



STAFF REPORT

DATE: October 15, 2019
CONSENT

AGENDA ITEM: Authorize Topographic Survey and Final Design for the Stonegate Street and Utility Improvements

SUBMITTED BY: Jack Griffin, City Engineer

REVIEWED BY: Kristina Handt, City Administrator
Chad Isakson, Assistant City Engineer

ISSUE BEFORE COUNCIL: Should the City Council authorize a topographic survey and final design for the Stonegate Street and Utility Improvements?

BACKGROUND: The City of Lake Elmo is extending watermain to 65 homes located in the Stonegate 1st and 2nd Addition neighborhood. The properties reside in an area affected by PFAS contamination and well advisories have been issued. In addition to the watermain improvements, a street reclaim project for the Stonegate 2nd Addition neighborhood is scheduled as part of the 2020 Street CIP. The City approved a grant agreement with the MPCA at the October 1, 2019 Council meeting regarding these improvements.

The project extends the public watermain from the adjacent Inwood development along 10th Street North, then along the public streets, making a looped watermain connection to the adjacent Savona development. Individual water service stubs will be installed to the edge of right-of-way at each of the 65 residential properties. The project will include restoration following the watermain installation and this will include a street reclamation for the Stonegate 2nd Addition along with boulevard sodding throughout the project over the disturbed areas.

PROPOSAL DETAILS/ANALYSIS: Staff is recommending that a detailed topographic survey and final design be authorized to ready the improvements for construction in 2020. The City Engineer has met with Bolton and Menk, Inc. to prepare an engineering design scope of work and associated fee to provide support services to FOCUS Engineering for this project. BMI will provide engineering and surveying services that include topographic survey and mapping of existing conditions, preparation of plans and specifications and construction support services.

The Stonegate Street and Utility Improvements include the following described areas and as shown on the attached Location Map:

- Jasmine Ave North from 10th St. N to Julep Ave N. (No street improvements)
- 9th Street North, from the west end to the east end. (No street improvements)
- Jasmine Ave Place North, from Jasmine Ave N to the south end. (No street improvements)
- Julep Ave North, from Jasmine Ave N to Jewel Ave N.
- Julep Court N, from Julep Ave N to the east end.
- Jewel Ave North, from 10th St N to the south end.

FISCAL IMPACT: \$192,727.

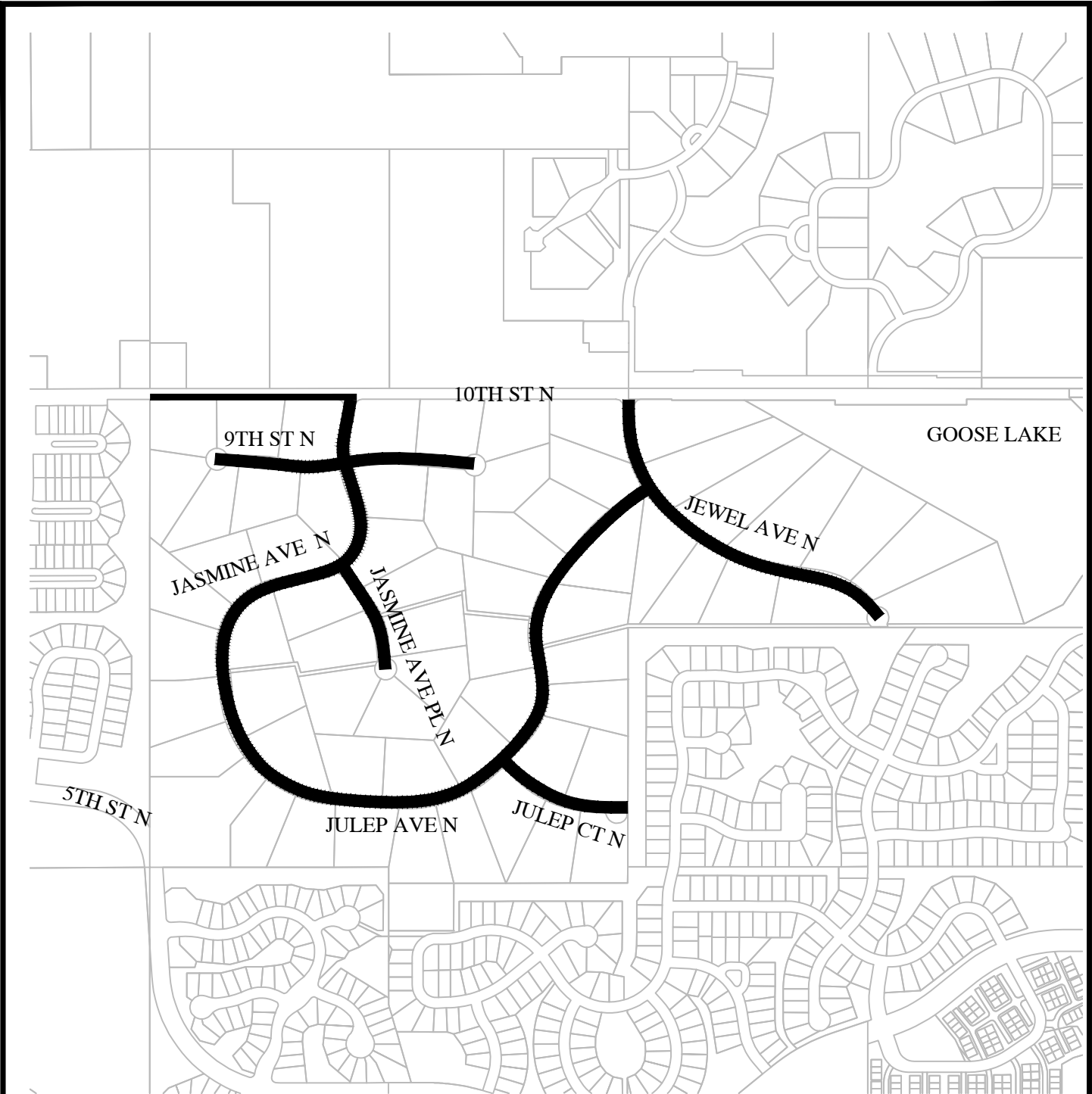
If authorized, Bolton and Menk, Inc. will initiate the topographic survey and final design services in a not to exceed amount of \$192,727. The engineering fees will be funded as a part of the project costs paid by the MPCA grant.

