TERRA ENGINEERING LTD.

Proposal To: The Village of Oak Park

Oak Park Avenue Streetscape Project

11/20/2023

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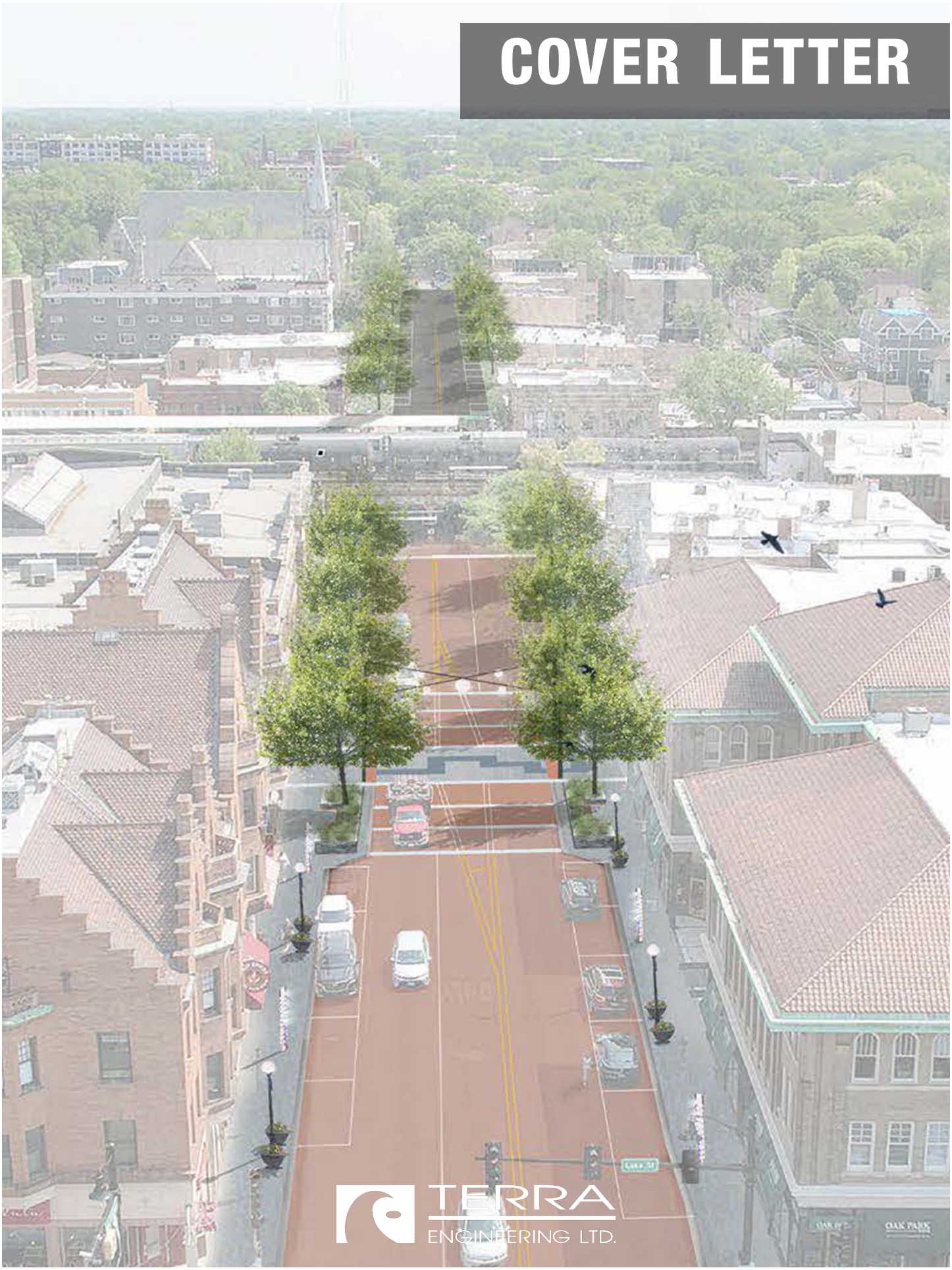
TERRA
ENGINEERING LTD

COVER LETTER



November 13, 2023

Bill McKenna, PE, Village Engineer
Engineering Division of the Public Works Department
Village of Oak Park
201 South Blvd.
Oak Park, IL 60302

Re: Oak Park Avenue Resurfacing, Utility, and Streetscape Projects

Dear Mr. McKenna,

Thank you for considering the TERRA Engineering, Ltd. (TERRA) team to continue supporting your Oak Park Avenue corridor improvement plan. As our team of experienced professionals completes the project's schematic design, we feel confident in our abilities to progress onto the next phase to complete design development, construction documents, and bidding services that will capture the vision Village of Oak Park (the Village) has conceived for the streetscape.

We are local and proud to be an active part of this community. Our technical expertise and public involvement experience, combined with our decades long working relationship with the Village, allow us to provide the service and attention to detail that no one else can match. We continue to take that responsibility seriously will prioritize the collaboration between TERRA and the Village to find the right solutions for the community.

As you know, TERRA is a woman-owned, full-service civil engineering firm with over 30 years of experience. We believe that our past successes in Oak Park in tandem with our thorough understanding of this Oak Park Avenue project will provide a significant advantage to you. Our experience and performance on the schematic design of this project will enable TERRA to hit the ground running with a cohesive team that fully understands the culture, objectives, and nuances inherent to the expectations for this project.

