Development**	●	
	9.0	**Environmental Review and Permitting**		
	10.0	**Grant Writing**	●	●
	11.0	**Right-of-Way Plans**	●	
	12.0	**Geotechnical Engineering**	●	
	13.0	**Intermediate Design**	●	
	14.0	**Final Design**	●	
Phase 3 Tasks	15.0	**Plans, Specifications, and Estimates**	●	●
	16.0	**Contract Ad and Award Support**	●	●
	17.0	**Design Services During Construction**	●	●

KEY ISSUES & CRITICAL MILESTONES

Project Background & Understanding

Spokane's East Central Neighborhood has historically been a working-class neighborhood. It has always been and remains home to the most culturally diverse population within the City of Spokane. Through "redlining" and other inequitable public policies in the early 1900's, East Central became one of the poorest neighborhoods in Spokane just before construction of the Interstate System. East Central is also home to Liberty Park, which was once considered the most elaborate park in the City and the pride of the neighborhood. Established in 1897, the park was over 20 acres and was renowned for its terraced bluffs, dramatic landscaping, stone masonry promenade, swimming pool, and ice skating pond along with many other amenities. The park fell into disrepair around the same time the neighborhood decline occurred. The neighborhood and park were then dramatically impacted by the construction of the interstate. I-90 bisected East Central Spokane, eliminated 18 acres of Liberty Park, and displaced over 1,000 homes by the time it was constructed in 1968. This impact further affected residents, local businesses, community religious centers and the impacts are still felt to this day. This project seeks to heal the barriers placed by this impact by providing a signature land bridge to reconnect the bisected community, provide a sense of pride for residents in developing the design, increasing green space, providing low-cost alternative means of travel for low-income residents, and providing future opportunities for the neighborhood to flourish.

Approach to Key Issues & Project Features

The ultimate goal for this project is to develop a signature land bridge over I-90 that reconnects the Spokane East Central neighborhood. DEA has been researching this project for the past six months, including several conversations with WSDOT staff, and presents the following key issues and our approach to achieve a successful outcome on the project along a proposed schedule with critical milestones.

PLACEMAKING THROUGH COMMUNITY LED ENGAGEMENT

The DEA team understands the importance of creating an experience for the community that will instill a sense of pride with this project. This experience will focus on paving the way for community harmony throughout the project's planning, design, and construction. We will know we succeeded when the East Central Community looks at the completed project and says, "Wow, look at that! We did that!" The DEA team will use that to guide our behaviors throughout the process.

This project presents an opportunity to heal the challenges experienced by the community through construction of I-90 and inequitable policies. To maximize this opportunity, the East Central neighborhood needs to be actively involved in the development of the design. WSDOT has identified community-led engagement as the ideal process to achieve this. Community led engagement aims to achieve more complete participation of residents so they have a voice equal to the business community.

Figure 9: Project Vicinity Map and Existing/Proposed Conditions

We will support WSDOT in the community led engagement process by providing displays, facilitating design charettes, and representing the team with SMEs. Our team brings a vision of what constitutes community led engagement and will work with WSDOT to further enhance this vision at the onset of the project to differentiate this unique process and tailor it to this project.

DEA's Community Led Engagement Vision

Find the Community: Engage residents at-large equally to neighborhood and business associations.

Community Defined Project: Listen to the community and let them define the project and own the outcomes and fundability of their vision.

Community Feedback = Project Team Actions: Commitment to act on feedback and utilize team skill to turn those messages into outcomes.

Convey Community Message to Key Decision Makers: Utilize project team expertise to strategically advocate on behalf of the community to WSDOT leadership.

We will work with WSDOT to tailor each outreach strategy to the intended audience, as well as the goals and desired outcomes for each outreach event to make sure that the events are engaging, dynamic, and fun. We will be adaptable in our methods and able to pivot where needed to address specific concerns that may come up during the process, or a specific target audience that we may need to engage more directly.

The methods and tools our team has used for engaging similar communities on past projects are outlined below for consideration on this project.

Site Walk 'n' Talks

These happen in-person while walking the site with project staff, local agencies, key stakeholders, and/or the general community. We discuss the site's history, hear concerns, and envision opportunities including recreation programming, community activation and placemaking, long-term maintenance, social equity, and accessibility. The walk 'n' talks are typically in-person, but can also be held as a virtual "walk" through the site using photos and videos to reach a larger audience when needed.

Focus Groups

These are small group discussions facilitated with key stakeholders, user groups, organizations, neighbors, or potential future partners. They can also be developed as an ongoing advisory committee to support the planning process and can remain in place beyond the initial phase(s) of the project as a volunteer organization to keep project momentum and community connections strong.

