



Village of Winnetka

Zoning Board of Appeals Regular Meeting

November 11, 2024 at 7:00 PM
Village Hall Council Chambers
510 Green Bay Road

AGENDA

1. **Call to Order & Roll Call**
2. **Approval of Minutes**
 - a. October 14, 2024, Regular Meeting Minutes
3. **Community Development Report**
4. **Continued Cases**
 - a. **Case No. 24-08-SU: 225 Sheridan Road - Centennial Park & Beach:** An application seeking approval of (i) a Special Use Permit to allow construction of improvements to the existing park and beach; (ii) a zoning variation to allow fences and walls to exceed the maximum permitted wall and fence heights allowed in a front yard setback; and (iii) steep slope exceptions to allow walkways, retaining walls, steps, and seating areas within the steep slope zone. The Village Council has final jurisdiction on this request. *This item was continued from the October 14, 2024, Zoning Board of Appeals meeting.*
5. **New Business**
 - a. November 18, 2024, Special Meeting - Quorum Check
 - b. December 9, 2024, Regular Meeting - Quorum Check
6. **Public Comments**
7. **Adjournment**

NOTICE

Public comment is permitted on all agenda items at the meeting. If you wish to provide testimony or comments prior to the meeting, you may provide them one of two ways: (1) by sending an email to planning@winnetka.org; or by sending a letter to Community Development, Village of Winnetka, 510 Green Bay Road, Winnetka, IL 60093. All agenda materials are available at www.villageofwinnetka.org/agendacenter.

The Village of Winnetka, in compliance with the Americans with Disabilities Act, requests that persons with disabilities, who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities contact the Village ADA Coordinator at 510 Green Bay Road, Winnetka, Illinois 60093, (Telephone (847) 716-3543; T.D.D. (847) 501-6041).

**WINNETKA ZONING BOARD OF APPEALS MEETING MINUTES
OCTOBER 14, 2024**

Zoning Board Members Present:

Matt Bradley, Chairman
Mark Haller
Lynn Hanley
Kathryn Leister
Kate Casale MacNally
Mike Nielsen
Todd Vender

Zoning Board Members Absent:

None

Village Staff:

David Schoon, Director of Community Development
Ann Klaassen, Assistant Director of Community
Development
Christopher Marx, Assistant Planner

Village Attorney:

Peter Friedman

Call to Order & Roll Call:

Chairman Bradley called the meeting to order at 7:00 p.m. Roll call was taken of the Board Members present.

Approval of Meeting Minutes.

Chairman Bradley asked for a motion to approve the September 9, 2024, meeting minutes. A motion to approve the September 9, 2024, meeting minutes was made by Ms. Casale MacNally and seconded by Ms. Hanley. A vote was taken and the motion unanimously passed, 7 to 0:

AYES: Bradley, Haller, Hanley, Leister, Casale MacNally, Nielsen, Vender

NAYS: None

Community Development Report.

Mr. Schoon stated there is no Community Development Report.

Chairman Bradley stated the agenda would be taken out of order and called Case No. 24-20-V2.

New Cases:

a. **Case No. 24-20-V2: 595 Elm Street:** An application seeking approval of a variation to allow construction of a second floor addition to the existing residence at 595 Elm Street. The requested variation would permit the proposed addition to provide less than the minimum required side yard setback from the west property line. The Village Council has final jurisdiction on this request.

Mr. Marx identified the property's location and zoning classification and described how the lot is legally nonconforming and the request encroached into the required side yard setback by 6.02 feet. He also identified the south façade and described the proposed second story addition location and provided a summary of the variation being requested. Mr. Marx then identified the proposed floor plan and south and west elevation renderings. He stated the Board may consider the options on page 405 in the agenda packet and asked if there were any questions.

1 Chairman Bradley also asked if there were any questions. No questions were raised at this time. He then
2 swore in those speaking to this matter.

3
4 Healy Rice introduced herself as the project architect representing the homeowners. She stated they were
5 granted the HAIS historic bonus in August 2024 and planned to construct the proposed addition over the
6 existing garage. Ms. Rice referred to the 2002 garage expansion which would be extended upward and
7 asked if there were any questions. She added the proposed location represented the most logical location.

8
9 Ms. Hanley asked if any addition would have triggered a variation. Mr. Marx responded although the
10 property was granted a historical maximum building size bonus, they could have possibly located the
11 proposed addition to take advantage of the extra GFA in another location which did not require a side
12 yard variation. Mr. Haller asked if any comments were received from the neighbors. Mr. Marx noted no
13 public comments were received. Mr. Haller referred to the space over the side door and asked if it was
14 done to continue the roofline. Ms. Rice explained the reasoning for that space which is necessary for the
15 hallway. No additional questions were raised at this time.

16
17 Chairman Bradley asked if there was any public comment. No comments were made at this time. He then
18 called the matter in for discussion.

19
20 Chairman Bradley stated the home currently contained an existing nonconformity and since no other
21 zoning relief is being sought, the project did not present an issue and referred to the reasonable return
22 standard with the remaining standards being met. He stated he would be in favor of the request. Mr.
23 Vender agreed with Chairman Bradley's comments. Mr. Haller referred to standard no. 4 and stated since
24 there has been no objection, he would also be in favor of the request. Ms. Casale MacNally stated since
25 the project would be extended straight up, it would maintain the home's look and feel and allow the
26 Village to keep the older historic home. She stated she would also be in favor of the request. Ms. Hanley
27 and Ms. Leister agreed with the comments made. Mr. Nielsen also referred to the reasonable return
28 standard which the home could achieve without the project but since the project would not create a larger
29 setback encroachment, he would be in favor of the request.

30
31 Chairman Bradley asked for a motion to recommend approval of the variation as noted on page nos. 405
32 and 406. A motion as stated by Chairman Bradley was made by Ms. Casale MacNally and seconded by Mr.
33 Nielsen. A vote was taken and the motion unanimously passed, 7 to 0:

34 AYES: Bradley, Haller, Hanley, Leister, Casale MacNally, Nielsen, Vender

35 NAYS: None

36
37 **b. Case No. 24-08-SU: 225 Sheridan Road - Centennial Park & Beach: An application seeking**
38 **approval of (i) a Special Use Permit to allow construction of improvements to the existing park and**
39 **beach; (ii) a zoning variation to allow fences and walls to exceed the maximum permitted wall and fence**
40 **heights allowed in a front yard setback; and (iii) steep slope exceptions to allow walkways, retaining**
41 **walls, steps, and seating areas within the steep slope zone. The Village Council has final jurisdiction on**
42 **this request.**

43 Chairman Bradley first explained how the presentation would take place. Mr. Schoon provided
44 background information related to the request including the Winnetka Park District's role and the zoning
45 relief application in detail, as well as the review and approval process, the steep slope regulations recently
46 adopted and the public trust doctrine. Ms. Klaassen outlined the specific details related to the zoning
47 request relief and identified the property's location, zoning classification and stated that public parks and
48 recreation facilities are allowed as a special use in the R-2 district. She also stated that the lakefront

1 preservation overlay district regulations do not apply but would if a portion of the public park became
2 privately owned. She then referred to images of the park from varying viewpoints. Ms. Klaassen provided
3 an overview of the proposed uses and improvements. She also identified the proposed bluff
4 improvements in detail as well as the proposed landscape plans and improvements along the beach and
5 access points.

6
7 Ms. Klaassen then explained the requested zoning relief in detail which is identified in the table. She stated
8 the Plan Commission and Design Review Board would also consider the proposed plan following the
9 Board's review. Ms. Klaassen referred to the Police Department's recommendation for security cameras,
10 and the Village Engineer's comments regarding the installation of a more robust permanent method to
11 notify the public for when the pier is closed due to high wave action. She referred to the variation and
12 special use standards the Board is to consider which are included in the packet. Ms. Klaassen then stated
13 following the applicant's presentation and public comment, the Board may either continue the public
14 hearing to a specific date to allow the applicant and Village staff time to provide additional information
15 or consider a motion to recommend approval or denial to the Village Council with draft language included
16 beginning on page 28 of the packet.

17
18 Chairman Bradley then asked for the applicant's presentation and swore in all those present at the
19 meeting that would like to speak on this matter.

20
21 Christina Codo, President of the Winnetka Park District Board of Commissioners, introduced herself to the
22 Board and stated they plan to discuss the proposed plans for repairs, protections, and ADA access
23 elements for Centennial Park and beach with the goal being to ensure that this project not only aligns
24 with the Park District's mission statement and the Village's 2040 Plan as well as the new zoning
25 regulations, but also incorporates the changes recommended by Winnetka residents over the past two
26 years while preserving the natural beauty of the lake environment. She noted tonight Park District staff
27 and consultants will present the Centennial improvements, reviewing the project from its starting point -
28 the Winnetka Waterfront 2030 Plan to the plan we are presenting tonight, the result of hundreds of hours
29 of engagement and review. Ms. Codo stated that tonight's plan has been revised from their original plan
30 proposed in April 2022 that was withdrawn from consideration by the Park Board in June 2022. She
31 explained that the current plan was amended to prioritize improved and expanded views and reduce the
32 impact of large breakwater's as requested by Winnetka residents. Ms. Codo stated that Centennial is the
33 District's fourth beach project; following Maple, Tower, and Lloyd. She referred to over 220 pages of public
34 comments and questions received and the extensive presentation planned which represented the first of
35 four meetings for the special use permit process. Ms. Codo then introduced Shannon Nazzal, Winnetka
36 Park District Executive Director, Costa Kutulus, Parks and Maintenance Director, Scott Freres of The Lakota
37 Group, Bill Loftus of Spaceco Engineering and Adam Simon of Ancel Glink, the Park District's attorney.

38
39 Costa Kutulus first identified the items that would be discussed during the presentation. Scott Freres
40 explained to the Board how the process evolved over the past 10 years, specifically relating to access in
41 terms of visual and accessibility for all community members. He explained how the process started with
42 an investigation at the state level with the Illinois Department of Natural Resources. He stated the Park
43 District wrote a grant for funding to study the lakefront in terms of studying their Master Plan which was
44 approved in 2016 and followed up with a Bluff Restoration Master Plan approved in 2019.

45
46 Mr. Kutulus explained how lake levels have changed and its evolution which took place over the course of
47 the last 10 years and contained dramatic events. Mr. Freres then referred to the 2030 Master Plan and
48 explained the amount of dialog that took place which was built around sustainable strategies for

1 operational excellence by the Park District as well as the shoreline's protection, preservation and
2 restoration. He stated a steering committee was established which helped develop the strategy for the
3 Master Plan and identified the seven pillars it contained. Mr. Freres stated the overwhelming takeaway
4 was that it needed to be for residents of all ages. He then explained in detail how the plan would
5 reestablish bluff habitats and revegetate it as well as provide for the removal of invasive species. Mr.
6 Freres also explained how the Comprehensive Plan and specific items were considered in terms of the
7 planning process.

8
9 Mr. Kutulus referred the Board to the implementation plan outline which he explained in detail as well as
10 the timeline for the application's planned presentation to the DRB, Plan Commission and the Village
11 Council and subsequent approval bodies. He identified the prior bluff restoration and beach
12 improvements in illustrations at other beaches and referred to before and after images for the proposed
13 project as well as their mission for long-term reinvestment in open space. He noted they have been
14 responding to all of the public input received and considered their concerns in the proposed plan. Mr.
15 Kutulus referred to the area's images during high lake levels and repairs which are part of the project. He
16 stated in terms of the regulatory process, he outlined the process in terms of the timeline for the permit
17 process and the departmental reviews required.

18
19 Shannon Nazzal explained the need for the special use permit since the property is zoned R-2 residential
20 including the variances to permit development in the front yard setback and exceptions to items in the
21 steep slope zone. Mr. Freres stated the standards would be addressed in the presentation. Mr. Kutulus
22 then outlined the site programming elements and mission alignment in detail which include an all access
23 swimming beach, a fenced dog beach and ADA park and beach access from Sheridan Road down to the
24 beach, as well as engaged viewing and access. He then referred to several illustrations and explained the
25 design elements for the project in detail.

26
27 Bill Loftus provided additional detail with regard to Element 1 which is the ADA accessibility route from
28 Sheridan Road to the end of the beach pier as well as the grade level change and the need for the retaining
29 walls. Mr. Kutulus also provided detail and boardwalk cross section images of the ADA accessibility route
30 which he indicated would have a subtle appearance. He outlined their responses to the standards and
31 their reasoning behind the variance requests. Mr. Kutulus then referred to the development in the steep
32 slope zone and Section 17.82.040 and identified the three elements for which they are requesting
33 exceptions and explained the reasoning behind those requests. He then referred to the six site renderings
34 which showed the plans as submitted to date. Mr. Kutulus then described the various elements and
35 several changes made to the proposal in illustrations in detail for the Board. He asked if there were any
36 questions.

37
38 Chairman Bradley asked for the Board's comments and questions prior to questions being taken from the
39 audience. Ms. Hanley asked the Village staff why the boardwalk is not considered an improvement in the
40 front yard setback and why it is not considered a deck. Mr. Haller also asked questions relating to the
41 walkway and why it would be allowed in the front yard setback. Mr. Schoon explained the reasoning to
42 the Board in that it is elevated and is being held up by the wall being constructed which would require
43 relief in either case. Ms. Hanley also questioned the type of maintenance equipment that would be used
44 for the ADA walkway. Mr. Kutulus described the proposed equipment to be used for maintenance and
45 noted stamped concrete would be used to provide the wooden effect on the boardwalk. Ms. Hanley then
46 asked how much of the slope would be excavated to accommodate the walkway. Mr. Kutulus referred to
47 a cross section image and identified the area to be cut out with the retaining wall installed.

1 Chairman Bradley asked for an additional explanation for Slide F in terms of users of the swimming beach
2 and users of the dog beach navigating the same area to enter each of the beaches. Mr. Kutulus identified
3 it as the main intersection and also identified an access gate and secondary gate leading to the dog beach.
4 He noted maintenance would be done after hours. Mr. Kutulus added a secondary access is also being
5 provided and explained the reasoning for the way the access points were set up and the alternative design
6 features which were considered. Chairman Bradley then referred to Slides J and K in the steep slope
7 exception and asked if they were not ADA accessible. Mr. Kutulus confirmed the stone steps are not ADA
8 accessible and identified areas of ADA accessibility.
9

10 Ms. Casale MacNally referred to page 169 and asked Village staff with regard to the subject property being
11 separate from Elder Park is that the request is being brought first. She also asked if a single plan could
12 have been brought before the Board for consideration for Centennial and Elder Park at one time. Mr.
13 Schoon responded the applicant could have submitted applications for both projects at the same time.
14 Ms. Casale MacNally asked the applicant if there was anywhere a guard station, bathrooms, water bottle
15 filling stations or shade were considered as part of the plan. Mr. Kutulus responded one lifeguard chair
16 would be provided and identified an area for the guard staff to be situated. He also identified two drinking
17 fountains in Centennial Park and a foot wash station next to the dog shower. Mr. Kutulus noted a
18 bathroom was not proposed for the site and the nearby Elder Lane beach house has a bathroom. Mr.
19 Nielsen questioned the need for 10-foot fencing and wall height. Mr. Kutulus responded the variation for
20 a 10 foot fence height is adjacent to the pier structure and noted the elevation of the area near the steel
21 wall is lower and described the varying elevation foot heights.
22

23 Mr. Haller asked if ADA ramp alternatives were considered that were less intrusive into the slope such as
24 a lift. Mr. Kutulus responded they discussed alternative elements to gain beach access but due to the size,
25 scale, cost, maintenance, etc., it made more sense to use the proposed walkway which would be the least
26 impactful and provide the most direct access. Mr. Haller asked for additional information relating to the
27 longer term plan to join both beaches. Mr. Kutulus explained their upcoming plan on the process to
28 connect both parcels and their reasoning not to include a bathroom at the Centennial site. Ms. Leister
29 questioned safety at the pier and asked what other regulatory bodies are evaluating it. Mr. Schoon
30 informed the Board that the U.S. Army Corp of Engineers and IDNR would have to review the pier design
31 and the Village Engineer and the coastal engineer would undertake a complete review of the pier. Mr.
32 Kutulus also provided additional information relating to safety which would also prohibit diving off the
33 pier. He added the proposed design would also serve to reduce rip currents. Mr. Haller asked for additional
34 information relating to the length of the dog beach compared to the swimming beach which Mr. Kutulus
35 provided to the Board. Mr. Haller asked how many dog beach passes there are. Ms. Nazzal informed the
36 Board there are over 350 dog beach passes with 175 active users.
37

38 Chairman Bradley then asked for public comment and provided an overview as to procedure.
39

40 Mark Mitchell, 224 Sheridan Road, read his concerns into the record relating to the proposed
41 development and referred to specific sections in the steep slope ordinance. He noted the proposed plans
42 would be very detrimental to his property and lack sufficient parking.
43

44 David Seaman, a former Park Board commissioner, referred to the amount of work that went into the
45 project's development over the years and described the proposed plan as much better. He stated they
46 need to invest in the lakefront to protect it and improve its access.
47

1 Dawn Livingston, 117 DeWindt Road, agreed with Mr. Seaman's comments and stated the Park Board was
2 elected to solve this problem. She asked for the Board to not comment on the items included in the plan
3 other than zoning issues.
4

5 Patty Mitchell stated she lives directly across the street from Centennial Park and that they purchased
6 their home 20 years ago. She described her views of the park as not overcrowded. She questioned the
7 need for the outlandish and unwanted change to the property and the project would turn the natural lake
8 into a dangerous rock pile. Ms. Mitchell stated the proposed plan would also increase traffic and asked
9 for the special use and zoning changes to not be allowed.
10

11 Joanna, resident of Winnetka, referred to the dog beach containment and the fact that it is not fully fenced
12 in. She commented they do not need a hermetically sealed dog beach and that the amount of proposed
13 fencing is not necessary.
14

15 Ted Wynnynchenko commented that this is not a pier, it's a breakwater and although the ordinary high
16 water mark is an item of concern relating to property line demarcation, it is not possible to determine the
17 boundary line between public and private ownership. He described the proposed fence installation as
18 improper. Mr. Wynnynchenko also stated the IDNR and U.S. Army Corp of Engineers do not comment on
19 safety issues and he made comments relating to sand height.
20

21 Steve Juliusson, 1436 Asbury, provided everyone with an overview of the two beaches at Centennial and
22 Elder which he read into the record. He urged the Board to reject the application.
23

24 John Root referred to an illustration and identified the Park District's plan to use the pier to separate the
25 human beach from the dog beach and serve as an amenity to view the lake. He stated the request would
26 result in two piers which violated lakefront construction ordinances with unnecessary building in the lake
27 as well as provided comments on sand and bluff retention. Mr. Root also referred to the claim that the
28 pier is being considered a wall.
29

30 Laurie Morse, a non-Winnetka resident, described the existing Centennial beach as the best beach in the
31 area. She stated water levels and accretions have occurred over the years and there is no urgency to
32 resolve the issue as had been claimed. Ms. Morse stated the answers to the safety questions were not
33 adequate and reiterated the IDNR and U.S. Army Corp of Engineers do not review safety concerns. She
34 referred to the insurance agency which did consider safety concerns and asked the Board to consider the
35 actual safety concerns. Ms. Morse added half of the beach should not be dedicated to dogs and a fence
36 should not be approved and additional sand is not needed.
37

38 Chuck Dowding described his background as a professor of civil and environmental engineering at
39 Northwestern and disagreed that the plan increased access. He described in detail how the proposed plan
40 restricted access in areas he identified and also discussed how the side yard setback should not be violated
41 by the proposed development.
42

43 Katie Stevens referred to the statement made that the public is not allowed to walk on the water line and
44 referred to the 2019 Elder Lane approval. She made several other comments relating to the water level
45 and the dangerous conditions relating to their kayaking experience and the rocks. Ms. Stevens stated the
46 large, proposed rocks are not what are minimally necessary as well as unsanitary beach conditions. She
47 concluded by asking that the project not be approved.
48

1 Mary Garrison referred to the approved steep slope ordinance and compliance with ADA requirements
2 being vital in all Village projects. She stated the proposed ADA pathway variation presented a significant
3 threat to the bluff and is full of significant safety risks and suggested the use of a less invasive alternative
4 such as an ADA lift. Ms. Garrison then asked for the variation to be denied.

5
6 Melissa Mizel referred to the neighborhood character standard and commented on the obstructed view
7 the proposal would cause with which the Park District's plan is greatly at odds. She asked for 3D modeling
8 of the project to assist in decision making prior to any approvals.
9

10 Kimberly Marsh, 360 Forest, urged the Board to table or vote against the special use permit and
11 commented on the view obstruction the proposal would cause and create detrimental safety issues. She
12 described the recent safety incidents and stated the proposed break wall would impede safety views.
13

14 John Edwardson, 301 Sheridan Road, described improvements recently made on his property and the
15 amount of approvals necessary. He stated he is concerned with beach erosion and referred to the amount
16 of money lakefront owners have spent on protections. Mr. Edwardson asked for the bluff to be protected
17 at the lake level to prevent further erosion of the bluff.
18

19 Linda Welch stated the proposed improvements would harm general welfare and safety by covering the
20 lake and beach with steel, stone, concrete, block site lines and create a major safety hazard. She also
21 stated it violated lake front ordinances since it is significantly more than is necessary for its intended
22 purpose. Ms. Welch described simpler alternatives used to separate the dog beach from the human beach
23 and asked for the application to be rejected.
24

25 Peggy Martay stated she has been following plans concerning the Centennial and Elder beaches over the
26 years and that the photos do not accurately depict the proposal. She asked the Board Members to visit
27 the beach prior to voting.
28

29 Susie Schreiber, a former Park District Board member, described her background and responded to the
30 comments made relating to the Centennial bathroom. She stated the Great Lakes are federal waters and
31 read related statements into the record. Ms. Schreiber stated offshore improvements can be used to
32 provide protections which would not directly impact the bluffs and asked the Board to not yet vote on
33 this matter.
34

35 Teresa Claybrook, a former Park District Board Member, stated she was part of the lakefront Master Plan
36 team for which an extensive amount of community input was contained. She stated she is in full support
37 of the plan as presented which addressed key issues discussed years ago in addressing items in the
38 lakefront Master Plan with regard to access and ADA compliance. Ms. Claybrook stated the Lloyd beach
39 break water installation has been successful and the proposed pier would serve the same function at
40 Centennial Beach. She concluded the Park District has performed its due diligence and encouraged the
41 Board to approve the plan.
42

43 Kris Schriesheim commented on whether the proposed plan is reasonably necessary for a dog beach and
44 stated the plan threatened public health with a lack of a bathroom. She also commented on there not
45 being enough lifeguards. Ms. Schriesheim stated piers and break walls create riptides, drowning risks, etc.
46 and referred to the lack of safety measures. She stated the non-professional lifeguards' safety would be
47 threatened by the break walls and currents and read a statement from the U.S. Army Corp of Engineers

1 relating to safety. Ms. Schriesheim then referred to an illustration comparing Navy Pier to the proposal
2 which she stated would draw increased activity.

3
4 David Stevens commented the Park District's hard work did not guarantee a good result and identified
5 several issues including the residents' opinions. He stated the second factor is that the plan did not take
6 into account elders and did not represent a comprehensive plan. Mr. Stevens also referred to previously
7 raised safety concerns and asked the Board to table the matter until a more comprehensive proposal is
8 submitted.

9
10 Wendy Dury, 339 Sheridan Road, agreed with Mr. Stevens' comments and described the difficulties she
11 experienced swimming including water clarity as a result of the lakefront improvements being constructed
12 south of Centennial Park. She also asked for the proposal to be tabled.

13
14 A neighbor spoke on behalf of Irene Smith and read Ms. Smith's letter into the record which included a
15 request to table the application.

16
17 Carol Rasmus agreed with Mr. Edwardson's comments relating to beach erosion. She stated the pier is
18 unsightly, unneeded and unwanted and should have been put to a referendum. No additional public
19 comments were made at this time.

20
21 Chairman Bradley closed public comment and thanked the public for their comments. He offered the
22 applicant the opportunity to respond to concerns raised at this time or at a later date. Chairman Bradley
23 suggested the matter be continued to a date certain. Ms. Nazzal stated they are willing to answer
24 questions tonight but if the Board wished to continue the matter, they are willing to make an
25 accommodation. Chairman Bradley then asked the Board if they had any questions or would like to
26 continue the matter to a date certain. Several Board Members agreed to continue the matter. Mr. Simon
27 asked for the Board to provide their questions to the Village staff.

28
29 Chairman Bradley stated his questions relate to the steep slope ordinance and the access ramp framed as
30 being ADA accessible and asked what specifically drove the 10 foot width and if mitigation efforts were
31 considered to minimize it. He then referred to the outcropping stones and pavement and asked for
32 clarification as to why the 6 foot width is being proposed as opposed to the 5 foot width allowed by right
33 as well as for the mid bluff paver walkway relating to the variation. Chairman Bradley stated special use
34 standard nos. 1, 2 and 3 have not been adequately addressed and also asked for additional clarity relating
35 to parking and the increased use.

36
37 Ms. Hanley asked for additional information relating to public safety and beach access and asked for
38 additional engineering or justification for the pier as designed in terms of it being a want or need. She also
39 questioned how to minimize safety risks and for additional information relating to beach access in
40 connection with the walkway around the dog beach which cut off access along the water. Ms. Hanley also
41 questioned how the fence would be positioned along the water.

42
43 Mr. Vender referred to the comments raised relating to the fence's appearance as well as the parking
44 concerns. Mr. Haller asked for additional information relating to coastal engineering reviews being done
45 as well as the essential character of the locality which would result in a different characteristic as a beach
46 and a park. Chairman Bradley referred to the Elder beach curiosity and suggested a lot of concerns would
47 be allayed if what is planned on that parcel would create a bootstrapping approval on subsequent
48 requests. He confirmed the Board considered projects as being separate.

Ms. Nazzal stated the Elder beach special use permit is not ready yet although the application has been submitted to the Village. She stated that information may be contained in the application for which they have not yet received comments back. Mr. Haller added it appeared funding is coming from another individual which is conditioned on approvals as submitted. He asked if that created a problem for the applicant if the planned changed. Mr. Simon stated they are aware they have to go through all of the regulatory steps and confirmed that the project's funding is independent of the Board's review.

Ms. Leister asked about the 50 year restrictive covenant and the maintenance obligations embedded in that and how that might interact with work that would need to be done in the future and what we're signing off on now if it's just on what's being done now or if they would have to come back in the future for any improvements related to maintenance and what's the prioritization is legally in terms of who would have sign off rights. Mr. Simon stated the Park District with its experts, its consultants, community input, put together the Park District's plan. He explained that what the Board sees tonight is the Park District's plan. Mr. Simon stated they have a donor who likes the Park District's plan and they have offered to support the District. He stated they have said that they want the District to support this plan for 50 years as the District has shown it. Mr. Simon stated they have to maintain what they are showing.

Chairman Bradley then asked for a motion to continue the request to the next regular ZBA meeting on November 11, 2024. The Board Members discussed their availability. Mr. Nielsen moved to continue the application to November 11, 2024, and reserved the right to open public comment. Mr. Haller seconded the motion. A vote was taken and the motion unanimously passed, 7 to 0:

AYES: Bradley, Haller, Hanley, Leister, Casale MacNally, Nielsen, Vender

NAYS: None

New Business:

a. November 11, 2024, Meeting - Quorum Check.

The Board Members previously discussed their availability.

Public Comment:

No comments were made at this time.

Adjournment:

Chairman Bradley asked for a motion to adjourn. A motion to adjourn was made by Ms. Casale MacNally and seconded by Mr. Nielsen. A vote was taken and the motion unanimously passed, 7 to 0:

AYES: Bradley, Haller, Hanley, Leister, Casale MacNally, Nielsen, Vender

NAYS: None

The meeting adjourned at 11:03 p.m.

Respectfully submitted,

Antionette Johnson

Recording Secretary



MEMORANDUM VILLAGE OF WINNETKA

COMMUNITY DEVELOPMENT DEPARTMENT

TO: ZONING BOARD OF APPEALS
FROM: DAVID SCHOON, DIRECTOR
ANN KLAASSEN, ASSISTANT DIRECTOR
DATE: NOVEMBER 5, 2024
SUBJECT: CENTENNIAL PARK & BEACH - 225 SHERIDAN ROAD - SPECIAL USE PERMIT, VARIATIONS, & EXCEPTIONS (CASE NO. 24-08-SU)

INTRODUCTION

On November 11, 2024, the Zoning Board of Appeals (“ZBA”) is scheduled to hold a continued public hearing on an application submitted by the Winnetka Park District (the “Applicant”), as the owner of the property located at 225 Sheridan Road (the “Subject Property”). The Applicant is proposing improvements to the existing park and beach located on the Subject Property and requests approval of the following relief:

1. Approval of a **Special Use Permit** to allow construction of improvements to the existing park and beach on the Subject Property, which is located in the R-2 Single-Family Residential Zoning District and the Lakefront Preservation Overlay District;
2. Approval of the following **zoning variation**:
 - a. **Fence and Wall Height** of 10.5 feet, whereas a maximum of 6.5 feet above natural grade is permitted, for a variation of 4 feet (61.54%) [Section 17.30.130 Obstructions in Required Yards or Courts]; and
3. Approval of the following **steep slope exceptions** [Section 17.82.040 Development in the Steep Slope Zone]:
 - a. Concrete access ramp 10 feet in width and associated retaining walls to support the ramp;
 - b. Outcropping stone steps that exceed 5 feet in width; and
 - c. Reconfigured mid-bluff paver walkway and seating area that extends beyond the footprint of the existing walkway and seating area and exceeds 5 feet in width.

A mail notice was sent to property owners within 250 feet of the Subject Property for the commencement of the public hearing on October 14, 2024, in compliance with the Zoning Ordinance. The hearing was also properly noticed in the *Winnetka Talk*, and a public hearing notice sign was posted on the Subject Property indicating the time and date of the October 14 ZBA public hearing. As of the date of this memo, staff has received several written comments from the public regarding this application. Written comments that were not included in the October 14 ZBA agenda packet but distributed to the Board in time for that meeting, as well as written comments that have been received since the October 14 meeting are included in **Attachment C1**. The public correspondence included in the October 14 agenda packet is available on the Village website:

<https://winnetkail.portal.civicclerk.com/event/833/files/attachment/3493>.

The Village Council has final jurisdiction on this application. The Council has sole authority to (i) grant a Special Use Permit and (ii) grant variations and exceptions related to the special use and the proposed project.

OCTOBER 14, 2024, ZONING BOARD OF APPEALS MEETING

On October 14, 2024, the ZBA commenced a public hearing on the Applicant's zoning relief application for proposed improvements to the existing park and beach located on the Subject Property. The staff report for the October 14 meeting can be found in **Attachment B1**.

After a presentation by staff and a presentation by the Applicant, the Board heard from over 20 members of the public. More than a majority of the speakers spoke in opposition to the plan, and the remaining speakers spoke in support. After hearing from the public and given the hour, nearly 11:00 p.m., Board members directed questions to the Applicant to respond to at a future meeting. The Board then continued the public hearing to its regular meeting on November 11, 2024. The Applicant was informed that Board members may have additional questions at that meeting. A copy of the October 14 meeting minutes is included in the November 11 agenda packet for the Board's approval.

The following is the list of questions Village staff heard Board members ask at the October 14 meeting; these questions were provided to the Applicant:

1. Regarding the steep slope ordinance, would like to understand what is driving the 10' width of the ADA/maintenance ramp? What mitigation efforts has the Park District taken to minimize the impact on the steep slope?
2. Can the mid-bluff stone steps be reconfigured to 5'-wide versus the proposed 6'-wide? Why does it need to be 6'? Also, why does the width of the mid-bluff walkway need to be as wide as proposed?
3. The most important special use permit standards that need to be answered are standards 1, 2 & 3. This Board member stated they would be asking more questions regarding standards 1, 2, & 3.
4. Would like more information regarding the placement of the dog beach and the interaction of dog beach users and the public accessing the swimming beach.
5. Would anticipate an increased usage of the park due to improvements and see more vehicular traffic but does not see an increase in parking.
6. Has the Park District undertaken any type of parking study related to the proposed improvements?
7. Given the curiosity that looms over Elder Lane Park, providing information regarding that project would help allay concerns some folks have regarding what is planned on that parcel and how it impacts the relief being granted at Centennial Park.
8. Please provide more engineering or justification for the pier. Is it a want or a need? Needs better understanding regarding how it helps with beach erosion. Also, how can the Park District diminish the safety risk of the pier and the rocks?
9. How much of bluff will be lost as a result of the project?
10. The proposed design of the dog beach cuts off access along the water line. Need a better explanation of how the dog beach fence crosses the Park District property line into the water. More clarification is necessary regarding the Park District property line and the public's access to the stairs on the adjacent stone groin.
11. Agrees that the dog fence along the southern property line does look a little odd and needs clarification. Questions length of the pier. Doesn't see a big change in use.

12. Would like to see coastal engineering reviews that support the features going out into the lake.
13. Want to hear more about the impact on the character of the neighborhood.
14. Provide additional analysis/assurances regarding the safety of the pier as presented in the proposed project.
15. If the Village suggests changes to the proposed plans, how will that impact funding from the adjacent property owner? (Park District representatives responded to this question at the October 14 meeting.)
16. Wondering about 50-year restrictive covenant and the maintenance obligations embedded in the covenant and how that would interact with work that would need to be done in the future? (Park District representatives responded to this question at the October 14 meeting.)

WINNETKA PARK DISTRICT'S RESPONSE TO OCTOBER 14 QUESTIONS

In response to the comments and questions the Applicant heard from the Board at the October 14 ZBA meeting, the Applicant has provided the attached written responses included in **Attachment A1**.

For reference, below and on the following pages are images representing the Subject Property and the proposed improvements. These images were also included in the October 8 staff report. The complete set of plans is included in **Attachment B1**.



Figure 1 – GIS Aerial Map

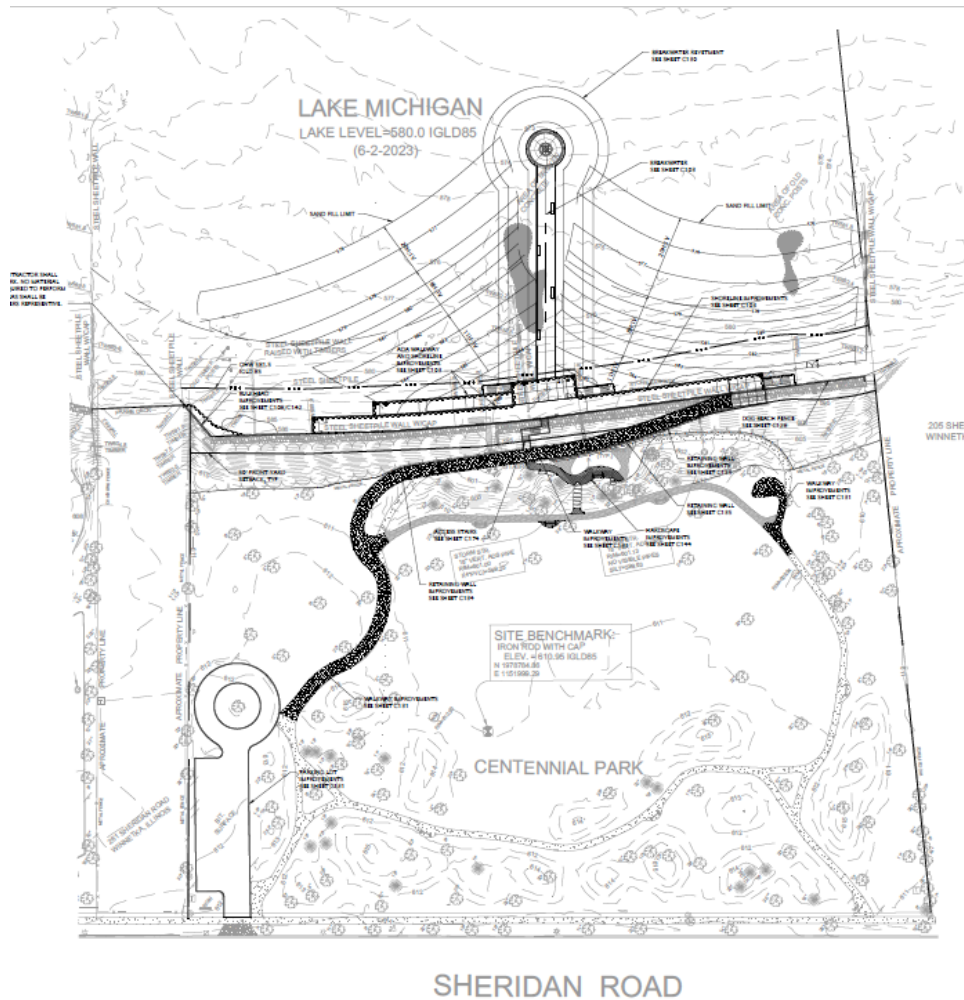


Figure 2 – General Site Development Plan (Sheet C101)

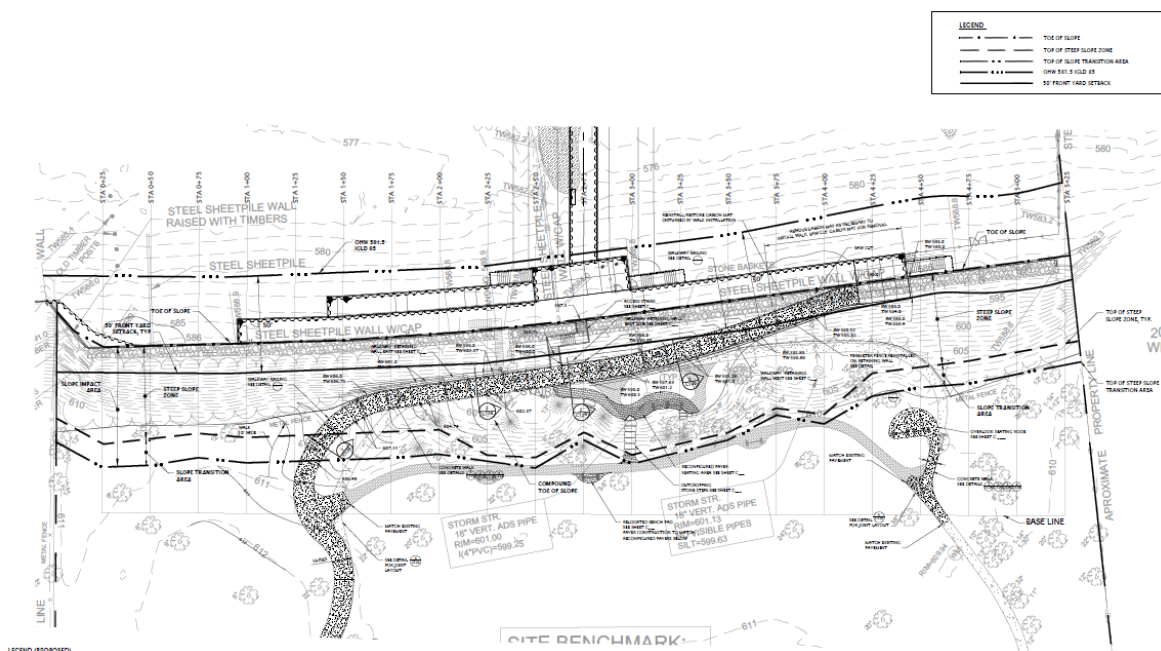


Figure 3 - Layout Plan (Sheet CS-6)

The following images illustrates the route the Applicant proposes that the public would take to walk along Centennial beach. At the November 11 ZBA meeting, staff will further explain, based upon the information we have, the ownership of land between the Park District's steel groin and the 205 Sheridan Road stone groin.

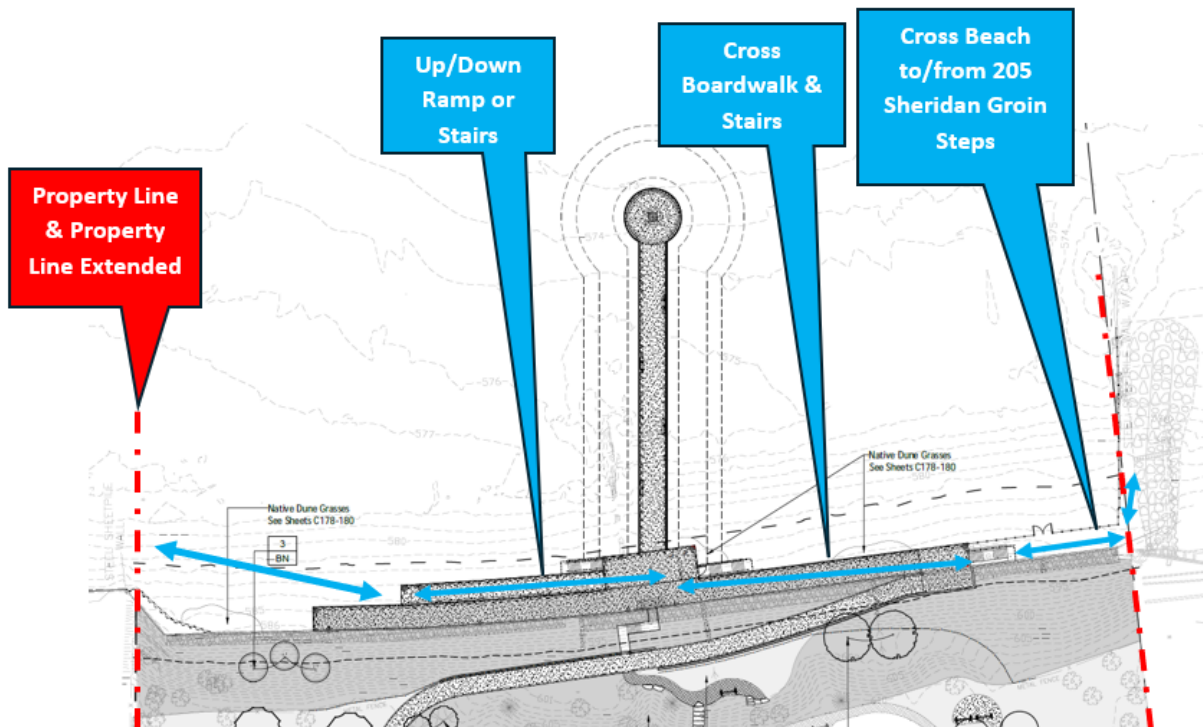


Figure 4 - Proposed Public Access Across Centennial Beach

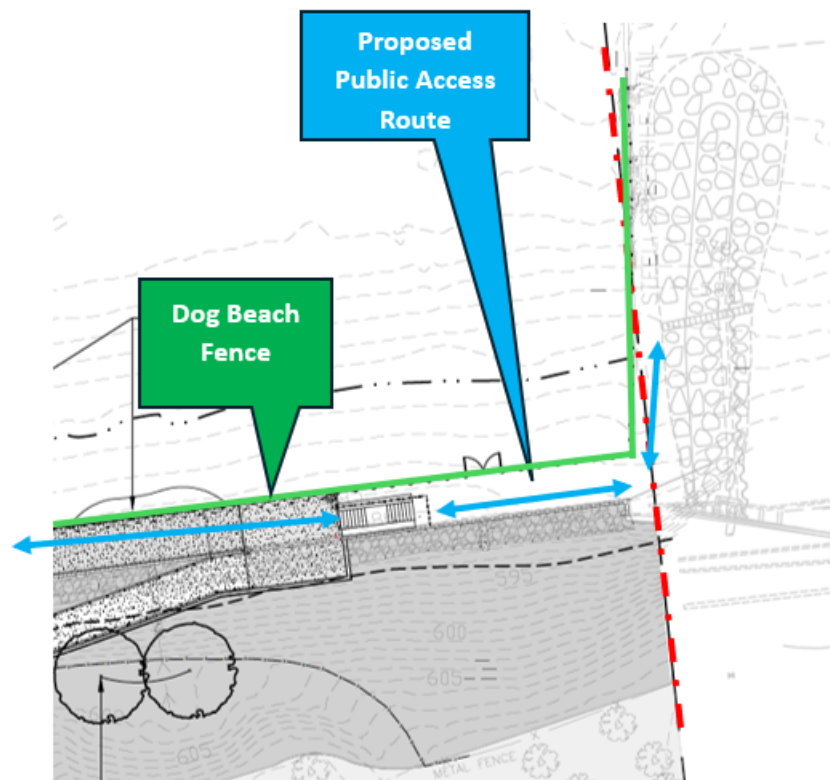


Figure 5 - Closeup of Proposed Public Access Across Centennial Beach Near South Property Line

The following images, which were also included in the October 8 staff report, show the location of the requested variations and exceptions. Specifics of each variation and exception are included in the **Findings** section that follows. At the November 11 ZBA meeting, staff will further explain the required zoning relief for portions of the boardwalk and pier.

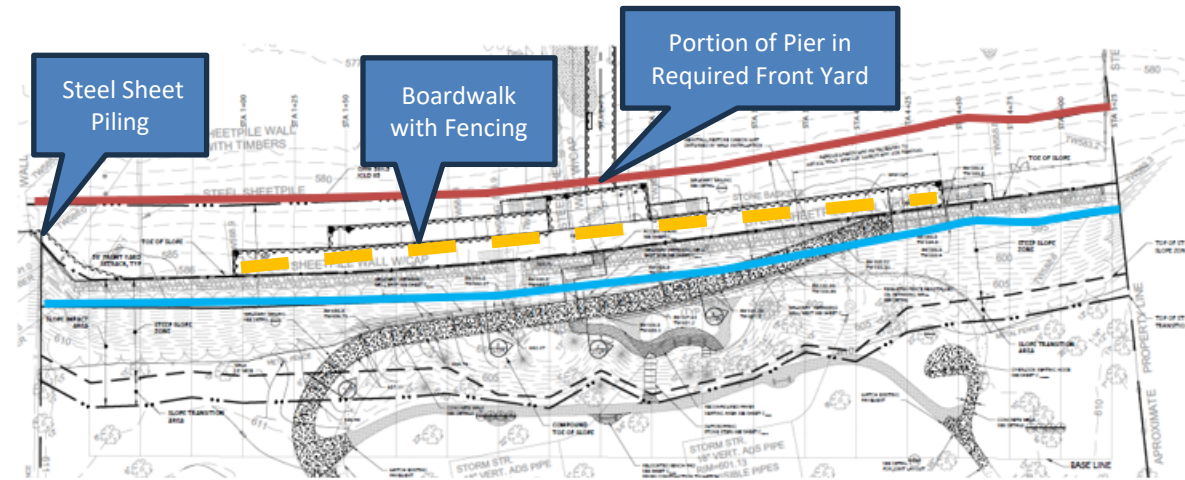


Figure 6- Proposed Elements in Required Front Yard Requiring Variations

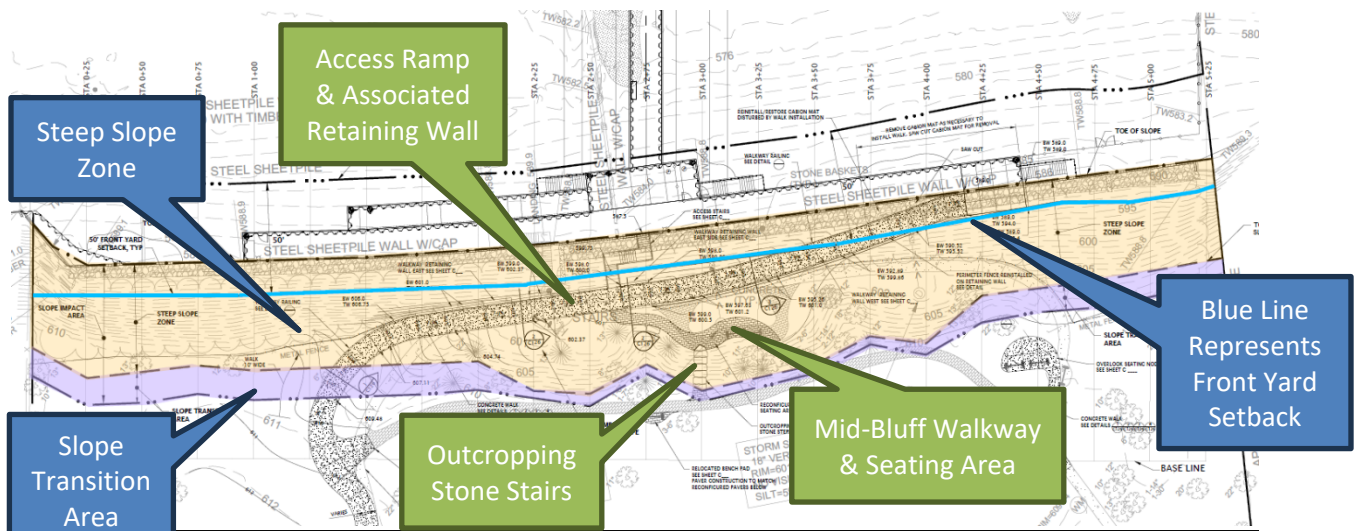


Figure 7- Proposed Elements in Steep Slope Zone Requiring Exceptions

FINDINGS

The ZBA is charged with evaluating Special Uses and associated steep slope exceptions for consistency with the six standards for granting special use permits, as well as evaluating Variations for consistency with the eight standards for granting of zoning variations. In the attached application materials submitted by the Applicant, the Applicant has provided a statement of justification regarding how the requested Special Use Permit and variations meet the standards for granting the requested Special Use Permit and zoning variations.

After hearing from the Applicant and the public, the Board may decide to act on one of two options:

- 1) Continue the public hearing to a specific date to provide the Applicant and/or staff with additional time to address questions and comments from the Board or the public.

- 2) Consider a motion recommending approval or denial of the Special Use, Exceptions and Variation. If the ZBA is prepared to make a recommendation to the Village Council regarding the requested relief, a ZBA member may wish to make a motion recommending approval or recommending denial based upon the following:

Move to recommend **approval** [denial] of

- A. A **Special Use Permit** to allow construction of improvements to the existing park and beach on the Subject Property, which is located in the R-2 Single-Family Residential Zoning District and the Lakefront Preservation Overlay District;
- B. The following **zoning variations**
 - a. **Fence and Wall Height** of 10.5 feet, whereas a maximum of 6.5 feet above natural grade is permitted, for a variation of 4 feet (61.54%) [Section 17.30.130 Obstructions in Required Yards or Courts]; and
- C. The following **steep slope zoning exceptions** [Section 17.82.040 Development in the Steep Slope Zone]:
 - a. Concrete access ramp 10 feet in width and associated retaining walls to support the ramp;
 - b. Outcropping stone steps that exceed 5 feet in width; and
 - c. Reconfigured mid-bluff paver walkway and seating area that extends beyond the footprint of the existing walkway and seating area and exceeds 5 feet in width.

based on evidence in the record, or a public document, and upon the following findings of fact:

- 1. The proposed improvements **are consistent** [are not consistent] with the Standards for the granting of Special Use Permits and associated exceptions, as follows:
 - a. That the establishment, maintenance and operation of the special use and associated exceptions will not be detrimental to or endanger the public health, safety, comfort, morals or general welfare;
 - b. That the special use and the associated exceptions will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the district or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;
 - c. That the establishment of the special use and associated exceptions will not impede the normal and orderly development or improvement of other property in the immediate vicinity for uses permitted by right in the district or districts of concern;
 - d. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimizes pedestrian and vehicular traffic congestion in the public ways;
 - e. That adequate parking, utilities, access roads, drainage and other facilities necessary to the operation of the special use exist or are to be provided; and
 - f. That the special use and associated exceptions in all other respects conforms to the applicable regulations of this and other Village ordinances and codes.
- 2. The requested zoning variations are **in harmony** [not in harmony] with the general purpose and intent of the Zoning Ordinance and that each of the following eight standards

on which evidence is required pursuant to Section 17.60.050 of this Code **have been met**
[have not been met]:

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by regulations in that zone.
2. The plight of the owner is due to unique circumstances. Such circumstances must be associated with the characteristics of the property in question, rather than being related to the occupants.
3. The variation, if granted, will not alter the essential character of the locality.
4. An adequate supply of light and air to the adjacent property will not be impaired.
5. The hazard from fire and other damages to the property will not be increased.
6. The taxable value of the land and buildings throughout the Village will not diminish.
7. The congestion in the public street will not increase.
8. The public health, safety, comfort, morals, and welfare of the inhabitants of the Village will not otherwise be impaired.

[The special use and the requested variations and exceptions should only be approved subject to the following two conditions and any other conditions that the ZBA may recommend.

- 1. The Applicant shall incorporate security cameras into areas of the park and beach in a manner approved by the Police Chief.**
- 2. The Applicant shall install a more robust permanent method to notify the public for when the pier is closed due to high wave action in a manner approved by the Director of Engineering.**
- 3. Other conditions.]**

ATTACHMENTS

Attachment A1: Applicant's Responses to ZBA Comments and Questions at October 14 ZBA Meeting

Attachment B1: October 8, 2024, ZBA Staff Report

Attachment C1: Public Correspondence Received After Posting of October ZBA Agenda Packet

ATTACHMENT A1



October 30, 2024

David Schoon
Director of Community Development
Village of Winnetka
510 Green Bay Road
Winnetka, Illinois 60093

Dear David,

As a follow-up to the Zoning Board of Appeals meeting from October 14, 2024, the Winnetka Park District has reviewed the comments and questions asked in response to the Centennial Park and Beach Special Use Permit Application. After reviewing the meeting questions and comments, staff and consultants have put together a response to those items in the attached memorandum. We are updating our presentation for the upcoming meeting to help the zoning board members review the questions and concerns more clearly. The finished presentation will be shared with Village staff before the meeting as we did for the last ZBA meeting.

We're hopeful that our responses, along with updated visuals, will inform the Zoning Board Members and answer their questions, allowing for a recommendation regarding our project that evening.

If you have any questions about the memorandum, feel free to contact Shannon Nazzal or me.

We look forward to seeing you and your staff at next month's Zoning Board Meeting.

Kind Regards,

Costa Kutulas

Director of Parks and Maintenance

Winnetka Park District
1380 Willow Road
Winnetka, Illinois 60093



WINNETKA PARK DISTRICT
PARKS AND MAINTENANCE DEPARTMENT
MEMORANDUM

TO: David Schoon, Village of Winnetka
FROM: Costa Kutulas, Director of Parks and Maintenance
DATE: October 30, 2024
SUBJECT: Centennial Park + Beach 225 Sheridan Road (Case No. 24-08 SU) ZBA Response

The following comments are the result of the staff's review of comments and questions asked by Zoning Board Members for the Centennial Park and Beach - Zoning Board of Appeals Meeting dated October 14, 2024.

The Park District acknowledges the natural tension that can arise when public spaces are classified as special uses within residential areas. We understand that a public park, intended as a community gathering space for recreation, may at times differ in character from the surrounding single-family homes. The Park District recognizes this and has taken thoughtful steps to design Centennial Park and Beach to minimize the conflicts with the surrounding community while addressing very specific needs for public spaces.

While these differences exist, it's important for the Zoning Board of Appeals (ZBA) to remember that the Village has designated the park and beach as a special use. This does not result in the zoning decision being left to the Village's discretion. Calling the park and beach a special use represents a legislative finding that the Park District's use is *compatible* with the surrounding property. The Illinois Supreme Court has held that a special use permit can be denied only when granting it "would result in an adverse effect upon adjoining and surrounding properties unique and different from the adverse effect that would otherwise result from the development of such a special exception use located anywhere within the zone."

The appropriate inquiry is whether there are facts and circumstances showing that a particular use proposed at a particular location would have any adverse effects above and beyond those inherently associated with the use wherever it is located in the zoning district.

There are similar existing public uses within residential neighborhoods that demonstrate why the proposed Centennial Park and Beach will not produce unusual or heightened adverse effects. For example, the armor stone proposed for Centennial Park and Beach are consistent with numerous other stone groins which already exist along the Village's shore. Likewise, many other current public beaches along the North Shore also share a productive balance with their surrounding residential neighborhoods, including Lake Bluff, Highland Park, Lake Forest, Glencoe, Wilmette and Kenilworth.

For these reasons, the Park District respectfully requests the board vote on November 11 and passes a positive recommendation to the Village Council.

Response to review comment received from the October 14, Zoning Board of Appeals Meeting. The Park District has attempted to organize the questions and our responses by the reference to the standards for granting special use permits set forth in Section 17.56.120:

1. That the establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, comfort, morals or general welfare;

The proposed improvements will not be detrimental to or endanger the public health, safety, comfort, morals, or general welfare of the community. Rather, the proposed improvements are compatible with the community and will enhance the general welfare by improving the applicants' facilities and the quality of the applicants' programming in service of the community.

The Applicant does not intend to expand the scope of its programming in connection with the Project from activities that have previously been provided at the park and beach. The Applicant only needs to apply for a Special Use Permit because of amendments to the Zoning Ordinance which were approved after the establishment of Centennial Park and Beach as a public amenity.

The proposed improvements are designed to complement and enhance the existing park and beach environment. Features such as the off-leash dog beach, swimming beach, elevated boardwalk, and pier, as well as concrete ADA access ramp are strategically located to minimize impact on neighboring properties while enhancing the park's role as a community asset.

The proposed improvements also result in the implementation of the Winnetka 2030 Waterfront Master Plan. The Lakefront Master Plan has been noted in the Village's Winnetka Comprehensive Plan. The Village's Comprehensive Master Plan further notes that the fluctuating record-high lake levels and other environmental factors are contributing to erosion and significant destruction of the Winnetka Shoreline and Bluffs. This further supports the need to address these types of concerns along Winnetka's Beaches to enhance the public health, safety, comfort, morals, or general welfare.

Question: What kind of maintenance equipment will be used on the ADA walkway?

Response: The park district is proposing using a tracked skid steer and rubber tired tractor to be able to maintain both the off-lease dog beach and human swimming beach. It is also important to note that this walkway serves as emergency vehicle (cart with gurney) access to the beach. Allowing two way traffic (pedestrian / vehicle) on this walkway is equally important as a safety feature for pedestrians in the case of an emergency response needing immediate, unimpeded access to the beach which reduces response times and increasing the chances of successful emergency outcomes.

Question: The variety of participants and how everything converges at the center of the boardwalk (the choke point), how does this work together? Concerns of the choke point in this design?

Response: The Park District disagrees with the premise for this question that the area of confluence is unsafe and for the reasons described below asserts it is safe. The space offers much more width than a typical sidewalk or a crowded market setting, accommodating clearances that facilitate freedom of movement and safety. From the bluff steps, users arrive at a generous 19'x40' (760 SF) landing area with direct access to the dog beach entrance, swimming beach stairs/ramp, and the expansive pier/boardwalk, with options to move forward, left, or right. The Park District plans to station a beach attendant near the swim beach steps, ensuring

direct visibility of all beachgoers at this central threshold. Dog traffic entering from the south pedestrian ramp will turn right through the gate before crossing the central threshold.

The number of examples demonstrating the amicable co-existence of pedestrians and dogs throughout the Winnetka community is innumerable and can be seen daily. Dogs are allowed at the Farmers Market, yet it does not result in a risk to public safety. Pedestrians and dogs share the sidewalks throughout the Village when owners take their pets for walks or enjoy time at one of Winnetka's pet friendly establishments including restaurants. The concern expressed for negative impacts caused by the confluence at the center of the boardwalk lacks any foundation in support of the premise that there will be any negative impacts.

Question: What did the WPD do in regards to make the pier safe for the community?

Response: To the extent this question presumes the pier is unsafe, the Park District disagrees and finds no evidence was introduced to support the claim the pier is unsafe. The proposed pier structure at Centennial Beach was designed to meet the requirements for the Lakefront Construction ordinances. The pier design includes a pier width of 15 feet, allowing for safe multi-direction passage along the structure. The pier was also lined with armor stone to reduce the reflective wave energy, resulting in a reduction of rip currents. The stone's width and elevation also act as a deterrent to reduce the risk of diving from the pier. The pier structure has a fence that runs the length of the southern edge of the pier to act as a handrail as well. The easternmost end of the pier has several integrated concrete benches, providing a physical barrier from the water's edge, which further reduce safety concerns. The pier elevations are set at an elevation similar to those already existing in the community at Elder Lane, Maple, Lloyd, and Tower beaches to minimize the impact on the views further evidence that the proposed improvements will not create unique and different impacts. The pier with armor stone surround will help collect sand and break the wave energy, helping to reduce erosion.

Question: Was any work or studies done to review and address the concerns of rip currents with the pier?

Response: The pier was designed by professional engineers with decades of experience working along the Lake Michigan shoreline and on the North Shore. There are studies that indicate that steel groins promote rip currents. To reduce these risks, armor stone revetments are placed adjacent to or on the steel groins to break up that reactive energy and significantly reduces the risk of rip currents. If the steel groins were removed entirely, Centennial Beach would be at significantly higher risk of erosion, lake bed down cutting, and the possibility of losing the beach entirely in the future.

The current design promoting safety, creating proper separation of the beaches, and sustaining the beach for future generations while also being responsive to aesthetic concerns to minimize the impact on the status quo.

Question: Are you safer with a pier with armor stone as you would be with no pier?

Response: To the extent this question presumes the pier is unsafe, the Park District disagrees and finds no evidence was introduced to support the claim the pier is unsafe. The proposed pier structure was designed with user safety in mind, but safety also relies on individuals following established guidelines including those outlined in Winnetka Park District Ordinance 504 (Conduct Ordinance) to include park hours of operation and adhering to designated use areas. To maintain a safe environment, users need to adhere to these rules, as any structure can become unsafe if not used as intended.

The existing Centennial Park and Beach shoreline has two steel groin structures surrounding the public beach to the south and middle. The reflective wave energy off of these structures creates the possibility of rip currents. Removing or lining these types of structures with stone helps reduce these concerns and improves safety. The proposed pier is lined with armor stone, which minimizes this risk, helps with sand retention, and reduces erosion as well as lakebed down cutting.

2. That the special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the district or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;

For the same reasons, the Proposed Improvements will not be substantially injurious to the use and enjoyment of other properties in the immediate vicinity or substantially diminish or impair property values in the immediate vicinity. First and foremost, the beach has existed in this location for decades and the public's use of the park and beach has had no negative impact on the enjoyment of any private property or property values in the immediate vicinity. As direct evidence of this, our neighbor to the south at 205 Sheridan Road is investing millions of dollars in a new home – an investment that would not occur if the park and beach was injurious to the use and enjoyment of that property.

As described above: (i) the Proposed Improvements and the Programming are compatible with the mix of uses in the vicinity of the Property; (ii) the height, bulk, and density of the Centennial Beach and Park improvements are compatible with the height, bulk, and density of shoreline improvements on Lake Michigan and are designed to fit within the R-2 District; and (iii) the Proposed Improvements will not increase vehicular traffic or parking demand in a manner that would be injurious to the use or reduce the property values of neighboring properties.

3. That the establishment of the special use will not impede the normal and orderly development or improvement of other property in the immediate vicinity for uses permitted by right in the district or districts of concern;

The Proposed Improvements will not impede the normal and orderly development or improvement of other properties in the immediate vicinity. The Proposed Improvements do not change the essential nature of the property as a public park that provides community access to Lake Michigan. As a result, the proposed improvements will not change the park and beach's impact on development. There has been no evidence introduced which demonstrates the current park and beach has any negative impact on development in the immediate vicinity. Moreover, the surrounding area is already developed. If development sites become available, the Proposed Improvements will not discourage additional development in the area because the Proposed Improvements will not change the essential character of the property nor negatively impact surrounding properties (e.g. the Proposed Improvements will not cast shadows or light onto neighbors) or the general welfare of the community (as discussed above). As direct evidence of this, our neighbor to the south at 205 Sheridan Road is investing millions of dollars in a new home – an investment that would not occur if the Project impeded the normal and orderly development in the immediate vicinity.

Question: Longer-term plan to join these two plans together, what is the combined plan?

Response: The Park District has submitted separate Special Use Permit Applications for Centennial and Elder Lane Parks, as these sites are currently independent. While there is a plan outlined in the Winnetka Waterfront 2030 Plan adopted by the Winnetka Park District in 2016, the Park District is currently planning the parcels

separately and have provided details in each separate application as to the elements that best fit both locations. Hence, the two sites need to operate independently while remaining compatible for future consolidation. The Park District has considered elements such as the boardwalk, beach locations, access, flow, and circulation. If it is determined in the future that combining locations is a feasible option, the Park District would finalize the plans and submit a Special Use Permit Application to the Village to proceed with that scope of work.

- 4. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimizes pedestrian and vehicular traffic congestion in the public ways;**
- 5. That adequate parking, utilities, access roads, drainage and other facilities necessary to the operation of the special use exist or are to be provided;**

Questions below are in response to both Standards 4 & 5.

Existing traffic and parking infrastructure is sufficient to minimize pedestrian and vehicular traffic congestion in the public ways. As discussed above, the Applicant does not expect the Proposed Improvements to create new parking demand or materially increase traffic. The existing and proposed parking supply provides adequate capacity to accommodate vehicular traffic generated by the Applicant's programming without causing unreasonable congestion in the right-of-way. The dog beach will be reduced in scale, resulting in less capacity and fewer patrons than the current dog beach that comprises the entirety of Centennial Beach. The beach site is a walking destination for most of the community, and with the supplemental parking at Elder Lane Park, there is enough parking to help with any potential overflow. As noted in the Village Comprehensive Plan, 90% of the parks in Winnetka are within a 10 minute walk for the residents.

Existing parking, utilities, access roads, drainage, and other facilities necessary for the Proposed Improvements are adequate. The Property is served by all existing utilities and drainage necessary to operate the Proposed Improvements. The Proposed Improvements do not require additional utilities or facilities to support the project.

Question: Why are the outcropping natural stone steps set at 6' vs 5'?

Response: The 6-foot-wide outcropping steps enhance user flow and accessibility, allowing multiple people to navigate the bluff slope comfortably without impeding pedestrian traffic flow. This broader width also strengthens the design's impact, offering a striking, natural focal point and ample space for users to pause and enjoy the landscape. The width also allows them to be utilized as a sitting area, while allowing people to traverse the steps.

Question: Are elements shown in the mid bluff, items J (paver walkway) and K (outcropping stones) ADA accessible?

Response: The reconfigured paver walkway is accessible by the proposed ADA Access Ramp near the mid bluff. The Outcropping natural stone steps are ADA accessible at the top and bottom of the mid bluff, but the steps themselves are not designed to be an accessible route. They are installed as a second point of access to the mid bluff.

Question: With the proposed improvements, I would anticipate an increase in park usage resulting in greater vehicular traffic and parking demand. Why doesn't the plan provide for an increase in parking?

Response: The Park District is not anticipating a drastic change in the parking needs at Centennial Park and Beach. With previous lakefront projects at Tower, Lloyd, and Maple beaches, the parking needs for these sites were managed within the existing footprints, and it has been found that there was no need to decrease green space and replace it with paved parking areas. Because the beaches are geographically distributed between the north and south ends of town, the community does a wonderful job of utilizing alternative methods of travel, i.e. bicycles, scooters, walking; minimizing the need for additional parking and its carbon footprint.

The Elder Lane parking lot is a great overflow parking lot due to its proximity to Centennial Park. Because beach season is generally the school off-season, the shared use of the parking lot with New Trier High School allows for great collaboration with a community partner without burdening Centennial's neighbors with a larger parking lot, which could sit empty during the off-season. If additional parking is needed, the Park District can rebalance the allocation of spaces to students to ensure adequate spaces are available for community use.

Question: Where are the bathrooms?

Response: No bathrooms are included in the current design. Instead, the goal is to utilize the bathrooms at the Elder Lane Beach House to support beach operations as both a short- and long-term solution. The Park District's future vision is to connect Elder Lane Park and Centennial Park, enabling shared use of the existing infrastructure and providing accessible bathroom facilities without constructing a second facility at Centennial Beach. This approach supports smoother circulation flow and preserves the open, scenic space created by the Centennial Project, avoiding the need for a second beach house several hundred feet from the existing Elder Lane Beach House.

Question: How many Dog Passes are currently issued??

Response: As of October 2024, for the season of April 1, 2024 through March 30, 2025, there are 300 active resident dog beach passes, and 61 non-resident dog beach passes for Centennial Park and Beach Dog Beach.

- 6. That the special use in all other respects conforms to the applicable regulations of this and other Village ordinances and codes. In the event that the application for special use permit involves a request for variation from the terms of this title, such request, subject to required notification procedures, may be considered at the same public hearing at which the proposed special use is reviewed by the Board of Appeals.**

Except for the Variations and Exceptions (described on the Chart Titled "Proposed Project Elements), the Proposed Improvements will conform to all applicable regulations of the

Zoning Ordinance and other Village ordinances and codes. Moreover, Section 17.56.020 of the Winnetka Zoning Ordinance establishes nonessential public uses as special uses in all districts within the Village.

Question: How much of the bluff slope will need to be excavated to install the ADA walkway?

Response: The design team carefully balanced slope impact with accessibility and functionality. Our goal was to minimize disturbance to the bluff while maintaining key elevation points—such as the mid-bluff seating area—and providing an ADA-compliant path for life-safety and maintenance vehicles, and a diverse range of users.

To reduce soil removal, we reused the existing park path footprint, elongated the path horizontally along the slope, and designed a comfortable ADA compliant gradient. According to the grading plan, approximately 312 cubic yards (CY) of soil will be cut, with 155 CY filled, totaling 467 CY of soil moved.

Additionally, the installation of retaining walls that support the ADA ramp requires about 340 CY of temporary soil disturbance. This soil will be replaced and stabilized with erosion control matting and native bluff plug plantings to ensure long-term slope resilience. These steps reflect our commitment to maintaining the site's character while achieving a durable, accessible pathway for public use.

Question: Concerns of fencing and wall heights of 10.5'

Response: The height in question is along the eastern edge of the boardwalk, just north and south of its transition to the pier. Based on the Village zoning ordinance, the proposed heights, as defined by the special use standards, must be measured from the existing topography rather than the finished sand elevations. It is also meant to address residential fencing at a current grade, rather than an altered grade, boardwalk and handrails for safety purposes. The 10.5-foot height measurement is taken from existing grade and includes both the boardwalk and the 42-inch fence (Type A Handrail as shown in the original design packet). In practice, the boardwalk itself will sit approximately 3 feet above the proposed sand elevation, with the 42-inch fence (Type A Handrail) bringing the total height to 6.5 feet from sand to handrail top. On the boardwalk, visitors will enjoy unimpeded panoramic views of the lake and shoreline over the 42-inch fence (Type A Handrail).

Question: Consider alternative to the ADA ramp, such as a lift or mechanical access chair to lessen the impact to the bluff?

Response: An ADA lift, while compact, may not be well-suited for a public setting like this bluff for several reasons. Lifts are typically designed for low-volume, individual use, which can lead to wait times during peak usage periods. In contrast, an ADA-compliant ramp, though it requires more space, can accommodate multiple users at once, including those using wheelchairs, walkers/canes, strollers, or scooters – ensuring inclusive access for all visitors. Furthermore, patrons do not need to suspend their use while emergency responders use the ramp – there is sufficient breadth so that visitors can continue their ingress and egress without jeopardizing access by EMTs or the police.

Additionally, a lift requires ongoing maintenance, especially in coastal or outdoor environments, where exposure to the elements, particularly harsh winter conditions, can lead to frequent mechanical issues, posing both safety and reliability concerns. In a public space, an out-of-service lift could limit accessibility, creating frustration among users and diminishing overall accessibility. Therefore, the design team recommends that the ADA ramp will provide a more reliable, inclusive, and sustainable option for accessibility on a steep bluff.

In developing the most inclusive and practical solution, the Park District consulted with individuals with disabilities and organizations like the Northern Suburban Special Recreation Association (NSSRA) to further understand accessibility needs and preferences. Through these conversations, it became clear that a lift is often seen as less inclusive, with some perceiving it as a segregated option rather than a fully integrated pathway. Additionally, lifts are more susceptible to damage and misuse in public outdoor settings, leading to frequent downtime that can disrupt access. By contrast, a ramp provides equitable access to everyone, allowing all visitors—regardless of ability—to move through the space without barriers or delays. For these reasons, the ramp is the preferred choice to create a more inclusive and universally accessible environment for all.

Question: Regarding the steep slope ordinance, would like to understand what is driving the 10' width of the ADA/maintenance ramp? What mitigation efforts has the park district take to minimize the impact on the steep slope?

Response: The initial conceptual design featured a 6-foot wide walkway; however, this was developed before the separation of the two beach designs. As the projects progressed and maintenance and access to each beach were evaluated independently, the request for increased path width for maintenance access led to a shift to a 9-foot wide clear path. Ultimately, during the construction documents phase, the width was further revised to 10 feet to ensure the 9-foot clearance between the required ADA ramp handrails.

There is a notable shift among municipalities and institutions toward 8-foot-wide pathways in public spaces such as parks, schools, and shopping districts. This trend reflects a growing commitment to inclusivity and functionality in design, recognizing the importance of accommodating a broad range of users—pedestrians, families with strollers, and those using mobility devices—comfortably and safely on shared paths.

Wider pathways not only enhance user experience by improving traffic flow and reducing congestion but also provide essential safety benefits. In emergencies, these spacious routes facilitate the movement of essential workers and their equipment, allowing for swift access to the beach or other critical areas. This design consideration is crucial for ensuring that emergency responders can efficiently transport equipment or carts during urgent situations. Furthermore, the increased width supports ease of maintenance and enabling access for service vehicles, which ultimately reduces long-term upkeep costs. By prioritizing safety, accessibility, and community well-being, these pathways contribute to a more resilient and functional public environment. Ability to accommodate both pedestrians and emergency responders at the same time. First responders cannot wait for path to clear to access a patient at the beach. Imagine what happens when an ambulance tries to pass on a one lane road.

To minimize the impact on the steep slope, the Park District has implemented several mitigation measures, including careful alignment of the walkway to follow the natural contours of the land minimize impact to the tableland and bluff. Additionally, native vegetation will be used to help stabilize the slope, minimize erosion, and integrate the walkway aesthetically into the landscape. These efforts balance ADA accessibility with environmental stewardship and slope preservation.

Additional Questions that did not fall within a Zoning Standard:

Question: Wouldn't the safer access for swimmers be the south beach vs. the north beach?

Response: There is no evidence that the north swimming beach is unsafe, so the Park District respectfully expresses that the foundation for this question is untrue and misleading. The primary safety component of the beach design is the clear delineation created by the proposed pier structure, which separates the swimming beach from the off-leash dog beach. This physical barrier minimizes interactions between swimmers and off-leash dogs, reducing the risk of accidents. It allows for more effective monitoring by lifeguards and staff, ensuring compliance with safety regulations. Additionally, this separation offers peace of mind for families with children while allowing dog owners to let their pets play freely in the off-leash area.

Positioning the swimming beach north of the dog beach on Lake Michigan is advantageous because it allows for better monitoring of swimmers and calmer water conditions, as the northern placement is less exposed to prevailing southern winds. The sunny, sheltered area is ideal for families seeking comfortable swimming conditions. Most importantly, the arrangement is designed knowing the proximity to Elder Lane Beach. This

location enables closer access to the existing Elder Lane Beach House for restrooms. Ultimately, this approach improves circulation and provides accessible bathroom facilities without the need for a second facility at Centennial Beach, preserving the open, scenic space created by the current Centennial Project.

Question: Is there anywhere in the plans for a Life Guard Station, bathroom, water fountain for humans, shade structures?

Response: Some of these elements are site furniture comprising part of the park's operations and maintenance, while others are installed seasonally and do not fall under the purview of the Zoning Board of Appeals. Although not indicated on the plans, the Park District intends to station a lifeguard on the beach, with the exact location subject to adjustment as needed. Currently, no bathrooms are included in this plan and is addressed in a previous question. We are open to re-evaluating the locations of the water fountain and may adjust the foot shower to create a combined-use fountain, currently there are two water fountains at the park level, one near each entry location of the park. The current plan assumes that visitors, as many beachgoers typically do, will bring their own shade structures (tents/umbrellas) to the beach.

Question: Beach access, understanding the walkway and access behind the dog beach fencing?

Response: The stone groin at the north property line of 205 Sheridan Road will cause the artificial accretion of sand. As described by Village Staff's presentation, artificially accreted sand/land becomes public property, resulting in the ability to walk across the artificially accreted land. The Centennial Park and Beach plan accommodates this passage of public property behind the proposed off-leash dog beach as indicated on the plan documents.

Question: Reasoning for limiting one's ability to walk the water line?

Response: There currently is no reason to limit a person's ability to walk across the beach to only the waterline because Centennial Beach is a public site, allowing anyone to walk the beach at any level. There is a safety reason for the proposed design of the off-leash dog beach. A pathway was created to allow anyone to be able to walk the beach and, in this case, walk around the off-leash dog beach to safely access the adjacent properties to walk along the Lake Michigan shoreline. Public access to the swimming beach is similar at Tower, Lloyd, Maple, and Elder beaches as well, allowing visitors to walk the public beach to traverse the Lake Michigan shoreline.

Based on state law, the Park District has discretion to allocate the property between different uses and to adopt regulations governing the use of its property.¹

Question: Understand how you are able to build the fencing on the steel groin beyond the extended property line as it extends into the water, and how the access tapers to the stairs and access to the south.

Response: It belongs to the Park District pursuant to Section 11-2 of the Park District Code:

¹ See 70 ILCS 1205/8-1(d): To pass all necessary ordinances, rules and regulations for the proper management and conduct of the business of the board and district and to establish by ordinance all needful rules and regulations for the government and protection of parks, boulevards and driveways and other property under its jurisdiction, and to effect the objects for which such districts are formed.

“When any park district borders upon any navigable body of water, the title to the bed or submerged land of which is vested in the State of Illinois, said district may take possession of, enclose, fill in, reclaim and protect any portion of such submerged land bordering thereon, over which there shall be shoal and shallow water not fit for navigation and shall have the power to establish, construct and maintain parks and boulevards over and upon the same, and all right, title and interest of the State of Illinois in and to the bed or submerged land of such body of water so taken possession of, enclosed, filled in and reclaimed is hereby granted and ceded to such park district and the title thereto shall vest in such park district to be held for the use and benefit of the public as a part of said park district for park and boulevard purposes exclusively, and said district shall have power for the purpose of reclaiming such submerged land and protecting the same thereafter, to construct all necessary break-waters, or protection for the building and maintenance of such parks and boulevards, and the enclosing or reclamation of such submerged lands.”



MEMORANDUM VILLAGE OF WINNETKA

COMMUNITY DEVELOPMENT DEPARTMENT

TO: ZONING BOARD OF APPEALS
FROM: DAVID SCHOON, DIRECTOR
ANN KLAASSEN, ASSISTANT DIRECTOR
DATE: OCTOBER 8, 2024
SUBJECT: CENTENNIAL PARK & BEACH - 225 SHERIDAN ROAD - SPECIAL USE PERMIT, VARIATIONS, & EXCEPTIONS (CASE NO. 24-08-SU)

INTRODUCTION

On October 14, 2024, the Zoning Board of Appeals ("ZBA") is scheduled to commence a public hearing on an application submitted by the Winnetka Park District (the "Applicant"), as the owner of the property located at 225 Sheridan Road (the "Subject Property"). The Applicant is proposing improvements to the existing park and beach located on the Subject Property and requests approval of the following relief:

1. Approval of a **Special Use Permit** to allow construction of improvements to the existing park and beach on the Subject Property, which is located in the R-2 Single-Family Residential Zoning District and the Lakefront Preservation Overlay District;
2. Approval of the following **zoning variation**:
 - a. **Fence and Wall Height** of 10.5 feet, whereas a maximum of 6.5 feet above natural grade is permitted, a variation of 4 feet (61.54%) variation [Section 17.30.130 Obstructions in Required Yards or Courts]; and
3. Approval of the follow **steep slope exceptions** [Section 17.82.040 Development in the Steep Slope Zone]:
 - a. Concrete access ramp 10 feet in width and associated retaining walls to support the ramp;
 - b. Outcropping stone steps that exceed 5 feet in width; and
 - c. Reconfigured mid-bluff paver walkway and seating area that extends beyond the footprint of the existing walkway and seating area and exceeds 5 feet in width.

A sign has been posted on the Subject Property indicating the time and date of the ZBA public hearing. A mail notice has been sent to property owners within 250 feet of the Subject Property, in compliance with the Zoning Ordinance. The hearing was properly noticed in the *Winnetka Talk* on September 26, 2024. As of the date of this memo, staff has received several written comments from the public regarding this application. The comments are provided in **Attachment C**.

The Village Council has final jurisdiction on this application. The Council has sole authority to (i) grant a Special Use Permit and (ii) grant variations or exceptions related to the special use.

PROPERTY DESCRIPTION

The Subject Property, which is approximately 5.3 acres (230,911.56 square feet) in size, is located on the east side of Sheridan Road generally between Fuller Lane and Elder Lane and contains Centennial Beach and Park (see Figure 1). Under the Village Zoning Ordinance, the Subject Property has two front yards: (i) the street frontage along Sheridan Road to the west; and (ii) lake frontage along Lake Michigan to the east.

The Comprehensive Plan designates the Subject Property as appropriate for “Open Space” land uses, which includes public parks & recreation facilities, pocket parks/plazas, and Cook County Forest Preserve Land. The Comprehensive Plan also includes the following related goals:

Goal 1.7: The Village will continue to ensure that open space uses, such as Park District parks, beaches, and facilities, are compatible with the residential neighborhoods in which they are located.

Initiative 1.7.1: Study and consider establishing a specific zoning district for open space uses, or specific zoning standards for such uses within existing residential districts. This would allow more appropriate zoning standards for these uses.

Goal 6.1: The Village will continue to promote and encourage partnerships with other units of government and agencies to conserve, restore, and enhance natural features and ecosystems, to ensure accessibility to natural areas, parks, and other open or public spaces, and to support recreational facilities and programs that support the health of residents of all ages and abilities.

Initiative 6.1.1. Continue to collaborate with the Park District, local school districts, Forest Preserves of Cook County, and others to create opportunities that enhance accessibility to the open spaces of Winnetka. (refer to initiative 8.3.5)

Initiative 6.1.2. Continue to collaborate with the Park District, School District, Library District, Community House of Winnetka, and other community institutions to offer programs that maintain active and thriving Village recreation programs, offering a variety of sports, exercise, arts and crafts, cultural, life skills, educational, social, and leisure programs for residents of all ages and abilities.

Goal 6.4: The Village will support health and wellness through innovative and diversified recreational, learning, and cultural opportunities in its public parks, plazas, trails, and open spaces.

Initiative 6.4.4. Support the efforts of the Park District and other community organizations to expand and/or modify Winnetka’s recreational programming to fill gaps in services.

Goal 6.5: The Village will support policies that preserve and protect the unique natural resources of and the recreational opportunities provided by the Lake Michigan shoreline and bluffs.

Initiative 6.5.1. Continue to study and consider establishing development regulations addressing construction of shoreline stabilization projects and specific recreational projects in and adjacent to Lake Michigan and its shoreline that will not cause environmental damage to or interfere with the greater recreational opportunities

provided by the Lake and adjacent areas. [Ordinance MC-05-2023 was adopted by the Village Council on March 21, 2023, which created a new chapter of Village Code – Chapter 15.78 Lakefront Construction.]

Initiative 6.5.2. Study and consider establishing development regulations that requires construction on and adjacent to the bluffs along the Lake Michigan shoreline that protects, restores, and manages the stability of the bluffs and natural shoreline and that are contextually sensitive to the natural features of the bluffs. [Ordinance MC-01-2024 was adopted by the Village Council on February 6, 2024, amending the Zoning Ordinance concerning establishing bluff regulations for development in the steep slope area along Lake Michigan.]

The Subject Property is zoned R-2 Single Family Residential and is in the Lakefront Preservation Overlay District, and it is bordered by R-2 Single Family Residential to the north and south, and R-4 Single Family Residential to the west (see Figure 2).

In addition to single-family residential uses, the R-2 District allows a limited range of additional uses by Special Use Permit. Allowed Special Uses in the R-2 District include (a) church or temple; (b) public school, elementary and high, or private school having a curriculum equivalent to a public elementary school, public high school or public institution of higher learning; and (c) library. In addition, the Zoning Ordinance allows park and recreational uses in any zoning district within the Village by special use permit approval.

The Applicant's current use of the Subject Property as a park and recreational facility is generally consistent with the Comprehensive Plan land use designation and the R-2 zoning district.



Figure 1 – Aerial Map



Figure 2 – Zoning Map

PROPERTY HISTORY AND PREVIOUS ZONING APPLICATIONS

Based upon documents provided by the Applicant, it appears that the Applicant has owned the Subject Property since 1969. There are five (5) previous zoning cases on file for the Subject Property, which occurred prior to the Applicant acquiring the Subject Property:

1. In 1923, ZBA Case No. 43 was approved to allow an addition to a nonconforming use for the North Shore Health Resort;
2. In 1945, ZBA Case No. 702 was approved to allow the alteration of a nonconforming use and building for the North Shore Health Resort;
3. In 1949, ZBA Case No. 751 was not approved to allow a building addition to the North Shore Health Resort;
4. In 1951, ZBA Case No. 776 was not approved to allow enclosure of the front entrance of the North Shore Health Resort; and
5. In 1964, ZBA Case No. 935 was approved to allow the extension of a nonconforming use (North Shore Health Resort) with the construction of an accessory building.

Figures 3 through 8 on the following pages are recent photos of the site where the improvements are proposed.



