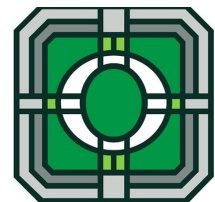




CiorbaGroup
CONSULTING ENGINEERS

Proposal for:

Fernway Road & Ditch Reconstruction
Phases 7, 8 and 9



**ORLAND
PARK**

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Scope of Services

Ciorba Group's Project Team has the technical expertise required by the Village of Orland Park to complete the Phase II design engineering services for the Fernway Road and Ditch Reconstruction Phase 7, 8 and 9 project. Ciorba Group will follow the requirements and scope of services as outlined in the Village's RFP and as described below.

1. Meetings, Coordination and Data Collection

Ciorba Group will attend an initial kick off meeting with the Village to review the proposed scope of improvements, engineering parameters, and project schedule. Prior to this meeting, Ciorba will request the following information to be provided at the meeting if possible: Electronic copies of standard Village specifications, contract conditions and details; Village public utility atlases and GIS data; any available right of way information; and historic as-built plans. An additional meeting will be scheduled with the Village to discuss plan review comments.

Coordination will be conducted with the Village, ILAW and the various private utility companies with facilities within the project limits. We will obtain atlases from private utility companies once Notice to Proceed is received from the Village. This information will be added onto our base sheets with the drafted topographic survey data. A critical item is to identify any private utility adjustments or relocations as soon as possible. During design, the staff will identify any potential conflicts so that the utility company can be contacted immediately to verify the conflict. Utility coordination will go beyond contacting the various companies about potential adjustments of their facilities. Once verified, we will request the private utility company develop a schedule for the adjustment or relocation to avoid delaying the start of construction. We will also discuss with utility companies any known future improvements planned for the project area so that the work can be coordinated with the roadway construction.

2. Topographic Survey and Base Sheet Preparation

Horizontal and vertical topographic survey will be completed the entire length of each street in the project. Survey tasks will include setting horizontal and vertical control; establishing the approximate existing right-of-way boundary based on monumentation found in the field and other records; isolated survey of rear yards; and obtaining public utility information and conditions. Collecting storm sewer and sanitary sewer manhole inverts and frame elevations will be important to identify potential conflicts.

Once the survey is completed, the topographic data will be used to develop base sheets for the design plan preparation.

3. Preliminary Plans, Specifications and Cost Estimates

Ciorba Group will prepare preliminary plans, specifications, and cost estimates for submittal to the Village for review. The plans will include but are not limited to: Title Sheet; General Notes; Summary of Quantities; Typical Sections; Maintenance of Traffic Notes and Details, Plan and Profile; Erosion Control Plan; Quantity Schedules; Cross Sections; and Special Details. All specifications will conform to the IDOT Standard Specifications for Road and Bridge Construction and Village of Orland Park requirements. Special Provisions will be prepared for pay items not addressed by the Standard Specifications. A Status of Utilities will be included in the specifications. An Estimate of Time and an Opinion of Probable Cost will be prepared for this submittal. Before the preliminary PS&E are submitted to the Village, a QC/QA Engineer not associated with the project's day to day work efforts will review the documents in accordance with the established QC/QA Plan.

Information will be requested from the Village's Public Works Department on any reported drainage issues. Ciorba will investigate these reports and develop improvement concepts for Village review. As directed, the improvement concepts will be incorporated into the plans. Maintenance of traffic plans will consist of IDOT standards as well as notes and special details. The Village will provide supplemental soil borings and geotechnical report of the existing pavement section conditions.

4. Permits

Ciorba will submit permit applications to the necessary regulatory agencies. We anticipate that only a National Pollutant Discharge Elimination System (NPDES) permit and Storm Water Pollution Prevention Plan (SWPPP) with Notice of Intent (NOI) will be prepared for submittal. If any sanitary sewers or structures will be impacted during construction, we will work with ILAW to replace or adjust any of their facilities in accordance with their requirements.

5. Final Plans, Specifications and Cost Estimates

The PS&E will be revised per Village comments on the preliminary documents. After a last QC/QA review, the final PS&E will be submitted to the Village for bid letting review. Final last-minute adjustments will be made to the documents if required by the Village.

Ciorba Group anticipates that the final plans, specifications, and cost estimates will be completed and approved by the Village on schedule for a spring 2022 start of construction. Our design goal for the roadway and ditch improvements will be to minimize impacts to both private and public utilities and thereby avoid delays to the start of construction.