Pop-Ups & Studios

This approach creates a type of centrally-located planning headquarters in an area with easy public access, like in the park itself as a pop-up event or in a community center, unoccupied commercial store-front, or other similar space for a longer design studio experience. Either way, the goal is to create a welcoming space where the community can drop in at their convenience, talk to team members, provide input, and see the plan take shape over the course of a day or more. These events can occur independently, concurrent with an open house or survey, or become part of an existing community event. We have found the pop-up/studio approach valuable in forming working relationships with attendees who may otherwise not participate in this type of process and giving the work greater transparency, effectively showcasing much of the process in a public setting.

Open Houses & Workshops

Social distancing has had a profound effect on how we connect to communities and hold public workshops or open house events. We can structure open houses and workshops as in-person events, virtual, or a hybrid environment. Our team has experience with a variety of online platforms to support public engagement, including interactive storyboards, audience polling, shared concept boards and tools, and other similar activities. Events are engaging and often include ways for the community to more actively participate in the design process, offer feedback, and tell us their concerns individually and/or in small group settings.

Websites & Surveys

Online surveys maximize community feedback and participation and are typically held concurrent with other pop-ups, studios, or open house/workshop events. They present the same information as the outreach event and offer a way to engage people who might not otherwise attend an in-person event. We can support a variety of online survey formats and provide a summary and analysis of survey results that is easy to understand and highlights the key themes from the comments received.

Ultimately, we are dedicated to maintaining our core principle of a community-based design process, providing fun, engaging activities for everyone.

COMPREHENSIVE DESIGN

A successful design for this project will blend a significant amount of constraints and challenges. To accomplish this, we propose to foster innovation, study origin-destination patterns to maximize socio-economic benefit, evaluate options to address complex geometric constraints, blend urban design and landscape architecture, minimize impacts to adjacent properties, consider forward compatibility, and implement the PEL process to bring it all together.

The PEL process will serve as a pivotal framework for integrating community-led engagement, urban design, and engineering solutions throughout the project's planning phase. By utilizing PEL, the project team can holistically assess the environmental, social, and economic benefits and impacts of proposed bridge locations and design early in the planning stages. Incorporating community input and urban design principles into this process will result in a land bridge that is not only efficient, but also reflects the unique needs and character of the community. Through robust community engagement, stakeholders can actively participate in shaping the vision of the project, while urban design considerations help in crafting solutions that enhance livability, promote sustainability, and foster connectivity within the built environment. By leveraging the synergies between PEL, community engagement, and urban design, the project team will navigate the complex project challenges while fostering inclusive decision-making processes that lead to the development of a project that truly benefits all stakeholders involved.

Innovation

A primary part of fostering innovation is recognizing that leveraging the ideas from the vast stakeholder group is key to unlocking innovative ideas. Innovation for this project will bring about new ideas and solutions that are “outside the Spokane box” and create positive impact and value. Innovation will lead to a statement piece that will make the community proud. Throughout the PEL process in the planning phase, the DEA team commits to fostering innovation in the following way:

- **Identify Opportunities:** Determine the vision and desired outcomes with broad community engagement.
- **Brainstorm:** Solicit creative ideas and temper judgment or evaluation to create a safe atmosphere for creative thinking “no bad ideas”! Solicit input throughout from stakeholders and the community.
- **Develop:** Develop concepts that integrate ideas.
- **Evaluate:** Determine which concepts align best with the vision by assessing environmental, social, and economic benefits and impacts with the PEL process.
- **Refine:** Adjust as needed to optimize the urban design with the vision.
- **Implement:** Utilize team skills to translate concepts into the desired outcomes.

Pedestrian and Bicyclist Connections

Understanding travel patterns throughout the community, particularly for pedestrians and bicyclists, is critical to establishing the preferred location for the crossing and associated amenities. The area land use will be reviewed to identify key origins and destinations for walking and biking, such as Liberty Park and other parks, schools, restaurants, and neighborhood retail to highlight the vital places that need to be connected for active transportation. Big Data can also be used with a zone analysis to collect concentrations of pedestrians and bicyclists within areas, as well as the average walking and bicycling distance. Focusing on the pedestrian and bicyclist needs and area origins and destinations will consider the future opportunities the land bridge connection will bring to create walking and bicycling travel options with transit connections and broad socio-economic benefits for the East Central community.

