

WAUKEGAN PARK DISTRICT

ADDENDUM #1

To: All Bidders

From: Tim Girmscheid, Manager of Planning Services

Re: Addendum #1

2017 Bowen Park Boardwalk Improvements

Bids Due on Thursday, March 9, 2017 at 1:00 p.m.

Date: March 3, 2017

PLEASE MAKE NOTE OF THE CHANGES AND CLARIFICATIONS:

1. **Change:** *Bidders shall replace the entire previous plan set with the attached plan set as well as section 32 34 00 Boardwalks. Additionally, Spec 03 30 00 Cast-In-Place Concrete is now irrelevant due to the removal of the option to place a concrete footer under piles with the auguring method. The attached plans and specs reflect changes pertaining to the pile installation and allow the use of the current plans without requiring additional plans and structural calculations.*
2. **Clarification:** *The revised boardwalk spec clarifies that the original design drawings (and supporting structural engineering signoff) are to be used "as-is" for this project and additional drawings and structural signoff is not required. If any variations are proposed, then separate drawings meeting the original design criteria must be provided with structural engineering signoff with their bid. Other spec references were modified that pertained to the LONI condition as well as a few other minor items (such as changing the layout offset from 20' to 10').*

End of Addendum #1

BIDDERS ARE TO ACKNOWLEDGE RECEIPT OF ADDENDUM #1.

PLEASE FAX BACK TO WAUKEGAN PARK DISTRICT, PARKS DEPARTMENT AT 847-244-7345 OR EMAIL TO LSALINAS@WAUKEGANPARKS.ORG. ALSO, PLEASE INCLUDE AN EXECUTED COPY OF THIS ADDENDUM AND NOTE RECEIPT OF THIS ADDENDUM IN YOUR BID PROPOSAL.

ADDENDUM #1 RECEIVED:

SIGNED: _____

DATE: _____

COMPANY: _____

Thank you.

SECTION 32 34 00 – BOARDWALKS
(revised 2017-03-01)

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section defines the performance design requirements for boardwalk structures in accordance with the plans as shown and specified.
- B. Related sections include the following:
 - 1. 01 22 00 Measurement and Payment
 - 2. 01 33 00 Submittals
 - 3. 01 74 23 Restoration
 - 4. 03 3000 Cast-in-place Concrete

1.02 QUALITY ASSURANCE

- A. Work shall be performed in accordance with referenced standards.
- B. ASTM International, (ASTM):
 - 1. ASTM A325 - Standard Specification for High Strength Bolts.
- C. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. AASTHO LRFD Bridge Design Specifications Customary U.S. Units, 5th Edition, with all applicable interims.
 - 2. LRFD Guide Specifications for the Design of Pedestrian Bridges, Latest Edition.
- D. Illinois Department of Transportation (IDOT):
 - 1. Standard Specifications for Road and Bridge Construction, Current Edition, including Supplemental Specifications.
- E. Americans with Disabilities Act Accessibilities Guidelines. (ADA or ADAAG).
- F. Illinois Accessibility Code, State of Illinois Capital Development Board (IAC).
- G. American National Standards Institute (ANSI)
 - 1. A21.1 Safety requirements for floor and wall openings, railings, and toe boards.
 - 2. A58.1 Minimum design loads in buildings and other structures.
 - 3. EA117.1 Accessible and usable buildings and facilities.
- H. American Society for Testing and Materials (ASTM)
 - 1. E 894 Standard test methods for anchorage of permanent metal railing systems and rails for buildings.
 - 2. E 935 Standard test methods for performance of permanent metal railing systems and rails for buildings.
 - 3. E 985 Specifications for permanent metal railing systems and rails for buildings.
- I. International Code Council (ICC) - A117.1 - 2009, Section 505.
- J. Occupational Safety & Health Administration (OSHA).
- K. Americans with Disabilities Act Accessibility Guidelines (ADAAG).
- L. Applicable state and local building codes, including IBC, BOCA, UBC, etc.
- M. At least one person must be present at all times during execution of this portion of the work that is thoroughly familiar with the type and operation of equipment and techniques being used. Said person shall direct all work performed under this section.
- N. Contractor shall have a minimum of fifteen (15) years of experience; and have successfully completed a minimum of five (5) similar projects.
- O. Boardwalk fabricator shall have the personnel, organization, experience, capability, and commitment to perform work.

- P. Boardwalk structure fabricator shall maintain full-time staff for inspection of boardwalk structure fabrication, maintaining accurate records, and other necessary aspects of boardwalk structure fabrication to ensure consistently high levels of quality fabrication.
- Q. If required, the Design Engineer retained by the Contractor shall be a licensed Structural Engineer registered in the State of Illinois having with a minimum of fifteen (15) years of experience designing similar boardwalk and bridge structures.
- R. Workmanship, fabrication, and shop connections shall be in accordance with American Association of State Highway and Transportation Officials Specifications (AASHTO).
- S. Marking of Pressure Treated Wood: Each piling, piece of lumber, or plywood shall be marked showing compliance with specified standards if within standard marking size range.
- T. The Contractor shall be responsible for verification of all field dimensions prior to boardwalk structure fabrication.

1.03 LAWS AND REGULATIONS

- A. Comply with all applicable regulations.
- B. All materials and workmanship must meet or exceed applicable federal, state, county and local laws and regulations.
- C. In the event of conflict between the requirements of these Specifications and the laws, rules or regulations of Federal, State or Local agencies, the more restrictive shall govern.

1.04 SUBMITTALS

- A. Certification of compliance for wood preservative treatment from the treating facility shall be provided before commencement of work.
- B. The boardwalk Contractor shall provide detailed information regarding the round wood pile driving equipment and methods to be used on the project, including tractor model and vibratory driver attachment specifications to verify driving capacity. The Engineer shall review the proposed equipment, accessories and methods for compatibility with the project. However, the adequacy of the equipment shall remain the responsibility of the Contractor.
- C. Contractor shall submit complete product testing and structural calculations for the modular pre-engineered railing system certified by a Professional Engineer or listed by the manufacturer for the intended use.
- D. Manufacturer's data sheets indicating metal type and corrosion resistance treatment details shall be provided for all connectors and fasteners and must be approved by the Engineer before the commencement of work.
- E. Warranty information.
- F. If any deviations are proposed from the original boardwalk design, the Contractor shall submit product data, shop drawings and structural calculations for the proposed changes, with their bid, meeting the following requirements:
 1. Shop drawings and design calculations shall be prepared, sealed and signed by a Structural Engineer registered in the State of Illinois and meet the quality assurance requirements of this specification.
 2. Shop drawings shall be original drawings, specifications and calculations prepared specifically for this project and not generic 'boiler plate' documents from other unrelated projects. They shall include the name, Owner's project number, location and date.
 3. Shop drawings shall include all plans, elevations, sections, details, labels and notes to fully describe material type, quantity, quality and size; layout, location, fabrication, erection and setting of assemblies; and references and industry standards to govern the construction. They shall also include all structural studies and calculations for all structural members, fasteners and assemblies to verify the structural integrity, required load capacities and compliance with the stated design goals.

1.05 SATISFACTORY PERFORMANCE

- A. Work shall at all times be satisfactory to the Owner and Consultant.
- B. Owner or Consultant shall inform the Contactor of unsatisfactory procedures and operations.
- C. Promptly correct unsatisfactory procedures and operations to the satisfaction of the Owner or Consultant.
- D. Failure to promptly correct unsatisfactory procedures and operations may cause the Owner or Consultant to suspend the performance of any or all other Work until the unsatisfactory condition has been corrected.
- E. Such suspension shall not be the basis of any claim by the Contractor for additional compensation from the Owner nor for an extension of time to complete the Work.
- F. Deliver and store materials per manufacturer's written instruction.
- G. All pressure treated material shall be stored, for the duration of the project, in a manner that will prevent damage to the lumber, or any condition that might affect treatment.
- H. Boardwalk contractor is responsible for keeping lumber banded and/or covered, as may be needed.
- I. The lumber supplier shall provide a warranty against defects in material and workmanship for a period of twenty (20) years from the completion date of the structure.
- J. The completion date of the structure shall be determined only after correction of any defects noted during a complete inspection by the Engineer, Contractor and boardwalk foreman. The Contractor shall re-inspect the structure within one year of the completion date and after the wood members have adequately dried and have attained a stable dimension. Defects and improperly seated fasteners found during the re-inspection shall be promptly remedied.

1.06 BOARDWALK DESIGN CRITERIA

- A. The boardwalks and other required or indicated accessory items shall be provided as indicated on the original Drawings. Coordinate with other trades. The boardwalk structure is to conform to the minimum requirements as shown on the original drawings and specifications, If any deviations are proposed from the original boardwalk design, the Contractor shall submit product data, shop drawings and structural calculations for the proposed changes, with their bid, meeting the following design requirements:
- B. Governing Design Codes / References
 - 1. Structural members shall be designed in accordance with recognized engineering practices and principles as follows: American Institute of Timber Construction (AITC), U.S. Forest Products Laboratory, American Forest & Paper Association (AF&PA).
 - 2. Sawn lumber shall be designed in accordance with: ANSI/AF&PA NDS, "National Design Standard for Wood Construction", as published by the American Forest & Paper Association or the "Timber Construction Manual" as published by the American Institute of Timber Construction (AITC).
- C. Boardwalk shall be designed utilizing a stringer-to-pile cap construction method. Stringers are to be aligned in the direction of the structures path.
- D. Width: As indicated on Drawings.
- E. Span: As indicated on Drawings.
- F. Camber: The boardwalk shall maintain a consistent deck elevation as designated by the site information provided for this specification.
- G. Existing concrete abutments shall be used. Connecting to abutments shall be incidental to boardwalk construction.

- H. Dead Load. The boardwalk structure shall be designed considering its own dead load (superstructure and original decking) only. No additional dead loading need be considered.
- I. Uniform Live Load Bridge / Boardwalk decks and supporting floor systems and main supporting members shall be designed for a minimum uniform live load of 85 pounds per square foot, with no reduction allowed. All boardwalks will be used by pedestrians and therefore shall be designed to withstand their anticipated loads and impact.
- J. Concentrated Loads: The boardwalk superstructure, floor system and decking shall be designed for each of the following point load conditions:
 - 1. All of the concentrated loads shall be placed so as to produce the maximum stress in each member being analyzed.
- K. Wind Load: The boardwalk and bridge structure shall be designed for wind loads in accordance with AASHTO section 3.
- L. Hydraulic and debris Load: All boardwalk structures shall be designed for hydraulic and debris loads of the intensity required by AASHTO criteria unless specified otherwise.
- M. Seismic: All boardwalk structures shall be designed for seismic loads of the intensity required by AASHTO criteria unless specified otherwise.
- N. Minimum Loads:
 - 1. Boardwalk and bridge structures: 85 pounds per square foot loading.
- O. Deflection Criteria:
 - 1. Boardwalk structures: In accordance with AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, Section 5.
 - a. Not to exceed 1/360 of span length.
 - b. Not to exceed 1/220 of cantilever length.
- P. Safety rails: As indicated on Drawings.

PART 2 PRODUCTS

2.01 PILINGS

- A. Pilings must meet minimum requirements as specified by the American Society for Testing and Materials (ASTM) under the provisions of D25 (latest edition), standard specifications for round timber piles. Design of foundation shall follow the recommendations of geotechnical investigation report.

2.02 LUMBER

- A. All dimensional lumber, two inch (2") nominal thickness and larger (unless specified otherwise), shall be Southern Yellow Pine and graded under the Southern Pine Inspection Bureau (SPIB) guidelines. All dimensional members are to be S4S, #1 grade or better, with .60 CCA treatment, and have the appropriate grade stamp clearly marked.
- B. All curbing and curb block shall be S4S, No. 1 and better, and shall have the appropriate grade stamp.
- C. All railing posts to be Southern Yellow Pine, #1 gr. kiln-dried after treatment (K.D.A.T.), or better with .06 lbs/Cu.Ft. retention and treated with 0.06 CA-C (Type C) or equal in accordance with the American Wood Preservers Association (AWPA) Standard U1, Use Category 3B, Commodity Specification (A).

2.03 DECKING

- A. Decking shall be 2"x6" or 2"x8" plastic deck boards, Chocolate Brown color, manufactured by Lumberock Premium Decking.

2.04 RAILINGS

- A. The system, consisting of rails and pickets, shall be an aluminum component, non-welded modular, pre-engineered system. Rails and posts shall be fabricated from extruded aluminum metal and shall comply with VCC 1012.3.1 with an outside diameter of 1.25" to 2.0" with a minimum wall thickness of 0.145", Schedule 40.
- B. Railing shall be Age Craft Colonial (Standard) with 3/4"x2" Pickets in a black finish manufactured by Age Craft Manufacturing Inc.

2.05 HARDWARE AND MISCELLANEOUS MATERIALS

- A. Fasteners shall be provided with a hot-dip zinc coating (ASTM A-153) for treated lumber and where wood is in ground contact, subjected to high relative humidity or exposed to weather.
- B. All structural bolts for pilings shall be 3/4" diameter A307 hot dipped galvanized per AASHTO specification #M-232. Contractor shall design the structural bolts as per structural requirements.
- C. "Simpson" part number H-5 clips, or approved equal, shall be used for all stringer to beam connections.
- D. All steel shapes shall be hot dip galvanized after fabrication per AASHTO specification #M-111. All hardware shall be hot dip galvanized per AASHTO specification #M-232. All field modifications to steel parts shall be treated with cold galvanizing paint.
- E. All welding shall be per A.W.S. specifications by certified welders.
- F. Screws to secure composite decking shall be stainless steel flat head deck screws, #10 size, 2-1/2" long.

2.06 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering product that may be incorporated into the work include, but are not limited to, the following.
 1. DFI Bridge Corporation, 5055 Babcock Street NE Suite #4. Palm Bay, FL 32905. 866-727-7100.
 2. Lumberock Premium Decking, 885 Church Road, Elgin, IL 60123. 800-480-2327
 3. Age Craft Manufacturing Inc., 45 Madison Ave, Greensburg, PA 15601. 800-247-5487.

