



CITY of NOVI CITY COUNCIL

Agenda Item G
June 18, 2018

SUBJECT: Approval to award civil engineering services to Spalding DeDecker for design engineering services associated with the Bosco Park Property project in the amount of \$85,225.00.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division
Parks, Recreational and Cultural Services

CITY MANAGER APPROVAL: *AA*

| | |
|-------------------------------|---------------------------|
| EXPENDITURE REQUIRED | \$ 85,225.00 |
| AMOUNT BUDGETED | \$ 2,000,000 |
| APPROPRIATION REQUIRED | N/A |
| LINE ITEM NUMBER | 400-691.00-977.028 |

BACKGROUND INFORMATION:

At the May 21, 2018 City Council meeting, a long-term use agreement was approved with the Novi Community School District for the undeveloped, vacant property on the west side of Beck Road and the south side of Eleven Mile Road. The City plans to develop and utilize the property for multi-purpose athletic and recreational fields with related amenities, including parking areas and access roads off Beck Road and 11 Mile Road.

The agreement allows the City to make improvements and maintain the land as public park land, open for use by the general public, and not for private operation. No indoor recreation is permitted, and no permanent structures are allowed, except for storage or maintenance structures agreed upon by the City and the School District. City staff is working with engineering consultant Spalding DeDecker to develop a conceptual plan and cost estimate for development of the park.

The attached *Design Engineering Services* proposal, executed by Spalding DeDecker, outlines the scope of services in more detail. The design fee rate submitted is a lump sum for the survey and engineering work. Surveying includes a topographical and alternate boundary survey, and an informational title search for a total cost of \$23,425.00. Engineering includes designing the site plan, preparing construction documents, and managing the bid of the project for a total cost of \$61,800.00. The total combined design engineering services is \$85,225.00. The estimated total construction cost is \$1,285,960.00.

The Engineering Division and Parks, Recreational and Cultural Services reviewed the scope of services proposal and recommend approval. Proposed completion for field development and seeding is fall of 2018 and active use pending turf establishment in late 2019.

RECOMMENDED ACTION: Approval to award civil engineering services to Spalding DeDecker for design engineering services associated with the Bosco Park Property project in the amount of \$85,225.00.

Bosco Park Property

Location Map

Eleven Mile Rd

Sierra Dr

Beck Rd

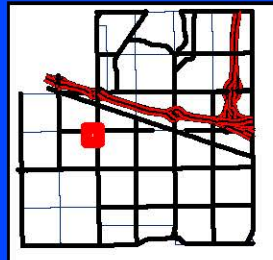
Sanford Dr



Proposed
Park Construction



Proposed
Parking Lot



City of Novi

Engineering Division
Department of Public Services
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org

0 45 90 180 270
Feet

1 inch = 226 feet



Map Author: Joseph Akers
Date: June 18, 2018
Project: Bosco Park Property
Version: 1.1

Amended By:
Date:
Department:

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

May 31, 2018

Mr. George Melistas
Engineering Senior Manager
City of Novi
45175 Ten Mile Road
Novi, Michigan 48375

Email: gmelistas@cityofnovi.org

**Re: City of Novi Park – 11 Mile and Beck Roads
Proposal for Civil Engineering Services
SD Job No.: PR18-168**

Dear Mr. Melistas:

Spalding DeDecker (SD) is pleased to provide the following proposal for the Proposed Park at 11 Mile and Beck Road.

Project Understanding

The City of Novi would like to develop a park at the Southwest corner of 11 Mile Road and Beck Road that will consist of softball/cricket fields, multi-purpose fields, walking paths and parking areas. The site is owned by the Novi School District and the City of Novi is entering into an agreement to develop the park. The City would like to begin work on the park in the summer of 2018 and be open for use in fall of 2019.