RECOMMENDATION: Staff is recommending that the City Council authorize Bolton and Menk, Inc. to complete the topographic survey and final design services for the Stonegate Street and Utility Improvements. The recommended motion for this action is as follows:

“Move to authorize Bolton and Menk, Inc. to complete the Topographic Survey and Final Design for the Stonegate Street and Utility Improvements in the not to exceed amount of \$192,727.”

ATTACHMENTS:

1. Project Location Map.
2. Bolton and Menk. Task Order No. 14 –Stonegate Street and Utility Improvements.



LEGEND

 STONEGATE NEIGHBORHOOD



FIGURE NO. 1

LOCATION MAP

STONEGATE NEIGHBORHOOD

FOCUS
ENGINEERING, inc.

STONEGATE ADDITION
STREET AND UTILITY
IMPROVEMENTS
PROJECT NO. 2019.120

In accordance with ARTICLE 1 of the Master AGREEMENT between the City of Lake Elmo (“CITY”) and Bolton and Menk, Inc. (“ENGINEER”), dated **MARCH 20, 2013** (“AGREEMENT”), the ENGINEER agrees to provide Professional Engineering Support Services as follows:

STONEGATE ADDITION: STREET AND UTILITY IMPROVEMENTS

PROJECT OVERVIEW: The City of Lake Elmo is extending watermain to 65 homes located in the Stonegate 1st and 2nd Addition neighborhood. The properties reside in an area affected by PFAS contamination and well advisories have been issued. In addition to the watermain improvements, a street reclaim project for the Stonegate 2nd Addition neighborhood is scheduled as part of the 2020 Street CIP. The Project includes Engineering Services for the Stonegate Addition: Street and Utility Improvements, including the preparation of Plans and Specifications and Contract Documents; Bidding Phase Services; Construction Staking; and Construction Administration support services to the City Engineer; all as detailed within this Task Order.

The project extends the public watermain from the adjacent Inwood development along 10th Street North, then along the public streets, making a looped watermain connection to the adjacent Savona development. The improvements include the extension of 10-inch and 14-inch HDPE watermain via trenchless methods. Individual water service stubs will be installed to the edge of right-of-way at each of the 65 residential properties. The project will include restoration following the watermain installation and this will include a street reclamation for the Stonegate 2nd Addition along with boulevard sodding throughout the project over the disturbed areas.

SERVICES TO BE PROVIDED BY ENGINEER: Bolton and Menk, Inc. shall provide the following Professional Engineering Services:

1. Project Management throughout the course of the work for preparation of design documents and construction phase services including submittal of a weekly progress memo and job to date budget form.