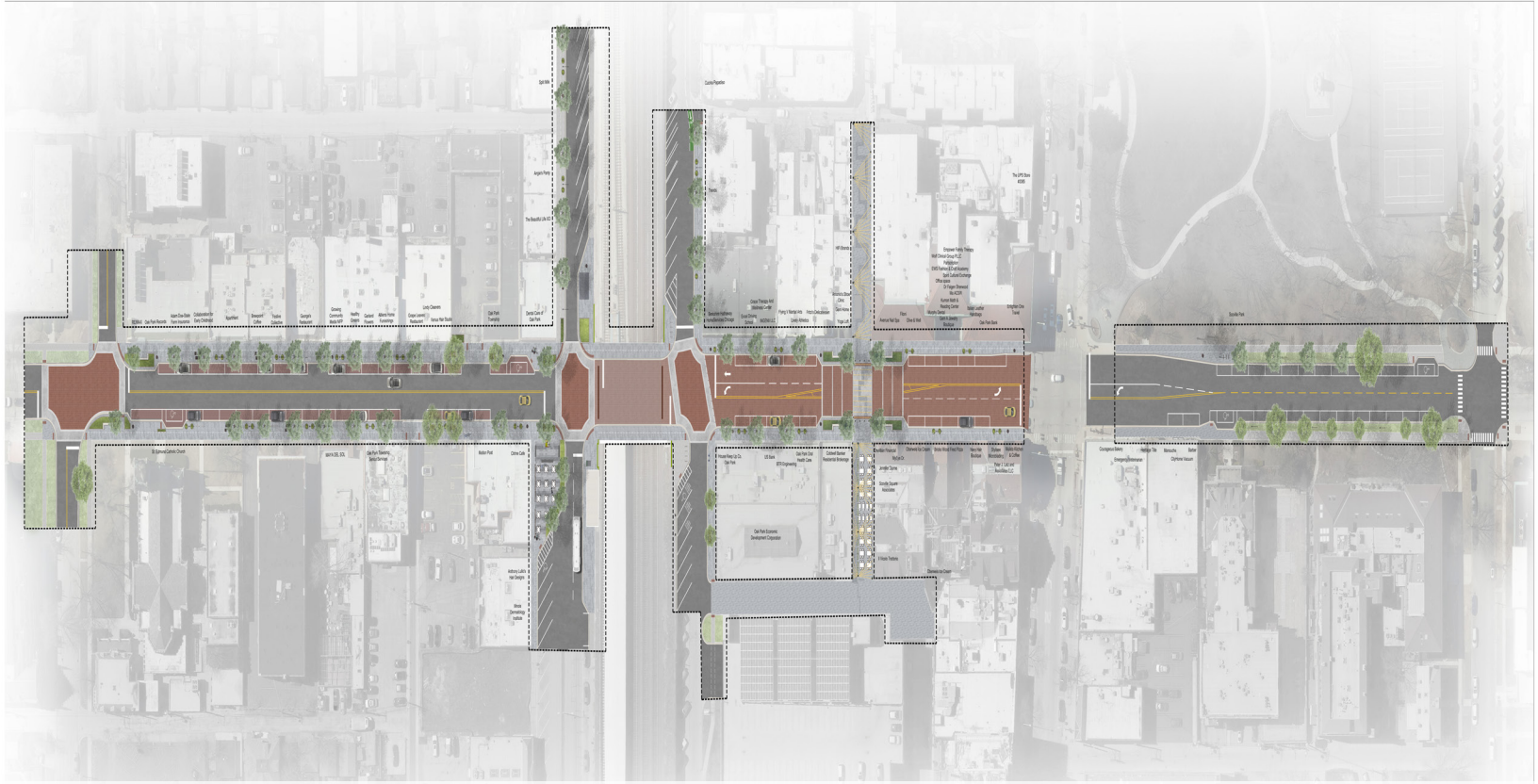
We propose a team of John Helfrich, PE, ENV SP and Rob Newell as Project Managers to continue delivering personalized and attentive project management to the project. In addition, **Design Workshop, Inc. (DW)** will continue to provide their national streetscape and landscape design experience, **a5 Branding and Digital (a5)** will continue to provide their local insight by guiding the public relations and engagement efforts, **H.W. Lochner (Lochner)** will continue to bring their structural expertise to evaluate improvement to the existing viaduct.

TERRA welcomes the opportunity to further discuss our ongoing involvement in this Oak Park Avenue corridor improvement plan with you. We are dedicated to providing an innovative approach for implementing the utility, roadway, and streetscape enhancements that will be enjoyed by all.

Jamil Bou-Saab, Vice President

PROJECT APPROACH

TERRA
ENGINEERING LTD.



PROJECT APPROACH

We understand the Village is proceeding with the development of design documents and procurement for the Oak Park Avenue Streetscape Project through their Hemmingway District. TERRA is excited for the opportunity to leverage our interdisciplinary team's background on this project and our institutional knowledge of the Village to move this project through this next key phase of development.

To assist us in this effort, we have maintained a diverse Design Team comprised of engineers, landscape architects, lighting designers, surveyors, irrigation designers, and community outreach consultants. We will continue to leverage the expertise of our entire team to provide you with a beautiful and resilient streetscape that exceeds the goals of the Village.