PART 3 EXECUTION

3.01 JOB SITE CONSTRUCTION REQUIREMENTS

- A. Contractor will flag off any structures, utilities, etc. that are adjacent to Contractor lay down area(s), access roads, and bridge/boardwalk sites to avoid any potential damage. Contractor is responsible for damages to marked areas.
- B. Where required by site conditions, the Engineer, or regulatory agencies, Contractor shall perform all work from deck level. All foot traffic shall be contained within six feet from boardwalk.
- C. The Owner is required to inspect and sign off for the boardwalk site both before and after construction to provide quality assurance.

3.02 INSTALLATION

- A. Boardwalks shall be installed at the locations shown on the Drawings. They shall be accurately located and staked using the approved control points. Curved boardwalks shall be staked at ten foot (10') intervals, either at the structure center line or as an offset. The Consultant must approve all elevations and staking before the start of work.
- B. When located in wetlands or other designated sensitive areas, the Contractor shall perform all work from deck level. All foot traffic, tools and materials shall be contained within fifteen feet of the boardwalk.
- C. When severe weather conditions such as extreme temperatures, snow or ice interfere with proper construction techniques and craftsmanship, work shall be suspended until proper conditions are present.

- D. Installed deck surfaces shall be kept clean of foreign debris such as stone or soil, and protected from damage due to continued construction activity.

3.03 ROUND TIMBER PILES

- A. All piles shall be driven from deck level or from outside the wetland boundary using only an approved vibratory compactor / driver and backhoe. Hand auguring and/or water jetting are not permitted for piling installation on this project.
- B. The Contractor shall drive each timber pile to a depth and resistance which meets or exceeds the loading requirements indicated on the plans or approved shop drawings. Estimated pile depths indicated in the Geotechnical Investigation report are provided for guidance only, and it shall be the sole responsibility of the Contractor to provide the exact pile depths required for the project. No additional compensation shall be allowed for installing piles to a greater depth than indicated in the Geotechnical Investigation report.
- C. All boardwalk pilings shall be driven below 42" (frost depth).
- D. If proper bearing capacity is not met at the minimum pile depth, pilings shall be spliced and driven until proper bearing is achieved. All standard splices must provide Engineers' calculations and stamp. The Owner may engage the services of an independent party to observe and approve the installation of one or more test piles.
- E. The Contractor shall compile and maintain a pile driving record on an approved plan which lists and locates each driven pile, the final pile depth from ground level to the pile tip and whether the pile was spliced. The pile driving record shall be submitted to the Engineer upon completion. Piles shall be adequately marked to determine exact depth.
- F. Installed piles shall not deviate from plumb more than ¼" per foot of pile length or six inches (6") total from the location of the pile top from original insertion location.
- G. Piles which have been split, cracked or otherwise damaged during driving shall be removed or abandoned, and a replacement pile installed.
- H. Splices shall be used only when the maximum usable pile length is insufficient to meet the required bearing capacity. Only approved splice methods shown on the drawings shall be used.
- I. Pile groups sharing a common pile cap shall be cut flush and level to each other such that the pile cap is contacted by every pile equally. Re-driving individual piles may be required due to soil disturbance when driving adjacent piles.
- J. All cuts, including end cuts and splices, shall be field-treated in accordance with AWWA Standard M4. A liberal application of a copper naphthenate preservative containing a minimum of two percent (2%) copper metal is specified.

3.04 STRUCTURAL WOOD MEMBERS

- A. Install in accordance with NFPA publication "Permanent Wood Foundation System: Design, Fabrication, Installation Manual" and Technical Report No. 7 "The Permanent Wood Foundation System: Basic Requirements", and APA Design/Construction Guide "Permanent Wood Foundation Guide to Design and Construction."
- B. No splices of pile caps, stringers or other structural wood members shall be allowed.
- C. All screws shall be pre-drilled to a maximum hole diameter no greater than the root or minor diameter of the screw and at least seventy-five (75%) of the screw depth.

3.05 COMPOSITE DECKING

- A. All decking boards shall be fully contacted by the support stringers below. Install decking with the wood-grained textured side up.
- B. No splices of deck boards shall be allowed.
- C. Maintain a continuous, neat screw pattern alignment parallel and consistent with the underlying stringer orientation.

- D. All screws shall be pre-drilled to a maximum hole diameter no greater than the root or minor diameter of the screw and at least seventy-five (75%) of the screw depth. Deck screws shall be countersunk to a depth of one-quarter inch (1/8").
- E. Deck boards which are cut along their length (ripped) to accommodate a curved design, shall measure at least two inches (2") across at the smallest end.
- F. The maximum allowable gap between deck boards shall be one-quarter inch (1/4").
- G. The maximum allowable difference in elevation between adjacent deck boards shall be one-quarter inch (1/4") without a planed bevel. The maximum allowable difference in elevation between adjacent deck boards where at least one (1) board has a planed bevel shall be one-half inch (1/2"). All planed bevels of deck boards shall be a minimum of one inch (1") wide.
- H. Deck boards which are end trimmed at curved sections shall be cut as an appearance of a continuous curve and not as individual straight bent sections. See sheets A1 Boardwalk Framing Plan and A3 Boardwalk Framing Plan for the desired look of the deck edge.

3.06 RAILINGS

- A. All boardwalks shall have handrail on both sides and comply with Section 505. ICC A117.1 - 2009.
- B. Handrail components shall be supplied based on site dimensions supplied by the Boardwalk Designer and shall be verified by the Contractor.
- C. All handrail sections shall be straight and true.
- D. Handrails shall be installed in strict accordance with the manufacturer's instructions.
- E. Load - Handrail shall be designed and installed to withstand a concentrated load of 200 lbs. applied anywhere on or throughout the system and 50 lbs. /LF in accordance with VCC 1607.8.
- F. Handrail shall provide a smooth and continuous gripping surface throughout the entire length of the ramp.
- G. A minimum clearance of 1 1/2" shall be maintained between the handrail and any obstructions above or behind the handrail.
- H. A minimum of 36" shall be maintained between handrails to provide clear access for users.
- I. Handrail system shall consist of one top rail 42" above the walking surface with a bottom rail positioned 3-15/16" on center above the walking surface.
- J. The slope of the handrail shall match the slope of the decking.
- K. The Contractor shall be responsible for all final measurements for modular pre-engineered handrail systems to ensure the handrails meet all applicable codes and specifications as stated herein.

3.07 CLEANING

- A. Contractor shall remove all stains, dirt, grease, or other substances by washing all railings thoroughly using clean water and soap; and rinse with clean water.
- B. Contractor shall not use acid solutions, steel wool, and other harsh abrasives.
- C. Contractor shall remove any foreign material which is permanently stained as well as damaged.

3.08 CLEAN-UP, REMOVAL, AND REPAIR

- A. Cleanup:
 - 1. Trash or other such materials shall not be allowed to accumulate at the project site.
 - 2. All tools to be kept in appropriate carrying cases or tool boxes when not in use.
 - 3. Parking areas, roads, sidewalks, paths and other paved areas to be kept free of mud, dirt, and other debris.
- B. Removal:
 - 1. Remove tools, empty containers, barricades, and all other debris generated by the Contractor after the work has been completed.
 - 2. Excess material to be properly disposed of by the Contractor at no additional cost to the Owner unless specified otherwise.

C. Repair:

1. Repair any damages caused by the Contractor during completion of the work described in this Section to the satisfaction of the Owner or Consultant.

3.09 PROTECTION OF FINISHED WORK

- A. Do not permit traffic over unfinished boardwalk and bridge structures.

3.10 SCHEDULE OF BOARDWALK AND BRIDGE STRUCTURES

- A. West Boardwalk: See Sheet C3.0 of the Drawings.
- B. East Boardwalk: See Sheet C3.0 of the Drawings.

END OF SECTION

Waukegan Park District

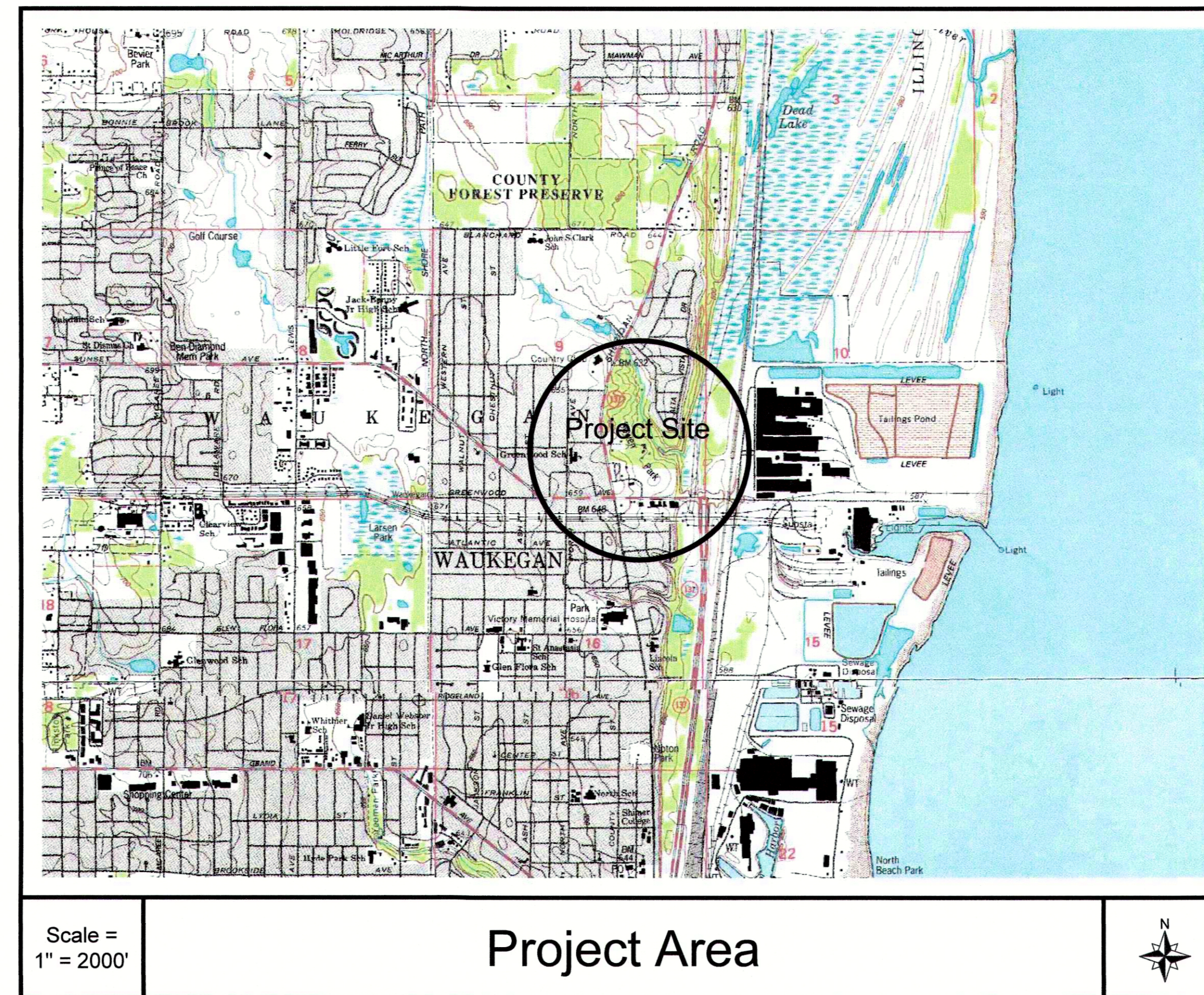
Bowen Park - Boardwalk Improvements

Client:

Waukegan Park District
 Park Maintenance Facility
 2211 Ernie Krueger Circle
 Waukegan, Illinois 60087
 Office: 847-360-4725
 Fax: 847-244-7345

Engineer:

Hey and Associates, Inc.
 26575 West Commerce Drive, Suite 601
 Volo, Illinois 60073
 Office (847) 740-0888
 Fax (847) 740-2888



Sheet Index:

- 1. C1.0 Cover Sheet
- 2. C1.1 General Notes
- 3. C1.2 Overall Plan
- 4. C2.0 Site Preparation Plan
- 5. C3.0 Layout & Materials Plan

- A1 Bridge Plan & Elevation
- A2 Sections Details & Notes
- A3 Bridge Plan & Elevation
- A4 Sections Details & Notes
- A5 Plan View & Profile

Benchmarks & Control:

Site Benchmark
 BM #1 = Northeast flange ("Mueller") bolt of fire hydrant on the south side of the cul-de-sac, west of Jack Benny Center. Elevation = 639.65 (NAVD 1988)

Horizontal Control Points
 CP #1 = Scribed cross in the concrete walk, 1 ft south of the north edge of the concrete walk, approx. 75 ft west of the northwest corner of the existing shelter's concrete pad. N 2084119.50 E 1119929.77

CP #2 = Scribed cross in the concrete walk, 1 ft west of the east edge of the concrete walk, approx. 70 ft northeast of the southeast corner of the existing shelter's concrete pad. N 2084062.39 E 1120102.49

CP #3 = 3/8" Rebar at center of proposed trail arc.
 N 2083992.41 E 1120044.29

Call J.U.L.I.E. 1-800-892-0123 at least 48 hours before start of construction with the following:

County: Lake
 City or Township: Waukegan
 Tier, Range & Section: T45N, R12E, Sec. 9

The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto.

PROFESSIONAL SEAL



Signature: Thomas L. Polzin
 Date: 2/24/17
 License Expires: 11/30/17

This document shall not be considered a valid technical submittal unless it bears an original seal and signature.