Proposal

Cost Estimate and Consultant Services

Client: Village of Orland Park

Date: 9/10/2021

| ITEM | MANHOURS (A) | PAYROLL (B) | (2.8) TIMES PAYROLL (C) | DIRECT COSTS (D) | SERVICES BY OTHERS (E) | TOTAL (C+D+E) | % OF GRAND TOTAL |
|--|-----------------|----------------|-------------------------------|------------------------|---------------------------------|------------------|------------------------|
| Meetings, Coordination & Data Collection | 33 | \$ 1,474.99 | \$ 4,129.97 | \$ 73.60 | | \$ 4,203.57 | 2.27% |
| Topographic Survey | 202 | \$ 8,445.65 | \$ 23,647.81 | \$ 1,336.80 | | \$ 24,984.61 | 13.52% |
| Water Resources and Permitting | 328 | \$ 12,925.26 | \$ 36,190.74 | | | \$ 36,190.74 | 19.58% |
| Engineering Plans | 963 | \$ 37,835.14 | \$ 105,938.39 | | | \$ 105,938.39 | 57.31% |
| QC/QA | 32 | \$ 2,720.00 | \$ 7,616.00 | | | \$ 7,616.00 | 4.12% |
| Project Management & Administration | 30 | \$ 2,110.02 | \$ 5,908.06 | | | \$ 5,908.06 | 3.20% |
| TOTALS | 1588 | \$ 65,511.06 | \$ 183,430.96 | \$ 1,410.40 | | \$ 184,841.36 | 100.00% |



Proposal

Staff Hours

| Task Sub-Task | Activity | Grand Total | Principal | Project Manager | Project Engineer | Senior Engineer | Engineer II | Engineer I | Senior Technician | QC/QA Engineer |
|--|--|----------------|-----------|--------------------|---------------------|--------------------|-------------|------------|----------------------|-------------------|
| | | 1588 | 10 | 165 | 51 | 160 | 714 | 304 | 152 | 32 |
| 1. Meetings, Coordination & Data Collection | Task Total: | 33 | | 11 | | | 22 | | | |
| 010 Meetings | Subtotal: | 8 | | 4 | | | 4 | | | |
| | Meetings with Village - 2 meetings | 8 | | 4 | | | 4 | | | |
| 011 Coordination | Subtotal: | 21 | | 7 | | | 14 | | | |
| | Coordination with Village | 8 | | 4 | | | 4 | | | |
| | Coordination with Utilities including ILAW | 10 | | 2 | | | 8 | | | |
| | Submit Plans to Utilities | 3 | | 1 | | | 2 | | | |
| 012 Data Collection | Subtotal: | 4 | | | | | 4 | | | |
| | Obtain Utility Atlases | 4 | | | | | 4 | | | |
| 2. Topographic Survey | Task Total: | 202 | | 1 | 5 | 8 | 20 | 16 | 152 | |
| 020 Field Survey | Subtotal: | 174 | | 1 | 5 | | 12 | 16 | 140 | |
| | Project Setup | 6 | | 1 | 1 | | | | 4 | |
| | Site Visits by Staff | 8 | | | 4 | | 4 | | | |
| | Establish Control Points and Ties | 40 | | | | | 8 | | 32 | |
| | Horizontal Topography | 48 | | | | | | | 48 | |
| | Cross Sections @ 50' Intervals | 32 | | | | | | | 32 | |
| | Supplemental Survey | 8 | | | | | | | 8 | |
| | Utility Structure Inventory | 32 | | | | | | 16 | 16 | |
| 021 Process Survey Information | Subtotal: | 28 | | | | 8 | 8 | | 12 | |
| | Down Loading Total Station | 12 | | | | | | | 12 | |
| | Create Digital Terrain Model | 16 | | | | 8 | 8 | | | |
| 3. Water Resources and Permitting | Task Total: | 328 | | 12 | 44 | 60 | 108 | 104 | | |
| 031 Stormwater Facility Design | Subtotal: | 316 | | 12 | 40 | 60 | 100 | 104 | | |
| | Ditch, Culvert and Storm Sewer Hydraulic Design | 280 | | 10 | 30 | 60 | 100 | 80 | | |
| | Erosion and Sediment Control Notes and Schedules | 36 | | 2 | 10 | | | 24 | | |
| 035 Permits | Subtotal: | 12 | | | 4 | | 8 | | | |
| | Permit - NPDES | 12 | | | 4 | | 8 | | | |



