

SCOPE OF SERVICES

Project Description and Scope Overview

This scope of services (“scope”) covers the tasks to complete surveying and engineering design services for the Rockwood Storm Drainage Improvement Project (“project”). The project area includes the residential Rockwood Heights and Rockwood Plaza subdivisions that extend from south of East 28th Terrace to north of East 25th Terrace, and between South Hardy Avenue and South Northern Boulevard. The project includes the following general tasks:

- Design storm sewer system improvements within the project area, from south of East 28th Terrace to north of East 25th Terrace. The Engineering Report dated July 1, 2022 for this project identifies design alternative 3 as the recommended alternative. The storm sewer system design for this project will generally follow the alignment and configuration from the recommended alternative, with the exception of the section between 26th Street and 25th Terrace where an open channel section will be evaluated.
- Replacement and possible relocation of existing storm sewer inlets with city standard inlets and structures, and adding new storm sewer inlets as necessary.

The work tasks will be performed by Olsson Inc (“Olsson”) for the City of Independence, Missouri (“city”).

Olsson shall be fully responsible for the professional quality, technical accuracy, readability, and completeness including coordination of designs, drawings, and specifications as is ordinary possessed and exercised by a professional consultant in the same community under similar circumstances. If Olsson fails to meet the foregoing standard, Olsson will perform at its own cost, and without reimbursement from the city, the professional services necessary to correct errors and omissions which are caused by Olsson’s failure to comply with the above standard. Prior to each submittal of plans to the city for review, Olsson shall provide quality control on the plans by the project manager. A letter is required from Olsson’s project manager to the city, stating that the final plan quantities have been calculated and checked for accuracy to the best of the firm’s ability. The professional services, necessary to correct errors and omissions during construction, shall include any data, property descriptions, surveying, plans, designs, and specifications. Olsson shall provide such services as expeditiously as is consistent with professional performance.

General Design Requirements

Olsson shall furnish and perform the various professional duties and services required for the construction of the project as outlined in this scope. All plan development stages shall be completed no later than the current project's schedule, exclusive of delays beyond Olsson’s control.

Olsson shall design the project in conformity with the most current version of the following criteria:

- City’s Public Works Design Standards (Updated: May, 2021)
- APWA 5600 design criteria.
- The current version of the Manual on Uniform Traffic Control Devices (MUTCD) as adopted by the city.

The design plans shall be signed and sealed by the licensed professional engineer responsible for the preparation of the design plans. Right-of-way and easement descriptions shall be signed and sealed by a Missouri Registered Professional Land Surveyor responsible for the preparation of these descriptions.

- patios, size and species of trees 2 inches and larger, shrubs, bushes, landscaping, and property pins. The topographic survey area is assumed to be 3.8 acres in size.
4. Where there is a group of trees, show the outside limits and label accordingly.
 5. Contact Missouri One Call and obtain available mapping from all pertinent utilities for locates of existing utilities and tie them into the topographic survey. Include sizes of utility lines.
 6. Obtain plat information from Jackson County's records and incorporate into the basemap.
 7. Prepare survey base map depicting above information, including property lines, ownership and easement dimensions and information.

Task 202 – Geotechnical Investigation

Olsson shall perform the following specific work tasks for a geotechnical investigation in the proposed project area:

1. Olsson will coordinate public utility locating services. This proposal assumes private utility lines will be marked prior to us mobilizing to the site. Additional fees may be required if utilities are improperly marked or unmarked. This proposal also assumes the site is accessible with a truck-mounted drilling rig and the boring locations will all be within public right-of-way.
2. Olsson will drill a total of three (3) borings in the project area, at the upper, middle, and lower end of the project. Each of the borings will be drilled to practical auger refusal on limestone bedrock or to a maximum depth of 15 feet, whichever comes first. Water levels will be recorded during and immediately following completion of drilling operations. Upon completion, the borings will be backfilled with auger cuttings.
3. A boring location plan and boring logs for these three boring locations will be prepared showing depth to bedrock information for use with the project design.

Task 203 – Field Check, Structure Staking, and Utility Coordination Meeting

Following the survey basemap creation, Olsson will prepare plan view drawings showing proposed storm sewer system alignments. Olsson will attend a field check review meeting with city staff to review these alignments. Two (2) Olsson staff will attend the field check. The field check is to assess the accuracy of the survey, proposed structure locations, and determine conflicts with topographic conditions and utilities.

Immediately prior to the field check, Olsson surveyors will stake the center of the proposed drainage facilities with elevations noted for each top of structure.

Olsson shall contact and work closely with utilities to determine the locations of existing and planned facilities to be shown on the plans. Olsson shall prepare correspondence to all utility companies at the proper times during the design phase and will provide plans to utilities prior to the utility coordination meeting. This initial utility coordination meeting will occur on the same day as the field check meeting, with the field check happening in the morning and the utility coordination meeting following at city hall in the afternoon.