Base Survey Information provided by:

Hey and Associates, Inc. supplemented with Lake County 1 FT Contours

No.	Revision/Issue	Date
1	Revised Sheet A2 - Note 4	2/23/17

Hey and Associates, Inc.
 Engineering, Ecology and Landscape Architecture
 26575 WEST COMMERCE DRIVE, SUITE 601
 VOLO, ILLINOIS 60073
 OFFICE (847) 740-0888
 FAX (847) 740-2888
 VOLO@HEYASSOC.COM
 PROFESSIONAL DESIGN FIRM
 LICENSE N O. 184.002429

Waukegan Park District
 Bowen Park
 Boardwalk Improvements

Cover Sheet

PROJECT NO.	16-0247	DRAWING NO.	C1.0
DESIGNED BY	KGK		
DRAWN BY	KGK		
CHECKED BY	TLP		
APPROVED BY	TLP	SHEET NO.	
ISSUE DATE	01/30/2017		1 of 5

For Bidding

GENERAL NOTES

- The IDOT "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016, IDOT Supplemental Specifications published prior to the date of the contract, and the project plans and specifications shall govern the work. In the event of a conflict between the IDOT documents and the project plans and specifications, the project plans and specifications shall prevail. Written information (e.g. dimensions) shall prevail over graphic representations (e.g. scaled lengths).
- Prior to submitting a bid, the Contractor shall examine all plans and specifications, visit the site of the work, and fully inform themselves of the work involved, general and local conditions, all Federal, State and local laws, ordinances, rules and regulations, and all other pertinent items which may affect the cost and time of completion of this project.
- All work and materials shall be in accordance with applicable code requirements and permits including but not necessarily limited to: City of Waukegan.
- Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor.
- Prior to submitting their bid, the Contractor shall call the attention of the Owner to any material or equipment they deem inadequate and to any item of work omitted.
- The Contractor shall provide a written work schedule, and shall update said schedule on a regular basis and as otherwise required. A minimum forty-eight (48) hour notice shall be given for any item that requires approval or inspection. The Contractor shall inform the Owner of all changes in the construction schedule as soon as they become apparent.
- Special attention is drawn to the fact that Article 105.06 of the IDOT "Standard Specifications for Road and Bridge Construction" requires the Contractor to have a competent superintendent on the project site at all times, irrespective of the amount of work sublet. The superintendent shall be capable of reading and understanding the plans and specifications, shall have full authority to execute orders to expedite the project, shall be responsible for scheduling and have control of all work as the agent of the Contractor. Failure to comply with this provision will result in a suspension of work until such time as reasonably decided by the Owner.
- Neither the Owner, Engineer, Designer, Consultant nor the Owner's representative shall be responsible for the construction means, methods, techniques, sequences or procedures, time of performance, programs or for any safety precautions used by the Contractor. The Contractor is solely responsible for execution of their work in accordance with the contract.
- The Contractor shall be responsible for providing safe and healthful working conditions throughout the construction of the proposed improvements.
- The Contractor shall provide, maintain, and remove all signs, barricades, flagmen and other control devices as may be necessary for the purpose of traffic control. As used herein, traffic shall apply to, but not necessarily be limited to the following: vehicles, pedestrians, and cyclists. All traffic control shall be in accordance with applicable parts of Section 701 of the "Standard Specifications for Traffic Control Items" except as specifically modified on the project plans and specifications. Traffic control shall be considered incidental to the contract.
- The Contractor shall notify J.U.L.I.E. (1-800-892-0123) to identify and mark any utilities that may occur within the work zone prior to construction.
- Locations of utilities shown on plans are approximate only, and are not necessarily complete. Contractor shall make their own investigations as to location of all existing underground structures, cables and pipe lines.
- The Contractor shall be responsible for the protection of all private and public utilities even though they may not be shown on the plans. Any utility that is damaged during construction shall be repaired or replaced to the satisfaction of the Owner. The cost of any such repair(s) shall be considered incidental to the contract.
- If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Owner so that the conflict may be resolved.
- The Contractor shall be required to make arrangements for the proper bracing, shoring and other required protection of all roadways, structures, poles, cables and pipe lines, before construction begins. They shall be responsible for any damage to the streets or roadways and associated structures and shall make repairs as necessary to the satisfaction of the Owner. The cost of any such repair(s) shall be considered incidental to the contract.
- All elevations are based on NAVD88 Datum.
- Layout of lines and grades or any other surveying required to construct the proposed improvements shall be the responsibility of the Contractor and shall be considered incidental to the contract.
- All lot irons and/or markers damaged or removed during construction of this project shall be replaced by the Owner. The cost of replacement shall be deducted from the amount owed to the Contractor under this contract.
- During construction the Contractor shall have in their possession on the job site a copy of the plans, specifications and necessary permits.
- The Contractor shall submit for approval any and all "approved equal" items, shop drawings, and other required submittals to the Owner's representative prior to construction.
- The Contractor is responsible for coordinating any required inspections with the Owner, Consultant, and other agencies.
- Before acceptance by the Owner and final payment, all work shall be inspected and approved by the Engineer or Consultant and Owner. Final payments shall be made after all of the Contractor's work has been approved and accepted.

CONSTRUCTION NOTES

- The Contractor shall be required to attend a pre-construction meeting with the Owner and Consultant prior to the start of construction to review shop drawing procedures, construction methods, phasing, sequencing, and to establish a well-defined construction schedule.
- Owner shall install soil erosion control measures and tree/construction fencing prior to the start of construction.
- The Contractor shall work within the limits of construction (unless otherwise specified). If work is done outside the limits of construction, it shall be the responsibility of the Contractor to restore any disturbed areas to a condition equal to or better than original. The opinion of the Owner shall be final in determining the acceptability of restored areas. The cost of any such restoration shall be considered incidental to the contract.
- Contractor shall take all necessary and reasonable precautions to prevent any damage to existing trees, foliage, plant materials, wetlands, structures, roads, parking lots, trails, turf areas, finished topsoil areas, and other property of Owner, the public, or private entities.
- The proposed lines and grades shown on the construction plans represent finished grade elevations.
- All disturbed areas to receive a minimum of 6 inches of topsoil generated on-site and be seeded as specified on the construction plans and specifications.
- Areas to be seeded shall be firm but not compacted and shall be fine graded to a smooth and natural contour prior to seeding. All rocks, sticks, roots, clods, and debris greater than one-inch shall be removed and disposed of off-site.
- Owner shall place erosion control blanket over seeded areas as necessary.
- Existing sidewalks outside the limits of construction are to remain open, safe, and in an accessible condition for public use at all times during the construction of this project. Access through and over these walks shall be kept to a minimum.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

All soil erosion and sedimentation control measures shall be in accordance with these plans and specifications and the "Standard Specifications for Road and Bridge Construction", State of Illinois, Department of Transportation, adopted January 1, 2016 and revisions thereto. Unless otherwise indicated, all vegetative and structural erosion and sediment control practices will be constructed according to minimum standards and specifications in the Illinois Urban Manual, latest edition and the Lake County Stormwater Management Commission standard notes and details.

- Soil disturbance shall be conducted in such a manner as to minimize erosion. Soil stabilization measures shall consider the time of year, site conditions and the use of temporary or permanent measures.
- Soil erosion and sediment control features shall be constructed prior to the commencement of upland disturbance.
- Temporary soil stabilization shall be applied to disturbed areas within 14 calendar days of the end of the active hydrologic disturbance. Permanent stabilization shall be completed within 7 days after completion of final grading of the soil. In areas where work has temporarily ceased for 21 days or more, temporary stabilization shall occur within 14 days after work has ceased.
- All storm sewer facilities that are or will be functioning during construction shall be protected, filtered or otherwise treated to remove sediment.
- All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization is achieved or after temporary measures are no longer needed. Trapped sediment and other disturbed soil areas shall be permanently stabilized.
- All temporary and permanent erosion control measures must be maintained and repaired as needed. The General Contractor will be responsible for inspection and repair during construction. The Owner will be responsible if erosion control is required after the Contractor has completed the project.
- The erosion control measures indicated on the plans are the minimum requirements. Additional measures may be required as directed by the engineer or governing agency.
- All erosion control measures must be inspected weekly and after each 0.5" rain event.
- Stockpiles of soil and other building materials to remain in place more than three (3) days shall be furnished with erosion and sediment control measures (i.e. perimeter silt fence). Stockpiles to remain in place for 30 days or more shall receive temporary seeding.
- All adjacent streets must be kept clear of debris, inspected daily, and cleaned when necessary.
- The Owner must be notified one week prior to the pre-construction conference, one week prior to the commencement of land disturbing activities, and one week prior to the final inspection.
- A copy of the approved erosion and sediment control plan shall be maintained on the site at all times.



LEGEND



No.	Revision/Issue	Date

Hey and Associates, Inc.
 Engineering, Ecology and Landscape Architecture
 26575 WEST COMMERCE DRIVE, SUITE 601
 VOLO, ILLINOIS 60073
 OFFICE (847) 740-0888
 FAX (847) 740-2888
 VOLO@HEYASSOC.COM
 PROFESSIONAL DESIGN FIRM
 LICENSE NO. 184.002429

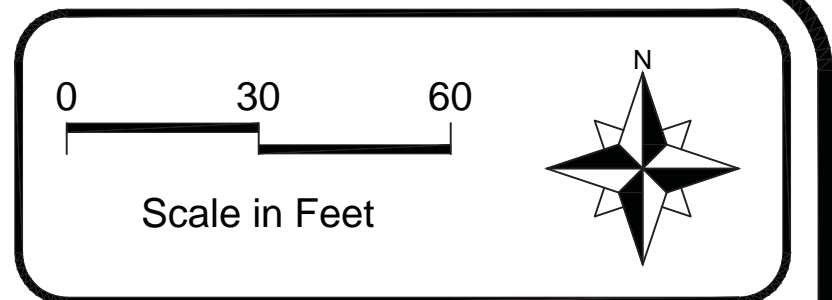
Waukegan Park District
 Bowen Park
 Boardwalk Improvements

General Notes

PROJECT NO:	16-0247	DRAWING NO:	C1.1
DESIGNED BY:	KGK		
DRAWN BY:	KGK		
CHECKED BY:	TLP		
APPROVED BY:	TLP	SHEET NO:	
ISSUE DATE:	01/30/2017	2 OF 5	

For Bidding

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LEGEND	
	Existing 1 FT Topography (Surveyed)
	Existing 1 FT Topography (Lake Co.)
	Wetland Boundary (Surveyed)
	Existing Storm Drainage
	Existing Water Main
	Existing Underground Electric Line
	Existing Underground Telephone Line
	Existing Drain Pipe
	Temporary Security Fence
	Limits of Construction
	Construction Access Routes
	Site Benchmark
	Control Point
	Soil Boring
	Existing Storm Manhole
	Existing Inlet
	Existing Sanitary Manhole
	Existing Fire Hydrant
	Existing Valve Vault
	Existing Valve Box
	Existing Telephone Pedestal
	Existing Bench
	Existing Tree

No.	Revision/Issue	Date

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 26575 WEST COMMERCE DRIVE, SUITE 601
 VOLO, ILLINOIS 60073
 OFFICE (847) 740-0888
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Waukegan Park District
 Bowen Park
 Boardwalk Improvements

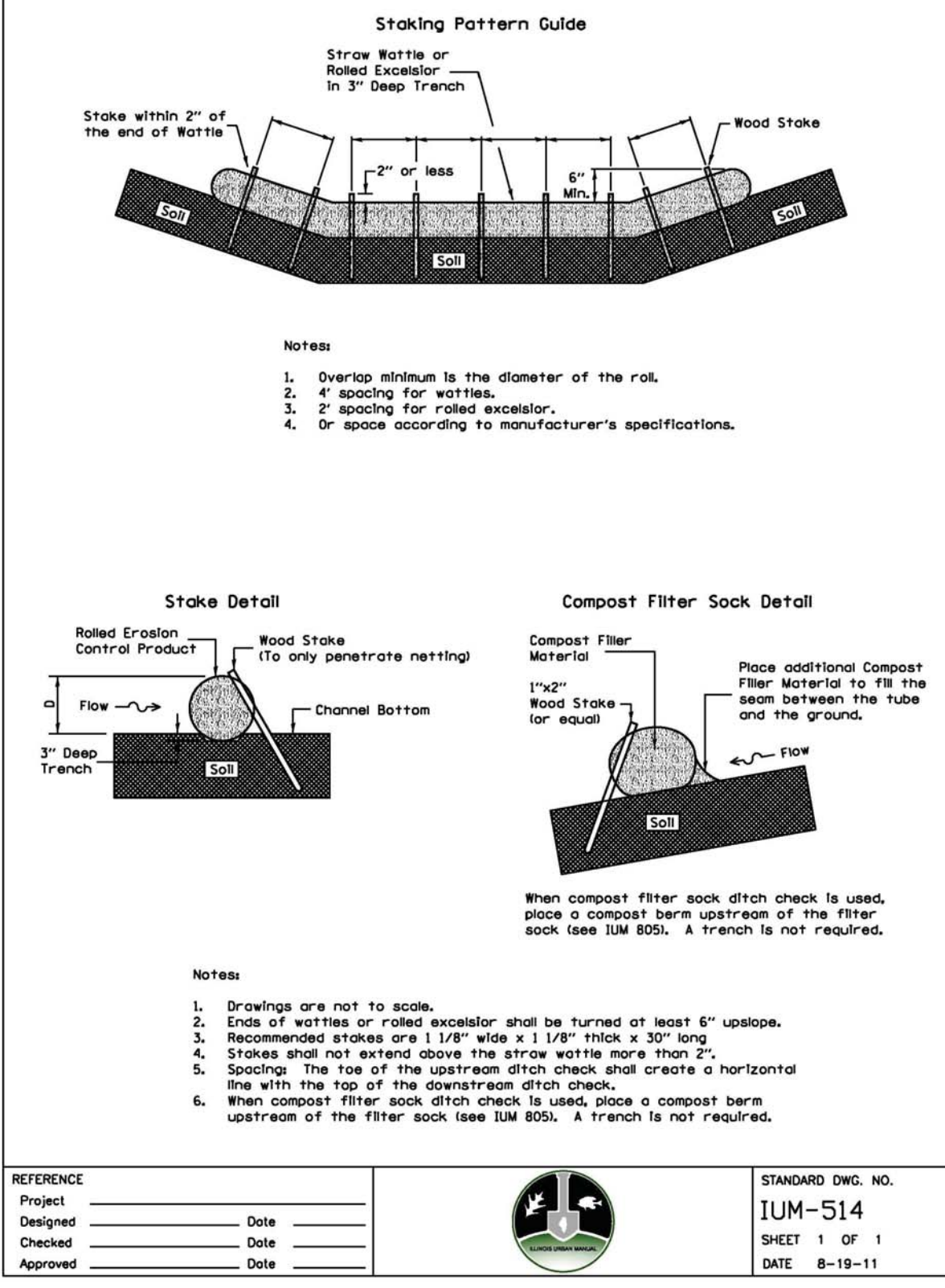
Overall Plan

PROJECT NO:	16-0247	DRAWING NO:	C1.2
DESIGNED BY:	KGK	SHEET NO.:	
DRAWN BY:	KGK	3 OF 5	
CHECKED BY:	TLP		
APPROVED BY:	TLP		
ISSUE DATE:	01/30/2017		

