BOOK 1

Public Building Commission
and
BOWA Construction

CONTRACT NO. PS3096

KELLS (GEORGE) PARK FIELDHOUSE
3201 West Chicago Avenue
Chicago, Illinois

Mayor Brandon Johnson, Chairman
Ray Giderof
Executive Director

PUBLIC BUILDING COMMISSION OF CHICAGO
Richard J. Daley Center
50 West Washington Street
Room 200
Chicago, Illinois 60602
312-744-3090
www.pbcchicago.com

DESIGN-BUILD AGREEMENT BETWEEN COMMISSION AND DESIGN-BUILDER

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ARTICLE 1
AGREEMENT

This Design-Build Agreement ("Agreement") is made as June 10, 2025 (the "Effective Date"), by and between the Public Building Commission of Chicago, a municipal corporation and body politic organized and operating under the Constitution of the State of Illinois ("Commission") and The BOWA Group, Inc. d/b/a BOWA Construction, located at 7050 South Stony Island Avenue, Chicago, Illinois 60649 ("Design-Builder") for design-build services ("Services") in connection with the following Project:

KELLS (GEORGE) PARK FIELDHOUSE
3201 West Chicago Avenue
Chicago, Illinois

WHEREAS, the Commission intends to undertake, on behalf of the Chicago Park District, ("User Agency") the design, construction, and delivery of a new fieldhouse and related site development (the "Project") to be located on certain property commonly known as 3201 West Chicago Avenue, Chicago, Illinois (the "Project Site"); and

WHEREAS, the Commission requires certain services necessary and appropriate in order to design, construct and deliver the Project, and desires to retain the Design-Builder to perform such services on the terms and conditions set forth in this Agreement; and

WHEREAS, the Design-Builder desires to be so retained and has represented to the Commission that it has the knowledge, skill, experience and other resources to perform such services in the manner provided by this Agreement; and

WHEREAS, the Commission has relied upon the Design-Builder's representations in selecting the Design-Builder to perform such services on the terms and conditions set forth in this Agreement;

NOW, THEREFORE, in consideration of the mutual promises, agreements and covenants set forth herein, the parties hereby agree as follows:

ARTICLE 2
GENERAL PROVISIONS

2.1 RECITALS. The above Recitals are incorporated herein by reference.

2.2 RELATIONSHIP. The Commission and the Design-Builder agree to proceed with the Project on the basis of trust, good faith, and fair dealing and shall take all actions reasonably necessary to perform this Agreement in an economical and timely manner, including consideration of design modifications and alternative materials or equipment that will permit the Scope of Work to be constructed within the Guaranteed Maximum Price (GMP) Project Cost Proposal/Cost Form and by the Dates of Substantial Completion and Final Completion for the Scope of Work. The Design-Builder agrees to procure or furnish, as permitted by the laws of Illinois, the design phase services and construction phase services as set forth below.

2.2.1 The Design-Builder represents that it is an independent contractor and that it is familiar with the type of work it is undertaking.

2.2.2 Neither the Design-Builder nor any of its agents or employees shall act on behalf of or in the name of the Commission unless authorized in writing by the Commission's Representative.

2.2.3 The Commission and the Design-Builder shall perform their obligations with integrity, ensuring at a minimum that:

2.2.3.1 Conflicts of interest shall be avoided or disclosed promptly to the other Party; and

2.2.3.2 The Design-Builder and the Commission warrant that they have not and shall not pay nor receive any contingent fees or gratuities to or from the other Party, including their agents, officers and employees, Subcontractors or others for whom they may be liable, to secure preferential treatment.

2.3 ARCHITECT/ENGINEER. Architectural and/or engineering services shall be procured from licensed, independent design professionals retained by the Design-Builder or furnished by licensed employees of the Design-Builder, as permitted by the law of the State of Illinois. The person or entity providing architectural and engineering services shall be referred to as the Architect/Engineer. If the Architect/Engineer is an independent design professional, the architectural and engineering services shall be procured pursuant to a separate agreement between the Design-Builder and the Architect/Engineer. The Design Architect for the Project is **Brook Architecture**.

2.4 EXTENT OF AGREEMENT. This Agreement is solely for the benefit of the Parties, represents the entire and integrated agreement between the Parties, and supersedes all prior negotiations, representations or agreements, either written or oral. The Commission and the Design-Builder agree to look solely to each other with respect to the performance of the Agreement. The Agreement and each and every provision are for the exclusive benefit of the Commission and the Design-Builder and not for the benefit of any third party nor any third-party beneficiary except to the extent expressly provided in the Agreement.

2.5 DEFINITIONS

2.5.1 The Contract Documents consist of:

a. Change Orders and written amendments to this Agreement including exhibits and appendices, signed by both the Commission and the Design-Builder;
b. this Agreement except for the existing Contract Documents set forth in item (e) below;
c. the most current documents approved by the Commission;
d. the information provided by the Commission pursuant to Clause 4.1.2.1;
e. the Contract documents in existence at the time of execution of this Agreement which are set forth in Article 15; and
f. the Commission's Program provided pursuant to Subparagraph 4.1.1.
g. In case of any inconsistency, conflict, or ambiguity among the Contract Documents, the documents shall govern in the order in which they are listed above; further, Book 1 will govern over Book 2.

2.5.2 Day shall mean calendar day, unless otherwise specifically defined.

2.5.3 Design-Builder's Fee means the compensation paid to the Design-Builder for salaries and other mandatory or customary compensation of the Design-Builder's employees at its principal and branch offices except employees listed in Subparagraph 7.1.3, general and administrative expenses of the Design-Builder's principal and branch offices other than the field office, and the Design-Builder's capital expenses, including interest on the Design-Builder's capital employed for the Work, and profit.

2.5.4 Defective Work is any portion of the Work not in conformance with the Contract Documents as more fully described in Article 3.

2.5.5 Fast-track means accelerated scheduling which involves expedited permitting, project phasing early bid package procurement specifically related to long lead material, and working extended hours, shifts, and weekends as necessary.

2.5.6 Final Completion and Acceptance of the Work means the last date on which all of the following events have occurred: all Work, including punch-list work, has been completed by the Design-Builder in accordance with the Contract Documents, approved by the Architect/Engineer, and accepted by the Commission; Design-Builder's LEED responsibilities have been completed if applicable and approved by the Architect/Engineer; all deliverables, including closeout documentation such as warrantees, record documents, as-builts, etc. have been submitted by the Design-Builder and approved by the Architect/Engineer; and all other contractual requirements for final payment have been completed.

2.5.7 Guaranteed Maximum Price (GMP) Project Cost Proposal/Cost Form is the maximum amount to be paid by the Commission to design, construct, and deliver the Project as set forth on the Guaranteed Maximum Project Cost Proposal, as amended.

2.5.8 Material Supplier is a party or entity retained by the Design-Builder to provide material and equipment for the Work.

2.5.9 Others means other contractors and all persons at the Worksite who are not employed by Design-Builder, its Subcontractors or Material Suppliers.

2.5.10 Commission is the person or entity identified as such in this Agreement and includes the Commission's Representative.

2.5.11 Commission's Program is an initial description of the Commission's objectives, that may include budget and time criteria, space requirements and relationships, flexibility and expandability requirements, special equipment and systems, and site requirements.

2.5.12 Project as identified in Article 1, is the building, facility or other improvements for which the Design-Builder is to perform the Work under this Agreement. It may also include improvements to be undertaken by the Commission or Others.

2.5.13 Subcontractor, vendor, or supplier is a party or entity retained by the Design-Builder as an independent contractor to provide the onsite labor, materials, equipment or services necessary to complete a specific portion of the work. The term Subcontractor does not include the Architect/Engineer or any separate contractor employed by the Commission or any separate contractor's subcontractor.

2.5.14 Substantial Completion of the Work, designated portions of the Work, occur on the date when the Design-Builder's obligations are sufficiently complete in accordance with the Contract Documents, inspected and approved, in writing, by the Architect/Engineer, and accepted by the Commission such that the User can occupy the Project without disruption.

2.5.15 Terrorism means a violent act, or an act that is dangerous to human life, property or infrastructure, that is committed by an individual or individuals and that appears to be part of an effort to coerce a civilian population or to influence the policy or affect the conduct of any government by coercion. Terrorism includes but is not limited to, any act certified by the United States Secretary of Treasury as an act of terrorism pursuant to the Terrorism Risk Insurance Act, as amended.

2.5.16 Work is the Design Phase services procured or furnished in accordance with Article 3 and the GMP. Additional services that may be provided in accordance with Article 3 and other services which are necessary to complete the Project in accordance with and reasonably inferable from the Contract Documents.

2.5.17 Deliverables are any and all documents, including but not limited to plans, specifications, drawings, and reports prepared by the Design-Builder in the performance of the Work.

2.5.18 Project Site means the geographic area at the location mentioned in Article 1 where the Work is to be performed.

2.5.19 User Agency means the unit of local government on the behalf of which the Commission is undertaking the design and construction of the Project.

ARTICLE 3
DESIGN-BUILDER'S RESPONSIBILITIES

The Design-Builder shall be responsible for procuring or furnishing the design and for the construction of the Work consistent with the Commission's Program, as such Program may be modified by the Commission during the course of the Work. The Design-Builder shall exercise reasonable skill and judgment in the performance of its services consistent with Paragraph 2.2 but does not warrant nor guarantee schedules and estimates other than those that are part of the GMP proposal. The Design-Builder shall at all times comply in letter and spirit with, and demonstrate good faith efforts to achieve, the affirmative action goals of the Commission and its User Agency, as those goals may be set forth in the MBE/WBE Special Conditions for Design Build Contracts, Book 2, Article 23, attached hereto and incorporated by reference herein, and all other terms and provisions of this Agreement.

3.1 DESIGN PHASE SERVICES. In addition to the Design Phase Services set forth below, the Design-Builder shall provide those design services specified in **Exhibit 1 - Design Builder Design Services**, attached hereto and incorporated by reference herein.

3.1.1 PRELIMINARY EVALUATION. The Design-Builder shall review the Commission's Program to ascertain the requirements of the Project and shall verify such requirements with the Commission. The Design-Builder's review shall also provide to the Commission a preliminary evaluation of the site with regard to access, drainage, building placement and other considerations affecting the building, the environment and energy use, as well as information regarding applicable governmental laws, regulations and requirements. The Design-Builder shall also propose alternative architectural, civil, structural, mechanical, electrical and other systems for review by the Commission, to determine the most desirable approach on the basis of costs, technology, quality and speed of delivery. Based upon its review and verification of the Commission's Program and other relevant information the Design-Builder shall provide a Preliminary Evaluation of the Project's feasibility for the Commission's acceptance. The Design-Builder's Preliminary Evaluation shall specifically identify any deviations from the Commission's Program.

3.1.2 PRELIMINARY SCHEDULE. The Design-Builder shall prepare a preliminary schedule of the Work. The Commission shall provide written approval of milestone dates established in the preliminary schedule of the Work. The schedule shall show the activities of the Commission, the Architect/Engineer and the Design-Builder necessary to meet the Commission's completion requirements. The schedule shall be updated periodically with the level of detail for each schedule update reflecting the information then available. If an update indicates that a previously approved schedule will not be met, the Design-Builder shall recommend corrective action to the Commission in writing.

3.1.3 PRELIMINARY ESTIMATE. When sufficient Project Information has been identified, the Design-Builder shall prepare for the Commission's acceptance a preliminary estimate utilizing area, volume or similar conceptual estimating techniques. The estimate shall be updated periodically with the level of detail for each estimate update reflecting the information then available. If the preliminary estimate or any update exceeds the Commission's budget, the Design-Builder shall make recommendations to the Commission.

3.1.4 SCHEMATIC DESIGN DOCUMENTS. The Design-Builder shall submit for the Commission's written approval Schematic Design Documents, based on the agreed upon Preliminary Evaluation. Schematic Design Documents shall include drawings, outline specifications and other conceptual documents illustrating the Project's basic elements, scale, and their relationship to the Worksite. One set of these documents shall be furnished to the Commission. When the Design-Builder submits the Schematic Design Documents the Design-Builder shall identify in writing all material changes and deviations that have taken place from the Design-Builder's Preliminary Evaluation, schedule and estimate. The Design-Builder shall update the preliminary schedule and estimate based on the Schematic Design Documents.

3.1.5 PERMITS. The Design-Builder shall obtain and the Commission shall pay for all permits necessary for the construction of the Project. The cost of permits are included in the Design Fee Services. The Design-Builder may use **Exhibit - 15 Fee Waiver** (hereafter "Exhibit 15") when applicable during the duration of the Project.

3.1.6 DESIGN DEVELOPMENT DOCUMENTS. The Design-Builder shall submit for the Commission's written approval Design Development Documents based on the approved Schematic Design Documents. The Design Development Documents shall further define the Project including drawings and outline specifications fixing and describing the Project size and character as to site utilization, and other appropriate elements incorporating the structural, architectural, mechanical and electrical systems. One set of these documents shall be furnished to the Commission. When the Design-Builder submits the Design Development Documents, the Design-Builder shall identify in writing all material changes and deviations that have taken place from the Schematic Design Documents. The Design-Builder shall update the schedule and estimate based on the Design Development.

3.1.7 CONSTRUCTION DOCUMENTS. The Design-Builder shall submit for the Commission's written approval Construction Documents based on the approved Design Development Documents. The Construction Documents shall set forth in detail the requirements for construction of the Work and shall consist of drawings and specifications based upon codes, laws and regulations enacted at the time of their preparation. When the Design-Builder submits the Construction Documents, the Design-Builder shall identify in writing all material changes and deviations that have taken place from the Design Development Documents. Construction shall be in accordance with these approved Construction Documents. One set of these documents shall be furnished to the Commission prior to commencement of construction. If GMP has not been established the Design-Builder shall prepare a further update of the schedule and estimate based on the Construction Documents.

The Design-Builder acknowledges that the Commission selected the design-build method of project delivery in order to obtain the advantages associated with having the builder participate in the design process. Throughout the Design Phase, the Design-Builder shall provide value engineering services to assist the Commission in reducing design, construction, operation, and maintenance costs with respect to the Project, while maintaining or enhancing the Project's quality, efficiency, integrity, and functional performance.

3.1.8 OWNERSHIP OF DOCUMENTS

3.1.8.1 OWNERSHIP OF DRAWINGS AND DOCUMENTS. All Deliverables, data, findings or information in any form prepared, assembled or encountered by or provided to Design-Builder under this Agreement are property of the Commission, including all copyrights inherent in them or their preparation. During performance of the Work, Design-Builder is responsible for any loss or damage to the Deliverables, data, findings or information while in Design-Builder's or any subcontractor's possession. Any such lost or damaged Deliverables, data, findings or information must be restored at the expense of the Design-Builder. If not restorable, Design-Builder must bear the cost of replacement and of any loss suffered by the Commission.

3.1.8.2 COPYRIGHTS. Design-Builder and the Commission agree that, to the extent permitted by law, the Deliverables to be produced by Design-Builder at the Commission's instance and expense under this Agreement are conclusively considered "works made for hire" within the meaning and purview of Section 101 of the United States Copyright Act, 17 U.S.C. §101 *et seq.*, and that the Commission will be the sole copyright owner of the Deliverables and of all aspects, elements and components of them in which copyright can subsist, and of all rights to apply for copyright registration or prosecute any claim of infringement.

To the extent that any Deliverable does not qualify as a "work made for hire," Design-Builder hereby irrevocably grants, conveys, bargains, sells, assigns, transfers and delivers to the Commission, its successors and assigns, all right, title and interest in and to the copyrights and all U.S. and foreign copyright registrations, copyright applications and copyright renewals for them, and other intangible, intellectual property embodied in or pertaining to the Deliverables prepared for the Commission under this Agreement, and all goodwill relating to them, free and clear of any liens, claims, or other encumbrances, to the fullest extent permitted by law. Design-Builder will, and will cause all of its subconsultants and subcontractors, employees, agents and other persons within its control to execute all documents and perform all acts that the Commission may reasonably request in order to assist the Commission in perfecting its rights in and to the copyrights relating to the Deliverables, at the sole expense of the Commission. Design-Builder warrants to the Commission, its successors and assigns, that on the date of transfer Design-Builder is the lawful owner of good and marketable title in and to the copyrights for the Deliverables and has the legal rights to fully assign them. Design-Builder further warrants that it has not assigned and will not assign any copyrights and that it has not granted and

will not grant any licenses, exclusive or non-exclusive, to any other party, and that it is not a party to any other agreements or subject to any other restrictions with respect to the Deliverables. Design-Builder warrants and represents that the Deliverables are complete, entire and comprehensive, and that the Deliverables constitute a work of original authorship.

3.1.8.3 USE OF DOCUMENTS IN EVENT OF TERMINATION. In the event of a termination of this Agreement pursuant to Article 12, the Commission shall have the right to use, to reproduce, and to made derivative works of the Documents to complete the Project, regardless of whether there has been a transfer of copyright under Subparagraph 3.1.8.2, provided payment has been made pursuant to Paragraph 3.1.8.1.

3.1.8.4 COMMISSION'S USE OF DOCUMENTS AFTER COMPLETION OF PROJECT. After completion of the Project, the Commission may reuse, reproduce or make derivative works from the Documents solely for the purposes of maintaining, renovating, remodeling or expanding the Project at the Project Site. The Commission's use of the Documents without the Design-Builder's involvement or on other projects is at the Commission' sole risk, except for the Design-Builder's indemnification obligations pursuant to Article 11.

3.1.8.5 DESIGN-BUILDER'S USE OF DOCUMENTS. Where the Design-Builder has transferred its copyright interest in the Documents under Subparagraph 3.1.8.1, the Design-Builder may reuse Documents prepared by it pursuant to this Agreement in its practice, but only in their separate constituent parts and not as a whole.

3.1.8.6 The Design-Builder shall obtain from its Architect/Engineer, Subcontractors and consultants rights and rights of use that correspond to the rights given by the Design-Builder to the Commission in this Agreement, and the Design-Builder shall provide evidence that such rights have been secured.

3.2 DESIGN-BUILDER'S GMP will contain, as part of the estimated Cost of the Work, costs for the following categories/line item: General Conditions, Payment and Performance Bond, Insurance, Design Phase Services, Cost of Work, and Design-Builder's Fee.

3.2.1 COST REPORTING. The Design-Builder shall keep such full and detailed accounts as are necessary for proper financial management under this Agreement. The Design-Builder shall maintain a complete set of all books and records prepared or used by the Design-Builder with respect to the Project. The Design-Builder's records supporting its performance and billings under this Agreement shall be current, complete and accurate and maintained according to generally accepted accounting principles. The Commission shall be afforded reasonable access during normal business hours to all the Design-Builder's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda and similar data relating to this Agreement. The Design-Builder shall present all such records for a period of five years after the final payment or longer where required by law.

3.2.2 ERRORS AND OMMISSIONS. The Design-Builder shall, at no additional cost to the Commission, immediately make additions, changes and corrections to any documents prepared by Design-Builder necessitated by errors and omissions in the Design-Builder's performance of its services. In addition, the Design/Builder shall not be entitled to any compensation or adjustment in the Design Builder's Fee or the GMP for additional work required as a result of errors or omissions by Design-Builder in the course of the performance of its duties under this Agreement.

3.3 CONSTRUCTION PHASE SERVICES

3.3.1 The Construction Phase of the Scope of Work will commence upon the issuance of a written Notice to Proceed (NTP) by the Commission.

3.3.2 In order to complete the Work, the Design-Builder shall provide all necessary construction supervision, inspection, construction equipment, labor, materials, tools and subcontracted items.

3.3.3 The Design-Builder shall give all notices and comply with all laws and ordinances legally enacted at the date of execution of the Agreement which govern the proper performance of the Work.

3.3.4 The Design-Builder shall obtain all permits necessary for the construction of the Project. The cost of permits are a Cost of the Work. The Design-Builder may use Exhibit 15 when applicable during the duration of the Project.

3.3.5 The Design-Builder shall provide written reports daily to the Commission on the progress of the Work in such detail as is required by the Commission and as agreed to by the Commission and the Design-Builder.

3.3.6 The Design-Builder shall develop a system of cost reporting for the Work, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes in the Work. The reports shall be presented to the Commission at mutually agreeable intervals.

3.3.7 The Design-Builder shall regularly and properly remove debris and waste materials at the Worksite resulting from the Work. Prior to discontinuing Work in an area, the Design-Builder shall clean the area and remove all rubbish and its construction equipment, tools, machinery, waste and surplus materials. The Design-Builder shall minimize and confine dust and debris resulting from construction activities. At the completion of the Work, the Design-Builder shall remove from the Worksite all construction equipment, tools, surplus materials, waste materials and debris.

3.3.8 The Design-Builder shall prepare and submit to the Commission:

3.3.8.1 Final marked-up as built drawings; and

3.3.8.2 updated electronic data documenting the various elements of the Work including changes actually constructed or installed, or as defined by the Parties by attachment to the Agreement.

3.4 CONSTRUCTION MEANS AND METHODS. Design-Builder is solely responsible for the means, methods, techniques, sequences and procedures of construction within the parameters set forth by this Agreement. Nothing in this Section 3.4 shall be deemed to limit the Design-Builder's obligations to provide the Commission access to all Work as provided in other Sections of this Agreement, nor shall the Commission's observation of the Work at Construction Hold Points be construed to relieve the Design-Builder of its obligation to correct defective Work if defects are discovered after an observation.

3.5 SCHEDULE OF THE WORK. The Design-Builder shall prepare and submit a Schedule of Work for the Commission's acceptance and written approval as to milestone dates and activities pursuant to Article 10 of Book 2. This schedule shall indicate the dates for the start and completion of the various stages of the Work, including the dates when information and approvals are required from the Commission. The Schedule shall be revised as required by the conditions of the Work and as agreed upon by the Parties and as otherwise provided in Article 10 of Book 2.

3.6 SAFETY OF PERSONS AND PROPERTY

3.6.1 SAFETY PRECAUTIONS AND PROGRAMS. The Design-Builder shall have overall responsibility for safety precautions and programs in the performance of the Work. While the provisions of this Paragraph establish the responsibility for safety between the Commission and the Design Builder, they do not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with the provisions of applicable laws and regulations.

3.6.1.1 The Design-Builder shall seek to avoid injury, loss or damage to persons or property by taking reasonable steps to protect:

3.6.1.1.1 its employees and other persons at the Worksite;

3.6.1.2.1 materials, supplies and equipment stored at the Worksite for use in performance of the Work; and

3.6.1.3.1 the Project and all property located at the Worksite and adjacent to work areas, whether or not said property or structures are part of the Project or involved in the Work.

3.6.2 DESIGN-BUILDER'S SAFETY REPRESENTATIVE. The Design-Builder shall designate a Safety Representative for the Project. The Design-Builder shall submit a Project specific Safety Plan, prepared and approved by its Safety Representative. The Design-Builder's Safety Representative shall conduct regular site visits and participate in tool box meetings to ensure compliance with the Design-Builder's Safety Plan. The Design-Builder will immediately report in writing all accidents and injuries occurring at the Worksite to the Commission. When the Design-Builder is required to file an accident report with a public authority, the Design-Builder shall furnish a copy of the report to the Commission.

3.6.2.1 The Design-Builder shall provide the Commission with copies of all notices required of the Design-Builder by law or regulation. The Design-Builder's safety program shall comply with the requirements of all governmental authorities having jurisdiction over the Work.

3.6.2.2 Damage or loss not insured under property insurance which may arise from the performance of the Work to the extent of the negligence attributed to such acts or omissions of the Design-Builder, or anyone for whose acts the Design-Builder may be liable, or any third party, shall be promptly remedied by the Design-Builder. Damage or loss attributable to the acts or omissions of the Commission and not to the Design-Builder shall be promptly remedied by the Commission; provided, however, that the Commission may direct the Design-Builder to remedy such damage or loss, and the Commission shall pay for such remedy as a Cost of the Work.

3.6.2.3 If the Commission deems any part of the Work or Worksite unsafe, the Commission, without assuming responsibility for the Design-Builder's safety program, may require the Design-Builder to stop performance of the Work or take corrective measures satisfactory to the Commission, or both. If the Design-Builder does not adopt corrective measures, the Commission may perform them and reduce by the costs of the corrective measures the amount of the GMP, or in the absence of a GMP, the Cost of the Work as provided in Article 7. The Design-Builder agrees to make no claim for damages, for an increase in the GMP, compensation for Design Phase services, the Design-Builder's Fee or the Date of Substantial Completion or the Date of Final Completion based on the Design-Builder's compliance with the Commission's reasonable request.

3.7 HAZARDOUS MATERIALS

3.7.1 A Hazardous Material is any substance or material identified as hazardous under any federal, state or local law or regulation, or any other substance or material which may be considered hazardous or otherwise subject to statutory or regulatory requirements governing handling, disposal or clean-up. The Design-Builder shall not be obligated to commence or continue work until all Hazardous Material discovered at the Worksite has been removed, rendered or determined to be harmless by the Commission as certified by an independent testing laboratory approved by the appropriate government agency.

3.7.2 If after the commencement of the Work, Hazardous Material is discovered at the Project, the Design-Builder shall be entitled to immediately stop Work in the affected area. The Design-Builder shall report the condition to the Commission and, if required, the government agency with jurisdiction.

3.7.3 The Design-Builder shall not be required to perform any Work relating to or in the area of Hazardous Material without written mutual agreement.

3.7.4 The Commission shall be responsible for retaining an independent testing laboratory to determine the nature of the material encountered and whether it is a Hazardous Material requiring corrective measures or remedial action. Such measures shall be the sole responsibility of the Commission. The Design-Builder shall resume Work in the area affected by any Hazardous Material only upon written agreement between the Parties after the Hazardous Material has been removed or rendered harmless and only after approval, if necessary, of the governmental agency or agencies with jurisdiction.

3.7.5 If the Design-Builder incurs additional costs or is delayed due to the presence or remediation of Hazardous Material, the Design-Builder shall be entitled to an equitable adjustment in the GMP, compensation for Design Phase services, the Design-Builder's Fee or the Date of Substantial Completion or the Date of Final Completion.

3.7.6 Material Safety Data (MSD) sheets as required by law and pertaining to materials or substances used or consumed in the performance of the Work, whether obtained by the Design-Builder, Subcontractors, the Commission or Others, shall be maintained at the Project by the Design-Builder and made available to the Commission and Subcontractors.

3.7.7 During the Design-Builder's performance of the Work, the Design-Builder shall be responsible for the proper handling of all materials brought to the Worksite by the Design-Builder. Upon issuance of the Certificate of Substantial Completion, the Commission shall be responsible under this Paragraph for materials and substances brought to the site by the Design-Builder if such materials or substances are required by the Contract Documents.

3.7.8 The terms of this Paragraph 3.7 shall survive the completion of the Work under this Agreement or any termination of this Agreement.

3.8 WARRANTIES AND COMPLETION

3.8.1 The Design-Builder warrants that all materials and equipment furnished under the Construction Phase of this Agreement will be new unless otherwise specified, of good quality, in conformance with the Contract Documents, and free from defective workmanship and materials. Warranties shall commence on the Date of Substantial Completion of the Work. The Design-Builder agrees to correct all construction performed under this Agreement which is defective in workmanship or materials within a period of one year from the Date of Substantial Completion or for such longer periods of time as may be set forth with respect to specific warranties required by the Contract Documents.

3.8.2 To the extent products, equipment, systems or materials incorporated in the Work are specified and purchased by the Commission, they shall be covered exclusively by the warranty of the manufacturer. There are no warranties which extend beyond the description on the face of any such warranty. The Design-Builder shall assist the Commission in pursuing warranty claims. ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

3.8.3 The Design-Builder shall secure any and all required certificates of inspection, testing or approval and deliver them to the Commission.

3.8.4 The Design-Builder shall collect all written warranties and equipment manuals and deliver them to the Commission in a format directed by the Commission.

3.8.5 The Design-Builder shall direct the commissioning checkout of utilities and start- up operations and adjusting and balancing of systems and equipment for readiness.

3.9 CONFIDENTIALITY. The Design-Builder shall treat as confidential and not disclose to third persons, except Subcontractors, Sub-subcontractors and the Architect/Engineer as is necessary for the performance of the Work or use for its own benefit any of the Commission's developments, confidential information, know-how, discoveries, production methods and the like that may be disclosed to the Design-Builder or which the Design-Builder may acquire in connection with the Work. The Commission shall treat as confidential information all of the Design-Builder's estimating systems and historical and parameter cost data that may be disclosed to the Commission in connection with the performance of this Agreement. The Commission and the Design-Builder shall each specify those items to be treated as confidential and shall mark them as "Confidential." Notwithstanding the foregoing, the Parties acknowledge and agree that the Commission is a unit of local government, and as such is subject to Freedom of Information Act, 5 ILCS 140/1 et seq. Design-Builder will not issue any publicity, news releases or grant press interviews, and, except as may be required by law during or after the performance of this Agreement, disseminate any information regarding its Work or the Project to which the Work pertains without the prior written consent of the Commission.

If Design-Builder is presented with a request for documents by any administrative agency, or with a subpœna duces tecum regarding any records, data or documents which may be in Design-Builder's possession by reason of this Agreement, Design-Builder shall immediately give notice to the Commission and its legal counsel with the understanding that the Commission will have the opportunity to contest such process by any means available to it before the records or documents are released to a court or other third party. Design-Builder is not, however, obligated to withhold the delivery beyond the time ordered by the court or administrative agency unless the subpœna or request is quashed, or the time to produce is otherwise extended.

3.10 ADDITIONAL SERVICES. The Design-Builder shall provide or procure the following Additional services upon the request of the Commission. A written amendment to this Agreement between the Commission and the Design-Builder shall define the extent of such Additional services before they are performed by the Design-Builder. If a GMP has been established for the Work or any portion of the Work, such Additional services shall be considered a change in the Work.

3.10.1 Development of the Commission's Program, establishing the Project budget, investigating sources of financing, general business planning and other information and documentation as may be required to establish the feasibility of the Project.

3.10.2 Consultations, negotiations, and documentation and supporting the procurement of Project financing.

3.10.3 Surveys, site evaluations, legal descriptions and aerial photographs.

3.10.4 Appraisals of existing equipment, existing properties, new equipment and developed properties.

3.10.5 Soils, subsurface and environmental studies, reports and investigations required for submission to governmental authorities or others having jurisdiction over the Project.

3.10.6 Consultations and representations before governmental authorities or others having jurisdiction over the Project other than normal assistance in securing building permits.

3.10.7 Investigation or making measured drawings of existing conditions or the reasonably required verification of Commission-provided drawings and information. Artistic renderings, models and mockups of the Project or any part of the Project or the Work.

3.10.8 Interior design and related services, including procurement and placement of furniture, furnishings, artwork and decorations.

3.10.9 Making revisions to the Design Development or Construction Documents or documents forming the basis of the GMP after they have been approved by the Commission, and which are due to causes beyond the control of the Design-Builder. Causes beyond the control of the Design-Builder do not include acts or omissions on the part of Subcontractors, Material Suppliers, Sub-subcontractors or the Architect/Engineer.

3.10.10 Design, coordination, management, expediting and other services supporting the procurement of materials to be obtained or work to be performed, by the Commission, including but not limited to telephone systems, computer wiring networks, sound systems, alarms, security systems and other specialty systems which are not a part of the Work.

3.10.11 Estimates, proposals, appraisals, consultations, negotiations and services in connection with the repair or replacement of an insured loss, provided such repair or replacement did not result from the negligence of the Design-Builder.

3.10.12 Out-of-town travel by the Architect/Engineer in connection with the Work, except between the Architect/Engineer's office, the Design-Builder's office, the Commission's office and the Worksite.

3.10.13 Obtaining service contractors and training maintenance personnel, assisting and consulting in the use of systems and equipment after the initial start-up.

3.10.14 Services for tenant or rental spaces not a part of this Agreement.

3.10.15 Services requested by the Commission or required by the Work which are not specified in the Contract Documents and which are not normally part of generally accepted design and construction practice.

3.10.16 Serving or preparing to serve as an expert witness in connection with any proceeding, legal or otherwise, regarding the Project.

3.10.17 Providing services relating to Hazardous Material discovered at the Worksite.

3.10.18 Other services as agreed to by the Parties.

3.11 STANDARD OF CARE

3.11.1 Design-Builder shall perform all services required by this Agreement with that degree of skill, care and diligence consistent with the professional standards prevailing in the Chicago metropolitan area for services of comparable scope and magnitude.

3.11.2 Design-Builder is and remains responsible for the professional and technical accuracy of all services or Deliverables furnished, whether by Design-Builder, the Architect Engineer, or others on its or their behalf. All Deliverables must be prepared in a form and content satisfactory to the Commission and delivered in a timely manner consistent with the requirements of this Agreement. Subsequent editions of design Deliverables, including drawings and specifications, shall supersede earlier editions, provided that any items that have changed on the design Deliverables are explicitly noted. Subsequent design Deliverables shall represent further development of the design Deliverables and shall not change or omit previously approved features or elements unless such differences or deviations are: (i) explicitly noted and identified in writing on the Deliverable, and (ii) expressly and unambiguously accepted by the Commission in writing. The Commission's inadvertent approval of a design Deliverable that contains an unapproved difference or deviation from any requirement of this Agreement shall not be construed as a waiver of such requirement.

3.11.3 Design-Builder shall, consistent with the Illinois Architecture Practice Act of 1989, 225 ILCS 305 et seq., and other applicable state licensing laws, provide through qualified, licensed design professionals employed by Design-Builder, or procured from qualified independent licensed design professionals, the necessary design services, including architectural, engineering and other design professional services, for the preparation of the required drawings, specifications and other design submittals to permit Design Builder to complete the Work consistent with the Contract Documents. Design-Builder must assure that all services that require the exercise of professional skills or judgment are accomplished by professionals qualified and competent in the applicable discipline and appropriately licensed, if required by law. Design-Builder must provide copies of any such licenses.

3.11.4 Any or all agreements between the Design-Builder and the Architect/Engineer shall provide that the Commission is a third-party beneficiary of such agreement, and shall provide further that the Commission shall have a direct right and cause of action against the Architect Engineer for any error or omission by the Architect/Engineer in the performance of the design services of the Work.

3.12 PROJECT PROCEDURES. Design-Builder shall develop in conjunction with the Commission's Representative and shall prepare and submit in writing for the Commission's review and approval, procedures with regard to procurement, construction, project controls, project management, safety and design for the duration of the Project. The Project Procedures are material terms of this Agreement. It is the intent of the Parties and this Agreement that the approved Project Procedures are solely for the purpose of adding additional and explanatory detail to the requirements of this Agreement. In the event of a contradiction or inconsistency, the provisions of the Contract Documents take precedence over an approved Project Procedure. In no event shall approved Project Procedures be interpreted to diminish Design-Builder's duties or obligations under this Agreement, or to impose additional duties or liabilities not otherwise set forth in this Agreement upon the Commission.

3.13 DESIGN-BUILDER'S STAFFING/KEY PERSONNEL

3.13.1 STAFFING. Immediately, upon execution of this Agreement, Design-Builder will assign and maintain throughout the term of the Agreement an adequate staff of competent personnel who are fully equipped, licensed as appropriate, available as needed, qualified and assigned to perform the Work.

3.13.2 KEY PERSONNEL. Design-Builder's Key Personnel for the Work are listed in Exhibit 4 - Key Personnel, attached hereto. In the event that any such Key Personnel are unable to continue to perform Work, the Design-Builder will promptly notify the Commission. Any change or substitution with respect to Key Personnel requires the approval of the Commission in writing. In the event that, in the opinion of the Executive Director, the performance of Key Personnel or any of Design-Builder's staff assigned to the Work, is at an unacceptable level, Design-Builder will remove them from the Project upon written notice from the Commission and will provide a replacement for the Commission's approval within seven Days of receipt of the notice to remove.

3.14 RIGHT OF ENTRY. The Design-Builder and any of its officers, employees, agents, subconsultants and subcontractors will be permitted to enter upon any part of the Project Site in connection with the performance of the Work hereunder, subject to the terms and conditions contained herein and those rules established by the Commission. Commission's consent to enter upon all or any part of the Project Site will not create nor be deemed to imply the creation of any additional responsibilities on the part of the Commission.

The Design-Builder will use, and will cause each of its officers, employees, agents, subconsultants and subcontractors to use reasonable care, unless otherwise expressly set forth in this Agreement, when entering upon the Project Site in connection with the Work. The Design-Builder will comply and will cause each of its officers, employees, agents, subconsultants and subcontractors to comply with any and all instructions and requirements for the use of the Project Site, and any express licenses for such use are hereby incorporated by reference. Any and all claims, suits, judgments, costs, or expenses, including reasonable attorneys' fees, arising from or by reason of or in connection with any such entry will be treated in accordance with the applicable terms and conditions of the Agreement, including, without limitation, the indemnification provisions contained in this Agreement. If the Design-Builder, or anyone for whom it is responsible, causes damage to Commission property, or the property of the owner of the Project Site, the Design-Builder must, at the option of the Commission, either 1) pay the cost of repair of the damage or 2) repair or replace the damaged property. The Commission shall have the right of set-off against the payments to the Design-Builder for the cost of repairs.

3.15 DESIGN-BUILDER'S REPRESENTATIVE. The Design-Builder shall designate a person who shall be the Design-Builder's authorized representative. The Design-Builder's Representative is **Nosa Ehimwerman.**

3.16 CLOSEOUT. The Design-Builder must provide its Closeout Execution Plan similar to its Design, Procurement, and Construction Execution Plan prior to the commencement of work.

3.17 LIVING WAGE REQUIREMENT. The Design-Builder shall abide by the City of Chicago's Executive Order No. 2014-1, duly adopted by the Public Building Commission's Board of Commissioners on November 12, 2014 as Resolution No. 8122, both documents of which are incorporated by reference to this Agreement. Design-Builder agrees to pay its eligible employees a minimum wage of not less than $13.00 per hour (or the then required wage) for work performed under this Agreement and further agrees to abide by all rules and regulations promulgated by the Executive Order. This applies to all subcontractors of the Design-Builder.

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ARTICLE 4
COMMISSION'S RESPONSIBILITIES

4.1 INFORMATION AND SERVICES PROVIDED BY THE COMMISSION

4.1.1 The Commission shall provide full information in a timely manner regarding requirements for the Project, include the Commission's Program Overview and other relevant information.

4.1.2 The Commission shall provide:

4.1.2.1 all available information describing the physical characteristics of the site, including surveys, site evaluations, legal descriptions, existing conditions, subsurface and environmental studies, reports and investigations.

4.1.2.2 inspection and testing services during construction as required by law or as mutually agreed; and

4.1.2.3 unless otherwise provided in the Contract Documents, necessary approvals, site plan review, rezoning, easements and assessments, fees and charges required for the construction, use, occupancy or renovation of permanent structures, including legal and other required services.

4.1.3 The Design-Builder shall be entitled to rely on the completeness and accuracy of the information and services required by this Paragraph 4.1.

4.2 RESPONSIBILITIES DURING DESIGN PHASE

4.2.1 The Commission shall provide the Commission's Program at the inception of the Design Phase and shall review and timely approve in writing schedules, Design Development Documents and Construction Documents furnished during the Design Phase as set forth in Article 3 and the Guaranteed Maximum Price (GMP) Project Cost Proposal/Cost Form.

4.3 RESPONSIBILITIES DURING CONSTRUCTION PHASE

4.3.1 The Commission shall review the Schedule of the Work as set forth in Paragraph 3.5 and timely approve the milestone dates set forth pursuant to Article 10 of Book 2.

4.3.2 If the Commission becomes aware of any error, omission or failure to meet the requirements of the Contract Documents or any fault or defect in the Work, the Commission shall give prompt written notice to the Design-Builder. The failure of the Commission to give such notice shall not relieve the Design-Builder of its obligations to fulfill the requirements of the Contract Documents.

4.3.3 The Commission shall communicate with the Design-Builder's Subcontractors, Material Suppliers and the Architect/Engineer only through or in the presence of the Design-Builder. The Commission shall have no contractual obligations to Subcontractors or suppliers.

4.3.4 The Commission shall provide insurance for the Project as provided in Article 5

4.4 COMMISSION'S REPRESENTATIVE. The Commission Representative is **Jose Barajas** for Design and Construction. The Representative(s):

4.4.1 shall be fully acquainted with the Project;

4.4.2 agrees to furnish the information and services required of the Commission pursuant to Paragraph 4.1 so as not to delay the Design-Builder's Work; and

4.4.3 shall have authority to bind the Commission in all matters requiring the Commission's approval, authorization or written notice. If the Commission changes its representatives or the representatives' authority as listed above, the Commission shall notify the Design-Builder in writing in advance.

4.5 PURPOSE OF COMMISSION'S REVIEW. The Commission's review or approval of the Design Documents, Construction Documents or any other submittals shall be solely for the purpose of determining consistency with the Commission's Program and other requirements. No review or approval by the Commission shall relieve the Design-Builder of its responsibility for the accuracy, adequacy or coordination of its services or the Work. Approval by any governmental or other regulatory agency of any documents or submittals by the Design-Builder or the Work shall not relieve Design-Builder of responsibility for the performance of its obligations under this Agreement.

4.6 TAX EXEMPTION. If in accordance with the Commission's direction the Design-Builder claims an exemption for taxes, the Commission shall indemnify and hold the Design-Builder harmless for all liability, penalty, interest, fine, tax assessment, attorneys' fees or other expense or cost incurred by the Design-Builder as a result of any action taken by the Design-Builder in accordance with the Commission's direction.

4.7 ELECTRONIC DOCUMENTS. If the Commission requires that the Commission and Design-Builder exchange documents and data in electronic or digital form, prior to any such exchange, the Commission and Design-Builder shall agree on a written protocol governing all such exchanges in a separate agreement, which, at a minimum, shall specify: (1) the definition of documents and data to be accepted in electronic or digital form or to be transmitted electronically or digitally; (2) management and coordination responsibilities; (3) necessary equipment, software and services; (4) acceptable formats, transmission methods and verification procedures; (5) methods for maintaining version control; (6) privacy and security requirements; and (7) storage and retrieval requirements. The Parties shall each bear their own costs for the requirements identified in the protocol. In the absence of a written protocol, use of documents and data in electronic or digital form shall be at the sole risk of the recipient.

ARTICLE 5
SUBCONTRACTS

Work not performed by the Design-Builder with its own forces shall be performed by Subcontractors or the Architect/Engineer.

5.1 RETAINING SUBCONTRACTORS. The Design-Builder shall not retain any subcontractor that has been debarred by the Commission, City of Chicago, County of Cook, Chicago Transit Authority, City Colleges of Chicago, Chicago Housing Authority, Chicago Park District, and/or Chicago Public Schools. The Design-Builder shall not make any substitute for any subcontractor that has been accepted by the Commission without the written approval of the Commission.

5.2 MANAGEMENT OF SUBCONTRACTORS. The Design-Builder shall be responsible for the management of the Subcontractors in the performance of their work. The Commission will communicate with the Design-Builder regarding the Work, except that the Commission shall have the right to communicate directly with the Design-Builder's subcontractors as the Commission deems reasonably necessary to address matters such as MBE and WBE issues, payments to subcontractors, lien and surety matters, and other matters where such direct communication may reasonably be required.

5.3 CONTINGENT ASSIGNMENT OF SUBCONTRACT

5.3.1 If this Agreement is terminated, each subcontract agreement shall be assigned by the Design-Builder to the Commission, subject to the prior rights of any surety, provided that:

5.3.1.1 This Agreement is terminated by the Commission pursuant to Article 19 of Book 2;

5.3.1.2 The Commission accepts such assignment, after termination by notifying Subcontractor and Design-/Builder in writing and assumes all rights and obligations of the Design-Builder pursuant to each subcontract agreement.

5.3.2 If the Commission accepts such assignment and the Work has been suspended for more than thirty (30) consecutive Days, following termination, if appropriate, the Subcontractor's compensation shall be equitably adjusted as a result of the suspension.

5.4 BINDING OF SUBCONTRACTORS AND MATERIAL SUPPLIIERS. The Design-Builder agrees to bind every Subcontractor and Material Supplier (and require every Subcontractor to so bind its Sub-subcontractors and Material Suppliers) to all the provisions of this Agreement and the Contract Documents.

5.5 DESIGN-BUILDER'S LIABILITY FOR SUBCONTRACTORS. The Design-Builder is responsible for all subcontractor Work and for all acts, failures to act, and omissions of its subcontractors. For the purposes of this Agreement, the Design-Builder's acts and omissions include those of its subcontractors to the same extent as if they had been committed by the Design-Builder. Notwithstanding the foregoing, there is no privity between subcontractors and the Commission. Except as set forth in Book 2, Article 23 "MBE/WBE Special Conditions for Construction Contracts" and Book 2 Article 24 "MBE/WBE Special Conditions for Professional Services Contracts," subcontractors have no rights as third-party beneficiaries under this Agreement. However, all subcontracts of every tier shall state that the Commission is an intended third-party beneficiary of the subcontract.

ARTICLE 6
TIME

6.1 DATE OF COMMENCEMENT The Date of Commencement is the Effective Date of this Agreement as first written in Article 1 unless otherwise set forth below:

6.1.1 The Work shall proceed in general accordance with the Design-Build Schedule attached hereto as **Exhibit - 6 Design Build Schedule**, as such schedule may be amended from time to time, subject, however, to other provisions of this Agreement.

6.2 SUBSTANTIAL/FINAL COMPLETION Unless the Parties agree otherwise, the Date of Substantial Completion and the date of Final Completion shall be established, and subject to adjustments, as provided for in the Contract Documents. The Commission and the Design-Builder may agree not to establish such dates. If such dates are not established upon the execution of this Agreement, at such time as a GMP is accepted a Date of Substantial Completion or Date of Final Completion of Work shall be established in the Notice to Proceed for each Scope of Work or by amendment to this Agreement.

6.2.1 Time limits stated in the Contract Documents are of the essence.

6.2.2 Unless instructed by the Commission in writing, the Design-Builder shall not knowingly commence the Work before the effective date of issuance that is required to be provided by the Design-Builder or the Commission.

6.3 DELAYS IN THE WORK. Delays and time extensions shall be administered as provided in Article 10 of Book 2.

6.4 LIQUIDATED DAMAGES

6.4.1 SUBSTANTIAL COMPLETION The Commission and the Design-Builder agree that this Agreement shall provide for the imposition of Liquidated Damages based on the Date of Substantial Completion established for each Scope of Work and as further set forth in Article 10 of Book 2, Section 10.04.

6.4.1.1. The Design-Builder understands that if the **December 1, 2026** (Date of Substantial Completion) established by the Parties for each Scope of Work, as may be amended by subsequent Change Order, is not attained, the Commission will suffer damages which are difficult to determine and accurately specify. The Design-Builder agrees that if the Date of Substantial Completion for any Scope of Work is not attained, the Design-Builder shall pay the Commission One Thousand Five Hundred Dollars ($1,500) as Liquidated Damages and not as a penalty for each Day that Substantial Completion for a given Scope of Work extends beyond the Date of Substantial Completion established for that Scope of Work. The Liquidated Damages provided herein shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages of whatsoever nature incurred by the Commission which are occasioned by any delay in achieving the Date of Substantial Completion for any Scope of Work.

6.4.2 FINAL COMPLETION The Commission and the Design-Builder agree that this Agreement shall provide for the imposition of Liquidated Damages based on the Date of Final Completion established for each Scope of Work.

6.4.3 The Design-Builder understands that if the Date of Final Completion established by the Parties for each Scope of Work is not attained, the Commission will suffer damages which are difficult to determine and accurately specify. The Design-Builder agrees that if the Date of Final Completion is not attained, the Design-Builder shall pay the Commission One Thousand Five Hundred Dollars ($1,500) as Liquidated Damages for each Day that Final Completion extends beyond the Date of Final Completion established for that Scope of Work. The Liquidated Damages provided herein shall be in lieu of all liability for any and all extra costs, losses, expenses, claims, penalties and any other damages of whatsoever nature incurred by the Commission which are occasioned by any delay in achieving the Date of Final Completion for any Scope of Work.

6.4.4 OTHER LIQUIDATED DAMAGES The Commission and the Design-Builder may agree upon the imposition of Liquidated Damages based on other project milestones or performance requirements. Such agreement shall be included as an exhibit to this Agreement.

6.5 COMMISSION'S RIGHT TO OCCUPY PORTIONS OF THE WORK. The Commission may occupy and use the Project or Scope of Work, or portions thereof, in advance of Substantial Completion. If the Commission desires to exercise partial occupancy and use prior to Substantial Completion, the Commission shall provide written notice to the Design-Builder, and the Design-Builder shall cooperate with the Commission in making available for the Commission's use such Project services as heating, ventilating, cooling, water, lighting and telephone for space or spaces to be occupied, and if the equipment required to furnish such services is not entirely completed at the time the Commission desires to occupy and use the space or spaces, then the Design-Builder will make every reasonable effort to complete that Work.

6.5.1 In the event of occupancy/turn-over prior to Substantial Completion:

6.5.2.1 Within fourteen (14) days after receiving notice of the planned early occupancy, the Design-Builder will provide written notice to the Commission of the following: (i) the current condition of the space desired for early occupancy; (ii) the anticipated condition of the space at the date of anticipated early occupancy; (iii) a preliminary estimate of any potential additional costs, if any, as a direct or indirect result of the early occupancy; and (iv) a preliminary estimate of any potential impact to the Project Schedule, if any, as a result of the early occupancy.

6.5.2.2 If the early occupancy is necessitated by a delay in Substantial Completion beyond the scheduled date of Substantial Completion and is not the subject of a Change Order, Design-Builder shall be responsible for all additional costs associated with the preparation of the space for the early occupancy.

6.5.2.3 The following conditions will apply to the spaces and/or equipment that is affected by the Commission's early occupancy:

6.5.2.3.1 A punch list will be assembled by the Commission, Design-Builder and its subcontractors, and an inspection of the affected space by the Commission will be accomplished prior to the start of early occupancy.

6.5.2.3.2 Warranties will begin to run only on those portions of systems and materials actively used and shall not begin to run on those portions of systems and materials not used. Warranties of systems that are common to both the occupied and unoccupied parts of the Project will begin to run at Substantial Completion.

6.5.2.3.3 Risk of loss associated with the finished Work which the Commission occupies early transfers to the Commission at the start of the early occupancy.

6.5.2.3.4 As part of the Change Order for early occupancy, the Parties will agree and set forth in writing the scope and date of early occupancy, and what effect early occupancy will have on Liquidated Damages and insurance coverage.

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ARTICLE 7
COMPENSATION

The Commission agrees to compensate the Design-Builder for Services as defined in this Article and as further described in **Exhibit 16 Guaranteed Maximum Price (GMP)Project Cost Proposal/Cost Form** (hereinafter "Exhibit 16"). Payment for these services are outlined in Article 16 of Book 2.

7.1 GUARANTEED MAXIMIM PRICE (GMP) PROJECT COST PROPOSAL/COST FORM

7.1.1 GMP PROPOSAL/COST FORM. The GMP shall be the total amount to be paid by the Commission to design, construct and deliver the Project. The GMP is subject to verification and must be supported by invoices or other evidence as determined by the Commission Representative. The Design-Builder agrees that it will be responsible for paying all costs of completing the Work which exceed the GMP, as adjusted in accordance with this Agreement. The Design-Builder shall at a minimum include with the GMP a written statement of its basis, which shall include:

7.1.1.1 A list of the drawings and specifications, including all addenda, which were used in preparation of the GMP;

7.1.1.2 A list of allowances and a statement of their basis;

7.1.1.3 A list of the assumptions and clarifications made by the Design-Builder in the preparation of the GMP to supplement the information contained in the drawings and specifications issued as part of the RFP;

7.1.1.4 The Date of Substantial Completion and the Date of Final Completion upon which the proposed GMP is based, and the Schedule of Work upon which the Date of Substantial Completion or the Date of Final Completion is based;

7.1.1.5 A schedule of applicable alternate prices;

7.1.1.6 A schedule of applicable unit prices;

7.1.1.7 A statement of Additional Services included, if any;

7.1.1.8 The Design-Builder's Contingency breakdown of costs, if any;

7.1.1.9 A statement of any work to be self-performed by the Design-Builder; and

7.1.1.10 A statement identifying all patented or copyrighted materials, methods or systems selected by the Design-Builder and incorporated in the Work that are likely to require the payment of royalties or license fees.

7.1.2 Within fifteen (15) Days after receipt of each monthly application for payment, the Commission shall give written notice to the Design-Builder of the Commission's acceptance or rejection, in whole or in part, of such application for payment. Within thirty (30) Days after accepting such application, the Commission shall pay directly to the Design-Builder the appropriate amount for which application for payment is made, less amounts previously paid by the Commission. If such application is rejected in whole or in part, the Commission shall indicate the reasons for its rejection. If the Commission and the Design-Builder cannot agree on a revised amount then, within fifteen (15) Days after its initial rejection in part of such application, the Commission shall

pay directly to the Design-Builder the appropriate amount for those items not rejected by the Commission for which application for payment is made, less amounts previously paid by the Commission. Those items rejected by the Commission shall be due and payable when the reasons for the rejection have been removed.

7.1.3 GENERAL CONDITIONS shall be listed in the GMP Cost Form which is delineated in **Exhibit 16**.

7.1.4.1 Wages paid for labor in the direct employ of the Design-Builder in the performance of the Work.

7.1.4.2 Salaries of the Design-Builder's employees when stationed at the field office, in whatever capacity employed, employees engaged on the road expediting the production or transportation of material and equipment, and employees from the principal or branch office performing the functions listed below:

7.1.3.2.1 Project management, administrative assistance, and project engineering directly associated with the Work.

7.1.4.3 Cost of all employee benefits and taxes including but not limited to Workers' Compensation, unemployment compensation, Social Security, health, welfare, retirement and other fringe benefits as required by law, labor agreements, or paid under the Design-Builder's standard personnel policy, insofar as such costs are paid to employees of the Design-Builder who are included in the Cost of the Work under other categories/line items.

7.1.4 PAYMENT AND PERFORMANCE BOND AND INSURANCE shall be listed in the GMP Cost Form which is delineated in **Exhibit 16.**

7.1.4.1 Cost of the premiums for all insurance and surety bonds which the Design-Builder is required to procure, and approved by the Commission, including any additional premium insurance (ie… Builder's Risk, Subcontractor Default Insurance, etc) incurred as a result of any increase in the GMP.

7.1.4.2 Deductibles paid on any insurance policy

7.1.5 DESIGN PHASE SERVICES shall be listed in the GMP Cost Form which is delineated in **Exhibit 16**.

7.1.5.1 Design Phase Services are outlined in Article 3.1.

7.1.5.2 To the extent required by applicable law, the costs of services performed directly by the Architect/Engineer is computed separately and is independent from the Design-Builder's Fee for work or services performed directly by the Design-Builder, Compensation for services and deliverables performed during the Design Phase, including the specialty areas shall be shown as separate items on applications for payment. If an Architect/Engineer is retained by the Design-Builder, the payments to the Architect/Engineer shall be as detailed in a separate agreement between the Design-Builder and the Architect/Engineer.

7.1.5.3 The Commission shall compensate the Design-Builder for services performed during the Design Phase including preparation of a GMP, if applicable, and the services and deliverables is delineated in **Exhibit 1 – Design Builder Design Services** as Design Phase Services.

7.1.5.4 Design Phase Services continue to be provided after construction has commenced, the Design-Builder shall continue to be compensated as provided in Paragraph 7.1.5.1, or as mutually agreed.

7.1.6 CONSTRUCTION PHASE SERVICES shall be listed in the GMP Cost Form which is delineated in **Exhibit 16**. Construction Phase Services are outlined in Article 3.

7.1.6.1 PRE-CONSTRUCTION

7.1.6.1.1 Services that provide assistance with design, engineering, permitting tasks, confirming construction costs, Project Schedule, and delivery.

7.1.6.1.2 Design-Builder's work associated with the procurement of the Trades/Subcontractors.

7.1.6.1.3 Participation in the Commission's Pre-Construction Meeting outlined in Article 11.

7.1.6.1.4 Fees include staffing of project managers, estimators, and compliance professionals.

7.1.6.2 COST OF WORK

7.1.6.2.1 GENERAL REQUIREMENTS

7.1.6.2.1.1 Cost of all materials, supplies and equipment incorporated in the Work, including costs of inspection and testing if not provided by the Commission, transportation, storage and handling. Payments made by the Design-Builder to Subcontractors for work performed under this Agreement.

7.1.6.2.1.2 Cost, including transportation and maintenance of all materials, supplies, equipment, temporary facilities and hand tools not owned by the workers that are used or consumed in the performance of the Work, less salvage value or residual value; and cost less salvage value on such items used, but not consumed that remain the property of the Design-Builder.

7.1.6.2.1.3 Rental charges of all necessary machinery and equipment, exclusive of hand tools owned by workers, used at the Worksite, whether rented from the Design-Builder or others including installation, repair and replacement, dismantling, removal, maintenance, transportation and delivery costs. Rental from unrelated third parties shall be reimbursed at actual cost. Rentals from the Design-Builder or its affiliates, subsidiaries or related parties shall be reimbursed.

7.1.6.2.1.4 Reproduction costs, photographs, facsimile transmissions, long-distance telephone calls, data processing services, postage, express delivery charges, data transmission, telephone service, and computer-related costs at the Worksite, to the extent such items are used and consumed in the performance of the Work or are not capable of use after completion of the Work.

7.1.6.2.1.5 All water, power and fuel costs necessary for the Work.

7.1.6.2.1.6 Sales, use, gross receipts or other taxes, tariffs or duties related to the Work for which the Design-Builder is liable.

7.1.6.2.1.7 All costs associated with establishing, equipping, operating, maintaining and demobilizing the field office.

7.1.6.2.1.8 Costs incurred due to an emergency affecting the safety of persons or property.

7.1.6.3 COST OF WORK

7.1.6.3.1 Trades/Subcontractor Services for executing the Work.

7.1.6.3.2 Permits, fees, licenses, tests, royalties, damages for infringement of patents or copyrights, including costs of defending related suits for which the Design-Builder is not responsible as set forth in Paragraph 11.2, and deposits lost for causes other than the Design-Builder's negligence.

7.1.6.3.3 Losses, expenses or damages to the extent not compensated by insurance or otherwise, and the cost of corrective work or redesign during the Construction Phase and for a period of one year following the Date of Substantial Completion, provided that such corrective work or redesign did not arise from the negligence of the Design-Builder.

7.1.6.3.4 Cost of removal of all non-hazardous substances, debris and waste materials.

7.1.6.3.5 Legal, mediation and arbitration fees and costs, other than those arising from disputes between the Commission and the Design-Builder, reasonably and properly resulting from the Design-Builder's performance of the Work.

7.1.6.3.6 All costs directly incurred in the performance of the Work or in connection with the Project, and not included in the Design-Builder's Fee which are reasonably inferable from the Contract Documents as necessary to produce the intended results.

7.1.6.4 ALLOWANCES AND CONTINGENCIES. Unused portions of all contingencies and allowances will be returned to the Project's budget and, ultimately, the User Agency.

7.1.6.4.1 Allowances are set by the Commission and includes the sum of mutually agreed upon, authorized, and monitored by the Commission to cover costs which are properly reimbursable part of the category/line item.

7.1.6.4.2 Design-Builder's Contingency is set by the Commission and includes the sum of mutually agreed upon and monitored by the Design-Builder and the Commission to cover costs which are properly reimbursable as a Cost of the Work but are not the basis for a Change Order. The Design-Builder shall provide the Commission with an accounting of charges against the Design-Builder's Contingency.

7.1.6.4.3 Commission's Contingency is for owner directed changes and unforeseen conditions to be used solely at the discretion of the Commission.

7.1.7 DESIGN-BUILDER'S FEE shall be listed in the GMP Cost Form which is delineated in **Exhibit 16**.

7.1.7.1 The Fee shall be payable in installments commensurate with the percentage of Project completion.

7.1.7.2 ADJUSTMENT IN THE DESIGN-BUILDER'S FEE shall be made as follows:

7.1.7.1.1 For changes in the Work as provided in Article17 of Book 2, the Design-Builder's fee shall be adjusted according Book 2;

7.1.7.1.2 For delays in the Work not caused by the Design-Builder, except as provided in Article 10 of Book 2, there will be an equitable adjustment in the Design-Builder's Fee to compensate the Design-Builder for increased expenses; and

7.1.7.1.3 If the Design-Builder is placed in charge of managing the replacement of an insured or uninsured loss, the Design-Builder shall be paid an additional fee in the same proportion that the Design-Builder's Fee bears to the estimated Cost of the Work for the replacement, provided that such loss was not due to any error or omission by the Design-Builder, or any party for which the Design-Builder may be liable.

7.1.8 TRANSFER PROVISIONS. The Design-Builder agrees that the actual cost of any line item listed on the Schedule of Values or category/line item shown on the Guaranteed Maximum Project Cost Proposal shall not exceed the estimated cost for such category/line item, as applicable, except as noted below:

7.1.7.2 In the event that the actual cost exceeds the estimated cost for such category/line item, the Design-Builder shall pay for such cost at its sole expense.

7.1.7.3 In the event that the actual cost is less than the estimated cost for such category/line item, the Design-Builder may request in writing approval by the Commission Representative to transfer such excess amount to one or more line items if the Design-Builder presents evidence reasonably satisfactory to the Commission Representative that the amount remaining in the category/line item to be reduced will be sufficient to complete the remaining portion of such line item or category.

7.1.8.3 Notwithstanding anything to the contrary, the Design-Builder shall not be entitled to transfer amounts from one category/line item listed in the Guaranteed Maximum Project Cost Proposal to increase any of the following categories: General Conditions; Payment and Performance Bond; Insurance; or the Design-Builder's Fee.

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ARTICLE 8
CHANGES IN THE WORK

8.1 CHANGES IN THE WORK. Changes in the Work which are within the general scope of this Agreement may be accomplished, without invalidating this Agreement, by Change Order pursuant to the provisions of Article 17 of Book 2: Changes in the Work.

ARTICLE 9
PAYMENT FOR CONSTRUCTION PHASE SERVICES

9.1 PROGRESS PAYMENTS. Payment applications and procedures shall be as defined in Article 16 of Book 2.

ARTICLE 10
INDEMNITY, INSURANCE, BONDS, AND WAIVER OF SUBROGATION

Indemnity, Insurance, Bonds and Waiver of Subrogation shall be as provided in Book 1 as **Exhibit 5 Insurance and Bonding Requirements** unless otherwise specified herein.

10.1 ROYALTIES, PATENTS AND COPYRIGHTS The Design-Builder shall pay all royalties and license fees which may be due on the inclusion of any patented or copyrighted materials, methods or systems selected by the Design-Builder and incorporated in the Work. The Design-Builder shall defend, indemnify and hold the Commission harmless from all suits or claims for infringement of any patent rights or copyrights arising out of any patented or copyrighted materials, methods or systems specified by the Commission.

10.2 LIENS If any of the Design-Builder's subconsultants, subcontractors, employees, officials, agents or other person directly or indirectly acting for, through or under any of them files or maintains a lien or claim pursuant to the Illinois Public Mechanics' Lien Act, 770 ILCS 60/23, against the public funds for the Project, then the Design-Builder agrees to cause such liens and claims to be satisfied, removed or discharged within thirty (30) days from the date of filing thereof; provided, however, that the Commission may extend the thirty (30) day period if the Commission determines that such lien claim cannot be so satisfied, removed or discharged in such period and that the Design-Builder is proceeding diligently to cause such liens or claims to be satisfied, removed or discharged. The Commission will have the right, in addition to all other rights and remedies provided under this Agreement, Book 2 Article 16, or by law, to cause such liens or claims to be satisfied, removed or discharged by any means at the Design-Builder's sole cost, such cost to include reasonable legal fees. The Design-Builder will give, or cause to be given, a copy of these provisions to all subcontractors and will include these provisions in all agreements with subcontractors, and/or give written notice to all subcontractors or other persons having oral or written agreements with such subcontractors.

10.3 LIMITED MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES. Except for damages mutually agreed upon by the Parties as Liquidated Damages in Paragraph 6.4 and excluding losses covered by insurance required by the Contract Documents, the Commission and the Design-Builder agree to waive all claims against each other for any consequential damages that may arise out of or relate to this agreement, except for those specific items of damages excluded from this waiver as mutually agreed upon by the Parties and identified below. The Commission agrees to waive damages including but not limited to the Commission's loss of use of the Project, loss of reputation, or insolvency. The

Design-Builder agrees to waive damages including but not limited to loss of business, loss of financing, principal office overhead and expenses, loss of profits not related to this Project, loss of bonding capacity, loss of reputation, or insolvency. The provisions of this Paragraph shall also apply to the termination of this Agreement and shall survive such termination. The following items of damages are excluded from this mutual waiver.

The Commission and the Design-Builder shall require similar waivers in contracts with Subcontractors and others retained for the Project.

ARTICLE 11
SUSPENSION AND TERMINATION OF THE AGREEMENT AND COMMISSION'S RIGHT TO PERFORM DESIGN-BUILDER'S RESPONSIBILITIES

11.1 SUSPENSION AND TERMINATION. Suspension and Termination shall be as defined in Article 19 of Book 2.

ARTICLE 12
DISPUTE MITIGATION AND RESOLUTION

12.1 DISPUTE MITIGATION AND RESOLUTION. Claims and Disputes shall be as defined in Article 18 of Book 2.

ARTICLE 13
MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW. This Agreement shall be governed by the law in effect at the location of the Project.

13.2 SEVERABILITY. The partial or complete invalidity of any one or more provisions of this Agreement shall not affect the validity or continuing force and effect of any other provision.

13.3 NO WAIVER OF PERFORMANCE. The failure of either Party to insist, in any one or more instances, on the performance of any of the terms, covenants, or conditions of this Agreement or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right with respect to further performance.

13.4 TITLES AND GROUPINGS. The titles given to the articles of this Agreement are for ease of reference only and shall not be relied upon or cited for any other purpose. The grouping of the articles in this Agreement and of the Commission's specifications under the various headings is solely for the purpose of convenient organization and in no event shall the grouping of provisions, the use of paragraphs or the use of headings be construed to limit or alter the meaning of any provisions.

13.5 JOINT DRAFTING. The Parties to this Agreement expressly agree that this Agreement was jointly drafted, and that both had opportunity to negotiate its terms and to obtain the assistance of counsel in reviewing its terms prior to execution. Therefore, this Agreement shall be construed neither against nor in favor of either Party, abut shall be construed in a neutral manner.

13.6 RIGHTS AND REMEDIES. The Parties' rights, liabilities, responsibilities and remedies with respect to this Agreement, whether in contract, tort, negligence or otherwise, shall be exclusively those expressly set forth in this Agreement.

13.7 FIREARMS AND OTHER WEAPONS**.** The PBC is committed to providing a safe and secure workplace for the benefit of its employees, consultants, contractors and the general public; therefore, threatening behavior by any person on or about the PBC office premises, project sites and any place in which PBC business is conducted is prohibited. Further, possession of firearms, explosives, or other weapons anywhere on PBC property and project sites or while conducting PBC business is prohibited. Employees and contractors must, at a minimum, comply with all federal, state and local laws relating to the possession and use of firearms, including the Illinois Firearm Concealed Carry Act, 430 ILCS 66/1, et. seq.; the Illinois Criminal Code – Article 5, Deadly Weapons, 720 ILCS 5/Art. 24 et. seq.; and the City of Chicago Firearms and Other Weapons Ordinance, Chicago Municipal Code, Sec. 8-24-005, et. seq. Further, as a condition of employment and/or contract, individuals may not bring weapons onto PBC premises or project sites (including parking lots), even in situations where such conduct would be allowed under the cited laws.

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ARTICLE 14
MBE/WBE, EEO, AND WORKFORCE REQUIREMENTS

14.1 MBE/WBE PROGRAM. It is the policy of the Commission to ensure competitive business opportunities for MBE and WBE firms in the performance of contracts, to prohibit discrimination in the award of or participation in contracts, and to abolish arbitrary barriers to full participation in contracts by all persons, regardless of race, sex or ethnicity.

Therefore, during the performance of this Contract, the Design-Builder must agree that it will not discriminate against any person or business on the basis of race, color, religion, ancestry, age, marital status, physical or mental handicap, unfavorable discharge from military service, parental status, sexual orientation, national origin or sex, in the solicitation or the purchase of goods and services or the subcontracting of work in the performance in this Contract.

The Commission requires the Design-Builder also agree to take affirmative action to ensure that MBE and WBE firms have the maximum opportunity to compete for and perform subcontracts with respect to this Contract. Design-Builder should refer to Article 23 in Book 2 for all MBE/WBE Special Conditions.

The specific goals of this agreement are **30%** MBE and **6%** WBE participation.

14.2 EEO AND WORKFORCE REQUIREMENTS. To promote the intended goal of economic opportunity and maximize the use of minority personnel on this project, the Public Building Commission of Chicago has established Equal Employment Opportunity (EEO) workforce requirements for this Project. The PBC requires that Design-Build Entities commit to a construction work site employment program that addresses the following employment goals:

Minority Journeyworker Project employment goal:	**50%** or more of total Journeyworker hours
Minority Apprentice Project employment goal:	**40%** or more of total Apprentice hours
Minority Laborer Project employment goal:	**60%** or more of total Laborer hours
Female Journeyworker Project employment goal:	**2%** or more of total Journeyworker hours
Female Apprentice Project employment goal:	**1%** or more of total Apprentice hours
Female Laborer Project employment goal:	**2%** or more of total Laborer hours
City of Chicago Resident goal:	**50%** of construction work hours to be performed City of Chicago residents
Community Resident employment goal:	**7.5%** of construction work hours to be performed by residents of the "Project Community" (see **Exhibit 10 - Community Area Map**)

14.3 LIQUIDATED DAMAGES. Design-Builder shall use **Exhibit 9 - EEO and Workforce Requirements** to utilize the prescribed formula to inform the amount of participation the Design-Builder achieves; this formula will also inform the amount of damages the Design-Builder will be assessed at the end of the Project, for failing to meet these EEO and Workforce requirements. The Public Building Commission of Chicago reserves the right to check all calculations for accuracy. The fulfillment of these requirements does not abrogate the responsibilities of the Contractor to comply with federal and state requirements under the Equal Employment Act and the Illinois Human Rights Act.

ARTICLE 15
EXISTING CONTRACT DOCUMENTS

15.1 As defined in Subparagraph 2.4, the following Exhibits are a part of this Agreement, in addition to those documents which formed the Phase 1 and Phase 2 Request for Proposals and any/all Addenda and associated documents. The Contract Documents in existence at the time of execution of this Agreement are as follows:

Book 1	Agreement
Exhibit 1	Design Builder Design Services
Exhibit 2	Various Documents and Drawings Issued for Scope and Performance Criteria from the RFP Phase I available here: https://www.pbcchicago.com/opportunities/rfpforkellsparkdb/ AND The RFP for Phase II (including all Attachments (A-J and L) listed in Section VI – List of Attachments) available here: https://pbcchicago.com/wp-content/uploads/2025/04/RFP_PBC_PXM_DBforKellsGeorgeParkFieldhousePhaseIIRFP_PS3096_20250424_Final.pdf are hereby incorporated by hyperlink attachment and by reference
Exhibit 3	Schematic Design dated April 24, 2025
Exhibit 4	Key Personnel
Exhibit 5	Insurance and Bonding Requirements
Exhibit 6	Design Build Schedule (to be revised as approved by the Commission)
Exhibit 7	MBE/WBE Commitment and Preliminary Information (to be supplemented/revised as necessary)
Exhibit 8	Schedule B – Joint Venture Affidavit and Joint Venture Agreement (Not Applicable)
Exhibit 9	EEO and Workforce Requirements & Liquidated Damages Calculations
Exhibit 10	Community Area Map
Exhibit 11	Legal Actions
Exhibit 12	Disclosure Affidavit
Exhibit 13	Disclosure of Retained Parties
Exhibit 14	Licenses and Certifications
Exhibit 15	Fee Waiver (To be inserted later)
Exhibit 16	Guaranteed Maximum Price (GMP)Project Cost Proposal/Cost Form
Book 2	Standard Terms and Conditions for Design Build Contracts

[EXECUTION PAGE FOLLOWS]

Execution Page for Design-Build Agreement between Public Building Commission of Chicago and The BOWA Group, Inc. d/b/a BOWA Construction with Effective Date of **June 10, 2025**. This Agreement is executed by the Parties stated below and made effective by such execution pursuant to its terms.

PUBLIC BUILDING COMMISSION OF CHICAGO

Brandon Johnson, Mayor
Chairman

Mary Pat Witry
Secretary

Date: 6/5/2026

Approved as to form and legality

Anne L. Fridl 6/5/26
Neal & Leroy, LLC

DESIGN – BUILDER The BOWA Group, Inc. d/b/a BOWA Construction

President or Authorized Designee

6/3/2026
Date

AFFIX CORPORATE
SEAL, IF ANY, HERE

County of Cook State of ILLINOIS

Subscribed and sworn to before me by Timothy A Scholten on behalf of the Design-Builder

this 3rd day of June, 2026.

OFFICIAL SEAL
DANIELLE ELEN UNGER
NOTARY PUBLIC, STATE OF ILLINOIS
COMMISSION NO. 10028065
MY COMMISSION EXPIRES MARCH 21, 2029

Notary Public Signature

My Commission expires: 3/21/2029

(SEAL OF NOTARY)

EXHIBIT #1

Design Builder Design Services

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DESIGN-BUILDER DESIGN SERVICES

Architect of Record Services

1. Complete the design for the Project, schedule a minimum 3 milestone review milestones, and solicit the Commission and User Agency reviews and approvals. Complete analysis of all Project requirements, including verification of the Scope and Performance Criteria, concept design, regulatory requirements, the conditions of the site and the survey. Consult with the Commission and Using Agency to establish the final design.

2. Provide design documents for written approval at the completion of Design Development, interim Construction Document Phase, and at completion of Construction Documents.

3. Separate from milestone reviews required above; provide all Coordination, Permit and Trade and Construction packages fourteen (14) days prior to issuance for Commission and User Agency review.

4. The Architect shall participate in weekly meetings, provide an agenda for each meeting and document meeting minutes.

5. The Architect is solely responsible for the development of the Project specifications. Specifications must comply with the following criteria.
    a. Specifications will follow performance criteria outline format.
    b. Specifications will identify acceptable manufacturers.
    c. No proprietary specifications will be permitted without written authorization from the Authorized Commission Representative.
    d. On projects where template specifications have been provided, the Architect is responsible for the development of any specifications which have not been provided. The Architect is responsible for the verification of all manufacturer names and model numbers as well as the compatibility with other systems and materials specified. Further, the Architect is responsible for verifying that each cited acceptable manufacturer is capable of providing the product as documented in the performance criteria. Deviations from major systems, materials or specialty items must be approved in writing on projects where template specifications have been provided.

6. Prepare and professionally seal documents that will be issued for regulatory reviews, approvals and permits. Conduct reviews and submit for review/permits with required regulatory agencies, including, but not limited to, Department of Buildings, Bureau of Fire Prevention, Chicago Department of Transportation, Mayor's Office for People with Disabilities, Office of Emergency Management and Communications, Chicago Department of Water Management, and Illinois Environmental Protection Agency**.** Conduct and prepare a code analysis package and/or Code Matrix, including, but not limited to, the following components**:**
    a. Occupancy classification.
    b. Construction type.
    c. Occupant load by area and floor.
    d. Travel distances.
    e. Accessibility.
    f. Exit types, units and widths.
    g. Plumbing fixture counts.
    h. Loading berths and parking requirements.
    i. Fire resistance requirements.

7. Facilitate a Lessons Learned walk-thru of recently constructed City College facilities with the Commission and User Agency. Document and issue for Commission and User Agency Approval a record of improvements and variations to be incorporated into design.

8. Provide coordination, support and responses in the form of information, including but not limited to narratives, specifications, and drawings concerning the design, installation and operation of Building Automation Systems (BAS) with the Commission's independent BAS Commissioning Authority.

9. Facilitate and document a Sustainable Design Plan for Commission and User Agency approval and provide follow up sessions as directed by the Commission Representative. The purpose of the Plan and meetings are to develop the appropriate design strategies and confirm that the Project's target LEED rating of silver is achievable for all project phases, and make alternative plans as required. Plan shall include LEED Checklist and narratives, including all LEED detail.

10. Provide an energy simulation model using the most current and required DOE Modeling Software

11. Preparation of Proposed Public Right of Way Amendment Plan and other documents necessary to illustrate any required amendments to the public right of way.

12. Preparation of CDOT coordination drawings to the extent required by the Commission and CDOT to coordinate site work with planned improvements by the City of Chicago and CDOT.

13. As required, prepare Request for Clarification submittals for the Commission or User Agency questions**.**

14. Preparation of storm water analysis and management proposal.

15. Issuance of a zoning analysis package (if required).

16. During all phases of the project the Architect will be responsible for the utility coordination and public infrastructure aspect of the Project including, but not limited to, the following:
    a. Present the Project to the Commission's Utility Roundtable Meeting attended by each public utility and coordinated by the Commission.
    b. Meet with the engineers from Commonwealth Edison to determine if infrastructure relocations will be required. Provide all necessary assistance and coordination for the relocations.
    c. Provide Commonwealth Edison with the electrical service requirements for the new facility. Provide necessary assistance and coordination for the new service. Assist and monitor the transition to permanent power for the facility.
    d. Meet with the engineers from AT&T to determine if infrastructure relocations will be required. Provide the necessary assistance and coordination for the relocation(s).
    e. Provide AT&T with voice and data service requirements for the new facility. Provide the necessary assistance and coordination for the new service.
    f. Meet with the engineers from People's Energy to determine if infrastructure relocations will be required. Provide the necessary assistance and coordination for the relocation(s).
    g. Provide People's Energy with gas service requirements for the new facility. Provide the necessary assistance and coordination for the new service.
    h. Meet with the Department of Water Management to review and gain approval for water service and sewer design. Provide the necessary assistance and coordination for the new service.
    i. Meet with the engineers from the City of Chicago Department of Streets and Sanitation, Bureau of Electricity to determine if infrastructure relocations or new street lighting will be required. Provide the necessary assistance and coordination for the relocations and new lighting.
    j. Meet with the Fire Prevention Bureau to determine whether infrastructure relocations or new hydrants will be required. Provide the necessary assistance and coordination for the relocations and the new hydrants.
    k. Meet with the Office of Emergency Management and Communications to determine whether infrastructure relocations or new infrastructure will be required. Provide the necessary assistance and coordination for the relocations and new infrastructure.

l. Meet with the Chicago Department of Transportation to determine whether infrastructure relocations or new infrastructure will be required. Provide the necessary assistance and coordination for the relocations and new infrastructure.
m. Meet with the Chicago Bureau of Electricity to determine whether infrastructure relocations or new infrastructure will be required. Provide the necessary assistance and coordination for the relocations and new infrastructure.

17. Prepare Interior Furnishing Fixture & Equipment (FF&E) Documents to define and fix the furniture, furnishings and equipment work. Include layout drawings, specifications, and a proposed color, materials and finishes schedule, including but not limited to; brochure cuts or sketches of the furniture, furnishings equipment and accessories. Budget for FF&E shall be in accordance with the published FF&E allowance.

18. Prepare interim and final estimates of the probable Interior Furnishings Costs with reasonable contingencies in accordance with the published FF&E Allowance.

19. Prepare descriptions of manufactured items, together with General Conditions, Supplementary conditions and other documents required for the procurement and installation of the Interior Furnishings Work for the Project.

