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Federal Transit Administration HQ
1200 New Jersey Avenue SE
East Building - Fourth Floor
Washington DC 20590
Attention: Mr. John Bardwell, Contracting Officer, (202) 366-4980

Reference: Solicitation Number: FTA-08-PMOC, Program Management Oversight Services (PMO)
Subject: CH2M HILL (PMO) Capabilities Statement

Dear Mr. Bardwell,

CH2M HILL is pleased to submit our Project Management Oversight (PMO) capabilities statement. We are positioned to lead this effort as a prime consultant firm.

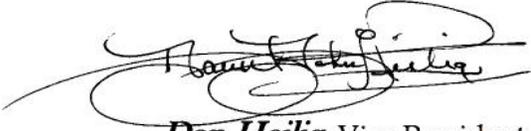
Our firm of professionals can:

- **Continuously review and evaluate assigned grantees** through the FTA processes, (and references to the FTA Construction Project Management Handbook, Project and Construction Management Guideline, and others), to ensure compliance with statutory, administrative, and regulatory requirements.
- **Evaluate grantee project management and technical capacity and capability** to successfully implement major transit projects as we have assisted Grantees in staffing PM/CM roles and are knowledgeable in staffing requirements.
- **Monitor** the projects to determine whether they are progressing on time, within budget, and in accordance with approved grantee plans and specifications. CH2M HILL has been ranked as the #1 provider of Construction Management and Program Management services the past four years in the ENR.
- **Provide design constructability, contract modification reviews, and value engineering submittals** as required by the FTA.
- As an value added, **CH2M HILL has a full service construction entity** called CH2M HILL Construction Inc., (CCI) that is licensed to perform construction in numerous states. CCI also performs CM at Risk scope. This is a tremendous added value to the Grantee and the FTA in an oversight role.
- CH2M HILL places a top **priority on safety as our record demonstrates**. Through 3rd quarter of 2007 we have consistently achieved our annual incident rate twenty five percent (25%) lower than the national average with Recordable Incident Rate of 0.37, with national average at 1.50.

- In a recent past life, I have personally been on the RTD T-Rex Program Management team and the RTD FasTracks Program Management team in addition to seven PMO agency assignments over 12 years throughout the US.

We look forward to this opportunity to provide Program Management Oversight Services to the Federal Transit Administration. On behalf of CH2M HILL, I am pleased to submit the attached qualifications, that cover our Company Background and Capabilities, Light Rail Transit, Commuter Rail Transit, Bus Rapid Transit, and Vehicle Maintenance Facilities.

Sincerely,



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Company Background and Capabilities



CH2M HILL has provided innovative technology and proven solutions combined with responsive, collaborative, and professional service to meet the transportation needs of public agencies and private industry for more than 60 years. Throughout the world, CH2M HILL is widely recognized and respected for delivering a full range of progressive planning, engineering/design, consulting, program management, and construction management services.

CH2M HILL maintains an integrated network of more than 300 offices around the world with 23,000 professional employees. This makes us the largest private, employee-owned consulting firm in the world, and being an employee-owned company promotes a strong commitment to clients by a highly motivated staff. Our high volume of repeat business is proof that our clients benefit from our committed and motivated staff.

Transit Services

CH2M HILL provides a full spectrum of transit services, including:

- Program, project, and construction management
- Timely management decisions
- Cost/Schedule analysis and reporting
- Environmental monitoring
- Delivery of a quality product
- Quality control and assurance
- Contract packaging and sequencing
- System safety
- Value engineering
- Risk analysis and mitigation planning
- Public involvement/public information
- Change control
- Staffing and training
- Financial capacity

Our work on transportation projects around the world ranges in size from rehabilitation efforts to large-scale multimodal corridor programs that include light rail, commuter rail, bus rapid transit, vehicle maintenance facilities and other exclusive or shared guideway transit systems. The firm has also completed railroad projects for the Alaska Railroad Corporation, Union Pacific Railroad/Southern Pacific Railroad, and Burlington Northern Santa Fe Railway Company, among many others.