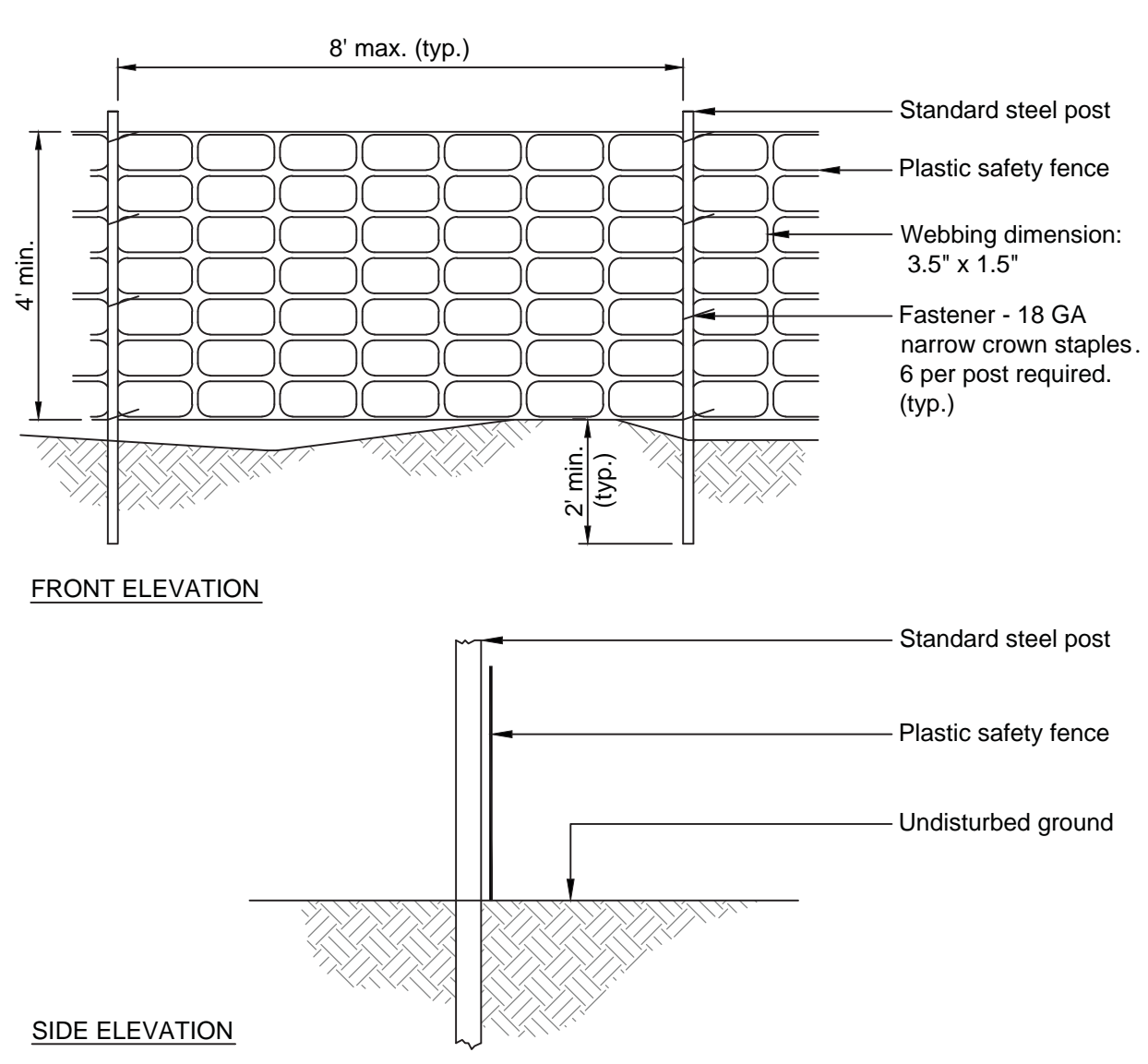
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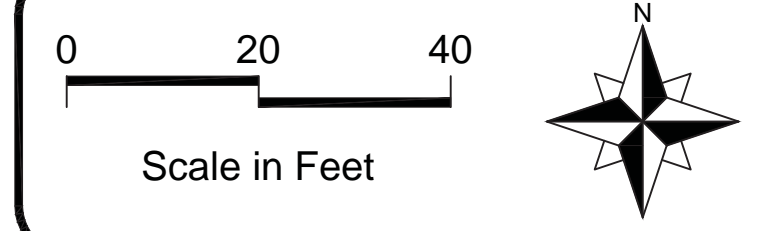
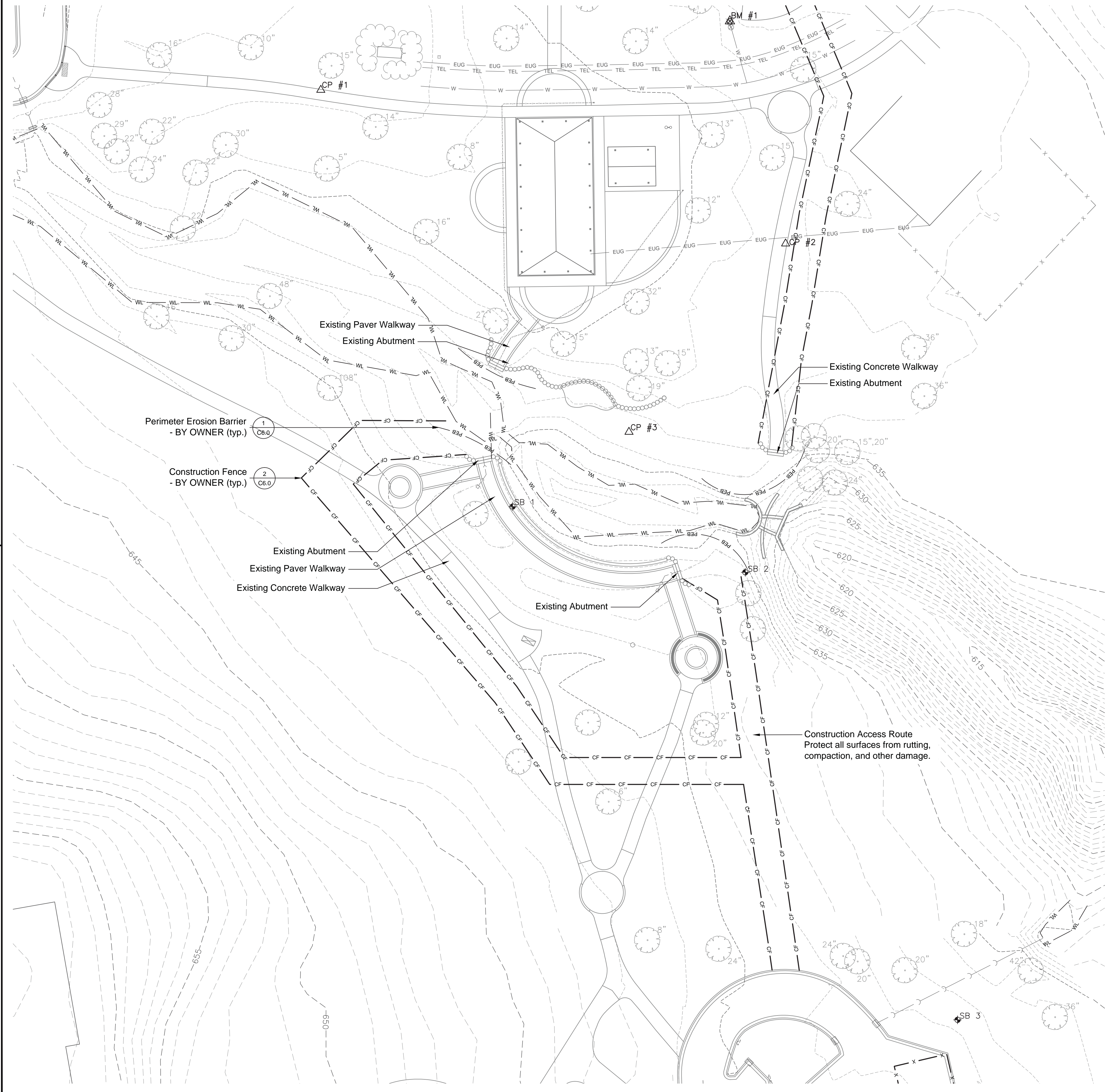
ROLLED EROSION CONTROL PRODUCTS



1 Perimeter Erosion Barrier Detail (Not to Scale)



2 Construction Fence Installation Detail (Not to Scale)



LEGEND

- Existing 1 FT Topography (Surveyed)
- Existing 1 FT Topography (Lake Co.)
- Wetland Boundary (Surveyed)
- Existing Water Main
- Existing Underground Electric Line
- Existing Underground Telephone Line
- Construction Fence (BY OWNER)
- Perimeter Erosion Barrier (BY OWNER)
- Site Benchmark
- Control Point
- Existing Storm Manhole
- Existing Inlet
- Existing Fire Hydrant
- Existing Valve Box
- Existing Telephone Pedestal
- Existing Bench
- Existing Tree

****NOTE: Protect all surfaces from rutting, compaction, and other damage.**

All areas disturbed or damaged shall be restored to preconstruction conditions, which includes fine grading to the satisfaction of the Owner. Seeding to be done by Owner.

No.	Revision/Issue	Date

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OFFICE (847) 740-0888
FAX (847) 740-2888
VOLO@HEYASSOC.COM

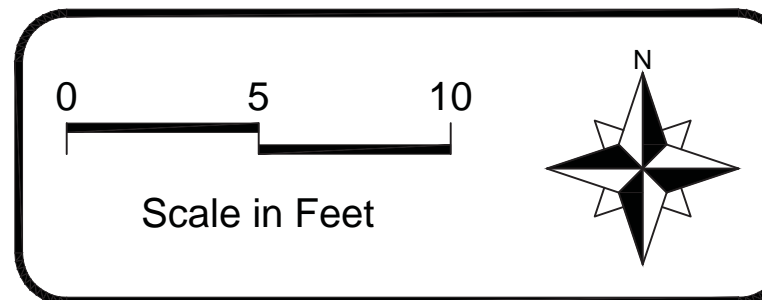
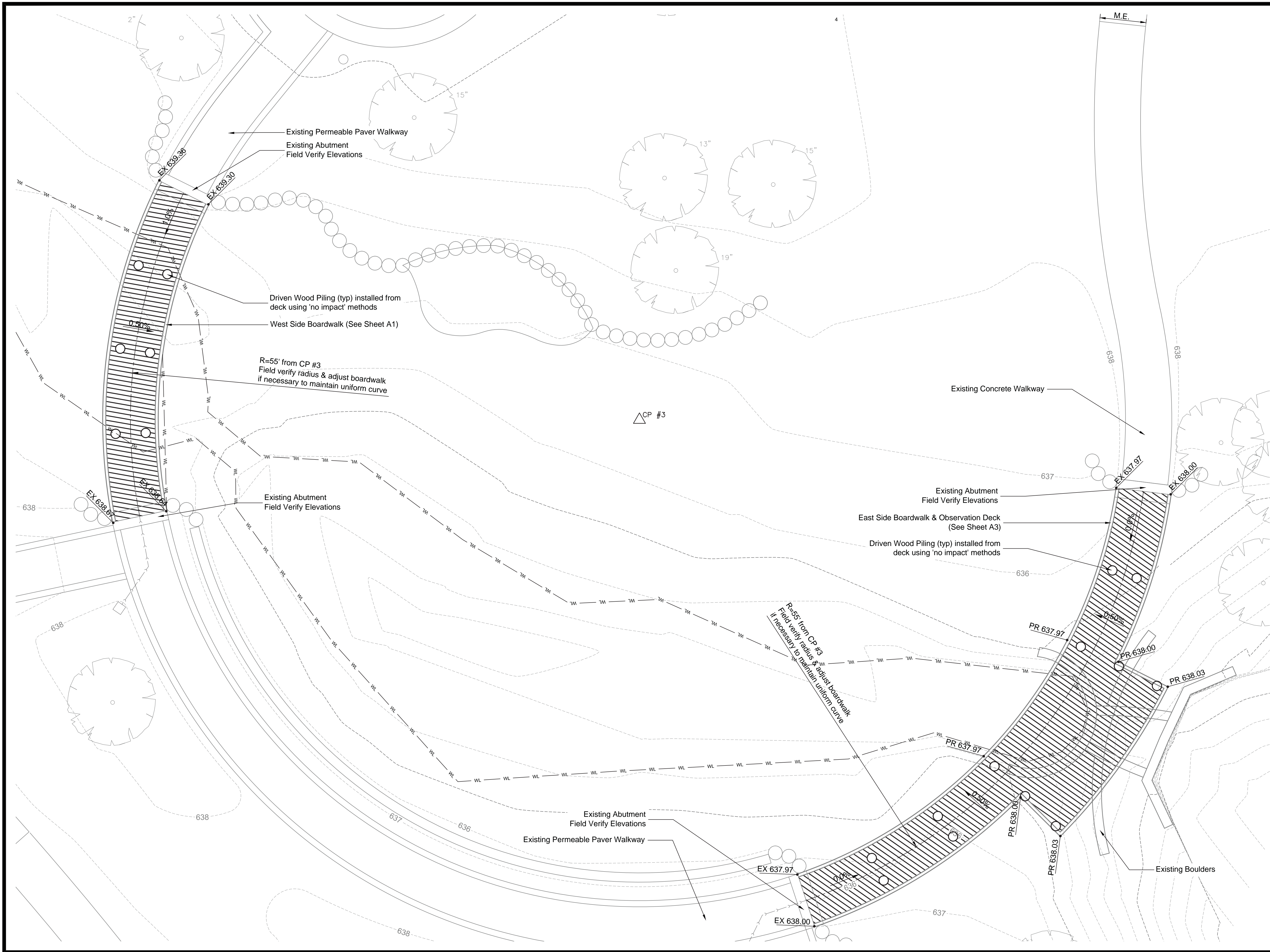
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184.002429

