

Project Approach / Scope of Services

“Putting the cart before the horse” could not be more applicable to this project. This project will require a careful planning and sequencing of tasks, messaging and consensus building with the impacted property owners before a significant effort is expended in advancing the design plans and permitting.

The following approach outlines our recommendation on the sequence of the project tasks. This can be discussed during the kickoff meeting and revised in collaboration with VILLAGE and MWRDGC.

TASK 1 – Project Management and Coordination (RFP Task 1)

This item will include project management and coordination tasks associated with the project including but not limited to:

- ▶ Developing a Project Work Plan and Schedule
- ▶ Monitoring scope, schedule, and budget
- ▶ Project correspondence with VILLAGE, regulatory agencies, and MWRDGC, where needed.
- ▶ Quality Control/Quality Assurance
- ▶ General administrative tasks (copying, collating, mailing, filing, etc.)

These administrative tasks will be provided for an assumed **twelve (12) month design schedule**, which is expected to begin on the anticipated Notice to Proceed date of May 10, 2021.

TASK 2 – Kickoff Meeting and Coordination Meetings with the VILLAGE/MWRDGC (RFP Tasks 2, 4, and 19)

The following meetings are planned:

- ▶ One (1) kickoff meeting with the VILLAGE and MWRDGC to discuss scope, schedule, and budget and for general project goals and objectives, milestones, etc. HR Green will provide a meeting agenda, attend the meeting and prepare minutes of the meeting. HR Green design team representatives will also complete a field review prior to this meeting.
- ▶ Six (6) bi-monthly coordination meetings for an assumed 12-month design schedule. These meeting will be planned to occur at the following milestones:
 - One (1) meeting for discussion of design requirements and criteria with VILLAGE and MWRDGC. The design criteria, preparation of plans, specifications, best

practices will be discussed. HR Green will prepare a “BASIS OF DESIGN” document following the meeting for VILLAGE and MWRDGC approval.

- One (1) meeting to review the 30% design submittal;
 - One (1) meeting to review the 60% design submittal;
 - One (1) meeting to review the 90% design submittal; and
 - Two (2) interim meetings during the course of the project; schedule to be determined.
- ▶ To supplement the bi-monthly meetings, HR Green Project Manager will send a weekly email to the VILLAGE on the project status update. The weekly update will include actions items responsibility of HR Green, VILLAGE, MWRDGC, and others to keep the team accountable and project moving forward in a timely manner.
 - ▶ One (1) meeting for presentation to the Village Board of Trustees, if requested by the VILLAGE

TASK 3 - Data Collection and Review (RFP Task 3)

TASK 3.1 – Obtain Available VILLAGE and MWRDGC Data

At the kickoff meeting, data needs from the VILLAGE and MWRDGC will be discussed. This will include obtaining available GIS information including but not limited to base map coverage, topographic information, land use data, utility maps and zoning maps. It is assumed that documents prepared for MWRDGC as part of the 98% design completed by Michael Baker will be made available to HR Green. This includes but is not limited to:

- ▶ Electronic CADD files of the 98% drawings;
- ▶ Electronic files of the hydrologic and hydraulic models;
- ▶ Structural design calculations;
- ▶ Word or pdf files of the specifications and permit documents;
- ▶ Excel spreadsheets or pdf of the Engineer’s Estimate;
- ▶ PDF copy of the geotechnical report and environmental reports;
- ▶ Electronic or PDF copies of the property easement exhibits previously completed;
- ▶ Boundary survey of the properties completed for easement purposes;

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- ▶ Property owner coordination summary or list of property owners who were not in support of the required easements and/or maintenance

Additional data needs, if required, will be identified during the scoping meeting.