CH2M HILL was the managing partner in the joint venture design-build team for the University Light Rail Line. This \$83 million design-build project was executed on a fast-track completion schedule for the 2002 Winter Olympics. Additionally, the firm provided civil engineering and final design work for Sound Transit light rail projects in Seattle, Washington.

CH2M HILL environmental study efforts include environmental impact statements for the Regional Transportation District Southwest Corridor light rail extension in metro Denver, Colorado. The study area included suburban settings surrounded by commercial, retail, and residential properties. Other environmental work includes the Sound Transit Central Link Light Rail Transit in Seattle.

Program management services include the Hampton Roads Transit (Norfolk Virginia) new start lines, management oversight of the Valley Transit Authority program for San Jose County, California, and program management oversight services for the Federal Transit Administration.

Through our depth of senior staff and effective delivery of services, CH2M HILL provides transit authority clients with:

- Local community leadership to guide a program from concept through implementation
- Tailored public involvement and education programs, which increase public trust and support of transit
- Accurate cost estimates and on-time design delivery
- Maximum community benefit through context-sensitive design and a transit-oriented development approach

- Working relationships with senior transit officials from national and local governments
- Quick and efficient project startup through system operations

Light Rail Transit



CH2M HILL assists clients in identifying and solving the social and technical issues that impact Light Rail Transit (LRT) projects, gaining consensus on project solutions, and efficiently and safely designing the LRT to blend with existing roadway and pedestrian infrastructure.

CH2M HILL's LRT services range from planning and development to the final design of complete LRT systems and their interface with other transportation modes. Our experience in fast-track delivery also helps our clients meet their project deadlines, while our design and operational expertise ensures that the ultimate transit system meets its unique project goals.

CH2M HILL's diverse array of transit-oriented services includes all aspects of LRT. We are involved in many LRT projects throughout the United States. We provided program management for two separate LRT segments in Hampton Roads, Virginia, and completed the design-build delivery of the University Line LRT in Salt Lake City, Utah, more than a year ahead of schedule.

Professional staff and an unrelenting commitment to quality and client service characterize all of our projects. This translates to active public involvement programs and community partnering to minimize construction impacts to residents and businesses.

For example, in Salt Lake City, the CH2M HILL roadway manager met with every property owner located on the University Line to discuss and implement solutions to ensure businesses remained open during construction

and that access points remained once the line was completed.

In Seattle, we have managed and facilitated third-party agency coordination in developing our final designs and gaining city concurrence. We have repeatedly garnered praise from the Seattle Department of Transportation, Seattle Public Utilities, and Seattle City Light, having set a high standard of performance in terms of understanding and applying their design criteria, addressing their concerns and requirements. We were also recognized for establishing a highly productive partnership among these outside agencies, Sound Transit, and our design team in our efforts to deliver a comprehensive, biddable, quality set of contract documents.

Our professionals routinely evaluate LRT lines around the country to share lessons learned with our clients. For example, controlling corrosion caused by stray current in the area of LRT systems often requires significant mitigation efforts. CH2M HILL has experts in stray current and corrosion control, and routinely works with local utilities to minimize stray current impact on in-ground equipment and infrastructure.

CH2M HILL understands that fast-track LRT construction often requires flexibility to meet the needs of the project. The designer must be able to quickly deliver approved designs to begin construction, and may be required to act as an extension of the transit agency or contractor's organization to meet these objectives. CH2M HILL meets aggressive schedules by prioritizing design elements, packaging design drawings, and expediting plan review and approval to provide early release of construction drawings.