Geometric Constraints

The existing terrain varies along the I-90 corridor throughout East Central. From the center of the Hamilton Interchange to the Helena Street vicinity, I-90 is elevated above Liberty Park to the south, as well as to the north along 2nd Avenue and the existing storm drainage basins. From the Helena vicinity to Crestline vicinity, the elevation of I-90 is roughly the same as the surrounding terrain on both sides. Near the Thor-Freya crossings, I-90 is depressed below the surrounding terrain. Our DEA team will focus on the preferred location near Liberty Park. We will utilize 3D renderings to help the entire team, including the community, to visualize how the land bridge will fit in with the existing terrain to help guide the selection of the preferred location from a geometric perspective.

Urban Design and Landscape Architecture

Our approach to urban design and landscaping involves a blend of park features, trails, and transportation design elements. This approach integrates the technical requirements of bridge and roadway infrastructure with other amenities such as gateways, gathering areas, non-motorized and micromobility improvements, and places for

flexible recreation to support community activation, placemaking, and events. The design solutions will be responsive to surrounding environments. Safety and security, sustainable design, long-term maintenance and budget requirements, connections to surrounding neighborhoods, and grant funding opportunities also play an important role in the overall design process. Defining volumes of space through the creative use of physical design elements creates successful placemaking – public spaces where the positive interaction of people with their surroundings can occur. We have developed an initial vision of what the project could be in *Figure 12* (page 29). This exhibit provides an example of a starting point concept that we can modify and build on in addition to other concepts with WSDOT and the East Central Community during the planning phase of the project.

Minimize Impacts to Adjacent Properties

WSDOT has acquired enough right-of-way to expand I-90 as part of the I-90/US 395 Interchange. However, depending on the design of this project, additional right-of-way may need to be acquired. Our goal will prioritize maximizing the space already acquired by WSDOT. Where right-of-way is required, we will look for solutions that impact adjacent properties the least.

Forward Compatibility

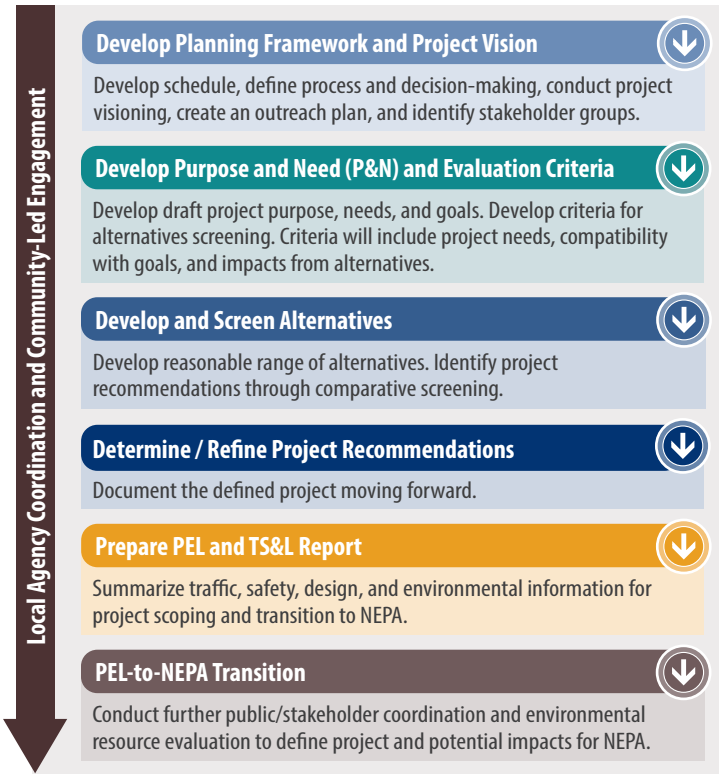
It is vital that the land bridge brings a long-term enhancement to the community that works with future improvements. During development of the TS&L, we will establish feasible locations for the land bridge that are compatible with the NSC/I-90 Interchange concept design. The team will work with WSDOT Eastern Region to understand long-term capacity needs that may be anticipated for the ultimate build-out of I-90. We will also coordinate with the City of Spokane to understand their future plans for local roads, parks, trails, and utilities within the project limits.

COMPREHENSIVE PROCESS TO ACHIEVE GOALS

Employ the PEL Process for a Holistic Solution

Our approach is based on 17 years of DEA PEL experience and lessons learned tailored to this project's needs. With our approach using the PEL process, the planning phase will facilitate key project decisions integrating community led engagement and urban design to provide a solid foundation for the project to move forward as efficiently as possible through NEPA, design, and construction. Our primary objectives for the PEL process are to:

Figure 10: PEL Process



- Use technical data and community-led engagement to shape the vision and recommendations that address project and community needs.
- Utilize the community led engagement throughout the planning decision-making process to show transparency and build ongoing public support.
- Document all project decisions and findings to deliver durable results that will propel the project forward without backtracking in future phases.