2. Preparation of Plans and Specifications, and Contract Documents.
 - Project kick-off meeting with city staff.
 - Work with city staff to develop critical success criteria for the project, obtain project information and formalize the budget and schedule.
 - Site visit to verify and review existing conditions and survey.

- Topographic Survey: Coordinate gopher state one utility locates and perform topographic survey of existing conditions within project limits for the purposes of preparing design documents.
- Prepare construction plans and specifications for bidding purposes.
- Identify small utility conflicts related to the proposed design to the City's Project Manager. The City will coordinate necessary relocation efforts with the respective small utility company as needed.
- Provide recommendation on the amount and location of soil borings for geotechnical investigation.
- Provide 60% plans and specifications to city for review, including design criteria and assumptions memorandum detailing the design decisions made in the plan preparation.
- Provide 90% plans and specifications to city for review, including updated design criteria and assumptions memorandum detailing the design decisions made in the plan preparation.
- Revise and final plans and specifications based on city comments.
- Prepare opinion of probable cost based on final plans.
- Identify permits required to complete the proposed work. The design shall incorporate measures to meet compliance requirements for all permits necessary.
- Prepare and submit any necessary permit applications for approval.

DELIVERABLES:

- Plans for each bid package in electronic format (PDF) and hard copy format (4 full size and 4 half size).
- Specifications for each bid package in electronic format and hard copy format (3 copies for the City and the appropriate number for contracts and required permits).
- Opinion of Total Probable Project Costs for each bid package.
- Design Memorandum summarizing final design assumptions and performance criteria incorporated into the project design.
- Identification of easements needed for the construction of the project. Easements shall be placed on the final plans.

3. Bidding Phase Services for each bid package.

- Submit "Advertisement for Bids" to Stillwater Gazette and Quest CDN.
- Distribute plans and specifications as requested by bidders.
- Maintain planholders list.
- Respond to bidders' questions and issue addenda as necessary.
- Attend bid opening and tabulate bids received in electronic format.
- Prepare contract award recommendation letter.

4. Construction Phase Services.

- Assist the city to prepare for the preconstruction meeting and attend meeting.
- Provide construction administration support throughout the project as requested by the City’s Project Manager (assume 40 hours from the design engineer of record).
- Coordinate and provide construction staking.
- Provide review of shop drawings and make recommendations regarding acceptability of submittals.
- Prepare and submit record drawings in electronic format (AutoCAD and PDF) and hard copy format (1 full size and three half-size) based upon staking information and information provided by the contractor and city.

5. City Responsibilities – The city (or its consultants) will provide the following:

- Coordination with the public and conduct public meetings.
- Preparation of Feasibility Report, if needed.
- Presentation(s) to the City Council.
- Easement negotiations and acquisition, if needed.
- Review of 60% and 90% plans and specifications.
- Coordination with small utility companies if conflicts are identified.
- Hire geotechnical firm for geotechnical investigation.
- Construction Administration.
- Construction Observation.
- One year warranty inspections.

TIMES FOR RENDERING SERVICES: ENGINEER shall perform its services and provide deliverables in accordance with the following schedule:

STONEGATE ADDITION: STREET AND UTILITY IMPROVEMENTS SCHEDULE

- | | |
|----------------------|---|
| 1. February 28, 2020 | Deliver final Plans and Specifications, and Post-Design EOC to city. |
| 2. March 17, 2020 | City Engineer presents Plans and Specifications for Council approval. |
| 3. April 23, 2020 | Receive Contractor Bids. |
| 4. May 5, 2020 | City Council accepts bids and awards Contract. |
| 5. May 26, 2020 | Issue Notice to Proceed. Contractor begins Work. |
| 6. October 23, 2020 | Substantial Completion. |
| 7. December 4, 2020 | Final Completion. |

CITY’S REPRESENTATIVE AND CONTRACT ADMINISTRATION: The CITY’s representative with respect to services rendered by ENGINEER under this TASK ORDER shall be the City Engineer. Project correspondence must be addressed to:

Jack Griffin, P.E., City Engineer
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042
651.300.4264
Email: Jack.griffin@focusengineeringinc.com

COMPENSATION: Compensation to ENGINEER shall be based on the hourly billing rates for each staff as assigned and provided in the ENGINEER's Proposal for the work. Invoices shall be submitted once each month and should be sent to the attention of the City Engineer.

Compensation to ENGINEER for Project Management, the Preparation of Plans and Specifications, Contract Documents, and Bidding Phase Services for the Stonegate Addition: Street and Utility Improvements shall be on an hourly rate basis in a not to exceed amount of **\$139,417**.