Key Approach Idea: *The focus of this task will be to review all prior data collected and analyzed as part of the Baker's Plan but more specifically focusing on the property owners who were not largely in support of the easement or were the "deal breakers" for this project. This will guide our team understand why easements were not granted and to look for opportunities to add value to these properties and/or even evaluate if impacts can be minimized or completely eliminated.*

TASK 3.2 – Previous 98% Design Review

HR Green and its subconsultants will review the available topographic survey files, drawings, design files and reports to gain an understanding of the "Basis of Design" and methodology used for the project. If any data gaps are identified, these will be discussed with the VILLAGE and MWRDGC.

Based on our review of materials included in the RFP, it is anticipated that a complete replacement of the topographic survey will be required. We do not anticipate any other significant data gaps at this point.

TASK 3.3 – Environmental and Geotechnical Investigation

It is anticipated that adequate geotechnical borings and environmental sampling has been completed for the project limits as part of the 98% design. Additional geotechnical investigations and completion of an environmental sampling and analysis for CCDD certifications will be required for the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) new project limits added to the project. HR Green will utilize a WBE, Rubino Engineering of Elgin, Illinois, to complete the additional geotechnical and environmental analysis.

TASK 3.4 – Utility Coordination

J.U.L.I.E. design ticket will be submitted upon Notice to Proceed to obtain utility maps to identify existing private and public utilities present within the project limits. These utility maps, supplemented by the field survey of visible utilities, will be used to identify potential conflicts with the

proposed construction. If a utility is identified as having a potential conflict, HR Green will coordinate with the utility company and provide preliminary design plans so that utility relocation design and coordination can be initiated ahead of project construction. The utility conflicts will be identified based on best available field data and available utility maps and is not intended to identify any and all conflicts that may not be known at the time of design. Note that utility coordination will occur during the design duration at various stages of the project.

TASK 4 – Stream Assessment/Plan in Hand Review (RFP Tasks 5 and 7)

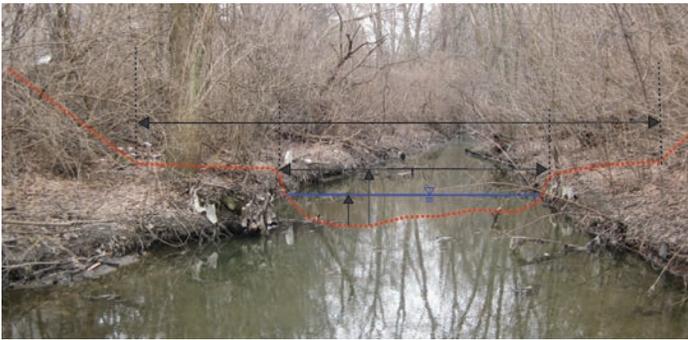
Representatives from HR Green design team and RES-AES will complete a stream assessment and complete a plan in hand review of the Baker's Plan and CBBEL recommended improvements.

Each of the sites will be reviewed for its stabilization measures proposed, its intended functionality and success and failure criteria. The sites will also be reviewed for changes in existing conditions to the extent practical. The site will be walked for review from design, ecological and constructability criteria and changes will be noted on the plans where it is anticipated current design will not be beneficial or may fail overtime.

A photographic documentation of the existing conditions will be completed. The following strategy is recommended:

- ▶ A photographic documentation of each property within the project limits will be completed;
- ▶ A picture of each bank across the property boundary line will be collected;
- ▶ At least one representative picture will be hyperlinked in GIS to each property parcel;
- ▶ A plan view with photo key map will be provided for the limits of the project; and
- ▶ An 8.5x11 existing condition photographic exhibit will be completed for each property. The exhibit will include property address, location map and picture(s).

