# ANNUAL REPORT BY THE DESIGN BUILD EXECUTIVE COMMITTEE REGARDING THE STATUS OF THE CITY OF BALTIMORE'S DESIGN BUILD PROJECTS

As mandated by the Design Build Project Delivery Procedures approved by the Board of Estimates on November 2, 2011, the Design Build Executive Committee ("DBEC") is required to annually report on the description, status and participation by minority and women owned businesses on all pending Design Build projects. In addition, the DBEC makes recommendations regarding policy changes or implementation measures. The DBEC submits this Annual Report for the period from August 2016 through August 2017 covering the three projects currently under contract and approved by the DBEC and Board of Estimates ("BOE").

## I. DEPARTMENT OF TRANSPORTATION CENTRAL AVENUE PROJECT TR 12317

The Central Avenue Design Build Project ("Project") is the Department of Transportation's ("DOT") and the City's first design-build project. The Project primarily consists of the reconstruction of Central Avenue between Lancaster Street and Baltimore Street into an urban boulevard. The total length of roadway construction is approximately 3,200 linear feet (8 blocks). The scope of roadwork includes full-depth pavement reconstruction, concrete curb/gutter and sidewalk reconstruction, construction of ADA-compliant pedestrian ramps and driveway entrances within the Project limits, roadway drainage system improvements, new street and pedestrian lighting, new pavement marking and signing, upgrades to water, sewer, and conduit utilities, and new traffic and pedestrian signals. The key element of the Project is the extension of Central Avenue with a new Harbor Point Connector Bridge over the tidal inlet waters to the Harbor Point development site. The length of the Harbor Point Connector Bridge is approximately 260 feet.

#### A. Project Status as of August, 2017

- Project awarded to Allan Myers, Inc., ("Myers") on March 30, 2016. Contract amount -- \$47,777,777.00. The Federal Funding is less than the typical 80% because some items are not eligible for federal funding. The balance will be paid by the City, primarily from the Harbor Point Developer TIF contributions.
- Schedule Related
  - Notice to Proceed was issued for June 15, 2015
  - The contract expires on June 15, 2021, which is NTP + 5 years. Myers' originally proposed to complete the work by approximately mid-2019. However, schedule complications and a City mandated stop work order, required scheduling adjustments. The current schedule provides that January 2021 as the completion date.
  - A key component of the schedule is the date the bridge will open for traffic, which per the contract is the NTP date + 15 months. That would be September 8, 2017. However, the City mandated work stoppage and other complications will delay this date. The revised date is still to be negotiated between Myers and DOT.

- Myers broke ground earlier this year and is actively working from Aliceanna Street and further south.
- Scope Changes and Change Orders
  - The City has requested several scope changes such as: substitution of high temperature rated conduit pipe in the vicinity of Veolia's hot water lines near Aliceanna, additional computers for City inspection staff, redesign/drafting of bridge plans per aesthetic decision change by the City, changing lights to LED, a delay while the north crane placement was confirmed near Ouzo Bay, restoration to culvert tops between Fleet and Lancaster, and potentially changing some multiple use poles to single use signal poles.
  - Third parties have requested and will pay for changes such as: Verizon's placement of their fiber optic lines in City conduit and Veolia will have a reinforced pavement section over their lines.
  - There are a few special scope changes/change orders such as the City's Engineering office sharing space with Myers because it could not be provided by Harbor East/Harbor Point as originally anticipated, additional monitoring on Harbor Point, and adding scuppers to the new bridge.
  - The majority of change orders have originated from Myers and include items such as restriction on staging areas, interactions with adjacent developers and property owners, various investigations for potential changes such as DPW's backflow preventer or DOT's realignment of the Lancaster Street intersections, the stop work order, usage of a crane on a barge instead of Harbor Point, various unexpected field conditions, conduit relocation costs, and the time it took between bidding and awarding. Many of the change order requests originating from Myers are disputed by the City and will have to be resolved either through negotiation or the contract mandated claims process.
  - The developer's agreement for Harbor Point TIF funding may be reduced to fund some incorrectly installed utilities that the Central Avenue Bridge will connect to and additional Living Classroom marina needed for a barge and crane to be delivered.

