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Hoffman Estates, IL 60169  
847.697.2640

April 25, 2024

Mr. Sean Keane  
Parking and Mobility Services Manager  
**Village of Oak Park**  
123 Madison Street  
Oak Park, IL 60302

Re: Limited Slab Post-Tensioned (PT) Tendon Evaluation  
Avenue Parking Structure  
720 North Boulevard  
Oak Park, Illinois

Dear Mr. Keane:

Walker Consultants, Inc., a Michigan corporation, d/b/a Walker Consultants Engineering, Inc. (Walker) is pleased to submit this proposal for professional engineering services required to perform a limited slab PT Tendon Evaluation at the Avenue Parking Structure located at 720 North Boulevard in Oak Park, Illinois. The purpose of this proposal is to clarify the project background, define our Scope of Services, establish a schedule, and serve as formal authorization to proceed with work.

Walker Consultants has a staff of more than 100 engineers and technicians nationwide that specializes in the evaluation and restoration design for parking structures, plazas, stadiums, building façades, and specialty concrete structures. Major services provided to our clients include condition assessments, structure evaluations, building code compliance review, lifecycle cost analyses, repair design, and construction administration services. We pride ourselves in having provided clients with creative and practical solutions on thousands of restoration projects. Our proven commitment to meeting clients' needs has resulted in over 85% of our work being received from repeat clients.

Walker Consultants has significant expertise in evaluating post-tensioned structures. Specifically, Daniel Moser of Walker has evaluated numerous post-tensioned parking structures over his 30-year career. Dan is a full voting member of the Post-Tensioning Institute's (PTI) PT Repair and Rehabilitation Committee. This committee has developed and published a national PTI guide publication regarding evaluation techniques as well as repair techniques for post-tensioned structures. The knowledge used to develop such a guide allows Walker Consultants to bring a state-of-the-art approach to this project.

## Project Understanding

The structure is a freestanding, six-level parking structure providing parking for approximately 535 vehicles and was built around 2002. The first level consists of a concrete slab-on-grade and the remaining five supported levels consist of cast-in-place, post-tensioned slabs supported by post-tensioned concrete beams that frame into conventionally reinforced concrete columns supported on foundations. It is two bays wide with one ramped bay

on the east side and one flat bay on the west side. There is one stair tower in the southwest corner and one stair/elevator on the west elevation towards the north end. Viewed in plan, the parking structure is rectangular with dimensions of approximately 237 feet in the north-south direction and approximately 116 feet in the east-west direction.

During recent concrete repairs, concealed PT slab tendons were exposed on the underside of the second-tier slab, between grid lines 5 and 6 and between grid lines B and C. Walker performed in-situ testing of the exposed slab PT tendons to determine if they were under tension. Walker observed six tendons out of fourteen exposed slab PT tendons that were not under tension or had partial tension. Based on the number of PT tendons that were found to be de-tensioned or broken in this area, we recommend performing additional limited PT slab tendon testing in this bay.

Our Scope of Services is as follows.

## Scope of Services

### Phase I – Limited Slab PT Tendon Evaluation and Reporting

The Phase I deliverables will include a PDF letter report that will focus on the current condition of representative slab PT tendons in the bay with the six broken tendons, recommended conceptual repairs for the slab PT system, and our opinion of probable costs for the recommended repairs.

#### Task I – Limited Slab PT Tendon Evaluation

Walker is proposing a limited slab tendon evaluation as a good first step toward understanding the condition of the slab tendons on the second tier of the structure. Because the post-tensioning system is embedded beneath the surface of the floor slab, distress is often not outwardly visible on the surface, as is the case for this structure. Excavations must be made into the slab to remove portions of the concrete around the PT tendons to allow close-up examination of the surrounding concrete and tendons and in-place testing of the tendons' tension. Although there are non-destructive test methods available that promise to be able to identify distress within the embedded PT system, we believe that excavations are the most cost effective, accurate and reliable method of identifying the current level of slab tendon deterioration. Excavation can also allow the observations to be compared with future observations to judge changes in the conditions and identify potential future deterioration.