20. Develop a keyed furniture, fixture and equipment plan and schedule for review and approval. The plan must locate devices requiring any power, data, communication, low voltage wiring, security and life safety equipment for Commission and User Agency review and approval. The plan will also indicate any equipment requiring water supply, drainage, condensate lines and vents for each device or piece of equipment.

21. Architect shall assist the commission and user agency in preparation of bidding information. All such documents shall be used for competitive bidding for furnishing and installation of the Interiors Furnishings Work.

22. The Architect will be responsible for infrastructure coordination and design integration of any owner-furnished furniture, fixture and equipment (e.g., advanced manufacturing equipment, furniture, communication equipment, sound systems, security/surveillance cameras, photovoltaic panels, or public art).

23. Develop a hardware and device location plan for Commission and User Agency review and approval.

24. Develop a campus way-finding, building way-finding, and room signage plan inclusive of design presentation materials and specifications for Commission and User Agency review and approval.

25. Certification of Compliance with Commission's Design Checklists submitted as part of the Book 3, Project Requirements of the Scope and Performance Criteria.

26. Prepare and Submit for use by the Commission an Inspection and Testing Plan forty five (45) days prior to any site construction activities. The plan must be in spreadsheet format, following the specification section numbering system. Each inspection, test and required certificate in the project Specifications shall be identified by specification section number. The Authorized Commission Representative upon request can provide a sample Inspection and Testing Plan for use. The Authorized Commission Representative will identify the testing firm(s) that will be used on the Project. The Inspection and Testing Plan must provide for:
    a. Verification of responsibilities for providing inspections, tests and certificates
    b. Scope of services for the testing and inspection services RFQ.
    c. A scorecard to monitor the completion of required inspections and tests, and the submittal of required certificates.

27. In addition to the Coordination set forth below, the Design Builder shall provide coordination services set forth in Book 2, Standard Terms and Conditions Procedures Manual for Design Build Contracts. Architect Engineer/Design Builder shall issue MEP coordination documentation to the Commission for review. Architect Engineer shall coordinate and resolve:
    a. Space requirements between trades and/or disciplines.

b. Space requirements and access for maintenance and replacement all MEP equipment
c. Incompatibility between items provided under different disciplines (such as difference in voltage between equipment and electrical power as specified in various Divisions).
d. Inconsistencies between drawings and specifications (between disciplines and within each discipline).
e. As required to manage discipline coordination, prepare drawings or models to manage discipline coordination, resolve conflicts, and present the findings of coordination process to the PBC's design review team.
    i. Above ceilings in corridors to confirm that service, fixtures, and other devices can fit between the designed ceiling height and the bottom of any structural members or other obstructions. The horizontal spacing of these items will also be reviewed to confirm that desired locations of lighting fixtures and other devices can be achieved.
    ii. Slabs where services would logically be installed within the slab on grade or on deck. The Architect will confirm that these services can fit within the slab cross section without compromising the structural integrity of the slab. Any limitations on embedded services will be noted on the construction documents.
    iii. Areas and/or rooms where a significant number of services converge. This includes mechanical rooms, MDF rooms, IDF rooms, electrical closets, fire pump rooms, and any other areas or rooms where the coordination of individual or multiple services are required with multiple disciplines. Where a significant number of services penetrate a wall, floor, ceiling, or roof in close proximity, the Architect will design and detail an appropriate chase with respect to structural elements, code issues, and proper installation of the services.
    iv. Within mechanical, equipment, and other specialty rooms to confirm that the required equipment, panels, racks, fixtures, ventilation, and other equipment, along with the services entering these rooms will fit within the designed space and layout. Checks will be made for door swings, as well as, equipment accessibility into and within the room.
    v. Locations on the site or under the building where major existing or new utilities come in close proximity to each other and/or other new or existing structures. This would include locations where these services enter the building or penetrate the foundations.

28. Prepare documents that confirm that the appropriate power, communication, and other low voltage services are shown running to and from each required device/fixture and back to the appropriate originating or receiving location are included in the design. This coordination may be a represented by a composite device/service schedule that cross references the appropriate interface points.

29. Architect Engineer shall provide no less than 16 hours per week solely dedicated to field observation of the construction in order to monitor the progress and conformance of the permanent features of the work to the requirements of the Contract Documents and submit periodic reports documenting their findings. This time is in addition to time dedicated to management, reviewing submittals, and attending project meetings. The Design Builder retains primary responsibility for ensuring the quality of construction. The Architect Engineer's on-site representative shall not be removed or replace before final completion of the Project without the prior written approval of the Authorized Commission Representative. The Architect Engineer's on-site representative will be removed immediately upon written request of the Authorized Commission Representative.

30. Provide installation phase services for the FF&E including but not limited to: review of required submittals, respond to RFI's, periodic observation of the installation, and issuance of "punch lists."

31. Provide an expert in roofing on the Project Site throughout the construction/installation of the roof for the Project.

32. Architect Engineer to conduct interim and a final comprehensive inspection of the Project with the Authorized Commission Representative and User Agency to verify that the materials furnished and the work performed are substantially compliant with the contract documents.
    a. The Design Builder is responsible for facilitating a walkthrough on site with the Authorized Commission Representative, Commissioning Agent and User Agency to review punch list items identified in the Design Builder's initial punch list. The Design Builder will consolidate and prepare punch lists indicating the items of

work remaining to be accomplished before a Certificate of Final Acceptance will be issued. Prepare certificates of preliminary and final completion in consultation with the Commission and the User Agency.

33. Submittal, Record Document and Close requirements set forth in Book 2, Standards Terms and Conditions Procedures Manual for Design Build Projects.

34. Oversee the efforts to assemble and deliver to the Commission all guarantees, warranties, operating and maintenance manuals required by the Contract Documents.

35. The User Agency requires a set of record drawings prepared and coordinated by the Architect. This set of record drawings must be provided in editable, auto-CAD format. Oversee the Design Builder's efforts to expedite the preparation and delivery of the "as-built" drawings, and operations and maintenance manuals of the Project in accordance with the specifications. The "as-built" documents will be subject to the approval of the Commission. Submit approved "as-built" documents to the Commission upon completion of the Project.

36. Upon completion of the all "punch list" items in accordance with the Contract Documents, issue a Certificate of Final Acceptance. A Certificate must not be issued by the Architect until, to the best of its knowledge, information and belief, all work has been completed in accordance with the Contract Documents.

37. Project Close-out Approval Form. The Architect shall draft and complete the Project Closeout Approval Form for the Project.

38. Assist the Commission on performing and documenting a warranty inspection 11 months walkthrough following Substantial Completion of the Project.

39. At the 11 month walkthrough the Architect shall recalibrate the design energy model to incorporate actual operation, utility and weather information collected during the first 11 months that the building has been occupied, and any changes made during construction.

40. Assist Commission Consultants by coordinating with and providing documentation to the Consultants to aid in the development or revision of investigations and reports. Commission Consultants include but are not limited to Environmental, Survey, Geotechnical, and Traffic.

Environmental Design Consultant Services

41. Environmental Design Consultant Services.
    a. The Design-Builder (DB) shall complete all environmental specifications for the renovation / demolitions / new construction activities, as needed, regarding:
        i. Lead-based paint (LBP);
        ii. Asbestos containing materials (ACM); and
        iii. Hazardous Materials / Non-Hazardous Materials / Universal Waste;
        iv. Existing Conditions (Hazardous Materials Assessment and Environmental Assessment);
        v. Soil Removal and Disposal;
        vi. Acceptance of Backfill.

    b. The Design Builder shall ensure that the environmental specifications, environmental scope of work, etc., include procedures to manage hidden conditions discovered during the project in order to minimize delays during renovation / demolition.

    c. The Design Builder shall follow all local, state and federal regulatory requirements and provide required specifications and procedures as necessary for managing those materials.

d. The Design Builder shall modify the following existing PBC template abatement specifications to tailor them for the ACM abatement work utilizing an Illinois Department of Public Health (IDPH) licensed Asbestos Project Designer:
    i. 01 56 11 TEMPORARY DUST, FUME, AND ODOR CONTROL;
    ii. 02 26 00 HAZARDOUS MATERIALS ASSESSMENT;
    iii. 02 82 13 ASBESTOS ABATEMENT PRIOR TO DEMOLITION;
    iv. 02 82 14 ASBESTOS ABATEMENT FOR INTERIORS
    v. 02 84 15 ASBESTOS ABATEMENT FOR EXTERIORS;
    vi. 02 83 19.13 LEAD-BASED PAINT ABATEMENT

e. The DB shall modify existing PBC template specifications as to the proper packaging, transportation and disposal / recycling of the materials identified in the Hazardous Materials Survey. The DB shall also provide cost effective methods for removing and disposing of the materials identified in the Hazardous Materials Survey. The Design Builder shall revise / develop PBC specifications for the following, as applicable to the renovation / demolition scope of work:
    i. 01 56 11 TEMPORARY DUST, FUME, AND ODOR CONTROL;
    ii. 02 26 00 HAZARDOUS MATERIALS ASSESSMENT; and
    iii. 02 41 16 HAZARDOUS AND UNIVERSAL WASTE MANAGEMENT

f. The DB shall revise/develop PBC specifications for the following, as applicable to the work:
    i. 02 65 00 UNDERGROUND STORAGE TANK REMOVAL;
    ii. 31 23 18 SOIL, FILL, BACKFILL, CU STRUCTURAL SOIL AND CONSTRUCION AND DEMOLITION DEBRIS REMOVAL; and
    iii. 31 23 23 ACCEPTANCE OF BACKFILL, TOP SOIL & CU STRUCTURAL SOIL

g. The DB shall provide Draft Environmental Specifications (PDF and Word format) to the PBC for review and comment prior to issuing them to the sub-contractors for execution. The Design Builder shall redline changes made to the template specifications prior to submitting them to the PBC. The DB shall make any required modifications or corrections and reissue the specifications. The DB shall upload the final version to Collaborative Workspace (CW) upon completion of the specifications. Scope of work sheets and drawings are required for this project.

h. General Environmental Manager: The DB shall provide an experienced individual to perform the following General Environmental Management (GEM) services for renovation/demolition activities which include, but are not limited to the following:

    i. Administrative Controls;
    ii. Management and Coordination of Regulated Waste Removal and Disposal Activities;
    iii. Waste Profiles, soil removal and disposal oversight;
    iv. Backfill analysis review and approval;
    v. Management and Scheduling of Air Sampling Activities During Asbestos Abatement Activities;
    vi. Management, Scheduling and Reporting for Ambient Air Monitoring During Demolition; and
    vii. Underground Storage Tank Removal Management, Oversight, Sampling and Reporting Services (if required).
    viii. Attend meetings as requested by the PBC;
    ix. Coordinating all environmental inspections and getting the inspection reports to the PBC in a timely manner for review;
    x. Making sure all environmental inspection reports are provided in hard copy to the PBC and uploaded to CW;
    xi. Getting all required design review deliverables to the PBC and incorporating all design review comments to the PBC's satisfaction;

xii. Setting up all required environmental meetings and providing environmental project and deliverables status to the PBC as requested;
xiii. Become familiar with and institute existing asbestos and demolition specifications;
xiv. Review and approve environmental submittals required in the specifications, receiving environmental documentation from the Demolition / Abatement Contractors through CW;
xv. Coordinate and schedule environmental consultant's work tasks. The GEM will coordinate with any and all abatement, air sampling professional work, waste removal and Demolition/Abatement Contractors to schedule environmental oversight activities and will be in charge of managing the schedule of any and all environmental activities;
xvi. Receive, review, comment and approve all documents related to asbestos abatement, regulated waste removal, underground storage tank and air monitoring activities on behalf of the PBC;
xvii. Be responsible for escorting regulators around on campus and will be the on-site point of contact for any and all regulatory or public inquiries related to environmental matters;
xviii. Respond to any and all correspondence from local, state or federal regulators on behalf of the PBC after PBC review, and will provide corrective action negotiations when necessary;
xix. Perform daily inspections of environmental work activities and will observe, document and notify the PBC of any issues as required;
xx. Sign waste manifests on behalf of site owner;
xxi. Provide regulated materials management and oversight during removal and disposal activities;
xxii. Coordinate with Demolition/Abatement Contractor on site and shall maintain all submittal records and upload them to CW on a weekly basis;
xxiii. Be responsible to maintain schedules of all waste removal activities on site;
xxiv. Be responsible to inspect the areas where all waste is being removed and stored to ensure work was done correctly and in accordance with contract specifications;
xxv. Respond to site issues, unforeseen conditions, regulatory inspections / citation, site emergencies, spills, etc. on an emergency response basis and prepare a detailed comprehensive report at the conclusion of each incident;
xxvi. Coordinate Air Sampling Professional's (ASP) with the Demolition / Abatement Contractors and will keep a schedule of all ASP work being performed;
xxvii. Provide advice on technical matters during the course of the abatement and demolition activities, and as needed consultation to the PBC;
xxviii. Provide daily observations and documentation of the asbestos abatement work; and
xxix. Provide coordination for ambient air monitoring for asbestos, lead and particulates (PM10) during demolition activities.

i. Air Sampling Professional Services: The DB shall provide Air Sampling Professional / Project Managers (ASP / PM) for the renovation/demolition activities as needed to satisfy applicable regulations such as OSHA. At a minimum, the ASP / PM shall be responsible for general asbestos abatement oversight activities, asbestos air sampling of inside and outside work areas, clearance air monitoring for asbestos abatement operations, and reporting. The ASP / PM will have to coordinate work activities with the GEM and the asbestos / demolition contractors. They will monitor abatement activities in accordance with all local, state and federal guidelines. They will review the asbestos/demolition contractor submittals including but not limited to:
    i. Notifications;
    ii. Worker and supervisor licensing;
    iii. Sign in sheets;
    iv. Waste manifests;
    v. The ASP / PM will conduct containment inspection;
    vi. The ASP / PM will inspect the work areas and abatement procedures;
    vii. THE ASP / PM will visually inspect the engineering controls systems including negative pressure ventilation systems, decontamination procedures and respiratory protection worn by asbestos abatement employees;
    viii. The ASP / PM will monitor of contractor work methods including workspace cleanliness, wet work methods, bag out, and final cleaning; and

ix. The ASP/PM will evaluate whether visible debris and asbestos containing materials have been fully removed as per the specifications.

j. The ASP / PM shall be licensed by the IDPH and shall have Asbestos Analyst Registry (AAR) accreditation. (If the ASP / PM is not an accredited AAR then the DB shall include the PCM analytical costs). Laboratories analyzing samples (if needed) shall participate in AIHA PAT Program or analyst should be AAR. The ASP / PM will be responsible for asbestos air sampling of inside and outside work areas and clearance monitoring.

k. Air monitoring shall be conducted in accordance with the National Institute for Occupational Safety and Health (NIOSH) Method 7400, counting rules and all local, state and federal requirements. The ASP/PM shall provide work area monitoring (inside and outside containments) and final clearance inspection, testing and sample analysis using phase contrast microscopy (PCM) in accordance with IDPH regulations. The timing and sequencing, including area start and finish points, of abatement must be coordinated with the PBC, the GEM and the asbestos/demolition contractor for related phases of the overall project.

l. The DB shall also prepare monitoring reports in a standardized reporting format to document on-site monitoring during abatement that includes, at a minimum:
    i. Summary of work;
    ii. Company and ASP / PM Name and License;
    iii. Date and time of activities;
    iv. Sampling methods used;
    v. Asbestos abatement contractor;
    vi. Daily worker log;
    vii. Work area sign-in and out logs;
    viii. Photographs during abatement activities (before and after);
    ix. Notifications;
    x. Worker and Supervisor Licensing;
    xi. Waste Manifests;
    xii. Analytical/filled out air sampling forms by ASP / PM;
    xiii. Daily inspectors logs;
    xiv. Other forms and/or logs required by state and federal regulations; and
    xv. Provide sampling and analysis of unexpected ACM encountered during the work.

m. Ambient Air Monitoring Services: The DB shall provide ambient air monitoring to ensure compliance with existing local, state and federal ambient air standards. Ambient air monitoring shall be performed during demolition activities for asbestos, lead and particulates (PM10). The DB shall prepare an “Ambient Air Monitoring Plan” which includes monitor locations, air sampling and analytical methodology and action levels. It is anticipated that these samples will be performed to establish a baseline demonstrating the ambient air levels of asbestos, lead and particulates during demolition activities. Once baselines are established, and if monitoring shows levels are below acceptable guidelines as stated below, with approval from PBC, the DB can demobilize the air monitors from the site. It is also anticipated these methods will be utilized for this project:
    i. Respirable Dust (PM10) found in the Code of Federal Regulations (40 CFR, Part 50, Appendix J) or other approved method;
    ii. Lead by the procedure found in Code of Federal Regulations (40 CFR, Part 50, Appendix G) or other approved method; and
    iii. Asbestos (utilizing Phase Contrast Microscopy (PCM) and / or Transmission Electron Microscopy (TEM)

n. The Design Builder shall provide a report for the project including but not limited to the following:
    i. Company and ASP Name and License;
    ii. Date and time of activities;
    iii. Sampling methods used;
    iv. Demolition contractor;

v. Analytical / filled out air sampling forms by ASP;
vi. Daily inspectors logs; and
vii. Other forms and/or logs required by state and federal regulations

o. Underground Storage Tank Oversight Services: The DB shall provide underground storage tank removal management, oversight, sampling and reporting services (if required). These services shall include, at a minimum:
    i. Following the removal of the tanks, soil samples will be collected from the excavation walls and floor. Two (2) samples shall be collected from the excavation floor below each UST and the four (4) side walls for a total of six (6) samples from each tank basin. The soil samples collected for chemical analysis will be placed into the appropriate pre-preserved sample containers provided by the laboratory. The sample jars will be labeled and immediately placed into an ice-filled cooler. The samples will be subsequently transported under proper chain-of-custody protocol to an IEPA approved analytical laboratory. Soil samples shall be analyzed for the absence/presence of Benzene, Toluene, Ethylene, and Xylene (BTEX) using USEPA Method 5035A/8260B and Polynuclear Aromatic Hydrocarbons (PNAs) by USEPA Method 8270 SIM. In addition, one soil sample will be collected for Leaking Underground Storage Tank (LUST) Priority Pollutants.
    ii. If needed, the DB shall prepare the 20 and 45 Day Reports as required by the Illinois Environmental Protection Agency.
    iii. The DB shall create one binder that includes the following information for each tank.
        1. Description of the UST removed, the location, the size, the date, time, Contractor Name, removal permit number, product and soil removed, GPS coordinates of each corner of tank basin, backfill type, analytical results and photos;
        2. Removal Permit; and
        3. Waste Records

p. Environmental Cost Estimate: Provide an environmental abatement estimate based on the surveys completed. The Cost Estimate shall include detailed information for the abatement of asbestos containing materials, lead-based paint mitigation (if required); removal and disposal/recycling of hazardous and non-hazardous materials; and soil removal and disposal.

q. Environmental Project Manager: The Design Builder shall provide an Environmental Project Manager (as needed) for providing consulting services related to:

    i. Review the Phase I and II Environmental Site Assessment and providing recommendations regarding management of soils in the project area;
    ii. Preparation of an “Environmental Remediation Plan” to indicate impacted soils and disposal requirements;
    iii. Providing submittal reviews related to soil disposal and imported materials;
    iv. Preparation of a “Waste Management Plan”; and
    v. Manage off-site soil disposal with a truck tracking log

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EXHIBIT #2

Various Documents and Drawings Issued for Scope and Performance Criteria from the RFP Phase I available here:
https://www.pbcchicago.com/opportunities/rfpforkellsparkdb/

AND

The RFP for Phase II (including all Attachments (A-J and L) listed in Section VI – List of Attachments) available here:
https://pbcchicago.com/wp-content/uploads/2025/04/RFP_PBC_PXM_DBforKellsGeorgeParkFieldhousePhaseIIRFP_PS3096_20250424_Final.pdf

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EXHIBIT #3

Schematic Design Plans and Specifications dated April 24, 2025

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KELLS (GEORGE) PARK

714,724,726 N KEDZIE CHICAGO IL 60612

Project Number 11340

100% SD SUBMISSION

APRIL 24, 2025

BROOK ARCHITECTURE

bailey edward

SMNGA

K2NCREST

TERRA ENGINEERING LTD.

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BROOK
ARCHITECTURE

PROJECT DESCRIPTION

Project Description

The Public Building Commission of Chicago (PBC) along with its partner at The Chicago Park District (CPD-PARKS), and the Aldermanic Offices of the 27th Ward, are embarking on delivering the construction of a new Fieldhouse along with site development.

The proposed single-story +/-12,000 SF Fieldhouse will include a multi-purpose room for activities such as basketball and volleyball with room for spectators. Also included are club rooms for Chicago Park District activities, gym storage, reception area, an administrative office, and public restrooms. The fenestration of glazing at the lobby entrance, gymnasium and multipurpose room will allow great visibility into the park and generous daylight into the main building spaces. The mechanical system will be designed to reduce energy consumption while providing a comfortable environment for fieldhouse activities.

The fieldhouse is designed to achieve minimum LEED v4/v4.1 Silver Certification as defined by the U.S. Green Building Council (USGBC). The fieldhouse design maximizes resource efficiency with the use of natural light, and a mechanical system and building envelope designed to reduce energy consumption while providing a comfortable environment for Fieldhouse activities. Potable water use is reduced through plumbing fixture selection and native and adaptive plantings in the landscaping immediately surrounding the Fieldhouse.

Site improvements for stormwater management infrastructure and for conformance to the landscaping ordinance utilize BMP's [Best Management Practice] to first infiltrate and maintain rainwater on site before retaining in underground piping to manage the impact on the combined sewer. The existing Kells Park playground is to be replaced with a new playground with 2-5 and 5-12 age group equipment located adjacent to the new fieldhouse.

BROOK ARCHITECTURE

The proposed Full-Time Equivalent (FTE) staffing is 9. Based on the zoning ratio of 3:1, the minimum required parking is 4 spaces. The project will also include new bicycle racks in accordance with zoning requirements.

Park History

In 1924, the City of Chicago ("City") acquired an almost 2-acre site using Water Bond Funds to construct the Chicago Avenue Water Tunnel. After the completion of the tunnel, the City determined that the land above the tunnel was suitable for use as a park. In 1942, the City's Bureau of Parks and Recreation installed playground equipment, a wading pool, a sand box, and a playing field that was flooded in the winter for ice skating.

The City named the park for George D. Kells (c.1894-1959), alderman of the surrounding 28th ward from 1931 to 1951. (At the time, the City regularly named parks for standing aldermen of the wards in which the sites were located.) During World War I, Kells served as an attaché at the U.S. Embassy in France. A strong proponent of civil rights, he served as the Democratic state attaché chairman from 1944 to 1950. ,The Chicago Park District began leasing Kells Park from the City of Chicago in 1959 with the most recent lease renewal in 2013. Over the years, the Park District made a number of improvements to the site. New basketball courts were installed in 1979. In the early 1990s, the Park District built a new soft surface playground and thoroughly replanted Kells Park's landscape.

ADDITIONAL PROJECT CONSIDERATIONS

- Permitting: Standard Plan Review
- Codes & Ordinances: 2024 Chicago Sustainable Development Policy, Energy Transformation Code, and Stormwater Management Ordinance
- Phasing: Project Phasing may be required
- Environmental: IEPA Site Remediation Program (SRP)
- Funding: per Chicago/Central Park TIF and Kinzie Industrial Conservation Area TIF, Expiration: December 31, 2026

ENVIRONMENTAL REMEDIATION RESPONSIBILITY

The Project will be enrolled into the Illinois Environmental Protection Agency's (IEPA) Site Remediation Program (SRP), including the installation of environmental barriers by the Design-Build firm for issuance of a comprehensive No Further Remediation (NFR) letter by the IEPA. Enrollment into the IEPA's SRP is anticipated in Q2 2025. The Design-Build firm shall be responsible for properly designing any required environmental barriers, in accordance with environmental reporting prepared by others (Project Environmental Consultant). The Design-Build firm is not responsible for preparing the environmental reports.

BROOK ARCHITECTURE

PBC

PROJECT REQUIREMENTS

PROGRAM MATRIX

Program	Room Name	Net Area (Sq.ft)	Description	Qty	Notes
Gym	Large Gym	6,834	high school basketball gym with bleachers	1	Overall GYM size: 64'-8" X 96'-0" Amenities: • Basket ball court : 50'-0" X 84'-0" • Volleyball court : 29'-6" X 59'-0" • Badminton court : 24'-0" X 48'-0" • a ceiling mounted sound system with downward projection is required. CPD does not have a current standard • destratification fans • key-switch retractable basketball and manually operated bleachers. Control panel for gym equipment shall be located within the gym office but with clear views to the equipment that it's operating • scoreboard for basketball & volleyball • basketball goal height will be adjustable to accommodate both youth and adult play • minimum ceiling height is 23ft
	Gym office	81		1	locate near gym doors, provide desk, files, outlets for computer, phone, and printer as well as two (2) data ports for computers (minimum)
Sub total		6,915		2	
Club Room	Club Room A	600		1	include window treatments, not automated
	Club Room B	600		1	include window treatments, not automated
	Pantry	157		1	large commercial refrigerator for camp programming, spec is True T-Series, T-49-HC in stainless steel
Sub total		1,357		3	
Circulation	Lobby	543		1	
	Corridor	1,111		1	
Sub total		1,654		2	
Office	Admin Office + Reception	307		1	A security system is required and will be included as part of the construction scope of work. A coordination meeting will be scheduled with CPD Security and Active Alarm as the project progresses. Active Alarm will provide monitoring services; all security equipment will be installed under this construction contract. The security scope will generally include cameras at building entrances and emergency exits, with strategic placement to maximize coverage. The system will also include an intrusion alarm and, where applicable, glass break detection. Motion sensors will not be included unless specifically requested by CPD Security, to avoid false alarms due to typical fieldhouse decorations. Window treatments will be included in office spaces and will be manual, not automated.
Sub total		307		1	
Restrooms	Toilet - Women's	311		1	W.C. – 4+1(accessible), LAV – 2
	Toilet - Men's	316		1	W.C. – 3+1(accessible), LAV - 2
	All gender toilet	59		1	A reduction in the number of required plumbing fixtures will be pursued through an Alternative Code Approval Request (ACAR) submitted to the City of Chicago. The proposed fixture count will be based on the Illinois Plumbing Code requirements plus 15%, following precedent established on previous CPD projects. This approach requires a separate occupancy calculation using Illinois Plumbing Code standards.
	Toilet Hallway	81		1	
	Men's locker room	147		1	
	Women's locker room	118		1	
Sub total		1,032		6	
BOH	Electrical Room	106		1	
	Tele Comm. Room	43		1	Recommended clearances for a communication rack (W24 x D36) are Front = 36", Back = 30", Sides= 6 - 12", Per ANSI/TIA guidelines, the recommended telecom space allocation is 0.75 sq. ft. per 100 sq. ft. of total building area, which would require approximately 104 sq. ft. for this facility.
	Vending	37		1	Two vending machines—one for dry goods and one for beverages—located adjacent to the lobby. Each machine to have dedicated electrical service and dedicated low-voltage data cabling for point-of-sale (POS) connectivity.
	Mechanical	140		1	Specify Trane, Daikin, or Carrier products for HVAC systems, as these manufacturers are preferred due to local support for troubleshooting and service. Ensure the basis of design aligns with one of these three manufacturers and does not include alternative options.
	Janitor room	77		1	Janitors closet with slop sink, power for charging, adequate storage for supplies including floor cleaners/waxers, mops, and other cleaning materials.
	Storage	506		1	
	Water Room	140		1	
Sub total		1,049		7	
Grand total		12,314		21	
Building envelope factor		+/- 12%			
Grand Total		13,792			

DESIGN TEAM DIRECTORY

Name	Organization	Discipline	Email	Phone	Address
RaMona Westbrook	Brook Architecture	Architectural	rwestbrook@brookarchitecture.com	312.348.1041	Brook Architecture Inc. 2301 South Michigan Avenue Chicago, IL 60616
Sheena Chow	Brook Architecture	Architectural	schow@brookarchitecture.com	312.348.1047	Brook Architecture Inc. 2301 South Michigan Avenue Chicago, IL 60616
Todd Niemiec	SMNG A Ltd.	Sustainability	tniemiec@smng-arch.com	312.829.3355 x231	SMNG A ltd. 943 W. Superior St. Chicago, IL 60642
Sarah Marshall	K2N CREST	Structural	sarahmarshall@k2n.com	(630) 990-9595	K2NCREST 1010 Jorie Blvd., Suite 320 Oak Brook, Illinois 60523
Merq Belongilot	Terra Engineering Ltd.	Civil	mbelongilot@terraengineering.com	312.467.0123	Terra Engineering Ltd 225 W. Ohio Street 4th Floor Chicago, IL 60654
Steve Lekan	Terra Engineering Ltd.	Landscape	slekan@terraengineering.com	312.467.0123	Terra Engineering Ltd 225 W. Ohio Street 4th Floor Chicago, IL 60654
Lito Peñas	Bailey Edward	Electrical	cpenas@baileyedward.com		Bailey Edward 104 Northwest Hwy Fox River Gove, IL 60021
Nicholas Turney	Bailey Edward	Plumbing	nturney@baileyedward.com	847.660.6608	Bailey Edward 104 Northwest Hwy Fox River Gove, IL 60021
Ryne Obenauf	Bailey Edward	Mechanical	robenauf@baileyedward.com		Bailey Edward 104 Northwest Hwy Fox River Gove, IL 60021

BROOK ARCHITECTURE

PRELIMINARY ZONING CODE AND BUILDING ANALYSIS

Zoning Analysis

The project site consists of 8 lots currently zoned R-3, which will be rezoned to POS (Parks and Open Space) as part of the development process. POS zoning permits the construction of park accessory structures, including a field house. Under POS zoning, the required front yard setback is 0'. Side and rear yard setbacks are equal to the height of the building. However, administrative relief may be granted to allow buildings to encroach up to 50% into the required side and rear yards.

Plumbing Fixture Reduction Note:
A reduction in the number of required plumbing fixtures will be pursued through an Alternative Code Approval Request (ACAR) submitted to the City of Chicago. The proposed fixture count will be based on the Illinois Plumbing Code requirements plus 15%, following precedent established on previous CPD projects. This approach requires a separate occupancy calculation using Illinois Plumbing Code standards.

BROOK
ARCHITECTURE

ZONING ANALYSIS

PROJECT: **KELLS PARK FIELDHOUSE** **LAST UPDATED: 04/21/2025**
ADDRESS: **714 N. KEDZIE AVE.**

ZONING INFORMATION			UNDERLYING ZONE / REQ'MTS	PROPOSED	NOTES
SITE AREA:			SUBJECT PROPERTY: (SURVEY PARCELS #2+#3 CONSOLIDATED) 168'x120.2' = +/-20,193.6 SF AJACENT ALLEY: 16'x120.2' = 1,923.2 SF POS-1 (EXIST'G KELLS PARK): 256.4'x276.1' = 70,792.04 SF CONSOLIDATED PARCELS (ALL) 97,024 SF / 2.227 ACRES PER SURVEY PREPARED BY GSG	CONSOLIDATE PARCELS TO POS-1 USE.	
EXISTING BUILDING AREA (GSF):			DNA	DNA - DEMOLISH EXISTING BUILDING	
PROPOSED BUILDING AREA (GSF):			DNA	13,862 SF.	
TOTAL AREA EX./NEW (GSF):			DNA	TBD	
ZONING DISTRICT:			SUBJECT PROPERTY: RS-3 AJACENT ALLEY: N/A EXISTING KELLS PARK: POS-1	RS-3 AND ALLEY TO BE CONSOLIDATED AND RE-ZONED TO POS-1	
PERMITTED USES: (17-2-0207)			(17-2-0207) USE TABLE (H(1) RECREATION BUILDINGS REQUIRE SPECIAL USE APPROVAL IN RS-3 DISTRICT POS-1 PERMITS USE BY RIGHT BUT WOULD REQUIRE ZONING CONSOLIDATION	RE-ZONING REQUIRED IF LOT TO BE CONSOLIDATED WITH POS-1	
FLOOR AREA RATIO (F.A.R.):			(17-2-0304-A): RS-3 = 0.90 POS-1 = N/A	POS-1 = N/A	
SETBACKS	FRONT:	N. KEDZIE (EAST)	(17-6-0204)-A: NO SETBACK REQUIRED EXCEPT WHERE R-ZONED PROPERTIES ARE LOCATED ON THE SAME STREET 50% OF EXISTING SETBACK.	3'-0"	
	SIDE:	ALLEY (SOUTH)	(17-6-0204-A): MUST BE SET BACK A MINIMUM OF 1' FOR EVERY 1' OF HEIGHT.	TBD – 30', CAN BE REDUCED UP TO 50% PER 17-13-1003-I THROUGH ADMINISTRATIVE ADJUSTMENT	
	SIDE:	POS-1 (NORTH)	(17-6-0204-A): MUST BE SET BACK A MINIMUM OF 1' FOR EVERY 1' OF HEIGHT.	TBD – 30', CAN BE REDUCED UP TO 50% PER 17-13-1003-I THROUGH ADMINISTRATIVE ADJUSTMENT	
	REAR:	ALLEY (WEST)	N/A – NO SETBACK IN POS-1.		
REAR YARD OPEN SPACE			N/A POS-1	N/A	
MAXIMUM BUILDING HEIGHT:			(17-6-0204-A) BUILDINGS IN POS-1 DISTRICT MUST BE EXPRESSLY APPROVED BY GOVERNING AUTHORITY.	N/A	
TRANSIT SERVED LOCATIONS			(17-10-0102-B): DOES NOT APPLY TO POS DISTRICTS	DNA	
PARKING REDUCTION			(17-17-0400-B): CHICAGO CTA BUS ROUTE FROM AUSTIN BLVD. – FAIRBANKS CT.	DNA – SEE ABOVE, RS DISTRICTS ARE NOT PROVIDED RELIEF FROM PARKING.	
PARKING STANDARDS			PARKING FOR RECREATION BUILDINGS SHALL COMPLY WITH (17-10-0207-E) R-DISTRICTS: 1 SPACE PER 3 EMPLOYEES + ADDITIONAL PARKING AND DROP-OFF SPACE AS DETERMINED BY DZLUP	FTE = 9	
BICYCLE PARKING:			(17-10-0207-E): 1 PER 10 AUTO SPACES, MINIMUM OF 4 SPACES, PER (17-10-0302-A) MUST BE 2'Wx6'Lx7'H (27-20-302-C): A NONRESIDENTIAL USE MAY USE UP TO 2 VEHICLE PARKING SPACES REQUIRED UNDER THIS CHAPTER AS SPACE FOR PROVIDING BICYCLE PARKING	FTE = 9	
EVSE-READY / INSTALLED SPACES:			(17-10-1011-B) NONRESIDENTIAL BLDGS.:WHEN PERMIT APPLICATION SUBMITTED AFTER 10/31/2020, NEW	DNA	

	CONSTRUCTION NONRESIDENTIAL WITH 30 OR MORE PARKING SPACES SHALL PROVIDE MIN. 20% AS EITHER EVSE-READY OR EVSE-INSTALLED SPACES		
OFF-STREET LOADING: TABLE (17-10-1101)	(17-10-1101) ENTERTAINMENT & SPECTATOR SPORTS: GSF 0 – 49,999SF = 0 LOADING SPACES 10'x50', 50,000 – 99,999SF = 1 LOADING SPACE REQ'D, 100,000+SF = 1 PER 100,000SF OR PORTION THEROF 10'x50'	DNA – BUILDING IS LESS THAN 49,999SF	
SPECIAL USE PROCESS / CRITERIA:	(17-13-0900): PROCESS - APPLICATION, REVIEW, PUBLIC HEARING, AND ZBA REQ'D • COMPLIES W/APPLICABLE STDS. OF CZO • IS IN INTEREST OF PUBLIC CONVENIENCE / HAS NO ADVERSE IMPACT • COMPATIBLE WITH CHARACTER RE: SITE PLANNING / BLDG SCALE • COMPATIBLE WITH SURROUNDING AREA IN OPERATING CHARACTERISTICS, HOUS OF OPERATION, LIGHTING, NOISE AND TRAFFIC GENERATION • IS DESIGNED TO PROMOTE PEDESTRIAN SAFETY	SPECIAL USE IS MANDATORY FOR THE PROPOSED USE IN THIS ZONING DISTRICT.	NOTE: INFORMATION LISTED FOR INFORMATION.
ADMINISTRATIVE ADJUSTMENT OTHER SETBACKS:	(17-13-1003-I): ZONING ADMIN. IS AUTHORIZED TO APPROVE A REDUCTION OF UP TO 50% OF THE DEPTH OF ANY REQ'D SETBACKS WHEN SUCH REDUCTION WOULD MATCH THE PREDOMINATE YARD DEPTH OF EXIST'G BLDGS. ON THE BLOCK	LISTED FOR INFO ONLY, CAN DELETE IF NOT REQUIRED / UTILIZED.	
ADMINISTRATIVE ADJUSTMENT BUILDING HEIGHT:	(17-13-1003-L) ZONING ADMIN. AUTHORIZED TO ALLOW AN INCREASE OF UP TO 10% IN HEIGHT	LISTED FOR INFO ONLY, CAN DELETE IF NOT REQUIRED / UTILIZED.	
ADMINISTRATIVE ADJUSTMENT DRIVEWAY AND VEHICLE ACCESS STDS.	(1713-1003-S) ZONING ADMIN. AUTHORIZED, IN COORDINATION W/ CDOT ACCESS TO SUBJECT LOT CANNOT BE SAFELY ACCOMMODATED BY ALLEY OR SIDE STREET ACCESS AND PROPOSED ADJUSTMENT MEETS GENERAL APPROVAL CRITERIA OF 17-13-1007-B	LISTED FOR INFO ONLY, CAN DELETE IF NOT REQUIRED / UTILIZED.	
PARKING SCREENING FROM STREETS	(17-11-0202-B) PERIMETER OF ALL VEHICULAR USE AREAS LARGER THAN 1,200SF MUST BE SET BACK MIN. 7' FROM STREET SIDE AND SCREENED FROM VIEW.	TBD - MAY BE REQUIRED	
PARKING FENCING	(17-11-0202-C) ORNAMENTAL FENCING REQUIRED ALONG PERIMTER OF VEHICULAR USE AREAS ADJACENT TO STREETS OR FRONT YARD WITHIN AN R-DISTRICT.	TBD - MAY BE REQUIRED	
TRASH STORAGE SCREENING	(17-11-301) REQUIRED FOR DEVELOPMENTS WHEN THE REHABILITATION EXCEEDS 150% OF THE PROPERTY'S ASSESSED VALUE MAY BE ACHIEVED THROUGH STORAGE IN THE BUILDING OR AN ACCESSORY STRUCTURE, IT MUST BE SCREENED ON ALL SIDES BY MASONRY WALLS PLANTED WITH VINES, WITH A MINIMUM HEIGHT OF 6' WITH AN OPAQUE LOCKABLE GATE REF. (17-11-0303-B)	REQUIRED	

KELLS PARK FIELDHOUSE – 100%SD CODE MATRIX

UPDATED - 3/14/2025

	SUBJECT	CODE REFERENCE	ORDINANCE REQ'MT	ACTUAL	NOTES
1	OCCUPANCY CLASSIFICATION	14B-3-303.4	DNA	A-3	
2	GRADE PLANE	14B-2 203.2	DNA	TBD (SURVEY REQ'D)	
3	NO. STORIES ABOVE GRADE PLANE	14B-2-202, 14B-5-504.4	DNA	1-STORY	
4	BUILDING AREA	14B-2-203.4, 14B-5-506	DNA	OPTION 1 – 10,873 SF OPTION 2 – 13,862 SF	
5	FRONTAGE INCREASE	14B-5-506.3	DNA		
6	MIXED OCCUPANCY STRATEGY	14B-5-508	DNA		
7	ACCESSORY OCCUPANCIES	14B-5-508.2	DNA		
8	CONSTRUCTION TYPE	----SEE BELOW----			
9	INCIDENTAL USES	14B-5-508.2	DNA		
10	COMBUSTIBLE MATERIAL, TYPE I-IV CONST.	14B-6-603, 14B-6-604.1	FIRE-TREATED WOOD MATERIALS ARE PERMITTED WHERE ALLOWED IN TYPE I+II CONSTRUCTION, REFER TO 603.1	F.T. WOOD BLOCKING ONLY	
11	EXTERIOR WALL RATING	TABLES 14B-6-601, 14B-6-602	II-B BASED ON SEPARATION DISTANCE: 2-HR REQ'D X < 3'-0"; 1-HR REQ'D 3 </- x < 10'-0" 0-HR REQ'D TO WALLS 10'-0" </= X < 30'-0"; 0-HR REQ'D TO WALLS X > 30'-0"	BUILDING IS OVER 10' FROM PERIMETER LOT LINES IN ALL OPTIONS, 0-HR REQUIRED.	
12	EXTERIOR WALL PROJECTIONS	14B-7-705.2	DNA	MAY EXTEND UP TO 40"	
	EXTERIOR WALL OPENINGS	14B-7-705.8	UNPROTECTED, NONSPRINKLERED (UP/NS): 0' - <3' AND 3' =<5' = NOT PERMITTED 5' - <10' = 10% 10' - <15' = 15% 15' - <20' = 25% 20' - <25' = 45% 25' - <30' = 70% 30' OR GREATER = NO LIMIT	OVER 30' / NO LIMIT	
13	EXTERIOR WALL PARAPETS	14B-7-705.11	PARAPET 30"H REQUIRED EXCEPT WHERE WALLS TERMINATE AT ROOFS NOT LESS THAN 2-HOUR FIRE-RESISTANCE RATED CONSTRUCTION, OR WHERE THE ROOF, INCLUDING THE DECK OR SLAB AND SUPPORTING CONSTRUCTION IS CONSTRUCTED ENTIRELY OF NONCOMBUSTIBLE MATERIALS.	PARAPET REQUIRED, ROOF IS NOT REQ'D TO BE 2-HR AND WE ARE CONTEMPLATING USE OF HEAVY TIMBER IN ROOF ASSEMBLY WHICH IS COMBUSTIBLE.	
14	AUTOMATIC SPRINKLER SYSTEM	14B-9-903.2.1	AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT ALL BUIDLINGS AND PORTIONS OF BUILDINGS AS OUTLINED IN THIS SECTION		
15	AUTOMATIC SPRINKLER SYSTEM – GROUP A-3 OCCUPANCY	15-B-9-903.2.1.3 GROUP A-3	SPRINKLERS SHALL BE PROVIDED WHEN ONE OF THE FOLLOWING CONDITIONS EXIST:SPRINKLERS SHALL BE PROVIDED WHEN ONE OF THE FOLLOWING CONDITIONS EXIST 1. FIRE AREA EXCEEDS 12,000 SF 2. FIRE AREA HAS AN OCCUPANT LOAD OF 300 OR MORE		

TYPE III-A NON-COMBUSTIBLE CONSTRUCTION

TYPE III CONSTRUCTION IS THE TYPE OF CONSTRUCTION IN WHICH THE EXTERIOR WALLS ARE OF NONCOMBUSTIBLE MATERIALS AND THE INTERIOR ELEMENTS ARE OF ANY MATERIAL PERMITTED BY THIS CODE.

	SUBJECT	CODE REFERENCE	ORDINANCE REQ'MT	ACTUAL	NOTES
8A	ALLOWABLE HEIGHT	TABLE 14B-504.3	55' NON-SPRINKLERED 70' SPRINKLERED	30'	COMPLIES
8B	ALLOWABLE NUMBER OF STORIES	TABLE 14B-504.4	2-STORIES NON-SPRINKLERED 3-STORIES SPRINKLERED	1 STORY	COMPLIES
8C	ALLOWABLE AREA	TABLE 14B-506.2	6,000 NON-SPRINKLERED 24,000 SPRINKLERED 1-STORY 18,000 SPRINKLERED MULTI-STORY	OPTION 1 – 10,298 SF OPTION 2 – 13,833 SF	BLDG. MUST BE SPRINKLERED
8D	RATING – PRIMARY STRUCTURAL FRAME	TABLE 14B-6-601	1-HR, FIRE PROTECTION OF STRUCTURAL MEMBERS IN ROOF CONSTRUCTION NOT REQUIRED, INCLUDING PRIMARY STRUCTURAL FRAME, WHERE EVERY PART OF ROOF CONSTRUCTION IS 20' ABOVE FLOOR BELOW	1-HR FOR ALL CONST. BELOW 20' A.F.F. 0-HR FOR ALL CONST. ABOVE 20' A.F.F.	LOBBY, CLUB RMS, TOILETS, OFFICES, ETC. 1-HR, GYM 0-HR ABOVE 20'
8E	RATING – EXTERIOR BEARING WALLS	TABLE 14B-6-601	2-HRS	2-HRS	
8F	RATING – INTERIOR BEARING WALLS	TABLE 14B-6-601	1-HR	1-HR	
8G	RATING – EXTERIOR NON-BEARING WALLS	TABLE 14B-6-601	SEE TABLE 602 (NOTED ABOVE)	WILL COMPLY	
8H	RATING – FLOOR CONSTRUCTION	TABLE 14B-6-601	1-HR TYP. – 0-HR ABOVE BASEMENTS AND UNEXCAVATED AREAS (S.O.G.)	0-HR, UNEXCAVATED / SLAB ON GRADE	
8J	RATING – ROOF CONSTRUCTION	TABLE 14B-6-601	1-HR BELOW 20' A.F.F., 0-HR ABOVE 20' A.F.F., H.T. COMPLYING W/ 2304.11 IS ALLOWED WHERE RATING IS 1-HR OR LESS		
8K	ROOF LOADS ONLY: MINIMUM DIMENSIONS OF HEAVY TIMBER (ROOF AND CEILING LOADS) – COLUMNS - LOWER HALF OF WOOD-FRAME OR GLUED-LAMIATED ARCHES SPRINGING FROM FLOOR OR GRADE	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 6"W, 8"D MIN. GLUED-LAM SIZE: 5"W, 8-1/4"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 5-1/4"W, 7-1/2"D		
8L	ROOF LOADS ONLY: MINIMUM DIMENSIONS OF HEAVY TIMBER (ROOF AND CEILING LOADS) – UPPER HALF OF WOOD-FRAME OR GLUED-LAMINATED ARCHES SPRINGING FROM FLOOR OR GRADE	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 6"W, 6"D MIN. GLUED-LAM SIZE: 5"W, 6"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 5-1/4"W, 5-1/2"D		
8M	ROOF LOADS ONLY: MIN. DIMENSIONS OF FRAMED OR GLUE-LAM ARCHES THAT SPRING FROM THE TOP OF WALLS	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 4"W, 6"D MIN. GLUED-LAM SIZE: 3"W, 6-7/8"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 3-1/2"W, 5-1/2"D		

TYPE IV HEAVY TIMBER CONSTRUCTION

PER 602.4 TYPE IV CONSTRUCTION HAS EXTERIOR WALLS OF NONCOMBUSTIBLE MATERIALS AND THE INTERIOR ELEMENTS ARE OF SOLID WOOD, LAMINATED WOOD, HEAVY TIMBER (HT) OR STRUCTURAL COMPOSITE LUMBER (SLC) WITHOUT CONCEALED SPACES. THE MIN. DIMENSIONS PERMITTED SHALL COMPLHY WITH THIS SECTION AND 2304.11. INTERIOR PARTITIONS AND NONCOMBUSTIBLE FLOOR AND ROOF ASSEMBLIES WITH NOT LESS THAN 1-HR FIRE RESISTANCE RATING OR HEAVY TIMBER COMPLYING WITH SECTION 2304.11.2.2 SHALL BE PERMITTED.

	SUBJECT	CODE REFERENCE	ORDINANCE REQ'MT	ACTUAL	NOTES
8A	ALLOWABLE HEIGHT	TABLE 14B-504.3	65' NON-SPRINKLERED 85' SPRINKLERED	30'	COMPLIES
8B	ALLOWABLE NUMBER OF STORIES	TABLE 14B-504.4	2-STORIES NON-SPRINKLERED 3-STORIES SPRINKLERED	1 STORY	COMPLIES
8C	ALLOWABLE AREA	TABLE 14B-506.2	6,000 NON-SPRINKLERED 24,000 SPRINKLERED 1-STORY 18,000 SPRINKLERED MULTI-STORY	OPTION 1 – 10,298 SF OPTION 2 – 13,833 SF	BLDG. MUST BE SPRINKLERED
8D	RATING – PRIMARY STRUCTURAL FRAME	TABLE 14B-6-601	HEAVY TIMBER:		
8E	RATING – EXTERIOR BEARING WALLS	TABLE 14B-6-601	2-HRS	2-HRS	
8F	RATING – INTERIOR BEARING WALLS	TABLE 14B-6-601	1-HR / HEAVY TIMBER	1-HR	
8G	RATING – EXTERIOR NON-BEARING WALLS	TABLE 14B-6-601	SEE TABLE 602 (NOTED ABOVE)	WILL COMPLY	
8H	RATING – FLOOR CONSTRUCTION	TABLE 14B-6-601	HEAVY TIMBER	0-HR, UNEXCAVATED / SLAB ON GRADE	
8J	RATING – ROOF CONSTRUCTION	TABLE 14B-6-601	HEAVY TIMBER		
8K	ROOF LOADS ONLY: MINIMUM DIMENSIONS OF HEAVY TIMBER (ROOF AND CEILING LOADS) – COLUMNS - LOWER HALF OF WOOD-FRAME OR GLUED-LAMIATED ARCHES SPRINGING FROM FLOOR OR GRADE	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 6"W, 8"D MIN. GLUED-LAM SIZE: 5"W, 8-1/4"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 5-1/4"W, 7-1/2"D		
8L	ROOF LOADS ONLY: MINIMUM DIMENSIONS OF HEAVY TIMBER (ROOF AND CEILING LOADS) – UPPER HALF OF WOOD-FRAME OR GLUED-LAMINATED ARCHES SPRINGING FROM FLOOR OR GRADE	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 6"W, 6"D MIN. GLUED-LAM SIZE: 5"W, 6"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 5-1/4"W, 5-1/2"D		
8M	ROOF LOADS ONLY: MIN. DIMENSIONS OF FRAMED OR GLUE-LAM ARCHES THAT SPRING FROM THE TOP OF WALLS	TABLE 2304.11	MIN. NOM. SOLID SAWN SIZE: 4"W, 6"D MIN. GLUED-LAM SIZE: 3"W, 6-7/8"D MIN STRUCT. COMPOSITE LUMBER NET SIZE: 3-1/2"W, 5-1/2"D		

CIVIL ENGINEERING AND LANDSCAPE
DESIGN NARRATIVE

BROOK
ARCHITECTURE

TERRA ENGINEERING LTD.

Civil Schematic Design Narrative

Kells Field House

714, 724, 726 N. Kedzie Ave
Chicago, IL 60612

Prepared for:

Chicago Parks District
4830 S. Western Ave
Chicago, IL 60609

Issued: April 22, 2025

PROJECT SUMMARY

1. Existing Parcel:
    a. The proposed project is located on an approximately 0.53-acre site at the southeast corner of Kells Park along N Kedzie Ave and north of W Huron St in the city of Chicago, Illinois. The project site is comprised of an existing abandoned 2-story firehouse, asphalt pavement, concrete sidewalk, fencing, and landscape.

2. Proposed Project:
    a. The Kells Field House project will involve the construction of a new field house at the southeast corner of Kells Park. The redevelopment will include a new playground north of the proposed field house as well as a new parking lot with access to the adjacent north/south public alley. Site utility improvements will be performed as needed. The firehouse and a portion of the existing concrete walks on site will be removed and reconfigured to improve accessibility and pedestrian circulation on the property. Landscape improvements are also planned for the proposed project.

CIVIL ENGINEERING DESCRIPTION

1. Site Demolition & Erosion Control
    a. Notable site items for removal include:
        i. The existing two-story firehouse, associated appurtenances, utility services, and surrounding concrete walks will be demolished.
        ii. The existing chain link fence separating the two lots will be removed.
        iii. Decorative metal fence along N Kedzie Ave will be removed.
        iv. Existing trees on site will be removed.
        v. Depressed curb and sidewalk along N Kedzie Ave will be removed.
        vi. Ally apron along N. Kedzie will be removed.

    b. Earthwork removal will be in accordance with the environmental investigation reports and shall be in accordance with IEPA regulations for Subtitle D, CCCD, or any other landfill identified in the anticipated environmental investigation report.

    c. Erosion control measures anticipated are:
        i. Construction fence with dust screening at property boundary
        ii. Silt fence at property boundary and at base of all stockpiles
        iii. Inlet filters at all proposed and existing catch basins
        iv. Temporary seeding at all stockpiles
        v. Erosion control blankets at all slopes 4:1 or greater
        vi. Stabilized construction entrance

2. Earthwork Requirements
    a. Earthwork excavation shall be performed in accordance with IDOT Standard Specifications for Road and Bridge Construction (latest edition) and shall also include the following:
        i. Excavation to design subgrade ±0.1’
        ii. Hauling, placement, and compaction of excavated material to 95% Standard Proctor Density, in fill areas.
        iii. Discing and drying of suitable materials to obtain proper compaction.
        iv. Borrow excavation to obtain suitable material.
        v. Undercutting, hauling and placement of unsuitable materials to non-structural fill areas.
        vi. Handling, hauling and placement of all excess spoil to fill areas.
        vii. Import or export of material necessary to bring site to final grade.
        viii. Fill to obtain desired subgrade shall be coordinated with stormwater management objectives.

3. At-Grade Improvements

    a. General Requirements:
        i. Subgrade preparation shall include final grading of the pavement subgrade to ±1" with an average subgrade elevation of ±0.02' from the proposed subgrade elevation.
        ii. Aggregate base course for concrete and asphalt pavements shall be constructed in conformance with Section 351. It shall be type "B" with a CA-6 gradation, unless otherwise specified. Up to 25% RAP allowable for base course aggregate as long as required gradation is maintained.
        iii. Hot mix asphalt aggregate base course shall be constructed in accordance with Section 311 of the Standard Specifications for Road and Bridge Construction. It shall have a minimum Marshall Stability of 1,700 or greater.
        iv. Hot mix asphalt binder course shall conform to IDOT SSRBC, latest edition.
        v. Hot mix asphalt surface course shall conform to IDOT SSRBC, latest edition. A prime coat will be required prior to surfacing.
        vi. Concrete sidewalks shall be 5" thick with a 6" aggregate base. The concrete shall be 3,500 psi air entrained. A ½" premoulded expansion joint shall be provided at minimum 30' intervals and tooled contraction joints at 5' centers will be required. Maximize recycled content for concrete; substitute fly-ash and slag for up to 40% of cementitious material.
        vii. Combination concrete curb and gutter shall be B6.12. Construction will conform to Section 606 of the Illinois Standard Specifications. The concrete shall be Class SI in accordance with Section 720. Maximize recycled content for concrete. Substitute fly-ash and slag for up to 40% of cementitious material.
        viii. Concrete pavement for driveways shall be 8” thick with 6” CA-6 granular base. The concrete shall be equivalent to IDOT class PV concrete and conform to Section 1020. Concrete pavement to have 3-year aged SR value of at least 0.28 or an initial SR value of at least 0.33. Provide 3/4” premoulded expansion joints at 30’ intervals and tooled contraction joints at 10’ centers.
        ix. Pavement markings shall be thermoplastic in accordance with Illinois Department of Transportation T501 of the Standard Specifications for Traffic Control Items.
        x. Any expansion joints falling on Park District property (not city sidewalk) shall not use asphalt-impregnated expansion joints.
        xi. Park District sidewalks require WWM reinforcement.

    b. Pavement Sections
        i. Proposed, on-site new paving improvements within the project site are planned as follows, pending coordination with geotechnical engineer and their forthcoming report:
            1. Asphalt Pavement
                a. 10” compacted CA-6 subbase
                b. 2.5” HMA Binder Course IL-4.75, N50
                c. 2” HMA Surface Course Mix D, N50
            2. Concrete Pavement - Vehicular
                a. 8” compacted CA-6 subbase
                b. 8” Portland Cement Concrete
            3. Concrete Pavement - Pedestrian
                a. 6” compacted CA-6 subbase
                b. 5” Portland Cement Concrete
            4. Permeable Rubber Playground Surface
                a. Poured-in-place rubber surface
                b. 4” CA-16
                c. 12” CA-7

4. Stormwater Management
    a. Since the project will disturb more than 15,000 square-ft of land and create 7,500 square-ft of new or reconstructed impervious area, the proposed project is understood to be regulated as defined by the current edition of the Chicago Stormwater Management Ordinance.
    b. Detention:
        i. Approximately 8,000 cubic-feet of detention volume will be required.
    c. Volume Control:
        i. Approximately 900 cubic-feet of volume control volume will be required.
    d. Stormwater Strategy:
        i. To meet the required detention and volume control volumes, the proposed playground will have permeable surfacing, with an aggregate stone layer and concrete detention tank below. Alternate option is for detention tank to be located below gymnasium.
5. Underground Utilities
    a. General
        i. All underground utility improvements shall be constructed in accordance with the Chicago Department of Water Management (CDWM) and City of Chicago requirements.
        ii. Select granular trench backfill will be required for all storm sewer trenches lying under existing or proposed streets, loading dock or sidewalks, and within 24" thereof. Trench materials shall be Illinois Department of Transportation CA-6 gradation.
        iii. Manholes, catch basins, and inlets shall be constructed of reinforced precast concrete ring construction with tongue and groove joints in conformance with ASTM C-478.
    b. Sanitary/Combined sewer shall be installed in accordance with the following:
        i. Pipe material shall be of water main quality, Ductile Iron Pipe (DIP), Class 56 or equivalent; or Extra Strength Vitrified Clay Pipe, ASTM C-700 specification, with PVC compression collar seal type joints conforming to ASTM Specification D-1784.
        ii. Pipe bedding shall consist of compacted aggregate, CA-11, placed 6" below to springline of pipe, and compacted FA-6 from springline of the pipe to 12” above for the width of the trench. Up to 25% RAP allowable for base course aggregate as long as required gradation is maintained.
        iii. Frames and lids shall be as specified by the DWM and shall include an external 10" elastomeric band extending from the frame to the manhole.
        iv. A watertight rubber boot conforming to ASTM C-923 shall be provided at all pipe connections to structures.
        v. Testing and televising of sanitary sewer shall be in accordance with the Standard Specifications for Sewer and Water Main Construction, and City of Chicago Department of Water Management.
    c. Storm sewer shall be installed in accordance with the following:
        i. Pipe material shall be reinforced concrete pipe for pipes greater than 21 inches, ASTM C-76, Class III, Wall-B O-ring joints is the minimum requirement. Pipe material shall be PVC-SDR-26, DIP, or Extra Strength vitrified Clay Pipe for pipes 21” and smaller in diameter.
        ii. Pipe material shall be 6” Perforated PVC SDR-26 for all subgrade drainage beneath the permeable pavement section.
        iii. Pipe bedding shall consist of Illinois Department of Transportation CA-11 gradation compacted from 6" below to the spring line of the pipe and compacted CA-11 or CA-16 from

springline of the pipe to 12” above, over the trench width. Up to 25% RAP allowable for base course aggregate as long as required gradation is maintained.

iv. Frame and lids shall be as specified by the City of Chicago Department of Water Management.

v. A watertight rubber boot conforming to ASTM C-923 shall be provided at all pipe connections to structures.

d. Water Main shall be installed in accordance with the following:

i. Pipe material shall be Ductile Iron Pipe, Class 56 or equivalent with mechanical joints.

ii. Pipe bedding shall consist of compacted aggregate, CA-11 or CA-16, placed 6" below and to springline of pipe, and compacted CA-16 from spring line to 12" above the pipe for the width of the trench. Up to 25% RAP allowable for base course aggregate as long as required gradation is maintained.

iii. Frame and lids shall be as specified by the City of Chicago Department of Water Management.

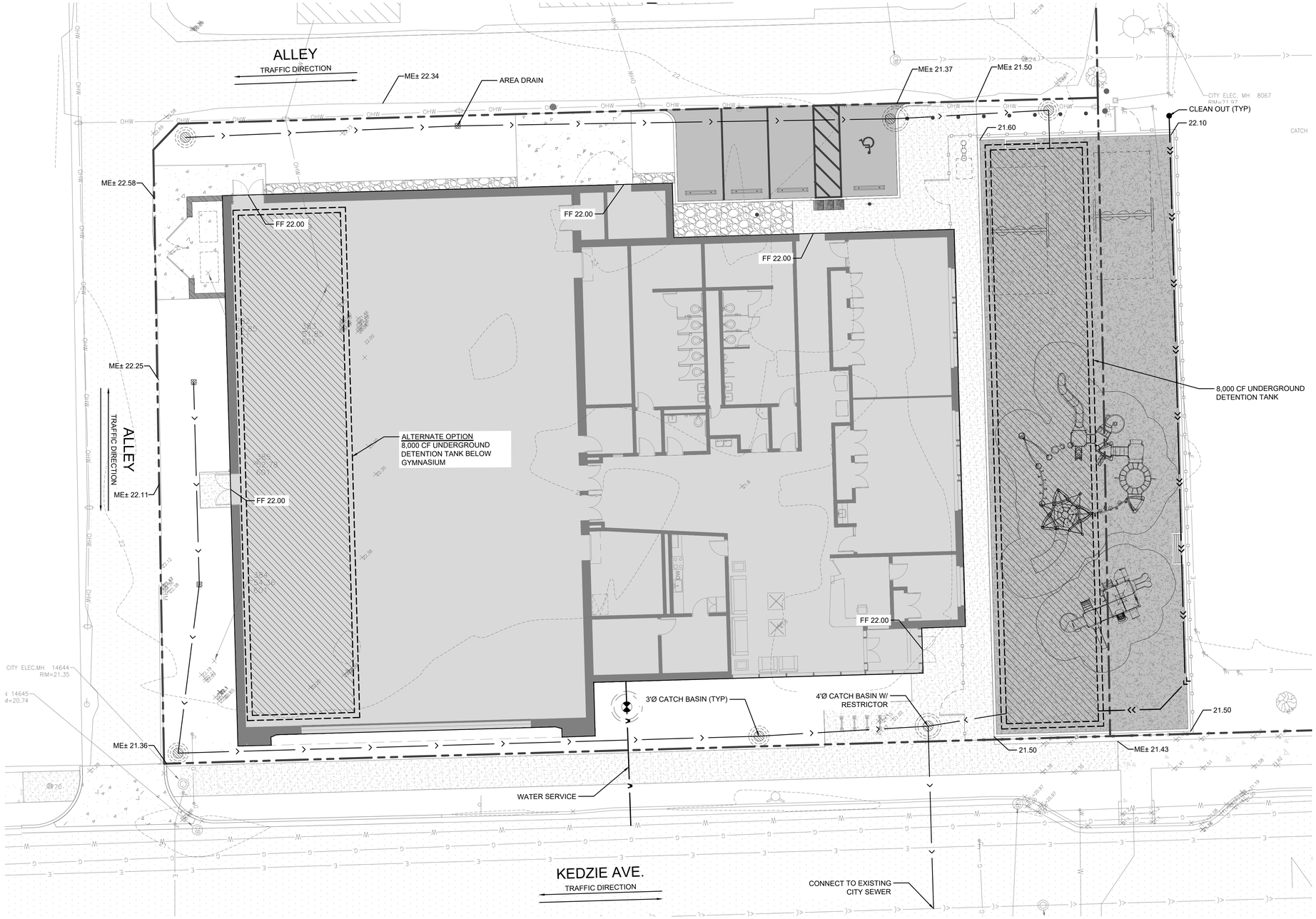
iv. Thrust blocking will be required at all bends greater than 11¼" degrees.

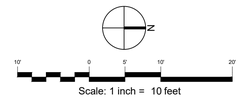
v. Testing shall be in conformance with City of Chicago Department of Water Management.

vi. Shut-off valve shall be required on the Park side of the water service and it shall comply with the Park District’s requirements: Clow Resilient Wedge Valve with 2” operating button, right hand close.

SPECIAL CONSIDERATIONS & PERMITTING

1. DOB Stormwater: Since the project is expected to include more than 15,000 square-ft of contiguous disturbance and 7,500 square-ft of new impervious area, the proposed project is understood to be regulated as defined by the current edition of the Chicago Stormwater Management Ordinance. Requirements will include detention, volume control, and the inclusion of stormwater BMP’s in the design.
2. OUC-EFP: It is understood that new building services will be required for this project. As a result, an OUC-EFP permit will be required from the Office of Underground Coordination for any and all work performed in the public right-of-way.





LEGEND:

- PROPERTY LINE
- DETENTION TANK
- STORM SEWER
- PERFORATED PIPE
- WATER SERVICE
- 3'Ø CATCH BASIN (CB)
- 4'Ø CATCH BASIN (CB)
- AREA DRAIN (AD)
- CLEAN OUT (CO)
- 18.89 — SPOT ELEVATION
- ME± — MATCH EXISTING
- FFE — FINISHED FLOOR ELEVATION

NOTES:

1. FOR CHICAGO PUBLIC SIDEWALKS THE MAXIMUM CROSS-SLOPE SHALL NOT EXCEED 1.56%, THE MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 4.16% OR THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET, WHICH EVER IS HIGHER.
2. FOR PRIVATE SIDEWALKS, THE MAXIMUM CROSS-SLOPE SHALL NOT EXCEED 2.0%, THE MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5.0%.

DOB Stamp

BROOK ARCHITECTURE

Architect of Record

2301 South Michigan Avenue
Chicago, IL 60616
p.312.528.0890
www.brookarchitecture.com

PBC KELLS PARK FIELD HOUSE

714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612

Project Team

CIVIL ENGINEER
Terra Engineering LTD
225 W. Ohio Street 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
Terra Engineering LTD
225 W. Ohio Street 4th Floor
Chicago, IL 60654

STRUCTURAL ENGINEER
K2NCREST
1010 Jorie Blvd., Suite 320
Oak Brook, Illinois 60523

MEP ENGINEER
Bailey Edward
104 Northwest Hwy
Fox River Gove, IL 60021

SUSTAINABILITY
SMNG A ltd.
943 W. Superior St.
Chicago, IL 60642

Seal

NOT FOR CONSTRUCTION

Current Issuance:

Mark	Description	Date
1	100% SD	03/20/25
2	100% SD REVISED	03/25/25
3	100% SD REVISED	04/22/25

Project No.: 2417

Title

PRELIMINARY GRADING AND DRAINAGE EXHIBIT

Sheet

CEX-1

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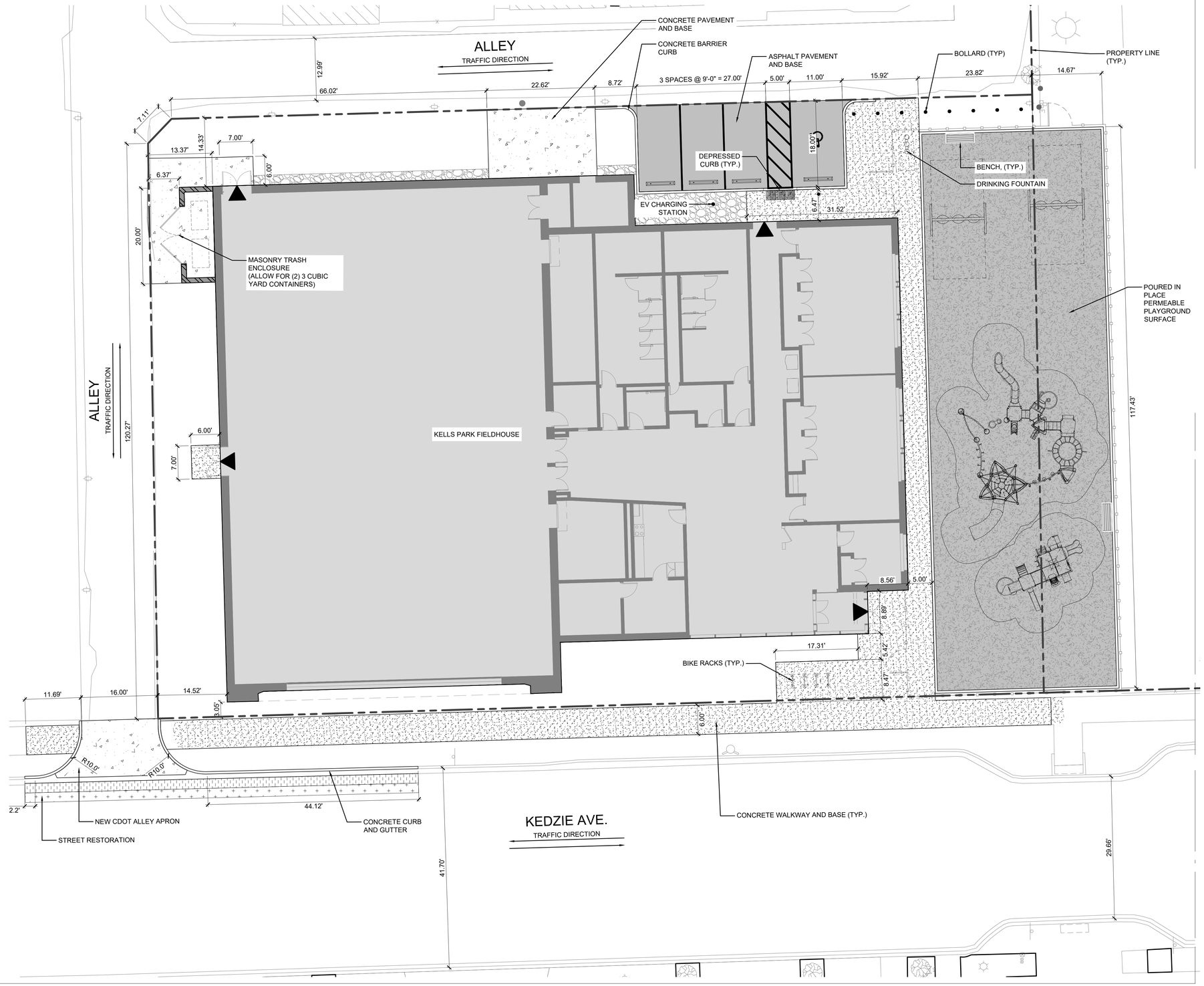

10' 0 5' 10' 20'

Scale: 1 inch = 10 feet

LEGEND:

- PROPERTY LINE
- BUILDING
- MASONRY TRASH ENCLOSURE
- CONCRETE PAVEMENT AND BASE
- CONCRETE WALK AND BASE
- ASPHALT PAVEMENT AND BASE
- STREET PAVEMENT AND BASE
- ASPHALT SURFACE COURSE
- GRAVEL/DECORATIVE STONE
- POURED IN PLACE PLAYGROUND SURFACE
- CONCRETE CURB AND GUTTER
- CONCRETE BARRIER CURB
- ORNAMENTAL FENCE
- BIKE RACKS
- BENCH
- BOLLARD
- SIGN
- WHEELSTOP
- ADA MARKING

DOB Stamp

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2301 South Michigan Avenue
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CIVIL ENGINEER
erra Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

LANDSCAPE ARCHITECT
erra Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

STRUCTURAL ENGINEER
KINCREI
1010 Jorie B d , Suite 320
Oak Brook, Iois 60523

MEP ENGINEER
Bai ey Edward
104 Northwest Hwy
Fox Ri er Go e, 60021

SUSTAINABILITY
SMNG A ld
943 W Superior St
Chicago, 60642

Seal

NOT FOR CONSTRUCTION

Current Issuance:

Mark	Description	Date
1	100% SD	03/20/25
2	100% SD REVISED	03/25/25
3	100% SD REVISED	04/22/25

Project No.: 2417

Title

SITE DIMENSION PLAN

Sheet

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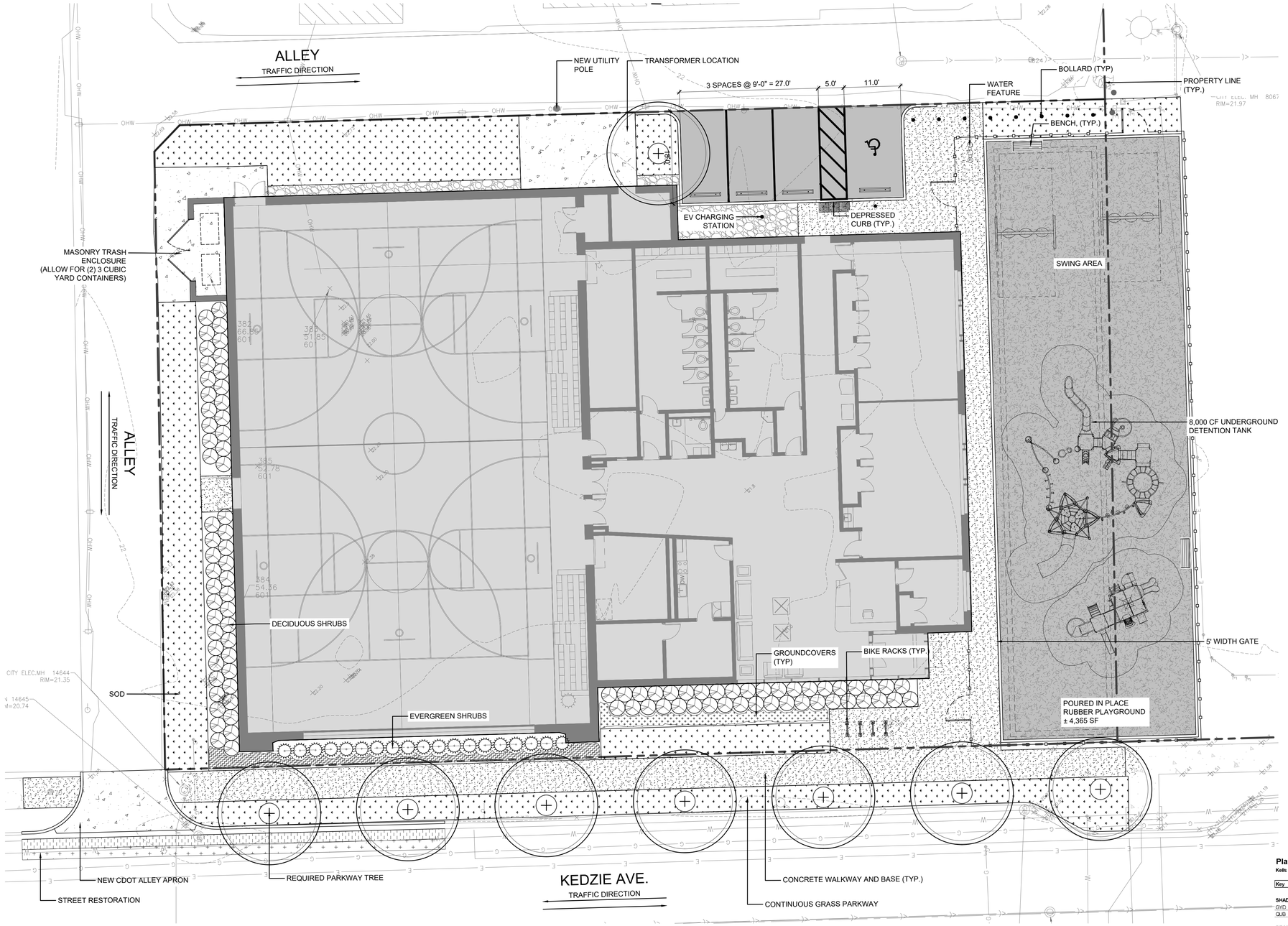
LANDSCAPE
SITE PLAN

BROOK
ARCHITECTURE



1 OVERALL SITE PLAN
SCALE: 1" = 10'

SWORN STATEMENTS:

The undersigned acknowledges the landscape planting shown on the landscape plan for the property at:

714,724,726 N. KEDZIE AVE. , Chicago, Illinois

to the best of the undersigned applicant's knowledge has been designed and will be installed, maintained, and replaced, as required, by current and subsequent owners in accordance with the requirements of Chapter 32 of the Chicago Municipal Code, the landscaping standard of the Chicago Zoning Ordinance, and the "Guide to the Chicago Landscape Ordinance."

Existing parkway and on-site interior trees are to be protected while project is under construction and will be replaced by current and subsequent owner if damaged.

Owner's Name and Signature

The undersigned LANDSCAPE ARCHITECT, registered in the State of Illinois, acknowledges that the landscape planting plan and construction details shown on the attached landscape plans for the property at:

714,724,726 N. KEDZIE AVE. , Chicago, Illinois

has been designed in accordance with the requirements of Title 10, Chapter 32 of the Chicago Municipal Code, the landscaping standards of the Chicago Zoning Ordinance, and the Guide to the Chicago Landscape Ordinance.

#157.01738
exp. 8/31/25

Stephen J. Lekan, PLA
TERRA Engineering Ltd.
225 W. Ohio Street, Fourth Floor
Chicago, Illinois 60610
ph: 312.467.0123

*Estimated time of planting: June 15, 2025

10' 0 5' 10' 20'
Scale: 1 inch = 10 feet

LEGEND:

- PROPERTY LINE
- BUILDING
- CONCRETE WALK AND BASE
- CONCRETE PAVEMENT AND BASE
- ASPHALT PAVEMENT AND BASE
- GRAVEL/DECORATIVE STONE
- POURED IN PLACE PLAYGROUND SURFACE
- STREET PAVEMENT AND BASE
- ASPHALT SURFACE COURSE
- CONCRETE CURB AND GUTTER
- CONCRETE BARRIER CURB
- BIKE RACKS
- BENCH
- WHEELSTOP
- DEPRESSED CURB
- ORNAMENTAL FENCE
- SHADE TREE
- ORNAMENTAL TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- LAWN SOD

Plant Schedule
Kells Park Field House

Key	Botanical name	Common name	Size	Notes
SHADE TREES				
GYD	Gymnocladus dioicus	Kentucky Coffee Tree	2.5" cal.	B&B
QUB	Quercus bicolor	Swamp White Oak	2.5" cal.	B&B
DECIDUOUS SHRUBS				
ARM	Aronia melanocarpa 'Iroquois Beauty'	Aronia melanocarpa 'Iroquois Beauty'	30" Ht.	#5 Cont.
COS	Cornus sericea 'Farrow'	Arctic Fire Dogwood	24" Ht.	#5 Cont.
HYA	Hydrangea arborescens 'Annabelle'	Annabelle Hydrangea	24" Ht.	#5 Cont.
RHA	Rhus aromatica 'Gro-low'	Gro-Low Sumac	24" width	#3 Cont.
VIB	Viburnum dentatum 'Chicago Lustre'	Chicago Lustre Viburnum	36" Ht.	B&B
EVERGREEN SHRUBS				
BUX	Buxus 'Glencoe'	Chicagoland Green Boxwood	24" wide	#5 Cont.
PERENNIALS				
AMB	Amsonia 'Blue Ice'	Blue Ice Blue Star	#1 Cont.	18" o.c.
ASC	Asclepias tuberosa 'Hello Yellow'	Hello Yellow Milkweed	#1 Cont.	18" o.c.
ECM	Echinacea purpurea 'Magnus'	Magnus Purple Coneflower	#1 Cont.	18" o.c.
EUM	Eupatorium maculatum 'Phantom'	Phantom Joe Pye Weed	#1 Cont.	18" o.c.
LIC	Liatris aspera	Rough Blazing Star	#1 Cont.	18" o.c.
NEF	Nepeta x faassenii 'Kit Cat'	Kit Cat Catmint	#1 Cont.	18" o.c.
RUF	Rudbeckia fulgida var. sullivantii	Showy Black-Eye Susan	#1 Cont.	18" o.c.
SDS	Sedum spectabile 'Autumn Joy'	Autumn Joy Sedum	#1 Cont.	18" o.c.
SYO	Symphyotrichum oolentangiense	Sky Blue Aster	#1 Cont.	18" o.c.
ORNAMENTAL GRASSES				
AMB	Ammochila brevliguata	Beach Grass	#1 Cont.	18" o.c.
BOG	Bouteloua gracilis 'Blonde Ambition'	Blonde Ambition Blue Grama	#1 Cont.	18" o.c.
CAA	Calamagrotis x acutiflora 'Karl Forester'	Feather Reed Grass	#1 Cont.	18" o.c.
ELC	Elymus canadensis	Canada Wild Rye	#1 Cont.	18" o.c.
MIS	Miscanthus sinensis 'Purpurascens'	Purple Maiden Grass	#1 Cont.	18" o.c.
PEA	Pennisetum alopecuroides 'Hameln'	Hameln Dwarf Fountain Grass	#1 Cont.	18" o.c.
SCS	Schizachyrium scoparium 'Carousel'	Carousel Little Bluestem	#1 Cont.	18" o.c.
SPH	Sporobolus heterolepis 'Tara'	Dwarf Prairie Dropseed	#1 Cont.	18" o.c.
GROUNDCOVER AND VINES				
CAP	Carex pensylvanica	Common Oak Sedge	#1 Cont.	18" o.c.
PAT	Parthenocissus tricuspidata	Boston Ivy	#1 Cont.	18" o.c.