#### Logistics

- Design submittals are now mostly complete for the Fleet Street bridge and all work at Aliceanna and south, which includes most of the structural work. The Phase 2 Streetscape design review is approximately 1/3 complete.
- Construction submittals such as RFIs, material selection, shop drawings, redline revisions continue to be submitted.
- City design and City construction management sections are coordinating closely.

#### Special Concerns

- DOT now understands that the conditions on Harbor Point require additional monitoring and additional requirements imposed by Beatty Development, including contractor entry agreements currently being negotiated. Two such agreements have been executed by all parties.
- The Liberty Project/Whole Foods being constructed by Bozzuto for Harbor East is resulting in some work zone overlaps between Bozzuto and Myers.
- Conduit relocations and approvals are proving to be the most difficult and complicated approval discipline. This is due in part to the interaction of 3<sup>rd</sup> party

- lessees such as BGE, jacking under culverts, and overlap with Bozzuto's work zone.
- BGE's proposed gas work from Aliceanna to Harbor Point has been eliminated from the Project, which is a significant benefit and one less conflict concern.
- When the north portion of the Aliceanna Street bridge is under construction, the west-bound traffic is expected to be detoured to south side of Aliceanna. Bozzuto has stated to Harbor East that this will shut construction down. No solution has been found yet; discussions continue.
- DOT will provide a shuttle bus for 2.5 years to help reduce traffic congestion.
- Due to complexity and commitments of this Project, DOT has been conducting an
  extraordinary number of meetings and regular communication between DOT,
  Myers and various stakeholders. There is even a Project website.
- Traffic detours and congestion will be an ongoing concern.
- DOT's TR08310 project, which overlaps the design-build project, will have some underground structural repairs work in the near future. The impacts from this are to be determined.
- This is the City's first DB project and one of our largest in a generation. It also happens to be technically very complex, located in a highly developed and congested portion of the City and coinciding with fully engaged stakeholders and an aggressive time schedules. However, once the work shifts north of Aliceanna Street and the bridge opens for traffic the work should progress more smoothly.

Total Paid to Date

#### B. Minority and Women Owned Business Participation

Design Phase DBE participation

The Project is federally funded and state Disadvantaged Business Enterprise standards apply, not the City's MBE/WBE. Myers is fully committed to meeting the established 30% overall DBE goal and 2% design goal as follows. The breakouts below reflect the commitments that Myers had received at the time of bidding. Myers will continue to make some revisions as the design becomes more complete so it can effectively meet the participation goals:

		July 2017
Athavale, Lystad & Associates	\$428,500.00	\$363,718.09 (84.88%)
<ul> <li>Floura Teeter Landscape Architects, Inc.</li> </ul>	\$62,000.00	\$39,179.20 (63.19%)
<ul> <li>J.K. Datta Consultants, Inc.</li> </ul>	\$206,500.00*	** N/A
• Findling, Inc.	\$299,500.00	\$253,405.11 (84.61%)
Synterra Ltd.	\$82,900.00	\$82,900.00 (100.00%)

<sup>•</sup> Albrecht Engineering, Inc. \$62,000.00 \$500.00 (0.81%)

TOTAL DESIGN DBE PARTICIPATION \$1,141,400.00 (2%)
TOTAL DESIGN DBE PARTICIPATION THROUGH JULY 2017 \$739,702.40 (1.58%)

<sup>\*\*\*</sup>J. K. Datta chose to go out of business so Myers balanced their portion amongst the previously identified firms.