The work will specifically include the following:

1. Conduct on-site visual observations required to select excavation locations based on observed deterioration specifically related to potential PT slab distress. We have anticipated the excavations to be located along grid lines 2, 5, 6, and 9, between grid lines A and C on the second level.
2. Coordinate with J. Gill, a repair Contractor hired by the Owner, to perform excavations within the PT slab at selected representative locations (the contractor will repair the exploratory openings at the end of our investigation). The excavations will generally be at the topside of the slab over a beam where the tendon is at its highest point with minimal concrete cover and are approximately 18" by 6" by 3" deep in size. The openings will be performed over a one-day period, assuming Walker and J. Gill have access to all excavation locations at one time. Typically, this timeframe will allow for approximately 45 to 55 tendon inspection locations, depending on the difficulty of chipping the concrete carefully around the PT tendons. We believe that this is the minimum number of excavations required for a reasonable picture of

the condition of the slab PT tendons. Prior to our testing, we will coordinate with you to get an appropriate number of parking spaces blocked off by your maintenance staff prior to the testing day.

3. Visually observe the condition of the embedded slab post-tensioning system at slab excavations. The observed conditions will be documented with notes and photographs.
4. Perform in-situ testing of the tendons' general tension using the "screwdriver penetration" test and the "pry-bar lift-off" test.
5. Perform limited analyses to evaluate the general magnitude of the loss of strength in the post-tensioned slab due to observed deterioration at investigation openings' locations. We will notify you immediately if our observations or limited analyses identify that shoring or repairs to the slab post-tensioning system are required for the continued safe use of the parking structure.
6. Incorporate our observation and findings into a letter report.

## Task II – Reporting

1. Compile and analyze results of our limited slab PT evaluation and provide conceptual repair recommendations and update our opinion of probable cost of repairs.
2. We will notify you immediately if our observations should happen to identify items that require immediate attention to allow continued safe use of the parking structure. We will also recommend any additional evaluation, if required, based on observed deterioration.
3. Provide our letter report in PDF format to summarize our observations, findings, and conceptual repair recommendations for the structure. Our report will:
  - a. Identify immediate conceptual repairs/conceptual shoring areas to structural elements to maintain serviceability, if observed.
  - b. Recommend conceptual repair solutions for the identified problems and provide an update to our opinion of probable cost.
  - c. Identify the need (if any) for other structural evaluation, field investigations, shoring design, and/or study that may be required based on our observations to develop or implement the restoration program.
4. Have a conference call with you to review our report, recommendations, and opinion of probable construction costs, if requested.

Following the Phase I Limited Slab PT Tendon Evaluation, we will be glad to provide a separate proposal for the following additional services to implement the recommended conceptual repairs once the type and scope of those repairs are known.

## Phase II – Construction Documents (Future Scope Of Work)

Phase II services consist of finalizing the scope of the repair work and preparing plans, details, specifications, and phasing to design and help implement the repairs. The plans, details, and specifications Walker will develop will allow you to obtain proper pricing from J. Gill for the repairs while specifying the latest technology in durable concrete repair.

## Phase III – Engineering Services During Construction (Future Scope Of Work)

Phase III services consist of site observation of the repair work for general conformance to the intent of the plans and specifications.



## Limitations

As stated in the above Scope of Services, the assessment is based on visual observations and limited testing of the existing conditions. Our observations may not discover or disclose latent conditions without performing more invasive testing. More detailed and invasive testing can be provided by Walker as an additional service upon written request from Client.

## Americans with Disabilities Act

A review of the facility for Building Code compliance and compliance with the Americans with Disabilities Act (ADA) requirements is not part of the scope of work. However, it should be noted that whenever significant repair, rehabilitation, or restoration is undertaken in an existing structure, ADA design requirements may become applicable if there are currently unmet ADA requirements.

## Schedule

Assuming Walker and J. Gill have access to all excavation locations at one time, we estimate that it will take approximately one (1) day to complete the on-site work, and we anticipate that our on-site work will be performed during the week. Typically, we can complete our report within three to four (3 to 4) weeks after completing our field work. Signing and returning one copy of this proposal to us will serve as our notice to proceed with the assessment. We will schedule and coordinate with you regarding the date to perform our field work to minimize disruption to your normal operation.

## Professional Fee

We propose to provide the Scope of Services described above for a lump sum fee of Eight Thousand Dollars (\$8,000.00) including expenses. The terms and conditions shall be in accordance with the attached Walker General Conditions of Agreement.

Walker is dedicated to providing our clients with engineering services that meet project requirements. To meet this goal, we are available to review this proposal with you at your convenience and adapt the work scope as deemed necessary. We appreciate this opportunity to be of continued service and look forward to working with you again.

Sincerely,

Walker Consultants, Inc., a Michigan corporation,  
d/b/a Walker Consultants Engineering, Inc.

Erika Green  
Building Envelope Consultant

Daniel E. Moser, S.E., P.E., FPTI  
Principal/Director of Forensics,  
Restoration & Building Envelope

EJG:DEM:cgm

Enclosures      General Conditions of Agreement for Restoration Services



## Authorization

Trusting that this meets with your approval, we ask that you sign in the space below to acknowledge your acceptance of the terms contained herein, and to confirm your authorization for us to proceed. Please return one signed original of this agreement for our records.