Proposal

| Task Sub-Task | Activity | Grand Total | Principal | Project Manager | Project Engineer | Senior Engineer | Engineer II | Engineer I | Senior Technician | QC/QA Engineer |
|---|---|----------------|-----------|-----------------|------------------|-----------------|-------------|------------|-------------------|----------------|
| 3. Engineering Plans | Task Total: | 963 | | 121 | 2 | 92 | 564 | 184 | | |
| 055 Contract Plans | Subtotal: | 66 | | 8 | | | 10 | 48 | | |
| | Title Sheet | 8 | | | | | 2 | 6 | | |
| | General Notes/Index/IDOT Highway Standards List | 10 | | 2 | | | | 8 | | |
| | Summary of Quantities | 12 | | 2 | | | | 10 | | |
| | Typical Sections | 26 | | 2 | | | 4 | 20 | | |
| | Plan Assembly - 2 Submittals | 4 | | | | | | 4 | | |
| | Disposition of Comments - 2 Submittals | 6 | | 2 | | | 4 | | | |
| 056 Roadway and Drainage Plans | Subtotal: | 722 | | 78 | | 80 | 486 | 78 | | |
| | Schedule of Quantities | 30 | | 6 | | | 12 | 12 | | |
| | Maintenance of Traffic Notes and Details | 8 | | 2 | | | | 6 | | |
| | Proposed Plan and Profile Sheets (1"=20') | 300 | | 50 | | | 190 | 60 | | |
| | Details including IDOT Standards | 34 | | 10 | | | 24 | | | |
| | Cross Sections (50' Intervals, 8 X-Sec/Sheet) | 350 | | 10 | | 80 | 260 | | | |
| 058 Quantity Calculations | Subtotal: | 115 | | 7 | 2 | 12 | 36 | 58 | | |
| | Quantities (Removals) | 23 | | | | 2 | 4 | 17 | | |
| | Quantities (Earthwork) | 24 | | 2 | | 2 | 20 | | | |
| | Quantities (Proposed Plan) | 40 | | 4 | | | 12 | 24 | | |
| | Quantities (Water Resources) | 28 | | 1 | 2 | 8 | | 17 | | |
| 059 Specifications & Estimates | Subtotal: | 60 | | 28 | | | 32 | | | |
| | Specifications and Contract Documents | 40 | | 20 | | | 20 | | | |
| | Estimate of Time (Pre-final & Final) | 6 | | 2 | | | 4 | | | |
| | Estimate of Cost (Pre-final & Final) | 14 | | 6 | | | 8 | | | |
| 4. QC/QA | Task Total: | 32 | | | | | | | | 32 |
| 090 QC/QA | Subtotal: | 32 | | | | | | | | 32 |
| | Roadway | 16 | | | | | | | | 16 |
| | Water Resources | 16 | | | | | | | | 16 |



Proposal

| Task Sub-Task | Activity | | Grand Total | Principal | Project Manager | Project Engineer | Senior Engineer | Engineer II | Engineer I | Senior Technician | QC/QA Engineer |
|---|----------|--|----------------|-----------|-----------------|------------------|-----------------|-------------|------------|-------------------|----------------|
| | | | | | | | | | | | |
| 5. Project Management & Administration | | | Task Total: | 30 | 10 | 20 | | | | | |
| 100 Project Management & Administration | | | Subtotal: | 30 | 10 | 20 | | | | | |
| Project Administration | | | | 15 | 5 | 10 | | | | | |
| Project Management | | | | 15 | 5 | 10 | | | | | |
| | | | | | | | | | | | |



Proposal

Rates

| CLASSIFICATION | CURRENT RATE | ESCALATED RATE |
|-------------------|--------------|----------------|
| Principal | \$83.50 | \$84.50 |
| Project Manager | \$62.50 | \$63.25 |
| Project Engineer | \$51.00 | \$51.61 |
| Senior Engineer | \$44.50 | \$45.03 |
| Engineer II | \$35.00 | \$35.42 |
| Engineer I | \$32.00 | \$32.38 |
| Senior Technician | \$42.50 | \$43.01 |
| QC/QA Engineer | \$84.00 | \$85.00 |



Proposal

Indirect Costs

Meetings, Coordination & Data Collection

| Description | Unit | Unit Cost | Quantity | Extended Cost |
|-------------------|------|-----------|----------|-----------------|
| Vehicle (mileage) | mile | \$ 0.575 | 128 | \$ 73.60 |
| Total: | | | | <u>\$ 73.60</u> |

Topographic Survey

| Description | Unit | Unit Cost | Quantity | Extended Cost |
|-------------------|------|-----------|----------|--------------------|
| Vehicle (mileage) | mile | \$ 0.58 | 64 | \$ 36.80 |
| Vehicle (day) | day | \$ 65.00 | 20 | \$ 1,300.00 |
| Total: | | | | <u>\$ 1,336.80</u> |