Key Approach Idea: *We recommend a stream assessment and a plan in hand review of the Baker's Plan as one of the first steps in the project. We propose to have three content experts with separate points of view walk this stream together. Logan (Civil Engineer), Steve (Ecologist) and Brad (Contractor) will walk the entire reach from 151st Street to Crystal Creek Drive.*



*The team will review the creek and document items related to channel stability or instability, geomorphology, hydraulic capacity, utility impacts, ecological condition, vegetation management and constructability and access. Critical measurements including normal depth, wetted width, channel width and channel depth of areas that are currently in a stable condition will be taken. It is vital to a successful project to study these issues early in the project. **If proposed improvements deviate from what the stream is naturally doing in these stable areas, then the stabilization measures will fail.***

TASK 5 – Surveying Services and Easement Exhibits (RFP Tasks 6 and 13)

Task 5.1 – Topographic and Utility Survey

The topographic survey of the project limits as part of the 98% design is several years old. It is anticipated that the existing conditions have changed as a result of continued erosion and changes made by property owners. Additionally, new survey will need to be obtained for the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) new project limits added to the project. The following strategy is proposed for survey to minimize costs:

- ▶ Complete a topographic survey of the project limits (old and new limits);
- ▶ Obtain a creek cross-section across each parcel. These sections will be later utilized for developing typical existing and proposed section and renderings.
- ▶ Limit structure survey in the 98% design limits to face sections upstream and downstream. The structures are being maintained and should not change from prior surveys.
- ▶ Complete structure and roadway crossing survey within the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) new project limits added to the project.

- ▶ Utilize utility survey from 98% design. However, utility data will be verified at locations where utilities are impacted by construction. We will consult with Village if any utility improvements have been made subsequent to the original survey.

Topographic survey will locate visible existing surface improvements and site topography within the area described above. Survey will reference Illinois State Plane Coordinates – East Zone (NAD83-2011) and North American Vertical Datum of 1988 (NAVD88).

This task will include processing and quality assurance and quality control of the field data. Upon completion of the data processing and base files set up, the Project Manager and key task leads will review the data and complete an initial high level overview of design constraints, challenges and opportunities.

Task 5.2 – Tree Survey

The tree survey of the project limits as part of the 98% design is several years old. It is anticipated that the existing conditions have changed included tree size and possible health. A new tree survey for the 98% design project limits will be required. Additionally, tree survey will need to be obtained for the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) new project limits added to the project. Tree survey for this project will be completed by our subconsultant RES-AES. The following will be included:

RES-AES will survey all trees and shrubs greater than or equal to 6 inches DBH within the proposed project area defined as approximately 20 feet on either side of the creek. RES-AES will also survey all highly desirable native trees/shrubs between 2-6 inches DBH. Each surveyed tree/shrub will be tagged, assessed, and located using submeter GPS. The information will be tabulated in a Tree Inventory Table including tree tag #, species (common and scientific), DBH, condition, and general comments regarding quality, etc.

Task 5.3 – Boundary and Right of Way (ROW) Survey

HR Green will perform a Boundary Survey of approximately fifty-one (51) parcels and six (6) roads lying within the project limits as shown on provided plat of dedication/right of way maps and recorded subdivision plats to include on the base map. The boundary survey will be used to re-establish the adjacent right of way lines for each road and boundary lines for each parcel needing an easement.

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This task does not include setting or resetting monuments at any parcel corners not found nor monumented.

Task 5.4 – Temporary and Permanent Easement Exhibits

Approximately fifty-one (51) parcels are estimated needing temporary and permanent easements. HR Green will prepare an individual exhibit for each property that is needing an easement. The exhibit will show parcel boundaries and proposed temporary and permanent easement with a legal description of the easement(s). It is assumed that these exhibits will be utilized by the Village to prepare Easement Agreement. Preparing the Easement Agreement and Easement Acquisition Services (appraisals and negotiations) will be completed by the Village and is not included in our scope of services.