Figure 3 – Subject Property – Looking East from Centennial Park Towards Lake Michigan



Figure 4 – Subject Property – Top of Centennial Park Bluff



Figure 5 – Subject Property – Looking North at Centennial Beach



Figure 6 – Subject Property – Looking South at Centennial Beach



Figure 7 – Subject Property – Looking North from Centennial Beach



Figure 8 – Subject Property – Looking South at Existing Steel Groin on Centennial Beach & Stone Groin at 205 Sheridan Road Property

LAKEFRONT CONSTRUCTION AND STEEP SLOPE ORDINANCES

Given the Subject Property is located along Lake Michigan it is subject to the recently adopted lakefront construction ordinance, Chapter 15.78 of the Village Code, and the steep slope regulations, Chapter 17.82 of the Village Code. The requirements of both chapters are administratively reviewed and approved by staff (in this case after zoning approval). However, an applicant may appeal the decision of staff regarding the application of the lakefront construction ordinance to the Village Council or may request exceptions from the steep slope requirements, which will be discussed later in this section.

The lakefront construction regulations govern construction along, adjacent to, and within Lake Michigan. A permit pursuant to the lakefront construction ordinance is required for any construction activity within Lake Michigan regulated areas that requires a permit from any of the following governmental agencies ("Permitting Agencies"): the United States Army Corp of Engineers, the Illinois Department of Natural Resources, the Metropolitan Water Reclamation District of Greater Chicago, or the Illinois Environmental Protection Agency (collectively, "Covered Construction"). Typical construction activity relates to beach preservation, which consist of steel or stone groins, revetments/bulkheads/seawalls, or other means of lakefront stabilization and preservation. The Village's formal review and approval of such a permit occurs after the applicable zoning approvals and the regulatory agencies review and approval their respective permits. The Village's review and approval is conducted administratively by the Village Director of Engineering in consultation with the applicant and the Village's coastal engineering consultant. This review is based upon a set of criteria identified in the regulations.



Figure 9 - Steel and stone groin



Figure 10- Stone Revetment



Figure 11-Existing Sea Wall on Subject Property

The steep slope regulations govern construction activity on or adjacent to the steep slope of the bluffs along Lake Michigan. The steep slope regulations are part of the Zoning Ordinance and include the following key slope definition regulations, which are illustrated in the image below.

- Bluff
- Table Land
- Toe of the Bluff
- Steep Slope Line
- Steep Slope Zone
- Slope Transition Area
- Slope Impact Area

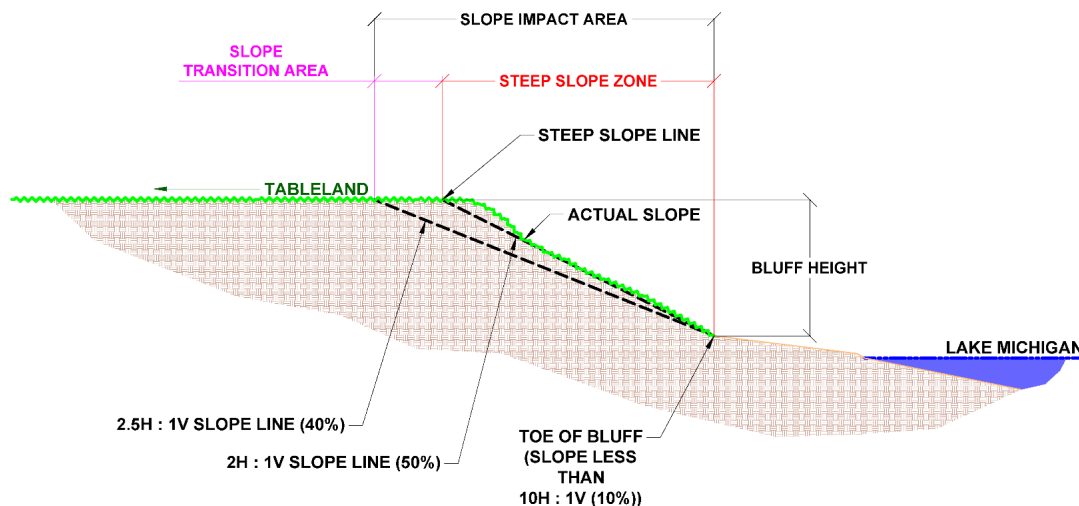


Figure 12 – Illustration of Steep Slope Regulation Terminology

The steep slope ordinance allows certain structures within the steep slope zone (area in red above). Additionally, it allows any structure within the slope transition area (area in magenta above) subject to certain engineering conditions and standards. In either the steep slope zone or the slope transition area, which together is the slope impact area, development must meet applicable geotechnical and structural engineering standards as noted in the ordinance.

The ordinance also **allows existing structures to remain and certain new development in the steep slope zone, which is summarized as follows:**

- a) Decks no larger than 50 square feet, unless exceptional engineering is provided.
- b) Retaining walls when necessary for stabilization, that do not increase or create tableland, and backfilling only allowed for stabilization.
- c) Stairs no more than 5 feet wide with landings no more than 50 square feet.
- d) Mechanical or electrical lifts, which do not obstruct the flow of light and water.
- e) Fences that comply with all other Village codes.
- f) Rebuilt, repaired, or remodeled existing structures that do not extend beyond the footprint or dimensions of the previously existing structure and constructed according to plans of an architect or structural engineer who certify that the new foundation or existing foundation (with appropriate engineering modifications and repairs, if any) will support the rebuilt, repaired or remodel structure without material adverse impact on the steep slope zone.
- g) Cantilevering of the principal structure with no more than a four-foot extension over the steep slope unless otherwise limited by the code. The cantilevering cannot block natural sunlight or alter natural stormwater drainage in a way that jeopardizes slope stability.
- h) Boat houses with a gross floor area limited to no more than 860 square feet, height limited to one-story and no taller than 15 feet, and the Engineering Director's determination that the structure will not impact slope stability.

The steep slope regulations include a provision that allows the Village Council to grant exceptions to the regulations as part of granting a special use permit, if the development includes construction activity that would not otherwise comply with the requirements under the steep slope regulations.

The steep slope regulations include a provision that allows the Village Council to grant exceptions to the regulations as part of granting a special use permit, if the development includes construction activity that would not otherwise comply with the requirements under the steep slope regulations.

The steep slope regulations also identify development standards for the slope impact area, which includes both the steep slope zone and the slope transition area. The standards include items related to:

- 1. Safety and control of steep slopes.
- 2. Construction techniques to enhance bluff stabilization.
- 3. Hydrological controls.
- 4. Vegetation maintenance and revegetation.
- 5. Filing, grading, and earth moving.

As with the lakefront construction regulations, the steep slope regulations are also administratively reviewed and approved through the Village's permit review process by the Village Director of Engineering with the assistance of the Village's coastal engineering consultant. They review proposed plans based upon whether the plans comply with the above steep slope development standards.

The technical review and approval of proposed plans set forth in the lakefront construction regulations and the steep slope regulations occurs during the building permit process, which occurs after the zoning entitlement process (e.g. special use, variations, etc.). That said, during Village staff's review of a zoning entitlement application, Village staff and consultants will conduct a preliminary review of the project for code requirements to determine if the development should be able to, in general terms, comply with administrative code requirements. Detailed construction plans are not required at this time, but the applicant is required to provide sufficient information so staff can determine whether the proposed site

layout can be achieved and still comply with other Village regulations as noted above. If after the Village Council approves a special use permit and during the building permit process an applicant changes the design of the project to such an extent that it would be considered a major change, the applicant would be required to go through the full special use permit process again before staff issues a building permit.

Regarding the Centennial Park and Beach zoning relief application, the Applicant has submitted preliminary engineering plans that have been reviewed by the Village Director of Engineering and Village's coastal engineer. The initial review that was performed assumes that all the Applicant's request for exceptions to the Village's steep slope regulations would be approved and the other applicable regulatory agencies would approve the proposed improvements regulated by the Village's lakefront construction regulations and steep slope regulations. The Engineering Department has provided preliminary comments to the Applicant. Based on the responses provided by the Applicant's engineering team to date, the Village Director of Engineering has determined that the Applicant will need to provide the additional required information. Based upon this additional information, the Village Engineer will determine if the information meets the design requirements of all Village Code requirements, including the lakefront construction regulations and the steep slope regulations.

Attached is a memo prepared by Village staff and the Village Attorney summarizing the role of Village staff, Boards/Commission, and the Council in the Centennial Park & Beach zoning relief application (**Attachment B**). As stated in this memo, each advisory board and commission will review the application based upon the applicable standards for that advisory body. Their review is based upon these broad standards and not based upon a review of the technical code requirements for such items as the Village's stormwater requirements, building code requirements, lakefront construction approval criteria, or steep slope regulation development standards. Those items are reviewed in detail administratively by qualified engineering staff during the building permit process. As noted above, if the Village Council were to approve zoning relief for the Centennial Park and Beach improvements and then during the building permit process the Applicant changed the design of the project to such an extent that it would be considered a major change, the Applicant would need to go through the full special use permit process again prior to the building permit being issued by staff.

PUBLIC TRUST DOCTRINE

Given the proposed improvements are located along the lakefront, it is important to review the nature and extent of the "public trust doctrine". At the January 10, 2023, Village Council study session, the Village Attorney reviewed a memorandum summarizing governmental jurisdiction as well as property rights and access along Lake Michigan. A copy of this memorandum can be found on the Village website by going to www.villageofwinnetka.org/agendas and looking for the January 10, 2023, Village Council study session agenda materials. The following are highlights of the applicable sections of the memo regarding the "public trust doctrine".

The "public trust doctrine" is a concept based upon an 1892 United States Supreme Court decision that held that lands under the navigable waters of Lake Michigan are held by the state in trust for the people of the state. This doctrine has since been codified by Illinois statute. Illinois courts have held that the boundary between private land and land owned by the state in public trust is "the line where the water usually [stands] when unaffected by storms or other disturbing causes." This line is variously referred to as the "water's edge," "still water shoreline," "calm waterline," "unaffected waterline," or the "normal waterline." Accordingly, in Illinois the boundary between private land and public land is the point at which the water normally stands (the "Normal Waterline").

A rule of thumb that generally applies in Illinois and other jurisdictions that rely on the Normal Waterline for the public-private property demarcation is that if your feet are wet, you are on public property, and if

your feet are dry then you are on private property. Based on these principles, the demarcation line in Illinois between public and private land is the same demarcation line that identifies where land held in trust begins and ends – both lines are the Normal Waterline.

The Illinois Supreme Court has held that the public trust doctrine for Lake Michigan extends “to recreational uses, including bathing, swimming and other shore activities.” Illinois Courts have acknowledged that the ability of the public to freely use Lake Michigan for recreational uses also ends at the Normal Waterline.

The Normal Waterline may change over time as a result of various processes, including accretion, reliction, and erosion. Accretion is the increase or reclamation of land along the shoreline due to the deposit, by water, of solid material such as mud, sand, or sediment. Reliction is the creation of dry land due to the recession of water. Similarly, dry land may become submerged by the erosion or removal of solid materials from the shoreline. Gradual changes to the Normal Waterline over time resulting in either increases or decreases in the amount of dry land are an “inherent and essential attribute of the original property,” and the property line changes with the Normal Waterline. However, if the addition or loss of property is sudden (i.e., caused by a violent storm), then the property line does not change. In the case of a sudden loss of land (called an avulsion), the owner may assert control over and reclaim the submerged land. The test of what change is gradual, as opposed to sudden, is “that though the witnesses may see from time to time that progress has been made, they could not perceive it while the process was going on”. Although a riparian owner may protect his property from erosion, he has no right to affect an increase of his own land, the result of which is a corresponding loss of land owned by the state in trust for the public.

Under these principles, the owner of real estate fronting on Lake Michigan owns the property to the Normal Waterline, and the land east of the Normal Waterline is owned by the state in trust for the public.

PROPOSED PLAN

The following is a summary of the Applicant's proposed improvements on the tableland, the slope impact area, and the lakefront. Each item described below is called out on an image by the corresponding paragraph number and the Applicant's plan sheet number from which the image comes from is identified. The complete set of plans is provided in the application materials, which are included in **Attachment A**.

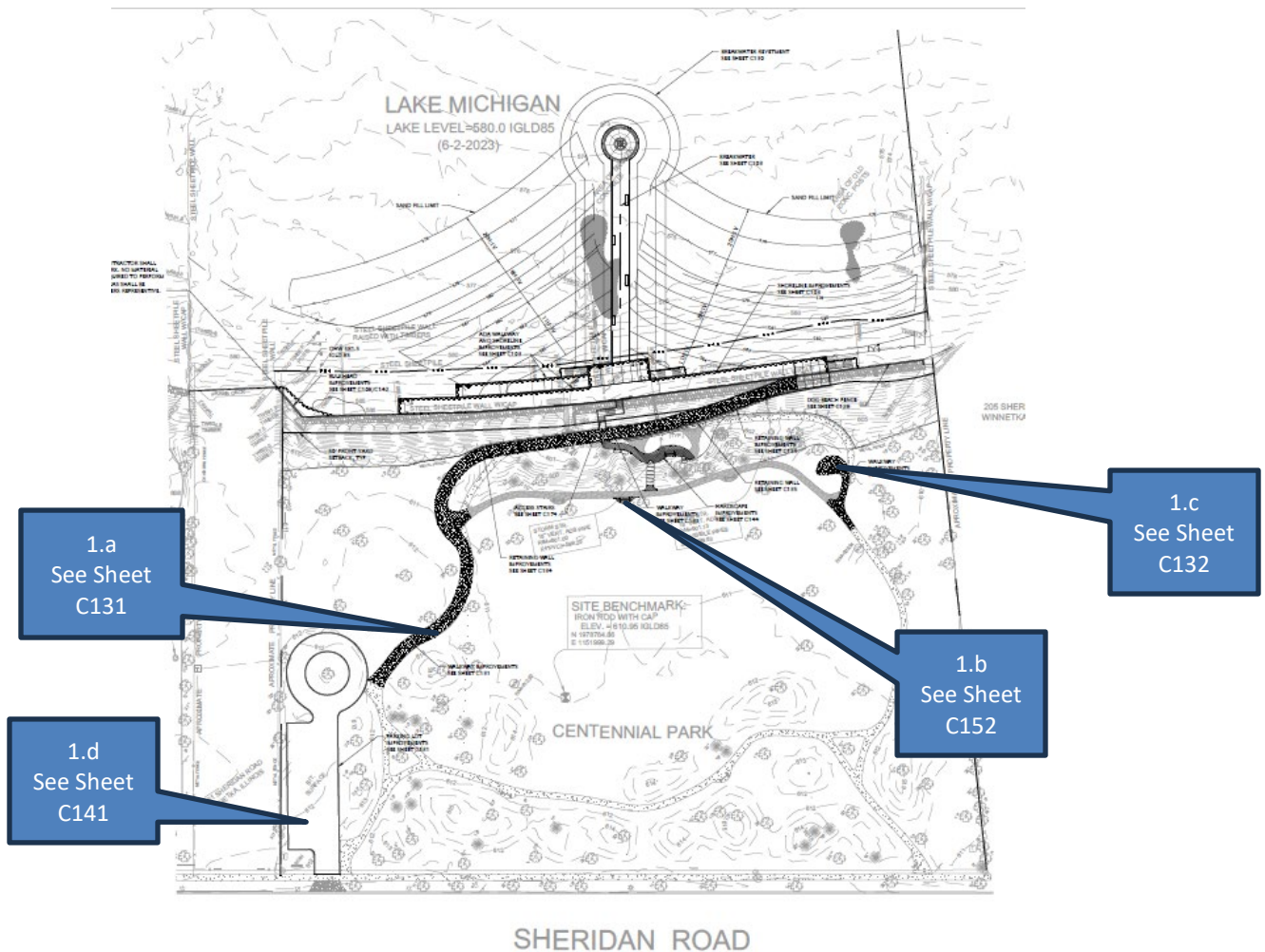


Figure 13 – General Site Development Plan (Sheet C101)

1. Tableland

- a. Walkway Improvements. The existing 5-wide concrete walkway from the circular vehicular island to the existing paver walkway would be expanded to 10 feet in width.
- b. Relocated Bench. An existing bench currently located mid-bluff would be relocated onto a new paver bench pad toward the center of the site.
- c. Overlook Seating Node: The existing bench towards the south side of the site would be replaced with an overlook seating node that would accommodate two benches.
- d. Resurfacing Parking Lot. The existing parking lot would be resurfaced. No expansion of the parking lot is proposed.

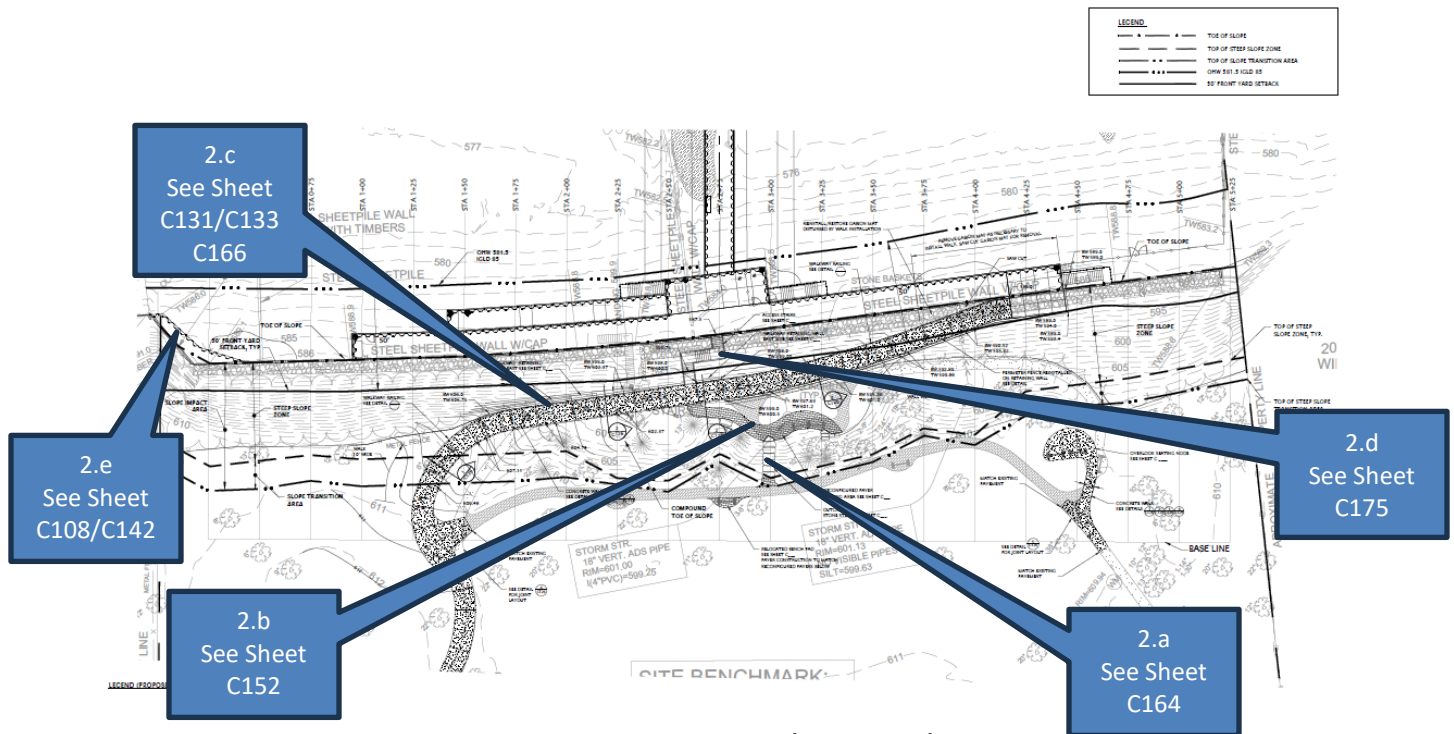


Figure 14 - Layout Plan (Sheet CS-6)

2. Steep Slope (Bluff)

- a. Outcropping Stone Steps. Stone steps measuring 6 feet in width are proposed from the existing walkway located on the tableland down to a reconfigured seating area. The distance from the existing walkway to the reconfigured seating area is approximately 22 feet.
- b. Mid-Bluff Paver Walkway and Seating Area. The existing paver seating area and walkway would be reconfigured to provide access to the proposed ramp that goes down to the beach).
- c. Concrete ADA Access Ramp with associated Retaining Walls. The existing concrete mid-bluff walkway, which is approximately 4-5 feet in width, would be replaced with a new 10-foot-wide concrete walkway/ramp to provide park users access to the proposed beach improvements as well as access for maintenance equipment for the beach. The slope of the ramp would be 7.9% or less to provide access for persons with disabilities.

Retaining walls are proposed to construct the proposed ramp. Towards the northern portion of the walkway/ramp, a retaining wall, 105 feet in length, would be located on the east of the access ramp until it intercepts with the proposed access stairs down to the proposed boardwalk. This portion of the retaining wall varies in height from 0.75 feet to 3.74 feet. Approximately 12.5 feet south of the proposed access stairs, the retaining wall transitions to the west side of the ramp, and it varies in height from 1.5 feet to 7.97 feet. The west retaining wall is approximately 175 feet in length; 30 feet of which is between 6.5 feet and 7.97 feet in height, the remaining 145 feet of the wall would be 1.5 feet to 6.4 feet in height. The approximate south 40 feet of the west retaining wall would be located within the required front yard, and it does not exceed 6.5 feet in height.

- d. Access Stairs (Bluff Staircase). Elevated wooden stairs, 5 feet in width, are proposed to provide a connection from the ramp described above to the proposed boardwalk below. The staircase would sit above the bluff on nine (9) helical piers. Traditional wood frame construction is proposed with Ipe wood decking and horizontal black metal railings.
- e. Steel Sheet Pile Replacement. At the northeast corner of the site, combined wooden timbers, steel I-beams, and steel sheet piling currently support a section of the bluff (see Figure 15 below). Due to the age and materials of this structure, the Applicant proposes to replace it with new steel sheet piling in front of the existing timber wall. The proposed steel sheet piling wall would be approximately 52 feet in length and approximately 8 feet in height from the current sand level, but 6.5 feet from the proposed sand (beach) elevation. This proposed sheet pile wall is located in the required front yard, and as discussed later in the report would require approval of a zoning variation. The proposed replacement steel sheeting will connect to the existing steel sheeting on the adjacent property to the north, just as the existing steel sheeting does today.



Figure 15 - Existing Wooden Timbers, Steel I-Beams, and Steel Sheet Piling to be Replaced

- f. Bluff Clearing and Restoration. The Applicant's plans for the site also include extensive clearing of invasive species as well as dead and dying trees. As described by the Applicant in the attached written explanation, an estimated 1.34 acres of invasive and noxious species control is proposed to be completed on the bluff. The Applicant's plan outlines four different restoration zones and strategic planting plans. The four zones include the: (i) bluff restoration zone (23,800 square feet); (ii) green gabion wall zone (3,200 square feet); (iii) dune grass planting zone (800 square feet); and (iv) turf restoration zone (32,162 square feet). The plan calls for the removal of 32 trees, four (4) of which are dead. To replace the trees being removed from the bluff, the Applicant states that it will plant nearly 30 caliper inches of trees on the site, and the remaining replacement caliper inches at other parks.

The Village Forester has reviewed preliminary landscape plans submitted by the Applicant. Most of the trees to be removed are located along the bluff, an area with a steep slope and otherwise challenging growing conditions for large-growing shade trees. Many of these trees are thus crowded and have not had space or other resources necessary to reach their potential mature size. Therefore, the canopy of these trees can be replaced by planting a less than one-to-one ratio if the trees are planted in locations with suitable growing conditions.

The Village will require the planting of at least 12 large-growing shade trades in Centennial Park. Upon maturity these trees should replace the canopy lost through tree removal. Trees not replaced with large-growing shade tree plantings as required may be planted as other shade trees, ornamentals or evergreens. It is preferred that these trees be planted in Centennial Park unless doing so would not be possible under good forestry practices. Any inches that cannot be planted in Centennial Park will need to be planted in another park in the Village. The species indicated in the landscape plan are suitable for the site. The number of trees to be planted should be increased to meet replanting requirements. The final landscape plan will be reviewed and approved by the Village Forester when the building permit plans are submitted for permit review.

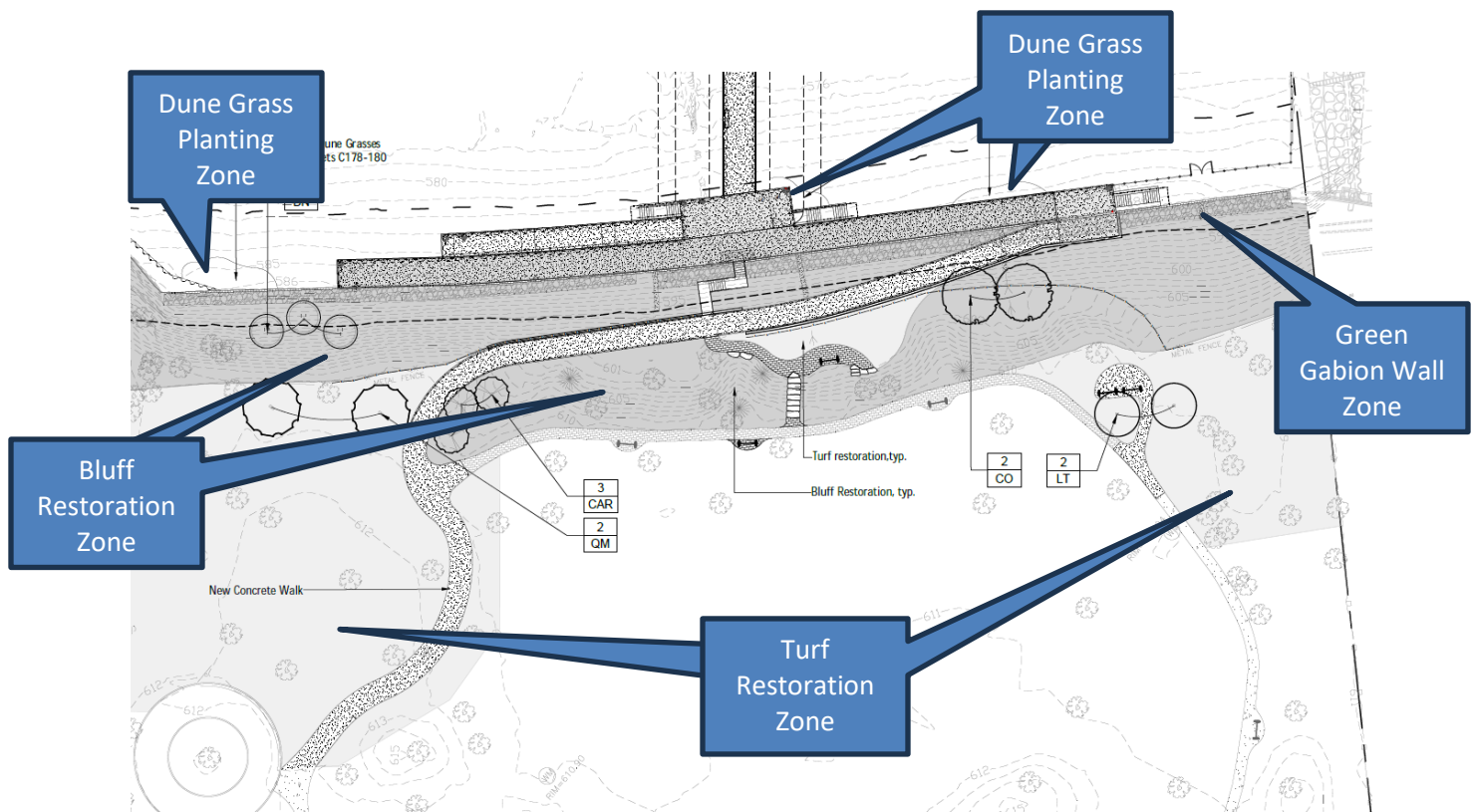


Figure 16 - Proposed Landscape Plan (Sheet C145)

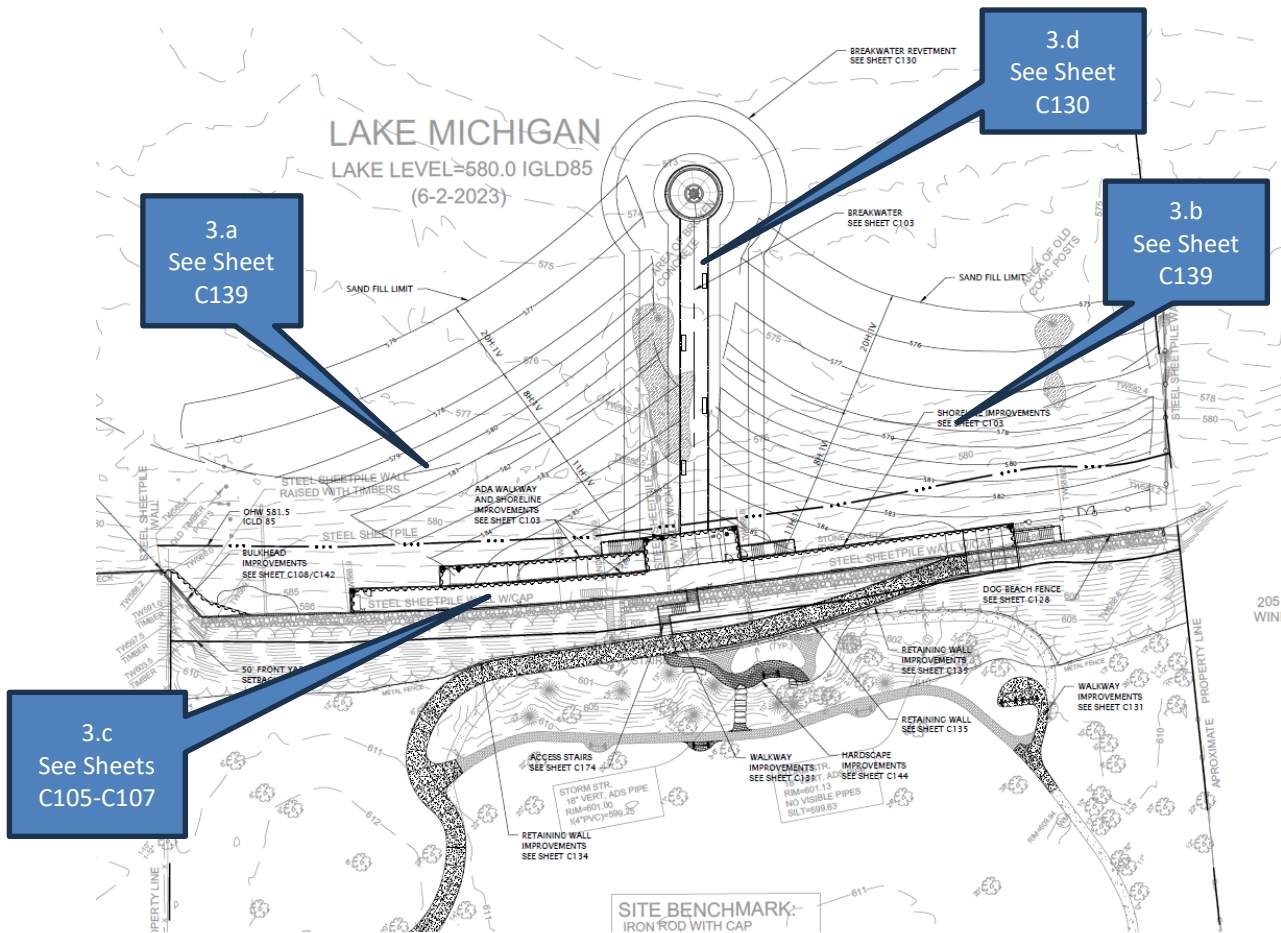


Figure 17 - Excerpt of General Site Development Plan (Sheet C101)

3. Lakefront (beach & within lake)

- a. Swimming Beach. A swimming beach is proposed on the north 250 feet of the site. It would operate under the same rules as the other Park District swimming beaches, with staff on site from late May until early September. The beach would be closed for swimming during the off-season but still open for beachgoers. At this time, the Applicant does not intend for the beach to be used for sailing, kayaking, paddleboarding, or other activities involving a boat or watercraft.
- b. Off-Leash Dog Beach. The Applicant has stated that it has operated a dog beach at Centennial Park since 1995. The existing dog beach would be reduced in size to accommodate the proposed swimming beach. The proposed 240-foot dog beach would have controlled access with a key fob system that would restrict access to registered users. The dog beach would be bordered by a 5-foot-tall black fence on the west and south boundaries of the specified area. The northern boundary of the dog beach would be the proposed pier and 3.5-foot-tall black handrail. On the southern portion of the site there is an existing steel groin that is perpendicular to the existing steel sheet piling (seawall identified in Figure 11) at the toe of the bluff. The steel groin extends approximately 145 feet easterly into the lake. Approximately 65 feet east of the seawall the steel groin is beyond the ordinary high water mark (OHWM). The southern portion of the proposed fencing enclosing the dog beach would be installed on top of the existing steel groin and extend into the lake approximately 103 feet. Approximately 26 feet of

the dog beach fence is within the required front yard but does not exceed 6.5 feet in height. The dog beach fence is off-set approximately 12.5 feet from the existing north/south seawall to maintain public access along the beach without having to walk through the dog beach. The dog beach would be accessed from 6-foot-wide concrete stairs off the proposed boardwalk within a secured entrance area. The existing dog beach is open year round and this would continue with the proposed improvements.

- c. Boardwalk. The proposed 12-12.5-foot-wide concrete boardwalk would connect to the existing seawall and is intended to not only provide a beach amenity but also maintain existing shore protection. The boardwalk would be elevated between 3 and 5.5 feet above the existing ground level, with a fence 3.5 feet in height on top. With the proposed sand nourishment, the boardwalk would be 1.5 to 4 feet above the beach.

The concrete would be tinted with a color additive used in other concrete on the site and it would be stamped with a wood decking pattern to give the boardwalk the appearance of natural wood. The goal is to achieve a weathered Ipe wood aesthetic to match the bluff staircase described earlier. The boardwalk would be 349 feet in length with integrated backed Ipe wooden benches mounted to the bulkhead along the western edge. Four low level LED bollard light fixtures are proposed for the boardwalk. Low-intensity lighting is also proposed along the walkway, or ramp, down to the boardwalk, and the dog beach area.

East of the proposed boardwalk would be a beach access ramp to the swimming beach. The concrete ramp would be 10-feet-wide and provide ADA access to the beach as well as access for maintenance equipment.

Three staircases are proposed from the boardwalk to access the different elements of the beach. The northernmost staircase would be east of the beach access ramp to provide access to the swimming beach. A second staircase would be from the fenced dog beach entry area down to the dog beach. The third staircase would be on the southernmost end of the boardwalk to provide access to properties south of the Subject Property for those walking the shoreline. The entire boardwalk and fencing on top of the boardwalk would be located within the required front yard, and as discussed later in the report would require approval of a zoning variation.

- d. Pier. According to the Applicant, a pier is proposed to serve several purposes, the primary purpose is to substantially delineate the swimming beach from the dog beach to the north and south respectively. The pier is also intended to provide additional shore protection and help hold sand for the beaches. Lastly, the pier would provide additional recreational use of the lake. The proposed pier would replace an existing sheet pile groin that currently splits the Centennial Beach. It would extend 192.5 feet from the boardwalk to the farthest end of the structure. The pier would be surrounded by 33.5 feet of stone, consisting of a bedding stone layer, armor stone, and elevated armor stone 3.5 feet above the ordinary high water mark (581.5). The elevated armor stone would be at the same height as the pier and extends 6 feet out from the pier, and then tapers down into the lake. The pier starts at 6 feet above grade and tapers down to the east by 2.5 feet, ending at an elevation of 585. A small portion of the proposed pier and the fencing on top of the pier would be located within the required front yard and would require approval of a variation.

The south side of the pier would have modular fence panels designed to provide a secure boundary for the dog beach. The proposed 3.5-foot-tall fence would consist of galvanized steel and powder coated black with horizontal rails. The east end of the pier would have six (6) concrete benches centered around a decorative 8-foot bronze compass rose inset on the flat surface of the pier.

The linear portion of the pier would also have four (4) 8-foot-long benches, equally spaced on both sides of the pier.

With the proposed design of the improvements along the lakefront, the Applicant is proposing that the public would be allowed access along the lakefront as illustrated in the following images.

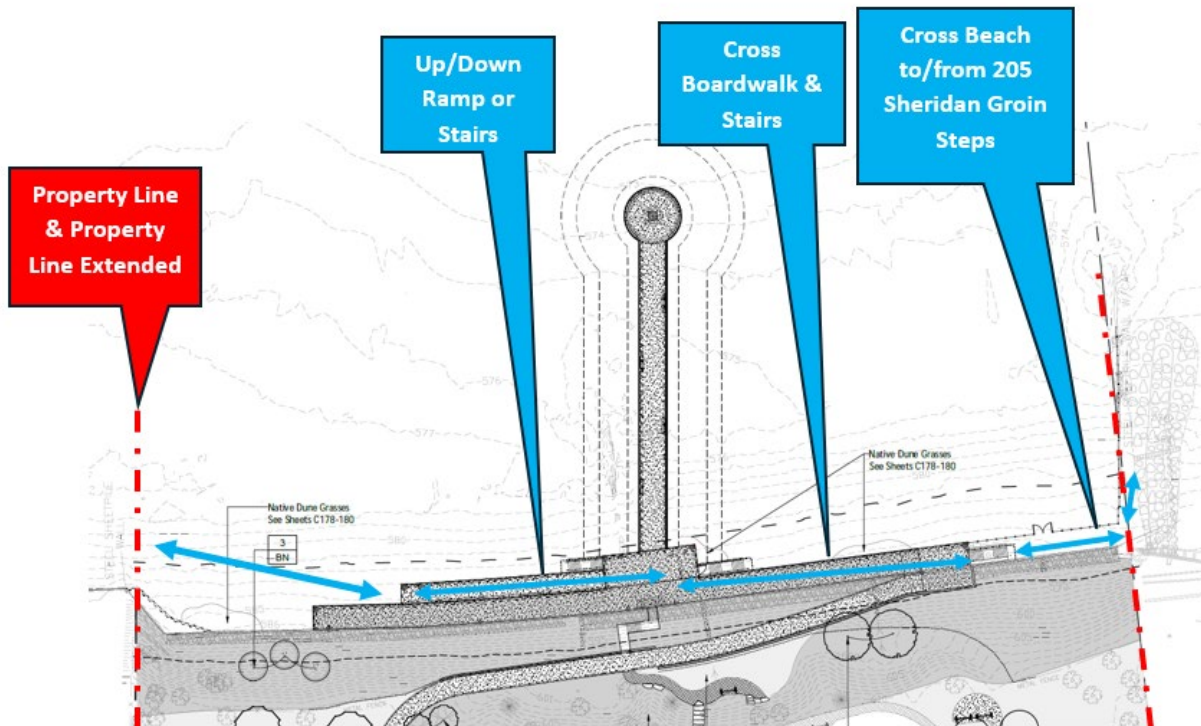


Figure 18 - Proposed Public Access Across Centennial Beach

As proposed, to walk along the beach from the north end to the south end of the Subject Property, or vice versa, a member of the public would need to use the proposed boardwalk and its ramp or stairs given the fencing around the dog park. Also, along the south property line, a member of the public would need to walk between the existing steel groin on which the dog fence would be placed, and the new stone groin associated with the 205 Sheridan Road property. The Applicant has stated that this portion of the path at its narrowest point will be 6 feet wide, which the Fire Department has indicated would be adequate. This path also runs along the Subject Property and the 205 Sheridan property, and we anticipate at the October 14 meeting, the Park District will provide additional details regarding how the public can legally access this area.

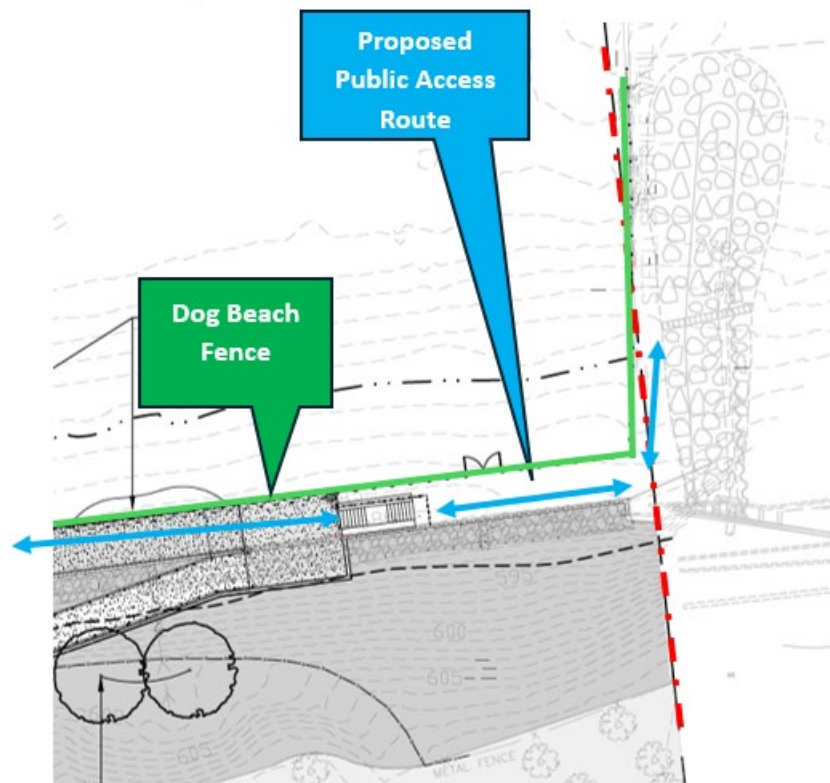


Figure 19 - Closeup of Proposed Public Access Across Centennial Beach Near South Property Line

Given the ZBA often receives questions regarding the stormwater regulations applicable to a specific request being considered by the ZBA, as previously noted, the Village Director of Engineering has reviewed preliminary engineering plans submitted by the Applicant. Based on these preliminary engineering plans and discussions between the Village Director of Engineering and the Applicant's engineering team, the Village Director of Engineering is confident that the preliminary plans for addressing stormwater on the site will be approved for the proposed improvements.

REQUESTED ZONING RELIEF

In addition to the special use permit request, the Applicant also requests approval of the following zoning variations and exceptions.

Zoning Variations

- Fence and wall height within required setbacks. With the recent adoption of the steep slope regulations, the Village also amended the Zoning Ordinance to redefine the front line along the

lake as well as the front yard setback along the lake. The front lot line is now the ordinary high water mark and is defined as the line on the shore of Lake Michigan consistent with the U.S. Army Corps of Engineers' administrative benchmark, which is currently set at 581.5'. The front yard setback along the lake is now defined as the toe of the bluff or 50 feet from the ordinary high water mark, whichever results in the line farthest from the ordinary high water mark.

The Zoning Ordinance currently allows fences, walls, or a combination of a fence and wall within a required yard that is no taller than 6.5 feet from natural grade. The following proposed elements exceed this maximum permitted height.

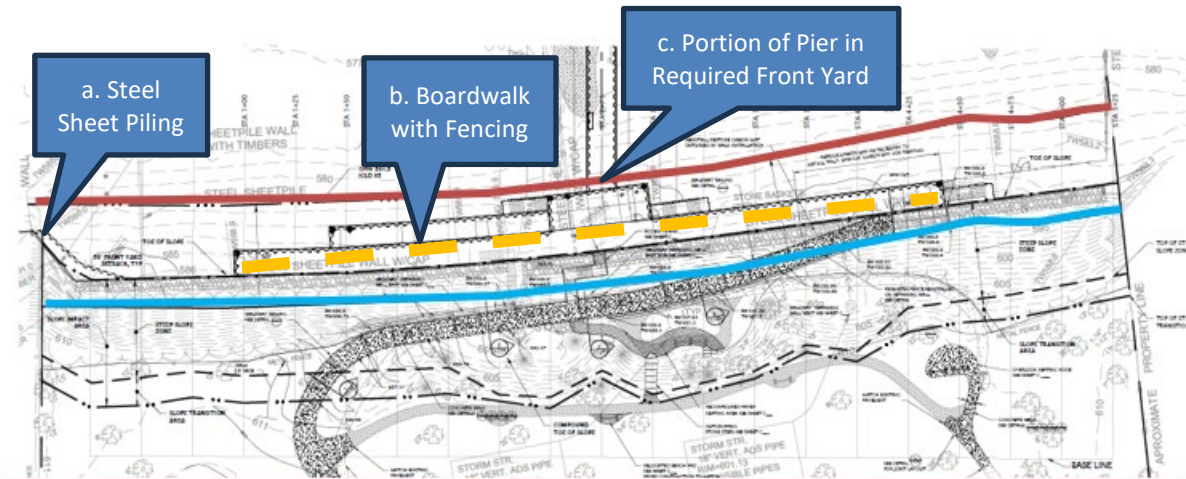


Figure 20- Proposed Elements in Required Front Yard

- a. Steel sheet piling wall at northeast corner of Subject Property would be 8 feet above the natural grade, requiring a variation of 1.5 feet (23.08%);
- b. Boardwalk with fencing. The height of the northern 120 feet of the boardwalk and the fencing on top of the boardwalk would be 8.5 feet above the natural grade. The center section (approximately 50 feet) of the boardwalk fencing has two sections that flare out to the proposed pier and range in overall height (boardwalk + fence) from 9.32 feet to 10.5 feet. The southern 95 feet of the boardwalk would have fencing that would be 8 feet in height at its tallest point. Therefore, at a maximum proposed height of 10.5 feet, the boardwalk fencing requires a variation of 4 feet (61.36%);
- c. Pier. That portion of the fencing on top of the pier that runs along the south side of the pier and is in required front yard would be 9.5 feet above natural grade, requiring a variation of 3 feet (46.15%). The length of this portion of the pier is 6 feet as it projects from the proposed boardwalk.

Steep Slope Zoning Exceptions

As previously stated, the steep slope regulations allow certain uses and structures within the steep slope zone. The proposed improvements require exceptions from the following two permitted structures – stairs and retaining walls.

To traverse from the top of the bluff to the toe of the bluff, the steep slope regulations allow stairs with the following limitations:

Stairs can be no greater than five feet in width. Stair landings can be no larger than 50 square feet. Stair landings for the purpose of this Chapter are defined as an intermediate platform on a flight of stairs, greater than 10 square feet, constructed for the purpose of allowing a change in stair direction down the steep slope zone or to break up ten or more stair steps.

The steep slope regulations also allow retaining walls subject to the following standards:

Retaining walls and other structures that are necessary for slope stabilization if constructed in a manner approved by the Director and in accordance with the following standards:

- (1) *Retaining walls cannot be used to increase table land;*
- (2) *Retaining walls cannot be used to create a shelf or other table area within the steep slope zone, unless it is necessary for slope stabilization; and*
- (3) *Backfilling of a retaining wall is not permitted, unless it is necessary for slope stabilization.*

The Applicant is requesting exceptions to these standards for the following proposed elements.

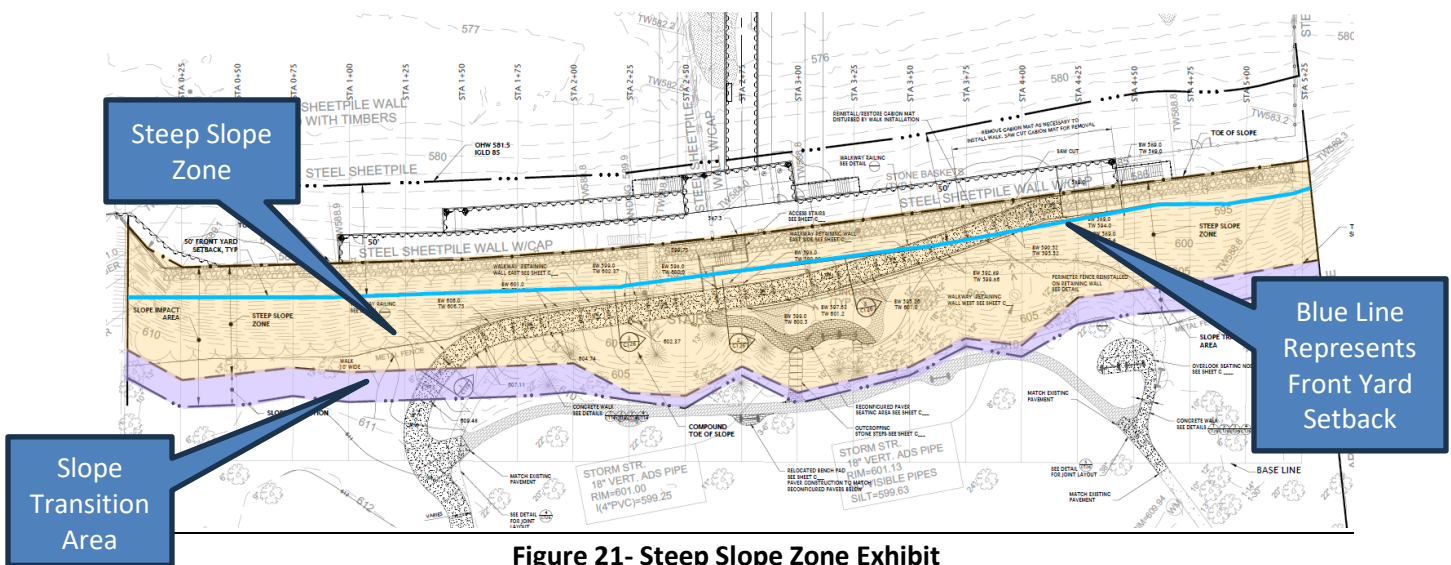


Figure 21- Steep Slope Zone Exhibit

- Concrete ADA Access Ramp and Associated Retaining Walls. The steep slope regulations allow stairs no wider than 5-feet in width within the steep slope zone. The Applicant proposes a 10-foot-wide walkway to serve as a ramp for persons with disabilities and to provide access for equipment to the beach. The proposed 10-foot-wide ramp, or walkway, exceeds the maximum permitted width of 5 feet. Retaining walls, on either side of the ramp, are necessary to construct the ramp, and therefore also require an exception from the steep slope regulations.
- Outcropping Stone Stairs. The proposed 6-foot width of the outcropping stone steps exceeds the permitted width of 5 feet. These are stairs down from the existing walkway on the tableland to the reconfigured mid-bluff seating area.
- Reconfigured mid-bluff paver walkway and seating area. This proposed element would extend beyond the footprint of the existing mid-bluff seating area and exceed the permitted width of 5 feet.

CONSIDERATION BY OTHER ADVISORY BOARDS/COMMISSIONS

The proposed improvements also require review by the Design Review and the Plan Commission. Their review will occur after the Zoning Board of Appeals' review is complete.

STAFF & CONSULTANT REVIEW

The Police Department recommends the installation of security cameras for the Centennial Park and Beach areas. These improvements are likely to draw large volumes of visitors and guests to enjoy the lakefront. The presence of security cameras not only provides safety for the patrons visiting this location, but also is a highly visible deterrent of potential crimes. Over the last several years, the safety and security of some of the Winnetka beaches and parks have been monitored by the presence of security cameras. These cameras have assisted law enforcement in several areas related to safety, security, and follow-up investigations; most notably with a recent drowning. Through security camera footage, public safety was able to identify how many people accessed the property and how many may have succumbed to the rough waters.

Various types of security camera systems are available ranging from those that require a hardwire connection between the security cameras and nearby data storage equipment to others that wirelessly transmit data from the cameras to the storage equipment located some distance from the site, such as the security camera equipment the Village uses in our commercial districts. The security camera system should provide adequate coverage of the property, function properly during day and nighttime hours (low or minimal light), and footage saved should be easily accessible to park district staff for efficient and timely collaboration with public safety when an incident needs further investigation or follow-up.

Given the design of the proposed breakwater/pier elevation will allow wave action over the top, the Applicant has stated that they will have interchangeable signage as they have for other swimming beaches that will inform the public of the lake conditions. These signs will be monitored and changed as needed throughout the season. In addition to the signage, they anticipate installing type 2 barricades at the western pier entrance as necessary to prevent the use of the pier during the high lake conditions where there could be an opportunity for waves to top the pier. The Director of Engineering recommends the installation of a more robust permanent solution to ensure public safety at all times. As weather events can change very quickly, the installation of temporary safety measures can leave opportunities for avoidable accidents to occur and heavy weather events can disturb temporary type 2 barricades.

The Applicant has not incorporated these two recommendations, the installation of security cameras or the installation of a more permanent system to note when the pier is closed due to poor weather conditions, into their proposal, and we anticipate that they will address their reasons at the ZBA meeting.

FINDINGS

The ZBA is charged with evaluating Special Uses and associated steep slope exceptions for consistency with the six standards for granting special use permits, as well as evaluating Variations for consistency with the eight standards for granting of zoning variations. In the attached application materials submitted by the Applicant, the Applicant has provided a statement of justification regarding how the requested Special Use Permit and variations meet the standards for granting the requested Special Use Permit and zoning variations.

After hearing from the Applicant and the public, the Board may decide to act on one of two options:

- 1) Continue the public hearing to a specific date to provide the Applicant and/or staff with additional time to address questions and comments from the Commission.
- 2) Consider a motion recommending approval or denial of the Special Use, Exceptions and Variation. If the ZBA is prepared to make a recommendation to the Village Council regarding the requested relief, a ZBA member may wish to make a motion recommending approval or recommending denial based upon the following:

Move to recommend **approval [denial]** of

- A. A **Special Use Permit** to allow construction of improvements to the existing park and beach on the Subject Property, which is located in the R-2 Single-Family Residential Zoning District;
- B. The following **zoning variations**
 - a. **Fence and Wall Height** of 10.5 feet, whereas a maximum of 6.5 feet above natural grade is permitted, a variation of 4 feet (61.54%) variation [Section 17.30.130 Obstructions in Required Yards or Courts]; and
- C. The follow **steep slope zoning exceptions** [Section 17.82.040 Development in the Steep Slope Zone]:
 - a. Concrete access ramp 10 feet in width and associated retaining walls to support the ramp;
 - b. Outcropping stone steps that exceed 5 feet in width; and
 - c. Reconfigured mid-bluff paver walkway and seating area that extends beyond the footprint of the existing walkway and seating area and exceeds 5 feet in width.

based on evidence in the record, or a public document, and upon the following findings of fact:

1. The proposed improvements **are consistent [are not consistent]** with the Standards for the granting of Special Use Permits and associated exceptions, as follows:
 - a. That the establishment, maintenance and operation of the special use and associated exceptions will not be detrimental to or endanger the public health, safety, comfort, morals or general welfare;
 - b. That the special use and the associated exceptions will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the district or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;
 - c. That the establishment of the special use and associated exceptions will not impede the normal and orderly development or improvement of other property in the immediate vicinity for uses permitted by right in the district or districts of concern;
 - d. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimizes pedestrian and vehicular traffic congestion in the public ways;
 - e. That adequate parking, utilities, access roads, drainage and other facilities necessary to the operation of the special use exist or are to be provided; and

- f. That the special use and associated exceptions in all other respects conforms to the applicable regulations of this and other Village ordinances and codes.
2. The requested zoning variations are **in harmony [not in harmony]** with the general purpose and intent of the Zoning Ordinance and that each of the following eight standards on which evidence is required pursuant to Section 17.60.050 of this Code **have been met [have not been met]**:
 1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by regulations in that zone.
 2. The plight of the owner is due to unique circumstances. Such circumstances must be associated with the characteristics of the property in question, rather than being related to the occupants.
 3. The variation, if granted, will not alter the essential character of the locality.
 4. An adequate supply of light and air to the adjacent property will not be impaired.
 5. The hazard from fire and other damages to the property will not be increased.
 6. The taxable value of the land and buildings throughout the Village will not diminish.
 7. The congestion in the public street will not increase.
 8. The public health, safety, comfort, morals, and welfare of the inhabitants of the Village will not otherwise be impaired.

[The special use and the requested variations and exceptions should only be approved subject to the following two conditions and any other conditions that the ZBA may approve.]

1. **The Applicant shall incorporate security cameras into areas of the park and beach in a manner approved by the Police Chief.**
2. **The Applicant shall install a more robust permanent method to notify the public for when the pier is closed due to high wave action in a manner approved by the Director of Engineering.**
3. **Other conditions.]**

ATTACHMENTS

Attachment A: Application Materials

Attachment B: Staff Report Regarding Village's Role in the Centennial Park & Beach Zoning Relief Application

Attachment C: Public Correspondence

ATTACHMENT A



August 5, 2024

David Schoon
Director of Community Development
Village of Winnetka
510 Green Bay Road
Winnetka, Illinois 60093

Dear Mr. Schoon,

On behalf of the Winnetka Park District, I would like to thank you, the rest of the Village staff, and additional consultants for all your time and effort in refining our submittal application for the Special Use Permit for the project implementation for Centennial Beach, Bluff, and Park improvements.

As you know, the Winnetka Park District seeks approval of this Special Use Permit to continue reinvesting in long-term sustainable recreation and open space infrastructure, as identified in its approved and previously executed Lakefront Master Plan, Winnetka Waterfront 2030.

The Centennial beach, bluff, and park improvements will not only enhance and support the continued successful operation of community-desired amenities such as the controlled off-leash dog beach and recreational swimming beach, but also foster a sense of pride and connection within the community.

Primary shoreline and bluff stabilization infrastructure seeks to provide a long-term, meaningful strategy to lessen beach and bluff erosion, create and stabilize the beach environment, and meet state and regional lakefront stabilization goals. Additionally, through a carefully crafted ramp and boardwalk system, the district looks to provide meaningful and continuous ADA access to beachfront users of all ages and abilities.

The Winnetka Park District's Mission is to provide a balance of quality recreation and leisure opportunities while protecting assets, natural resources, and open space to benefit present and future generations. As a District, we believe the plan outlined in this application meets all the required Special Use Standards and Lakefront and Bluff ordinances that have been put in place to protect one of Winnetka's greatest community assets, its beautiful Lake Michigan Shoreline.

We have reviewed all the comments and questions from the various department heads and put together what we feel is a very thoughtful project that considers the founding pillars of the Waterfront 2030 Plan while balancing the community information we received throughout our engagement in this project.



Completing the Centennial Beach, Bluff, and Park improvements will allow the Park District to complete another lakefront park and move one-step closer to implementing the Winnetka Waterfront 2030 Plan.

We look forward to presenting our plan to the Village's governing boards in the next couple of months.

Sincerely,



Shannon Q. Nazzal, CPRE

Executive Director

Winnetka Park District

Winnetka Park District - Special Use Permit Application Narrative for Centennial Park and Beach Project

Introduction

The Winnetka Park District (the "District") is seeking a Special Use Permit, exceptions from the Steep Slope Regulations and related Variances to allow the construction, maintenance and operation of proposed improvements at Centennial Park and Beach as outlined in the plans. The District proposes the improvement project for Centennial Park and Beach to implement the Winnetka Waterfront 2030 Master Plan with goals to protect and improve access and safety for the community.

Relief Requested

1. Under the Winnetka Zoning Ordinance, a “nonessential public use” includes a use affected with the public interest, regardless of ownership, including uses owned and operated by local governments other than the Village. Section 17.56.020 of the Winnetka Zoning Ordinance establishes nonessential public uses as special uses in all districts within the Village. Consequently, the Park District is seeking a Special Use Permit to ratify and expand the public recreational use of Centennial Park and Beach within the R-2 single-family residential district.
2. The project outlined in the plans meets some of the requirements outlined in the recently enacted Steep Slope Regulations, codified at Chapter 17.82 of the Winnetka Zoning Ordinance. As permitted by Section 17.82.110, the submitted Special Use Permit application also asks for “exceptions” from Chapter 17.82 for items included in the plan that protect the beach, bluff, and tableland for the Centennial Park and Beach site.
3. Section 17.30.050.C.7 of the Winnetka Zoning Ordinance establishes the front yard setbacks for lakefront properties. The regulation states the required front yard setback is the toe of the bluff or 50 feet from the ordinary high-water mark, whichever results in the line farthest from the ordinary high-water mark. The District’s proposed plans include improvements which do not otherwise qualify as permitted obstructions in required yards, as defined by Section 17.130.130.A. For those improvements we are requesting variances to permit construction as presented in the plans.

Background

The redevelopment planning of Centennial Park and Beach began in 2014 with the District’s Winnetka Waterfront 2030 Master Planning process. When the Winnetka Waterfront 2030 Plan was adopted in 2016, it set the stage for the District's investment in the lakefront. The initiatives and founding pillars of that plan, along with the near-all-time high lake levels from 2020, have made this project a priority for the District. The Winnetka Park Board has been invested in this

project for several years and they have not wavered from the responsibility to repair the beach and protect the beach and bluff for future generations to come. This narrative supports the District's application by demonstrating that the proposed Centennial Park and Beach project meets the standards for granting a Special Use Permit and the related variances. Additionally, the narrative addresses comments from the Special Use Permit review process, outlines access and operational details, and provides a clear overview of the project's components and intended use. The District is excited for the opportunity to meet with each one of the different review boards and commissions, not only to present the project but also to tell the story of why this is a wonderful opportunity to allow the District to reinvest in one of the greatest and most unique amenities that Winnetka has to offer its residents.

In Section 17.56.120 of the Winnetka Zoning Ordinance, the Special Use Permit process outlines six standards that must be met and reviewed by each review board and commission as a condition of granting a Special Use Permit. This narrative shows that the District is proposing a project that clearly and unequivocally meets those standards and has been well-vetted with public input and feedback from the community every step of the way.

In Section 17.60.040 and 17.60.050 of the Winnetka Zoning Ordinance it describes the evidence to be presented in support of a variance application and the standards for granting such relief. This narrative summarizes the facts in support of the District's application to construct improvements within the front yard of Centennial Park and Beach facing Lake Michigan, as defined by Section 17.30.060 of the Winnetka Zoning Ordinance. The District's application shows it clearly satisfies all the evidentiary standards.

Project Summary

The Centennial Park and Beach project (the "Project"), is designed with a clear purpose to protect the bluff and tableland from erosion due to high lake levels and waves, improve site access and accessibility, create greater lake access for all community members and secure the off-leash dog beach. The District is proposing to restore and improve a public beach that can be used for both swimming and recreational uses, while maintaining an off-leash dog beach, and investing to secure the dog beach with fencing on three sides.

The Project was designed while considering many factors, including (1) the former use of Centennial Beach as a swimming beach, (2) the historical use of Centennial Beach as a dog park for the past 30 years, (3) the existing uses of nearby properties, (4) protecting and enhancing neighborhood property values, (5) promoting the public's health, safety and welfare, (6) the suitability of the property for the proposed uses and improvements, (7) the amount of time the beach has been closed due to shore erosion, and (8) the community's expressed desire for the proposed use. The Project also considers accessibility, newly adopted Village of Winnetka ordinances, County, State, and Federal laws and regulations, ongoing and future maintenance needs, community input and low impact to the community.

The Project which is proposed for Centennial Park and Beach includes a range of elements, such as:

- Swimming Beach;
- Off-leash dog beach with fencing and double entry gate system and stairs;
- Bluff clearing and restoration;
- Steel sheet pile replacement;
- New steel sheet pile bulkhead;
- Accessible boardwalk;
- Accessible pier with armor stone groin surrounding the pier;
- ADA beach ramp;
- Beach stairs (2), Low level safety bollard lighting;
- Boardwalk access staircase;
- Concrete ADA accessible walkway retaining walls;
- Reconfigured paver walkway; and
- Outcropping stone steps.

These elements are divided into two sections for zoning review: Chapter 17.30, Section 17.30.050 Front and Corner Yard Setbacks, and Chapter 17.82, Section 17.82.040 Development in Steep Slope Zone. The variations and exceptions being requested are outlined in the narrative and the chart titled "Proposed Project Elements" and can be viewed in the final plans submitted with the Special Use Permit application.

Project Elements

Human Swimming Beach (Reintroduction): Centennial Beach was once a swimming beach for the community before the development of the dog beach in 1995. The proposed human swimming beach will operate to the same standards as our other swimming beaches, such as Tower Road Beach or Maple Street Beach. The proposed swimming beach is 250 feet in length.

The sand elevations, compared to the new proposed pier, start 18" below the western most elevation of the pier. Moving east, the sand profile gradually drops to the water level.

The anticipated use for the human swimming beach includes swimming, sunbathing, passive recreation activities, sandcastle building, and other activities you would expect on a public beach. Currently, there is no proposed sailing, kayaking, paddle boarding, or other activities that include using a boat or watercraft of any kind.

Below is a list of the current beach rules we anticipate enforcing at Centennial Swimming Beach.

Swimming Beach Rules: The following regulations will be implemented by the Winnetka Park District staff during hours of operations to ensure that all beach users will be able to use, understand and will follow all rules when they are at the beaches.

1. Hours of Operation are 9am to dusk.
2. When lifeguards are not present, swimming is not allowed.
3. Swimming is allowed only in the supervised swimming areas as posted at each beach.
4. Parents and guardians are responsible for the supervision of children.
5. Children 9 and under must be accompanied by an adult.
6. Coast Guard approved life jackets are allowed when the child is within arm's reach of their parent. All other floatation devices are not allowed.
7. No scuba or snorkeling equipment is allowed.
8. Children who are not toilet trained must wear tight fitting plastic pants or swim diapers.
9. Beach facilities will be closed whenever water is considered unsafe by Health Department or lifeguards.
10. There is no roughhousing or horseplay allowed. Lifeguards will enforce this rule to ensure the safety of others.
11. No skateboards, bicycles, roller skates, or similar items allowed at beach.
12. No throwing rocks or sand in the swimming areas.
13. No jumping off piers.
14. No fires, including grills, are allowed on the beach.
15. Glass containers are not allowed on the beach.
16. No alcohol is allowed on the beach.
17. Smoking is prohibited at all Winnetka Park District facilities.
18. Dogs are only allowed at Centennial Dog Beach. Village Ordinance #504 will be enforced.
19. Motorized vessels are only allowed at Lloyd Boat Launch.
20. Non-motorized vessels are only allowed at Lloyd Boat Launch.
21. The Village of Winnetka Police Department maintains a regular patrol of the beach and enforces all Park District ordinances.
22. All other state and local health codes apply.

We anticipate operating the Centennial Swimming Beach from May 25 to September 2 (estimated) from year to year, and the beach would be staffed with personnel during the hours of operations for those dates. The beach would be closed off season (prior to May 25, and after September 3) for swimming but still open for beach goers to enjoy the beach.

There is no zoning relief needed for the swimming beach, this was to provide perspective on operations.

Off-Leash Dog Beach: The proposed off-leash dog beach is an existing on-leash element at Centennial Beach today and will remain per the project plans. The District has operated the dog beach since 1995, allowing controlled access to a single type of activity. The proposed off-leash dog beach will be reduced in size to allow for the re-introduction of the human swimming beach. The proposed 240' dog beach will be controlled with a double entry gate system and electronic key fob system, which will allow access for the registered users. The dog beach will be surrounded on the west and south boundaries by 5' black fencing on the beach. The northern boundary of the off-leash dog beach will be the pier structure and have a 42" black handrail (Type A) providing the required security. The eastern side of the dog beach will be the natural barrier of Lake Michigan.

On the southern end of the site and dog beach perimeter there is an existing steel groin running perpendicular to the existing steel sheet piling (seawall) at the toe of the bluff. The steel groin runs approximately 145-feet east into the lake, with a western elevation of 583.2' and an eastern elevation of 581.70'. Roughly 65 feet off the seawall, the existing steel groin crosses the south property line of Centennial Park. At this point, the steel groin is beyond the ordinary high water mark of 581.5'. The portion of fencing on the south perimeter of the dog beach will be installed on top of the existing steel groin going east into the lake approximately 103 feet. The 5-foot height fence may step down to maintain a maximum overall height of 6.5-feet off the adjacent proposed sand contours. The proposed fencing can be seen on sheet C161 of the construction plans.

Approximately 12.5-feet offset from the existing seawall along the toe of the bluff, the 5-foot height dog beach perimeter fencing continues north-south along the west edge of the dog beach area. This offset allows the public to cross Centennial Beach without walking through an active off-leash dog beach. A 10-foot-wide maintenance access gate is situated along this fence line, allowing access for beach maintenance equipment. This gate will be secured and operated as needed by maintenance personnel only.

The 42-inch-high (Type A) handrail will double as a fence on the pier and boardwalk to further secure the off-leash dog beach. In addition, a line of armor stone creates a border along the south of the pier, helping further separate the pier and the off-leash dog beach. The fencing is mounted to the pier and boardwalk at a consistent height of 42-inches. When viewing the fence line from the dog beach side, there will be a visual incline due to the sand contouring. The proposed grading for the dog beach sand fill is as follows: The westernmost sand elevation is set at 585.0', sloping at 11:1 to 583.0'. The slope then increases at 8:1 to an elevation of 578.0', then flattens again to a slope of 20:1 to elevation 575.0'.

To access the off-leash dog beach, there is a single concrete access stair of the boardwalk within the secure entrance area. The stairs are designed to be constructed with concrete within a steel sheet pile cell to support the harsh lake environment. The stairs have a 6-foot-wide clearance

with handrails on both sides. The stairs are designed with accessibility in mind, using acceptable materials with the proper rise and run for the treads and appropriate returns on the handrails. The bottom of the stairs are set to an elevation of 579.33' to allow for the fluctuating sand levels. The handrails are 1.5-inch brushed stainless steel round tubing set at 42-inch height. The detailed design can be viewed on Sheet C159.

The dog beach is operated year-round (excluding high wave events) from sunrise to sunset for the community's enjoyment.

To receive a dog beach pass, each applicant must complete a Dog Beach Pass Application which includes: owner information, pet information, vaccine certificate with vet signature, insurance acknowledgement (waivers, rules, warning of risk, release of all claims, indemnification agreement, assumption of risk, and policies). All applicants must adhere to dog beach rules anticipated below, though they may be changed by the Park Board.

Anticipated Off-leash Dog Beach Rules:

1. Leashed Area: Park + Parking Lot + walkways and boardwalk.
2. Only unleashed area is area inside the dog beach gate and dog beach itself.
3. You are solely responsible for the actions of your dog.
4. Leashes must not exceed 8 feet.
5. You must bring your electronic key fob each visit.
6. Attendants are not allowed to let anyone through the gate without a fob.
7. Keep an eye on your dog and keep your dog's leash with you at all times.
8. For safety reasons children must be at least 10 years of age to use the park and they must be closely supervised.
9. Children will be expected to behave in an appropriate manner: no running, no chasing dogs, no petting of other dogs unless permission is granted from the owner first.
10. Be polite: pick up dog feces and dispose of the dog feces in the waste receptacles, which are available throughout the park.
11. Dogs must wear current license tag and be up-to-date on shots.
12. Fill any holes your dog digs.
13. No more than 2 dogs per person on any one visit.
14. Check with your veterinarian before bringing a puppy under the age of four months to the park.
15. No dogs known to be aggressive toward other dogs or people may enter the area.
16. Owners/handlers are asked to closely supervise their dogs and at no time should anyone leave the area without his/her dog(s).
17. Do not bring rawhide or food into the dog area as dogfights may result.
18. Please remove pinch and spike collars from your dog prior to entering the beach.

19. Hours are sunrise to sunset.

The District has also reached out to Cook County Department for Animal Control for guidelines on how best to address the eastern barrier of the off-leash dog beach. It has been suggested that the District submit for a waiver until Cook County Animal Control is able to address this matter for all dog parks that abut Lake Michigan.

Bluff Clearing and Restoration: The bluffs will undergo an extensive clearing of invasive species and dead and dying trees to improve the overall health of the vegetated environment. The proposed work is outlined in the attached plans, sheets C178-C181. An estimated 1.34 acres of invasive and noxious species control is proposed to be completed on the Centennial Park bluff. There are approximately 30 different target invasive species identified on the removal list. This list includes a handful of various deciduous tree species that can be detrimental to the bluff environment if left uncontrolled and unmonitored. The plan outlines the four different restoration zones and strategic planting plans, dependent on the impact of construction and best management practices for each bluff zone. These four zones include the bluff restoration zone (23,800 sq. ft.), the green gabion wall zone (3,200 sq. ft.), the dune grass planting zone (800 sq. ft.), and the turf restoration zone (31,162 sq. ft.). All of these different zones combined account for the required installation and long-term maintenance to reestablish the bluffs and repair disturbed areas affected by construction. As part of the slope planting, the seed and plugs will be covered with a two-layer erosion control fabric while the plant material is established to minimize erosion. To replace the trees removed from the bluff, we will re-plant nearly 30 caliper inches of new trees on site, and the remaining replacement caliper inches at other park locations within the agency. This entire process will allow for greater views and vistas of the lake, one of the highest-ranked pillars of the Waterfront 2030 Lakefront Master Plan and a point of emphasis from public input.

Variations for Section 17.30.050 Front and Corner Yard Setbacks

As outlined in Chapter 17.30, Section 17.30.050(C)(7) Front yard setback for Lakefront Properties, it's noted that the required front yard setback is the toe of the bluff or 50 feet from the ordinary high-water mark, whichever results in the line farthest from the ordinary high-water mark. Nonetheless, Section 17.30.130(A) describes permitted obstructions in required yards. Village staff have issued an opinion that the District's vertical improvements in the front yard are characterized as either a wall or a fence, as described in Section 17.30.130(A)(10). Based on the District's review of these sections and staff's code interpretation, we propose including the following project elements as variations since they exceed a height of 6.5' from grade. The work proposed in the lakeward front yard includes the following elements which exceed 6.5' tall: Boardwalk with Type A handrailing (fencing), a 226 foot long elevated pier structure with armor

stone surround. The improvements listed below are those elements of the project that fall within the Ordinary High-Water (581.5' OHWM) Mark and the 50' setback associated with section 17.30.050 of the zoning code.

As outlined in the "Proposed Project Elements Chart", the maximum variation requested is 4' over the allowed 6.5' height as measured from the existing grade. This is outlined in detail in the "Non- conforming Elements" chart. Please note, as part of our overall proposed plan, the District has included sand nourishment for the two beaches and once completed the overall height variances will fall within the acceptable limits of the zoning requirements. The District, through its consultants, designed this element while listening to feedback from the community and with what would be minimally required from a coastal engineering perspective.

Based on the information and the zoning requirements, there is a small 6' section requiring a variance. The south 6' of the Type A handrail is set at 592.0' elevation, 9.5' above the existing sand profile. At this time, the District is requesting a zoning variance of 3' for this 6' section of Type A handrailing and pier. Please note, once the project is completed, and the sand is placed on the beach, the overall height for this area will fall within the 6.5' zoning requirement for the front yard setback.

Steel Sheet Pile Replacement: Located on the northern property line, north of the existing steel sheet wall, a combined wooden timber, steel I beam, and steel sheet piling hold back the bluff section. Due to the age of these structures and materials, this structure has the potential risk of failure, causing severe erosion concern for the northern portion of bluff. The District is preparing to correct this issue by installing a new line of steel sheet piling in front of the existing timber wall as a best practice repair. The proposed wall would consist of about 25 sheets of PZC-18 Steel Sheet Pile Bulkhead wall (roughly 52 feet in length), with a 3/8" bent plate cap welded on top of it. These 25-foot-tall sheets will be driven in place to a finish elevation of 592' to create the new vertical sheet piling wall with a height that does exceed 6.5 feet from grade. The existing grade of the beach in this area adjacent to the wall is 584' and the new proposed steel seawall is set at an elevation of 592', which is 8 feet tall with the current sand profile. The proposed replacement steel sheeting will connect to the existing steel sheeting on the adjacent property located at 261 Sheridan Road as it does today to ensure a mechanical connection to prevent future bluff erosion. These replacement sheets will become the primary shore protection for this area of the bluff.

The bluff areas located behind the eroded wall will be filled in, creating a sustainable slope of 2 to 1 (or greater) allowing for new for new plantings, stabilizing the bluff for the future. The bluff will be backfilled and compacted in 12" lifts for proper grading and planting. The slope will be covered with an erosion fabric while the plant material is established.

Elevated Boardwalk: As discussed previously, the District intends to create a boardwalk element at the Centennial Beach site to serve several functions. The boardwalk will maintain the existing shore protection for the Centennial Park bluff and protect against bluff erosion by using the

existing steel sheet pile seawalls installed in 1987. The boardwalk will connect to the existing walls to provide a continuous line of defense against future bluff erosion while establishing a foundation for additional improvements, including ADA accessible paths, and beach and pier amenities. The boardwalk also doubles as a recreational platform to allow greater access to the beaches and help delineate the beach elements. It also allows for greater connectivity for the beaches while permitting individuals the ability to traverse the lakeshore without having to pass through the off-leash dog beach.

Set at a base height of 3 feet above grade and ramping up slightly near the concrete ADA access ramp interchange, the boardwalk finishes at a height of 5.5 feet. The boardwalk is set between 18"-48" above the final sand nourishment and is pitched minimally to allow storm water runoff from the structure. The boardwalk is built by installing steel sheet piling which is driven in the clay to maintain the shore protection for the bluff and park backfilling with angular stone and capped with a thickened concrete slab. To help soften the feel for the boardwalk, the concrete will be tinted with a color additive used in other concrete areas across the site, to provide a seamless aesthetic throughout the site. The boardwalk concrete will be further distinguished with a stamped wood decking pattern to give the appearance of natural wood. The final result will achieve a weathered Ipe wood aesthetic to match the style of the bluff staircase which will land on the boardwalk. The boardwalk runs for a total length of 349', with integrated backed Ipe wooden benches mounted to the bulkhead along the western edge. These benches are provided to allow beach goers the opportunity to sit and relax on the boardwalk while enjoying the lake environment. There are also four (4) low level LED bollard light fixtures that will also be installed for safety and security. Low-intensity lighting will be used along pathways and in the dog beach area. Lights will be designed to minimize light pollution and focus on safety.

Like the stair access, the boardwalk also serves as the accessible transition route planned to ADA standards for the public to use and access the swimming beach, off-leash dog beach, and pier elements. There are three staircases that can be used to access the different elements of Centennial Beach. The northernmost staircase is set just to the east of the ADA access ramp, allowing quick access down to the beach level. The stairs have a 5-foot-wide clearance with 1.5-inch brushed stainless steel tube handrails on both sides to help patrons access the beach.

A second staircase runs from the boardwalk level fencing for the dog leash entry area (just beyond the electric dog gate) down to the dog beach. This staircase is described in the off-leash dog beach review.

A third staircase runs due south at the farthest southern end of the boardwalk allowing a clear access path to the properties south of Centennial Park, for those who chose to walk the Lake Michigan shoreline. This staircase was also described in the off-leash dog beach review.

To complement the access routing, an ADA accessible concrete ramp has also been included in the design for the human swimming beach. The ramp is 10 feet wide to allow access for both beach goers and maintenance equipment. Please note, current Centennial Beach improvements do not allow personnel to access the beach with the required equipment to maintain the beach. The proposed design allows for maintenance equipment to access the swimming beach and off-leash dog beach areas. While the site does not allow for large vehicle access such as ambulances or fire trucks, the same access route along the park ramp and boardwalk will allow first responders direct access to the Centennial Beach sites, as needed. The completed stamped drawing set has been included for final review by the Village.

District staff will utilize the northern-most section of the boardwalk for storage and respite between on-water shifts.

The proposed work is designed to be built upon the existing toe of slope, but east of and outside the steep slope zone.

Elevated Pier Structure: The proposed pier structure was designed to serve several purposes on site. The main purpose of the pier is to more substantially delineate the two distinctive swimming beach and dog beach uses, north and south respectively. Furthermore, the pier provides additional shore protection by diffusing wave energy and helps hold sand for both beaches from erosion and littoral drift. Finally, the pier provides an additional recreational use allowing visitors greater interaction with the lake. The pier structure replaces an existing steel sheet pile groin that splits the Centennial Beach site. The pier structure is 192.5 feet in length from the boardwalk to the farthest end of the concrete. Surrounding the outer ring of the pier is an additional 33.5 feet of stone, which makes up the bedding stone layer, armor stone, and elevated armor stone ring 3.5 feet above the ordinary high-water mark of 581.5'. The armor stone is set at the same height of the pier and goes out for 6 feet, from there the stone tapers into the lake at a slope of 1.5 to 1. The pier starts 6 feet above grade and tapers down to the east by 2.5 feet, ending at an elevation of 585.00'. The pier structure is lined with armor stone to dissipate wave action, help hold sand and prevent reflective rip currents from the steel surfaces. The pier is erected by driving steel sheet piling into the lake and capping the structure with a 12" concrete cap tied into the steel with welded pins. The southern edge of the pier is lined with modular fence panels, which by design provide a secure boundary for the off-leash dog beach, as previously described. The ornamental handrail (Type A) is designed for a marine setting made from galvanized steel and powder coated black with a rectangular framework of $\frac{3}{4}$ inch horizontal rails to minimize visual obstructions. The fence height is 42 inches high. The eastern end of the pier is ornamented with six (6) 9'9" concrete benches matching the outer pier's radius pinned into the 12-inch concrete cap. The benches are 18 inches tall with a spacing of an 18-inch gap between each bench to allow for drainage. Interior of the benches in the center of the pier's flat surface is a decorative 8-foot bronze compass rose inset with two gray granite border inlays around the inner and outer

perimeters of paving. The linear section of the pier is set with four (4) 18" x 18" x 8' long benches equally spaced with two on each side of the pier.

The design heights and elevation for the pier were driven by community input and what was minimally required to achieve its intended and proper purpose. To address the concerns of possible waves overtopping the pier from time to time during high wave events, the District intends to provide signage when necessary, noting that the pier is closed due to unsafe wave activity. This is the same signage used for the other three lakefront beach sites operated by the District. In the case of severe storms, Type 2 barricades would be installed to close the pier as needed.

Exceptions from Section 17.82.040 Development in Steep Slope Zone & Variations for Section 17.30.050 Front and Corner Yard Setbacks

After reviewing the zoning standards, there are two project elements which fall within the combined zoning for both the Front Yard Setback requirements and the slope impact area. The park staircase and the concrete ADA access ramp are split within these zones. The notes below outline these elements and how they fall within the zoning code.

Bluff Staircase to Park: (from the concrete ADA Access Ramp to the Boardwalk) To provide a more direct route to the proposed boardwalk, included in the Plan is a set of stairs that would allow a person to walk down a staircase from the ADA Access Ramp to the proposed elevated boardwalk. This staircase follows the design details from the existing staircase at Centennial and our Tower Road staircase, which utilizes an elevated platform built on helical piers that suspend over the bluff, allowing an individual to access the beach down an Ipe wood staircase with black powder-coated metal railings. The proposed staircase has two landing areas. The staircase is designed with 42" tall black Type A handrails with a horizontal top rail and .75" square tubing used to complete the horizontal rails on both sides of the access stairs from the intersection with the concrete ADA access ramp down to the boardwalk. The staircase is a traditional wood frame construction, with Ipe wood decking and metal handrails as described. The staircase sits above the bluff and is supported by nine helical piers. The proposed design was completed by structural engineers, who completed a similar design at the Tower Road bluff in 2019-2020. Based on the design, size of the landing areas, and where it falls within the front yard setback and steep slope zone, the staircase design meets the requirements for both sets of regulations.

Concrete ADA Access Ramp: The proposed concrete ADA access ramp falls within both the steep slope zone and the front yard setback. There is a short section (approximately 110 feet) of the lower south section of the ramp that falls within the front yard setback area, while the remaining

section (west of the front yard setback and east of the upper table land) falls within the Steep Slope Zone.

Currently, a mid-bluff sidewalk exists today, which runs parallel to the existing top of the bluff fence line, as shown in the Plan. The current sidewalk does not meet ADA requirements due to its slope. It is only a looped path that reconnects to the upper parkland; no current ADA-accessible route down to the Centennial beach exists. The proposed concrete ADA access ramp has been designed to meet several requirements for the project site. First, it will be used as an accessible walkway to access the proposed beach improvements for the recreation swimming beach and the off-leash dog beach. The current beach access is only for the gated dog beach, which is only accessed by a single stairway installed over the current bluff vegetation. During the high lake levels, there was a two-foot drop down to the sand from the Centennial Beach dog beach stairs, causing closures on the dog beach. In addition, the current stairway is only accessible to those who register with the District and purchase a key fob to access the beach. It is the vision of the Winnetka Waterfront 2030 Master Plan to reopen Centennial Beach to the greater population of the District.

The proposed design includes an accessible pathway to the new boardwalk, pier, swimming beach, and off-leash dog beach. In addition, the current 5-foot sidewalk in the park from the parking lot to the dog gate is being widened to allow greater access for users to all the beach elements. It also serves as an access point for maintenance equipment needed for the beach as previously described.

The new proposed width of the access ramp is 10-foot edge to edge, with integrated handrails on each side of the access ramp. The plans illustrate the handrails as 36inch in high, 1.5-inch round brushed stainless steel with a 9-foot clear width. The District also widened this walkway back to the parking lot as suggested by Village staff upon the initial review of the plans. To lessen the impact in the bluff steep slope zone, the design team utilized a single walkway with a slope of 7.9% or less with 5-foot landings every 30 feet as required by law. Since the bluff at Centennial Park is significantly narrower in width compared to the bluffs on the northern end of Winnetka, logic dictates a single walkway without switchbacks is best suited to achieve our goal. This also helps soften the impact on the bluff and keep clear and open sight lines for access and safety. Additional retaining walls were added to meet the required structural requirements to build the access ramp. The District's structural engineering team designed the retaining walls, with design input from contracted civil engineers and landscape architects. The north retaining wall runs on the east side of the access ramp (on the downslope side) for 105 feet until it intercepts with the access stair opening. The retaining wall height varies from .75 feet to 3.74 feet at its tallest section. There is a gap of 6 feet where it then starts again for an additional 12.5 feet with a height starting at 2 feet and tapering down to 1 foot.

