



**CENTRAL TEXAS
Regional Mobility Authority**

AGENDA ITEM #11 SUMMARY

Approve a supplement to the work authorization with Atkins North America Inc. for general engineering consultant services on the Oak Hill Parkway project.

Strategic Plan Relevance: Regional Mobility

Department: Engineering

Associated Costs: \$1,811,000

Funding Source: General Fund, reimbursed per Advanced Funding Agreement with TxDOT

Board Action Required: Yes

Description of Matter:

Atkins is providing general engineering consultant support services for the Oak Hill Parkway Project.

This supplement to the work authorization for those services provides for continued oversight of activities required to assist the Mobility Authority in obtaining environmental clearance for the Oak Hill Parkway Project. These efforts will include, but not be limited to, project management, administrative tasks, and program oversight including: coordination with TxDOT, consultants, resource agencies, environmental studies, schematic development, operational analyses, community outreach, and additional activities as specifically requested by the Authority.

Reference documentation: Draft Resolution
Proposed Supplement #1 to Work Authorization #7

Contact for further information: Wesley M. Burford, P.E., Director of Engineering

**GENERAL MEETING OF THE BOARD OF DIRECTORS
OF THE
CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY**

RESOLUTION NO. 14-___

**APPROVING A SUPPLEMENT TO THE WORK AUTHORIZATION WITH ATKINS
NORTH AMERICA, INC., TO PROVIDE GENERAL ENGINEERING CONSULTANT
SERVICES FOR THE OAK HILL PARKWAY.**

WHEREAS, Atkins North America, Inc., (“Atkins”) serves as a general engineering consultant to the Mobility Authority under the Agreement for General Consulting Civil Engineering Services effective January 1, 2010 (the “GEC Agreement”); and

WHEREAS, Atkins provides general engineering consultant support services to the Mobility Authority for the Oak Hill Parkway Project; and

WHEREAS, the Executive Director and Atkins have discussed and agreed to a proposed supplement to the work authorization for Atkins to provide continued general engineering consultant services for the Oak Hill Parkway Project; and

WHEREAS, the Executive Director recommends approval of the proposed supplement to the work authorization attached as Exhibit 1.

NOW THEREFORE, BE IT RESOLVED that the proposed supplement to the work authorization is hereby approved; and

BE IT FURTHER RESOLVED that the Executive Director may finalize and execute for the Mobility Authority the proposed supplement to the work authorization in the form or substantially the same form as Exhibit 1.

Adopted by the Board of Directors of the Central Texas Regional Mobility Authority on the 24th day of September, 2014.

Submitted and reviewed by:

Approved:

Andrew Martin
General Counsel for the Central
Texas Regional Mobility Authority

Ray A. Wilkerson
Chairman, Board of Directors
Resolution Number: 14-___
Date Passed: 9/24/2014

EXHIBIT 1 TO RESOLUTION 14-
SUPPLEMENT TO THE WORK AUTHORIZATION WITH ATKINS NORTH
AMERICA, INC.

[on the following 13 pages]

EXHIBIT D
WORK AUTHORIZATION

Supplement No. 1 to Work Authorization No.7

This Work Authorization is made as of this 1st day of September, 2014, under the terms and conditions established in the AGREEMENT FOR GENERAL CONSULTING ENGINEERING SERVICES, dated as of January 4th, 2010 (the Agreement), between the **Central Texas Regional Mobility Authority** (Authority) and **Atkins North America, Inc.** (GEC). This Work Authorization is made for the following purpose, consistent with the services defined in the Agreement:

*Oak Hill Parkway
Oversight Services*

Section A. - Scope of Services

A.1. GEC shall perform the following Services:

Please reference Attachment A – Services to be Provided by the GEC

A.2. The following Services are not included in this Work Authorization, but shall be provided as Additional Services if authorized or confirmed in writing by the Authority.

Not applicable.