Waukegan Park District
Bowen Park
Boardwalk Improvements

Site Preparation Plan

PROJECT NO:	16-0247	DRAWING NO:	C2.0
DESIGNED BY:	KGK	CHECKED BY:	TLP
DRAWN BY:	KGK	APPROVED BY:	TLP
ISSUE DATE:	01/30/2017	SHEET NO.:	4 OF 5

For Bidding



LEGEND		
	Existing Topography	
	Wetland Boundary (Surveyed)	
	Existing Pipe Drain	
	Site Benchmark	
	Control Point	
	Existing Storm Manhole	
	Existing Inlet	
	Existing Fire Hydrant	
	Existing Valve Box	
	Existing Telephone Pedestal	
	Existing Inlet	
	Existing Tree	
	Existing Abutment Spot Elevation	
	Proposed Spot Elevation	
	Direction of Overland Flow	

No.	Revision/Issue	Date

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 Engineering, Ecology and Landscape Architecture
 26575 WEST COMMERCE DRIVE, SUITE 601
 Volo, ILLINOIS 60073
 OFFICE (847) 740-0888
 FAX (847) 740-2888
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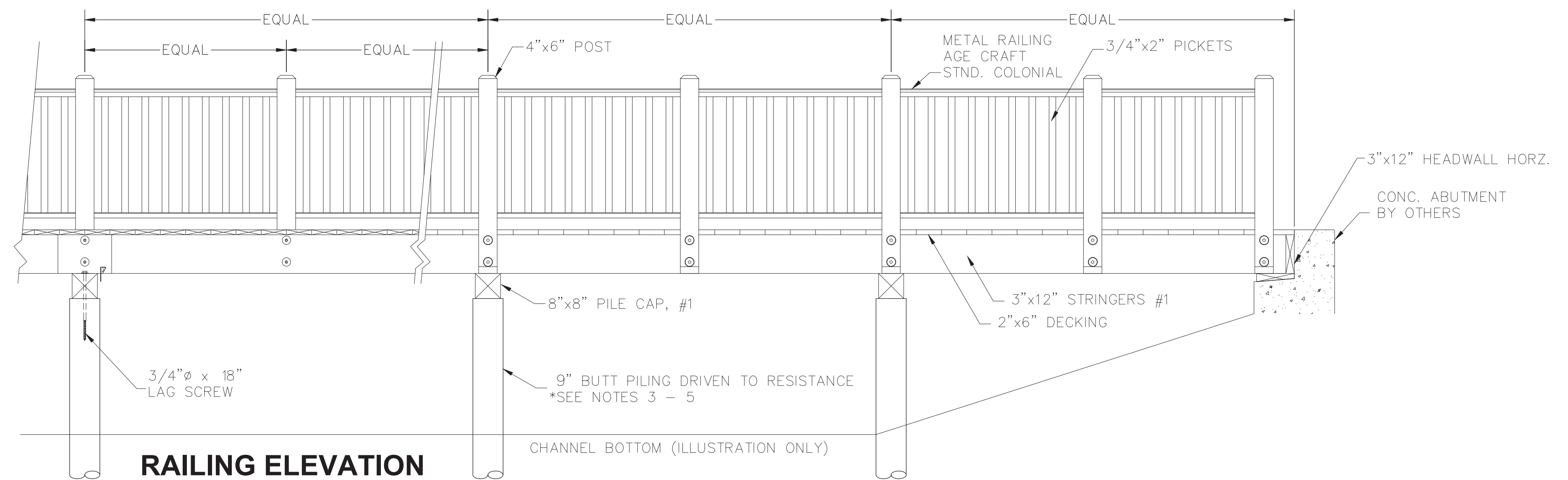
Waukegan Park District
 Bowen Park
 Boardwalk Improvements

Layout & Materials Plan
 Boardwalk & Observation Deck

PROJECT NO:	16-0247	DRAWING NO:	C3.0
DESIGNED BY:	KGK		
DRAWN BY:	KGK		
CHECKED BY:	TLP		
APPROVED BY:	TLP	SHEET NO:	
ISSUE DATE:	01/30/2017		5 OF 5

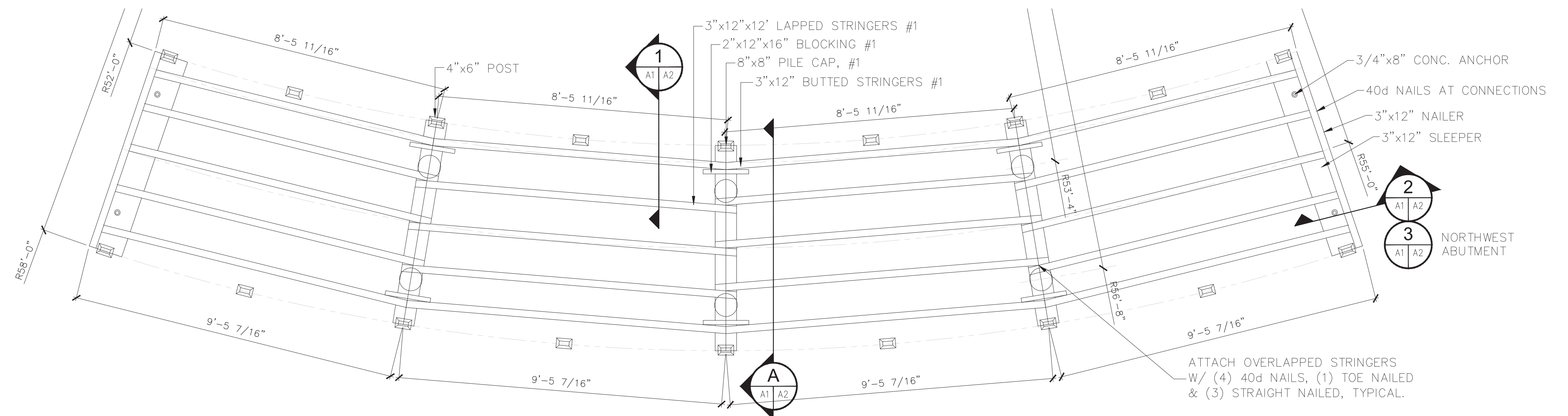
For Bidding

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RAILING ELEVATION
INSIDE VIEW

BOARDWALK ELEVATION
METAL RAILING



BOARDWALK FRAMING PLAN

ATTACH OVERLAPPED STRINGERS
W/ (4) 40d NAILS, (1) TOE NAILED
& (3) STRAIGHT NAILED, TYPICAL.

DRAWING APPROVAL
THESE DRAWINGS ARE APPROVED FOR CONSTRUCTION
WITH CHANGES (IF AND) AS NOTED
CUSTOMER SIGNATURE _____ DATE _____

WAUKEGAN PARK DISTRICT
BOWEN PARK - HOFFLANDER TRAIL
& CIRCULATION IMPROVEMENTS
(MAIN TRAIL - NORTH)



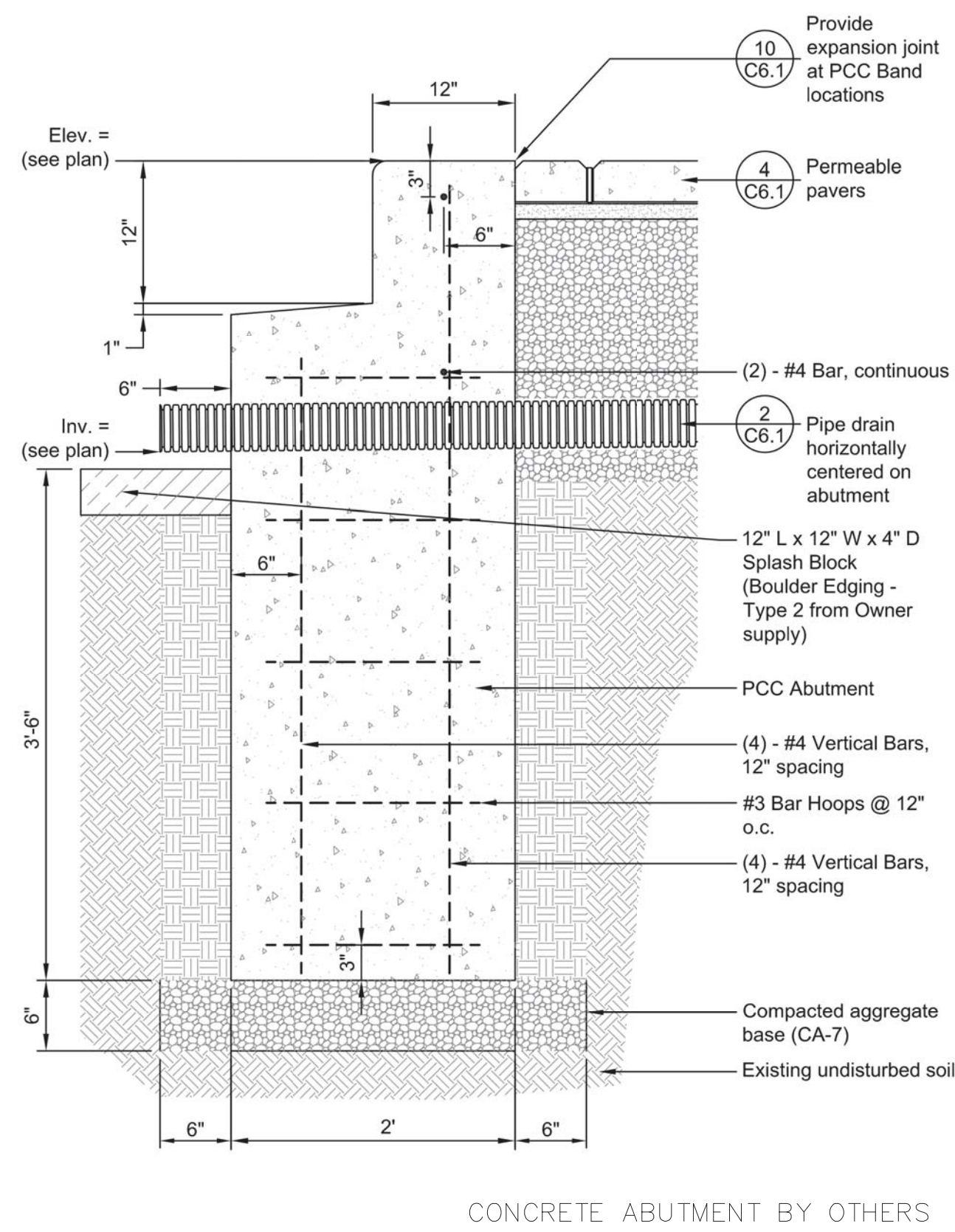
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PALM BAY, FL 32905
Phone: (866) 727-7100
Fax: (321) 728-7100
Web: www.dfi-gc.com

scale: as shown
drawn: C. THOMAS
checked: D. HUGHES
approved: D. HUGHES
date: 9-13-16
job no.: 92216