General

Team Structure/Management

TERRA Engineering, Ltd. (TERRA) will lead the effort on this project, led by a team of managers including Senior Project Manager, **John Helfrich, PE, ENV SP** and Senior Project Designer, **Rob Newell**. John and Rob will manage TERRA's internal team of surveyors, engineers, and technical experts as well as **Design Workshop, Inc. (DW)** and their team of landscape architects, planners, and lighting designers. We will also work with **Hines, Inc.** for irrigation design and **H.W. Lochner, Inc**. for continued structural collaboration at the viaduct. We recognize that community engagement through the design, bidding, and construction process will be a critical measure of the project's success. We intend on maintaining our partnership with **a5 Branding and Digital** for communications and community outreach.

Project Scope

The proposed scope of work will align with the Final Schematic Design presented to the Board on October 23, 2023, and generally includes underground infrastructure improvements, notably water and sewer main reconstruction from Randolph Street north to Ontario Street along Oak Park Avenue. Other infrastructure improvements will include traffic signal modernization, power distribution for charging stations and site lighting, and coordination with public utilities for potential relocations. Streetscape improvements will be located from Pleasant Street north to Ontario Street along Oak Park Avenue, extending east and west on adjacent side streets and in the Hunter Court alley and area around the existing parking deck. The streetscape scope of work will also include lighting design and irrigation design. Refer to Figure 1 for project scope limits.

TERRA will also assist the Village in coordinating with stakeholder agencies like the Chicago Transit Authority (CTA) and public utilities, administering of grants, and permitting through agencies including Union Pacific Railroad, Illinois Environmental Protection Agency (IEPA) – Water Section, and the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) for sewer work.

TERRA and a5 will collaborate to host public meetings, maintain and update the project website, and complete door-to-door outreach with impacted businesses. This community outreach will begin during the design process and continue throughout the procurement process.

The Design Team will work with the Village to seek and interview artists for the viaduct murals between South Boulevard and North Boulevard, showcasing a "stained glass" design element and the "monument" located at the southeast corner of South Boulevard and Oak Park Avenue, as documented in the Schematic Design package. Once the artist(s) is selected, the Design Team will collaborate with them to design and implement the works, providing design for supporting infrastructure including power and structural considerations. Please note this design effort is subject to change based on the selected artist and may result in additional services depending on the defined effort.

1 Streetscape Design

1.1 Design Development

1.1.1 Kickoff Meeting (Meeting #1)

We will kick the design phase off with an in-person meeting that includes key Design Team members and Village Staff personnel. During the meeting we will:

- Introduce the Design Team.
- Discuss the project scope and recommendations from the Schematic Design.
- Discuss the schedule, milestones, deliverables, and budget.
- Discuss our role in coordination with partners, stakeholders, regulatory agencies, and other entities.