At that point, the bluff topography switches due to the elevation, and the retaining wall transitions to the western edge of the access ramp. The proposed western retaining wall runs for approximately 175 feet in total length. It begins with a wall height of 1.5 feet. At the farthest south section of the western retaining wall, the final wall height is 4.07 feet. The wall height varies from 1.5 feet at its shortest and 7.97 feet at the tallest section. There is roughly 30 feet in which the retaining wall height is over 6.5 feet and maxes out at 7.97 feet. The remaining 145 feet vary between 1.5 feet and 6.4 feet. The face of the retaining wall in this section faces downslope so it is invisible from the table land at the top of the bluff.

The retaining wall is built into the bluff with a spread-type footing and is required to support the proposed ADA access ramp. Consideration was taken to help soften the retaining wall, as shown in the plans with a wave patterned concrete form liner. The wave reliefs on the liner are up to 0.75 inches deep (maximum depth), creating a flowing pattern on both the east and west sections of the retaining wall. Individuals can look to the east with uninterrupted lake views from the park and access ramp. When looking back from the shoreline, individuals can see the gentle waves of the form liners and bluff restoration to help break up the view.

Based on the design and engineering, the District is proposing a 10-foot-wide accessible ramp to allow access for beach users, life safety, and maintenance equipment to access the beach. To accomplish this, we are proposing to install retaining walls within this zone. The District is requesting an exception for this improvement within the slope impact area.

Please note, the Centennial Park bluff in question has been reconstructed over the years, including the erosion and rebuilding of the bluffs in the mid-'80s and previous developments that have taken place on-site prior to newly approved Village ordinances.

Variations for Section 17.82.040 Development in Steep Slope Zone

The elements listed below are the remaining project improvements that fall within the zoning requirements for section 17.82.040 Development in Steep Slope Zone.

Outcropping Stone Steps: Outcropping stone steps are being included as an active way to allow individuals to utilize the bluff more naturally. The outcropping stones are being proposed to be placed at the midlevel bluff passive seating area to allow an individual to walk up the limestone outcropping steps to access the upper park tableland. The rise and run of these steps are designed to be an active recreational step feature for users and not the sole source of access for the site. These steps are proposed to have a tread height of 13.5 inches with a total width of 72 inches. They are designed to be installed on a geotextile fabric supported by CA-6 stone bedding and dry stacked with mortar as needed for stability and proper drainage.

Due to their 6-foot width, which is 1 foot greater than the allowable 5-foot limit, the district is requesting exception for this project element.

Improved Mid-bluff Paver Walkway and Seating Area: The Plan has two seating node areas. As described below, one is within the steep slope, and the second is on the upper park tableland, outside the slope transition area. The seating node on the steep slope of the bluff is an existing park feature and has been since its development years ago. The proposed seating area is a reconfiguration of the existing pavers in the mid-bluff level to allow access to the seating area from the new ADA ramp at this location. The current pavers will be stockpiled and reused to set a walkway to the entrance location off the concrete ADA access ramp. Less than 150 square feet of pavers are being relocated to access this area. In addition to reworking the pavers, the current park bench will be replaced with the proposed natural stone benches. Due to the reconfiguration of the paver walkway, the District is requesting exception for this improvement which is located within steep slope of the bluff.

Standards for Granting a Special Use Permit

As a preliminary statement, a refusal to grant a Special Use Permit for the District to provide park and recreational uses on Centennial Park and Beach will frustrate the essential purpose and statutory function of the District. Moreover, the District is not proposing to change the essential character of the subject property, which will continue to provide community access to active and passive recreational activities along the lakeshore. The District has taken great care to plan this project and has accepted and considered the public comments it received for over two years. Based on the feedback received, a failure to issue a Special Use Permit will frustrate the community's interest and deny our shared residents a lakeshore amenity for which they have expressed a desire to see completed.

1. **That the establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, comfort, morals, or general welfare;**

The proposed improvements will not be detrimental to or endanger the public health, safety, comfort, morals, or general welfare of the community. Rather, the proposed improvements are compatible with the community and will enhance the general welfare by improving the applicants' facilities and the quality of the applicants' programming in service of the community.

The Applicant does not intend to expand the scope of its programming in connection with the Project from activities that have previously been provided at the park and beach. The Applicant only needs to apply for a Special Use Permit because of amendments to the Zoning Ordinance which were approved after the establishment of Centennial Park and Beach as a public amenity.

The proposed improvements are designed to complement and enhance the existing park and beach environment. Features such as the off-leash dog beach, swimming beach, elevated boardwalk, and pier, as well as concrete ADA access ramp are strategically located to minimize impact on neighboring properties while enhancing the park's role as a community asset.

The proposed improvements also result in the implementation of the Winnetka 2030 Waterfront Master Plan. The Lakefront Master Plan has been adopted and endorsed by the Village of Winnetka Comprehensive Plan, which provides further evidence the proposed improvements are compatible with and will enhance the public health, safety, comfort, morals, or general welfare.

2. That the special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the districts or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;

For the same reasons, the Proposed Improvements will not be substantially injurious to the use and enjoyment of other properties in the immediate vicinity or substantially diminish or impair property values in the immediate vicinity. First and foremost, the beach has existed in this location for decades and the public's use of the park and beach has had no negative impact on the enjoyment of any private property or property values in the immediate vicinity. As direct evidence of this, our neighbor to the south at 205 Sheridan Road is investing millions of dollars in a new home – an investment that would not occur if the park and beach was injurious to the use and enjoyment of that property.

As described above: (i) the Proposed Improvements and the Programming are compatible with the mix of uses in the vicinity of the Property; (ii) the height, bulk, and density of the Centennial Beach and Park improvements are compatible with the height, bulk, and density of shoreline improvements on Lake Michigan and are designed to fit within the R-2 District; and (iii) the Proposed Improvements will not increase vehicular traffic or parking demand in a manner that would be injurious to the use or reduce the property values of neighboring properties.

- 3. That the establishment of the special use will not impede the normal and orderly development or improvement of other property in the immediate vicinity for the uses permitted by right in the districts or districts of concern;**

The Proposed Improvements will not impede the normal and orderly development or improvement of other properties in the immediate vicinity. The Proposed Improvements do not change the essential nature of the property as a public park that provides community access to Lake Michigan. As a result, the proposed improvements will not change the park and beach's impact on development. Moreover, the surrounding area is already developed. If development sites become available, the Proposed Improvements will not discourage additional development in the area because the Proposed Improvements will not change the essential character of the property nor negatively impact surrounding properties or the general welfare of the community (as discussed above). As direct evidence of this, our neighbor to the south at 205 Sheridan Road is investing millions of dollars in a new home – an investment that would not occur if the Project impeded the normal and orderly development in the immediate vicinity.

- 4. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimize pedestrian and vehicular traffic congestion in the public ways;**

Existing traffic and parking infrastructure is sufficient to minimize pedestrian and vehicular traffic congestion in the public ways. As discussed above, the Applicant does not expect the Proposed Improvements to create new parking demand or materially increase traffic. The existing and proposed parking supply provides adequate capacity to accommodate vehicular traffic generated by the Applicant's programming without causing unreasonable congestion in the right-of-way. The beach site is a walking destination for most of the community, and with the supplemental parking at Elder Lane Park, there is enough parking to help with any potential overflow.

- 5. That adequate parking, utilities, access roads, drainage, and other facilities necessary to the operation of the special use exits or are to be provided; and**

Existing parking, utilities, access roads, drainage, and other facilities necessary for the Proposed Improvements are adequate. The Property is served by all existing utilities and drainage necessary to operate the Proposed Improvements. The Proposed Improvements do not require additional utilities or facilities to support the project.

- 6. That the special use in all other respects conforms to the applicable regulations of this and other village ordinances and codes.**

Except for the Variations and Exceptions (described on the Chart Titled "Proposed Project Elements), the Proposed Improvements will conform to all applicable regulations of the

Zoning Ordinance and other Village ordinances and codes. Moreover, Section 17.56.020 of the Winnetka Zoning Ordinance establishes nonessential public uses as special uses in all districts within the Village.

Standards for Granting a Variation:

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that district

Because the Property is owned by the District, a public entity, the conventional interpretation of this criteria is not germane to this application. The District does not operate property with an aim to obtaining a reasonable return, but for the purpose of providing park and recreational amenities for the use and enjoyment of the community. The proposed improvements will clearly enhance the public's use and enjoyment of Centennial Park and Beach and benefit the public's health and welfare.

2. The plight of the owner is due to unique circumstances;

The Front Yard setback regulations are designed for a residential zoning district. Because the property is not used for residential purposes, the variances needed for the Project result from unique circumstances that are not generally applicable within the R-2 zoning district. The improvements located in the front yard setback area for which variances are required have been designed in response to community interest to minimize their height and maximize the visual aesthetics of the lakefront environment so the degree of incompatibility with the front yard setback regulations has been minimized.

3. The variation, if granted, will not alter the essential character of the locality;

The current use of the property is a park and beach. With the variations, the proposed improvements will permit the property to continue to be used as a park and beach, but with enhanced access to the lakefront for patrons of all abilities. The variations will most definitely not alter the essential character of the property and the locality.

4. An adequate supply of light and air to adjacent property will not be impaired;

The Project will result in no impairment to the supply of the light and air to adjacent property because all the proposed improvements within the front yard setback area for which variances

are required are built to maximize views of Lake Michigan and minimize their height. The improvements do not cause any shadows or encroachments on adjoining parcels.

5. The hazard from fire and other damages to the property will not be increased;

The design, nature and building materials used for the proposed improvements in the front yard setback area for which variances are required will not increase any hazard from fire or other damages to the property.

6. The taxable value of land and buildings throughout the Village will not diminish;

The proposed improvements in the front yard setback area for which variances are required will not diminish the taxable value of land and buildings in the Village. Just the opposite, the creation of an enhanced beach is an additional community amenity that will make Winnetka a more attractive place to live and enhance property values.

7. The congestion in the public street will not increase;

The proposed improvements in the front yard setback area for which variances are required will not result in an increase in congestion in the public streets nearby. The District has adequate off-street parking to accommodate patrons at the park and beach.

8. The public health, safety, comfort, morals and welfare of the inhabitants of the Village will not be otherwise impaired.

The proposed improvements in the front yard setback area for which variations are required will not be detrimental to or endanger the public health, safety, comfort, morals, or general welfare of the community. Rather, the proposed improvements are compatible with the community and will enhance the general welfare by improving the District's facilities and the quality of the applicants' programming in service of the community.

Conclusion:

The Centennial Park and Beach project is designed to significantly enhance community recreational opportunities while ensuring environmental stewardship and public safety. By meeting the six standards for a Special Use Permit, addressing review comments, and providing detailed operational plans, the project is positioned to serve as a valuable community asset for generations to come. The District looks forward to presenting this project to required boards and

commissions in the near future to continue the process of making these much-needed beach improvements a reality for the community.

Winnetka Park District
Centennial Park and Beach Project
Proposed Project Elements

Code Section	Project Element	Requirement	Existing Condition	Proposed Improvement	Variance/Exception Required (yes/no)	Rational
Front and Corner Yard Setback Section 17.30.050 subsection	Steel Sheet Pile Replacement (Failing Wall)	Development on lots abutting Lake Michigan between the ordinary high water mark of lake Michigan (581.5') and the table land as defined by section 17.82.020 will also comply	The existing steel sheet pile bulkhead is at an elevation varying from 586.0' to 591.0'	New proposed steel piling is designed at an elevation of 592.0'	Yes, we are requesting a maximum variance of 1.5' for this primary shore protection	Primary shore protection, structural replacement to the existing sheeting and allow for proper backfilling and planting of the bluff slope.
	Boardwalk with Type A Handrail (Fencing) (elev. 587.5' - 589.0')		The existing sand contours vary from section to section ranging from 583' to 585.	Northern section of the boardwalk approx.. 120' have a height differential of greater than 6.5' ranging from 6.51' - 8.5'. This elevation includes a Type A style handrail that can be viewed on Sheet C155 (Drawing 1). Once the Beach is nourished, the height differential will be roughly the same.	Yes, we are requesting a maximum variance of 2' for this section of the boardwalk.	Suplemntal Shore Protection and structural support for the beach boardwalk, Type A handrails, accessible beach route and support access for life safety and maintenance equipment for the beach.
	Boardwalk with Type A Handrail (Fencing) (elev. 587.5' - 589.0')		The existing sand contours vary from section to section. ranging from 581.5' to 585.	The center section of the boardwalk approx. 50' has two smaller sections (20' and 16') where it flares out to the proposed pier area, ranging in overall heigh of 9.32' and 10.5' (which includes the 42" Type A Handrail (Fence). Once the Beach is nourished, the height differential will be 5.32' and 6.5'.	Yes, we are requesting a maximum variance of 4' for this section of the boardwalk.	Suplemntal Shore Protection and structural support for the beach boardwalk, Type A handrails, accessible beach route and support access for life safety and maintenance equipment for the beach.
	Boardwalk with Type A Handrail (Fencing) (elev. 587.5' - 589.0')		The existing sand contours vary from section to section. ranging from 583.5' to 585.	The southern section of the boardwalk approx. 95' from the southernmost end of the boardwalk to the center, ranges from 591.75' - 592.5', creating a difference of 6.51' - 8.0'.	Yes, we are requesting a maximum variance of 1.5' in the section of the boardwalk.	Suplemntal Shore Protection and structural support for the beach boardwalk, Type A handrails, accessible beach route and support access for life safety and maintenance equipment for the beach.
	Elevated Pier Structure		Existing Contours 581.5' OHWM to 582.0'	The south 6' of the Type A handrail is set at an elevation of 591.0' which is 9.5'. Upon completion of the project, the sand elevation will increase to 585.0' leaving a difference of 6' including the 42" handrail.	Yes, we are requesting a maximum variance of 3' in this six foot area of the pier.	Beach stabilization, structural support for the pier, type A handrails, accessible beach route and support access for life safety.

ADA Beach Access Ramp	with Chapter 17.82, Steep Slope, Regulations and Chapter 15.78 Lakefront Construction. For lots abutting lake Michigan, the required front yard setback is the toe of the bluff or 50 feet from the ordinary high water mark, whichever results in the line farthest from the ordinary high water mark. And Section 17.30.130 Obstructions in Required Yards or Court (10).	Existing Contours 582.5' - 585.0'	The ADA accessible beach access ramp ranges from 580.0' to 587.5', with a maximum height differential of 4.5' to the top of the ramp. Type B Handrails do not count in the overall height Measurment.	No, not greater than 6.5' from existing conditions.	ADA Universal Design.
Beach Access Stair (North) Swimming Beach		Existing Contours 581.5 - 583.0'	Access stair for the north swimming beach is set at elevation of 580.0' and meets the boardwalk at an elevation of 587.5'. The Type B Handrail do not count in the overall height measurement.	No, not greater than 6.5' from existing conditions.	Site Connectivity, swimming beach access.
Beach Access Stair (South)		Existing Contours 585.0' - 586.0'	Access stair for the south beach access is set at an elevation of 589.23' - 579.90'	No, not greater than 6.5' from existing conditions.	Site Connectivity, south beach bypass route.
Dog Beach Fencing		Existing Contours for exiting sheet piling 581.8' - 583.2'	The proposed off leashe dog beach is surrounded on the three sides with 5' high fencing. The fencing located on the southern boundery is proposed to be secured to the existing steel sheet pile groin, which till not exceed the 6.5' limit of fencing. The western fencing is designed to be installed on the beach and will be set at a height of 5'. Neither the southern or western fencing is proposed to surpass the maximum height for fencing within the front yard setback.	No, not greater than 6.5' from existing conditions.	Off leash dog beach site fening to secure the dogs within the boundries of the designated off leash dog beach area.
Dog Beach Access Stair (Off-leash Dog Beach)		Existing Contours 582.5' - 584.0'	Access stair for the Off-leash dog beach is set at an elevation of 587.50' - 579.33.	No, not greater than 6.5' from existing conditions.	Site Connectivity, off-leash dog beach access.
Concrete ADA Access Ramp		Existing Contours 589.0' -596.0'	ADA accessible ramp from upper park table land to the proposed boardwalk. Proposed retaining wall maximum height within the 50' setback is 595.52' with a bottom of wall at 590.52' tapering down to 593.4' with a bottom of wall at 589.0'	No, not greater than 6.5' from existing conditions.	ADA Universal Design and site connectivity.
Staircase to Park		Existing Contours 587.0' - 600.0'	Elevated access stair that is being installed on helical piles, that support a wooden sub structure, type A hand railings (42"), and a 5' wide lpe decked stair landings and treads.	No, the design width for the staircase is 5' and landings fall within their perspective sizes for each zoning location requirements.	Site Connectivity and secondary access to boardwalk and beach improvements.

Development in Steep Slope Zone Section 17.82.040	Concrete ADA Access Ramp and required retaining walls to support the ramp	Proposed improvements must meet the requirements for Ordinance No. MC-01-2024, Steep Slope Area Along Lake Michigan and required Zoning Requirements as noted in Section 17.82.040.	The current bluff existing elevation ranges from 611.0' down to 594.0' within the Slope Impact Area.	The proposed 10' walkway starts at the upper park table land and contours down to the bluff to the 50' front yard setback as noted in Chapter 17.30.050 Front and Corner Yard Setbacks. We are proposing a 10' wide accessible ramp for to allow access for beach users, life safety, and maintenance equipment to access the beach. To accomplish this, we are proposing to install retaining walls on both the upslope side and down slope side of the access ramp to support the bluff and grade.	The Park District is looking for exception of this improvement from the Slope Impact Area, to allow for the accessible connection to the Centennial Beach Level amenities.	ADA Universal Design and site connectivity.
	Outcropping Stone Steps		The existing conditions for the proposed outcropping stone staircase is set between 601.0' and 611.0'	The proposed outcropping stone steps are proposed to be 72" wide per the specifications.	The proposed stair width is 1' greater than the allowable limit. We are requesting an exception for this improvement to accommodate the additional 1 foot width of the outcropping stone staircase.	Recreational Asset and Site Connectivity
	Improved Mid-Bluff paver walkway and seating area		This location is set at an elevation of 600.0' and 602.0'. Currently there is a brick paver path and bench seating area.	The proposed re-design of this area include the installation of two (2) natural stone benches and the reconfiguration of the brick paver path to connect it to the proposed concrete ADA access ramp. The square-footage between the old configuration and new proposed configuration is about the same.	The proposed paver walkway is being reconfigured and not following the current footprint, which makes it a new improvement. Since the new area is wider than 5' we are requesting a exception.	Recreational Asset and Site Connectivity
	Staircase to Park		Existing Contours 587.0' - 600.0'	Elevated access stair that is being installed on helical piles, that support a wooden sub structure, type A hand railings (42"), and a 5' wide lpe decked stair landings and treads.	No, the design width for the staircase is 5' and landings fall within their perspective sizes for each zoning location requirements.	Site Connectivity and secondary access to boardwalk and beach improvements.

VILLAGE OF WINNETKA, ILLINOIS
DEPARTMENT OF COMMUNITY DEVELOPMENT

SPECIAL USE PERMIT APPLICATION

Case No. _____

Property Information

Site Address: 225 Sheridan Road, Winnetka, Illinois 60093 (Centennial Park)

Applicant Information

Name: Winnetka Park District
Primary Contact: Costa Kutulas
Address: 540 Hibbard Road
City, State, ZIP: Winnetka, IL 60093
Phone No. 847-501-2052
Email: ckutulas@winpark.org

Architect Information

Name: The Lakota Group
Primary Contact: Scott Freres
Address: One East Wacker Dr. Ste. 2700
City, State, ZIP: Chicago, Illinois 60601
Phone No. 312-467-5445
Email: sfreres@thelakotagroup.com

Owner Information

Name: Winnetka Park District
Primary Contact: Shannon Nazzal
Address: 540 Hibbard Road
City, State, ZIP: Winnetka, IL 60093
Phone No. 847-501-2052
Email: Snazzal@winpark.org

Attorney Information

Name: Ancel Glink
Primary Contact: Adam Simon
Address: 175 E. Hawthorn Parkway, Suite 145
City, State, Zip: Vernon Hills, IL 60061
Phone No. 847-247-7400
Email: asimon@ancelglink.com

Applicant Signature: _____

Property Owner Signa _____

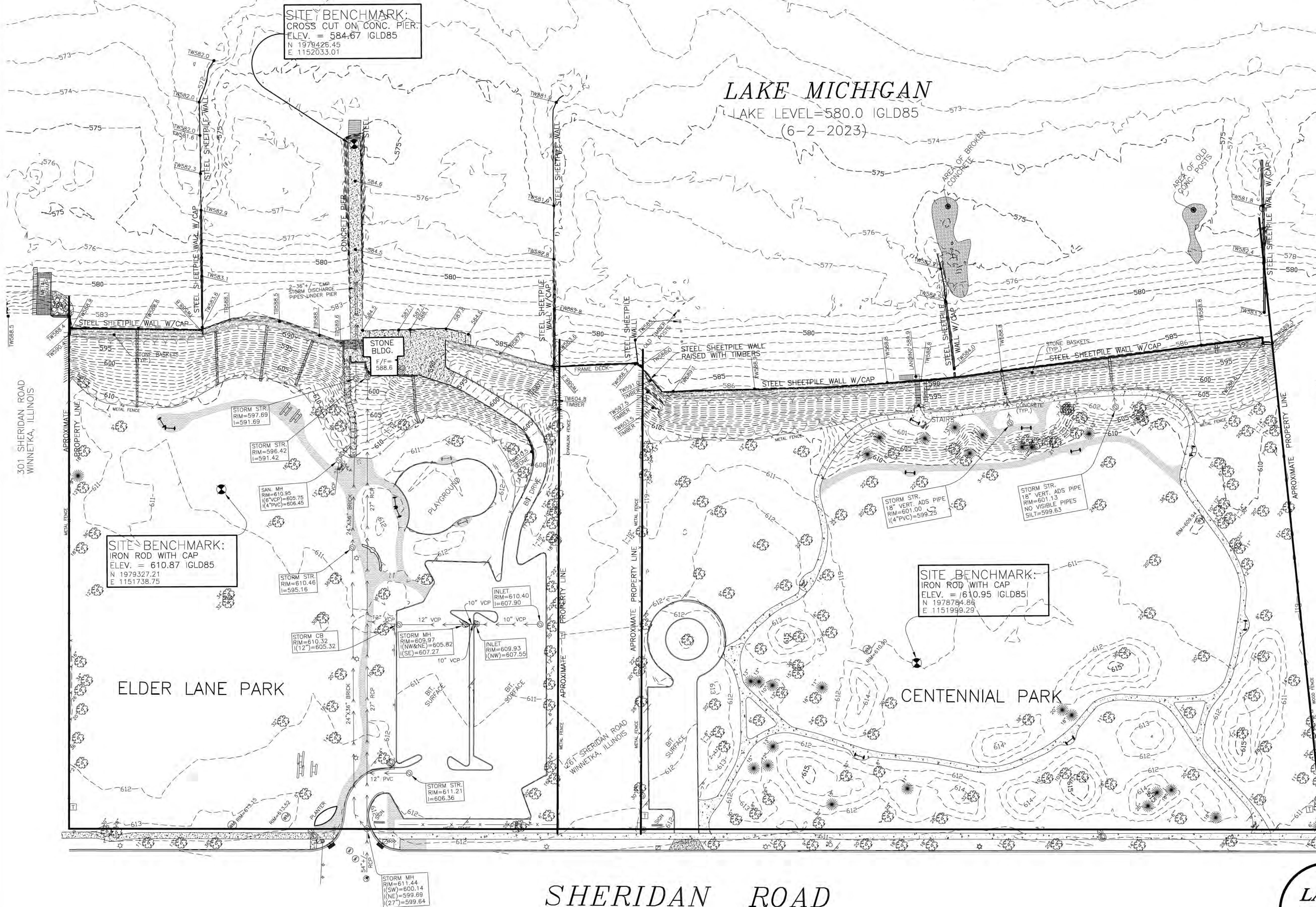
Printed Name of Owner: Shannon Nazzal

Date: 04/03/2024

Date: 04/03/2024

TOPOGRAPHIC / BATHYMETRIC SURVEY

ELDER LANE PARK
CENTENNIAL PARK
WINNETKA, ILLINOIS



SYMBOL LEGEND	
	PICNIC TABLE
	BENCH
	WATER METER
	B-BOX
	DRINKING FOUNTAIN
	SANITARY MANHOLE
	TRANSFORMER
	ELECTRIC MANHOLE
	LIGHT POLE
	SIGN
	STORM STRUCTURE
	STORM STRUCTURE
	TRAFFIC SIGNAL
	HANDHOLE
	UTILITY CANISTER
	TREES/BRUSH

SCALE: 1" = 40'



STATE OF ILLINOIS
COUNTY OF LAKE SS.

I, Vydas Z. Rekasius, an Illinois Professional Land Surveyor, do hereby certify that I have surveyed the property described above and that the plot shown hereon is a correct representation of said survey.

DATED THIS 18th DAY OF JULY, A.D. 2023.

BY: _____

Illinois Professional Land Surveyor No. 3210
License Renewal Date : 11/30/2024
DESIGN FIRM NO. 184-004538 RENEWAL DATE: 4/30/2025
REVISED : 10/10/2023 - SURVEY NOTES
REVISED : 1/5/2024 - CONTOURS

- SURVEY NOTES:**
1. BASEMAP, TOPOGRAPHIC AND BATHYMETRIC INFORMATION PREPARED FROM SURVEY PERFORMED IN JUNE 2023.
 2. HORIZONTAL DATUM IS BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 EAST ZONE 1201 - ESTABLISHED USING TRIMBLE VHS NOW NETWORK.
 3. VERTICAL DATUM IS IGLD85 (NAVD88 - 0.51' = IGLD85)
 4. TOPOGRAPHIC AND BATHYMETRIC SURVEYS GENERATING CONTOURS AT ONE (1) FOOT INTERVALS.
 5. UNDERGROUND UTILITIES ARE BASED ON FIELD OBSERVATIONS.
 6. UNDERGROUND UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR / OWNER IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR / OWNER SHALL CALL FOR A JULIE LOCATE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.

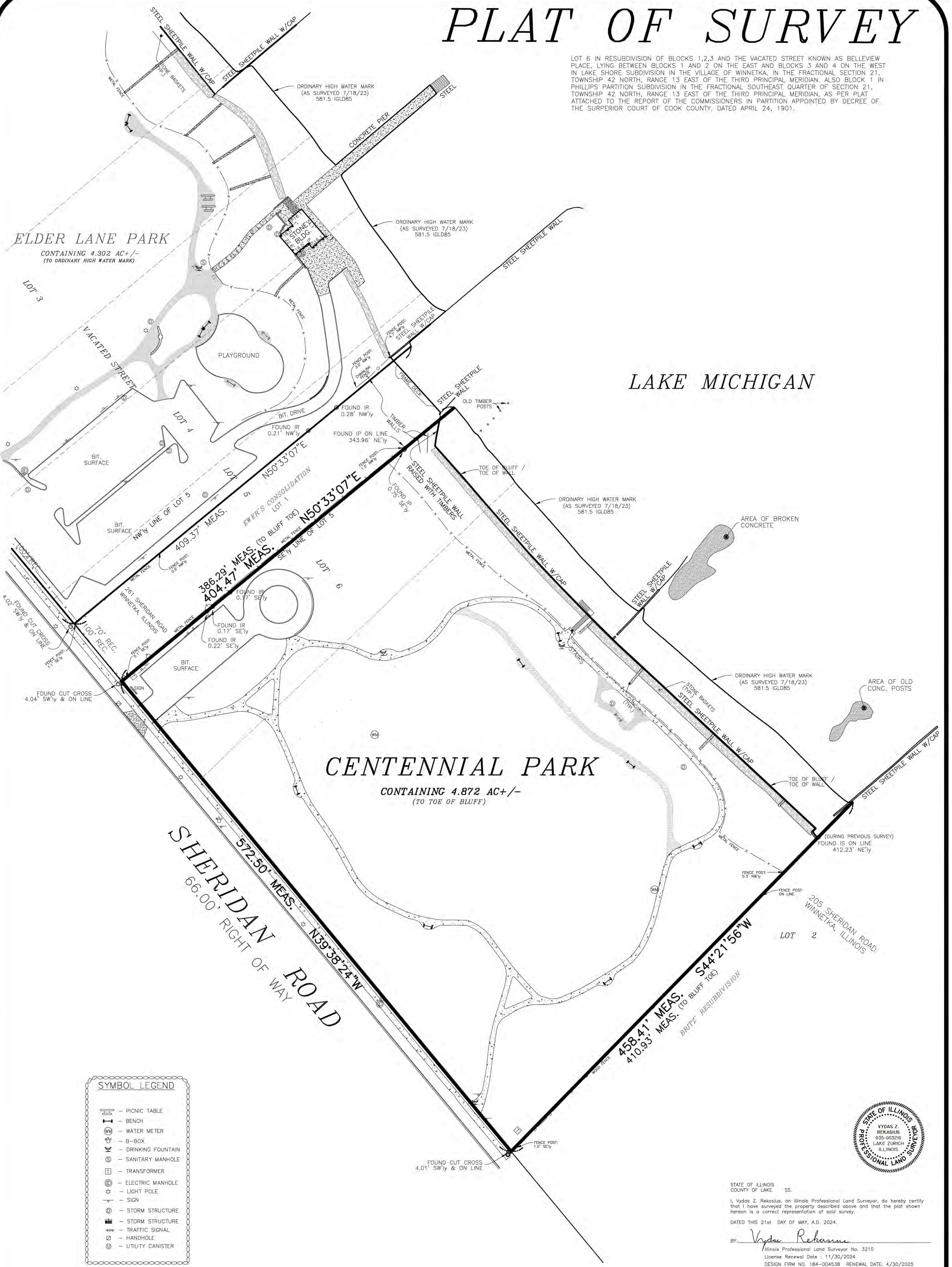
- GENERAL NOTES:**
1. Please check Legal Description with Deed and report any discrepancy immediately.
 2. Compare all points before building by same and report any discrepancies at once.
 3. Building lines, if any shown hereon are building lines shown on the recorded subdivision plat or called out in the title report.
 4. Consult local authorities for building lines established by local ordinances.
 5. This professional service conforms to the current Illinois minimum standards for a boundary survey.

**TERRA TECHNOLOGY
LAND SURVEYING, INC.**

24198 ROSE AVE. LAKE ZURICH, ILLINOIS 60047
PHONE: (847) 540-8606 E-MAIL: TTLS.1@SBCGLOBAL.NET
JOB NO.: 20-0078 SURVEY DATE: 1/4/2024
DWG FILE: DATA/20/0078/JUNE2023
/CHECK 12-27-23/SITE 12-23 SHEET.DWG

PLAT OF SURVEY

LOT 6 IN RESUBDIVISION OF BLOCKS 1,2,3 AND THE VACATED STREET KNOWN AS BELLEVUE PLACE, LYING BETWEEN BLOCKS 1 AND 2 ON THE EAST AND BLOCKS 3 AND 4 ON THE WEST IN LAKE SHORE SUBDIVISION IN THE VILLAGE OF WINNETKA, IN THE FRACTIONAL SECTION 21, TOWNSHIP 42 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN. ALSO BLOCK 1 IN PHILLIPS PARTITION SUBDIVISION IN THE FRACTIONAL SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 42 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, AS PER PLAT ATTACHED TO THE REPORT OF THE COMMISSIONERS IN PARTITION APPOINTED BY DECREE OF THE SUPERIOR COURT OF COOK COUNTY, DATED APRIL 24, 1901.



SYMBOL LEGEND

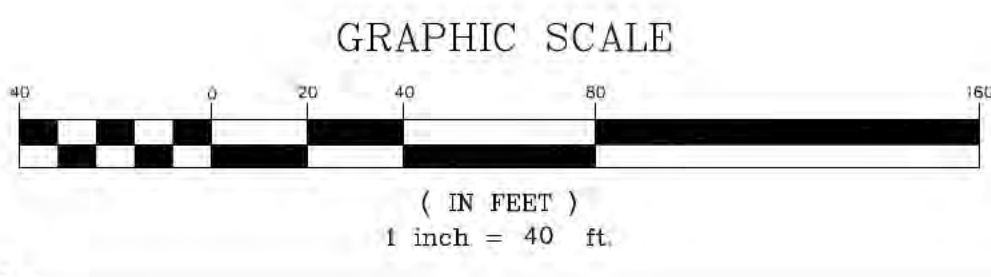
	- PICNIC TABLE
	- BENCH
	- WATER METER
	- B-BOX
	- DRINKING FOUNTAIN
	- SANITARY MANHOLE
	- TRANSFORMER
	- ELECTRIC MANHOLE
	- LIGHT POLE
	- SIGN
	- STORM STRUCTURE
	- TRAFFIC SIGNAL
	- HANDHOLE
	- UTILITY CANISTER



STATE OF ILLINOIS
COUNTY OF LAKE SS.
I, Vydas Z. Rekasius, an Illinois Professional Land Surveyor, do hereby certify that I have surveyed the property described above and that the plat shown hereon is a correct representation of said survey.
DATED THIS 21st DAY OF MAY, A.D. 2024.
BY: Vydas Rekasius
Illinois Professional Land Surveyor No. 3210
License Renewal Date : 11/30/2024
DESIGN FIRM NO. 184-004538 RENEWAL DATE: 4/30/2025
REV: 7/18/2024 ACREAGE COMPUTATION OHW-TOE

- NOTE:
- Please check Legal Description with Deed and report any discrepancy immediately.
 - Compare all points before building by same and report any discrepancies at once.
 - Building lines, if any, shown hereon are building lines shown on the recorded subdivision plat or noted out in the title report.
 - Consult local authorities for building lines established by local ordinances.
 - This professional service conforms to the current Illinois minimum standards for a boundary survey.

**TERRA TECHNOLOGY
LAND SURVEYING, INC.**
24198 ROSE AVE. LAKE ZURICH, ILLINOIS 60047
PHONE: (847) 540-8606 E-MAIL: TTLS.1@SBCGLOBAL.NET
JOB NO. : 20-0078 SURVEY DATE : 7/18/2023
DWG FILE: JUNE2023/BOUNDARY2024/BOUNDARY-CENT.DWG



SCALE: 1" = 40'

Centennial Park and Beach Existing Conditions





Centennial Parking Lot (East View)



East of Centennial Parking Lot (East View)



Sidewalk leading from Parking Lot to Upper Park (East View)



Existing Sidewalk From Parking Lot Beach (West View)



Park Sidewalk Split (Upper Park Loop and Beach Loop)



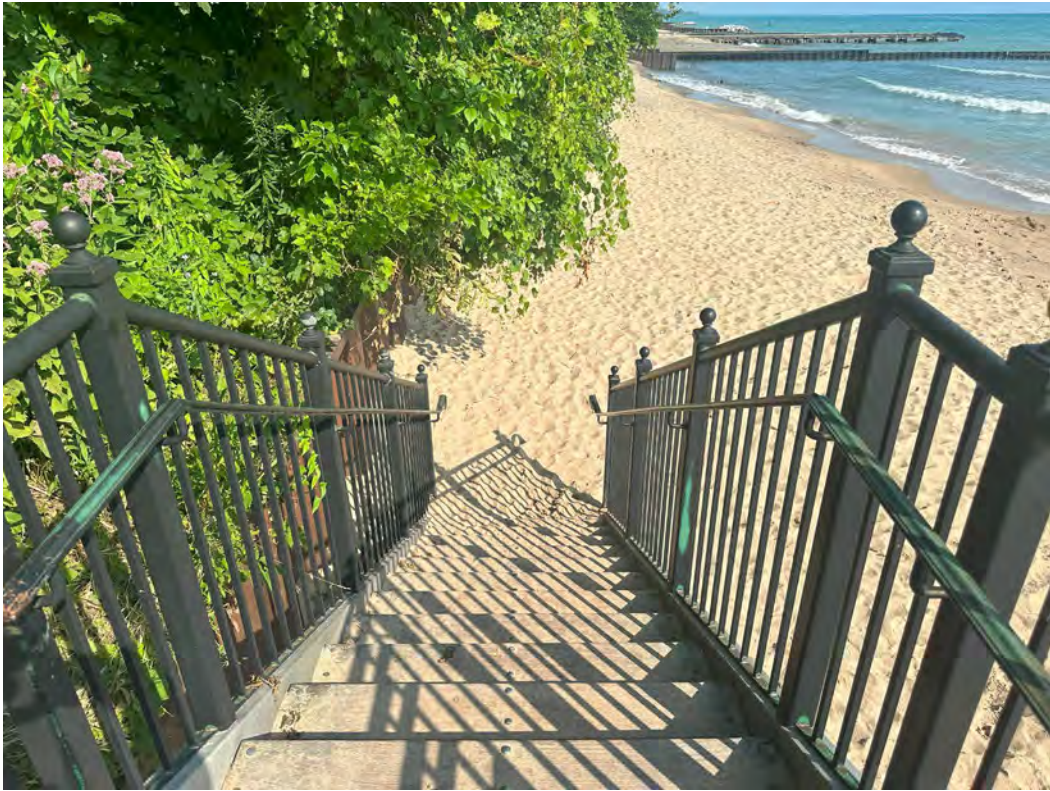
Dog Beach Access Area (Looking North)



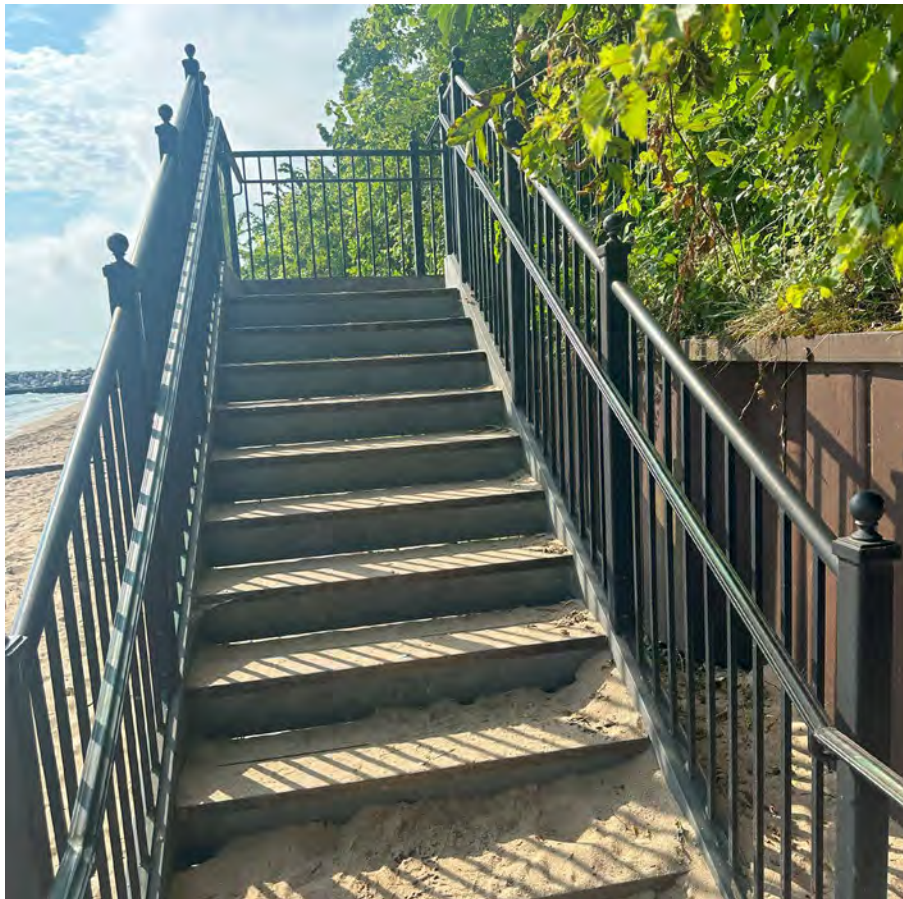
Dog Shower Amenities (Looking Northwest)



Dog Beach Access Gate (Looking East)



Dog Beach Access Stairs (Looking East)



Dog Beach Access Stairs Beach Level (Looking South)



Dog Beach Stairs Beach View (Looking West)



Dog Beach (Looking North)



North Seawall (Looking West)



North Seawall (Looking Northwest)



Dog Beach (Looking South)



Bog Beach (Looking South)



Dog Beach South Property Line (Looking West)



Dog Beach Seawall (Looking West)



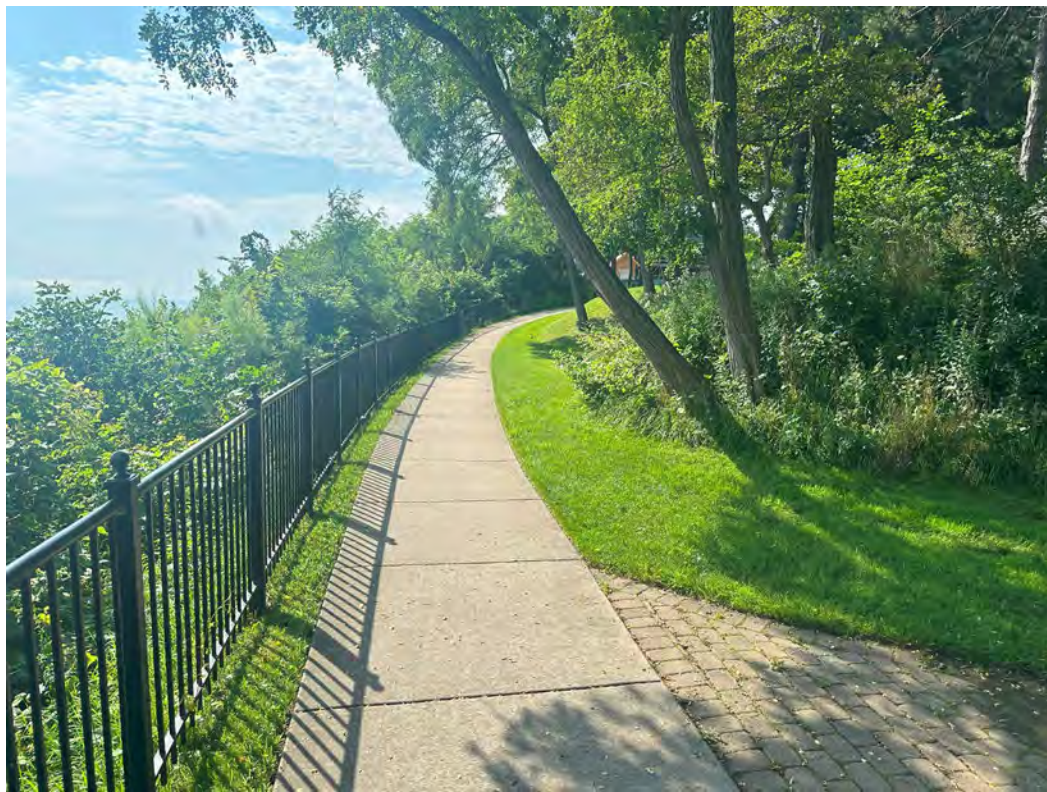
Mid-level Bluff Sidewalk (Looking South)



Mid-level Bluff Paver and Bench Area (Looking Southwest)



Mid-level Bluff Paver and Bench Area (Looking West)



Mid-level Bluff Sidewalk (Looking South)



Mid-level Bluff Sidewalk to Park Area (Looking West)



Upper Bench Southeast Section of Upper Parkland



Upper Park Sidewalk Southwest Corner of the Park (Looking East)



Upper Park Sidewalk South End (Looking East)



Upper Park (Looking South)



Upper Park (Looking East)



Upper Park Sidewalk (Looking North)



Upper Park Center East Side (Looking East)



Upper Park Center Overlooking Dog Entry Gate (Looking East)



Upper Park Sidewalk (Looking North)



Upper Park Area (Looking Southwest)



Upper Park Area (Looking Northeast)



Upper Park Sidewalk (Looking Southwest)



Sheridan Road Sidewalk South side of Park (Looking North)

ILLUSTRATIVE CONCEPT IMAGERY

FOR REFERENCE ONLY. ALL RENDERINGS ARE BASED ON WPD APPROVED SCHEMATIC DESIGN. NOT FOR CONSTRUCTION.



VIEW 1
CENTENNIAL BREAKWATER PIER LOOKING WEST (EYE-LEVEL, APPROX. 65.5" HT.)



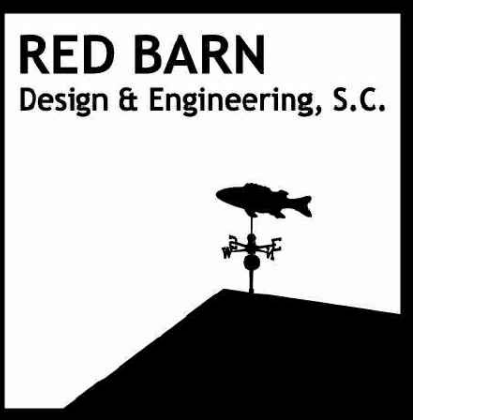
VIEW 2
SOUTH CENTENNIAL LOOKING W/NW (BIRDS EYE)



VIEW 3
CENTENNIAL SWIMMING BEACH LOOKING SOUTH (EYE-LEVEL, APPROX. 65.5" HT.)



VIEW 4
CENTENNIAL ACCESS PATH LOOKING E/SE (EYE-LEVEL, APPROX. 65.5" HT.)



6750 Woodland Drive
Waukegan Wisconsin 53597
p. 608.849.2042
c. 608.843.1870
redbarnde@tds.net

Consultants

**THE
LAKOTA
GROUP.**

16 West Illinois Street
Floor 7
Chicago, Illinois 60654
t 312.467.5445
f 312.467.5484
www.chelakotagroup.com

[illegible]

Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

Scale NONE

Drawing Title
Overall Site Plan

Sheet No. C102

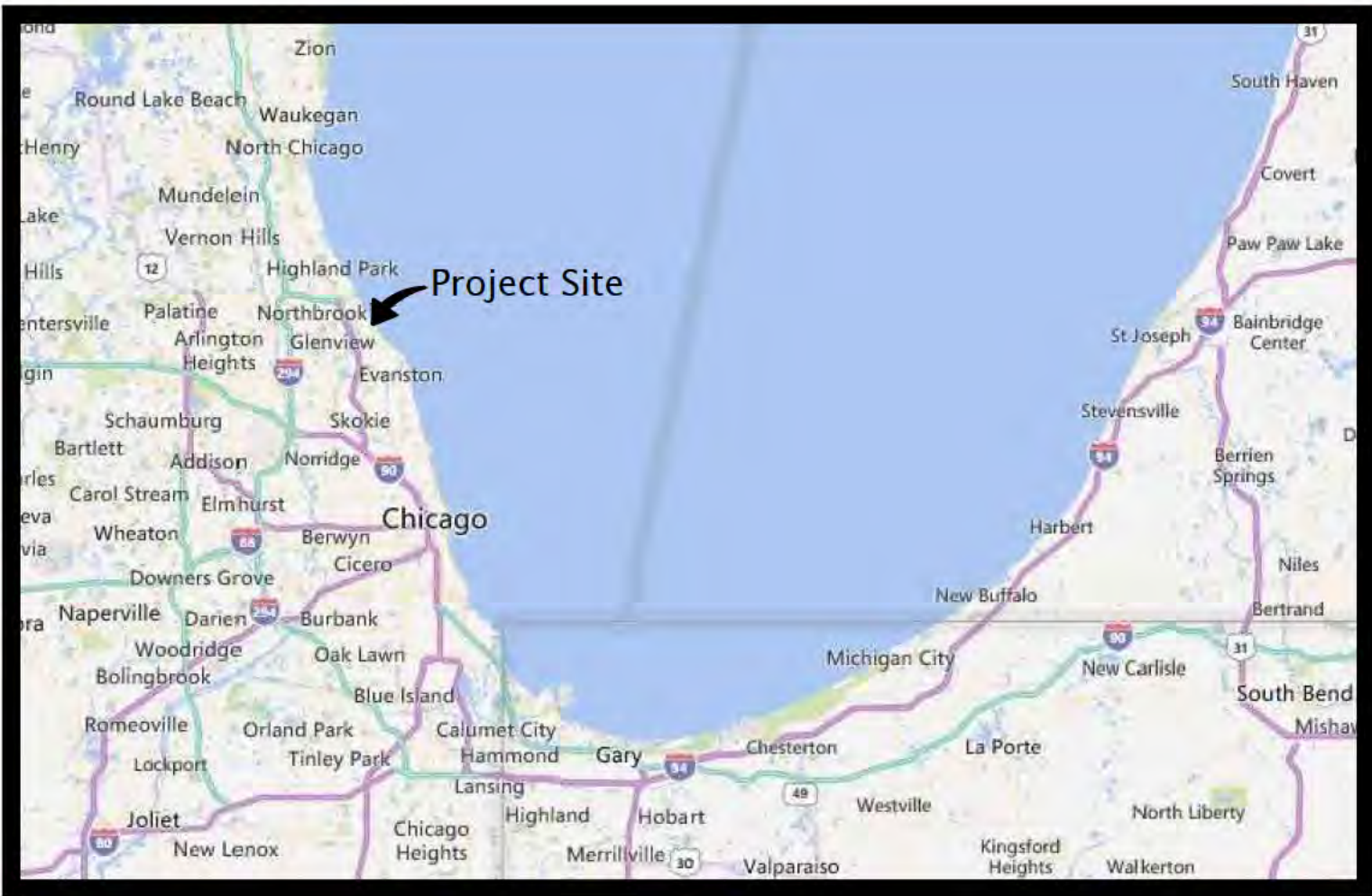
DRAWING LIST

- T101 Title Sheet
- C100 Existing Conditions Plan
- C101 General Site Development Plan
- C102 Site Preparation and Erosion Control Plan
- C103 Shoreline Improvement Plan Overview
- C104 Shoreline Improvement Layout Plan 1
- C105 Shoreline Improvement Layout Plan 2
- C106 Shoreline Improvement Layout Plan 3
- C107 Shoreline Improvement Layout Plan 4
- C108 Shoreline Improvements Sections and Details Section A-A'
- C109 Shoreline Improvements Sections and Details Section B-B'
- C110 Shoreline Improvements Sections and Details Section C-C'
- C111 Shoreline Improvements Sections and Details Section D-D'
- C112 Shoreline Improvements Sections and Details Section E-E'
- C113 Shoreline Improvements Sections and Details Section F-F'
- C114 Shoreline Improvements Sections and Details Section G-G'
- C115 Shoreline Improvements Sections and Details Section H-H'
- C116 Shoreline Improvements Sections and Details Section I-I'
- C117 Shoreline Improvements Sections and Details Section J-J'
- C118 Shoreline Improvements Sections and Details Section K-K'
- C119 Shoreline Improvements Sections and Details Section L-L'
- C120 Shoreline Improvements Corner Details 1
- C121 Shoreline Improvements Corner Details 2
- C122 Shoreline Improvements Corner Details 3
- C123 Shoreline Improvements Corner Details 4
- C124 Breakwater Plan Overview
- C125 Breakwater Layout Plan 1
- C126 Breakwater Layout Plan 2
- C127 Breakwater Section and Details Section M-M'
- C128 Breakwater Section and Details Section N-N'
- C129 Breakwater Corner Details
- C130 Breakwater Revetment Layout Plan and Sections
- C131 Walkway Layout Plan and Details
- C132 Walkway Details
- C133 Retaining Wall Overview
- C134 East Retaining Wall Plan and Profile View
- C135 West Retaining Wall Plan and Profile View 1
- C136 West Retaining Wall Plan and Profile View 2
- C137 East Retaining Wall Details
- C138 West Retaining Wall Details
- C139 Sand Fill Layout Plan
- C140 Sand Fill Sections
- C141 Parking Lot Improvements
- C142 Centennial North Bulkhead Corner Improvements
- C143 Tree Preservation Plan
- C144 Overall Site Plan
- C145 Landscape Plan
- C146 Planting Details
- C147 Handrail and Fencing Plan
- C148 Handrail and Fencing Enlargement Plan A
- C149 Handrail and Fencing Enlargement Plan B
- C150 Handrail and Fencing Enlargement Plan C
- C151 Handrail and Fencing Enlargement Plan C and D
- C152 Hardscape Details
- C153 Hardscape Details
- C154 Boardwalk Details
- C155 Handrail Details
- C156 Handrail Details
- C157 Handrail Details
- C158 Handrail Details
- C159 Handrail Details
- C160 Handrail Details
- C161 Fencing Details
- C162 Fencing Details
- C163 Gate Details
- C164 Site Furnishings
- C165 Site Furnishings
- C166 Retaining Wall Details
- C167 Retaining Wall Details
- C168 Lighting and Electrical Plan
- C169 Lighting and Electrical Details
- C170 Lighting and Electrical Details
- C171 Lighting and Electrical Details
- C172 Lighting and Electrical Details
- C173 Dog and Foot Wash Plumbing Layout Plan
- C174 Stairs - General Notes and Bill of Materials
- C175 Stairs – General Plan, Foundation Plan and Framing Plan
- C176 Stairs – Structural Details (Sheet 1 of 2)
- C177 Stairs – Structural Details (Sheet 1 of 2)
- C178 Overall Restoration Plan
- C179 Restoration Plan
- C180 Restoration Notes
- C181 Restoration Notes
- C182 Site Closure Plan

Site Improvements

Centennial Park

Winnetka, IL



LOCATION MAP
NTS



SOURCE : GOOGLE EARTH

PROJECT SITE
NTS



ENGINEER:
RED BARN Design & Engineering, SC
6750 Woodland Drive
Waunakee, Wisconsin 53597
Ph: (608) 849-2042
Attn: Matthew Wright, P.E.

LANDSCAPE ARCHITECT:
The Lakota Group
One East Wacker Drive
Chicago, IL 60601
Ph: (312) 467-5445
Attn: Scott Freres, ASLA

OWNER:
Winnetka Park District



540 Hibbard Road
Winnetka, IL 60093
Ph: (847) 501-2040
Attn: Costa Kutulas

License Expires 11-30-25	License Expires 11-30-24	License Expires 11-30-25	License Expires 11-30-24	License Expires 11-30-25



6750 Woodland Drive
Waunakee Wisconsin 53597
p. 608.849.2042
c. 608.843.1870
redbarnde@tds.net

Consultants

Issued for	Rev. Date
70% Submittal	04/08/24
100% Submittal	06/28/24
Bidding And Construction	07/19/24

Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

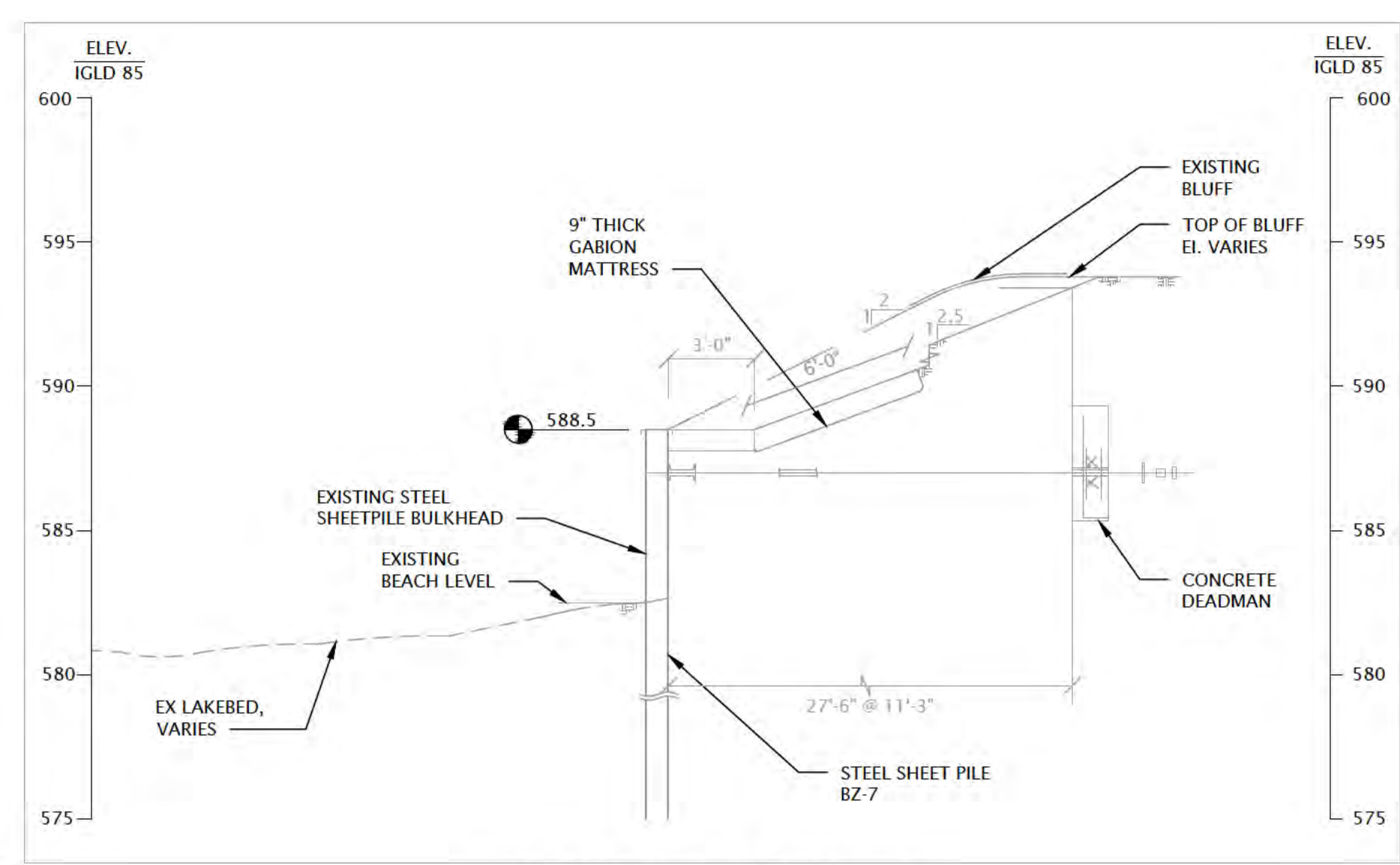
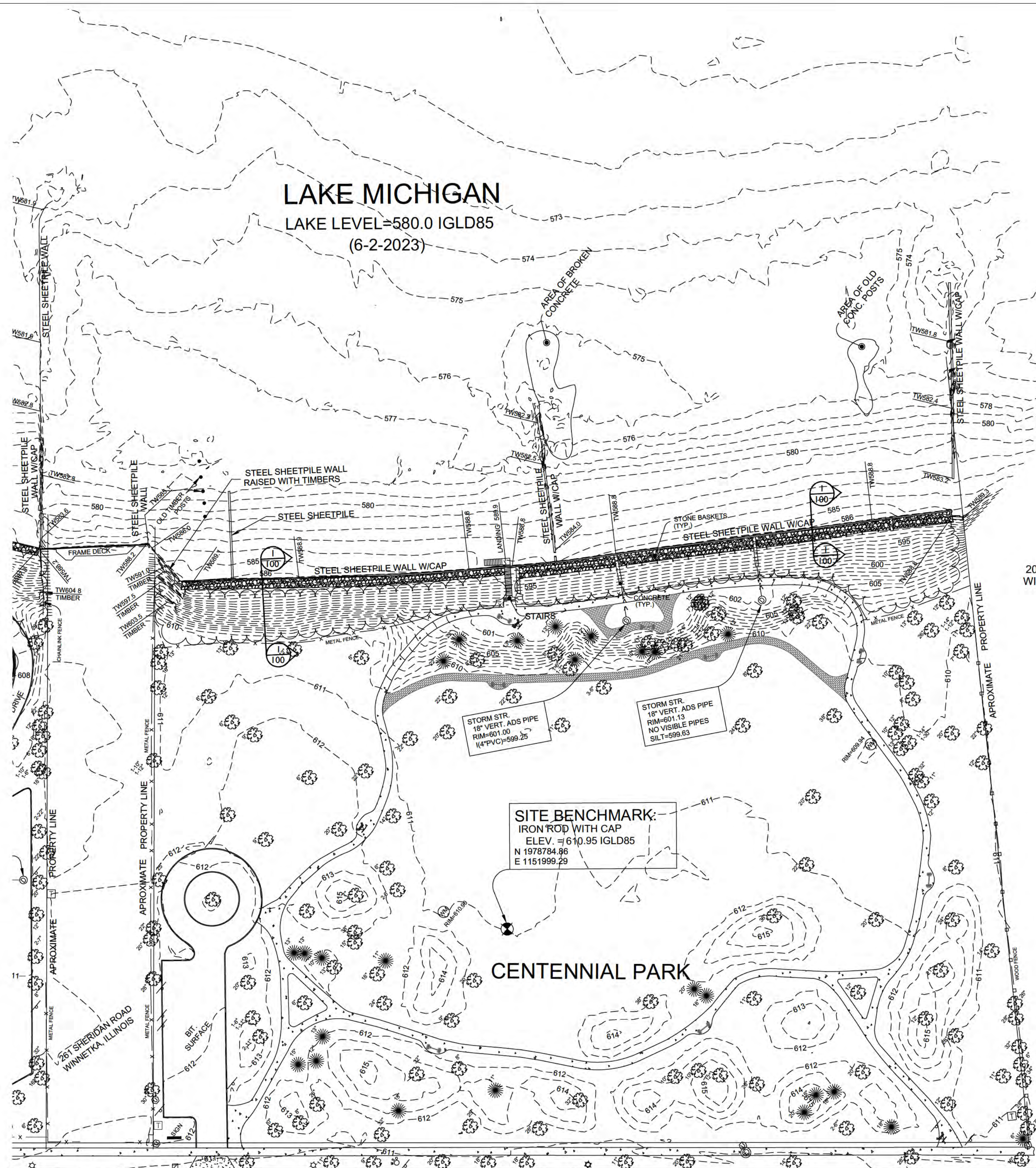
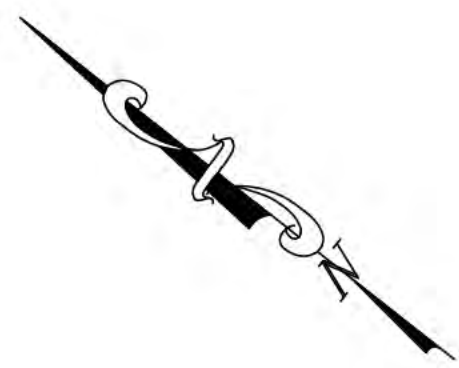
Graphic Scale

Scale None

Drawing Title

Title Sheet

Sheet No. T101



Existing Bulkhead
Scale : 0' 2.5' 5'

- LEGEND (EXISTING)**
- PICNIC TABLE
 - BENCH
 - WATER METER
 - B-BOX
 - DRINKING FOUNTAIN
 - SANITARY MANHOLE
 - TRANSFORMER
 - ELECTRIC MANHOLE
 - LIGHT POLE
 - SIGN
 - STORM STRUCTURE
 - STORM STRUCTURE
 - TRAFFIC SIGNAL
 - HANDHOLE
 - UTILITY CANISTER
 - TREES/BRUSH

"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."



SHERIDAN ROAD

- NOTES:**
1. BASEMAP, TOPOGRAPHIC AND BATHYMETRIC INFORMATION PREPARED FROM SURVEYS PERFORMED IN JAN 2024.
 2. HORIZONTAL DATUM IS BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD 83 EAST ZONE 1201 - ESTABLISHED USING TRIMBLE VRS NOW NETWORK.
 3. VERTICAL DATUM IS IGLD85 (NAVD88 - 0.51' = IGLD85)
 4. TOPOGRAPHIC AND BATHYMETRIC SURVEYS GENERATING CONTOURS AT ONE (1) FOOT INTERVALS.
 5. UNDERGROUND UTILITIES ARE BASED ON FIELD OBSERVATIONS.
 6. UNDERGROUND UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR/OWNER IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL FOR A JUNE LOCATE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.

- CONTROL POINTS/BENCHMARKS**
- CROSS CUT ON CONC. PIER
ELEV. = 584.67 IGLD 85
N 1979426.45
E 1152033.01
- IRON ROD WITH CAP
ELEV. = 610.95 IGLD 85
N 1978784.86
E 1151999.29
- IRON ROD WITH CAP
ELEV. = 610.87 IGLD 85
N 1979327.21
E 1151738.75



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100% Submittal	06/28/24
Bidding And Construction	07/19/24

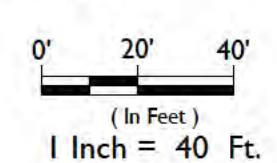
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 Inch = 40 Ft.

Drawing Title

Existing Conditions Plan

Sheet No. C100



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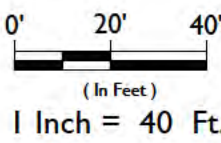
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



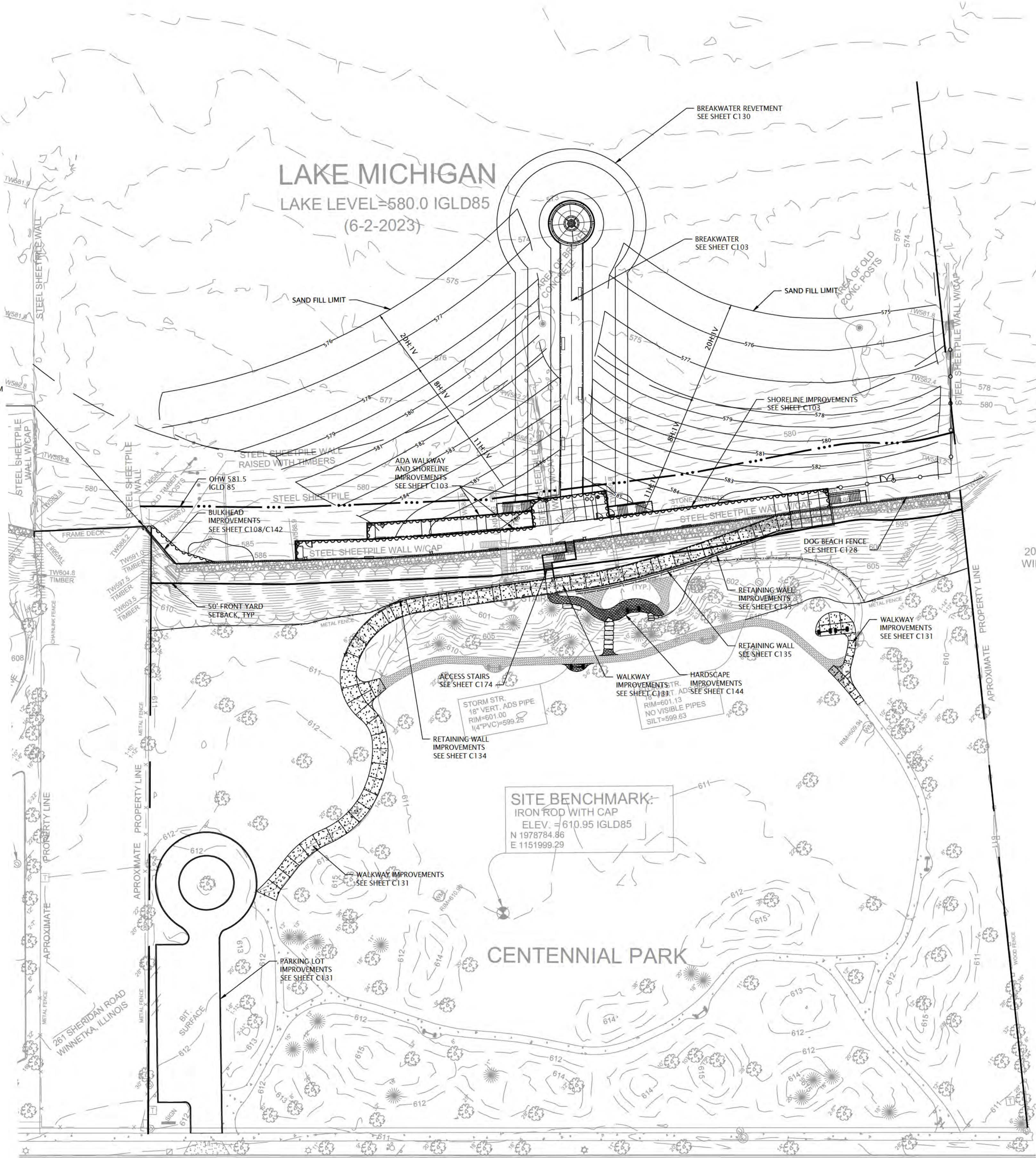
Scale
1 Inch = 40 Ft.

Drawing Title

General Site
Development Plan

Sheet No.
C101

CORNER CONSTRUCTION REQUIRES WORK ON ADJACENT PROPERTY. THE CONTRACTOR SHALL MINIMIZE ENCROACHMENT ONTO ADJACENT PROPERTY TO PERFORM THE WORK. NO MATERIAL STOCKPILING, EQUIPMENT STAGING, OR ANY ACTIVITY BEYOND THOSE IS REQUIRED TO PERFORM THE WORK SHALL BE PERFORMED. ALL DISTURBANCES TO UPLAND BEACH AREAS SHALL BE RESTORED TO PREEXISTING CONDITIONS TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE.



SHERIDAN ROAD

LEGEND (PROPOSED)

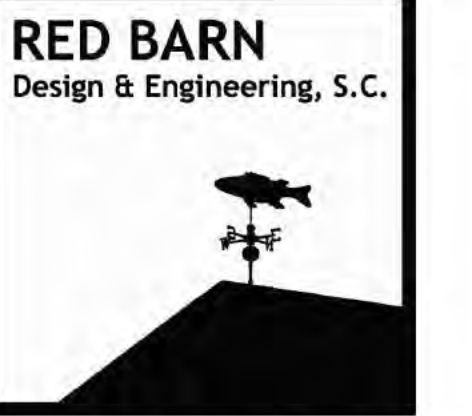
- OHW 581.5 IGLD 85
- 50' FRONT YARD SETBACK

"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."



LEGEND

- ORDINARY HIGH WATER MARK (OHW)
--- 50' SETBACK LINE FROM OHW



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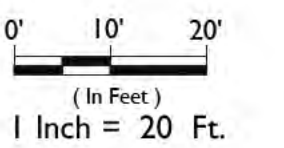
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 Inch = 20 Ft.

Drawing Title

SHORELINE IMPROVEMENT
OVERVIEW

Sheet No.

C103

"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."



CENTENNIAL PARK SHORELINE IMPROVEMENTS OVERVIEW



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Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Winnetka Park District
Winnetka, IL

0' 2.5' 5'

(In Feet)

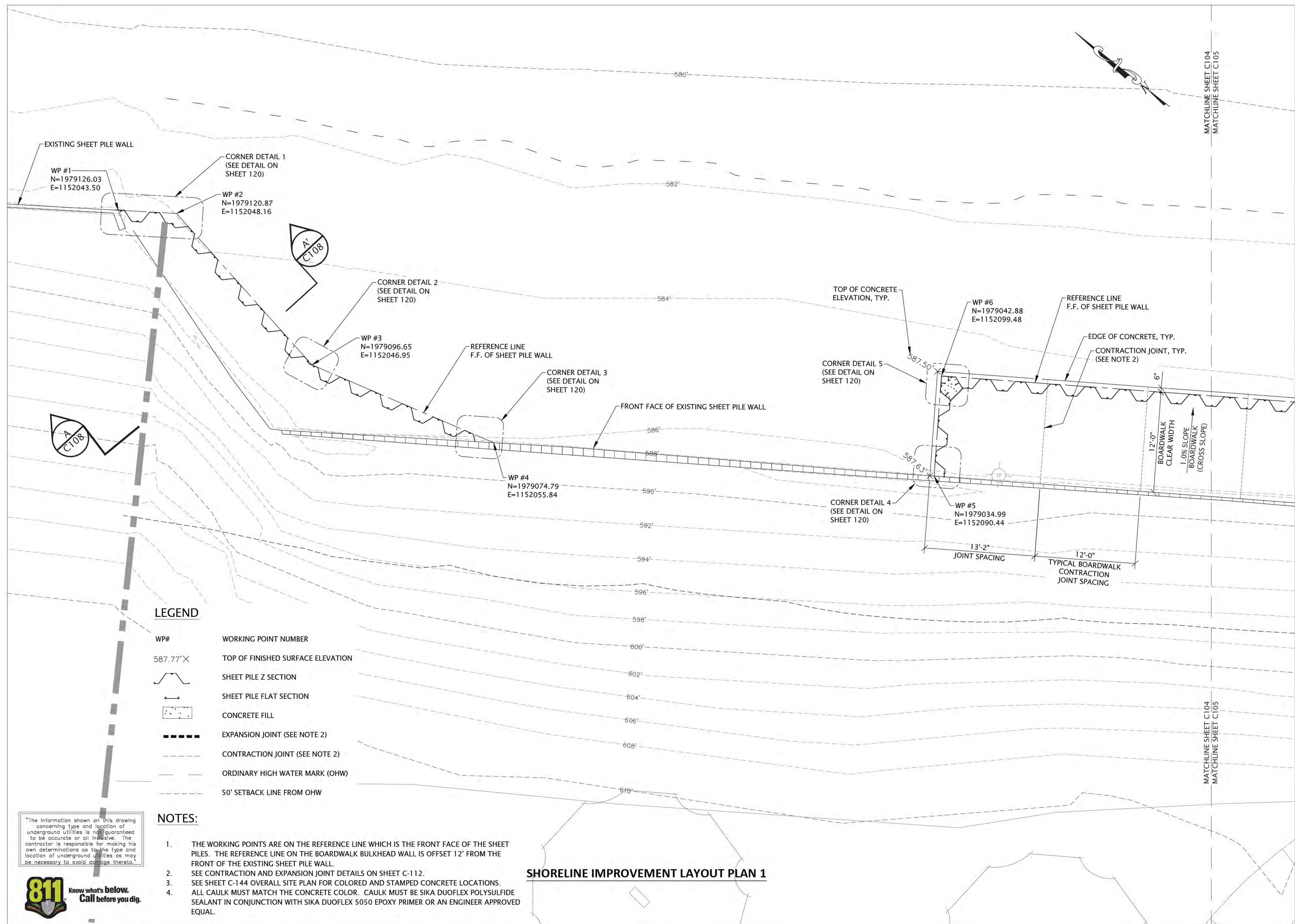
1 Inch = 5 Ft.

Scale 1 Inch = 5 Ft.

Drawing Title

SHORELINE IMPROVEMENT
LAYOUT PLAN I

Sheet No.	C104
-----------	------



"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."



SHORELINE IMPROVEMENT LAYOUT PLAN 1



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Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Winnetka Park District
Winnetka, IL

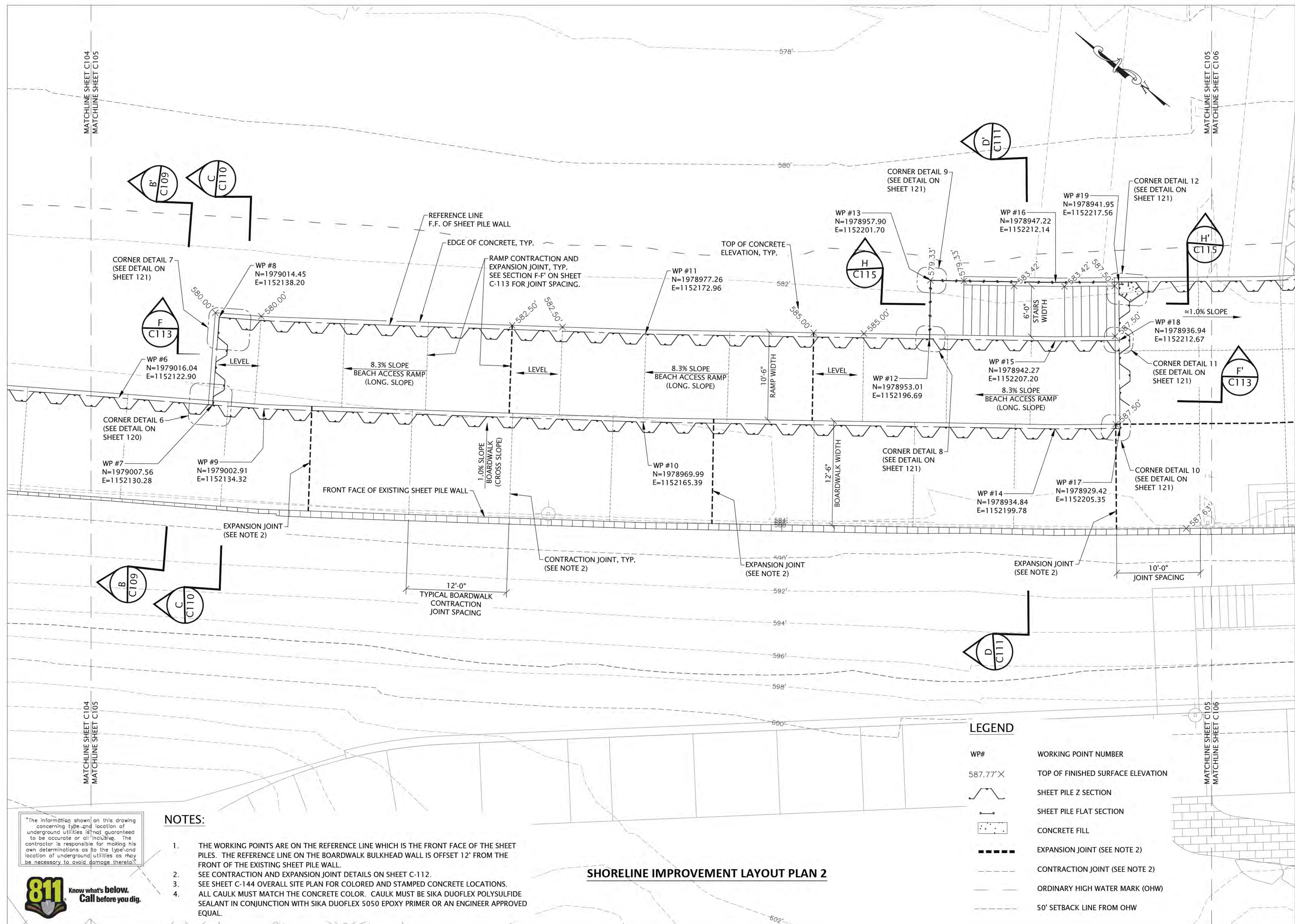
0' 2.5' 5'
(In Feet)
1 Inch = 5 Ft.

Scale 1 Inch = 5 Ft.

Drawing Title

SHORELINE IMPROVEMENT
LAYOUT PLAN 2

Sheet No.	C105
-----------	------



"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."

NOTES:

1. THE WORKING POINTS ARE ON THE REFERENCE LINE WHICH IS THE FRONT FACE OF THE SHEET PILES. THE REFERENCE LINE ON THE BOARDWALK BULKHEAD WALL IS OFFSET 12' FROM THE FRONT OF THE EXISTING SHEET PILE WALL.
2. SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C-112.
3. SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
4. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKADUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKADUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.

SHORELINE IMPROVEMENT LAYOUT PLAN 2



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Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Winnetka Park District
Winnetka, IL

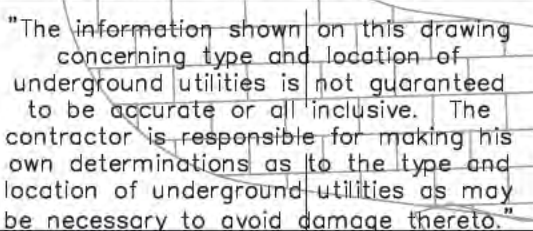
0' 2.5' 5'
(In Feet)
1 Inch = 5 Ft.

Scale 1 Inch = 5 Ft.

Drawing Title

SHORELINE IMPROVEMENT
LAYOUT PLAN 3

Sheet No. C106

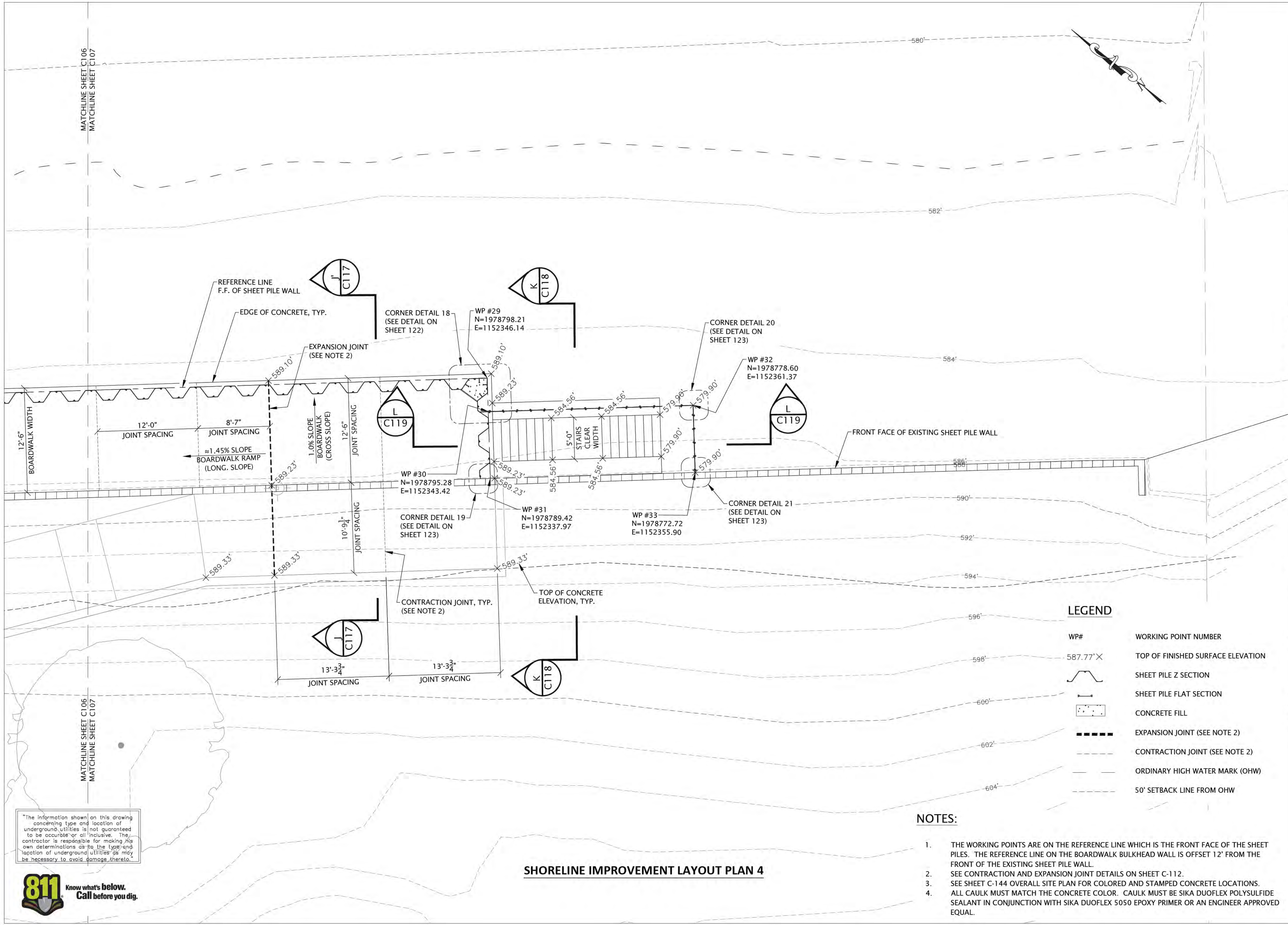


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SHORELINE IMPROVEMENT LAYOUT PLAN 3

NOTES:

1. THE WORKING POINTS ARE ON THE REFERENCE LINE WHICH IS THE FRONT FACE OF THE SHEET PILES. THE REFERENCE LINE ON THE BOARDWALK BULKHEAD WALL IS OFFSET 12' FROM THE FRONT OF THE EXISTING SHEET PILE WALL.
2. SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C-112.
3. SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
4. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



RED BARN
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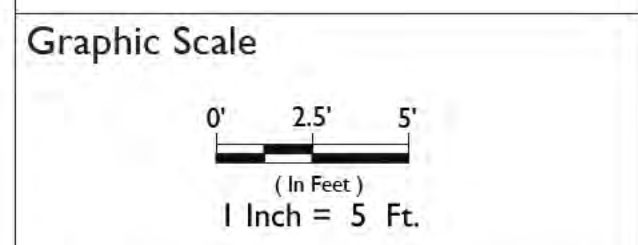
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100% Submittal	06/28/24
Bidding and Construction	07/19/24

Project Title:

Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL



Scale 1 Inch = 5 Ft.

Drawing Title

**SHORELINE IMPROVEMENT
LAYOUT PLAN 4**

Sheet No.

C107

"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."