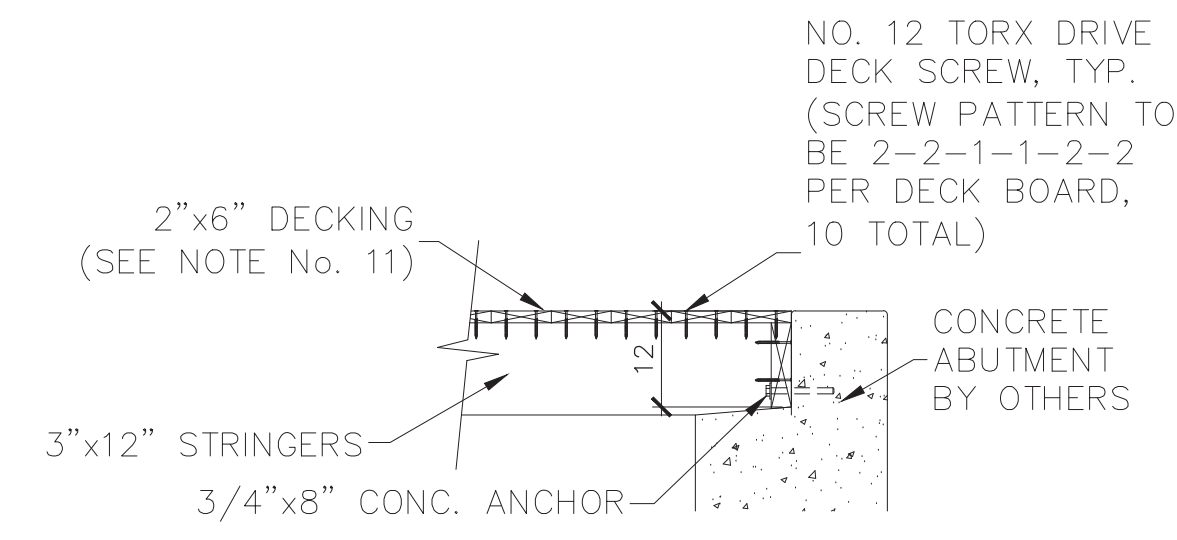
BRIDGE PLAN
& ELEVATION

SHEET NO.
A
1
1 OF 5

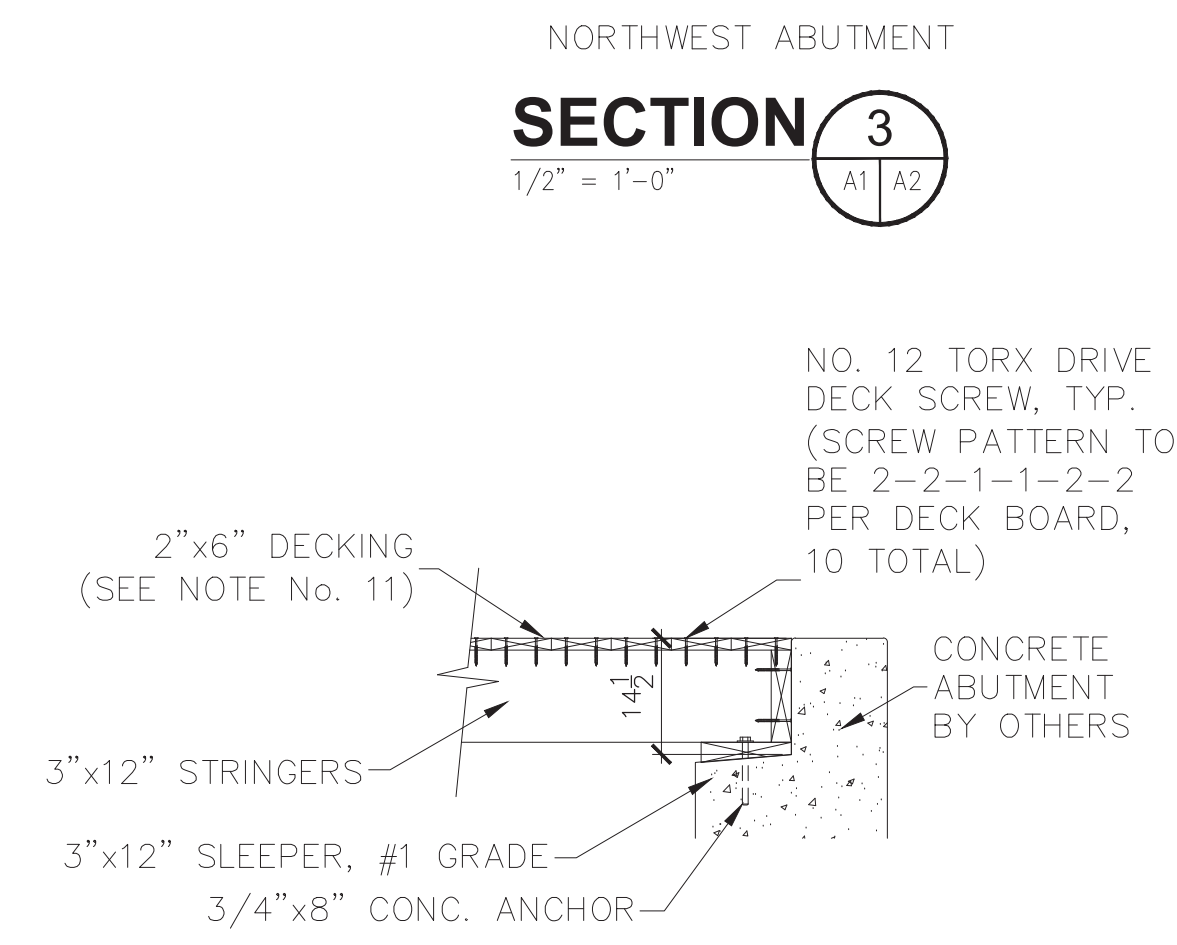




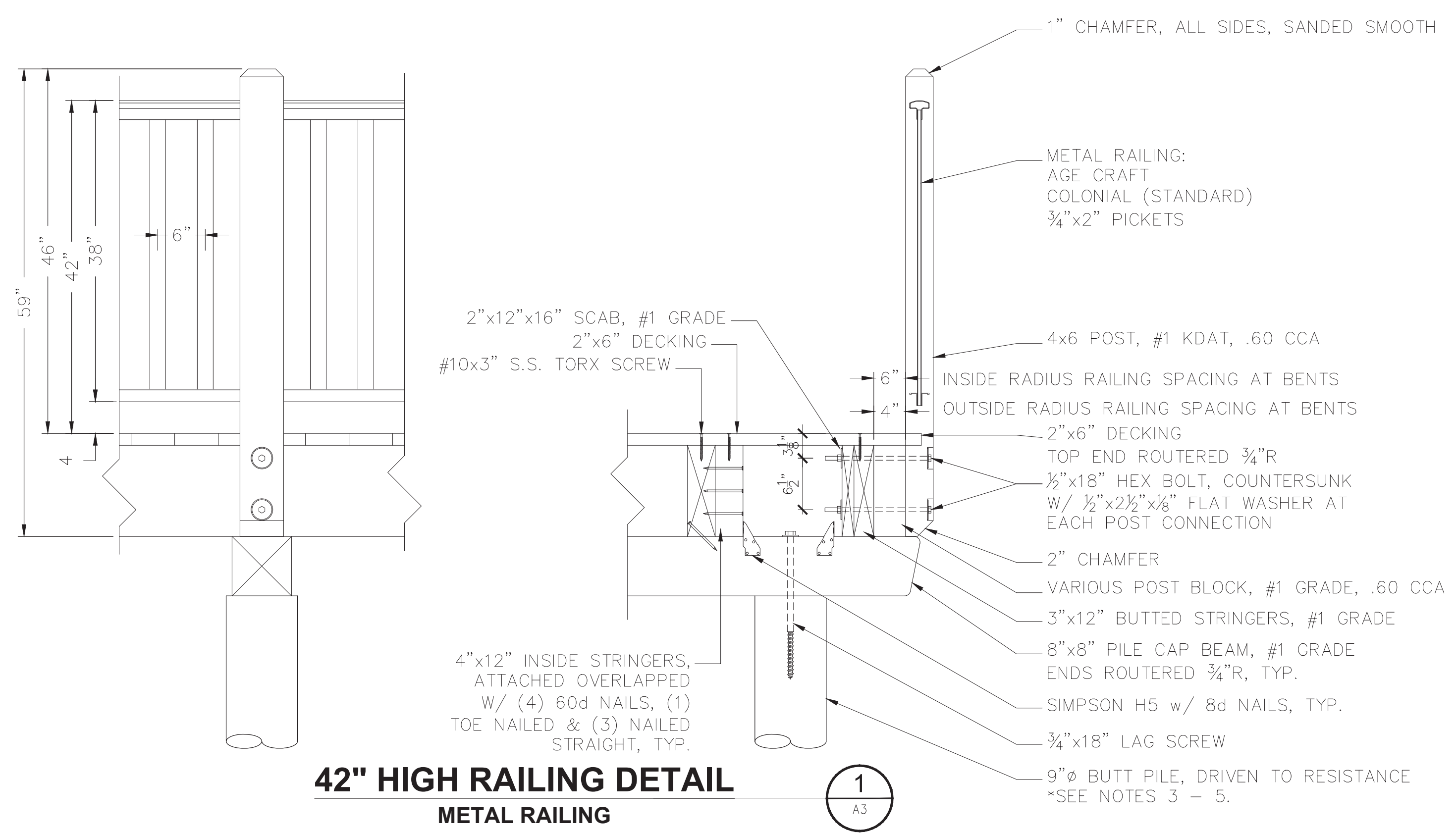
4 PCC Band - Type D Detail (Not to Scale)



SECTION 3 NORTHWEST ABUTMENT 1/2" = 1'-0"

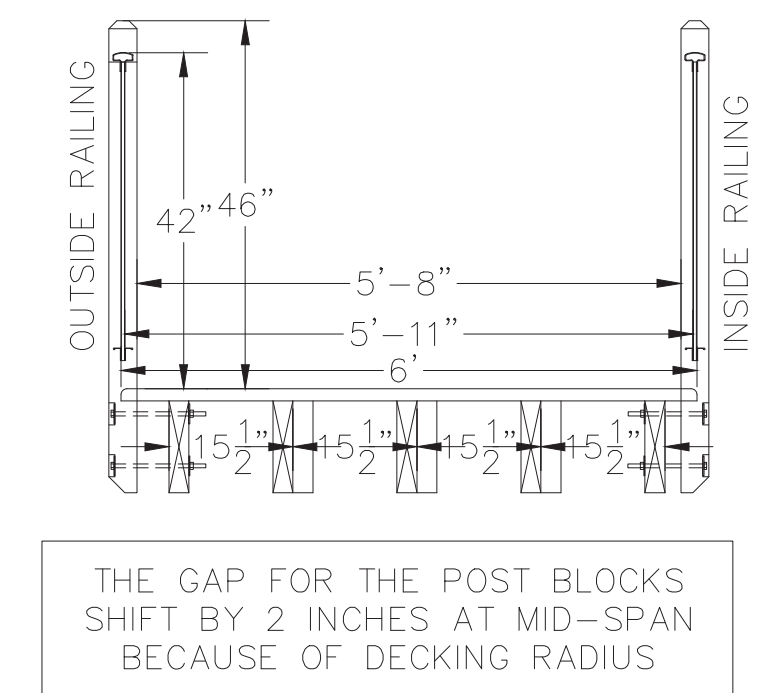


SECTION 2 1/2" = 1'-0"

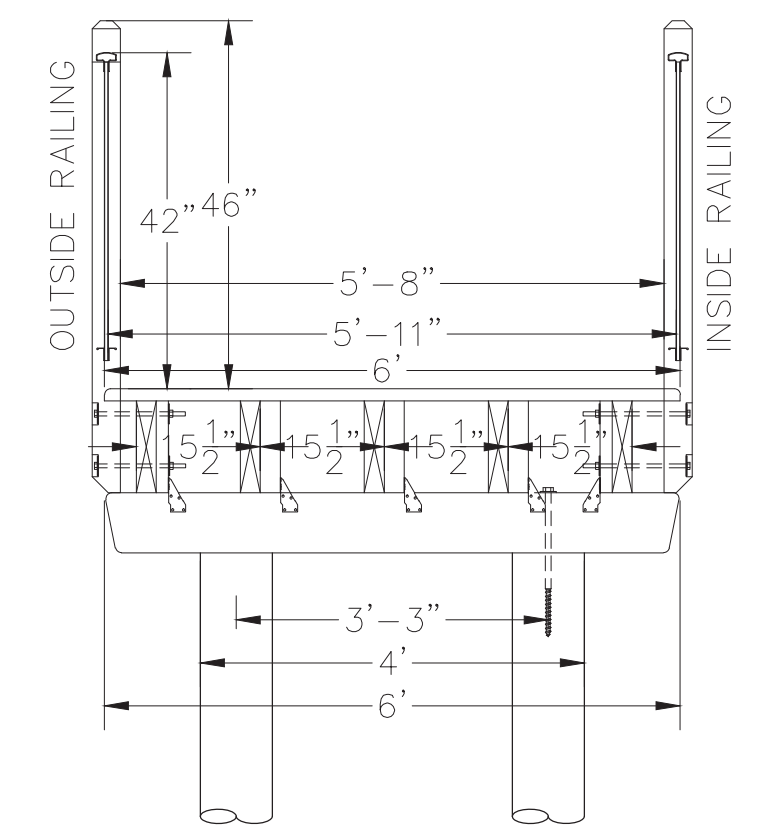


42" HIGH RAILING DETAIL METAL RAILING

- ALL TIMBER, FASTENERS, AND CONSTRUCTION SHALL BE MARINE GRADE.
- PILINGS SHALL BE SOUTHERN YELLOW PINE, CONFORMING TO ASTM D-25 TREATED TO A MINIMUM .60 POUND PER CUBIC FOOT NET RETENTION OF CCA, AWWA STANDARDS.
- HAND AUGURING IS NOT AN APPROVED PILE INSTALLATION METHOD.
- PILES ARE REQUIRED TO BE DRIVEN BELOW 42" (FROST DEPTH) OR TO REFUSAL AS DEFINED BY BOARDWALK DESIGNER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED. CONTRACTOR MAY VISIT SITE PRIOR TO BIDDING TO ASSIST IN DETERMINING THE METHOD.
- IF PROPER BEARING CAPACITY IS NOT MET AT THE MINIMUM PILE DEPTH, PILINGS SHALL BE SPLICED AND DRIVEN UNTIL PROPER BEARING IS ACHIEVED. ALL STANDARD SPLICES MUST PROVIDE ENGINEERS CALCULATIONS AND STAMP. CONTRACTOR MAY VISIT SITE PRIOR TO BIDDING, TO ASSIST IN DETERMINING THE PROPER DEPTH OF PILINGS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DRIVING AND INSTALLING PILES DEEPER THAN MAY BE SHOWN ON THE DRAWINGS.
- FRAMING LUMBER AND TIMBERS SUCH AS BENTS, STRINGERS, NAILERS, BRACING, AND BLOCKING SHALL BE SOUTHERN YELLOW PINE, NO. 2 GRADE OR BETTER, TREATED TO A MINIMUM .60 POUNDS PER CUBIC FOOT NET RETENTION OF CCA, AWWA STANDARDS.
- UNLESS OTHERWISE SPECIFIED, ALL BOLTS, SCREWS, AND NAILS SHALL BE CARBON STEEL, HOT DIPPED GALVANIZING, CONFORMING TO FEDERAL SPECIFICATION FF-8-575 C.
- WASHERS SHALL BE CARBON STEEL, HOT DIPPED GALVANIZED, CONFORMING TO FEDERAL SPECIFICATION FF-W-92B, TYPE L, GRADE 1, CLASS A.
- NUTS SHALL BE CARBON STEEL, HOT DIPPED GALVANIZED, CONFORMING TO FEDERAL SPECIFICATION FF-N-836 A (1).
- DECKING AND EXPOSED CORNERS SHALL BE BEVELED/ROUTERED AND SANDED TO REMOVE SPLINTERS AND SHARP EDGES.
- SPLICES OF STRUCTURAL MEMBERS MAY BE MADE OVER SUPPORTS; SPLICES BETWEEN SUPPORTS PROHIBITED UNLESS OTHERWISE APPROVED BY THE ENGINEER. USE ONLY LONGEST LENGTHS OF MATERIALS AND JOIN ONLY WHERE SOLID FASTENING CAN BE MADE.
- ALL OUTSIDE STRINGER SPLICES SHALL BE MADE WITH A 2"x10" SCAB, 12" LONG WITH (2) 16d NAILS EACH SIDE OF JOINT AT EACH SPLICE.
- NO SPLICES SHALL BE ALLOWED FOR BRIDGE DECKING.