DOB Stamp

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Architect of Record
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Chicago, IL 60616
p.312.528.0890
www.brookarchitecture.com

PBC KELLS PARK FIELD HOUSE

714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612

Project Team

CIVIL ENGINEER
era Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

LANDSCAPE ARCHITECT
era Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

STRUCTURAL ENGINEER
K2NCRES
1010 Jorie B d., Suite 330
Oak Brook, Illi 60523

MEP ENGINEER
Bai ey Edward
104 Northwest Hwy
Fox Ri er Gro e, 60021

SUSTAINABILITY
SMNG A id
943 W Superior St
Chicago, 60642

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1	100% SD	03/20/25
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3	100% SD REVISED	04/22/25

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Title

OVERALL SITE PLAN

Sheet

L1-00

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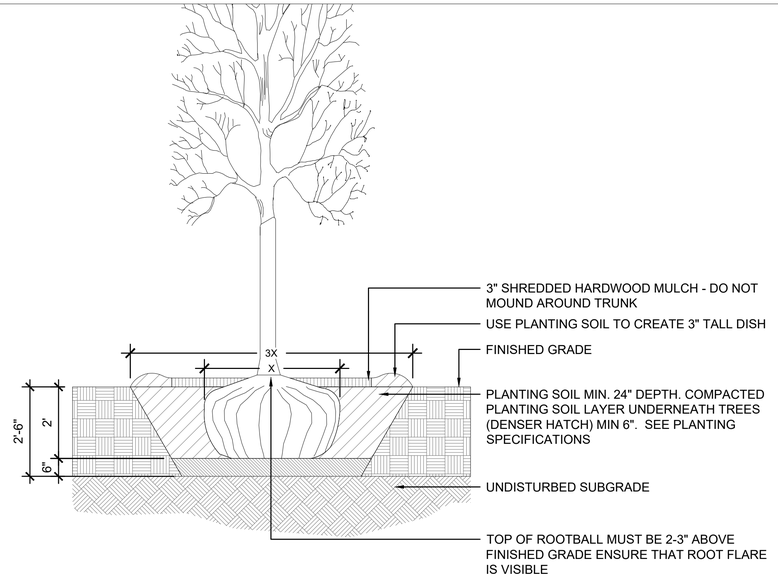

1 SHADE TREE PLANTING DETAIL
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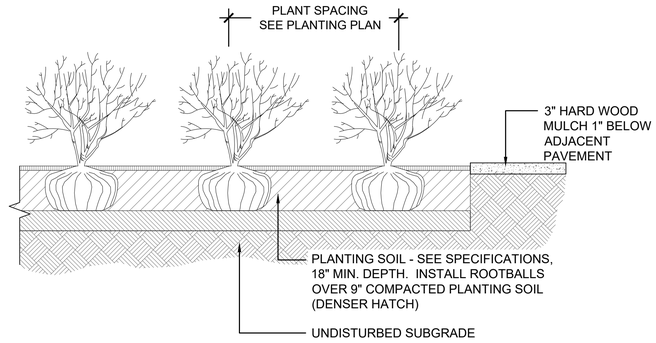

2 SHRUB DETAILS
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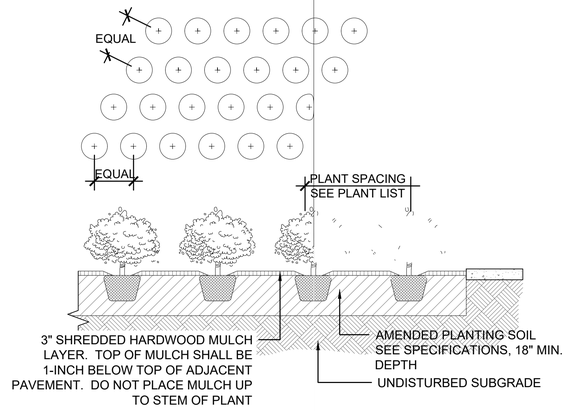

3 GROUNDCOVER/PERENNIAL DETAIL
SCALE: NTS

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Chicago, IL 60616
p.312.528.0890
www.brookarchitecture.com

PBC KELLS PARK FIELD HOUSE

714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612

Project Team

CIVIL ENGINEER
erra Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

LANDSCAPE ARCHITECT
erra Engineering D
225 W Ohio Street 4th F oor
Chicago, 60654

STRUCTURAL ENGINEER
K2KCRES
1010 Jorie B d , Suite 320
Oak Brook, Iois 60523

MEP ENGINEER
Bai ey Edward
104 Northwest Hwy
Fox Ri er Gro e, 60021

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943 W Superior St
Chicago, 60642

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Project No.: 2417

Title

LANDSCAPE DETAILS

Sheet

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ARCHITECTURE
DESIGN NARRATIVE

Building and Playground Description

In support of the Chicago Park District's mission, the construction will be institutional quality, vandal resistant, safe and accessible and above all aesthetically pleasing. The design will meet the following codes and standards:

- Chicago Park District Code
- Chicago Zoning Ordinance
- With administrative adjustments for setbacks
- City of Chicago Building Code
- With an ACAR for plumbing fixture reduction
- Chicago Energy Conservation Code
- Via performance method / energy modeling
- Current Regulations for Sewer Construction and Storm Water Management
- American National Standard: Accessible and Usable Building and Facilities
- Americans with Disabilities Act Accessibility Guidelines
- Guide to the Chicago Landscape Ordinance
- Environmental Protection Agency Regulations
- Chicago Sustainable Development Policy (2024) - strategies to include Bird Protection and Exceed Energy Transformation Code by 10%
- USGBC's Leadership in Energy and Environmental Design standards for sustainability
- Illinois Department of Transportation, Bureau of Design standards
- NFPA NAtional Codes for Life Safety #101and National Electrical Code #70 and Chicago Electrical Code
- OSHA - Occupational Safety and Health Administration standards
- Chicago Park District's Design Guidelines and Standards 2019
- Public Playground Safety Handbook, U.S. Consumer Product Safety Commission

Playground

- Stand alone play equipment, one 2-5 play structure, one 5-12 play structure, and two swing sets
- Poured in place rubber surface
- Three (3) tier water conserving drinking fountain to meet ADA child use with integral hose bib
- Enclosed fencing with 3 gates
- 5' concrete walkway
- Provide energy-efficient, Dark Sky-compliant lighting via light poles. Include spare conduit under the playground surfacing and handholes at each light fixture for future maintenance.
- Product and materials must qualify for LEED points and adhere to green standards

Building Exterior

- Substructure: Poured concrete strip and spread footings; 4' foundation wall. Reinforced concrete slab with vapor barrier, insulation R-10 and granular fill. Site prep and excavation as required for utilities
    - Superstructure

        Load-bearing CMU with glu-laminated joists;

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A. 2-½" acoustical cellular metal deck at gymnasium and sloped roof over corridor and club rooms (no concrete / basis of design Epic Toris A). 1-hour columns / bracing to 20' a.f.f. (UL Des. X772), no fire protection req'd for cols/girders over 20' a.f.f.
B. 2-½" concrete filled cellular acoustical deck (basis of design Epic Toris CA or 4CA) lower roof. 1-hour rated roof UL Des. P908; columns/ bracing supporting roof only 1-hr UL Des. X772.

Exterior enclosure
Designed to meet or exceed the minimum performance requirements of the Energy Transformation Code. Target performance improvements to support Chicago Sustainable Development Policy (2024) goals.

- Exterior wall A: Reinforced concrete block with spray-applied vapor barrier, minimum R-20 polystyrene insulation, thermally broken anchorage system, and Norman brick masonry veneer.
- Exterior wall B: Precast concrete cladding shadow-box/frame with vapor barrier, minimum R-20 insulation, and fixed Kalwall translucent insulated glazing unit; laterally braced and supported by perimeter structural columns and beams.
- Exterior wall C: Glazed aluminum entrance and storefront system with insulated glazing. Awning composed of aluminum composite wall panels over steel framing with continuous minimum R-20 insulation at the perimeter envelope.
- Exterior wall D: Reinforced concrete block with spray-applied vapor barrier, minimum R-20 polystyrene insulation, thermally broken anchorage system (green girt), and metal panels with lasercut custom graphics anchored to brick using studs, art to be discussed with owner.
- Exterior windows: Aluminum-framed insulated glazing units designed to comply with Chicago Sustainable Development Policy (2024) Bird Protection (Basic) requirements for bird-friendly design. High-performance glazing is utilized throughout to support passive solar control strategies—minimizing heat gain and glare, and reducing overall cooling loads.
- Exterior doors: Aluminum and glass, Hollow metal and Insulated Steel overhead door.

Roofing:

Envelope: Single-ply PVC membrane roofing system, mechanically adhered. Assembly includes ½" cover board over three layers of 2.5" polyisocyanurate insulation (total R-value 40 minimum), 5/8" Type X substrate board over structural roof deck. Roofing design will be refined as needed to meet or exceed the project's energy efficiency goals, with consideration for increasing insulation values beyond R-40 where necessary.

Roof membrane to meet high-reflectance requirements per Chicago Sustainable Development Policy (2024):

Low-slope roofs must achieve a 3-year aged SRI (Solar Reflectance Index) of ≥64 or an initial SRI of ≥82.

Steep-slope roofs (if applicable) must meet a 3-year aged SRI of ≥32 or an initial SRI of ≥39.

Drainage: Thru-wall scuppers to downspouts; cast-iron hubs at perimeter extended 8' above grade to accept roof downspouts. Cast-iron piping ties into site stormwater system.

ARCHITECTURE

Building Interior

Gymnasium Playcourt +/- 7,000 sf

- High school sized basketball court 50'x84' with striping for 2 half courts
- Additional striping for volleyball courts
- Collapsible bleachers on one side with5' apron when bleachers are open
- Clear ceiling height to underside of structure to be 23'
- Floors: 33/32" thick tongue-and-groove certified maple flooring with ventilated cove base
- Walls: ground-faced and filled CMU
- Ceilings: exposed structural system
- Doors and Frames: Painted hollow metal, emergency exits to have safety pads, panic hardware, and removable mullions for moving
- Windows: Kalwall translucent insulated glazing units; fixed units. Clerestory fixed windows located at 14' AFF
- Mechanical: perimeter heating with fans for exhaust
- Electrical: ceiling mounted pendant fixtures, with separate switching in divided gym. Locate the switch in office. Locate outlets along each perimeter wall to allow equipment with 50' cord to all areas. Provide a minimum of 2 data ports, one for each side of the gym
    - Retractable backstops, mounted to supplemental framing in ceiling
    - Walk-draw divider curtain, lower section solid vinyl upper section netting, track system mounted to glulam beam
    - Collapsible bleachers
    - Floor inserts for volleyball stanchions
    - Safety wall padding, height to align with top of door frames
    - Electronic score boards and wall clocks
    - Emergency exits equipped with alarm
    - Ceiling mounted sound system with downward projection
    - High-volume low-velocity (HVLS) fans,coordinate fan placement with ceiling-mounted pendant light fixtures to prevent strobe effects

Gymnasium equipment storage, +/- 500SF

- Large enough to store general gym equipment, volleyball nets/poles, balls, floor mats, balance beams, horse, etc.
- Shelving, 12" deep
- Space should be accessible from both halves of the gym
- Provide overhead rolling doors between the storage and the gym.
- Floors: sealed concrete
- Walls: ground-faced and filled CMU
- Ceiling: exposed structure (min height 10')
- Doors: heavy-duty / high-impact overhead coiling doors
- Electrical: energy efficient surface mountedLED fixtures, convenience outlets for cleaning

Gym Office

- Small office adjacent to gym storage room, provide visibility to gym
- Floors: Resilient LVT
- Walls: ground-faced and filled CMU
- Ceiling: exposed
- Doors and Frames: Painted Hollow metal with vision panel
- Mechanical: perimeter heating and cooling, ventilation per code
- Electrical: Power for computer and printer, recessed LED fixtures, maintenance outlet, control panel for gym sound system
- Communications: 2 telephone outlets one data
- Furnishings: tack surface on one wall, desk, chair, lockable file cabinet, computer, phone and printer

BROOK ARCHITECTURE

ARCHITECTURE

- Electrical: Recessed LED or cove LED lighting, electric hand dryers, work light and outlet in pipe chase, GFCI outlets above lavatories and in locker rooms
- Wall mounted plumbing fixtures to be 20% more efficient than Energy policy act of 1992, provide floor drains with clean outs in all rooms, provide drinking fountain near the locker room, provide electronically activated toilet flushing system, manual metered faucets at the lavatories
- Vandal resistant accessories, including paper towel, soap and toilet tissue dispenser.
- Toilet partitions to be metal ceiling mounted

Clubrooms with Storage, +/- 900 sf cluster of 2

- Ceiling Mounted room divider - Skyfold (see appendix)
- Room to be used as a meeting room when one space
- Storage closet for tables, chairs and supplies in each room
- Provision for portable stage or lectern in one room
- Nearby pantry will be used for box lunches
- Floors: resilient LVT material
- Walls: ground-faced and filled CMU
- Ceilings: exposed
- Doors and Frames: Painted hollow metal; moveable partition to be acoustical vinyl coated panels suspended from ceiling tracks. Lockable doors at closets
- Mechanical: Perimeter heating with mechanical ventilation, operable windows for ventilation and air conditioning
- Electrical: wall outlets for computers on dedicated circuits. Energy efficient recessed LED fixtures. minimum 2 floor outlet banks per clubroom
- Plumbing: Provide floor drain and deep sink in one of the club rooms
- Provide 3 data ports and wall outlets for each clubroom (minimum).
- Closet storage should be deep enough to store tables and chairs (Minimum 36" deep), with shelves above to store art supplies, etc.
- "Kitchen areas" in the clubroom to have upper and lower cabinets with solid surface counters and sink.
- Provide one wall with tack surface/white board
- Provide manually operated window treatments

Visitor/Public Spaces

- Entry vestibule, provide 2 sets of double doors with metal grate walk off mat, visible from drop-off, 150sf minimum
- Lobby to include a two-tiered solid surface counter reception desk with visual control and space for large gathering, with entry vestibule 400sf min
- Floors: Thick set terrazzo, wrapped up base at gyp. walls
- Walls: ground-faced and filled CMU with bull nose edge and integral base
- Ceilings: exposed structure
- Doors and Frames: Aluminum and glass exterior and painted hollow metal interior
- Windows: Aluminum store front with safety glass as required, operable
- Mechanical: natural and mechanical ventilated, perimeter heating and airconditioning
- Electrical: reception desk to have electrical outlets and a minimum of six data ports to support a computer, phone, printer, credit card terminal, and security camera, recessed LED lighting, lobby shall have 2 data ports for monitors and wall outlets minimum, dedicated power and data for 2 vending machines, dedicated data drop for the Activenet computer (also handles POS)
- Plumbing: 2 wall hung drinking fountains, one for ADA. Provide drain with clean-out
- Communications: 1 telephone and 1 data outlet, Active Alarm security sytem

ARCHITECTURE

- Furnishings and equipment: Building directory, bulletin board for announcements, trophy case, seating for patrons and millwork service desk with storage, trash receptacle, bike rack, vending machine alcove for 1 drink machine and 1 dry goods machine.

Administrative Office,300 sf

- Locate adjacent to lobby, need visibility into gym and locker room entry
- Lockable office storage within the room for coats and equipment
- Adjacent to lobby with vision glass
- Audio control panel for Public address system
- Floors: Resilient LVT
- Walls: ground-faced and filled CMU
- Ceiling: exposed
- Doors and Frames: Painted Hollow metal with vision window to reception
- Window to be: Operable aluminum
- Mechanical: natural and mechanical ventilation, perimeter heating and air conditioning
- Electrical: outlets for computer, phone, and printer as well as 2 data ports for computers (minimum).
- Furnishings: tack surface on one wall, desk, chairs and workstation, file cabinets, computer, phone and printer.

Building Services, Mechanical room, 550 SF

- Location should be easily serviceable, room noise and vibration to be isolated from the gym, clubrooms and offices.
- Space for domestic hot water, fan equipment and controls
- Floor: Sealed concrete
- Walls: CMU
- Ceiling: exposed
- Doors and Frames: painted hollow metal
- Mechanical: Provide water, gas and electricity as required to equipment
- Electrical: Surface mountedLED fixtures, power for all equipment hardwired CO detector
- Plumbing: floor drains and water connections, hose bib with hot water
- Communications: desk for building engineer / BAS system computer (provided by CPD). Power / data should be located nearby

Building Services, Electrical Room, 100 SF

- Location for building main distribution panels boards and circuit breakers, locate nearest to electric service and utilize energy star equipment, accessible from the main corridor.
- Floor: Sealed concrete
- Walls: CMU
- Ceiling: exposed
- Doors and Frames: painted hollow metal
- Mechanical: ventilation per code
- Electrical: Surface mountedLED fixture and maintenance outlet

Building Services, Telecom Room

- Location for data racks, patch panels, and network distribution equipment; provide Wireless Access Points throughout building; coordinate locations and cabling with low-voltage provider
- Floor: Sealed concrete
- Walls: CMU with minimum one wall covered in ¾" fire-rated backboard
- Ceiling: Exposed
- Doors and Frames: Painted hollow metal with keyed access
- Mechanical: Ventilation and cooling per code and equipment requirements
- Electrical: Dedicated circuits with isolated ground; surface-mounted LED fixture and maintenance outlet
- Include cable tray or ladder rack for structured cabling; grounding and bonding per EIA/TIA standards

ARCHITECTURE

Building Services, Staff Pantry, 100SF

- To be used for staging catering and food prep area for preschool (club rooms), space for refrigerator, with ice maker, range, microwave, storage cabinet and sink. Provide service entry close to staff and trash removal.
- Floors: Resilient LVT
- Walls: ground-faced and filled CMU
- Ceiling: Suspended ACT
- Doors and Frames: Painted hollow metal and lockable
- Mechanical: provide exhaust fan
- Electrical: GFI outlets above counter, dedicated outlet for microwave and refrigerator
- Plumbing: Stainless steel double compartment sink, faucets with vacuum breaker, grease interceptor, floor drain with clean out
- Communications: Wall phone outlet
- Furnishings and Equipment: Broom closet, plastic laminate wall and base cabinets with solid surface countertop, heavy duty refrigerator with ice make and microwave, trash and recycling receptacles

Building Services, Water Room

- Location for main water service and fire protection risers
- Fire sprinkler riser to be fed from the middle roof and either enclosed or painted to match adjacent surfaces for visual integration
- Floors: Sealed concrete with floor drain
- Walls: CMU
- Ceiling: Exposed
- Doors and Frames: Painted hollow metal (3’-0” width minimum)
- Mechanical: Ventilation per code
- Electrical: Surface-mounted LED fixture and maintenance outlet

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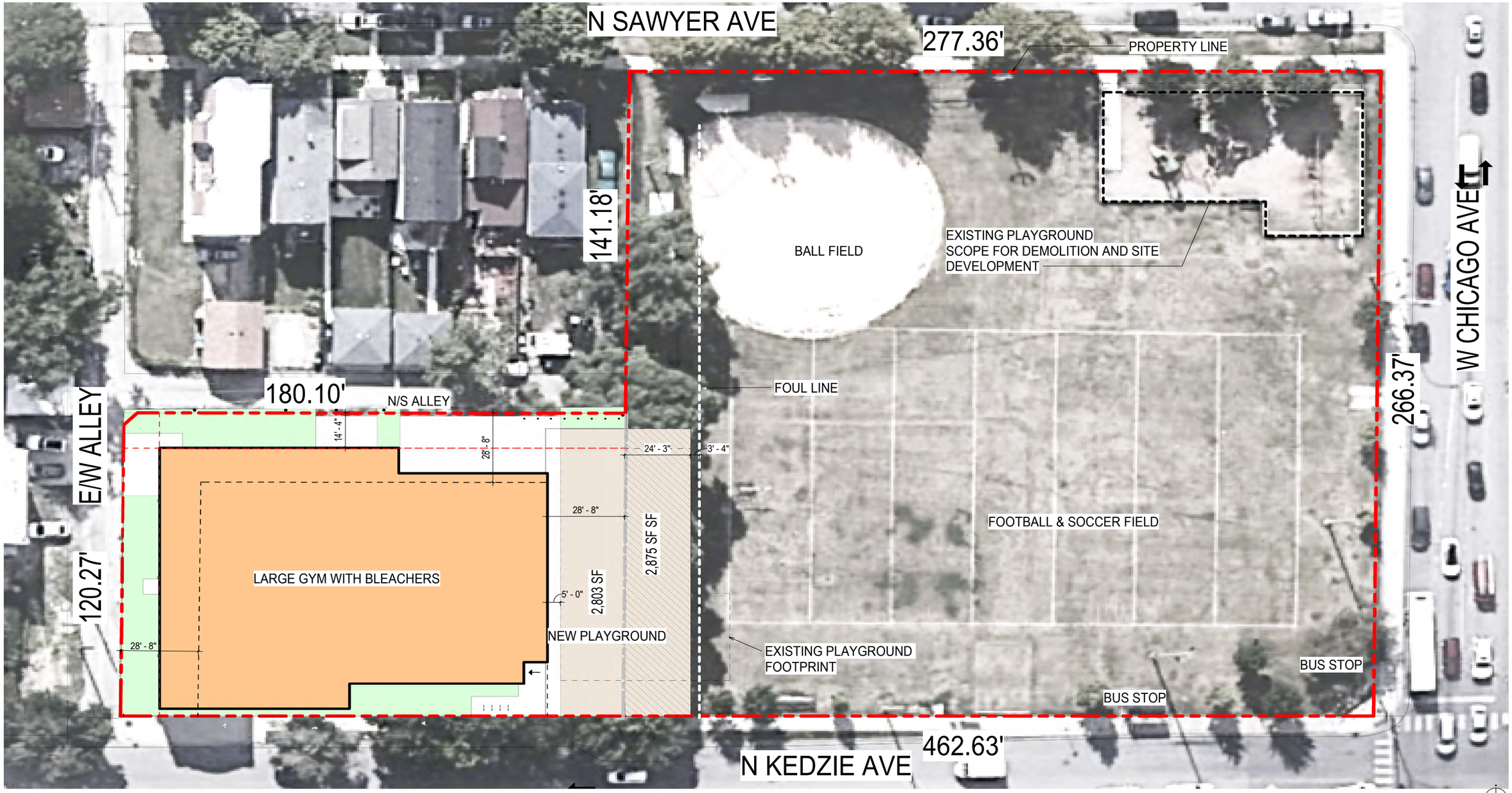
Building Services, Janitor closet

- For service sinks with mop holders and floor drains, shelving for supplies could be combined with plumbing chase/toilet room components. Locate the main corridor
- Floors to be: Sealed concrete
- Walls to be: unpainted CMU
- Ceilings to be: Exposed
- Doors and Frames: Painted hollow metal, lockable with louver and undercut
- Mechanical: louvered and undercut door
- Electrical: outlets for vacuum cleaners and surface-mountedLED fixtures
- Plumbing: Service sinks with hose attachment and vacuum breaker and floor drain
- Furnishings: mop holder and shelving

Toilets and Lockers

- Plumbing fixtures per CPD standards, count may exceed minimum code requirement and must conserve water
- toilet partitions to be solid polymer plastic
- Men’s and Women’s toilet plumbing chase (2’-6”) is desired and be accessible for maintenance
- Toilets adjacent to locker room
- Secure toilets and locker rooms from each other
- Locker rooms to accommodate 50 half height lockers (metal or solid plastic), center bench and a diaper changing area and coat hooks
- Provide ADA unisex family toilet with 2 lockers
- Floors to be: terrazzo, pitch to floor drains
- Walls to be: Structural glazed tile
- Ceilings to be: Gypsum board, 8’-6”
- Doors and Frames to be: painted hollow metal
- Windows to be: operable clerestory with obscure glazing and guards
- Mechanical: exhaust fans

ARCHITECTURE
SITE PLAN



0' 8' 16' 32' 64'

LEGEND

ADMINISTRATIVE RELIEF LINE

PROPERTY LINE

SETBACK LINE LINE

POS-1 ZONING

PR-0.2
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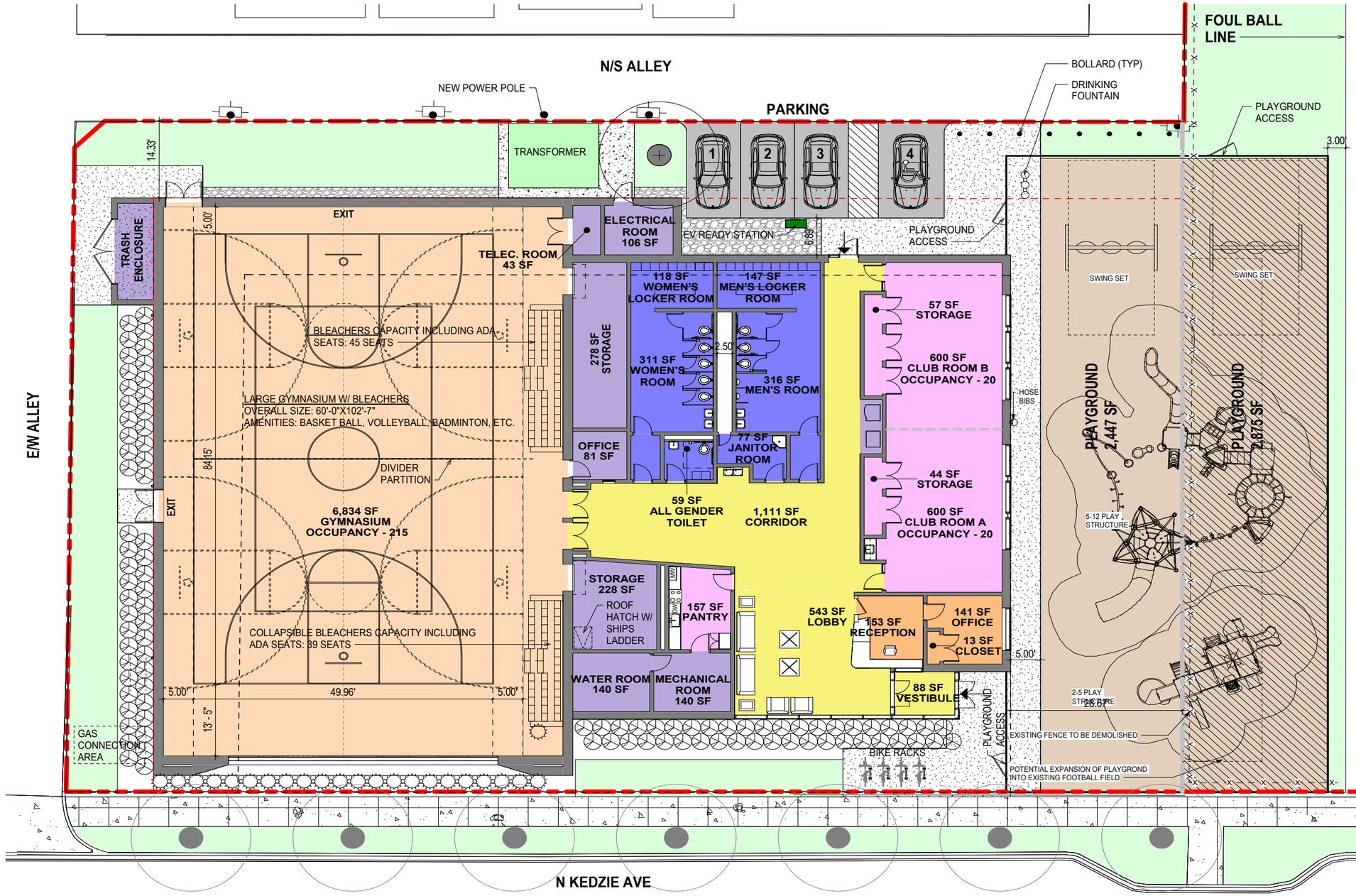
ARCHITECTURE
ENLARGED PLAN



LEGEND

- PROPERTY LINE
- ADMINISTATIVE RELIEF LINE
- SETBACK LINE

ROOM LEGEND

- BOH
- GYM
- OFFICE
- CLUB ROOM
- LOBBY
- RESTROOMS

Proposed Zoning:	Re-zone to POS-1
Option Description:	One-story, high school basketball gym with bleachers, large playground, club room on the first floor
Proposed Building SF:	13,997 SF
Proposed Playground SF:	5,678 SF, smaller than existing playground
Proposed # Parking Spaces:	4
Proposed # Bike Spaces:	4
Gymnasium information	Area: 6,430 sf Overall size: 60'-0" X 102'-7" **Amenities:** • Basket ball court : 50'-0" X 84'-0" • Volleyball court : 29'-6" X 59'-0" • Badminton court : 24'-0" X 48'-0"
Front Yard Req'mt:	As per POS-1 zoning, no setback in the front yard (Kedzie), 1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Front Yard (E):	N. Kedzie, 3'-0" setback,
Zoning relief required? (if so list zoning code ref.)	Yes: reduction into req'd setback (17-13-1003-I), Side yard setback (South): reduction required from 28'-8" to 14'-4" Rear yard setback (West): reduction required from 28'-8" to 14'-4" Zoning admin. is authorized to approve a reduction of up to 50% of the depth of any req'd setbacks when such reduction would match the predominate yard depth of exist'g bldgs. on the block
Side Yard Req'mt:	1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Side Yard (N):	28'-8"
Proposed Side Yard (S):	14'-4" reduction into req'd setback of 28'-8"
Rear Yard Req'mt:	1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Rear Yard (W):	14'-4" reduction into req'd setback of 28'-8"

0' 4' 8' 16' 32'

PR-0.3
04/23/2025

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04/23/2025. ENLARGED PLAN

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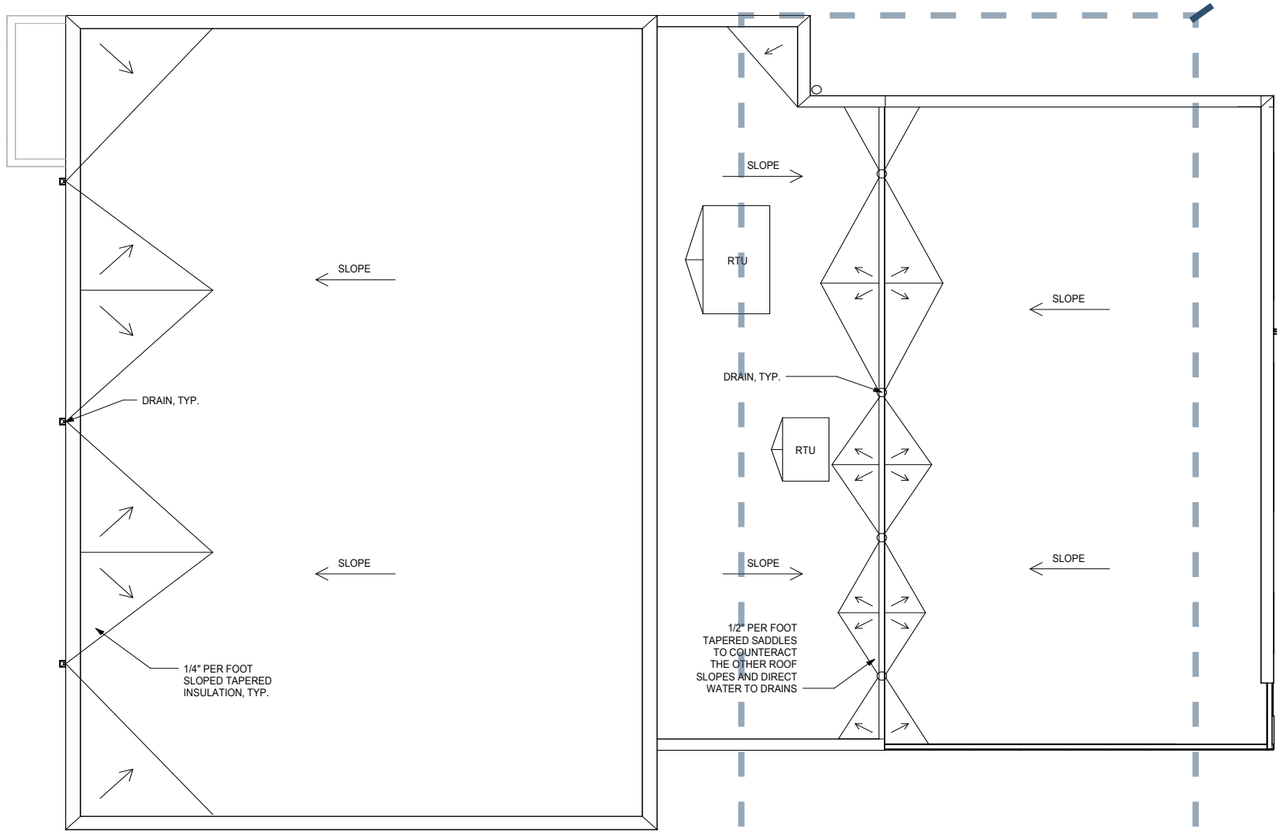
ARCHITECTURE

ROOF PLAN



INTERIOR ROOF DRAIN SKETCH

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04/23/2025. ROOF PLAN

0' 4' 8' 16' 32'

PR-0.14
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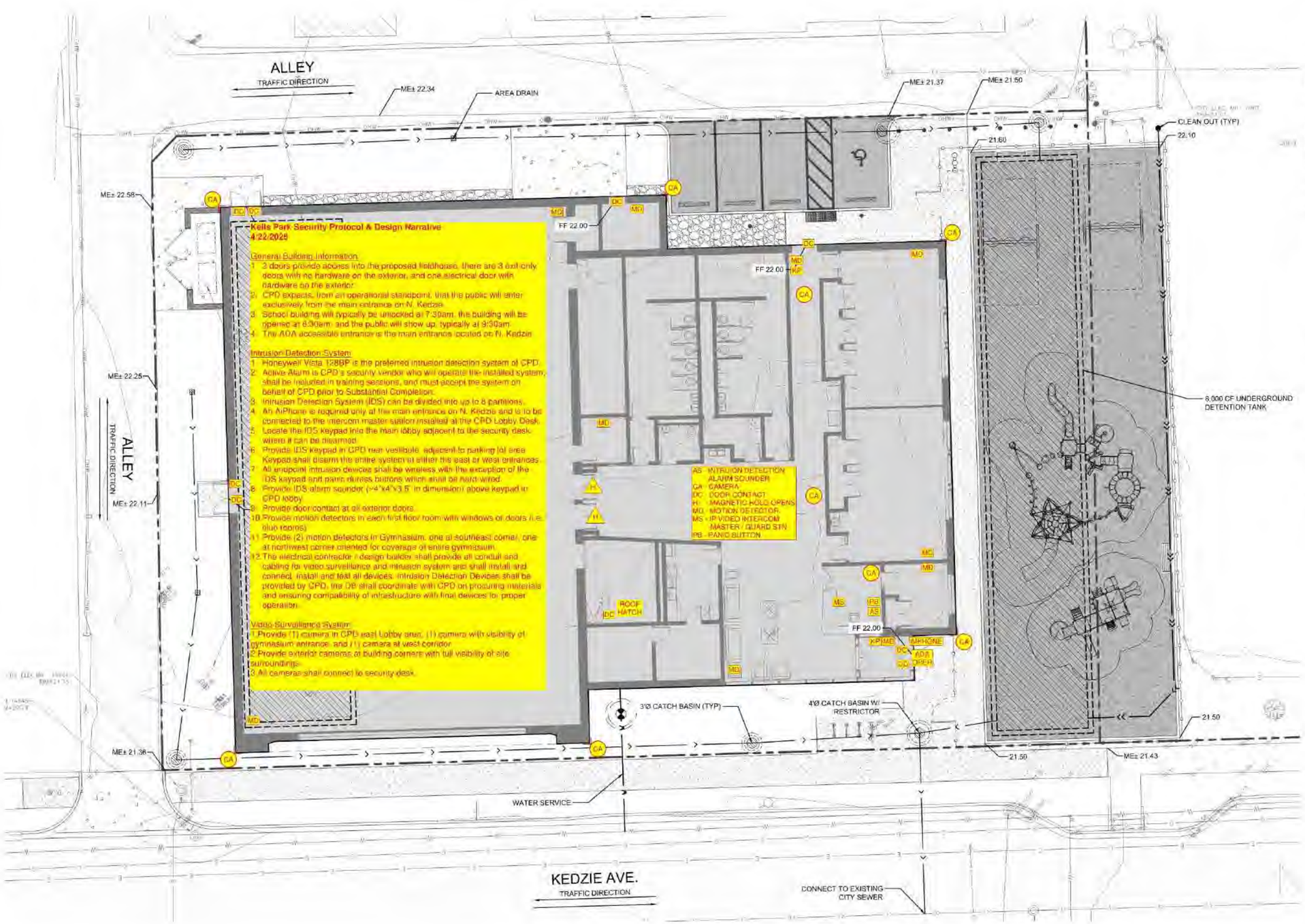
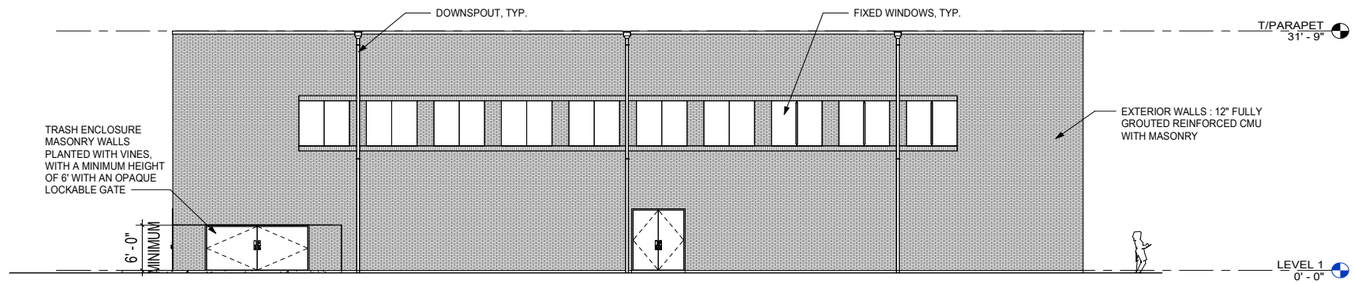
ARCHITECTURE

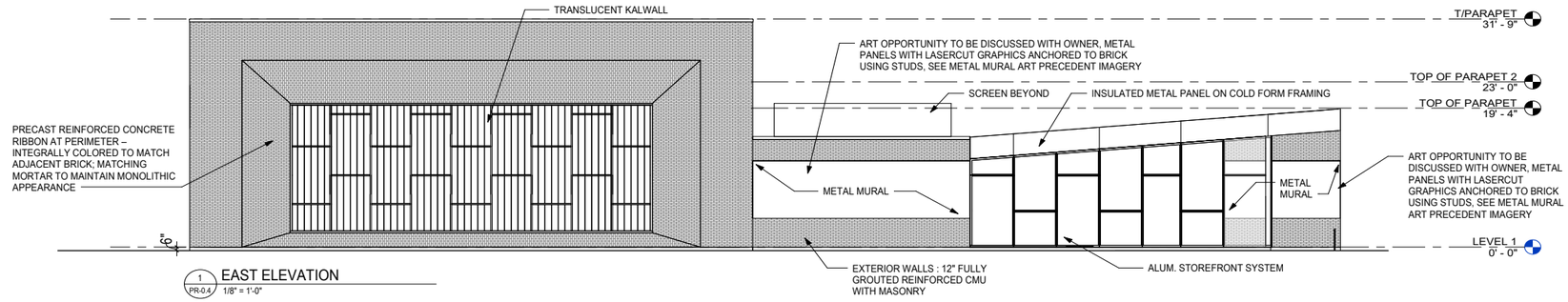
SECURITY PROTOCOL & NARRATIVE



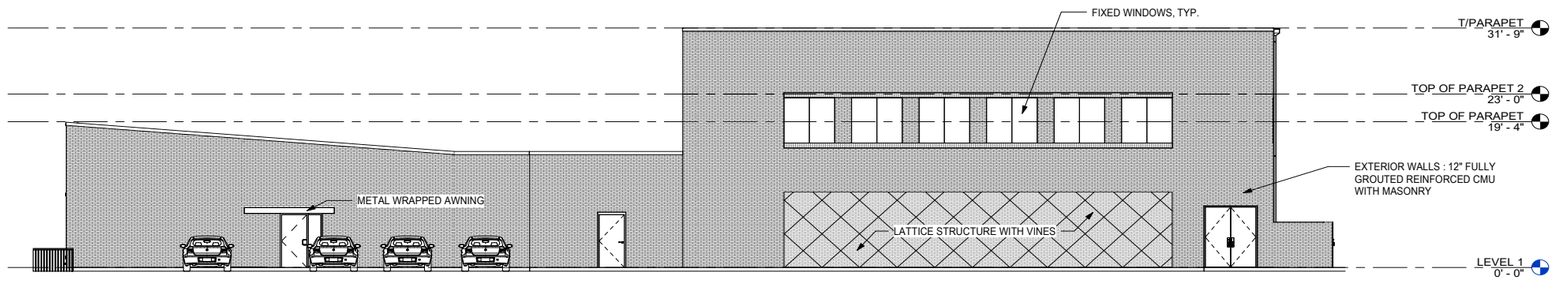
ARCHITECTURE
ELEVATIONS



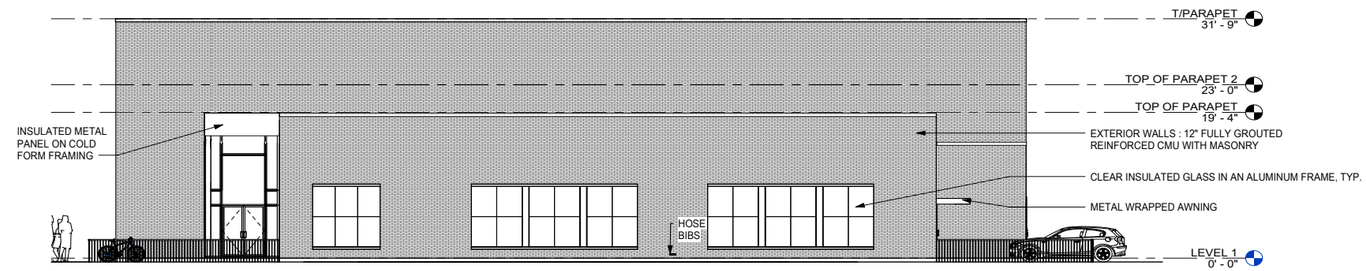
2 PR-0.4 SOUTH ELEVATION
1/8" = 1'-0"



1 PR-0.4 EAST ELEVATION
1/8" = 1'-0"



3 PR-0.4 WEST ELEVATION
1/8" = 1'-0"



4 PR-0.4 NORTH ELEVATION
1/8" = 1'-0"

PR-0.4
04/23/2025

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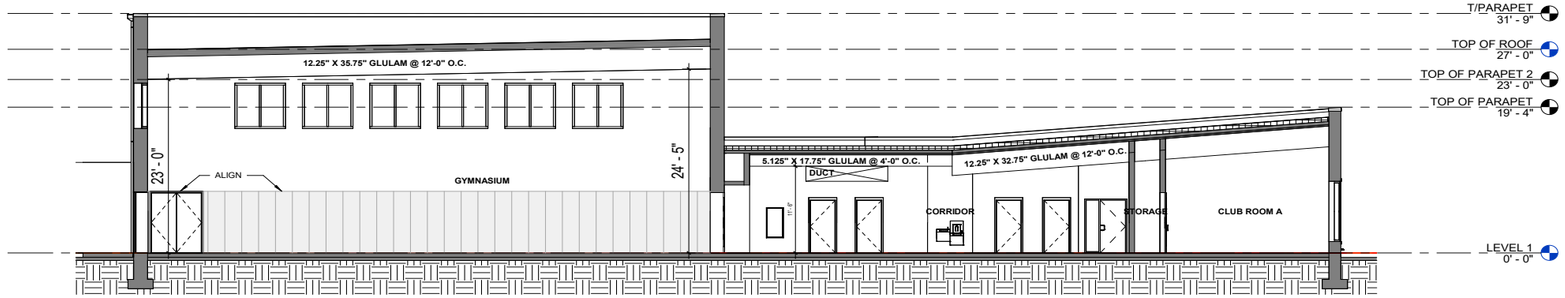

1 PR-0.13 Section 1
1/8" = 1'-0"

PR-0.13
04/23/2025

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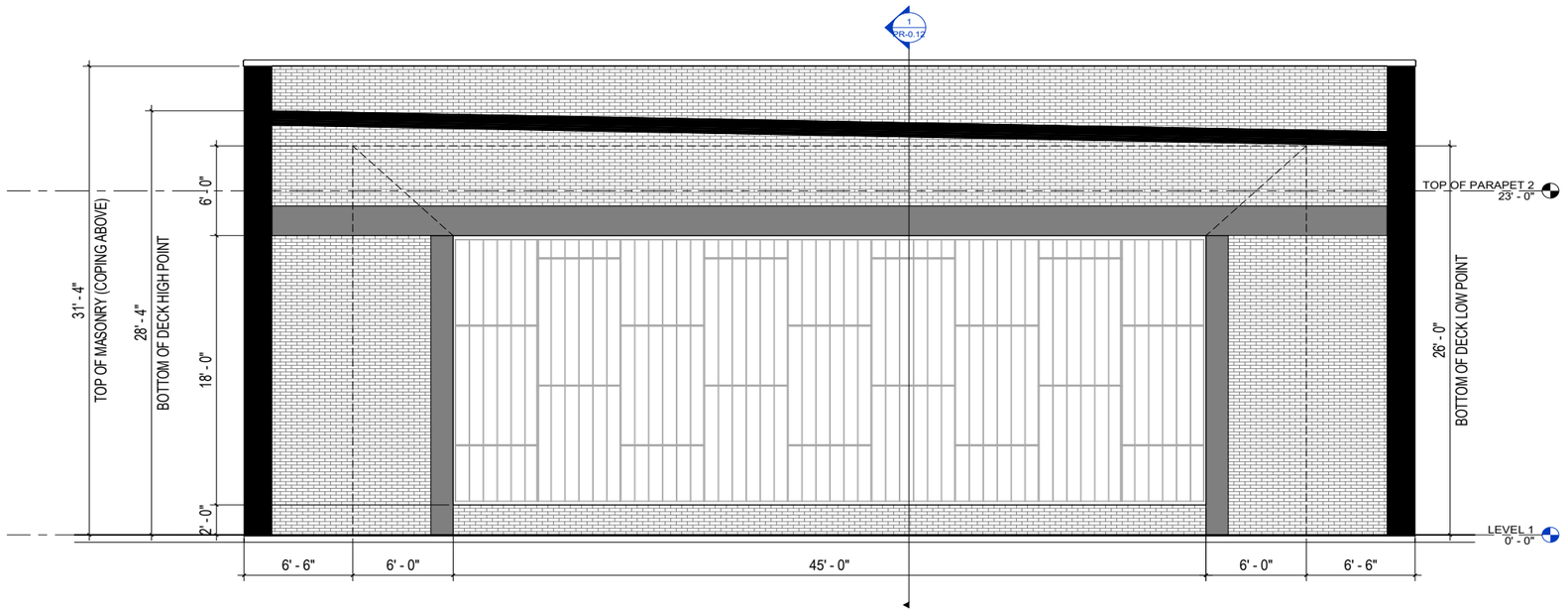
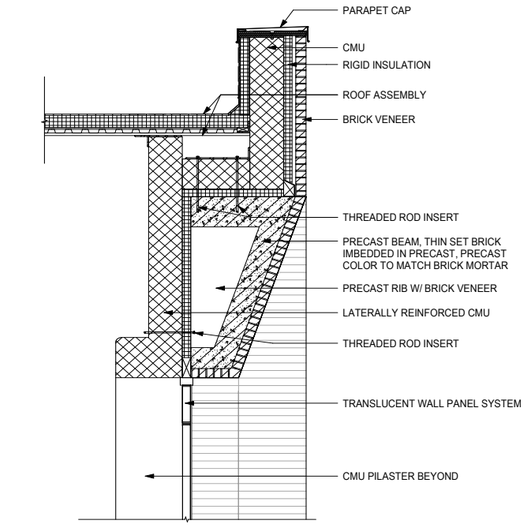
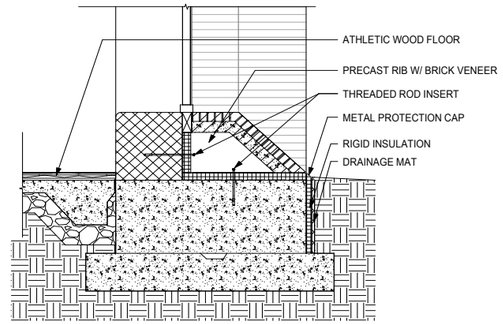
DETAILS



2 PR-0.12 INTERIOR ELEVATION - GYM EAST WALL
1/4" = 1'-0"





1 PR-0.12 GYM EAST WALL SECTION DETAILS
1/2" = 1'-0"

PR-0.12
04/23/2025

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04/23/2025. DETAILS

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STRUCTURAL ENGINEERING
DESIGN NARRATIVE

BROOK ARCHITECTURE

PBC

K2NCREST

April 22, 2025
K2N #: 25908

PBC Kells Park Fieldhouse – Chicago, Illinois

Schematic Structural Framing System

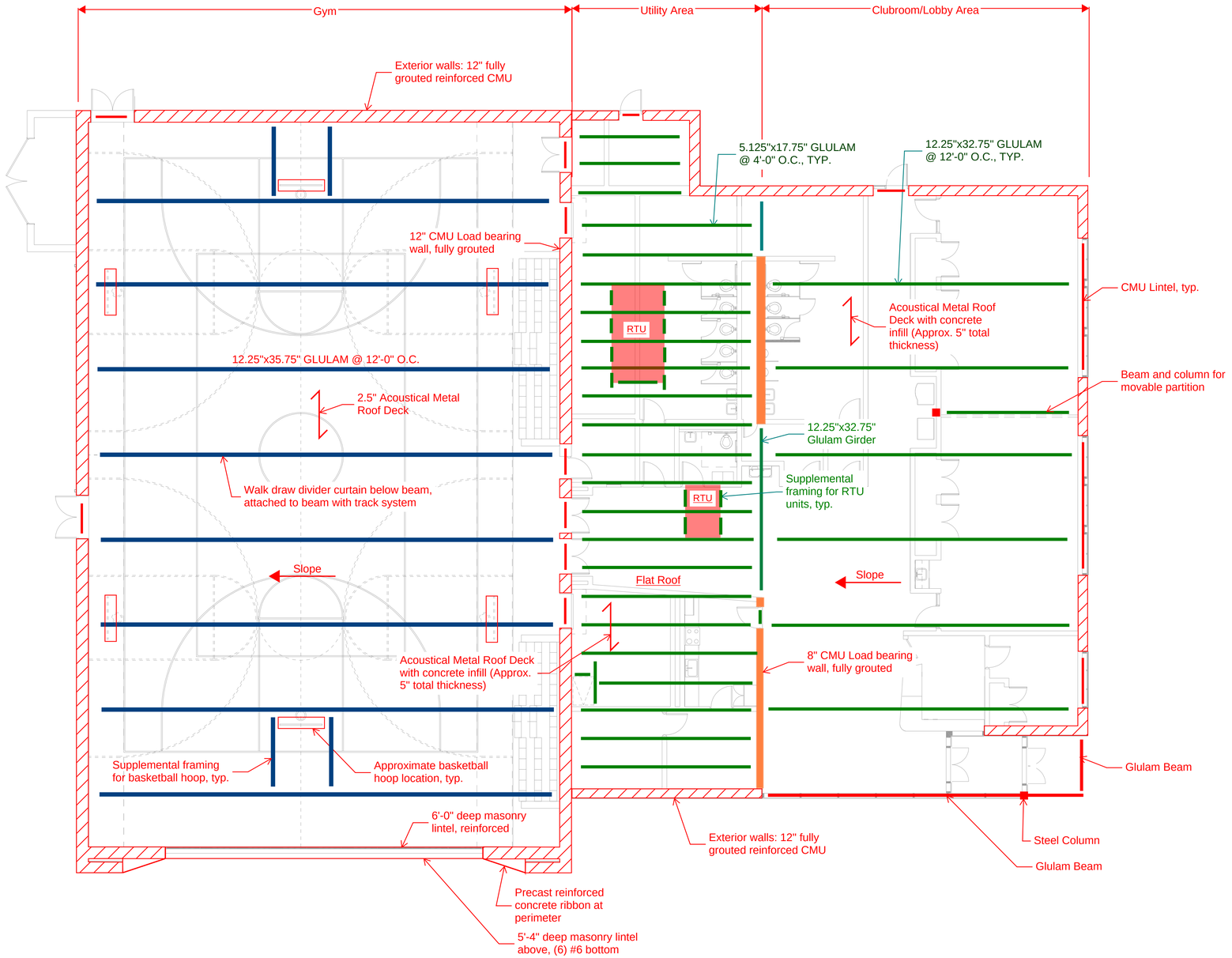
1. General: The structure of the building will be designed in accordance with the 2019 Chicago Building Code (Based on the 2018 International Building Code).
2. Building Foundation System:
    a. Soil summary:
        i. 3,000 PSF net allowable soil bearing capacity.
        ii. Shallow foundation consisting of spread footings extending down to frost depth is recommended by preliminary soils report.
    b. Typical exterior wall:
        i. Stem foundation wall with continuous footing.
        ii. Exterior foundation wall width:
            i. 1’-8” at Gym perimeter pending coordination.
            ii. 1’-0” at Lobby/Clubhouse area locations pending coordination.
        iii. Exterior wall continuous strip footing: 3’-0” wide x 1’-0” thick
        iv. Footing depth:
            i. Bottom of footing 4’-0” below top of slab (or deeper depending on thickness of footing).
        v. Foundation wall insulation:
            a. Rigid horizontal insulation at perimeter (per Architect).
    c. Typical interior load bearing wall:
        i. Minimum 2’-0” wide x 1’-0” thick reinforced continuous thickened slab.
    d. Isolated spread footings located under heavily loaded columns and at shear wall hold down locations.
    e. Slab on Grade:
        i. 6” concrete slab on grade with 6x6 W2.9xW2.9 WWF mid-depth, over 8-inches of compacted granular fill (CA-6) over 4-inches of free draining aggregate (CA-7) and vapor barrier.
        ii. Depressed slabs should be added at different floor locations to mitigate floor finish elevation differences.

3. Framing Structure:
    a. Wall System:
        i. Gym Exterior Walls:
            1. East Façade:
                a. Window wall system (see Arch.) within masonry opening.
                b. 6’-0” wide reinforced with interior insulation precast concrete frame at perimeter. Thin brick veneer will be set into forms on the exterior face.
                c. 12” reinforced CMU, fully grouted, with deep masonry lintels to span across the masonry opening.
                d. Steel frame within masonry opening for window wall system support. Assume (3) columns at third points and (2) beam lines/wind beams.
            2. South and West Walls:
                a. 12” reinforced CMU, fully grouted,
                b. Masonry veneer
            3. North Wall:
                a. 12” reinforced CMU, fully grouted
                b. Masonry veneer
        ii. Clubhouse Area Exterior Walls:
            1. Lobby Area: Glass storefront system with structural mullions. Steel beams and columns to support cantilevered corner.
            2. Clubhouse:
                a. 12” reinforced CMU, fully grouted
                b. Masonry veneer
        iii. Clubhouse Area Interior Load Bearing Walls:
            1. 8” fully grouted CMU

b. Roof Framing System:
    i. Gym:
        1. 12.25"x35.75” Glulam @ 12’-0” O.C.
        2. 2.5” Acoustical metal roof deck
        3. 23-feet clear height to underside of structure.
        4. Basketball hoop pipe supports mounted to glulam beams utilizing a steel bracket with either lag screws or thru bolts.
        5. Walk draw divider curtain on a track system that is mounted to the bottom of the glulam beam to make the curtain track parallel to the ground.
    ii. Utility Area:
        1. 5.125”x17.75” Glulam @ 4’-0” O.C.
        2. Acoustical metal roof deck with concrete infill (Approximate 5” total thickness)
        3. Supplemental glulam framing at RTU perimeters. Include additional miscellaneous framing for duct penetrations through roof (not shown on sketch).
    iii. Clubhouse:
        1. 12.25”x32.75” Glulam @ 12’-0” O.C.
        2. Acoustical metal roof deck with concrete infill (Approximate 5” total thickness)

K2N CREST
large Gym
SD Framing Layout
04-22-2025

1/8" = 1'-0"



0' 4' 8' 16' 32'

PR-0.3
04/22/2025

04/22/2025. ENLARGED PLAN

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612

MECHANICAL, ELECTRICAL, PLUMBING, & FIRE PROTECTION
DESIGN NARRATIVE

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ARCHITECTURE

MEPFP Schematic Design Narrative for a New Construction Chicago Park District Building at Kells Park

PROJECT OVERVIEW:

The project entails the design and construction of a new LEED certified park district building that includes two multipurpose/club rooms and a gymnasium. The building will be located within the City of Chicago and is designed to provide community recreational space, including areas for events, fitness activities, and general gatherings. The schematic design for the MEPFP systems takes into account energy efficiency, sustainability, user comfort, and code compliance while adhering to local regulations, including those specific to the City of Chicago and applicable energy codes such as the Illinois Energy Conservation Code and Chicago Energy Transformation Code.

System types and equipment selections to be used shall be industry standard, readily available systems and should be available at reasonable lead times to maintain project schedule.

MECHANICAL SYSTEMS:
HVAC (HEATING, VENTILATION, AND AIR CONDITIONING):

- **System Type:** The building will be served by a centralized HVAC system using energy-efficient rooftop units (RTUs) with direct expansion (DX) cooling and natural gas heating. These units will provide heating and cooling to the building's common areas, multipurpose rooms, and gymnasium. Selected equipment shall be capable of

obtaining LEEDs enhanced refrigeration management credit. The building should be better than the Chicago Energy Transformation code by at least 10%. In addition to being more efficient than required by the energy transformation code, the building shall endeavor to obtain LEED points for improvement in energy performance. The design build contractor shall provide an ASHRAE Appendix G compliant energy simulation to validate the energy savings associated with the building design. The stakeholders would like to see high volume low speed fans in the gymnasium for comfort reasons. The design should include fans that are UL listed for installation in a gymnasium and all features to prevent fans from falling to the floor should be provided.

- **Air Distribution:** The building will have a mix of supply air ducts and return air grilles. The system will be designed to ensure adequate airflow and ventilation, with the gymnasium area requiring higher air exchange rates to meet occupancy and activity levels.
- **Zoning:** The HVAC system will be zoned to accommodate the varying heating and cooling needs of the multipurpose rooms, gymnasium, and other building spaces. The gymnasium will have a dedicated zone with higher cooling and dehumidification needs, while the multipurpose rooms will have more moderate climate control.
- **Energy Recovery:** The inclusion of energy recovery ventilators (ERV) or heat recovery ventilators (HRV) will be considered to enhance energy efficiency and reduce operational costs by transferring heat between exhaust and fresh air streams.

2. **Ventilation and Air Quality:**
   - **Fresh Air Intake:** The system will be designed to comply with ASHRAE Standard 62.1 for minimum ventilation rates. Fresh air will be provided to each zone, with dedicated outdoor air units where needed.

- **Gymnasium Specifics:** Due to the high occupancy and physical activity, the gymnasium will be equipped with an enhanced ventilation system, ensuring adequate air changes per hour to maintain air quality and reduce humidity levels.

3. **Building Automation System (BAS):**
   - An ASHRAE BACNET compatible Building Automation System shall be provided to monitor and manage operation of the HVAC equipment and integrate energy meters.
4. **HVAC Sustainability**
   - Refer to the sustainability checklist for the initiatives involving HVAC. More information can be found in the LEED reference guide provided by the LEED experts.

ELECTRICAL SYSTEMS:

1. **Power Distribution:**
   - The building will have a main electrical service entry, fed by a pole mounted utility transformer with adequate capacity to support all loads, including HVAC, lighting, gymnasium equipment, and general building systems. Pole mounted transformer shall be mounted on a new utility pole.
   - Reception counter will include outlets for computer, phone, printer, credit card terminal and security cameras (6 minimum).
   - Lobby will have a minimum of two wall outlets.
   - Each Club Room will have a minimum of three wall outlets.
   - Main Office will have outlets for computer and printer.
   - Gymnasium will have power outlets along perimeter walls every 25 feet and/or a minimum of two wall outlets. No point along the wall shall be more than 12.5 feet from an outlet.
   - **Panelboards:** The electrical distribution system will include a main distribution panel and dedicated panelboards for each major load area, including separate panels for HVAC, lighting, gym

equipment, receptacles and emergency systems.

2. **Lighting:**
    - The lighting design will incorporate energy-efficient LED fixtures, which will be specified for both general and task lighting. The gymnasium and multipurpose rooms will feature adjustable lighting levels, automatic shut off, with dimming controls for flexibility in space use. Gymnasium lighting fixtures shall have protective guards. Exterior lighting will use dark sky friendly fixtures with full cut-off light distribution pattern.
    - **Control Systems:** Vacancy sensors, daylight harvesting, and timed lighting controls will be included for interior lighting to reduce energy consumption and improve the building's sustainability. Occupancy sensors, astronomic time switch and/or photocell controls will be used for outdoor lighting control.
3. **Communications:**
    - Reception counter will include data ports for computers, phones, printer, and credit card terminal(s).
    - Lobby will have a minimum of two wall data outlets.
    - Each Club Room will have a minimum of three wall data ports.
    - Main Office will have data ports for phone and printer and a minimum two data ports for computers.
    - Gymnasium will have a minimum of two data ports on each side of perimeter wall.
    - Wireless Access Point (WAP) shall be adequately provided throughout the building.
4. **Electronic Safety and Security:**
    - **Fire Alarm System:** A fully integrated addressable fire alarm system will be designed in compliance with NFPA 72 and local Chicago Fire Department requirements. The system will include smoke detectors, manual pull stations, and alarm notification appliances (horns, strobes) throughout the building. The fire alarm system will be tied into the building's emergency power supply

to ensure functionality during power outages.
    - **Security Systems:** Reception counter will include data ports for security camera operation (6 minimum).
5. **Electric Vehicle Charging Station:**
    - (1) EV charging station required.
6. **Electrical Sustainability**
    - Refer to the sustainability checklist for the initiatives involving Electrical. More information can be found in the LEED reference guide provided by the LEED experts.

PLUMBING SYSTEMS:

1. **Water Supply:**
    - The building will be served by the City of Chicago's water supply, with a metered connection to the municipal water system. A 6" water service will be required for domestic water and fire protection (3" for domestic water, 4" for fire protection.)
    - Plumbing will include hot and cold water distribution to restrooms, janitor room, club room sink, and drinking fountain(s).
    - Letter of intent from CPD to share utility data with USGBC. A verification meter shall be placed directly after the municipal water meter prior to distribution to the building.
    - Provide a high efficiency gas-fired storage tank type domestic water heater with a hot water recirculation pump. Tank shall be approximately 40 gallons capacity.
    - Provide a water meter on the cold water line supplying the domestic hot water heater.
    - Provide a water meter on the cold water line supplying the toilet fixtures.
    - The system will be designed with backflow prevention devices where required.
    - No outdoor irrigation systems planned for this facility.
2. **Sanitary Drainage:**

- The sanitary drainage system will consist of gravity-fed pipes, with properly sized sewer lines to meet the peak demand of the building.

3. **Stormwater Drainage:**
   - Stormwater runoff will be managed according to local codes, with a combination of gutters and downspouts. Provide cast iron piping at grade to +/- 10'-0" above grade. Provide transition from cast iron to gutter above. Provide a clean out in cast iron piping at +/- 24" above grade.
4. **Fixtures and Fittings:**
   - The quantity of plumbing fixtures shown (water closet stalls, lavatories) are based on IL Plumbing Code requirements plus 15% in lieu of Chicago Building Code requirements. An Alternative Code Approval Request (ACAR) will need to be submitted with the City of Chicago for approval of the reduced number of plumbing fixtures shown.
   - The building will be equipped with water-saving fixtures, such as low-flow toilet and faucets. This is part of the commitment to sustainability and reducing the building's overall water consumption.
   - Provide a walk-in plumbing chase; minimum 2'-6" deep.
   - Fixtures shall be per CPD approved standards.
   - For the fixtures and fittings listed in Table 1, as applicable to the project scope, reduce aggregate water consumption by 20% from the baseline. Base calculations on the volumes and flow rates shown in Table 1. All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling must be WaterSense labeled.
   - Baseline is 1.6 GPF water closets; 1.0 GPF urinal; 0.5 GPM at 60psi for lavatories. Design should support reduction in water use with 1.28 GPF water closets, 0.125 GPF urinals, 0.25 GPM lavatories.
   - Water closets shall be wall hung with manual flushometer valves.

TABLE 1. Baseline water consumption of fixtures and fittings

Fixture or fitting	Baseline (IP units)	Baseline (SI units)
Toilet (water closet)*	1.6 gpf	6 lpf
Urinal*	1.0 gpf	3.8 lpf
Public lavatory (restroom) faucet	0.5 gpm at 60 psi all others except private applications	1.9 lpm at 415 kPa, all others except private applications
Private lavatory faucets	2.2 gpm at 60 psi	8.3 lpm at 415 kPa
Kitchen faucet (excluding faucets used exclusively for filling operations)	2.2 gpm at 60 psi	8.3 lpm at 415 kPa
Showerhead*	2.5 gpm at 80 psi per shower stall	9.5 lpm at 550 kPa per shower stall

*WaterSense label available for this product type
gpf = gallons per flush gpm = gallons per minute psi = pounds per square inch
lpf = liters per flush lpm = liters per minute kPa = kilopascals

- Lavatories shall have manual metering faucets.
- Provide a wall mounted high/low electric water cooler with bottle filling station. Water cooler shall have a filter for water supply. Water cooler shall have an ADA cane apron.
- Provide a sink with faucet in the club room/club room storage room.
- Provide An exterior drinking fountain near the playground with water supply coming from the building.

5. **Plumbing Sustainability**
   - Refer to the sustainability checklist for the initiatives involving Plumbing. More information can be found in the LEED reference guide provided by the LEED experts.

FIRE PROTECTION SYSTEMS:

1. **Fire Suppression:**
   - A wet-pipe sprinkler system will be installed throughout the building, with sprinkler heads located in all areas, including the gymnasium and multipurpose rooms. The design will comply with NFPA 13 and Chicago Fire Code requirements.
   - Fire sprinklers will be zoned by area to ensure efficient coverage and meet local fire protection regulations.
   - The designers should refer to the city of Chicago code matrix to finalize their design.
   - Fire protection designer will need to coordinate routing of sprinkler piping main from the middle/lower roof as it transitions into and routed up to the Gymnasium/higher roof. Coordinate the aesthetic of piping as it rises along the wall, I.E. enclosing the pipe or painting pipe to match the wall color.

SUSTAINABILITY AND ENERGY EFFICIENCY:

The building will aim for sustainability, incorporating energy-efficient systems and materials in all aspects of the MEPFP design. Specific goals include:

- **LEED Certification**: The building design will strive to meet or exceed LEED (Leadership in Energy and Environmental

Design) v4.0/v4.1 Silver Certification standards.

- More information can be found in the LEED reference guide provided by the LEED experts. Refer to the LEED reference guide for information on prerequisites and credits associated with LEED process. Refer to the reference guide for additional information regarding credits.
- **Energy-efficient Equipment**: Use of high-efficiency HVAC units, LED lighting, and low-flow plumbing fixtures.

CONCLUSION:

The MEPFP schematic design for this new Chicago Park District building is developed to meet the specific needs of the facility while ensuring high performance, energy efficiency, and user comfort. The design will comply with all applicable local codes and standards, ensuring a safe, functional, and sustainable space for the community.