SHORELINE IMPROVEMENT LAYOUT PLAN 4

- NOTES:**
1. THE WORKING POINTS ARE ON THE REFERENCE LINE WHICH IS THE FRONT FACE OF THE SHEET PILES. THE REFERENCE LINE ON THE BOARDWALK BULKHEAD WALL IS OFFSET 12' FROM THE FRONT OF THE EXISTING SHEET PILE WALL.
 2. SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C-112.
 3. SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
 4. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.

LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

GRANULAR FILL COMPACTION NOTES:

- ALL GRANULAR FILL SHALL CONFORM TO ILLINOIS DOT CA 6.
- PLACE GRANULAR FILL IN 12" MAX. LIFTS.
- EACH LAYER MUST BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY (ASTM D698).
- COMPACTION EQUIPMENT OR METHODS THAT PRODUCE HORIZONTAL OR VERTICAL EARTH PRESSURES THAT MAY CAUSE EXCESSIVE DISPLACEMENT OR OVERTURNING, OR MAY DAMAGE THE BULKHEAD STRUCTURE, SHALL NOT BE USED.



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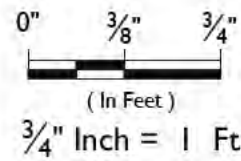
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION A-A'

Sheet No.

C108

GRIND SMOOTH AND
EASE SHARP CORNERS

BEACHSIDE

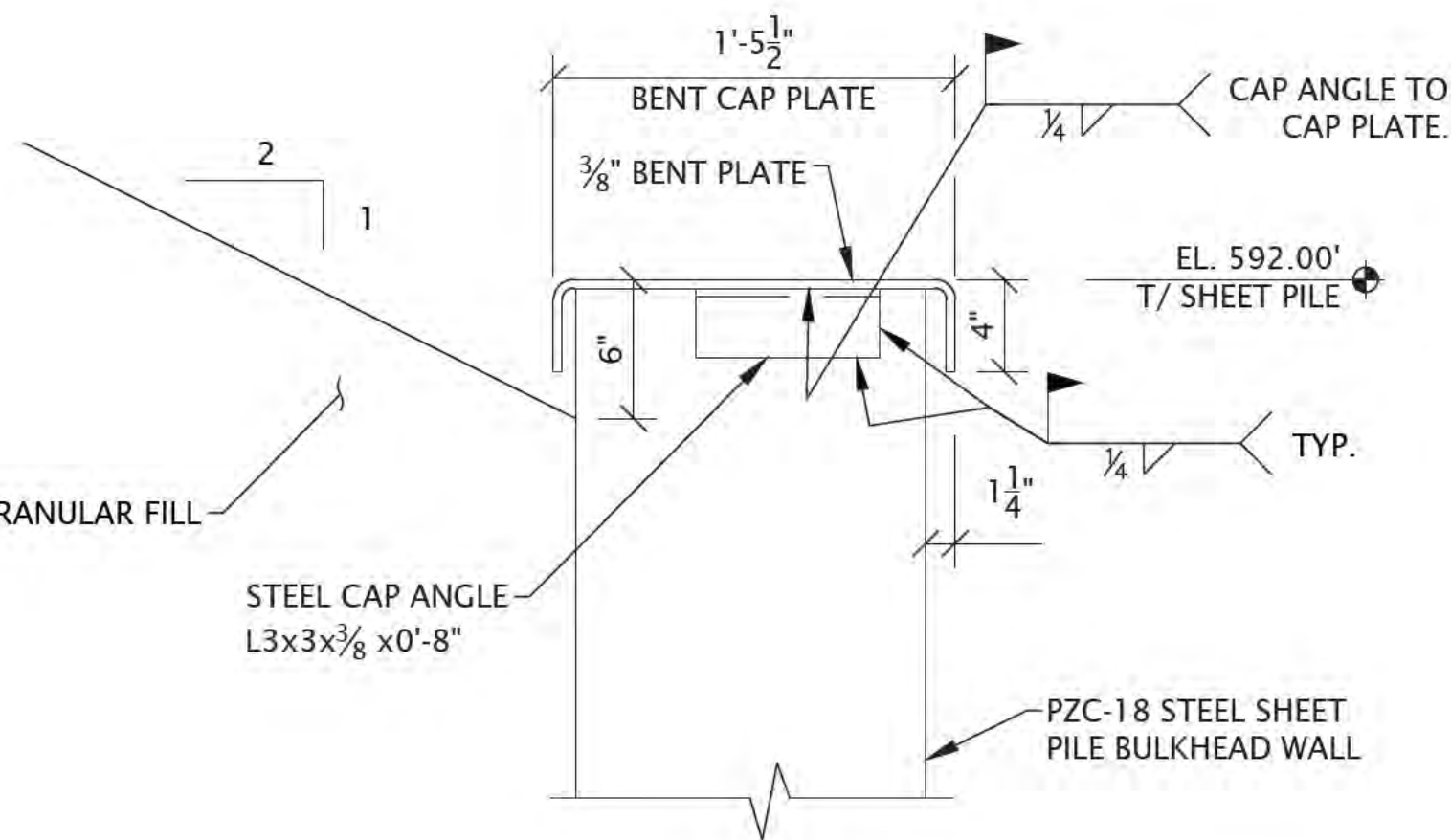
3/8" BENT PLATE

CAP ANGLE TO
CAP PLATE.

CAP BENT PLATE SPLICE DETAIL

FILLSIDE

STEEL CAP ANGLE
L3x3x3/8 x0'-8"



FILLSIDE

BEACHSIDE

CAP BENT PLATE ELEVATION VIEW

EXISTING WOOD RETAINING WALL, TYP.

GRANULAR FILL

ORDINARY HIGH WATER
EL. 581.50'

EL. 567.00'
PILE TIP

SHORELINE IMPROVEMENT TYPICAL SECTION A-A'

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- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- ▲ SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

1. SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
2. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



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0" $\frac{3}{8}$ " $\frac{3}{4}$ "
(In Feet)
 $\frac{3}{4}$ " Inch = 1 Ft.

Drawing Title	SHORELINE IMPROVEMENTS SECTIONS AND DETAILS SECTION B-B'
---------------	--

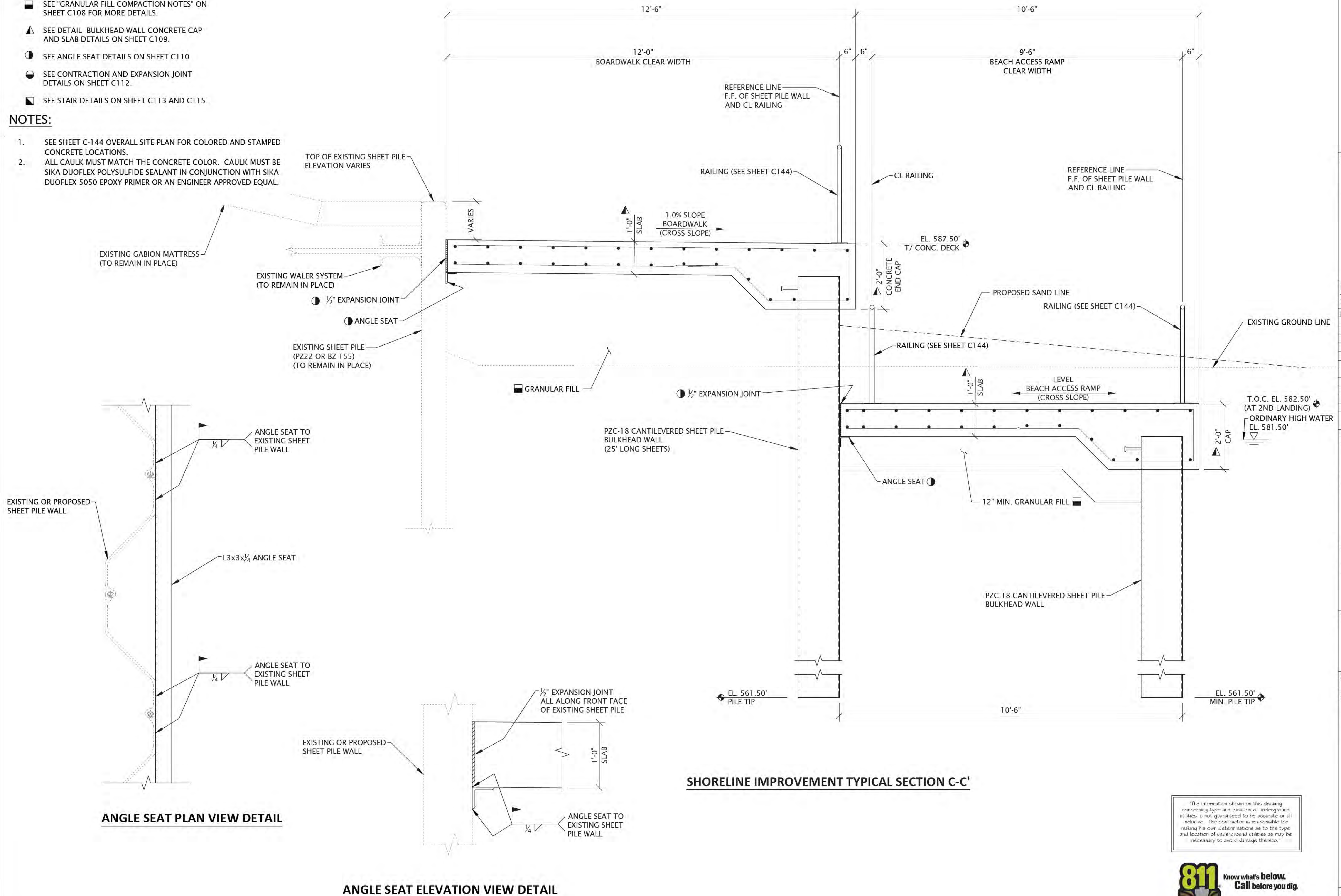
Sheet No.	C109
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LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- ▲ SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKADUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKADUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



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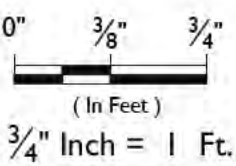
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION C-C'

Sheet No.

C110

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- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- ▲ SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

1. SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
2. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



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Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION D-D'

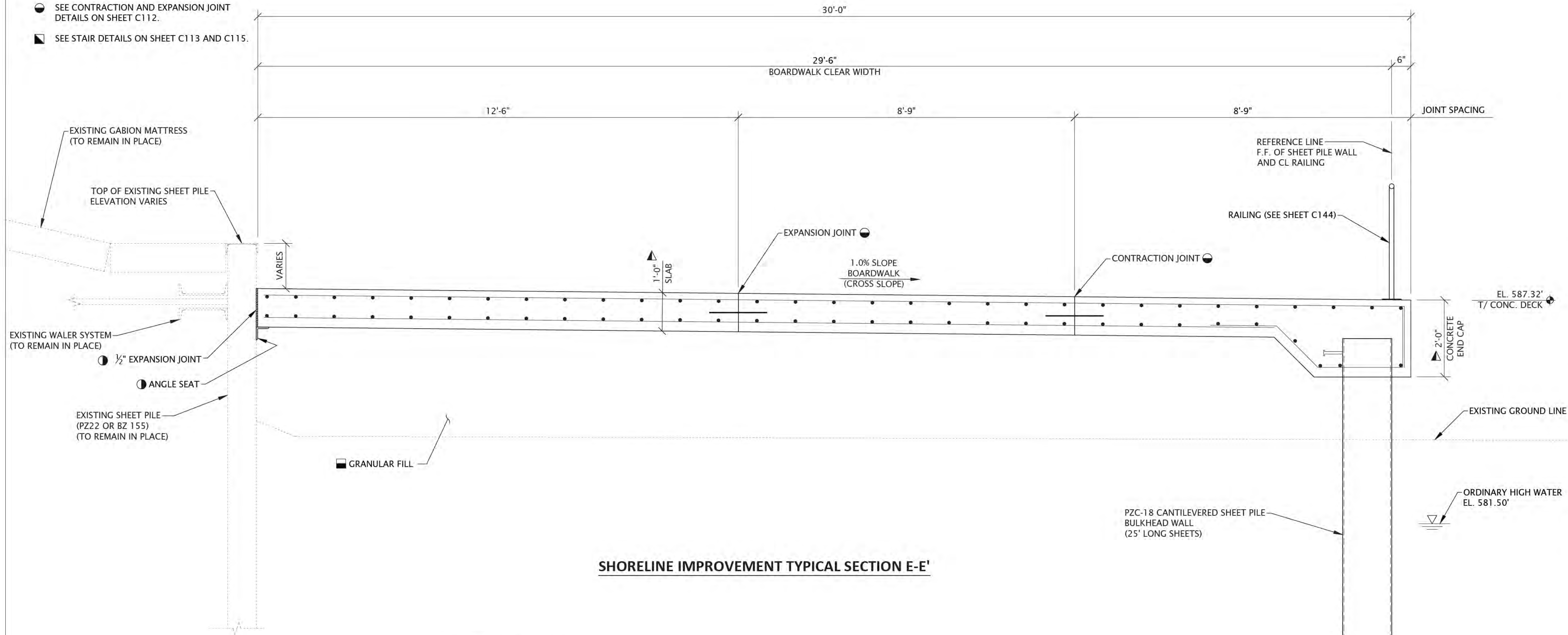
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LEGEND:

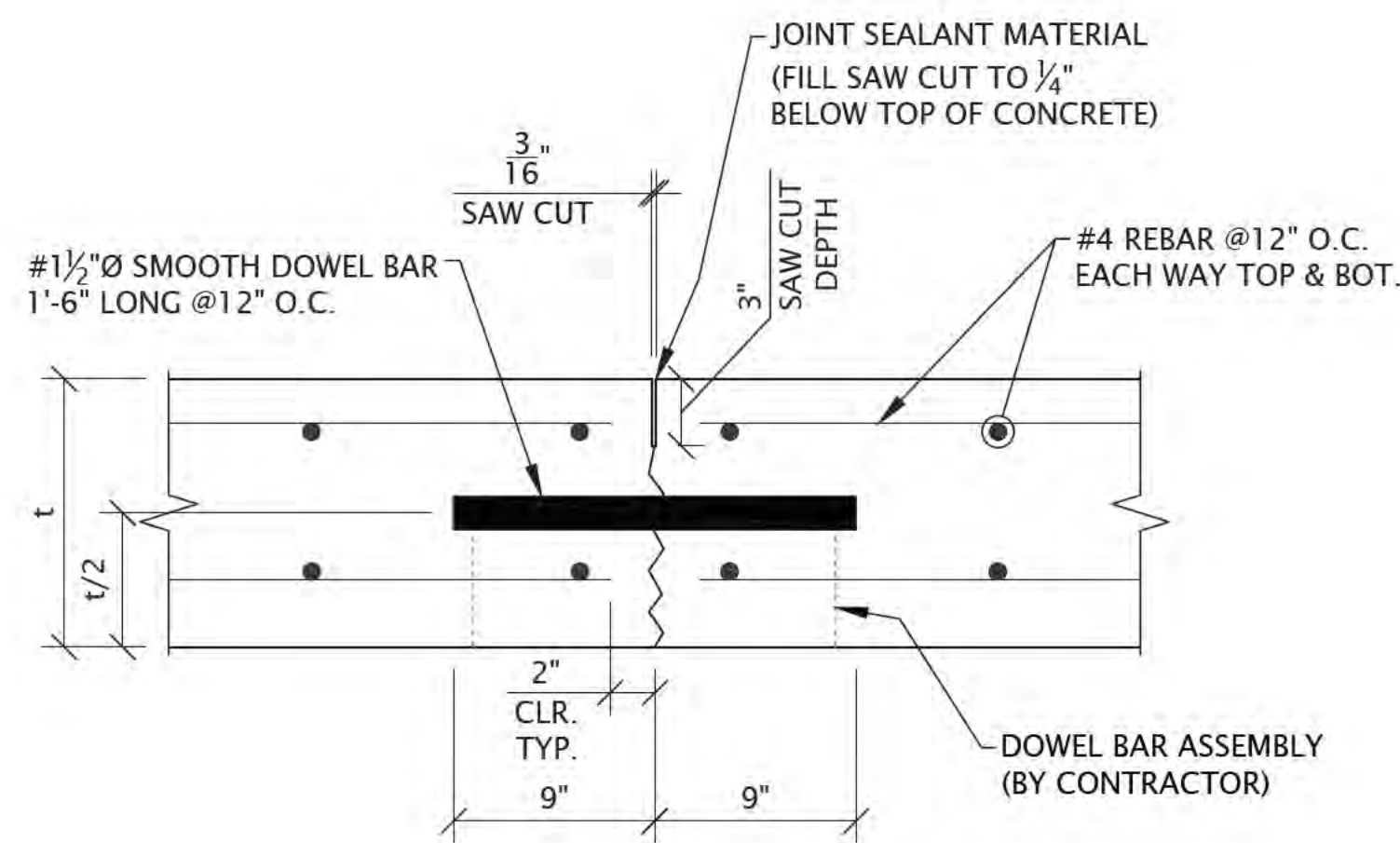
- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

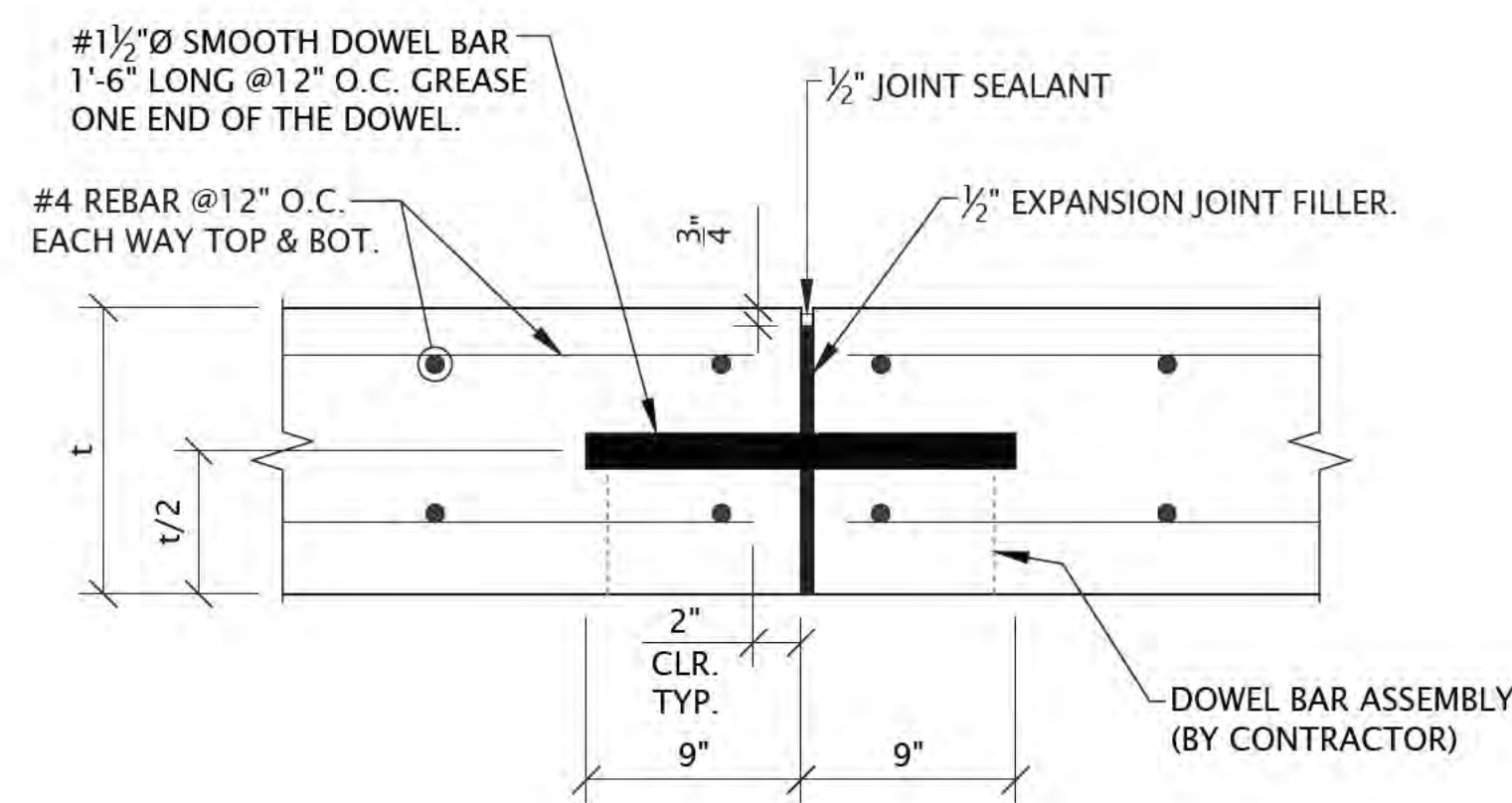
- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



SHORELINE IMPROVEMENT TYPICAL SECTION E-E'



TYPICAL CONTRACTION JOINT DETAIL



TYPICAL EXPANSION JOINT DETAIL

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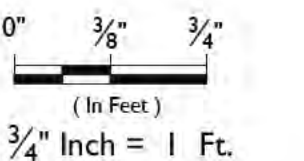
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION E-E'

Sheet No.

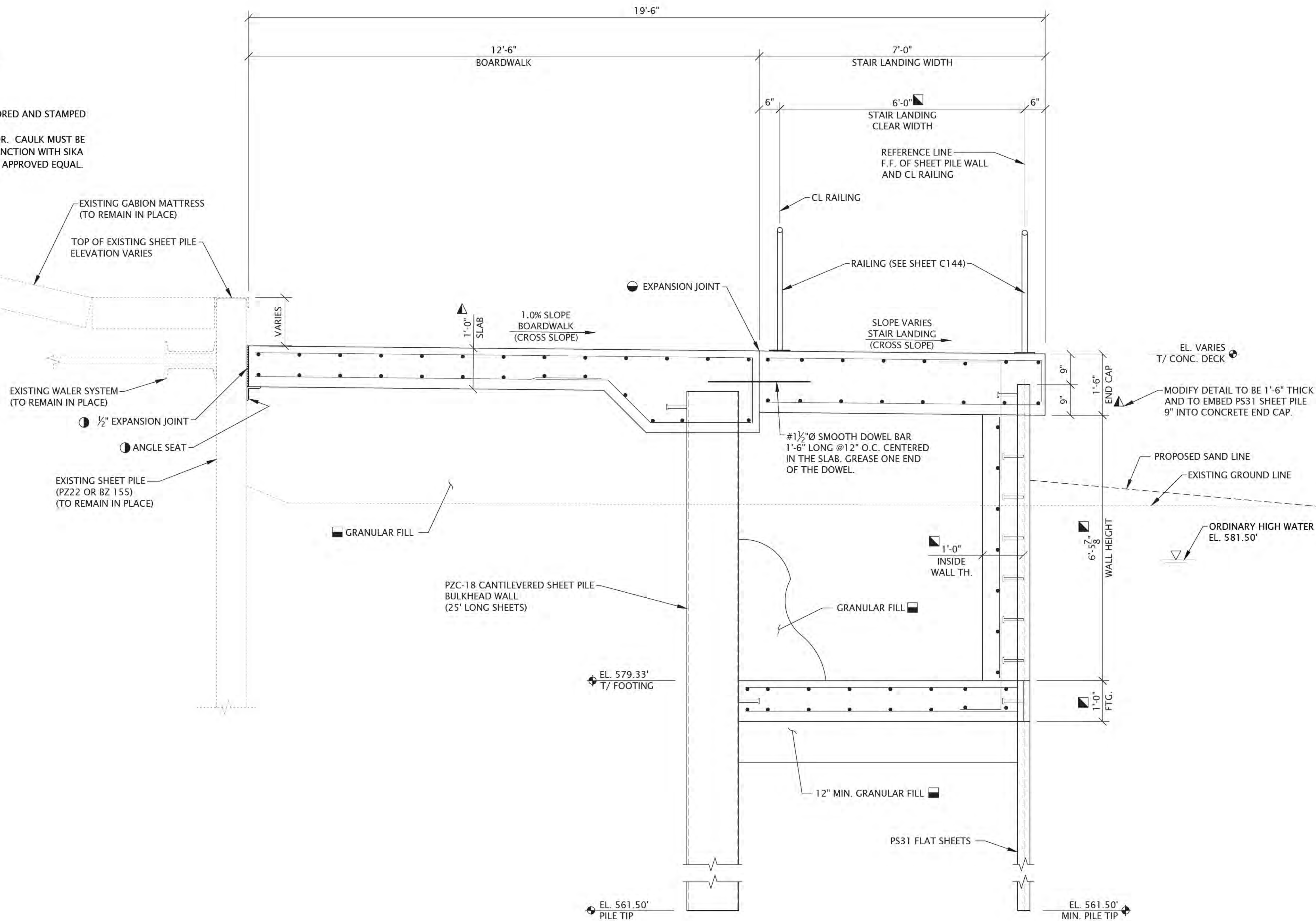
C112

LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKADUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKADUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



SHORELINE IMPROVEMENT TYPICAL SECTION G-G'

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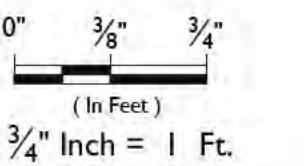
Project Title:

Site Improvements
Eldorado Park &
Winnetka Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION G-G'

Sheet No.

C114

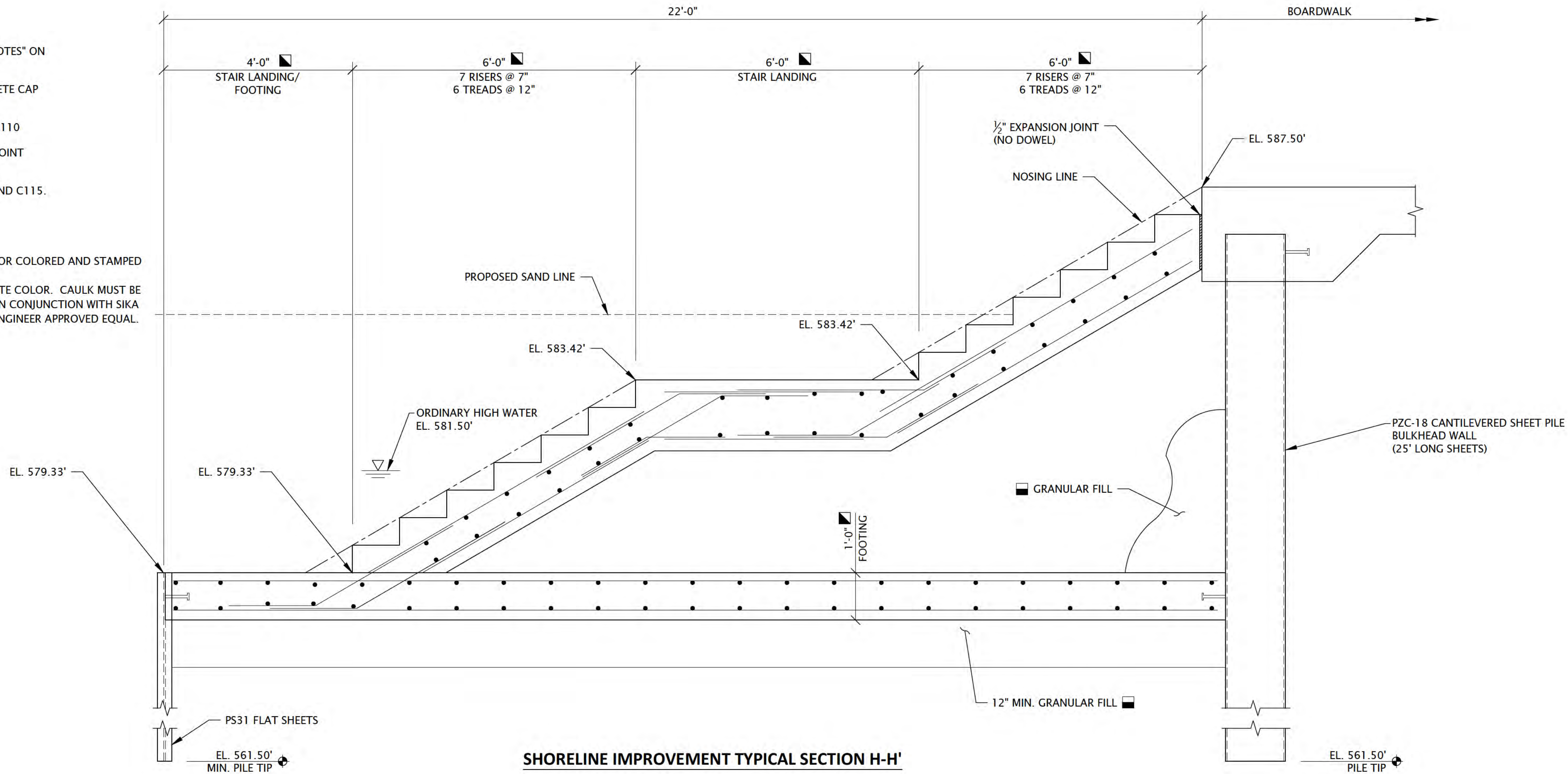
LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

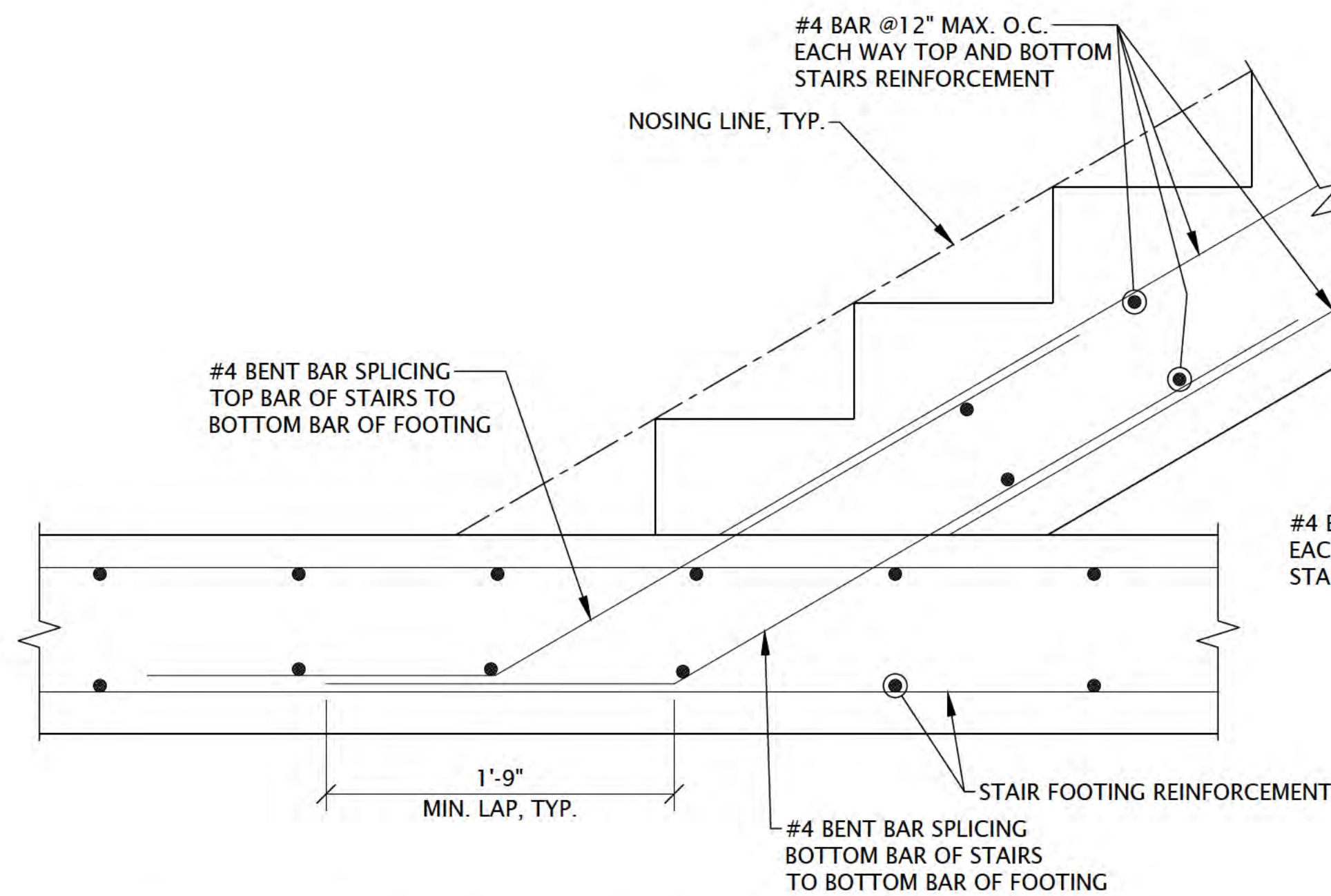
NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.

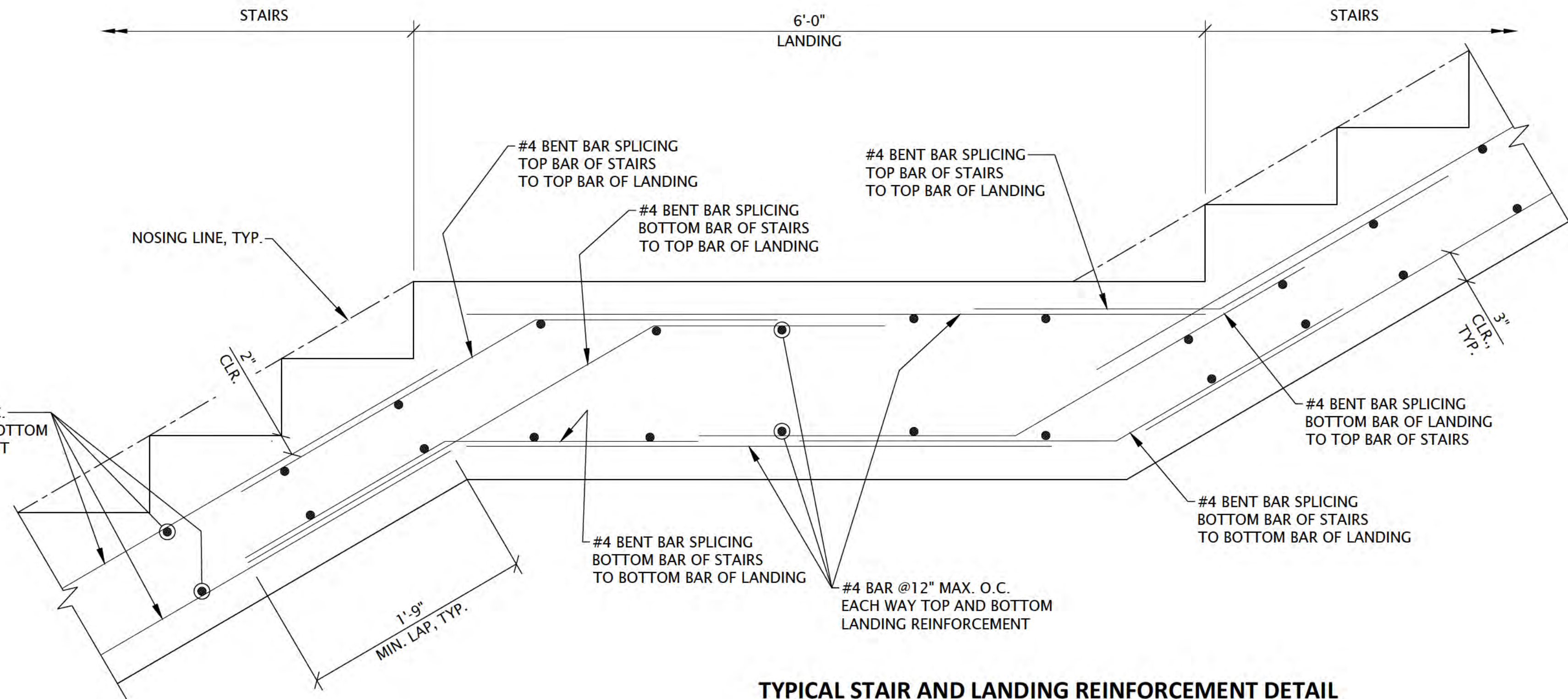
"The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto."



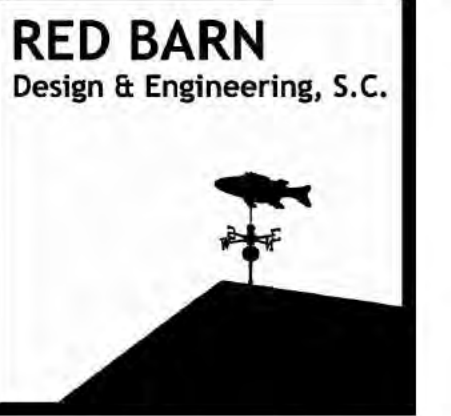
SHORELINE IMPROVEMENT TYPICAL SECTION H-H'



TYPICAL STAIR TO FOOTING REINFORCEMENT DETAIL



TYPICAL STAIR AND LANDING REINFORCEMENT DETAIL



6750 Woodland Drive
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Spring Green Wisconsin 53588
p. 608.588.7866

Issued for	Rev. Date
70% Submittal	04/08/24
100% Submittal	06/28/24
Bidding and Construction	07/19/24

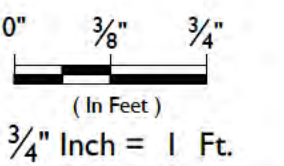
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION H-H'

Sheet No.

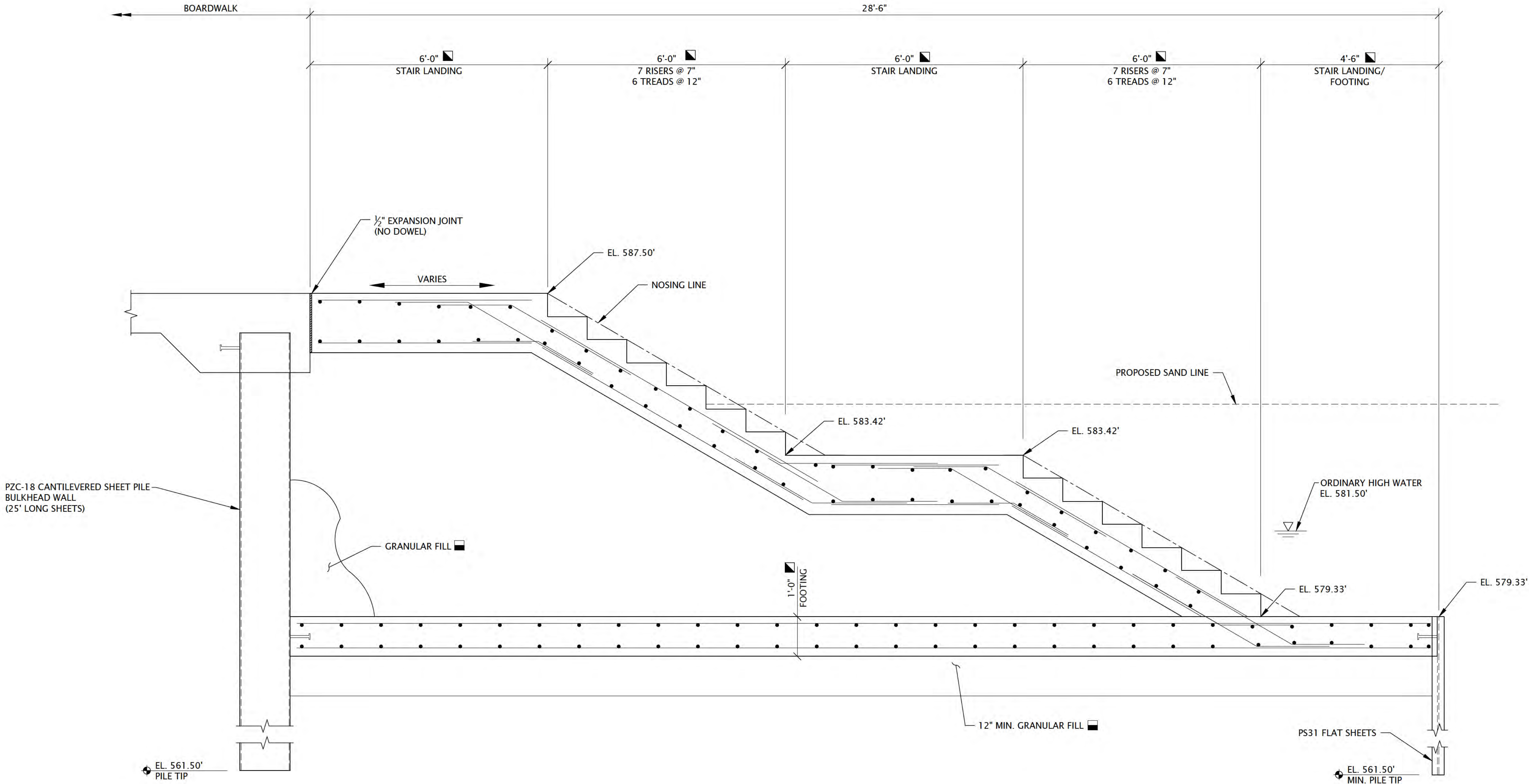
C115

LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- ▲ SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- ▣ SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



SHORELINE IMPROVEMENT TYPICAL SECTION I-I'



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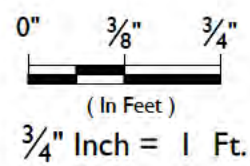
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

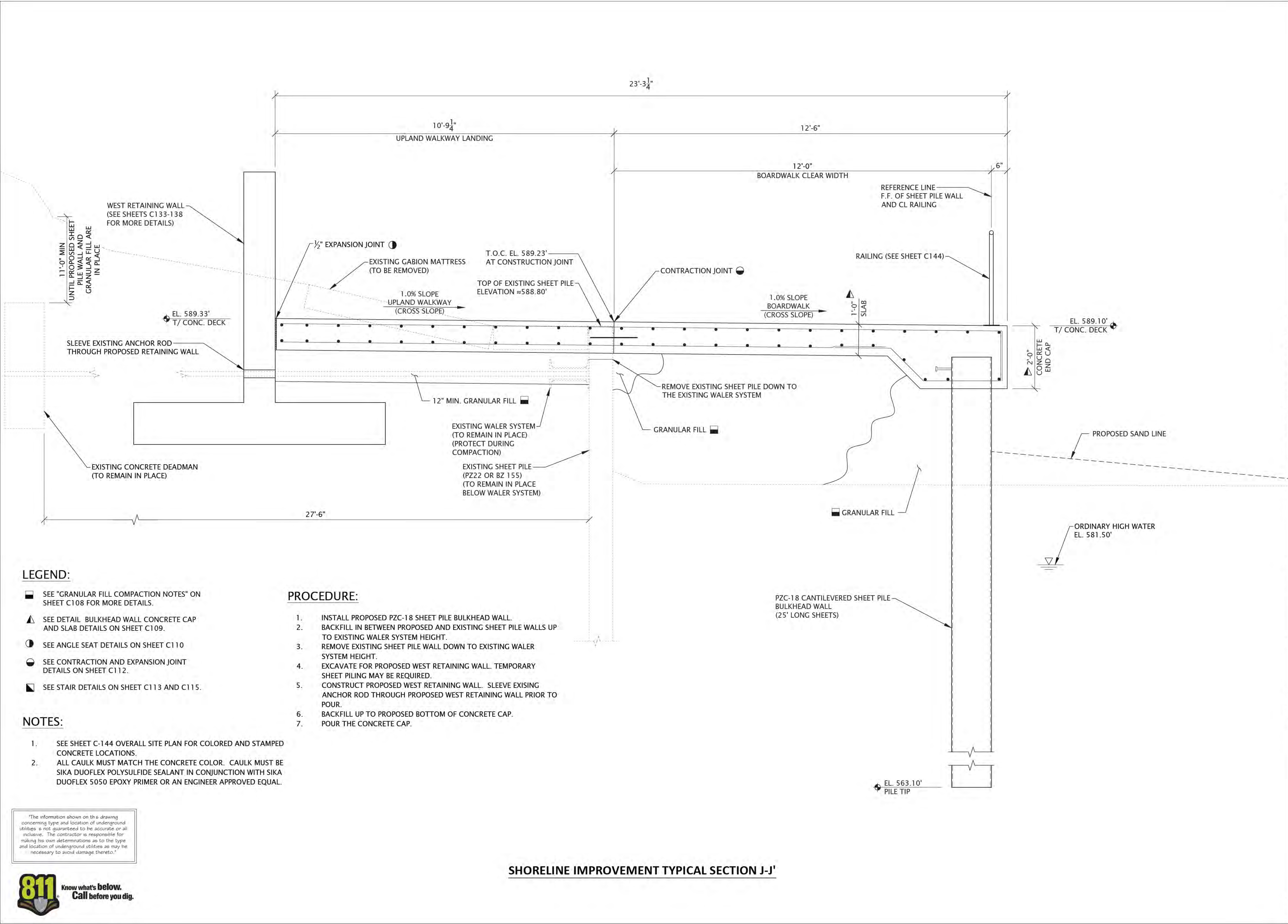
SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION I-I'

Sheet No.

C116

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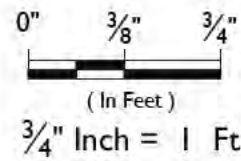
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION J-J'

Sheet No.

C117

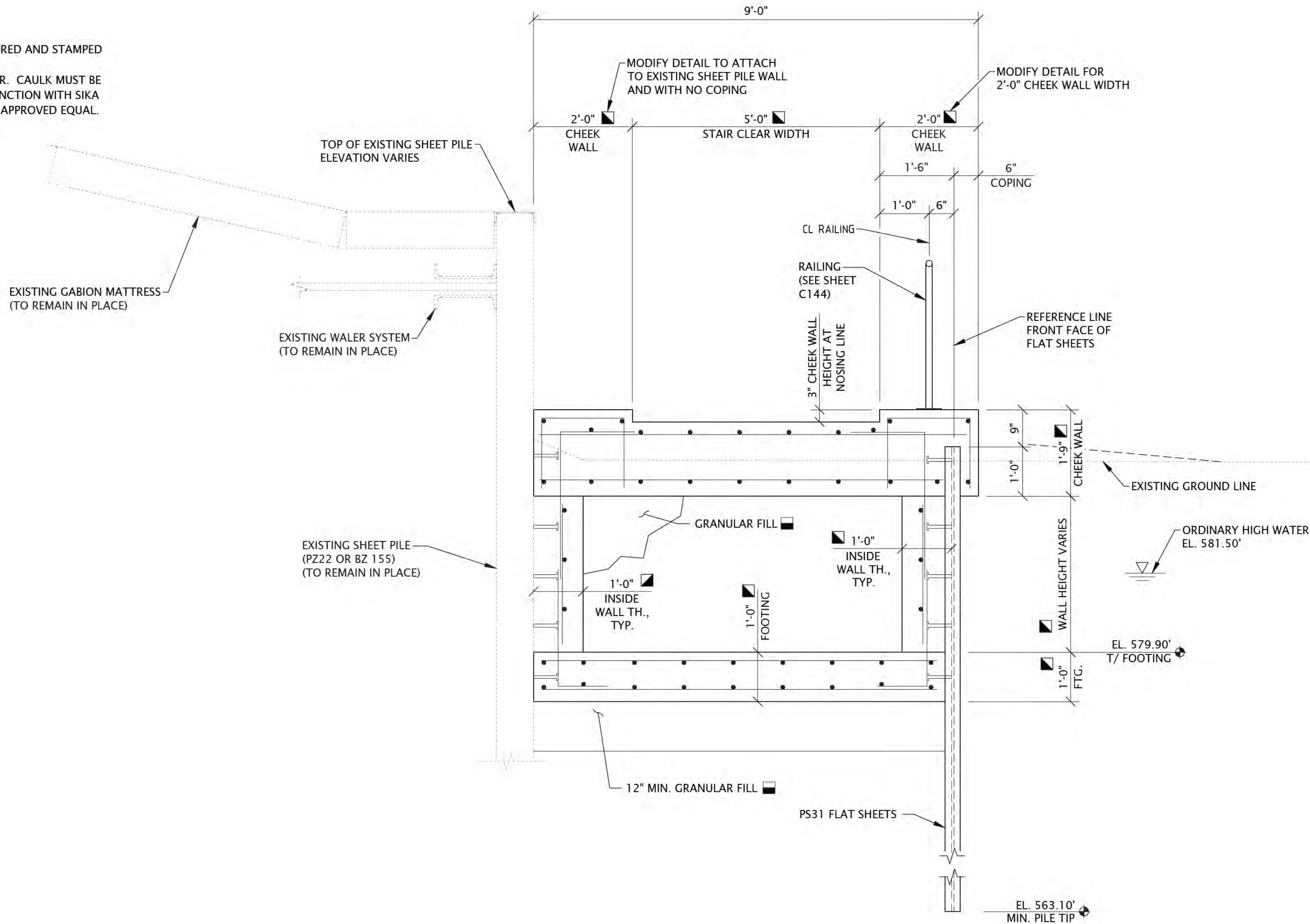


LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



SHORELINE IMPROVEMENT TYPICAL SECTION K-K'

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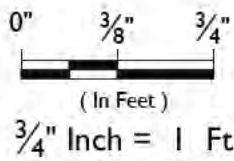
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION K-K'

Sheet No.

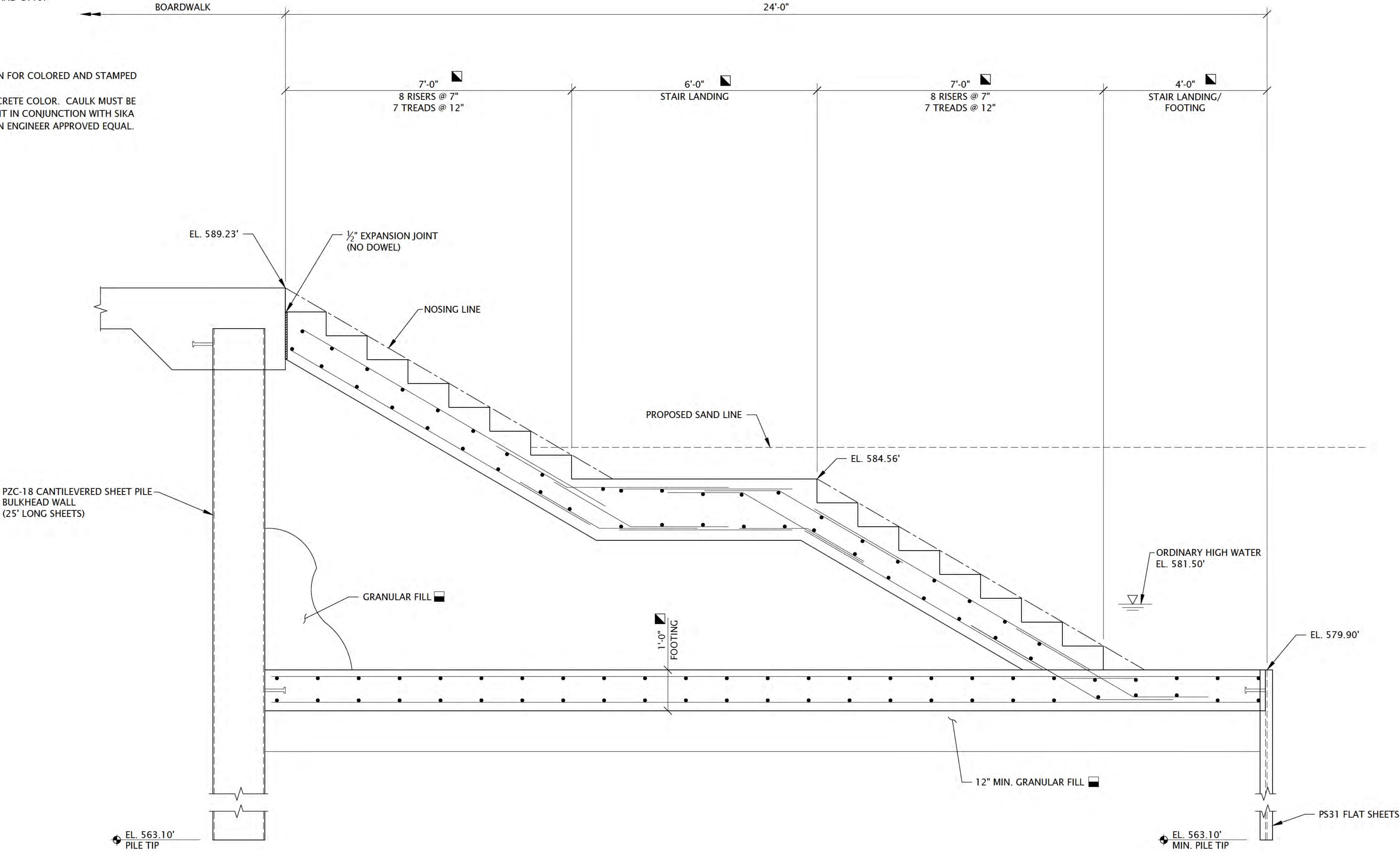
C118

LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.
- SEE ANGLE SEAT DETAILS ON SHEET C110
- SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C112.
- SEE STAIR DETAILS ON SHEET C113 AND C115.

NOTES:

- SEE SHEET C-144 OVERALL SITE PLAN FOR COLORED AND STAMPED CONCRETE LOCATIONS.
- ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.



SHORELINE IMPROVEMENT TYPICAL SECTION L-L'

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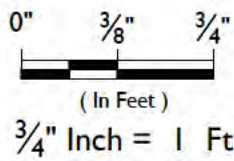
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



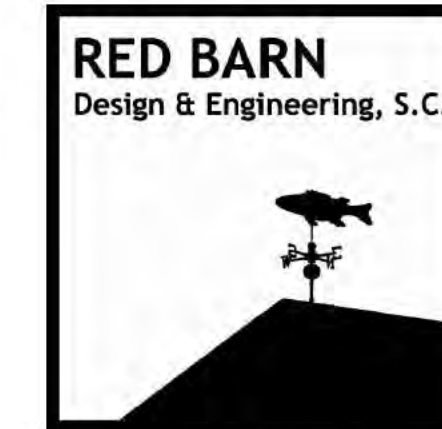
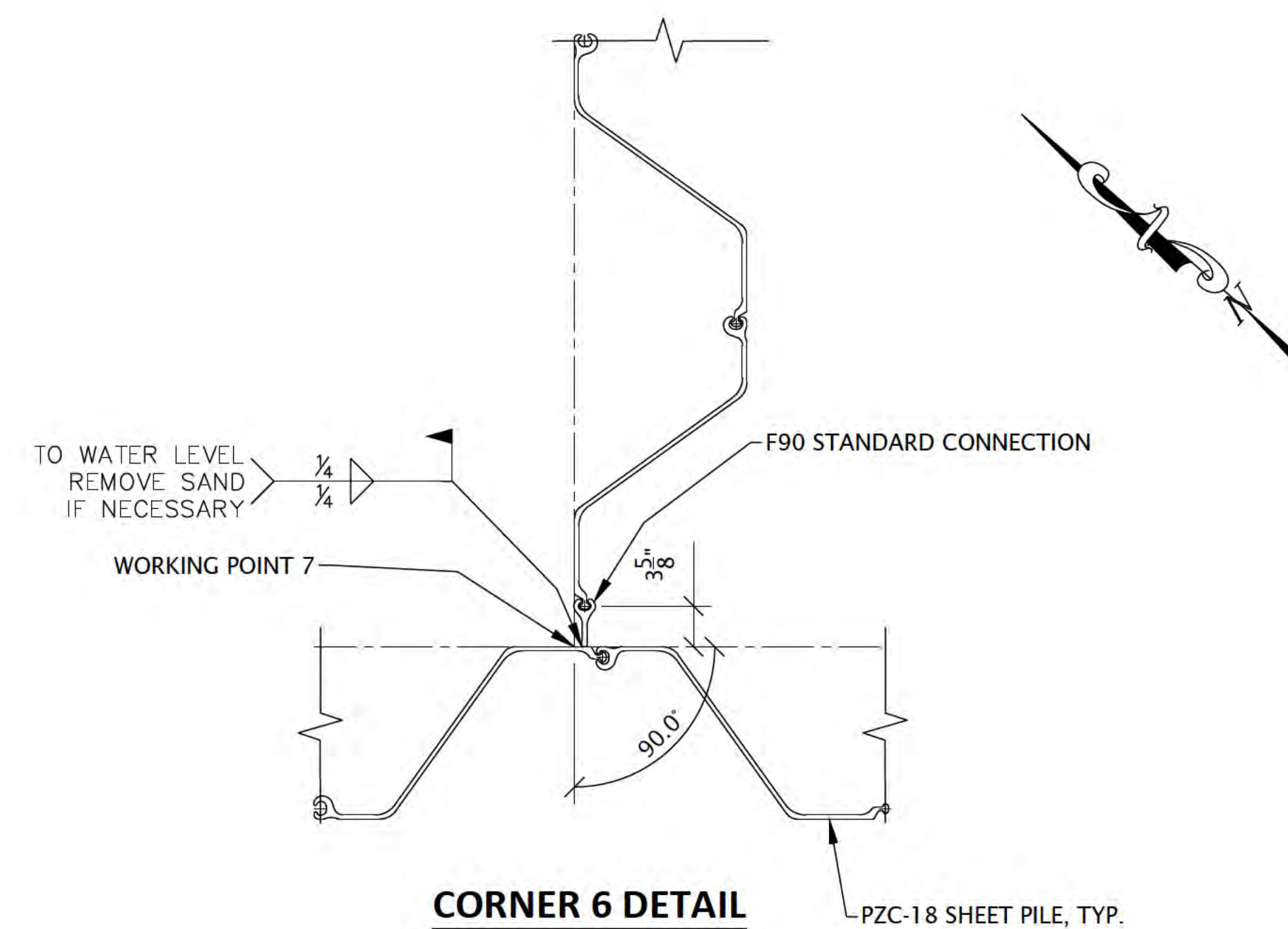
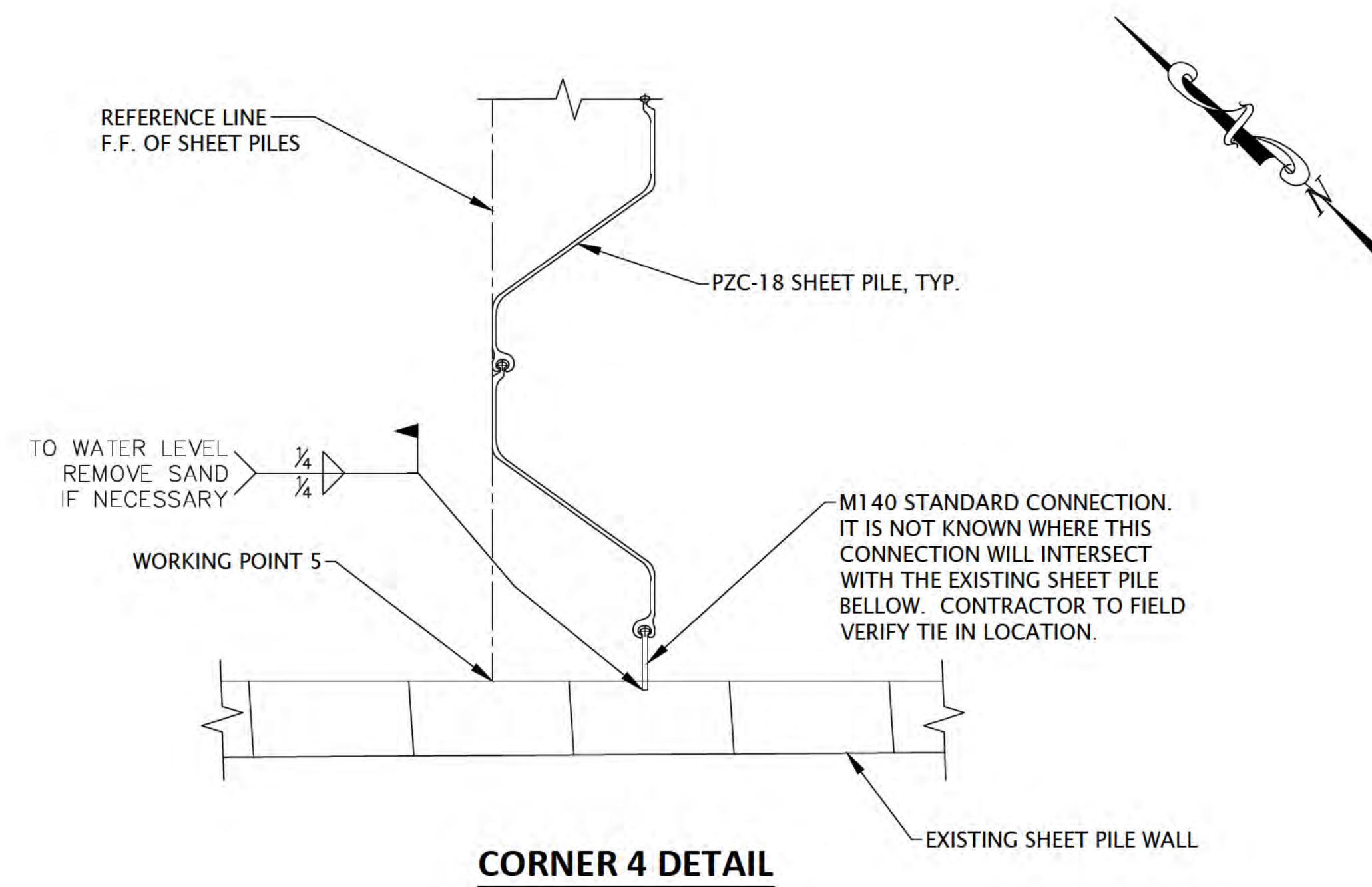
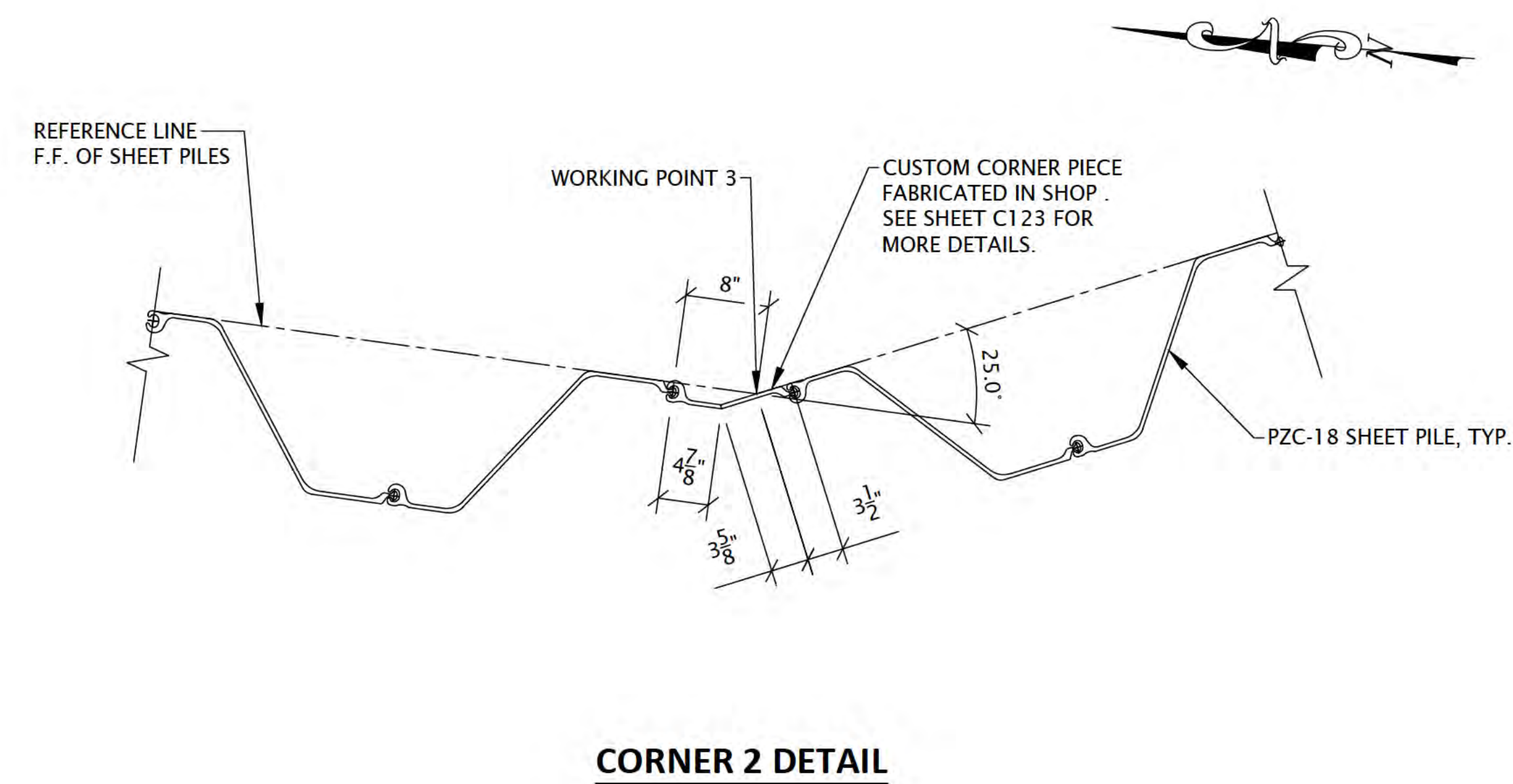
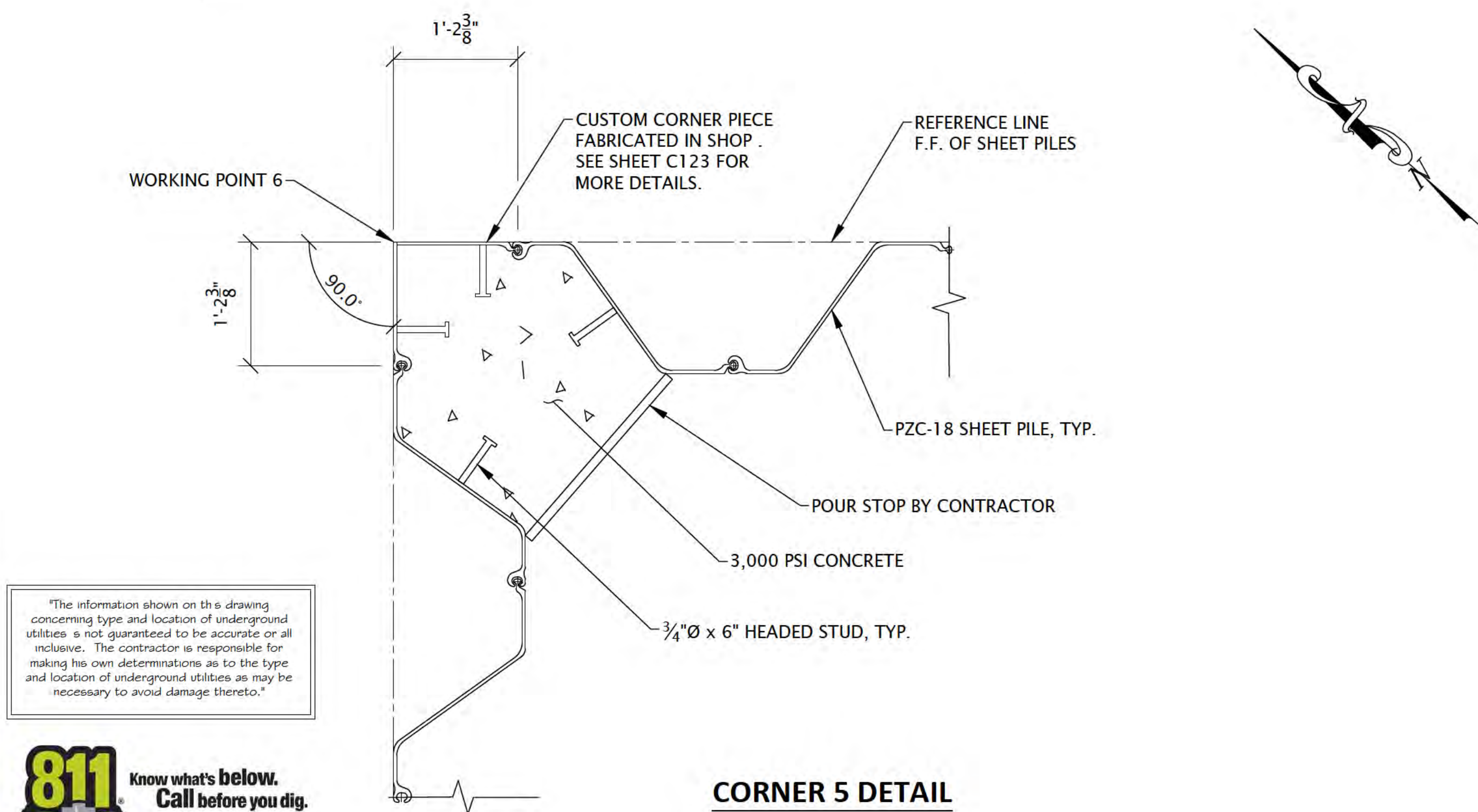
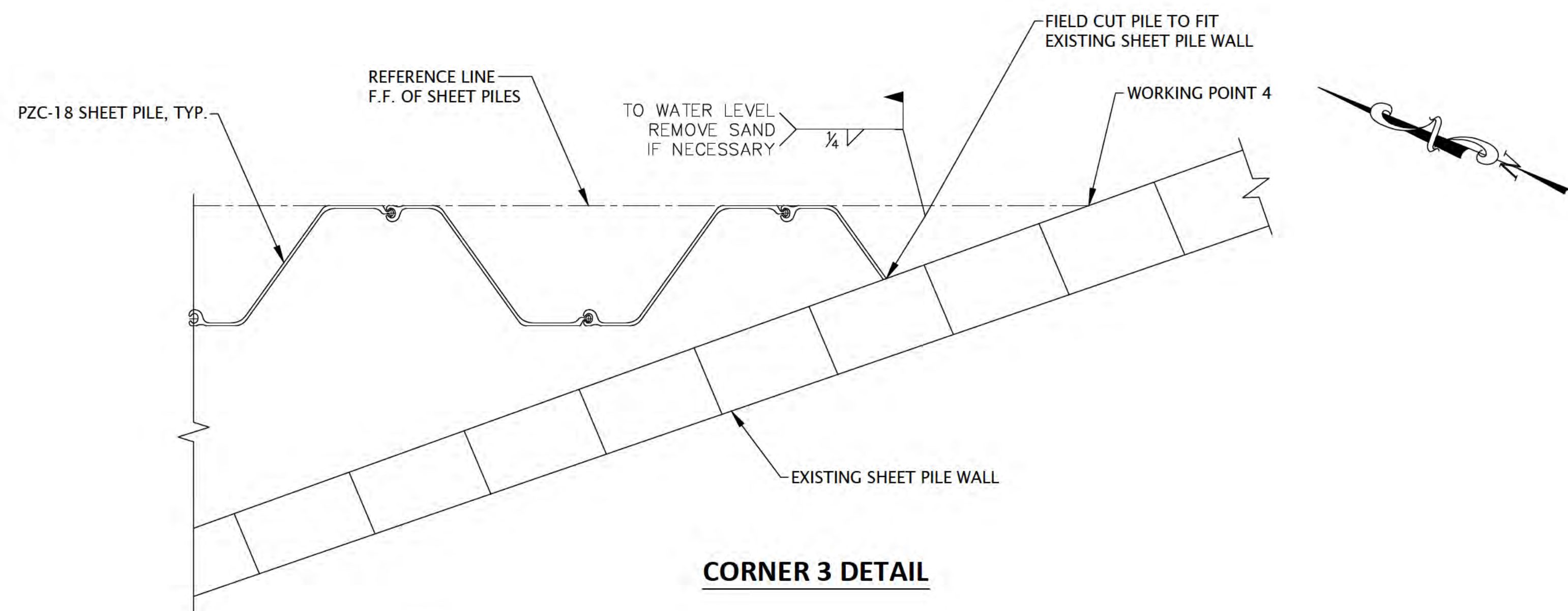
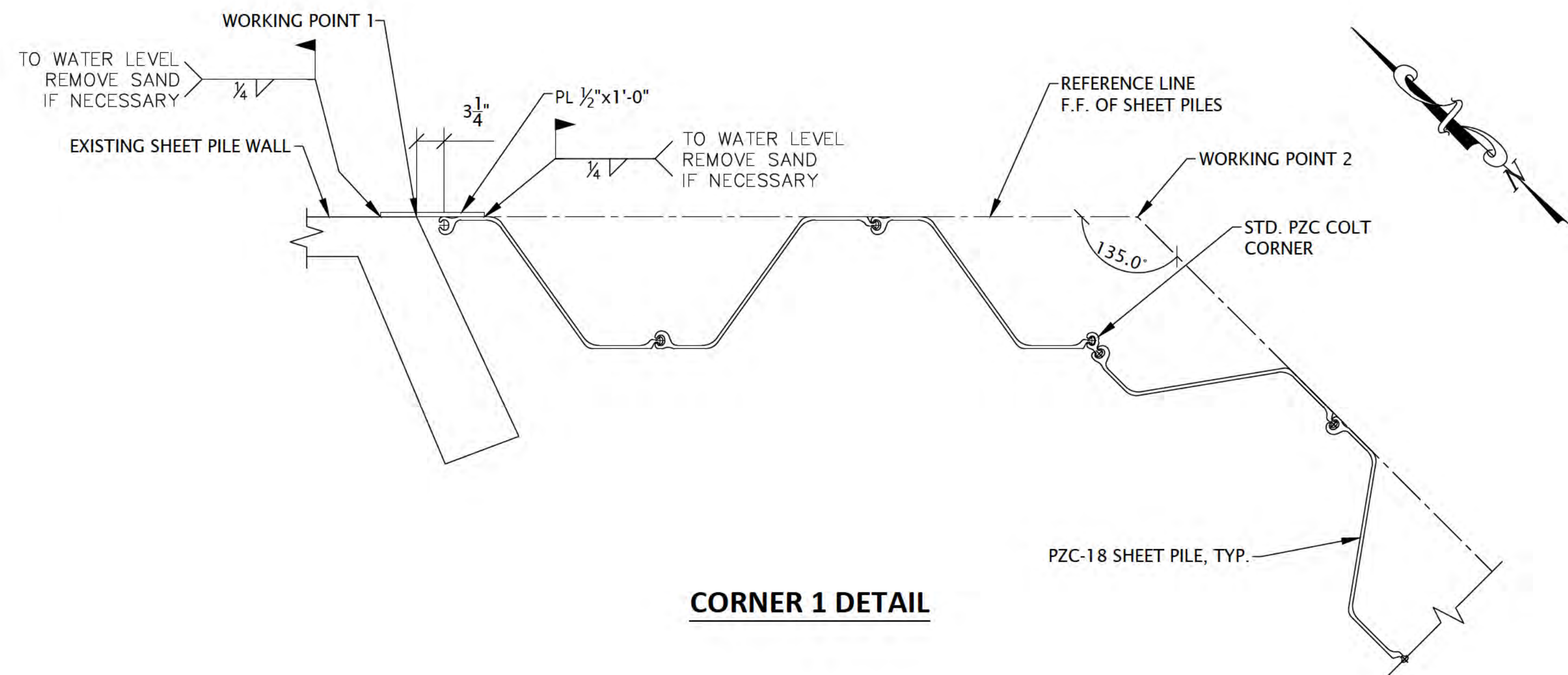
Scale: 3/4" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
SECTIONS AND DETAILS
SECTION L-L'

Sheet No.

C119



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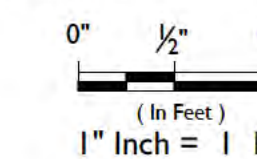
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 1" Inch = 1 Ft.

Drawing Title

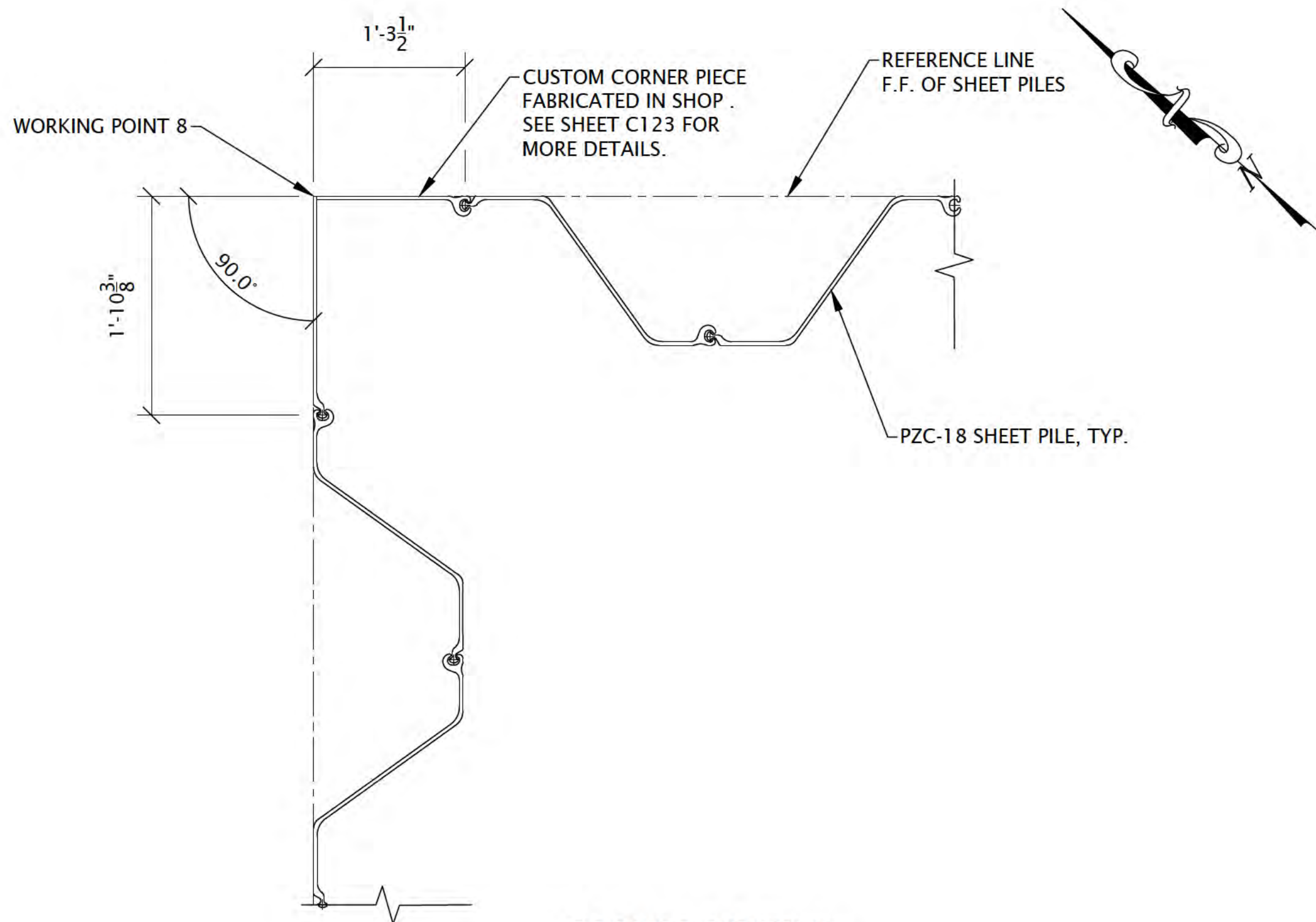
SHORELINE IMPROVEMENTS
CORNER DETAILS I

Sheet No.

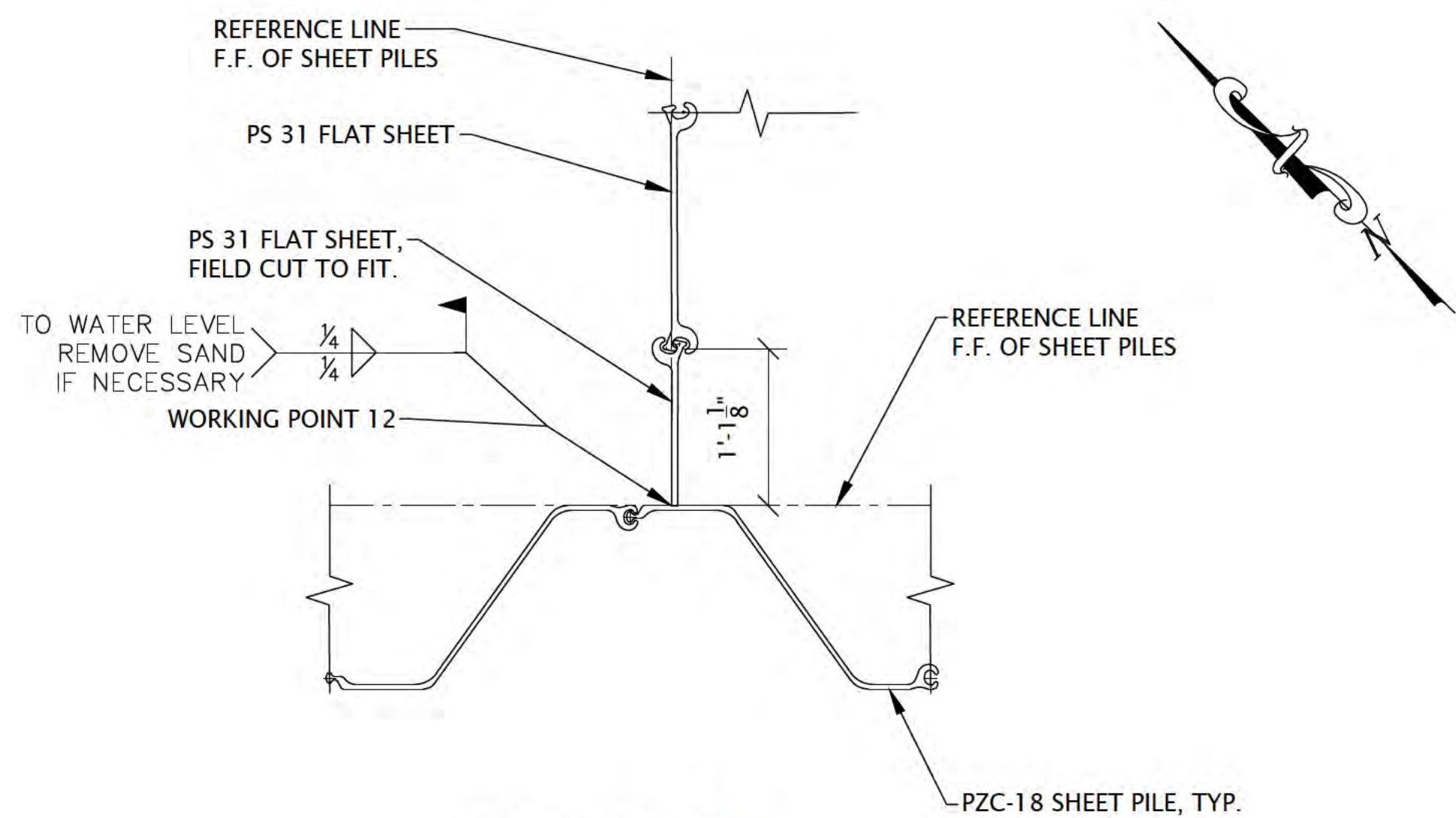
C120

"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."