#### Construction Phase DBE Participation

• J&M Sweeping	\$250,000.00	\$0.00 (0.00%)
• Barbie's Recycling & Hauling, Inc.	\$1,200,000.00	\$1,020.00(0.09%)
• Load Runner	\$1,200,000.00	\$7,820.50(0.65%)
• Quarry Products Unlimited, Inc.	\$93,000.00	\$0.00 (0.00%)
<ul> <li>Machado Construction Co. Inc.</li> </ul>	\$4,400,000.00	\$11,326.87 (0.25%)
• Priceless Industries, Inc.	\$145,000.00	\$2,773.50 (1.91%)
<ul> <li>Native Terrain Restoration Services</li> </ul>	\$290,000.00	\$0.00 (0.00%)
• Traffic Systems, Inc.	\$2,650,000.00	\$0.00 (0.00%)
• Road Safety, LLC.	\$200,000.00	\$19,062.09 (9.53%)
• Nasir and Associates, LLC.	\$1,500,000.00	\$486,983.04 (32.47%)
<ul> <li>Mohawk Bridge &amp; Iron Inc.</li> </ul>	\$700,000.00	\$36,262.34 (5.18%)
• Wilton Corporation	\$200,000.00	\$0.00 (0.00%)
Remline Corporation.	\$82,900.00	\$5,401.82 (6.52%)

TOTAL CONSTRUCTION DBE PARTICIPATION \$12,910,900.00 (28%)
TOTAL CONSTRUCTION DBE PARTICIPATION THROUGH JULY 2017 \$570,650.16 (1.22%)

TOTAL DBE PARTICIPATION
TOTAL DBE PARTICIPATION THROUGH JULY 2017

\$14,052,300.00 (30%) \$1,310,352.56 (2.80%)

#### C. <u>Implementation and Policy Challenges with Recommendation</u>

The DBEC recognizes that the Project is in its earliest stages post procurement and understands that DOT does not yet have specific or detailed recommendations to make regarding implementation or policy challenges. DOT is compiling a data set of such matters which will be reviewed internally to arrive at detailed recommendations for the DBEC's consideration and inclusion in later DBEC reports.

# II. <u>DEPARTMENT OF PUBLIC WORKS</u> BACK RIVER HEADWORKS PROJECT SC 918H

The Department of Public Works ("DPW"), Back River Headworks Improvements Project ("Headworks Project") primarily entails construction of new headworks facilities, consisting of an influent pumping station, a fine screen facility, and a grit removal facility, and wet weather storage facilities. The City's Wet Weather Program determined that the construction of the Headworks Project is the single, most cost-effective solution to elimination of the City's sanitary sewer overflows and comply with the Wet Weather Consent Decree.

The Headworks Project is being delivered under the Construction Manager-at-Risk (CMAR) delivery method, and is the City's first CMAR project. The CMAR delivery method is essentially a hybrid of the Design Build method in that there is a distinct design phase followed by construction. One of the key distinctions between CMAR and DB is that there are two separate contracts; one for design, the other for construction. One procurement is used to

advertise both phases and only one firm is selected by the City. Following the design phase the winning bidder and the City engage in negotiations to agree on a Guaranteed Maximum Price ("GMP"). If the parties agree on GMP then the successful firm contracts with the City for the construction phase. If GMP cannot be agreed, then the City would be free to re-advertise the construction portion of the work.

The Headworks Project was originally advertised as a traditional design-bid-build project with a 100% design having been completed prior to advertising for bids. Two bids were received, the lowest of which was \$90,000,000.00 over the budget for the project. DPW then approached the DBEC about the possibility of structuring the Headworks Project using a modified CMAR method. DPW and the DBEC concluded that a modified CMAR delivery method had the best potential to reduce construction costs. The DBEC concluded that given the similarity between this CMAR project and traditional design build projects that the Headworks project should comply, to the greatest extent possible, with the Design Build Resolution of the Board of Estimates ("BOE") and be overseen by the DBEC. The BOE agreed and accepted the DBEC's recommendation to use the CMAR delivery method on January 27, 2016.