BRIDGE SECTION B MID-SPAN 1/2" = 1'-0"



BRIDGE SECTION A PILE SUPPORTS 1/2" = 1'-0"



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CUSTOMER SIGNATURE
DATE

WAUKEGAN PARK DISTRICT
BOWEN PARK - HOFFLANDER TRAIL
& CIRCULATION IMPROVEMENTS
(MAIN TRAIL - NORTH)

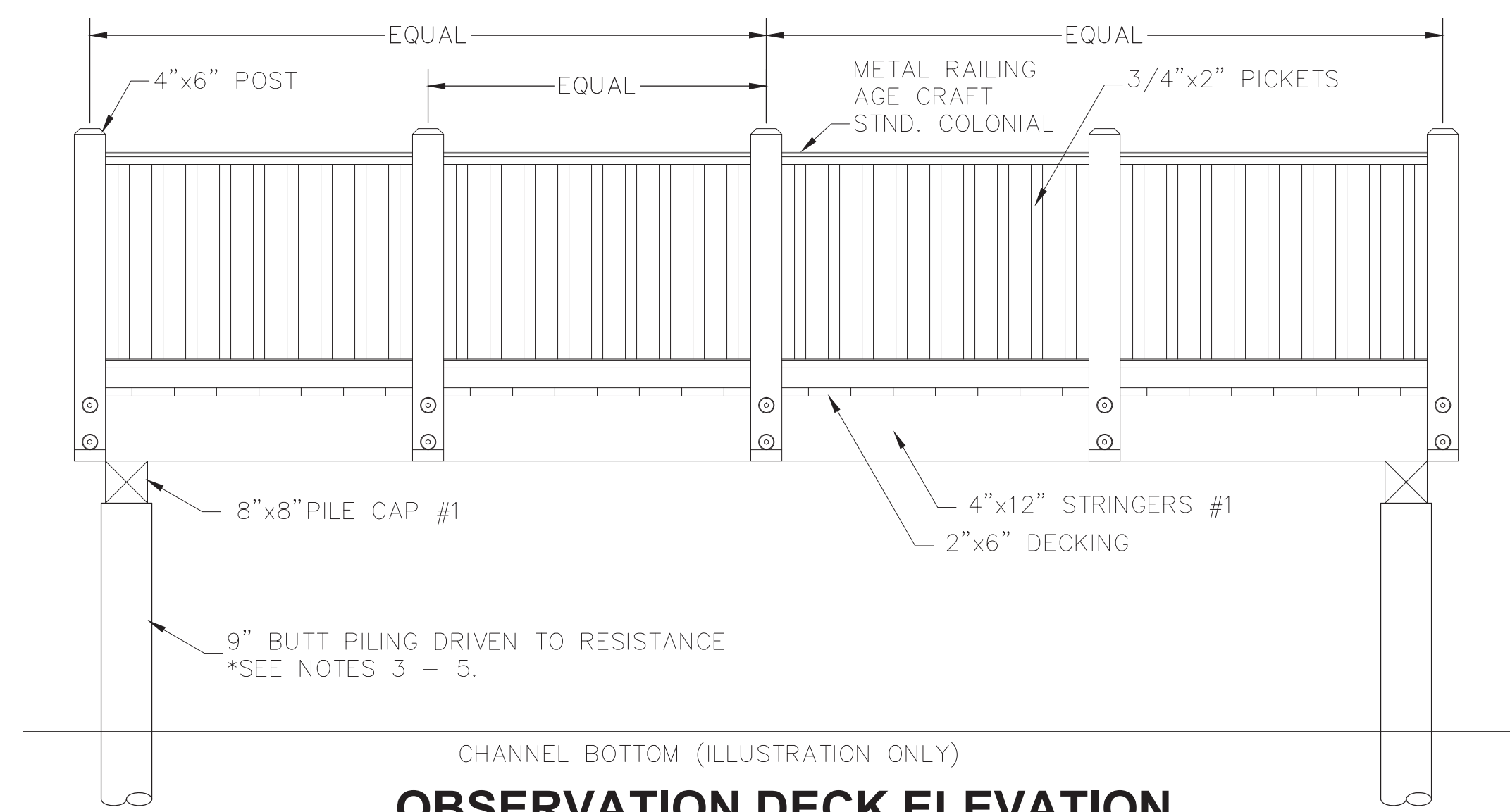


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PALM BAY, FL 32905
Phone: (866) 727-7100
Fax: (321) 728-7100
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scale: as shown
drawn: C. THOMAS
checked: D. HUGHES
approved: D. HUGHES
date: 9-13-16
job no.: 92216

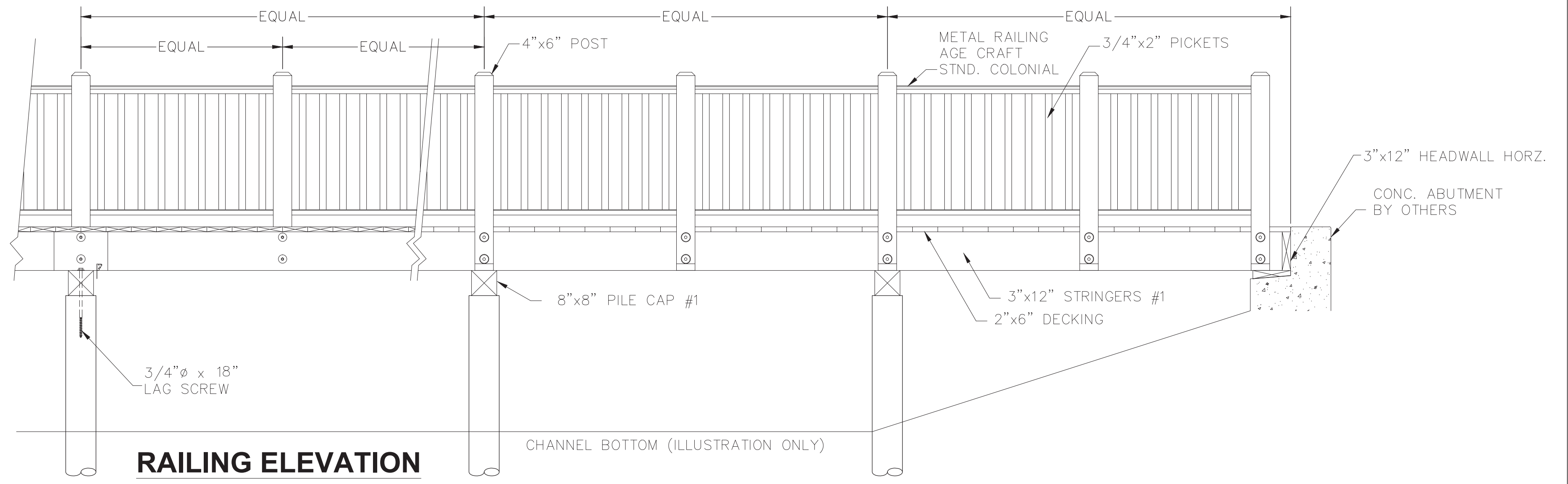
SECTIONS
DETAILS
& NOTES

SHEET NO.
A
2
2 OF 5

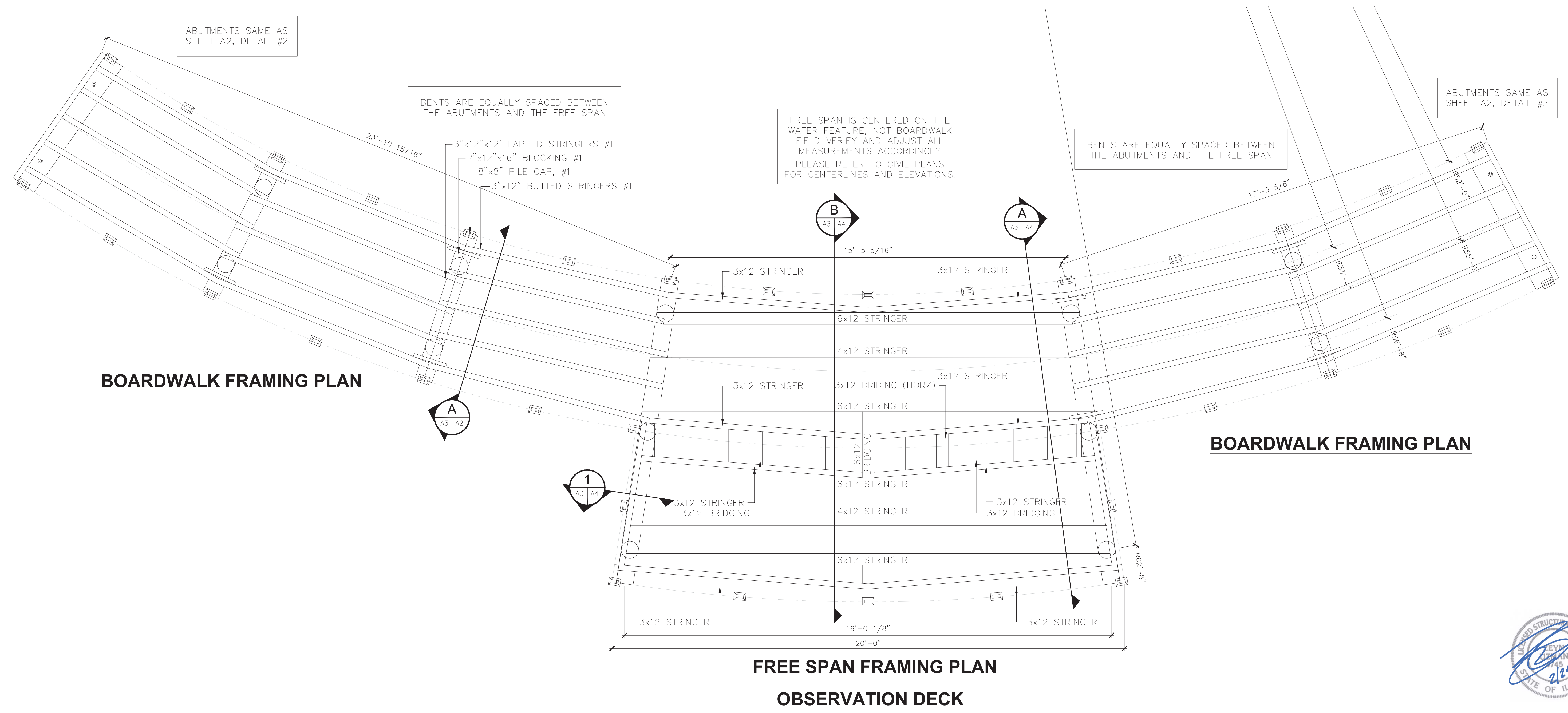


OBSERVATION DECK ELEVATION
OUTSIDE RAILING

BOARDWALK PROFILE IS SHOWN STRAIGHT. ACTUAL BOARDWALK IS CURVED. PLEASE REFER TO CIVIL PLANS FOR CENTERLINES AND ELEVATIONS.



BOARDWALK ELEVATION
METAL RAILING



BOARDWALK FRAMING PLAN

BOARDWALK FRAMING PLAN

FREE SPAN FRAMING PLAN
OBSERVATION DECK

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WAUKEGAN PARK DISTRICT
BOWEN PARK - HOFFLANDER TRAIL
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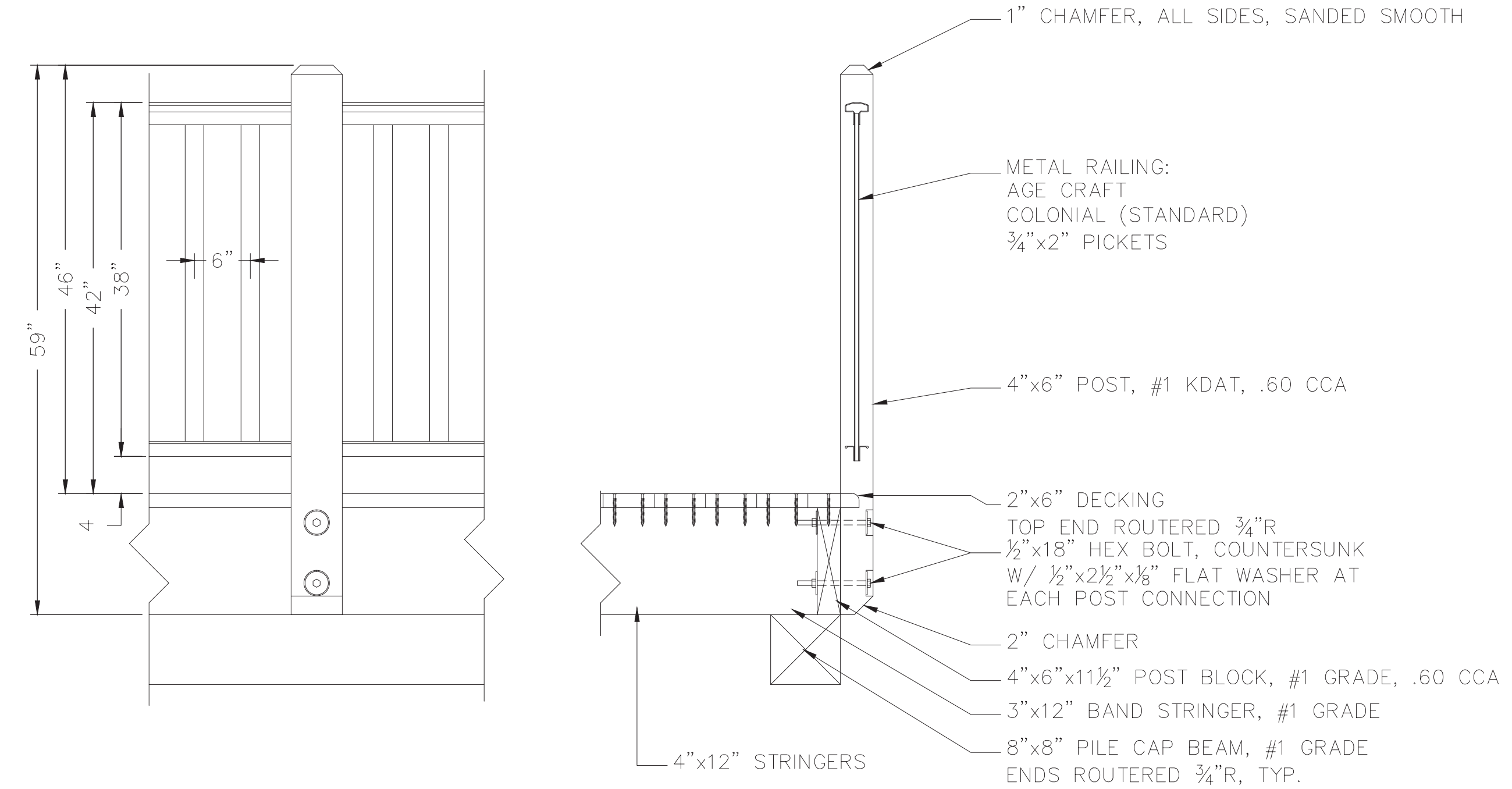
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BRIDGE PLAN
& ELEVATION