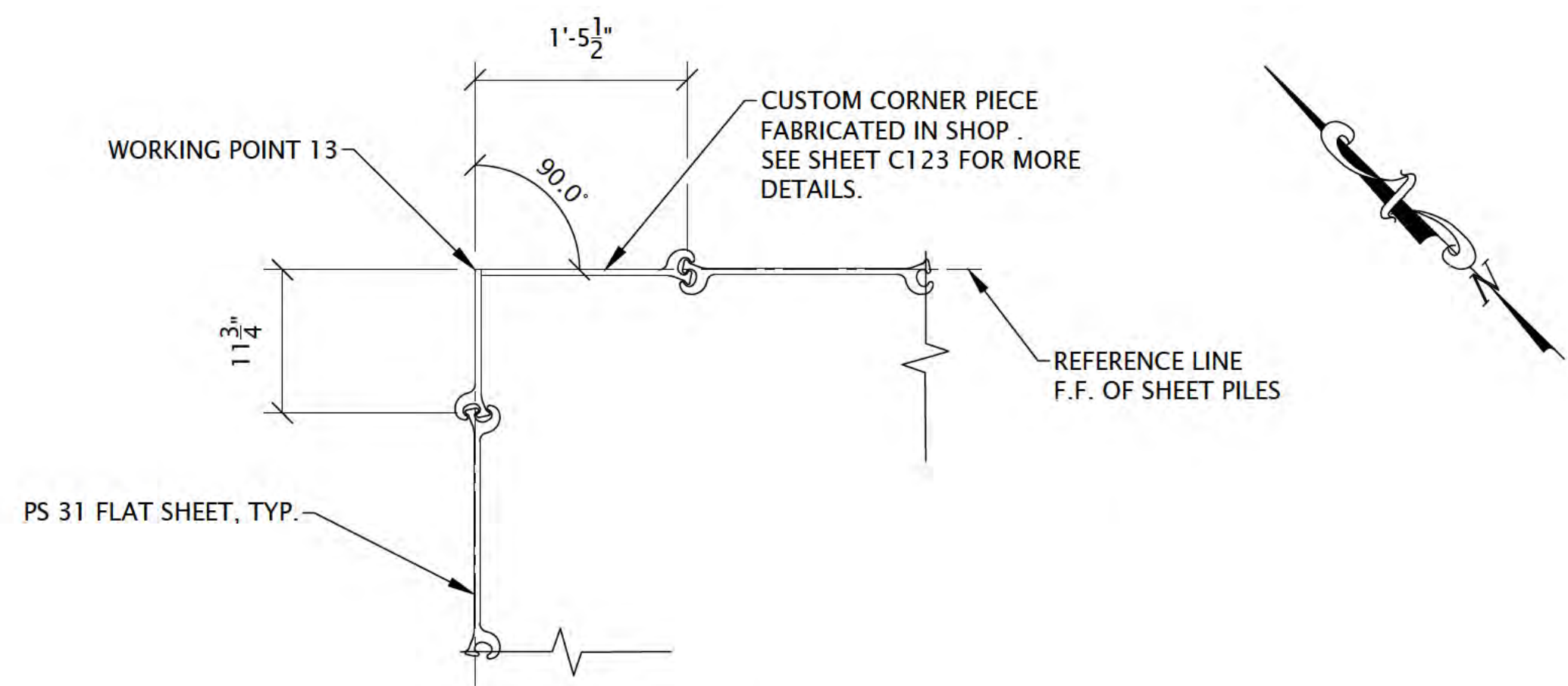




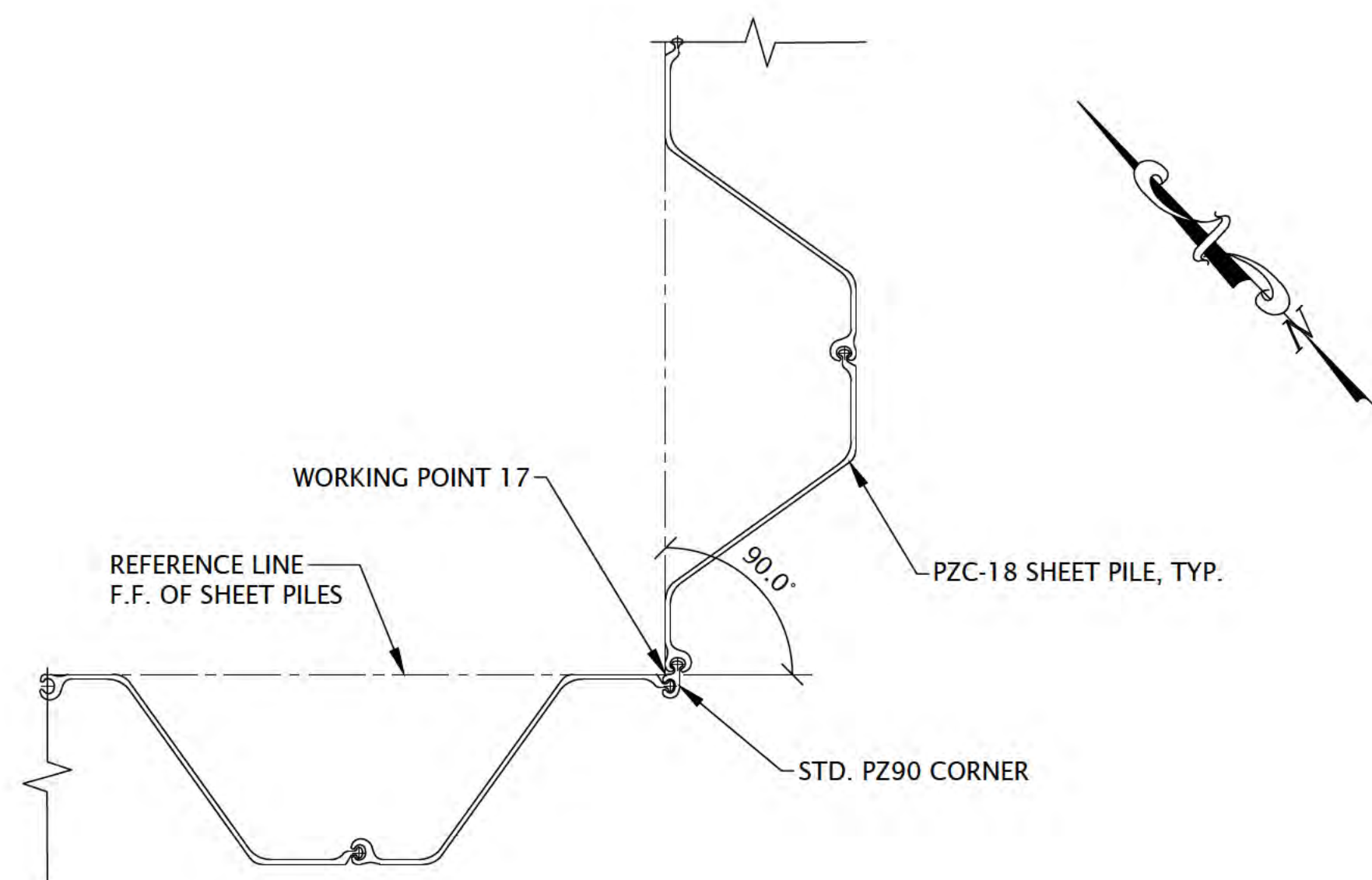
CORNER 7 DETAIL



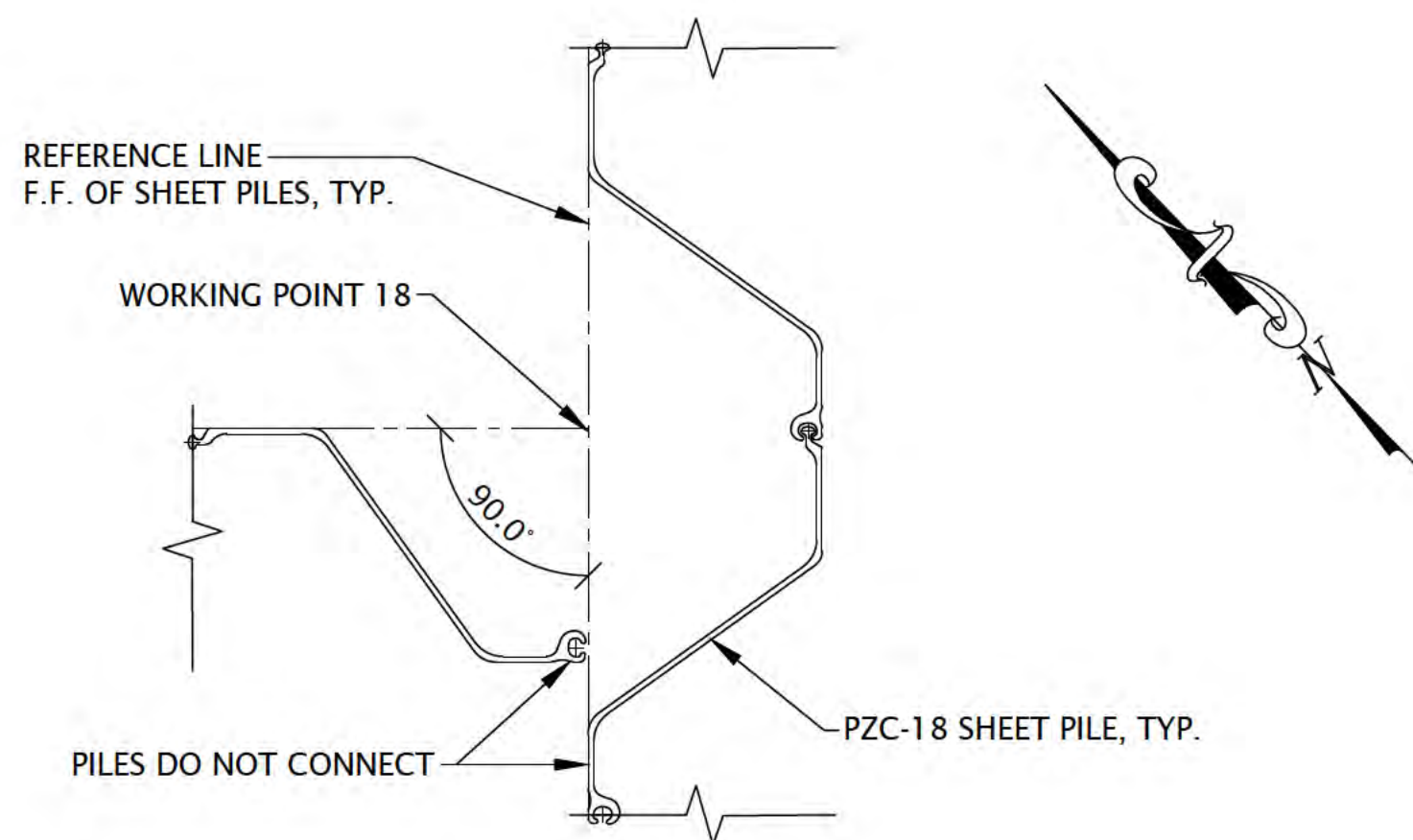
CORNER 8 DETAIL



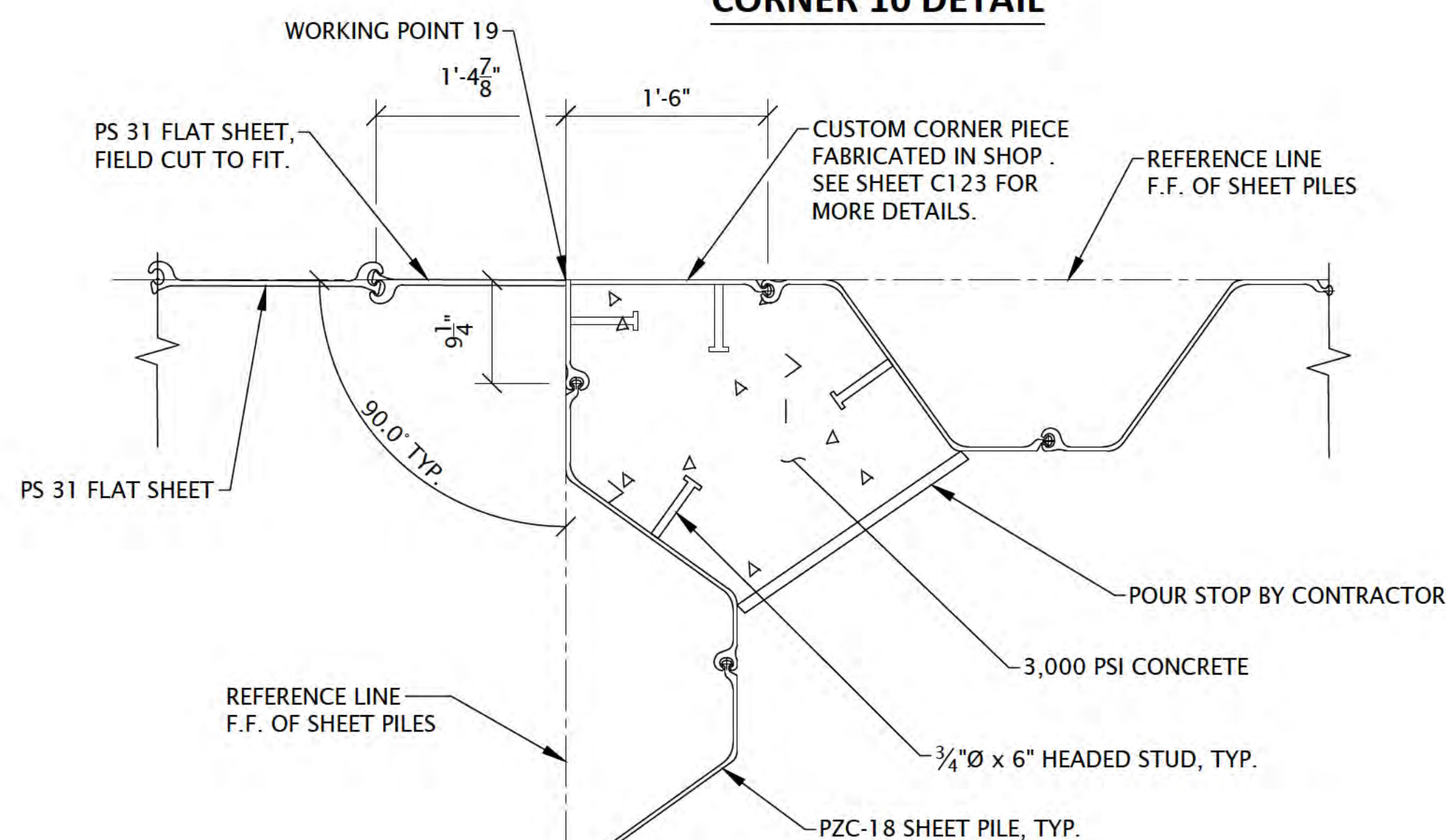
CORNER 9 DETAIL



CORNER 10 DETAIL



CORNER 11 DETAIL



CORNER 12 DETAIL

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Bidding and Construction	07/19/24

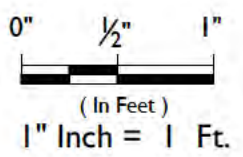
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 1" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
CORNER DETAILS 2

Sheet No.

C121



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Waukegan Wisconsin 53597
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p. 608.588.7866

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100% Submittal	06/28/24
Bidding and Construction	07/19/24

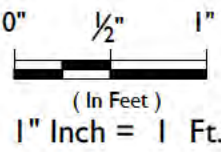
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



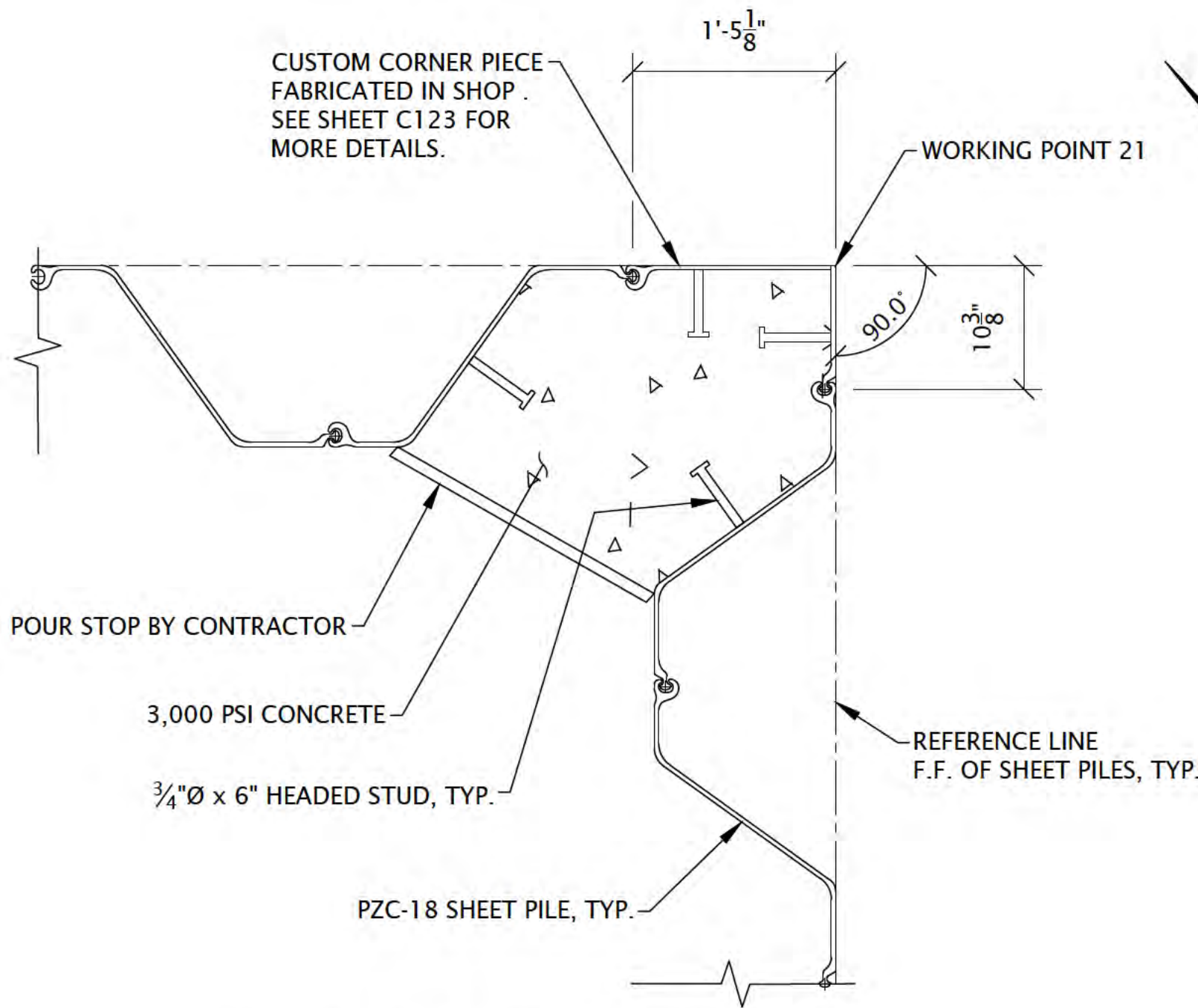
Scale: 1" Inch = 1 Ft.

Drawing Title

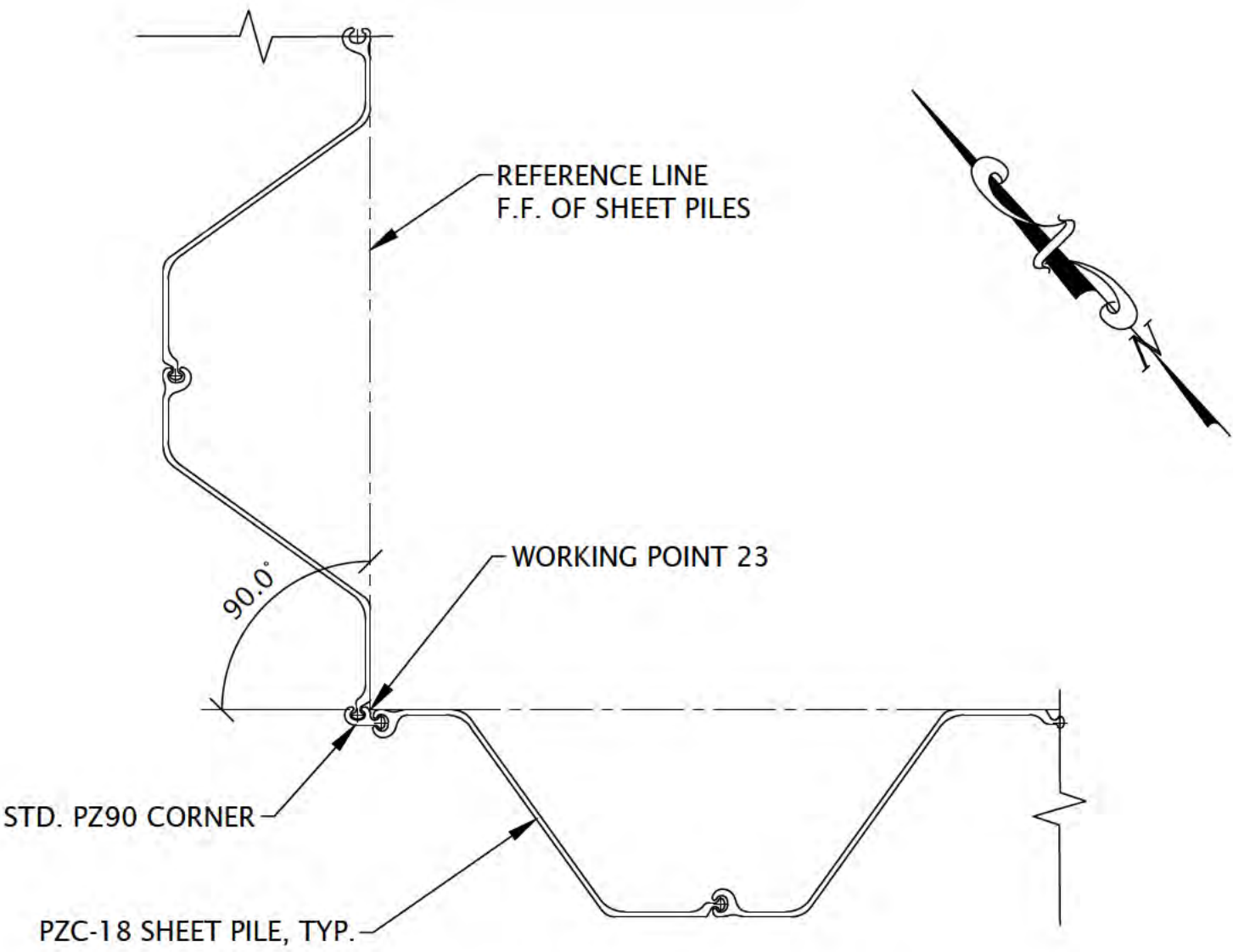
SHORELINE IMPROVEMENTS
CORNER DETAILS 3

Sheet No.

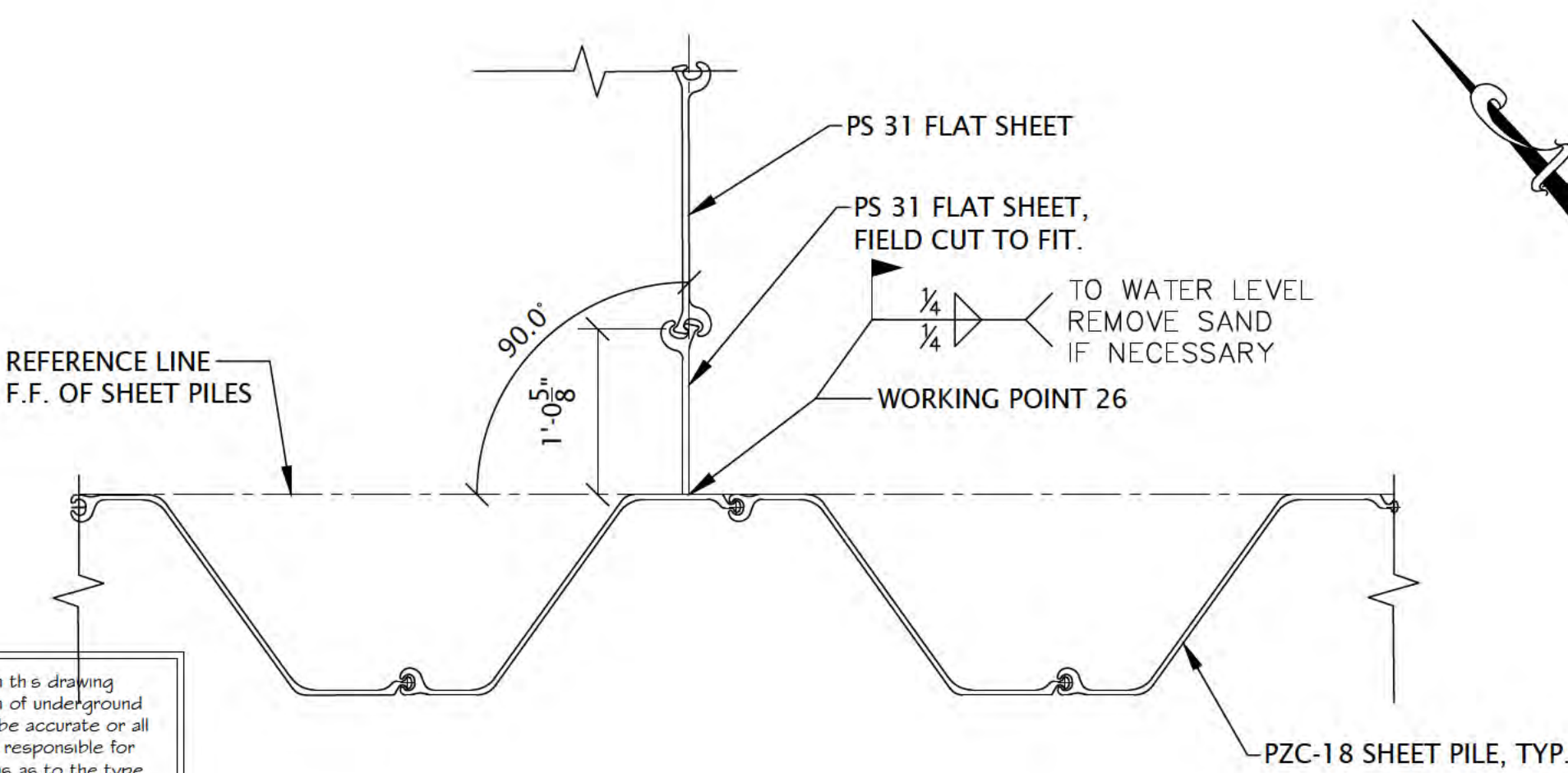
C122



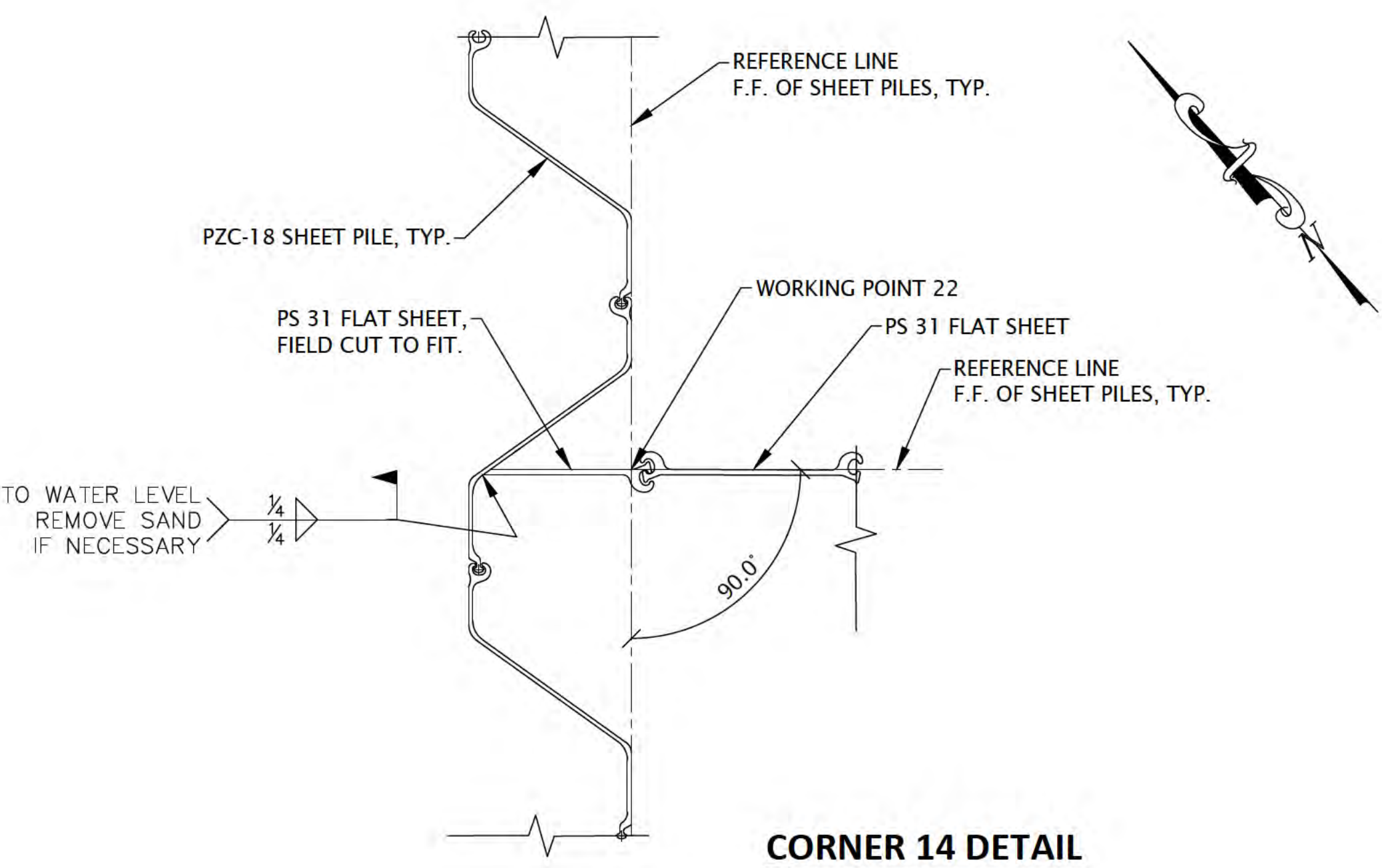
CORNER 13 DETAIL



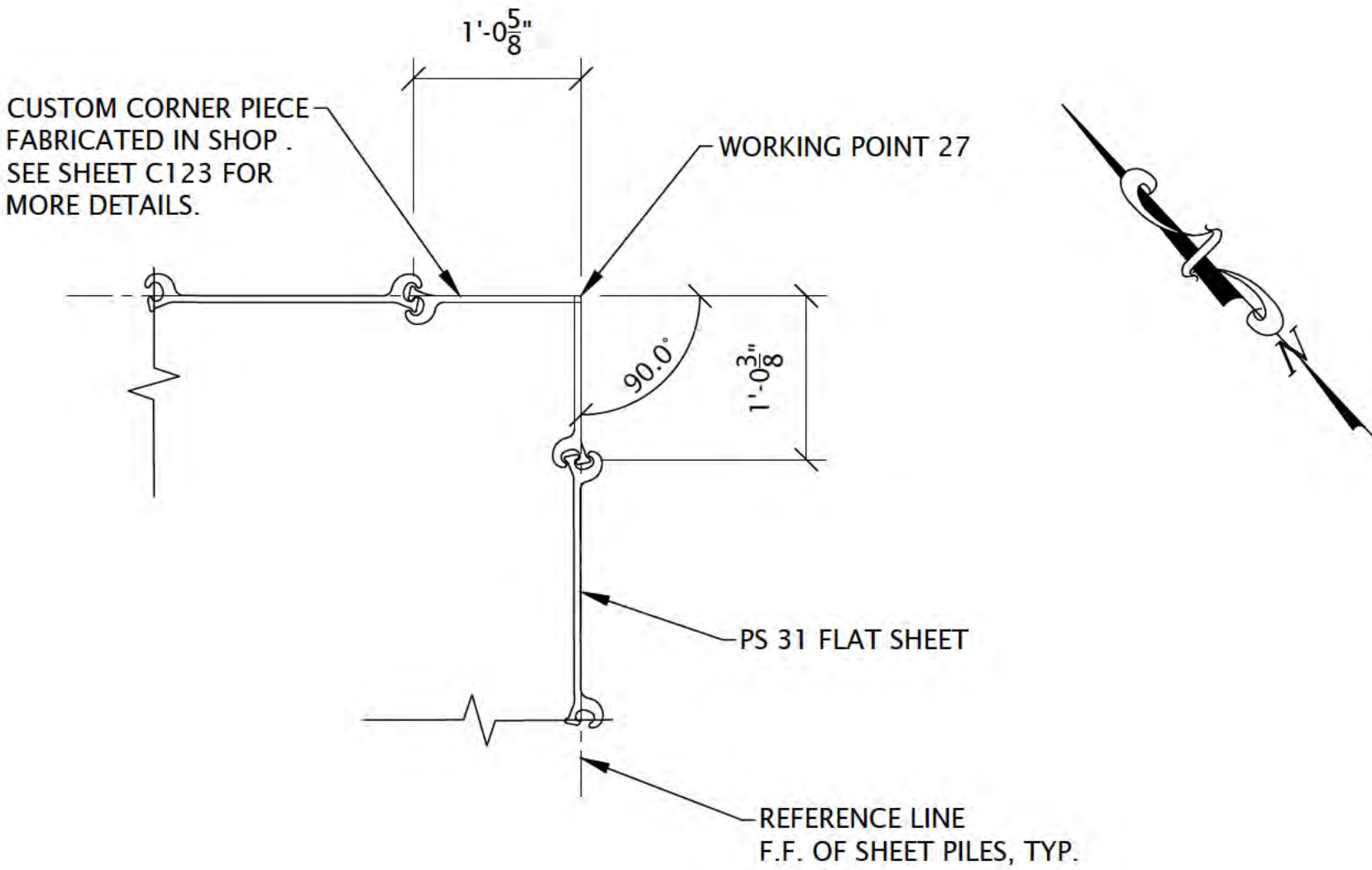
CORNER 15 DETAIL



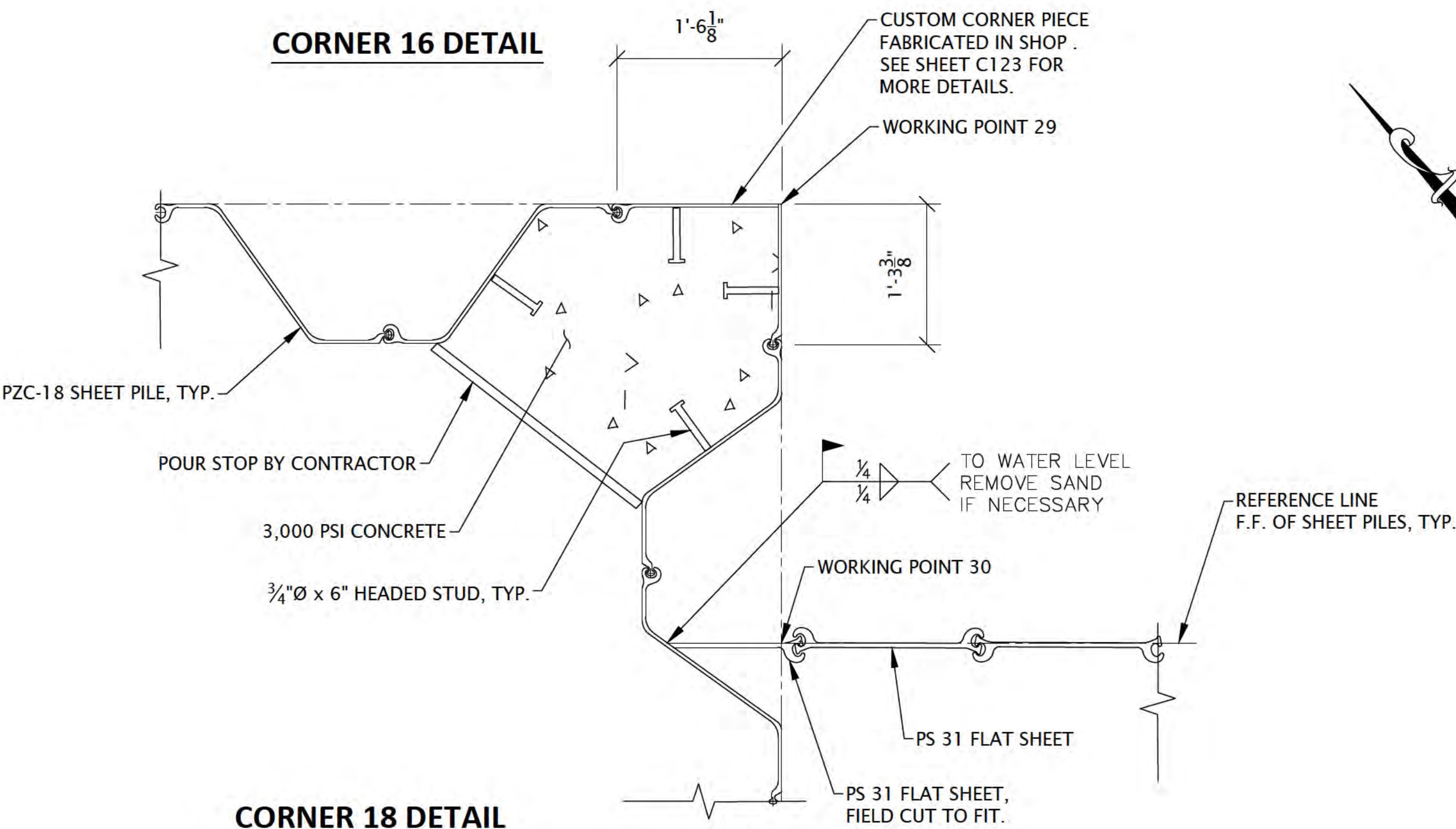
CORNER 17 DETAIL



CORNER 14 DETAIL



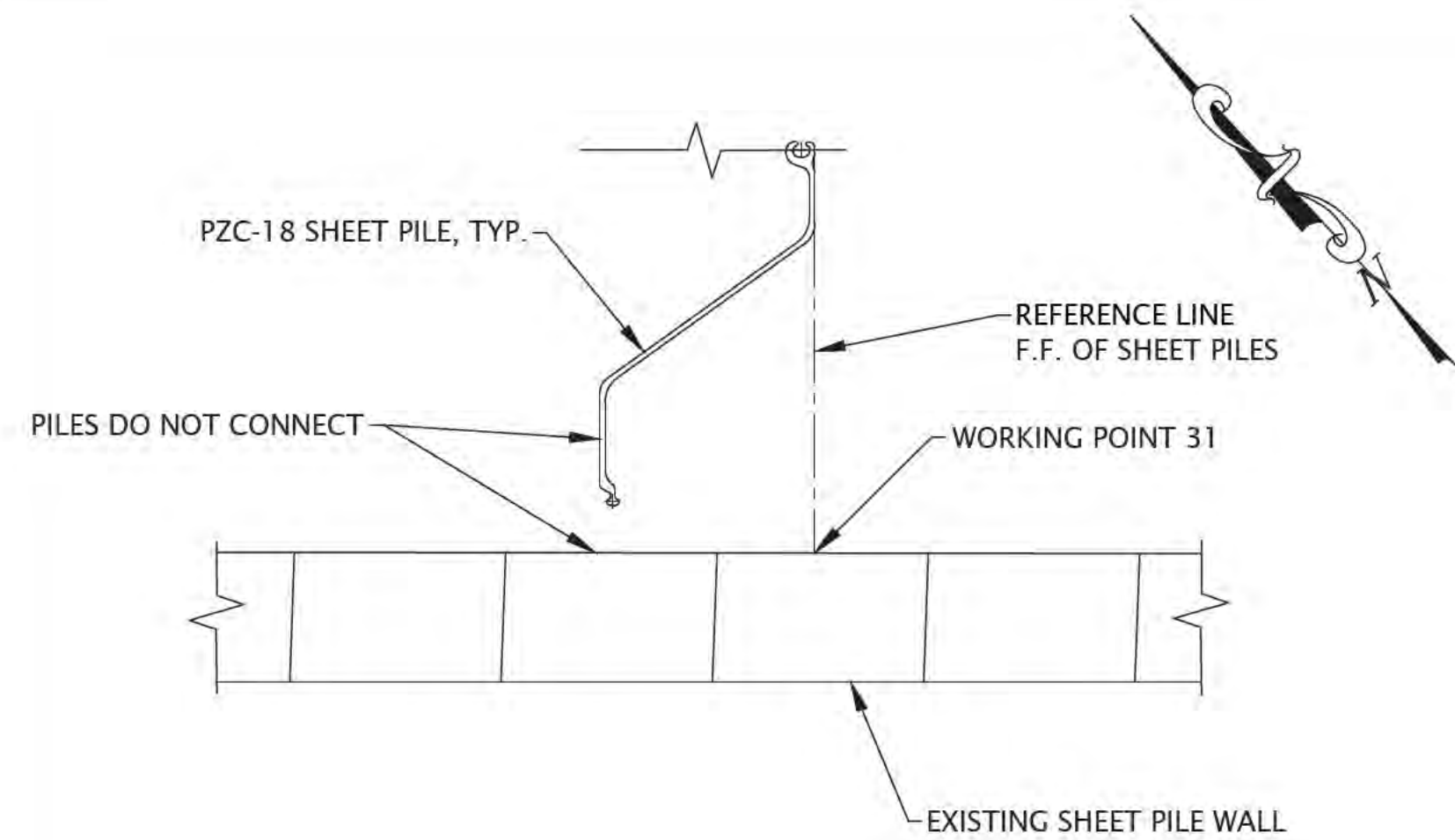
CORNER 16 DETAIL



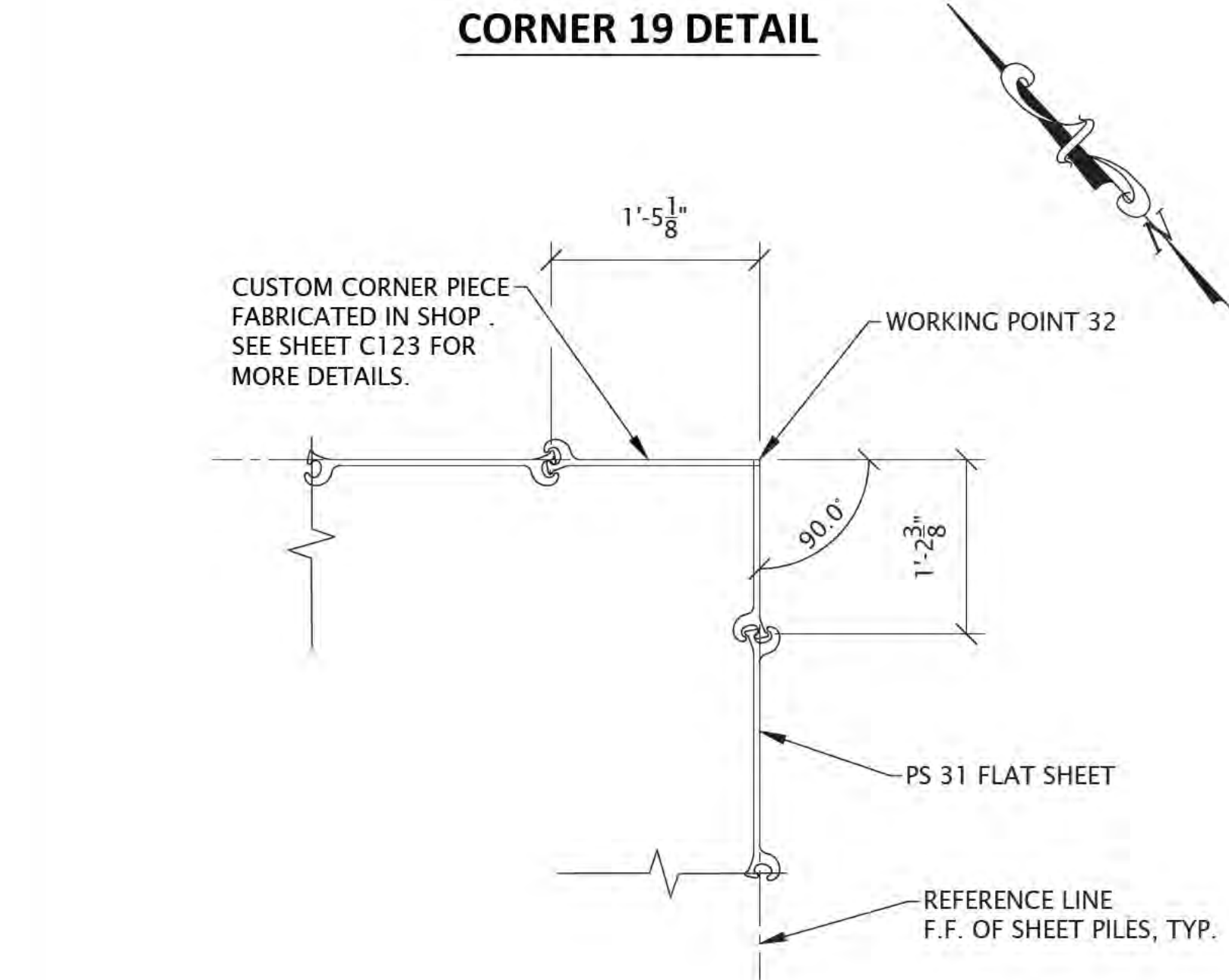
CORNER 18 DETAIL

"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."

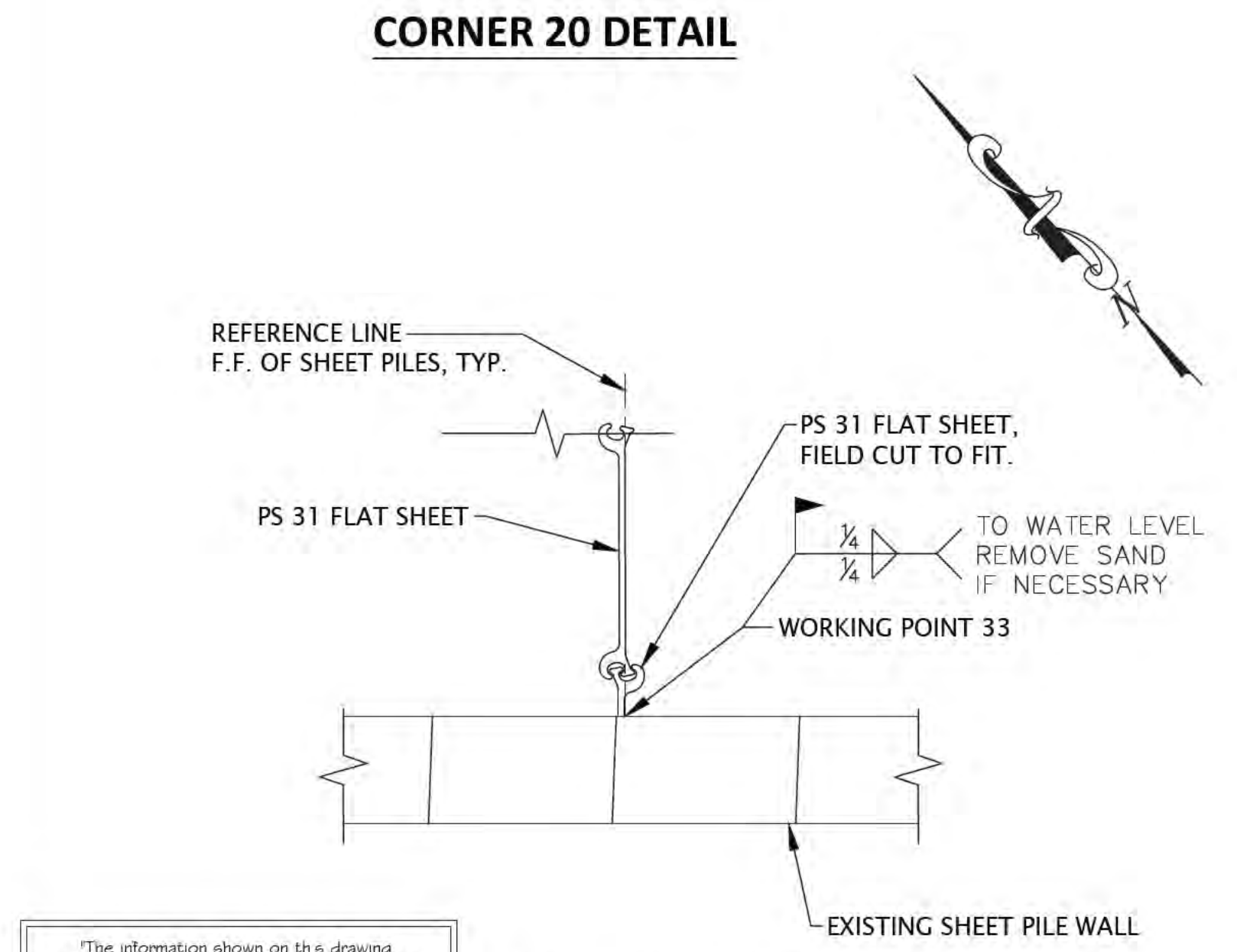




CORNER 19 DETAIL

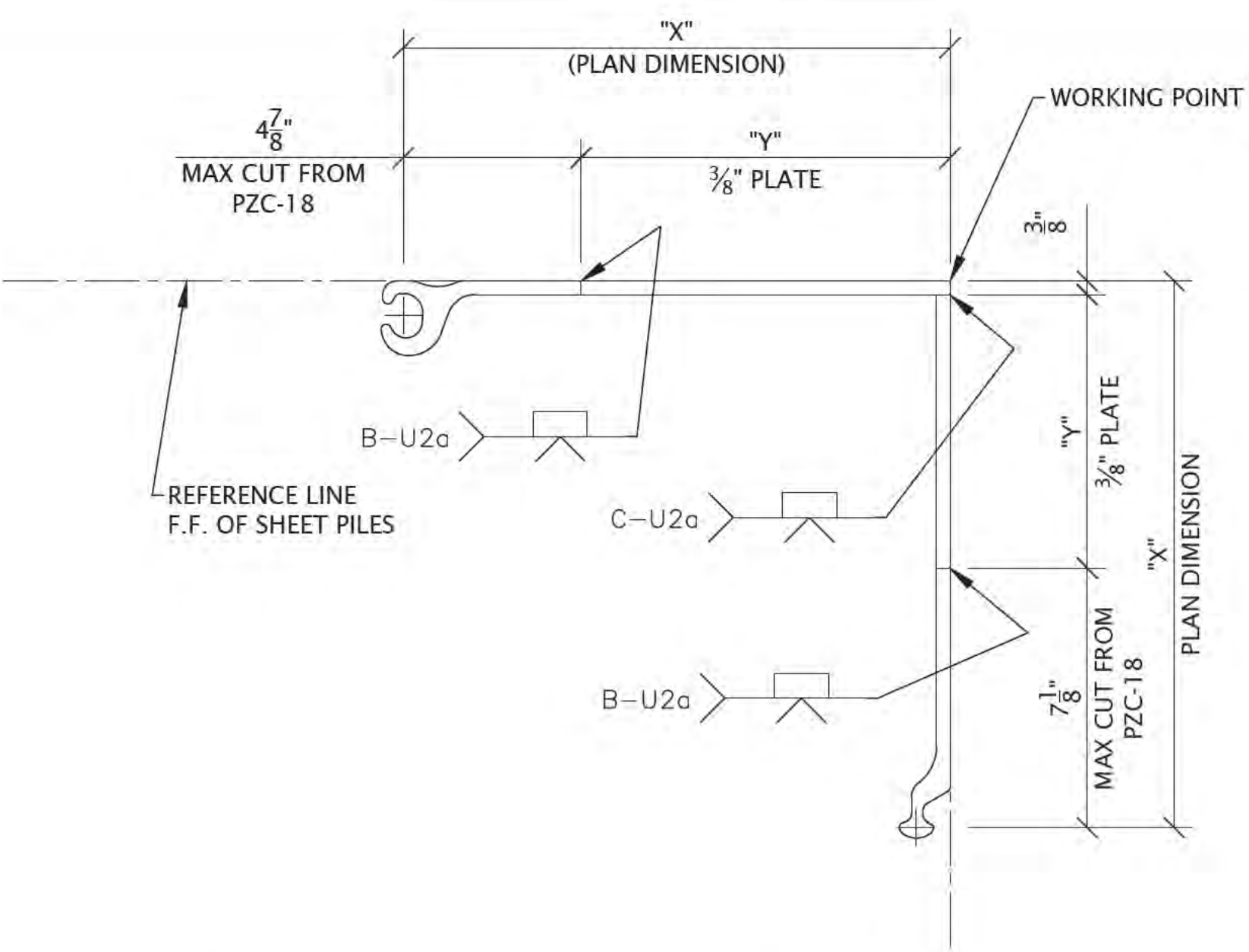


CORNER 20 DETAIL

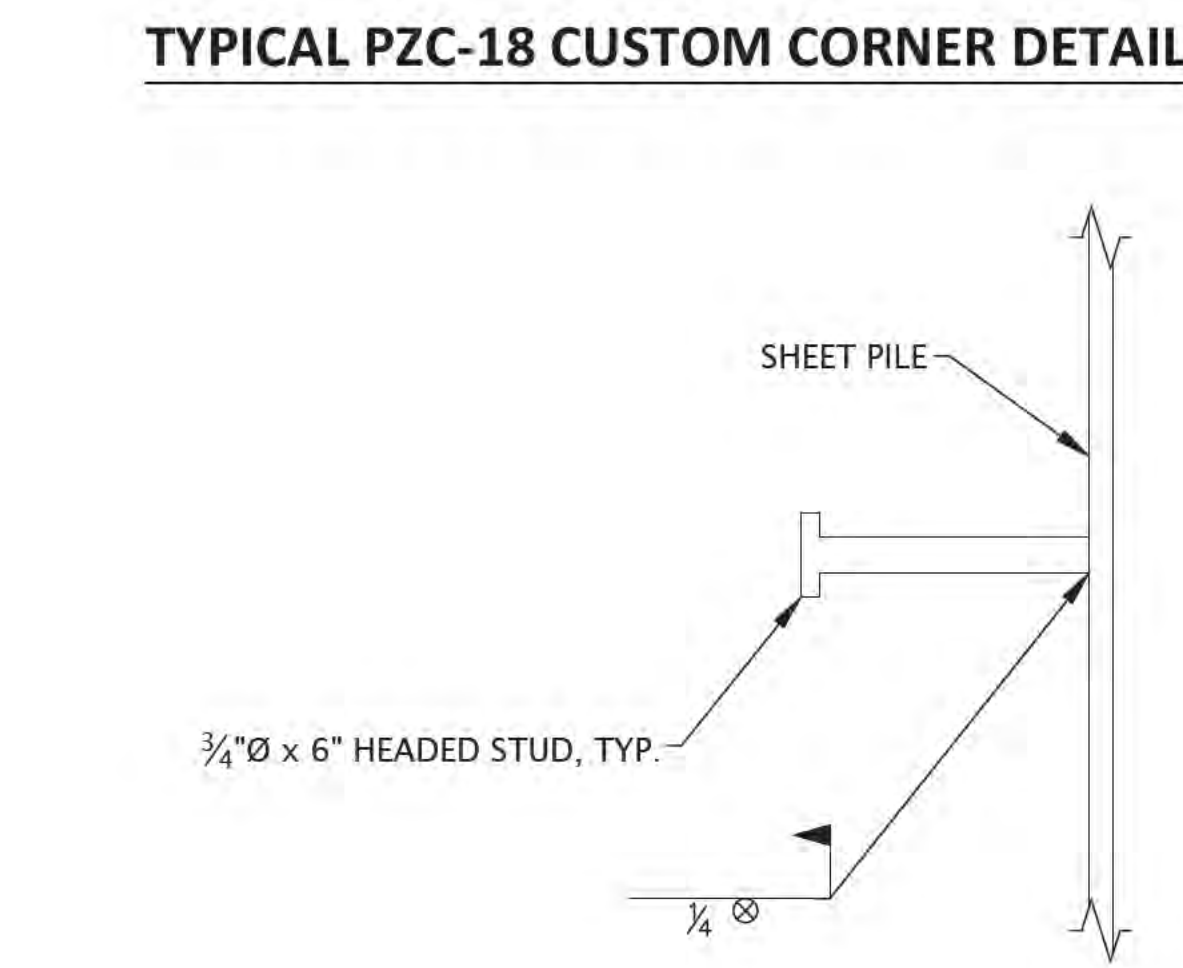


CORNER 21 DETAIL

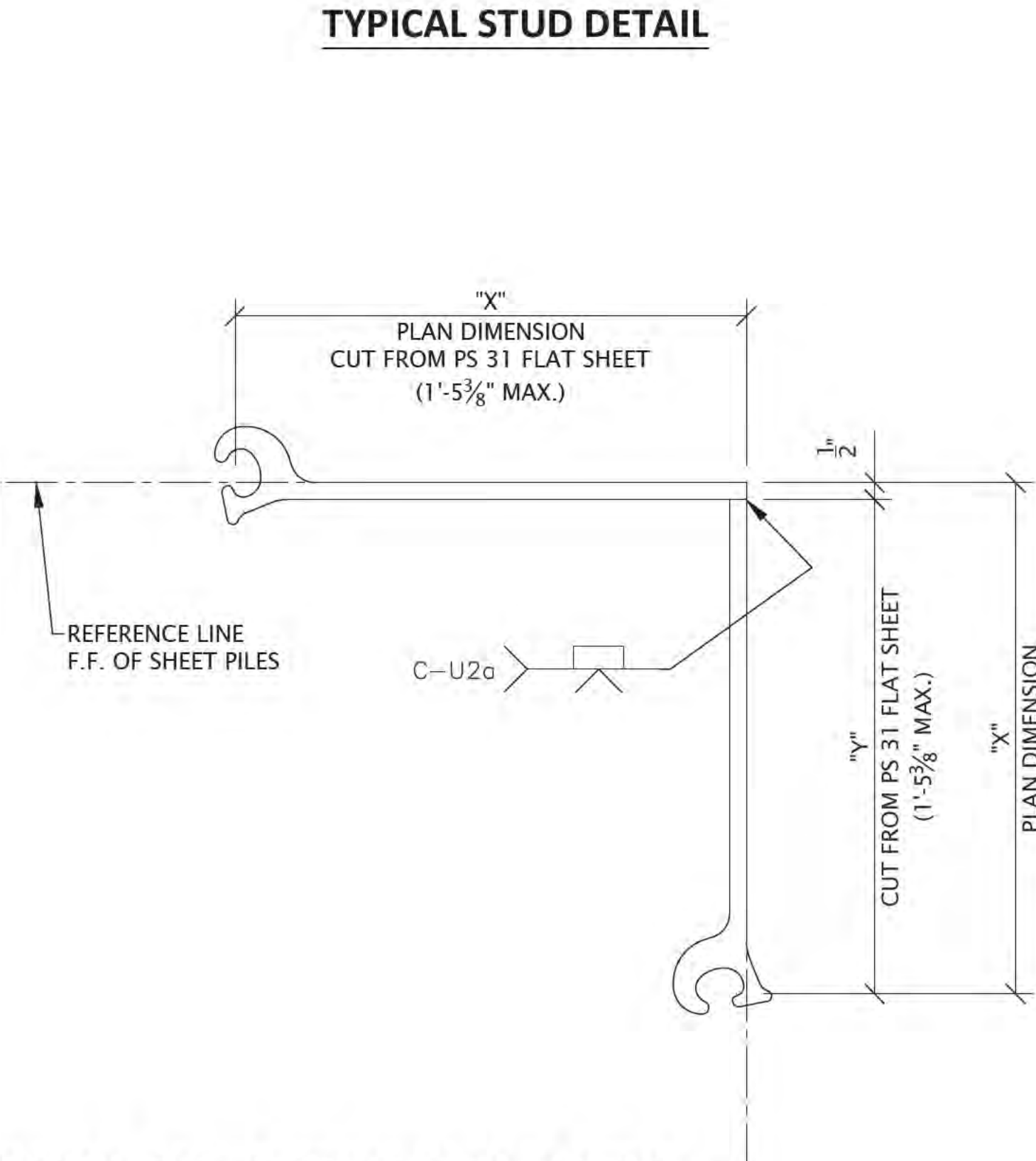
"The information shown on this drawing concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto."



TYPICAL PZC-18 CUSTOM CORNER DETAIL



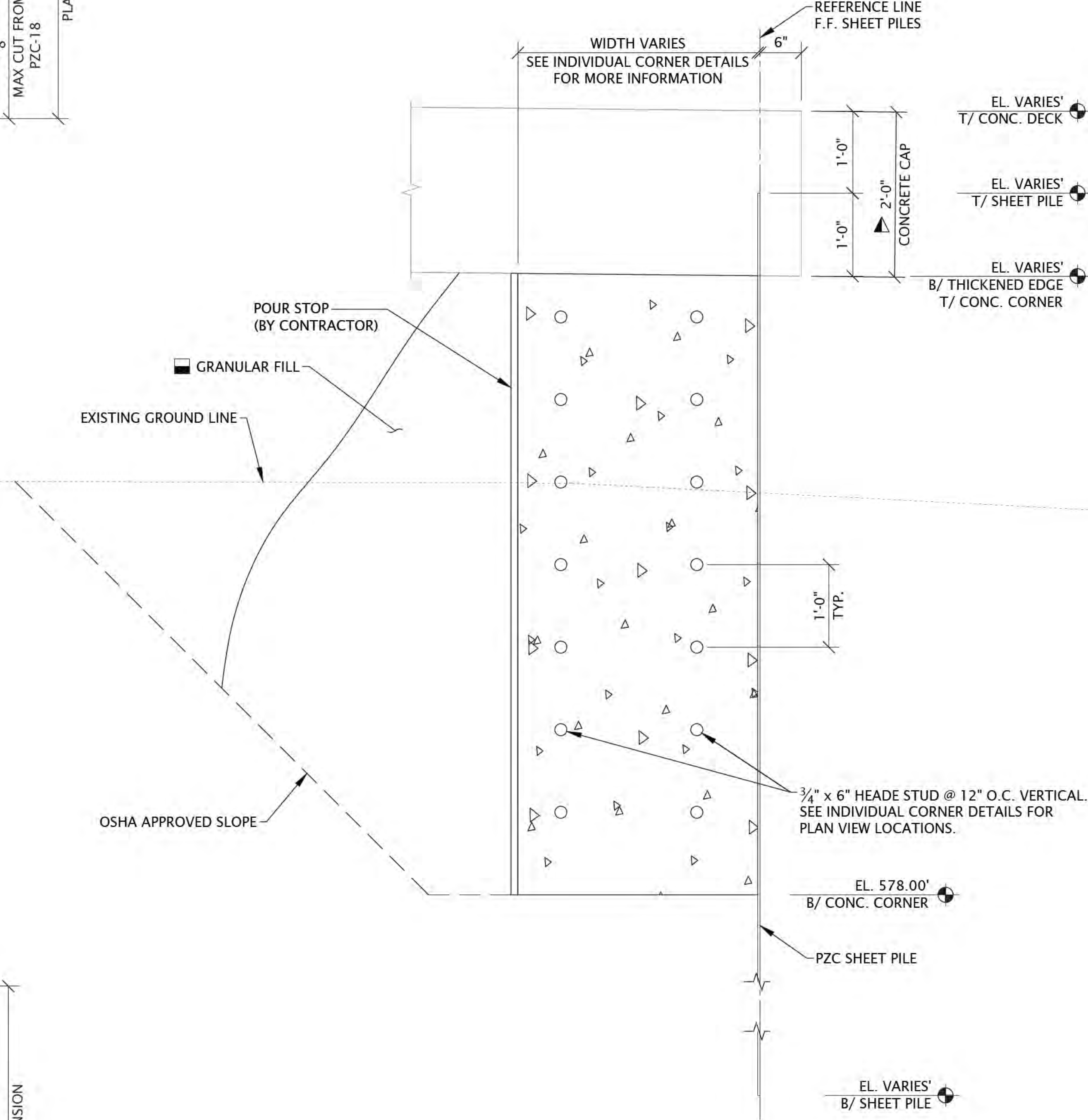
TYPICAL STUD DETAIL



TYPICAL PS31 CUSTOM CORNER DETAIL

LEGEND:

- SEE "GRANULAR FILL COMPACTION NOTES" ON SHEET C108 FOR MORE DETAILS.
- SEE DETAIL BULKHEAD WALL CONCRETE CAP AND SLAB DETAILS ON SHEET C109.



TYPICAL SECTION THROUGH CONCRETE CORNER



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Spring Green Wisconsin 53588
p. 608.588.7866

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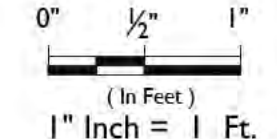
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 1" Inch = 1 Ft.

Drawing Title

SHORELINE IMPROVEMENTS
CORNER DETAILS 4

Sheet No.

C123

LEGEND

- ORDINARY HIGH WATER MARK (OHW)
- - - 50' SETBACK LINE FROM OHW

RED BARN
Design & Engineering, S.C.



6750 Woodland Drive
Waukegan Wisconsin 53597
p. 608.849.2042
c. 608.843.1870
redbarnde@tds.net

Consultants

WESTBROOK
Associated Engineers, Inc.

619 E. Hoxie St.
Spring Green Wisconsin 53588
p. 608.588.7866

Issued for	Rev. Date
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100% Submittal	06/28/24
Bidding and Construction	07/19/24

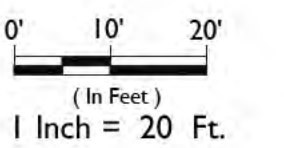
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 Inch = 20 Ft.

Drawing Title

BREAKWATER PLAN
OVERVIEW

Sheet No.

C124

"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."



CENTENNIAL PARK BREAKWATER OVERVIEW



WESTBROOK
Associated Engineers, Inc.

619 E. Hoxie St.
Spring Green Wisconsin 53588
p. 608.588.7866

Issued for	Rev. Date
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100% Submittal	06/28/24
Bidding and Construction	07/19/24

Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Winnetka Park District
Winnetka, IL

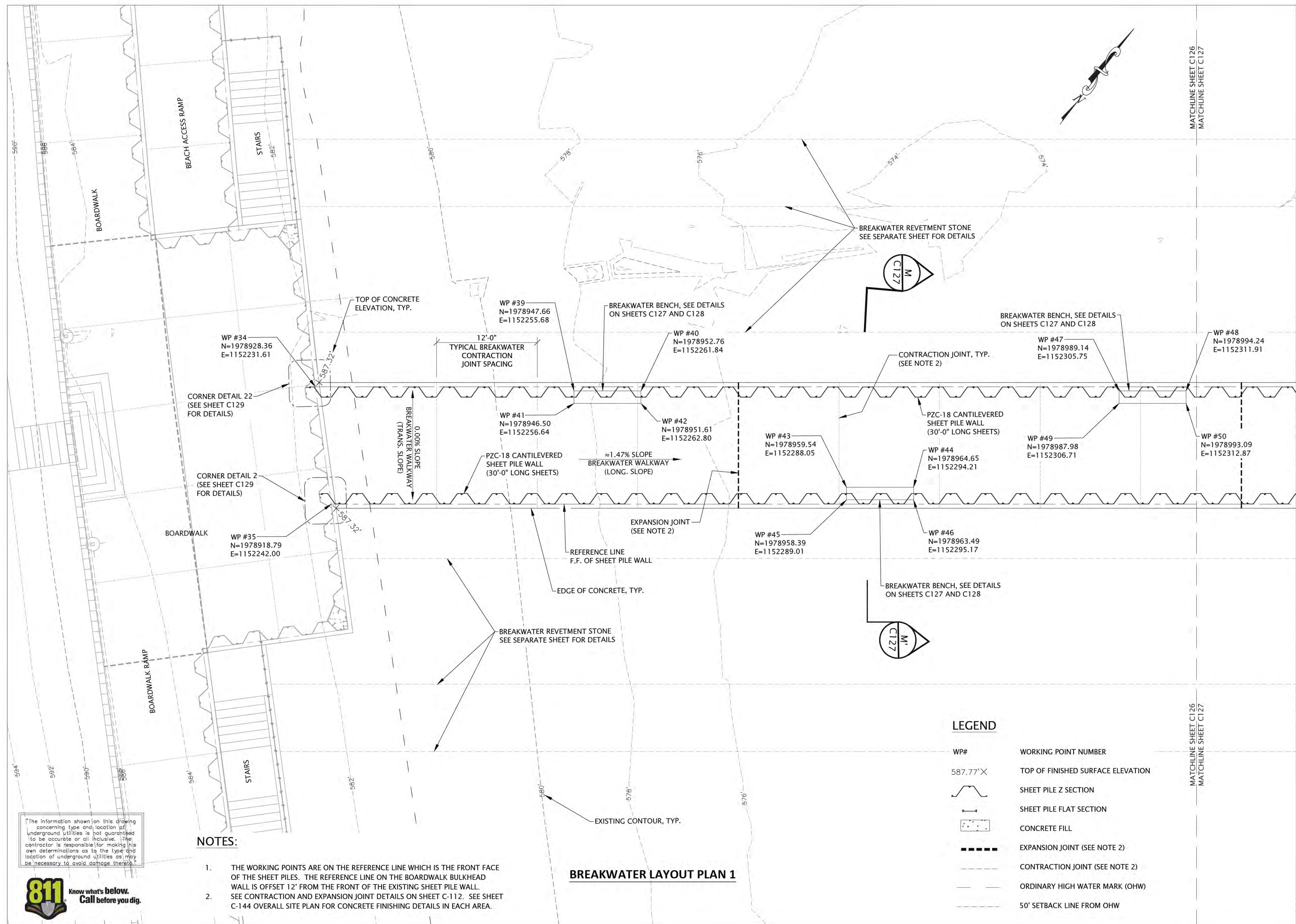
0' 2.5' 5'
(In Feet)
1 Inch = 5 Ft.

Scale 1 Inch = 5 Ft.

Drawing Title

**BREAKWATER
LAYOUT PLAN I**

Sheet No.	C125
-----------	------



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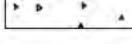
**Know what's below.
Call before you dig.**

NOTES:

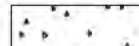
1. THE WORKING POINTS ARE ON THE REFERENCE LINE WHICH IS THE FRONT FACE OF THE SHEET PILES. THE REFERENCE LINE ON THE BOARDWALK BULKHEAD WALL IS OFFSET 12" FROM THE FRONT OF THE EXISTING SHEET PILE WALL.
2. SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C-112. SEE SHEET C-144 OVERALL SITE PLAN FOR CONCRETE FINISHING DETAILS IN EACH AREA.

BREAKWATER LAYOUT PLAN 1

LEGEND

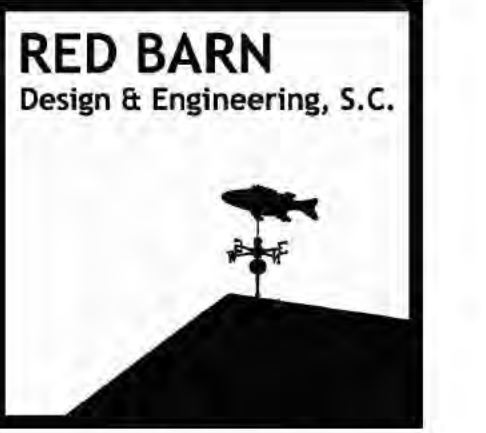
WP#	WORKING POINT NUMBER
587.77'X	TOP OF FINISHED SURFACE ELEVATION
	SHEET PILE Z SECTION
	SHEET PILE FLAT SECTION
	CONCRETE FILL
	EXPANSION JOINT (SEE NOTE 2)
	CONTRACTION JOINT (SEE NOTE 2)
	ORDINARY HIGH WATER MARK (OHW)
	50' SETBACK LINE FROM OHW

LEGEND (PROPOSED)

WP#	WORKING POINT NUMBER
587.77'X	TOP OF FINISHED SURFACE ELEVATION
	SHEET PILE Z SECTION
	SHEET PILE FLAT SECTION
	CONCRETE FILL
	EXPANSION JOINT (SEE NOTE 2)
	CONTRACTION JOINT (SEE NOTE 2)

NOTES:

1. THE WORKING POINTS ARE ON THE REFERENCE LINE WHICH IS THE FRONT FACE OF THE SHEET PILES. THE REFERENCE LINE ON THE BOARDWALK BULKHEAD WALL IS OFFSET 12' FROM THE FRONT OF THE EXISTING SHEET PILE WALL.
2. SEE CONTRACTION AND EXPANSION JOINT DETAILS ON SHEET C-112. SEE SHEET C-144 OVERALL SITE PLAN FOR CONCRETE FINISHING DETAILS IN EACH AREA.



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p. 608.588.7866

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70% Submittal	04/08/24
100% Submittal	06/28/24
Bidding and Construction	07/19/24

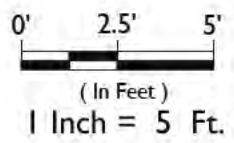
Project Title:

Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



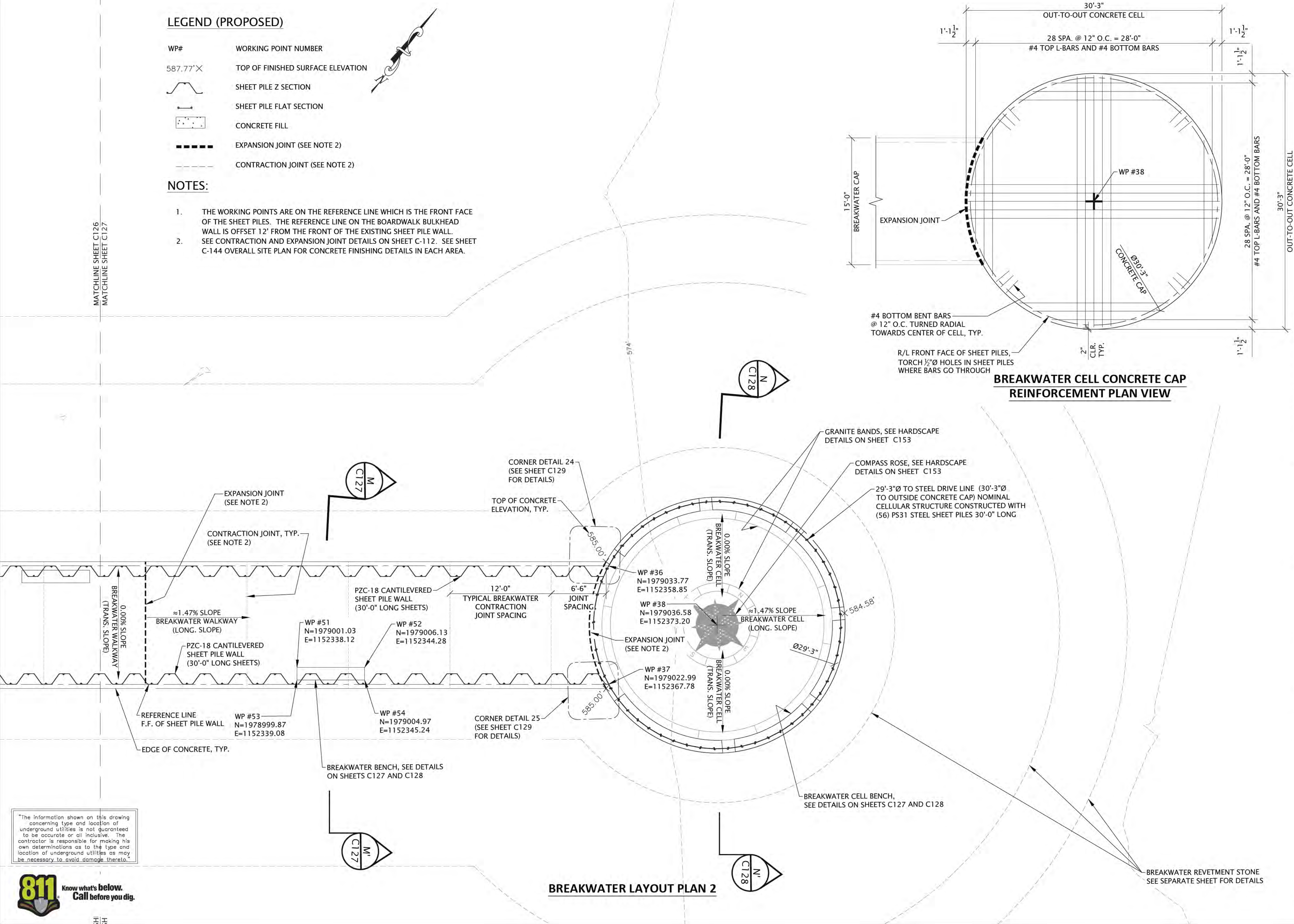
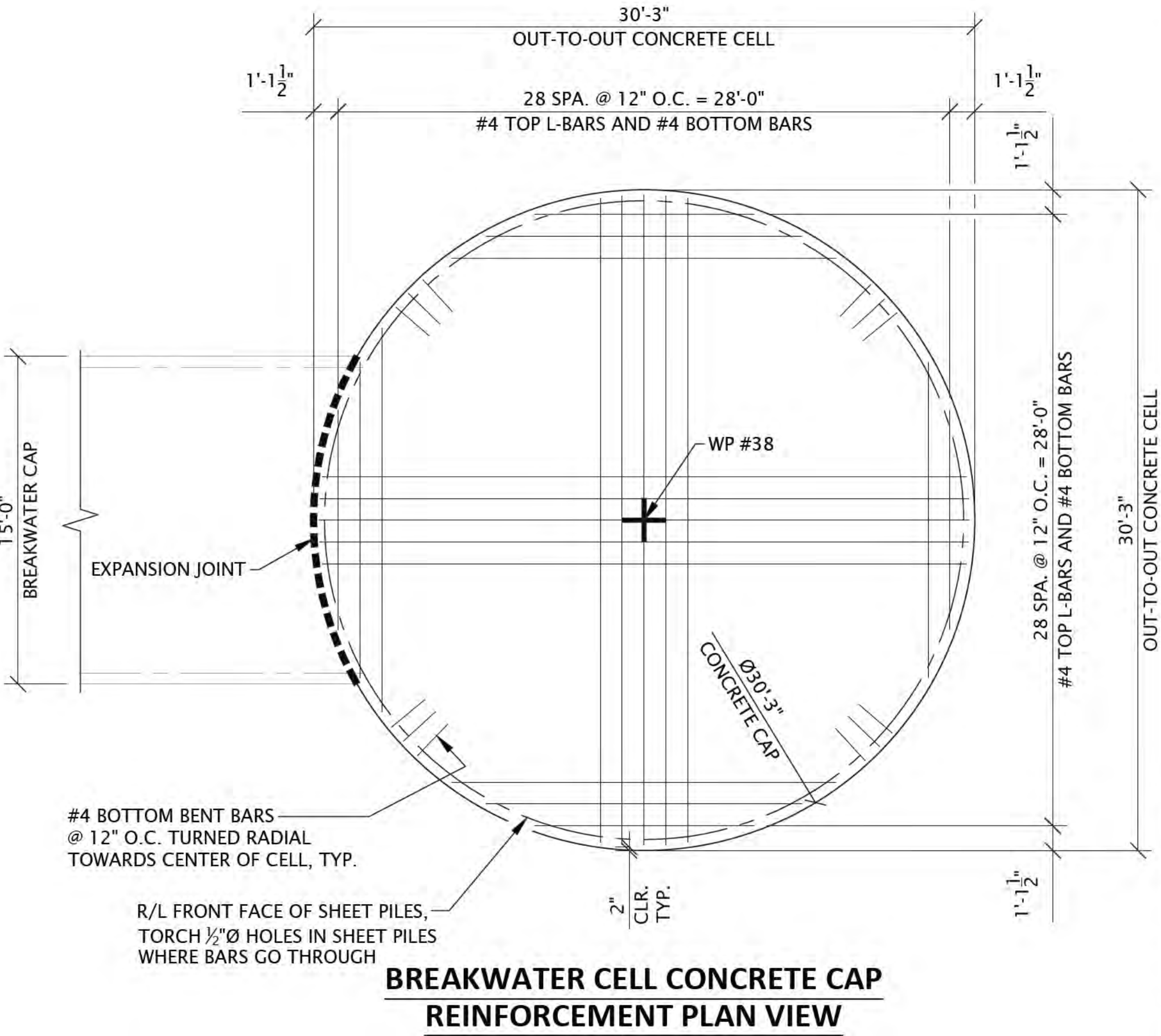
Scale 1 Inch = 5 Ft.

Drawing Title

BREAKWATER
LAYOUT PLAN 2

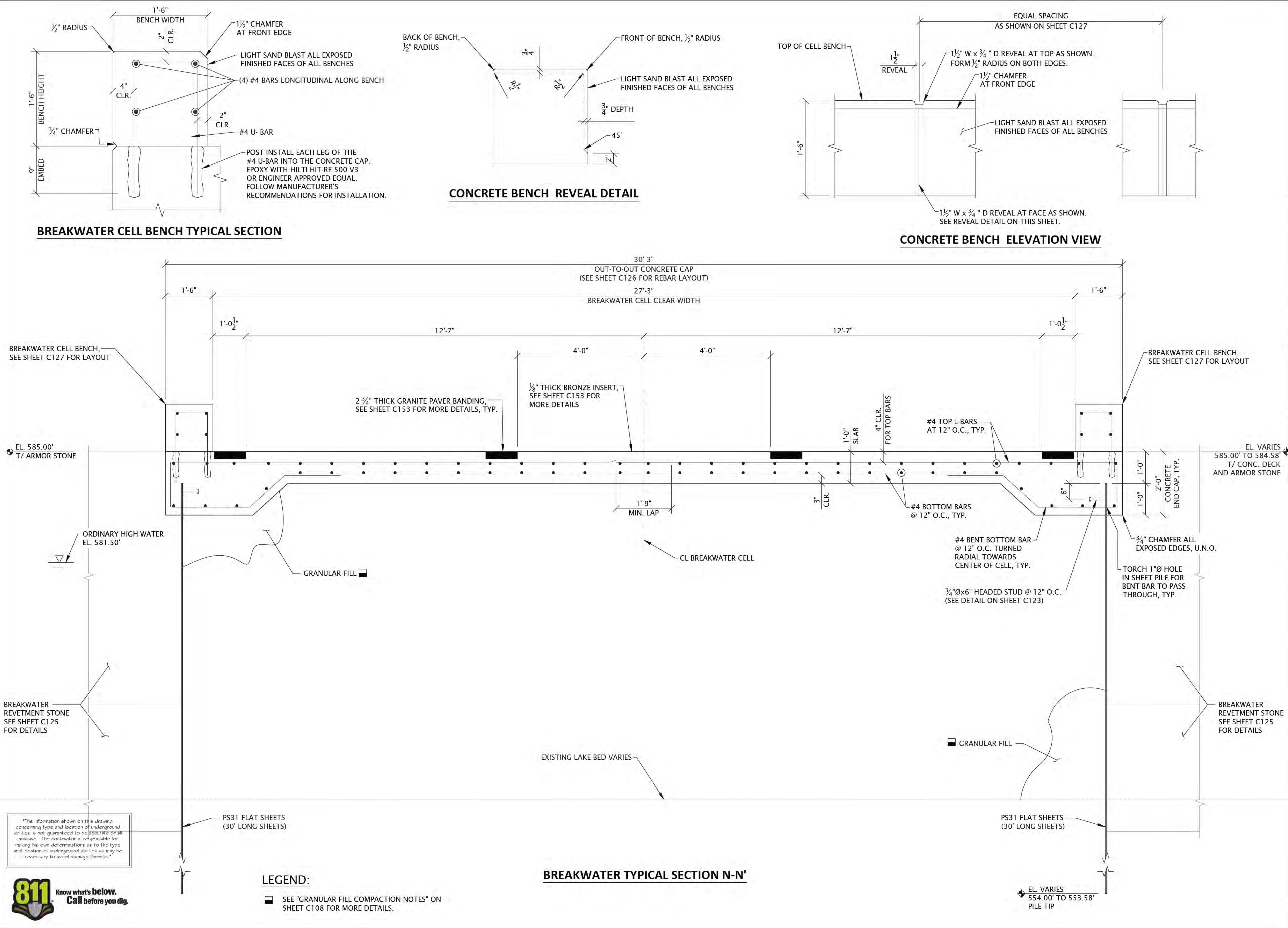
Sheet No.

C126



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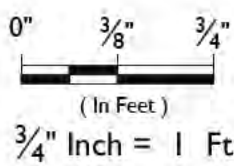
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



Scale: 3/4" Inch = 1 Ft.

Drawing Title

BREAKWATER IMPROVEMENTS
SECTIONS AND DETAILS
SECTION N-N'

Sheet No.