#### A. Project Status as of August 17, 2017

#### **Background Pre-Construction:**

- Project was advertised on January 29, 2016 after the BOE approved the request for Proposals using the CMAR method.
- Four proposals were received on March 2, 2016
  - All proposals were found to be responsive and were evaluated
- The evaluation process followed the procedures as established in the RFP which included review based on the following criteria
  - Qualifications and approach (65%)
  - Financial capacity and proposed fees (15%)
  - Interview (20%)
- Interviews were conducted on March 15, 2016
- All scoring was reviewed and finalized by the evaluation panelists on March 15, 2016
- March 25, 2016 Selection of preferred CMAR firm, a joint venture between Clark Construction and Ulliman Schutte, Inc. ("Clark/US")
- March 29, 2016 Presentation to DBEC which approved the selection of Clark/US.
- March 30, 2016 DPW notified Clark/US of DPW's intent to recommend award by the BOE to Clark/US, subject to reaching agreement on all terms and conditions and completion of all administrative procedures
- May 4, 2016 The BOE Approved award to Clark/US.
- May 25, 2016 CMAR firm submitted signed contract documents for processing by DPW.
- July 28, 2017 Notice to Proceed for Pre-Construction was issued.

<sup>1</sup> Modified by virtue of the fact that a 100% design existed. The design phase for the Headworks Projects, unlike traditional CMAR projects consists mainly of value engineering and to modify the 100% design to reduce costs.

- GMP Estimates were received:
  - November 2016.
  - January 2017.
- GMP package bids were received:
  - March 2017.
  - April 2017.
- GMP Negotiations progressed from April through May 2017.
- GMP Package and Pricing were submitted to the BOE for processing in May 2017
- GMP cost of \$429,776,789.
- BOE Approval of the GMP Package and Contract for the Headworks Construction was approved on June 28, 2017.

#### Construction Progress to Date:

- Construction Phase Milestones:
  - June 29, 2017 Construction NTP -- December 30, 2020 Technical Compliance Milestone.
  - October 31, 2021 Substantial Completion.
  - October 31, 2021 City issue Conditional Acceptance.

Actual construction for Sediment and Erosion Controls was started within 3 weeks of NTP. The excavation subcontractor, Stella May (WBE), has been onsite and has progressed with excavation of over 40,000 cubic yards of dirt. They have also installed a number of the dewatering wells which will be necessary for the control of groundwater and rainwater during construction on the site.

#### B. Minority and Women Owned Business Participation

The Pre-Construction phase of the project is being be funded by the City and Baltimore County therefore City MBE/WBE Goals of 10% and 3% respectively apply during the preconstruction process.

Pre-Construction Fee \$3,490,000.00

Contractual Participation Requirements: MBE \$349,000.00 10% WBE \$104,700.00 3%

#### Pre-Construction Phase MBE/WBE participation:

SUBCONTRACTOR	MBE CONTRACT	<u>Thru 04/30/17</u>	<u>Participation</u>
MBE Companies	MBE Goal	\$349,000.00	10.0%
Shah Associates	\$183,008.00	\$112,423.44	3.2%
Roane's	\$71,444.00	\$70,528.40	2.0%
SP Arch	\$34,868.00	\$18,720.00	0.5%
Native Sons	\$60,000.00	\$46,580.00	1.3%

Horton	\$20,800.00	\$20,800.00	0.6%
C. L. McCoy	\$7,000.00	\$3,000.00	0.1%
CMC Repro & Assoc.	\$9,309.72	\$9,309.72	0.3%
MBE Totals	\$386,429.72	\$281,361.56	8.1%
SUBCONTRACTOR	MBE CONTRACT	<u>Thru 04/30/17</u>	<u>Contract</u> <u>Amount</u>
WBE Companies	WBE Goal	\$104,700.00	3.0%
Stella May	\$46,812.00	\$43,327.00	1.2%
Carroll	\$48,722.00	\$29,940.00	0.9%
Keep U Clean Jan Svc	\$4,100.00	\$2,171.44	0.1%
CMC Repro & Assoc	\$9,309.72	\$9,309.72	0.3%
WBE Totals	\$108,943.72	\$84,748.16	2.4%

Overall Contract	\$3,490,000.00
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#### Construction Phase MBE/WBE Participation:

The Construction phase of the Headworks Project is being funded by the state's revolving fund therefore the state's Disadvantaged Business Enterprise standards apply and not the City's MBE/WBE standards. The Construction phase of the project has the MBE and WBE State Goals of 18% and 16% respectively.