The initial development of the park will be to construct the various athletic fields, walks, drainage, irrigation, gravel parking area, approaches from 11 Mile and Beck Roads and walks along frontage of both roads. The conceptual plan provides 4 – 4v4 (60' x 90'), 4 – 7v7 fields (135' x 195'), 3 – 9v9 fields (165' x 240'), 2 – 11v11 fields (225' x 336'), and 1 softball/modified cricket field.

A complete set of construction documents will be provided including a overall site plan, detailed grading, stormwater drainage, irrigation, detailed entrance plans for both 11 Mile and Beck Roads, landscape plans and notes and details meeting the requirements of the City of Novi. Bid documents will be prepared from the construction documents including all drawings and specifications.

Based on the wetland maps for the City the most southwestern portion of the property has significant wetlands on the site. Prior to developing that portion of the site, the wetlands should be flagged and located. SD can coordinate the wetland delineation or the City can employ one of their environmental firms to provide that service. Our fee does not include any wetland delineation or surveying.



Proposed Scope of Services

Surveying

Topographical Survey

We will perform a topographical survey for the project including the following details:

- Mapping will include the portion of the site to be developed in the northeast quadrant. Limits will include this portion of the site and extend one-hundred feet beyond the site. Limits along Eleven Mile Road and Beck Road will include the full right of way width adjacent to the site.
- Base mapping will be performed using photogrammetric methods. Spot elevations at a random grid will be obtained, including apparent high and low points and terrain break lines. Contours will be generated and shown at one-foot intervals.
- The aerial base map will be supplemented with conventional on the ground surveying, including obtaining pavement grades where critical for roadway work as directed by our engineers. We will perform a complete walk through of the area to confirm the content of the mapping and add any obscured features as needed.
- Underground utilities will be shown based upon a combination of record information along with actual field-measurements for above-ground manifestations of underground utilities. We will obtain pipe invert elevations where possible.
- Property lines will be graphically shown based upon the legal description to be furnished to us. The base scope does not include performing a complete boundary survey.
- Mapping-grade aerial photography for will be obtained for the entire site, including the area to be developed in the northeast quadrant of the site and the remaining area in the southwest quadrant. Only the northeast portion will be mapped now, but the photography will be obtained for future reference so mapping could be obtained if desired.

Based upon the proposed use of aerial mapping for a portion of the work, it is critical to obtain the photography as soon as possible before vegetation develops.

Additional Survey – Complete Boundary Survey

If desired, we can perform a complete boundary survey. This would include showing record and measured parcel dimensions and area, and writing an as-surveyed legal description. We will compare adjacent legal description from tax records and note any apparent gaps, overlaps, or gores. We will show any easements furnished to us, and set property corners. If a recent title commitment is not available, we would advise Novi to have us obtain an informational title search.



Engineering

Site Plan

We will prepare a site plan of the proposed park for submittal to City planning department to ensure compliance with all the City ordinances. The site plan will show the layout and location of the athletic fields, parking lot, pathways, sidewalks, drives and approaches and required zoning notes and information for approval.

Construction Documents

We will prepare construction documents for the park including:

- Grading Plan – Grading plan will provide grading on all the fields and parking to provide positive drainage. The grading will be designed to balance the earthwork and avoid importing or exporting soils. A pad area will be graded for porta johns.
- Drainage Plan – Drainage plan will include storm sewers for the parking lot and storm sewers and underdrains to ensure proper drainage of the sports fields. Stormwater quantity and quality plans will be prepared. The fields will be designed with drain tiles to provide adequate drainage and avoid excessive crowns in the fields.
- Irrigation Plan –Irrigation plan will be prepared by for the athletic fields. Irrigation will be accomplished with the use of well. A hydrological study will need to be completed and as part of the well application to Oakland County Health Department.
- Landscape Plan – A landscape plan will be prepared showing the landscaping on the proposed berms to discourage vehicles from entering the park on off hours. The berms may vary depending on the ability to generate soil from the grading operations on-site.
- Entrance Detail – Detailed entrance plans will be prepared for the 11 Mile Road and Beck Road drives. The drive entrances will have deceleration/acceleration tapers and required left turn bypass lanes. Walks will be place along Beck Road.