A.3. In conjunction with the performance of the foregoing Services, GEC shall provide the following submittals/deliverables (Documents) to the Authority:

Please reference Attachment A – Services to be Provided by the GEC

Section B. - Schedule

GEC shall perform the Services and deliver the related Documents (if any) according to the following schedule:

Services defined herein are expected to be substantially complete within twenty four (24) months from the date this Supplement becomes effective. This Supplement will not expire until all tasks associated with the Scope of Services are complete.

Section C. - Compensation

C.1. In return for the performance of the foregoing obligations, the Authority shall pay to the GEC the amount not to exceed \$1,811,000, based on Attachment B -Fee Estimate. This will increase the not to exceed amount for Work Authorization No. 7 from \$750,692 to \$2,561,692. Compensation for Direct Expenses under this Supplement which are incurred as part of normal business operations (i.e., internal

document reproduction, internal plotting, travel and parking associated with local meetings, etc.) will be reimbursed on a Lump-Sum basis in the amount of: \$66,150 (with \$2,756.25 to be invoiced monthly). Profit will be 12% for all services. Compensation shall be in accordance with the Agreement.

C.2. Compensation for Additional Services (if any) shall be paid by the Authority to the GEC according to the terms of a future Work Authorization.

Section D. - Authority’s Responsibilities

The Authority shall perform and/or provide the following in a timely manner so as not to delay the Services of the GEC. Unless otherwise provided in this Work Authorization, the Authority shall bear all costs incident to compliance with the following:

Please reference Attachment A – Services to be Provided by the GEC

Section E. - Other Provisions

The parties agree to the following provisions with respect to this specific Work Authorization:

Not applicable.

Except to the extent expressly modified herein, all terms and conditions of the Agreement shall continue in full force and effect.

Authority: Central Texas Regional Mobility
Authority

GEC: Atkins North America, Inc.

By: Mike Heiligenstein

By: _____

Signature: _____

Signature: _____

Title: Executive Director

Title: _____

Date: _____

Date: _____

CENTRAL TEXAS REGIONAL MOBILITY AUTHORITY

**SUPPLEMENT NO. 1 TO
WORK AUTHORIZATION NO. 7
ATKINS**

**ATTACHMENT A
SERVICES TO BE PROVIDED BY GEC**

OAK HILL PARKWAY (US290 WEST/SH 71 WEST) PROJECT

1.0 Preliminary Engineering [Code 13110]

Schematics and Exhibits

- 1.1 TxDOT Support: Provide engineering support as directed by the Mobility Authority for the review and updates to the corridor exhibits and schematic.
- 1.2 Design Verification: Provide a cursory review of the current TxDOT Design to ensure that all elements of the schematic conform to current standards. Develop a list of non-conformance elements and provide recommendations to the Mobility Authority. Develop a design notebook which notes the results of the design.
- 1.3 Design Modifications: Address all non-conformance elements as directed by the Mobility Authority.
- 1.4 Shared Use Path: Provide a cursory review of the current TxDOT Design to ensure that a Shared Use Path can be incorporated into the Design. Provide recommendations to the locations of the Shared Use Path. Incorporate the proposed design as directed by the Mobility Authority.
- 1.5 Tree Alternative Design: Evaluate designs that lessen the impacts to specific trees within the corridor.
- 1.6 Mobility Improvements associated with Logical Termini. Evaluate and update the design of the TxDOT proposed Mobility improvement at the west end of the Project (near Circle Drive).
- 1.7 Preliminary Cross-sections: Develop cross-sections including limits of construction in order to evaluate the ROW footprint. Provide comments and recommendations to the Mobility Authority.

2.0 Traffic & Revenue Analyses (Pre-Investment Grade) [Code 13120]

Pre-Investment Grade Traffic & Revenue

- 2.1 Support the Mobility Authority during their coordination efforts with the Traffic & Revenue consultant, as directed by the Authority.
- 2.2 Provide detailed project configuration and scope information to the Traffic & Revenue consultant. Review Draft Traffic & Revenue Analyses to ensure consistency with project information.