C128





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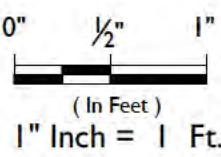
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale:



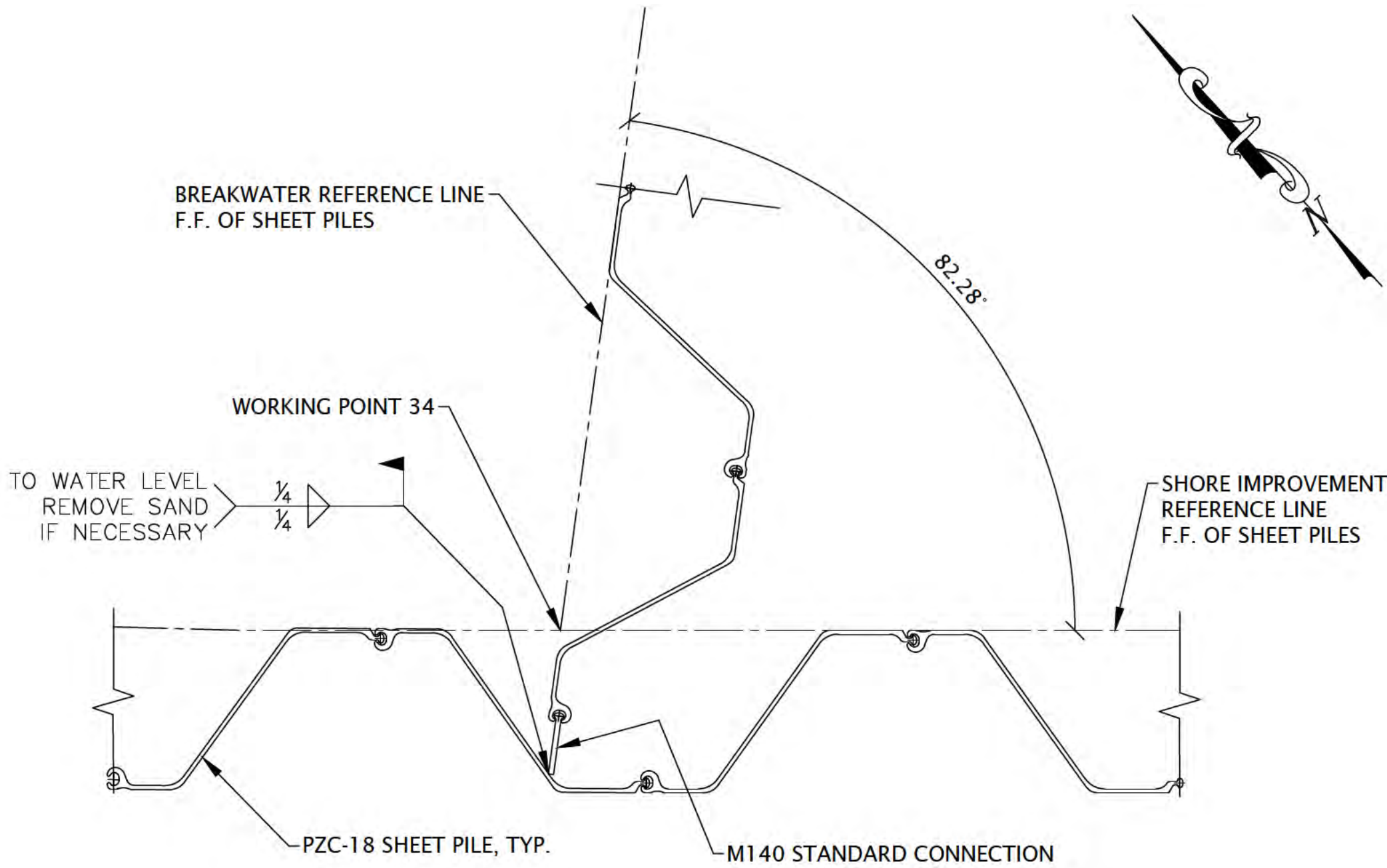
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Drawing Title

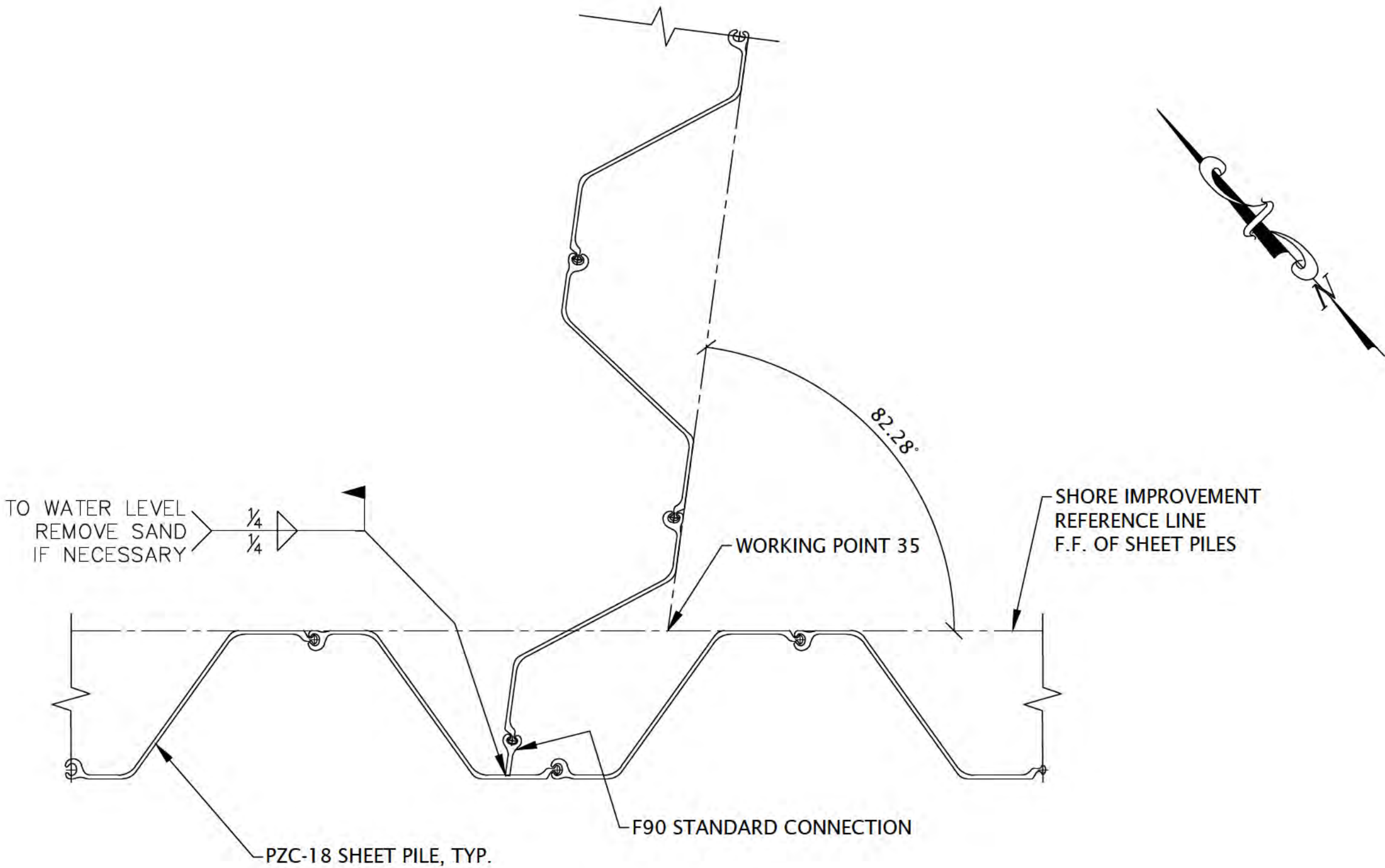
BREAKWATER
CORNER DETAILS

Sheet No.

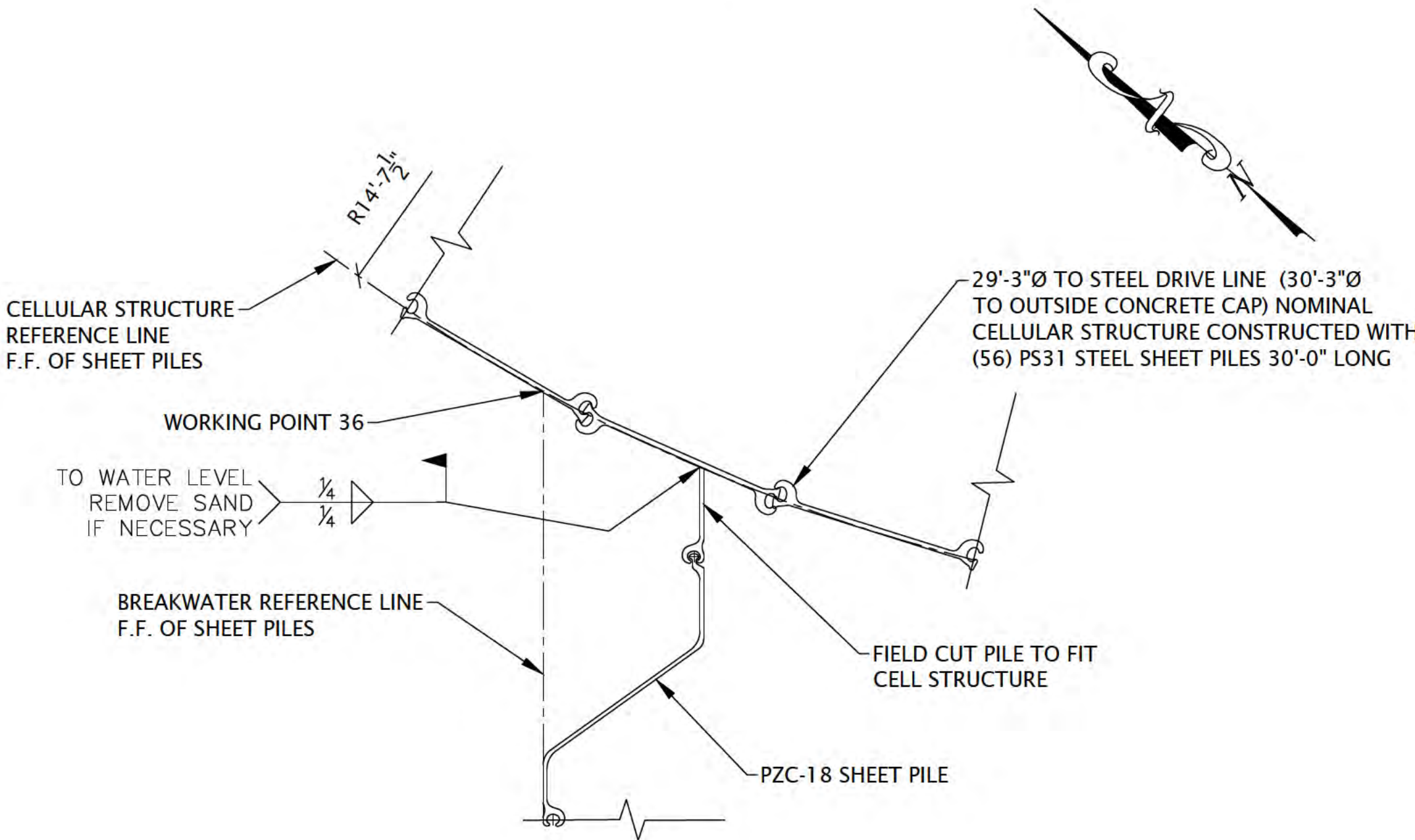
C129



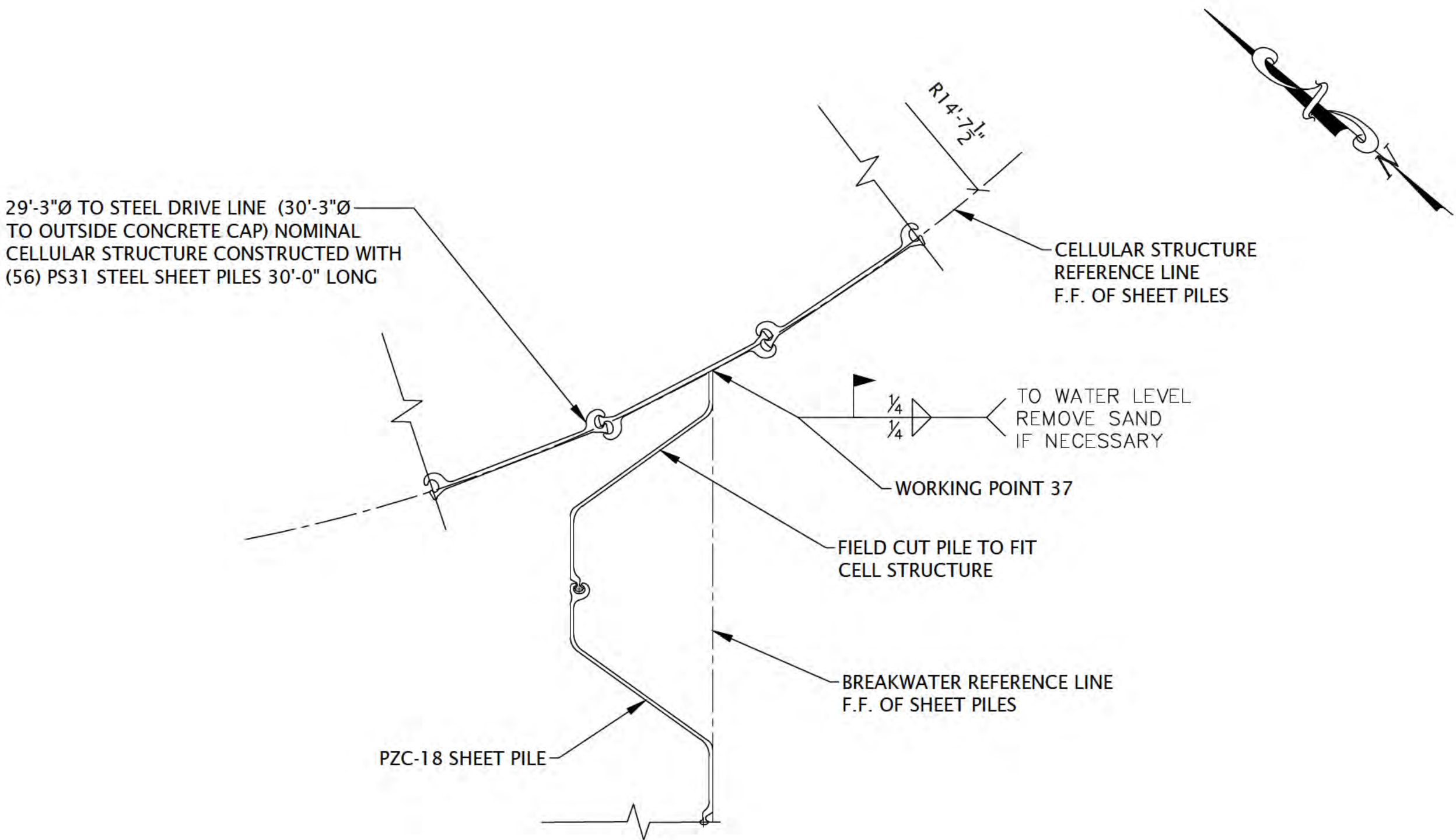
CORNER 22 DETAIL



CORNER 23 DETAIL



CORNER 24 DETAIL



CORNER 25 DETAIL

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Project Title:

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Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

0' 15' 30'
(In Feet)
1 Inch = 30 Ft.

Scale 1 Inch = 30 Ft.

Drawing Title

Breakwater Revetment
Layout Plan and Sections

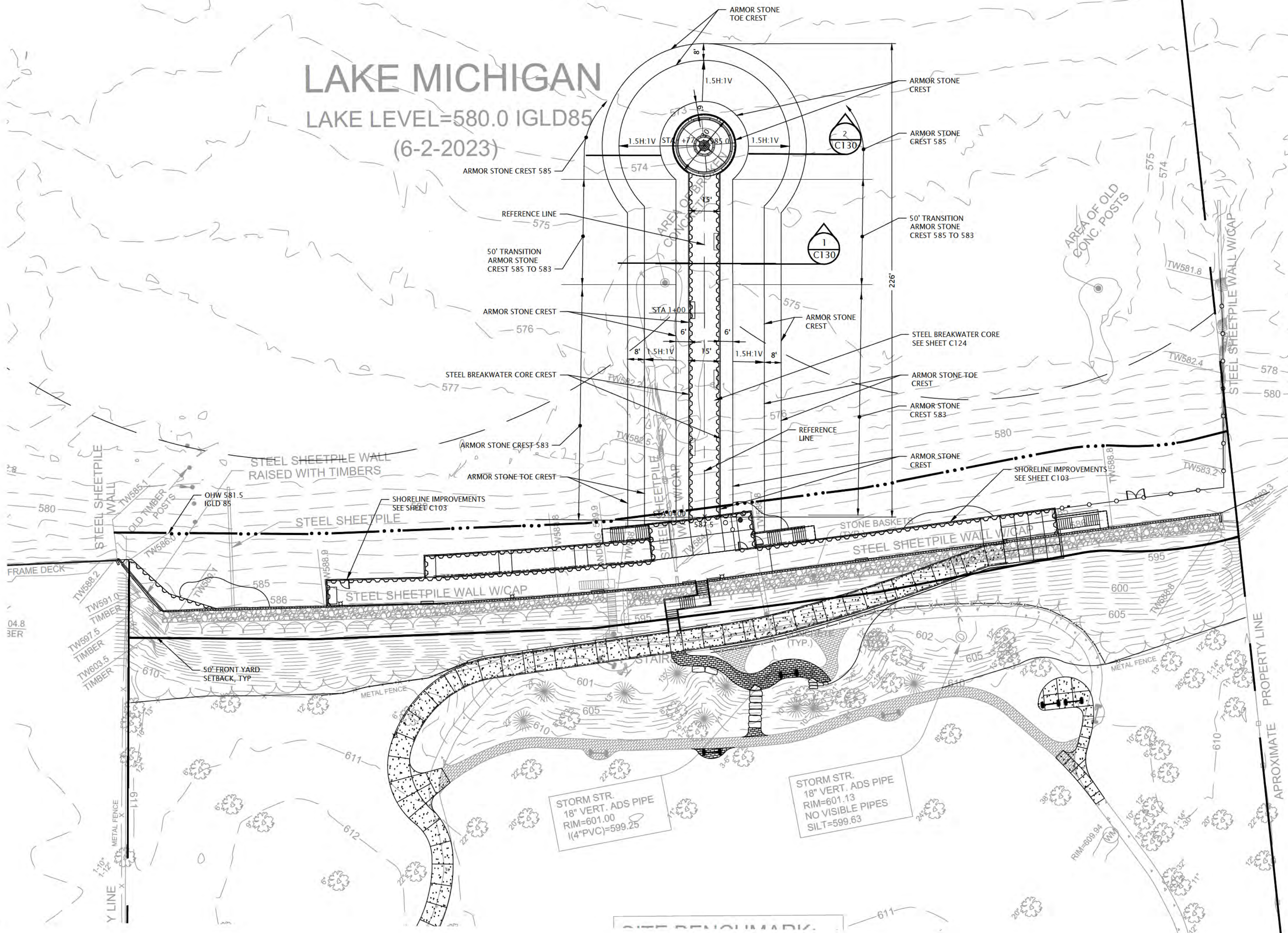
Sheet No.

C130

LAKE MICHIGAN

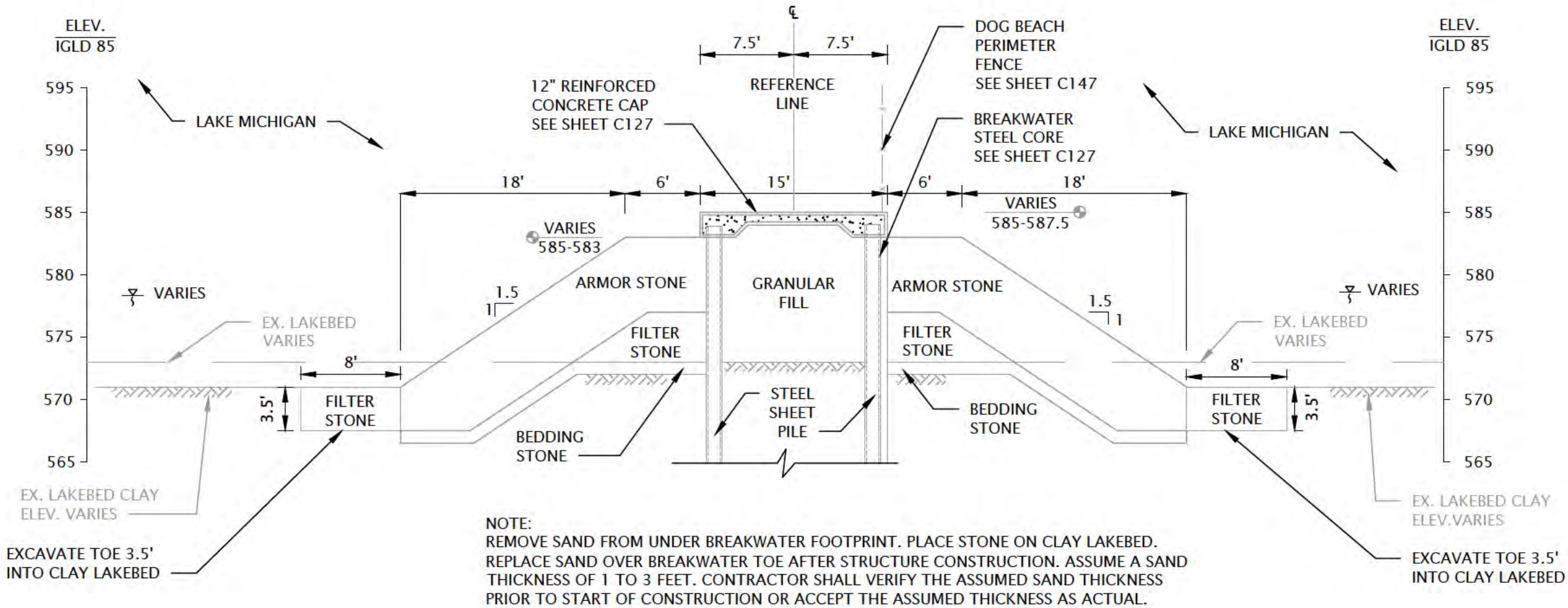
LAKE LEVEL=580.0 IGLD85

(6-2-2023)

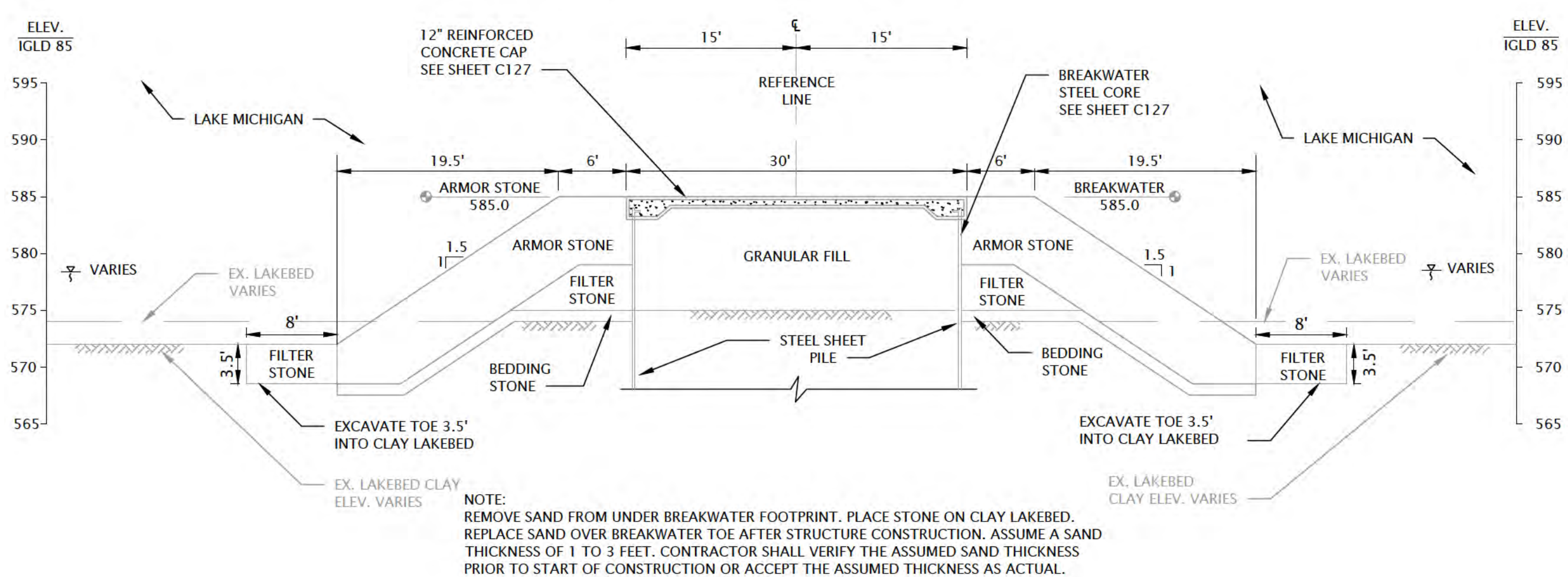


LEGEND (PROPOSED)

- BOARD WALK
- CONCRETE ADA RAMP
- BREAKWATER
- STORM SEWER
- X 585 - SPOT ELEVATION
- REFERENCE LINE
- OHW 581.5 IGLD 85
- 50' FRONT YARD SETBACK



1 BREAKWATER SECTION STA 0+00 TO STA 1+45
C130 Scale: 0' 5' 10'



2 BREAKWATER SECTION STA 1+45 TO STA 1+77
C130 Scale: 0' 5' 10'





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Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

0' 10' 20'
(In Feet)
1 Inch = 20 Ft.

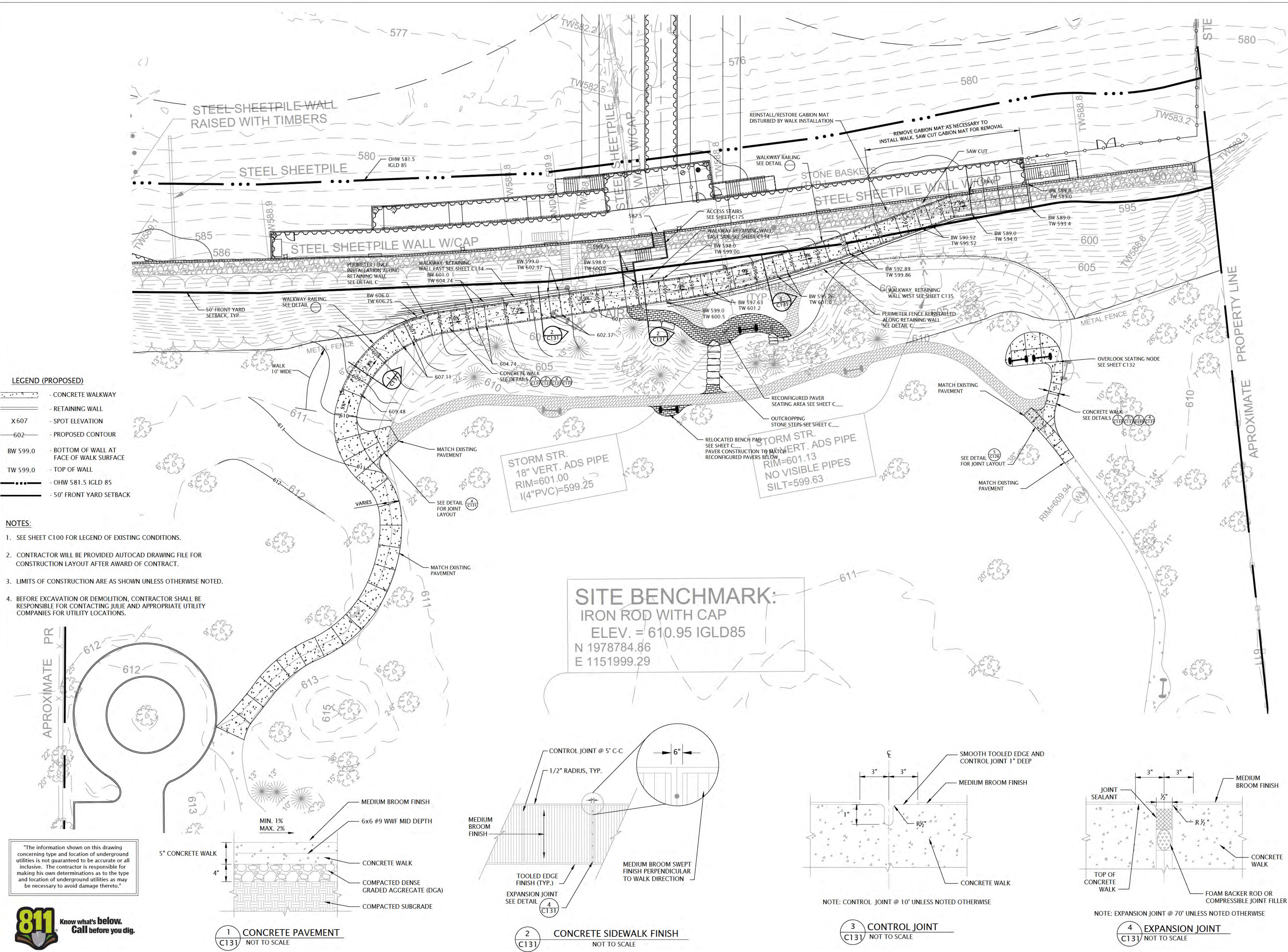
Scale 1 Inch = 20 Ft.

Drawing Title

Walkway Layout
Plan and Details

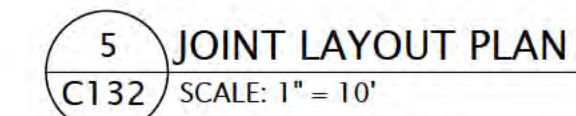
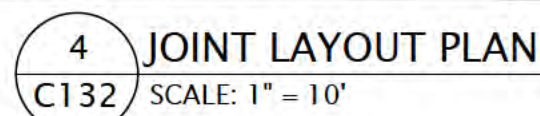
Sheet No.

C131





811 Know what's below.
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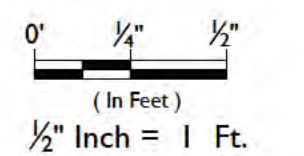
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Centennial Park
Winnetka, IL

Prepared For:

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Winnetka, IL

Graphic Scale



Scale $1/2" = 1'-0"$

Drawing Title
Walkway Details

Sheet No.

C132

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Project Title:

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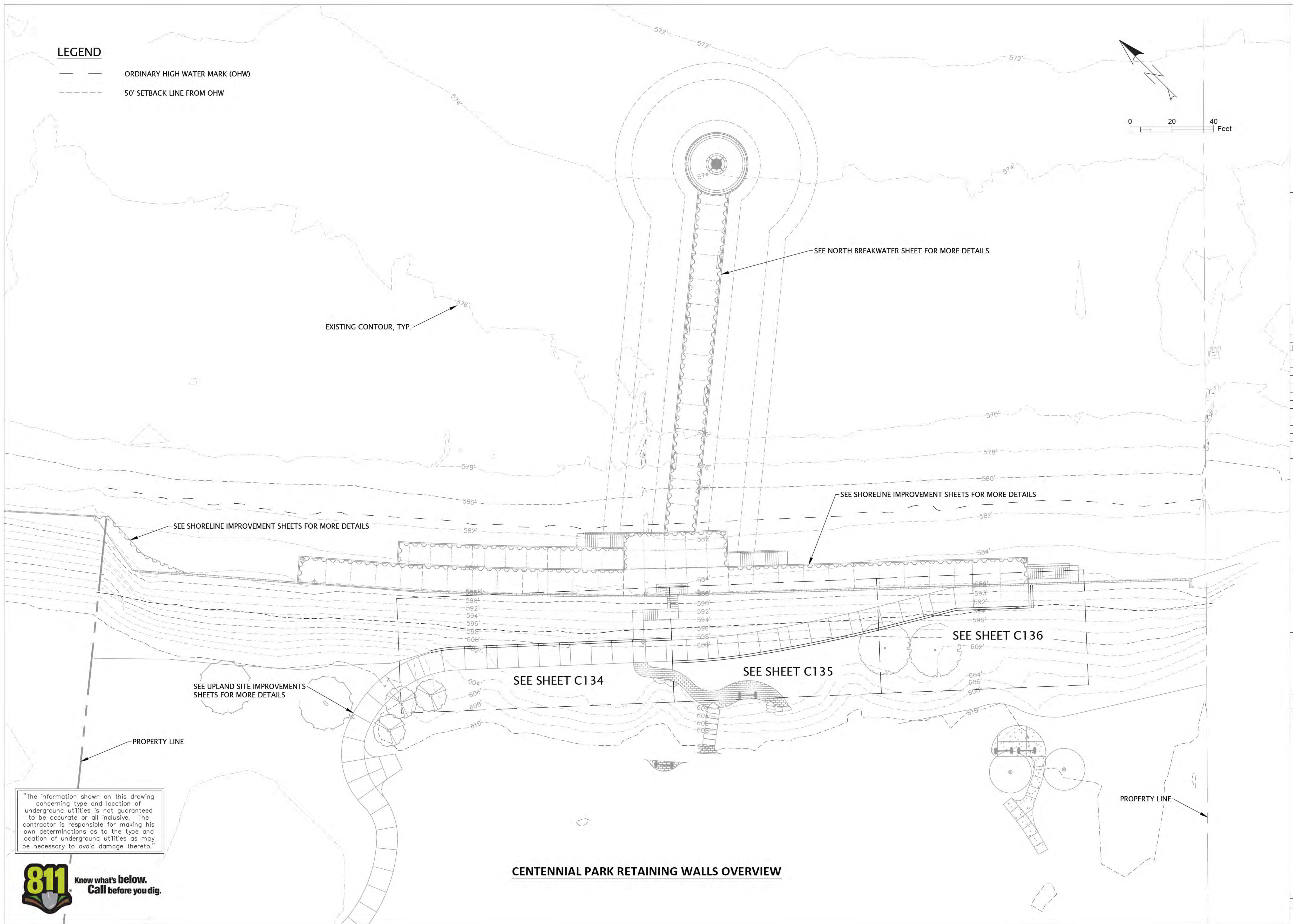
Winnetka Park District
Winnetka, IL

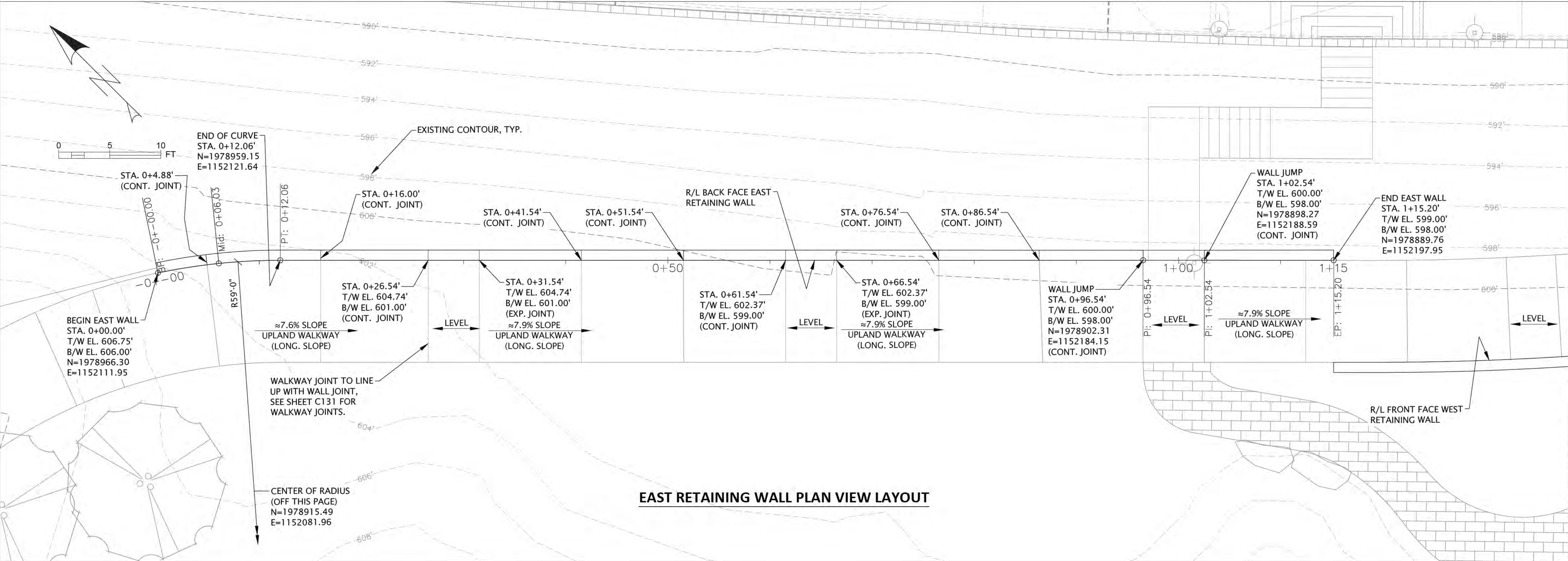
Graphic Scale

Scale 1" = 40'

Drawing Title	RETAINING WALL OVERVIEW
---------------	-------------------------

Sheet No. C133





EAST RETAINING WALL PLAN VIEW LAYOUT



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Elder Lane Park &
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Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

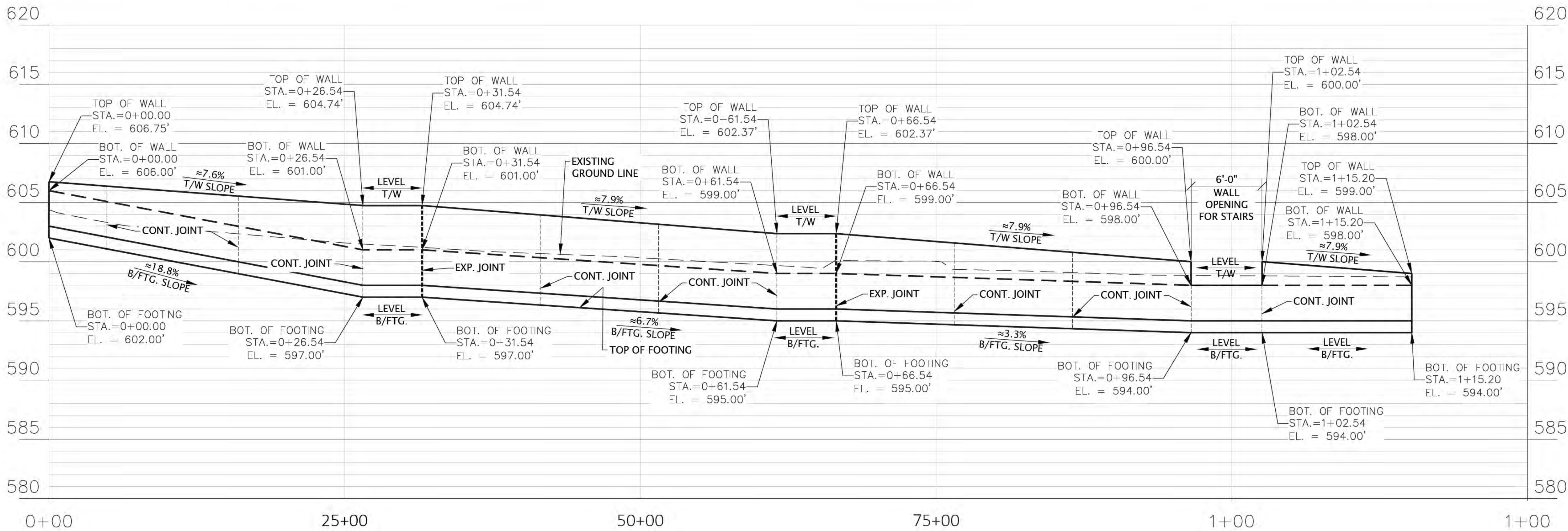
Scale 1" = 10'

Drawing Title

EAST RETAINING WALL PLAN
AND PROFILE
VIEW

Sheet No.

C134

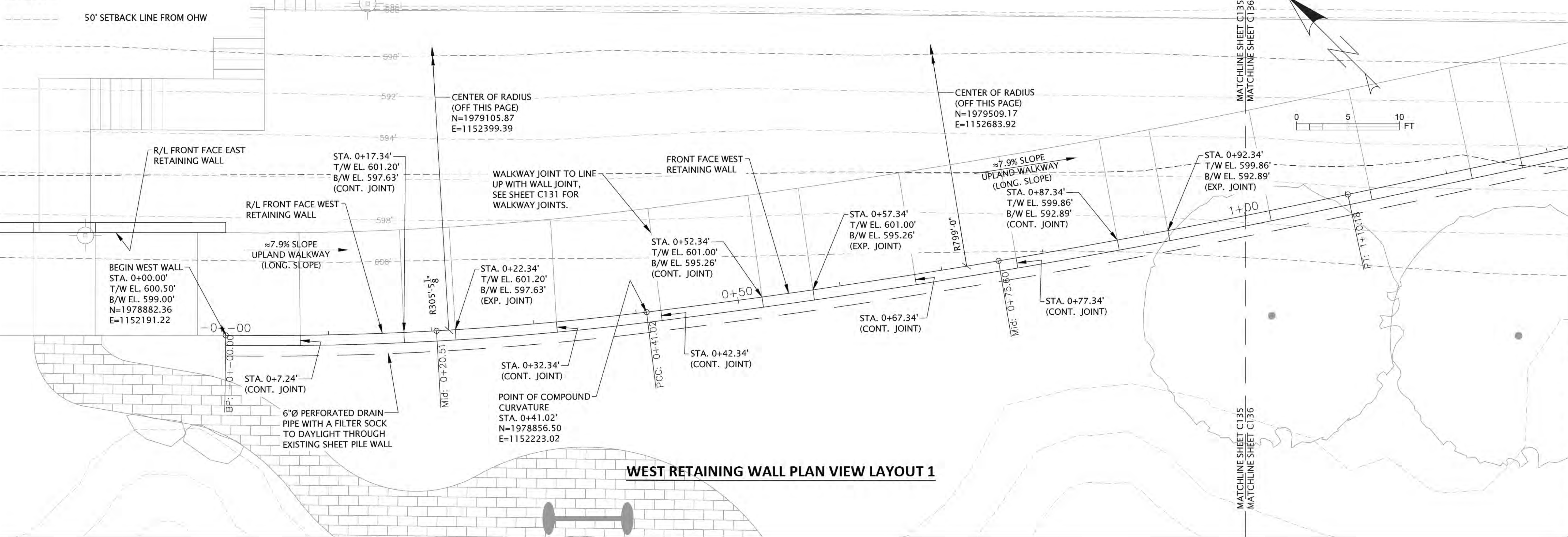


EAST RETAINING WALL PROFILE VIEW

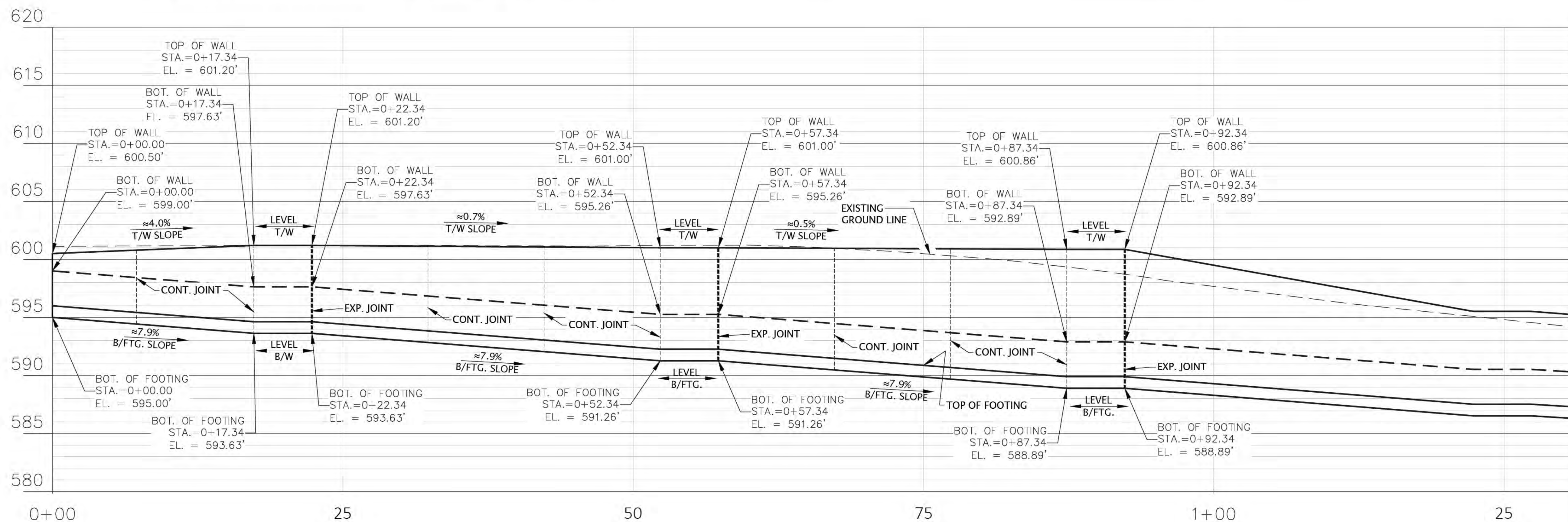


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LEGEND



WEST RETAINING WALL PLAN VIEW LAYOUT 1



WEST RETAINING WALL PROFILE VIEW 1



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Winnetka, IL

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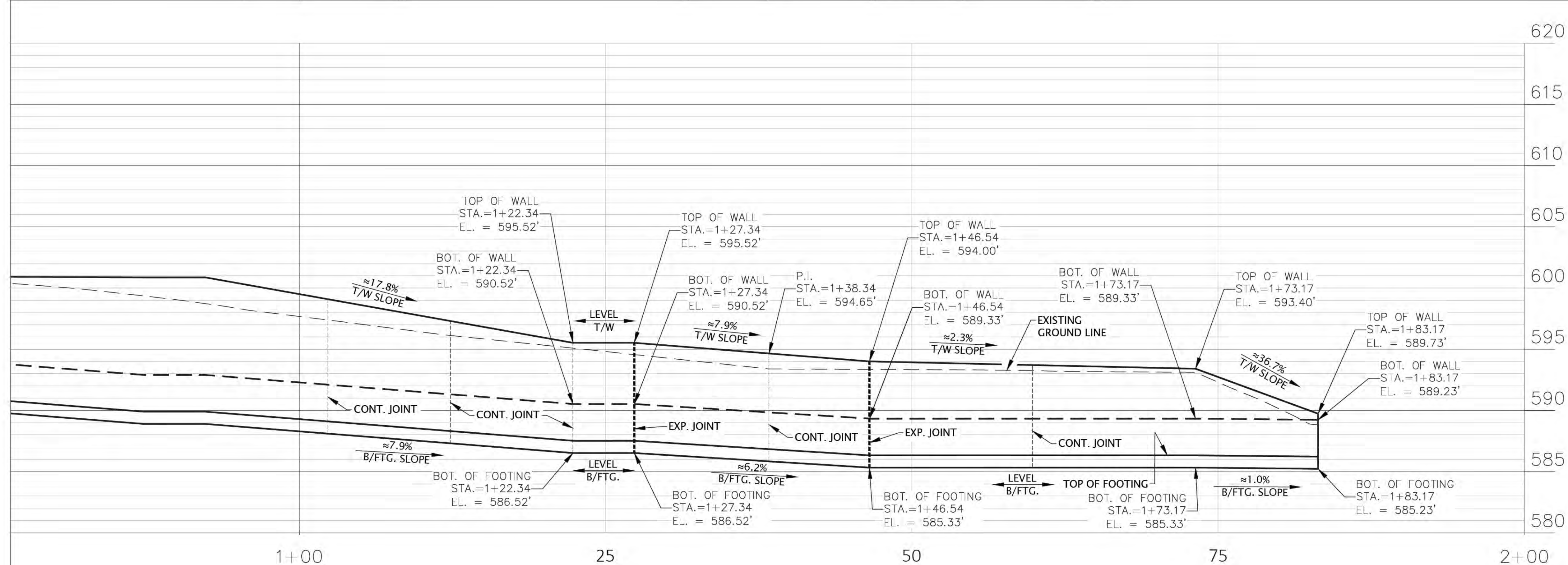
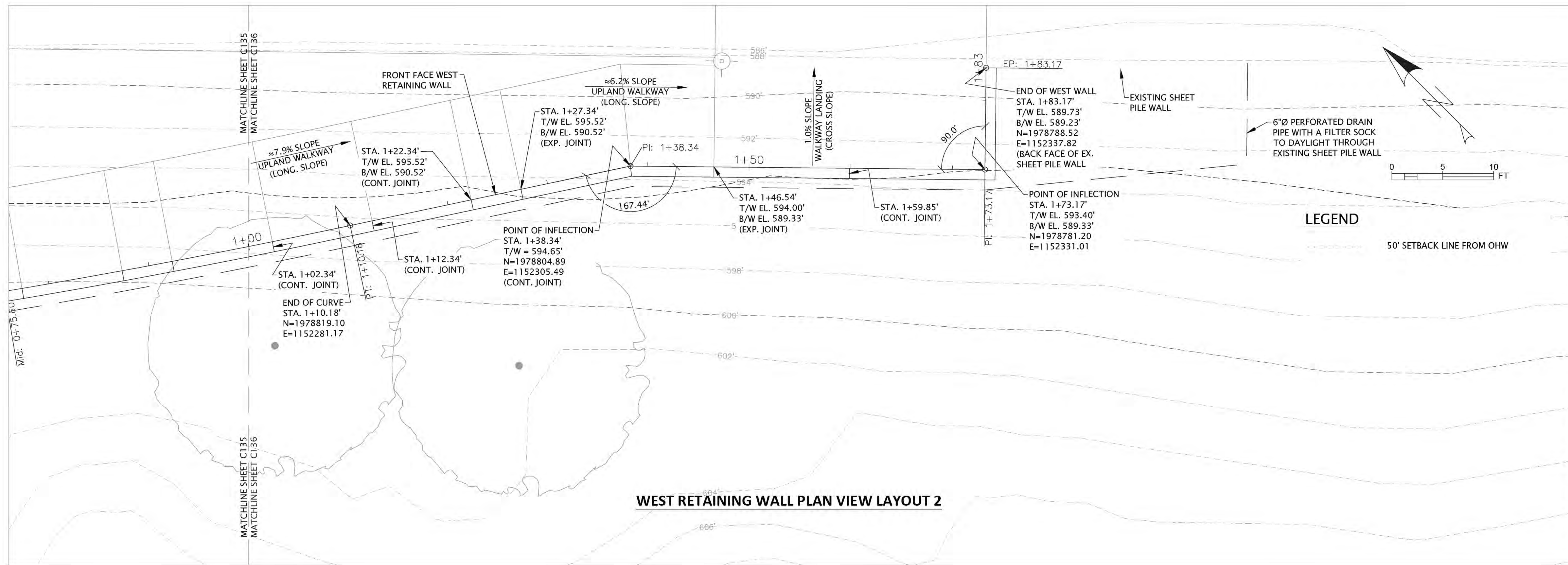
Scale 1" = 10'

Drawing Title

WEST RETAINING WALL PLAN
AND PROFILE VIEW 1

Sheet No.

C135



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WEST RETAINING WALL PROFILE VIEW 2



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p. 608.588.7866

[illegible]

Project Title:

Site Improvements
Elder Lane Park &
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

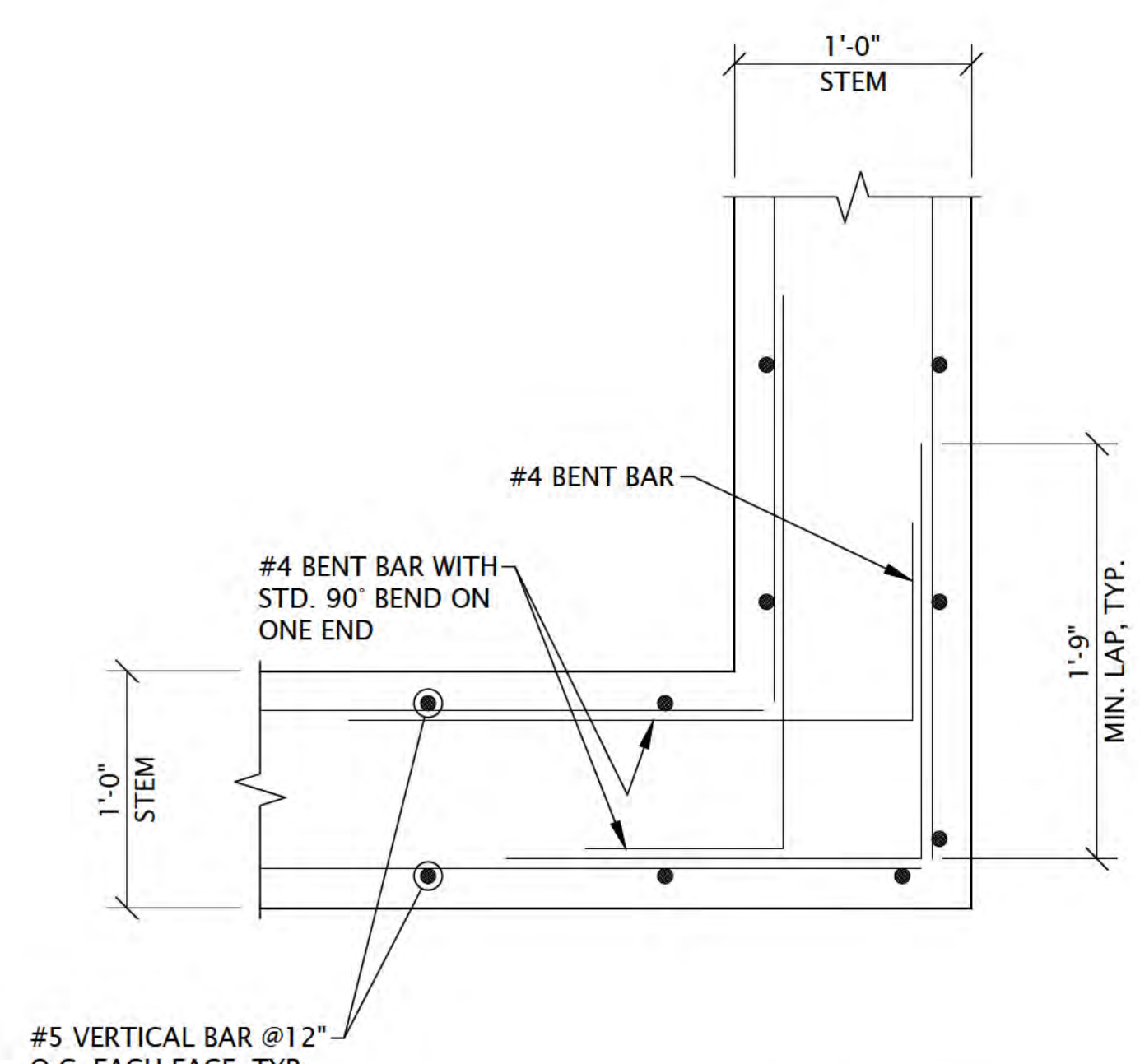
Scale 1" = 10'

Drawing Title

WEST RETAINING WALL PLAN
AND PROFILE VIEW 2

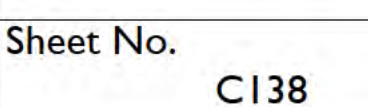
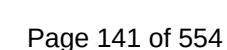
Sheet No.

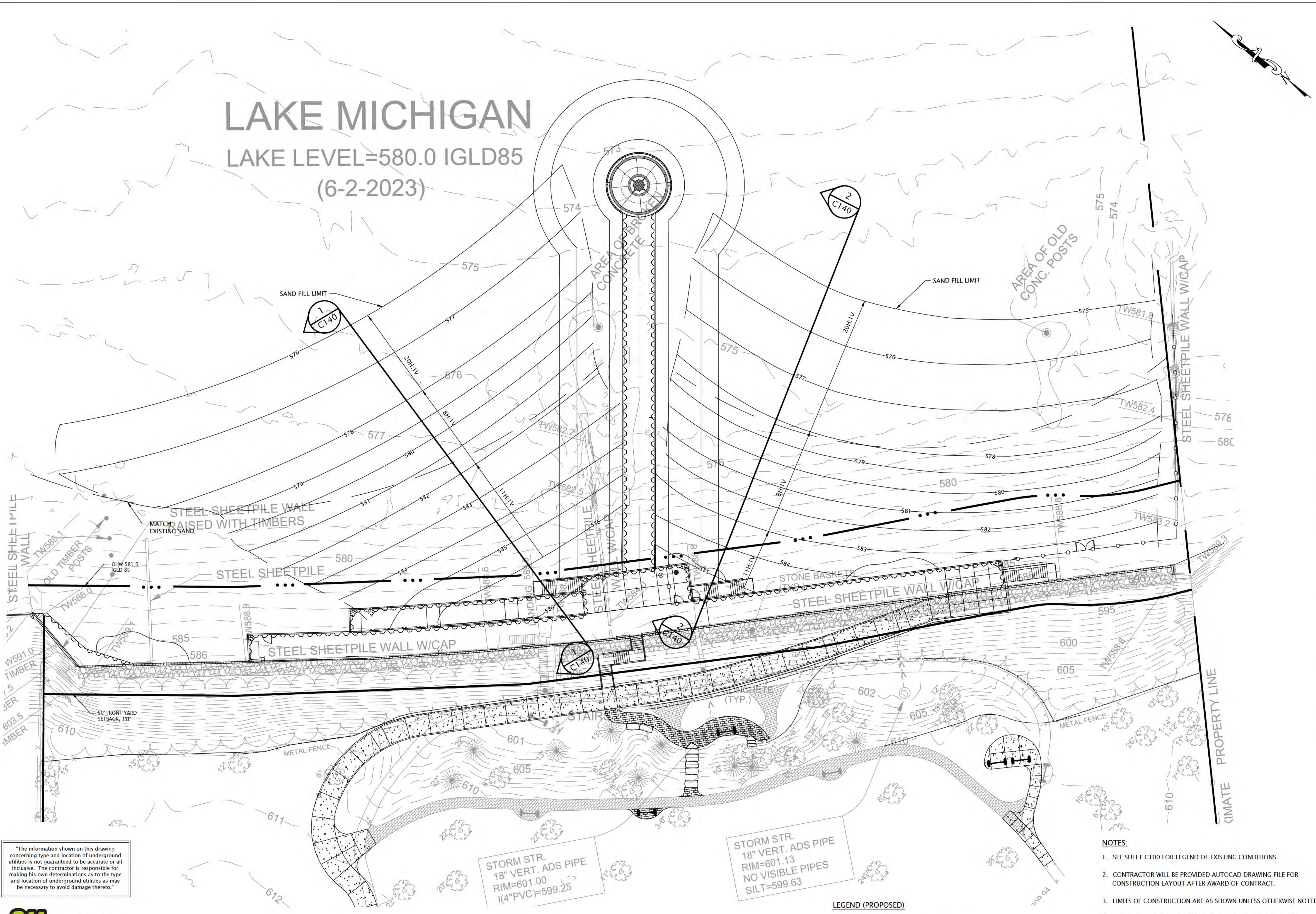
C136



RETAINING WALL CORNER DETAIL PLAN VIEW

1. SEE SHEET C-166 FOR FORMLINER DETAILS.
2. ALL CAULK MUST MATCH THE CONCRETE COLOR. CAULK MUST BE SIKA DUOFLEX POLYSULFIDE SEALANT IN CONJUNCTION WITH SIKA DUOFLEX 5050 EPOXY PRIMER OR AN ENGINEER APPROVED EQUAL.





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STORM STR.
18" VERT. ADS PIPE
RIM=601.00
(4"PVC)=599.25

STORM STR.
18" VERT. ADS PIPE
RIM=601.13
NO VISIBLE PIPES
SILT=599.63

LEGEND (PROPOSED)

- 50' FRONT YARD SETBACK
- OHW 581.5 IGLD 85

- NOTES:
1. SEE SHEET C100 FOR LEGEND OF EXISTING CONDITIONS.
 2. CONTRACTOR WILL BE PROVIDED AUTOCAD DRAWING FILE FOR CONSTRUCTION LAYOUT AFTER AWARD OF CONTRACT.
 3. LIMITS OF CONSTRUCTION ARE AS SHOWN UNLESS OTHERWISE NOTED.
 4. BEFORE EXCAVATION OR DEMOLITION, CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING JULIE AND APPROPRIATE UTILITY COMPANIES FOR UTILITY LOCATIONS.



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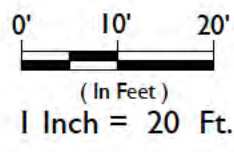
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 Inch = 20 Ft.

Drawing Title

Sand Fill Layout Plan

Sheet No.

C139



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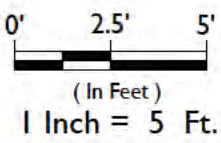
Project Title:

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Winnetka, IL

Prepared For:

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Winnetka, IL

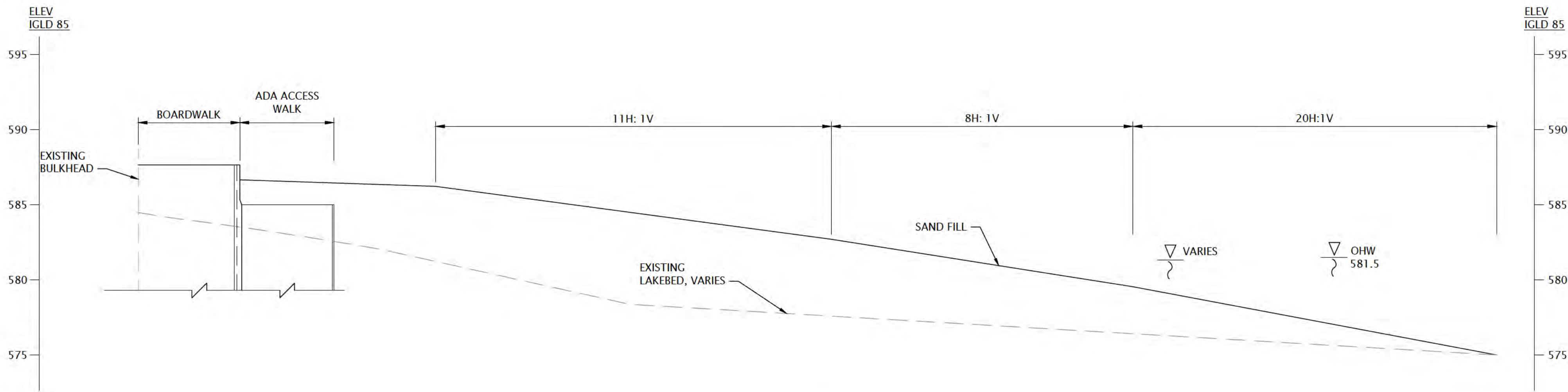
Graphic Scale



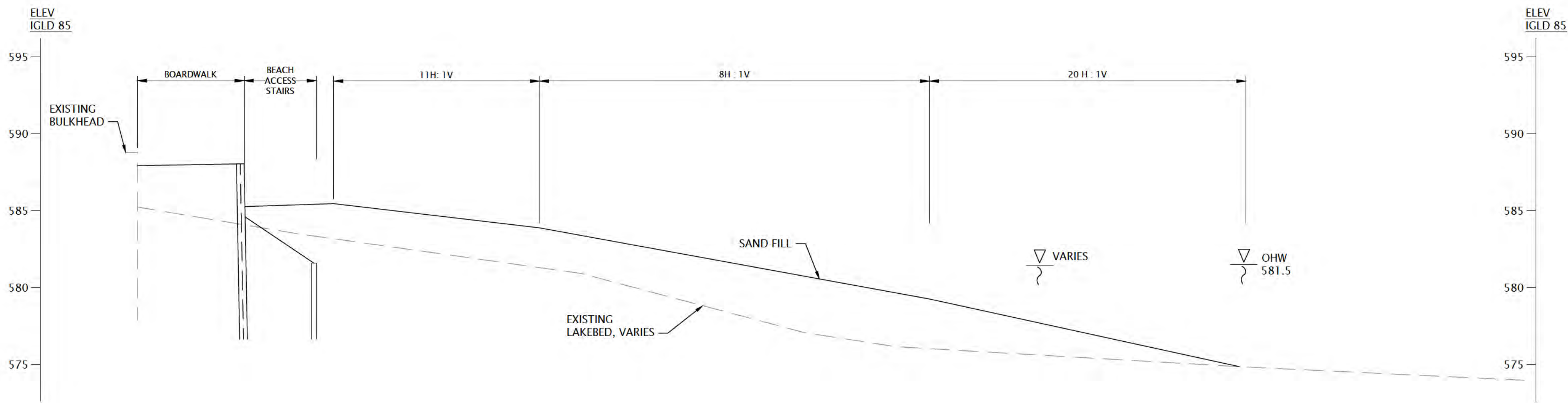
Scale 1 Inch = 5 Ft.

Drawing Title
SAND FILL SECTIONS

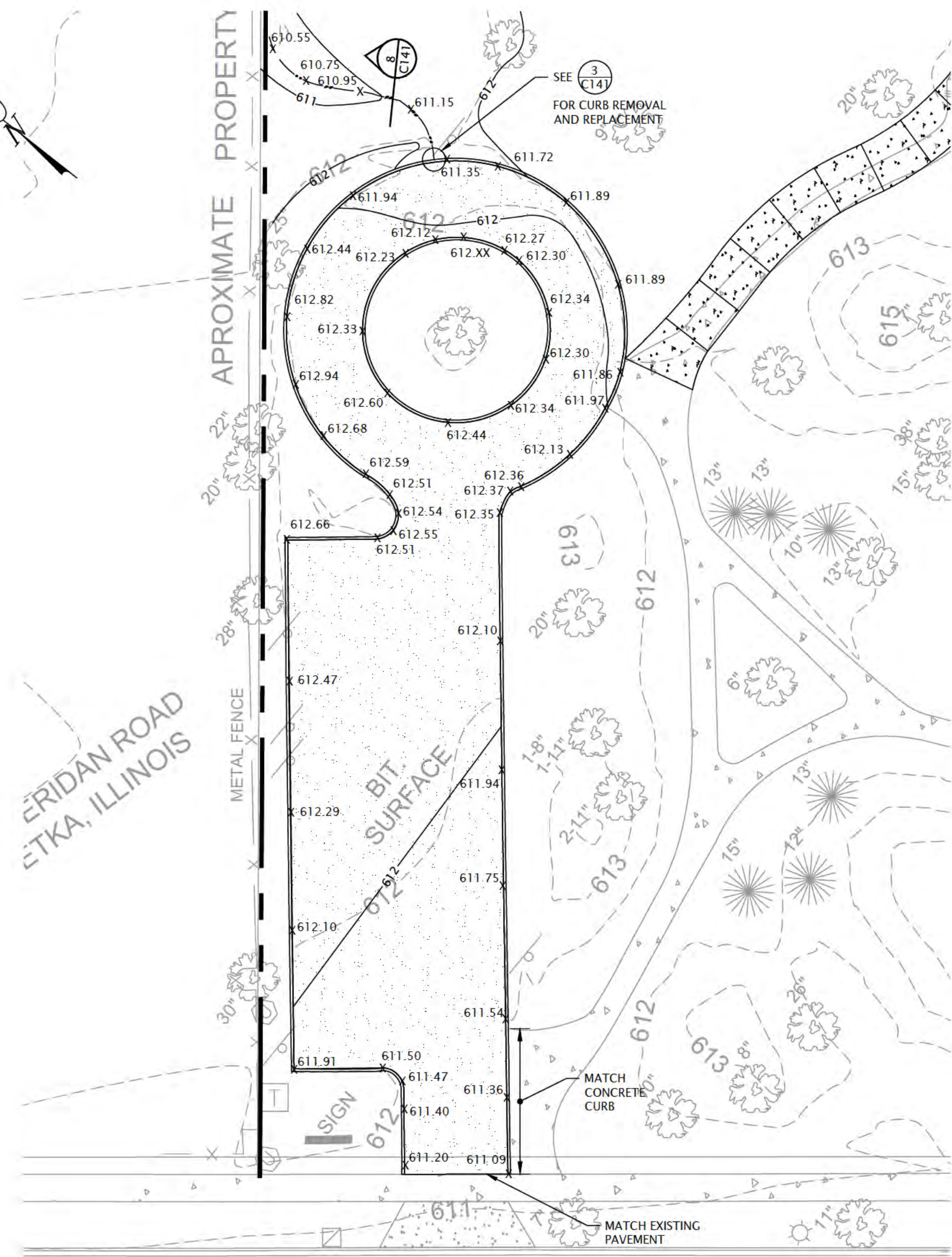
Sheet No.
C140



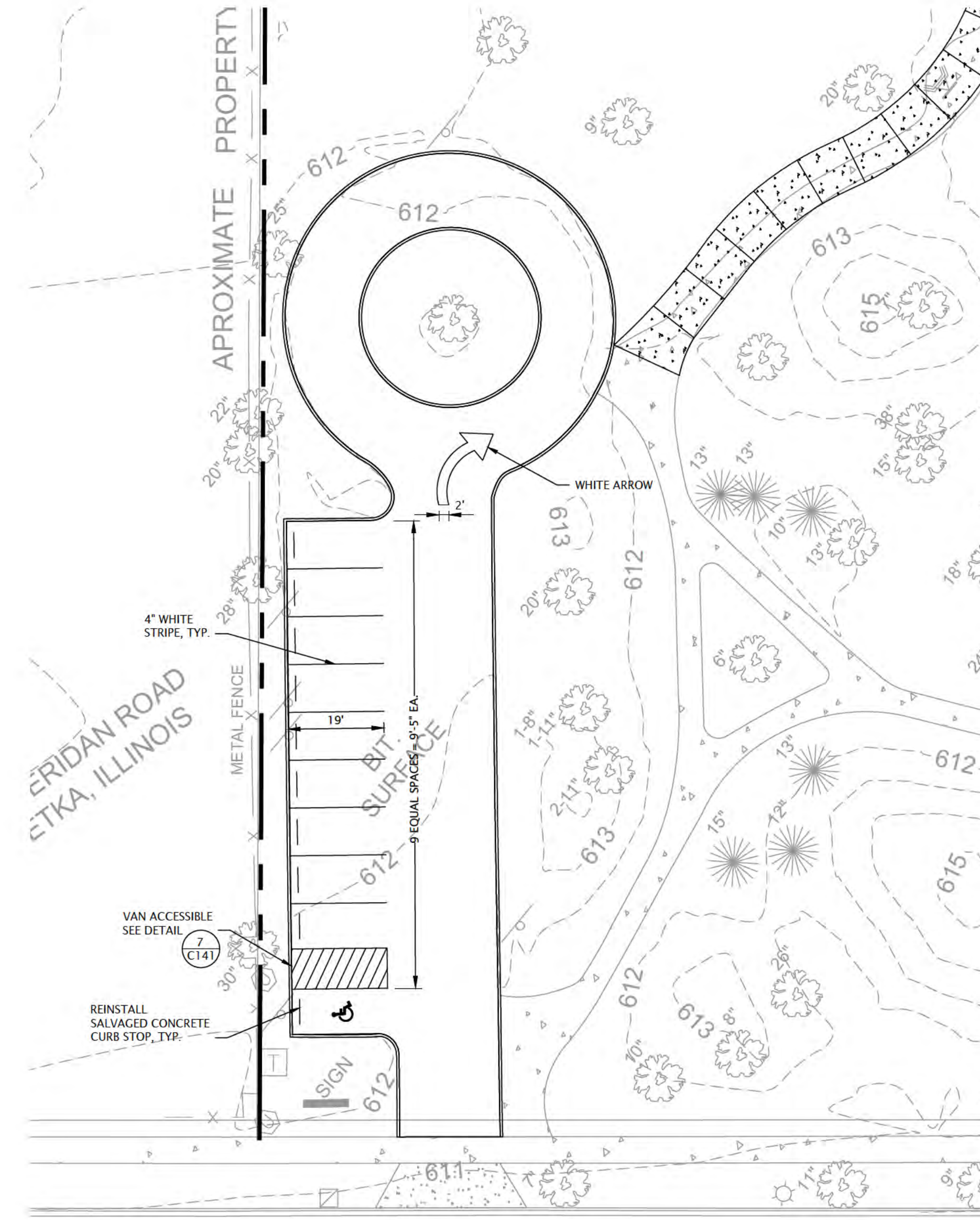
1 SAND FILL SECTION 1
C140 SCALE : H: 1" = 10'
V: 1" = 5'



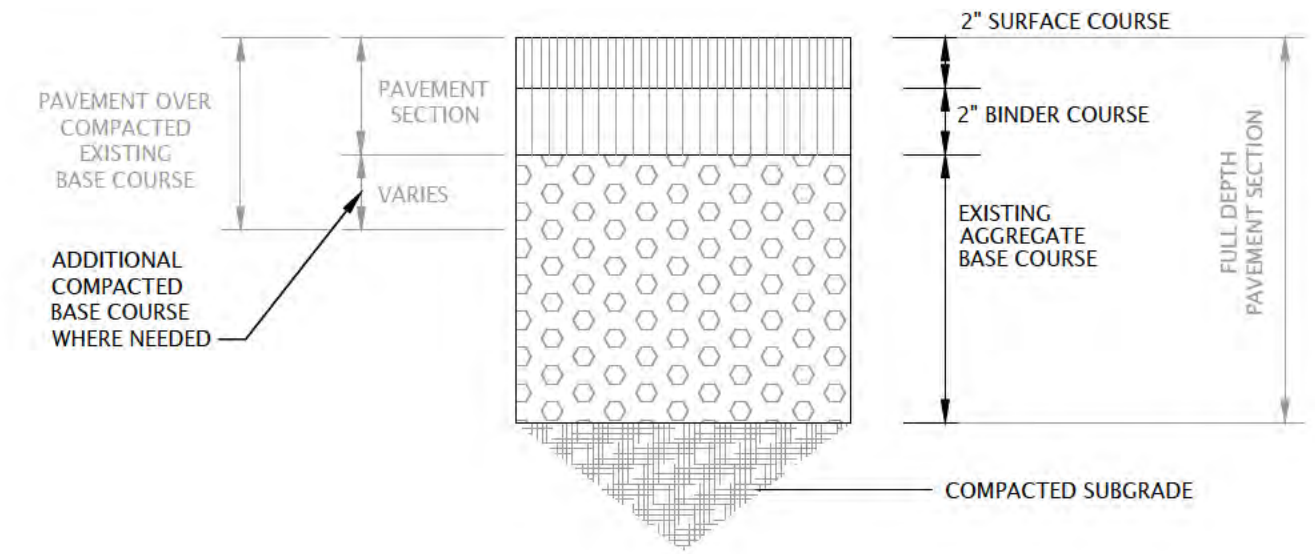
2 SAND FILL SECTION 2
C140 SCALE : H: 1" = 10'
V: 1" = 5'



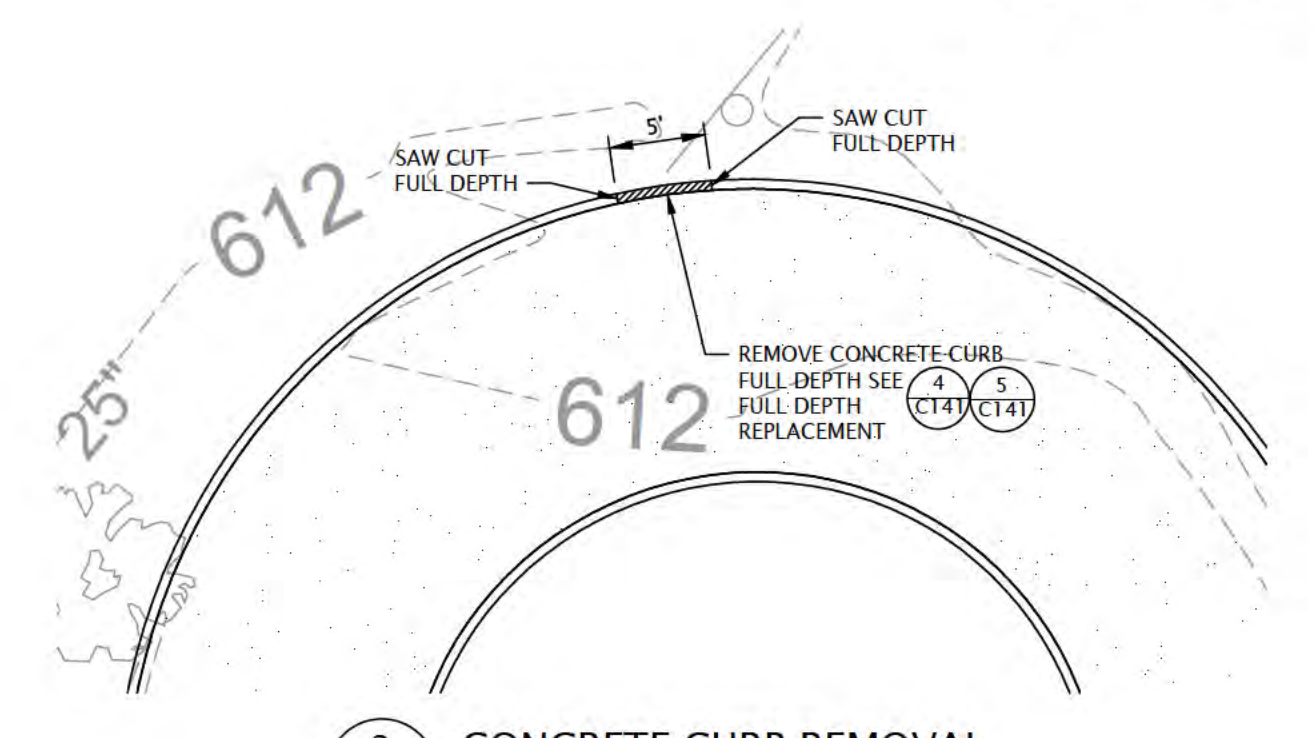
1 PAVEMENT LAYOUT AND GRADING
C141 SCALE: 0' 10' 20'



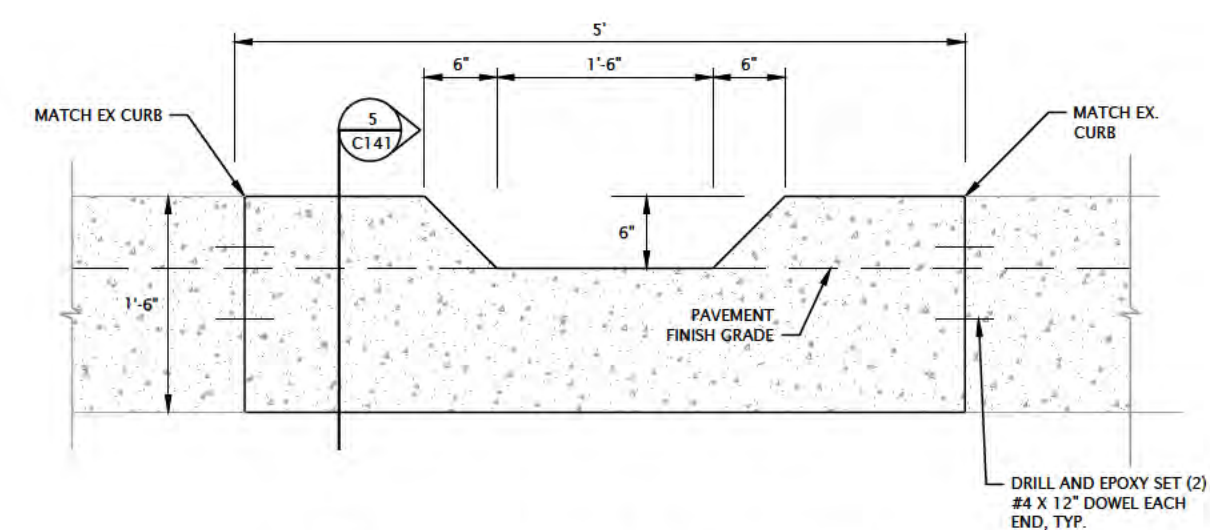
6 PARKING LOT PAVEMENT MARKING PLAN
C141 SCALE: 0' 10' 20'



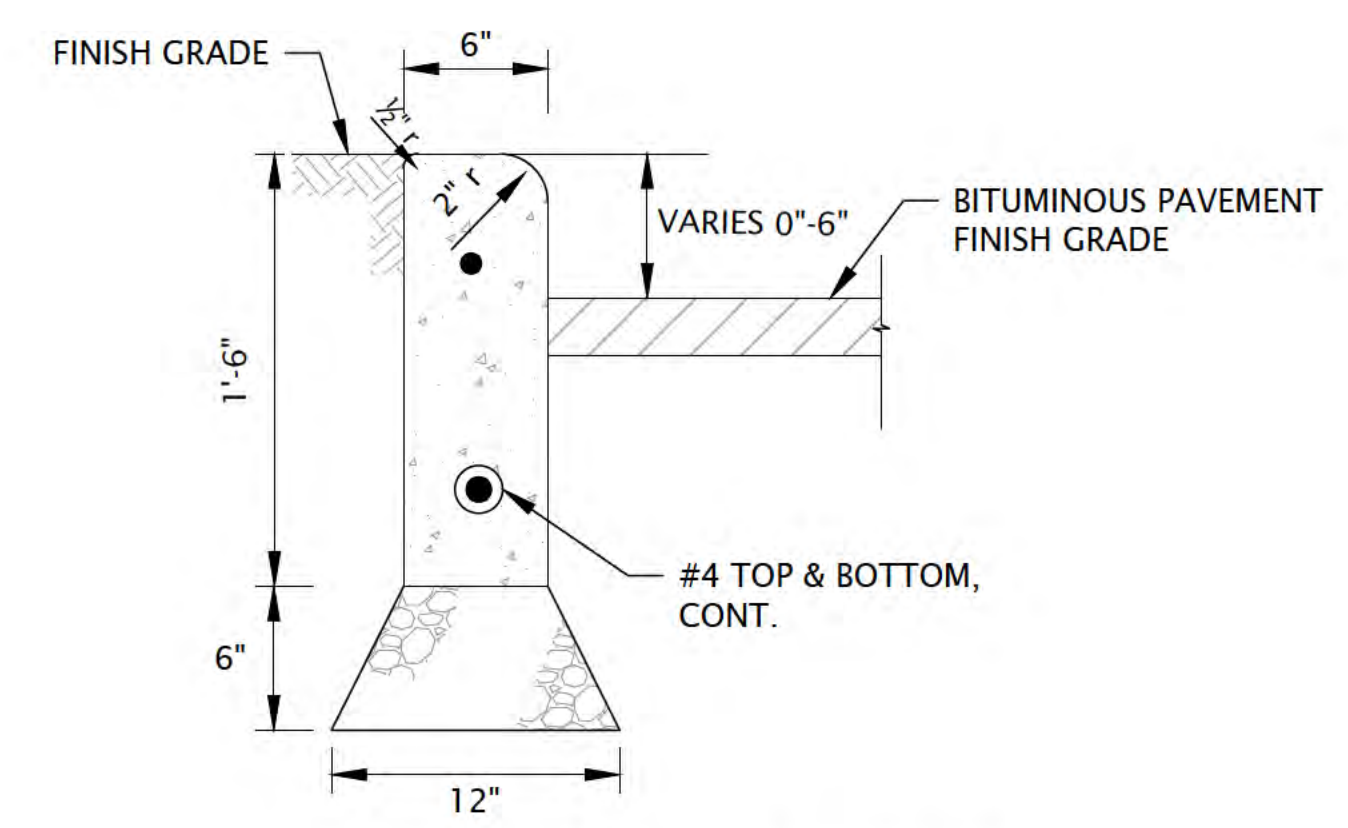
2 BITUMINOUS PAVEMENT
C141 NOT TO SCALE



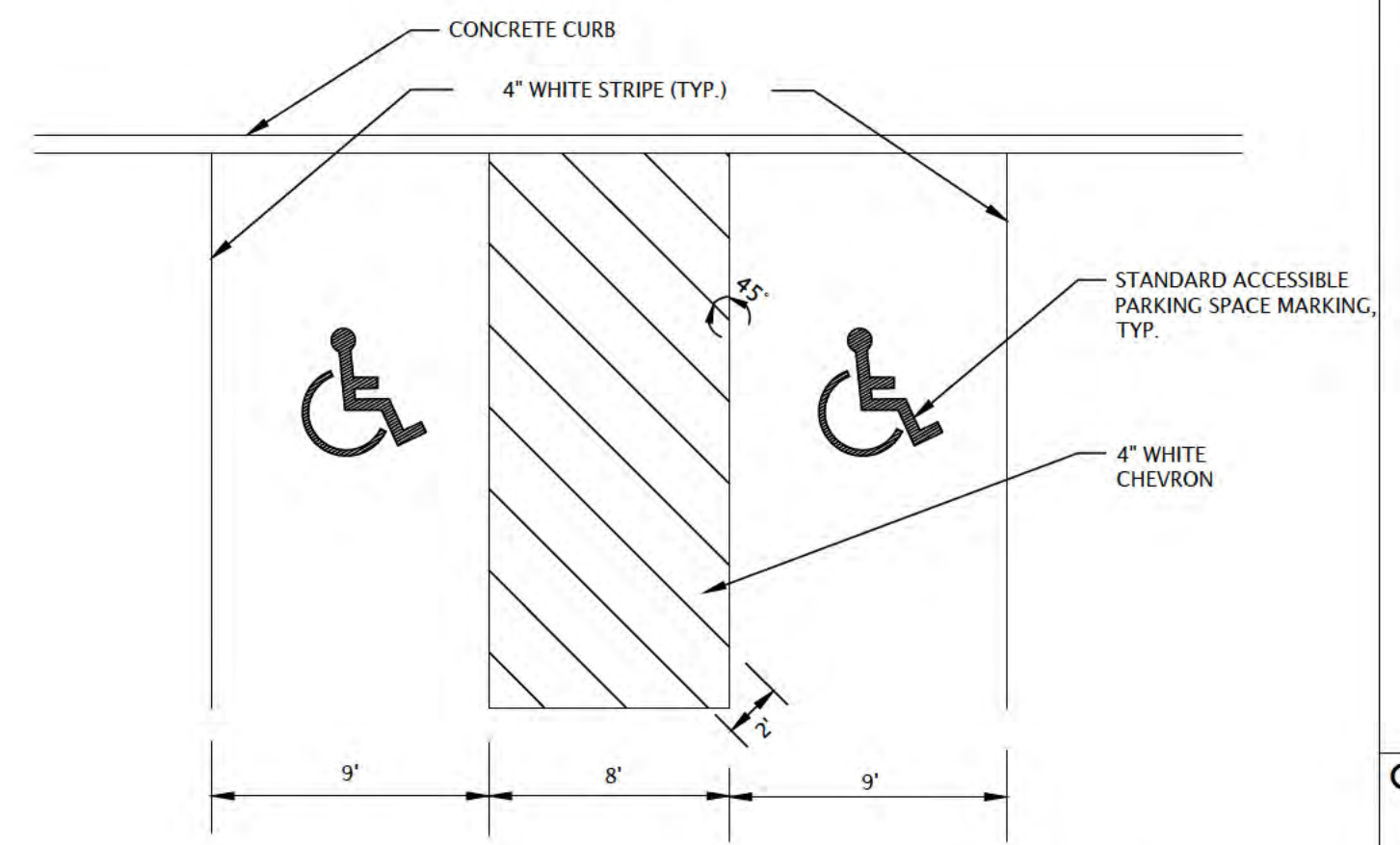
3 CONCRETE CURB REMOVAL
C141 SCALE: 0' 5' 10'



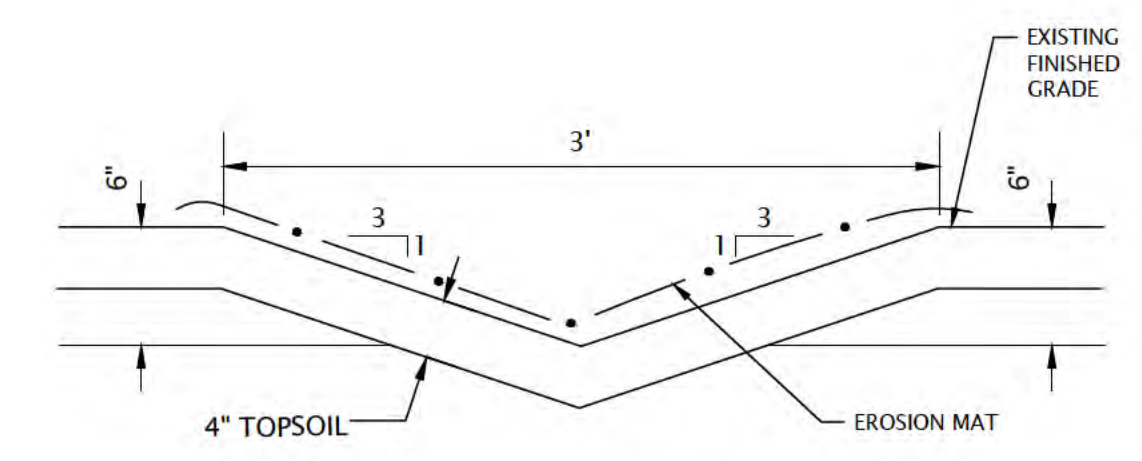
4 CONCRETE CURB ELEVATION
C141 SCALE: 0' 3/8" 3/4"



5 CONCRETE CURB - SECTION
C141 SCALE: 0' 3/4" 1-1/2"



7 ACCESSIBLE PARKING SPACE PAVEMENT MARKING
C141 NOT TO SCALE



8 SWALE SECTION
C141 NOT TO SCALE

- WORK SEQUENCE NOTES:**
1. LIMIT OF CONSTRUCTION ARE PAVEMENT EDGE UNLESS NOTED OTHERWISE.
 2. SEE SHEET C100 FOR LEGEND OF EXISTING CONDITIONS.
 3. BEFORE EXCAVATION OR DEMOLITION, CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY COMPANIES AND JULIE FOR UTILITY LOCATIONS.
 4. CONTOUR INTERVAL IS ONE (1) FOOT.
 5. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PRIOR TO DISTURBANCE ACTIVITIES.
 6. SEED AND MULCH ALL DISTURBED AREAS.
 7. PROPOSED GRADES SHOWN INDICATE FINISH GRADE.
 8. CONTRACTOR WILL BE PROVIDED AUTOCAD DRAWING FILE FOR CONSTRUCTION LAYOUT AFTER AWARD OF CONSTRUCTION CONTRACT.