The estimates for the MBE/WBE participation are showing 12.2% and 6.4% respectively at this time. The level of efforts expended on contacting regional and local DBE businesses has been documented and will continue to be recorded in accordance with MDE guidelines for reporting purposes.

The estimated percentages translate into the following dollar amounts to be spent with the MBE/WBE subcontractors, based on the Contract amount of \$429,776,789:

- MBE 12.2% \$52,342,515.00
- WBE 6.4% \$27,514,310.00

At this time the subcontracts are still being purchased and a follow up report with all of the listed MBE/WBE firms will be provided with the respective contract amounts. It would be imprudent to publish named firms until after the subcontract negotiations are completed.

#### C. Implementation and Policy Challenges with Recommendation

The DBEC recognizes that the Headworks Project is in its earliest stages post procurement and understands that DPW does not yet have specific or detailed recommendations to make regarding implementation or policy challenges. DPW is compiling a data set of such

matters which will be reviewed internally to arrive at detailed recommendations for the DBEC's consideration and inclusion in later DBEC reports.

### III. DEPARTMENT OF TRANSPORTATION COMPREHENSIVE CONDUIT FACILITY DESIGN, MANAGEMENT, AND CONSTRUCTION SERVICES PROJECT (PMAR) TR 16020

The Comprehensive Conduit Facility Design, Management, and Construction Services Project ("Project") is one of the Department of Transportation's ("DOT") and the City's first Program Manager at Risk projects. DOT approached the DBEC about the possibility of structuring the Project using a Program Manager at Risk ("PMAR") approach. DOT and the DBEC concluded that a modified PMAR delivery method had the best potential to reduce construction costs.

The PMAR delivery method is essentially a hybrid of the Design Build method. The DBEC concluded that given the similarity between this PMAR project and traditional design build projects that the Project should comply, to the greatest extent possible, with the Design Build Resolution of the BOE and be overseen by the DBEC. Suitability of the project for the PMAR approach was determined by several factors. During development of the Request for Proposals, DOT and the Conduit Section determined that an expedited schedule was required because untimely project execution would result in loss of available funding. Additionally, it was determined that the nature of the work is not conducive to Design-Bid-Build; inspection, design, construction, and database population must occur concurrently lending itself to Program/Asset Management. For maintaining the conduit infrastructure, design work does not necessarily dictate construction. Instead inspection reveals the need for design and then construction commences. The BOE agreed with the approach selected by DOT and DBEC and awarded the contract in August 2016.

The Project primarily consists of inspection of conduit manholes (i.e. the structural condition, duct occupancy, cable owner identification, etc.), installation of an asset security mechanism retrofitted to secure/monitor entry of conduit manholes and cable racks as needed; design, construction, excavation, modification, repair of manhole chimney top slab, manhole replacement, and conduit duct bank; construction management; data input into a GIS database; financial tracking and reporting; safety retrofits and program compliance system-wide.

#### A. Project Status as of August, 2017

- Project Awarded to KCI-CG Tri-Venture on August 10, 2016. Contract Amount \$26,108,286.00 (Professional Services \$5,841,986.00 Construction \$20,266,300.00) per year for five (5) years.
- Schedule Related
  - Notice to Proceed was issued for February 22, 2017.
  - The Contract expires February 20, 2022 with the option of two (2) one-year extensions.