Representative Project Experience

University/Medical Center LRT Line—Utah

CH2M HILL was the lead designer and design program manager for this LRT system, which connects downtown Salt Lake City and the existing light rail line to Rice-Eccles Stadium and the University of Utah's premiere health sciences center. The stadium was the site of the opening and closing ceremonies for the 2002 Winter Olympics. The project included 4 miles of track, seven LRT stations, roadway and intersection reconstruction, design and construction of a roundabout with the LRT tracks bisecting the traffic circle, and

utilities relocation. CH2M HILL provided project management and led roadway and intersection design, utilities relocation design and coordination, permitting assistance, and agency coordination. Design included four major elements: roads, utilities, trackwork, and systems (including the stations). Because the team completed the University Line phase of the project 10 months ahead of schedule and on budget, the Utah Transit Authority awarded the Medical Center Line extension of the project through direct negotiation.

Commuter Rail



CH2M HILL has an in-depth understanding of commuter rail and other transit development and implementation programs from our experience across the United States. Based on this experience, and through our global resources and local expertise, we understand the challenges facing transit authorities across the country as they look to the future to meet increasing travel demands. We bring to our clients a knowledgeable, well-motivated, community-sensitive team with both a personal and a professional stake in meeting the challenges and achieving success for each commuter rail development program.

Mass transit systems, including commuter rail, are becoming increasingly critical needs for cities as they face growing travel demands within limited infrastructure. An effective commuter rail development project can help meet those needs. Working with existing and new rail networks, CH2M HILL can help create an effective and efficient commuter transit system that serves the needs of a region, and its residents, well into the future.

CH2M HILL provides effective planning, design, and construction management of commuter rail systems that:

- Integrate commuter rail, light rail transit, and other multimodal transit modes safely, reliably, and

efficiently into a region's transportation network; and leverage a transit system's investments to maximize convenience for the traveling public.

- Meet regulatory compliance and other stakeholder issues, such as clean air standards and traffic congestion mitigation, while improving overall quality of life in the area.
- Work closely with railroads and utilities along the commuter rail corridor to meet all joint and shared use of trackage and corridors, relocation and commercial freight delivery needs.
- Meet the needs of the Americans with Disabilities Act (ADA), the ADA Accessibility Guidelines (ADAAG) for Building and Facilities, and for Transportation Vehicles, and other state and federal regulations.
- Evaluate environmental considerations and technologies that affect design and/or construction, addressing system equipment including vehicles, electrification power and distribution, signals, fare collection and validation equipment, and passenger stations.

Representative Project Experience

2012 London Olympic and Paralympic Games—Great Britain

CH2M HILL is one of three firms comprising the international program management consortium, CLM Delivery Partner. In September 2006, CLM was chosen by the Olympic Delivery Authority (ODA) to oversee the design and construction of the venues and infrastructure for the 2012 Olympic and Paralympic Games. CH2M HILL provides the consortium and ODA with global engineering/construction program management expertise. Elements of the project include a transport program that integrates London's air, road and rail networks. The 7-year 2012 Olympics program is currently valued at \$10.6 billion.

Bus Rapid Transit



With the Federal Transit Administration's (FTA's) waiting list of new start rail projects, and with traffic congestion in the nation's cities continuing to grow, transit agencies across the country are considering innovative transit alternatives such as bus rapid transit (BRT). This cost-effective mode offers improved system capacity and throughput, often reducing overall project impacts while providing travel benefits comparable to light rail and commuter rail programs.

BRT offers communities the ability to increase transportation system capacity by providing attractive alternatives to private vehicles, supporting desired urban development patterns, improving the transportation linkages between urban core areas and dispersed employment centers, and improving mobility and travel time reliability in congested corridors and metropolitan centers.

CH2M HILL's BRT system solutions bring fast, efficient congestion relief to areas where the cost and associated impacts of rail systems are not feasible. With a focus on safe, clean, and convenient transportation, BRT solutions offer a range of flexible travel advantages to communities.

CH2M HILL uses sound knowledge of transit planning, traffic engineering, traffic forecasting, operational analysis, and street and highway design to identify corridor and site-specific conditions that promote BRT project solutions. Our planners and engineers apply a proper mix of transit needs assessment, traffic planning, and geometric design to provide solutions that leverage the flexibility and multiple design options inherent in BRT features.