3.0 Environmental Studies [Code 13210]

US 290 West/ SH 71 West Environmental Impact Statement (EIS)

- 3.1 Facilitate EIS project status meetings with TxDOT and other Agencies as needed.
 - 3.1.1 Prepare meeting agendas, action items and meeting summaries.
- 3.2 Complete EIS document reviews including Technical Reports prior to submittal to Environmental Affairs Divisions (ENV), Federal Highway Administration (FHWA) and other Resources Agencies.
 - 3.2.1 Prepare and submit recommendations/comments to the Austin District prior to ENV submittal.
 - 3.2.2 Prepare and submit recommendations/comments to the Austin District prior to FHWA submittal.
- 3.3 Review updates to the traffic information and data for specific elements of the EIS.
 - 3.3.1 Review the updates to the traffic information and data and the associated impacts to the Level of Service for the Environmental Justice Analysis.
 - 3.3.2 Review incorporation of the updated traffic information and data into the Noise Analysis, Air Quality CO Analysis and the MSAT.
- 3.4 Update the US 290 West Regional Toll Analyses. The analysis used CAMPO's 2035 plan and will elapse when the CAMPO 2040 Plan is adopted. This will include the following:
 - 3.4.1 Incorporations of the results of CAMPO's 2040 Plan.
- 3.5 Develop Exhibits related to the EIS process.
 - 3.5.1 Prepare progress exhibits.
 - 3.5.2 Other figures as needed.

4.0 Project Oversight – Pre-Construction [Code 13710]

Project Management

- 4.1 Project Management
 - 4.1.1 Provide staff to manage the daily activities of the project.
 - 4.1.2 Serve as the primary contact between the Mobility Authority, TxDOT, design consultants, third party consultants, utility companies, public agencies, and the general public.
- 4.2 Document Control
 - 4.2.1 Implement document control plan
 - 4.2.2 Maintain project files for the length of the project
 - 4.2.3 Transfer project files to the Mobility Authority upon completion of the work or as directed by the Mobility Authority
- 4.3 Sub-Consultant Coordination, Work Authorization Management and Invoicing.
- 4.4 Project Reporting

- 4.4.1 Provide updates to the Mobility Authority on key tasks accomplished during the preceding month, meetings and key activities for the upcoming month, and identify outstanding issues requiring resolution.
- 4.4.2 Provide Project Administrative support staff to track, monitor, evaluate and report on contracts and budgets.

4.5 Project Scheduling

- 4.5.1 Maintain a Master Project Schedule (Primavera format) that will show critical milestones for the performance and coordination of services.
- 4.5.2 Monitor, evaluate, validate, and periodically update all schedules produced by others (Segment Designers, Utility Companies, etc.) that are a subset of the Master Project Schedule.

4.6 Project Development Support

- 4.6.1 Loan and/or Grant Applications: Assist the Authority in the development of loan and/or grant applications.
- 4.6.2 Engineering and Technical Support: Provide various engineering and technical tasks as requested by the Authority including but not limited to engineering assistance, general technology assistance, general environmental coordination reports, research, and presentations.
- 4.6.3 Traffic Modeling: Conduct peer review of the CORSIM and/or VISSIM Traffic Models and provide summary of suggestions.
- 4.6.4 TxDOT Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and TxDOT, as directed by the Authority.
- 4.6.5 Agency Coordination: Provide the appropriate staff as part of the coordination efforts between the Authority and Agencies, as directed by the Authority.
- 4.6.6 Project Agreements: Assist in the development and review of various agreements necessary such as the Project Development Agreement (PDA), Advance Funding Agreement (AFA), Financial Assistance Agreement (FAA), etc.; generation of agreement exhibits; review of agreement drafts; and TxDOT coordination support, as directed by the Authority.
- 4.6.7 DBE Outreach support as requested by the Authority.