Compensation to the ENGINEER for the Construction Phase Services for the Stonegate Addition: Street and Utility Improvements shall be on an hourly rate basis in a not to exceed amount of **\$53,310**.

ADDITIONAL SERVICES: If authorized by the City, ENGINEER shall furnish or obtain from others Additional Services which are not considered under this Task Order. Such services shall be compensated for on an Hourly Rate basis in an amount approved by the City prior to any services being started or as otherwise mutually agreed. The City is not obligated to compensate ENGINEER for services completed outside the approved scope of work which are completed prior to ENGINEER submitting a written request to the City, and receiving written approval of the City.

ATTACHMENTS: This agreement supersedes and replaces all previous understandings, agreements or contracts, written or verbal, between ENGINEER and City, regarding the Stonegate Addition: Street and Utility Improvements. The following documents are attached for reference:

1. ENGINEER's Proposal to the CITY dated October 7, 2019.

APPROVAL AND ACCEPTANCE: Approval and Acceptance of this Task Order, including the attachment(s) listed above, shall incorporate this document as part of the AGREEMENT. ENGINEER is authorized to begin performance of services upon receipt of a copy of this Task Order signed by CITY.

The Effective Date of this Task Order is **October 15, 2019**.

BOLTON AND MENK, INC.

CITY OF LAKE ELMO, MINNESOTA

By _____

By _____

(Authorized Principal of the Firm)

City Administrator



**BOLTON
& MENK**

Real People. Real Solutions.

2035 County Road D East
Maplewood, MN 55109-5314

Ph: (651) 704-9970
Fax: (651) 704-9971
Bolton-Menk.com

October 7, 2019

Mr. Jack Griffin, P.E., City Engineer
City of Lake Elmo
3880 Laverne Avenue North, Suite 100
Lake Elmo, MN 55042

RE: Stonegate Addition - Street and Utility Improvements
City of Lake Elmo

Dear Mr. Griffin,

Stonegate Addition has two (2) neighborhoods in need of various street and utility improvements. The westerly neighborhood consists of Jasmine Avenue North, 9th Street North, and Jasmine Avenue Place North. The roadways in this neighborhood were improved in 2016. The goal is to install 10" HDPE and 14" HDPE watermain in this neighborhood via trenchless methods. Hydrants and valving would be installed along the routes and 1.5" water services would be extended to each lot. Mainline piping will be designed in the boulevards to minimize street and curbing replacement. The city would provide anticipated water service locations to each lot. Individual property owner meetings to determine existing well locations and proposed service locations are not included in our scope but could be added if requested.

The easterly neighborhood consists of Julep Avenue North, Julep Court North and Jewel Avenue North. The roadways in this neighborhood require the addition of concrete curb and a new bituminous surface. Reclamation will be utilized on the existing bituminous surface. Watermain improvements include the installation of 10" and 14" HDPE watermain via trenchless methods. Hydrants and valving would be installed along the routes and 1.5" water services would be extended to each lot. Mainline piping will be designed in the boulevards to minimize street disruption. The city would provide anticipated water service locations to each lot. Individual property owner meetings to determine existing well locations and proposed service locations are not included in our scope but could be added if requested. Storm sewer improvements will include resetting and/or possibly replacing castings and adjustment rings, and minor repairs to the structures.

A small pressure reducing valve (PRV) station is also anticipated along Julep Avenue N. We assume the PRV station would be similar to the station designed and implemented along 7th Street in the Savona development. We assume the City will provide the modeling to determine the location for the valve and the anticipated pressures upstream and downstream. For the purposes of this proposal, we assume the watermain would not be extended across 10th Street to serve the Whistling Valley subdivision. Future extension of watermain across 10th Street would likely change the design of the PRV station, and an analysis of the neighborhood elevations and anticipated pressures would need to be performed.

The scope of engineering and surveying services include project management, topographic survey, preparation of plans and specifications, bidding and construction phase services. The construction phase services include construction administration (40 hours), construction staking, record drawings and GIS shape files. We acknowledge the project schedule identified in the request for proposal and will work with you and your staff to meet all deadlines.

Funding for the project is assumed to be from a grant agreement between the City and the State, like the agreement in place for the construction of well #5. The main requirements of the agreement consist of applicable prevailing wages and insurance criteria for the contractor. A feasibility report may need to be

Name: Mr. Griffin
Date: October 7, 2019
Page: 2 of 2

prepared for this project and would be developed and presented to the city council at the same time as the approval of the plans and specs. The feasibility report preparation is considered outside our scope of work. However, we would work with the city to supply information being prepared with the plans and specs (quantities) to assist in the preparation of the report.