Bidding

SD will prepare bid documents and assist the City with bidding of the project. The bidding documents will include the construction plans along with detailed specifications and contract documents. SD will answer RFI's and review the bids and make a recommendation as to the City Council as to the lowest, responsive, responsible bidder.

Construction Cost Estimate and Proposed Fees

Based on our pre-qualification status with the City, engineering design fees are based on a percentage of the pre-design construction cost estimate. The fee percentage used depends on the type of services to be provided based on the proposed work. However, the nature of this project does not correlate to the types of services pre-established in the fee table. The fees below are based on estimated hours to complete the work.



FEE

We will perform the work for the following lump sum fees:

Survey

| | | |
|------------------------------|-------------|--|
| Topographical Survey: | \$18,925.00 | lump sum |
| Alternate (Boundary Survey): | \$ 4,500.00 | lump sum |
| Informational Title search | \$ 500.00 | reimbursable expense (budget estimate) |

Engineering

| | | |
|---------------------------------------|--------------------|-----------------|
| Site Plan: | \$ 5,200.00 | lump sum |
| Construction Documents: | \$53,400.00 | lump sum |
| Bidding | <u>\$ 3,200.00</u> | lump sum |
| TOTAL FEE | \$80,725.00 | lump sum |
| TOTAL FEE W/ALTERNATE BOUNDARY | \$85,225.00 | lump sum |

Project Schedule

The following summarizes the anticipated schedule for the project:

| <u>Milestone</u> | <u>Completed By</u> |
|--|---------------------|
| Council Award | 6/18/2018 |
| Site Plan | 6/22/18 |
| Construction Documents | 7/2/18 |
| 100% Bid Package & Advertising | 7/10/18 |
| Bid Opening | 7/24/18 |
| Construction Contract Award by Council | 8/13/18 |
| Construction Start, estimated | 8/27/18 |
| Construction Completion, estimated | 10/1/18 |

Mr. George Melistas
May 31, 2018
Page 5 of 4



Thank you for your selection of SD to provide design services for the Proposed Park project. Please do not hesitate to contact me if you have any questions or comments regarding this submittal.

SPALDING DEDECKER ASSOCIATES, INC.

David E. Richmond, PE
Project Manager

OPINION OF PROBABLE CONSTRUCTION COST

CONCEPTUAL PLAN

PROJECT NAME: NOVI PARK - NE CORNER
 CLIENT NAME: CITY OF NOVI
 PREPARED BY: DER/TER

PROJECT NO: PR18-168
 DATE: 16-May-18

| NO. | ITEM | QUANTITY | UNIT | UNIT PRICE | TOTAL AMOUNT |
|--|---|----------|------|-----------------------------|--|
| 1 | Bonds, Insurance and Mobilization (5% Max) | 1 | LS | \$ 72,300.00 | \$ 72,300.00 |
| 2 | Pre-Construction Audio-Visual | 1 | LS | \$ 5,000.00 | \$ 5,000.00 |
| 3 | Soil Erosion Control Measures | 1 | LS | \$ 5,000.00 | \$ 5,000.00 |
| 4 | Temporary Traffic Control Devices | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| 5 | Clearing , Tree Removals, & Tree Protection | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| 6 | Excavation, Earth | 41,500 | CY | \$ 4.00 | \$ 166,000.00 |
| 7 | Seed & Mulch Fields, Landscaping | 1 | LS | \$ 134,150.00 | \$ 134,150.00 |
| 8 | Site Drainage System | 1 | LS | \$ 250,000.00 | \$ 250,000.00 |
| 9 | Gravel Pathway (6 Inch, 6 FT wide) | 3,200 | SY | \$ 10.00 | \$ 32,000.00 |
| 10 | Gravel Parking Lot (8 Inch) | 11,000 | SY | \$ 13.00 | \$ 143,000.00 |
| 11 | 8' Wide Concrete Walk, 4 Inch | 3,600 | SF | \$ 7.00 | \$ 25,200.00 |
| 12 | HMA Entrances (Beck Rd and 11 Mile Rd) | 1 | LS | \$ 76,400.00 | \$ 76,400.00 |
| 13 | Irrigation, Well | 1 | LS | \$ 200,000.00 | \$ 200,000.00 |
| 14 | Baseball Field Appurtances | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| 15 | Restoration | 1 | LS | \$ 15,000.00 | \$ 15,000.00 |
| Construction Subtotal: | | | | | \$ 1,169,050.00 |
| | | | | Contingency: 10% | \$ 116,910.00 |
| Construction Total: | | | | | \$ 1,285,960.00 |
| | | | | Design Engineering: | NA \$ 85,225.00 |
| | | | | Geotechnical Investigation: | \$ - |
| 17 | Inspection (Crew Days at \$700/Day): | 40 | | | \$ 28,000.00 |
| | | | | Contract Administration: | 3.50% \$ 45,008.60 |
| | | | | Material Testing: | 2.0% \$ 25,719.20 |
| | | | | ROW Acquisition: | |
| | | | | Permitting: | |
| | | | | [Other Non Bid Items]: | |
| OPINION OF PROBABLE CONSTRUCTION COST | | | | | Total Estimated Project Cost: \$ 1,469,913.00 |