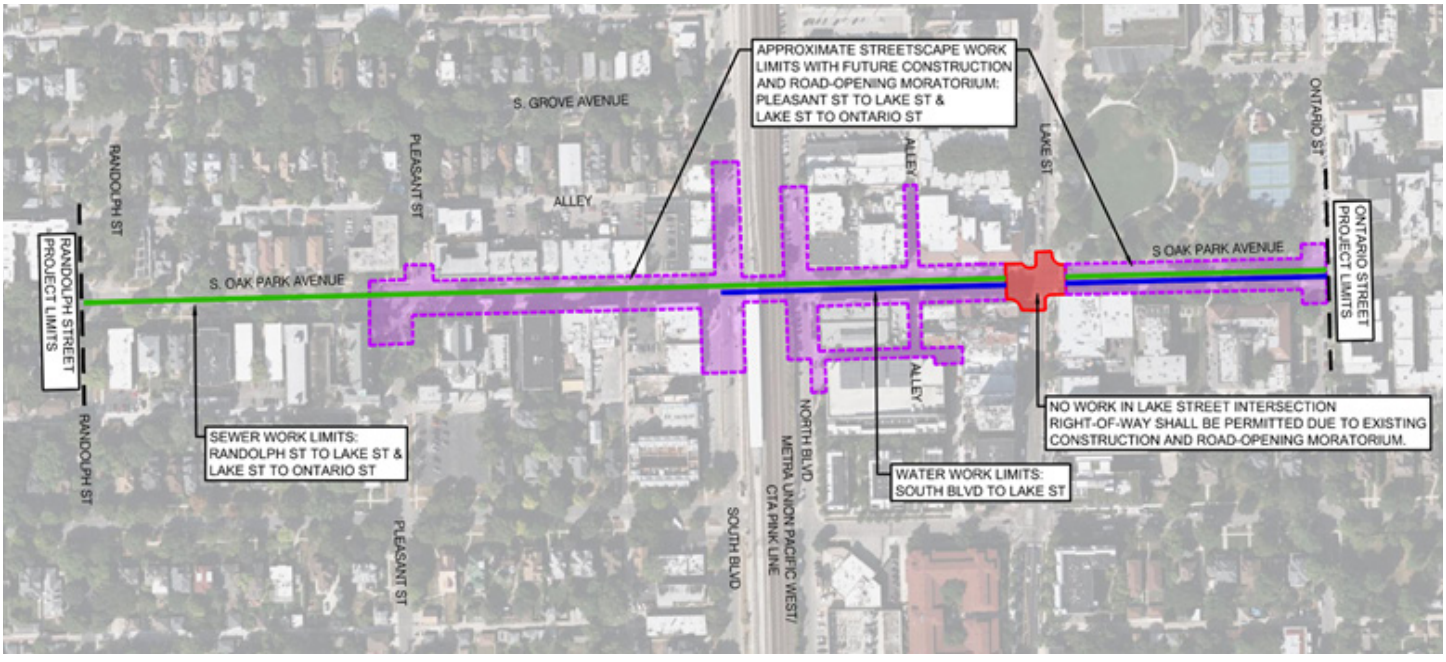
1.1.2 Design Refinement

Working closely with the Village, the Design Team will refine and focus attention on design efforts from the previously established Schematic Design. This will include updating the design in accordance with research and evaluation of materials, stakeholder agency input, planting selection, and traffic studies.

1.1.3 Environmental Graphic Design (EGD)

The Design Team will design the "OAK PARK" viaduct signage (qty 2). All other signage and wayfinding services are excluded from this scope of work.

Figure 1 - Project Scope Boundary



We will also work with the Village to seek artists for the design elements mentioned previously. We understand this scope to include:

- Six (6) bi-weekly virtual meetings over the course of 12 weeks (December 2023 through February 2024).
- Assisting the Village in writing and editing one (1) Request for Proposals to be issued by the Village.
- Responding to Requests for Information by perspective artists.
- Review artist candidates and provide a written summary to the Village selection committee. This summary is to narrow down the pool of candidates to ten (10) or fewer for interviews.
- Assist the Village in up to ten (10) 45-minute virtual interviews with artist candidates.
- Prepare a written summary of recommendations of the top candidate portfolios and professional qualifications to assist the Village with final candidate selection.

1.1.4 Plan Production

Following Design Refinement, our team will develop Design Development documents utilizing Autodesk Civil 3D Computer-Aided Design (CAD) software. Design Development documents will be issued at a 50% and 100% milestone for Village Staff review and comment. We currently anticipate the following deliverables for the Streetscape Design Development:

- **Plan Documents:** including maintenance of traffic, demolition, layout, materials, grading, utilities, lighting, electrical, irrigation, and planting and soils plans, along with typical details.
- **Technical Specifications:** in outline format.
- **Cost Estimate**
- **Supporting Narrative(s):** notably design intent for irrigation and an EGD design package in 11x17 format.

1.2 Construction Documents

1.2.1 Kickoff Meeting (Meeting #2)

We will kick the construction documents phase off with another in-person meeting that includes key Design Team members and Village Staff personnel. During the meeting we will:

- Review outstanding Village coordination items from the DD milestone review.
- Discuss the schedule, upcoming milestones, deliverables, and budget.

1.2.2 Plan Production

Following Village review of the 100% Design Development documents, our team will move into Construction Documents. Construction Documents will be issued at a 50% and 100% milestone for Village review and comment. We currently anticipate the following deliverables for the Streetscape Construction Documents:

- **Plan Documents:** including maintenance of traffic, demolition, layout, materials, grading, utilities, lighting, electrical, irrigation, and planting and soils plans, along with typical details.
- **Technical Specifications:** in CSI Masterspec format.
- **Cost Estimate**
- **Supporting Narrative(s):** EGD design package in 11x17 format.

1.3 Bidding Assistance

The Design Team will incorporate Village comments into a final Bid Package consisting of final Drawings and Specifications for the Village's use in soliciting bids. The Design Team will review and respond to questions from bidders and issue addenda to the documents, as required. We will also participate in up to two (2) virtual scope review meetings with apparent low bidders.

Upon selection of a successful bidder, the Design Team will issue final Contract Documents to the Village for their use during construction. Please note Construction Management services are currently excluded from this scope of work; but we understand the Design Team may be retained for a yet-to-be-determined scope of work during Construction Administration to assist with RFI responses and convey design intent throughout construction.

1.4 Public Utility/Agency Coordination

Our team will work with the Village to continue our proactive outreach to public utilities and coordinate

any necessary relocations through the corridor. We will review and comment on documents provided by the utilities, share streetscape and utility design documents, and participate in virtual coordination meetings. We currently anticipate coordinating with AT&T, ComEd, Nicor Gas, and various small cell providers.

We will also work with the Village to continue our coordination with Pace, Union Pacific, and the Chicago Transit Authority (CTA) for their existing, and proposed, facilities through the corridor. We will review and comment on documents provided by the agencies, share streetscape and utility design documents, and participate in virtual coordination meetings.

1.5 Electrical Engineering

TERRA electrical engineers will provide power distribution design and documents to support the specialty lighting design by Design Workshop, along with the design of general corridor pedestrian and vehicular lighting. Lighting photometrics will be provided, generally adhering to IDOT standards, for the corridor lighting. All electrical engineering documents related to the streetscape design will be incorporated into the deliverables outlined above. Electrical engineering documents related to traffic signal modifications will be incorporated into the infrastructure scope.

We will also coordinate power requirements for Level III Electrical Vehicle charging stations. We assume coordination with ComEd will be required for the charging stations and potentially for the enhanced lighting areas in the streetscape design. The general vehicular and pedestrian street lighting is anticipated to be fed from existing Village circuits.