SUSTAINABILITY STRATEGIES

BROOK ARCHITECTURE

Chicago Sustainable Development Policy (2024)

Strategy Menu and Third-Party Building Certifications

Strategy No.	Strategy Name	Points	Available in Compliance Pathway #1: Menu	Available in Compliance Pathway #2: Third-Party Certification
A. Bird Protection				
A.1	Bird Protection (Basic)	20	Y	Y
A.2	Bird Protection (Enhanced)	30	Y	Y
B. Energy				
B.1	Exceed Current Energy Transformation Code (5%)	20	Y	N
B.2	Exceed Current Energy Transformation Code (10%)	30	Y	N
B.3	*Rooftop Solar-Ready Construction**	*5*	*Y*	*Y*
B.4	*On-Site Renewable Energy Provision of 5-10%**	*10*	*Y*	*Y*
B.5	*On-site Renewable Energy Provision of 10-20%**	*20*	*Y*	*Y*
B.6	*On-site Renewable Energy Provision of > 20%**	*30*	*Y*	*Y*
B.7	Building Electrification	30	Y	N
B.8	Maximum 40% Glass	10	Y	N
B.9	Meet ComEd New Construction Best Practice Requirements	20	Y	N
C. Landscape and Green Infrastructure				
C.1	Green Roof Coverage (>50%)	10	Y	Y
C.2	Green Roof Coverage (100%)	20	Y	Y
C.3	Productive Landscapes	5	Y	Y
C.4	Native Landscapes	5	Y	Y
C.5	Tree Health	5	Y	Y
C.6	*Industrial Landscaped Buffer**	*10*	*Y*	*Y*
C.7	Non-toxic Pavement Sealants	5	Y	Y
C.8	Naturalize River Edges	10	Y	Y
C.9	Exceed River Setback for Naturalized Space	5	Y	Y
C.10	Aquatic River Habitat	10	Y	Y
D. Public Health and Community Benefits				
D.1	Well Building Standard	50	Y	Y
D.2	Fitwel Certification	30	Y	Y
D.3	100% on-site ARO	10 to 15	Y	Y
D.4	*Air Quality Monitoring**	*10*	*Y*	*Y*
D.5	Indoor Air Quality	5	Y	Y
D.6	*Cleaner Industrial Operations Equipment**	*5*	*Y*	*Y*
D.7	Cleaner Construction Equipment	5	Y	Y
D.8	Community Resiliency Asset	10 to 15	Y	Y
D.9	*Workforce Development**	*10*	*Y*	*Y*
D.10	Exceed Requirements for Accessible Dwelling Units	5	Y	Y

Strategy No.	Strategy Name	Points	Available in Compliance Pathway #1: Menu	Available in Compliance Pathway #2: Third-Party Certification
E. Stormwater				
E.1	Sump Pump Capture and Reuse	5	Y	Y
E.2	*Exceed Stormwater Ordinance by 25%**	*10*	*Y*	*Y*
E.3	*Exceed Stormwater Ordinance by 50%**	*20*	*Y*	*Y*
E.4	100% Stormwater Infiltration	40	Y	Y
E.5	100-year Detention for Lot-to-Lot buildings	25	Y	Y
E.6	100-year Detention for Bypass	5	Y	Y
F. Transportation				
F.1	Divvy Bikeshare Sponsorship	5	Y	N
F.2	Residential Bike Parking Facilities	5	Y	N
F.3	Non-Residential Bike Parking Facilities	5	Y	N
F.4	EV Charging Stations 30%	5	Y	N
F.5	EV Charging Stations Fast Charger	10	Y	N
F.6	EV Charger Readiness (Basic)	5	Y	N
F.7	EV Charger Readiness (Enhanced)	10	Y	N
F.8	*Commercial EV Fleet Readiness**	*10*	*Y*	*Y*
F.9	CTA Digital Display	5	Y	Y
G. Waste				
G.1	80% Waste Diversion	5	Y	N
G.2	80% Waste Diversion + 10% reuse	10	Y	N
H. Water				
H.1	Indoor Water Use Reduction (25%)	5	Y	N
H.2	Indoor Water Use Reduction (40%)	10	Y	N
Sustainability Excellence & Innovation				
-	Sustainability Excellence and Innovation	5 to 20	Y	Y

Third-party Building Certification Program	Points
LEED Gold	80
LEED Platinum	90
LEED Zero	95
Three Green Globes	80
Four Green Globes	90
Green Globes Journey to Net Zero Carbon / Net Zero Energy	95

Third-party Building Certification Program	Points
PHIUS	90
PHIUS Zero	95
ILFI Living Building Challenge	90
ILFI Zero Energy	95
Enterprise Green Communities	80
National Green Building Standard Gold	70
National Green Building Standard Emerald	80

** Recommended strategy for Air Quality Ordinance and industrial use category projects*

DPD
Department of Planning and Development

LEED v4 for BD+C: New Construction and Major Renovation

Project Checklist

Project Name:

Date:

Y	?	N			
			Credit	Integrative Process	1

11	0	5	**Location and Transportation**		16
			Credit	LEED for Neighborhood Development Location	16
1			Credit	Sensitive Land Protection	1
2			Credit	High Priority Site	2
4		1	Credit	Surrounding Density and Diverse Uses	5
2		3	Credit	Access to Quality Transit	5
		1	Credit	Bicycle Facilities	1
1			Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

3	0	7	**Sustainable Sites**		10
Y			Prereq	Construction Activity Pollution Prevention	Required
		1	Credit	Site Assessment	1
		2	Credit	Site Development - Protect or Restore Habitat	2
		1	Credit	Open Space	1
		3	Credit	Rainwater Management	3
2			Credit	Heat Island Reduction	2
1			Credit	Light Pollution Reduction	1

5	1	5	**Water Efficiency**		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2			Credit	Outdoor Water Use Reduction	2
2	1	3	Credit	Indoor Water Use Reduction	6
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

13	7	13	**Energy and Atmosphere**		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
5	1		Credit	Enhanced Commissioning	6
7	5	6	Credit	Optimize Energy Performance	18
1			Credit	Advanced Energy Metering	1
		2	Credit	Demand Response	2
		3	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
		2	Credit	Green Power and Carbon Offsets	2

6	2	5	**Materials and Resources**		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
		5	Credit	Building Life-Cycle Impact Reduction	5
2			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
	2		Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
2			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2			Credit	Construction and Demolition Waste Management	2

13	0	3	**Indoor Environmental Quality**		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials	3
1			Credit	Construction Indoor Air Quality Management Plan	1
2			Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1		1	Credit	Interior Lighting	2
2		1	Credit	Daylight	3
1			Credit	Quality Views	1
		1	Credit	Acoustic Performance	1

5	0	2	**Innovation**		6
4		2	Credit	Innovation	5
1			Credit	LEED Accredited Professional	1

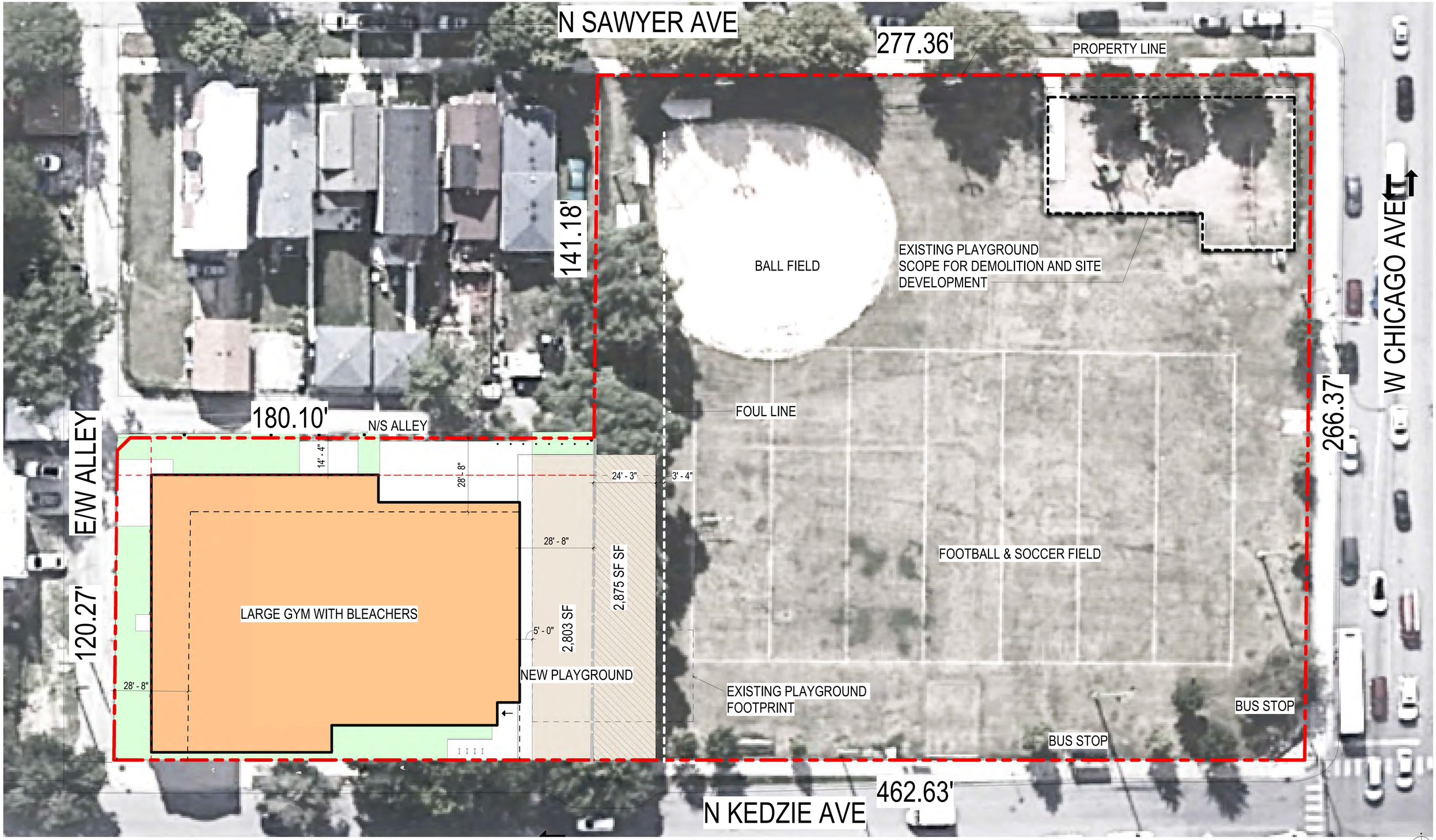
3	0	1	**Regional Priority**		4
1			Credit	Regional Priority: Advanced Energy Metering	1
1			Credit	Regional Priority: High Priority Site and Equitable Development	1
1			Credit	Regional Priority: Inhanced Indoor Air Quality Strategies	1
		1	Credit	Regional Priority: Specific Credit	1

59	10	41	**TOTALS**	Possible Points:	110

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

APPENDIX

BROOK ARCHITECTURE



0' 8' 16' 32' 64'

LEGEND	
ADMINISTRATIVE RELIEF LINE	PROPERTY LINE
	SETBACK LINE LINE

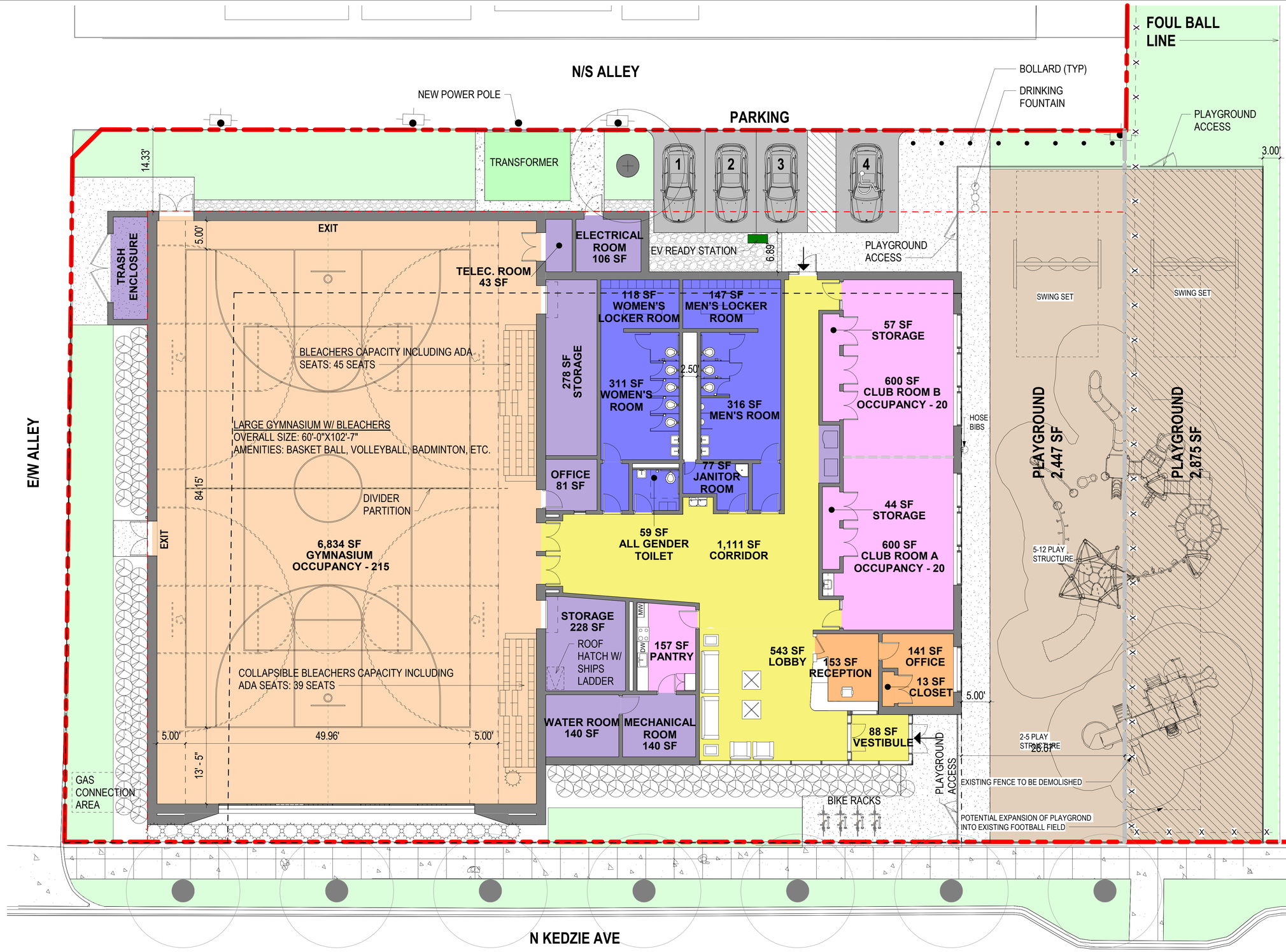
POS-1 ZONING

PR-0.2
04/23/2025

BROOK ARCHITECTURE
2301 S. MICHIGAN AVE. 60616 P.312.528.0890
WWW.BROOKARCHITECTURE.COM

04/23/2025. SITE PLAN

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612



LEGEND

- PROPERTY LINE
- ADMINISTATIVE RELIEF LINE
- SETBACK LINE

ROOM LEGEND

- BOH
- GYM
- OFFICE
- CLUB ROOM
- LOBBY
- RESTROOMS

Proposed Zoning:	Re-zone to POS-1
Option Description:	One-story, high school basketball gym with bleachers, large playground, club room on the first floor
Proposed Building SF:	13,997 SF
Proposed Playground SF:	5,678 SF, smaller than existing playground
Proposed # Parking Spaces:	4
Proposed # Bike Spaces:	4
Gymnasium information	Area: 6,430 sf Overall size: 60'-0" X 102'-7" **Amenities:** • Basket ball court : 50'-0" X 84'-0" • Volleyball court : 29'-6" X 59'-0" • Badminton court : 24'-0" X 48'-0"
Front Yard Req'mt:	As per POS-1 zoning, no setback in the front yard (Kedzie), 1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Front Yard (E):	N. Kedzie, 3'-0" setback,
Zoning relief required? (if so list zoning code ref.)	Yes: reduction into req'd setback (17-13-1003-I), Side yard setback (South): reduction required from 28'-8" to 14'-4" Rear yard setback (West): reduction required from 28'-8" to 14'-4" Zoning admin. is authorized to approve a reduction of up to 50% of the depth of any req'd setbacks when such reduction would match the predominate yard depth of exist'g bldgs. on the block
Side Yard Req'mt:	1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Side Yard (N):	28'-8"
Proposed Side Yard (S):	14'-4" reduction into req'd setback of 28'-8"
Rear Yard Req'mt:	1-foot of setback per 1-foot in height on side and rear-yards.
Proposed Rear Yard (W):	14'-4" reduction into req'd setback of 28'-8"

0' 4' 8' 16' 32'

PR-0.3
04/23/2025

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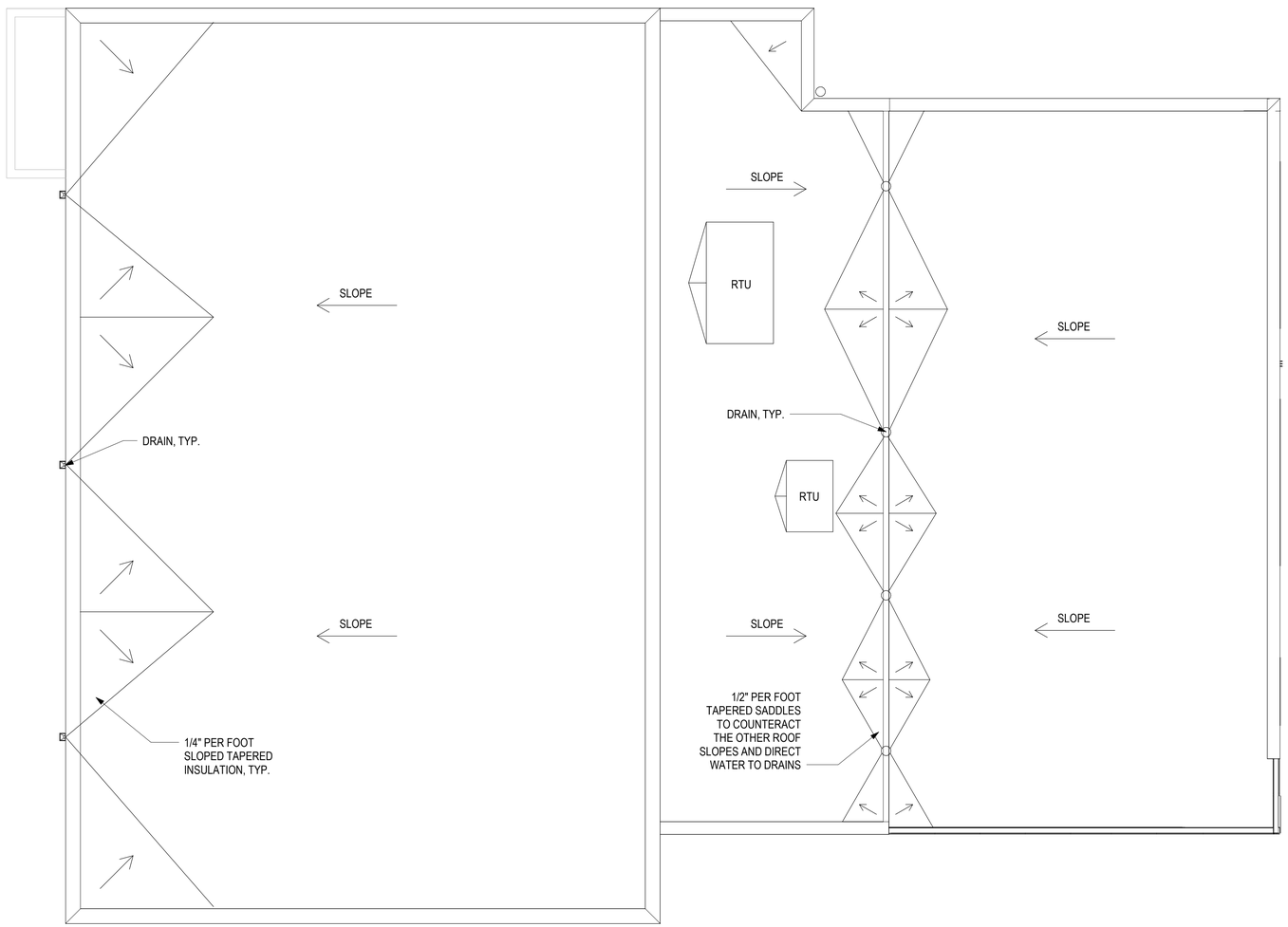
04/23/2025. ENLARGED PLAN

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612



0' 4' 8' 16' 32'

PR-0.14
04/23/2025

BROOK ARCHITECTURE

2301 S. MICHIGAN AVE. 60616 P.312.528.0890
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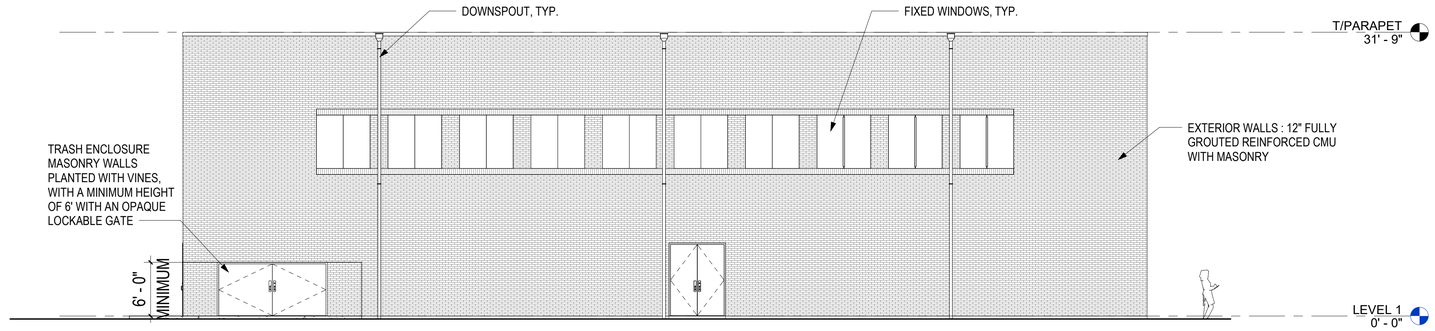
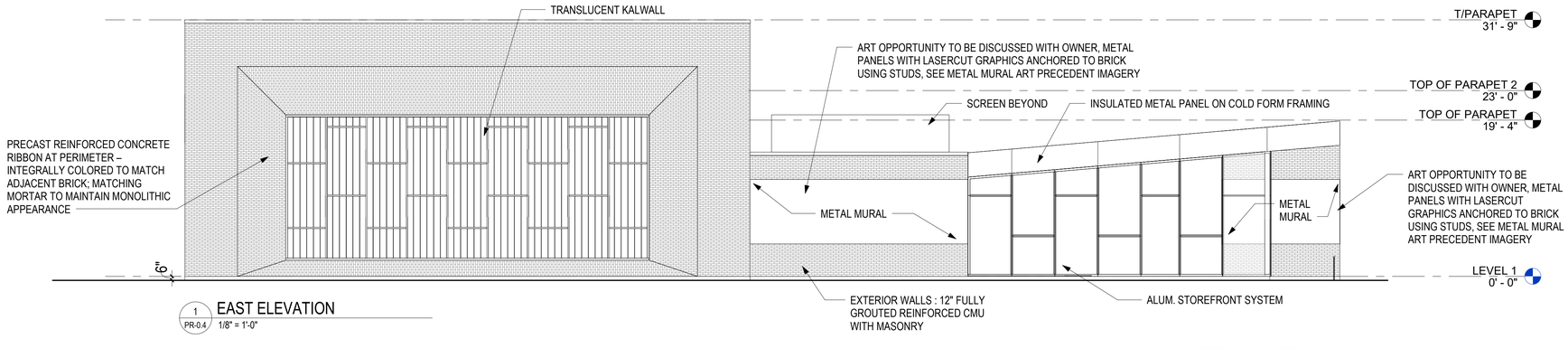
PBC

04/23/2025. ROOF PLAN

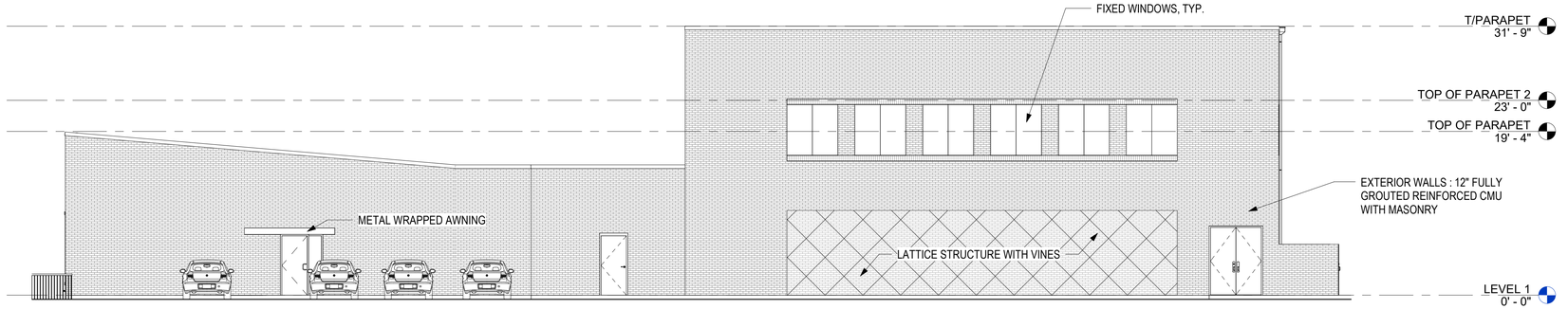
PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612



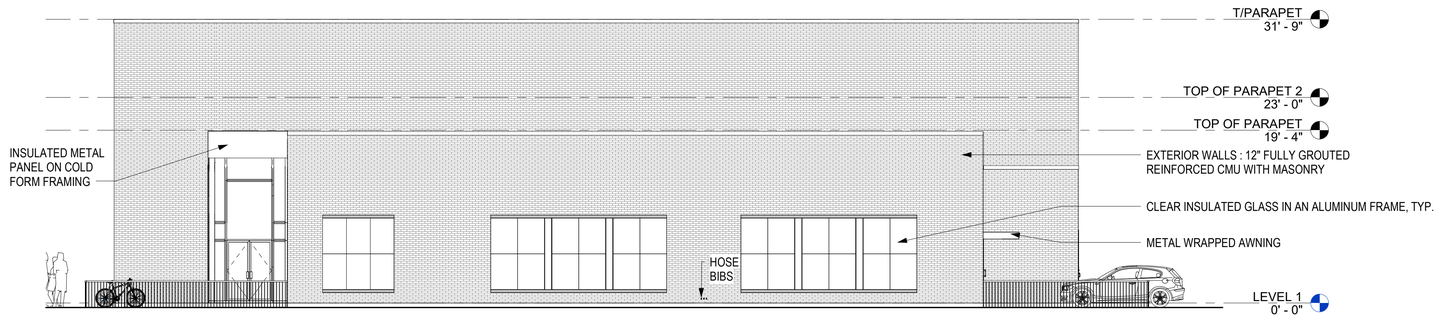
2 PR-0.4 **SOUTH ELEVATION**
1/8" = 1'-0"



1 PR-0.4 **EAST ELEVATION**
1/8" = 1'-0"



3 PR-0.4 **WEST ELEVATION**
1/8" = 1'-0"



4 PR-0.4 **NORTH ELEVATION**
1/8" = 1'-0"

PR-0.4
04/23/2025

BROOK ARCHITECTURE
2301 S. MICHIGAN AVE. 60616 P.312.528.0890
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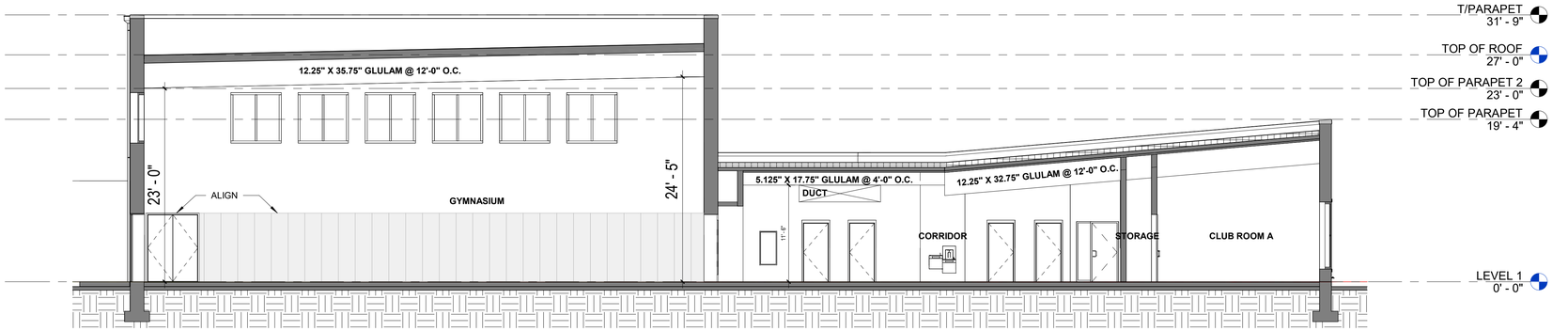
04/23/2025. EXTERIOR ELEVATIONS

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612



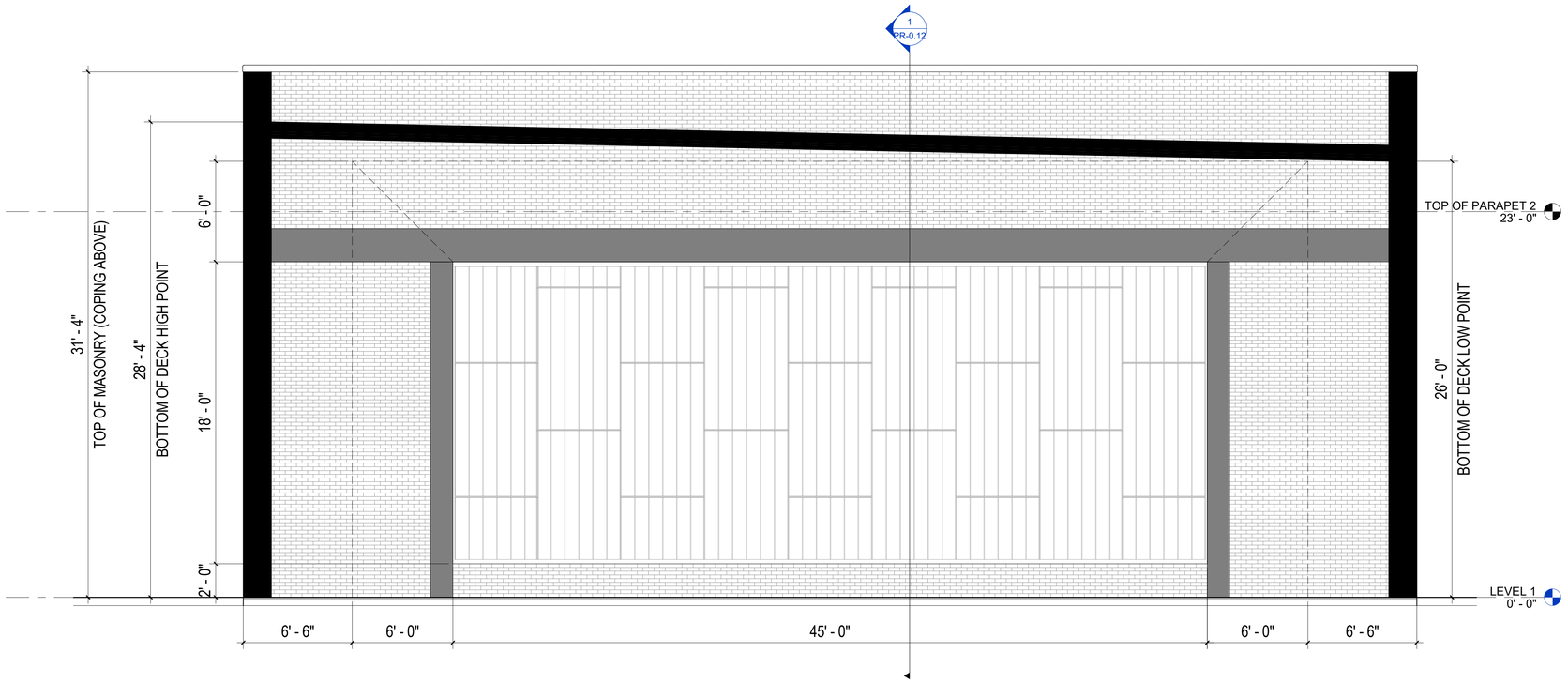
1 PR-0.13 Section 1
1/8" = 1'-0"

PR-0.13
04/23/2025

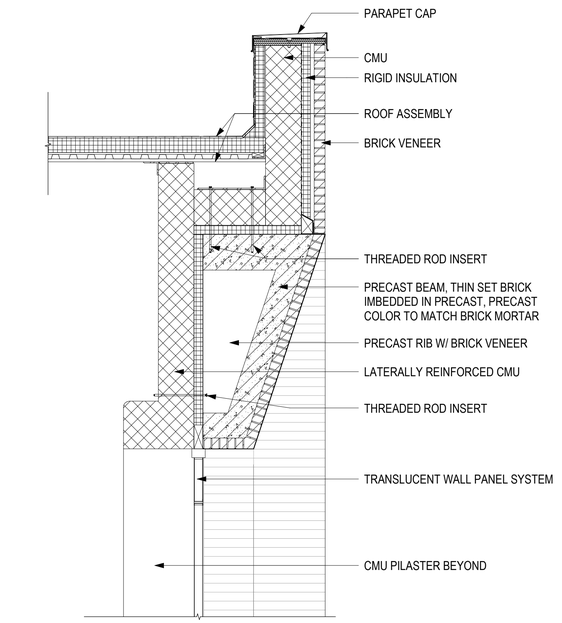
BROOK ARCHITECTURE
2301 S. MICHIGAN AVE. 60616 P.312.528.0890
WWW.BROOKARCHITECTURE.COM

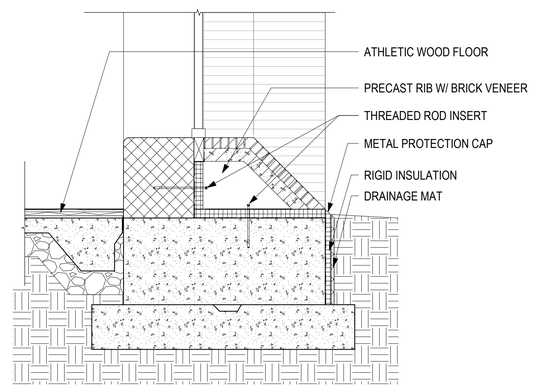
04/23/2025. SECTION

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612



2 PR-0.12 INTERIOR ELEVATION - GYM EAST WALL
1/4" = 1'-0"





1 PR-0.12 GYM EAST WALL SECTION DETAILS
1/2" = 1'-0"

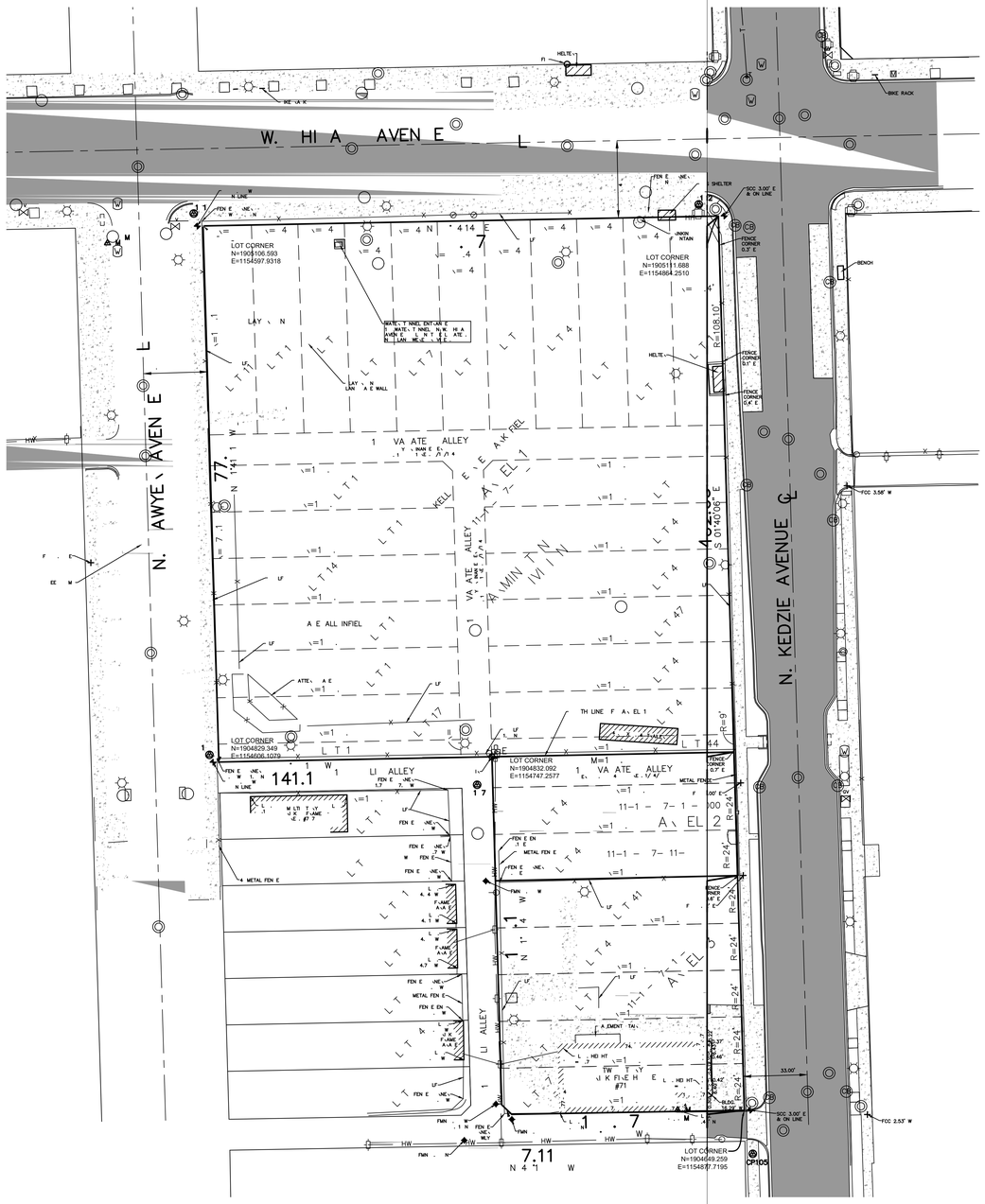
PR-0.12
04/23/2025

BROOK ARCHITECTURE
2301 S. MICHIGAN AVE. 60616 P.312.528.0890
WWW.BROOKARCHITECTURE.COM

04/23/2025. DETAILS

PBC KELLS (GEORGE) PARK FIELDHOUSE 2417
714, 724, 726 N.KEDZIE AVE
Chicago, IL 60612

ALTA/NSPS LAND TITLE SURVEY
WITH TOPOGRAPHY



PARCEL 1
LOTS 1 THROUGH 18 EXCEPT THE SOUTH 16 FEET THEREOF AND LOTS 44 EXCEPT THE SOUTH 16 FEET THEREOF THROUGH 50 IN 2 ARMINGTON'S SUBDIVISION OF THE NORTHEAST 14 OF THE NORTHEAST 14 OF SECTION 11 TOWNSHIP 39 NORTH RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN TOGETHER WITH THE VACATED EAST WEST ALLEY LYING SOUTH OF AND ADJACENT TO SAID LOTS 1 THROUGH 11 ALSO THAT PART OF THE VACATED NORTH SOUTH ALLEY WHICH LIES NORTH OF THE SOUTH LINE OF THE NORTH 8 FEET OF SAID LOT 18 COOK COUNTY ILLINOIS.

ADDRESS: 3250 W. CHICAGO AVENUE, ILLINOIS 60651
P.I.N.: 16-11-207-025
CONTAINING AN AREA OF 73,852 SQ.FT OR 1.695 ACRES, MORE OR LESS

PARCEL 2
LOTS 42 AND 43 IN ARMINGTON'S SUBDIVISION OF THE NORTHEAST OF THE NORTHEAST ¼ OF THE NORTHEAST IF SECTION 11 TOWNSHIP 39 NORTH RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY ILLINOIS.

AND

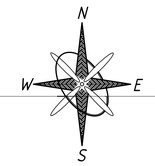
THE SOUTH 16 FEET OF LOT 44 IN ARMINGTON'S SUBDIVISION OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 11 TOWNSHIP 39 NORTH RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN COOK COUNTY ILLINOIS.

ADDRESS: 726 N. KEDZIE AVENUE, CHICAGO, ILLINOIS 60612
P.I.N.: 16-11-207-010
ADDRESS: 724 N. KEDZIE AVENUE, CHICAGO, ILLINOIS 60612
P.I.N.: 16-11-207-011
CONTAINING A TOTAL AREA OF 8,014 SQ.FT OR 0.184 ACRES, MORE OR LESS

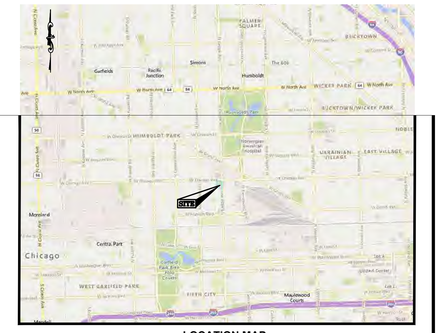
PARCEL 3
LOTS 37 THROUGH 41 IN ARMINGTON'S SUBDIVISION OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 11 TOWNSHIP 39 NORTH RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN COOK COUNTY ILLINOIS.

ADDRESS: 724 N. KEDZIE AVENUE, CHICAGO, ILLINOIS 60612
P.I.N.: 16-11-207-012
CONTAINING AN AREA OF 15,158 SQ.FT OR 0.348 ACRES, MORE OR LESS

CONTAINING A TOTAL AREA OF 97,024 SQ.FT OR 2.227 ACRES, MORE OR LESS



GRAPHIC SCALE
0 15 30 60
(IN FEET)
1 inch = 30 ft.



LOCATION MAP
NOT TO SCALE

CONTROL/BENCHMARKS

BM 'B':	HYDRANT CHAIN BOLT AT THE SOUTHWEST CORNER OF SAWYER AND CHICAGO. ELEVATION = 22.66 (CITY OF CHICAGO DATUM)
BM 'D'	NOTCH CUT 3.15' ± ABOVE SIDEWALK AT SIDE OF FIREHOUSE BUILDING. ELEVATION =25.56'
CP100:	CROSS CUT ON PAVEMENT 4.76' WEST AND 3.93' NORTH OF WEST, SOUTHWEST CORNER OF PROPERTY. N: 104833.138 E: 54601.238 ELEVATION = 21.76 (CITY OF CHICAGO DATUM)
CP101:	CROSS CUT ON PAVEMENT 4.92' WEST AND 6.48' NORTH OF NORTHWESTER CORNER OF PROPERTY. N: 1905113.090 E: 115493.101 ELEVATION = 21.533 (CITY OF CHICAGO DATUM)
CP102:	CROSS CUT ON PAVEMENT 10.15' WEST AND 6.30' NORTH OF NORTHEAST CORNER OF PROPERTY. N: 1905117.802 E: 1154854.131 ELEVATION = 21.576 (CITY OF CHICAGO DATUM)
CP105:	CROSS CUT 3.76' EAST AND 22.54' SOUTH OF SOUTHEAST CORNER OF PROPERTY. N: 19044626.815 E: 1154882.083 ELEVATION = 21.454 (CITY OF CHICAGO DATUM)
CP107:	MAG NAIL IN PAVEMENT 8.06' WEST AND 14.28' SOUTH OF EAST, SOUTHWEST CORNER OF PROPERTY. N: 1904817.661 E: 1154739.599 ELEVATION = 22.047' (CITY OF CHICAGO DATUM)
NOTE:	ANY AND ALL PARTIES UTILIZING THE VERTICAL DATUM LISTED ABOVE SHALL ALWAYS CHECK INTO AT LEAST TWO (2) BENCHMARKS TO AVOID MISTAKES DUE TO HYDRANT ADJUSTMENTS OR TRANSPOSITIONAL ERRORS. FAILURE TO DO SO WILL BE CONSIDERED TANTAMOUNT TO GROSS NEGLIGENCE AND SUBJECT THE OFFENDING PARTY TO ANY DAMAGES ATTENDANT THERETO.

LEGEND

BM	BENCHMARK
FCC	FOUND CROSS-CUT
SCC	SET CROSS-CUT
FIP	FOUND IRON PIPE
SIP	SET IRON PIPE
FIR	FOUND IRON ROD
SIR	SET IRON ROD
FPK	FOUND P.K. NAIL
FMN	FOUND MAG NAIL
SMN	SET MAG NAIL
SCM	SET CONCRETE MONUMENT
	EXISTING TRAFFIC LIGHT
	EXISTING POWER POLE
	EXISTING GUY ANCHOR
	EXISTING TRAFFIC CONTROL BOX
	EXISTING LIGHT STANDARD
TR	EXISTING TRANSFORMER PAD
A/C	EXISTING AIR CONDITIONER UNIT
E	EXISTING ELECTRIC PEDESTAL
T	EXISTING TELEPHONE PEDESTAL
C	EXISTING CABLE PEDESTAL
ME	EXISTING ELECTRIC METER
MG	EXISTING GAS METER
MW	EXISTING WATER METER
	EXISTING HAND HOLE
	EXISTING DOUBLE HAND HOLE
	EXISTING UTILITY FLAGGING
	EXISTING GAS VALVE
	EXISTING WATER VALVE
	PROPERTY LINE
W	EXISTING WATER MAIN
G	EXISTING GAS MAIN
D	EXISTING COMBINED SEWER LINE
D	EXISTING STORM SEWER LINE
S	EXISTING SANITARY SEWER LINE
TV	EXISTING CABLE/TV LINE
T	EXISTING TELEPHONE/COMMUNICATION LINE
E	EXISTING ELECTRIC LINE
OHW	EXISTING OVERHEAD LINE
	CENTERLINE
	EASEMENT
	BUILDING SETBACK
	EXISTING CHAIN LINK FENCE
	EXISTING WOOD FENCE
	EXISTING GUARDRAIL
	EXISTING RAILROAD TRACKS
	EXISTING FIBER OPTICS
	EXISTING WATER EDGE
	DEPRESSED CURB
812	EXISTING CONTOUR LINE
812	PROPOSED CONTOUR LINE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	GRAVEL PAVEMENT
	BRICK PAVEMENT
XXXX	PROPOSED SPOT ELEVATIONS
XXX.X	AS-BUILT SPOT ELEVATIONS
	DRAINAGE FLOW ARROW
	EXISTING SPOT ELEVATIONS
WB	EXISTING WATER BUFFALO BOX
GAS	EXISTING GAS BUFFALO BOX
	EXISTING CLEANOUT
	EXISTING SANITARY WYE CONNECTION
	EXISTING WATER VALVE VAULT
CB	EXISTING STORM CATCH BASIN
	EXISTING STORM CURB INLET
	EXISTING MANHOLE
	EXISTING DECIDUOUS TREE W/ SIZE
	EXISTING CONIFEROUS TREE W/ SIZE
	EXISTING BOLLARDS
	EXISTING FIRE HYDRANTS
	EXISTING STREET SIGN
DSP	EXISTING DOWNSPOUT
	EXISTING WELL
MW	EXISTING MONITORING WELL
	EXISTING HEADWALL
M	EXISTING MAILBOX
	EXISTING RAILROAD SIGNAL
	EXISTING BUSH
PU	EXISTING POP-UP EMITTER
(XX.XX')	RECORD DIMENSIONS AND BEARINGS

ABBREVIATIONS

B/C	BACK OF CURB
B/W	BOTTOM OF WALL
BIT.	BITUMINOUS
CALC.	CALCULATED DATUM
CHD	CHORD
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
D.E.	DRAINAGE EASEMENT
D/C	DEPRESSED CURB
DEED	DEED DATUM
DIP	DUCTILE IRON PIPE
E	EAST
E/P	EDGE OF PAVEMENT
EXIST./EX	EXISTING
F/F	FINISHED FLOOR
F/L	FLOW LINE
FES	FLARED END SECTION
I.E.E.	INGRESS EGRESS EASEMENT
INV	INVERT
MEAS./M=	MEASURED DATUM
MH	MANHOLE
N	NORTH
P.U. & D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
PROP.	PROPOSED
PT	POINT OF TANGENCY
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REC./R=	RECORD DATUM
S	SOUTH
SAN	SANITARY
SWLY	SOUTHWESTERLY
T/C	TOP OF CURB
T/F	TOP OF FOUNDATION
T/P	TOP OF PIPE
T/W	TOP OF WALL
U.E.	UTILITY EASEMENT
VCP	VITRIFIED CLAY PIPE
W	WEST
WW	WINDOW WELL

GENERAL NOTES:
1. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF.
2. COMPARE DEED DESCRIPTION AND SITE CONDITIONS WITH THE DATA SHOWN HEREON AND REPORT ANY DISCREPANCIES AT ONCE.
3. NO DIMENSIONS SHALL BE DERIVED FROM SCALED MEASUREMENT.
4. ONLY THOSE BUILDING SETBACK LINES AND EASEMENTS WHICH ARE SHOWN ON THE RECORDED PLAT OF SUBDIVISION ARE SHOWN HEREON, UNLESS INDICATED OTHERWISE. REFER TO DEED, TITLE INSURANCE POLICY AND LOCAL ORDINANCES FOR OTHER RESTRICTIONS WHICH MAY OR MAY NOT EXIST.
5. DISTANCES AS SHOWN ALONG CURVES ARE ARC DISTANCES UNLESS NOTED AS OTHERWISE.

SURVEYOR'S NOTES
1. BEARINGS BASED ON GPS MEASUREMENTS REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT).
2. ONLY THE IMPROVEMENTS THAT WERE VISIBLE FROM ABOVE GROUND AT TIME OF SURVEY AND THROUGH A NORMAL SEARCH AND WALK THROUGH OF THE SITE ARE SHOWN ON THE FACE OF THIS PLAT. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.
3. VISIBLE SURFACE INDICATIONS OF UTILITIES AROUND THE PERIMETER OF THE SURVEYED PARCEL AND WITHIN THE EXISTING EASEMENTS HAVE BEEN SHOWN. UNDERGROUND AND OFFSITE OBSERVATIONS HAVE NOT BEEN MADE TO DETERMINE THE EXTENT OF UTILITIES SERVING OR EXISTING ON THE PROPERTY. PUBLIC AND/OR PRIVATE RECORDS HAVE NOT BEEN SEARCHED TO PROVIDE ADDITIONAL INFORMATION.
4. OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEMENT REGARDING THE ACTUAL PRESENCE OR ABSENCE OF ANY SERVICE OR UTILITY LINE. CONTROLLED UNDERGROUND EXPLORATORY EFFORT TOGETHER WITH DIGGER LOCATIONS IS RECOMMENDED TO DETERMINE THE FULL EXTENT OF UNDERGROUND SERVICE AND UTILITY LINES. DIGGER AT 1-312-744-7000.
5. LEGAL DESCRIPTION AS SHOWN HEREON CONFORMS TO THAT CONTAINED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY FILE NUMBERS GSG-2025CO-247240, GSG-2025CO-247250, AND GSG-2025CO-247260, ALL DATED JANUARY 17, 2025. THE FOLLOWING SCHEDULE B SPECIAL EXCEPTIONS ARE NOTED:
   a. EXCEPTION 9 IN THE ABOVE REFERENCED NOTE NO. 5 FILE NUMBER GSG-2025CO-247240 REFERS TO TERMS AND CONDITIONS OF AN ORDINANCE VACATING ALLEYS MADE BY THE CITY OF CHICAGO RECORDED AS DOCUMENT 12892991. (DOCUMENT NOT AVAILABLE FOR REVIEW.)
   b. EXCEPTION 8 IN THE ABOVE REFERENCED NOTE NO. 5 FILE NUMBER GSG-2025CO-247250 REFERS TO POSSIBLE UNRECORDED EASEMENTS FOR UTILITIES AND OR ACTUAL UTILITIES LYING WITHIN THE VACATED ALLEY BEING THE SOUTHERLY 16 FEET OF LOT 44 DESCRIBED HEREIN AND THE RIGHTS OF THE PUBLIC OR QUASI PUBLIC UTILITY COMPANIES TO IMPROVE REPAIR OR MAINTAIN SAID POLES CONDUITS PIPES SEWERS ETC.
6. SUBJECT PROPERTY HAS ACCESS TO NORTH KEDZIE AVENUE, SHOWN GRAPHICALLY.
7. BASED ON CAREFUL INSPECTION OF FEMA FLOOD INSURANCE RATE MAP, NUMBER 17031C0415 J FOR COOK COUNTY, ILLINOIS DATED AUGUST 19, 2008, THE PROPERTY SHOWN HEREON LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
8. NO PARKING STALLS WERE OBSERVED AT TIME OF SURVEY.

TO: -FIDELITY NATIONAL TITLE INSURANCE COMPANY
-CITY OF CHICAGO, A MUNICIPAL CORPORATION
-PUBLIC BUILDING COMMISSION OF CHICAGO

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7(a), 7(c), 8, 9, 11(b), AND 14 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON FEBRUARY 12, 2025.

DATE OF PLAT OR MAP: _____

PRELIMINARY

STEVEN BARCZAK, IPLS NO. 035-003269
LICENSE EXPIRES: 11/30/2026
SBARCZAK@GSG-CONSULTANTS.COM

THIS PROFESSIONAL SERVICE CONFORMS TO THE ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY & TOPOGRAPHIC SURVEY

REVISIONS

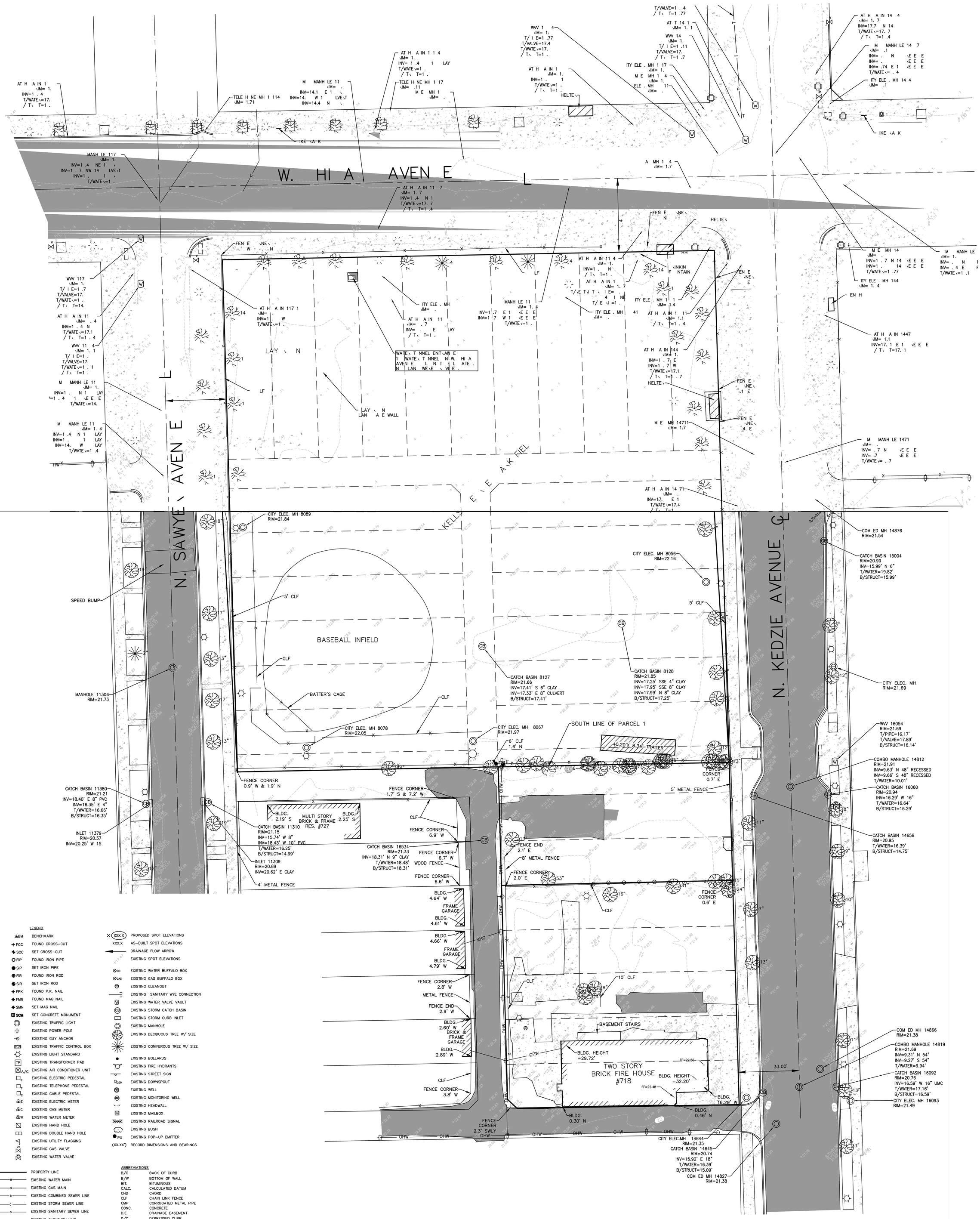
NO.	DATE:	DESCRIPTION:
1		
1		
1		
1		
1		

GSG CONSULTANTS, INC.
735 E REMINGTON RD, SCHAUMBURG, IL 60173
TEL: +1 630.787.0776 FAX: +1 630.787.0786 WWW.GSG-CONSULTANTS.COM
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-002552

KELLS GEORGE PARK FIELDHOUSE
714 - 750 N. KEDZIE AVENUE
CHICAGO, IL 60612

PUBLIC BUILDING COMMISSION OF CHICAGO
50 WEST WASHINGTON ST. ROOM 200
CHICAGO, ILLINOIS 60602

DRAWN BY:	PROJECT:
AMS/ISJV	24-10027
CHECKED BY:	SCALE:
SB	1"=30'
DATE:	SHEET #:
3/26/2025	1 OF 3
FILE NAME:	
24-10027 KELLS PARK ALTA_PRELIM	



LEGEND

BM	BENCHMARK
FCC	FOUND CROSS-CUT
SCC	SET CROSS-CUT
FIP	FOUND IRON PIPE
SIP	SET IRON PIPE
FIR	FOUND IRON ROD
SIR	SET IRON ROD
FPK	FOUND P.K. NAIL
FMN	FOUND MAG NAIL
SMN	SET MAG NAIL
SCM	SET CONCRETE MONUMENT
	EXISTING TRAFFIC LIGHT
	EXISTING POWER POLE
	EXISTING GUY ANCHOR
TCB	EXISTING TRAFFIC CONTROL BOX
	EXISTING LIGHT STANDARD
TP	EXISTING TRANSFORMER PAD
A/C	EXISTING AIR CONDITIONER UNIT
E	EXISTING ELECTRIC PEDESTAL
T	EXISTING TELEPHONE PEDESTAL
C	EXISTING CABLE PEDESTAL
E	EXISTING ELECTRIC METER
G	EXISTING GAS METER
W	EXISTING WATER METER
	EXISTING HAND HOLE
	EXISTING DOUBLE HAND HOLE
	EXISTING UTILITY FLAGGING
	EXISTING GAS VALVE
	EXISTING WATER VALVE

XXX.X	PROPOSED SPOT ELEVATIONS
XXX.X	AS-BUILT SPOT ELEVATIONS
	DRAINAGE FLOW ARROW
	EXISTING SPOT ELEVATIONS
BB	EXISTING WATER BUFFALO BOX
GAS	EXISTING GAS BUFFALO BOX
	EXISTING CLEANOUT
	EXISTING SANITARY WYE CONNECTION
	EXISTING WATER VALVE VAULT
CB	EXISTING STORM CATCH BASIN
	EXISTING STORM CURB INLET
	EXISTING MANHOLE
	EXISTING DECIDUOUS TREE W/ SIZE
	EXISTING CONIFEROUS TREE W/ SIZE
	EXISTING BOLLARDS
	EXISTING FIRE HYDRANTS
	EXISTING STREET SIGN
DSP	EXISTING DOWNSPOUT
W	EXISTING WELL
MW	EXISTING MONITORING WELL
	EXISTING HEADWALL
M	EXISTING MAILBOX
	EXISTING RAILROAD SIGNAL
	EXISTING BUSH
PU	EXISTING POP-UP EMITTER
(XX.XX')	RECORD DIMENSIONS AND BEARINGS

	PROPERTY LINE
W	EXISTING WATER MAIN
G	EXISTING GAS MAIN
	EXISTING COMBINED SEWER LINE
	EXISTING STORM SEWER LINE
	EXISTING SANITARY SEWER LINE
TV	EXISTING CABLE/TV LINE
T	EXISTING TELEPHONE/COMMUNICATION LINE
E	EXISTING ELECTRIC LINE
OHW	EXISTING OVERHEAD LINE
	CENTERLINE
	EASEMENT
	BUILDING SETBACK
	EXISTING CHAIN LINK FENCE
	EXISTING WOOD FENCE
	EXISTING GUARDRAIL
	EXISTING RAILROAD TRACKS
	EXISTING FIBER OPTICS
	EXISTING WATER EDGE
	DEPRESSED CURB
812	EXISTING CONTOUR LINE
812	PROPOSED CONTOUR LINE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	GRAVEL PAVEMENT
	BRICK PAVEMENT

ABBREVIATIONS

B/C	BACK OF CURB
B/W	BOTTOM OF WALL
BIT.	BITUMINOUS
CALC.	CALCULATED DATUM
CHD	CHORD
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
D.E.	DRAINAGE EASEMENT
D/C	DEPRESSED CURB
DEED	DEED DATUM
DIP	DUCTILE IRON PIPE
E	EAST
E/P	EDGE OF PAVEMENT
EXIST./EX	EXISTING
F/F	FINISHED FLOOR
F/L	FLOW LINE
FES	FLARED END SECTION
I.E.E.	INGRESS EGRESS EASEMENT
INV	INVERT
MEAS./M=	MEASURED DATUM
MH	MANHOLE
N	NORTH
P.U. & D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
PROP.	PROPOSED
PT	POINT OF TANGENCY
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
REC./R=	RECORD DATUM
S	SOUTH
SAN	SANITARY
T/C	TOP OF CURB
T/F	TOP OF FOUNDATION
T/P	TOP OF PIPE
T/W	TOP OF WALL
U.E.	UTILITY EASEMENT
VCP	VITRIFIED CLAY PIPE
W	WEST
WW	WINDOW WELL

N
W E
S

GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 inch = 20 ft.

KELLS GEORGE PARK FIELDHOUSE
714 - 750 N. KEDZIE AVENUE
CHICAGO, IL 60612

PUBLIC BUILDING COMMISSION OF CHICAGO
50 WEST WASHINGTON ST. ROOM 200
CHICAGO, ILLINOIS 60602

GSG CONSULTANTS, INC.
735 E. REMINGTON RD, SCHAUMBURG, IL 60173
TEL: +1630.994.2600 | WWW.GSG-CONSULTANTS.COM
ILLINOIS PROFESSIONAL DESIGN FIRM# 184-002852

REVISIONS

NO.	DATE:	DESCRIPTION:
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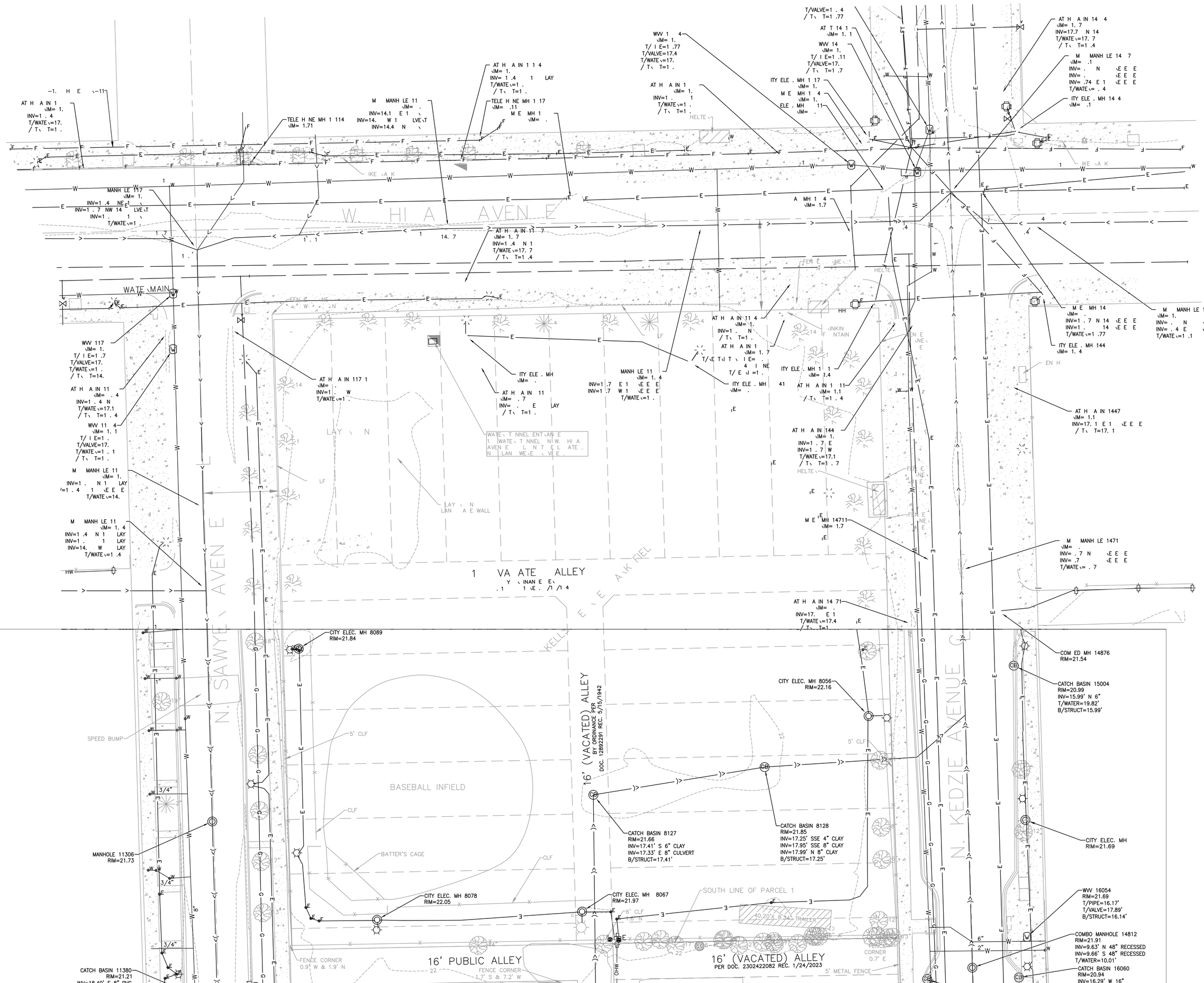
DRAWN BY:	AMS/IS/JV
CHECKED BY:	SB
SCALE:	1"=30'
DATE:	3/26/2025
SHEET #:	2 OF 3
PROJECT:	24-10027
FILE NAME:	24-10027 KELLS PARK ALTA_PRELIM



LEGEND

BM	BENCHMARK
FCC	FOUND CROSS-CUT
SCC	SET CROSS-CUT
FIP	FOUND IRON PIPE
SIP	SET IRON PIPE
FIR	FOUND IRON ROD
SIR	SET IRON ROD
FPK	FOUND P.K. NAIL
FMN	FOUND MAG NAIL
SMN	SET MAG NAIL
SCM	SET CONCRETE MONUMENT
	EXISTING TRAFFIC LIGHT
	EXISTING POWER POLE
	EXISTING GUY ANCHOR
TCB	EXISTING TRAFFIC CONTROL BOX
	EXISTING LIGHT STANDARD
TP	EXISTING TRANSFORMER PAD
A/C	EXISTING AIR CONDITIONER UNIT
E	EXISTING ELECTRIC PEDESTAL
T	EXISTING TELEPHONE PEDESTAL
C	EXISTING CABLE PEDESTAL
E	EXISTING ELECTRIC METER
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W	EXISTING WATER METER
	EXISTING HAND HOLE
	EXISTING DOUBLE HAND HOLE
	EXISTING UTILITY FLAGGING
GV	EXISTING GAS VALVE
WV	EXISTING WATER VALVE
	PROPERTY LINE
W	EXISTING WATER MAIN
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	EXISTING STORM SEWER LINE
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	EASEMENT
	BUILDING SETBACK
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O	EXISTING WOOD FENCE
	EXISTING GUARDRAIL
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	BRICK PAVEMENT

XXX.X	PROPOSED SPOT ELEVATIONS
XXX.X	AS-BUILT SPOT ELEVATIONS
	DRAINAGE FLOW ARROW
417.47	EXISTING SPOT ELEVATIONS
BB	EXISTING WATER BUFFALO BOX
GAS	EXISTING GAS BUFFALO BOX
CO	EXISTING CLEANOUT
	EXISTING SANITARY WYE CONNECTION
V	EXISTING WATER VALVE VAULT
CB	EXISTING STORM CATCH BASIN
	EXISTING STORM CURB INLET
	EXISTING MANHOLE
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	EXISTING CONIFEROUS TREE W/ SIZE
	EXISTING BOLLARDS
	EXISTING FIRE HYDRANTS
	EXISTING STREET SIGN
DSP	EXISTING DOWNSPOUT
W	EXISTING WELL
MW	EXISTING MONITORING WELL
	EXISTING HEADWALL
M	EXISTING MAILBOX
	EXISTING RAILROAD SIGNAL
	EXISTING BUSH
PU	EXISTING POP-UP EMITTER
(XX.XX')	RECORD DIMENSIONS AND BEARINGS

ABBREVIATIONS

B/C	BACK OF CURB
B/W	BOTTOM OF WALL
BIT.	BITUMINOUS
CALC.	CALCULATED DATUM
CHD	CHORD
CLF	CHAIN LINK FENCE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
D.E.	DRAINAGE EASEMENT
D/C	DEPRESSED CURB
DEED	DEED DATUM
DIP	DUCTILE IRON PIPE
E	EAST
E/P	EDGE OF PAVEMENT
EXIST./EX	EXISTING
F/F	FINISHED FLOOR
F/L	FLOW LINE
FES	FLARED END SECTION
I.E.E.	INGRESS EGRESS EASEMENT
INV	INVERT
MEAS./M=	MEASURED DATUM
MH	MANHOLE
N	NORTH
P.U. & D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
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PT	POINT OF TANGENCY
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
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SAN	SANITARY
T/C	TOP OF CURB
T/F	TOP OF FOUNDATION
T/P	TOP OF PIPE
T/W	TOP OF WALL
U.E.	UTILITY EASEMENT
VCP	VITRIFIED CLAY PIPE
W	WEST
WW	WINDOW WELL

N

W E

S

GRAPHIC SCALE

0 10 20 40

(IN FEET)
1 inch = 20 ft.

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ILLINOIS PROFESSIONAL DESIGN FIRM# 184-002852

REVISIONS

NO.	DATE:	DESCRIPTION:
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DRAWN BY:	AMS/IS/JV
PROJECT:	24-10027
CHECKED BY:	SB
SCALE:	1"=30'
DATE:	3/26/2025
SHEET #:	3 OF 3
FILE NAME:	24-10027 KELLS PARK ALTA_PRELIM

EPIC METALS®

Toris®

Roof and Floor Deck Ceiling Systems

inspiring
CREATIVITY
through
PERFORMANCE®

Central Arizona College, Signal Peak Campus, Coolidge, Arizona
Toris A

Toris®

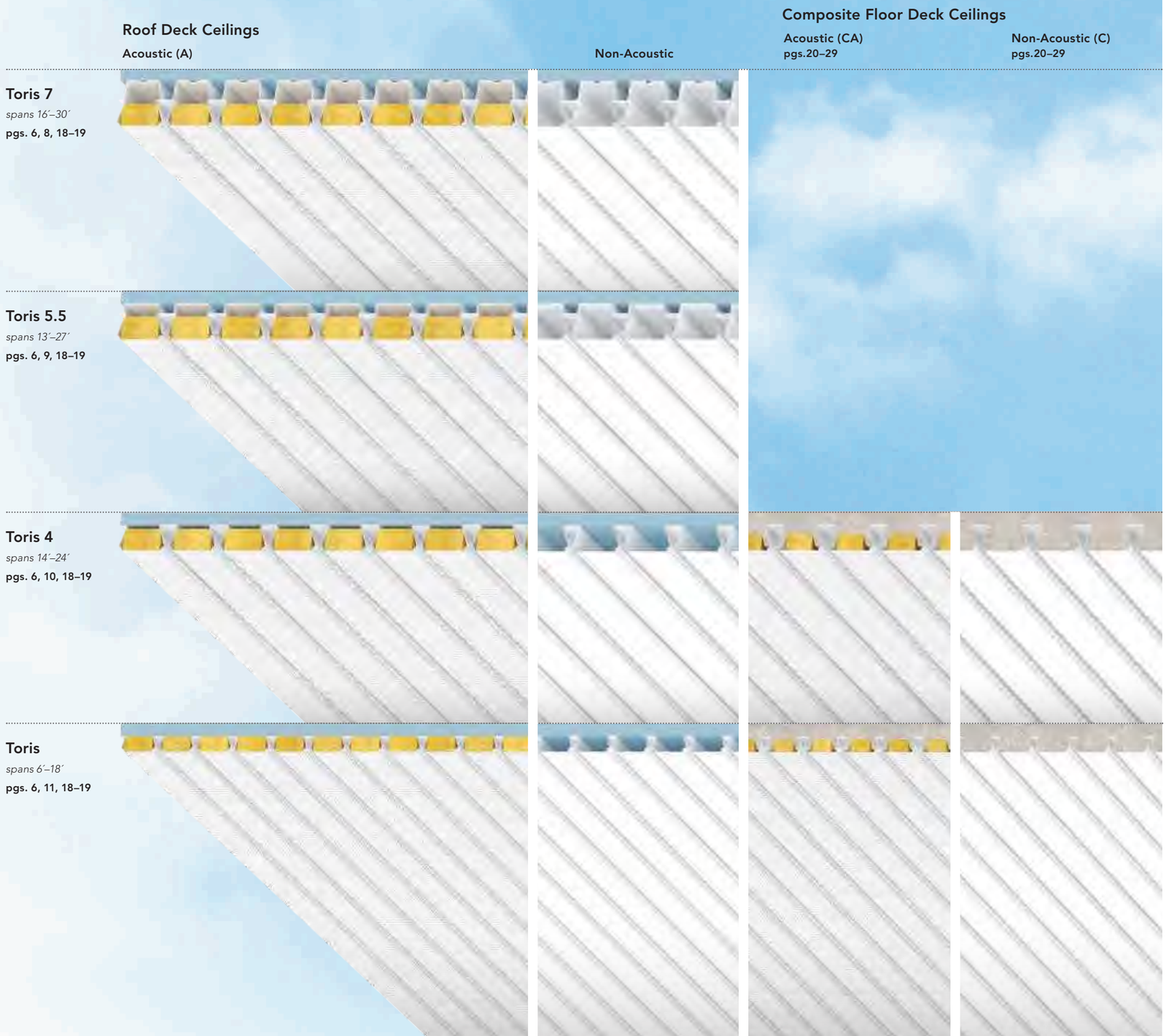
Roof & Floor Deck Ceiling System

EPIC's Toris® Roof and Floor Deck Ceiling Systems offer an innovative approach to designing modern, visually unobstructed interiors with architectural appeal.

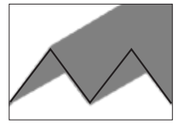
Recessed corners soften the linear plank form of Toris and create a unique appearance with a gently rounded edge.

A dovetail recess hides roofing fasteners – enhancing the architectural appearance. The depth of Toris profiles range from 7″ to 2.5″, allowing roof clear spans up to an impressive 30 feet. Choose the Toris profile that fits best with project span requirements, depth/gage parameters, and load carrying capacities. All Toris profiles offer a hanging system to accommodate signage, lighting, or utilities. The various features and design innovations of the Toris Roof and Floor Deck Ceiling Systems can lead to their specification in a variety of projects including: airport terminals, schools and universities, office buildings, libraries, gymnasiums, canopies, museums, theaters, natatoriums, or any area where an architectural roof/floor deck ceiling system is desired.

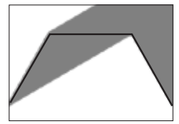
Skydeck® option: All Toris profiles may be specified to accommodate Solatube® daylighting systems to bring natural light into any design (see page 15).



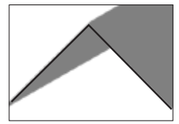
Design Examples:



Cathedral Folded Plate

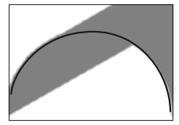


Gambrel Folded Plate

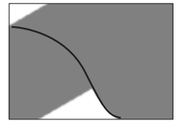


Cathedral

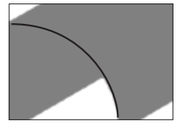
Half Cathedral



Barrel Vaulted

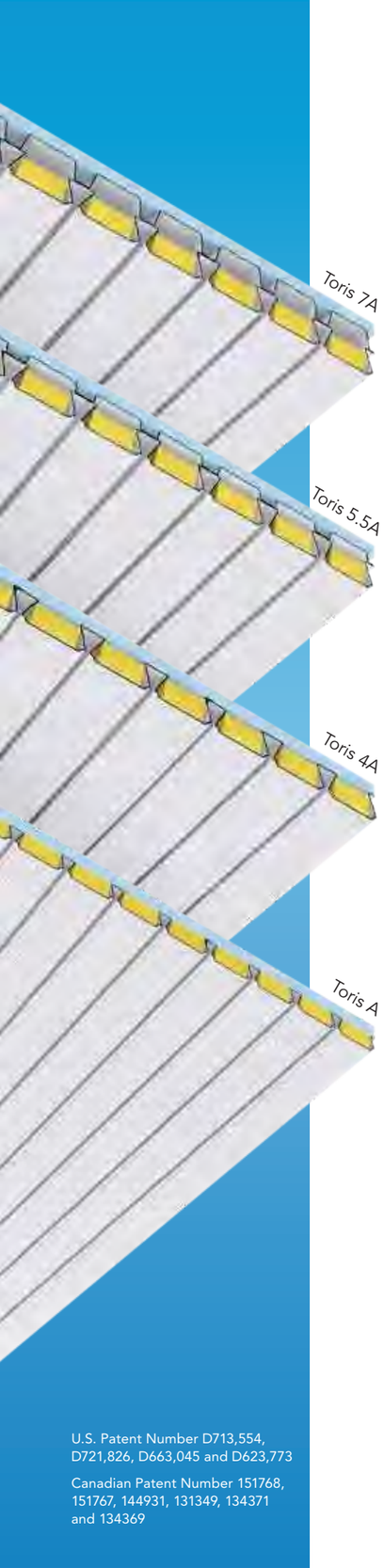


Serpentine



Half Vaulted

Flat



U.S. Patent Number D713,554, D721,826, D663,045 and D623,773

Canadian Patent Number 151768, 151767, 144931, 131349, 134371 and 134369

Toris®
Roof Deck Ceiling Systems

Toris profiles, when painted with a light color, aid in the reflection of natural light when designed in buildings with clerestory windows. These same principles work well with indirect up-lighting. Acoustical Toris profiles reduce the noise levels across all sound frequency ranges. The noise reduction coefficients of each profile can be found in the technical tables beginning on page 8. The Toris rib shape enables the roof deck ceiling to provide a hanging system. Toris hangers placed in the ribs can be used for hanging signage, speakers, lighting, banners and projection screens. Hangers can be purchased and installed as they are needed, and can be relocated, or removed and reused, at any time during the life of the building (see page 17).

U.L. Approved Pipe Hangers for Fire Protection Systems

Use Ankore® and Ankore Lock with Toris 7(A), Toris 5.5(A) and Toris 4(A) or ⅜˝ Wedge Bolt and Wedge Lock with Toris (A). Install per EPIC detail sheet EHI17. Connections and parts have been tested by U.L. under standard #203, and in accordance with NFPA 13.

Diaphragm Resistance

Another benefit of specifying Toris 7(A), Toris 5.5(A), Toris 4(A) and Toris (A) is their inherent ability to resist lateral forces caused by wind or seismic occurrences. The Toris family of products, when properly designed and attached, can provide an effective and efficient diaphragm bracing system for any structure. Contact EPIC Metals for diaphragm tables.

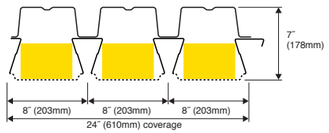
MacArthur Elementary School, Binghamton, New York
Toris A

Toris 7(A) Roof Deck Ceiling System Technical Tables

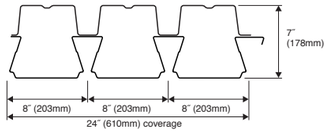
SPANS
16'–30'

ACOUSTIC (TORIS 7A) **NON-ACOUSTIC** (TORIS 7)

Toris 7A*



Toris 7*



*U.S. Patent Number D713,554
Canadian Patent Number 151768

Toris 7(A) Approvals

IAPMO evaluation report 0226

Toris 7A Noise Reduction Coefficients

Deck Type	Absorption Coefficients						NRC
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	
Toris 7A	.52	1.15	.98	1.00	.95	.74	1.00

In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports.

The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

Toris 7A & Toris 7 Section Properties (per foot of width)

Deck Type	Gage	Weight (psf)	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})	Allowable Support Reaction (PLF)
Toris 7A	20/20	5.6	10.04	2.31	1.66	803
	18/18	7.5	13.83	3.49	2.59	1343
	16/16	9.5	17.80	4.82	3.68	2062
Toris 7	20/20	5.7	10.68	2.36	1.77	803
	18/18	7.6	14.71	3.56	2.75	1343
	16/16	9.6	18.94	4.92	3.91	2062

*Minimum end support bearing length = 3" (See note 5 below)

Hanger Load Capacities

Deck Type	Gage	Hanger Type	Design Values				Fire Sprinkler Support with Riverts	
			Without Rivets		With Rivets			
			LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris 7(A)	20/20	3/8" Ankore (ANK38)	168	105	698	436	4	3/8
	18/18		252	157	1,357	848	4	3/8
	16/16		346	216	2,180	1,362	4	3/8

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the roof deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies with and without rivets.
4. The hangers are limited to static vertical tension loading only.
5. Where hanger spacing is less than 24 inches along the same rib, the combined load to all hangers shall be less than or equal to a single hanger design strength.
6. Sprinkler pipe installations shall comply with NFPA 13.
7. Ends of deck sheets must be fastened to supports at every cell.
8. Do not place hangers at side laps.
9. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus 1/2 turn).
10. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

Toris 7A & Toris 7 Load Table Uniform Total Service Load (Dead and Live), PSF

Deck Type	No. spans	Gage	Span Length Center to Center of Supports (ft.)														
			16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Toris 7A	1	20/20	100/161	94/134	89/113	85/96	80/82	76/68	73/56	70/47	64/40	59/34	55/29	–	–	–	–
		18/18	168/222	158/185	149/156	141/132	134/114	127/93	115/78	106/65	97/55	89/46	83/40	77/34	71/30	–	–
		16/16	258/285	243/238	229/200	214/170	193/146	175/120	159/100	146/84	134/70	123/60	114/51	106/44	98/38	92/33	86/29
Toris 7	1	20/20	100/171	94/143	89/120	85/102	80/88	76/72	73/60	70/50	66/42	60/36	56/31	–	–	–	–
		18/18	168/236	158/197	149/166	141/141	134/121	128/100	118/83	108/69	99/58	91/50	84/42	78/36	73/31	68/27	–
		16/16	258/304	243/253	229/213	217/181	197/155	179/128	163/106	149/89	137/75	126/64	116/54	108/47	100/40	94/35	87/31

If higher loads or longer spans are required, contact EPIC Metals.

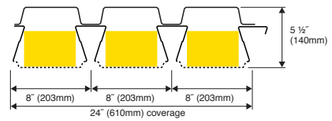
NOTES: 1. Loads are based on ASD Design.
2. Uniform load values listed on the left side of the box, 100/50, are governed by stress or web crippling and the values listed on the right side, 100/50, are governed by deflection.
3. The deflection criteria used for generating the tables above were L/240 or 1" maximum. The Engineer of Record shall calculate the allowable uniform load if a different deflection criteria is required.
4. Stress governed values assume a maximum allowable stress of 24 ksi.
5. Minimum end support bearing lengths are shown above. If shorter bearing lengths are used, check safe support reaction table on page 19.

Toris 5.5(A) Roof Deck Ceiling System Technical Tables

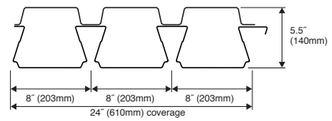
SPANS
13'–27'

ACOUSTIC (TORIS 5.5A) **NON-ACOUSTIC** (TORIS 5.5)

Toris 5.5A*



Toris 5.5*



*U.S. Patent Number D721,826
Canadian Patent Number 151767

Toris 5.5(A) Approvals

IAPMO evaluation report 0226

Toris 5.5A Noise Reduction Coefficients

Deck Type	Absorption Coefficients						NRC
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	
Toris 5.5A	.41	1.15	1.00	1.00	.93	.75	1.00

In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports.

The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

Toris 5.5A & Toris 5.5 Section Properties (per foot of width)

Deck Type	Gage	Weight (psf)	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})	Allowable Support Reaction (PLF)
Toris 5.5A	20/20	5.1	5.72	1.65	1.22	803
	18/18	6.8	7.85	2.40	1.86	1343
	16/16	8.7	10.27	3.26	2.60	2062
Toris 5.5	20/20	5.2	6.08	1.68	1.30	803
	18/18	6.9	8.35	2.45	1.98	1343
	16/16	8.8	10.93	3.33	2.77	2062

*Minimum end support bearing length = 3" (See note 5 below)

Hanger Load Capacities

Deck Type	Gage	Hanger Type	Design Values				Fire Sprinkler Support with Riverts	
			Without Rivets		With Rivets			
			LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris 5.5(A)	20/20	3/8" Ankore (ANK38)	168	105	698	436	4	3/8
	18/18		252	157	1,357	848	4	3/8
	16/16		346	216	2,180	1,362	4	3/8

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the roof deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies with and without rivets.
4. The hangers are limited to static vertical tension loading only.
5. Where hanger spacing is less than 24 inches along the same rib, the combined load to all hangers shall be less than or equal to a single hanger design strength.
6. Sprinkler pipe installations shall comply with NFPA 13.
7. Ends of deck sheets must be fastened to supports at every cell.
8. Do not place hangers at side laps.
9. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus 1/2 turn).
10. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

Toris 5.5A & Toris 5.5 Load Table Uniform Total Service Load (Dead and Live), PSF

Deck Type	No. spans	Gage	Span Length Center to Center of Supports (ft.)														
			13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Toris 5.5A	1	20/20	124/171	115/137	107/111	100/92	91/76	81/64	73/55	66/47	60/39	55/32	50/27	–	–	–	–
		18/18	207/235	192/188	171/153	150/126	133/105	119/88	106/75	96/64	87/53	79/44	73/37	67/31	61/26	–	–
		16/16	309/307	266/246	232/200	204/165	180/137	161/116	144/98	130/84	118/69	108/58	99/48	91/41	83/35	77/30	–
Toris 5.5	1	20/20	124/182	115/145	107/118	100/97	93/81	83/68	74/58	67/50	61/41	56/34	51/29	–	–	–	–
		18/18	207/250	192/200	174/162	153/134	136/112	121/94	109/80	98/69	89/56	81/47	74/39	68/33	63/28	–	–
		16/16	315/327	272/262	237/213	208/175	184/146	164/123	148/105	133/90	121/74	110/61	101/51	93/43	85/37	79/31	73/27

If higher loads or longer spans are required, contact EPIC Metals.

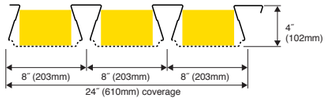
NOTES: 1. Loads are based on ASD Design.
2. Uniform load values listed on the left side of the box, 100/50, are governed by stress or web crippling and the values listed on the right side, 100/50, are governed by deflection.
3. The deflection criteria used for generating the tables above were L/240 or 1" maximum. The Engineer of Record shall calculate the allowable uniform load if a different deflection criteria is required.
4. Stress governed values assume a maximum allowable stress of 24 ksi.
5. Minimum end support bearing lengths are shown above. If shorter bearing lengths are used, check safe support reaction table on page 19.

Toris 4(A) Roof Deck Ceiling System Technical Tables

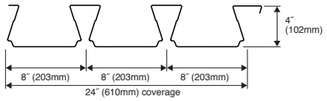
SPANS
14′–24′

ACOUSTIC (TORIS 4A) **NON-ACOUSTIC** (TORIS 4)

Toris 4A*



Toris 4*



*U.S. Patent Number D663,045
Canadian Patent Number 144931

Toris 4(A) Approvals

IAPMO evaluation report 0226
Class 1-60, 1-75, 1-90 rated per
Factory Mutual Standard 4451

Toris 4A Noise Reduction Coefficients

Deck Type	Absorption Coefficients						NRC
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	
Toris 4A	.33	.93	1.01	.90	.89	.67	.95

In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports.