TASK 6 – Wetland Delineation (RFP Task 20)

The wetland delineation completed as part of the 98% design is only good for 5 years and is therefore considered obsolete. A new wetland delineation for the 98% design project limits will be required. Additionally, wetland delineation and survey will need to be completed for the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) of new project limits added to the project. Tinley Creek is considered to be Waters of the United States (WOTUS) and therefore under the jurisdiction of the USACOE. A Jurisdictional Determination (JD) report is therefore not recommended. Wetland delineation and survey for this project will be completed by our subconsultant RES-AES. The following will be included:

- ▶ RES-AES Ecologists will conduct a wetland delineation along the approximately 1.3 mile (centerline length) reach of Tinley Creek and approximately 20 feet on each side of the creek in accordance with the USACOE 1987 Wetland Delineation and the Midwest Regional Supplement for Wetland Delineations. Pink pin flags will be used to delineate the on-site wetland boundaries and located using submeter GPS. As required by USACOE, the delineation will include an on-site investigation of vegetation, soils, and hydrology. In addition, the Floristic Quality Index (FQI) will be calculated for each wetland encountered. Digital photographs of data points will be taken to assist in documenting existing site conditions. Adjacent off-site wetlands will also be identified and inspected, if possible, but not flagged. It is assumed that wetland delineation will occur during the growing season.

- ▶ RES-AES will prepare a wetland delineation report in accordance with the USACOE 1987 Wetland Delineation Manual and Midwest Regional Supplement. The report will include the following: a written summary of results, wetland delineation exhibit that shows all wetlands and data collection points within the project area, photos of representative data points locations, wetland and soils maps, completed USACOE data forms, and an evaluation of the quality of on-site wetlands based upon the Floristic Quality Index (FQI). The report will also include all additional Cook County wetland delineation requirements.
- ▶ Schedule and attend an onsite pre-application meeting with a representative of the USACOE upon completion of the wetland delineation. The purpose of the meeting will be to confirm the wetland boundary with the USACOE and to discuss regional permit program under which the proposed construction activity will be permitted. Meeting minutes of the pre-application meeting will be prepared and submitted to the attendees and VILLAGE.

TASK 7 – Hydrologic and Hydraulic Analysis (RFP Task 20)

It is assumed that Michael Baker's electronic files of the previously completed hydrologic and hydraulic modeling will be made available to HR Green. At the onset of the project, we recommend that design criteria (including impacts of Bulletin 75 rainfall data) be discussed for design and permitting. It is assumed that if updates to Bulletin 75 rainfall is required, it will simply be limited to changing the rainfall data in the current approved hydrologic model to establish new flow data for the hydraulic model.



- ▶ Bio-engineered bank stabilizations in floodway

Whether using Bulletin 70 or the Bulletin 75 rainfall data, the hydraulic model used for the 98% design will be updated using the new existing and proposed conditions for the project limits. HR Green will insert the stream cross sections based on proposed survey and selected stream alignments and grading plan of the channel and overbank areas. The hydraulic models will guide the development of the bank stabilization measures to account for velocities and shear stresses expected at various heights of the banks. The hydraulic models will also be reviewed in accordance with applicable design requirements per IDNR-OWR Part 3708 rules for floodway and per the MWRDGC WMO requirements. HR Green will present the results of the hydraulic analysis and proposed flood inundation maps and BFE tabular data by sections during a scheduled progress meeting for approval by the VILLAGE and MWRDGC prior to completion of the 60% Plans.

TASK 8 – 30% Engineering Plans (RFP Tasks 8, 9, 11 and 14)

The 30% Engineering Plans will include updating the Baker's 98% Plans with updated topographic, utility and tree survey and revised or new proposed stabilization practices that will minimize erosion along the creek. Properties which can be designed around for successful stabilization will be identified to reduce number of property impacts. Additional sheets will be added to the plan set for the approximately 0.75 miles of streambanks (or 0.38 miles of stream centerline) of new project limits added to the project.

Plans will be prepared in AutoCAD Civil 3D software meeting MWRDGC design standards for plan preparation.

The 30% plan set will include the following updated sheets:

- ▶ General Sheets
 - Cover
 - Legend
 - General Site Symbols
 - Abbreviations
 - Overall Layout Plan
- ▶ Civil Sheets
 - Existing Site Layout and Demo Plans.
 - Plan and Profile. These sheets will show the existing and proposed creek alignment and stabilization practices along the length of the creek and limits of temporary and permanent easements. Profiles will not be updated for 30% Engineering Plans.