- Scope Changes and Change Orders Though no change orders for this contract have been executed to date, it should be noted that zero cost change orders for quantity adjustments are imminent for a multitude of reasons:
  - 1. Due to project approach, proposed work is determined by inspection, therefore required quantities are not finalized until assessment of the inspection results.
  - 2. Aspects of the Asset Management Program cannot be initiated or executed within the first fiscal year due to the need to, first, acquire in-house resources, receive approval of approach from all stake holders including DOT administration, Legal, Agencies, and Conduit Lease Holders. Program is currently being developed within the Professional Service item of this contract but construction bid items and quantities have yet to be utilized.

#### Logistics

Within this Project, resources for reactive maintenance work; the traditional mantra of the Conduit Maintenance Section, has been determined to add capacity to existing JOC Contracts. Reactive maintenance, that is, service requests that consist of manhole frame and cover replacements, obstruction clearing, split duct installation, etc. has been established within this contract. However, the most significant component of this contract is formulating the processes, operating procedures, and work flows resulting in the anatomy of a proper asset management program (i.e. asset information, life cycle delivery, staffing, proactive maintenance, risk, and review).

#### **Special Concerns**

Contract for scope refinements, payment requirements of professional services as a lump sum construction item, and asset security risks. As previously mentioned DOT has identified several items that may need to be increased in quantity, decreased, or added to the contract. Furthermore, the scope of work for the Project is broadly defined and open to possible interpretation and dispute. The payment for lump sum items is typically item specific. However, DOT is not aware of a precedent for the measuring and payment of professional services by providing a detailed breakdown which provides a basis for estimating monthly progress payment.

#### B. Minority and Women Owned Business Participation

The Project is federally funded and state Disadvantaged Business Enterprise standards apply not the City's MBE/WBE. KCI-CG is fully committed to meeting the established 27% MBE and 10% WBE goal for professional services and 27% MBE and 7% goal for construction. The breakouts below reflect the commitments received at the time of

bidding. KCI-CG will continue to make some revisions as tasks are received so it can effectively meet the anticipated participation goals:

#### Professional Service DBE participation

•	AB Consultants, Inc	\$140,095.58	(2.4%)
•	Baker Engineering Services, Inc.	\$490,334.52	(8.39%)
•	Constellation Design Group, Inc.	\$280,191.15	(4.8%)
•	iCivil Inc.	\$70,047.79	(1.2%)
•	Infrastructure Technologies, LLC	\$70,047.79	(1.2%)
•	Ross Technical Services	\$224,152.92	(3.84%)
•	Sabra, Wang and Associates, Inc.	\$560,382.31	(9.59%)
•	SAMMS Engineering, LLC	\$560,382.31	(9.59%)

#### Construction Service DBE participation

•	Couser-Supply, Inc.	\$1,367,975.25	(6.75%)
•	Cuddy and Associates, LLC	\$1.215.978	(6.0%)
•	Machado Construction Co. Inc.	\$810,652.00	(4.0%)
•	Priceless Industries, Inc.	\$202,663.00	(1.0%)
•	R.E. Harrington Plumbing & Heating Company	\$1,621,304.00	(8.0%)
•	Sue Ann's Office Supply, Inc.	\$303,994.50	(1.5%)
•	Sunrise Safety Services, Inc.	\$202,663.00	(1.0%)
•	WSI, Inc./Washington Stair and Iron	\$1,418,641.00	(7.0%)

TOTAL PROFESSIONAL SERVICE DBE PARTICIPATION \$2,195,634.37 (38%)
TOTAL PROFESSIONAL SERVICE DBE PARTICIPATION THROUGH JULY 2017
\$117,069.25 (5.3%)

#### NO CONSTRUCTION INVOICE HAS BEEN SUBMITTED TO DATE

#### C. <u>Implementation and Policy Challenges with Recommendation</u>

The DBEC recognizes that this Project is in its earliest stages of post procurement and understands that DOT does not yet have specific or detailed recommendations to make regarding implementation or policy challenges. DOT is compiling a data set of such matters which will be reviewed internally to arrive at detailed recommendations for the DBEC's consideration and inclusion in later DBEC reports.