We propose to complete the work identified in the previous paragraphs for a fee of \$192,727. We propose to work on an hourly basis with a not-to-exceed amount. The attached Detailed Cost Estimate identifies our estimated hours and billing rates.

Thank you for the opportunity to submit the proposed for the Stonegate Addition Improvements. Please call me at (651) 728-3172 if you have any questions.

Sincerely,
Bolton & Menk, Inc.



Mike Warner, P.E.
Project Manager

Attachment – Fee Proposal

DETAILED COST ESTIMATE

Client: City of Lake Elmo Project: Stonegate Addition		BOLTON & MENK, INC.										
TASK NO.	WORK TASK DESCRIPTION	Project Manager Mike Warner	Design Engineer Coleton Nelson	Trenchless Technologies Mitch Hoeft	PRV Station Engineer TBD	Stormwater Manager Tim Olson	Stormwater EIT Dallas Jones	RL Surveyor Russ Halverson	Survey Technician Arron Eder	Survey Crew Chief TBD	Clerical Courtney Maul	Totals
1.0 Project Management												
1.1	Project Management	40										40
SUBTOTAL HOURS - TASK 1		40	0	0	0	0	0	0	0	0	0	40
2.0 Preparation of Plans and Specs and Contract Documents												
2.1	Project Kick-Off Meeting	3										3
2.2	Critical Success Criteria	1										1
2.3	Site Visit to Review Existing Conditions	3										3
2.4	Topographic Survey	4	24					10	20	140	4	202
2.5	Identify Small Utility Conflicts	2	4									6
2.6	Recommend Soil Boring Locations	1	2									3
2.7	Provide 60% Plans, Specs, and Design Criteria Memo	100	320	24	40	8	20					512
2.8	Provide 90% Plans, Specs, and Design Criteria Memo	40	160	16	20	4	10					250
2.9	Provide Final Plans and Specs	10	10	2	10	2	4				4	42
3.0	Opinion of Probable Construction Costs	4										4
3.1	Prepare and Submit Necessary Permits	2	4			8					2	16
SUBTOTAL HOURS - TASK 2		170	524	42	70	22	34	10	20	140	10	1042
3.0 Bidding												
3.1	Submit Ad for Bid	1									1	2
3.2	Distribute Plans and Specs										1	1
3.3	Maintain Planholder List										2	2
3.4	Respond to Bidders' Questions and Issue Addenda	8			2						1	11
3.5	Bid Tabulation	1									4	5
3.6	Prepare Contract Award Recommendation Letter	2										2
SUBTOTAL HOURS - TASK 3		12	0	0	2	0	0	0	0	0	9	23
4.0 Construction Services												
4.1	Attend Preconstruction Meeting	4										4
4.2	Construction Administration from Project Manager	40			16							56
4.3	Construction Staking		12					10	32	190		244
4.4	Prepare and Submit Record Drawings	4	40							16	2	62
4.5	Prepare and Submit GIS Shapefiles	2	20									22
SUBTOTAL HOURS - TASK 4		50	72	0	16	0	0	10	32	206	2	388

DETAILED COST ESTIMATE

Client: City of Lake Elmo		BOLTON & MENK, INC.											
Project: Stonegate Addition													
TASK NO.	WORK TASK DESCRIPTION	Project Manager Mike Warner	Design Engineer Coleton Nelson	Trenchless Technologies Mitch Hoeft	PRV Station Engineer TBD	Stormwater Manager Tim Olson	Stormwater EIT Dallas Jones	RL Surveyor Russ Halverson	Survey Technician Arron Eder	Survey Crew Chief TBD	Clerical Courtney Maul	Total Hours	Total Cost
1.0	Project Management	40	0	0	0	0	0	0	0	0	0	40	\$5,880
2.0	Preparation of Plans and Specs and Contract Documents	170	524	42	70	22	34	10	20	140	10	1042	\$130,588
3.0	Bidding	12	0	0	2	0	0	0	0	0	9	23	\$2,949
4.0	Construction Services	50	72	0	16	0	0	10	32	206	2	388	\$53,310
TOTAL HOURS		272	596	42	88	22	34	20	52	346	21	1493	
AVERAGE HOURLY RATE		\$147.00	\$105.00	\$165.00	\$165.00	\$138.00	\$108.00	\$154.00	\$130.00	\$145.00	\$95.00		
SUBTOTAL		\$39,984	\$62,580	\$6,930	\$14,520	\$3,036	\$3,672	\$3,080	\$6,760	\$50,170	\$1,995		
TOTAL FEE												\$192,727	