- Alignment and Ties
- Cross Sections. We propose a cross section at every 50-foot along the centerline stationing; across each impacted parcel; and at key locations. Approximately 51 parcels are estimated to be impacted along the creek. Cross sections will show the proposed stabilization practices that will reduce erosion, minimize O&M and improve aesthetics and safety along the creek.

Deliverable and Review Meeting: *The 30% Engineering Plans will be submitted to VILLAGE, MWRDGC and Utility Companies for review. A review meeting will be scheduled with VILLAGE and MWRDGC to go over comments and finalize proposed stabilization practices.*

TASK 9 – Plan View and Cross Section Renderings (RFP Task 12)

From the typical sections prepared in Task 8 above, HR Green and its subconsultant, LVBrown Studios, will prepare the following renderings:

- ▶ Plan view rendering of the proposed creek stabilization for the project length;
- ▶ An 8.5x11 plan view and cross section rendering for each of the impacted property along with sample pictures of the proposed outcomes. Approximately 51 parcels are estimated to be impacted along the creek. These renderings are anticipated to be used for property owner meetings. Some examples of these renderings can be found in the Appendix.

Deliverable and Review Meeting: *The plan view and cross section renderings will be submitted to VILLAGE and MWRDGC for review. A review meeting will be scheduled with VILLAGE and MWRDGC to go over comments and finalize renderings.*

TASK 10 – Public Meeting (RFP Task 15)

This task can be completed after the completion of Task 8 and Task 9 or after completion of Task 11, based on VILLAGE and MWRDGC preference. We believe an early coordination may be helpful in identifying property owner concerns and revise the design accordingly.

One (1) public meeting is planned. We recommend that this be an open house format with up to there (3) visiting stations broken out by reach lengths to guide property owners to the appropriate station. It is anticipated that the public meeting will be held at Village Hall (or another Village location). HR green will prepare and mail meeting



- ▶ Logan hosting an educational meeting for residents who live along waterways

invitation letters along with appropriate documents to impacted property owners and other residents along the creek. HR Green will also prepare a presentation for the overall project and subsequently be available at each of these stations to answer any specific questions property owners may have as it relates to their individual property and/or the overall project. Up to three (3) people from HR Green will attend the public meeting to provide coverage and answer questions. HR Green will prepare and mail invitations along with appropriate documents to impacted property owners.

COVID-19 guidelines will need to be evaluated ahead of these meetings. If there are limitations to #people who can attend in a single meeting, we recommend breaking out the public meeting in two (2) 2-hour sessions. Other options can be evaluated based on limitations imposed at the time of these meetings.

TASK 11 – 60% Engineering Plans, Specifications and Estimates (RFP Tasks 8, 9, 10, 11, 14, 17 and 18)

Based on input from the VILLAGE/MWRDGC and public meeting input, HR Green will prepare the 60% Engineering Plans, Specifications and Engineer's Opinion of Probable Construction Costs (EOPCC).

The 60% submittal will include the following documents in conformance to MWRDGC requirements:

- ▶ 60% Engineering Plans
- ▶ Specifications
- ▶ EOPCC – The EOPCC will be broken into two distinct sections; bid items for project elements that are within MWRDGC scope (98% project limits) and bid items that are entirely VILLAGE's responsibility (approximately 0.75

miles of streambanks or 0.38 miles of stream centerline of new project limits)

- ▶ Draft 3-Year Operation and Maintenance (O&M) Plan
- ▶ Draft 20-Year O&M Plan and associated costs

The 60% Engineering Plan set will include the following updated sheets:

- ▶ General Sheets
 - Cover
 - Signatures and Seals/Index/Location Maps
 - Legend
 - General Site Symbols
 - Abbreviations
 - Overall Layout Plan
 - General Notes
- ▶ Civil
 - Existing Site Layout and Demo Plans
 - Plan and Profile
 - Alignment and Ties
 - Cross Sections
 - Details
 - Schedule of Quantities
 - Traffic Control Plan
- ▶ Landscaping
 - Soil Erosion and sediment Control Plan
 - Planting Plan
 - Tree Schedule
 - Planting Schedule
- ▶ Structural
 - Retaining Wall Plan and Elevation
 - Structural Notes
 - Typical Wall Details
 - Wall Data
 - Reinforcing Bar Schedule

Deliverable and Review Meeting: The 60% Engineering Plans will be submitted to VILLAGE, MWRDGC and Utility Companies for review. A review meeting will be scheduled with VILLAGE and MWRDGC to go over comments and finalize proposed stabilization practices.

TASK 12 – Value Engineering (VE) and Funding Eligibility Analysis (RFP Task 17)

The extent of cost impacts for the revised design is unknown. It is understood that the project budget is estimated at approximately \$6.0 Million. Should the EOPCC exceed project budget, the following strategies will be employed to bring the costs within available budget:

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- ▶ Work with VILLAGE and MWRDGC to implement Value engineering (VE) elements; and/or
- ▶ Evaluate available funding opportunities including project eligibility and potential award amounts. HR Green will present the funding opportunities, if applicable, to the VILLAGE and MWRDGC for consideration. If a funding application is required, it will be prepared under a separate agreement.

TASK 13 – Impacted Property Owner Coordination (RFP Tasks 12, 13, and 16)

After the completion of the 60% Engineering Plans, Specifications and Estimate in Task 11 above, we recommend that VILLAGE schedule one on one meetings with the impacted property owner and Homeowner's Association (HOA). The following activities will be included: HR Green will update the property owner impact exhibits prepared in Task 5.4 and plan view and cross section renderings completed in Task 9 above based on the updated 60% Engineering Plans.

- ▶ **Property Impact Exhibits:** HR Green will update the property owner impact exhibits prepared in Task 5.4 and plan view and cross section renderings completed in Task 9 above based on the updated 60% Engineering Plans. The exhibits will show details of improvements including permanent and temporary easement limits. These exhibits can be shared with the property owners during coordination meetings, comments collected, and designs adjusted, if needed and approved by the VILLAGE and MWRDGC.
- ▶ **Letter of Intent:** If approved by the VILLAGE, HR Green recommends that we assist the VILLAGE in preparing a sample Letter of Intent (LOI) for Village Attorney's review and approval. A LOI can be an instrument that interested property owners can sign at the 60% stage indicating their approval of the design, required easements and maintenance obligations. The LOI will include property impact exhibits as an attachment.
- ▶ **Impacted Property Owner Meetings:** If approved by the VILLAGE, HR Green recommends that Village schedule and meet with all impacted property owners at this stage of the project. At Village's request, HR Green will attend up to five (5) meetings with individual property owners and/or Homeowners' Associations to discuss and share improvements.

TASK 14 – Permit Applications (RFP Task 20)

HR Green will review the previously approved permits and permit conditions. It is assumed that due to time that has lapsed between permits issued as well as due to revisions to the plans, permit applications will need to be updated and resubmitted to the applicable permit jurisdictional agencies. The following permits will be applied for:

- ▶ **U.S. Army Corps of Engineer's (USACOE):** USACOE Wetland and WOTUS Impact Permit. It is assumed the project will be permitted as multiple regional permits through the Regional Permit (RP) Program. These permits will be applied for under one submittal and will not be applied for separately. HR Green anticipates filing for the following regional permits:
 - Regional Permit 5 – Aquatic Habitat Restoration, Establishment, and Enhancement. This permit authorizes the restoration of streams and the installation of best management practices (BMPs).
 - Regional Permit 7 – Temporary Construction Activities. This permit will be required to install temporary stream crossings and cofferdams and to complete bypass pumping of the stream.
 - Regional Permit 10 – Bank Stabilization. This permit authorizes the stabilization of the streambanks.

HR Green will prepare up to two (2) submittals to USACOE.