Task 204 – Public Meeting

Three (3) Olsson staff will attend a public meeting for residents in the project area at the beginning of the project to gather project related flooding and storm sewer system information. Olsson will prepare a project area map with an aerial background showing parcels, existing storm sewer system, proposed concept storm sewer system alignment, and other pertinent site information.

- Erosion control plans. All disturbed areas are assumed to be sodded or hydroseeded.
- Standard details.
- Quality control review.

All proposed structures or improvements shall be located by station and offset or their coordinate values on the plans. There shall be a note as to the exact point(s) being located for each type of structure or improvement on the final plans. The location of property lines, utilities, and other conflicts that will impact the design will be included in the plans.

Task 303 – Opinion of Probable Construction Cost (OPCC)

Olsson will prepare an OPCC based on the information provided in the preliminary plans. The OPCC shall include construction quantities, unit costs, and a 15% construction contingency.

Task 304 – Preliminary Submittal and Progress Meeting

Olsson shall submit two (2) copies of half-size (11x17-inch) plans and one (1) full size (22x34-inch) set of the preliminary plans and OPCC for formal city review. Following the city review, Olsson will attend a project progress meeting to discuss the review comments.

Task 305 – Ownership and Abutting Property Information

Olsson will work through the city contracted title company for ownership information investigations and obtain full title reports for each property where easements are required by this project (title reports for 30 properties are assumed). The costs associated with ownership information investigations shall be included in the total compensation fee for this project.

- Provide spreadsheet related to ownership including:
 - Owner Name.
 - Address.
 - Site Address.
 - Easements.
 - Square Footage.
- Title information will be provided in electronic format.

Task 306 – Easement Documents

Describe easements necessary to complete project.

- Furnish legal descriptions sealed by an RLS licensed in the state of Missouri. Legal descriptions are also to be provided in a digital format compatible with Microsoft Word (30 legal descriptions are assumed).
- Prepare permanent and temporary construction easement descriptions and figures in accordance with the city’s acquisition requirements.
- Prepare tract maps (30 tract maps assumed), including.
 - Title block, including a graphical scale and north arrow.
 - Ownership boundaries and information.
 - Existing rights-of-way and easements.
 - Proposed takings identified with text and graphically.
- Submit 8 1/2 x 11-inch exhibits and legal descriptions of each property required for easement acquisition to the city. Up to 30 properties are included in the scope.

army (DA) permits that meet a set of nationwide standards that have minimal individual and cumulative environmental impacts. Nationwide permits are required when jurisdictional aquatic impacts occur related to a project. Olsson will follow the Clean Water Act regulations (33 CFR Parts 320-332) and Section 404(b)(1) Guidelines (40 CFR Part 230). Nationwide permits include a description of the Project, aquatic impacts, threatened and endangered species (desktop evaluation), and cultural resources (desktop evaluation). Following completion of the permit, Olsson will submit the permit request to the USACE for permit issuance. Olsson will follow-up with additional USACE requests within the limitation of the assumptions outlined below. The stream mitigation cost associated with this Nationwide Permit are not included in the design fee.

Phase 400 – Final Design

Task 401 – Final Plans

Final design plans and specifications shall be clearly stamped “Final” or otherwise indicated. A transmittal letter shall accompany this submittal addressing city staff’s comments on the preliminary design. The city’s project number shall be included upon all plans and correspondence.

Olsson will prepare correspondence indicating significant changes in scope or design from information submitted as part of the preliminary plans. If such changes occur, all information required as part of the preliminary plans shall be resubmitted for items which have changed and all portions of the project which have been affected by the change(s).

Olsson will prepare a written narrative which outlines how city review comments were addressed in the final plan submittal.

Prepare final plans (assuming a maximum of 40 sheets), incorporating all preliminary plan review and field check comments from city staff. At a minimum, the final plans shall include all information from the preliminary plans plus the following detailed design additions:

- Update cover sheet, legend, general notes, typical sections, and survey references.
- Project quantities schedule, including a removals schedule.
- Easement and ownership sheet that illustrates property lines, right of ways, existing and proposed easements, and a table listing in square feet all the required temporary construction easements and permanent easements. All easement dimensions shall coincide with the legal descriptions.
- Plan and profile sheet updates, including proposed swale grading shown on the plan and profile sheets.
- Where grading is not over a proposed pipe, a grading plan which clearly indicate limits of grading.
- Overflow channels and swales used to accommodate the maximum design storm shall be defined and the effects of velocity/shear determined for cover selection.
- Updated hydrologic and hydraulic summary tables detailing capacities for each inlet and conduit. Add hydraulic grade lines to the storm sewer profiles.
- Driveway replacement dimension table. Driveway profiles will only be provided in complex drive replacement situations.
- Typical details for road closures during construction

- Locate the city's water main horizontally and pothole where appropriate to determine depths of the system.
- Permit fees
- Stream mitigation fee