Following the PEL process (see *Figure 10*), from the very beginning we will conduct evaluations, coordinate with the community and agencies, and format deliverables to maximize use of the planning phase documentation in the project NEPA process.

With her leadership role on a large variety of major planning and PEL studies over the last 17 years, Stacy Tschuor has developed proven techniques for maximizing the benefits of the PEL process by focusing on agency and public engagement, technical analysis, and documentation that can be carried into the NEPA phase of the project, streamlining the NEPA process with resource evaluations and public and stakeholder consensus.

Developing Planning Framework and Project Vision

Before collecting or compiling available existing conditions data, WSDOT, FHWA, City of Spokane, and the DEA team will establish a charter agreement

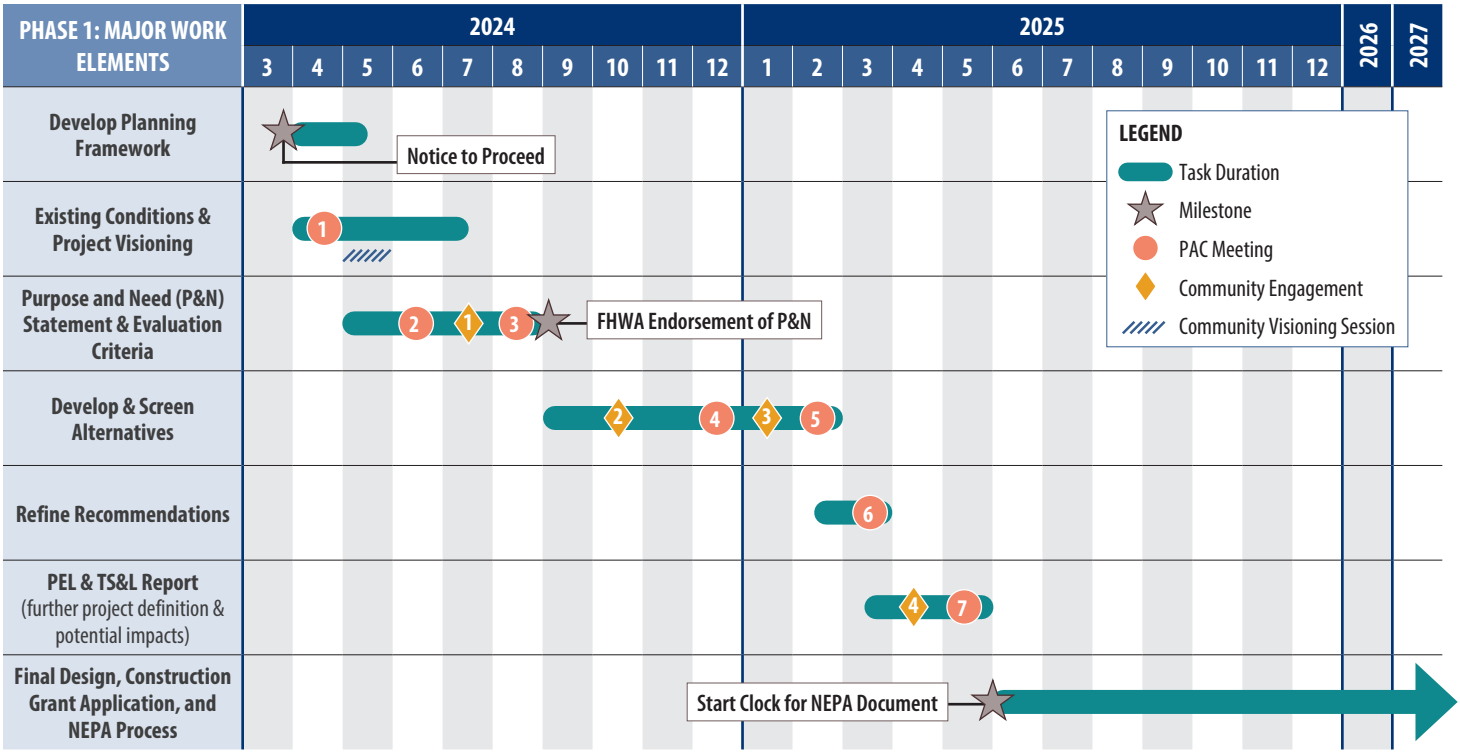
that defines roles, responsibilities, decision-making authority, and rules of engagement for project collaboration. This charter agreement will serve as a guidepost to confirm that the project and team are on track to accomplish the project goals. Along with the development of the charter, we will lead the agency team in an initial project Visioning Workshop.