- NOTES:**
1. SEE SHEET C100 FOR LEGEND OF EXISTING CONDITIONS.
 2. CONTRACTOR WILL BE PROVIDED AUTOCAD DRAWING FILE FOR CONSTRUCTION LAYOUT AFTER AWARD OF CONTRACT.
 3. LIMITS OF CONSTRUCTION ARE AS SHOWN UNLESS OTHERWISE NOTED.
 4. BEFORE EXCAVATION OR DEMOLITION, CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING JULIE AND APPROPRIATE UTILITY COMPANIES FOR UTILITY LOCATIONS.



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Bidding And Construction	07/19/24

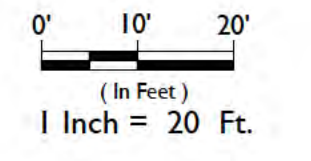
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 Inch = 20 Ft.

Drawing Title

Park Parking Lot
Improvements

Sheet No.

C141

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RED BARN
Design & Engineering, S.C.

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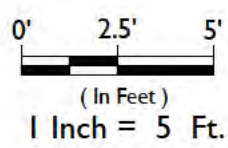
Project Title:

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Centennial Park
Winnetka, IL

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Winnetka Park District
Winnetka, IL

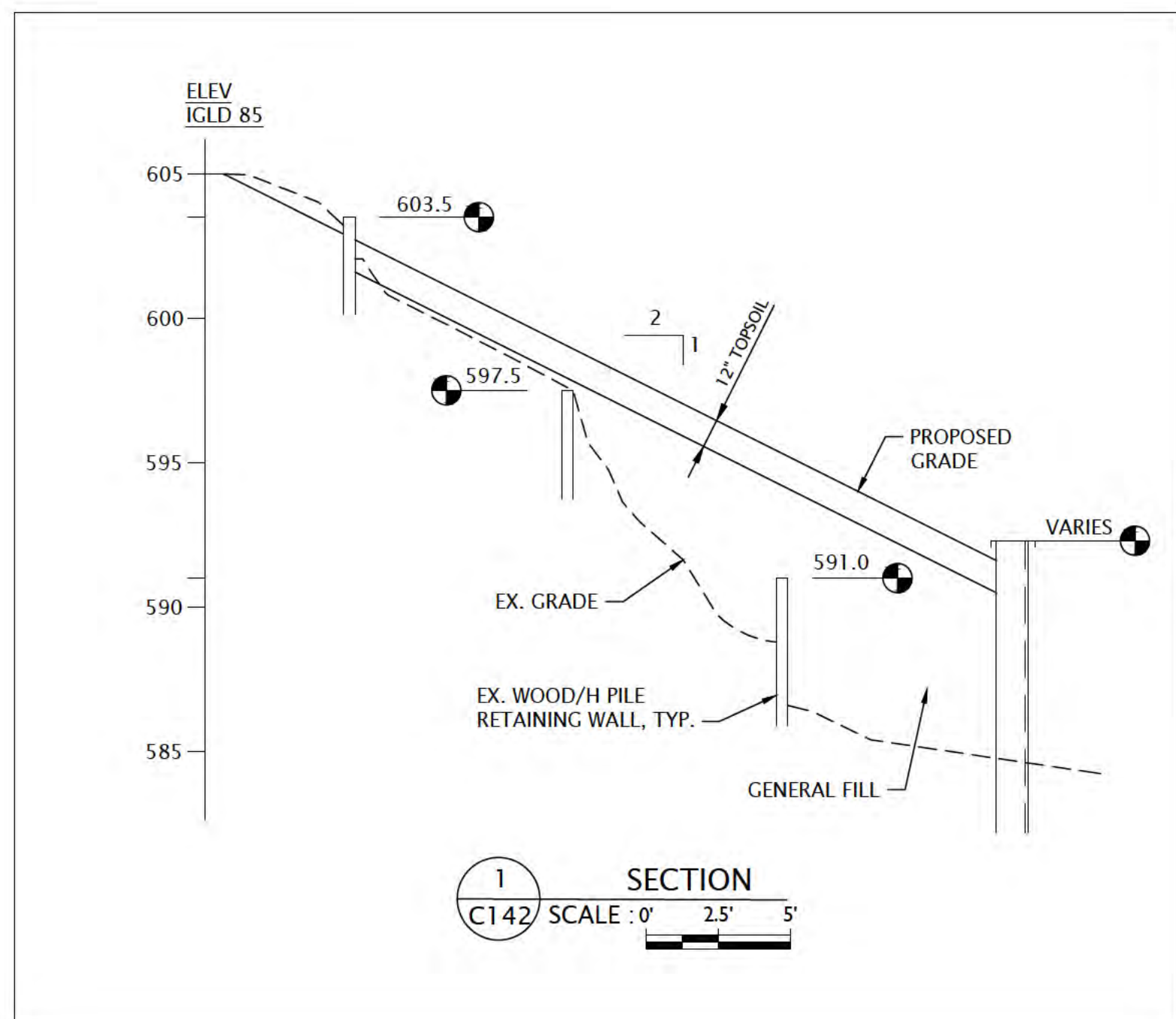
Graphic Scale



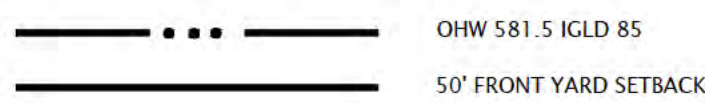
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Drawing Title
Centennial North Bulkhead
Corner Improvements

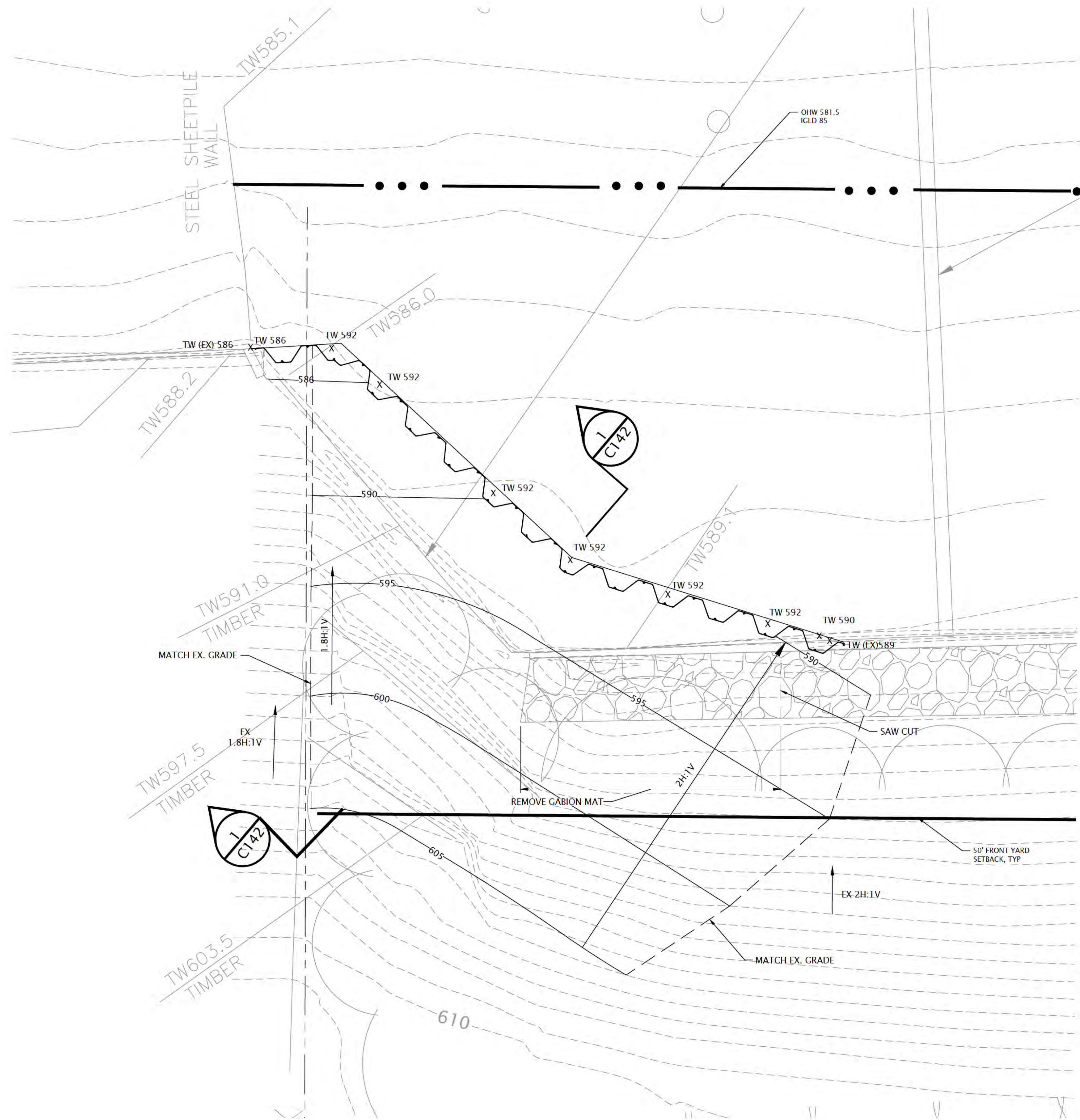
Sheet No.	CI42
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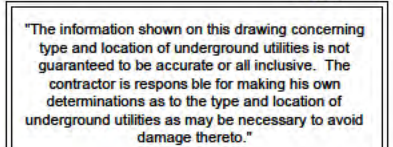


LEGEND (PROPOSED)



"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."





Tree Removals - Centennial Beach

Notes: The condition of the trees shall be based on a six (6) point scale and one (1) being the best and six (6) being the worst.
1 - Excellent, 2-Good to Fair, 3-Fair (average), 4-Fair to Poor, 5-Poor, 6-Dead

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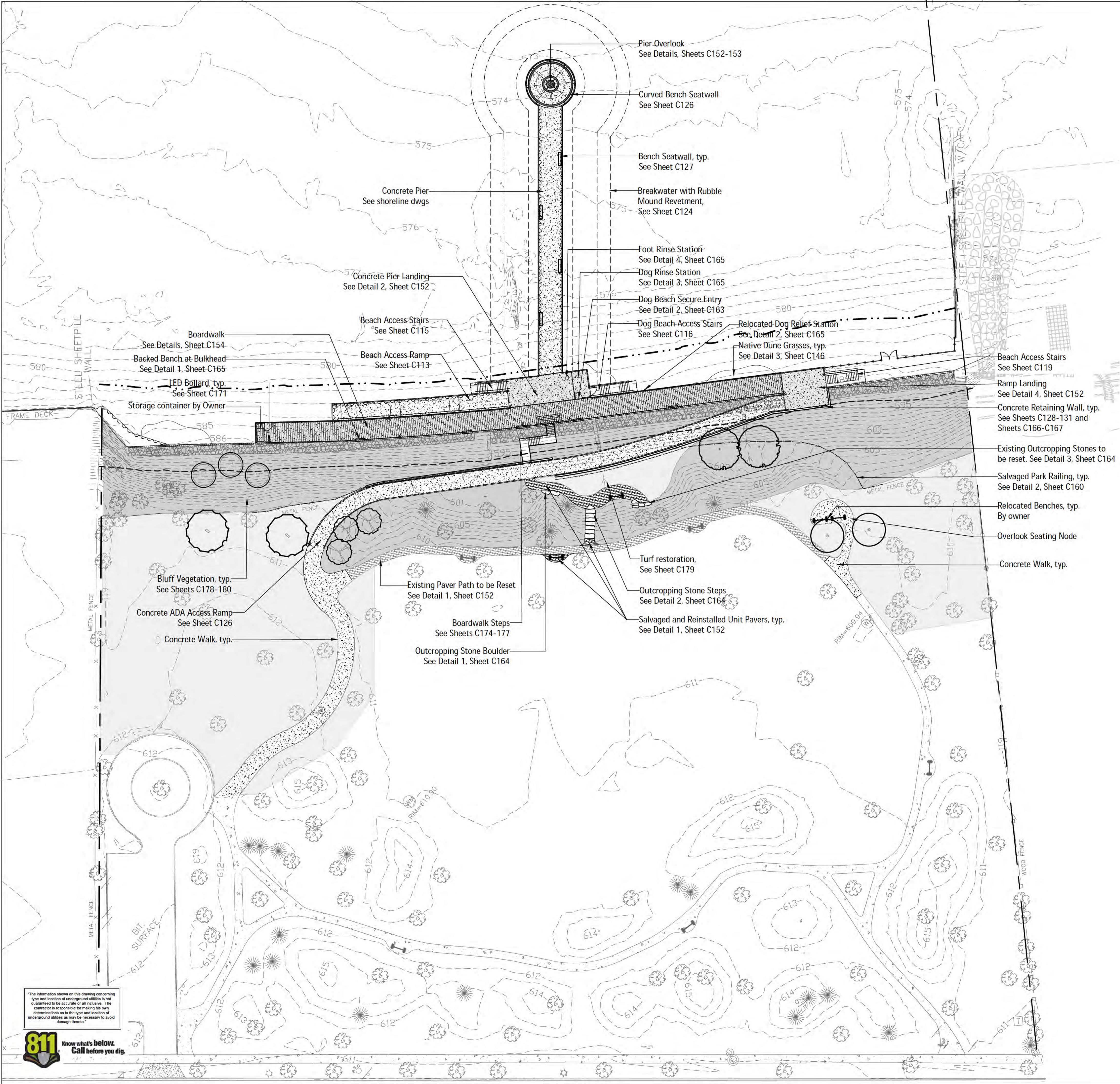
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06/28/24

07/19/24

C143



LEGEND

- Ordinary High Water Mark (OHW)
- - - 50' Setback Line from OHW
- Concrete Walks, typ.
- Salvaged and Reinstalled Unit Pavers, typ. See Detail 1, Sheet C152
- Boardwalk, typ. See Details, Sheet C154
- Bluff Restoration, typ. See Restoration Plans
- Turf Restoration, typ. See Restoration Plans
- Proposed Shade Tree See Detail 1, Sheet C146
- Proposed Ornamental Tree See Details 2 & 4, Sheet C146
- Existing Trees to Remain
- Existing Bench to be Relocated
- Backed Bench Top
- Bollard, typ. See Lighting and Electrical Plans

GENERAL NOTES

- Contractor responsible for field layout of all new improvements. The Owner's Representative is to verify in field all layout and locations prior to installation and provide additional coordinates and dimensions as needed.
- Digital files of geometric information will be provided upon request in AutoCAD format by the landscape architect.
- Contact the Owner's Representative for resolution of discrepancies between existing conditions and dimensioned layout as shown in contract documents. No additional payment will be made for adjustments necessary to construct the work as drawn.
- Contractor to field verify site conditions and information on drawings. Contractor to promptly report any concealed conditions, mistakes, discrepancies or deviations from the information shown in the Contract Documents. The Owner is not responsible for unauthorized changes or extra work required to correct unreported discrepancies.
- Contractor responsible to maintain all layout stakes during construction. No additional payment will be made to replace layout stakes.
- Place stakes at edges of concrete and every 25 feet on center along centerline of all pathways for review by the Owner's Representative prior to earthwork operations.
- All curves and radii to be smooth and not segmented.
- Contractor to provide layout stakes every 10 feet minimum for large arcs where radius points are not accessible.
- Adjustment to stake locations due to discrepancies between coordinates and dimensions is incidental to the contract. No additional payments will be made for this work.
- Layout all surfacing, score joints, and paving patterns as identified in the plans. Do not deviate from the plans unless approval is obtained from the Owner's Representative.
- Layout of pavers, site amenities, light fixtures, control box enclosure(s), and outcropping stones shall be verified in field by the Owner's Representative prior to placement.
- All surface drainage shall be diverted away from structures and noted site features in all areas as shown on the civil engineer's grading plans. Where poor subsurface drainage conditions occur in the field, contractor shall notify the Owner's Representative immediately and make recommendations for solutions to drainage issues before proceeding with work.
- Landscape accent lighting as shown on these plans is for general location and intent only. The specified fixture and wattage shall be provided and installed on the desired feature per the electrical drawings and at the Owner's Representative's direction. Contractor shall field stake all accent lighting locations and obtain the Owner's Representative's approval before final installation. Please refer to electrical plans for conduit or low-voltage cable routing and power-source (timer, transformers, switch boxes, etc.).



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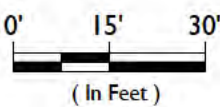
Project Title:

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Centennial Park
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Prepared For:

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Winnetka, IL

Graphic Scale



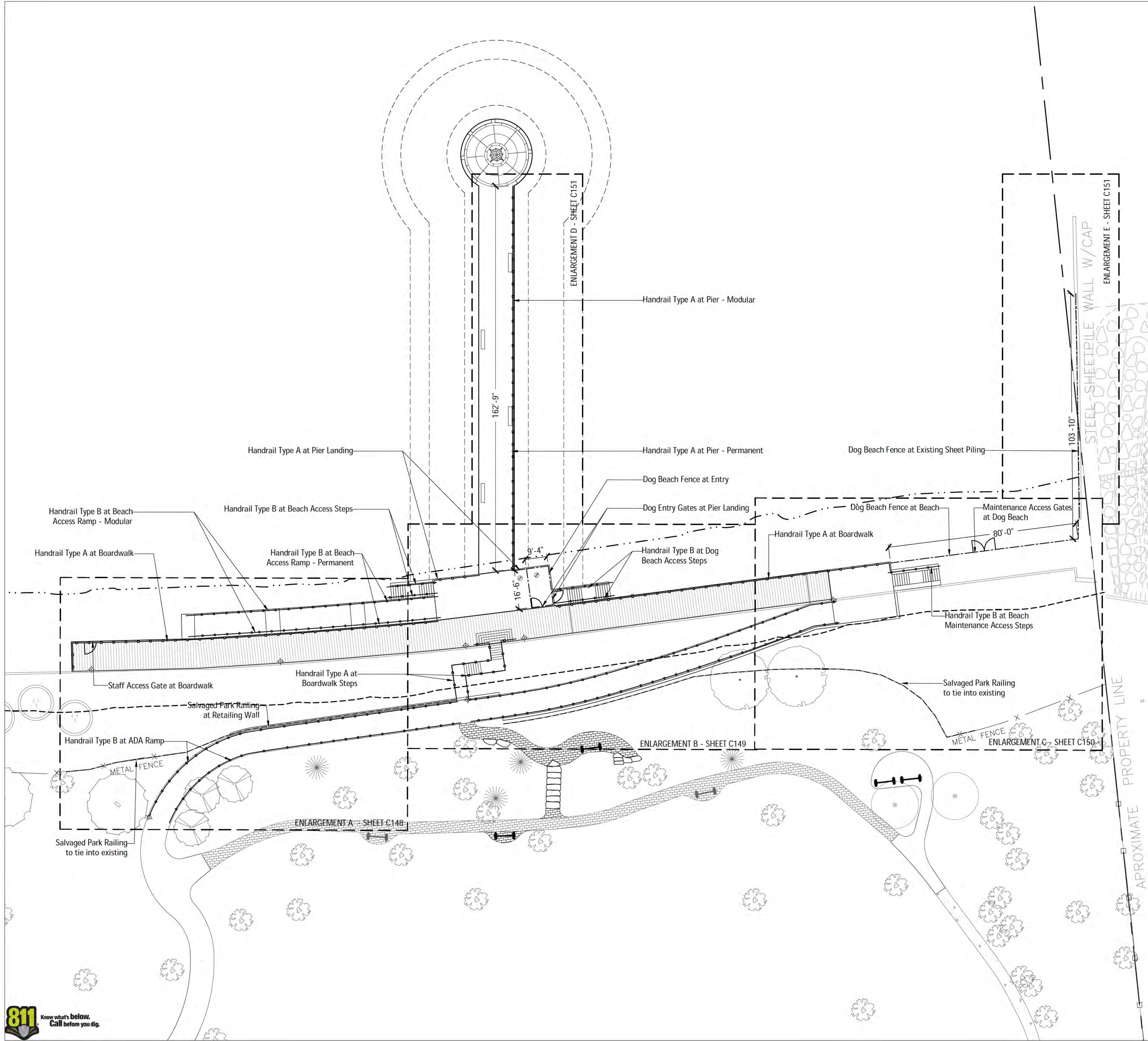
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Drawing Title

OVERALL SITE PLAN

Sheet No.

C144



LEGEND

- Ordinary High Water Mark (OHW)
- 50' Setback Line from OHW
- Handrail Type A
See Details, Sheets C155-157
- Handrail Type B
See Details, Sheet C158-C160
- Dog Beach Fencing
See Details, Sheet C161-163
- Salvaged Park Railing
See Detail 2, Sheet C160

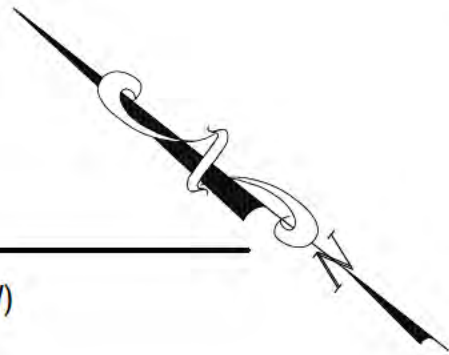
METAL FABRICATION NOTES

1. Metal fabricator to provide shop drawings and specifications for all metal work including, but not limited to, all connections, fixtures, hardware, and related equipment needed to provide structure and coverage per the contract drawings and for review by the Owner's Representative.
2. Contractor shall provide coordinated shop drawings for all fabrication components and installation of these elements for approval by Owner's representative. Shop drawings shall coordinate all aspects of the bluff ramp, boardwalk, and staircase construction including structural, ipe decking, wood, concrete, and metal fabrication.
3. Contractor shall assume full structural and manufacturing responsibility for all mounting components and ensure durability and integrity of these elements.
4. Mockups of each handrail type shall be submitted for review and approval by Owner and Owner's representative. Approved mockups to become part of final installation.

HANDRAIL NOTES

The following notes apply to all handrails, see sheets C155-C160.

1. Coordinate with Structural Drawings for framework and footing details.
2. All steel components, other than than stainless steel, to be powder coated black. See specifications.
3. All welds shall be ground smooth, clean, and as close to straight angles as possible for a clean finished appearance.
4. All hardware and fasteners for handrail Type A shall be stainless steel, heads painted black, unless otherwise noted.
5. All hardware and fasteners for handrail Type B shall be stainless steel, unless otherwise noted.
6. Metal fabricator to determine appropriate anchor bolt depth and indicate in coordinated shop drawings.
7. Metal Fabricator to indicate expansion joint locations and splice connections for all permanent handrails (Type A and Type B) and for horizontal bars for the length of dog beach fence where mounted at sheet piling.
8. Samples of all metal component finishes to be submitted for review and approval by the Owner's Representative.



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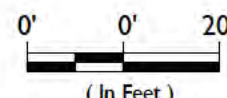
Project Title:

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Prepared For:

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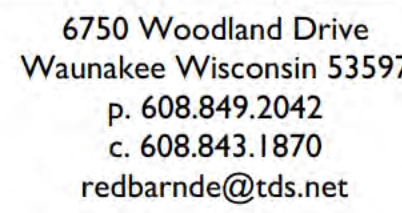
Scale 1 Inch = 20 Ft.

Drawing Title

HANDRAIL AND FENCING PLAN

Sheet No.

C147



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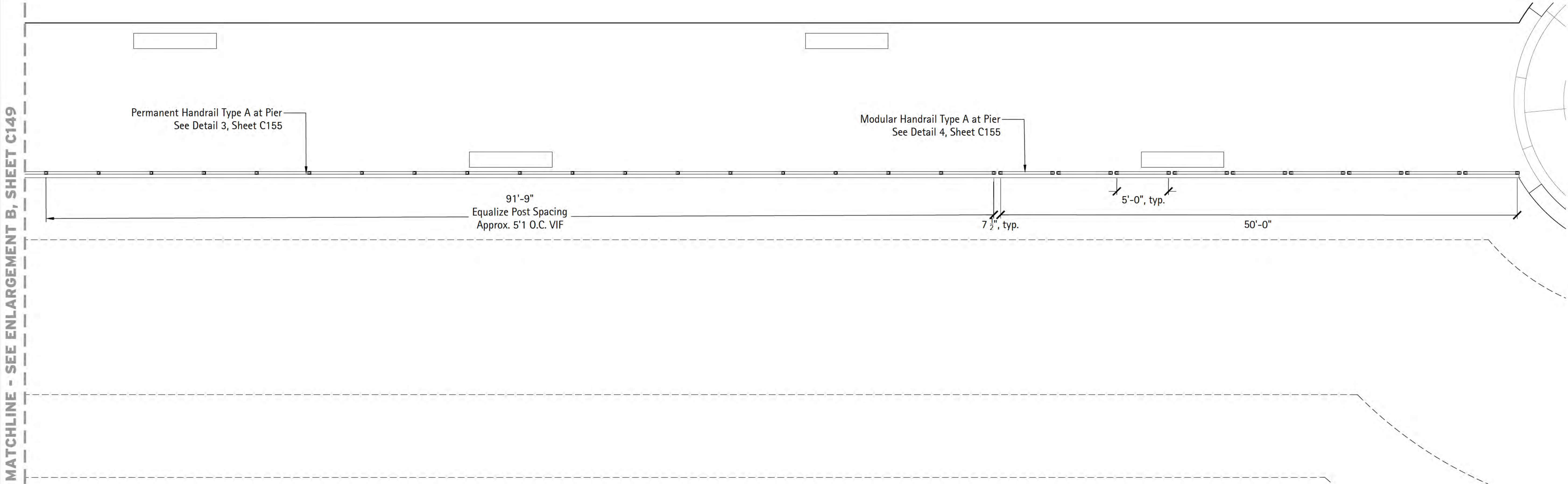
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(In Feet)

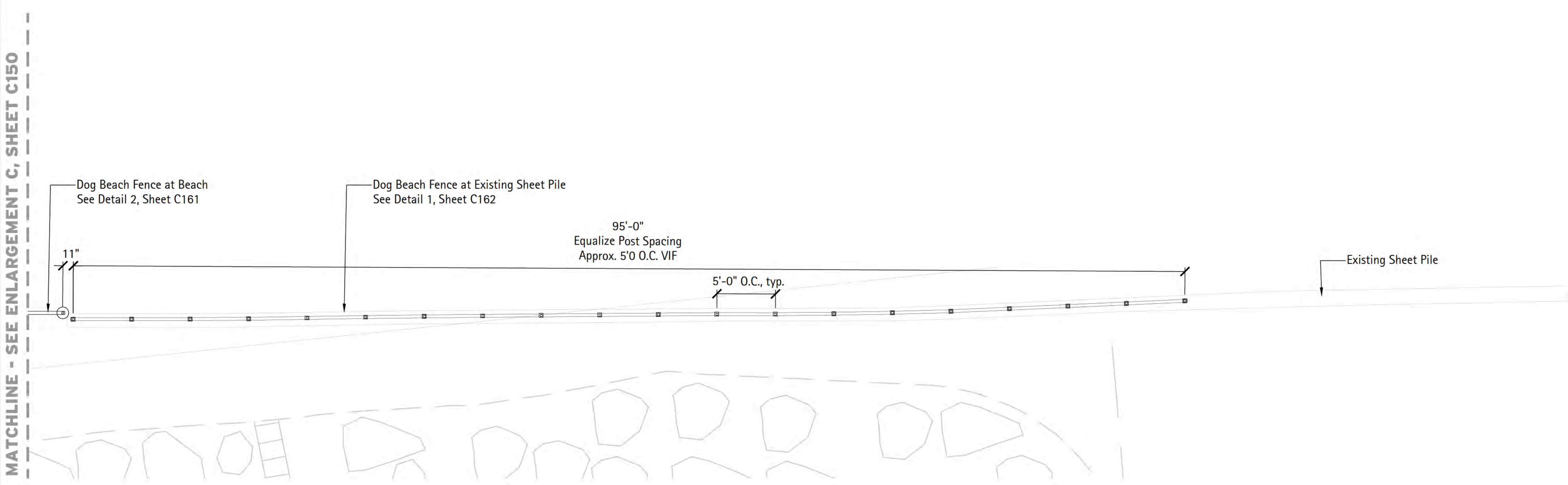
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C149

ENLARGEMENT PLAN D



ENLARGEMENT PLAN E



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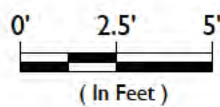
Project Title:

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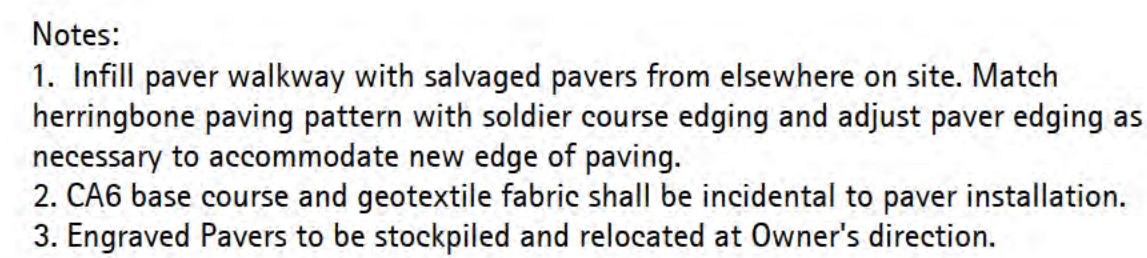
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Drawing Title

HANDRAIL AND FENCING
ENLARGEMENT PLANS D AND E

Sheet No.

C151



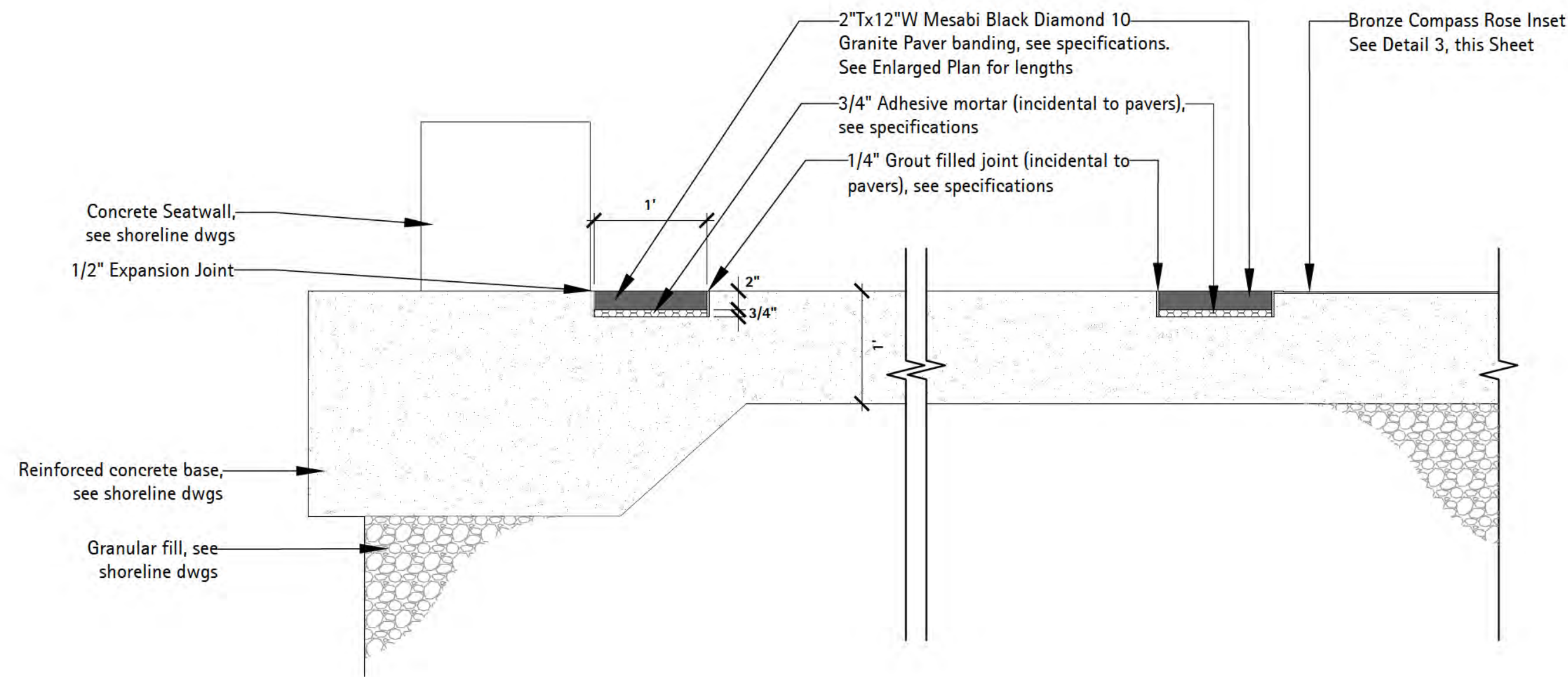
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Scale: 1" = 5'-0"

Scale: 1" = 5'-0"

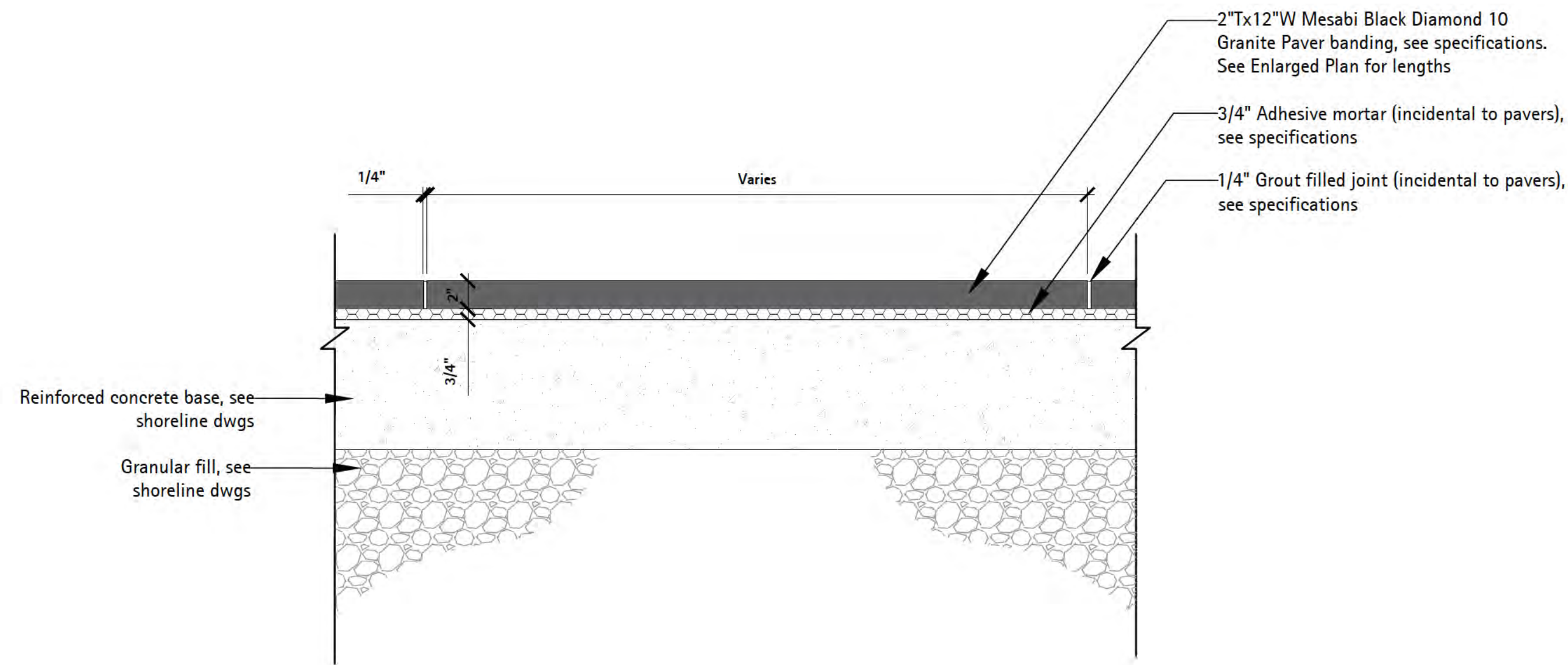
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C152



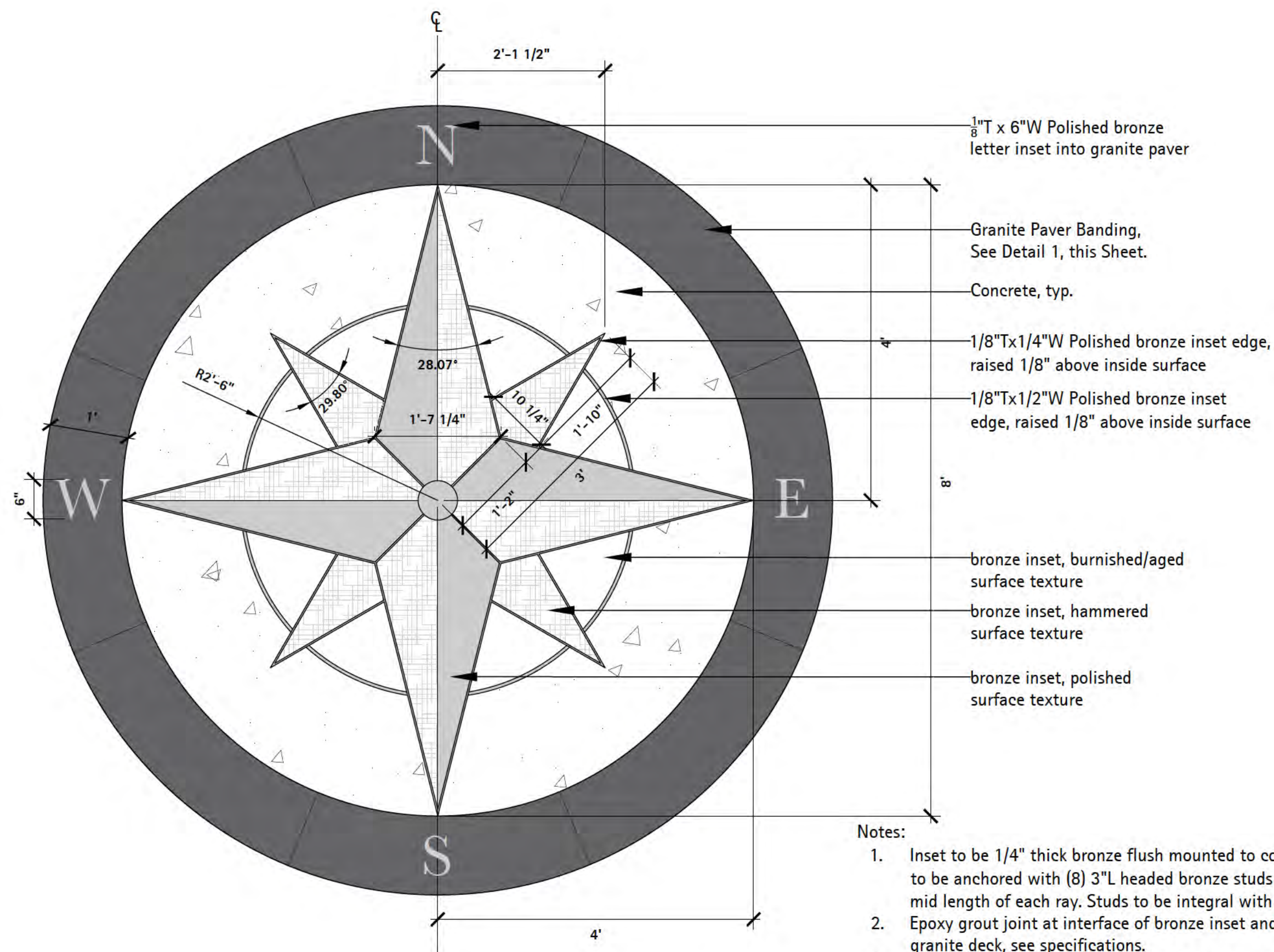
1 Section – Granite Banding
Scale: 1" = 1'-0"

d-granite banding



2 Section – Granite Paver Joint Spacing
Scale: 1 1/2" = 1'-0"

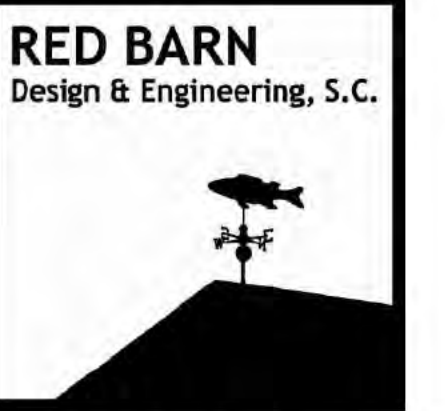
d-file name



3 Enlarged Plan – Bronze Compass Rose Inset
Scale: 3/4" = 1'-0"

d-bronze inset

- Notes:
1. Inset to be 1/4" thick bronze flush mounted to concrete deck. Inset to be anchored with (8) 3/8" L headed bronze studs (one per ray) at mid length of each ray. Studs to be integral with body of inset.
 2. Epoxy grout joint at interface of bronze inset and concrete and granite deck, see specifications.
 3. Contractor shall provide coordinated shop drawings for all fabrication components and installation of these elements for approval by Owner's Representative.



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Prepared For:

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Graphic Scale

Scale None

Drawing Title

HARDSCAPE DETAILS

Sheet No.

C153



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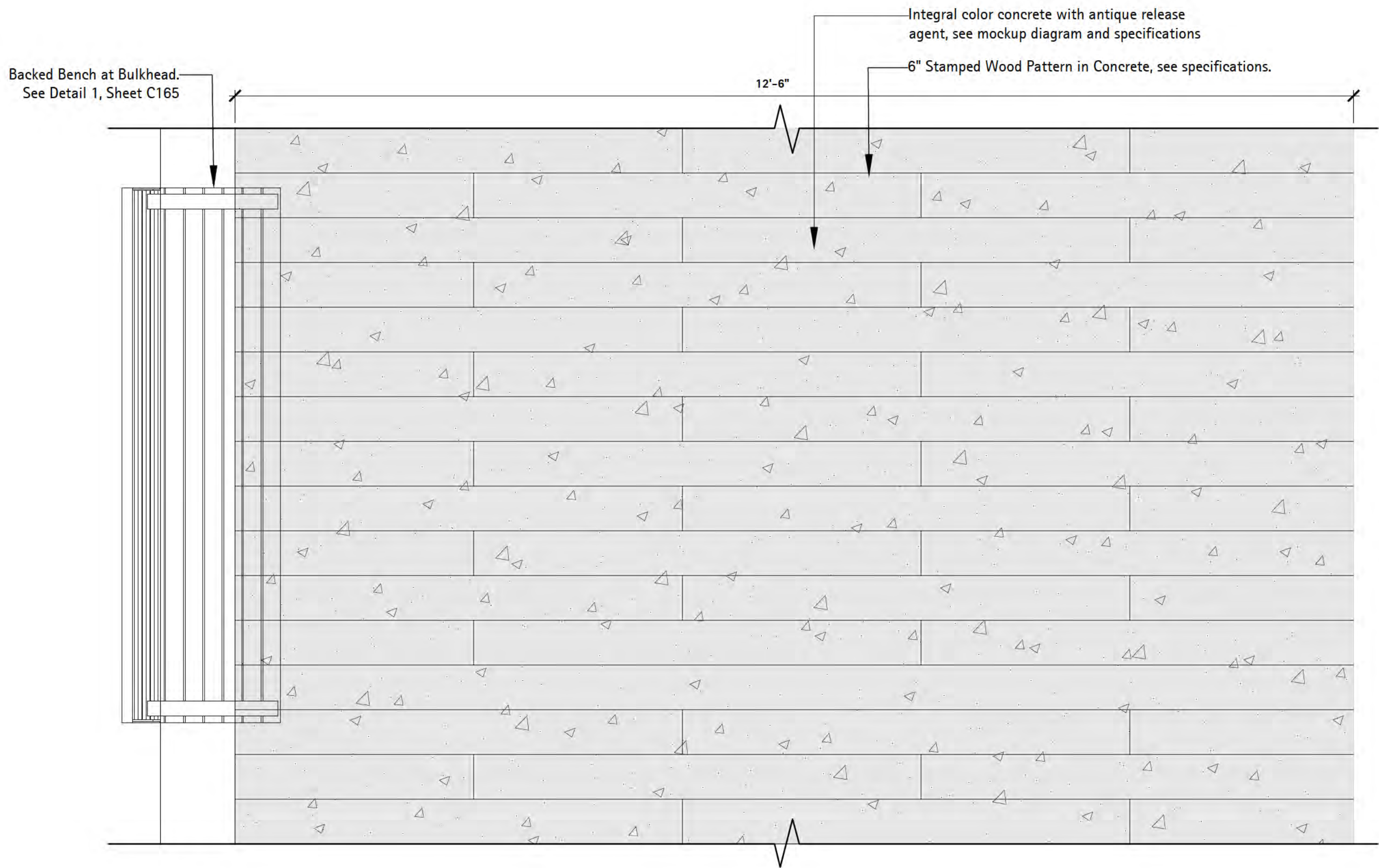
Scale

Drawing Title

BOARDWALK DETAILS

Sheet No.

C154



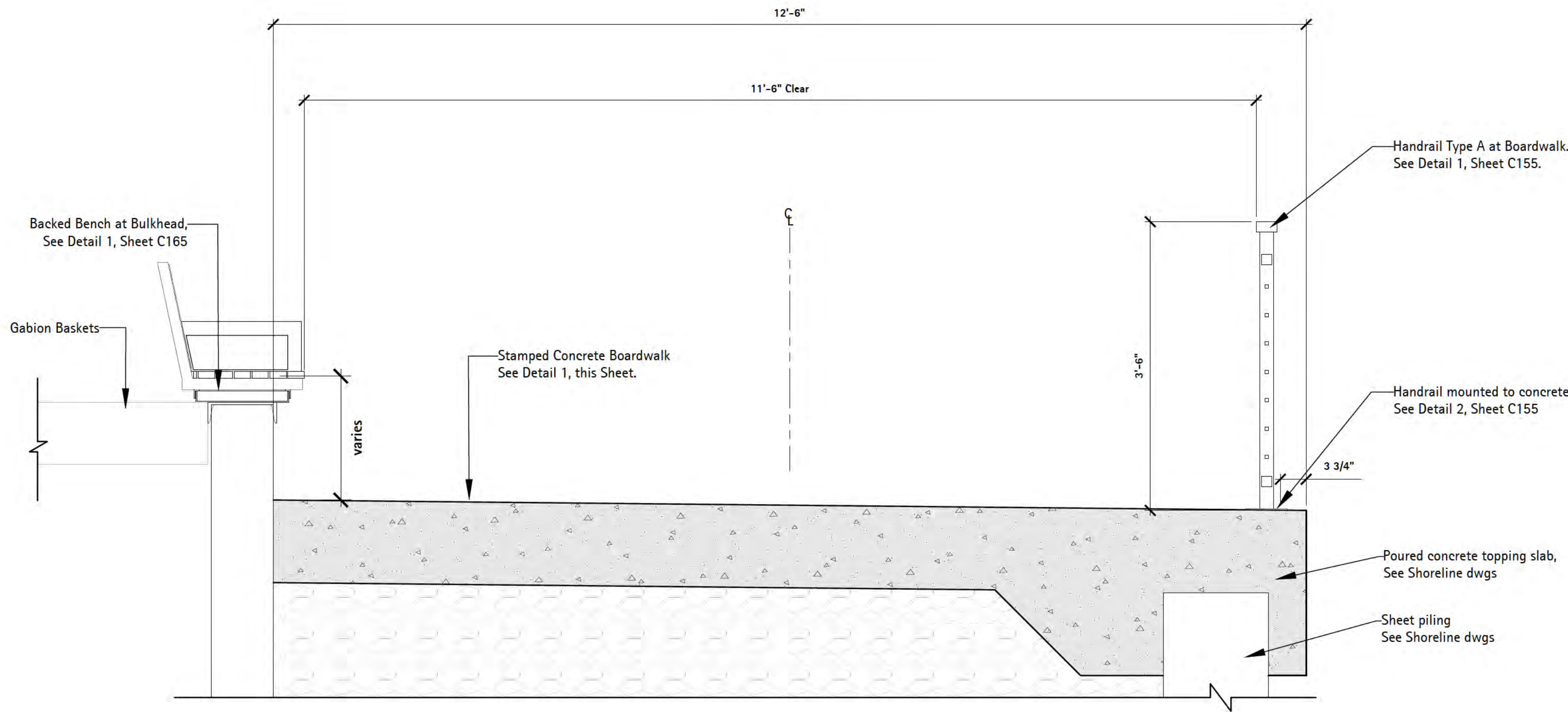
Mockup Diagram		
	Color Option 1 Uni-Mix U-10 Sonoran Tan	Color Option 2 Uni-Mix U-20 Smoke
Type A Finish Antique Release Color SikaColor-300 R24 Colina Tan		
Type B Finish Antique Release Color SikaColor-300 R14 Walnut		
Type C Finish Broom Finish		

Note:
1. Mockup panels to be 4' x 4' x full depth.
2. See specifications for product information and mockup requirements.
3. Wood pattern to run perpendicular to boardwalk alignment. Break and re-set pattern at any changes in boardwalk alignment direction. Askew pattern will not be acceptable.

1 Enlarged Plan - Stamped Concrete Boardwalk

Scale: 1" = 1'-0"

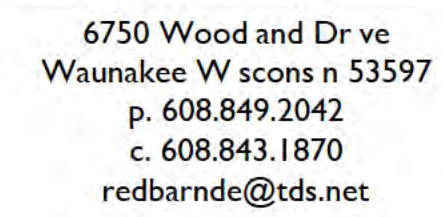
d-boardwalk-plan



2 Section - Stamped Concrete Boardwalk

Scale: 1" = 1'-0"

d-boardwalk-section



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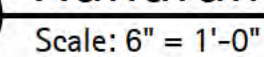
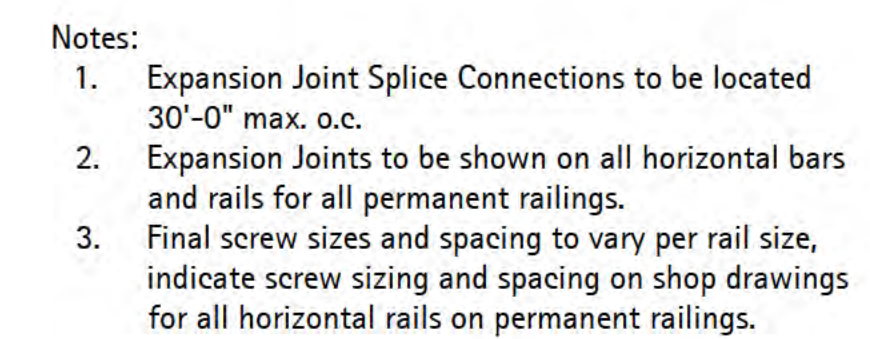
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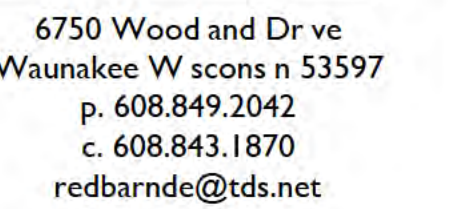
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Scale	None
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HANDRAIL DETAILS

C156

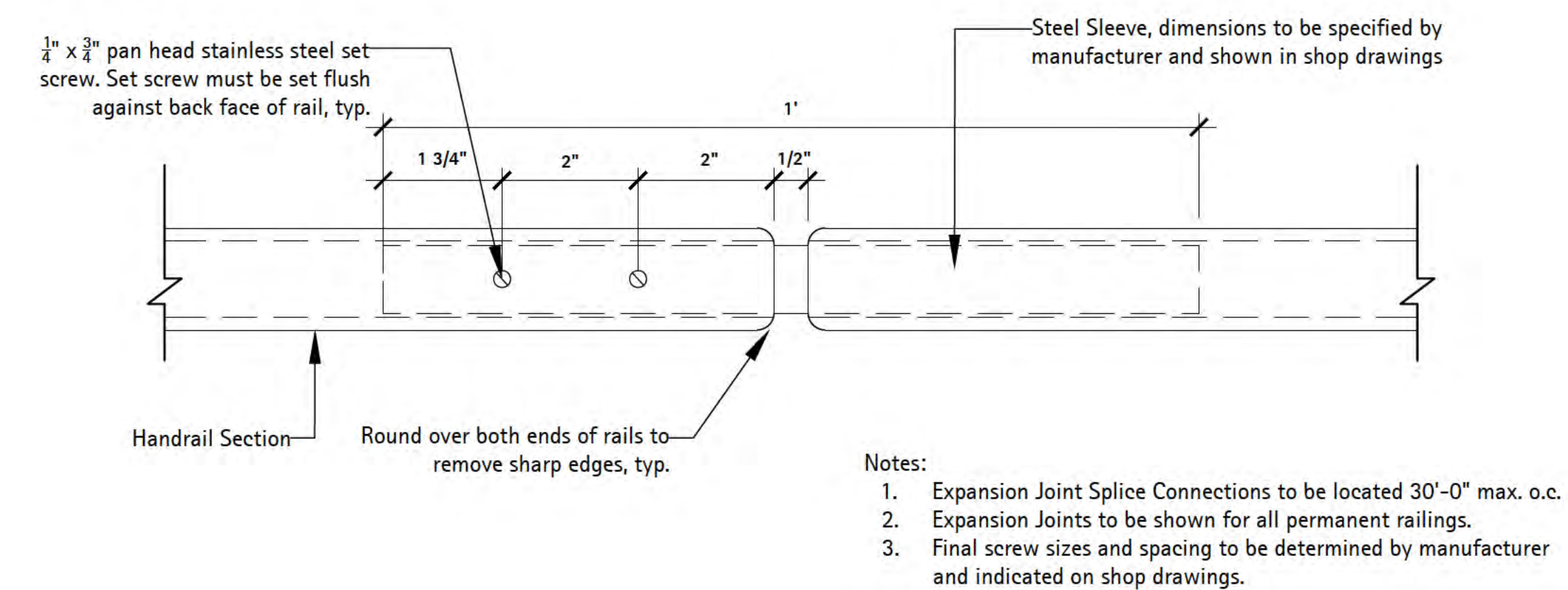
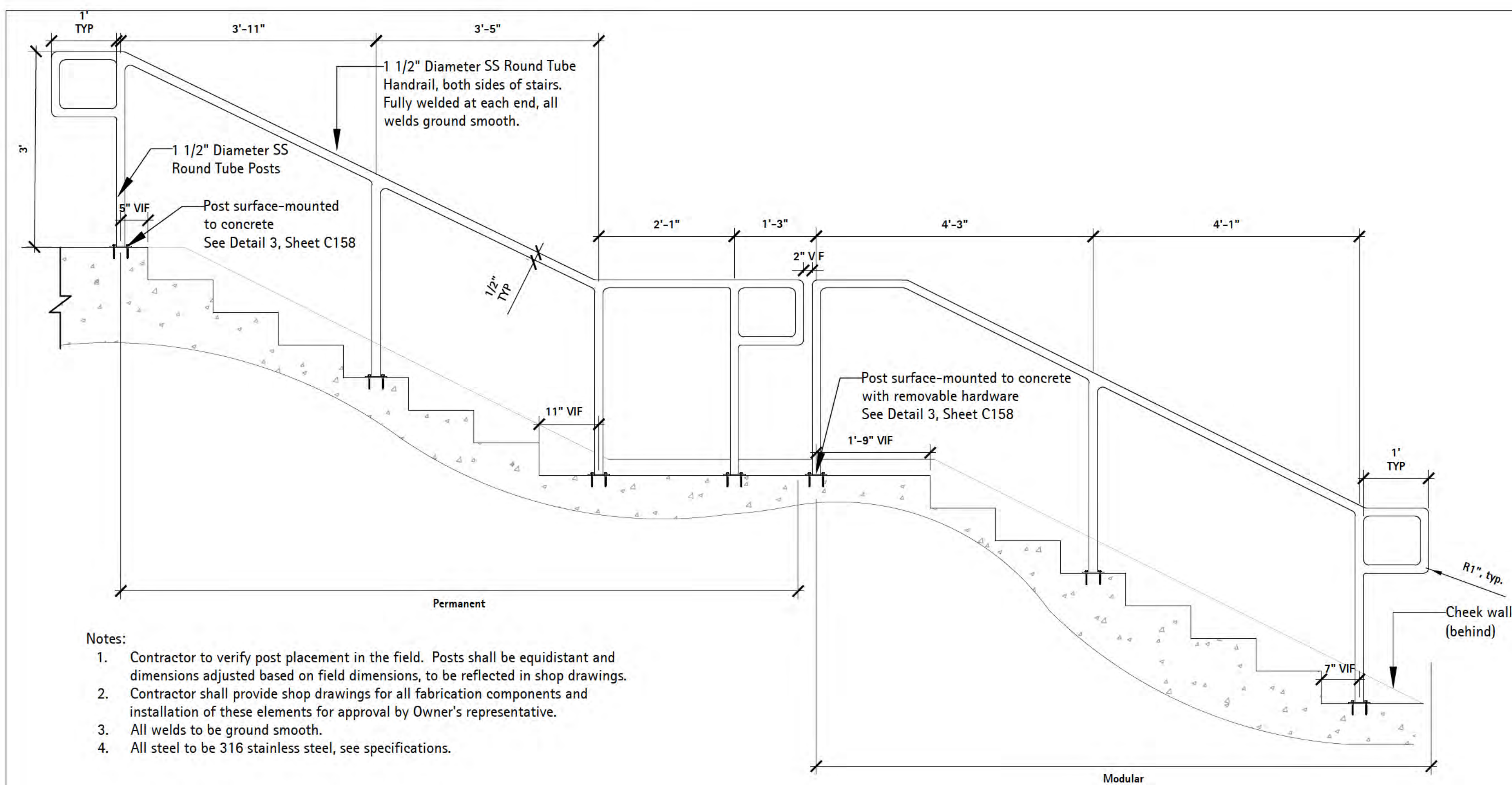




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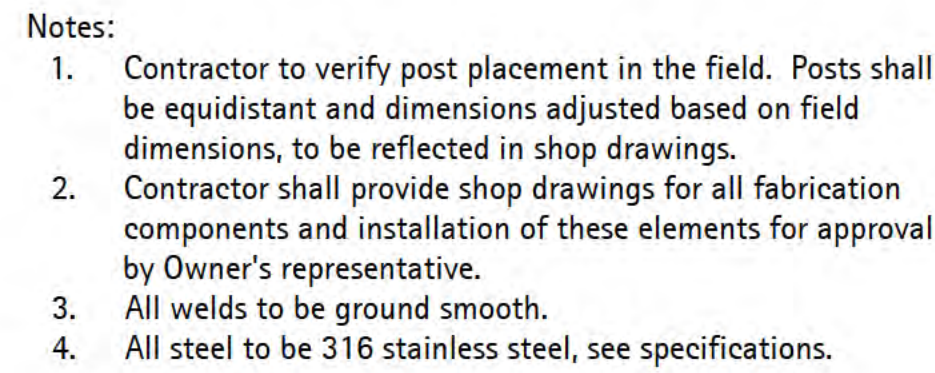
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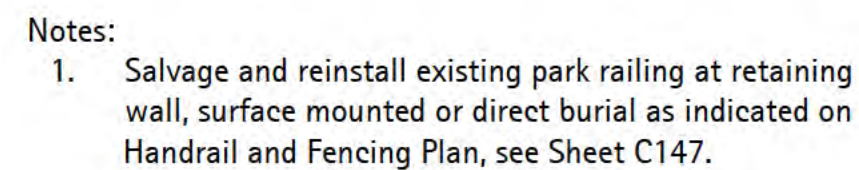
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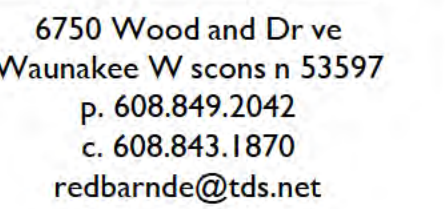
C159



d-conc handrail exst steps elevation



d-handrail at conc



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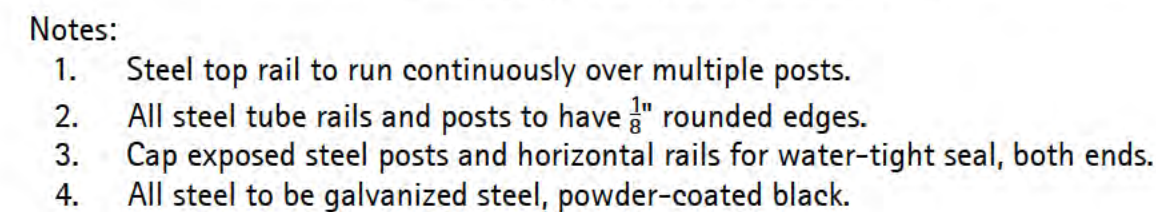
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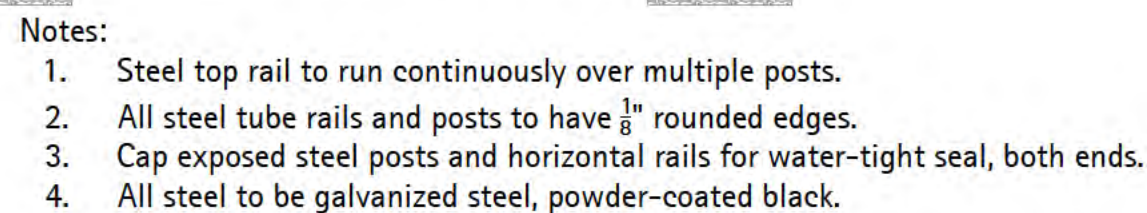
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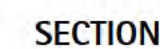
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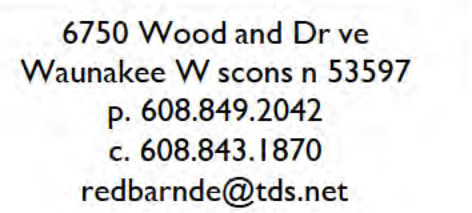
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Scale: $3/4" = 1'-0"$



Scale: 1 1/2" = 1'-0"



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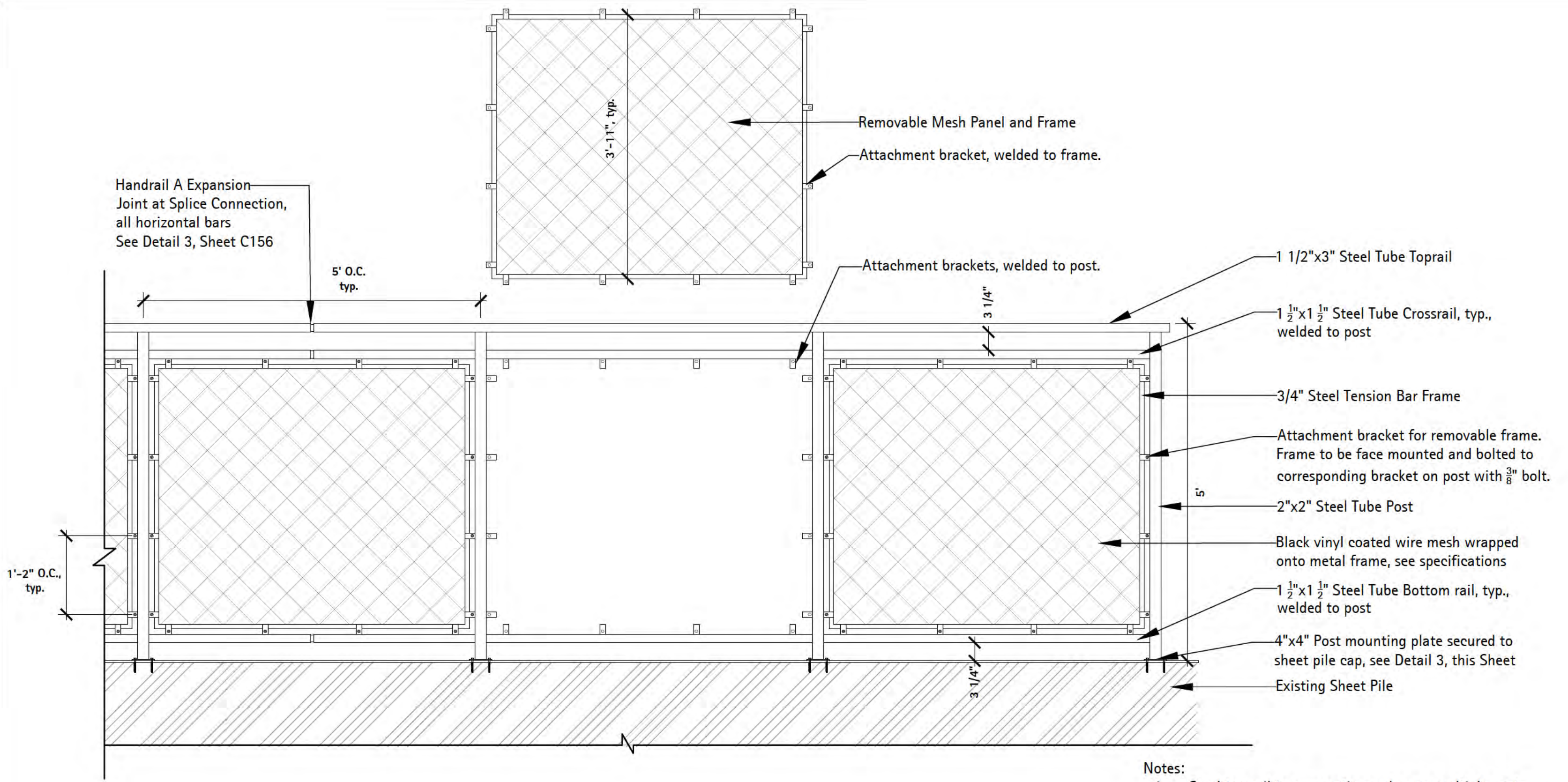
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Drawing Title

FENCING DETAILS

Sheet No.

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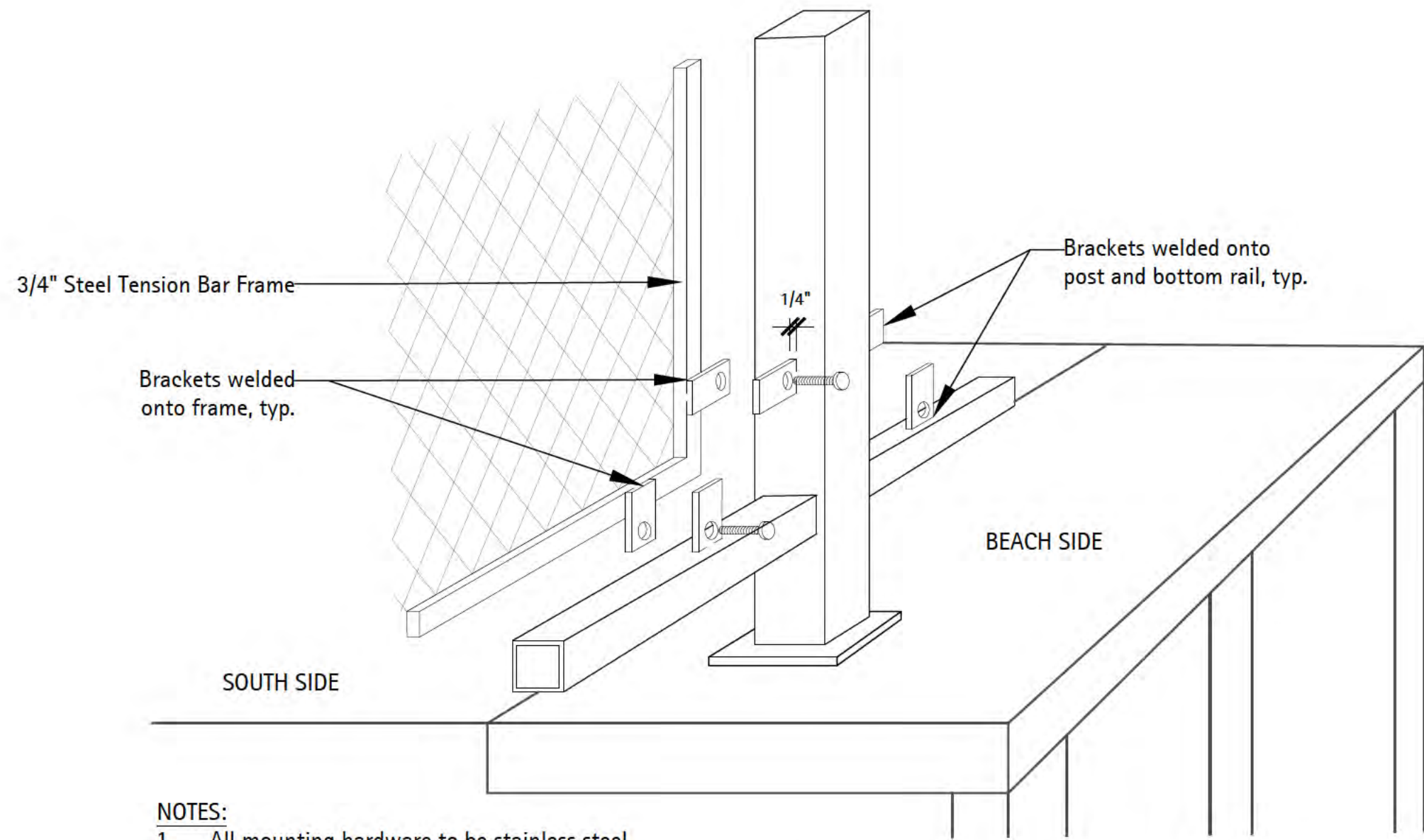


1 Elevation - Dog Beach Fence at Existing Sheet Pile

Scale: 3/4" = 1'-0"

- Notes:
1. Steel top rail to run continuously over multiple posts.
 2. All steel tube rails and posts to have 1/8" rounded edges.
 3. Cap exposed steel posts and horizontal rails for water-tight seal, both ends.
 4. All steel to be galvanized steel, powder-coated black.

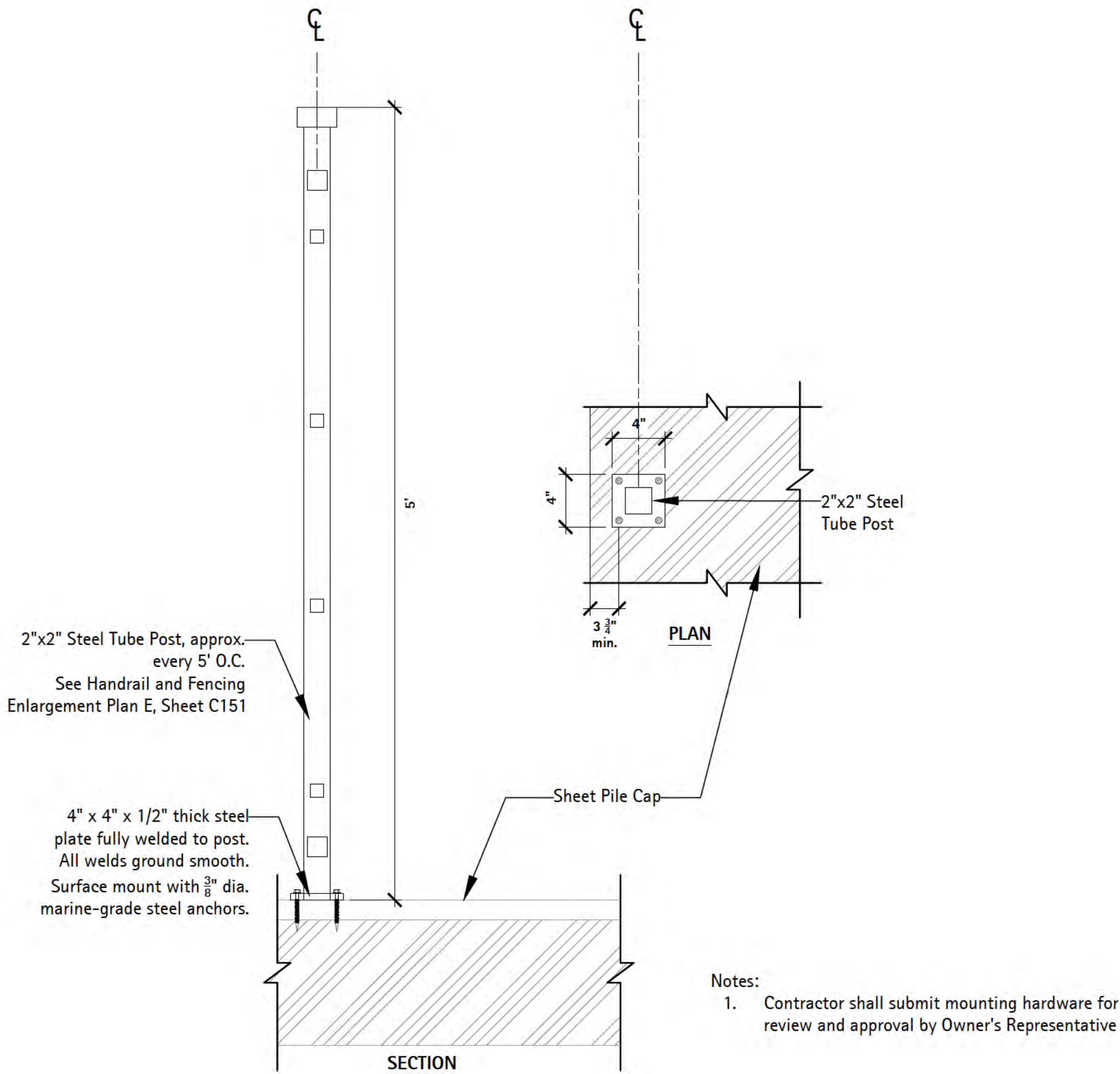
d-dog beach fence type a - pier



- NOTES:
1. All mounting hardware to be stainless steel.
 2. Weld all brackets to respective frame or post.
 3. Brackets on frame to be aligned with and bolted to brackets welded on posts using a 3/8" bolt.

2 Section - Removable Panel Attachment at Dog Beach Fence

Scale: 3" = 1'-0"



3 Section - Dog Beach Fence at Existing Sheet Pile (Surface Mount)

Scale: 1 1/2" = 1'-0"

d-handrail at conc



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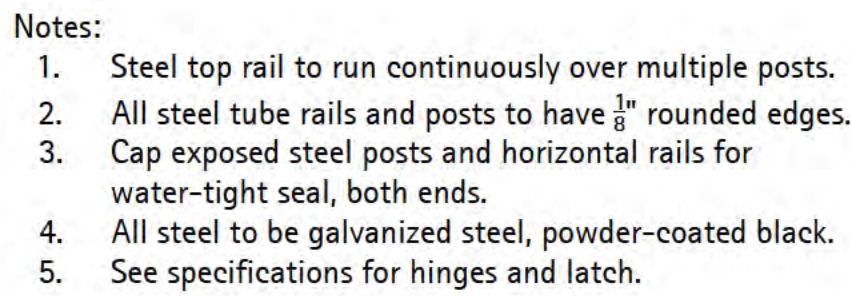
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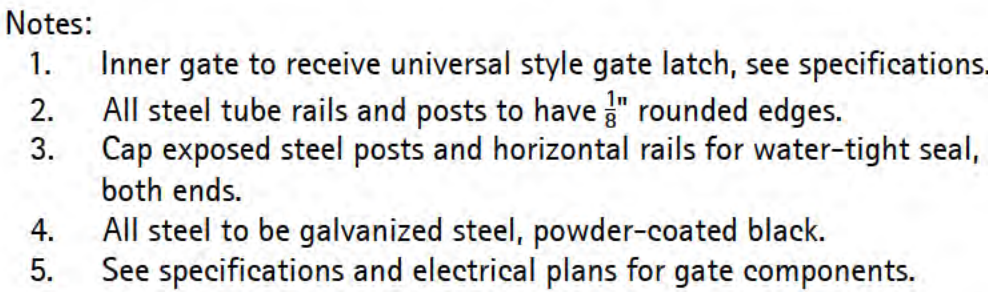
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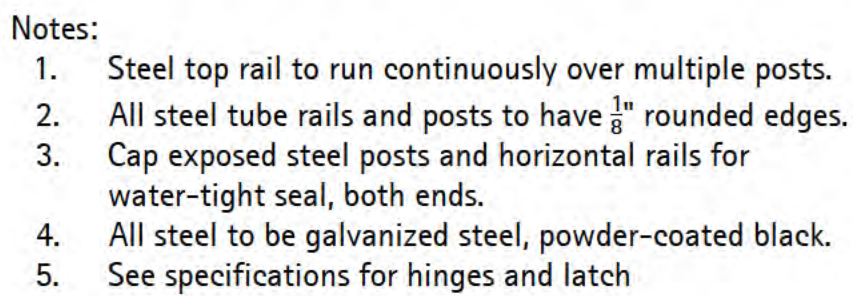
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Scale: 1" = 1'-0"

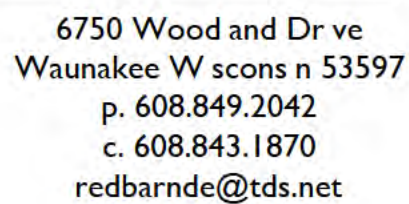


Scale: 1" = 1'-0"



Scale: 1" = 1'-0"

d-dog beach fence type a - pier



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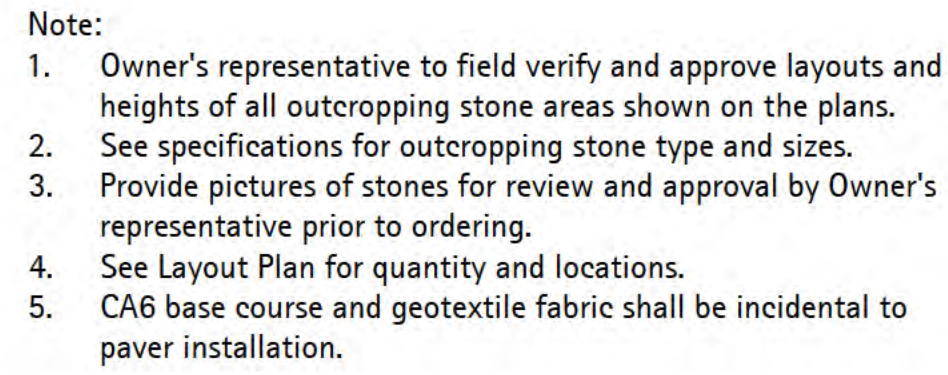
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Drawing Title

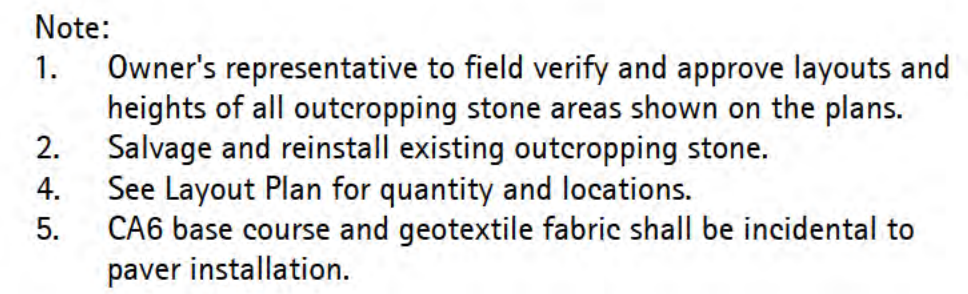
GATE DETAILS

Sheet No.