1.6 Intersection Signal Modernizations

TERRA will provide engineering of traffic signals at the Pleasant Street, South Boulevard, and North Boulevard intersections per the results of the traffic study and aligned with the streetscape improvements. We will collaborate with the Village on the overall schedule to potentially procure traffic signal components in the early infrastructure bid package.

The traffic signals at South Boulevard and North Boulevard are to be fully reconstructed (modernized). The traffic signal at Pleasant Street is to be modified. Anticipated modifications include the addition of Accessible Pedestrian Signals for PROWAG compliance, replacing the interconnect, painting, video vehicle detection equipment, and emergency vehicle preemption.

1.6.1 Traffic Signal Layout and Design

TERRA will develop proposed traffic signal layout in accordance with MUTCD standards, PROWAG requirements, and Village detail and specifications. The traffic signals will include Accessible Pedestrian Signals (APS) in accordance with PROWAG requirements. To do so, the traffic signals will need to be laid out with push buttons carefully placed adjacent to the pedestrian access route (i.e., with working hand in hand with the curb ramps). Additionally, special consideration will be given to traffic signal head placement and orientation for visibility at the railroad viaduct.

The traffic signals are anticipated to be fiber optically interconnected. The interconnect will be laid out, considering potential utility conflicts, extending down to the Washington and Oak Park Avenue intersection and potentially east to the Fire Station.

TERRA will coordinate with the Village regarding their preference for vehicle detection and emergency vehicle preemption.

The intersections of Oak Park Avenue at North Blvd and South Blvd are anticipated to operate off one controller.

The intersection of Oak Park Avenue and Pleasant Street may need to be modified to operate with split phasing for the eastbound and westbound approaches due to the offset geometry, per the results of the traffic study.

Assumptions:

- Record signal plans for the three intersections will be provided for use in developing removal plans.
- The Village will provide a current example of signal plans and specifications to guide

formatting preferences and as a basis for the specifications to be developed.

- The Village will provide guidance regarding mast arm street name signs with information regarding custom “Oak Park” symbols.

1.6.2 Plan Production

TERRA will produce engineering documents for the signal modernizations. Documents will be issued at a 60% Design and 90% Pre-Final milestone for Village review and comment. These deliverables will align with the Streetscape Milestones. See section 6 for additional schedule information. We anticipate the following deliverables for the traffic signal documents:

- Plan Documents: Drawings will generally follow IDOT standards (content and symbology). The set will include traffic signal removal plans; temporary traffic signal plans; temporary traffic signal cable plans; traffic signal modernization plans; cable plans (with schedule of quantities, phase designation diagrams and emergency vehicle preemption sequence). Applicable state Highway Standards, IDOT District 1 details, and Village details will be included. An interconnect plan and interconnect schematic will be developed in accordance with IDOT format. Mast arm street name sign details will be provided in accordance with Village standard.
- Technical Specifications: Traffic signal specifications will be compiled and edited for applicability. Available specifications from recent traffic signal projects in Oak Park will be used as a starting point. The specifications will be in CSI Masterspec format unless otherwise requested. Applicable state special provisions and IDOT District 1 specifications may be included.
- Cost Estimate: The proposed traffic signal work will be estimated based on recent and relevant bid tabulations from IDOT lettings.

1.7 Sidewalk Vaults

TERRA understands there are several existing vaults in the sidewalk area along the streetscape limits. We include a site visit to observe the existing vaults to the extent practicable. We include an initial assessment of the vaulted area at 115 N. Oak Park Avenue. Any modifications to existing vaults will be designed by others and the Design Team will coordinate said improvements as it relates to the streetscape design and incorporate into the documents for reference.

1.8 Quantities and Estimate

The Design Team will provide an updated cost estimate at each milestone deliverable, as well as value engineering suggestions should the estimate come in over the previously established budget. We expect the review and approval of the cost estimate to formally end each design milestone, as we collaborate with you to ensure the project’s cost is aligned with your budget.

1.9 Quality Control and Quality Assurance

The Design Team will conduct a peer review of the work by internal team members with expertise in streetscape and municipal infrastructure projects. Comments received from peer reviews will be documented internally and incorporated into the design. We will also track review comments received from the Village during milestone reviews and track them via an open coordination log.

2 Water and Sewer Main Design

TERRA will provide engineering of combined sewer main replacement from Randolph Street to Lake Street and Lake Street to Ontario Street, along Oak Park Avenue. We will also engineer water main replacement from South Boulevard to Lake Street and Lake Street to Ontario Street, along Oak Park Avenue. Wherever new water main is replaced, new services will be installed to the existing buffalo box and lead services, if encountered, will be replaced to the meter. Sewer and water main replacement will also extend east and west down South Boulevard to a point beyond the future streetscape limits.

TERRA also includes a site visit to access buildings along the corridor to verify water service location and materials.

2.1 Plan Production

TERRA will produce engineering documents for the water and sewer main scope of work, assuming it will be bid out in two (2) early infrastructure packag-

es. Documents will be issued at a 60% Design and 90% Pre-Final milestone for Village review and comment. The breakdown of the two (2) bid packages will be determined during the 60% Design submittal. These deliverables will align with the Streetscape Milestones – see Section 6 for additional schedule information. We currently anticipate the following deliverables for the Water and Sewer Documents:

- Plan Documents: including maintenance of traffic, demolition, restoration, water and sewer plan and profiles, and typical restoration and utility details.
- Technical Specifications: in CSI Masterspec format.
- Cost Estimate

2.2 Bidding Assistance

TERRA will incorporate Village comments into the 100% Contract Plans for the Village's use in soliciting bids. The Design Team will review and respond to questions from bidders and issue addenda to the documents, as required. We will also participate in up to four (4) virtual scope review meetings with apparent low bidders (two meetings per bid package).