- ▶ **Will-South Cook Soil and Water Conservation**

District: Will-South Cook Soil and Water Conservation District (WSCSWCD) Sediment and Erosion Control Permit. It is assumed that the review fee will be approximately \$3,500 which includes the review and inspection fees and includes in-stream work. Since the total disturbed area will exceed 1 acre, an additional refundable fee of \$3,500 will be required to be submitted to WSCSWCD. This fee will be refunded upon written notice of the construction start date. The above fee of \$3,500 is included in our Professional Fee estimate. HR Green will also pay the \$500 refundable fee.

- ▶ **Illinois Department of Natural Resources – Office of Water Resources:** IDNR-OWR Permit for Construction in Floodway in accordance with Part 3708 rules. It is assumed that the review fee will be \$3,230 for construction activities within Northeastern Illinois that requires hydrologic and hydraulic review by the IDNR-OWR. An additional \$1,620 may be required if a public notice is required. The above fees totaling \$4,850 are included in our Professional Fee estimate.

▶ **Metropolitan Reclamation District of Greater Chicago – WMO Permit:** A WMO permit is not anticipated since this is a joint project with MWRDGC.

▶ **Illinois Department of Natural Resources - ECOCAT:** An ECOCAT consultation will be required. The consultation fee is approximately \$125. The fee is included in our Professional Fee estimate.

▶ **Illinois Environmental Protection Agency – IRL-10 NPDES:** IEPA IRL-10 NPDES Phase II permit for construction activity will be required since the total disturbed area will be greater than 1 acre.

▶ **Illinois Environmental Protection Agency – Sewer & Water Main Permits:** An IEPA sewer and Water Main permits are not anticipated at this time since relocation of existing sewer and water mains is not anticipated.

TASK 15 – 90% Engineering Plans, Specifications and Estimates (RFP Tasks 8, 9, 10, 11, 17, 18 and 23)

Based on input from the VILLAGE/MWRDGC and impacted property owner coordination meetings, HR Green will prepare the 90% Engineering Plans, Specifications and Engineer's Opinion of Probable Construction Costs (EOPCC).

The 90% submittal will include the following updated documents in conformance to MWRDGC requirements:

- ▶ 90% Engineering Plans
- ▶ Specifications
- ▶ 90% EOPCC - The EOPCC will be broken into two distinct sections; bid items for project elements that are within MWRDGC scope (98% project limits) and bid items that are entirely VILLAGE's responsibility (approximately 0.75 miles of streambanks or 0.38 miles of stream centerline of new project limits)
- ▶ Pre-Final 3-Year Operation and Maintenance (O&M) Plan included in Volume IV
- ▶ Pre-Final 20-Year O&M Plan and associated costs
- ▶ Construction Schedule – Construction Schedule will include an estimated construction schedule for improvements including Gantt charts for graphical presentation

Deliverable and Review Meeting: The 90% Engineering Plans will be submitted to VILLAGE, MWRDGC and Utility Companies for review. A review meeting will be scheduled with VILLAGE and MWRDGC to go over comments and finalize proposed stabilization practices.

TASK 16 – 100% Engineering Plans, Specifications and Estimates (RFP Task 21, 22, and 23)

Based on input from the VILLAGE/MWRDGC, HR Green will prepare the 100% engineering plans, specifications and estimates and supporting documents (BID DOCUMENTS) for the Village to solicit bids from qualified contractors.

The BID DOCUMENTS will include the following documents:

- ▶ 100% Engineering Plans
- ▶ Specifications
- ▶ Pre-Final 3-Year Operation and Maintenance (O&M) Plan included in Volume IV

The following additional documents will be provided for Village's files:

- ▶ 100% EOPCC
- ▶ Final 20-Year O&M Plan and associated costs
- ▶ Construction Schedule – Construction Schedule will include an estimated construction schedule for improvements including Gantt charts for graphical presentation

Deliverables: The 100% Engineering Plans will be submitted to VILLAGE and MWRDGC and made available for electronic bidding system. Up to ten (10) hard copy submittals are included in the scope.