The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

Toris 4A & Toris 4 Section Properties (per foot of width)

Deck Type	Gage	Weight (psf)	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})	Allowable Support Reaction (PLF)	
						End*	Int.*
Toris 4A	20	3.3	2.38	0.75	0.77	639	1507
	18	4.3	3.21	1.22	1.17	1081	2491
	16	5.5	4.10	1.63	1.56	1676	3796
Toris 4	20	3.4	2.53	0.77	0.82	639	1507
	18	4.4	3.42	1.24	1.24	1081	2491
	16	5.6	4.36	1.66	1.66	1676	3796

*Minimum end and interior support bearing lengths (See note 5 below):
End = 1.5″ Interior = 4″

Hanger Load Capacities

Deck Type	Gage	Hanger Type	Design Values				Fire Sprinkler Support with Riverts	
			Without Rivets		With Rivets			
			LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris 4(A)	20	⅜″ Ankore (ANK38)	168	105	698	436	4	⅜
	18		252	157	1,357	848	4	⅜
	16		346	216	2,180	1,362	4	⅜

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the roof deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies with and without rivets.
4. The hangers are limited to static vertical tension loading only.
5. Where hanger spacing is less than 24 inches along the same rib, the combined load to all hangers shall be less than or equal to a single hanger design strength.
6. Sprinkler pipe installations shall comply with NFPA 13.
7. Ends of deck sheets must be fastened to supports at every cell.
8. Do not place hangers at side laps.
9. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus 1/2 turn).
10. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

Toris 4A & Toris 4 Load Table Uniform Total Service Load (Dead and Live), PSF

Deck Type	No. spans	Gage	Span Length Center to Center of Supports (ft.)										
			14	15	16	17	18	19	20	21	22	23	24
Toris 4A	1	20	61/57	53/46	47/38	42/32	37/27	–	–	–	–	–	–
		18	100/77	87/62	76/51	68/43	60/36	54/31	–	–	–	–	–
		16	133/98	116/80	102/66	90/55	80/46	72/39	65/34	59/28	–	–	–
	2	20	63/137	55/111	48/92	43/77	38/65	34/55	31/47	28/39	25/32	23/27	–
		18	96/185	83/150	73/124	65/103	58/87	52/74	47/63	42/52	39/43	35/36	33/31
		16	127/236	111/192	98/158	86/132	77/111	69/94	62/81	57/67	52/55	47/46	43/39
	3	20	79/107	68/87	60/72	48 Foot Maximum Sheet Length							
		18	119/145	104/118	91/97								
		16	159/185	139/150	122/124								
Toris 4	1	20	63/61	55/49	48/41	43/34	38/28	–	–	–	–	–	–
		18	101/82	88/67	78/55	69/46	61/39	55/33	50/28	–	–	–	–
		16	136/104	118/85	104/70	92/58	82/49	74/42	66/36	60/29	–	–	–
	2	20	67/146	58/118	51/98	45/81	40/69	36/58	33/50	30/41	27/34	25/29	–
		18	101/197	88/160	78/132	69/110	61/93	55/79	50/68	45/56	41/46	38/39	34/33
		16	136/251	118/204	104/168	92/140	82/118	74/100	66/86	60/71	55/59	50/49	46/42
	3	20	84/114	73/93	64/76	48 Foot Maximum Sheet Length							
		18	127/154	110/125	97/103								
		16	169/197	148/160	130/132								

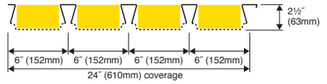
If higher loads or longer spans are required, contact EPIC Metals.
NOTES: 1. Loads are based on ASD Design.
2. Uniform load values listed on the left side of the box, 100/50, are governed by stress or web crippling and the values listed on the right side, 100/50, are governed by deflection.
3. The deflection criteria used for generating the tables above were L/240 or 1″ maximum. The Engineer of Record shall calculate the allowable uniform load if a different deflection criteria is required.
4. Stress governed values assume a maximum allowable stress of 24 ksi.
5. Minimum end and interior support bearing lengths are shown above. If shorter bearing lengths are used, check safe support reaction table on page 19.

Toris® **(A)** Roof Deck Ceiling System Technical Tables

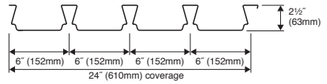
SPANS
6′–18′

ACOUSTIC (TORIS A) **NON-ACOUSTIC** (TORIS)

Toris A*



Toris*



*U.S. Patent Number D623,773
Canadian Patent Number 131349, 134371 and 134369

Toris (A) Approvals

IAPMO evaluation report 0226
Class 1-60, 1-75, 1-90 rated per
Factory Mutual Standard 4451

Toris A Noise Reduction Coefficients

Deck Type	Absorption Coefficients						NRC
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	
Toris A	.18	.78	1.15	.94	.90	.80	.95

In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports.

The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

Toris A & Toris Section Properties (per foot of width)

Deck Type	Gage	Weight (psf)	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})	Allowable Support Reaction (PLF)	
						End*	Int.*
Toris A	20	2.7	0.73	0.47	0.42	950	1922
	18	3.6	0.98	0.63	0.58	1583	3176
	16	4.6	1.25	0.80	0.76	2429	4843
Toris	20	2.8	0.77	0.48	0.44	950	1922
	18	3.7	1.03	0.64	0.60	1583	3176
	16	4.7	1.31	0.81	0.78	2429	4843

*Minimum end and interior support bearing lengths (See note 5 below):
End = 1.5″ Interior = 3″

Hanger Load Capacities

Deck Type	Gage	Hanger Type	Design Values				Fire Sprinkler Support with Riverts	
			Without Rivets		With Rivets			
			LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris (A)	20	⅜″ Wedge Bolt (38WB250)	130	81	481	300	3	⅜
	18		222	139	634	396	4	⅜
	16		353	221	865	541	4	⅜

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the roof deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies with and without rivets.
4. The hangers are limited to static vertical tension loading only.
5. Where hanger spacing is less than 24 inches along the same rib, the combined load to all hangers shall be less than or equal to a single hanger design strength.
6. Sprinkler pipe installations shall comply with NFPA 13.
7. Ends of deck sheets must be fastened to supports at every cell.
8. Do not place hangers at side laps.
9. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus 1/2 turn).
10. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

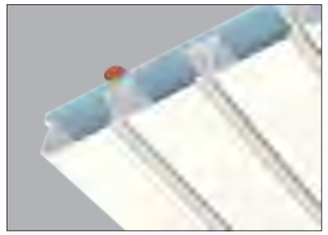
Toris A & Toris Load Table Uniform Total Service Load (Dead and Live), PSF

Deck Type	No. spans	Gage	Span Length Center to Center of Supports (ft.)											
			6	7	8	9	10	11	12	13	14	15	16	17	18
Toris A	1	20	209/222	153/140	118/94	93/66	75/48	62/36	52/28	–	–	–	–	–	–
		18	280/298	206/188	158/126	124/88	101/64	83/48	70/37	60/29	–	–	–	–	–
		16	356/380	261/239	200/160	158/113	128/82	106/62	89/47	76/37	65/30	–	–	–	–
	2	20	187/500	137/336	105/225	83/158	67/115	56/87	47/67	40/53	34/42	30/34	–	–	–
		18	258/500	189/452	145/303	115/212	93/155	77/116	64/90	55/71	47/56	41/46	36/38	32/32	–
		16	338/500	248/500	190/386	150/271	122/198	100/148	84/114	72/90	62/72	54/59	48/48	42/40	38/34
	3 or more	20	233/418	171/263	131/176	104/124	84/90	69/68	58/52	50/41	43/33	37/27	–	48 Foot Maximum Sheet Length	
		18	322/500	237/353	181/237	143/166	116/121	96/91	81/70	69/55	59/44	52/36	45/30		
		16	422/500	310/451	238/302	188/212	152/155	126/116	106/89	90/70	78/56	68/46	59/38		
Toris	1	20	213/234	157/147	120/99	95/69	77/51	63/38	53/29	–	–	–	–	–	–
		18	284/313	209/197	160/132	126/93	102/68	85/51	71/39	61/31	–	–	–	–	–
		16	360/398	264/251	203/168	160/118	130/86	107/65	90/50	77/39	66/31	–	–	–	–
	2	20	196/500	144/355	110/238	87/167	70/122	58/91	49/70	42/55	36/44	31/36	28/30	–	–
		18	267/500	196/475	150/318	119/223	96/163	79/122	67/94	57/74	49/59	43/48	38/40	33/33	–
		16	347/500	255/500	195/404	154/284	125/207	103/156	87/120	74/94	64/75	55/61	49/51	43/42	39/36
	3 or more	20	244/441	180/278	138/186	109/131	88/95	73/72	61/55	52/43	45/35	39/28	–	48 Foot Maximum Sheet Length	
		18	333/500	245/371	188/249	148/175	120/127	99/96	83/74	71/58	61/46	53/38	47/31		
		16	433/500	318/472	244/317	193/222	156/162	129/122	108/94	92/74	80/59	69/48	61/40		

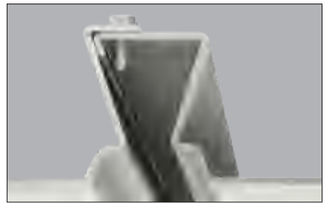
If higher loads or longer spans are required, contact EPIC Metals.
NOTES: 1. Loads are based on ASD Design.
2. Uniform load values listed on the left side of the box, 100/50, are governed by stress or web crippling and the values listed on the right side, 100/50, are governed by deflection.
3. The deflection criteria used for generating the tables above were L/240 or 0.75″ maximum. The Engineer of Record shall calculate the allowable uniform load if a different deflection criteria is required.
4. Stress governed values assume a maximum allowable stress of 24 ksi.
5. Minimum end and interior support bearing lengths are shown above. If shorter bearing lengths are used, check safe support reaction table on page 19.

Bal Seal Engineering, Colorado Springs, Colorado
Toris 4A

Standard Features with Toris



Conceals Fasteners
All of the Toris panels conceal the roofing system fasteners.

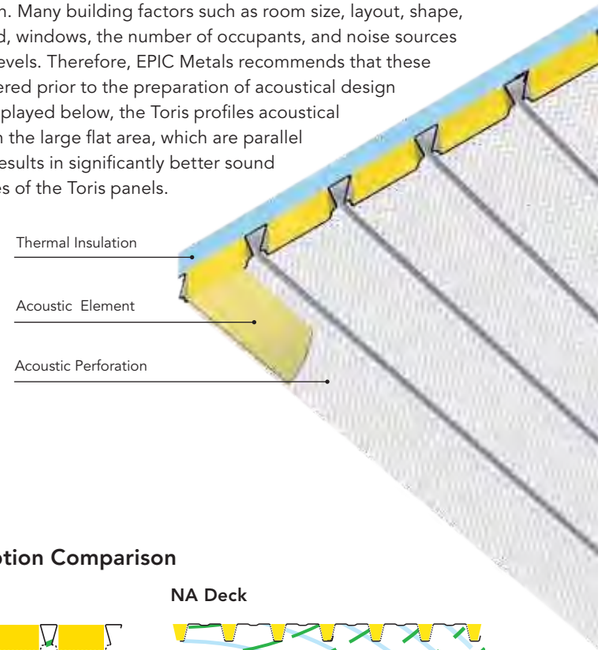


Sidelap
The dovetail ribs of the sidelaps conceal the fasteners.

Toris® Options

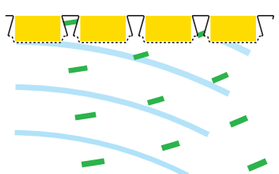
Toris' Superior Acoustic Properties

Acoustic roof and floor deck ceiling systems are specified as an economical means of reducing noise levels in building interiors, and offer an attractive appearance without adding an additional ceiling. NRC values are the noise absorption averages over a range of frequencies. The higher the NRC value, the greater the amount of noise that is absorbed over the frequency ranges. An NRC value of 1.00 would mean that 100% of the noise that strikes the panel is absorbed, whereas an NRC value of .60 would mean that only 60% of the sound that strikes the panel surface is absorbed and 40% of the sound is reflected back. Lower NRC values can contribute to creating reverberation (an echo effect) that makes speech less intelligible and can create a sense of noise amplification. Many building factors such as room size, layout, shape, materials specified, windows, the number of occupants, and noise sources also affect noise levels. Therefore, EPIC Metals recommends that these factors be considered prior to the preparation of acoustical design specifications. Displayed below, the Toris profiles acoustical perforations are in the large flat area, which are parallel to the floor. This results in significantly better sound absorbing qualities of the Toris panels.

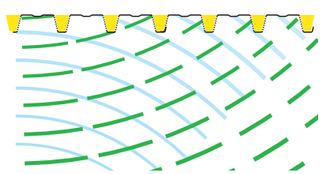


Sound Absorption Comparison

Toris A



NA Deck



Direct Sound
Reflected Sound

Skydeck®

Natural light makes spaces appear larger and reveals true colors in the interior of buildings. In the past, to incorporate skylights with a long-span roof deck ceiling system required that the skylight be framed with structural steel, detracting from the open appearance of the system. Skydeck with the Solatube® Daylighting System captures ambient light as well as direct light, enabling it to provide exceptional lighting even on cloudy days. Energy costs can be reduced in structures using Skydeck as a day-lighting technique. Skydeck can be an important contributor to achieving Leadership in Energy and Environmental Design (LEED®) points.

EPIC Metals' Skydeck specified to accept Solatube® Daylighting System, transfers up to 500% more daylight than other tubular skylight systems with the brightest, cleanest, and whitest natural light possible. This advantage is particularly significant in low-angle light conditions, such as during the early morning and late afternoon, and in the winter months when the sun is low on the horizon. Skydeck has minimal heat loss or gain between the interior and exterior because the Solatubes work like a dual glazed window.

Solatube® is a registered trademark owned by Solatube International Inc. LEED® is a registered trademark owned by the U.S. Green Building Council and is used with permission.

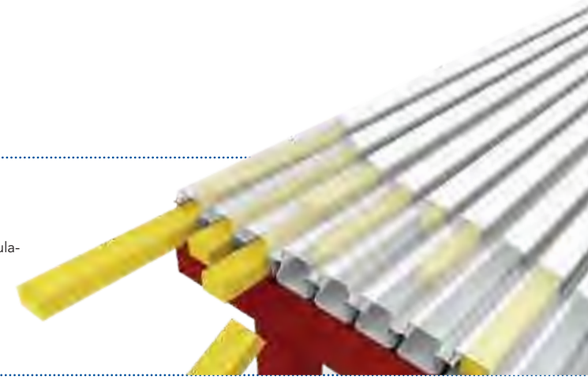
Toris with Skydeck Option
U.S. Patent Number 6,813,864

Windgard® Toris 7A & 5.5A

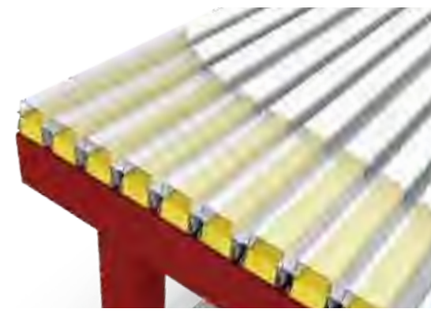
EPIC Metals' structural roof deck ceiling systems utilize acoustic elements to reduce interior noise and sound reverberation. Dislodged or missing acoustic elements can greatly reduce the system's effectiveness to control noise. Dislodging can occur during product transportation or installation in Toris 7A and Toris 5.5A.

EPIC Metals addresses this issue with Windgard, a system used in Toris 7A and Toris 5.5A to ensure that acoustic insulation stays in place from panel fabrication to final installation. The EPIC Windgard system has been laboratory tested to maintain acoustic element positions at wind speeds up to 105 mph. Windgard ensures the acoustic properties are preserved, delivering expected noise reduction coefficients and effectiveness.

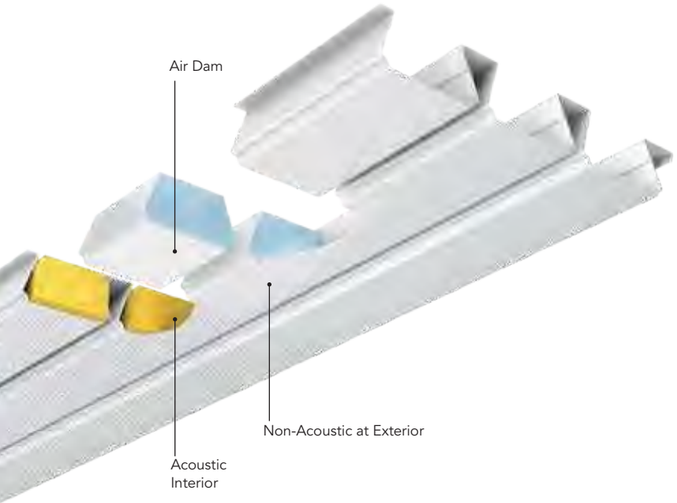
Without Windgard, acoustic insulation can shift or dislodge.



With Windgard, acoustic insulation remains in place.



Toris® Options & Features



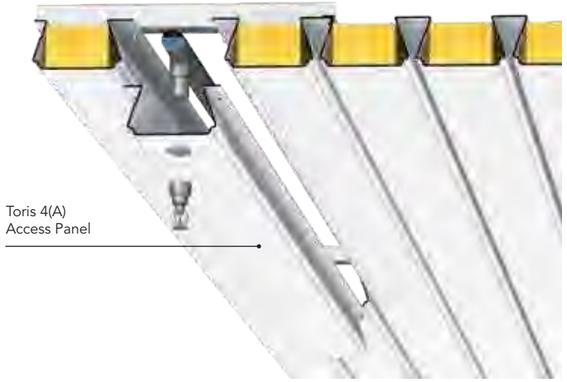
Air Dams

EPIC Metals understands the importance of reducing energy loss in buildings. This is the reason that EPIC pioneered the use of specially designed air dams to prevent air movement in roof and floor deck ceiling panels that cantilever outside of a building. Where these panels are partially inside the building and transition to the outside, a barrier is necessary to prevent the exterior unconditioned air from moving through the conditioned spaces.

EPIC Metals specially designed air dams to help reduce the building energy usage when roof or floor deck ceiling panels extend from the interior of a building to the exterior of the building.

Access Panel

With Toris 7(A), Toris 5.5(A), Toris 4(A) and Toris (A), it is possible to easily access utilities that have been located within the roof deck ceiling system. Access panels come in various sizes and configurations, are placed according to architectural drawings and are provided during the manufacturing process. The removable panels are fabricated to match the finish, size, and shape of the adjacent ceiling surface. The result is a clean, uninterrupted look while providing a simple and convenient access to hidden utilities. Toris (A) access panels lack the clearance for sprinkler lines but can accommodate other utilities.



Toris CA & 4CA Hidden Utilities Feature

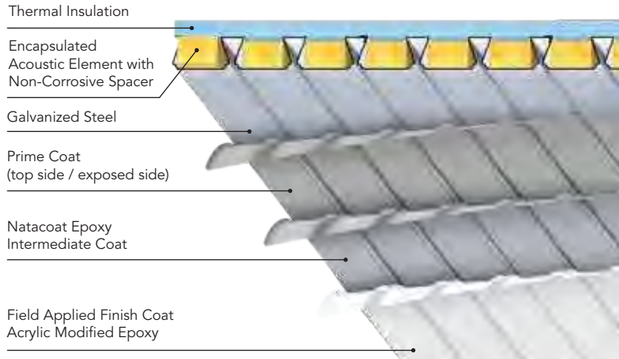
Toris Composite Floor Deck Ceiling Systems provide a concrete form for a structural floor while providing an acoustical/architectural ceiling underneath. This system was engineered to house various hidden utilities within the cells of the deck while providing access through removable panels along the system ribs. It is no longer necessary to expose electrical systems, wire ducts, sprinker pipes, or strut channels when designing a facility with multiple floors. Toris Composite Floors/Ceilings allow a consistent floor to floor aesthetic while providing architectural appeal.

Texas A&M University, Student Recreation Center, College Station, Texas, Toris 4A & Natacoat

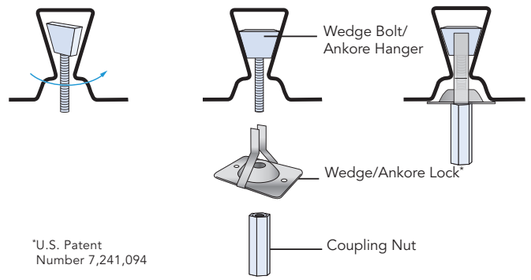
Natacoat®

Natatoriums create a highly humid and corrosive interior environment for building materials. EPIC Natacoat is an innovative, specialized coating that has been applied to protect long span, acoustic roof and floor deck ceiling systems in such harsh settings for over 20 years.

Prior to panel fabrication, all surfaces of the galvanized steel are degreased and cleaned by a chemical conversion coating before applying a primer to increase bonding capabilities. Following the prime coat, the panels are fabricated and the Natacoat specialized coating is applied to the ceiling surface. Natacoat is a factory-applied, oven-baked polyamide epoxy. The finish coat is applied after installation. Contact EPIC for special paint specifications for natatoriums or other high humidity applications.



Hanging System



*U.S. Patent Number 7,241,094

Insert the Toris hanger with the head parallel to the Toris deck. Rotate the hanger 90° and pull down to seat. After the hanger is seated, install the proper hanger lock and nut.

Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

Toris® Roof Deck Ceiling Systems
Specifications

Note: Omit underlined areas for non-acoustic applications

For the additional specification language covering factory reinforced openings to accommodate SkyDeck® for Solatube® skylights, contact EPIC Metals.

PART 1: GENERAL

1.1 SUMMARY

The requirements of this specification section include all materials, equipment, and labor necessary to furnish and install Toris 7A Acoustical, Toris 5.5A Acoustical, Toris 4A Acoustical or Toris A Acoustical Roof Deck System.

A. Panels shall serve as an acoustical ceiling and a structural roof deck as indicated on the contract drawings.

B. Acoustical panels shall provide an exposed bottom surface that is substantially flat. The narrow rib openings of the Roof Deck panels shall provide the appearance of a linear ceiling. Fasteners for sidelaps and overlying roofing materials shall be concealed within the depth of the dovetail shaped ribs.

C. Toris 7A, 5.5A or 4A Acoustical Roof Deck: Toris Ankore hanging devices that are specially configured to fit into the dovetail-shaped ribs of the Toris 7A, 5.5A or 4A Acoustical Roof Deck panels shall be available. These hanging devices shall be utilized wherever any related work is suspended from Toris 7A, 5.5A or 4A Acoustical Roof Deck. Toris Ankore hanging devices shall be furnished by the installer of the related work unless otherwise indicated.

Toris A Acoustical Roof Deck: Toris Wedge Bolt hanging devices that are specially configured to fit into the dovetail-shaped ribs of the Toris A Acoustical Roof Deck panels shall be available. These hanging devices shall be utilized wherever any related work is suspended from Toris A Acoustical Roof Deck. Toris Wedge Bolt hanging devices shall be furnished by the installer of the related work unless otherwise indicated.

1.2 RELATED WORK

The following related work is not part of this specification section:

A. Structural Steel: Supplementary framing.

B. Roofing: Other than structural roof deck and accessories. Installation of acoustic elements.

C. Painting: Preparation for and application of field painting.

D. Mechanical: Attachments to Roof Deck.

E. Electrical: Attachments to Roof Deck.

1.3 SUBMITTALS

Submit the following items in accordance with the conditions of the contract and appropriate specification sections:

A. Product data for Roof Deck and hanging devices including material types, dimensions, finishes, load capacities, and noise reduction coefficients.

B. Erection drawings for Roof Deck and related accessory items showing profiles and material thicknesses, layout, anchorage, and openings as dimensioned on the structural drawings.

1.4 REFERENCE STANDARDS

A. Section Properties: Shall be computed in accordance with the American Iron and Steel Institute (AISI) *Specification for Design of Cold-Formed Steel Structural Members.*

B. Welding: Shall comply with applicable provisions of the *American Welding Society (AWS) D1.3 Structural Welding Code – Sheet Steel.*

C. Noise Reduction Coefficients: Shall be verified by the results of sound absorption tests conducted in accordance with the ASTM C423 and E795. A minimum NRC of 1.00 shall be provided for Toris 7A and Toris 5.5A. A minimum NRC of 0.95 shall be provided for Toris 4A and Toris A. Copies of the Sound Absorption test shall be submitted upon request.

1.5 QUALITY ASSURANCE

A. Toris 4A Acoustical or Toris A Acoustical Roof Deck shall have been tested and approved by Factory Mutual Research Corporation for use in Class 1 insulated steel deck roof construction without the use of DensDeck® as a fire barrier.

B. Toris 4A Acoustical or Toris A Acoustical Roof Deck shall be listed in the FM Approval Guide. All bundles shall bear the appropriate FM approved label.

DensDeck® is a registered trademark owned by Georgia-Pacific Gypsum LLC.

PART 2: PRODUCTS

2.1 MANUFACTURER

A. In accordance with the requirements of this specification section, provide products manufactured by EPIC Metals, Rankin, PA.

B. Substitutions: (Under Provisions of Division 01) Not permitted.

2.2 MATERIALS

A. Roof Deck panels shall be cold-formed from steel sheets conforming to ASTM A653, Grade 40 or equal, having a minimum yield strength of 40,000 psi.

B. Before forming, the steel sheets shall have received a hot-dip protective coating of zinc conforming to ASTM A924, Class G60 or G90.

Toris 7A and Toris 5.5A Primer Paint Option—The bottom ceiling surface of the panel shall be prime painted at the factory after forming and welding. Before painting, the galvanized steel shall be chemically cleaned and coated with a pretreatment followed by a coat of manufacturer's standard white prime paint and then oven-cured. Compatibility of field applied finish paint shall be the responsibility of the painting contractor.

Toris 4A and Toris A Primer Paint Option—Prior to forming, galvanized steel shall be chemically cleaned and pre-treated followed by an oven-cured epoxy primer and a second coat of oven-cured polyester primer paint applied to both sides in the manufacturer's standard color of off-white. Compatibility of field applied finish paint with factory applied primer paint shall be the responsibility of the painting contractor.

Toris 4A and Toris A Finish Paint Option—Prior to forming, galvanized steel shall be chemically cleaned and pre-treated followed by an oven-cured epoxy primer and a second coat of oven-cured polyester paint applied to both sides. After factory painting is complete, a plastic removable film shall be applied to the bottom surface of the panels to protect paint finish during manufacturing, shipping, and handling. The protective film is to be removed by the erector prior to installation.

Paint Option—For specialized painting systems that are recommended for Natatoriums and other high humidity applications, contact EPIC Metals.

C. The minimum uncoated thickness of material supplied shall be within 5% of the design thickness.

2.3 FABRICATION

A. Toris 7A Acoustical Roof Deck shall have continuous dovetail shaped ribs spaced 8˝ on center. The profile shall be 7˝ deep.

Toris 5.5A Acoustical Roof Deck shall have continuous dovetail shaped ribs spaced 8˝ on center. The profile shall be 5.5˝ deep.

Toris 4A Acoustical Roof Deck panels shall have continuous dovetail-shaped ribs spaced 8˝ on center. The profile shall be 4˝ deep.

Toris A Acoustical Roof Deck panels shall have continuous dovetail-shaped ribs spaced 6˝ on center. The profile shall be 2.5˝ deep.

B. The design thickness and minimum section properties shall be indicated on the contract drawings.

C. Roof Deck panels shall have positive registering sidelaps that can be fastened by welds or screws.

D. Acoustical Roof Deck panels shall be fabricated with perforated holes. Perforated areas shall be located in the areas between the dovetail-shaped ribs.

2.4 ACCESSORIES

A. Where panels continue from the interior of the building through to the exterior of the building (for example as a cantilever canopy): the panels will be perforated on the interior and not perforated on the exterior, air dams will be provided to block the movement of conditioned air from the interior of the building to the exterior. Air dam assembly shall have an allowable air infiltration of less than 0.02 cfm/ft^2 at 1.57 lb/ft^2

Toris 4A Acoustical or Toris A Acoustical Roof Deck will be supplied with factory assembled EpicTjoints® to provide a thermal break between panels that span from the interior to the exterior of the building. The EpicTjoints shall have been tested in accordance with ASTM C1363.

B. Wedge Bolt hanging devices (which include Wedge Locks) or Ankore hanging devices (which include Ankore Locks) shall be installable and relocatable along the length of the interior ribs of the Acoustical Roof Deck panels. Manufacturer's product data shall be consulted for minimum spacing, load capacities, and proper installation procedure of the Wedge Bolt or Ankore Hanging devices.

C. Sump pans, ridge, valley, transition, and eave plates shall be provided per manufacturer's standards.

D. Manufacturer's standard profile closures shall be provided as indicated on the contract drawings.

E. Acoustic elements shall be provided for installation above the perforated holes in the bottom flat area between the dovetail-shaped ribs. To facilitate field painting of the perforated surfaces, the sound absorbing elements shall be supported above the surface on corrosion resistant spacers. Sound absorbing elements and spacers shall be furnished under this specification section for installation by others for Toris 4A and Toris A.

Toris 7A and Toris 5.5A Acoustic sound-absorbing elements shall be factory installed. The acoustic elements will be supported above the bottom panel be either individual stand-offs or continuous mesh to avoid plugging the perforated holes when field painting.

F. Toris 7A Acoustical, Toris 5.5A Acoustical, Toris 4A Acoustical and Toris A Acoustical panels requiring access openings shall be shown on the structural or architectural drawings. Openings shall be shop-fabricated in the panel area between ribs, 8˝ wide for Toris 7A, Toris 5.5A or Toris 4A Acoustical and 6˝ wide for Toris A Acoustical. Access covers shall match the finish and profile of the adjacent deck surface, including perforations.

PART 3: EXECUTION

3.1 GENERAL

Roof Deck panels and accessories shall be installed in strict accordance with the manufacturer's approved erection drawings, installation instructions, the *Steel Deck Institute (SDI) Manual for Construction with Steel Deck*, and all applicable safety regulations.

3.2 BEFORE INSTALLATION

A. The supporting frame and other work relating to the Acoustical Roof Deck shall be examined to determine if this work has been properly completed.

B. All components of the Acoustical Roof Deck System shall be protected from significant damage during shipment and handling. If storage at the jobsite is required, bundles or packages of these materials shall be elevated above the ground, sloped to provide drainage, and protected from the elements with a ventilated waterproof covering.

3.3 INSTALLATION

A. Bundles or packages of Acoustical Roof Deck System components shall be located on supporting members in such a manner that overloading of any individual members does not occur.

B. Before being permanently fastened, Acoustical Roof Deck panels shall be placed with ends accurately aligned and adequately bearing on supporting members. Proper coverage of the Acoustical Roof Deck panels shall be maintained. Care must be taken by the erector to maintain uniform spacing of the bottom rib opening (equal to the openings in the profiled sheet) at the sidelaps. Consistent coverage shall be maintained so that panels located in adjacent bays will be properly aligned.

C. Field cutting of the Acoustical Roof Deck panels shall be performed in a neat and precise manner. Only those openings shown on the structural drawings shall be cut. Other openings shall be approved by the structural engineer and cut by those requiring the opening.

D. Acoustical Roof Deck panels shall be fastened to all supporting members with ¾˝ diameter puddle welds at a nominal spacing of 8˝ on center or less as indicated on the manufacturer's erection drawings.

E. Mechanical fasteners may be substituted for puddle welds to permanently fasten Acoustical Roof Deck panels to supporting members. The mechanical fastener manufacturer shall provide documentation as to the equivalent load capacity and proper installation procedure for each type of fastener being used.

F. Sidelaps of Acoustical Roof Deck panels shall be fastened by welds or screws at a spacing of 36˝ on center or less as indicated on the manufacturer's erection drawings. Sides of Acoustical Roof Deck panels that are located at perimeter edges of the building shall be fastened to supporting members at a spacing of 36˝ on center or less as indicated on the manufacturer's erection drawings.

G. Sump pans, ridge, valley, transition, eave plates, and supplied reinforcement for small openings shall be fastened as indicated on the manufacturer's erection drawings.

3.4 AFTER INSTALLATION

A. Construction loads that could damage the Acoustical Roof Deck such as heavy concentrated loads and impact loads shall be avoided. Planking shall be used in all high traffic areas.

B. Cleaning the bottom surface of the Acoustical Roof Deck for field painting shall be the responsibility of the painting contractor.

C. Galvanized coatings that are significantly damaged shall be repaired. Appropriate galvanized repair paint shall be used, and the paint manufacturer's application instructions shall be followed.

Toris®
Safe Support Reaction Tables

Safe Support Reaction Tables for End and Interior Supports (PLF)

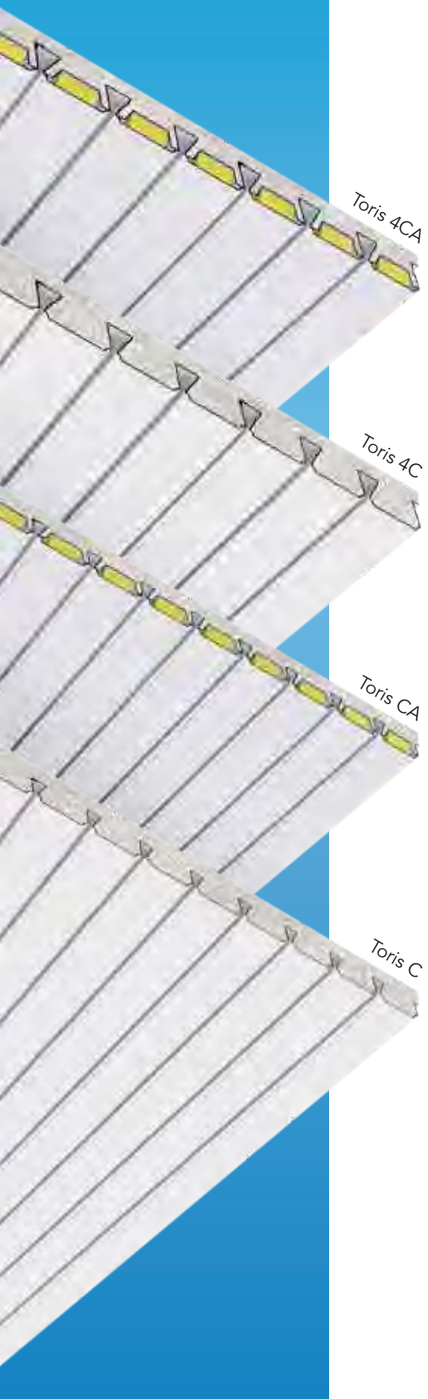
Deck Type	Gage	Length of Bearing							
		end				int.			
		1˝	1.5˝	2˝	3˝	3˝	4˝	5˝	6˝
Toris 7(A)	20	566	639	700	803	1378	1507	1622	1725
Toris 5.5(A)	18	965	1081	1179	1343	2287	2491	2670	2832
Toris 4(A)	16	1506	1676	1820	2062	3500	3796	4056	4292
	20	842	950	1041	1193	1922	2103	2262	2406
Toris (A)	18	1413	1583	1726	1966	3176	3458	3707	3932
	16	2181	2429	2637	2987	4843	5252	5612	5938

Simple span: ER = 0.50WL
Double Span: ER = 0.375WL
IR = 1.25WL

Clinica Family Health - Lafayette, Lafayette, Colorado, Toris 5.5A

Toris®
Composite Floor Deck Ceiling Systems

Toris Composite Floor Deck Ceiling Systems combine the structural advantages of a flat slab with the time and cost saving advantages of a permanent form. Due to the dovetail rib shape, the slab can support greater loading than a typical reinforced concrete slab of the same depth. The shape of the profile also supplies a simple, economical, and permanent hanging system. The Toris Floor Deck additionally furnishes the total positive reinforcing for the composite slab and serves as a permanent form for the concrete. See page 22 or 23 for unprotected U.L. fire resistance ratings.



Hanging System

Toris 4C(A) and Toris C(A) dovetail ribs provide a simple, economical, and permanent means for hanging piping, ducts, and other mechanical and utility components. Toris hangers are inserted parallel to the ribs and can be placed continuously, spaced across the width of the profile. Hangers can be installed as they are needed, and can be relocated, removed or reused at any time during the life of the building.

Code Compliance

Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

U.L. Approved Pipe Hangers for Fire Protection Systems

Toris hangers have been rated under *U.L. #203—Pipe Hanger Equipment for Fire Protection Service.* Wedge Bolts and Ankores can be used in accordance with the *National Fire Protection Association Standards For Installation of Sprinkler Systems (NFPA 13).*

Superior Fire Ratings

The Toris 4CA and Toris CA Acoustical Composite Floor Deck Ceiling Systems have efficient unprotected fire ratings (see page 22 and 23).

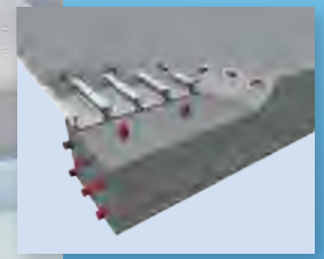
Toris 4C Composite Floor Deck fire ratings under U.L. Design Numbers D980 and Toris C Composite Floor Deck fire ratings under U.L. Design Number D971 are superior to fire ratings of generic composite floor decks. In most instances, the fire ratings of Toris C Composite Floor Deck slabs require from ½˝ - 1 ¼˝ less slab depth than generic profile slabs.

For the unprotected fire ratings shown on page 22 and 23, no spray-applied fireproofing is required on the deck.

Hogan Assessment Systems Headquarters, Tulsa, Oklahoma
Toris 4CA

Steel Beam

Reinforced Concrete Beam



Precast Beam

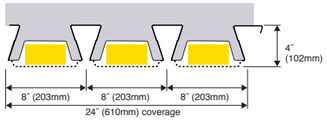
Slab Beam

Toris® 4CA & 4C Composite
Floor Deck Ceiling System Technical Tables

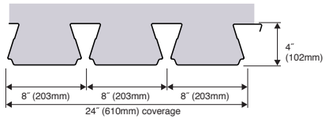
SPANS
10′–32′

ACOUSTIC (TORIS 4CA) **NON-ACOUSTIC** (TORIS 4C)

Toris 4CA



Toris 4C



Hanger Load Capacities

Deck Type	Gage	Hanger Type	Minimum Concrete Strength (psi)	Minimum Concrete Slab Thickness (in)	Design Values		Fire Sprinkler Support	
					LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris 4CA	20 18 16	⅜″ Ankore (ANK38)	3,000	6	1,633	1,021	4	⅜
Toris 4C	20 18 16	⅜″ Ankore (ANK38)	3,000	6	2,440	1,525	4	⅜

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the floor deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies.
4. The hangers are limited to static vertical tension loading only.
5. Sprinkler pipe installations shall comply with NFPA 13.
6. Ends of deck sheets must be fastened to supports at every cell.
7. Do not place hangers at side laps.
8. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus ½ turn).
9. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

Toris 4CA Noise Reduction Coefficients*

Absorption Coefficients						NRC
125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	
.33	.84	.87	.92	.83	.79	.85

* In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports. The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

Toris 4CA Fire Ratings (U.L. Design Number D980)

Restrained Fire Rating	Total Slab Depth (in.)	Type and Density of Concrete (pcf)
1 hour	6.5	RW (147)
1 hour	6	LW (110)
1½ hours	7	RW (147)
1½ hours	6	LW (110)
2 hours	7.5	RW (147)
2 hours	6.25	LW (110)
3 hours	8.25	RW (147)
3 hours	7	LW (110)

NOTE: Toris 4CA can achieve the loads shown on page 24 with the fire ratings indicated above.

RW = Regular Weight Concrete
LW = Lightweight Concrete

Toris 4C Fire Ratings (U.L. Design Number D980)

Restrained Fire Rating	Total Slab Depth (in.)	Type and Density of Concrete (pcf)
1½ hours	6	RW (147)
1½ hours	6	LW (110)
2 hours	6.5	RW (147)
2 hours	6	LW (110)
3 hours	7.5	RW (147)
3 hours	6.5	LW (110)

NOTE: Toris 4C can achieve the loads shown on page 25 with the fire ratings indicated above.

RW = Regular Weight Concrete
LW = Lightweight Concrete

Suggested Temperature and Shrinkage Reinforcement

Slab Depth (in.)	Welded Wire Fabric Mesh
6–7	6 x 6 – W1.4 x W1.4
7½ – 9	6 x 6 – W2.5 x W2.5

See U.L. Fire Resistance Directory for temperature and shrinkage reinforcement of fire rated assemblies. U.L. Fire Rated Slabs require 6 x 6 – W1.4 x W1.4 mesh.

Toris 4CA & Toris 4C Section Properties

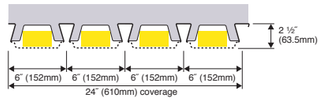
Deck Type	Gage	Weight (psf)	A_S (in.^{2})	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})
Toris 4CA	20	4.7	1.39	2.70	0.88	0.98
	18	5.8	1.70	3.52	1.32	1.29
	16	6.9	2.03	4.41	1.73	1.64
Toris 4C	20	3.4	0.98	2.53	0.77	0.82
	18	4.4	1.30	3.42	1.24	1.24
	16	5.6	1.65	4.36	1.66	1.66

Toris® CA & C Composite
Floor Deck Ceiling System Technical Tables

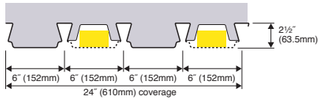
SPANS
6′–24′

ACOUSTIC (TORIS CA, CA50%) **NON-ACOUSTIC** (TORIS C)

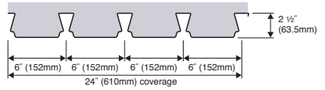
Toris CA



Toris CA 50%



Toris C



Hanger Load Capacities

Deck Type	Gage	Hanger Type	Minimum Concrete Strength (psi)	Minimum Concrete Slab Thickness (in)	Design Values		Fire Sprinkler Support	
					LRFD ΦP_n (lbs)	ASD P_n/Ω (lbs)	Max. Pipe Dia. (in)	Rod Dia. (in)
Toris CA	20 18 16	⅜″ Wedge Bolt (38WB250)	3,000	4.5	838	524	6	⅜
Toris C	20 18 16	⅜″ Wedge Bolt (38WB250)	3,000	4.5	2,291	1,432	8	⅜

NOTES:
1. Resitance Factors, Φ, and Safety Factors, Ω, have been calculated in accordance with AISI S100-16, Chapter K.
2. The structural design professional is responsible to ensure the additional point loads do not exceed the load carrying capacity of the floor deck.
3. Consult EPIC Hanger Installation instructional sheets for detailed information on hanger assemblies.
4. The hangers are limited to static vertical tension loading only.
5. In cases where the supported fire sprinkler pipe exceeds 4″ in diameter, a ⅜″ to ½″ increaser coupling nut and ½″ rod shall be used.
6. Sprinkler pipe installations shall comply with NFPA 13.
7. Ends of deck sheets must be fastened to supports at every cell.
8. Do not place hangers at side laps.
9. Do not overtighten nut on hanger rod as this will spread rib and lessen capacity (Finger tight plus ½ turn).
10. Hangers have been reviewed by IAMPO for compliance with the IBC, LABC and CBC.

WARNING: FAILURE TO ADHERE TO THE ABOVE NOTES MAY CAUSE HANGERS TO PULL OUT OF DECK RIBS!

Toris CA Noise Reduction Coefficients*

Type	Absorption Coefficients						NRC
	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	
100% A	.15	.67	.86	.88	.91	.81	.85
50% A**	.21	.68	.74	.75	.54	.40	.70

* In accordance with ASTM C423 and E795. Consult EPIC Metals for other test results and individual reports. The NRC is the average of the absorption coefficients at 250, 500, 1000, and 2000 Hz., rounded off to the nearest .05.

** Estimates

Toris CA Fire Ratings (U.L. Design Number D971)

Restrained Fire Rating	Total Slab Depth (in.)	Type and Density of Concrete (pcf)
1 hour	6.25	RW (147)
1 hour	5	LW (110)
1½ hours	6.75	RW (147)
1½ hours	5.5	LW (110)
2 hours	7	RW (147)
2 hours	5.75	LW (110)
3 hours	7.75	RW (147)
3 hours	6.75	LW (110)

NOTE: Toris CA can achieve the loads shown on page 26 with the fire ratings indicated above

RW = Regular Weight Concrete
LW = Lightweight Concrete

Toris C Fire Ratings (U.L. Design Number D971)

Restrained Fire Rating	Total Slab Depth (in.)	Type and Density of Concrete (pcf)
1 hour	4.5	RW (147)
1 hour	4.5	LW (110)
1½ hours	5	RW (147)
1½ hours	4.5	LW (110)
2 hours	5.5	RW (147)
2 hours	4.75	LW (110)
3 hours	6.75	RW (147)
3 hours	5.5	LW (110)

NOTE: Toris C can achieve the loads shown on page 27 with the fire ratings indicated above

RW = Regular Weight Concrete
LW = Lightweight Concrete

Suggested Temperature and Shrinkage Reinforcement

Slab Depth (in.)	Welded Wire Fabric Mesh
4	6 x 6 – W1.4 x W1.4
4½ – 5	6 x 6 – W2.1 x W2.1
5½ – 8	6 x 6 – W2.9 x W2.9

See U.L. Fire Resistance Directory for temperature and shrinkage reinforcement of fire rated assemblies. U.L. Fire Rated Slabs require 6 x 6 – W1.4 x W1.4 mesh.

Toris CA & Toris C Section Properties

Deck Type	Gage	Weight (psf)	A_S (in.^{2})	I_D (in.^{4})	S_P (in.^{3})	S_N (in.^{3})
Toris CA	20	4.3	1.26	0.99	0.64	0.46
	18	5.2	1.52	1.25	0.81	0.61
	16	6.1	1.80	1.51	0.99	0.78
Toris C	20	2.8	0.83	0.77	0.48	0.44
	18	3.7	1.10	1.03	0.64	0.60
	16	4.7	1.39	1.31	0.81	0.78

Toris® 4CA & 4C Composite
Floor Deck Ceiling System Technical Tables

Toris 4CA Composite Floor Deck Systems

	Slab Depth and Weight	Design Thickness (in.)	Maximum Clear Span Without Shoring (ft.-in.)			Uniform Service Load Capacity (LRFD), psf														
						Simple Span Condition (See Note 2)											Continuous Span Condition (Negative Moment Reinforcement REQUIRED. See Note 3)			
			Single Span	Double Span	Triple Span	10′0″	11′0″	12′0″	13′0″	14′0″	15′0″	16′0″	17′0″	18′0″	20′0″	22′0″	24′0″	26′0″	28′0″	30′0″	32′0″
3 ksi Regular Weight Concrete (147 pcf)	6″ 50 PSF	0.0358	14-8	15-7	G	360	324	294	268	247	198	155	121	94	56	–	–	41	–	–	–
		0.0474	16-3	17-9	G	388	349	317	290	266	212	166	131	102	61	–	–	46	–	–	–
		0.0600	17-2	19-10	G	364	328	297	271	249	227	179	140	110	67	–	–	50	–	–	–
	6.5″ 56 PSF	0.0358	13-11	14-10	15-4	400	341	280	233	195	165	140	119	102	74	42	–	53	–	–	–
		0.0474	15-10	16-11	G	400	400	365	334	307	268	211	167	132	81	47	–	62	–	–	–
		0.0600	16-8	19-0	G	400	381	345	316	290	268	226	179	142	88	52	–	68	43	–	–
	7″ 62 PSF	0.0358	13-4	14-3	14-9	400	386	317	263	221	187	159	135	116	85	57	–	61	46	–	–
		0.0474	15-5	16-3	G	400	400	387	323	272	231	198	170	146	105	63	–	81	53	–	–
		0.0600	16-3	18-3	G	400	400	393	360	331	305	281	224	179	114	70	–	88	58	–	–
	7.5″ 68 PSF	0.0358	12-9	13-8	14-2	400	400	356	296	248	210	178	152	130	96	71	42	69	53	–	–
		0.0474	15-1	15-8	G	400	400	400	362	305	259	222	191	165	124	83	48	91	70	44	–
		0.0600	15-10	17-7	G	400	400	400	400	371	343	318	276	222	143	91	54	113	77	50	–
	8″ 75 PSF	0.0358	12-3	13-1	13-8	400	400	396	329	276	234	199	170	146	108	80	57	77	59	45	–
		0.0474	14-9	15-1	15-7	400	400	400	400	340	289	247	213	184	138	105	64	102	81	59	–
		0.0600	15-6	16-11	G	400	400	400	400	400	347	299	258	224	171	115	71	129	98	66	41
	8.5″ 81 PSF	0.0358	11-10	12-3	13-3	400	400	400	364	305	258	220	188	161	120	89	65	86	66	50	–
		0.0474	14-5	14-7	15-1	400	400	400	400	375	319	273	235	204	153	117	83	114	90	71	49
		0.0600	15-3	16-5	G	400	400	400	400	400	384	330	285	248	189	143	91	143	115	85	56
	9″ 87 PSF	0.0358	11-5	11-6	12-10	400	400	400	399	335	284	242	207	178	132	98	72	95	74	56	41
		0.0474	14-2	14-2	14-8	400	400	400	400	400	351	300	259	224	169	129	98	126	99	78	61
		0.0600	14-11	15-11	G	400	400	400	400	400	400	362	314	273	208	161	114	156	127	102	73
3 ksi Light Weight Concrete (110 pcf)	6″ 39 PSF	0.0358	16-2	17-1	G	368	332	302	239	184	142	111	86	67	–	–	–	–	–	–	–
		0.0474	17-4	19-5	G	396	357	325	259	200	155	121	95	74	43	–	–	–	–	–	–
		0.0600	18-3	21-9	G	372	336	305	280	216	169	132	104	81	48	–	–	–	–	–	–
	6.5″ 44 PSF	0.0358	15-6	16-4	G	400	327	270	225	190	161	138	111	87	52	–	–	–	–	–	–
		0.0474	16-10	18-8	G	400	400	374	324	251	196	154	121	95	58	–	–	44	–	–	–
		0.0600	17-9	20-11	G	400	390	355	325	270	212	167	132	104	64	–	–	49	–	–	–
	7″ 48 PSF	0.0358	14-11	15-9	G	400	371	306	256	216	183	157	135	111	68	40	–	52	–	–	–
		0.0474	16-5	18-0	G	400	400	370	310	263	224	192	153	121	75	45	–	58	–	–	–
		0.0600	17-4	20-1	G	400	400	400	370	334	263	208	165	132	83	50	–	64	42	–	–
	7.5″ 53 PSF	0.0358	14-4	15-2	15-9	400	400	344	287	242	206	177	152	132	87	53	–	68	44	–	–
		0.0474	16-1	17-4	G	400	400	400	348	295	252	217	188	151	96	59	–	75	50	–	–
		0.0600	16-11	19-5	G	400	400	400	400	383	322	256	204	164	105	66	–	83	56	–	–
	8″ 58 PSF	0.0358	13-10	14-9	15-2	400	400	383	320	271	230	197	170	147	109	68	40	83	58	–	–
		0.0474	15-9	16-9	G	400	400	400	388	329	281	242	209	182	120	76	46	95	65	42	–
		0.0600	16-7	18-10	G	400	400	400	400	391	335	289	249	201	131	84	52	104	72	48	–
	8.5″ 62 PSF	0.0358	13-4	14-3	14-9	400	400	400	355	299	255	219	189	163	124	86	53	92	73	49	–
		0.0474	15-5	16-3	G	400	400	400	400	364	311	268	232	202	148	96	60	118	82	56	–
		0.0600	16-3	18-3	G	400	400	400	400	400	370	320	278	243	161	105	67	129	91	62	40
	9″ 67 PSF	0.0358	12-11	13-10	14-4	400	400	400	390	329	281	241	208	180	137	105	67	102	81	63	40
		0.0474	15-2	15-10	G	400	400	400	400	400	342	295	256	223	171	118	76	130	102	71	47
		0.0600	16-0	17-9	G	400	400	400	400	400	400	352	306	268	195	130	85	157	113	79	53

No Shoring Shoring Required in Shaded Areas

COMPOSITE SLAB DESIGN NOTES:

1 Design is based on ANSI/SDI Standard for Composite Steel Floor Decks.
2. Simple span conditions for composite design assume no continuity of negative moments. Slab cracking at supports must be considered by the EOR for serviceability design.
3. Continuous span conditions are based on continuity over interior supports which requires appropriate negative moment reinforcing steel over supports.
4. Deflection limit of the composite slab is L/360 under total load.
5. Loads appearing in shaded areas require shoring. Do not exceed unshored spans shown above.
6. Composite slab spans are center-to-center of supports.
7. All loads are assumed to be statically applied. For dynamic Loads Consult EPIC Metals.
8. Slab weight has already been subtracted from the Uniform Service Load Capacity (LRFD) values shown above.

DECK DESIGN AS A WET CONCRETE FORM:

A. Maximum clear spans without shoring are based on the Steel Deck Institute recommendations for sequential loading and using LRFD methods. The table is based on 0.6Fy steel yield stress and deflection limits of L/180 or 0.75″, whichever is less.
B. Construction loads are 20 psf uniform loading or 150 lb concentrated load at midspan per SDI recommendations. If heavier construction loads or less form deflection is required, reduce spans or use temporary shoring.
C. Runways and planking is recommended during wet concrete placement.
D. Minimum bearing length is 1.5″ at end supports and 4″ at interior supports.
E. Listed slab weights include weight of 16 gage deck.
F. The slump of the concrete will influence the amount of water/cement leakage. Cleanup of the exposed ceiling surface will be required for leakage.
G. 48 foot max sheet length (recommended).
H. For temporary shoring of architecturally exposed ceilings: It is recommended to use extra wide shoring support bearing surface and/or to reduce the maximum clear span shoring distances shown in the above table so that permanent indentations to the deck/ceiling (under the shoring supports) do not occur.
I. The determination of the time for removal of supporting shores may be controlled by the presence of construction loads or deflection limitations. The removal of shores may have to occur after the concrete has reached its full compressive strength f′c, modules Ec and stiffness, particularly in those instances where the construction loads may be as high as the specified live load. If shoring is removed too early, more significant deflection may occur and may even result in permanent damage. The strength and stiffness of the concrete during the various stages of construction should be substantiated by job-constructed and job-cured test specimens (cylinders). See ACI 318-99 (Chapter 6).

Toris 4C Composite Floor Deck Systems

	Slab Depth and Weight	Design Thickness (in.)	Maximum Clear Span Without Shoring (ft.-in.)			Uniform Service Load Capacity (LRFD), psf														
						Simple Span Condition (See Note 2)											Continuous Span Condition (Negative Moment Reinforcement REQUIRED. See Note 3)			
			Single Span	Double Span	Triple Span	10′0″	11′0″	12′0″	13′0″	14′0″	15′0″	16′0″	17′0″	18′0″	20′0″	22′0″	24′0″	26′0″	28′0″	30′0″	32′0″
3 ksi Regular Weight Concrete (147 pcf)	6″ 67 PSF	0.0358	11-10	12-7	13-0	362	324	293	267	216	163	123	92	67	–	–	–	–	–	–	–
		0.0474	15-0	15-5	15-11	385	346	313	285	246	187	143	108	81	41	–	–	–	–	–	–
		0.0600	15-11	17-9	G	355	318	287	261	239	211	162	124	94	50	–	–	–	–	–	–
	6.5″ 74 PSF	0.0358	11-5	12-2	12-7	383	308	250	205	169	141	117	98	81	49	–	–	–	–	–	–
		0.0474	14-8	14-10	15-4	400	398	361	329	301	243	187	144	110	61	–	–	42	–	–	–
		0.0600	15-7	17-1	G	400	371	335	305	279	257	211	164	126	72	–	–	51	–	–	–
	7″ 80 PSF	0.0358	11-0	11-9	12-2	400	346	281	231	191	159	133	111	93	64	–	–	41	–	–	–
		0.0474	14-4	14-5	14-10	400	400	377	312	261	220	186	158	135	84	44	–	61	–	–	–
		0.0600	15-3	16-7	G	400	400	383	349	320	295	268	210	165	98	54	–	73	43	–	–
	7.5″ 86 PSF	0.0358	10-8	11-5	11-9	400	385	314	258	214	178	149	125	105	73	49	–	48	–	–	–
		0.0474	13-10	13-11	14-5	400	400	400	349	292	246	209	177	151	111	64	–	78	51	–	–
		0.0600	14-11	16-1	G	400	400	431	393	361	332	307	265	209	129	76	–	99	62	–	–
	8″ 92 PSF	0.0358	10-4	11-0	11-5	400	400	348	286	238	198	166	169	117	82	56	–	54	–	–	–
		0.0474	13-5	13-6	14-0	400	400	400	386	324	273	232	198	169	124	87	46	88	67	40	–
		0.0600	14-8	15-7	G	400	400	400	400	400	351	300	258	223	165	101	57	123	85	52	–
	8.5″ 98 PSF	0.0358	10-0	10-5	11-1	400	400	382	315	262	219	184	154	130	92	63	42	61	43	–	–
		0.0474	13-0	13-2	13-7	400	400	400	400	357	301	256	219	187	138	101	65	99	75	56	–
		0.0600	14-6	15-2	15-8	400	400	400	400	400	387	331	285	246	186	131	78	137	108	72	42
	9″ 104 PSF	0.0358	9-9	9-11	10-10	400	400	400	345	287	240	202	170	143	102	71	47	68	48	–	–
		0.0474	12-8	12-10	13-3	400	400	400	400	391	330	281	240	206	152	112	82	109	84	63	46
		0.0600	14-3	14-9	15-3	400	400	400	400	400	400	364	313	271	205	155	102	152	120	95	60
3 ksi Light Weight Concrete (110 pcf)	6″ 52 PSF	0.0358	13-4	14-0	14-6	373	336	292	219	165	125	94	71	52	–	–	–	–	–	–	–
		0.0474	16-1	17-1	G	397	357	324	252	191	146	111	84	63	–	–	–	–	–	–	–
		0.0600	17-0	19-8	G	366	329	299	273	217	167	128	98	75	40	–	–	–	–	–	–
	6.5″ 56 PSF	0.0358	12-10	13-6	14-0	376	304	249	206	172	145	122	95	71	–	–	–	–	–	–	–
		0.0474	15-9	16-7	G	400	400	374	318	243	188	145	112	85	47	–	–	–	–	–	–
		0.0600	16-7	19-0	G	400	383	348	318	247	212	165	128	99	57	–	–	–	–	–	–
	7″ 61 PSF	0.0358	12-5	13-1	13-7	400	341	279	232	194	163	138	117	95	53	–	–	–	–	–	–
		0.0474	15-5	16-1	G	400	400	368	307	259	220	184	144	112	65	–	–	47	–	–	–
		0.0600	16-3	18-5	G	400	400	397	363	334	266	208	163	128	77	–	–	57	–	–	–
	7.5″ 66 PSF	0.0358	12-0	12-9	13-2	400	380	312	259	216	182	155	132	112	72	–	–	53	–	–	–
		0.0474	15-1	15-7	G	400	400	400	343	289	245	210	180	143	86	49	–	65	–	–	–
		0.0600	16-0	17-11	G	400	400	400	400	376	328	259	205	162	100	59	–	77	48	–	–
	8″ 70 PSF	0.0358	11-8	12-5	12-10	400	400	345	287	240	203	172	147	125	92	54	–	65	43	–	–
		0.0474	14-10	15-2	15-8	400	400	400	380	321	273	233	201	173	111	66	–	85	55	–	–
		0.0600	15-9	17-5	G	400	400	400	400	400	345	296	252	201	128	78	44	100	66	40	–
	8.5″ 75 PSF	0.0358	11-4	12-1	12-6	400	400	380	316	265	224	190	162	139	102	71	–	73	55	–	–
		0.0474	14-8	14-9	15-3	400	400	400	400	353	301	258	222	192	139	86	50	108	73	45	–
		0.0600	15-6	17-0	G	400	400	400	400	445	380	327	283	246	159	101	61	126	86	56	–
	9″ 79 PSF	0.0358	11-0	11-9	12-2	400	400	400	400	346	290	245	209	178	153	113	83	53	81	62	46
		0.0474	14-4	14-5	14-11	400	400	400	400	387	330	283	244	211	160	109	66	119	93	61	–
		0.0600	15-3	16-7	G	400	400	400	400	400	400	359	311	271	194	126	79	155	109	73	47

No Shoring Shoring Required in Shaded Areas

COMPOSITE SLAB DESIGN NOTES:

1 Design is based on ANSI/SDI Standard for Composite Steel Floor Decks.
2. Simple span conditions for composite design assume no continuity of negative moments. Slab cracking at supports must be considered by the EOR for serviceability design.
3. Continuous span conditions are based on continuity over interior supports which requires appropriate negative moment reinforcing steel over supports.
4. Deflection limit of the composite slab is L/360 under total load.
5. Loads appearing in shaded areas require shoring. Do not exceed unshored spans shown above.
6. Composite slab spans are center-to-center of supports.
7. All loads are assumed to be statically applied. For dynamic Loads Consult EPIC Metals.
8. Slab weight has already been subtracted from the Uniform Service Load Capacity (LRFD) values shown above.

DECK DESIGN AS A WET CONCRETE FORM:

A. Maximum clear spans without shoring are based on the Steel Deck Institute recommendations for sequential loading and using LRFD methods. The table is based on 0.6Fy steel yield stress and deflection limits of L/180 or 0.75″, whichever is less.
B. Construction loads are 20 psf uniform loading or 150 lb concentrated load at midspan per SDI recommendations. If heavier construction loads or less form deflection is required, reduce spans or use temporary shoring.
C. Runways and planking is recommended during wet concrete placement.
D. Minimum bearing length is 1.5″ at end supports and 4″ at interior supports.
E. Listed slab weights include weight of 16 gage deck.
F. The slump of the concrete will influence the amount of water/cement leakage. Cleanup of the exposed ceiling surface will be required for leakage.
G. 48 foot max sheet length (recommended).
H. For temporary shoring of architecturally exposed ceilings: It is recommended to use extra wide shoring support bearing surface and/or to reduce the maximum clear span shoring distances shown in the above table so that permanent indentations to the deck/ceiling (under the shoring supports) do not occur.
I. The determination of the time for removal of supporting shores may be controlled by the presence of construction loads or deflection limitations. The removal of shores may have to occur after the concrete has reached its full compressive strength f′c, modules Ec and stiffness, particularly in those instances where the construction loads may be as high as the specified live load. If shoring is removed too early, more significant deflection may occur and may even result in permanent damage. The strength and stiffness of the concrete during the various stages of construction should be substantiated by job-constructed and job-cured test specimens (cylinders). See ACI 318-99 (Chapter 6).

Toris® CA & C Composite
Floor Deck Ceiling System Technical Tables

Toris CA Composite Floor Deck Systems

	Slab Depth and Weight	Design Thickness (in.)	Maximum Clear Span Without Shoring (ft.-in.)			Uniform Service Load Capacity (LRFD), psf														
						Simple Span Condition (See Note 2)										Continuous Span Condition (Negative Moment Reinforcement REQUIRED. See Note 3)				
			Single Span	Double Span	Triple Span	6′0″	8′0″	10′0″	12′0″	14′0″	15′0″	16′0″	17′0″	18′0″	19′0″	20′0″	16′0″	18′0″	20′0″	22′0″	24′0″
3 ksi Regular Weight Concrete (147 pcf)	4.5″ 40 PSF	0.0358	12-8	12-8	12-8	400	341	237	175	96	71	52	–	–	–	–	131	81	49	–	–
		0.0474	13-4	13-4	13-8	400	400	336	189	105	78	57	41	–	–	–	142	88	54	–	–
		0.0600	13-11	14-10	15-4	400	400	337	201	112	84	62	45	–	–	–	152	95	58	–	–
	5″ 46 PSF	0.0358	12-2	12-2	12-2	400	391	272	199	135	101	76	56	40	–	–	147	109	72	43	–
		0.0474	12-10	12-10	13-0	400	400	386	259	146	111	83	62	45	–	–	197	125	79	48	–
		0.0600	13-5	14-1	14-7	400	400	387	276	157	119	90	67	49	–	–	205	134	85	52	–
	5.5″ 52 PSF	0.0358	11-10	11-10	11-10	400	400	307	230	162	136	106	80	59	43	–	173	129	97	63	–
		0.0474	12-5	12-5	12-5	400	400	400	288	198	151	115	88	66	48	–	214	161	110	70	42
		0.0600	13-0	13-5	13-11	400	400	400	337	211	162	124	95	72	53	–	226	181	118	76	46
	6″ 58 PSF	0.0358	11-4	11-4	11-4	400	400	342	257	188	158	134	109	83	62	45	200	149	113	86	54
		0.0474	12-1	12-1	12-1	400	400	400	332	233	197	155	119	91	69	51	247	186	143	96	61
		0.0600	12-8	12-11	13-4	400	400	400	375	277	214	166	129	99	76	57	246	214	149	104	67
	6.5″ 64 PSF	0.0358	10-10	10-10	10-10	400	400	378	283	215	181	153	130	111	85	64	229	171	129	99	75
		0.0474	11-9	11-9	11-9	400	400	400	378	265	225	192	157	122	94	72	268	213	163	127	84
		0.0600	12-4	12-5	12-10	400	400	400	400	315	269	216	170	133	103	79	267	232	197	139	92
	7″ 71 PSF	0.0358	10-5	10-5	10-5	400	400	400	309	242	204	173	148	126	108	87	257	193	146	112	86
		0.0474	11-6	11-6	11-6	400	400	400	400	299	253	216	186	159	124	97	288	240	184	143	112
		0.0600	12-1	12-1	12-4	400	400	400	400	355	303	260	217	172	136	106	288	250	219	174	122
	7.5″ 77 PSF	0.0358	10-1	10-1	10-1	400	400	400	336	265	228	193	165	141	121	104	272	215	163	125	96
		0.0474	11-3	11-3	11-3	400	400	400	400	333	282	241	207	179	155	126	308	267	206	160	125
		0.0600	11-10	11-10	11-11	400	400	400	400	396	337	289	250	217	173	138	308	267	235	195	155
3 ksi Light Weight Concrete (110 pcf)	4.5″ 31 PSF	0.0358	13-6	13-6	13-6	400	341	237	127	69	50	–	–	–	–	–	94	58	–	–	–
		0.0474	14-2	14-5	14-10	400	400	261	138	76	56	41	–	–	–	–	103	64	–	–	–
		0.0600	14-9	16-2	G	400	400	280	149	82	61	44	–	–	–	–	112	69	42	–	–
	5″ 36 PSF	0.0358	13-0	13-0	13-0	400	391	272	175	97	73	54	–	–	–	–	132	82	51	–	–
		0.0474	13-8	13-9	13-10	400	400	354	190	107	80	60	44	–	–	–	144	91	56	–	–
		0.0600	14-3	15-5	15-11	400	400	378	204	115	87	65	48	–	–	–	154	98	61	–	–
	5.5″ 41 PSF	0.0358	12-7	12-7	12-7	400	400	307	226	133	101	76	57	42	–	–	168	113	72	45	–
		0.0474	13-3	13-3	13-7	400	400	400	254	145	111	84	64	47	–	–	194	124	80	50	–
		0.0600	13-10	14-9	15-3	400	400	400	271	273	119	91	69	52	–	–	207	134	86	55	–
	6″ 45 PSF	0.0358	12-3	12-3	12-3	400	400	342	257	176	135	103	79	60	44	–	195	148	98	63	–
		0.0474	12-11	12-11	13-1	400	400	400	318	192	148	114	88	67	50	–	239	165	108	70	44
		0.0600	13-6	14-2	14-8	400	400	400	353	206	159	123	95	73	55	41	256	177	117	77	49
	6.5″ 50 PSF	0.0358	11-11	11-11	11-11	400	400	378	283	211	175	136	105	81	62	46	224	169	130	85	55
		0.0474	12-7	12-7	12-7	400	400	400	363	247	192	149	116	90	69	53	273	208	142	95	62
		0.0600	13-2	13-8	14-2	400	400	400	400	265	206	161	126	98	76	58	278	229	154	103	68
	7″ 54 PSF	0.0358	11-8	11-8	11-8	400	400	400	309	238	202	173	136	107	83	64	234	192	148	112	74
		0.0474	12-4	12-4	12-4	400	400	400	400	291	243	191	150	118	92	72	281	235	182	124	83
		0.0600	12-10	13-3	13-8	400	400	400	400	334	261	206	163	128	101	79	300	262	197	134	91
	7.5″ 59 PSF	0.0358	11-4	11-4	11-4	400	400	400	336	265	227	194	167	136	107	84	240	209	165	129	97
		0.0474	12-1	12-1	12-1	400	400	400	400	325	277	238	189	150	119	94	287	250	205	157	108
		0.0600	12-7	12-10	13-3	400	400	400	400	383	325	258	205	163	130	103	321	281	243	170	118

No Shoring Shoring Required in Shaded Areas

COMPOSITE SLAB DESIGN NOTES:

1 Design is based on ANSI/SDI Standard for Composite Steel Floor Decks.
2. Simple span conditions for composite design assume no continuity of negative moments. Slab cracking at supports must be considered by the EOR for serviceability design.
3. Continuous span conditions are based on continuity over interior supports which requires appropriate negative moment reinforcing steel over supports.
4. Deflection limit of the composite slab is L/360 under total load.
5. Loads appearing in shaded areas require shoring. Do not exceed unshored spans shown above.
6. Composite slab spans are center-to-center of supports.
7. All loads are assumed to be statically applied. For dynamic Loads Consult EPIC Metals.
8. Slab weight has already been subtracted from the Uniform Service Load Capacity (LRFD) values shown above.

DECK DESIGN AS A WET CONCRETE FORM:

A. Maximum clear spans without shoring are based on the Steel Deck Institute recommendations for sequential loading and using LRFD methods. The table is based on 0.6Fy steel yield stress and deflection limits of L/180 or 0.75″, whichever is less.
B. Construction loads are 20 psf uniform loading or 150 lb concentrated load at midspan per SDI recommendations. If heavier construction loads or less form deflection is required, reduce spans or use temporary shoring.
C. Runways and planking is recommended during wet concrete placement.
D. Minimum bearing length is 1.5″ at end supports and 3″ at interior supports.
E. Listed slab weights include weight of 16 gage deck.
F. The slump of the concrete will influence the amount of water/cement leakage. Cleanup of the exposed ceiling surface will be required for leakage.
G. 48 foot max sheet length (recommended).
H. For temporary shoring of architecturally exposed ceilings: It is recommended to use extra wide shoring support bearing surface and/or to reduce the maximum clear span shoring distances shown in the above table so that permanent indentations to the deck/ceiling (under the shoring supports) do not occur.
I. The determination of the time for removal of supporting shores may be controlled by the presence of construction loads or deflection limitations. The removal of shores may have to occur after the concrete has reached its full compressive strength f′c, modules Ec and stiffness, particularly in those instances where the construction loads may be as high as the specified live load. If shoring is removed too early, more significant deflection may occur and may even result in permanent damage. The strength and stiffness of the concrete during the various stages of construction should be substantiated by job-constructed and job-cured test specimens (cylinders). See ACI 318-99 (Chapter 6).

Toris C Composite Floor Deck Systems

	Slab Depth and Weight	Design Thickness (in.)	Maximum Clear Span Without Shoring (ft.-in.)			Uniform Service Load Capacity (LRFD), psf														
						Simple Span Condition (See Note 2)										Continuous Span Condition (Negative Moment Reinforcement REQUIRED. See Note 3)				
			Single Span	Double Span	Triple Span	6′0″	8′0″	10′0″	12′0″	14′0″	15′0″	16′0″	17′0″	18′0″	19′0″	20′0″	16′0″	18′0″	20′0″	22′0″	24′0″
3 ksi Regular Weight Concrete (147 pcf)	4.5″ 55 PSF	0.0358	9-10	10-0	10-4	400	360	238	153	79	54	–	–	–	–	–	109	64	–	–	–
		0.0474	11-7	11-7	12-0	400	400	347	178	92	65	44	–	–	–	–	131	76	41	–	–
		0.0600	12-5	13-2	13-7	400	400	351	200	106	76	53	–	–	–	–	148	87	49	–	–
	5″ 61 PSF	0.0358	9-5	9-7	9-11	400	400	280	181	117	84	59	–	–	–	–	130	93	55	–	–
		0.0474	11-1	11-2	11-6	400	400	369	243	135	99	71	49	–	–	–	177	113	66	–	–
		0.0600	12-1	12-8	13-1	400	400	400	279	153	113	82	58	40	–	–	205	129	77	43	–
	5.5″ 67 PSF	0.0358	9-0	9-3	9-6	400	400	321	209	141	116	89	63	43	–	–	151	109	79	46	–
		0.0474	10-7	10-9	11-1	400	400	400	281	188	140	104	76	53	–	–	206	153	98	57	–
		0.0600	11-9	12-2	12-7	400	400	400	347	211	159	119	88	64	44	–	226	179	112	68	–
	6″ 73 PSF	0.0358	8-8	8-11	9-2	400	400	356	239	162	134	111	92	66	46	–	173	125	91	66	–
		0.0474	10-3	10-4	10-8	400	400	400	321	222	186	144	108	80	57	–	236	175	132	85	49
		0.0600	11-6	11-9	12-2	400	400	400	386	280	214	164	124	93	68	48	247	213	155	98	59
	6.5″ 79 PSF	0.0358	8-5	8-7	8-11	400	400	391	270	183	152	126	105	88	69	48	196	142	104	76	55
		0.0474	9-10	10-0	10-4	400	400	400	363	251	211	178	147	112	83	60	267	199	150	114	73
		0.0600	11-3	11-4	11-9	400	400	400	400	322	272	216	167	128	97	72	267	231	197	135	86
	7″ 85 PSF	0.0358	8-1	8-4	8-7	400	400	400	301	205	170	142	119	99	82	68	219	160	117	86	62
		0.0474	9-7	9-8	10-0	400	400	400	400	281	236	200	170	145	114	86	288	223	168	128	98
		0.0600	10-11	11-0	11-5	400	400	400	400	360	305	260	217	169	131	100	288	248	217	172	117
	7.5″ 92 PSF	0.0358	7-11	8-1	8-4	400	400	400	333	227	189	158	132	111	92	77	242	177	131	96	70
		0.0474	9-3	9-5	9-9	400	400	400	400	311	262	222	189	161	138	116	308	247	187	143	109
		0.0600	10-7	10-8	11-1	400	400	400	400	399	338	289	248	214	171	133	308	266	233	192	150
3 ksi Light Weight Concrete (110 pcf)	4.5″ 42 PSF	0.0358	10-11	11-1	11-5	400	360	233	120	61	42	–	–	–	–	–	87	49	–	–	–
		0.0474	12-6	12-10	13-3	400	400	269	139	72	51	–	–	–	–	–	102	59	–	–	–
		0.0600	13-3	14-6	15-0	400	400	301	156	83	59	42	–	–	–	–	116	69	–	–	–
	5″ 47 PSF	0.0358	10-6	10-8	11-0	400	400	275	169	90	65	45	–	–	–	–	125	74	42	–	–
		0.0474	12-2	12-4	12-9	400	400	357	193	105	77	55	–	–	–	–	144	88	51	–	–
		0.0600	12-11	14-0	14-6	400	400	400	216	119	88	64	46	–	–	–	162	100	60	–	–
	5.5″ 51 PSF	0.0358	10-1	10-3	10-7	400	400	318	209	125	93	68	48	–	–	–	153	106	64	–	–
		0.0474	11-11	11-11	12-4	400	400	400	260	145	108	80	59	42	–	–	196	123	76	44	–
		0.0600	12-7	13-6	14-0	400	400	400	290	163	123	92	69	50	–	–	220	139	87	53	–
	6″ 56 PSF	0.0358	9-9	9-11	10-3	400	400	356	239	165	127	95	70	51	–	–	176	130	90	54	–
		0.0474	11-6	11-6	11-11	400	400	400	316	193	147	111	84	62	44	–	235	165	105	65	–
		0.0600	12-4	13-1	13-6	400	400	400	377	217	166	127	96	72	53	–	259	186	120	76	46
	6.5″ 61 PSF	0.0358	9-5	9-7	9-11	400	400	391	270	187	157	127	96	72	52	–	199	148	112	76	45
		0.0474	11-1	11-2	11-7	400	400	400	357	250	192	148	113	86	64	47	266	201	140	91	56
		0.0600	12-1	12-8	13-1	400	400	400	400	279	216	167	129	99	75	56	281	241	159	104	67
	7″ 65 PSF	0.0358	9-1	9-4	9-8	400	400	400	302	209	176	149	127	97	73	54	223	166	125	95	64
		0.0474	10-9	10-10	11-3	400	400	400	399	280	238	190	148	114	88	66	297	225	173	120	78
		0.0600	11-10	12-4	12-9	400	400	400	400	352	274	214	168	131	102	78	303	264	204	137	91
	7.5″ 70 PSF	0.0358	8-10	9-1	9-5	400	400	400	334	232	195	165	141	120	97	74	247	184	140	106	81
		0.0474	10-5	10-7	10-11	400	400	400	400	311	264	226	188	147	115	89	324	250	192	150	103
		0.0600	11-8	12-0	12-5	400	400	400	400	393	335	268	212	168	132	103	324	283	248	175	119

No Shoring Shoring Required in Shaded Areas

COMPOSITE SLAB DESIGN NOTES

1 Design is based on ANSI/SDI Standard for Composite Steel Floor Decks.
2. Simple span conditions for composite design assume no continuity of negative moments. Slab cracking at supports must be considered by the EOR for serviceability design.
3. Continuous span conditions are based on continuity over interior supports which requires appropriate negative moment reinforcing steel over supports.
4. Deflection limit of the composite slab is L/360 under total load.
5. Loads appearing in shaded areas require shoring. Do not exceed unshored spans shown above.
6. Composite slab spans are center-to-center of supports.
7. All loads are assumed to be statically applied. For dynamic Loads Consult EPIC Metals.
8. Slab weight has already been subtracted from the Uniform Service Load Capacity (LRFD) values shown above.

DECK DESIGN AS A WET CONCRETE FORM:

A. Maximum clear spans without shoring are based on the Steel Deck Institute recommendations for sequential loading and using LRFD methods. The table is based on 0.6Fy steel yield stress and deflection limits of L/180 or 0.75″, whichever is less.
B. Construction loads are 20 psf uniform loading or 150 lb concentrated load at midspan per SDI recommendations. If heavier construction loads or less form deflection is required, reduce spans or use temporary shoring.
C. Runways and planking is recommended during wet concrete placement.
D. Minimum bearing length is 1.5″ at end supports and 3″ at interior supports.
E. Listed slab weights include weight of 16 gage deck.
F. The slump of the concrete will influence the amount of water/cement leakage. Cleanup of the exposed ceiling surface will be required for leakage.
G. For temporary shoring of architecturally exposed ceilings: It is recommended to use extra wide shoring support bearing surface and/or to reduce the maximum clear span shoring distances shown in the above table so that permanent indentations to the deck/ceiling (under the shoring supports) do not occur.
H. The determination of the time for removal of supporting shores may be controlled by the presence of construction loads or deflection limitations. The removal of shores may have to occur after the concrete has reached its full compressive strength f′c, modules Ec and stiffness, particularly in those instances where the construction loads may be as high as the specified live load. If shoring is removed too early, more significant deflection may occur and may even result in permanent damage. The strength and stiffness of the concrete during the various stages of construction should be substantiated by job-constructed and job-cured test specimens (cylinders). See ACI 318-99 (Chapter 6).

Toris® C(A) & 4C(A) Composite Floor Deck Ceiling Systems
Specifications

Notes: Omit underlined areas for non-acoustic applications.

PART 1: GENERAL

1.1 SUMMARY

The requirements of this specification section include all materials, equipment and labor necessary to furnish and install Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck System.

A. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck shall serve as permanent metal form and total positive reinforcement for concrete floor slabs as indicated on the contract drawings.

B. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck shall provide an exposed bottom surface that is substantially flat. The narrow rib openings of the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall provide the appearance of a linear ceiling. Sidelap fasteners shall be concealed within the depth of the dovetail-shaped ribs.

C. Toris 4CA Acoustical Floor Deck: Toris 4C Ankore hanging devices (supplied with ankore locks) that are specially configured to fit into the dovetail-shaped ribs of the Toris 4CA Acoustical Roof Deck panels shall be available. These hanging devices shall be utilized wherever any related work is suspended from Toris 4CA Acoustical Roof Deck. Toris 4C Ankore hanging devices shall be furnished by the installer of the related work unless otherwise indicated.

   Toris CA Acoustical Floor Deck: Toris C Wedge Bolt hanging devices (supplied with Wedge Locks) that are specially configured to fit into the dovetail-shaped ribs of the Toris CA Acoustical Composite Floor Deck panels shall be available. These hanging devices shall be utilized whenever any related work is suspended from an Toris CA Acoustical Composite Floor Deck slab. Toris CA Acoustical Wedge Bolt hanging devices shall be furnished by the installer of the related work unless otherwise indicated.

1.2 RELATED WORK

The following related work is not part of this specification section:

A. Cast-In-Place Concrete: Concrete fill, welded wire fabric, reinforcing steel, and temporary shoring.

B. Structural Steel: Supplementary framing and shear studs.

C. Fireproofing: Preparation for and application of fireproofing to supporting steel members.

D. Ceilings: Attachments to Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck.

E. Painting: Preparation for and application of field painting.

F. Mechanical: Attachments to Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck.

G. Electrical: Attachments to Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck.

1.3 SUBMITTALS

Submit the following items in accordance with the conditions of the contract and appropriate specification sections:

A. Product data for Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck and Toris 4C or Toris C hanging devices including material types, dimensions, finishes, load capacities, and U.L. fire resistance ratings.

B. Erection drawings for Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck and related accessory items showing profiles and material thicknesses, layout, anchorage, openings as dimensioned on the structural drawings, and shoring requirements.

1.4 REFERENCE STANDARDS

A. Section Properties: Shall be computed in accordance with the *American Iron and Steel Institute (AISI) Specification for the Design of Cold-Formed Steel Structural Members.*

B. Welding: Shall comply with applicable provisions of *American Welding Society (AWS) D1.3 Structural Welding Code-Sheet Steel.*

C. Fire Resistance Classification: Shall be acceptable for use in *Underwriters Laboratories Fire Resistance Design No. D980* (Toris 4CA Acoustical) or *Underwriters Laboratories Fire Resistance Design No. D971* (Toris CA Acoustical). All Toris 4CA Acoustical and Toris CA Acoustical Composite Floor Deck panels used in rated fire resistance designs shall bear the appropriate U.L. classification marking.

D. Cast-In-Place Concrete: Shall be in accordance with applicable sections of chapters 3, 4, and 5 of *American Concrete Institute (ACI) 318 Building Code Requirement for Reinforced Concrete*. Minimum compressive strength shall be 3000 psi. Admixtures containing chloride salts shall not be used. Additionally, all concrete constituents including but not limited to aggregates, sand, and water shall be closely monitored to assure that the chlorides do not exceed the limits proscribed in ACI 318.

E. Noise Reduction Coefficient: Shall be verified by the results of sound absorption tests conducted in accordance with ASTM C423 and E795. A minimum NRC of 0.85 shall be provided (100% acoustic). Copies of the sound absorption test shall be submitted upon request.

PART 2: PRODUCTS

2.1 MANUFACTURER

A. In accordance with the requirements of this specification section, provide products manufactured by EPIC Metals, Rankin, PA.

B. Substitutions: (Under Provisions of Division 01) Not permitted.

2.2 MATERIALS

A. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck ceiling panels shall be cold-formed from steel sheets conforming to ASTM A653, Grade 40 and Grade 33 or equal, having a minimum yield strength of 40,000 psi and 33,000 psi.

B. Before forming, the steel sheets shall have received a hot-dip protective coating of zinc conforming to ASTM A924, Class G60 or G90.

   Primer Paint Option—Prior to forming, galvanized steel shall be chemically cleaned and pre-treated followed by (on the ceiling surface) an oven-cured epoxy primer and a second coat of oven-cured polyester primer paint applied in the manufacturer's standard color of off-white. Compatibility of field applied finish paint with factory applied primer paint shall be the responsibility of the painting contractor.

   Finish Paint Option—Prior to forming, galvanized steel shall be chemically cleaned and pre-treated followed by (on the ceiling surface) an oven-cured epoxy primer and a second coat of oven-cured polyester paint. After factory painting is complete, a plastic removable film shall be applied to the bottom surface of the panels to protect paint finish during manufacturing, shipping, and handling. The protective film is to be removed by the erector prior to installation.

   Paint Option—For specialized painting systems that are recommended for Natatoriums and other high humidity applications, contact EPIC Metals.

C. The minimum uncoated thickness of material supplied shall be within 5% of the design thickness.

2.3 FABRICATION

A. Toris 4CA Acoustical Composite Floor Deck panels shall have continuous dovetail-shaped ribs spaced 8˝ on center. The profile shall be 4˝ deep.

   Toris CA Acoustical Composite Floor Deck panels shall have continuous dovetail-shaped ribs spaced 6˝ on center. The profile shall be 2.5˝ deep.

B. The design thickness and minimum section properties shall be indicated on the contract drawings.

C. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall have full depth positive registering sidelaps that can be fastened together by welds or screws.

D. Whenever possible, Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be fabricated to provide a minimum three span condition.

E. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be fabricated from sections formed with dovetail-shaped ribs. The sections shall be perforated in the areas between the dovetail-shaped ribs as indicated on the contract drawings. All perforated areas shall be covered with "cap" sections formed from galvanized steel sheets and factory attached to the underlying perforated sections. The combination of these sections shall form units that contain cavities suitable for sound absorbing elements.

2.4 ACCESSORIES

A. Toris 4C Ankore hanging devices (which include Ankore locks) or Toris C Wedge Bolt hanging devices (which include Wedge Locks) shall be installable and relocatable anywhere along the length of the interior ribs of the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels.

B. Column closures, end closures, and side closures shall be provided as required by the manufacturer's standards.

C. Manufacturer's standard flexible or metal type rib profile closures shall be provided as indicated on the contract drawings.

D. Slab edge forms of 10 gage or less material thickness shall be provided as indicated on the contract drawings.

E. Reinforcement for small openings that are shown on the structural drawings and do not require supplementary framing shall be provided based on the manufacturer's recommendations.

F. Acoustic elements shall be factory installed above the perforated holes in the bottom flat area between the dovetail-shaped ribs. To facilitate field painting of the perforated surfaces, the sound absorbing elements shall be supported above the surface on corrosion resistant spacers. Sound absorbing elements and spacers shall be factory installed.

PART 3: EXECUTION

3.1 GENERAL

Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels and accessories shall be installed in strict accordance with the manufacturer's approved erection drawings, installation instructions, the *Steel Deck Institute (SDI) Manual for Construction with Steel Deck*, and all applicable safety regulations.

3.2 BEFORE INSTALLATION

A. The need for temporary shoring shall be investigated. Shoring tables published by the manufacturer shall be consulted to determine if shoring will be required. Unshored spans shall be reduced if greater construction loads are anticipated or if less deflection of the deck as a form is allowable.

B. The supporting frame and other work relating to Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck shall be examined to determine if this work has been properly completed. Temporary shoring, if required, shall be in place prior to installation of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels.

C. All components of the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck System shall be protected from significant damage during shipment and handling. If storage at the jobsite is required, bundles or packages of these materials shall be elevated above the ground, sloped to provide drainage, and protected from the elements with a ventilated waterproof covering.

3.3 INSTALLATION

A. Bundles or packages of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck System components shall be located on supporting members in such a manner that overloading of any of the individual members does not occur. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall not be placed on concrete supporting members until after the members have adequately cured or properly designed formwork is in place.

B. Before being permanently fastened, Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be placed with ends accurately aligned and adequately bearing on supporting members or formwork. Proper coverage of the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be maintained. Care must be taken by the erector to maintain uniform spacing of the bottom rib opening (equal to the openings in the profiled sheet) at the sidelaps.

C. Field cutting of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be performed in a neat and precise manner. Only those openings shown on the structural drawings shall be cut. Other openings shall be approved by the structural engineer and cut by those requiring the opening.

D. Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be fastened to all supporting members with ¾˝ diameter puddle welds at a nominal spacing of 8˝ on center or less as indicated on the manufacturer's erection drawings.

E. Sidelaps of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels shall be fastened together by welds or screws at a spacing of 36˝ on center or less as indicated on the manufacturer's erection drawings. Sides of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels that are located at perimeter edges of the building shall be fastened to supporting members at a spacing of 36˝ on center or less as indicated on the manufacturer's erection drawings.

F. Column closures, end closures, side closures, rib closures, slab edge forms, and supplied reinforcement for small openings shall be fastened as indicated on the manufacturer's erection drawings.

G. Shear studs may be substituted for puddle welds to permanently fasten Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels to steel supporting members. The shear stud manufacturer shall provide instructions for welding studs through Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck.

H. Mechanical fasteners may be substituted for puddle welds to permanently fasten Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck panels to supporting members. The mechanical fastener manufacturer shall provide documentation as to the equivalent load capacity and proper installation procedure for each type of fastener being used.

3.4 WORK BY OTHER TRADES

A. The slump of the concrete will determine the amount of concrete leakage and cleanup that will be required to the ceiling surface. On all projects some cleanup of the ceiling surface will be required.

3.5 AFTER INSTALLATION

A. Construction loads that could damage the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck such as heavy concentrated loads and impact loads shall be avoided. Planking shall be used in all high traffic areas.

B. Prior to placement of concrete, the top surface of Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck shall be cleaned of all debris, grease, oil, and other foreign substances. Cleaning the bottom surface of the Toris 4CA Acoustical or Toris CA Acoustical Composite Floor Deck for field painting shall be the responsibility of the painting contractor.

C. Galvanized coatings that are significantly damaged shall be repaired. An appropriate galvanized repair paint shall be used, and the paint manufacturer's application instructions shall be followed.

D. The determination of the time for removal of supporting shores may be controlled by the presence of construction loads or deflection limitations. The removal of shores may have to occur after the concrete has reached its full compressive strength f'c, modules Ec and stiffness, particularly in those instances where the construction loads may be as high as the specified live load. If shoring is removed too early, more significant deflection may occur and may even result in permanent damage. The strength and stiffness of the concrete during the various stages of construction should be substantiated by job-constructed and job-cured test specimens (cylinders). See ACI 318-99 (Chapter 6).

3.6 PROTECTION

When the Toris 4C or Toris C Composite Floor Slab is used in an exterior application (such as a balcony) the Toris 4C or Toris C steel deck shall be adequately protected by field priming and painting with a rust inhibitive paint or by stuccoing the deck. The surface of the concrete shall also be adequately sealed. The composite deck provides the positive reinforcement for the slab; therefore, the finish on the steel deck must be specified by the architect and engineer for the environment it will be used in to protect the steel deck for the life of the structure.

Wilsonart® Headquarters, Temple, Texas, Toris® 4A LEED Silver
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Designer's **Responsibility** & Warranty

Designer's Responsibility

The information presented in this brochure has been prepared in accordance with generally recognized engineering principles. We recommend that this information not be used or relied upon for any application without a thorough review by a licensed professional engineer, designer, or architect who will be competent to evaluate the significance and limitations of this material and who will accept responsibility for the application of this material for any specific application.

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Since hazards may be associated with the handling, installation, or use of steel and its accessories, prudent construction practices should always be followed. We recommend that the parties involved in such handling, installation, or use review all applicable manufacturer's material safety data sheets, applicable rules and regulations of the Occupational Safety and Health Administration and other government agencies having jurisdiction over such handling, installation, or use, and other relevant construction practice publications, including the Steel Deck Institute (SDI) *Manual for Construction with Steel Deck*.

Warranty

EPIC Metals warrants that materials to be furnished, insofar as they are manufactured by EPIC Metals, shall be free from structural defects. In the event of the failure of the material within one year from the date of delivery, and providing that such failure is attributed to defects found to have existed at the time of delivery, EPIC Metals' liability hereunder shall be limited to furnishing necessary replacement material. EPIC Metals assumes no liability for damages, losses, or injuries, direct or consequential, that may arise from use or inability to use the products.

Except as herein provided, there are no expressed or implied warranties as to merchantability or fitness of the materials for any particular purpose.

Westside Multimodal Transit Center
San Antonio, Texas
Toris

Front Cover: Columbia Basin Health Association
Othello, Washington
Toris 4

Specifying EPIC Metals' Toris® Roof and Floor Deck Ceiling Systems for your next project can bring the structural art of the building's design and acoustics to the appreciation of the public. Acoustic Toris enables the architect or engineer to control the interior sound environment of the building. EPIC Metals continues to be the innovative leader in the design and production of roof and floor deck ceiling systems.

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EPIC Roof and Acoustical Deck Systems

EPIC Composite Acoustical Floor and Form Decks

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VERTICAL DESIGN **OPTIMAL ACOUSTICS**

SKYFOLD®

Acoustic *leader in*
vertical ***retractable walls***

3 LINES + 8 PRODUCTS = ENDLESS POSSIBILITIES

Discover the Skyfold® family of products, vertically folding operable walls that unite design, performance, flexibility and acoustics. Lightweight, electric and easy to operate, all Skyfold systems are:

- **Acoustic** walls that exceed industry standards
- **Space** dividers that are self-retracting and made-to-measure
- **Decorative** elements with distinctive, customizable design options

02 CLASSIC SERIES

04 ZENITH SERIES

06 MIRAGE

08 SKYFOLD® ADVANTAGES

09 COMPARISON SUMMARY

SKYFOLD **CLASSIC** SERIES

The Classic series was developed to meet the acoustic challenges of geometrically variable spaces, from the simple (offices, classrooms) to the complex (auditoriums with sloped or stepped floors).

Exceeding industry standards, the acoustic soundproofing indexes for Classic 51, 55 and 60 ensure privacy and confidentiality are respected from one space to another. The Classic NR model also reduces ambient noise within meeting and conference rooms, increasing the user's comfort.

ACOUSTIC PERFORMANCE OF INSTALLED SYSTEMS

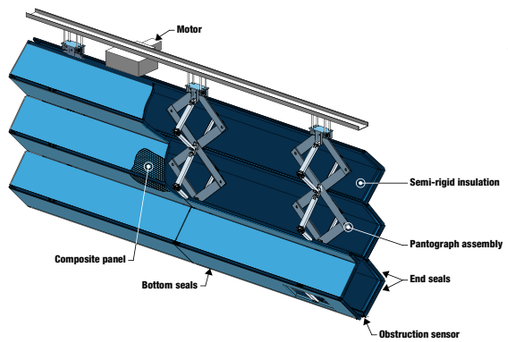
- **Classic 51**_____Exceptional soundproofing (STC 51 / RW 51)
- **Classic 55**_____Superior soundproofing (STC 55 / RW 54)
- **Classic 60**_____Maximum soundproofing (STC 60 / RW 59)
- **Classic NR**_____Excellent sound absorption with a noise reduction coefficient (NRC/SAC) of up to 0.65 (STC 50 / RW 49)

CUSTOM DIMENSIONS

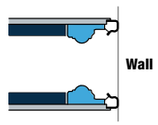
- **Width:**_____Unlimited
- **Height:**_____Up to 36 feet (11m)

FINISHES

Wood Veneer, Metal, Vinyl, Fabric, Plastic Laminate (Melamine), Painted, Mural, Writing Surface or create a custom design.



End seals (enlarged)



SKYFOLD classic series

SKYFOLD **ZENITH** SERIES

Zenith combines the accordion folding elements found in the Classic series at the top portion of the wall with a slick straight down descent thereafter.

Ideal for areas that may have wall obstructions which could limit the use of a vertically folding wall.

ACOUSTIC PERFORMANCE OF INSTALLED SYSTEMS

- **Zenith 48**_____Excellent soundproofing (STC 48 / RW 47)
- **Zenith 55**_____Superior soundproofing (STC 55 / RW 54)
- **Zenith 60**_____Maximum soundproofing (STC 60 / RW 59)

CUSTOM DIMENSIONS

- **Width:**_____Up to 48 feet (14,6m)
- **Height:**_____Up to 12 feet (3.6m)

FINISHES

Wood Veneer, Metal, Vinyl, Fabric, Plastic Laminate (Melamin), Painted, Mural, Writing Surface or create a custom design.

(Zenith 48 – Skyfold Standard Fabric and Vinyl finishes only)

SKYFOLD MIRAGE

Mirage incorporates Skyfold technology in order to provide the user with the added luxury of transparency!

Clean lines, a lightweight structure into which a wide range of glass and plexiglass panels can be inserted, high efficiency acoustic seams, and ease of maintenance make Mirage the ideal solution for bright, sophisticated and welcoming spaces.

CUSTOM DIMENSIONS

- **Width:**_____Unlimited
- **Height:**_____Up to 24 feet (7,3m)

FINISHES

Glass available in a variety of finishes, including Plexiglass, Lexan©, Bullet-Proof Glass, Frosted Glass, and Plastic Honeycomb.

10 GOOD REASONS TO CHOOSE SKYFOLD®

01 ***ACOUSTICALLY SUPERIOR:*** All Skyfold walls offer soundproofing indexes above and beyond industry standards. In addition, the measurable acoustic qualities apply to the entire installed system, not just the panels!

02 ***SIMPLE:*** Electrically operated systems that work at the turn of a key!

03 ***SPACE:*** Valuable floor space is no longer compromised as Skyfold walls retract neatly into the ceiling when not required.

04 ***DESIGN:*** Create a customized look with a wide selection of materials and finishes that can be mixed and matched, with no visible mechanisms, floor or wall tracks.

05 ***ECONOMICAL:*** Requires little manpower and minimal maintenance.

06 ***FAST:*** Skyfold lets you reconfigure a space in mere minutes.

07 ***QUIET:*** Silent operation – create a banquet hall without disturbing the conference going on right next door!

08 ***LIGHTWEIGHT:*** Thanks to an ingenious structural design using less steel, Skyfold operable walls are lighter than most traditional systems.

09 ***FLEXIBILITY:*** Made-to-measure systems adapt to all types of environments, whether large or small, simple or complex (sloped gymnasiums, stepped-floor auditoriums, stairs, etc.).

10 ***RELIABILITY:*** Skyfold walls are durable and built to ensure many years of dependable operation. We stand behind our products by offering an industry leading 10 year warranty!

SKYFOLD PRODUCT LINE COMPARISON SUMMARY

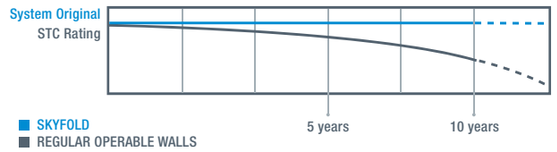
	Skyfold Classic 51	Skyfold Classic 55	Skyfold Classic 60	Skyfold Classic NR	Skyfold Zenith 48	Skyfold Zenith 55	Skyfold Zenith 60	Skyfold Mirage
TECHNICAL (IMPERIAL)								
STC (System)	51	55	60	50	48	55	60	-
STC (Panel)	61	61	66	60	57	61	66	-
NRC (System)	-	-	-	up to 0.65	-	-	-	-
Max Height (ft.)	36	36	28	36	12	12	12	24
Max Length (ft.)	unlimited	unlimited	unlimited	unlimited	48	48	48	unlimited
Weight (lbs/sq.ft.)	7	7.6	9.4	7.5	6	6.8	8.6	8
Available Finishes	Various*	Various*	Various*	Fabric only	STD Fabric/vinyl	Various*	Various*	Various**
Ceiling space required for storage (ft) - (approx.)	2'-0"to 6'- 4"	2'-0"to 6'- 4"	2'-0"to 5'-0"	2'-0"to 6'-4"	2'-0"to 2'-8.25"	2'-0"to 2'-8.25"	2'-0"to 2'-8.25"	3'-2"to 4'-9"
Pocket width (ft) - (approx.)	55" to 69"	55" to 69"	55" to 69"	55" to 69"	47.75" to 62.75"	47.75" to 62.75"	47.75" to 62.75"	44" to 61"
TECHNICAL (METRIC)								
RW (System)	51	54	59	49	47	54	59	-
RW (Panel)	60	60	64	58	55	60	64	-
SAC (System)	-	-	-	up to 0.65	-	-	-	-
Max Height (mm)	11,000	11,000	8,535	11,000	3,660	3,660	3,660	7,315
Max Length (mm)	unlimited	unlimited	unlimited	unlimited	14,600	14,600	14,600	unlimited
Weight (kg/m²)	34.2	37.1	46	36.6	29.3	33.3	42	39.1
Available Finishes	Various*	Various*	Various*	Fabric only	STD Fabric/vinyl	Various*	Various*	Various**
Ceiling space required for storage (mm) - (approx.)	615 to 1,960	615 to 1,960	615 to 1,530	615 to 1,960	615 to 820	615 to 820	615 to 820	965 to 1,450
Pocket width (mm) - (approx.)	1,385 to 1,750	1,385 to 1,750	1,385 to 1,750	1,385 to 1,750	1,210 to 1,595	1,210 to 1,595	1,210 to 1,595	1,105 to 1,550
ADDITIONAL FEATURES								
Auto-reverse	Y	Y	Y	Y	Y	Y	Y	Y
Floor track	N	N	N	N	N	N	N	N
Wall tracks	N	N	N	N	N	N	N	Y
Obstruction safety sensor	Y	Y	Y	Y	Y	Y	Y	N
Infrared sensor	N	N	N	N	N	N	N	Y
Back-up operation	Y	Y	Y	Y	Y	Y	Y	Y
AVAILABLE OPTIONS								
10 year parts warranty	Y	Y	Y	Y	Y	Y	Y	Y

* Finishes must not exceed 1/8" thick (3mm) or weigh more than 0.11 lbs/sq.ft. (0.54 kg./m²)

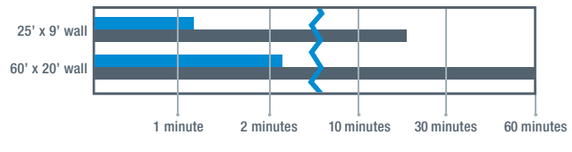
** Please refer to the technical section of our website for available finishes

Please note that certain figures listed above were approximated for comparison purposes only.
For specific and complete technical information, REVIT Drawings and drawing details, please visit our website.

ACOUSTIC PERFORMANCE OF SKYFOLD WALLS AS COMPARED TO CONVENTIONAL OPERABLE WALLS



SKYFOLD DEPLOYMENT TIME REQUIRED COMPARED TO CONVENTIONAL OPERABLE WALLS



SKYFOLD'S EXCLUSIVE LINE OF VERTICALLY FOLDING OPERABLE WALL SYSTEMS PROVIDES A UNIQUE WAY TO SUBDIVIDE SPACE. OUR CUSTOM BUILT SYSTEMS ARE COMPLETELY AUTOMATIC AND RETRACT INTO A CEILING CAVITY WITH A SIMPLE TURNKEY OPERATION.

- **CLASSIC SERIES** State-of-the-art acoustics for privacy and soundproofing
- **ZENITH SERIES** Cutting-edge, innovative vertical wall technology
- **MIRAGE** Brings in the light with your choice of transparent panels

Skyfold is pleased to be an official member of the U.S. Green Building Council. The Green Council is committed to promoting better designed buildings that are not only more environmentally and socially responsible, but also help improve the quality of life for those who occupy them and the communities in which they are built. The Council has developed a benchmarking system known as LEED (Leadership in Energy & Environmental Design). When it comes to recycled materials, architects and owners who choose a Skyfold vertically folding operable wall system can calculate the following toward LEED accreditation on their projects.

In order to continue protecting our environment, it is essential that we all do our part by using recycled materials whenever possible. Skyfold is proud to help.

Recycled materials	Up to 97%
Post-consumer	Up to 27%
Pre-consumer	Up to 50%

SKYFOLD® LIMITED WARRANTY
WORKMANSHIP: Parts & labour - 2 years or 5,000 cycles*
Optional extended warranty on parts available - 10 years or 5,000 cycles*
Acoustical Performance - 10 years
*First occurrence from date of shipment

SKYFOLD®, SKYFOLD® Classic™, SKYFOLD® Zenith™ and SKYFOLD Mirage® are registered trademarks of Railtech Ltd and Railquip Enterprises Inc.

For more information visit our website or contact us directly.
MAIN OFFICE

T +1 (514) 457-4767
F +1 (514) 457-7111
info@skyfold.com
www.skyfold.com

325 Lee Avenue
Montreal, Quebec
CANADA H9X 3S3

SKYFOLD®

DISTRIBUTOR:
New York, New Jersey, and greater Philadelphia area

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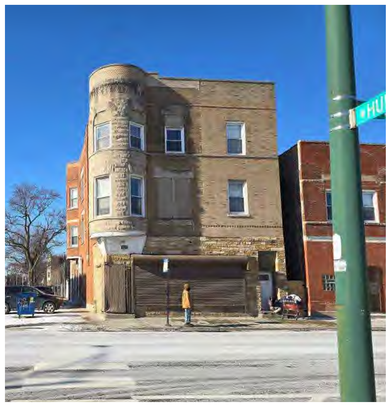
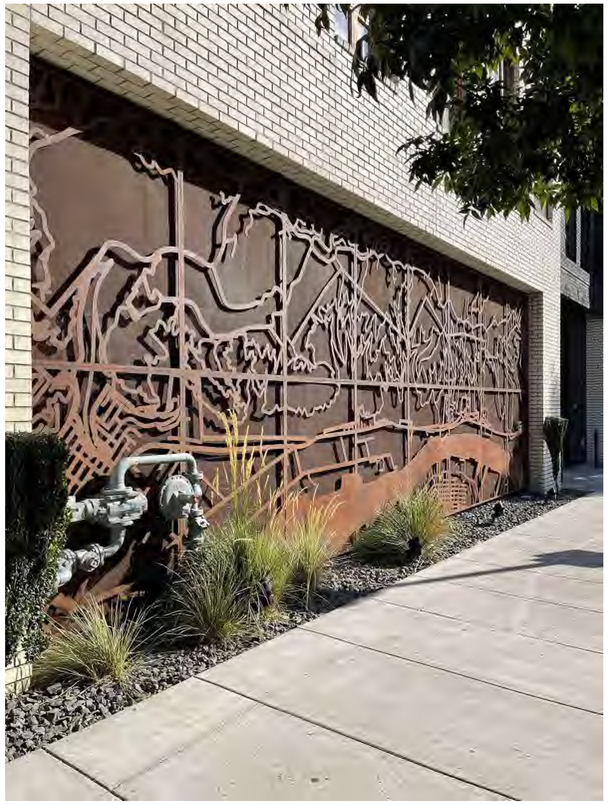


CONTEXT IMAGERY

BUILDING EXTERIOR PRECEDENT IMAGERY



MURAL WALL PRECEDENT IMAGERY

Design Milestone Review Comments Register

Public Building Commission · Richard J. Daley Center · 50 West Washington, Room 200 · Chicago, Illinois 60602 · Tel: (312) 744-3090 · Fax: (312) 744-8005

Project Name:	FY24 PROJECT
Project Number:	11340
Design Milestone:	

100% Schematic Design Phase

Date Documents Issued to Review Team:	
March 14, 2025	
Date Comments Issued to AOR:	March 28, 2025
#/#/2025	REV0 (Outstanding per Prior Phase - Ocre)
#/#/2025	REV1 (Yellow)
#/#/2025	REV2 (Blue)
Date Comments returned to PBC:	
#/#/2025	FINAL Submittal for Milestone Meeting
#/#/2025	REV1 for Reconciliation and Record

Review Team

KELLS (GEORGE) PARK FIELDHOUSE

User Agency (CPD): Heather Gleason (HG), Jennifer Bulin-Larson (JBL), Michael Lange (ML)

PBC: Kerl LaJeune (KL), Ray C Giderof (RCG), Jose Barajas (JB), Deeta E Bernstein (DEB), Randy Williams (RW), Miriam Gutierrez (MG), Justin Cafferty (JC), MaryAnn VanHook (MAVH), Mary Cavanaugh (MC), Robert Ochi (RO), John Pietrzyk (JP)

User Agency Consultants:

PBC Consultants (Environmental Manager): Ryan LaDieu (RLD)
PBC Consultants (DA Technical Reviewers): TBD
PBC Consultants (Environmental & Others): AECOM Technical Services

Design Team

DESIGN ARCHITECT (DA) TEAM

Design Architect: Brook Architecture (BA)
Structural Engineer: K2N Crest
Landscape/Civil Architect: Terra Engineering
Mech/Elec. Engineer: Bailey Edward (BE)
Environmental: SMNGA Ltd.
Cost Estimator: RLB

ARCHITECT OF RECORD (AOR) TEAM

Architect of Record: TBD
Design Lead: TBD
LEED Consultant: TBD
Civil Engineer: TBD
Landscape Architect: TBD
Structural Engineer: TBD
Mech/Elec. Engineer: TBD
Commissioning Agent: TBD

RESPONSE TO ACTION REQUIRED

A. AGREE FULLY, WILL COMPLY

B. AGREE PARTIALLY, EXCEPT AS NOTED

C. DISAGREE FULLY, REASONS NOTED

D. COMMENT HAS BEEN SUPERCEDED BY DESIGN DEVELOPMENTS

E. OTHER, PROVIDE EXPLANATION

Milestone Register Statement: The purpose of the Milestone Register Matrix ("Matrix") is to provide guidance, confirm Project requirements for compliance with User Agency standards, including specifications, guidelines, etc., for use by the Design Team. The intent of the exercise is for the Design Team to utilize the Matrix to support development of design documents throughout the project from planning, design to construction documents phases. The Matrix is not intended to direct the Design Team's means and methods for design and engineering elements, including detailing and overall standard of care. The Design Team is solely responsible and will be held accountable for the standard of care. Items designated as "Open" or "Closed" are either part of the documents or will be incorporated and developed as part of subsequent design milestones. Determination of designated (A through E) response actions required in the Matrix are intended to provide current status for tracking purposes but is not intended as a precursor to ongoing development of future design milestones. The team acknowledges that the Matrix provides value to the project and is beneficial in the continued QA/QC.

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	BY	COMMENTS	BY	RESPONSES	ACTION REQUIRED (A/B/C/D/E)	CURRENT STATUS (Open/Closed)
	GENERAL							
1	General	Cover Sheet/All Sheets	**MAVH**	Cover Sheet Documents are missing Date/Review Code Matrix Item 13		Will update	**A**	**Closed**
2	General	Project Description	**DEB**	Suggest revisions to project description: confirm target size of field house, eliminate reference to water harvest system, and to rainwater storage under building, unless that is the direction that Park District selects. Also consider some of the following language: *... The fenestration of glazing at the lobby entrance, gymnasium and multipurpose room will allow great visibility into the park and generous daylight into the main building spaces. The fieldhouse is designed to achieve minimum LEED v4/v4.1 Silver Certification as defined by the U.S. Green Building Council (USGBC).* *The fieldhouse design maximizes resource efficiency with the use of natural light, and a mechanical system and building envelope designed to reduce energy consumption while providing a comfortable environment for Fieldhouse activities. Potable water use is reduced through plumbing fixture selection and native and adaptive plantings in the landscaping immediately surrounding the Fieldhouse. Site improvements for stormwater management infrastructure and for conformance to the landscaping ordinance utilize BMP's [Best Management Practice] to first infiltrate and maintain rainwater on site before retaining in underground piping to manage the impact on the combined sewer. The existing Kells Park playground is to be replaced with a new playground with 2-5 and 5-12 age group equipment located adjacent to the new fieldhouse.* *Permitting:* *- Standard Plan Review* *- Current code and ordinance, including the Chicago Sustainable Development Policy (2024), Energy Transformation Code, and Stormwater Ordinance.*		Will update, project description to be adjusted	**A**	**Closed**

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	BY	COMMENTS	BY	RESPONSES	ACTION REQUIRED (A/B/C/D/E)	CURRENT STATUS (Open/Closed)
3	General	Program Matrix	**NS**	One clarification for basketball, the basketball goal heigh should also be adjustable for both youth/adult basketball.		Will update gym program to include basketball notes	**A**	**Closed**
4	General	Program Matrix	**NS**	Notes that CPD to provide spec for the large commercial refrigerator. The refrigerator we specify is True T-Series, T-49-HC in stainless steel.		Will update pantry program notes to include provided spec	**A**	**Closed**
5	General	Program Matrix	**NS**	Security scope, agree yes a meeting should occur with Active Alarm, however, please note that Active is the alarm monitoring company and all equipment shall be provided as a part of this construction scope of work. Generally our security program for new field houses is cameras in entrances or emergency exits to the building, we try to maximize coverage with camera placement. Additionally, project should include intrusion alarm and we're applicable glass break detection. Do not include motion sensors unless security specifically requests (we get false alarms due to typical fieldhouse decorations).		Will update office program and narrative to include security notes accordingly.	**A**	**Closed**
6	General	Program Matrix	**NS**	Vending – make sure the vending receives dedicated electrical and dedicated low-voltage data cabling lines (for POS) to each machine.		Will update vending program to include note	**A**	**Closed**
7	General	Program Matrix	**NS**	Mechanical – trades prefer Trane, Daikin and Carrier products due to the local support received when issues arise. Please make sure specification lists these three manufacturers and basis of design is not utilizing a different one.		Will update mechanical program to include note	**A**	**Closed**
	Civil							
8	Civil	Civil Narrative 3.a	**DEB**	Concrete pavement to have 3-year aged SR value of at least 0.28 or an initial SR value of at least 0.33 .		Will add to narrative as noted.	**A**	**Closed**
9	Civil	Special Considerations	**DEB**	Add inclusion of stormwater BMP's in the design		Will add to narrative as noted.	**A**	**Closed**
10	Civil	Narrative	**MAVH**	Stormwater Management is outlined in Terra Narrative however should be confirmed and budgeted in project. The project includes demolition of Fire House that creates impervious areas that will require further investigation upon Removal/Remediation of the existing City Firehouse. Drainage of Playground to be Determined upon Final Layout. Will there be any Exterior Plumbing/Drinking Fountains?		Stormwater management is included in the latest cost estimate. The stormwater management includes the post developed conditions after the fire house demolition and construction of new site, stormwater management is not required when wrecking buildings unless the site will be temporarily developed afterwards. It is assumed the proposed improvements would follow the wrecking of the existing fire house. Drinking fountain will be added near playground. Refer to the Full CPD standards for consultants. Drinking fountain and water supply from buidling to outdoor location will be added to the MEPFP narrative.	**B**	**Closed**
11	Civil	Civil Narrative	**NS**	At-Grade Improvements – please note that any expansion joints falling on Park District property (not city sidewalk) shall not use asphalt-impregnated expansion joints. Also Park District sidewalks require WWM reinforcement which is not listed in the write-up.		Will add to narrative as noted.	**A**	**Closed**
12	Civil	Civil Narrative	**NS**	Concrete Detention Tank – is beneath the playground the only option for the detention tank? We've used the aggregate stone layer for detention but concerned about several potential conflicts between play equipment and the detention tank. Prefer to look for other locations on the site.		Other locations on site are limited for the large required detention volume, but will review options.	**B**	**Closed**
13	Civil	Civil Narrative	**NS**	Water Main – please indicate that there needs to be a shut-off valve on the Park side of the water service and it shall comply with the Park District's requirements: Clow Resilient Wedge Valve with 2" operating button, right hand close.		Will add to narrative as noted.	**A**	**Closed**
14	Civil	CEX-1	**NS**	Kedzie is misspelled on the plan.		Plan is updated	**A**	**Closed**
15	Civil	CEX-1	**NS**	Avoid any tree planting within 5' of utility center lines.		Will review locations.	**A**	**Closed**
16	Civil	CEX-1	**NS**	Building FF should not be lower than the alley. Right not FF 22.00 for the building and the alley is around 22.11 and 22.34 near two of the egress doors, meaning the sidewalk is pitching from the alley to the building. This will create the potential for flooding from the alley to get into the building.		There is an approximately 1' elevation difference between the north and south side of the site, which creates issues with maintaining a consistent finished floor elevation while meeting existing grades with ADA accessibility for parking and adjacent sidewalks. The both existing alleys to the south and west are pitched away from the building, but an additional area drain can be added to capture runoff from the landscape area.	**B**	**Closed**
17	Civil	CEX-1	**NS**	Several of the spots indicate meet existing, but need to include provisions that meeting existing grades should not result in slopes that exceed allowable tolerances for slope and cross-slope. Need to meet ADA.		Note to meet ADA slopes will be added to exhibit.	**A**	**Closed**
18	Civil	CEX-1	**NS**	Where is the water service shown from?		Will coordinate water service location with MEP	**A**	**Closed**
	Landscaping							

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	BY	COMMENTS	BY	RESPONSES	ACTION REQUIRED (A/B/C/D/E)	CURRENT STATUS (Open/Closed)
19	Landscaping	General/Overall	MAVH	Consider Landscape Elements Adjacent to Gym Exterior Wall to Avoid/Deter Graffiti in Future of large Expansive Gymnasium Walls. This could also be accommodated with other elements to deter Graffiti on building located near alleys.		We added and increased the amount of landscape around the building. Although we are in SD and have not identified specific plant types, we did allow prepare a plant palette shown in the drawings.	A	Closed
20	Landscaping	L-100	NS	Is there fencing or bollards along the rest of the alley? Why only in the NW corner?		The fence and bollard layout were designed to isolate the playground area. It's not recommended to put too much fence along the alley since it is prone to damage.	A	Closed
21	Landscaping	L-100	NS	CPD DCNR needs to approve any landscaping beyond turf and trees, such as shrubs and groundcovers.		Acknowledged	A	Closed
22	Landscaping	Project Description	JBL	The existing playground is to be abandoned and the area restored		Acknowledged	A	Closed
23	Landscaping	Project Description	JBL	The proposed full-time equivalent is 9.		Will update project description to note 9 FTE	A	Closed
24	Landscaping	Architectural Design Narrative-playground	JBL	CPD does not require LEED		Acknowledged. While CPD does not require LEED, PBC requires a minimum of LEED Silver. This requirement will be maintained moving forward.	A	Closed
25	Landscaping	Architectural Design Narrative-gym playcourt	JBL	2 1/2 ct basketball? Add full court basketball		The design includes a high school-sized full basketball court (50' x 84') with striping for two half courts. No changes are needed to the court layout.	A	Closed
26	Landscaping	Architectural Design Narrative-clubrooms	JBL	What is the "Refrigerated alcove" noted in the clubrooms		The narrative will be revised to clarify that the nearby pantry will be used to store box lunches, and the "Refrigerated Alcove" reference will be removed.	A	Closed
27	Landscaping	Architectural Design Narrative-janitors closet	JBL	Also, please add outlets sufficient for charging floor cleaning machine with rechargeable batteries		Will update program matrix and design narrative to include outlets as noted.	A	Closed
28	Landscaping	Overall Site Plan L1-000	JBL	1 set of swings?		There are two bays of swings shown. The playground equipment is strictly conceptual. Please keep in mind: swings use a lot of area due to their required fall zones	A	Closed
29	Landscaping	General	JBL	Equipment in Terra playground and Brooks playground areas do not match		This is being coordinated, but regardless, the playground equipment is strictly conceptual	A	Closed
	Architecture							
30	Architecture	Architecture Design Narrative	DEB	Specify that the Chicago Sustainable Development Policy (2024) is to be followed. Identify that Sustainable Development Policy Matrix strategies are to include Bird Protection and Exceed Energy Transformation Code by 10%.		Will do, narrative to be adjusted	A	Closed
31	Architecture	Architecture Design Narrative	DEB	Playground / site - energy efficient lighting - must be darksky compliant.		Ok, narrative to be adjusted to note this.	A	Closed
32	Architecture	Architecture Design Narrative	DEB	Exterior Enclosure - R-values should be noted as minimum. To achieve SDP points to exceed Energy Transformation Code by 10% ensure improvement in envelope and system performance. As follow up to item 32 from 50% SD, recommend setting the target and using energy model to guide system selection and refinement incl envelope to achieve the target..		Agreed, please note that the DB will manage energy / code / sustainability development policy requirements post SD, we can let DB know but ultimately they are responsible post transfer.	A	Closed
33	Architecture	Architecture Design Narrative	DEB	Exterior enclosure must support bird friendly design / SDP Bird Protection (Basic)		Will add to narrative as noted	A	
34	Architecture	Architecture Design Narrative	DEB	Building integrated passive solar control elements to reduce cooling load and glare.		Understood, currently managed with high performance glazing.	A	Closed
35	Architecture	Architecture Design Narrative	DEB	Roofing - R-40 should be considered a minimum. May need more to meet energy efficiency goals. Also, specify Low-sloped roof must have a 3-year aged SRI value of at least 64 or an initial SRI value of at least 82 in order to count toward total standard area of qualifying high-reflectance roof. Steep-sloped roof must have a 3-year aged SRI value of 32 min or initial SRI value of 39 min.		Ultimately energy code compliance will be managed through energy modeling that is premature at SD. This message can be noted in narrative form pre-transfer, but ultimately will fall to the DB to manage the process.	A	Closed
36	Architecture	Architecture Design Narrative	DEB	Gym - Add high volume low velocity fans in gymnasium. Coordinate with pendant fixtures to avoid strobe effect. (CPD uses such fans in other facilities.)		This was discussed, if not shown it will be added as an alternate as it is a good idea but not essential or the sole method of achieving thermal comfort / energy performance.	A	Closed
37	Architecture	Architecture Design Narrative	DEB	Plumbing fixtures - does CPD have required fixture types? Fixtures in aggregate must achieve a minimum of 20% lower water use than baseline. For 1 LEED point, must achieve 25% reduction over baseline Recommend referring to LEED v.4 baseline and Code instead of EPAct. Plumbing narrative addresses this.		Plumbing fixtures will be indicated per CPD's standards. It will be the DB's responsibiilty to confirm to LEED requirements after transfer. Will update narrative accordingly.	B	Closed
38	Architecture	Architecture Design Narrative	DEB	Visitor / Public Spaces - recommend selecting terrazzo or polished concrete rather than leaving this to the bidder.		Will remove polished concrete as a floor finish option. Will also include base details in the narrative; wrap up terrazzo base at drywall, not at CMU walls	A	Closed

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39	Architecture	Architecture Design Narrative	DEB	Building Services Mechanical Room - has all electric building been considered / discussed with CPD?		We have reviewed this with CPD, and they have indicated that an all-electric building is highly unlikely. The current design does not include this option, and we are moving forward with the planned energy systems.	B	Closed
40	Architecture	Narrative/Architectural Plans	MAVH	Gymnasium Exit Doors should not be located adjacent to ends of Gym where there is a potential of running/physical implications. Padding etc. should be included at these locations. Exit Doors should be relocated relative to security including Review of Distance of Exiting etc. Based on code exiting requirements .Confirm Security implications at all Alley exits. Collapsible Bleachers to be supported in wall/provide structural support?		Per CPD direction, the west exit only door in the gym will be shifted south to be closer to the trash enclosure and avoid running/physical implications. The exit only doors in the gym will have pads and panic hardware. DB to review security implications and support for collapsible bleachers in the next phase.	A	Closed
41	Architecture	Program Matrix	JC	Review notes for Janitor Room. Sentence appears to be cut off; "..adequate storage for"?		Will update. Note meant to read: "adequate storage for supplies, floor cleaner/waxers, mops, etc."	A	Closed
42	Architecture	Design Narrative; Building Exterior	JC	A. Suggest replacing the word "room" with "roof" in first sentence		Will revise sentence as noted.	A	Closed
43	Architecture	Design Narrative; Building Interior	JC	Confirm that overhead coiling doors are acceptable to CPD from a durable standpoint for this high impact space. When repeatedly hit by basketball/volleyball they may deform and become difficult to operate. Suggest considering multiple pairs of 3' or even 42" HM doors.		Per CPD's direction, overhead coiling doors have been included as their standard for gym storage rooms. We will update our narrative to specify "heavy-duty / high-impact" coilding doors to minimize damage due to activities in the gym.	B	Closed
44	Architecture	Design Narrative; Building Interior	JC	Different floor finishes thickness (gym wood floor, LVT, polished concrete / terrazzo and recessed walk off Matts) will require different slab depression thickness to be coordinated during future phases but should be noted in structural narrative now.		Will update structural narrative to include this note.	A	Closed
45	Architecture	Design Narrative; Building Interior	JC	Provide floor ceiling wall finishes for mechanical room similar to all other spaces.		Will update narrative, finishes will match the ones listed for the electrical room	A	Closed
46	Architecture	PR-0.3	JC	Consider revising location of west exist door to avoid conflict with wall safety pads directly behind the basketball stops for layouts and courts over runs. Suggest adjusting to north west for greater proximity to parking lot with connected lot for spectator exit at end of games.		Per CPD direction, the west exit only door in the gym will be shifted south for ease of trash removal and basketball safety. A path will be added from the door to the trash enclosure.	A	Closed
47	Architecture	PR-0.3	JC	Suggest adjusting location of south exit door to south east corner of gym for similar continuity of wall mounted gym safety pads behind cross court back stops.		Per CPD direction, the south emergency exit door does not align with any of the basketball hoops and therefore does not need to be relocated. The emergency exit doors will have safety pads and panic hardware.	A	Closed
48	Architecture	PR-0.3	JC	Review divider curtain and large storage room door conflict.		The divider curtain will have a 5ft set back from each wall to allow for circulation. Will update plans to show this.	A	Closed
49	Architecture	PR-0.3	JC	Consider repositioning bleachers to south side of gym to afford better access / multiple pairs of doors to the storage rooms to support easier movement of large items such as chairs storage carts etc. which are difficult to maneuver within a storage room. Ideally its easier to push these straight in and pull out rather than have to turn 90 degrees.		Per CPD direction, bleachers will remain on the north side of the gym to allow for easier circulation between programming events. No changes to the storage room door locations are required.	C	Closed
50	Architecture	PR-0.3	JC	Confirm test fit for desired quantity of chairs and all proposed equipment to be stored has been completed to confirm adequate storage is provided.		Storage requirements will be addressed per CPD's direction (see Items 51, 52, and 71).	A	Closed
51	Architecture	PR-0.3	JC	Confirm single 3' door for each Club Room is sufficient for potential large items that may be required. Suggest providing one room (closest to parking lot) with 5' opening (3' + 2' doors).		CPD has provided the following storage requirements: Clubroom closet storage should be deep enough to store tables and chairs (Minimum 36-42" deep), with shelves above to store art supplies, etc. "Kitchen areas" in the clubroom to have upper and lower cabinets with solid surface counters and sink. We will update the drawings and narrative accordingly.	B	Closed
52	Architecture	PR-0.3	JC	Suggest providing at least one pair of doors with removable mullion to gym and main lobby. Note removable mullions can cause security issue when doors have pulls on the exterior so suggest using exterior doors that will not require pulls such as egress only doors. Suggest identifying possible largest object that will need to access facility and ensure that its path through the facility is accommodated.		Emergency exit doors in the gym will not have pulls on the exterior. We will indicate both doors to be equipped with removable mullions for moving. CPD has provided the following storage requirements: Gym storage should be large enough to store general gym equipment, volleyball nets/poles, balls, floor mats, balance beams, horse, etc. with shelf storage as well.	B	Closed
53	Architecture	PR-0.3	JC	Confirm that access door widths (3'-0") to water room and mechanical room through pantry are sufficient for future equipment replacement.		Will review equipment requirements and adjust door sizes accordingly.	A	Closed

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54	Architecture	PR-0.3	JC	Confirm that proposed underside of structure (lowest free hanging element, structure, lighting, speakers, folded bball backstops, etc.) provide sufficient vertical clearance for all proposed sports (basketball, Volleyball, badminton).		Sufficient vertical clearance for all planned sports has been provided. Drawings will be updated for clarity.	A	Closed
55	Architecture	PR-0.14	JC	Confirm roof access strategy to access / service equipment and clear drains. If interior roof hatch consider where it is located within the building to accommodate the appropriate floor space for an OSHA compliant stairs or ships ladder.		Roof hatch with ships ladder is currently shown in the east storage room. A callout will be added to clarify its location in the enlarged plan.	A	Closed
56	Architecture	PR-.04	JC	Show proposed location of roof drains and scupper boxes for coordination purposes with fenestration layout.		Will update elevations as noted.	A	Closed
57	Architecture	PR-013	JC	Appreciating that this is SD but since you have taken the time to show wall safety pads in the building section, consider increasing the height of the pads to match to top of the door frames to establish a consistent datum line in the interior.		Agreed, will update section as noted. We will include a general note to show the minimum extent of wall pads behind main and cross-court basketball goals.	A	Closed
58	Architecture	PR-013	JC	Confirm that building section as drawn provides sufficient dimension at exterior wall above windows to support the roof structure (appears to be load bearing masonry per structural narrative) or will structural member sit proud inside face of wall requiring column enclosure pilasters that are not currently illustrated in the plan layout of the gym.		The intent is for the CMU to be load bearing, and that the CMU above the windows will act as lintels (consisting of reinforced grouted bond beams) for bearing the roof framing and spanning the openings. Lintel depths to be developed by design team after SD phase.	A	Closed
59	Architecture	Architecture Design Narrative (p.18)	MC	Building exterior- CMU is load-bearing, therefore steel columns not required		Steel columns were removed from structural scope after 50% review. Architect to revise narrative.	A	Closed
60	Architecture	Architecture Design Narrative (p.19)	MC	Exterior wall B- this seems like a very complicated and costly wall system. Suggest studying simpler, more cost-effective solutions that achieve the same design impact while being more appropriate to the function of the interior activity. (See further comments below).		Acknowledged. This will be studied further in the next phase with DB to explore more cost-effective solutions that maintain the intended design impact and are appropriate for the interior use.	A	Closed
61	Architecture	Architecture Design Narrative (p.19)	MC	Exterior wall D- although only SD, not too early to be thinking about detail at transition between brick and corrugated metal. Assume some type of metal frame around corrugated metal that the brick can be sealed against? Detail must maintain continuous insulation.		Agreed, will update the narrative to include a note about the anticipated transition detail at Exterior Wall D to ensure continuous insulation and proper sealing.	A	Closed
62	Architecture	Architecture Design Narrative (p.19)	MC	Roofing- drainage via through-wall scupper to downspout. Plumbing narrative calls for gutters and downspouts. Roof plan shows internal drains at one story roof. Please coordinate.		We acknowledge the discrepancy with the plumbing narrative and will coordinate accordingly. We propose to maintain internal roof drains at the central portion of the building only, for constructability and cost efficiency, with through-wall scuppers and downspouts at the gymnasium. Internal piping will be located within accessible areas of the building to allow for future maintenance. This approach was previously approved on the Jane Addams Recreation Center project. We are seeking CPD's approval to proceed with this configuration.	A	Closed
63	Architecture	Architecture Design Narrative (p.20)	MC	Walls- burnished and filled CMU- are you suggesting the bearing wall utilizes burnished block in lieu of standard CMU? Or are you suggesting and additional wythe of burnished block veneer on the interior of the wall?		We are proposing ground-faced and filled CMU at the interior face of the wall for durability and ease of maintenance. This would be a single wythe load-bearing wall—not an additional veneer. Wall details to be further developed by DB after SD phase.	B	Closed
64	Architecture	Architecture Design Narrative (p.20)	MC	Walls- burnished and filled CMU- solid surface material as an option? CMU is a durable material for a gymnasium, why propose the expense of solid surface?		Solid surface proposed for durability with a cleaner look. Agreed that CMU is durable; proposed locations for solid surface to be reviewed by DB in the next phase for appropriateness.	A	Closed
65	Architecture	Architecture Design Narrative (p.20)	MC	Building Interior, Gymnasium Playcourt- Kalwall windows to be operable? This is not shown in elevation. How will they be opened at 14'-0" AFF?		Note will be revised to clarify that Kalwall windows are not operable	A	Closed
66	Architecture	Architecture Design Narrative (p.20)	MC	Building Interior, Gymnasium Playcourt- safety wall padding only possible on 3 walls. Even though back of court has been moved further from the exterior Kalwall wall, there is still potential during other gym activities for someone to run into the wall. Consider raising translucent panel on east wall to accommodate wall padding.		Plans were developed with CPD input at weekly meetings. We feel it's important to maintain a connection to the pedestrian experience along Kedzie. That said, we understand the safety concerns. Final wall details to be further developed post SD transfer.	C	Closed
67	Architecture	Architecture Design Narrative (p.21)	MC	Building Interior, Toilets and Lockers- toilet partitions: are metal partitions a CPD standard? If not, suggest utilizing solid polymer plastic or phenolic toilet partitions for durability and scratch resistance.		Per CPD direction, toilet partitions will comply with the CPD Standard Product List. Product type to be confirmed during design development.	A	Closed
68	Architecture	Architecture Design Narrative (p.21)	MC	Building Interior, Clubrooms w/ Storage- Electrical calls for wall outlets. Are floor power/data outlets required when space is used as a meeting room?		Acknowledged. Clubrooms will include a minimum of two floor outlet banks per CPD direction. Locations to be coordinated during design development.	B	Closed
69	Architecture	Architecture Design Narrative (p.23)	MC	Building Interior, Building Services, Janitor Closet- Walls to be unpainted CMU. Aren't painted CMU walls easier to clean and maintain?		Painted CMU walls are generally easier to clean and maintain. This can be evaluated further with the DB to determine the best approach for durability and maintenance.	A	Closed

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70	Architecture	Architecture Enlarged Plan (p.28)	MC	The only access to the Water Room is through the Mechanical Room which is through the Pantry which is used by the public? Do either of these rooms need to be accessed from the exterior? Suggest adding a "back of house" corridor between Storage and Pantry to access these rooms.		Layout has been reviewed and approved by CPD during weekly meetings. Design team is coordinating with MEP engineer to confirm that equipment can be accommodated through existing doorways; adjustments will be made if necessary.	B	Closed
71	Architecture	Architecture Enlarged Plan (p.28)	MC	Have the storage rooms serving the Club Rooms been test-fitted for table and chair storage? The long narrow proportion appears to be less efficient and may require deeper clearance.		Acknowledged. Clubroom storage rooms will be revised to provide a minimum 36" clear depth to accommodate table and chair storage, with shelving above for art supplies, ect. per CPD direction.	B	Closed
72	Architecture	Architecture Enlarged Plan (p.28)	MC	The east end of the basketball court striping has been moved further west to accommodate the use of the Kalwall system extending almost to the floor. This now seems like wasted space within the room. Have you considered turning the CMU at the bottom of this wall and using the Kalwall at clerestory height?		Plans were developed with CPD input. The current configuration was designed to maintain the connection between the interior space and the pedestrian experience along Kedzie.	C	Closed
73	Architecture	Architecture Roof Plan (p.29)	MC	Lower roof- are 4 roof drains required for this size of roof? Seems excessive.		We are coordinating overall roof drainage strategy with CPD. As part of this, we are proposing internal roof drains only at the central portion of the building for constructability and cost efficiency. Drain quantity at the lower roof will need to be reviewed with the plumbing engineer and adjusted as needed based on final calculations and layout.	A	Closed
74	Architecture	Architecture Roof Plan (p.29)	MC	Upper roof plan indicates scuppers and downspouts (narrative states gutters and downspouts). Coordinate center downspout with south façade.		Will update	A	Closed
75	Architecture	Architecture Elevations (p.30)	MC	South Elevation- show scuppers and downspouts- coordinate with window and egress doors.		Will update	A	Closed
76	Architecture	Architecture Elevations (p.30)	MC	South Elevation- are windows labeled "translucent glazing" intended to be Kalwall?		Yes, the "translucent glazing" on the South Elevation is intended to be Kalwall. We will update the drawings accordingly to clarify this.	A	Closed
77	Architecture	Architecture Elevations (p.30)	MC	East Elevation- the 'shadowbox" requires special shaped brick at the outside obtuse angled corners. Have you considered utilizing metal panel for the shadow box?		We acknowledge that special-shaped brick will be required at the obtuse angled corners of the shadow box to ensure a seamless appearance when adjoining the thin-brick panels. This is a key design feature, and we intend to use special-shaped brick at the perimeter to achieve the desired aesthetic.	B	Closed
78	Architecture	Architecture Elevations (p.30)	MC	East Elevation- the way the aluminum storefront system is drawn it appears to extend beyond the roof framing to the gravel stop with a spandrel panel glazed into the top portion, functioning more like a curtainwall system. Assume this is shown incorrectly and the storefront framing stops below a metal panel fascia system that becomes the canopy, correct?		Yes, the storefront framing is intended to stop below the metal panel fascia, which forms the canopy. It's not meant to function as a curtainwall. Drawings will be revised to clarify this relationship	A	Closed
79	Architecture	Architecture Elevations (p.30)	MC	North Elevation- glazing not called out but assume it is clear insulated glass in aluminum frame?		A callout will be added to clearly specify the glazing as clear insulated glass in an aluminum frame.	A	Closed
80	Architecture	Architecture Details (p.32)	MC	Section Detail- "brick veneer" called out- is it thin brick cast into the precast "rib" per the structural narrative? Again, special-shaped bricks are required at the outside obtuse angled corners of the shadowbox.		Yes, the "brick veneer" refers to thin brick cast into the precast "rib" as outlined in the structural narrative.	A	Closed
81	Architecture	Architecture Details (p.32)	MC	Section Detail- the base detail is concerning. Tiny slivers of brick veneer at grade. Grade must be held down for drainage. If staying with precast frame concept, suggest an integrally colored precast base to match the brick.			A	Closed
82	Architecture	Architecture Details (p.32)	MC	Section Detail- again, this is an extremely complex wall system to create a shadowbox that doesn't support the function on the interior. Suggest studying this façade further to simplify. Consider: 1. returning the CMU at the lower portion of the wall in order to get wall padding on the interior. Exterior lower portion could be clad in metal panel at the exterior to maintain the "shadow box" look. 2. simplify shadow box frame - if metal panel utilized the back-up system can be cold-formed metal framing in lieu of the precast concrete frame.		We appreciate the suggestion and understand the concerns. However, these details will need to be further explored with the Design Builder (DB) after the SD transfer. At this stage, we have prioritized the overall design direction, and specific technical solutions will be addressed in the next phase of the project	B	Closed
83	Architecture	Architecture Narrative	NS	Electrical outlets – is 50" correct or was this meant as a different dimension and is a typo?		Will update. Per CPD standards the dimension should be 50', not 50"	A	Closed
84	Architecture	Architecture Narrative	NS	Lockers – are there lockers available outside of the "locker rooms" to provide lockers for use by someone using the all-gender restroom?		In accordance with CPD's direction, a minimum of 2 lockers will be added within the all-gender restroom, as specified in the CPD Standard Product List. We will also provide a bench for a 30" x 48" side approach to the lockers, provided it does not cause any conflicts with the overall plan. We will review the space to ensure it meets accessibility requirements while maintaining functionality.	A	Closed
85	Architecture	Architecture Narrative	NS	Clubroom - refrigerated alcove? We just need a space for the refrigerator. Not sure if this is intended as something different? Or am I mis-interpreting and this is a typo?		The narrative will be revised to clarify that the nearby pantry will be used to store box lunches, and the "Refrigerated Alcove" reference will be removed.	A	Closed

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86	Architecture	Architecture Narrative	NS	Visitor / Public Spaces – floors should not be polished concrete, we've had too many past issues with this installation. Remove from recommendations. Terrazzo is acceptable.		Will update to removed polished conrete as an option.	A	Closed
87	Architecture	Architecture Narrative	NS	Electrical should state dedicated power and data for 2 vending machines. Also note that a dedicated data drop for the Activenet computer (also handles POS) is also necessary.		Will update narrative as noted	A	Closed
88	Architecture	Architecture Narrative	NS	Communications – not understanding the recommendation for two public phone enclosures. Please clarify.		The inclusion of two public phone enclosures is based on what was list in CPD's design standards. These will be removed from the narrative.	A	Closed
89	Architecture	Architecture Narrative	NS	Did not see an IT racks identified in the list.		Will update narrative to include telec. room	A	Closed
90	Architecture	Architecture Narrative	NS	Furnishings and equipment – All CPD facilities are no-smoking facilities including the outdoor park spaces. Outdoor ash urn should not be provided as this is counter to our policies.		Agreed, this was listed in CPD's design standards. We will remove the outdoor ash urn from the design narrative.	A	Closed
91	Architecture	Architecture Narrative	NS	Building Mechanical – further discussion will be needed with CPD Facilities to determine whether we have maintenance capabilities for geothermal, wind or solar systems.		Per CPD's direction, geothermal, wind, and solar systems are not being considered for this project. We will update the narrative accordingly.	A	Closed
92	Architecture	Architecture Narrative	NS	Building Mechanical – include desk for building engineer / BAS system computer (provided by CPD). Power / data should be located nearby.		Will update narrative as noted	A	Closed
93	Architecture	Architecture	NS	Need gym office if the larger gym option was selected by community. Suggest reducing storage to accommodate a gym office near the gym doors.		Acknowledged. A small gym office will be incorporated within the adjacent storage room, per CPD direction. Office will include desk, file storage, data, and electrical as outlined for the main office.	A	Closed
94	Architecture	Architecture	NS	Play equipment use zone appears to exceed what is shown as the limits of the play surfacing. Review.		The playground equipment shown is strictly conceptual at this stage. It will be the responsibility of the design-build team to design for the specified age groups and ensure that all fall-zone and accessibility requirements are met. This will be further clarified in the design narrative.	A	Closed
95	Architecture	Architecture	NS	A couple of elements do not appear to align between the Landscape site plan and architecture plan need to coordinate.		We acknowledge the discrepancies between the Landscape site plan and the architectural plan. We will coordinate with the landscape team to ensure alignment of all elements and update the plans accordingly.	A	Closed
96	Architecture	Architecture	NS	Would be more convenient for the trash enclosure to have an exit door nearby and a walkway to the alley.		We received direction from CPD to move the emergency exit door south along the west wall for ease of trash removal and basketball safety. A sidewalk will be added from the exit door to the trash enclosure. Additionally, safety mats/pads will be included inside the exit doors as per CPD's other exit door safety comments.	A	Closed
97	Architecture	Architecture Roof Plan	NS	It appears that the slope of the low roof is assuming interior roof drains. CPD does not allow interior roof drains. Revise.		MEPFP narrative indicates stormwater drainage via gutters and downspouts, no internal roof drains.	B	Closed
98	Architecture	Architecture Exterior Elevations	NS	East Elevation – Kalwall – reviewed the response to our previous comment regarding concern for the durability of the Kalwall. It might help ease our maintenance concern if CPD sees how the product is holding up at your comparable facility. Is it possible to setup a visit? Also, design team indicated that the run-out distance was increased, but that is not shown on the plans yet (which is fine given the level of development) but we would like to continue to track this comment until illustrated on plans.		Plans were developed with CPD input. The typical run-out distance is 5ft, but we are showing 12ft at the east wall. We will update the plans to include this dimension for clarity.	A	Closed
99	Architecture	Architecture Exterior Elevations	NS	Architecture Exterior Elevations – East Elevation – this elevation also calls out a metal mural in several locations. What is this? Who is coordinating? Who owns the artwork once constructed. Need more details.		The metal mural is identified as a future art opportunity to be discussed with the owner in later phases of the project. We will update the drawings to include more detail on the proposed panel mounting system, which will be anchored to the brick using studs.	A	Closed
100	Architecture	Architecture Exterior Elevations	NS	Architecture Exterior Elevations – the roof plan shows the roof sloping but the top of roof elevation is shown on all the elevations at 27'-0" without a slope to it. Which is correct? Is the roof following the slope of the glu-lam shown in the cross-sections?		The roof is intended to follow the slope of the glu-lam as shown in the cross-sections. The elevation at 27'-0" on the exterior elevations will be updated to reflect the sloped roof, and the roof height will be adjusted accordingly to maintain consistency with the cross-section details.	A	Closed
101	Architecture	Architecture Section	NS	Please provide a dimension to bottom of glu-lam to confirm the Park District's minimum gym height is achieved.		Will provide dimension as noted	A	
	Accessibility							
102	Accessibility	General/Overall	MAVH	Comments were considered from Previous review…confirm exterior grade changes etc. from adjacent areas of site including existing walkways at Kedzie and alleys		Grading changes to be further developed after SD transfer to DB	A	Closed
	Arts & Theatre							
103	Arts & Theatre	General/Overall	MAVH	Consider Gymnasium Area for performance and/or other uses, including power and storage if stage is considered		Not being considered per CPD's direction.	C	Closed

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	Athletics							
104	Athletics	Architectural Floor Plan-PR-0.3	**MAVH**	Refer to comments on location of Exterior Doors.(Doors should have portion Glazed for Security concerns). Opacity of Front Glazed wall to be reviewed for glare etc.		Plans developed with CPD input, final exit door locations to be reviewed after SD transfer to DB.	**A**	**Closed**
	Structural							
105	Structural	Narrative/Architectural Plans	**MAVH**	Narrative..straightforward Substructure and Shell.Confirm Gym Ceiling Height for Activities and securing		Clear ceiling height to underside of structure to be 23ft as noted in the design narrative under Gymnasium Playcourt	**A**	**Closed**
106	Structural	Enlarged Plan (p.37)	**MC**	Why is there concrete infill at the sloped portion of the lower roof deck?		The concrete is required to achieve a 1-hour rated roof without spray fireproofing for roofs that are less than 20-feet above the finished floor. The club rooms have this requirement as well.	**A**	**Closed**
107	Structural	Enlarged Plan (p.37)	**MC**	At east lobby exterior wall- why not use glulam beam exposed on the interior to match the aesthetic of the space?		This can be a glulam beam. We can look at changing it and coordinate with the Architect regarding having it exposed.	**A**	**Closed**
108	Structural	Enlarged Plan (p.37)	**MC**	At center of gymnasium a moveable wall below the beam is called out. Architectural narrative calls for walk draw divider curtain. Please coordinate.		We will coordinate with Arch. Will be a walk draw divider curtain per Arch.	**A**	**Closed**
109	Structural	Structural Narrative	**NS**	Lists assumed soil bearing but there doesn't seem to be a Geotech report, is this pending?		The Geotech report is pending.	**A**	**Closed**
110	Structural	PR-0.3	**NS**	The sloped glulams have a nice aesthetic, but curious as to where the basketball standards will be mounted to? Is there additional reinforcing that needs to be shown within the gym? Doesn't seem right to mount the basketball equipment (or other equipment for that matter) to the glu-lam beams.		The basketball hoop pipe supports should be able to be attached to the glulam beams utilizing a steel bracket and either lag screws or thru bolts to the glulams. The narrative will be updated to reflect this.	**A**	**Closed**
111	Structural	PR-0.3	**NS**	For the movable partitions – are these mounted to glu-lams as well? How does that detail work? Especially considering that the beams in the gym are sloped.		The movable partitions will be on a track system that is mounted to the glulam with lag screws to make the track parallel to the ground. We will update the narrative to include this.	**A**	**Closed**
	Mechanical							
112	Mechanical	MEPFP SD Narrative	**DEB**	Code - suggest refer to IL stretch code and /or Chicago Energy Transformation Code.		Narrative to be updated reflecting this comment.	**A**	**Closed**
113	Mechanical	MEPFP SD Narrative	**DEB**	Will the narrative strategy support Exceeding Energy Transformation code by 10%?		The narrative will be updated to clearly state that the project is required to both comply with the Energy Transformation Code and exceed energy efficiency objectives by at least 10%, as demonstrated through energy modeling. Both requirements will be addressed in the updated performance strategy.	**A**	**Closed**
114	Mechanical	MEPFP SD Narrative	**DEB**	Confirm systems in narrative will support earning LEED enhanced refrigerant management credit		Narrative to be updated reflecting this comment.	**A**	**Closed**
115	Mechanical	MEPFP SD Narrative	**DEB**	High volume low velocity fans in gymnasium to support thermal comfort.		Narrative to be updated reflecting this comment.	**A**	**Closed**
116	Mechanical	MEPFP SD Narrative	**DEB**	Building Services Mechanical Room - has all electric building been considered / discussed with CPD?		An all electric building has not been discussed with CPD.	**A**	**Closed**
	Electrical							
117	Electrical	MEPFP SD Narrative	**DEB**	Lighting - consider vacancy sensors instead of occupancy sensors.		Narrative to be updated reflecting this comment.	**A**	**Closed**
118	Electrical	MEPFP SD Narrative	**DEB**	Exterior lighting design to be dark sky compliant, support bird friendly design / SDP Bird Protection (Basic) and support Light Pollution Reduction LEED credit.		Narrative to be updated reflecting this comment.	**A**	**Closed**
119	Electrical	Narrative/Architectural Plans	**MAVH**	Confirm Gymnasium Ceiling Mounted Fixtures have Guards		Narrative to be updated reflecting this comment.	**A**	**Closed**
120	Electrical	MEP Narrative	**NS**	Electrical narrative indicates that an EV charger is provided but the sustainability matrix does not. Please confirm.		Narrative to be updated and coordinated with sustainability matrix to reflect this comment.	**A**	**Closed**
	ITS - Communications							
121	ITS - Communications	Narrative/Architectural Plans	**MAVH**	Confirm Requirements at Front Desk etc.		Reception desk will be designed to include a two-tiered solid surface counter, with electrical outlets and a minimum of six data ports to support a computer, phone, printer, credit card terminal, and security camera, per CPD's direction. This will be reflected in the updated narrative and architectural drawings.	**A**	**Closed**
	Safety & Security							
122	Safety & Security	---	---	No Comments	---		A	Closed
	Plumbing							
123	Plumbing	Narrative/Plan	**MAVH**	Continue to Develop Toilet Rooms Locker Rooms and Janitor Room Layouts		Refer to architectural drawings for plan development.	**A**	**Closed**
124	Plumbing	MEP Narrative	**NS**	Plumbing also needs to be run to the clubroom sink and the drinking fountain.		Narrative to be updated reflecting this comment.	**A**	**Closed**
125	Plumbing	MEP Narrative	**NS**	Why are additional water meters being provided? CPD only wants one meter on the service.		The additional meters are a LEED requirement for water use monitoring.	**C**	**Closed**
	Food Service							

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	BY	COMMENTS	BY	RESPONSES	ACTION REQUIRED (A/B/C/D/E)	CURRENT STATUS (Open/Closed)
126	Food Service	Narrative/Plan	MAVH	Confirm Power location etc. to Vending Room/Easy access etc.(Note SD Code Matrix -13-Heavy Timber may be a typo)		Will update accordingly	A	Closed
	Fire Protection							
127	Fire Protection	Narrative	MAVH	Refer to Code Matrix upon finalization of Building Design		Narrative to be updated to clarify that the fire sprinkler riser will need to be fed from the middle roof, and to provide aesthetic parameters for how it is to be treated—e.g., enclosed or painted to match adjacent surfaces. This note will be included in both Architectural and Fire Protection sections to ensure visibility.	A	Closed
	Environmental							
128	Environmental	---	---	No Comments	---		A	Closed
	END OF REVIEW COMMENTS							

PROJECT DEVIATIONS / PROPRIETARY LOG

Design Phases Only (Cncpt, SD, DD, 60%CD, 90%CD, 100%CD)

Project Deviation/Proprietary Log Statement: **The log's intent is to provide design modifications that do not follow, the latest applicable, User Agency guidelines, standards, and specifications. Providing this information is largely used primarily during the design phases of a project and identified by members of the Design Team. A key component is to provide enough information deemed applicable for the User Agency's approval for the deviation being sought after. Known impacts to schedule, cost adds or efficiencies, and scope impact should also be identified for reference in the decision-making process.**

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	DEVIATION DESCRIPTION (References, Links, Data, etc.)	REASON FOR PROJECT DEVIATION (Identify: pros/cons, cost add/deduct, and schedule impacts)	USER AGENCY APPROVAL & DATE	PROJECT STATUS (DESIGN PHASE)
1					Yes/No, #/#/##	#%DD
2						
3						
4						
5						
6						
7						
8						
9						
	END OF PROJECT DEVIATIONS LOG					

LESSONS LEARNED LOG

Design Phases Only (Cncpt, SD, DD, 60%CD, 90%CD, 100%CD)

Lessons Learned Log Statement: **Its intent is to provide a log of items that may have impact to the project and determined as for program-wide use for PBC projects. The log is further to capture and share knowledge about what has worked well and what could have been done differently during the planning, design, construction, and delivery of a project. As a commitment to management excellence and opportunities for learning objectives, the log will offer ongoing tracking based on actual experiences or projected. Sharing the lessons from the log amongst constituents prevents from repeating the same challenges but will provide for an opportunity to take advance of best practices.**
The Owner (PBC), User Agency, Design Team (DA & AOR), General Contractor, Design Builder, Construction Manager (CM) call all participate in contributing to the log.

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	LESSONS LEARNED DESCRIPTION (References, Links, Data, etc.)	RESOLUTION OR NEXT STEPS	USER AGENCY STANDARDS IMPACT	PROJECT STATUS (DESIGN / CONSTR)
1						
2						
3						
4						
5						
6						
7						
8						
9						
	END OF LESSONS LEARNED LOG					

PROJECT VALUE ENGINEERING LOG

Design Phases Only (Cncpt, SD, DD, 60%CD, 90%CD, 100%CD)

ITEM #	DISCIPLINE	DWG # / SPEC. SECTION #	BY	COMMENTS	BY	RESPONSES	ACTION REQUIRED (A/B/C/D/E)	CURRENT STATUS (Open/Closed)
Value Engineering Log Statement: Value engineering is a systematic, organized approach to providing necessary functions in a project at the lowest cost. Value engineering promotes the substitution of materials and methods with less expensive alternatives, without sacrificing functionality. It is focused solely on the functions of various components and materials, rather than their physical attributes. There is an understanding that some value engineering proposals may impact the standards, guidelines or specifications of the User Agency and will require confirmation prior to proceeding with the change.								
ITEM #	PROJECT DESIGN PHASE	DWG # / SPEC. SECTION #		DESCRIPTION (References, Links, Data, etc.)		IMPACT OF PROJECT VALUE ENGINEERING (IDENTIFY IF USER AGENCY STANDARDS AND/OR GUIDELINES ARE AFFECTED - DEVIATION IMPACT)	RECOMMENDATION	ROM COST IMPACT
1								
2								
3								
4								
5								
6								
7								
8								
9								
	END OF VALUE ENGINEERING LOG							

COMMERCIAL & INDUSTRIAL SERVICE APPLICATION

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DIRECTIONS: Please save a copy of this form to your computer by selecting "**FILE/SAVE AS**" before entering text and numbers. Then fill in your information electronically and select "**SAVE**." Note that this form requires Adobe Reader® version 11.0 or greater to function properly. Download the most recent version of Adobe Reader® at **http://get.adobe.com/reader**.

APPLICATION PROCESS

Below is the process to receive any type of electric service from ComEd:

1 Establish or Verify Your Account

If you have an existing ComEd account please enter the number in the "Existing ComEd Account #" field. If this is a new service and you need to establish a ComEd account you must provide a SSN (Residential) or TaxID (Commercial) for account setup by calling ComEd at 1-866-639-3532 (1-866-New-Elec). If this information is not provided, you can continue your submission, but a customer service representative will have to contact you before your application can be processed.

2 Complete and Submit Service Application

Please work with a licensed electrical professional to complete your application. You have two options for submitting your information:

Preferred Method: Enter your information directly into the **New Business Portal** online form. You will immediately receive a confirmation number for tracking your project status.

Alternative Method: You may email your completed pdf application to **ServiceApplications@ComEd.com**.

3 Coordinate with Project Lead

You will be assigned a ComEd Project Lead who will determine how we can best meet your electric service needs and will contact you to learn more about your project. If needed, the assigned Project Lead will meet you at the project site to take measurements and evaluate equipment. They will create an agreement, a summary of any applicable charges, and diagrams depicting the service and will mail or email the documents to you.

4 Service Authorization

Review all documents provided by your ComEd Project Lead, sign and return them to your representative along with payment, if applicable, to authorize work to begin.

5 "Service Need" Date Determination

The "start work" and "service need" dates will be negotiated with you and every effort will be made to meet your "preferred service" date. Delays in submitting the necessary documentation or changes to the project may adversely impact the "service need" date.

6 "Service Need" Date Confirmation

Four weeks prior to the "start work" date, your ComEd representative will contact you to confirm whether work can begin. If the work cannot begin, the "start work" and "service need" dates will be adjusted accordingly. The new dates will be subject to ComEd's workload and resource availability.

7 Final Inspection

Two weeks prior to the "start work" date, ComEd will perform an on-site inspection to verify the site is ready for work to begin. If the site is not ready, ComEd will let you know what needs to be done to make the site ready. ComEd reserves the right to reschedule the "start work" and "service need" dates based on the work required to make the site ready.

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GENERAL SERVICE NOTES

- Unanticipated events such as severe weather or other emergencies may delay the "start work" or meeting the "service need" date. ComEd will make every attempt to notify you as soon as it becomes aware of such delays.
- Like any other business, ComEd is obligated to obtain all necessary permits before beginning work. Promptly returning accurate and complete documents can help expedite this process.
- The "service need" date may be impacted depending on the amount of offsite work ComEd may need to perform.
- If ComEd crews are required to work outside of normal weekday hours, overtime labor charges will apply.
- For more information about the ComEd New Business process, please go to: ComEd.com/NewBusiness

NEW, REVISED AND TEMPORARY SERVICE NOTES

- The date service that is provided may be impacted depended on the existing capacity of the area.
- Some municipalities may require separate Fire Pump and Emergency services. Please remember to include these services on your New Service application if applicable.
- You may be required to provide easements and space on your property, or inside your building for ComEd equipment.

METERING NOTES

Please be aware that the ComEd System Meter department must approve the installation of main electrical panels and all associated new electrical equipment that are rated greater or equal to 1,200 amps & any service that is greater than 600 volts.

To obtain approval, email the following documents to **SWBD.Approvals@ComEd.com**:

- ☐ The ComEd Service Application (completely filled out)
- ☐ A PDF of the existing or planned electrical/power system one-line diagram which illustrates the meter current transformer cabinet, switchgear, power panels and disconnect switch sequence.
- ☐ A PDF diagram* of the physical equipment which you plan to install (e.g.. meter current transformer cabinet, switchgear and/or power panels).
- ☐ One line drawings for multi-unit buildings must show the location and amount of meters cabinets on each floor for approval.

Allow the ComEd System Meter department *10 business days* to review and return your drawings.

All customer-submitted plans/drawings must be stamped *ComEd* approved before service can be provided.

Individual residential units are treated as separate customers requiring separate metering per the ComEd rate book (ComEd.com/Rates).

A diagram must be provided for* **each *switchboard needing approval. These diagrams may be found in your project's electrical plans and manufacturer's specifications. Confer with your electrical contractor, architect or engineer. Always include the name of the equipment manufacturer and model number in the title block.*

OTHER

Please note that all customers now have a choice of electric suppliers, electric rates, metering option, etc. For more information, visit our website at **ComEd.com/Choice** or call our Business Solutions at 1-877-426-6331 (1-877-4-ComEd-1).