Upon selection of a successful bidder, the Design Team will issue final Contract Documents to the Village for their use during construction. Please note Construction Management services are currently excluded from this scope of work.

2.3 Public Utility/Agency Coordination

TERRA will align public utility and agency coordination related to the water and sewer main reconstruction scope with the streetscape design process described previously.

2.4 Quantities and Estimate

TERRA will provide an updated cost estimate at each milestone deliverable. We expect the review and approval of the cost estimate to formally end each design milestone, as we collaborate with you to ensure the project's cost is aligned with your budget.

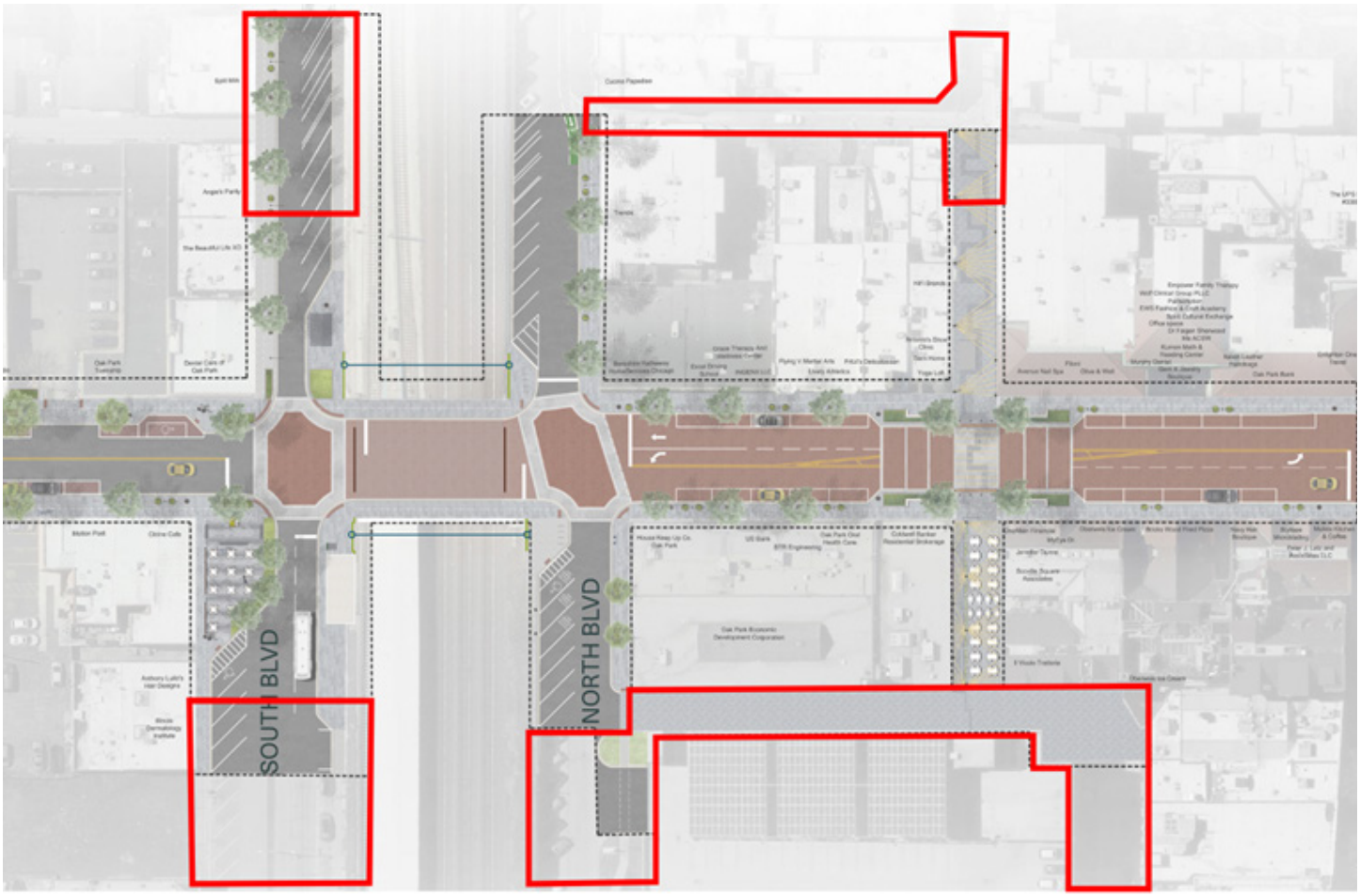
2.5 Quality Control and Quality Assurance

TERRA will conduct a peer review of the work by internal team members with expertise in streetscape and municipal infrastructure projects. Comments received from peer reviews will be documented and incorporated into the design. We will also track review comments received from the Village during milestone reviews and track them via an open coordination log.