The community will help shape the project's vision and objectives with an early Community-based Visioning Session. This facilitated outreach will include gathering input on how community members envision the future use, appearance, and surrounding environment of the land bridge. By taking the time to clearly define project success through the eyes of the agencies and the East Central community, we will establish a vision that guides activity and drives efficient decision-making.

Project Schedule and Milestones

To successfully integrate community engagement, concept development and selection of the preferred alternative, planning, and environmental considerations for this unique project, DEA proposes the PEL process. *Figure 11* below shows a proposed schedule with key milestones and outlines the interaction of these key features of the project to integrate them in a systematic manner to guide the Phase 1 portion of the project. The goal will be to select a preferred type, size, and location of the land bridge that achieves community buy-in, and sets the stage for the environmental process and final design to occur seamlessly in Phase 2 of the project development.

Figure 11: Critical Path Diagram and Critical Milestones



Community Engagement

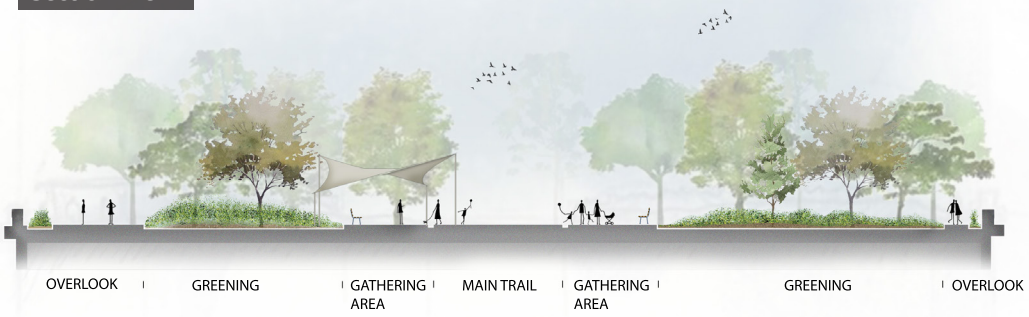
1. Present existing conditions, draft purpose, need, and goals
2. Present initial concepts & conduct design charette for public art / urban and landscape design
3. Present alternatives and initial screening for public input
4. Present project recommendations to the public to confirm goals are met

PAC Meetings

1. Project team and overview; PEL framework; community engagement; agency visioning workshop
2. Summary of existing conditions; review agency and community visioning; draft P&N statement; community engagement #1 materials review
3. Evaluation criteria; feedback/comments from public outreach on P&N, existing conditions, and what is important to the public; initial alternative concepts; community engagement #2 materials review
4. Initial alternatives screening; community engagement #3 materials review
5. Results of alternatives screening; feedback/ comments from community engagement on alternatives screening
6. Refine project recommendations; community engagement #4 materials review
7. Draft PEL & TS&L report review comments; concurrence on defined project for NEPA; NEPA class of action recommendation; NEPA scoping and schedule

Figure 12: Example East Central Land Bridge Concept

Section View



Plan View

The DEA team will develop a solution that results in:

- Reconnects East Central Spokane in a meaningful way
- Enhances multimodal connectivity and provides low cost transportation modes for lower-income residents focusing on origin-destination patterns
- Mitigates the visual impact of I-90 bisecting the community and supports revitalization
- Increases green space for the neighborhood
- Provides recreation opportunities
- Improves existing trail connectivity
- Maximizes the utility of the added space
- Blends into the surrounding terrain

1. Parking/trailhead
2. Grading to blend into adjacent terrain
3. Realign 2nd Ave and Ramp to maximize space in WSDOT/City right-of-way
4. Lawn/recreation areas
5. Overlook
6. Main trail
7. Wall (Typ.)
8. Gathering areas
9. Strategically place trees near bridge supports or on shorter spans
10. Regrade park to blend into elevated land bridge
11. ADA compliant trail
12. Ben Burr Trail connection
13. Elevated viewpoint on natural basalt outcrop
14. Play Area (To Remain)
15. Liberty Park Library

DAVID EVANS
AND ASSOCIATES INC.

Jake Menard, PE, SE, Project Manager
908 N. Howard Street, Suite 300
Spokane, WA 99201
509.252.5886
jake.menard@deainc.com