TASK 17 – Bid Award and Assistance (RFP Task 26)

The bidding process will be managed by the VILLAGE. HR Green will assist the VILLAGE with the following tasks:

- ▶ Answer questions and issue addendum, if necessary;
- ▶ Review bids; and
- ▶ Prepare recommendation for award

Task 18 – Scope of Service for Construction Engineering and Construction Observation (RFP Task 25)

HR Green will develop proposed scope of services (without professional fees) for construction engineering or construction observation services to implement the improvements. It is understood that the VILLAGE may use this scope of services to solicit proposals from qualified consultants for construction engineering or construction observation services.

Schedule

The following schedule is proposed for the Tinley Creek Streambank Stabilization project.

Task	Description	Schedule
Board Approval		May 3, 2021
Contract Execution and Notice to Proceed		May 10, 2021
TASK 1	Project management and coordination	May 10, 2021 – May 27, 2022
TASK 2	Kickoff Meeting and Coordination Meetings	KO Meeting – Week of May 17, 2021 Coordination Meetings – Bi-monthly
TASK 3	Data Collection and Review	May 10, 2021 - May 21, 2021
TASK 4	Stream Assessment/Plan in hand review	Week of May 24, 2021
TASK 5	Field Survey	May 31, 2021 – June 18, 2021
TASK 6	Wetland Delineation Survey	May 31, 2021 – June 4, 2021
TASK 7	Hydrologic and hydraulic update	June 21, 2021 – July 9, 2021
Bi-Monthly Meeting #1 (Progress Meeting)		Week of July 12, 2021
TASK 8	30% Plans, Specifications and Estimates (PSE)	June 21, 2021 - July 30, 2021
TASK 9	Typical Sections and Renderings	July 19, 2021 - August 6, 2021
Deliverable	30% PSE and Typical Sections and Renderings	August 9, 2021
VILLAGE and MWRDGC Review		August 9, 2021 – August 20, 2021
Bi-Monthly Meeting #2 (Review 30% PSE and Typical Sections)		Week of August 23, 2021
TASK 10	Public Meeting	Tentative – September 2021
TASK 11	60% Plans, Specifications and Estimates	August 30, 2021 – Nov 5, 2021
Bi-Monthly Meeting #3 (Progress Meeting)		Week of October 11, 2021
TASK 12	Value engineering and Funding Eligibility Review	Nov 1, 2021 – Nov 5, 2021
Deliverable	60% PSE and Typical Sections and Renderings	Nov 8, 2021
VILLAGE and MWRDGC Review		Nov 8, 2021 – Dec 10, 2021
Bi-Monthly Meeting #4 (Review 60% PSE and Typical Sections)		Week of December 13, 2021
TASK 13	Impacted Property Owner Coordination	Dec 20, 2021 – Feb 11, 2022
TASK 14	Permit Applications	Nov 8, 2021 – Dec 17, 2021
Bi-Monthly Meeting #5 (Progress Meeting)		Week of Feb 7, 2022
TASK 15	90% Plans, Specifications and Estimates	Feb 14, 2022 – March 25, 2022
Deliverable	90% Plans, Specifications and Estimates	March 28, 2022
VILLAGE and MWRDGC Review		March 28, 2022 – April 22, 2022
Bi-Monthly Meeting #6 (Review 90% PSE and Typical Sections)		Week of April 25, 2022
TASK 16	100% Plans, Specifications and Estimates	May 27, 2022
TASK 17	Bid Award and Assistance	May 30, 2022 – June 27, 2022
TASK 18	Scope of Services for Construction Engineering	March 28, 2022
Anticipated Contract Award and NTP		August 1, 2022
Anticipated Construction Start		August 22, 2022
Anticipated Construction Completion		June 2023

Milestone Deliverable	VILLAGE and MWRDGC Review	Bi-Monthly Meeting
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