4.7 Financial Planning Support

- 4.7.1 Operation, Maintenance, and Renewal & Replacement Estimates
 - 4.7.1.1 Develop and/or update GEC's opinion of probable operations cost estimates using either a Sketch Level approach (assumed per transaction costs based on average operations cost of similar toll systems) or a Level 1 approach (estimate actual quantities for various elements of toll operations, enforcement and incident management and applying anticipated unit prices to opening year with an escalation over an established periods of time)
 - 4.7.1.2 Develop and/or update GEC's opinion of probable annual/routine maintenance cost estimates using either a Sketch level approach (an estimated per centerline mile cost based on facility type which considers the number of lanes, pavement material and location) on a Level 1 approach (estimated quantities for the various elements of the maintenance efforts and

applying anticipated unit prices to opening year cost with escalation over an established period of time)

4.7.1.3 Develop and/or update GEC's opinion of probable renewal & replacement budget cost estimates (non-routine estimates) using either a Sketch Level approach (an estimated per mile cost based on renewal & replacement budgets utilized on similar facilities) or a Level 1 approach (identification of long-term, periodic maintenance replacement schedule, estimation of quantities, and apply escalation to the appropriate replacement years.)

4.7.2 Project Cost Estimates: Prepare an estimate of probable construction costs which will include quantity/costs for all major components of work. Prepare estimate for total project cost which will include: program management, preliminary engineering, final engineering, right-of-way, environmental compliance/mitigation, construction, toll collection systems, utility relocation, and CE&I, and financing.

4.7.3 Financial Advisor Support / Financial Plan Development: Provide financial advisor support necessary for the Authority to conduct financial programming including but not limited to cost estimating, financing techniques, shortfall mitigation techniques, and funding contingency plan.

4.8 Conceptual Operations Plan

4.8.1 Prepare a preliminary draft Conceptual Operations Plan which will establish the basic framework for operations of the facility including a basic definition of systems architecture for ITS and toll collection, incident management, safety and enforcement, maintenance. The plan will include roles and responsibilities of the various agencies.

5.0 Public Involvement / Outreach [Code 13750]

5.1 Prepare a comprehensive mailing list of adjacent property owners which may include additional property owners defined by the Mobility Authority

5.2 Distribute invitations based on comprehensive mailing lists

5.3 Support the Mobility Authority in the development and maintenance of the Project Website.

5.4 Support the Mobility Authority in the development of miscellaneous public involvement materials including but not limited to fact sheets, stake holder lists, advertisements, and news letters

5.5 Develop 3D roadway animation incorporating schematic and context sensitive designs as directed by the Mobility Authority.

5.6 Public Meetings

5.6.1 Facilitate, prepare documents and provide supporting staff as needed for two (2) Open House meetings.

5.7 Public Hearing

5.7.1 Assist TxDOT with preparation of a comprehensive mailing list of adjacent property owners which may include additional property owners defined by the Mobility Authority.

- 5.7.2 Distribute invitations to the additional property owners.
- 5.7.3 Provide supporting staff as needed for the Public Hearing.
- 5.7.4 Provide supporting documentation as directed by the Mobility Authority.

5.8 Context Sensitive Solutions

- 5.8.1 Provide supporting staff as needed for meetings and workshops.
- 5.8.2 Provide supporting documentation as directed by the Mobility Authority.

5.9 Mobility Authority Open House/Workshops

- 5.9.1 Provide supporting staff as needed for stakeholder meetings and workshops.
- 5.9.2 Provide Supporting Documentation and materials as directed by the Mobility Authority.

**Attachment B - Fee Estimate
Summary**

CTRMA General Engineering Consultant
Atkins - Man-hour Breakdown & Fee Estimate
290 West_SH 71 West Project (Oak Hill Parkway)