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COMMERCIAL & INDUSTRIAL LOAD INFORMATION

FORM TO BE COMPLETED BY QUALIFIED ELECTRICAL PROFESSIONAL

SITE & BUILDING INFORMATION

PROJECT NAME	PROJECT TYPE	EXISTING COMED ACCOUNT #
PBC Kells Park Field House	Other	

SITE ADDRESS	CITY	ZIP CODE
	Chicago	

REQUESTED SERVICE

☑ Permanent ☐ Temporary

UNIT TYPE (IF APPLICABLE)

☐ Residential ☑ Commercial

RESIDENTIAL # OF UNITS	TOTAL RESIDENTIAL SQ. FOOTAGE	COMMERCIAL # OF UNITS	TOTAL COMMERCIAL SQ. FOOTAGE
n/a	n/a	1	13,038

HOURS OF NORMAL OPERATION

Start: ☐ AM ☐ PM End: ☐ AM ☐ PM ☐ 24-hour

EQUIPMENT AND VOLTAGE

PREFERRED SERVICE EQUIPMENT TYPE

☐ Underground ☑ Overhead ☐ Vault/High-rise ☐ Outdoor Lighting

SERVICE VOLTAGE

☐ 120/240V 1-phase 3-wire ☑ 120/240V 3-phase 4-wire ☐ 120/208V 3-phase 4-wire ☐ 277/480V 3-phase 4-wire

☐ 480V 3-phase 3-wire (B-phase grounded, not allowed in Chicago) ☐ 480V 3-phase 3-wire (ungrounded, req. special equipment & approval)

☐ 4kV ☐ 12kV ☐ 34kV ☐ Other:

SWITCH INFORMATION (if more than one, please attach the following information per switch)

SWITCH NAME	# TOTAL SWITCHES FOR PROJECT	# SWITCHES IDENTICAL TO THIS APP
MDP-1	1	

SWITCH LOCATION, IF KNOWN	SWITCH SIZE (AMPS)	SIZE OF CONDUCTOR
Electrical Room	800A	4 #600 KCMIL

SWITCH RATING (%)	NUMBER OF SECONDARY SETS	CONDUCTOR MATERIAL
100%	2	☑ CU ☐ AL

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COMMERCIAL & INDUSTRIAL LOAD INFORMATION

FORM TO BE COMPLETED BY QUALIFIED ELECTRICAL PROFESSIONAL

PROJECT NAME	
	PBC Kells Park Field House
SWITCH NAME	
	MDP-1

LOAD INFORMATION (all loads should be shown in kW, with a power factor of .85 used for conversion from KVA)

CATEGORY	DESCRIPTION	I-PHASE CONNECTED LOAD	I-PHASE DIVERSIFIED CAPACITY*	3-PHASE CONNECTED LOAD	3-PHASE DIVERSIFIED CAPACITY*
Lighting	General Lighting	23.2	29		
Appliances	Gas-Fired Water Heater	3.4	3.4		
Receptacle	Gen. Receptacles	15	11.73		
Process Heat	N/A				
Water Heat	N/A				
Motors**	Pumps	2	2		
HVAC/Heating	(Assumed smaller that cooling)				
HVAC/Cooling	(Assumed Larger than heating)			54.4	54.4
Ventilation-All Year	Fans	4.4	4.4		
Other	Electric Vehicle Chargers	11.5	14.4		
Total		59.5	64.9	54.4	54.4

**Diversify connected load per Chicago Electrical Code in the City of Chicago and applicable areas, diversify per National Electrical Code in all other areas.*

***Please provide mechanical switchboard schedule.*

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COMMERCIAL & INDUSTRIAL LOAD INFORMATION

FORM TO BE COMPLETED BY QUALIFIED ELECTRICAL PROFESSIONAL

PROJECT NAME
PBC Kells Park Field House
SWITCH NAME
MDP-1

MOTOR INFORMATION

EQUIPMENT TYPE	QTY	VOLTAGE	HP	STARTING AMPS	FULL LOAD AMPS	STARTER TYPE	STARTER FLA COEFFICIENT	# OF STARTS PER DAY	NEMA CODE	POSITION IN STARTING SEQUENCE
VENTILATION	9	230/1P	.5	20	2.9	Full Volt	2.5		G	
HVAC/COOLING	6	230/3P	10	42	28	VFD	1.2		G	
PUMPS	4	120/1P	.5	40	9.8	Full Volt	2.5		G	

Please provide mechanical switchboard schedule.

WELDER INFORMATION

DESCRIPTION	QTY	VOLTAGE	SIZE (KVA)	TYPE	FULL LOAD AMPS	P.F. AT PEAK	STARTER FLA COEFFICIENT	WELDS PER MINUTE	CYCLES PER WELD	HOUR PER DAY USE
N/A										

Please fill out welder table if welder load required.

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COMMERCIAL & INDUSTRIAL PROJECT INFORMATION

SITE INFORMATION

PROJECT NAME		CONTACT NAME	
PBC Kells Park Field House			
SITE ADDRESS		**CITY**	**ZIP CODE**
CONTACT EMAIL	**CONTACT PHONE**	**TOTAL NUMBER OF SERVICE ENTRANCE LOCATIONS**	
		1	
ELECTRICAL PERMIT #	**DATE OF GROUNDBREAKING**	**TOTAL NUMBER OF SWITCHES (Points of Service)**	
DATE COMED CAN BEGIN WORK	**PREFERRED SERVICE DATE**	**TOTAL NUMBER OF METERS REQUESTED**	
		1	

BUSINESS INFORMATION

LEGAL NAME OF ENTITY (ELECTRIC CONSUMER)	TAX I.D.	EXISTING COMED ACCOUNT #

☐ Corporation ☐ Partnership ☐ Sole Proprietor ☐ Other:

PRINCIPLE(S) to sign agreements for service, easements, etc.

PROPERTY OWNER	PHONE
BUILDING OWNER	**PHONE**
BUILDING MANAGER	**PHONE**

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COMMERCIAL & INDUSTRIAL PROJECT INFORMATION

PROJECT NAME
PBC Kells Park Field House

MAILING ADDRESS FOR AGREEMENTS

COMPANY	EMAIL	PHONE	FAX

ADDRESS	CITY	STATE	ZIP CODE

MAILING ADDRESS FOR ELECTRIC BILLS

COMPANY	EMAIL	PHONE	FAX

ADDRESS	CITY	STATE	ZIP CODE

PROJECT CONTACTS

CONSULTING ENGINEER	FIRM NAME

ADDRESS	CITY	STATE	ZIP CODE

EMAIL	PHONE	FAX

GENERAL CONTRACTOR	FIRM NAME

ADDRESS	CITY	STATE	ZIP CODE

EMAIL	PHONE	FAX

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COMMERCIAL & INDUSTRIAL PROJECT INFORMATION

PROJECT NAME
PBC Kells Park Field House

ELECTRICAL CONTRACTOR	FIRM NAME		
ADDRESS	CITY	STATE	ZIP CODE
EMAIL	PHONE	FAX	

OTHER	ROLE	FIRM NAME		
ADDRESS	CITY	STATE	ZIP CODE	
EMAIL	PHONE	FAX		

REQUIRED DOCUMENTS

The following documents may be required (items are required for non-overhead services):

- Plat of Survey with legal description of property (for easement, if required)
- Site Plan showing building relative to property lines and elevation information for multi-story buildings – mark service entrance location(s)
- Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
- Complete electrical drawings and/or load detail sheets

INFORMATION PROVIDED BY

SIGNATURE	PRINT NAME	DATE

Submit your information via the New Business Portal online form or email your completed pdf application to ServiceApplications@ComEd.com.

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COMMERCIAL & INDUSTRIAL CUSTOMER METER CHECKLIST

The following must be complete before any meters can be set (Check all that apply)

GENERAL REQUIREMENTS

- ☐ If applicable, a permit must be obtained prior to ComEd notification and/or approval.
- ☐ All fittings must have a CECHA stamp to receive ComEd approval. Fittings must be located in a ComEd approved location.
- ☐ All meter sockets must be clearly identified with unit number, fire pump, building meter, etc. on the fitting.
- ☐ All units must be clearly identified, using the final unit number, designation and/or address on the unit's breaker panel.
- ☐ All load wires must be landed and terminated between the meter socket and unit panels.
- ☐ All new and existing services must have required grounds.
- ☐ One line drawings for multi-unit buildings must show the location and amount of meters cabinets on each floor for approval.
- ☐ Individual residential units are treated as separate customers requiring separate metering per the ComEd rate book (ComEd.com/Rates).
- ☐ No empty meter fittings allowed; if meter housing will not be used, please remove meter connection hardware and secure with blank metal face plate.

SINGLE-PHASE METERING

- ☐ A fifth jaw is required at the nine o'clock position of the socket for "WYE" (120/208v) services.
- ☐ If there is no bypass handle provided on the socket, jumping studs/horns are required on the line and load connectors of the meter fitting. Meter fitting(s) must be proper height. Service attachment (I-plate) must be installed in proper location and must be within minimum and maximum height clearances.
- ☐ Trees on private property must be trimmed and/or removed as needed by the customer to allow service drop installation.

THREE-PHASE SELF-CONTAINED METERING

- ☐ All three-phase, 120/240V, four-wire, self-contained meter installations (200 Amps.or less), the high phase must be attached on the right side of the fitting and clearly identified within the meter fitting and at the weatherhead.
- ☐ All phases and the neutral must be clearly identified.
- ☐ An integrated bypass lever is required for all three-phase, self-contained meter fittings.

THREE-PHASE TRANSFORMER-RATED METERING

- ☑ High phase must be in the center positon in all current-transformer cabinet installations.
- ☐ Please make sure the switchgear size, estimated demand load and voltages have been provided to the Project Engineer. Also, an approved wiring harness must be provided in all current-transformer cabinet installations (per ComEd requirements) when the meter fitting is on the CT cabinet door.

For metering standards and dimensions, please see ComEd's Service and Meter Requirements on the ComEd website at: ComEd.com/Redbook or ComEd.com/MeteringRequirements.

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3.G.II Schematic Design Deliverables Checklist

Public Building Commission of Chicago | Richard J. Daley Center | 50 West Washington Street, Room 200 | Chicago, Illinois 60602 | (312) 744-3090 | pbcchicago.com

Project Name: Kells Park 100SD

This document is a tool for the User Agency in preparing design submittals to the PBC. This checklist contains the PBC's expectations of actions and documents that the User Agency and their design team, to take or prepare prior to the completion of the phase for which this document is issued. The appropriate design team member is to check off each item in acknowledgement of its completion or, if not completed, indicate in "Req'd % Complete" the extent to which it is complete, and describe discrepancies in the "Comments" column. Reviewers may then comment on what work they know to expect via the checklist, and level of completion via the User Agencies notes. This document does not alleviate contractual obligations of either the User Agency/PBC design team or the reviewers.

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
General				AS OF 04/23		
Project Schedule			☐		Confirmation of design and construction schedule	
			☐		Establish appearance and review schedule for Zoning and Chicago Dept. of Planning & Development	
Cost Estimate			☐		Cost estimate with comparisons, revisions and updated probable costs for the building and the site preparation. Provide alternates in the rough order of magnitude if base costs are exceeded. Base cost must be achievable with acceptance of reasonable alternates.	
Title Sheet			☐		Project name and address, project directory with all consultants	
			☐		User agency, PBC ID and logo (on all drawings)	
Design Team Directory		100%	☐	100	Identify and submit directory of contacts from all professional services firms involved	BA
RFCs			☐		Request for Clarification compilation and log	
Conceptual Design Review Comments			☐		Incorporate reviewer, User agency and or PBC PM comments into the subsequent phase of the contract documents	
Utilities		90%	☐	100	Off-site work identified, utilities and easements identified	contingent upon the status of the survey
Specifications			☐		Outline specifications or amended CPS Master Specifications Table of Contents. Any special sections required for project, with Table of Contents	
			☐		Confirm that specifications are without conflict	
Approvals		50%	☐	TBD	Submit formal sign-off drawings, with Dept. Head signatures, approving general layout of various departments within project. Provide supporting documentation, including meeting minutes and drawing notations.	PBC/Park District
Other:						

SCHEMATIC DESIGN DELIVERABLES

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
Space Program			☐		Comparison of design program to project requirement conceptual design document	
			☐		Identify any special environmental, systems or equipment requirements	
Building Area Diagrams and Area Calculations			☐		Calculations for gross and usable square footage, enclosed volume and exterior surface area of the building envelope	
LEED			☐		Facilitate and document LEED Charrette. Provide target LEED scorecard and minutes from Charrette.	
			☐		Provide LEED Project Evaluation Matrix with narratives describing strategies to achieve each credit	
			☐		Record of application submittal to USGBC.	
			☐		Initial energy simulation model using the DOE2 Modeling Software	
Preliminary Reviews			☐		Conduct and document reviews with CDOT, MOPD, Fire Prevention and other regulatory agencies	
			☐		Determine involvement of Landmarks or IHPA	
Zoning Analysis			☐		Provide a zoning analysis package for review	
			☐		Verify any required amendments to the public right of way	
Updated Code Analysis Package			☐		Occupancy classification	
			☐		Construction type	
			☐		Fire resistance requirements	
			☐		Occupant load by area and floor	
			☐		Travel distances	
			☐		Exit types, units and widths	
			☐		Loading berths and parking requirements	
Civil Engineering						
Survey		100%	☐	100	Boundary survey and topographical (if available). Note "FOR REFERENCE ONLY"	PBC
Basis of Design Narrative			☐		Description of systems, criteria, grading analysis (import/export), surface drainage and retention, water availability and conservation, other sustainability issues, sub-surface investigation recommendations and City requirements	
Site Plan		75%	☐	100	Storm Water analysis and Management Plan	TE
		10%	☐	100	Grading/drainage plan	TE
		95%	☐	100	Storm water release calculations and discharge rate	TE
			☐		identify non-piped stormwater management opportunities.	
			☐		Acknowledgement of receipt of off-site requirements meeting minutes with CDOT round table	

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
Utilities			☐		Identify existing utilities and resolve to be reused, re-routed, abandoned.	
Landscape Design						
Basis of Design Narrative			☐		Description of design approach and criteria, plant selections, irrigation, soil preparation requirements	
Architecture						
Basis of Design Narrative			☐		Design approach and philosophy, general description of buildings and materials, important design factors, community issues, sustainability measures	
Architectural Site Plan		25%	☐	100	Buildings, playground areas, future buildings	BA
			☐		Scope and Limits of Work, off-site improvements, property lines, easements and finish elevations (including floor)	
			☐		Relevant topographical features, grading concepts, property elevations at corners and spot elevations as required.	
			☐		Driveways, streets, parking, receiving areas, curb cuts, access points, walks, future street widening	
			☐		Existing landscape features, planting concepts, storm water retention or detention areas	
			☐		Identify any areas of future expansion	
Floor Plans	1/8	25%	☐	100	Room names and square footages, doors and windows, special finishes. Identify the various major areas, core areas and their relationships	BA
			☐		Cabinets, furniture and equipment to show function, capacity	
			☐		Structural bay spacing and column centerlines	
			☐		Stairs, ramps, elevators, major structural elements	
			☐		Equipment rooms (mechanical, power, data), major shafts and chases	
	¼	10%	☐	0	Develop enlarged plans of special or feature areas	
			☐		Develop interior elevations of special or feature areas	
Roof Plans	1/8	10%	☐	100	Identify roof systems, deck, membrane flashing and drainage technique and indicate overall combined heat transfer coefficient at wall/envelope	
Exterior Elevations	1/8		☐		Show exterior building elevations identifying proposed shell finishes (includes all exterior surfaces, doors and windows)	
Wall Sections		20%	☐	90	Show preliminary exterior wall sections indicating location of openings, and overall thermal transfer value for each element of the exterior wall /envelope	missing transfer value on elevations

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
Building Sections	1/8	10%	☐		Indicate room names. Show floor-to-floor dimensions, interstitial ceiling space dimensions, ceiling heights, atriums, vaulted spaces, balconies and bridged spaces. Note adequate clearances for proposed mechanical systems.	
Building Performance Goals		60%	☐	100	Determine envelope performance goals, incorporating thermal, lighting, acoustical and daylighting, etc. strategies	BA/SMNGA
Structural Engineering						
Basis of Design Narrative			☐		Description of systems, bearing conditions, load criteria, foundation-engineering report reference (or geotechnical investigation recommendations)	
Soil Borings			☐		Procure geotechnical services, determine locations and have soil borings completed.	
Floor and Roof Plans	1/8	10%	☐	100	Preliminary structural floor and roof plans with overall dimensions and floor elevations	K2N
			☐		Identify structural system and provide preliminary sizes for all main structural members. Diagrammatic layout of structural elements. Indicate design criteria (loads)	
Building Sections		10%	☐	100	Main building sections depicting proposed structural systems. Investigate thickness of ceiling and roof structural system for adequate clearance for proposed mechanical and electrical systems.	K2N/BA/BE
			☐		Analysis of comparative systems with recommendations. Indicate provisions for future expansion	
Code Analysis			☐		Conduct code search and analysis with recommendations	
HVAC						
Basis of Design Narrative			☐		Description of systems, criteria, special energy and sustainability issues, envelope criteria, possible phasing	
			☐		Existing mechanical systems and components analyzed	
			☐		Analysis of comparative systems with recommendations. Indicate provisions for future expansion	
Code Analysis			☐		Conduct code search and analysis with recommendations	
Plumbing & Fire Protection						
Basis of Design Narrative			☐		Description of systems and criteria, fixture types, general loads, gas, domestic and fire water, sanitary waste, water availability, on and off-site drainage provisions	
			☐		Analysis of comparative systems with recommendations.	

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
					Indicate provisions for future expansion	
Code Analysis			☐		Conduct code search and analysis with recommendations	
Electrical						
Floor Plans			☐		Floor plans showing all major electrical equipment locations	
Basis of Design Narrative			☐		Description of all electric power related systems, including emergency power, computer power, equipment types, etc.	
			☐		Analysis of comparative systems for light and power distribution, emergency systems, telephone and data distribution and any special systems, with recommendations. Indicate provisions for future expansion of systems	
			☐		Preliminary one-line electrical distribution diagrams. Indicate preliminary location of service entry, switchboards, motor control centers, panels, transformers and emergency generator	
			☐		Description of all signal systems, including fire alarm, intrusion alarm, CCTV/audio surveillance systems, PA/intercom, autonomous PA/sound system (gym, auditorium, athletic fields, multi-purpose rooms and large instruction rooms), TV distribution (copper or fiber optic), clock system, classroom sound enhancement system	
			☐		Description of lighting system in typical areas, indicating fixture types and lighting controls	
			☐		Indicate measures and strategies to achieve maximum LEED credits	
			☐		Typical classroom plan (lighting, power and data outlets) Other special conditions including communication, fire alarm and technology. (8.5x11 or 11x17 bound with Basis of Design)	
			☐		Estimated Load(s)	
			☐		Coordinate with Com Ed, BOE, Telephone, Cable Co.	
Acoustical Consultant		100%	☐		Preliminary site evaluation for background noise levels (special consideration).	
Food Service		25%	☐		Basis of Design, criteria, descriptive material of other design disciplines as may be needed by the size and complexity of the project	
Graphics & Signage		25%	☐			
Theater Consultant		25%	☐			
Kitchen Consultant		25%	☐			
Documents for review						
Hard files			☐		Issue bound copies for distribution (see distribution list for	

DOCUMENTS	Scale (Min) in. / ft.	Req'd % Complete	AOR	AOR % Complete	Review Information Required	Comments
					amount)	
Electronic Files			☐		pdf files for all submittals (CDs)	
AOR Acknowledgement:	It is acknowledged that use of this checklist does not relieve AOR of contractual obligations regarding project phase deliverables and otherwise.					
Project name:						
Certification: This is to certify that the design documents as issued comply with the elements of this Design Checklist. 04/23/2025 Architect of Record/Date	Comments:					

BROOK

ARCHITECTURE

2301 South Michigan Avenue Chicago, Illinois 60616 312.528.0890 brookarchitecture.

EXHIBIT #4

Design-Builder Key Personnel

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BOWA CONSTRUCTION fgma

- BOWA (MBE)
- FGMA
- Milhouse (MBE)
- Engage Civil (MBE)
- **HUSarchitecture (WBE)**
- CCJM (MBE)
- SM&W
- DWA (WBE)
- EDI (MBE/WBE)
- MAPS (WBE)
- INTERRA (MBE)
- Juli Ordower Landscape Architecture (WBE)

EXECUTIVE LEADERSHIP
Nosa Ehimwenman, President & CEO

DESIGN PRINCIPAL IN CHARGE (AOR)
Jim Woods, AIA, LEED AP

SENIOR PROJECT EXECUTIVE
Tim Scholten, Senior Vice President

DESIGN MANAGEMENT

PRECONSTRUCTION MANAGER
Sean Sweeney

Cost Estimator
Monica Niebles

Compliance / Outreach
Natalie Pedraza

Community Outreach
Lee Fantroy

Virtual Design / Construction
John Pasowicz

Constructability
Tom Tennett

Design Manager
Jason Klinker, AIA, NCARB

Lead Design Architect
Dan Nicholas, AIA

Lead Interior Designer
Reagan Porter, IIDA, LEED AP ID+C

Project Architect
Brian Lipski, AIA, LEED AP BD+C

MEP/FP
Milhouse

Civil
Engage Civil

LEED
HUSARCH

Cx
CCJM

AV/IT/SEC
SM&W

Structural
DWA

Environmental
EDI

Permitting
MAPS

GEOTECH
INTERRA

Landscape
Juli Ordower

BIDDING / PROCUREMENT MANAGEMENT

PROJECT MANAGER
Abie Ehimwenman

Preconstruction Manager
Sean Sweeney

Cost Estimator
Monica Niebles

Compliance / Outreach
Natalie Pedraza

Community Outreach
Lee Fantroy

CONSTRUCTION MANAGEMENT

PROJECT MANAGER
Abie Ehimwenman

Senior Superintendent
Tom Tennett

Virtual Design / Construction
John Pasowicz

Project Engineer
Joshua Gregory

Quality Assurance / Control
Timi Asupoto

Safety Management
Dave Stewart

Resume

Lee Fantroy
SENIOR PROJECT EXECUTIVE

BOWA CONSTRUCTION

As Senior Project Executive, Lee will be responsible for overseeing overall project performance in order to ensure your project is delivered per the requirements. He will be the executive representation from BOWA and will keep all stakeholders informed on project progress in coordination with project plans and specifications.

INDUSTRY EXP.
33 years

EDUCATION
BA University of Illinois

Experience

Joint Public Safety Training Academy Phase 01A
Core and shell construction of a single-story building for restaurant tenant, Culvers, including site remediation, PROW, site development and landscaping.

Gately Indoor Track & Field Facility
New $53,000,000, 139,000 SF complex including a banked 200-meter track, an eight-lane sprint track, seating for 3,500 spectators and space for track and field events.

Robert Crown Community Center
$8,600,000 development consisting of 21 housing units on four vacant lots including four buildings configured as three- and six-unit buildings with a focus on high levels of wheelchair accessibility.

Dixmoor Recreational Facility
413 mixed income housing units and 11 acres of green space. Additional scope included extensive ADA retrofit of 108 units located on the ground floor incorporating both Type A and Type B guidelines.

Wind Creek Chicago Southland
$280,000,000 casino housing 1,350 slot machines and 56 table games, in addition to dining and entertainment.

Homan Square
$8,600,000 development consisting of 21 housing units on four vacant lots including four buildings configured as three- and six-unit buildings with a focus on high levels of wheelchair accessibility.

JAMES WOODS, AIA, ALEP, LEED AP

Executive Vice President & Principal

"We share our clients' goals: to improve lives through our work."

Jim helps clients translate pedagogy and long-term strategy into spaces that work. He is a recognized expert in facility programming and planning. Jim is known for the way he works with the public and user groups to get feedback and buy-in.

EDUCATION

M of Architecture | University of Virginia

BS in Architecture | University of Virginia | 1978

LICENSES & CERTIFICATIONS

Registered Architect | Illinois, Wisconsin, Indiana

MEMBERSHIPS

American Institute of Architects

Association for Learning Environments (A4LE)

Chicagoland Chapter President & Midwest Great Lakes Region President Elect

Chicago Building Congress

Illinois State Board of Education
21st Century Schools Focus Group

U.S. Green Building Council

PROJECT ROLE

Principal-in-Charge / Project Executive / Architect of Record

EXPERIENCE

CHICAGO PUBLIC SCHOOLS, IL
Mather HS *ADDITION & RENOVATION*
Dunne ES *ADDITION & RENOVATION*
Prosser HS Career & Tech Education Wing *RENOVATION*
John M. Palmer ES *ADDITION*
Poe ES *ADDITION*
McCutcheon ES *ADDITION*
Air Force Academy *RENOVATION*
100+ District Wide *ADDITIONS & RENOVATIONS*

GLEN ELLYN PARK DISTRICT, IL
Main Street Rec Center *RENOVATION*

HUNTLEY PARK DISTRICT, IL
Recreational, Educational & Cultural (REC) Center *ADDITION & RENOVATION*

RIVER FOREST PARK DISTRICT, IL
Recreation Center *PRE-REFERENDUM SERVICES*

ST. RITA OF CASCIA HIGH SCHOOL, IL
Master Plan
Fundraising Support
Fitness Center *ADDITION & RENOVATION*
Media Center *RENOVATION*
Student Center *ADDITION & RENOVATION*

ROCKFORD SD 205, IL
Auburn HS Fieldhouse *ADDITION*
Guilford HS Fieldhouse *ADDITION*
East HS Fieldhouse *ADDITION & HS RENOVATION*
Johnson ES *ADDITION & RENOVATION*
Conklin ES *ADDITION & RENOVATION*
Lathrop ES *ADDITION & RENOVATION*
McIntosh ES *ADDITION & RENOVATION*
Froberg ES *ADDITION & RENOVATION*
Auburn HS *RENOVATION*

GRAYSLAKE CHSD 127, IL
North HS Athletic Complex *ADDITION & RENOVATION*
Central HS Athletic Complex *RENOVATION*
District Architect Services Master Plan

MARET SCHOOL, WASHINGTON, DC*
Academic Building *ADDITION*
Athletic Building *ADDITION*

SYCAMORE CUSD 427, IL
District Architect Services Master Plan
District Office *RENOVATION*
Athletic Fields *RENOVATION*
Sycamore HS Athletic Fields *MASTER PLAN*

**Project completed while Jim was affiliated with another firm.*

Resume

Sean Sweeney
PRECONSTRUCTION MANAGER

BOWA CONSTRUCTION

With nearly ten years of construction experience, Sean has played several key roles encompassing cost estimating and project and program documentation and coordination. As Preconstruction Manager, Sean will support project management including overseeing all cost control, materials logistics and estimating.

INDUSTRY EXP.
10 years

EDUCATION
BS Dublin Institute of Technology

Experience

Joint Public Safety Training Academy Phase 01A
Core and shell construction of a single-story building for restaurant tenant, Culvers, including site remediation, PROW, site development and landscaping.

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

Chicago Fire FC Training Center
$90,000,000, 54,900 SF team facility inclusive of training, rehabilitation and performance. Amenities include locker rooms, meeting spaces, performance, sports medicine, rehabilitation club dining and offices.

McDade Elementary School Annex and Renovations
Addition of a new, 9,600 SF gymnasium and multi-purpose room to the existing school. Renovations included conversion of the gymnasium into a cafeteria/ multi-purpose room and upgraded restrooms.

Dirksen Elementary School Annex and Renovations
65,000 SF addition to the existing school. The annex includes 18 classrooms, four special need classrooms, four pre-kindergarten classrooms, library/media center, kitchen office, building storage, utility rooms and elevator.

Thrive Englewood Phase I
New construction of a six-story, mixed-use building including 61 affordable housing units and limited commercial space.

Resume

Monica Niebles
COST ESTIMATOR

BOWA CONSTRUCTION

As Cost Estimator, Monica will support Sean with all cost control, materials logistics and estimating. Monica will apply familiar concepts, practices and procedures that credit her experience and judgments in order to successfully accomplish project goals.

INDUSTRY EXP.
9 years

EDUCATION
BS Universidad de la Costa, Colombia
MS University of the Cumberlands, Kentucky

Experience

Joint Public Safety Training Academy Phase 01A
Core and shell construction of a single-story building for restaurant tenant, Culvers, including site remediation, PROW, site development and landscaping.

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

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Thrive Englewood Phase I
New construction of a six-story, mixed-use building including 61 affordable housing units and limited commercial space.

Resume

Natalie Pedraza
VP, COMPLIANCE / OUTREACH

BOWA CONSTRUCTION

Natalie has more than 25 years of industry experience. She has handled a variety of matters regarding the certification and participation of disadvantaged, minority and woman business enterprises (D/M/WBE) and has assisted clients in preparing D/M/WBE certification applications, assessing certification eligibility and drafting appeals of certification eligibility decisions. Natalie also has extensive experience providing counsel regarding contract compliance including D/M/WBE direct and indirect participation, substitution and allocation of credit.

INDUSTRY EXP.
25 years

EDUCATION
BS DePaul University

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

Roosevelt Square Phase 3B
207 mixed-income apartments across three, new mid-rise buildings, 15 apartments as part of the rehabilitation of the existing National Public Housing Museum and the rehab of 184 units in 38 buildings.

Homan Square
$8,600,000 development consisting of 21 housing units on four vacant lots including four buildings configured as three- and six-unit buildings with a focus on high levels of wheelchair accessibility.

Thrive Englewood Phase I
New construction of a six-story, mixed-use building including 61 affordable housing units and limited commercial space.

Aeroterm NE Cargo Phase III
Single-tenant cargo handling facility including 122,637 SF of warehouse and 8,225 SF of mezzanine office space built on a 12-acre site, with the ability to provide ramp space for two Group 6 wide-body aircrafts.

43 Green Phase I
New $26,000,000, 10-story high-rise apartment building including a total of 99 residential units, 36 studio units, 45 one-bedroom units and 18
two-bedroom units.

Jerry L. Lewis

President, JLL Construction Services Inc.

Email: jlewis@jllconstruction.com | Phone: 708-941-9094 |

Executive Profile

Visionary and experienced construction executive with over 30 years of leadership in the commercial construction industry. As President of JLL Construction Services Inc., a certified Minority Business Enterprise (MBE / BEP), I lead a dynamic team with a commitment to excellence in general contracting, construction management, excavation, and community-driven development. With a foundation in architecture and a passion for empowering others, I have also founded impactful initiatives such as the Minority Business Alliance (MBA), Community Entrepreneurial Empowerment Program (CEEP) to foster entrepreneurship across all trades in construction. Also a founder of Synergy Development Resources LLC to further support minority general and subcontractor opportunities.

Education

Bachelor of Science Architecture
Minor in History of Architecture

Certification

Plumbing
Electrical
Carpentry
Electrical
Company Signatory to
Operator Local 150
Labor Local 6

Professional Experience

President
JLL Construction Services Inc.
2139 W. Madison, Chicago, IL. 60612
1999 – Present

- Founded and incorporated a full-service general contracting firm with MBE certification.
- Lead and manage all phases of commercial construction projects, including excavation and trucking services.
- Provide construction management and owner's representative services for public and private sector clients.
- Oversee design-build initiatives, working closely with architects and engineers to deliver turnkey solutions.
- Serve as a trusted community liaison, representing major development projects and fostering local engagement.
- Self-perform excavation services, ensuring quality control and cost-efficiency.
- Maintain strategic partnerships with minority subcontractors and promote diversity in construction.

Leadership & Community Impact

Founder:
Minority Business Alliance (MBA)
Synergy Development Resources (SDR)
Community Entrepreneurial Empowerment Program (CEEP)

- Established a training and mentorship organization dedicated to preparing individuals for entrepreneurship across all trades within the construction industry.
- Developed tailored curriculum and hands-on workshops covering business setup, bidding, compliance, and field operations.
- Provided pathways to union and non-union opportunities for emerging contractors and workers.
- Founder of Synergy Development Resource to further opportunities for minorities

Core Competencies

- Commercial General Contracting
- Excavation & Trucking Operations
- Construction Management
- Owner's Representative Services
- Design-Build Project Delivery
- Community Liaison & Stakeholder Engagement
- Minority Workforce Development
- Entrepreneur Training & Mentorship
- Strategic Planning & Business Development

Project Experience

July 2024 – General Contractor
River North Car Wash
1317 W. North Ave
Chicago, IL.
General Contractor - Design Build Interior Car wash and auto body repair facility

January 2024 – Excavation
160 Morgan
Chicago, IL.
Subcontractor - Excavation

June 2023 – Partner agreement Community Liaison
868 N. Wells
Chicago, IL.

Minority Subcontractor management

June 2023 – Partner agreement Community Liaison
920 N. Wells
Chicago, IL.
Minority Subcontractor management

March 2023 – JV Power Construction
360 Green
Chicago, IL.
Project Management / Superintendent

March 2023 – JV Power Construction
1475 Kingsbury – Common Lincoln Park
Chicago, IL.
Project Management / Superintendent

October 2019 – Excavation
Ogden Residential Development
Chicago, IL.
Subcontractor – Excavation

June 2018 – Excavation
Plumbers Hall
Chicago, IL.
Subcontractor – Excavation

December 2017
171 Aberdeen
Chicago, IL.
Construction Management

Resume

John Pasowicz, AIA
VIRTUAL DESIGN / CONSTR.

BOWA CONSTRUCTION

With nearly ten years of industry experience, John is an expert on systems integration and coordination and is passionate about how technology can enhance the building process. As Virtual Design / Construction Manager, John will be a critical team member on the project, responsible for utilizing BIM management during preconstruction and construction.

INDUSTRY EXP.
10 years

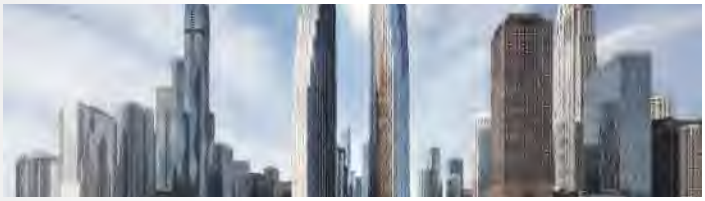
EDUCATION
B. Arch Illinois Institute of Technology

CERTIFICATIONS
Licensed Architect

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

Roosevelt Square Phase 3B
207 mixed-income apartments across three, new mid-rise buildings, 15 apartments as part of the rehabilitation of the existing National Public Housing Museum and the rehab of 184 units in 38 buildings.



400 Lake Shore Phase I
$327,500,000 Phase I construction of 58-foot luxury residential tower. The project will also feature 4.5 acres of public land.

Thrive Englewood Phase I
New construction of a six-story, mixed-use building including 61 affordable housing units and limited commercial space.

Dallas ISD Nolan Estes Plaza Downtown Dallas
New construction of a three-story, 190,000 SF school that houses grades PK – 12 located in Downtown Dallas, Texas.

JASON KLINKER, AIA, NCARB

Senior Associate

"I want to help you create something you are proud of."

Jason's adaptability is rooted in his range of experience throughout the design and construction process. His role includes developing technical and design solutions, managing the design team, and leading the development of construction documents. He also guides project coordination with consultants, leads material and code research, and handles the day-to-day construction administration.

EDUCATION
Master of Architecture
Ball State University

Bachelor of Science in Architecture
Ball State University

AS in Architectural Engineering
Purdue University

LICENSES & CERTIFICATIONS
Registered Architect | Illinois, Indiana

Chicago Self-Certification Professional

NCARB Certificate

MEMBERSHIPS
American Institute of Architects

National Council for Architectural Registration Boards

PROJECT ROLE

Design Manager/Project Manager

EXPERIENCE

PUBLIC BUILDING COMMISSION OF CHICAGO, IL
Joint Public Safety Training Center *NEW/PHASE 1A*

CHICAGO PUBLIC SCHOOLS IL
Walsh Elementary School Classrooms *RENOVATION*
Benito Juarez Pool *RENOVATION*
Hawthorne Elementary *CAPITAL IMPROVEMENTS*
Skinner Elementary *CAPITAL IMPROVEMENTS*

COOK COUNTY, IL
Oak Forest *REDEVELOPMENT*
Building at 118 North Clark Street Floors 1 & 2 *RENOVATION*
Building at 118 North Clark Street Floor 5 *RENOVATION*
Building at 118 North Clark Street Floors 10 & 11 *RENOVATION*
Department of Corrections Campus Gates *REPLACEMENT*
Oak Forest Campus *MASTER PLAN*

FORT WAYNE COMMUNITY SCHOOLS IN*
District Wide HS *ANNUAL CAPITAL IMPROVEMENTS*
District Wide MS *ANNUAL CAPITAL IMPROVEMENTS*
District Wide ES *ANNUAL CAPITAL IMPROVEMENTS*

WAUBONSEE COMMUNITY COLLEGE, IL
New Student Building *NEW*

DOMINICAN UNIVERSITY, IL
Multi-Cultural Center *INTERIOR RENOVATION*

WHEATON COLLEGE, IL
McAlister Hall *INTERIOR RENOVATION*
Chrouser Athletics *ADDITION & RENOVATION*

SCHOOL OF THE ART INSTITUTE OF CHICAGO, IL
Fiber Faculty Office *INTERIOR RENOVATION*
Accounting Suite *INTERIOR RENOVATION*

ALPHA KAPPA ALPHA, IL
Administrative Offices *INTERIOR RENOVATION*

GREATER ROUND LAKE FPD, IL
Fire Station No. 1 *ADDITION & RENOVATION*

WHEATON PD, IL
Locker Rooms *INTERIOR RENOVATION*

**Project completed while Jason was affiliated with another firm.*

DANIEL T. NICHOLAS, AIA

Principal & Senior Associate

"I design spaces to attract people and promote operational efficiencies."

Dan has experience in the recreation arena creating award winning recreation centers, aquatic parks and golf course clubhouse facilities. With 38 years of exprience, he is a recognized leader in clubhouse and amenity design resulting in over 80 golf related projects across the country.

EDUCATION
BA in Architecture | Iowa State University

LICENSES & CERTIFICATIONS
Registered Architect | Illinois

National Council of Architectural Registration Boards Certificate

MEMBERSHIPS
American Institute of Architects

Urban Land Institute

National Golf Foundation

Chicago District Golf Foundation

Rotary Club of Central DuPage

THOUGHT LEADERSHIP
Illinois Parks and Recreation Association

Great Chicago Club Managers Association of America GCCMA

Midwest Regional Educational Forum

PROJECT ROLE

Subject Matter Expert / Design Lead

EXPERIENCE

GURNEE PARK DISTRICT, IL
FitNation Golf and Interiors
RENOVATION STUDY

ARLINGTON HEIGHTS PARK DISTRICT, IL
Comprehensive Master Planning

O'FALLON PARK DISTRICT, IL
Parks and Rec Master Plan *FCA*

DEL WEBB SUN CITY HUNTLEY, IL
Prairie Lodge *NEW*

BOWES CREEK COUNTRY CLUB, IL
Community Clubhouse *NEW*

WESTERN SPRINGS SERVICE CLUB, IL

BOLINGBROOK RECREATION AND AQUATIC COMPLEX, IL

VALLEY LO CLUB, IL
Beach Club and Fitness Center
NEW

GLENVIEW PARK GOLF CLUB, IL
Golf Club *RENOVATION*

BOWES CREEK COUNTRY CLUB, IL
Clubhouse *NEW*
Turf Care Center *NEW*
Turnstand *NEW*

SPRINGBROOK GOLF CLUB, IL
Clubhouse *ADDITION & RENOVATION*

BOUGHTON RIDGE GOLF CLUB, IL
Clubhouse *NEW*

ARROWHEAD GOLF CLUB, IL
Clubhouse and Turnstand *NEW*

ANTIOCH GOLF CLUB, IL
Clubhouse *NEW*

THUNDERHAWK GOLF CLUB, IL
Clubhouse and Turf Care Center
NEW

VILLAGE OF GLENCOE, IL
Golf Club Clubhouse *NEW*

CRESS CREEK COUNTRY CLUB, IL
Clubhouse *NEW*
Card Room *RENOVATION*

RIDGE CREEK GOLF CLUB, CA
Clubhouse and Turf Care Center
NEW

CROWFIELD PLANTATION, SC
Clubhouse and Aquatic Center
NEW

PRESTWICK COUNTRY CLUB, IL
Clubhouse *MASTER PLAN*

RAEGAN PORTER, IIDA, NCIDQ, LEED AP ID+C

Vice President & Principal

"I want to create exciting spaces that make people feel good."

Raegan has a diverse background in recreation, municipal, educational and contract design. She translates her client's needs into creative, functional space plans and with skillfully selected materials brings their vision to life. Her goal for clients is to create an overall experience for the communities using her spaces.

EDUCATION
BA in Interior Architecture
Columbia College Chicago

LICENSES & CERTIFICATIONS
Registered Interior Designer | Illinois

MEMBERSHIPS
International Interior Design Association

Board Member National Council for Interior Design Qualification

U.S. Green Building Council

THOUGHT LEADERSHIP
Presentation at 2019 SSD Conference

SPEAKING ENGAGEMENTS
"All You Need to Know on Materials" Session Speaker | Station Design Conference, 2022
"How to Change Culture Through Design"

PROJECT ROLE

Interior Design Lead

EXPERIENCE

MUNDELEIN PARK & RECREATION DISTRICT
Dunbar Recreation Center *NEW*

LOMBARD PARK DISTRICT, IL
Madison Meadow Rec Center *NEW*
Lagoon Shelter *RENOVATION*

WHEELING PARK DISTRICT, IL
Community Recreation Center *ADDITION & RENOVATION*

CITY OF MCHENRY, IL
Recreation Center *NEW*

NILES PARK DISTRICT, IL
Howard Leisure Center *RENOVATION STUDY*

ARLINGTON HEIGHTS PARK DISTRICT, IL
Arlington Ridge Recreation Center *RENOVATION*
Camelot Park Recreation Center *NEW*
Heritage Tennis Club *ADDITION & RENOVATION*
Forest View Racquet & Tennis Club *RENOVATION*
Lake Arlington Clubhouse & Boathouse *RENOVATION*

BOLINGBROOK PARK DISTRICT, IL
Annerino Center *RENOVATION*
Facility & Parks *LONG-RANGE PLAN*
BRAC

GURNEE PARK DISTRICT, IL
FitNation Fitness Facility Painting *RENOVATION*
FitNation Aquatic *RENOVATION*
FitNation Multi-Purpose *RENOVATION*

NORTHBROOK PARK DISTRICT, IL
Sports Center *RENOVATION*

PARK RIDGE PARK DISTRICT, IL
Prospect Park O'Connor Community Building *NEW*
Prospect Park Administrative Building *RENOVATION*
Maine Park Leisure Center *RENOVATION*
Centennial Activity Center *RENOVATION*

RIVER FOREST PARK DISTRICT, IL
Depot Recreation Center *RENOVATION*

CHICAGO PUBLIC SCHOOLS, IL
Mather HS *ADDITION & RENOVATION*

BRIAN LIPSKI, LEED AP BD+C

Senior Associate

"Helping my clients achieve their visions is what inspires me."

Brian dedicates his time to the design, programming and planning phases of a project, working closely with the Design Director to realize the architectural design that suits both the clients' functional needs and aesthetic aspirations. His attention to detail ensures that the client's vision is fulfilled.

EDUCATION
BS in Architecture | Illinois Institute of Technology

LICENSES & CERTIFICATIONS
Registered Architect | Illinois

MEMBERSHIPS
American Institute of Architect

U.S. Green Building Council

IDPH Certified Architect

PROJECT ROLE

Project Architect

EXPERIENCE

LOMBARD PARK DISTRICT, IL
Madison Meadow Rec Center
NEW

MUNDELEIN PARK & RECREATION DISTRICT
Dunbar Recreation Center *NEW*

ARLINGTON HEIGHTS PARK DISTRICT, IL
Camelot Park *NEW*
Olympic Recreation Center
RENOVATION & ADDITION

GURNEE PARK DISTRICT, IL
FitNation Fitness Facility Painting
RENOVATION
FitNation Aquatic *RENOVATION*
FitNation Multi-Purpose
RENOVATION

CITY OF MCHENRY, IL
Recreation Center *NEW*
Civic Center Reception Area
RENOVATION

WHEELING PARK DISTRICT, IL
Community Recreation Center
ADDITION & RENOVATION
Chevy Chase Golf Clubhouse
MASTER PLAN
Chevy Chase Golf Clubhouse
ADDITION & RENOVATION

GLENVIEW PARK DISTRICT, IL
Flick Park Fieldhouse
RENOVATION & ADDITION

PARK RIDGE PARK DISTRICT, IL
Prospect Park *RENOVATION*

HOFFMAN ESTATES PARK DISTRICT, IL
Willow RecreationCenter
RENOVATION

FENWICK HIGH SCHOOL, IL
Athletic Fields *STUDY*

COOK COUNTY, IL
118 N. Clark Floors 5, 8 & 10
RENOVATION

George Bouris, PE, CxA

VICE PRESIDENT OF MEP

REGISTRATIONS

Licensed Professional Engineer

- IL #062.055291
- NY #094389
- PA #082721
- NJ #24GE05990500

EDUCATION

BS Mechanical Engineering

- University of Illinois at Chicago, IL

YEAR JOINED THE FIRM

- 2020

CERTIFICATIONS

- ACG Certified Commissioning Agent

George is a mechanical engineer and construction expert with a 31-year record of achievement in MEP Engineering, construction management, and commissioning for projects throughout the continental US. George brings experience in working with internal and external clients as well as contractors. He is a results-oriented leader with recognized success in problem-solving while remaining pragmatic, hands-on, and focused.

Relevant Project Experience

CPS Assessments *Chicago Public Schools, Chicago, IL*

PRINCIPAL-IN-CHARGE

The project involved performing field visits to seven (7) Chicago Public Schools and documenting their existing conditions for mechanical, electrical, plumbing, and fire protection. Mechanical conditions documented included chillers, boilers, pumps, air handling units, and fans. Electrical conditions documented included electrical panels, emergency service, fire alarm systems, interior and exterior lighting, and security systems. Existing plumbing conditions documented included plumbing fixtures, water heaters, and roof drains. Existing fire protection conditions documented include sprinkler heads, sprinkler mains, and fire pumps. After each field visit, Milhouse prepared a report documenting the existing conditions. The reports included descriptions of major systems and equipment, life safety deficiencies, code compliance deficiencies, ADA/accessibility compliance deficiencies, maintenance recommendations, and site photos. (2024)

PAAC Obama Community Center *Moody Nolan, Chicago, IL*

PROGRAM MANAGER

The proposed Obama Presidential Center to be located at Jackson Park in Chicago, Illinois consists of an estimated 37,200 sq. ft. facility/recreation center/community center. Milhouse's scope of work includes HVAC design, advanced building automation, plumbing, fire protection, power, fire alarm LEED design, and energy modeling. This project is pursuing LEED Platinum certification, which will be achieved through green vehicle electric vehicle charging, low flow plumbing fixtures, electrical demand metering, lighting daylight harvesting, and solar panels on the roof. $25 million project. (2022–Present)

CPS Prosser High School FY23 MEP EOR Services *Chicago Public Schools, Chicago, IL*

PROJECT MANAGER

The scope of work includes large-scale MEP upgrades to 1918, 1958, 1974, and CTE buildings, as well as replacing the existing domestic water heating system and failing piping. The existing system at the school was a steam boiler with heat exchangers that converted steam to hot water to supply installation. There was no infrastructure in place to have cooling in the 1918 building. The entire system, including boilers, piping, etc., was removed and replaced with a new hot water boiler heating system. Electrical upgrades include new electrical systems to accommodate HVAC and plumbing, as well as providing upgrades to lighting systems. Architectural and Structural upgrades were also made to accommodate MEP work. $14 million project. (2022–2024)

Morris Maintenance Storage Facility *Capital Development Board, IDOT, Morris, IL*

LEAD MECHANICAL ENGINEER

The 7 Bay Truck Storage Building is a 10,368 sq. ft. building constructed in 1955. The scope of work includes an assessment for demolishing the existing 7 Bay Truck Storage Building, constructing a new office maintenance building, and a new Salt Brine Mixing and Storage Building. The Morris 5 Bay Truck Storage Building is a 4,320 sq. ft. building, constructed in 1963. The scope of work includes repairing and remodeling the Vehicle Maintenance and Storage Building to allow for additional storage space. George led the overall MEP design process for the various facilities involved in this project.

Bally's Chicago Casino *Environmental Design Services, Inc., Chicago, IL*

PROJECT MANAGER

The project includes a casino with approximately 4,000 gaming positions, food and beverage venues which are adjacent to the casino, an approximately 3,000-person capacity Event Center, a museum located at the Riverwalk level, a small amount of retail, and parking containing approximately 3,300 spaces, and a River Garden providing and interior link between the casino and hotel as well as the main vehicular Porte Cochere to the Riverwalk level, and a 40-story 500 room Hotel Tower with amenities and meeting rooms. In addition, Milhouse has assisted in designing the electrical distribution to the EV charging stations for 20% of the parking spaces while adhering to and meeting energy code compliance and Chicago regulations and requirements. (August 2022–Present)

Falconer Middle School *Chicago Public Schools, Chicago, IL*

LEAD HVAC ENGINEER

Modernization of early 1900s HVAC system for 1500 student population education facility. Systems included three 50,000 cfm air handling units, introducing a new dual pipe cooling and heating plant, and refurbishing the school toilet exhaust system. Challenges included designing modern systems that could be integrated with the 1900s construction methodology. The project included a 125 kVA genset. $9.5 million project. (2021–2023)

South Battery Park Resiliency Project *Port Authority NYNJ, New York City, NY*

PROJECT MANAGER/LEAD HVAC ENGINEER

Approximately a 5-acre site with a 30,000 sf community center multi-use facility that includes ADA-compliant restrooms, gathering space, and a restaurant. This highly sustainable building was engineered to meet the net zero carbon footprint. Challenges included designing a deep-well geothermal heating and cooling system and state-of-the-art energy recovery systems. This project received WEDG (Waterfront Edge Design Guidelines) Verification, the gold standard for waterfront design, which recognizes excellence in resilient, ecological, and accessible waterfront projects. South Battery Park is one of the 13 in the nation to receive this prestigious certification. $150 million project. (2021–Present)

N Chicago Humboldt Park Development *548 Capital LLC, Chicago, IL*

LEAD QA/QC AND HVAC ENGINEER

Milhouse is providing MEP/FP, structural, and Phase 1 Environmental Site Assessment engineering services for the redevelopment of 3831 West Chicago Avenue, which includes two contiguous commercial buildings. This project involves a new, 4-story condominium with 60 total units.

ENGAGECIVIL INCORPORATED

Kelsey A. Taylor, P.E.
Principal & Civil Project Manager

Licenses
Professional Engineer
Illinois (#062-057215)
2004

Certifications
LEED AP, U.S. Green Building Council
2008

Education
B.S., Civil Engineering
University of Illinois - Chicago
1998

Graduate Certificate in Construction Management,
Illinois Institute of Technology
2011

Kelsey began his engineering career testing soils for future home foundations in the middle of a 2,000 acre site - that was 1998. Transitioning into design mode the following year, that critical experience monitoring civil construction continues to inform his civil-site design style.

An accomplished, team-oriented civil engineering and site development project manager, Kelsey brings to bear a broad expanse of civil-site knowledge, from 150-acre mass grading of power plants, to detailed sewer and grading work of complex commercial, industrial, and municipal projects on storied sites in Chicago. The ability to produce quality deliverables that both anticipate and respond to the needs of both the contractor tasked to build and the developer posited with paying for a project are hallmarks of his work. Belief that a clean and elegant design on paper is more likely to translate to faster permitting time and better construction results drives his passion in service of development in his home town of Chicago. Kelsey has been Principal of Engage since its founding in 2013.

A Sample of Key Projects

Bronzeville Lakefront
Clients: SOM, SHNA-Woolpert
Location: 53-acre site at 31st Street, west of DuSable Lake Shore Drive in Chicago
Role: Lead Civil Project Manager for Conceptual Designs (2019-present)

The proposed mega-development on the former Michael Reese Hospital site has separate parcels within the master plan being conceptualized for planned buildings. Serving as Civil Engineer of Record for two separate design teams at multi-acre parcels within the development provides a continuity of knowledge of the existing conditions across the broader site, extending from the mapping of underground legacy foundations to an understanding of the geo-technical soil conditions and potential synergies with the imagined blue-green stormwater corridor.

Englewood Connect – Multiple Phases
Designed by Skidmore, Owings & Merrill for McLaurin Development
Location: 6205 S. Peoria Drive, Chicago
Role: Lead Civil Engineer (2021-present)
Reference: Zeb McLaurin
312.263.4660::zeb@mclaurindev.com

As part of the City of Chicago's dynamic "Invest South-West" program, the Development/Design team undertook the re-imagining of an historic firehouse building and the surrounding approximately 2-acre site as a first phase, with a second phase to include a new performance and marketplace venue being designed from the ground up. Site complexities included intricate stormwater calculations that coordinated with a previously installed detention vault, new R.O.W. features including a raised speed-reducing table, and coordinating with the City's Department of Water Management to help insure the timely installation of a new water main needed to serve the coming development.

Auburn-Gresham – Multiple Phases
Designed by Ross Barney Architects for
Evergreen Imagine Joint Venture
Locations: 838 W. 79th and 753 W. 79th Steets, Chicago
Role: Lead Civil Engineer (2021-present)
Reference: Eric Martin
312.897.1753:: ECM@r-barc.com

A dual-site, dual-building portfolio developed under aggressive timeline as part of the City's "Invest South-West" program. Both buildings include residential over ground floor retail, parking at-grade, extensive R.O.W. improvements, and new water and sewer services clearing the City's Office of Underground Coordination process. The larger of the two sites, at approximately 28,000 sq.ft., features a 9,000 cu.ft. stormwater detention vault to mitigate peak stormwater runoff.

Renovation of Old Cook County Hospital
Civic Health Development Group
Role: Lead Civil Engineer for Design-Build Team (2017-2020)
Reference: Adam Semel, Partner, Skidmore, Owings & Merrill
312.360.4179 :: adam.semel@som.com

The 102-year old iconic former Cook County Hospital Building began the herculean process of undergoing a $130M renovation into hotel, medical office, and commercial space in the summer of 2017. As Civil Engineer of Record, monumental achievements included leading the team thru the complex task of interfacing new dual-water service lines with planned construction of new water mains in adjacent ROW, a synergistic six-figure cost savings to the project. The ability to understand the limitations of working with an historic building with multi-leveled basements helped to guide the interior utility design with efficiency and facilitated the project team in procuring City Stormwater, DWM, and OUC Approvals in support of an unyielding construction schedule.

CDOT Streetscape Corridor Project - Bronzeville Chicago
Peralte-Clark, LLC
Role: Subconsultant (2021-2024)
providing community engagement, and ADA ramp and driveway apron design
Reference: Jean-Alix Peralte
P.E., President, Peralte-Clark, LLC,
847.485.8069 :: jean-alix.peralte@peralte-clark.com

As a hyper-local sub-consultant to a 2-mile long corridor improvement project on Chicago's South Side, Engage is providing community engagement assistance to the team and assisting with the Contract Plans for the 43rd street stretch of the Corridor; detailing ADA ramps, driveway aprons, and underground utility coordination.

CTA 95th Red Line Lot Development
Constructed by F.H. Paschen
Role: Civil Design Engineer of Record (2020-Present).
Reference: Bradley Morrison, Sr. P.M., FH Paschen
773.444.3474 :: bmorrison@fhpaschen.com

The Chicago Transit Authority is in the process of converting two areas adjacent to the 95th Red Line Station with Engage providing full civil site engineering and permit support to the General Contractor FH Paschen. The smaller area is a 5,500sf parcel adjacent to a CTA substation being converted to a parking lot. The larger is a 105,000sf former commercial area that is being demolished, fenced and stabilized as a "Regulated Development" under the City's Stormwater Management Ordinance. The design process required Engage to utilize CTA's bridging documents as design basis and produce design documents in conformance with stringent requirements of both the City of Chicago and CTA.

Taylor Street Library & Apartments
Skidmore, Owings & Merrill
Role: Lead Civil Engineer (2017-2019)
Reference: Adam Semel, Partner, Skidmore, Owings & Merrill
312.360.4179 :: adam.semel@som.com

A partnership project between The Chicago Housing Authority and The Chicago Public Library, famed architect SOM chose Engage to civil engineer a joint library and multi-story apartment building in Chicago's "Little Italy". Stormwater controls managed within a tight space underneath a permeable paver parking lot, adjacent alleys, detailed grading in the public ROW and required approval from the Office of Underground Coordination all provided an opportunity for Engage to demonstrate successful performance for a major real estate development team under aggressive time constraints. Project is pursuing LEED silver certification amidst several recently procured architectural awards.

Oakwood Shores - 508 E. Pershing Building
Developed by The Community Builders
Architect of Record - Nia Architects
Role: Lead Civil Engineer for Design-Build Team (2018-2021)
Reference: Ms. Gaby Miramon, Senior Design Manager (TCB)
312.577-5267 :: gaby.miramon@tcbinc.org

This four story building, occupying a 0.7-acre corner lot in Chicgo's Bronzeville neighborhood, provides 53 mixed-income housing units, including 36 affordable units in conjunction with the Chicago Housing Authority. The ground floor also provides 4,000 sq. ft. of retail space. Serving as Civil Engineer of Record, responsibilities included detailed design and supervision of all aspects of the permeable paver surface for the 41-stall parking lot, stormwater detention calculations, and all permitting and construction documents.

Lake Meadows Retail Development
Draper & Kramer
Role: Lead Civil Engineer (2017-2018)
Reference: Gordon Ziegenhagen, V.P., Draper & Kramer
312.795.2232 :: gziegen@draperandkramer.com

Principal contact and design engineer for a 2.2 acre re-visioning of a commercial outlet in Chicago's Bronzeville neighborhood, which includes, among other venues, the City's first Culver's Restaurant. Responsive to the requirements of Chicago's Stormwater Management Ordinance and CDOT, site design elements include parking, drive-thru lanes, full site utilities and stormwater BMP's (including permeable pavement systems) for multiple new commercial buildings including two separate restaurant venues. The project also includes the engineering of geometric and MOT plans for the introduction of a new access cut in the median of Martin Luther King Jr. Boulevard.

"We have found that the key to successful implementation of sustainable and accessible concepts is collaboration."

CHYANNE HUSAR

AIA, LEED BD+C, BECxP

PRINCIPAL OF SUSTAINABILITY AND ARCHITECTURE & OWNER

EDUCATION

- Masters of Architecture, Columbia University, NYC
- BS in Architecture, University of Illinois, Urbana Ecole d'Architecture, Versailles France

AFFILIATIONS

- Licensed in IL, IN American Institute of Architects
- USGBC (LEED)
- Building Performance Institute
- Registered Energy Professional in City of Chicago
- Int. Living Building Institute

INDUSTRY EXPERIENCE

- 25 years

AVAILABILITY

- 25%

Chyanne's vision of building a more sustainable future is reflected in the firm's collective goals of enhancing building portfolios through energy efficiency and accessible strategies. Chyanne's architectural foundation expands through specialization in building envelope commissioning, energy auditing, and certifications in ICC Accessibility and SWPPP. She leads her team to develop forward thinking solutions by cultivating a collaborative work environment.

SELECT LEED PROJECTS

UIC CDRLC, with Booth Hansen
Seeking v4 LEED Gold, Ongoing

EPA Headquarters, with JGMA and SMWilson
v4 LEED Silver, Ongoing

PBC Thomas Waters ES, with Bailey Edwards and Gilbane
LEED Silver, 2020

PBC Dirksen ES, with StudioARQ
LEED Silver, 2021

Daley College MTEC, with Cannon & JGMA, and Old Vet. Const.
LEED Gold, 2020

Northshore SD#112 Northwood JR High, with Gilbane
LEED Silver, 2020

CHA Headquarters, w/ Holabird & Root
v4CI LEED Gold, 2018

CHA Altgeld Gardens Daycare, with KOO + ALL Masonry
LEED Gold, 2018

CHA Altgeld Gardens Daycare, with KOO + ALL Masonry
LEED Gold, 2018

SELECT SUSTAINABILITY PROJECTS

ComED AHNC Rebate Program, with Slipstream
Energy Auditor, Ongoing

CHA Master Specifications, with SMNGa
Sustainability Focus, 2018

Carrie L Warner, SE PE Principal

Carrie leads building design for this women-owned practice. Over the past 24 years, she's collaborated on cutting-edge structures across many sectors. Prior to joining DWA, she spent her career with WSP (formerly Halvorson and Partners) and was a Vice President. Pairing technical knowledge with a passion for architecture, Carrie helps teams integrate structural solutions that contribute to the design quality of each building.

Carrie received her Bachelor of Science in Civil/Structural Engineering from Purdue University and her Master of Architecture (Structures) from the University of Illinois at Urbana-Champaign. Recognition includes Crain's Chicago Business 40 under 40 (2006), Purdue Civil Engineering Alumni Achievement (2019) and Purdue Chi Epsilon Chapter Honor Member (2021) awarded each year to one Civil Engineering Alum.

Select Project Experience, with DWA

Oak Park Field Center, Oak Park, IL, In Design
4,600 sq. ft. center, with CLT and glulam roof supported to rammed earth walls

University of Chicago New Engineering & Science Building, In Design
Lab and research facility in early design phase; WBE partner with MKA

Northwestern University Kip & Sara Kirkpatrick Softball Stadium, In Design
New facility with seating, concourse, press box and enclosed program

UIC Computer Design Research & Learning Center, In Construction
168,000 sq. ft. $118MM education building

South Suburban College Allied Health, South Holland, IL. In Bid Phase
69,000 sq. ft. addition for nursing and medical teaching, in design

Illinois State Police Crime Lab, Crest Hill, IL, In EPA review
Pair of buildings – for police and laboratory – totaling 69,000 sq ft.

Sauganash Elementary Annex II, Chicago, 2023
37,000 sq. ft. $26MM Chicago Public School building addition

Select Project Experience, with prior firm

William Jones College Prep High School, Chicago, IL, 2013
Lead structural engineer for 8-story CPS school

Writers' Theatre, Glencoe, IL, 2015
Lead structural engineer for new facility with two performance theaters

GEMS Chicago Secondary School, Chicago, 2015
Lead structural engineer for high-rise school in Chicago's Lake Shore East

Northwestern Ryan/Walter Athletic Center, Evanston, IL 2014
Senior project engineer in SD phase for facility with indoor football field

Earlham College Visual & Performing Arts Center, Richmond, IN, 2013
Senior project engineer, includes 200-seat hall and black box theater

JASON JANSSEN, CHMM
DIRECTOR, ENVIRONMENTAL DEPARTMENT

Mr. Janssen has over 19 years of professional experience with extensive knowledge of environmental consulting, remediation, and construction. Mr. Janssen's experience includes department level management of staff, project management, environmental site assessments, inspections, permitting, sampling, environmental compliance, site remediation, NEPA environmental assessments, and regulatory compliance. Work has included developing and leading a comprehensive update and expansion of health and safety policy and programs, as well as expanding employment of GIS geo-databases and systems utilizing the Esri ArcGIS software suite to provide accurate, timely, and thorough analysis of environmental issues. Key work has also included the development and implementation of Ambient Air Monitoring Programs designed to protect the public's health and safety during remediation efforts at former Manufactured Gas Plant sites, as well as being project team leader directly supervising staff and overseeing the program implementation.

EDUCATION
BS, Environmental Science & Natural Resources, Purdue University, West Lafayette, Indiana

LICENSES
Certified Hazardous Materials Manger (CHMM), 2014

CERTIFICATIONS
40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

Annual 8-hour OSHA HAZWOPER Refresher Training

AFFILIATIONS / MEMBERSHIP
Alliance of Hazardous Materials Professionals

Society of American Military Engineers

Key Projects

TranSystems Corporation – Metra Task Order No. 12, Design Services for Metra Milwaukee District West (MDW) Bridge #A6 over Grand Avenue (April 2022 – Present), Environmental Scientist. Mr. Janssen was responsible for senior review of the services provided to TranSystems and Metra. The environmental scope of the project includes completion of a Preliminary Environmental Site Assessment (PESA) and Preliminary Site Investigation (PSI) for the project corridor. *Mr. Lawrence Kirchner, PE, SE, Principal, Senior Vice President, National Bridge Practice Leader, TranSystems Corporation, 222 S. Riverside Plaza, Suite* 610*, Chicago, IL 60606. 312-669-5843. llkirchner@transystems.com*

Chicago Transit Authority (CTA) Red Line Extension (RLE), 120th Street Yard & Shop, Chicago, IL (June 2023 – Present). EDI continues its work with CTA's Red Line extension as part of the team under T.Y. Lin International Great Lakes, Inc. (T.Y. Lin) that is contracted to provide General Engineering Consultant (GEC) services for the final design of the 120th Street Yard & Shop. The Red Line extension is part of CTA's efforts to extend service from the Red Line's existing terminal at 95th Street south to 130th Street. This represents a continuation of EDI's efforts supporting the Red Line extension that began in 2020. Mr. Janssen provides senior level guidance in support of the additional work at the approximately 50-acre partial brownfield site. *Mr. Jeff Fine, Principal Civil Engineer, TY Lin, 200 S. Wacker Dr., Ste 1400 Chicago, IL, 60606, jeff.fine@tylin.com*

Parsons Transportation Group, Inc., CREATE Railroad Program, Chicago, Illinois (2019-present), Project Manager. Ms. Janssen managed or provided senior review of numerous environmental site investigations for the CREATE railroad program on behalf of Parsons. These included Special Waste Assessment (SWA) Screenings, Preliminary Environmental Site Assessments (PESAs), and Preliminary Site Investigations (PSIs) for locations for proposed improvements along elevated railroad tracks and at the street level for CREATE Project WA1, a Metra bridge raise near West 79th Street for CREATE EW2 Project, and improvements along railroad tracks for the EW3 project corridor. All work was conducted in accordance with the Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA) *CREATE Railroad Property Special Waste Procedures. Craig Moore, Parsons Transportation Group, 222 S. Riverside Plaza, Suite 2450, Chicago, Illinois 60606 Craig.Moore@parsons.com*

Preservation of Affordable Housing, Inc. (POAH), The Ave. Redevelopment Project – West Humboldt Park, Chicago, IL (2022 - 2023), Project Manager. EDI completed and performed Phase I-related activities in July 2022, including environmental and historical database reviews, site walkthrough, conducting interviews, determining recognized environmental concerns (RECs), preparing exhibits and authoring the report. EDI completed and performed Phase II-related activities including, supervising the

Heather Morrison

Chief Executive Officer, MAPS

hmorrison@map-strategies.com
773-351-9842

Heather Morrison is the Founder and CEO of MAP Strategies and MAP Studio. She is an architectural strategist and project executive with a twenty-five year record of successfully overseeing large-scale architecture and construction projects.

After working in the field of architecture for several years Heather observed significant inefficiencies in how entitlement processes for permitting, code review, and licensing were managed. Design changes often occurred after the fact, exacerbating inefficiencies. Heather found a hole in the market, which quickly became a passion for helping all sides of a development team streamline the compliance process.

Notable developments overseen by Heather and her team include: 400 North Lakeshore Drive, Lincoln Yards, 727 West Madison, the Tribune Tower Renovation, and 900 West Randolph (The Row), the tallest building in Chicago's West Loop.

Project Experience
New Children's Memorial Hospital
The new building would be the first high-rise hospital in downtown Chicago | 1.25 million square feet of floor area | Building Permit Manager

Howard Brown Health Center
Mixed-use building | 5-story | 71,000 square feet | Project Executive

Dr. Shifrin's Office, 2335 S. Michigan Ave
Commercial building renovated and converted into a physician's office | 3 stories | 12,000 square feet | Project Executive

The Bell at 25 W Randolph
Gut renovation of historic office building | 850,000 sq.ft. | Project Executive

Yahoo Campus, San Jose
New construction | Architectural Project Manager

Experience
25 years

Education
Bachelor of Architecture, Rhode Island School of Design

Bachelor of Fine Arts, Rhode Island School of Design

Affiliations
Lambda Alpha International, Ely Chapter

The Economic Club of Chicago

Near South Planning Board

Realty Club of Chicago

Service
Chicago Building Code Re-write Stakeholder Committee, 2019

Founded the Michael P. Morrison Scholarship Fund at the Chicago Jesuit Academy

Certifications
City of Chicago Licensed Expeditor

MAPS

INTIMATE SPACES FOR LIVE, WORK, PLAY

JULI ORDOWER, ASLA, RLA, CDT

PROFILE

Founding Principal of full-service landscape architecture firm with a proven track record of guiding multi-faceted projects through design and implementation. Dedicated to collaborative, sustainable design as exemplified in many projects located throughout Chicago and beyond. Passionate about exploring details in the built environment. Continually integrating new design strategies into an existing knowledge base to create powerful outdoor spaces.

REGISTRATION

Licensed Landscape Architect, State of Illinois, #157-001203, 2006

EXPERIENCE

Juli Ordower Landscape Architecture, *Principal,* Chicago, IL January 2012-Present

Focused on creating a collaborative design partnership with the Client, specializing in creating intimate spaces for live, work, and play. Projects can range from multi-family residential spaces and amenity decks to public and commercial sites such as courtyards, plazas, green roofs, parks and play spaces. Design expertise includes ornamental and native plantings, hardscape, site furnishings, playgrounds, lighting, green infrastructure, irrigation, and water features.

Selected Projects:

- PBC Joint Public Safety Training Center, Chicago, IL; Construction Documents for landscape amenities including a public art plaza.
- Space to Grow/CPS Schoolyard Renovations, Chicago, IL; Guide programming and design to provide green infrastructure to alleviate neighborhood flooding through varied play spaces.
- Eleven40, Chicago, IL; Streetscape, amenity deck and green roof design of this South Loop high-rise rental building.
- CPD Touhy-Herbert Park, Chicago, IL; Team leader for this 4-acre park with a new interactive water spray feature, playground renovations, lighting and recreational sports field.
- South Suburban College Allied Health Facility, South Holland, IL; Landscape design for this teaching facility consisting of native seeding, rain gardens, targeting LEED Silver.
- Maggie Daley Park; Chicago, IL; Construction Project Manager for Landscape Subcontractor. Sourced more than 4000 shrubs and 44,000 perennials from 20 Midwest nurseries.

Site Design Group, Ltd., *Senior Project Manager,* Chicago, IL July 2002-October 2011

Managed up to twenty-five simultaneous projects, overseeing all aspects. Developed relationships with all stakeholders for successful projects. As part of the management team, oversaw several areas of firm operations and mentored junior staff members.

EDUCATION

University of Colorado at Denver, Denver, CO; Master of Landscape Architecture, May 2002
GPA 3.84/4.0, National Dean's List member
Tufts University, Medford, MA; Bachelor of Arts in Classics, Magna Cum Laude, May 1993
GPA 3.62/4.0, Dean's List each semester
Sweet Briar College, Paris, France; Junior Year Abroad 1991-1992

AWARDS AND HIGHLIGHTS

Featured Project Unilock Commercial Catalog for Inspire West Town, Chicago, IL 2024
Playground of the Month NuToys Leisure Products Newsletter for Cardenas ES, Chicago, IL, 2023
Highlighted Custom Seating Maglin Site Furniture Newsletter and Website for Mann ES, Chicago, IL, 2022
Featured Project Hearth & Homes Magazine for Eleven40 Apartments, Chicago, IL, 2020
I-Plants Magazine First Place, Exterior Planting for Bucktown Residence, Chicago, IL, 2015
Profile University of Colorado Denver Alumni Magazine, 2014
Profile The Chicago Architecture Blog, 2013

2343 north janssen avenue #3 chicago, il 60614, 312-399-2355, juli@juliordower.com, www.juliordower.com

Resume

Abie Ehimwenman
PROJECT MANAGER

BOWA CONSTRUCTION

Abie has nearly 10 years of project management, engineering and construction supervision experience, as well as widespread knowledge of local construction practices and procedures. As Project Manager, Abie will oversee all field operations, site safety, budget, productivity, scheduling, QIC and trade contractor and supplier coordination in conjunction with the project team.

INDUSTRY EXP.
10 years

EDUCATION
BS Ohio State University

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

UAL Holdroom Maintenance Program
Refurbishing of 50 total United Airlines terminal gates at O'Hare International Airport.

Starbucks ORD Terminal 2
786 SF, $841,349 build-out of a new Starbucks retail store located in Terminal 2 of Chicago's O'Hare International Airport.

Dunkin' Donuts ORD Terminal 3
508 SF, $514,418 build-out of a new Dunkin' Donuts retail store located in Terminal 3 of Chicago's O'Hare International Airport.

Nationwide Children's Hospital Level 7 Fit-Out
$15,000,000, 50,000 SF fit-out of the 7th floor shell space for medical/surgical and neonatal beds with a special pathogens unit.

Facebook Data Center Building 1 & 2
$685,000,000, 100,000,000 SF data center with dedicated administrative support space located on a 380-acre secure site.

Resume

Joshua Gregory
PROJECT ENGINEER

BOWA CONSTRUCTION

As Project Engineer, Joshua will assist project management on all scheduling, cost controls, trade coordination, field engineering and site and materials logistics. Joshua will work as an owners advocate and will ensure your project meets all schedule, budget and quality standards you can expect and deserve.

INDUSTRY EXP.
2 years

EDUCATION
BS Purdue University

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

Resume

Peter Hughes
SENIOR SUPERINTENDENT

BOWA CONSTRUCTION

Peter brings 17 years of experience in the industry with extensive knowledge in project estimation, contract negotiation, compliance with building codes and cost-reduction strategies. Building strong relationships with clients, vendors and officials while leading teams to achieve project goals. As Senior Superintendent, Peter will assist with all field operations, site safety, productivity, schedule, quality work and trade contractor and supplier coordination in conjunction with project management.

INDUSTRY EXP.
17 years

EDUCATION
Illinois College

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

43 Green Phase II
$33,253,906, phase II of a 10-story high-rise apartment building including a total of 99 residential units, 36 studio units, 45 one-bedroom units and 18 two-bedroom units.

Additional Relevant Experience

- **McCook Public Works Facility**
- **Woodridge Police Department and Public Works**
- **Lisle / Woodridge Fire Stations 1, 4 and 5**
- **Lisle / Woodridge Fire Station 3**
- **Clarendon Hills Police Department**
- **Hickory Hills Police Department**
- **Palos Heights Fire Protection Department**
- **Riverdale Resource Center**

Resume

David Stewart
SAFETY MANAGER

BOWA CONSTRUCTION

As Safety Manager, David will be an objective observer with the responsibility of ensuring every contractor on the site maintains safety at all times. He will develop a customized project-specific safety plan tailored to the site, align subcontractors with our safety focus, identify key safety challenges and create a plan to mitigate risks throughout the life of the project. In addition to the safety audits, checklists and other tools that BOWA utilizes, David will be involved in training all to embrace our safety culture based upon people, not on statistics.

INDUSTRY EXP.
18 years

CERTIFICATIONS
First-Aid / CPR
Flagger Instructor
OSHA 500
OSHA 30
40 Hr Hazwoper
CHST Certification
Ergonomics Mgmt.
Defensive Driving

Experience

OPC Athletic Center
$70,000,000, 60,000 SF Athletic Center featuring a state-of-the-art gymnasium and additional space for recreation and community programming. One of four buildings on the 19.3-acre OPC campus.

Roosevelt Square Phase 3B
207 mixed-income apartments across three, new mid-rise buildings, 15 apartments as part of the rehabilitation of the existing National Public Housing Museum and the rehab of 184 units in 38 buildings.

Thrive Englewood Phase I
New construction of a six-story, mixed-use building including 61 affordable housing units and limited commercial space.

Englewood Connect Phase I
7,000 SF eco-friendly food hub and community "living room" serving as a commercial kitchen and culinary center replacing the historic 93-year-old Engine Co. 84 firehouse.

Dallas ISD Nolan Estes Plaza Downtown Dallas
New construction of a three-story, 190,000 SF school that houses grades PK – 12 located in Downtown Dallas, Texas.

THE UNIVERSITY OF CHICAGO MEDICINE

UCM CCD 5130 IR 4 Replacement
Equipment replacement in the existing Cath 5130 IR Room including new CT and cabling.

Resume

Oluwadurotimi Asupoto
QUALITY ASSURANCE / CONTROL

BOWA CONSTRUCTION

As Quality Engineer, Timi will be responsible for assessing overall project health and provide feedback to the project team at various stages throughout the project. Timi works closely with the project team to ensure compliance with the project-specific QA/QC plan.

INDUSTRY EXP.
2 years

EDUCATION
BS Illinois Institute of Technology

Experience

Quincy Veterans' Home & Domiciliary
New 261,000 SF nursing home and residential long-term care building, in addition to a 74,000 SF independent living building and domiciliary on the campus of the Quincy Veterans' Home.

Roosevelt Square Phase 3B
207 mixed-income apartments across three, new mid-rise buildings, 15 apartments as part of the rehabilitation of the existing National Public Housing Museum and the rehab of 184 units in 38 buildings.

EXHIBIT #5

Insurance and Bonding Requirements

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EXHIBIT #B INSURANCE REQUIREMENTS

PS3096 – DESIGN-BUILD SERVICES FOR KELLS GEORGE PARK FIELDHOUSE

The Design-Builder must provide and maintain at Design-Builder's own expense, the minimum insurance coverage and requirements specified below, insuring all operations related to the Contract. The insurance must remain in effect from the date of the Notice to Proceed until Substantial Completion of the project, during completion of Punch List, as well as any time Design-Builder returns to perform additional work regarding warranties or for any other purpose, unless otherwise noted below or agreed by the Public Building Commission.

INSURANCE TO BE PROVIDED

1) Workers' Compensation and Employers Liability (Primary and Umbrella)

Workers' Compensation Insurance as prescribed by applicable law covering all employees who are to provide a service under this Contract and Employers Liability coverage with limits of not less than $1,000,000 each accident, illness or disease. Coverage will include a waiver of subrogation as required below.

2) Commercial General Liability (Primary and Umbrella)

Commercial General Liability Insurance or equivalent with limits of not less than $5,000,000 per occurrence for bodily injury, personal injury, and property damage liability. Coverage must include the following: All premises and operations, products/completed operations to be maintained for minimum of two (2) years following project completion, explosion, collapse, underground hazards, defense and contractual liability. Design-Builder and all subcontractors of every tier **will specifically name** the Public Building Commission of Chicago, the City of Chicago, the Chicago Park District (the User Agency) their respective Board members, employees, elected officials, officers, or representatives, and others as may be required by the Public Building Commission of Chicago and others as may be required by the Public Building Commission of Chicago, as Additional Insured using the latest version of the ISO CG2010 0704 and CG2037 0704. Additional Insured status will be on a primary, non-contributory basis for any liability arising directly or indirectly from the work, including the two year completed operations periods. Coverage will include a waiver of subrogation as required below.

Subcontractors performing work for Design-Builder must maintain limits of not less than $1,000,000 per occurrence with the same terms herein.

3) Automobile Liability (Primary and Umbrella)

When any motor vehicles (owned, non-owned and hired) are used in connection with work to be performed, the Design-Builder must provide Automobile Liability Insurance, with limits of not less than $1,000,000 per occurrence for bodily injury and property damage. The Public Building Commission of Chicago, the City of Chicago, the Chicago Park District (the User Agency) their respective Board members, employees, elected officials, officers, or representatives, and others as may be required by the Public Building Commission of Chicago, are to be named as Additional Insured on a primary, non-contributory basis.

Subcontractors performing work for Design-Builder must maintain limits of not less than $1,000,000 per occurrence with the same terms herein.