3 Topographic Surveying

TERRA includes additional topographic survey of the expanded streetscape scope limits as designed in the Schematic Design. We will engage our surveyors to start field work as soon as Notice to Proceed is provided. They will prepare a topographic and utility survey with elevations shown on a 25’ grid in open space, 50’ x/x along the roadways and alleys, elevations at highs and lows, pavement and other improvements shown, and utilities located as visible and documented. Our team will prepare surveys using Autodesk Civil 3D Computer-Aided Design (CAD) software.

Figure 2 - Surveying Limits (Topographic/Utility in red)



4 Public Engagement, Meetings, and Website

The Design Team understands that public outreach will remain a critical component of the project through the design process. Beyond public outreach, we will also plan frequent touch points with the Village to ensure the project is progressing and schedule and budget are being maintained. In addition to the meetings previously described, we include the following meetings between key Design Team and Village personnel:

- One (1) Public Open House (in-person)
- Two (2) Business Open Houses (in-person)
- Weekly Management Meetings with the Village (virtual)
- Four (4) Milestone Review Meetings with the Village (virtual)
- Bi-weekly Internal Design Coordination Meetings, no Village participation (virtual)

TERRA and a5 will also collaborate with the Village and their communications group to create branding of materials (flyers, stickers, social media posts, etc.) that will be used for consistent communications to the public on the project's design progress and, ultimately, could be used during the construction phase (currently excluded from this scope of work). In addition to the meetings above, we include three (3) site walks for door-to-door notification during the design phase. We also include consistent updates and maintenance to the project website.

5 Permit Assistance

Closely collaborating with the Village, we will commence permitting assistance at the 100% Construction Documents milestone for the Streetscape Design and the 90% milestone for the Infrastructure Design. Based on the current scope of work, we anticipate coordination with the following permitting agencies:

- Union Pacific Railroad (for improvements adjacent and to the viaduct)
- Illinois Environmental Protection Agency (for water main replacement)
- Metropolitan Water Reclamation District (for combined sewer replacement)

6 Project Schedule

Our Design Team has capacity to begin immediately after Board approval and plans to start in earnest at the beginning of 2024. Below is a tentative schedule of milestone deliverables, to be reviewed further with the Village prior to commencing work.

Design Developments	
DD Village Kick-Off Meeting:	Week of 1/8/2024
50% Streetscape:	3/8/2024 (8 weeks)
Village Review:	3/22/2024 (2 weeks)
100% Streetscape/60% Infrastructure:	5/3/2024 (8 weeks)
Village Review:	5/17/2024 (2 weeks)
Construction Documents	
CD Village Kick-Off Meeting:	Week of 5/20/2024
Public Open House:	Week of 6/10/2024
50% Streetscape/90% Infrastructure:	7/12/2024 (8 weeks)
Village Review:	7/26/2024 (2 weeks)
Business Open House:	Week of 8/5/2024
100% Streetscape/Bid Infrastructure:	8/23/2024 (6 weeks)
Village Review:	9/6/2024 (2 weeks)
Streetscape Bid Documents:	9/27/2024 (3 weeks)
Business Open House:	Week of 10/7/2024 (during VOP procurement)

7 Fee Schedule

The proposed fee is included in the attached Cost Estimate of Consultant Services form, generally outlining the tasks described herein. The fees do not include permitting fees as may be required and are valid only for the duration of the project schedule above.

8 Excluded Services

The following services are excluded from our current approach yet may prove valuable to the Village, or required by authorities having jurisdiction, as the project progresses:

- Environmental Engineering & Testing
- Building Modifications (i.e., at entrances)
- Additional Perspective Renderings, not including updates to already completed renderings.
- Signage and wayfinding design and documentation outside of included scope, including viaduct murals, monument, custom fence design, and the murals at Hunter Court.
- Design of art elements not explicitly included herein.
- Additional meetings other than the number indicated in the above scope of services.
- Site excavation (EX) or earth retention (ERS) Drawings
- Construction Management Services

FEE PROPOSAL

TERRA
ENGINEERING LTD.

PAYROLL ESCALATION TABLE
FIXED RAISES

FIRM NAME TERRA Engineering Ltd
PRIME/SUPPLEMENT Prime

DATE 11/18/23
PTB NO. 0

CONTRACT TERM	13	**MONTHS**	**OVERHEAD RATE**	165.43%
START DATE	12/4/2023		**COMPLEXITY FACTOR**	0.035
RAISE DATE	1/1/2024		**% OF RAISE**	3.00%

ESCALATION PER YEAR

12/4/2023 - 1/1/2024	1/2/2024 - 1/1/2025			
1 / 13	12 / 13			
= 7.69%	95.08%			
= 1.0277				

The total escalation for this project would be: **2.77%**

PAYROLL RATES

FIRM NAME TERRA Engineering Ltd **DATE** 11/18/23

PRIME/SUPPLEMENT Prime

Escalation Rate: 2.77%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal	$86.00	$88.38
Sr. Project Manager	$83.16	$85.46
Sr. Project Manager - Site	$54.89	$56.41
Project Manager	$60.69	$62.37
Sr. Project Engineer	$52.97	$54.44
Sr. Project Engineer - Site	$42.40	$43.57
Project Engineer	$38.88	$39.96
Project Engineer - Site	$41.06	$42.20
Sr. Project Designer - Electrical	$55.29	$56.82
Sr. Project Designer	$38.59	$39.66
Design Engineer	$33.83	$34.77
Design Engineer - Site	$33.31	$34.23
Sr. Landscape Architect	$61.23	$62.93
Landscape Designer	$26.04	$26.76
Professional Land Surveyor	$50.42	$51.82
Surveyor	$40.55	$41.67
Survey Technician	$20.25	$20.81
Sr. Technician	$38.47	$39.54