In providing opinions of probable construction cost, the Client understands that the Consultant has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the Co

PRELIMINARY OPINION OF PROBABLE PROJECT COSTS

| Project ID# | CIP Budget Category | Opinion as of | Total Project Cost |
|-------------|--|---------------|--------------------|
| NEW | Parks, Recreation, & Cultural Services | May 2018 | \$1,610,172 |

Bosco Park Property

Construction of a park near 11 Mile and Beck to include soccer fields and a softball field.



| | |
|--|------------------|
| Design Engineering | \$ 61,800 |
| Right-of-Way Acquisition | \$ - |
| Geotechnical Design | \$ - |
| Other | \$ 23,425 |
| TOTAL ENGINEERING | \$ 85,225 |
| * Contingency | \$ 8,523 |
| <i>* Contingency Notes:</i> | |
| 10% | |
| TOTAL ENGINEERING (including contingency) | \$ 93,748 |

| | |
|---|---------------------|
| Construction | \$ 1,169,050 |
| Construction Engineering | \$ 40,917 |
| Crew Days | \$ 28,000 |
| Material Testing | \$ 25,719 |
| Other | \$ - |
| TOTAL CONSTRUCTION | \$ 1,263,686 |
| * Contingency | \$ 252,738 |
| <i>* Contingency Notes:</i> | |
| 20% | |
| TOTAL CONSTRUCTION (including contingency) | \$ 1,516,424 |

| BUDGET DETERMINATION BASED ON YEAR AWARDED | | | |
|--|-------------|---------|-------------|
| 2018-19 | \$1,610,173 | 2023-24 | \$1,866,632 |
| 2019-20 | \$1,658,478 | 2024-25 | \$1,922,631 |
| 2020-21 | \$1,708,233 | 2025-26 | \$1,980,310 |
| 2021-22 | \$1,759,480 | 2026-27 | \$2,039,719 |
| 2022-23 | \$1,812,264 | 2027-28 | \$2,100,911 |

Outside Funding?

CONCEPT PLAN



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CITY OF NOVI PARK PROJECT

CONCEPT PLAN

SECTION PRIVATE CLAIM
TOWN RANGE
CITY OF NOVI
OAKLAND COUNTY

| NO. | DATE | REVISION |
|-----|------|----------|
| | | |
| | | |
| | | |

| | |
|-----------------------------|-----------------|
| DRAWN BY | DATE |
| DESIGNER D. RICHMOND | DATE 5-15-18 |
| CHECKED | DATE |
| PROJECT MANAGER | BID PLAN DATE |
| DEPARTMENT MANAGER APPROVAL | DATE |

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|---------------|-------------|
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