We use cutting-edge technology, such as computer modeling and computer-operated traffic signal operation, control, and prioritization to keep transit moving smoothly along some of the country's busiest thoroughfares. These technologies allow the integration of BRT into the overall network to maximize traveler throughput and reduce travel times.

BRT design can include fully exclusive new right-of-way, priority lanes alongside general purpose lanes in existing highways, transit-only access ramps, enhanced bus stations, and cleaner and quieter vehicle technology. Providing limited stop-service and locating stations to areas programmed for transit oriented development can both speed up and integrate service with land use policies. Adding automatic vehicle location systems helps manage service intervals between buses and minimizes passenger waiting time. These features give buses many of the same features of rail at substantially lower cost.

Representative Project Experience

Downtown/Natomas/Airport Regional Transit District Extension Alternatives Analysis/Draft EIS and Final EIR, Sacramento Regional Transit—California

CH2M HILL worked with the Sacramento Regional Transit District (RT) to conduct a transit alternatives analysis/draft Environmental Impact Statement (EIS) and Final Environmental Impact Review (EIR) on the Downtown/ Natomas/Airport corridor. The team provided services consistent with the FTA New Start requirements, as well as with federal, state, and local environmental impact assessment processes.

Alternative technologies studied included light rail, BRT, enhanced bus, and transportation system management. A variety of alignments between the airport and downtown Sacramento were also examined. To enhance the alternatives analysis, CH2M HILL prepared all of the GIS mapping for the study. Public involvement activities were conducted to maximize citizen and agency input into the process.

Vehicle Maintenance Facilities



CH2M HILL helps transit agencies plan and design vehicle maintenance facilities to meet their current and future maintenance needs. We develop plans for new facilities and plans for expansion and renovation of existing facilities, select the most appropriate maintenance and servicing equipment, and provide detailed shop and facility layouts.

Our vehicle maintenance facility design group (VMFDG) has provided planning, programming, and equipment design for mass transit facilities across the United States. CH2M HILL's personnel has experience analyzing current operations, determining short- and long-term spatial needs, developing alternative site and facility layouts, and conducting long-term operational planning for the needs of new and existing facilities. We have provided planning, programming, site and facility layout, equipment selection, and construction phase services for over 140 maintenance and operation facilities, with fleets ranging from 40 to 3,000 vehicles.

CH2M HILL provided a complete range of project services and skills related to planning, designing, and constructing facilities for vehicle fleet maintenance and operation, including:

- Same as in the transit capabilities section above
- Facility needs analysis
- Site selection
- Master planning
- Facility programming
- Shop layout
- Maintenance equipment selection
- Fueling facilities
- Maintenance audits

We also perform maintenance audits, evaluate the potential for joint development of a maintenance facility

between neighboring entities, and analyze the advantages and disadvantages of in-house versus contract maintenance.

CH2M HILL provides feasibility studies, including:

- Maintenance, operations, and administration site selection and space programming
- Deadhead mileage analysis
- Design criteria preparation
- Alternatives and cost/benefit analysis construction cost estimating

CH2M HILL's VMFDG has worked on more than 100 transit maintenance and operation facility projects throughout the country and assisted numerous public and private clients in planning, designing, and constructing vehicle maintenance and operation facilities—customizing it to their unique operating characteristics.

Representative Project Experience

Orange County Transportation Authority—California

CH2M HILL provided professional services for the planning, schematic and final design, and construction assistance for a 250-bus maintenance and operation facility. The new facility is the fourth operating base for the Orange County Transportation Authority (OCTA) and will serve both standard and articulated buses as part of the assigned fleet. The maintenance facility is programmed to provide a centralized major component rebuild shop to service the entire OCTA transit fleet. Component tear-down, rebuilding, and dynamometer testing were provided for engines and transmissions.