Village of Oak Park

Avenue Parking Structure

Phase I – Limited Slab PT Tendon Evaluation

Authorized Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

## General Conditions of Agreement for Restoration Services

### Services

Walker Consultants, Inc., a Michigan corporation, d/b/a Walker Consultants Engineering, Inc. (Walker) will provide the Client professional services that are limited to the work described in the attached letter (the “services”). Any additional services requested will be provided at our standard hourly rates or for a mutually agreeable lump sum fee. The services are provided solely in accordance with written information and documents supplied by the Client and are limited to and furnished solely for the specific use disclosed to us in writing by the Client. No third-party beneficiary is contemplated.

### Payment for Services

#### Monthly Invoices

Walker will submit monthly invoices based on work completed plus. Payment is due upon receipt of invoice.

If for any reason the Client does not deliver payment to Walker within thirty (30) days of date of invoice, the Client agrees to pay Walker a monthly late charge of one and one-half percent (1.5%) per month of any unpaid balance of the invoice plus attorney’s fees and other costs incurred to collect the unpaid sum.

#### Payment Method

Walker’s preferred method of payment is ACH. All payments should be made electronically to:

Truist Bank  
ABA Routing Number 021052053  
Credit to the account of - Walker Consultants  
Account Number 79592337

### Period of Service

In the event that no contract administration phase services are to be provided by Walker, services shall be completed the earlier of (1) the date when final documents are accepted by the Client or (2) thirty days after final documents are delivered to the Client. If contract administration phase services are provided by Walker, services shall be complete upon the earlier of (1) the time of approval by Walker of final payment to the contractor or (2) thirty (30) days after completion of the work designed by Walker.

### Standard of Care

Walker will perform the services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality. Walker makes no warranty, express or implied, as to its professional services under this agreement.

Any estimates or projections provided by Walker will be premised in part upon assumptions provided by the Client. Walker will not independently investigate the accuracy of the assumptions. Because of the inherent uncertainty and probable variation of the assumptions, actual results will vary from estimated or projected results

and such variations may be material. As such, Walker makes no warranty or representation, express or implied, as to the accuracy of the estimates or projections.

## Limitation of Liability

To the maximum extent permitted by law, the Client agrees to limit Walker's liability for the Client's damages to the sum of \$10,000 or Walker's fee, whichever is greater. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

## Indemnification

Walker agrees, to the fullest extent permitted by law, to indemnify and hold harmless the Client, its officers, directors, and employees (collectively, Client) against all damages or liabilities, to the extent caused by Walker's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom Walker is legally liable.

The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Walker, its officers, directors, employees, and subconsultants (collectively Walker) against all damages or liabilities, to the extent caused by the Client's negligent acts, errors, or omissions in connection with the Project as well as the acts, errors, or omissions of its contractors, subcontractors, or consultants or anyone for whom the Client is legally liable.

Neither the Client nor Walker shall be obligated to indemnify the other party in any manner whatsoever for the other party's own negligence or for the negligence of others.

## Ownership of Documents

Walker shall retain ownership of all reports, drawings, plans, specifications, electronic files, field data, notes, calculations, and other documents and instruments prepared by Walker as instruments of service. Walker shall retain all common law, statutory, and other reserved rights, including, without limitation, all copyrights thereto. Any use for modifications or extensions of this work, for new projects, or for completion of this project by others without Walker's written consent will be at the Client's sole risk.

## Consequential Damages

The Client and Walker waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement.

## Dispute Resolution

This Agreement shall be governed by the laws of the Commonwealth, District, or State of the office performing Walker's services. In addition to, and as a condition precedent to litigation, the Client and Walker shall endeavor to resolve claims, disputes, and other matters in question between them by mediation, which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of this Agreement. A request for mediation shall

be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation.

The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the locality of the Walker office performing services under this Agreement.

### Non-Solicitation Clause

The Client agrees that it will not directly or indirectly solicit for employment any Walker employee providing services on behalf of Client for a period of two years after the date of this agreement. Client agrees that a breach of this provision would have material and adverse impacts on Walker's business and Client therefore agrees to pay Walker an amount equal to two times the annual salary of any employee of Walker who accepts a position with Client within such two-year period, in addition to all other rights and remedies available to Walker.

### Proprietary Information

The information contained in this proposal is confidential, privileged, and only for the Client and may not be shared, published, or redistributed without prior written permission from Walker Consultants.