ATKINS - Supplemental Work Authorization #1 to Work Authorization #7

290 West_SH 71 West Project (Oak Hill Parkway)

	<u>SUBTOTAL</u>	<u>SUBTOTAL</u>	<u>TOTAL</u>
TASK	Labor + Overhead + Profit	Direct Expenses	
290 West_ 71 West Project (Oak Hill Parkway)			
1.0 Preliminary Engineering [13110]	\$ 428,046	\$ 15,750	\$ 443,796
2.0 Traffic & Revenue Analyses (Pre-Investment Grade) [Code 13120]	\$ 9,603	\$ -	\$ 9,603
3.0 Environmental Study / Document Services [Code 13210]	\$ 235,326	\$ 9,250	\$ 244,576
4.0 Project Oversight - Pre Construction [Code 13710]	\$ 687,813	\$ 29,250	\$ 717,063
5.0 Public Involvement / Outreach [Code 13750]	\$ 384,053	\$ 11,900	\$ 395,953
Subtotals	\$ 1,744,840	\$ 66,150	\$ 1,810,990
		TOTAL (rounded)	\$ 1,811,000

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 Atkins - Man-hour Breakdown & Fee Estimate
 290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A	B	C	D	E	F	
1.0 Preliminary Engineering [13110] Schematics and Exhibits							
1.1 TxDOT Support	40	380	320	380	70	40	1230
1.2 Design Verification	16	120	48	24			208
1.3 Design Modifications	32	120	80	80	24		336
1.4 Shared Use Path	8	60	240	40			348
1.5 Tree Alternative Designs		48	80	40			168
1.6 Mobility Improvement associated with logical termini	8	48	24	40			120
1.7 Preliminary Cross Sections	4	40	24	40			108

TOTAL DIRECT LABOR	108	816	816	644	94	40	2518
<i>% Total by Classification</i>	<i>4.29%</i>	<i>32.41%</i>	<i>32.41%</i>	<i>25.58%</i>	<i>3.73%</i>	<i>1.59%</i>	
Labor Costs	\$ 8,640	\$ 57,120	\$ 48,960	\$ 28,980	\$ 3,290	\$ 1,000	\$ 147,990
Overhead Costs	1,5825 \$ 13,673	\$ 90,392	\$ 77,479	\$ 45,861	\$ 5,206	\$ 1,583	\$ 234,194
Profit	12.0% \$ 2,678	\$ 17,701	\$ 15,173	\$ 8,981	\$ 1,020	\$ 310	\$ 45,862
Total Loaded Labor	\$ 24,990	\$ 165,214	\$ 141,612	\$ 83,822	\$ 9,516	\$ 2,892	\$428,046

Direct Expenses

Plotting and Reproduction	\$ 2,000
Mail and Deliveries	\$ 250
Misc Expenses	\$ 8,500
Travel and Field Expenses	\$ 5,000
Total Direct Expenses	\$ 15,750

Total \$ 443,796

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290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A	B	C	D	E	F	
	\$ 80.00	\$ 70.00	\$ 60.00	\$ 45.00	\$ 35.00	\$ 25.00	
2.0 Traffic & Revenue Analyses (Pre-Investment Grade) [Code 13120]							0
2.1 Coordination with CTRMA's T&R Consultant	2	12	8	4			26
2.2 Provide project information to T&R Consultant	2	12	8	4			26
							0
							0
							0
							0
							0

TOTAL DIRECT LABOR	4	24	16	8	0	0	52
<i>% Total by Classification</i>	7.69%	46.15%	30.77%	15.38%	0.00%	0.00%	
Labor Costs	\$ 320	\$ 1,680	\$ 960	\$ 360	\$ -	\$ -	\$ 3,320
Overhead Costs	1.5825 \$ 506	\$ 2,659	\$ 1,519	\$ 570	\$ -	\$ -	\$ 5,254
Profit	12.0% \$ 99	\$ 521	\$ 298	\$ 112	\$ -	\$ -	\$ 1,029
Total Loaded Labor	\$ 926	\$ 4,859	\$ 2,777	\$ 1,041	\$ -	\$ -	\$9,603

Direct Expenses	
Plotting and Reproduction	\$ -
Mail and Deliveries	\$ -
Misc Expenses	\$ -
Travel and Field Expenses	\$ -
Total Direct Expenses	\$ -

Total \$ 9,603

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290 West_71 West Project (Oak Hill Parkway)

TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)							TOTAL HRS
	A	B	C	D	E	F		
	\$ 80.00	\$ 70.00	\$ 60.00	\$ 45.00	\$ 35.00	\$ 25.00		
4.0 Project Oversight - Pre Construction [Code 13710]								
4.1 Project Management	180	375	360	240	40	72	1267	
4.2 Document Control	8	40	40	60	80			
4.3 Sub-Consultant Coordination, WA Management and Invoicing	24	48	36	48	84			
4.4 Project Reporting	48	128	96	24	36	72	404	
4.5 Project Scheduling	24	48	164				236	
4.6 Project Development Support	96	320	240	240	80	80	1056	
4.7 Financial Planning Support	40	120	200	90	40		490	
4.8 Conceptual Operations Plan	40	8	80	48			176	
							0	
							0	
							0	

TOTAL DIRECT LABOR	460	1087	1216	750	360	224	3629
<i>% Total by Classification</i>	<i>12.68%</i>	<i>29.95%</i>	<i>33.51%</i>	<i>20.67%</i>	<i>9.92%</i>	<i>6.17%</i>	
Labor Costs	\$ 36,800	\$ 76,090	\$ 72,960	\$ 33,750	\$ 12,600	\$ 5,600	\$ 237,800
Overhead Costs	1.5825 \$ 58,236	\$ 120,412	\$ 115,459	\$ 53,409	\$ 19,940	\$ 8,862	\$ 376,319
Profit	12.0% \$ 11,404	\$ 23,580	\$ 22,610	\$ 10,459	\$ 3,905	\$ 1,735	\$ 73,694
Total Loaded Labor	\$ 106,440	\$ 220,083	\$ 211,030	\$ 97,619	\$ 36,444	\$ 16,198	\$687,813

Direct Expenses	
Plotting and Reproduction	\$ 4,500
Mail and Deliveries	\$ 250
Misc Expenses	\$ 9,500
Travel and Field Expenses	\$ 15,000
Total Direct Expenses	\$ 29,250

Total \$ 717,063

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TASK / WORK DESCRIPTION	(Estimated Average Labor Rates)						TOTAL HRS
	A \$ 80.00	B \$ 70.00	C \$ 60.00	D \$ 45.00	E \$ 35.00	F \$ 25.00	
5.0 Public Involvement / Outreach [Code 13750]							
5.1 Prepare Comprehensive Mailing List		8	24	48		40	120
5.2 Distribute Invitations		8	24	24		40	96
5.3 Website development and maintenance	4	16	32	160	160		372
5.4 Development of Public Involvement materials	8	48	40	180	180		456
5.5 Develop 3D Animation	4	24	340	24			392
5.6 Public Meetings	12	32	40	48	40	24	196
5.7 Public Hearing	8	32	40	40	40	24	184
5.8 Context Sensitive Solutions	8	24	360	48	80	40	560
5.9 Open House/Workshops	16	60	40	60	80	40	296
							0
							0

TOTAL DIRECT LABOR	60	252	940	632	580	208	2672
<i>% Total by Classification</i>	2.25%	9.43%	35.18%	23.65%	21.71%	7.78%	
Labor Costs	\$ 4,800	\$ 17,640	\$ 56,400	\$ 28,440	\$ 20,300	\$ 5,200	\$ 132,780
Overhead Costs	1.5825 \$ 7,596	\$ 27,915	\$ 89,253	\$ 45,006	\$ 32,125	\$ 8,229	\$ 210,124
Profit	12.0% \$ 1,488	\$ 5,467	\$ 17,478	\$ 8,814	\$ 6,291	\$ 1,611	\$ 41,149
Total Loaded Labor	\$ 13,884	\$ 51,022	\$ 163,131	\$ 82,260	\$ 58,716	\$ 15,041	\$384,053

Direct Expenses	
Plotting and Reproduction	\$ 1,000
Mail and Deliveries	\$ 400
Misc Expenses	\$ 7,500
Travel and Field Expenses	\$ 3,000
Total Direct Expenses	\$ 11,900

Total \$ 395,953