Additional Services

Should the city request work in addition to the Scope of Services, Olsson shall invoice city for such additional services (Additional Services) at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Additional Services without prior written approval from the city. The following services are excluded from this scope of services and would be considered Additional Services for this project:

- The proposed storm sewer alignment follows a narrow corridor between homes. If the proposed storm sewer alignment is to deviate to from its existing alignment elsewhere or due to constructability concerns outside the proposed survey corridor and additional topographic survey is needed, an amendment to the contract will be necessary.
- Project cross-sections.
- Home and street flooding assessment, and home low opening elevations.
- Water main relocation plans.
- Meetings to discuss the impacts during construction with individual property owners.
- Additional public meetings.
- Surveying potholed utilities.
- Structural design and details.
- Traffic control plans.
- Meet with the city to identify easement and right-of-way locations beyond what is discussed at the field check.
- Revise legal descriptions, tract maps and/or easement descriptions prior to acquisition and construction as requested by the city.
- Updated title reports.
- Federal, state, or local permits beyond the permits discussed in Phase 300.
- Intersection details.
- ADA ramp details.
- Pavement marking and permanent signage plans.
- Construction staking
- Bidding Services
- Construction Services

Hourly Fee Table
Rockwood Storm Drainage Improvement Project
City of Independence, MO
 March 15, 2023

TASK DESCRIPTIONS		Personnel Classification: Average Hourly Rate:	Project Manager \$210	Assoc. Engineer \$125	Assist. Geotech \$112	Project Scientist \$124	Eng. Technician \$110	RLS Surveyor \$180	Survey Tech. \$115	Survey Crew \$165	Total Hours	Total Fees	Expenses	TOTALS	
Phase 100 - Project Management and Coordination															
Task 101 - Project Kickoff Meeting			4	4							8	\$1,340	\$50	\$1,390	
Task 102 - Design Schedule			4	6	0	0	0	0	0	0	2	\$250		\$250	
Subtotal											10	\$1,590	\$50	\$1,640	
Phase 200 - Field Data Collection															
Task 201 - Field Survey and Office Survey								24	70	130	224	\$33,820	\$350	\$34,170	
Task 202 - Geotechnical Investigation					6						6	\$672	\$3,000	\$3,672	
Task 203 - Field Check, Structure Staking, and Utility Coordination Meeting			10	24			8		6	8	48	\$7,110	\$120	\$7,230	
Task 204 - Public Meeting (3 Olsson staff to attend)			4	8			8				20	\$2,720	\$90	\$2,810	
Subtotal			14	32	6	0	8	24	76	138	298	\$44,322	\$3,560	\$47,882	
Phase 300 - Preliminary Design															
Task 301 - Project Hydrology and Hydraulics Analysis			4	32							36	\$4,840		\$4,840	
Task 302 - Preliminary Plans			16	200			64				280	\$35,400		\$35,400	
Task 303 - Opinion of Probable Construction Cost (OPCC)			2	8							10	\$1,420		\$1,420	
Task 304 - Preliminary Submittal and Progress Meeting			4	6							10	\$1,590	\$50	\$1,640	
Task 305 - Ownership and Abutting Property Information (30 properties @ \$125/Report Assumed)				12				8	16	16	24	\$3,280	\$3,750	\$7,030	
Task 306 - Easement Documents and Staking (30 properties assumed)			4	8			8		60		118	\$16,440		\$16,440	
Task 307 - Public Meeting (3 Olsson staff to attend)			4	6							20	\$2,720	\$90	\$2,810	
Task 308 - Land Disturbance Permit			4	6							10	\$1,590		\$1,590	
Task 309 - Initial Site Assessment and Desktop Resources Analysis			2	8		32					40	\$5,138	\$60	\$5,198	
Task 310 - USACE Nationwide Permit			2	8		40					50	\$6,380	\$60	\$6,440	
Subtotal			38	286	0	72	72	38	76	16	598	\$78,798	\$4,010	\$82,808	
Phase 400 - Final Design															
Task 401 - Final Plans			8	80			56				144	\$17,840		\$17,840	
Task 402 - Project Specifications			8	40							48	\$6,680		\$6,680	
Task 403 - Final OPCC			2	14							16	\$2,170		\$2,170	
Task 404 - Final Submittal			2	4							6	\$920		\$920	
Task 405 - Public Meeting (3 Olsson staff to attend)			4	8			8				20	\$2,720	\$90	\$2,810	
Task 406 - Utility Coordination			4	14			4				22	\$3,030	\$60	\$3,090	
Task 407 - Project Bid Plans			4	48			40				92	\$11,240		\$11,240	
Subtotal			32	208	0	0	108	0	0	0	348	\$44,600	\$150	\$44,750	
Total All Tasks			88	532	6	72	188	62	152	154	1254	\$169,310	\$7,770	\$177,080	
												TOTAL FEES & EXPENSES			\$177,080