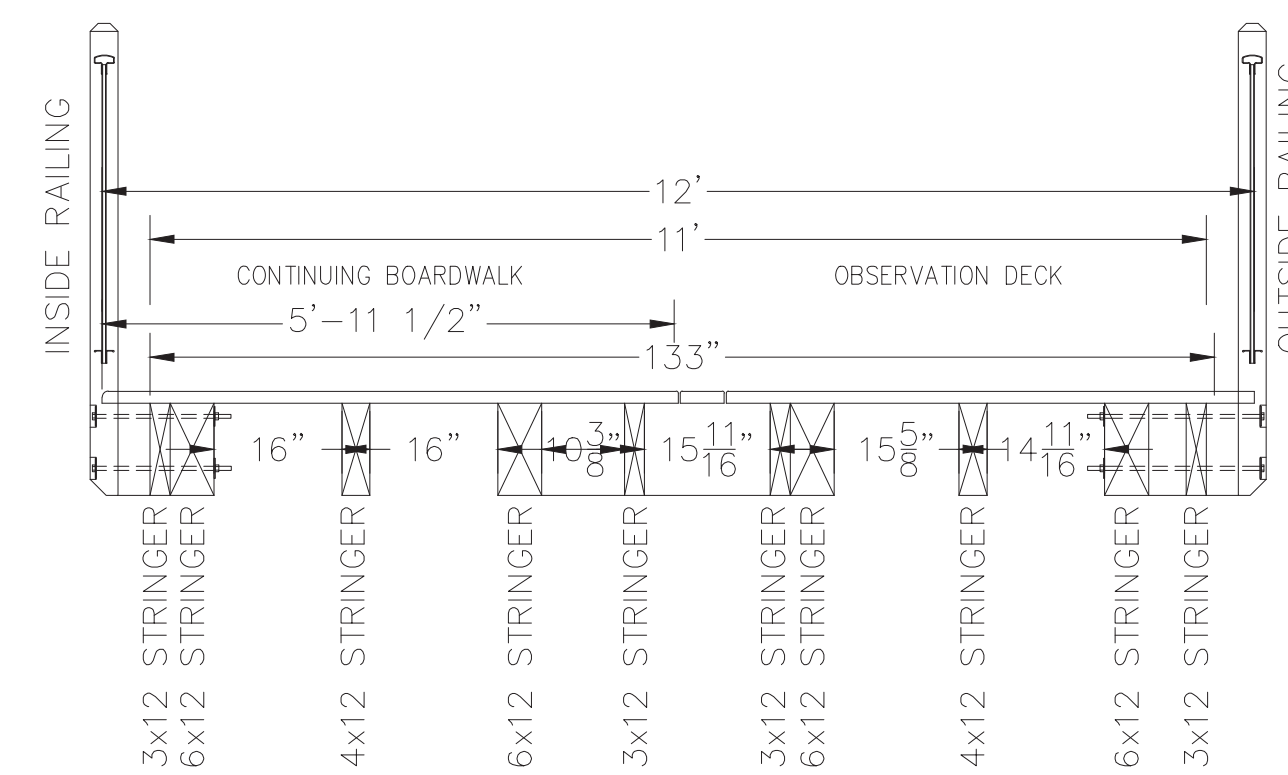
SHEET NO.
A
3
3 OF 5





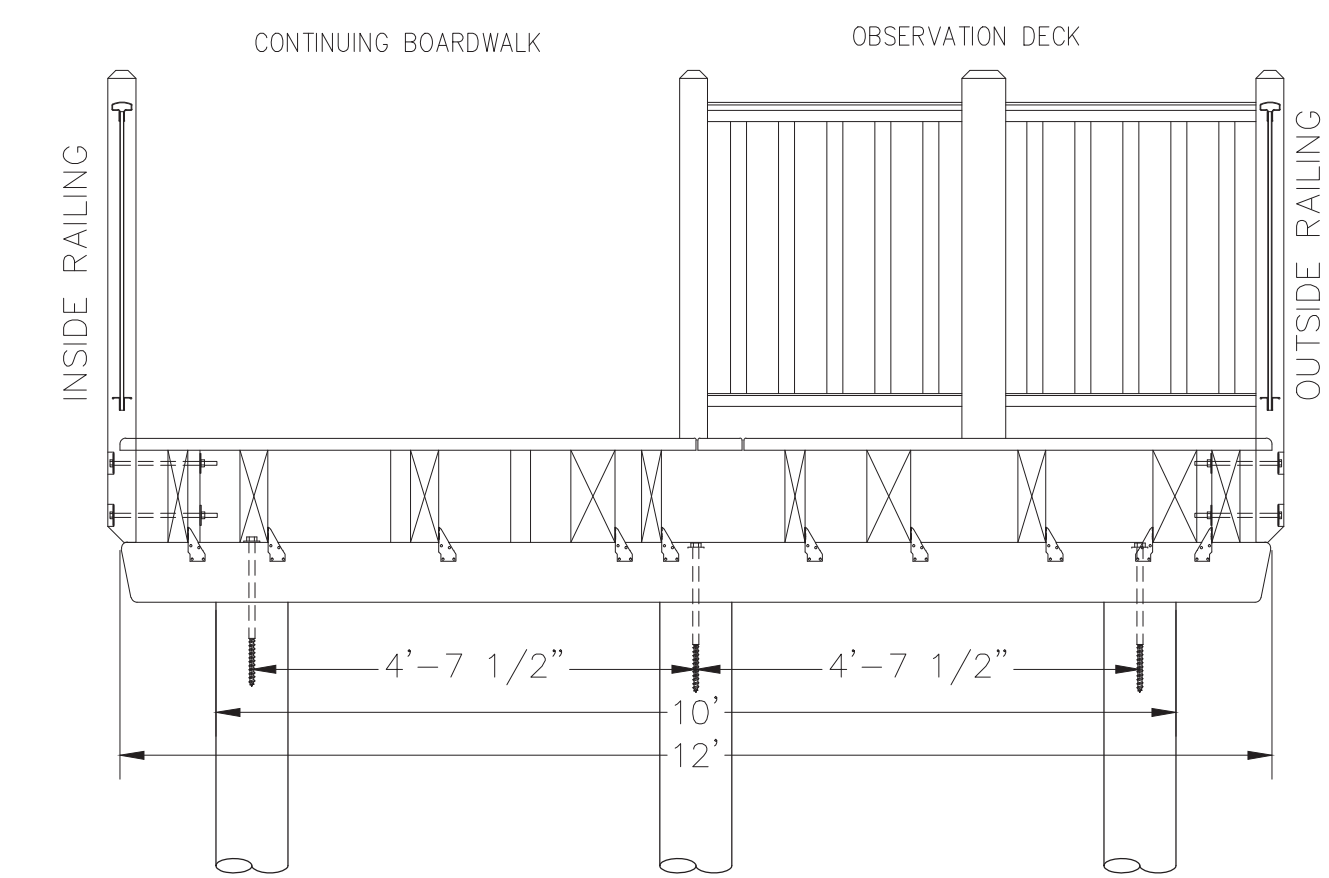
42" HIGH RAILING DETAIL
METAL RAILING

1
A4



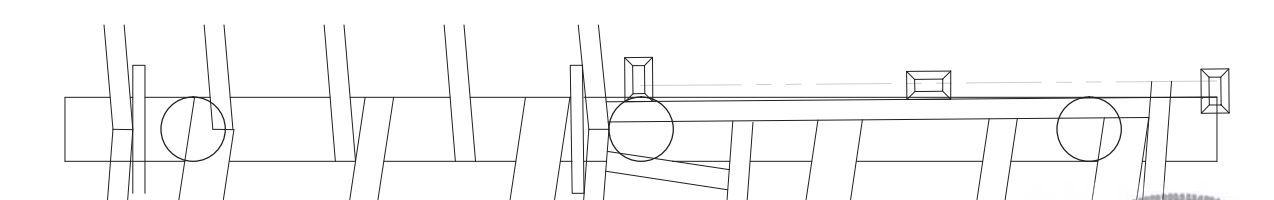
OBSERVATION SECTION B
MID-SPAN
1/2" = 1'-0"

A3 A4



OBSERVATION SECTION A
PILE SUPPORTED
1/2" = 1'-0"

A3 A4



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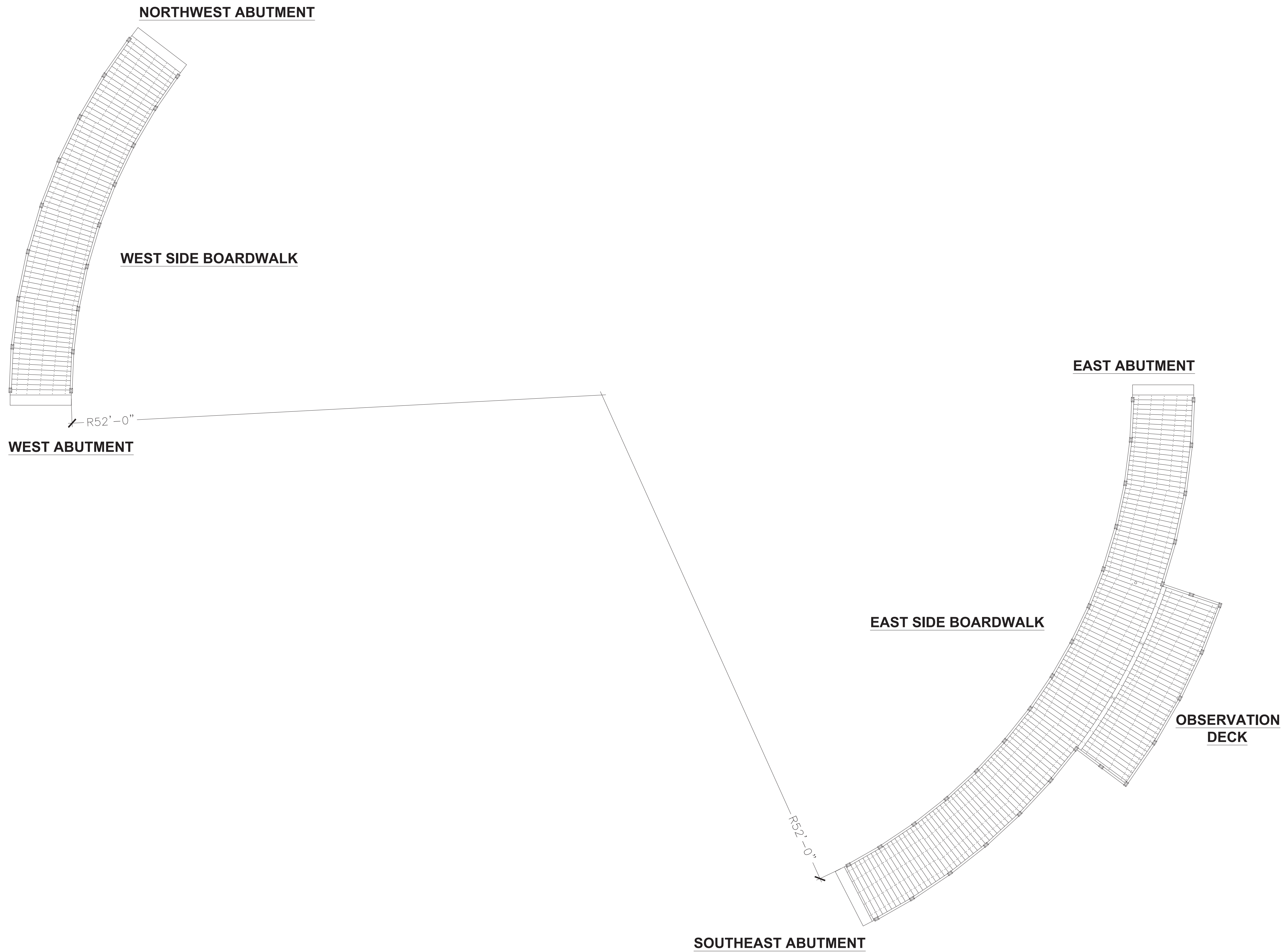
SECTIONS
DETAILS
& NOTES

SHEET NO.

A
4

4 OF 5





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PLAN VIEW
 & PROFILE

SHEET NO.

A
5

5 OF 5