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

FIRM TERRA Engineering Ltd

PROJECT Oak Park Ave Streetscape Design

PRIME/SUPPLEMENT Prime

DATE 11/18/2023

OVERHEAD RATE 165.43%

COMPLEXITY FACTOR **0.035**

TASK	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
1. Streetscape Design	1,218	53,123	87,882	2,500	15,511			159,016	15.9%
2. Water and Sewer Main Design	986	40,494	66,989	1,500	11,823			120,806	12.1%
3. Electrical Engineering	1,018	52,179	86,319	2,000	15,235			155,733	15.6%
4. Intersection Enhancements	710	33,781	55,884	0	9,863			99,528	10.0%
5. Topographic Survey	104	3,682	6,092	0	1,075			10,849	1.1%
6. Public Engagement, Meetings and Website	76	3,885	6,427	4,500	1,134			15,947	1.6%
7. Administration	104	4,996	8,264	1,000	1,459			15,718	1.6%
Subconsultants									
Design Workshop						346,680		346,680	34.7%
Hines, Inc. (Irrigation)						16,300		16,300	1.6%
H.W. Lochner						10,000		10,000	1.0%
a5 Communications						48,000		48,000	4.8%
TOTALS	4,216	192,140	317,857	11,500	56,100	420,980	-	998,577	100.0%

AVERAGE HOURLY PROJECT RATES

FIRM TERRA Engineering Ltd

PROJECT Oak Park Ave Corridor

PRIME/SUPPLEMENT Prime

DATE 11/18/23

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			1. Streetscape Design			2. Water and Sewer Main Design			3. Electrical Engineering			4. Intersection Enhancements			5. Topographic Survey		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	88.38	90	2.1%	1.89	32	2.6%	2.32	26	2.6%	2.33	32	3.1%	2.78						
Sr. Project Manager	85.46	48	1.1%	0.97							48	4.7%	4.03						
Sr. Project Manager - Site	56.41	364	8.6%	4.87	188	15.4%	8.71	64	6.5%	3.66							8	7.7%	4.34
Project Manager	62.37	312	7.4%	4.62										312	43.9%	27.41			
Sr. Project Engineer	54.44	12	0.3%	0.15										12	1.7%	0.92			
Sr. Project Engineer - Site	43.57	232	5.5%	2.40	108	8.9%	3.86	124	12.6%	5.48									
Project Engineer	39.96	0																	
Project Engineer - Site	42.20	418	9.9%	4.18	162	13.3%	5.61	256	26.0%	10.96									
Sr. Project Designer - Electrical	56.82	573	13.6%	7.72							573	56.3%	31.98						
Sr. Project Designer	39.66	620	14.7%	5.83	404	33.2%	13.15	132	13.4%	5.31							8	7.7%	3.05
Design Engineer	34.77	699	16.6%	5.76							365	35.9%	12.47	334	47.0%	16.36			
Design Engineer - Site	34.23	672	15.9%	5.46	288	23.6%	8.10	384	38.9%	13.33									
Sr. Landscape Architect	62.93	36	0.9%	0.54	36	3.0%	1.86												
Landscape Designer	26.76	0																	
Professional Land Surveyor	51.82	8	0.2%	0.10													8	7.7%	3.99
Surveyor	41.67	40	0.9%	0.40													40	38.5%	16.03
Survey Technician	20.81	40	0.9%	0.20													40	38.5%	8.00
Sr. Technician	39.54	52	1.2%	0.49										52	7.3%	2.90			
TOTALS		4,216	100.0%	$45.57	1218	100.0%	$43.61	986	100.0%	$41.07	1018	100.0%	$51.26	710	100.0%	$47.58	104	100.0%	$35.41

AVERAGE HOURLY PROJECT RATES

FIRM TERRA Engineering Ltd
PROJECT Oak Park Ave Streetscape Design
PRIME/SUPPLEMENT Prime

DATE 11/18/23

SHEET 2 **OF** 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6. Public Engagement, Meetings and Website			7. Administration															
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	88.38																		
Sr. Project Manager	85.46																		
Sr. Project Manager - Site	56.41	52	68.4%	38.60	52	50.0%	28.21												
Project Manager	62.37																		
Sr. Project Engineer	54.44																		
Sr. Project Engineer - Site	43.57																		
Project Engineer	39.96																		
Project Engineer - Site	42.20																		
Sr. Project Designer - Electrical	56.82																		
Sr. Project Designer	39.66	24	31.6%	12.52	52	50.0%	19.83												
Design Engineer	34.77																		
Design Engineer - Site	34.23																		
Sr. Landscape Architect	62.93																		
Landscape Designer	26.76																		
Professional Land Surveyor	51.82																		
Surveyor	41.67																		
Survey Technician	20.81																		
Sr. Technician	39.54																		
TOTALS		76	100.0%	$51.12	104	100.0%	$48.03	0	0.0%	$0.00	0	0.0%	$0.00	0	0.0%	$0.00	0	0.0%	$0.00