4) Contractor's/Design-Builders Pollution Liability

Design-Builders Pollution coverage is required with limits of not less than $5,000,000 per occurrence for any portion of the services, which may entail, exposure to any pollutants, whether in the course of sampling, remedial work or any other activity under this contract. The Design-Builder pollution liability policy will provide coverage for sums that the insured become legally obligated to pay as loss as a result of claims for bodily injury, property damage and/or clean-up costs caused by any pollution incident arising out of the Work including remediation operations, transportation of pollutants, owned and non-owned disposal sites and any and all other activities of Design-Builder and its subcontractors. Pollution incidents will include, but not be limited to, the discharge, dispersal, release or escape of any solid, liquid, gaseous or thermal irritant or contaminant, including but not limited smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals,

medical waste, waste materials, lead, asbestos, silica, hydrocarbons and microbial matter, including fungi, bacterial or viral matter which reproduces through release of spores or the splitting of cells or other means, including but not limited to, mold, mildew and viruses, whether or not such microbial matter is living.

The policy will be maintained for a period of three years after final completion and include completed operations coverage. The policy will include the Public Building Commission of Chicago, the City of Chicago, the Chicago Park District (the User Agency) their respective Board members, employees, elected officials, officers, or representatives, and others as may be required by the Public Building Commission. These entities must be specifically named and endorsed on the policy. Additional Insured coverage must be on a primary and non-contributory basis for ongoing and completed operations. Coverage will include a waiver of subrogation as required below.

Subcontractors performing work for Design-Builder must maintain limits of not less than $1,000,000 per occurrence with the same terms herein. Subcontractors performing environmental work for Design-Builder must maintain limits of not less than $2,000,000 per occurrence.

5) Professional Liability

When Design-Builder performs professional work in connection with the Agreement, Professional Liability Insurance must be maintained with limits of not less than $2,000,000 covering acts, errors, or omissions. The policy will include coverage for wrongful acts, including but not limited to errors, acts or omissions, in the rendering or failure to render professional services resulting in a pollution incident. When policies are renewed or replaced, the policy retroactive date must coincide with, or precede the, start of work on the Agreement. Coverage must be maintained for two years after substantial completion. A claims-made policy, which is not renewed or replaced, must have an extended reporting period of two (2) years.

Subcontractors performing professional work for Design-Builder must maintain limits of not less than $1,000,000 per occurrence with the same terms herein.

6) Builders Risk/Installation Floater

Design-Builder must provide All Risk Builders Risk or Installation Floater insurance on a replacement cost basis including but not limited to all labor, materials, supplies, equipment, machinery and fixtures that are or will be permanent part of the facility, inclusive of prior site-work. Coverage must be on an All Risk or Cause of Loss, Special Form basis including, but not limited to, the following: right to partial or complete occupancy, collapse; water damage including overflow, leakage, sewer backup, or seepage; resulting damage from faulty or defective workmanship or materials; resulting damage from error or omission in design, plans or specifications; debris removal; Ordinance and Law and include damage to, false work, fences, temporary structures and equipment stored off site or in transit. The policy will allow for partial or complete occupancy and include damage to existing property at the site.

The Public Building Commission of Chicago and the Chicago Park District will be Named Insureds on the policy. Coverage must be for the full completed value of the work and must remain in place until at least Substantial Completion and **may only be cancelled with the written permission** of the Public Building Commission, even if the Project has been put to its intended use.

The Design-Builder is responsible for all loss or damage to personal property including but not limited to materials, equipment, tools, scaffolding and supplies owned, rented, or used by Design-Builder.

B. ADDITIONAL REQUIREMENTS

Design-Builder must furnish the Public Building Commission Procurement Department, Richard J. Daley Center, Room 200, Chicago, IL 60602, original Certificates of Insurance, or such similar evidence, to be in force on the date of this Contract, and Renewal Certificates of Insurance, or such similar evidence, if any insurance policy has an expiration or renewal date occurring during the term of this Contract. The Design-Builder must submit evidence of insurance to the Public Building Commission prior to Contract award. The receipt of any certificate does not constitute agreement by the Commission that the insurance requirements in the Contract have been fully met or that the insurance policies indicated on the certificate are in compliance with all Contract requirements. The failure of the Commission to obtain certificates or other insurance evidence from Design-Builder is not a waiver

by the Commission of any requirements for the Design-Builder to obtain and maintain the specified insurance. The Design-Builder will advise all insurers of the Contract provisions regarding insurance. Non-conforming insurance does not relieve Design-Builder of the obligation to provide insurance as specified in this contract. Non-fulfillment of the insurance conditions may constitute a breach of the Contract, and the Commission retains the right to stop work until proper evidence of insurance is provided, or the Contract may be terminated.

The insurance must provide for 30 days prior written notice to be given to the Commission in the event coverage is substantially changed, canceled, or non-renewed.

The Public Building Commission of Chicago reserves the right to obtain copies of insurance policies and records

Any deductibles or self-insured retentions on referenced insurance must be borne by Design-Builder. All self-insurance, retentions and/or deductibles must conform to these requirements.

The Design-Builder waives and agrees to cause all their insurers to waive their rights of subrogation against the Public Building Commission of Chicago, the City of Chicago, the Chicago Park District and any other entity as required by the Public Building Commission of Chicago, their respective Board members, employees, elected officials, officers, or representatives. The Design-Builder must require each Subcontractor to include similar waivers of subrogation in favor of the Commission, the City of Chicago, the Chicago Park District and any other entity as required by the Public Building Commission of Chicago.

The insurance coverage and limits furnished by Design-Builder in no way limit the Design-Builder's liabilities and responsibilities specified within the Contract or by law.

Any insurance or self-insurance programs maintained by the Public Building Commission of Chicago, the City of Chicago, the Chicago Park District and any other entity as required by the Public Building Commission of Chicago, will not contribute with insurance provided by the Design-Builder under the Contract.

The required insurance to be carried is not limited by any limitations expressed in the indemnification language in this Contract or any limitation placed on the indemnity in this Contract given as a matter of law.

If Design-Builder is a joint venture or limited liability company, the insurance policies must name the joint venture or limited liability company as a Named Insured.

The Design-Builder must require all subcontractors to provide the insurance required herein**,** or Design-Builder may provide the insurance for subcontractors. All subcontractors are subject to the same insurance requirements of Design-Builder unless otherwise specified in this Contract.

If Design-Builder or subcontractor desires additional coverage, the party desiring the additional coverage is responsible for the acquisition and cost

Design-Builder must submit the following at the time of award:

1. Standard ACORD form Certificate of Insurance issued to the Public Building Commission of Chicago as Certificate Holder including:
    a. All required entities as Additional Insured
    b. Evidence of waivers of subrogation
    c. Evidence of primary and non-contributory status
2. All required endorsements including the CG 20 10 and CG 20 37

The Public Building Commission reserves the right to modify, delete, alter or change these requirements.

TRAVELERS

January 16, 2025

RE: Surety Prequalification Letter for Bowa Construction
222 S. Jefferson Street, Chicago, IL 60649

To Whom It May Concern:

Bowa Construction has been a highly regarded client of Travelers Casualty and Surety Company of America. Travelers is privileged to provide bonds for Bowa Construction, and throughout our relationship, their financial strength and management capabilities have qualified them for bonding on all projects which they have chosen to undertake.

At the present time, Travelers is providing Bowa Construction with a bonding capacity which supports single bonds in excess of $200 million and an aggregate work program in excess of $500 million. Consideration would be given to increasing this amount should the opportunity arise. Bowa Construction maintains more than a sufficient amount of working capital to support their bonding program.

We may comment only favorably on the ability of Bowa Construction. Naturally, as is customary within the surety industry, the issuance of any final bonds is always contingent upon satisfactory underwriting review at the time a request for bonds is made. This review may include, but not be limited to, the acceptability of the contract documents, bond forms and financing. It should be understood that any arrangement for surety bonds is a matter strictly between Bowa Construction and Travelers. We assume no liability to third parties or to you by the issuance of this letter.

Should you desire more information on our bonding relationship with Bowa Construction, please do not hesitate to contact me.

Sincerely,

Peter S. Forker
Attorney-In-Fact

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA
HARTFORD, CONN.

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Peter S Forker** of **ROLLING MEADOWS**, **Illinois**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April**, **2021.**

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April**, **2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June**, **2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 16th day of January , 2025 .

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA
HARTFORD, CONN.

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

ACKNOWLEDGMENT BY SURETY

STATE OF Illinois
County of Kendall } ss.

On this 16th day of January , 2025, before me personally appeared Peter S. Forker , known to, me to be the Attorney-in-Fact of Travelers Casualty and Surety Company of America , the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, at my office in the aforesaid County, the day and year in this certificate first above written.

Notary Public in the State of Illinois
County of Kendall

OFFICIAL SEAL
GINA MARIE DAMATO
Notary Public, State of Illinois
Commission No. 980704
My Commission Expires
May 13, 2028

S-0230/GE 10/99

XDP

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/19/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, LLC 2850 Golf Rd Rolling Meadows IL 60008	**CONTACT NAME:** Certificate Service Center **PHONE (A/C, No, Ext):** 312-704-0100 **FAX (A/C, No):** **E-MAIL ADDRESS:** BSD.COIR.ChicagoCerts@ajg.com
INSURED THEBOWA-01 The Bowa Group Inc 7050 S Stony Island Chicago, IL 60649	**INSURER(S) AFFORDING COVERAGE** / **NAIC #** **INSURER A :** Travelers Property Casualty Co of America / 25674 **INSURER B :** Illinois Union Insurance Company / 27960 **INSURER C :** Trumbull Insurance Company / 27120 **INSURER D :** Hartford Fire Insurance Company / 19682 **INSURER E :** The Harford Mutual Insurance Company / 14141 **INSURER F :** Hartford Casualty Insurance Company / 29424

COVERAGES **CERTIFICATE NUMBER:** 418212396 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
D	X **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			83UEABN8VU8	3/19/2025	3/19/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 2,000,000 $ 100,000 $ $10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $
C	**AUTOMOBILE LIABILITY** X ANY AUTO [ ] OWNED AUTOS ONLY [X] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			83UEABN8VUL	3/19/2025	3/19/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Comp/Coll	$ 2,000,000 $ $ $ $ 1,000 /$1,000
F A	X **UMBRELLA LIAB** [X] OCCUR X **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 10,000			83RHABN9EED EX-3T253175-25-NF	3/19/2025 3/19/2025	3/19/2026 3/19/2026	EACH OCCURRENCE AGGREGATE XS Limits	$ $10,000,000 $ $10,000,000 $ $15,000,000
E	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		83WEABN8VU4	3/19/2025	3/19/2026	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
B	Contractors Pollution Professional Liability			CPY G47454323 001 P03CP0000078860	2/20/2024 3/19/2025	10/1/2025 3/19/2026	Limit Limit Limit	$5,000,000 $2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Builders Risk - policy #: MXI93092807
Carrier: AGCS Marine Insurance Company
Eff Date: 7/17/2024-7/17/2025
Limit: $1,000,000

CERTIFICATE HOLDER

Proof of Insurance
United States

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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EXHIBIT #6

Initial Design Build Schedule

(to be revised as approved by the Commission)

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Design and Construction Schedule

Provide an integrated Design and Construction Schedule with critical paths clearly identified.

- **The schedule for design and construction shall be task oriented, indicating dates by which milestones are to be achieved. The Proposer shall use a critical path scheduling approach and the schedules shall be graphically represented.**
- **The schedule is to be an integrated and networked multi-layered schedule of program/project tasks. It identifies project events, accomplishment, and criteria and the expected dates of each. These dates are based on the calendar dates provided as the starting point and the logical flow of dates provided by calculating the addition of duration of all tasks using typical schedule networking tools.**
- **Each major task will be directly traceable to the requirements of the project. The schedule is intended as a tool for day-to-day tracking of the program/project that rolls up to increasingly higher summary levels.**
- **All tasks/activities in the schedule should be logically linked together showing predecessor/successor relationships.**
- **The Proposer shall also submit a rationale explaining how the schedules will be achieved.**

Our team has developed a holistic approach to successfully deliver the Kells Park Fieldhouse project by December 2026. Our strategy is to develop three (3) design packages consisting of building demolition, site/utilities/foundation and a full building package. Initially, we will issue the building demolition package for permit the beginning of September 2025 and anticipate receiving permit within first week of November 2025. The building demolition package will be running concurrent with the schematic design process to ensure that our team can deliver the site/utilities/foundation permit package as expeditiously as possible.

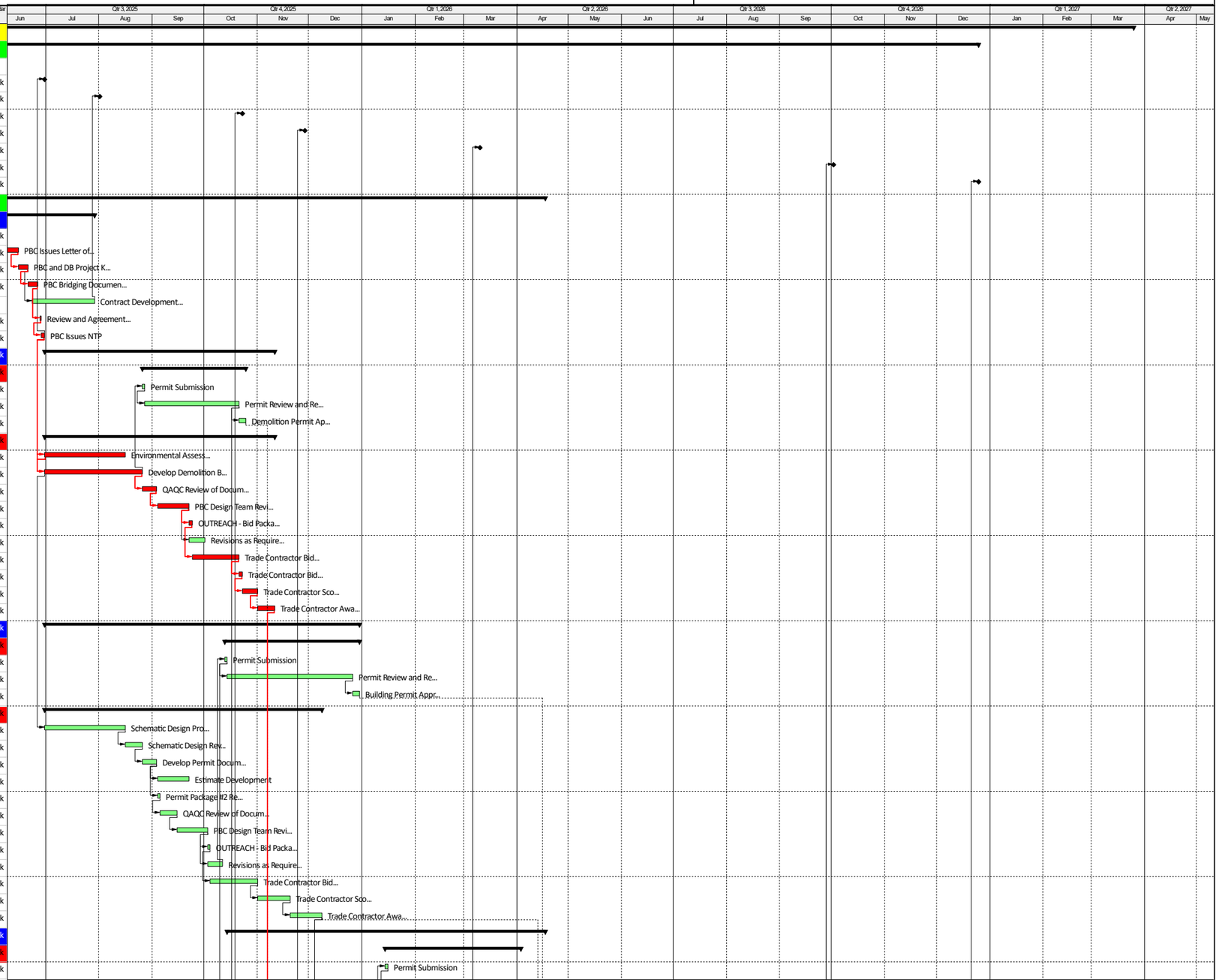
While working on the building demolition permit, FGMA and the design team will work on completing the second design package involving the site work, utilities and foundations. The second permit package will need extensive review time associated with going through the Board of Underground due to deep foundation systems. During the permit review period, bids will be due early February 2026, allowing construction to start in February with site clearing, followed by remediation, site utility installation and foundation work. We anticipate having site utilities and foundations completed by the second week in June 2026.

The final permit package is the remaining divisions consisting of building structure, enclosure, interior finishes, MEP systems and landscape improvements. FGMA and the design team will issue this package, which should take 30 days for permit review. Subsequently, bid package two (2) will be at completion with foundations completed in the second week of June 2026, allowing our team to proceed with steel erection once the full building permit is received. We will quickly move into building enclosure systems and glazing to create a watertight facility for the CPD. The installation of mechanical, electrical and plumbing systems will begin with a 45-day duration to complete associated activities. The construction team will pre-order long lead equipment in advance to minimize project delays. BOWA will coordinate and prioritize this information with FGMA during the submittal process. Inspections and commissioning reviews will coincide with the project schedule. Remaining trades will follow including interior and site work with substantial completion within the second week of December 2026. Please refer to our proposed project schedule on the following pages for a detailed breakdown of activities.

BOWA CONSTRUCTION

Kells (George) Park Fieldhouse

#	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Calendar
1		**Kells (George) Park Fieldhouse**	353	353	06-Jun-25	25-Mar-27	
2		**Milestones**	304	304	06-Jun-25	25-Dec-26	
3	A1000	Notice of Award	0	0		06-Jun-25	5 Day Workweek w/
4	A1020	Notice to Proceed Issued	0	0		30-Jun-25	TP MOB Weekend Work
5	A1010	Contract Finalization and Bond Submission	0	0		01-Aug-25	TP MOB Weekend Work
6	A1030	Mobilization & Site Control	0	0		23-Oct-25	TP MOB Weekend Work
7	A1040	Building and Playground Demoltion Complete	0	0		29-Nov-25	TP MOB Weekend Work
8	A1050	Soil Remediation and Eng Barrier Complete	0	0		10-Mar-26	TP MOB Weekend Work
9	A1070	No Further Remediation Letter Issued	0	0		02-Oct-26	TP MOB Weekend Work
10	A1060	Substantial Completion	0	0		25-Dec-26	TP MOB Weekend Work
11		**Design Phase**	167	167	06-Jun-25	17-Apr-26	
12		**Design Preparation**	24	24	06-Jun-25	29-Jul-25	
13	A1080	PBC Board Approval of DB	0	0	06-Jun-25*		TP MOB Weekend Work
14	A1090	PBC Issues Letter of Intent	5	5	06-Jun-25	15-Jun-25	TP MOB Weekend Work
15	A1100	PBC and DB Project Kick-Off Meeting	1	1	15-Jun-25	20-Jun-25	TP MOB Weekend Work
16	A1120	PBC Bridging Document file Transfer	5	5	20-Jun-25	26-Jun-25	TP MOB Weekend Work
17	A1110	Contract Development and Execution	25	25	23-Jun-25	29-Jul-25	Standard 5 Day
18	A1130	Review and Agreement on Schedule and Strat	1	1	27-Jun-25	28-Jun-25	TP MOB Weekend Work
19	A1140	PBC Issues NTP	2	2	28-Jun-25	30-Jun-25	TP MOB Weekend Work
20		**Permit/Bid Package #1 Building Demo**	67	67	30-Jun-25	11-Nov-25	TP MOB Weekend Work
21		**Building Demolition Permit Process**	33	33	26-Aug-25	25-Oct-25	TP MOB Weekend Work
22	A1150	Permit Submission	1	1	26-Aug-25	27-Aug-25	TP MOB Weekend Work
23	A1160	Permit Review and Revisions	30	30	27-Aug-25	21-Oct-25	TP MOB Weekend Work
24	A1170	Demolition Permit Approved	2	2	21-Oct-25	25-Oct-25	TP MOB Weekend Work
25		**Design Completion and Contract Award**	67	67	30-Jun-25	11-Nov-25	TP MOB Weekend Work
26	A1230	Environmental Assessment of Existing Structu	20	20	30-Jun-25	16-Aug-25	TP MOB Weekend Work
27	A1240	Develop Demolition Bid/Permit Package	25	25	30-Jun-25	26-Aug-25	TP MOB Weekend Work
28	A1250	QAQC Review of Documents	5	5	26-Aug-25	03-Sep-25	TP MOB Weekend Work
29	A1260	PBC Design Team Review Period	10	10	04-Sep-25	22-Sep-25	TP MOB Weekend Work
30	A1180	OUTREACH - Bid Package Issue	1	1	22-Sep-25	24-Sep-25	TP MOB Weekend Work
31	A1270	Revisions as Required	5	5	22-Sep-25	01-Oct-25	TP MOB Weekend Work
32	A1190	Trade Contractor Bidding	15	15	24-Sep-25	21-Oct-25	TP MOB Weekend Work
33	A1530	Trade Contractor Bids Due	1	1	21-Oct-25	23-Oct-25	TP MOB Weekend Work
34	A1540	Trade Contractor Scope Reviews	5	5	23-Oct-25	01-Nov-25	TP MOB Weekend Work
35	A1550	Trade Contractor Awards	5	5	01-Nov-25	11-Nov-25	TP MOB Weekend Work
36		**Permit/Bid Package #2 Site/Foundations**	94	94	30-Jun-25	30-Dec-25	TP MOB Weekend Work
37		**Site/Foundation Permit Process**	43	43	13-Oct-25	30-Dec-25	TP MOB Weekend Work
38	A1350	Permit Submission	1	1	13-Oct-25	14-Oct-25	TP MOB Weekend Work
39	A1360	Permit Review and Revisions	40	40	14-Oct-25	26-Dec-25	TP MOB Weekend Work
40	A1370	Building Permit Approved	2	2	26-Dec-25	30-Dec-25	TP MOB Weekend Work
41		**Design Completion and Contract Award**	82	82	30-Jun-25	08-Dec-25	TP MOB Weekend Work
42	A1200	Schematic Design Process	20	20	30-Jun-25	16-Aug-25	TP MOB Weekend Work
43	A1210	Schematic Design Review and PBC Signoff	5	5	16-Aug-25	26-Aug-25	TP MOB Weekend Work
44	A1220	Develop Permit Document Package #2 (75% CI	5	5	26-Aug-25	03-Sep-25	TP MOB Weekend Work
45	A1320	Estimate Development	10	10	04-Sep-25	22-Sep-25	TP MOB Weekend Work
46	A1330	Permit Package #2 Review Documents and Est	1	1	04-Sep-25	05-Sep-25	TP MOB Weekend Work
47	A1380	QAQC Review of Documents	5	5	05-Sep-25	15-Sep-25	TP MOB Weekend Work
48	A1390	PBC Design Team Review Period	10	10	15-Sep-25	03-Oct-25	TP MOB Weekend Work
49	A1340	OUTREACH - Bid Package #2 Issue	1	1	03-Oct-25	04-Oct-25	TP MOB Weekend Work
50	A1400	Revisions as Required	5	5	03-Oct-25	12-Oct-25	TP MOB Weekend Work
51	A1560	Trade Contractor Bids Due	15	15	04-Oct-25	01-Nov-25	TP MOB Weekend Work
52	A1570	Trade Contractor Scope Reviews	10	10	01-Nov-25	20-Nov-25	TP MOB Weekend Work
53	A1580	Trade Contractor Awards	10	10	20-Nov-25	08-Dec-25	TP MOB Weekend Work
54		**Permit/Bid Package #3 Full Building**	101	101	14-Oct-25	17-Apr-26	TP MOB Weekend Work
55		**Building Permit Process**	43	43	14-Jan-26	03-Apr-26	TP MOB Weekend Work
56	A1410	Permit Submission	1	1	14-Jan-26	16-Jan-26	TP MOB Weekend Work



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

28-May-25

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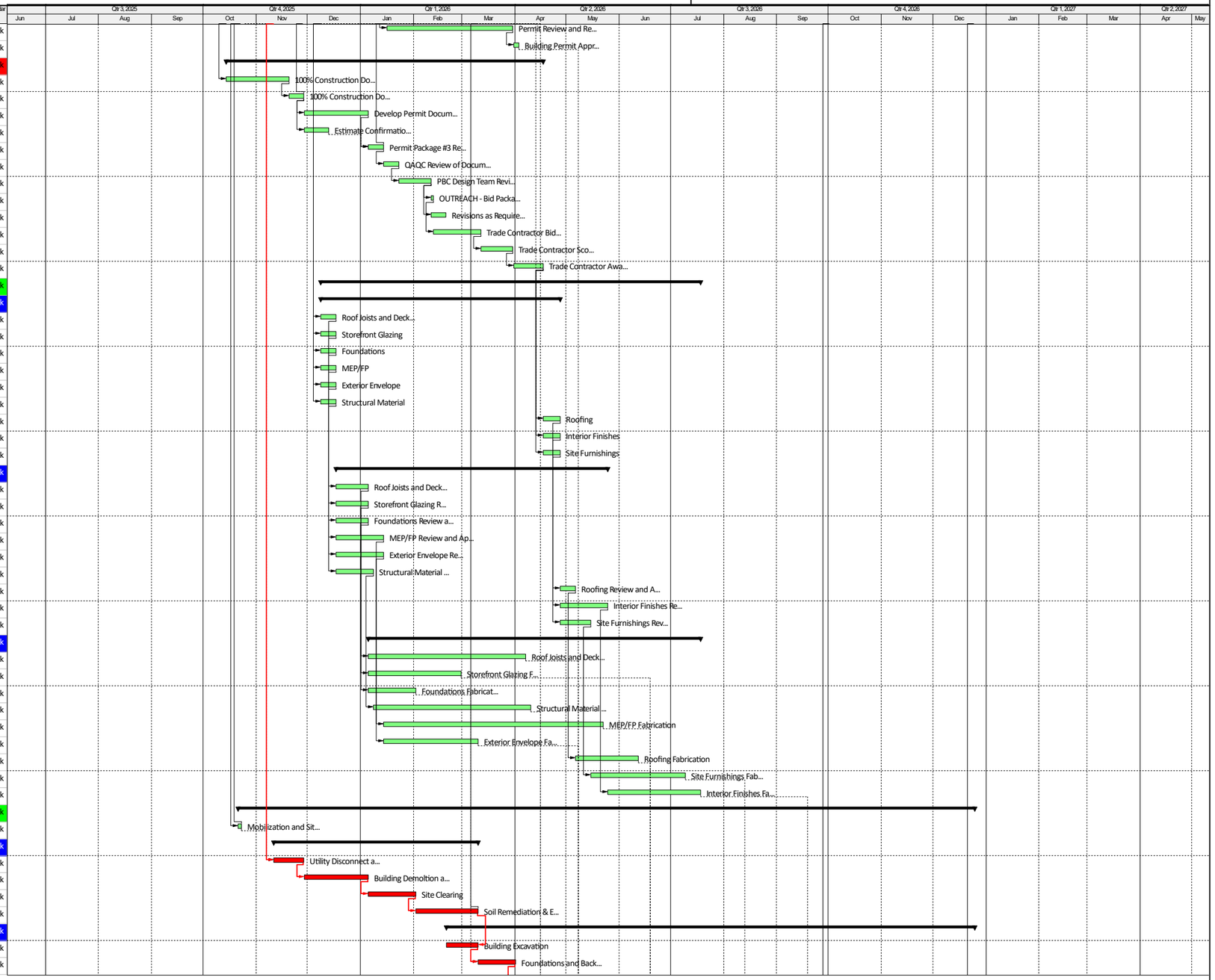
Kells (George) Park Fieldhouse

#	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Calendar
57	A1420	Permit Review and Revisions	40	40	16-Jan-26	30-Mar-26	TP MOB Weekend Work
58	A1430	Building Permit Approved	2	2	31-Mar-26	03-Apr-26	TP MOB Weekend Work
59		**Design Completion and Contract Award**	101	101	14-Oct-25	17-Apr-26	TP MOB Weekend Work
60	A1440	100% Construction Document Design Process	20	20	14-Oct-25	20-Nov-25	TP MOB Weekend Work
61	A1450	100% Construction Document Review and PBI	5	5	20-Nov-25	29-Nov-25	TP MOB Weekend Work
62	A1460	Develop Permit Document Package #3	20	20	29-Nov-25	05-Jan-26	TP MOB Weekend Work
63	A1470	Estimate Confirmation	8	8	29-Nov-25	13-Dec-25	TP MOB Weekend Work
64	A1480	Permit Package #3 Review Documents and Est	5	5	05-Jan-26	14-Jan-26	TP MOB Weekend Work
65	A1500	QAQC Review of Documents	5	5	14-Jan-26	23-Jan-26	TP MOB Weekend Work
66	A1510	PBC Design Team Review Period	10	10	23-Jan-26	11-Feb-26	TP MOB Weekend Work
67	A1490	OUTREACH - Bid Package #3 Issue	1	1	11-Feb-26	12-Feb-26	TP MOB Weekend Work
68	A1520	Revisions as Required	5	5	11-Feb-26	19-Feb-26	TP MOB Weekend Work
69	A1590	Trade Contractor Bids Due	15	15	12-Feb-26	12-Mar-26	TP MOB Weekend Work
70	A1600	Trade Contractor Scope Reviews	10	10	12-Mar-26	30-Mar-26	TP MOB Weekend Work
71	A1610	Trade Contractor Awards	10	10	31-Mar-26	17-Apr-26	TP MOB Weekend Work
72		**Pre-Construction**	121	121	08-Dec-25	18-Jul-26	TP MOB Weekend Work
73		**Procurement**	76	76	08-Dec-25	27-Apr-26	TP MOB Weekend Work
74	A1620	Roof Joists and Decking	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
75	A1640	Storefront Glazing	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
76	A1650	Foundations	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
77	A1660	MEP/FP	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
78	A1670	Exterior Envelope	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
79	A2040	Structural Material	5	5	08-Dec-25	17-Dec-25	TP MOB Weekend Work
80	A1630	Roofing	5	5	17-Apr-26	27-Apr-26	TP MOB Weekend Work
81	A1680	Interior Finishes	5	5	17-Apr-26	27-Apr-26	TP MOB Weekend Work
82	A1690	Site Furnishings	5	5	17-Apr-26	27-Apr-26	TP MOB Weekend Work
83		**Submittals**	86	86	17-Dec-25	25-May-26	TP MOB Weekend Work
84	A1700	Roof Joists and Decking Review and Approval	10	10	17-Dec-25	05-Jan-26	TP MOB Weekend Work
85	A1720	Storefront Glazing Review and Approval	10	10	17-Dec-25	05-Jan-26	TP MOB Weekend Work
86	A1730	Foundations Review and Approval	10	10	17-Dec-25	05-Jan-26	TP MOB Weekend Work
87	A1740	MEP/FP Review and Approval	15	15	17-Dec-25	14-Jan-26	TP MOB Weekend Work
88	A1750	Exterior Envelope Review and Approval	15	15	17-Dec-25	14-Jan-26	TP MOB Weekend Work
89	A2050	Structural Material Review and Approval	12	12	17-Dec-25	08-Jan-26	TP MOB Weekend Work
90	A1710	Roofing Review and Approval	5	5	27-Apr-26	06-May-26	TP MOB Weekend Work
91	A1760	Interior Finishes Review and Approval	15	15	27-Apr-26	25-May-26	TP MOB Weekend Work
92	A1770	Site Furnishings Review and Approval	10	10	27-Apr-26	15-May-26	TP MOB Weekend Work
93		**Fiurnish and Delivery**	106	106	05-Jan-26	18-Jul-26	TP MOB Weekend Work
94	A1780	Roof Joists and Decking Fabrication	50	50	05-Jan-26	07-Apr-26	TP MOB Weekend Work
95	A1800	Storefront Glazing Fabrication	30	30	05-Jan-26	28-Feb-26	TP MOB Weekend Work
96	A1810	Foundations Fabrication	15	15	05-Jan-26	02-Feb-26	TP MOB Weekend Work
97	A2060	Structural Material Fabrication	50	50	08-Jan-26	10-Apr-26	TP MOB Weekend Work
98	A1820	MEP/FP Fabrication	70	70	14-Jan-26	22-May-26	TP MOB Weekend Work
99	A1830	Exterior Envelope Fabrication	30	30	14-Jan-26	10-Mar-26	TP MOB Weekend Work
100	A1790	Roofing Fabrication	20	20	06-May-26	12-Jun-26	TP MOB Weekend Work
101	A1850	Site Furnishings Fabrication	30	30	15-May-26	09-Jul-26	TP MOB Weekend Work
102	A1840	Interior Finishes Fabrication	30	30	25-May-26	18-Jul-26	TP MOB Weekend Work
103		**Construction**	234	234	21-Oct-25	25-Dec-26	TP MOB Weekend Work
104	A1280	Mobilization and Site Control	1	1	21-Oct-25	23-Oct-25	TP MOB Weekend Work
105		**Building/Site Demolition**	65	65	11-Nov-25	10-Mar-26	TP MOB Weekend Work
106	A1290	Utility Disconnect and Make Safe	10	10	11-Nov-25	29-Nov-25	TP MOB Weekend Work
107	A1300	Building Demoltion and Debris Removal	20	20	29-Nov-25	05-Jan-26	TP MOB Weekend Work
108	A1310	Site Clearing	15	15	05-Jan-26	02-Feb-26	TP MOB Weekend Work
109	A1860	Soil Remediation & Environmental Barriers	20	20	02-Feb-26	10-Mar-26	TP MOB Weekend Work
110		**Building Construction**	168	168	20-Feb-26	25-Dec-26	TP MOB Weekend Work
111	A1870	Building Excavation	10	10	20-Feb-26	10-Mar-26	TP MOB Weekend Work
112	A1880	Foundations and Backfill	12	12	10-Mar-26	01-Apr-26	TP MOB Weekend Work



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

28-May-25

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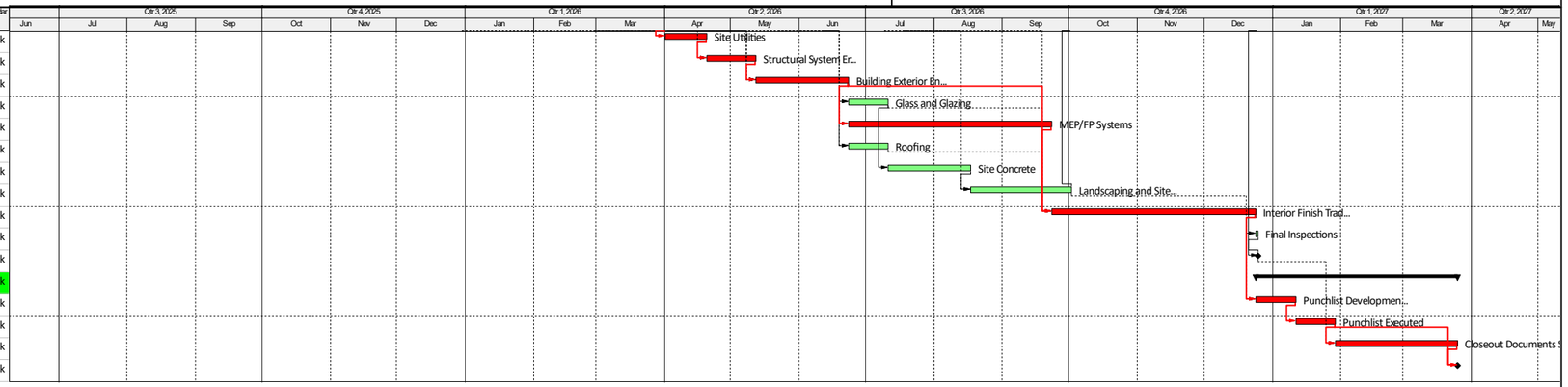
Kells (George) Park Fieldhouse

#	Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Calendar
113	A1890	Site Utilities	10	10	01-Apr-26	20-Apr-26	TP MOB Weekend Work
114	A1900	Structural System Erection	12	12	20-Apr-26	12-May-26	TP MOB Weekend Work
115	A1910	Building Exterior Enclosure	23	23	12-May-26	23-Jun-26	TP MOB Weekend Work
116	A1920	Glass and Glazing	10	10	23-Jun-26	11-Jul-26	TP MOB Weekend Work
117	A1930	MEP/FP Systems	50	50	23-Jun-26	23-Sep-26	TP MOB Weekend Work
118	A1940	Roofing	10	10	23-Jun-26	11-Jul-26	TP MOB Weekend Work
119	A1950	Site Concrete	20	20	11-Jul-26	17-Aug-26	TP MOB Weekend Work
120	A1970	Landscaping and Site Furnishings	25	25	17-Aug-26	02-Oct-26	TP MOB Weekend Work
121	A1960	Interior Finish Trades	50	50	23-Sep-26	24-Dec-26	TP MOB Weekend Work
122	A1980	Final Inspections	1	1	24-Dec-26	25-Dec-26	TP MOB Weekend Work
123	A1990	Substantial Completion	0	0		25-Dec-26	TP MOB Weekend Work
124	Close Out		50	50	24-Dec-26	25-Mar-27	TP MOB Weekend Work
125	A2000	Punchlist Development and Review	10	10	24-Dec-26	11-Jan-27	TP MOB Weekend Work
126	A2010	Punchlist Executed	10	10	11-Jan-27	29-Jan-27	TP MOB Weekend Work
127	A2020	Closeout Documents Submitted	30	30	29-Jan-27	25-Mar-27	TP MOB Weekend Work
128	A2030	Final Completion	0	0		25-Mar-27	TP MOB Weekend Work



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

28-May-25

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EXHIBIT #7

MBE/WBE Commitment and Preliminary Information
(to be supplemented/revised as necessary)

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FORM A – MBE/WBE, EEO, CRO, AND CH PARTICIPATION

SUBMITTING FIRM NAME:	BOWA Construction

Instructions:

Please identify and report compliance history for last three (3) projects completed over the last three (3) years for which work is/was performed by your firm (government experience preferred but not required). The experience of any member of the Respondent's team will be deemed responsive to this requirement (lead partners experience preferred.) Additionally, please complete the "Demonstrate Commitment" section below.

DEMONSTRATE COMMITMENT

The PBC may host outreach sessions, networking events, and community hiring intakes where the Respondent is expected to fully participate.

MBE/WBE

Respondent must demonstrate commitment by affirming and acknowledging the PBC's MBE/WBE goals. If Respondent is not able to commit to the MBE/WBE goal stated in the RFP, please submit a narrative requesting relief and explaining why Respondent believes that the goals cannot be achieved.

EEO, CRO, and CH

Respondent must demonstrate commitment by affirming and acknowledging the PBC's commitment to employ minority and women journeyworkers, apprentices, and laborers along with local/community residents on goals for each Project. If Respondent is not able to commit to EEO, CRO, and CH stated in the RFP, please submit a narrative requesting relief and explaining why Respondent believes that the goals cannot be achieved.

DEMONSTRATE COMMITMENT

BOWA Construction affirms and acknowledges the MBE and WBE goals for the project.

BOWA Construction is committed to achieving the PBC's goals for the project.

BOWA Construction affirms and acknowledges the EEO, CRO and CH goals for the project.

BOWA Construction is committed to achieving the PBC's goals for the project.

EXHIBIT #8

Schedule B – Joint Venture Affidavit and Joint Venture Agreement (Not Applicable)

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EXHIBIT #9

EEO and Workforce Requirements &
Liquidated Damages Calculations

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DESIGN-BUILDER
EEO AND WORKFORCE REQUIREMENTS

A. EEO Workforce Requirements Purpose Statement

To promote the intended goal of economic opportunity and maximize the use of minority personnel on this project, the Public Building Commission of Chicago has established Equal Employment Opportunity (EEO) workforce requirements for this Project.

Design-Builder shall reference the prescribed formula below to inform the amount of participation the Design-Builder achieves; this formula will also inform the amount of damages the Design-Builder will be assessed at the end of the Project, for failing to meet these EEO and Workforce requirements. The Public Building Commission of Chicago reserves the right to check all calculations for accuracy. The fulfillment of the Award Criteria does not abrogate the responsibilities of the Design-Builder to comply with federal and state requirements under the Equal Employment Act and the Illinois Human Rights Act.

1. EEO and Workforce Calulations

Line 1.	TOTAL of the Design Phase Services and Cost of the Work of the GMP Project Cost Proposal Cost Form (Exhibit 16) as Amended	**TBD**
Line 2.	Percentage of the total Journeyworkers hours required to be worked by **Minority Journeyworkers** during construction of the project.	**50%**
Line 3.	Multiply Line 2 by Line 1 by 0.04	_____
Line 4.	Percentage of total Apprentice hours required to be worked by **Minority Apprentices** during construction of the project.	**40%**
Line 5.	Multiply Line 4 by Line 1 by 0.03	_____
Line 6.	Percentage of the total Laborer hours required to be worked by **Minority Laborers** during construction of the project.	**60%**
Line 7.	Multiply Line 6 by Line 1 by 0.01	_____
Line 8.	Percentage of total Journeyworker hours required to be worked by **Female Journeyworkers** during the construction of the project.	**2%**
Line 9.	Multiply Line 8 by Line 1 by 0.04	_____
Line 10.	Percentage of total Apprentice hours required to be worked by **Female Apprentices** during construction of the project.	**1%**
Line 11.	Multiply Line 10 by Line 1 by 0.03	_____
Line 12.	Percentage of the total Laborer hours required to be worked by **Female Laborers** during construction of the project.	**2%**
Line 13.	Multiply Line 12 by Line 1 by 0.01	_____

DESIGN-BUILDER
EEO AND WORKFORCE REQUIREMENTS

2. City of Chicago Resident Employment

The specific City of Chicago Reident Employment Goal for this Project: **50%**

"City of Chicago Residents" means persons domiciled within the City of Chicago. Domicile is an individual's one and only true, fixed, and permanent home and principal establishment.

3. Community Hiring Bounses

The specific Community Resident Employment Goal for this Project: **7.5%**

(See EXHIBIT 10 Community Area Map) "Community Hiring Resident" means persons domiciled within the "Community Area Map" as defined in Agreement.

Bonuses: In order to encourage maximum employment of interested and available residents of the project community on this project, the following bonus calculations shall apply:

a. In calculating the hours worked by minority and women journeyworkers, apprentices, and laborers, all hours worked by minority and women Journeyworkers, existing apprentices, and laborers who are residents of the project community shall be multiplied by 1.5.

b. In calculating the hours worked by minority and women apprentices, all hours worked in new apprenticeships by minority and women apprentices who are residents of the project community shall be multiplied by 2.0.

4. Reporting

In accordance with this commitment, the Design-Builder must submit certified payroll in our electronic system and provide information for the Design-Builder's Recapitulation of Minority and Female Worker Hours and Percentages Form on a monthly basis. All Subcontractors shall be listed on the Design Builder's Recapitulation Form whether active or not. For the purpose of this report, the following group categories will be used:

a. The classification "White" includes person of Indo-European descent.

b. The classification "Black" or "African-American" includes persons having origins in any of the black racial groups of Africa.

c. The classification "Hispanic" includes persons whose origins are from Mexico, Puerto Rico, Cuba, Central or South America, the Caribbean Islands or other Spanish culture or origin, regardless of race.

d. The classification "Native American" includes persons who are Native Americans by virtue of tribal association.

e. The classification "Asian-Pacific" includes persons whose origins are from East Asia, Southeast Asia, the Pacific Islands or the Indian sub-continent.

f. The classification "Other" includes qualified individuals with disabilities who meet legitimate skill, experience, education or other requirements of employment positions held or sought and who perform the essential function with or without reasonable accommodation and other groups or other individuals found by the Public Building Commission of Chicago to be socially and economically disadvantaged and to have suffered actual racial or ethnic discrimination and decreased opportunities to compete in Chicago area markets.

5. Liquidated Damages

The Design-Builder hereby consents and agrees that, in the event that it fails to comply with each of the minimum commitments on Lines 2, 4, 6, 8, 10, and 12 of the EEO and Workforce Calculations covering minority and female journeyworkers, apprentices, and laborers respectively, the following shall apply.

If the total hours in any category for which a percentage is assigned in Lines 2, 4, 6, 8, 10, or 12 of the EEO and Workforce Calculations equals zero at the completion of the work, then a net deficiency of the entire percentage assigned will be deemed to exist. For any net deficiency in each category, the following amounts shall be deducted as liquidated damages from monies due the Design-Builder and the GMP modified accordingly:

a. For each full one (1%) percent deficiency of minority journeyworkers not utilized – four cents per each hundred dollars of the base bid calculated as follows:

$$\frac{\text{Line 1 x 04}}{100}$$

Each one (1%) percent deficiency toward the goal for female journeyworkers (Line 8) shall be calculated in the same way.

b. For each full one (1%) percent deficiency of minority apprentices not utilized – three cents per hundred dollars of the base bid calculated as follows:

$$\frac{\text{Line 1 x 03}}{100}$$

Each one (1%) percent deficiency toward the goal for female apprentices (Line 10) shall be calculated in the same way.

c. For each one (1%) percent deficiency of minority laborers not utilized – one cent per each hundred dollars of the base bid calculated as follows:

$$\frac{\text{Line 1 x 01}}{100}$$

Each one (1%) percent deficiency toward the goal for female laborers (Line 12) shall be calculated in the same way.

d. Liquidated damages, if any, will be calculated for the first pay requests reflecting fifty percent (50%) completion, seventy-five percent (75%) completion, and ninety percent (90%) completion, respectively, based upon the Contractor's pay request together with all attendant certified payrolls and other required documentation of minority and women employment. The accrued liquidated damages and interest will be added to the retention provided elsewhere in this contract. The amount of liquidated damages due to the Commission under this provision will bear compound interest at the rate of 5% per annum, compounded monthly from the date of the Notice to Proceed to the date of approval of a deductive change order or revised GMP for liquidated damages. Should the total amount of liquidated damages due under all provisions of this contract exceed the amount of the Commission's retainage, compound interest on the amount over and above the retainage will continue to accrue until the entire amount of liquidated damages and compound interest is paid to the Commission.

e. The Commission is aware that certain subcontract agreements under this contract may require subcontractors to contribute to payment of liquidated damages assessed under this provision. Should enforcement of subcontract liquidated damages provisions result in an aggregate total of subcontractor liquidated damages greater than the liquidated damages assessed hereunder against Design-Builder, then Design-Builder must pay the excess pro rata as a bonus to each subcontractor exceeding its subcontract commitments for minority or women employment, or both.

EXHIBIT #10

Community Area Map

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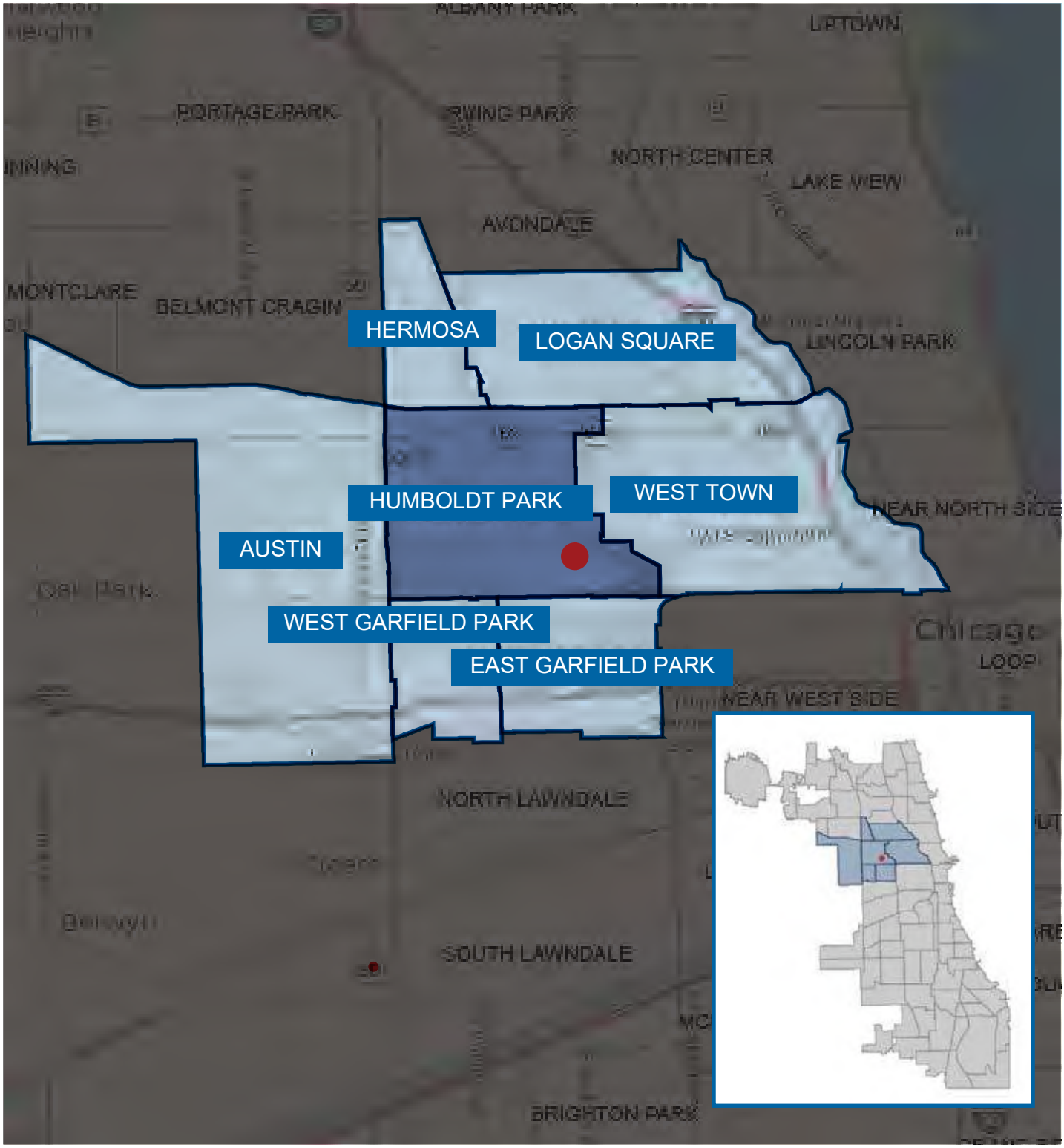

Kells (George) Park Fieldhouse

- Project location
- Project Area
- Community Areas

EXHIBIT #11

Legal Actions

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FORM G – LEGAL ACTIONS

I. LEGAL ACTIONS

Submitting Firm Name: BOWA Construction

If the answer to any of the questions below is **YES**, you must provide a type-written, brief description, and/or explanation on a separate sheet following this page. Each question must be answered.

	Question	Yes	No
1	Has the firm or venture been issued a notice of default on any contract awarded to it in the last 3 years?	☐	☒
2	Does the firm or venture have any legally filed judgments, claims (liquidated damages, or other), arbitration proceedings or suits pending or outstanding against the firm or venture or its officers?	☐	☒
3	If the answer to the preceding question is "Yes", provide the requisite explanation on a separate sheet and include the date(s) of filing with the corresponding dollar amount of claims (or judgments and the contract value of the contract).		
4	Within the past 3 years has the firm or venture been a party to any lawsuits or arbitration proceedings with regard to any contracts?	☐	☒
5	Within the last 3 years, has any officer or principal of the firm or venture ever been an officer or principal of another organization that failed to complete any contract as a result of termination, litigation, arbitration or similar matter?	☐	☒
6	Has any key person with the firm or venture or its predecessor ever been convicted of or charged with any state or federal crime (excluding traffic violations), including but not limited to, embezzlement, theft, forgery, bribery, falsification or destruction of records, receipt of stolen property, criminal anti-trust violations, bid-rigging or bid-rotating?	☐	☒
7	Has the firm or venture ever been temporarily or permanently debarred from contract award by any federal, state, or local agency?	☐	☒
8	Within the last 3 years, has the firm or venture been investigated or assessed penalties for any statutory or administrative violations (including but not limited to MBE, WBE, EEOC violations)?	☐	☒
9	Has the firm or venture ever failed to complete any work awarded to it?	☐	☒

EXHIBIT #12

Disclosure Affidavit

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FORM C – DISCLOSURE AFFIDAVIT

I. HISTORY AND OWNERSHIP OF RESPONDENT FIRM

Any firm proposing to conduct any business transactions with the Public Building Commission of Chicago must complete this Disclosure Affidavit. Please note that in the event the Contractor is a joint venture, the joint venture and each of the joint venture partners must submit a completed Disclosure Affidavit.

The undersigned Nosa Ehimwenman (Name), as President & CEO (Title)

and on behalf of BOWA Construction
("Bidder/Proposer/Respondent or Contractor") having been duly sworn under oath certifies the following:

RESPONDENT			
Name of Firm:	BOWA Construction		
Address:	7050 S. Stony Island Ave.		
City/State/Zip:	Chicago, IL 60649		
Telephone:	312.238.9899	**Facsimile:**	603.388.1071
FEIN:	27-1197421	**SSN:**	
Email:	nehi@bowaconstruction.com		
Nature of Transaction:			

- ☐ Sale or purchase of land
- ☒ Construction Contract
- ☐ Professional Services Agreement
- ☐ Other _____

II. DISCLOSURE OF OWNERSHIP INTERESTS

Pursuant to Resolution No. 5371 of the Board of Commissioners of the Public Building Commission of Chicago, all Bidders/Proposers shall provide the following information with their Bid/Proposal. If the question is not applicable, answer "NA". If the answer is none, please answer "none".

- ☒ Corporation
- ☐ Partnership
- ☐ Sole Proprietorship
- ☐ Joint Venture
- ☐ Limited Liability Company
- ☐ Limited Liability Partnership
- ☐ Not-for-profit Corporation
- ☐ Other: _____

FORM C – DISCLOSURE AFFIDAVIT

A. CORPORATIONS AND LLC'S

State of Incorporation or Organization:	Illinois
If outside of Illinois, is your firm authorized to conduct business in the State Of Illinois:	☐ Yes ☐ No
City/State/ZIP:	
Telephone:	

Identify the names of all officers and directors of the business entity.
(Please attach list if necessary.)

Name	Title
Nosa Ehimwenman	President & CEO
Linda Igbinovia	Senior Vice President
Timothy Scholten	Senior Vice President
James McInerney	Senior Vice President
Natalie Pedraza	Vice President

Identify all shareholders whose ownership percentage exceeds 7.5% of the business entity.
(Please attach list if necessary.)

Name	Address	Ownership Interest Percentage
Nosa Ehimwenman	5349 Maryland Ave., Chicago, IL 60616	100 %
		%
		%

LLC's only, indicate Management Type and Name:

☐ Member-managed	☐ Manager-managed	**Name:**	

Is the corporation or LLC owned partially or completely by one or more other corporations or legal entities?	☐ Yes ☒ No

If yes, please provide the above information, as applicable, for each such corporation or entity such that any person with a beneficial ownership interest of 7.5% or more in the corporation contracting in the PBC is disclosed. For example, if Corporation B owns 15% of Corporation A, and Corporation A is contracting with the PBC, then Corporation B must complete a Disclosure Affidavit. If Corporation B is owned by Corporations C and D, each of which owns 50% of Corporation B, then both Corporations C and D must complete Disclosure Affidavits.

B. PARTNERSHIPS

If the bidder/proposer or contractor is a partnership, indicate the name of each partner and the percentage of interest of each therein. Also indicate, if applicable, whether General Partner (GP) or Limited Partner (LP).		
Name	**Type**	**Ownership Interest Percentage**
		%
		%
		%
		%
		%

C. SOLE PROPRIETORSHIP

The bidder/proposer or contractor is a sole proprietorship and is not acting in any representative capacity on behalf of any beneficiary:	
If the answer is no, please complete the following two sections.	☐ Yes ☐ No
If the sole proprietorship is held by an agent(s) or a nominee(s), indicate the principal(s) for whom the agent or nominee holds such interest.	
Name of Principal(s)	
If the interest of a spouse or any other party is constructively controlled by another person or legal entity, state the name and address of such person or entity possessing such control and the relationship under which such control is being or may be exercised.	
Name	**Address**

III. CONTRACTOR CERTIFICATION

A. CONTRACTORS

1. The Contractor, or any affiliated entities of the Contractor, or any responsible official thereof, or any other official, agent or employee of the Contractor, any such affiliated entity, acting pursuant to the direction or authorization of a responsible official thereof has not, during a period of three years prior to the date of execution of this certification:

    a. Bribed or attempted to bribe, or been convicted of bribery or attempting to bribe a public officer or employee of the City of Chicago, the State of Illinois, any agency of the federal government or any state or local government in the United States (if an officer or employee, in that officer's or employee's official capacity); or

    b. Agreed or colluded, or been convicted of agreement or collusion among bidders or prospective bidders in restraint of freedom of competition by agreement to bid a fixed price or otherwise; or

    c. Made an admission of such conduct described in 1(a) or (b) above which is a matter of record but has not been prosecuted for such conduct.

2. The Contractor or agent, partner, employee or officer of the Contractor is not barred from contracting with any unit of state or local government as a result of engaging in or being convicted of bid-rigging[2] in violation of Section 3 of Article 33E of the Illinois Criminal Code of 1961, as amended (720 ILCS 5/33E-3), or any similar offense of any state or the United States which contains the same elements as the offense of bid-rigging during a period of five years prior to the date of Submission of this bid, proposal or response.

3. The Contractor or any agent, partner, employee, or officer of the Contractor is not barred from contracting with any unit of state or local government as a result of engaging in or being convicted of bid-rotating[4] in violation of Section 4 of Article 33E of the Illinois Criminal Code of 1961, as amended (720 ILCS 5/33E-4), or any similar offense of any state or the United States which contains the same elements as the offense of bid-rotating.

4. The Contractor understands and will abide by all provisions of Chapter 2-56 of the Municipal Code entitled "Office of the Inspector General" and all provisions of the Public Building Commission Code of Ethics Resolution No.5339, as amended by Resolution No. 5371.

5. The Contractor certifies to the best of its knowledge and belief, that it and its principals:

    a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal, state or local department or agency.

    b. Have not within a three-year period preceding this bid or proposal been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes; commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;

    c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph (5)(b) above; and

    d. Have not within a three-year period preceding this bid or proposal had one or more public transactions (federal, state or local) terminated for cause or default.

B. SUBCONTRACTORS

1. The Contractor has obtained from all subcontractors being used in the performance of this contract or agreement, known by the Contractor at this time, disclosures substantially in the form of Section 1, and certifications substantially in the form of Section 2, of this Disclosure Affidavit. Based on such disclosures and certification(s), and any other information known or obtained by the Contractor, is not aware of any such subcontractor or subcontractor's affiliated entity or any agent, partner, employee or officer of such subcontractor or subcontractor's affiliated entity having engaged in or been convicted of (a) any of the conduct described as prohibited in this document; (b) bid-rigging, bid-rotating, or any similar offense of any state or the United States which contains the same elements as bid-rigging or bid-rotating, or having made an admission of guilt of the conduct described in Section 2 which is matter of record but has/have not been prosecuted for such conduct.

2. The Contractor will, prior to using them as subcontractors, obtain from all subcontractors to be used in the performance of this contract or agreement, but not yet known by the Contractor at this time, certifications substantially in the form of this certification. The Contractor shall not, without the prior written permission of the Commission, use any of such subcontractors in the performance of this contract if the Contractor, based on such certifications or any other information known or obtained by Contractor, became aware of such subcontractor, subcontractor's affiliated entity or any agent, employee or officer of such subcontractor or subcontractor's affiliated entity having engaged in or been convicted of (a) any of the conduct described as prohibited in this document of or (b) bid-rigging, bid-rotating or any similar offenses of any state or the United States which contains the same elements as bid-rigging or bid-rotating or having made an admission of guilt of the conduct described as prohibited in this document which is a matter of record but has/have not been prosecuted for such conduct. The Contractor shall cause such subcontractors to certify as to all necessary items. In the event any subcontractor is unable to certify to a particular item, such subcontractor shall attach an explanation to the certification.

3. For all subcontractors to be used in the performance of this contract or agreement, the Contractor shall maintain for the duration of the contract all subcontractors' certifications required by this document and Contractor shall make such certifications promptly available to the Public Building Commission of Chicago upon request.

4. The Contractor will not, without the prior written consent of the Public Building Commission of Chicago, use as subcontractors any individual, firm, partnership, corporation, joint venture or other entity from whom the Contractor is unable to obtain a certification substantially in the form of this certification.

5. The Contractor hereby agrees, if the Public Building Commission of Chicago so demands, to terminate its subcontractor with any subcontract if such subcontractor was ineligible at the time that the subcontract was entered into for award of such subcontract. The Contractor shall insert adequate provisions in all subcontracts to allow it to terminate such subcontract as required by this certification.

C. STATE TAX DELINQUENCIES

1. The Contractor is not delinquent in the payment of any tax administered by the Illinois Department of Revenue or, if delinquent, the Contractor is contesting, in accordance with the procedures established by the appropriate Revenue Act, its liability for the tax or amount of the tax.

2. Alternatively, the Contractor has entered into an agreement with the Illinois Department of Revenue for the payment of all such taxes that are due and is in compliance with such agreement.

3. If the Contractor is unable to certify to any of the above statements, the Contractor shall explain below. Attach additional pages if necessary.

If the letters "NA", the word "None" or no response appears on the lines above, it will be conclusively presumed that the Undersigned certified to the above statements.

4. If any subcontractors are to be used in the performance of this contract or agreement, the Contractor shall cause such subcontractors to certify as to paragraph (C)(1) or (C)(2) of this certification. In the event that any subcontractor is unable to certify to any of the statements in this certification, such subcontractor shall attach an explanation to this certification.

D. OTHER TAXES/FEES

1. The Contractor is not delinquent in paying any fine, fee, tax or other charge owed to the City of Chicago.

2. If Contractor is unable to certify to the above statement, Contractor shall explain below and (attach additional pages if necessary).

   If the letters "NA", the word "None" or no response appears on the lines above, it will be conclusively presumed that the Undersigned certified to the above statements.

E. PUNISHMENT

1. A Contractor who makes a false statement material to Section II(A)(2) of this certification commits a Class 3 felony. 720 ILCS 5/33E-11(b).

F. JUDICIAL OR ADMINISTRATIVE PROCEEDINGS

1. The Contractor is not a party to any pending lawsuits against the City of Chicago or the Public Building Commission of Chicago nor has Contractor been sued by the City of Chicago or the Public Building Commission of Chicago in any judicial or administrative proceeding.

2. If the Contractor cannot certify to the above, provide the (1) case name; (2) docket number; (3) court in which the action is or was pending; and (4) a brief description of each such judicial or administrative proceeding. Attach additional sheets if necessary.

   If the letters "NA", the word "None" or no response appears on the lines above, it will be conclusively presumed that the Undersigned certified to the above statements.

G. CERTIFICATION OF ENVIRONMENTAL COMPLIANCE

A. Neither the Contractor nor any affiliated entity of the Contractor has, during a period of five years prior to the date of execution of this Affidavit: (1) violated or engaged in any conduct which violated federal, state or local environmental restriction, (2) received notice of any claim, demand or action, including but not limited to citations and warrants, from any federal, state or local agency exercising executive, legislative, judicial, regulatory or administrative functions relating to a violation or alleged violation of any federal, state or local statute, regulation or other environmental restriction; or (3) been subject to any fine or penalty of any nature for failure to comply with any federal, state or local statute, regulation or other environmental restriction.

   If the Contractor cannot make the certification contained in the above paragraph, identify any exceptions (attach additional pages if necessary):

   If the letters "NA", the word "None" or no response appears on the lines above, it will be conclusively presumed that the Undersigned certified to the above statements.

B. Without the prior written consent of the Public Building Commission of Chicago, Contractor will not employ any subcontractor in connection with the contract or proposal to which this Affidavit pertains without obtaining from such subcontractor a certification similar in form and substance to the certification contained in Paragraph A of this Section III prior to such subcontractor's performance of any work or services or furnishing any goods, supplies or materials of any kind under the proposal or the contract to which this Affidavit pertains.

C. Until completion of the Contract's performance under the proposal or contract to which this Affidavit pertains, the Contractor will not violate any federal, state or local statute, regulation or other Environmental Restriction, whether in the performance of such contract or otherwise.

H. INCORPORATION INTO CONTRACT AND COMPLIANCE

The above certification shall become part of any contract awarded to the Contractor set forth on page 1 of this Disclosure Affidavit and are a material inducement to the Public Building Commission of Chicago's execution of the contract, contract modification or contract amendment with respect to which this Disclosure Affidavit is being executed and delivered on behalf of the Contractor. Furthermore, Contractor shall comply with these certifications during the term and/or performance of the contract.

I. VERIFICATION

Under penalty of perjury, I certify that I am authorized to execute this Disclosure Affidavit on behalf of the Contractor set forth on page 1, that I have personal knowledge of all the certifications made herein and that the same are true.

The Contractor must report any change in any of the facts stated in this Affidavit to the Public Building Commission of Chicago within 14 days of the effective date of such change by completing and submitting a new Disclosure Affidavit. Failure to comply with this requirement is grounds for your firm to be deemed non-qualified to do business with the PBCC. Deliver any such new Disclosure Affidavit to: Public Building Commission of Chicago, Director of Compliance, 50 W. Washington, Room 200, Chicago, IL 60602.

Signature of Authorized Officer

Nosa Ehimwenman
Name of Authorized Officer (Print or Type)

President & CEO
Title

312.238.9899
Telephone Number

State of IL

County of Cook

Signed and sworn to before me on this 16th day of April, 2025 by

Nosa Ehimwenman (Name) as President & CEO (Title) of

BOWA Construction (Bidder/Proposer/Respondent or Contractor)

Notary Public Signature and Seal

OFFICIAL SEAL
JENNIFER M ESPINOZA
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES JULY 19, 2026

EXHIBIT #13

Disclosure of Retained Parties

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FORM D – DISCLOSURE OF RETAINED PARTIES

Disclosure of Retained Parties

Pursuant to Resolution No. 5339, as amended by Resolution No. 5371, of the Board of the Public Building Commission of Chicago, the apparent low Bidder is required to submit a fully executed Disclosure of Retained Parties within five (5) days of receipt of notice that it is the apparent low bidder.

A. Definitions and Disclosure Requirements

1. As used herein, "Contractor" means a person or entity that has any contract or lease with the Public Building Commission of Chicago ("Commission").
2. Commission contracts and/or qualification submittals must be accompanied by a disclosure statement providing certain information about any lobbyists whom the Contractor has retained or expects to retain with respect to the contract or lease. In particular, the Contractor must disclose the name of each such person, his or her business address, the name of the relationship, and the amount of fees paid or estimated to be paid. The Contractor is not required to disclose employees who are paid solely through the Contractor's regular payroll.
3. "Lobbyists" means any person a) who for compensation or on behalf of any person other than himself undertakes to influence any legislative or administrative action, or b) any part of whose duties as an employee of another includes undertaking to influence any legislative or administrative action.

B. Certification

Contractor hereby certifies as follows:

1. This Disclosure relates to the following transaction: Kells (George) Park Fieldhouse PS3096
   a. Description of goods or services to be provided under Contract
      DB Services
2. Name of Contractor: BOWA Construction
3. EACH AND EVERY lobbyist retained or anticipated to be retained by the Contractor with respect to or in connection with the contract or lease is listed below. Attach additional pages if necessary.
   Check here if no such persons have been retained or are anticipated to be retained: X

Retained Parties:

Name	Business Address	Relationship (Lobbyists, etc.)	Fees (indicate whether paid or estimated)

4. The Contractor understands and agrees as follows:

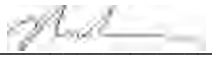
   a. The information provided herein is a material inducement to the Commission execution of the contract or other action with respect to which this Disclosure of Retained Parties form is being executed, and the Commission may rely on the information provided herein. Furthermore, if the Commission determines that any information provided herein is false, incomplete, or inaccurate, the Commission may terminate the contract or other transaction; terminate the Contractor's participation in the contract or other transactions with the Commission.

   b. If the Contractor is uncertain whether a disclosure is required, the Contractor must either ask the Commission whether disclosure is required or make the disclosure.

   c. This Disclosure of Retained Parties form, some or all of the information provided herein, and any attachments may be made available to the public on the Internet, in response to a Freedom of Information Act request, or otherwise. The Contractor waives and releases any possible rights or claims it may have against the Commission in connection with the public release of information contained in the completed Disclosure of Retained Parties form and any attachments.

Under penalty of perjury, I certify that I am authorized to execute this Disclosure of Retained Parties on behalf of the Contractor and that the information disclosed herein is true and complete.

The Contractor also certifies to the best of its knowledge and belief that it, its principals and any subcontractors used in the performance of this contract, meet the Agency requirements and have not violated any City or Sister Agency policy, codes, state, federal or local laws, rules or regulations and have not been subject to any debarment, suspension or other disciplinary action by any government agency. Additionally, if at any time the Contractor becomes aware of such information, it must immediately disclose it to the Commission.



Signature

4/16/25

Date

Nosa Ehimwenman

Name (Type or Print)

President & CEO

Title

Subscribed and sworn to before me
this 16th day of April, 20 25 (SEAL)

Notary Public

Commission expires: 7/19/26

EXHIBIT #14

Licenses and Certifications

(Remainder of Page Intentionally Left Blank)

CITY OF CHICAGO

LICENSE CERTIFICATE

NON-TRANSFERABLE

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING SPECIFIED LICENSE IS HEREBY GRANTED TO: The Bowa Group Inc.

PRINTED ON: 02/02/2024

NAME: The Bowa Group
7050 S. STONY ISLAND AVE., Floor GROUND
CHICAGO, IL 60649

DBA:

AT:

LICENSE NO.:	CODE:	FEE:
2308500	1010	$****250.00

LICENSE: Limited Business License

Includes: Commercial Construction;

PRESIDENT:Nosa Ehimwenman
SECRETARY:Nosa Ehimwenman

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION THEREFOR, AND MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES GOVERNMENT, STATE OF ILLINOIS, COUNTY OF COOK, CITY OF CHICAGO AND ALL AGENCIES THEREOF:

WITNESS THE HAND OF THE MAYOR OF SAID CITY AND THE CORPORATE SEAL THEREOF
THIS 15 DAY OF FEBRUARY ,2024

EXPIRATION DATE: February 15, 2026

ATTEST: Anna M. Valencia

MAYOR

CITY CLERK

ACCOUNT NO.: 987966 SITE : 1

TRANS NO.

THIS LICENSE MUST BE POSTED IN A CONSPICUOUS PLACE UPON THE LICENSED PREMISES.

City of Chicago
Department of Buildings
General Contractor's Licenses

BY THE AUTHORITY OF THE CITY OF CHICAGO, THE FOLLOWING LICENSE IS HEREBY GRANTED TO :

THE BOWA GROUP INC
7050 SOUTH STONY ISLAND AVENUE
CHICAGO IL 60649

LICENSE CLASS: **(A) ALL PROJECTS - NO RESTRICTIONS**

LICENSE NUMBER: **TGC111260**

CERTIFICATE NUMBER : **GC111260-6**

FEE: **$ 2000**

DATE ISSUED: **07/24/2024**

DATE EXPIRES: **08/09/2025**

THIS LICENSE IS NON-TRANSFERABLE

THIS LICENSE IS ISSUED AND ACCEPTED SUBJECT TO THE REPRESENTATIONS MADE ON THE APPLICATION FOR SAID LICENSE. THIS LICENSE MAY BE SUSPENDED OR REVOKED FOR CAUSE AS PROVIDED BY LAW. THE ABOVE LICENSEE SHALL OBSERVE AND COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF THE UNITED STATES, STATE OF ILLINOIS, COUNTY OF COOI AND CITY OF CHICAGO AND ALL AGENCIES THEREOF.

Brandon Johnson
Mayor

Marlene Hopkins
Commissioner

File Number 6734-156-2

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

I, **Alexi Giannoulias***, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that*

THE BOWA GROUP INC., A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON OCTOBER 25, 2009, ADOPTED THE ASSUMED NAME BOWA CONSTRUCTION ON FEBRUARY 16, 2018, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE BUSINESS CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 6TH *day of* AUGUST *A.D.* 2024 .

Authentication #: 2421903810 verifiable until 08/06/2025

Authenticate at: https://www.ilsos.gov

SECRETARY OF STATE

State of Illinois

Department of Financial and Professional Regulation

Division of Professional Regulation

LICENSE NO.
184.000350-0001
001.009845

The person, firm, or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below:

EXPIRES:
04/30/2025

DESIGN FIRM - ARCHITECT

FGM ARCHITECTS INC
JOHN C DZARNOWSKI
1211 W 22ND ST STE 700
OAK BROOK, IL 60523-3220

MARIO TRETO, JR.
SECRETARY

CECILIA ABUNDIS
DIRECTOR

The official status of this license can be verified at IDFPR.illinois.gov

17865878

Cut on Dotted Line

Illinois Department of Financial and Professional Regulation

Lookup Detail View

Contact

Contact Information

Name	City/State/Zip	DBA / AKA
JAMES G WOODS	EVANSTON, IL 60201	

License

License Information

License Number	Description	Status	First Effective Date	Effective Date	Expiration Date	Ever Disciplined
001013941	LICENSED ARCHITECT	ACTIVE	09/30/1991	10/29/2024	11/30/2026	N

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Illinois Department of Financial and Professional Regulation

Lookup Detail View

Contact

Contact Information

Name	City/State/Zip	DBA / AKA
Daniel T Nicholas	Wheaton, IL 60187	

License

License Information

License Number	Description	Status	First Effective Date	Effective Date	Expiration Date	Ever Disciplined
001016259	LICENSED ARCHITECT	ACTIVE	08/07/1996	11/06/2024	11/30/2026	N

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Illinois Department of Financial and Professional Regulation

Lookup Detail View

Contact

Contact Information

Name	City/State/Zip	DBA / AKA
JASON N KLINKER	CHICAGO, IL 60613	

License

License Information

License Number	Description	Status	First Effective Date	Effective Date	Expiration Date	Ever Disciplined
001023075	LICENSED ARCHITECT	ACTIVE	07/22/2015	09/15/2024	11/30/2026	N

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Illinois Department of Financial and Professional Regulation

Lookup Detail View

Contact

Contact Information

Name	City/State/Zip	DBA / AKA
BRIAN MICHAEL LIPSKI	Homer Glen, IL 60491	

License

License Information

License Number	Description	Status	First Effective Date	Effective Date	Expiration Date	Ever Disciplined
001023050	LICENSED ARCHITECT	ACTIVE	07/09/2015	11/21/2024	11/30/2026	N

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EXHIBIT #15

Fee Waiver

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EXHIBIT 15
FEE WAIVER

FIN

OFFICE OF THE MAYOR

CITY OF CHICAGO

BRANDON JOHNSON
MAYOR

February 18, 2026

TO THE HONORABLE, THE CITY COUNCIL
OF THE CITY OF CHICAGO

Ladies and Gentlemen:

At the request of the Executive Director of the Public Building Commission, I transmit herewith an ordinance authorizing building and facility-related permit fee waivers for Public Building Commission of Chicago.

Your favorable consideration of this ordinance will be appreciated.

Very truly yours,

Mayor

SUBSTITUTE
ORDINANCE

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. Pursuant to Section 2-8-065(c)(1) of the Municipal Code of Chicago ("Code"), the appropriate city departments are hereby authorized and directed to waive, in full, all permit fees, license fees, plan review fees, special review fees, approval process fees, and on-site inspection fees, including, but not limited to, building permits, trade permits, administrative permits, special use permits, demolition permits, sprinkler system permits, public way use permits, sewer permits, zoning/planning reviews and approvals, elevator permits and permits for work affecting parkway trees and shrubs, otherwise required to be paid by the Public Building Commission of Chicago ("PBC"), a governmental entity, in connection with the construction, repair, alteration, renovation, rehabilitation, and maintenance of buildings, land, parks, and other facilities owned by the below-named governmental entities and done by the PBC for the below-named governmental-entity clients of the PBC:

- City of Chicago, including all City departments, including but not limited to, Chicago Public Library, Chicago Department of Transportation, Department of Fleet and Facility Management, Department of Family Support Services, Department of Planning and Development, Department of Water Management, Chicago Police Department, and Chicago Fire Department
- Chicago Public Schools
- Chicago Park District
- Chicago Transit Authority
- Chicago Housing Authority
- City Colleges of Chicago

Provided, however, that the fee waivers authorized under this section shall not apply in connection with any monies owed by the City to any third party for any service provided to the City by such third party under the Department of Buildings' developer services program or under any other city program.

Provided further, that the fee waivers authorized under this section shall be, used exclusively to carry out the PBC's statutory and corporate purposes in connection with work done by the PBC for the above-named governmental-entity clients of the PBC. As a continued condition to the grant of this waiver, all work requiring the submission of plans shall be done in accordance with departmental requirements, including submission to and approval of the plans by the appropriate city department; obtaining all required permits and licenses; and constructing and maintaining said buildings, land, parks and facilities, and all appurtenances thereto, in compliance with the applicable provisions of the Code and any rules and regulations duly promulgated thereunder.

SECTION 2. The PBC shall submit to the Office of Budget and Management ("OBM"), and the Chicago City Council Committee on Finance, on a quarterly basis, a written report summarizing the number and type of fee waivers granted to the PBC under Section 1 of this ordinance, and the amount of each fee so waived. Such written report shall be submitted in a manner and form acceptable to OBM.

SECTION 3. This ordinance shall take full force and effect upon its passage and approval; shall be retroactive from January 1, 2026; and shall be in force until December 31, 2031.

EXHIBIT #16

Guaranteed Maximum Price (GMP)
Project Cost Proposal/Cost Form

(Remainder of Page Intentionally Left Blank)

REVISED ATTACHMENT K - DESIGN-BUILD SERVICES FOR KELLS (GEORGE) PARK FIELDHOUSE - PS3096 GUARANTEED MAXIMUM PRICE COST PROPOSAL

PROJECT NAME:	Design-Build Services for Kells (George) Park Fieldhouse
CONTRACT NO.:	PS3096
DESIGN-BUILDER:	**Bowa Construction**

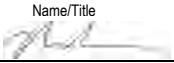
	DESCRIPTION		COST
1	**General Conditions**		
	Total General Conditions		**1,507,932.94**
2	**Payment and Performance Bond & Insurance**		
	Payment and Performance Bond	175,000.00	
	Insurance	175,000.00	
	Total Bonds and Insurance		**350,000.00**
3	**Design Phase Services[1]:** (Including but not limited to services and deliverables associated with the following: stakeholder and community engagement, architecture, engineering, permitting, LEED/sustainability, code compliance, environmental design/engineering related to the Illinois Environmental Protection Agency's Site Remediation Program, wayfinding, regulatory and entitlement, and any required certifications)		
	Total Design Phase Services		**1,746,339.00**
4	**Cost of the Work[1]:** Cost of Construction (including Pre-Construction and General Requirements) + Owner Allowances + Design Builder's Contingency + Commission's Contingency		
	Cost of Construction	6,707,391.35	
	Camera Allowance	75,000.00	
	Sitework Allowance	175,000.00	
	Moisture Mitigation Allowance	62,500.00	
	FFE Allowance (Design, Procurement, and Installation)	400,000.00	
	Design-Builders Contingency	300,000.00	
	Commission's Contingency	450,000.00	
	Total Cost of Work		**8,169,891.35**
5	**Design-Builder's Fee** *(Percentage of the total value of line 3 + 4)*	**5.38%**	
	Total Design-Builder's Fee		**533,493.19**
6	**The Guaranteed Maximum Price (Value of Lines 1 + 2 + 3 + 4 + 5)[2]**		**12,307,656.48**

[1] Indicates values to be included in the MBE/WBE calculation of Line 3 + 4

[2] Unused portions of all funds will be returned to the Project's budget and ultimately, the Chicago Park District

Nosa Ehimwenman

Name/Title



Signaure

5-Jun

Date

Date: May 23, 2025