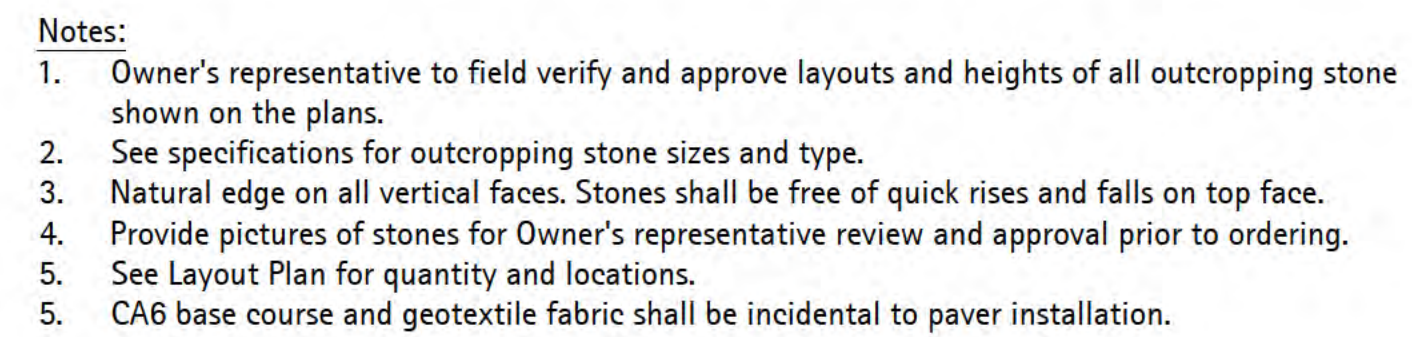
C163



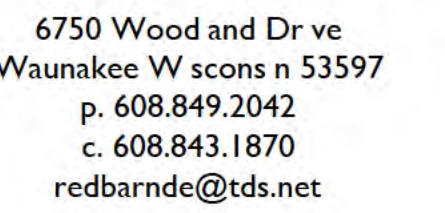
Scale: 1" = 1'-0"



Scale: $1/2" = 1'-0"$



Scale: 1" = 1'-0"



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B dd ng and Construct on	07/19/24

Site Improvements Centennial Park Winnetka, IL

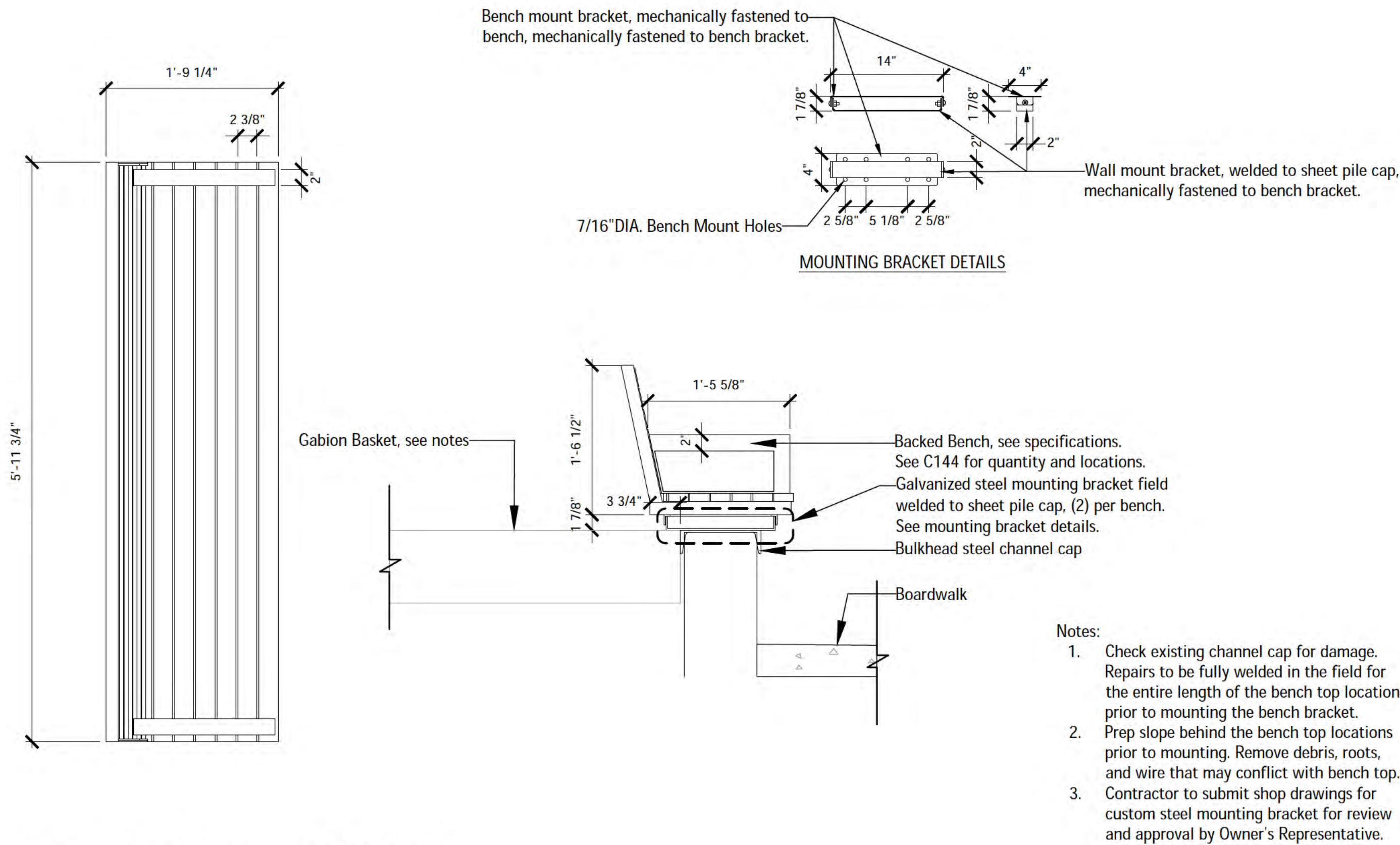
Winnetka Park District
Winnetka, IL

Scale	None
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Drawing Title

FURNISHINGS

C164

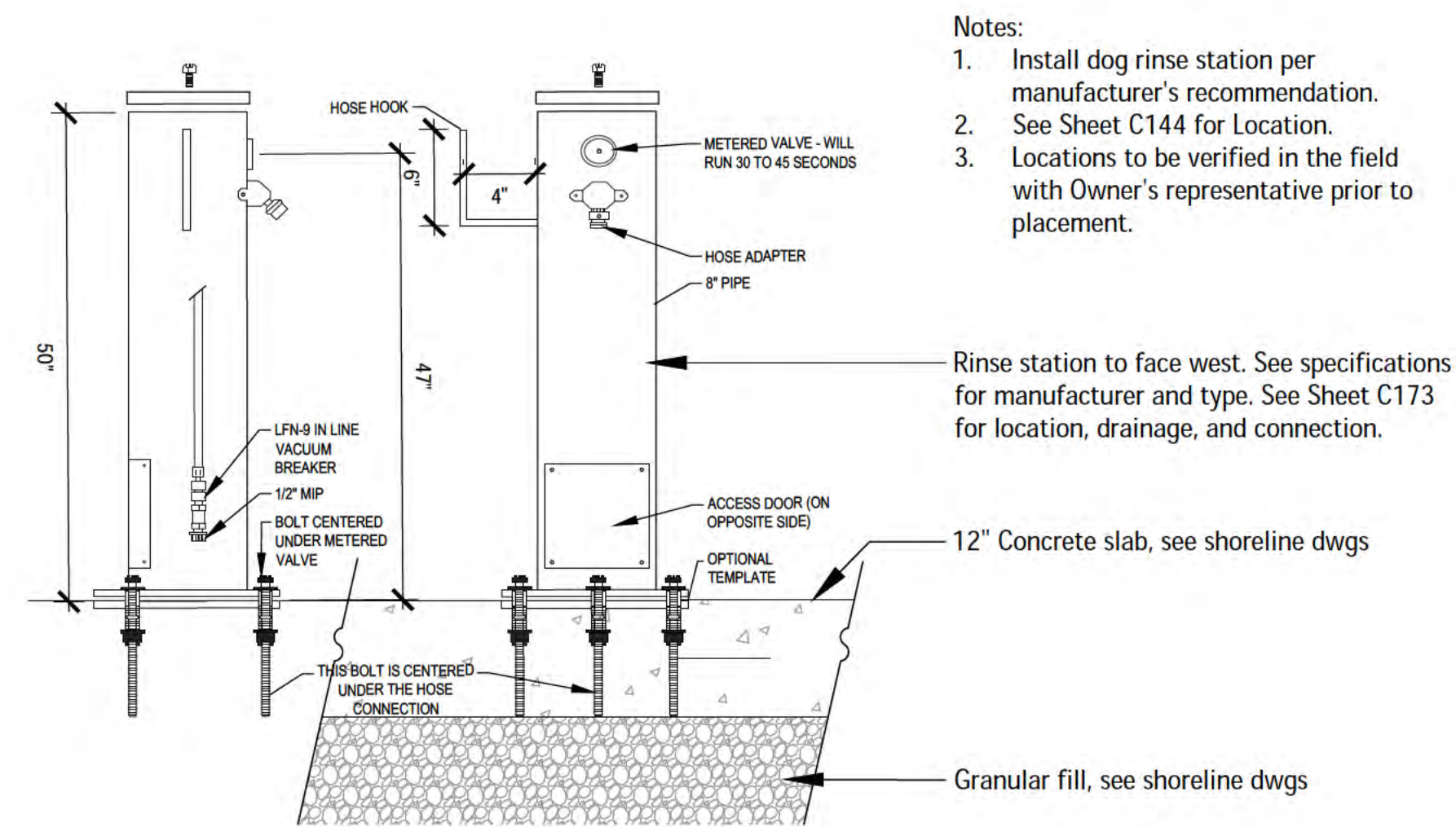


1 Backed Bench at Bulkhead
Scale: 1" = 1'-0"

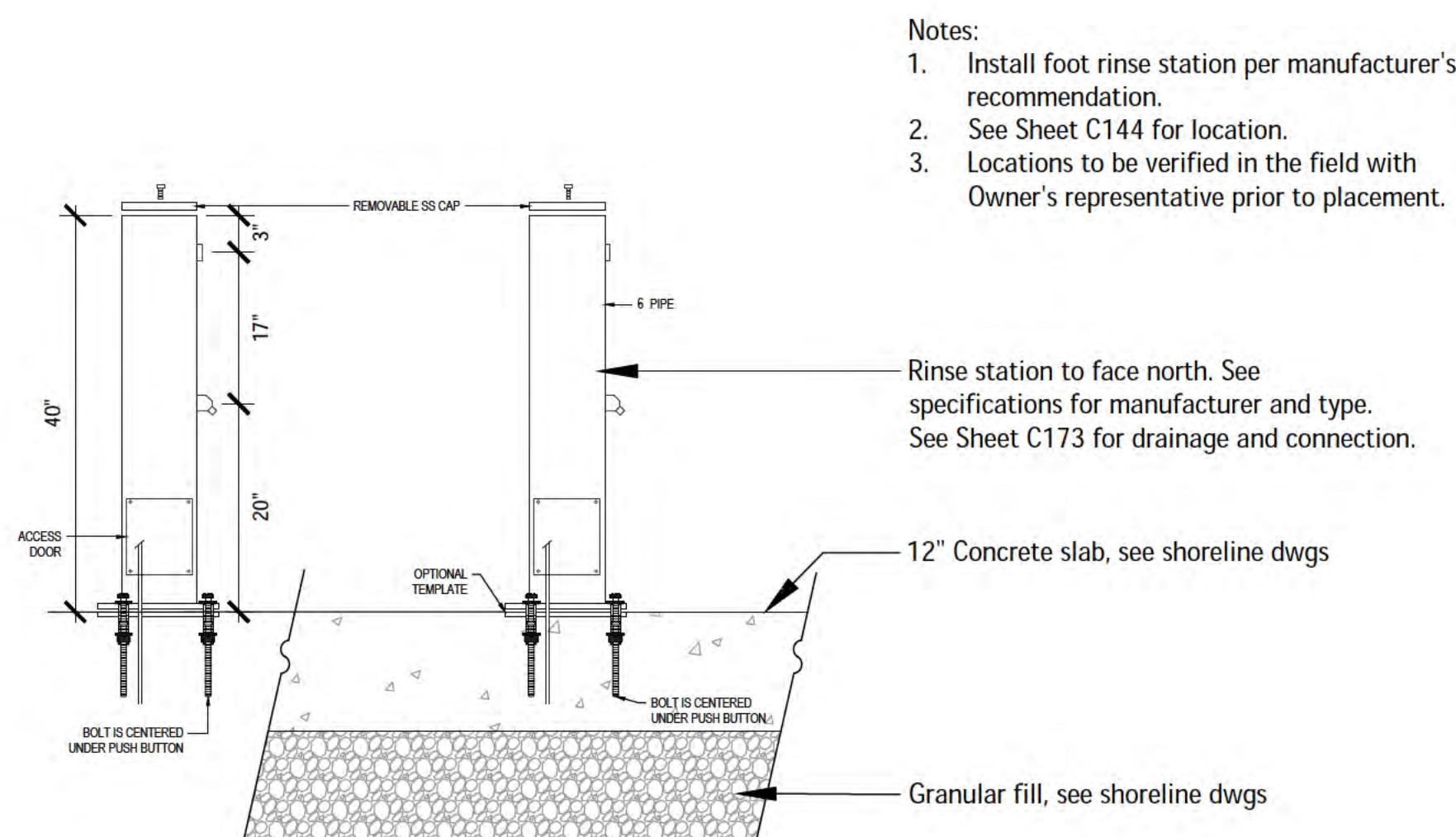


Relocate pet relief station and signage as directed by Owner. See locations on Overall Site Plan, Sheet C144. Verify in the field.

2 Pet Relief Station (Relocated)
NTS



3 Section - Dog Rinse Station
Scale: 3/4" = 1'-0"



4 Section - Foot Rinse Station
Scale: 3/4" = 1'-0"



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Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

Scale None

Drawing Title

FURNISHINGS

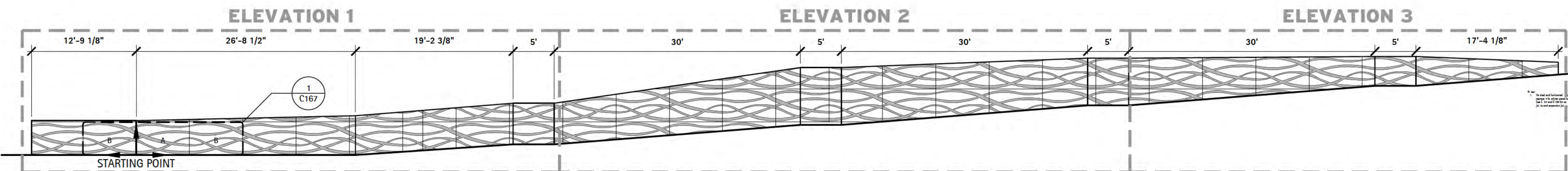
Sheet No.

C165



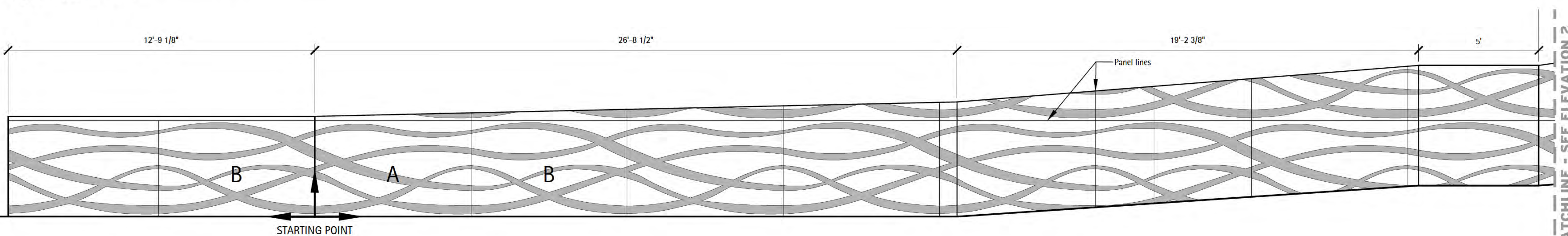
1 Retaining Wall - Plan View

Scale: $1/8" = 1'-0"$



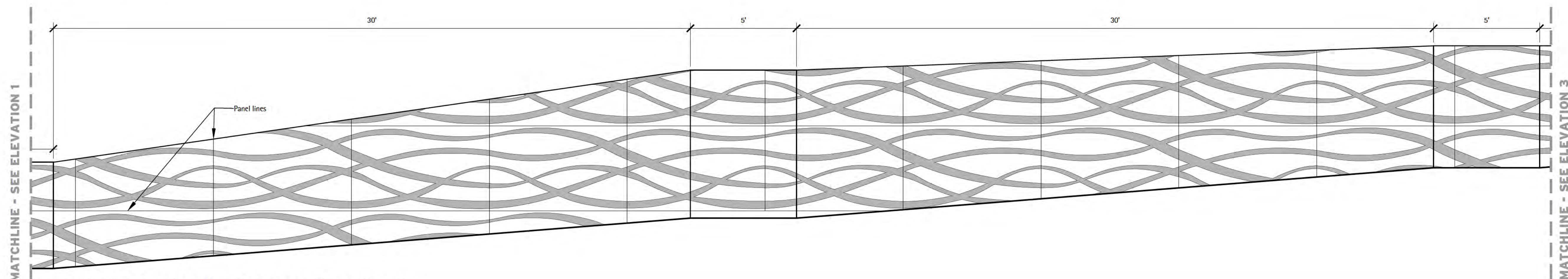
Retaining Wall - Elevation

Scale: 1/8" = 1'-0"



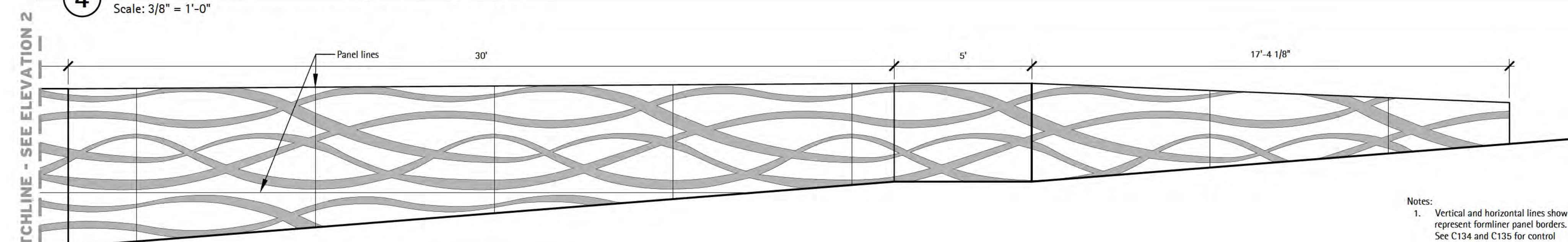
Retaining Wall - Enlarged Elevation1

Scale: $3/8" = 1'-0"$



1 Retaining Wall - Enlarged Elevation 2

Scale: $3/8" = 1'-0"$



Retaining Wall - Enlarged Elevation 3

Scale: $3/8" = 1'-0"$

Notes:

1. Vertical and horizontal lines shown represent formliner panel borders. See C134 and C135 for control joints and expansion joints.



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-------------	--

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Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

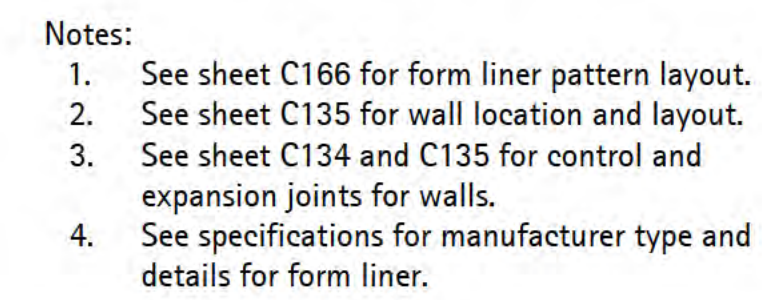
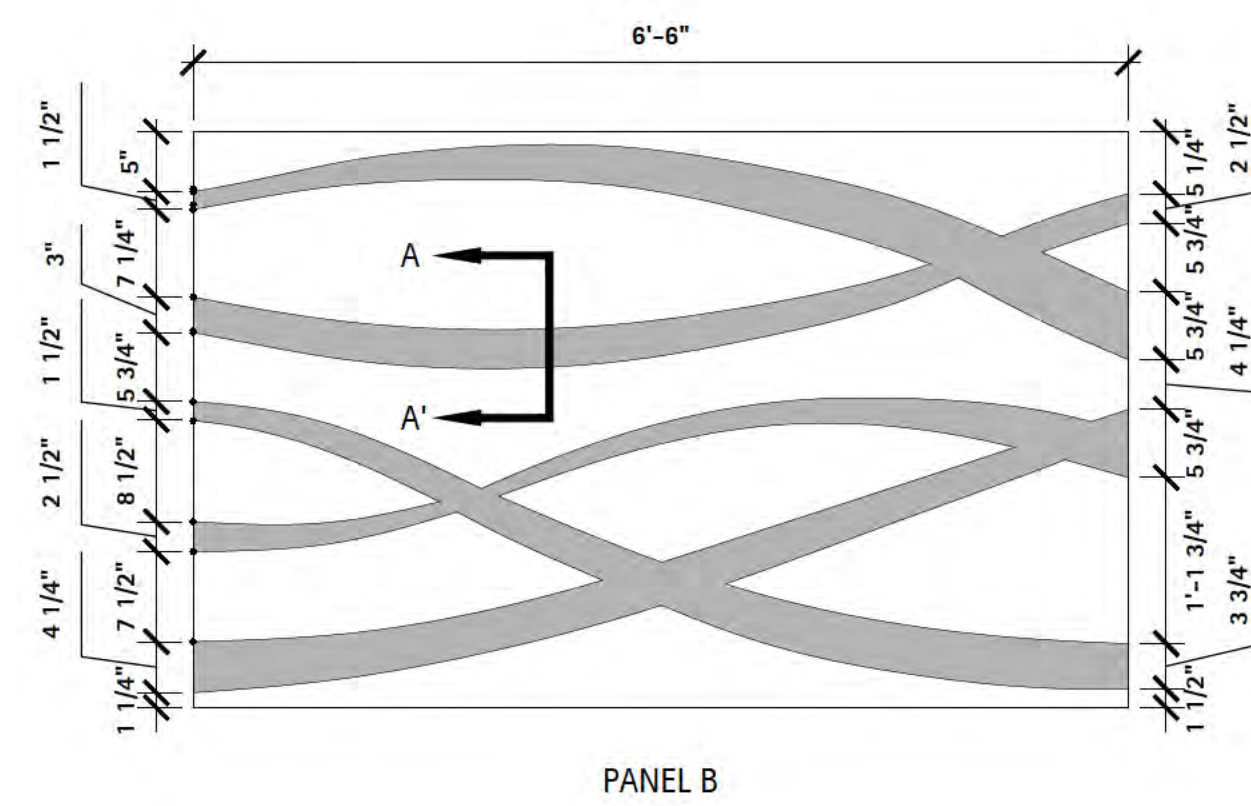
Scale	None
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Drawing Title

RETAINING WALL DETAILS

Sheet No.

C166



Scale: $\frac{3}{4}" = 1'-0"$

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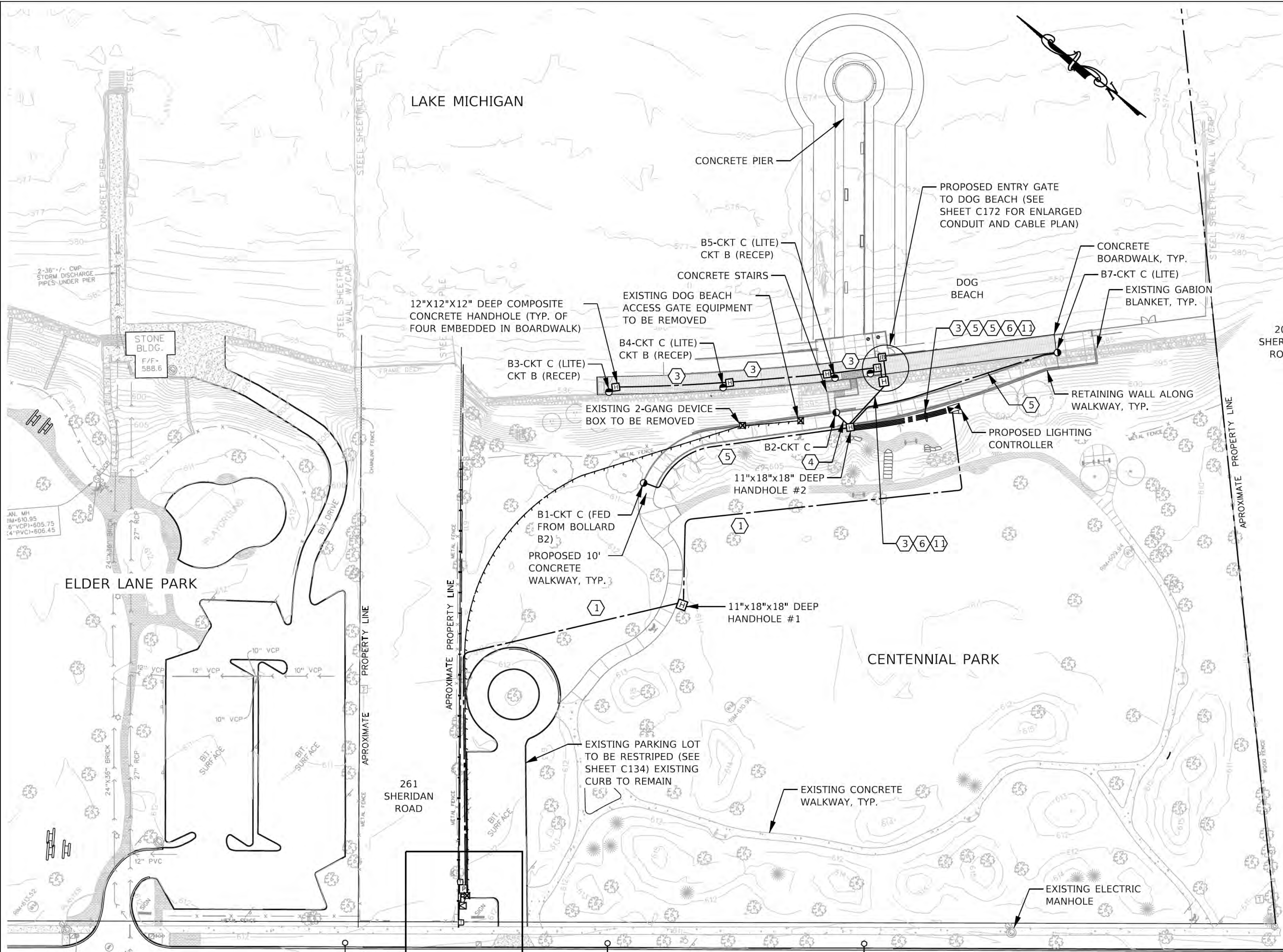
Site Improvements
Centennial Park
Winnetka, IL

Winnetka Park District
Winnetka, IL

Scale	None
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RETAINING WALL DETAILS

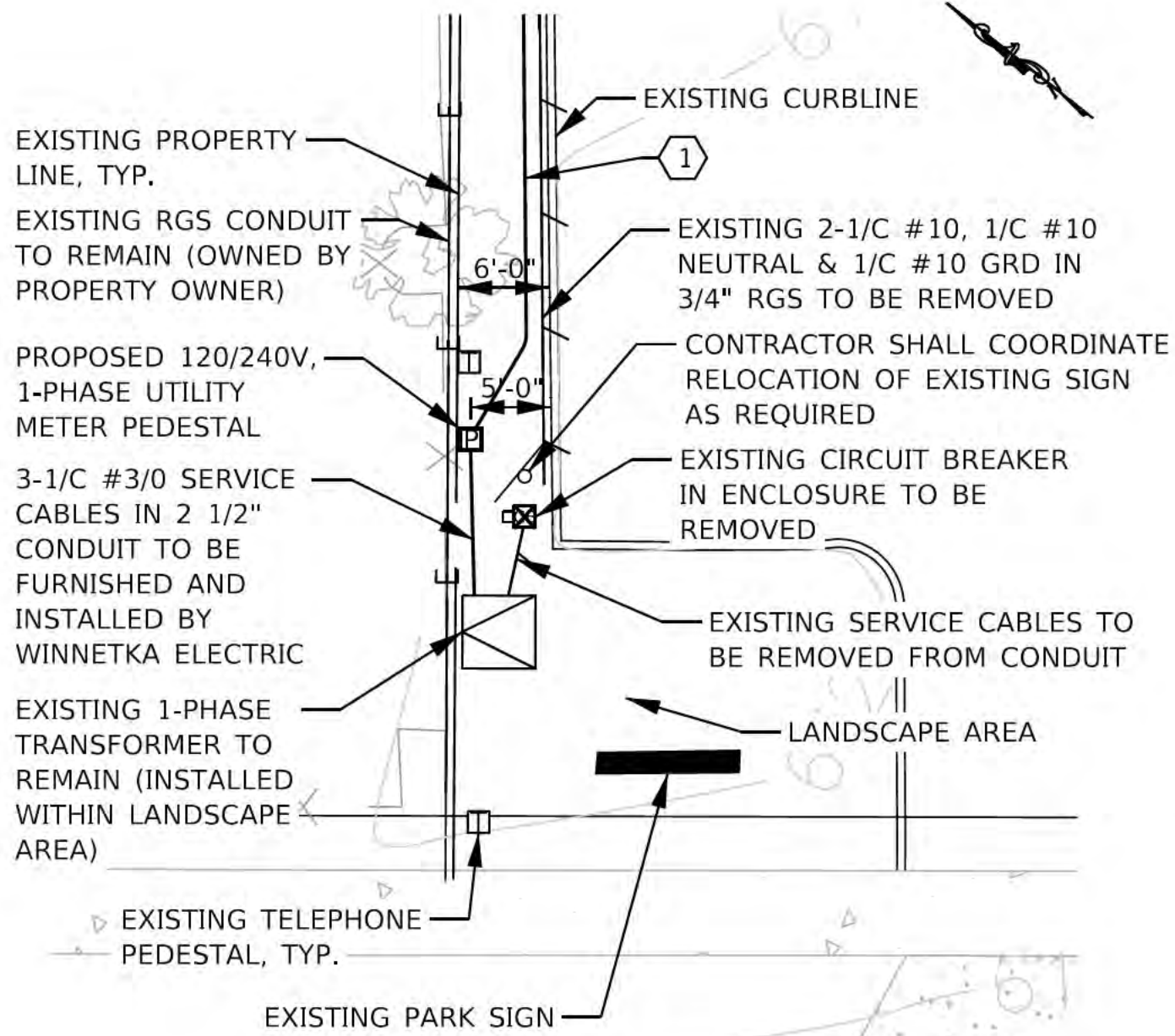
C167



- LIGHTING LEGEND**
- PROPOSED BOLLARD
 - ORIENTATION OF LED LIGHT
 - PROPOSED CONDUIT AND CABLE (SEE PROPOSED LIGHTING CABLE AND CONDUIT SCHEDULE)
 - SERVICE CONDUIT
 - LIGHTING CONTROLLER
 - COMPOSITE CONCRETE HANDHOLE
 - UTILITY METER PEDESTAL
 - EXISTING CABLE IN CONDUIT TO BE REMOVED
 - EXISTING EQUIPMENT TO BE REMOVED (AS INDICATED)

NOTES:

1. SEE SHEET C171 FOR TYPICAL WIRING TO BOARDWALK BOLLARDS. HANDHOLES SHALL BE INSTALLED ADJACENT TO EACH BOLLARD FOR WIRING PURPOSES.



SHERIDAN ROAD

ENLARGED VIEW

PROPOSED LIGHTING CABLE AND CONDUIT SCHEDULE	
1	UNIT DUCT, 600V, 3-1/C #6, 1/C #6 GROUND, (XLP-TYPE USE), 2" DIA. POLYETHYLENE
2	ELECTRIC CABLE IN CONDUIT, 600V, 4-1/C #6 (RECEP), 4-1/C #10 (LITE) & 2-1/C #6 GROUND, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.
3	ELECTRIC CABLE IN CONDUIT, 600V, 2-1/C #6 (RECEP), 2-1/C #10 (LITE) & 1/C #6 GROUND, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.
4	ELECTRIC CABLE IN CONDUIT, 600V, 4-1/C #10, 2-1/C #10 GROUND, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 1 1/4" DIA.
5	ELECTRIC CABLE IN CONDUIT, 600V, 2-1/C #10, 1/C #10 GROUND, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 1 1/4" DIA.
6	ELECTRIC CABLE IN CONDUIT, 600V, 2-1/C #10, 1/C #10 GROUND, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 3/4" DIA.
7	MANUFACTURER CORD CABLE IN CONDUIT ATTACHED TO STRUCTURE, LIQUIDTIGHT FLEXIBLE CONDUIT, 1/2" DIA
8	ELECTRIC CABLE IN CONDUIT, 600V, 4-1/C #12 (XLP-TYPE USE), IN CONDUIT ATTACHED TO STRUCTURE, LIQUIDTIGHT FLEXIBLE CONDUIT, 1/2" DIA.
9	ELECTRIC CABLE IN CONDUIT, 600V, 2-1/C #12, (XLP-TYPE USE), IN UNDERGROUND CONDUIT, PVC, 1/2" DIA.
10	ELECTRIC CABLE IN CONDUIT, 600V, 2-1/C #12, (XLP-TYPE USE), IN CONDUIT ATTACHED TO STRUCTURE, LIQUIDTIGHT FLEXIBLE CONDUIT, 1/2" DIA.
11	UNDERGROUND CONDUIT, PVC, 2" DIA. (SPARE) WITH PULL ROPE
12	UNDERGROUND CONDUIT, PVC, 3/4" DIA. (SPARE) WITH PULL ROPE

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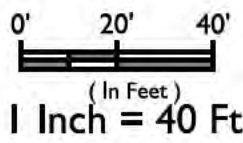
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



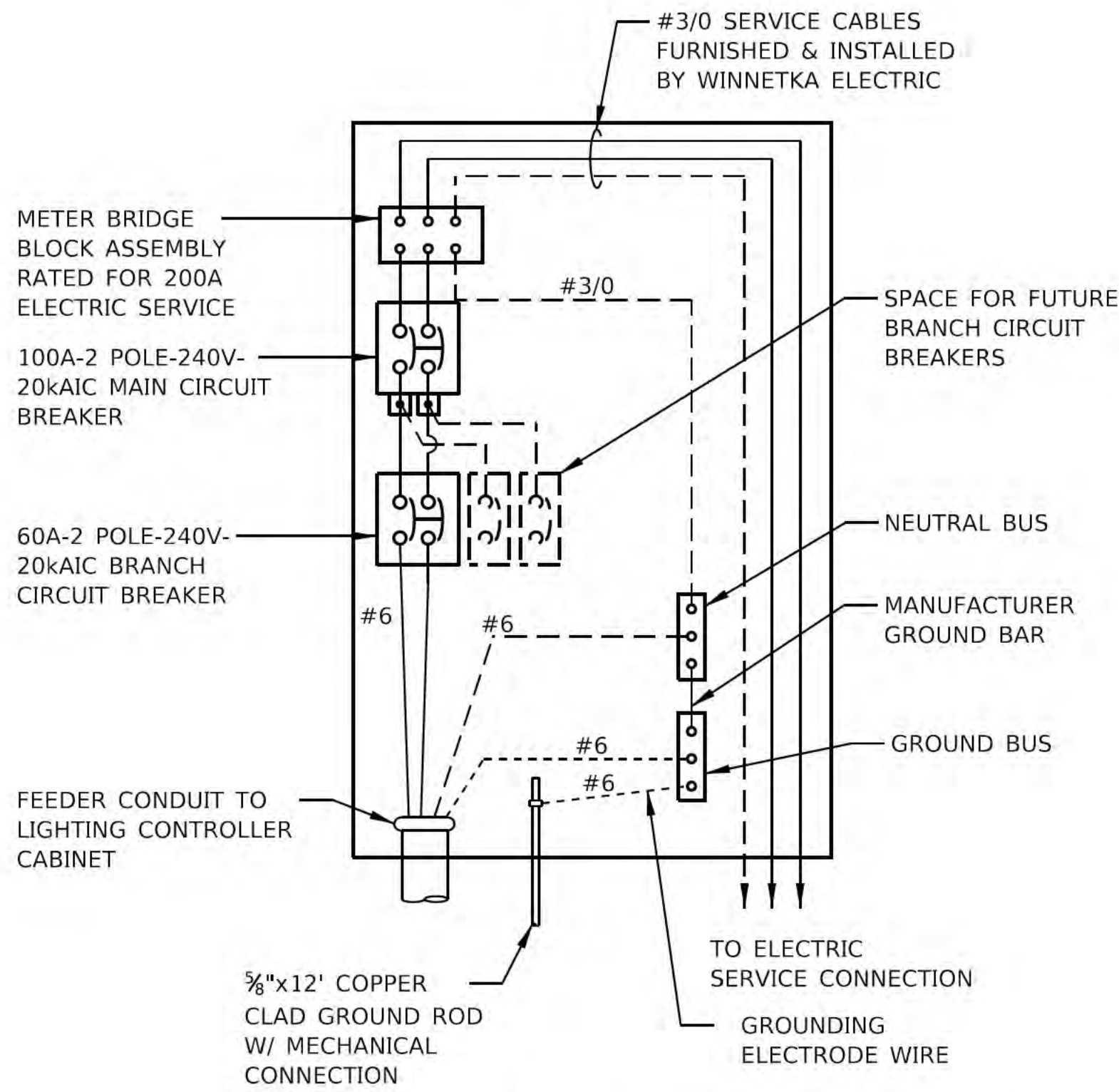
Scale 1 Inch = 40 Ft.

Drawing Title

Lighting and Electrical Plan

Sheet No.

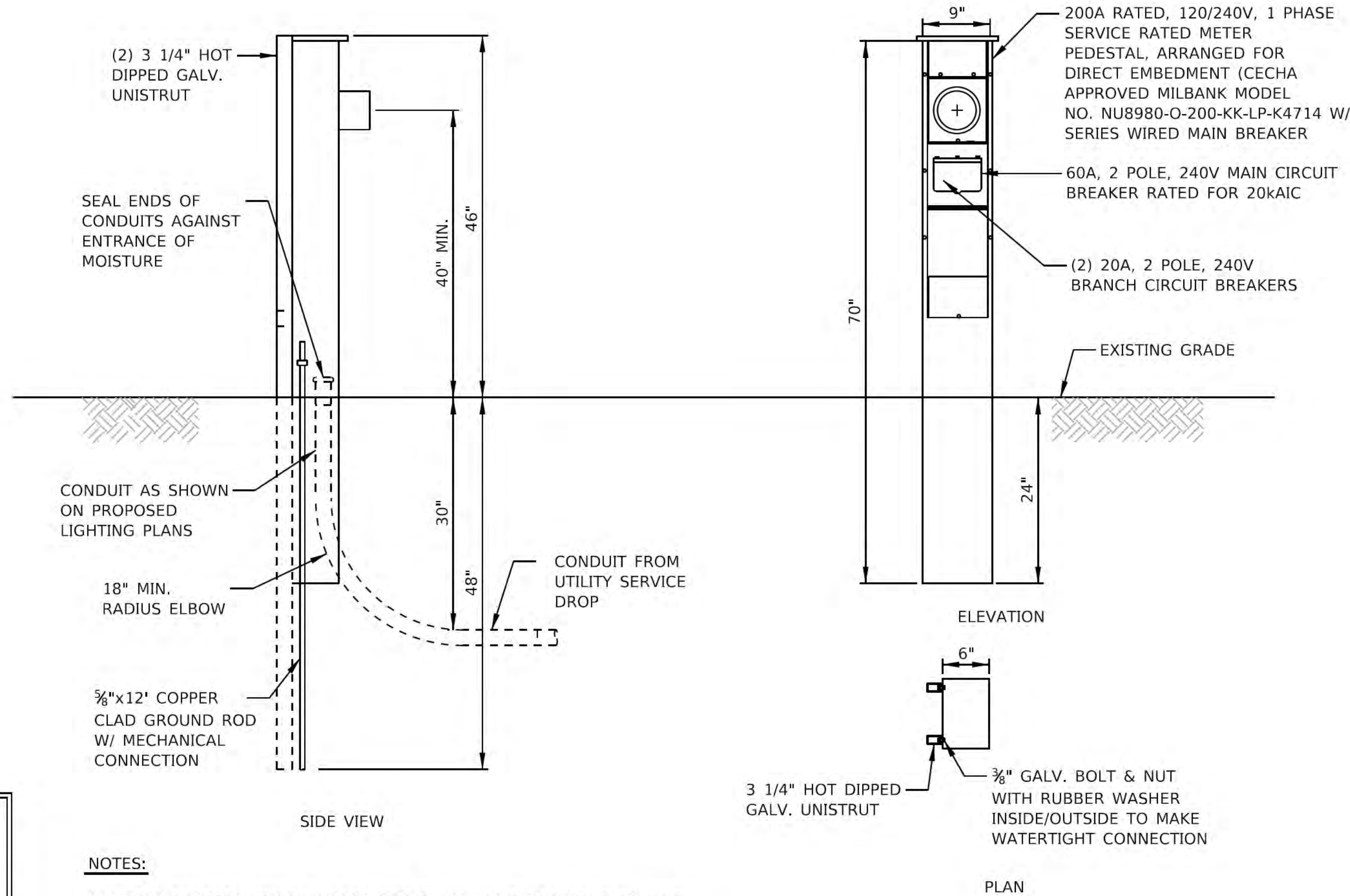
C168



SERVICE METER PEDESTAL WIRING DIAGRAM
N.T.S.



EXISTING ELECTRIC SERVICE (FOR REFERENCE ONLY)
N.T.S.



- NOTES:**
- METER PEDESTAL CIRCUIT BREAKERS SHALL HAVE LOCKABLE COVERS.

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SERVICE METER PEDESTAL
N.T.S.

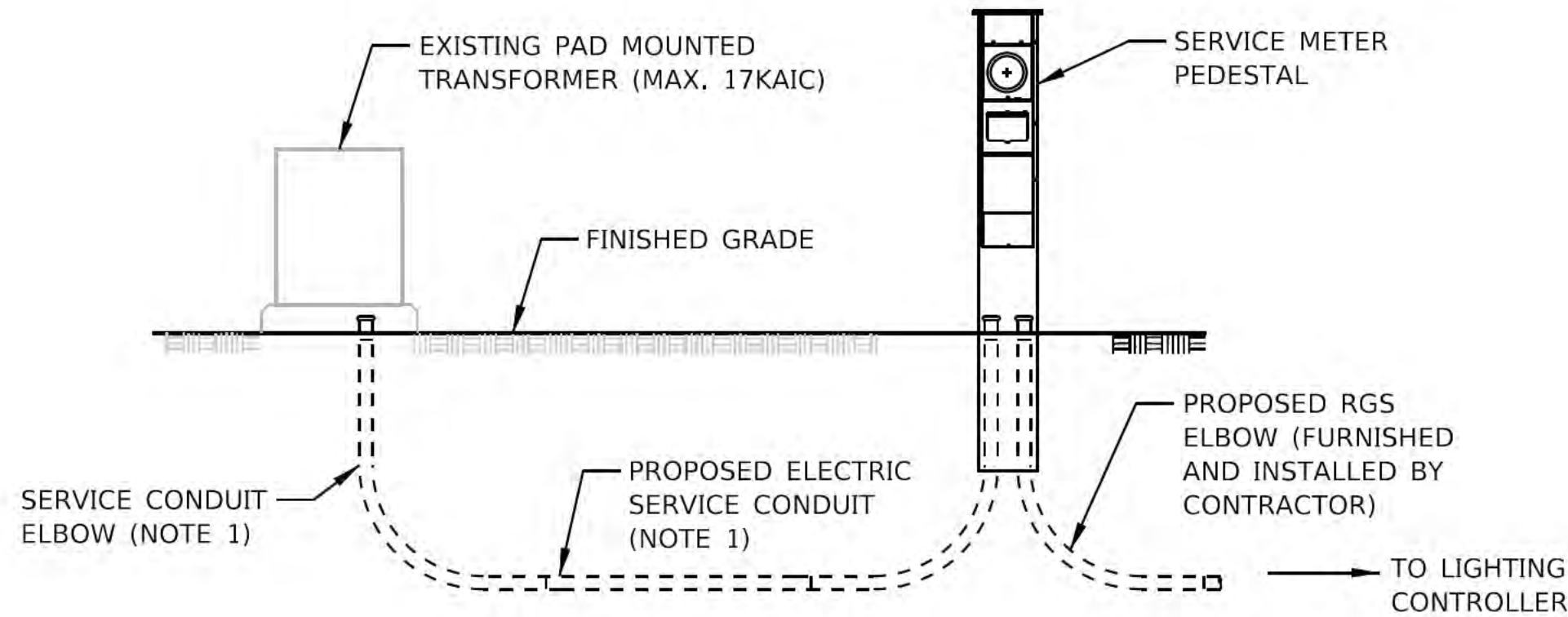
LIGHTING GENERAL NOTES

- THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. REROUTING, DISCONNECTION, RELOCATION, PROTECTION ETC., OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BASED ON UTILITY/JULIE MARKINGS PRIOR TO BEGINNING CONSTRUCTION.
- THE LOCATIONS OF EXISTING LIGHTING/ELECTRICAL FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS.
- BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES THE CONTRACTOR SHALL CALL ELECTRIC UTILITY COMPANY FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING SPECIFICATIONS:
 - STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PREPARED BY IDOT, ALSO REFERRED TO AS THE "STANDARD SPECIFICATIONS"
 - NATIONAL ELECTRIC CODE (NEC)
 - LOCAL CODES AND STANDARDS
 - WINNETKA ELECTRIC UTILITY STANDARDS
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.
- UNDERGROUND CABLES SHALL BE DISCONNECTED AND REMOVED FROM CONDUITS TO BE ABANDONED.
- UNDERGROUND CONDUITS TO BE ABANDONED SHALL BE REMOVED TO A MINIMUM OF 2 FT BELOW GRADE.
- UPON COMPLETION OF THE SITE LIGHTING AND ELECTRICAL IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS. ALL ELECTRICAL TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER/OWNER, PARK DISTRICT, AND THE VILLAGE.

PROJECT CONTACTS

WINNETKA ELECTRIC

CONTACT: MR. RYAN BRIDGES
OFFICE NO.: (847) 716-3550



- NOTES:**
- WINNETKA ELECTRIC DEPARTMENT WILL SUPPLY SERVICE CONDUIT, ELBOWS, AND CABLES BETWEEN THE EXISTING PAD MOUNTED TRANSFORMER AND SERVICE METER PEDESTAL.
 - CONTRACTOR TO SCHEDULE & COORDINATE ALL WORK WITH WINNETKA ELECTRIC DEPARTMENT.

ELECTRIC SERVICE DETAIL
N.T.S.



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70% Submittal	—	04/08/24
100% Submittal	—	06/28/24
Bidding and Construction	—	07/19/24

Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

Scale N.T.S.

Drawing Title

Lighting and Electrical Details

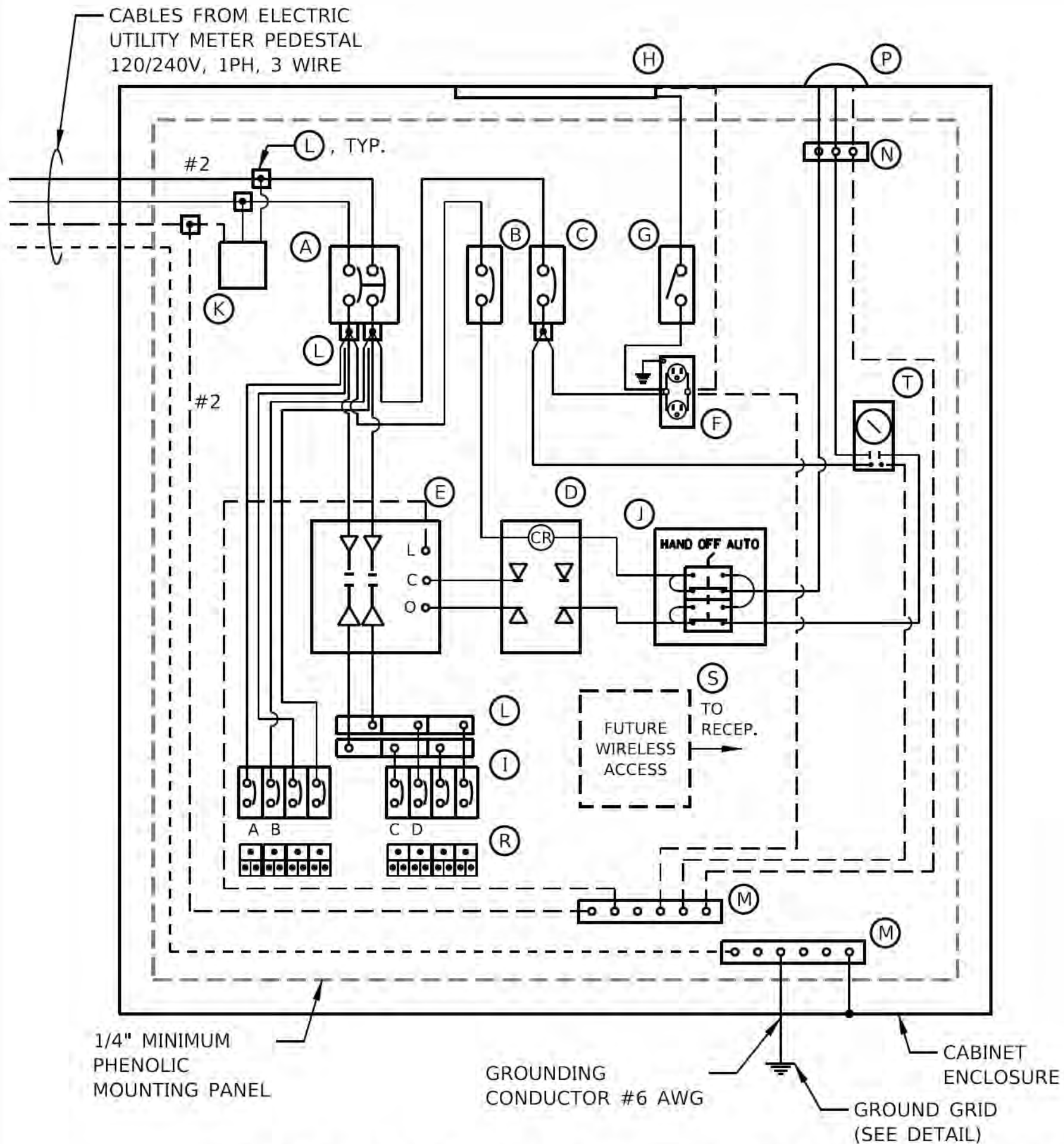
Sheet No.

C169

LIGHTING CONTROLLER EQUIPMENT

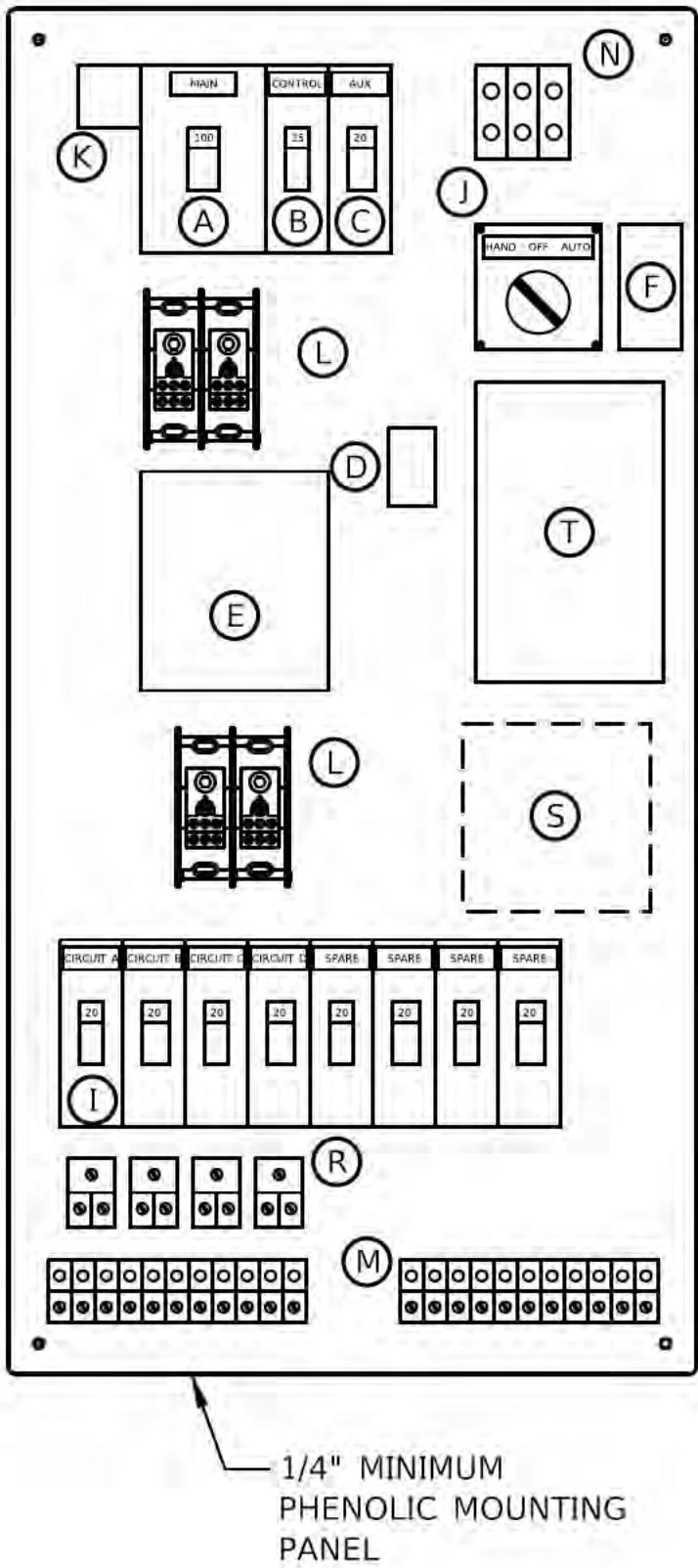
ITEM	SPECIFICATION	MANUFACTURER MODEL NO. OR EQUAL
A MAIN CIRCUIT BREAKER	60A, 2P, 240V SERVICE RATING, 10KAIC	SQUARE D NO. BDL26060
B CONTROL CIRCUIT BREAKER	15A, 1P, 120V RATING, 10KAIC	SQUARE D NO. BDL16015
C CABINET CIRCUIT BREAKER	20A, 1P, 120V RATING, 10KAIC	SQUARE D NO. BDL16020
D AUXILIARY RELAY	30A-120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS, PLUG IN	MAGNECRAFT NO. 389 FXBXC1-120A
E LIGHTING CONTACTOR	30A, 2-POLE, 120V COIL, MECH HELD, OPEN TYPE	SQUARE D NO. 8903SMO1 V02
F CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/120V, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER	RECEPTACLE: LEVITON NO. 8899, BOX: APPLETON NO. WSM150 COVER: APPLETON NO. WHG1
G DOOR SWITCH	20A-120V, DOOR MTD SNAP ACTION PLUNGER SWITCH	OMRON NO. A-20GQ-K
H CABINET LIGHT	5 WATT LED STRIP LIGHT, 60K HOUR RATING, DOOR SWITCH CONTROLLED, FASTENED TO TOP OF CABINET	PENTAIR NO. LEDA1S35
I BRANCH CIRCUIT BREAKER	8-20A, 1P, 120V RATING, 10 KAIC	SIEMENS NO. ED21B020
J HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN 3-GANG CAST ALUM. BOX	SQUARE D NO. 9001 KYK 111
K SURGE ARRESTOR	10 K AMPERE RATING	SQUARE D NO. SDSA 1175
L POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REQ'D, 10KAIC	MARATHON
M GROUND & NEUTRAL COPPER BUS	NEUTRAL BUS-MIN 24 TERMINATIONS (#3/0-#10) & GROUND BUS-MIN 16 TERMINATIONS (#3/0-#10), BUSES SHALL BE HORIZONTAL & LOCATED AT THE BASE OF CABINET	ERICO NO. TCB
N PHOTOCELL TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, #14-#10 WIRE SIZE	CINCH NO. 3-142
P PHOTOCELL	120V, MTD ON CABINET, DELAY TYPE, SPST-NC	FISHER PIERCE NO. FPFA-105M
R TERMINAL BLOCK	30A, 240V, #12-#1/0 AWG WIRE RANGE (MAX 3 #10 PER LUG), INSULATED, CKTS SHALL BE LABELED	SQUARE D NO. GD6
S FUTURE TRILOGY WIRELESS ACCESS	8"x8" SPACE FOR FUTURE WIRELESS CONTROL BOX AND CONNECTIONS	TRILOGY NETWORKX LOCK
T TIMECLOCK	120V, DPST, 24-HOUR MECHANICAL TIME CLOCK WITH METAL ENCLOSURE	INTERMATIC NO. T103

NOTES:
 1. THE CONTROLLER, ALONG WITH ALL ITS COMPONENTS, SHALL BE UL LISTED 508A AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL."
 2. THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT."
 3. ALL SWITCHES SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAME PLATES.
 4. THE CABINET SHALL BE LABELED WITH THE APPROPRIATE ARC FLASH LABEL AND INCLUDE PERSONNEL PROTECTION DESIGNATIONS.
 5. ALL EXPOSED BUS BARS AND COMPONENTS SHALL BE INSULATED.
 6. CONTROL WIRE SHALL BE #12 MTW.



LIGHTING CONTROLLER WIRING DIAGRAM

N.T.S.

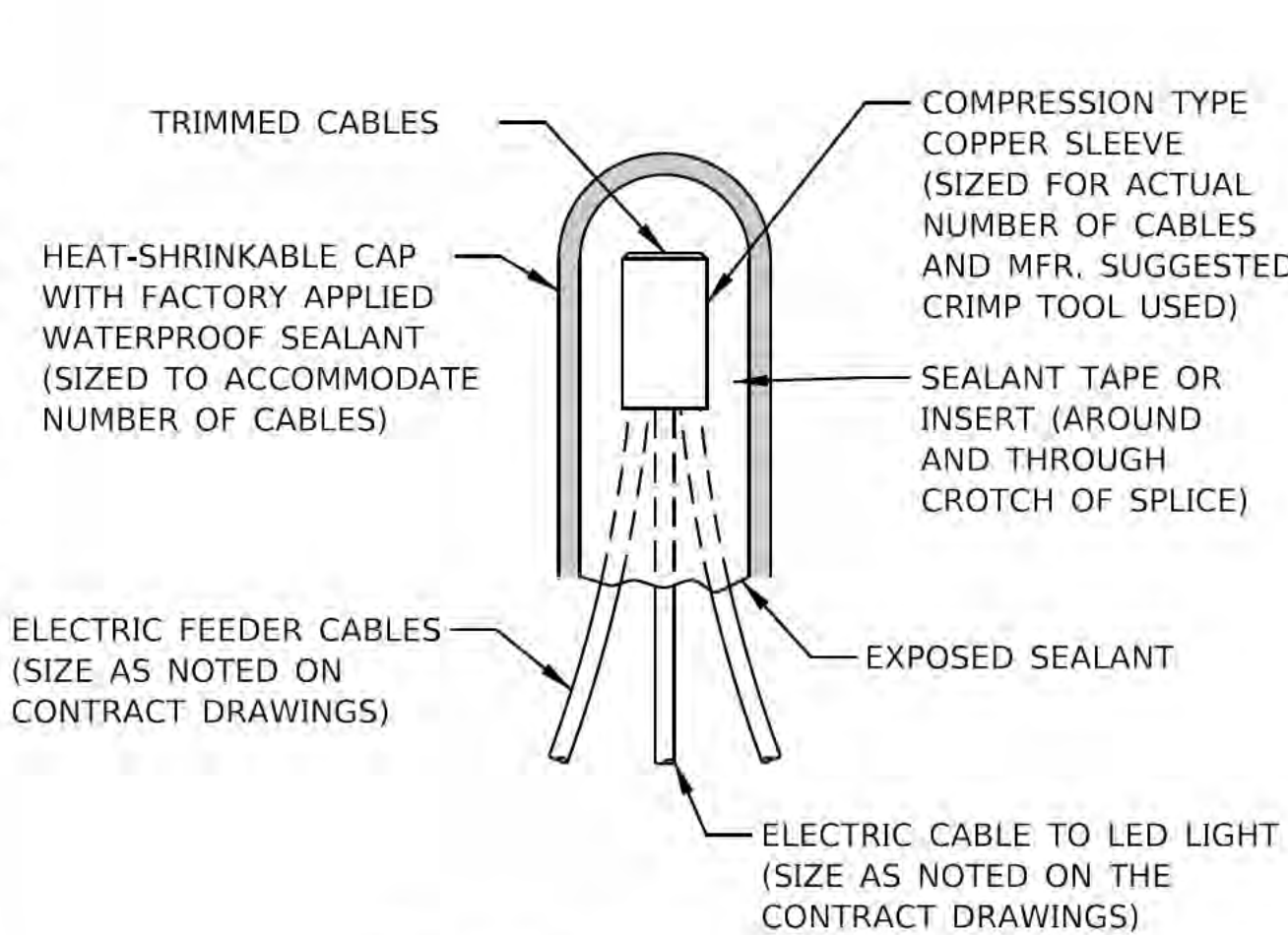


LIGHTING CONTROLLER EQUIPMENT LAYOUT

N.T.S.

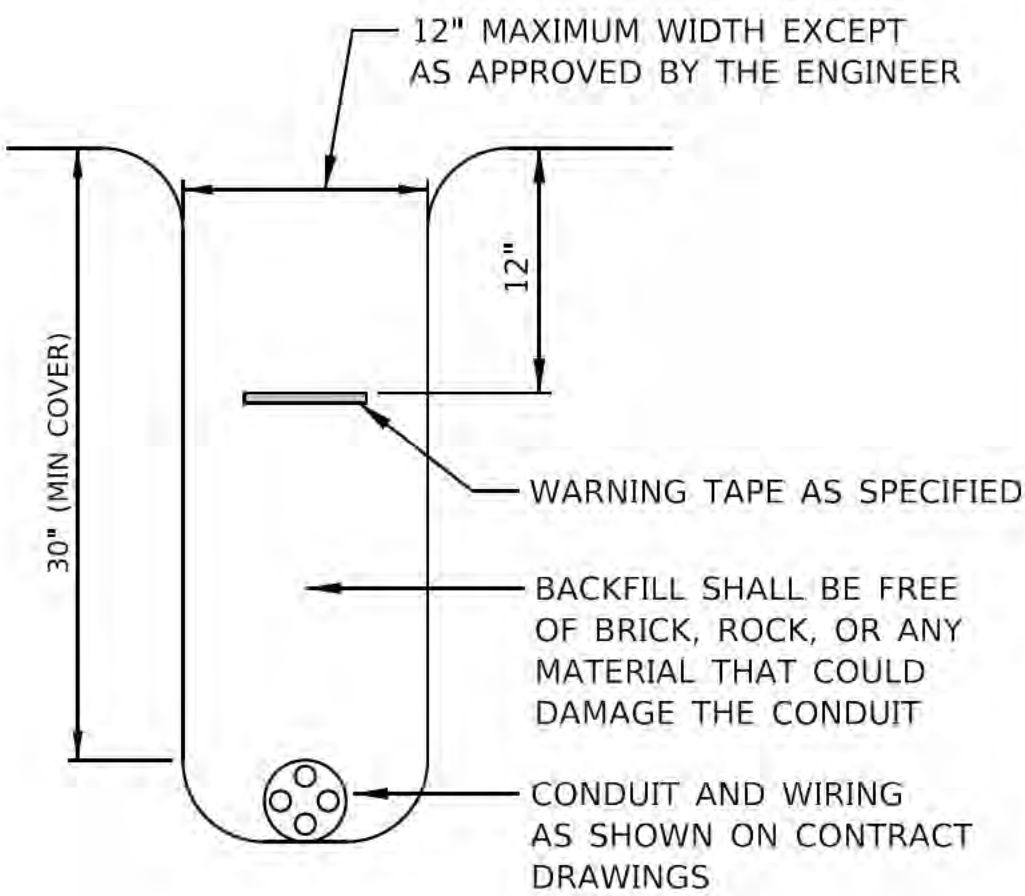
PROPOSED LIGHTING CONTROLLER LOAD TABLE

CIRCUIT ID (INSULATION COLOR)	CIRCUIT BREAKER/ POLES	BOLLARD		DUPLEX RECEPTACLE		MOTORIZED GATE		TOTAL CIRCUIT LOAD		
		QTY.	LOAD/FIX T	QTY.	LOAD/FIX T	QTY.	LOAD/FIX T	WATTS	AMPS	VOLTS
A - RED	20A-1P	0	20	0	500	1	100	100	0.8	120
B - BLACK	20A-1P	0	20	4	500	0	100	2,000	16.7	120
C - RED	20A-1P	7	20	0	500	0	100	140	1.2	120
D - BLACK	20A-1P	0	20	0	500	0	100	0	0.0	120
E - RED	20A-1P	0	20	0	500	0	100	0	0.0	120
F - BLACK	20A-1P	0	20	0	500	0	100	0	0.0	120
TOTAL		7		4		1		2240W	9.33A	240



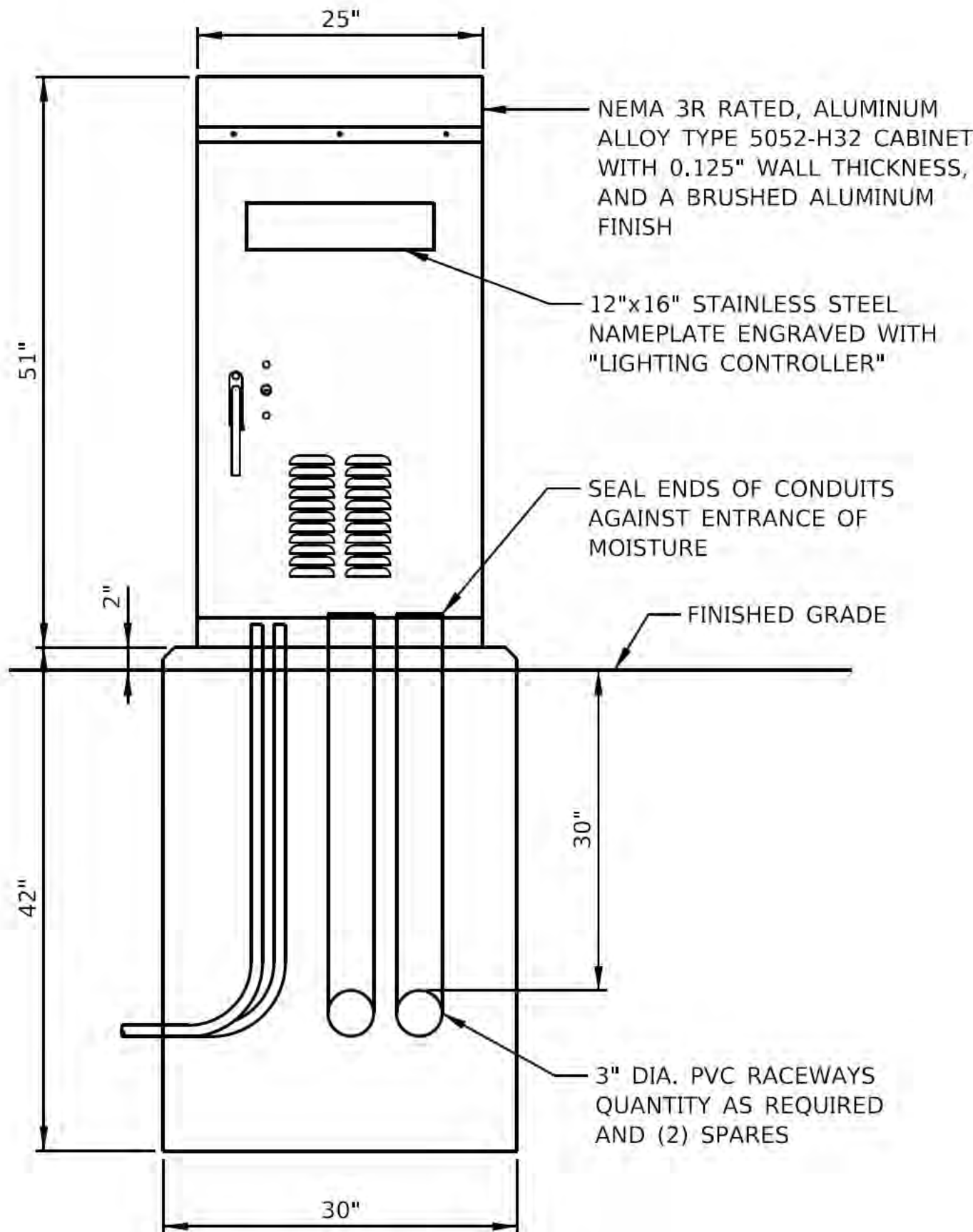
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



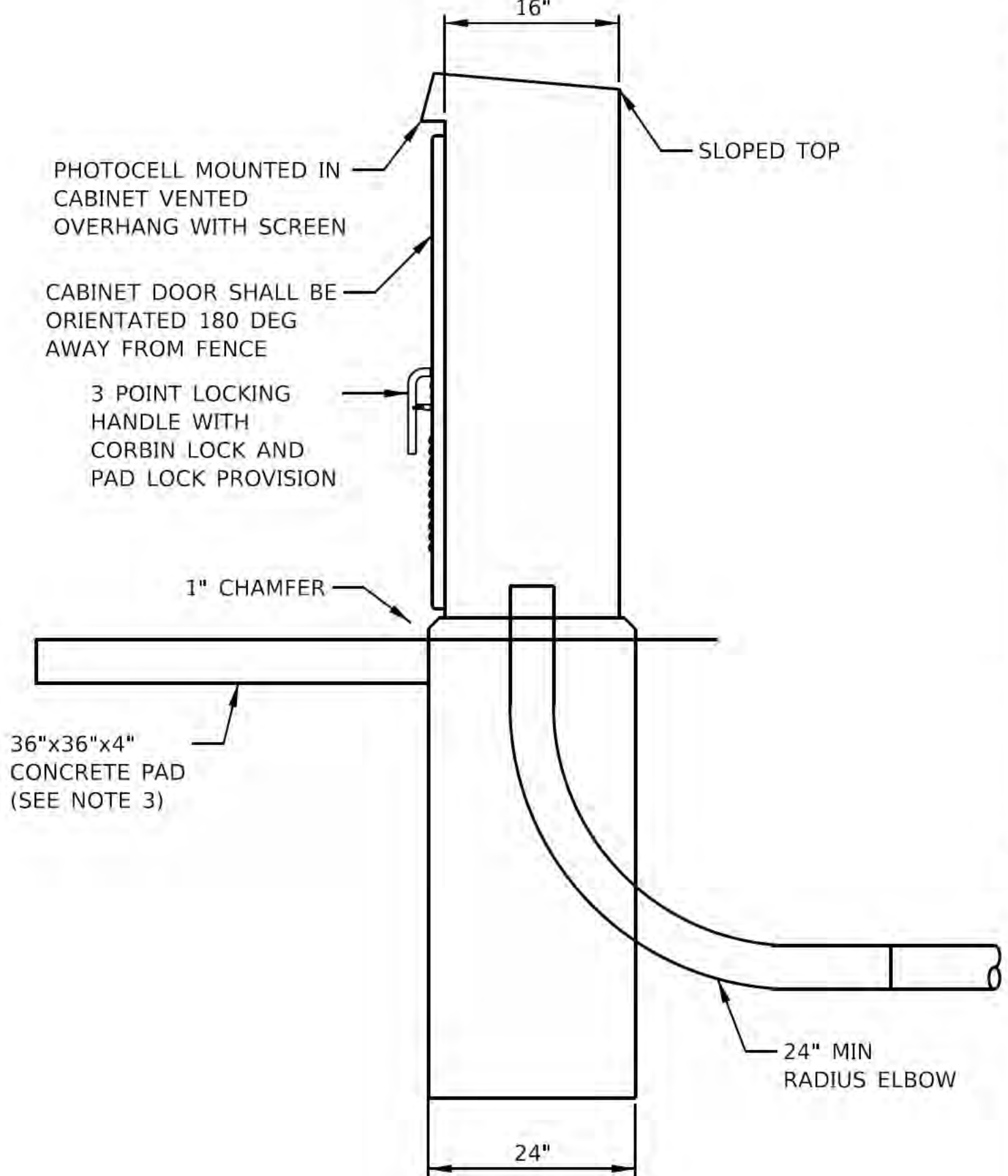
ELEVATION

NOTES:

- CABINET DIMENSIONS SHOWN ARE APPROXIMATE. CABINET SHALL BE AS COMPACT AS POSSIBLE.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL REMOVE VEGETATION IN FRONT OF CONTROL CABINET DOOR, LEVEL THE AREA AND TOP WITH 2" TOPSOIL, WHERE THERE IS NO SIDEWALK.

LIGHTING CONTROLLER CABINET DETAIL

N.T.S.



SIDE

RED BARN
 Design & Engineering, S.C.



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 Winnetka, IL

Prepared For:

Winnetka Park District
 Winnetka, IL

Graphic Scale

Scale N.T.S.

Drawing Title

Lighting and Electrical Details

Sheet No.

C170



EXISTING JUNCTION BOX TO BE REMOVED

EXISTING GATE ACCESS EQUIPMENT
TO BE REMOVED

N.T.S.

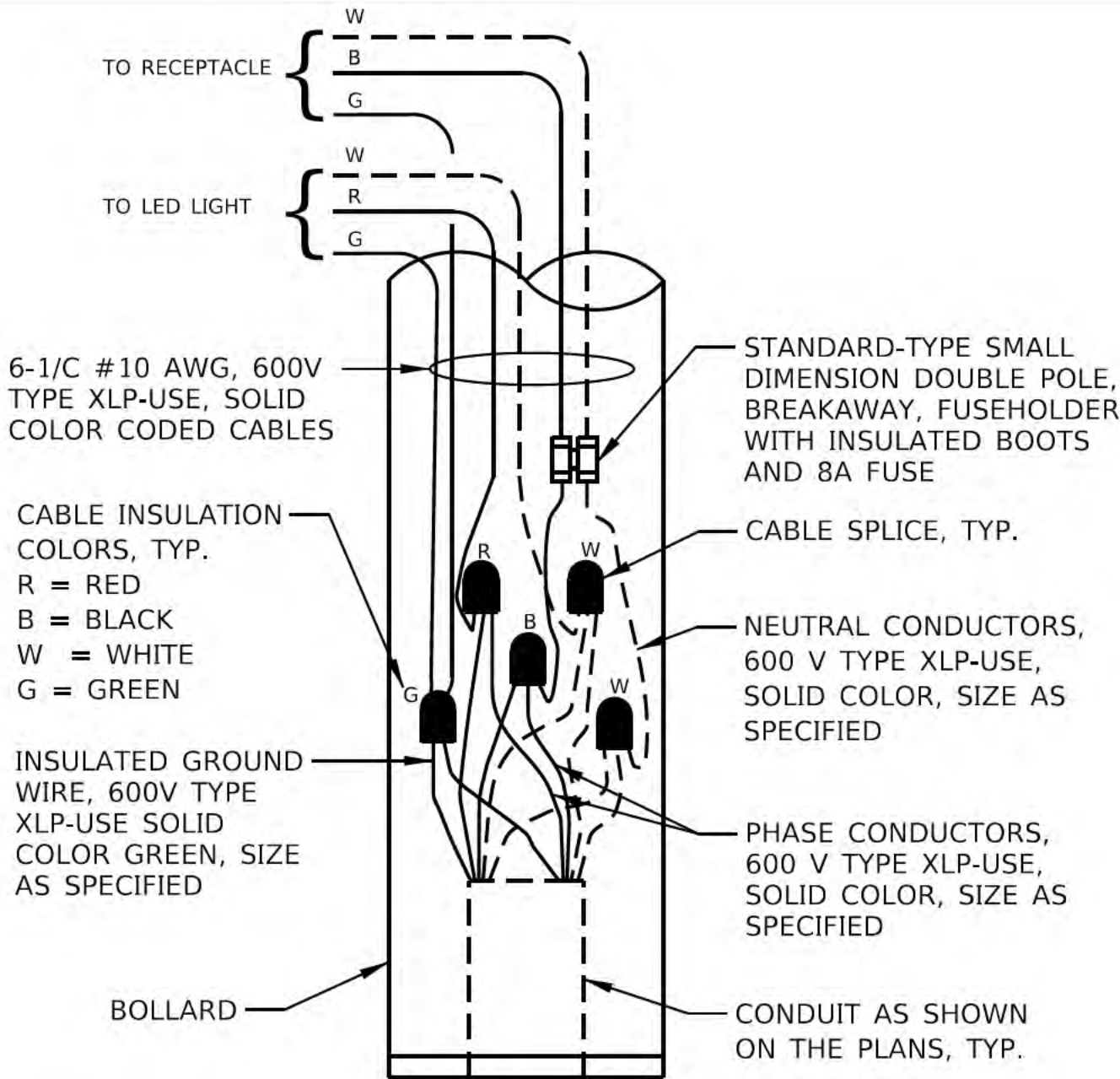


EXISTING JUNCTION BOX TO BE REMOVED (FEEDS DOG BEACH ACCESS GATE)

EXISTING GATE ACCESS
JUNCTION BOX TO BE REMOVED

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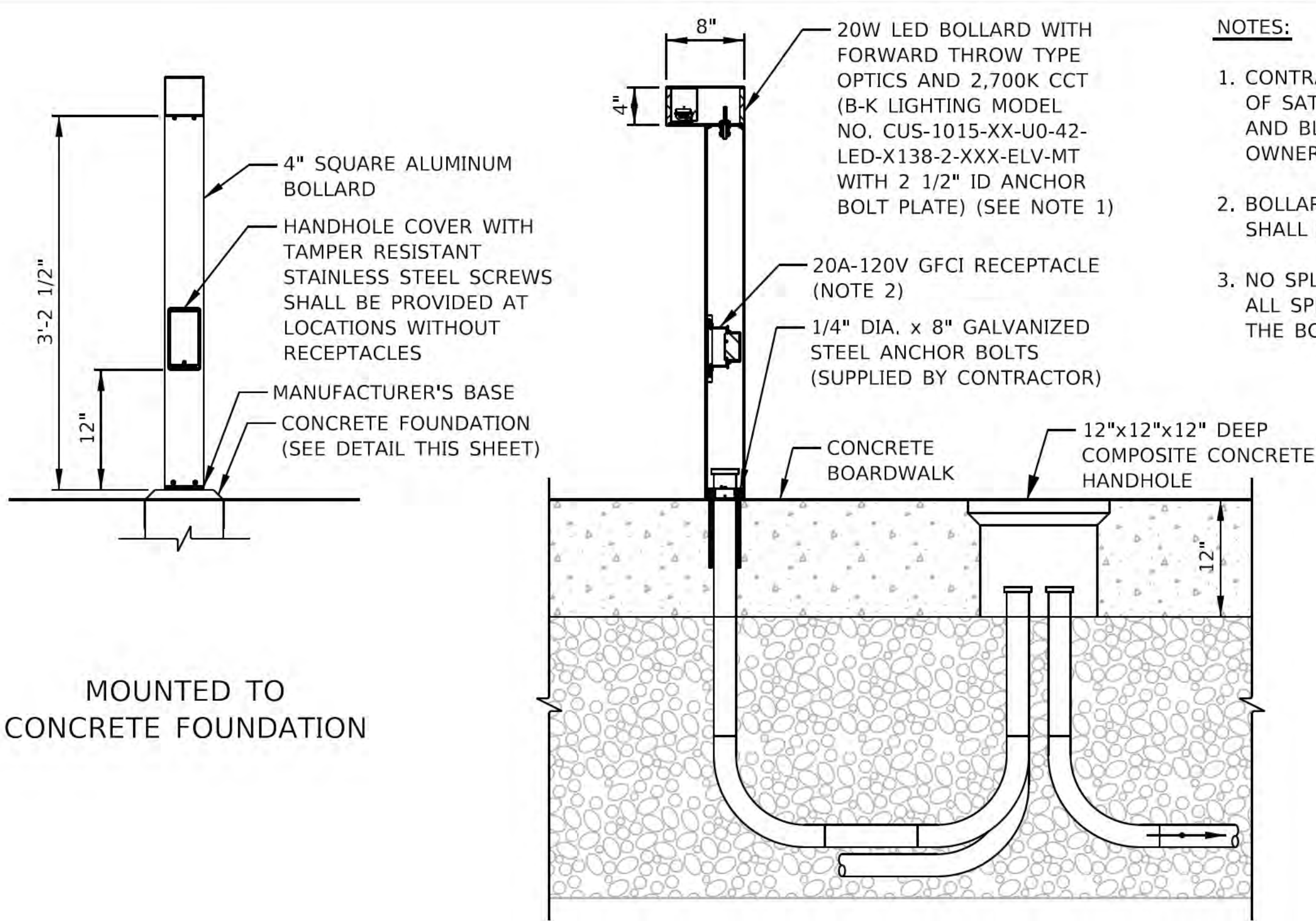


NOTES:

1. BOLLARDS MOUNTED TO BOARDWALK (B3-B6) SHALL BE PROVIDED WITH RECEPTACLES. ALL OTHER BOLLARDS SHALL ONLY BE PROVIDED WITH A LED LIGHT.

BOLLARD WIRING DETAIL

N.T.S.

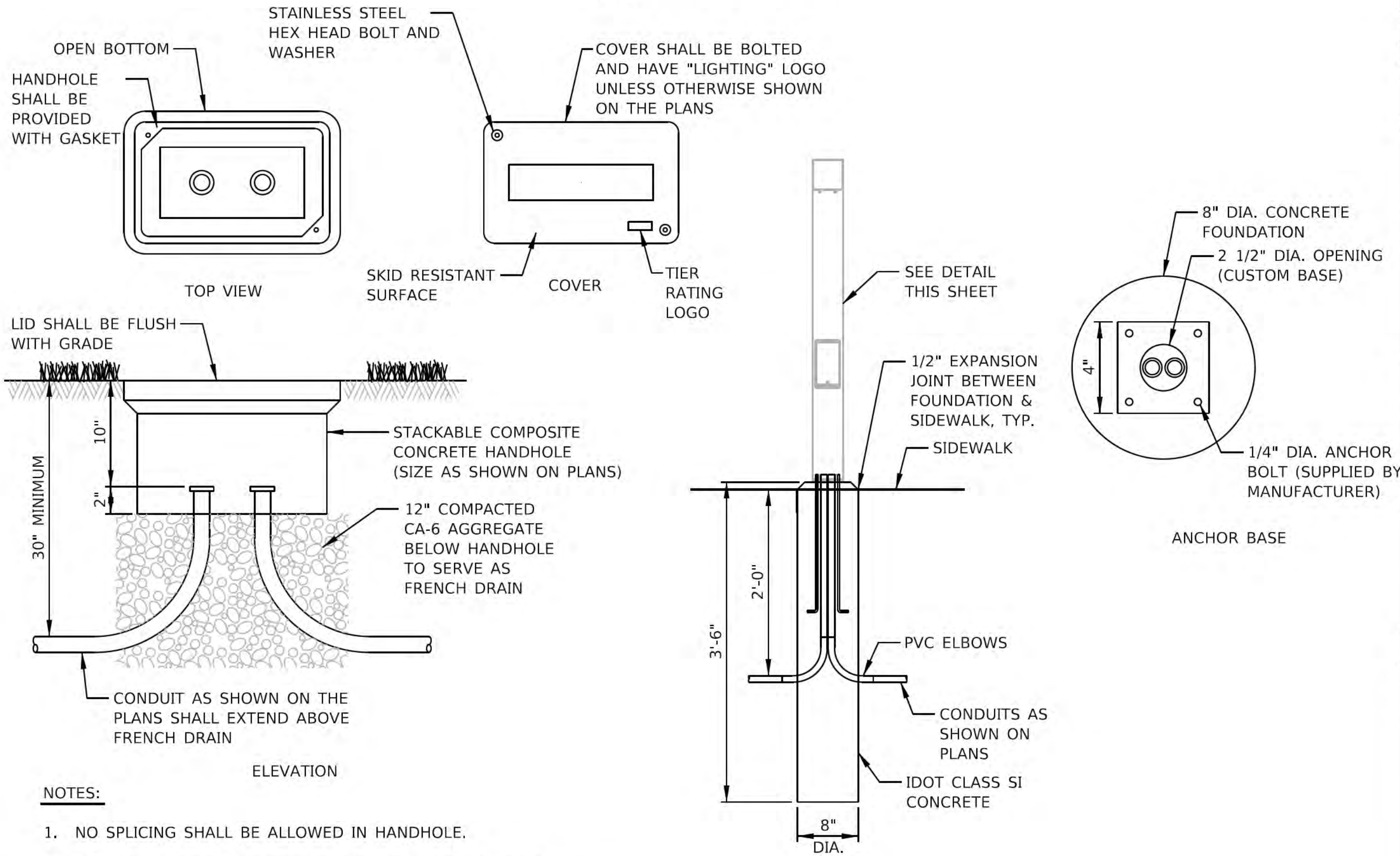


NOTES:

1. CONTRACTOR SHALL SUBMIT COLOR SAMPLES OF SATIN BLACK (BLP), BLACK WRINKLE (BLW), AND BLACK CHROME (BCM) PAINT CHIPS FOR OWNER SELECTION.
2. BOLLARDS MOUNTED TO CONCRETE BOARDWALK SHALL BE PROVIDED WITH GFCI RECEPTACLE (ONLY).
3. NO SPLICING SHALL BE ALLOWED IN HANDHOLES. ALL SPLICES SHALL BE MADE AT THE BASE OF THE BOLLARDS ONLY.

BOLLARD DETAIL

N.T.S.



NOTES:

1. NO SPLICING SHALL BE ALLOWED IN HANDHOLE.
2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREEN IN LANDSCAPED AREAS AND MATCH COLOR IN CONCRETE/BRICK AREAS.
3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

COMPOSITE CONCRETE HANDHOLE DETAIL

N.T.S.

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL FASTENERS AND ACCESSORIES TO MOUNT THE BOLLARD TO CONCRETE FOUNDATION.
2. CONTRACTOR SHALL INSTALL BOLLARD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BOLLARD CONCRETE FOUNDATION DETAIL

N.T.S.



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Winnetka, IL

Graphic Scale

Scale N.T.S.

Drawing Title

Lighting and Electrical Details

Sheet No.

C171

General Notes

1.

The building code applicable to this project is the International Building Code (IBC) 2017
2.

All details and sections shown on the drawings are typical and shall be used wherever a similar condition occurs unless noted otherwise.
3.

Contractor shall field verify all existing dimensions and conditions as it relates to new construction. Contractor shall report any discrepancies to the E/A.
4.

The stability and strength of the completed structure depends upon the interaction of various connected parts such as diaphragms, braces and/or shear walls. Contractor shall provide temporary bracing and/or shoring as necessary to complete the work.
5.

Design Loads:

Dead Load

Uniform Live Load

Concentrated Live Load

.....

.....

.....

actual weight

100 psf

300 pounds
- Roof Snow Load:

Ground Snow Load (P_g)

Flat Roof Snow Load (P_f)

Snow Exposure Factor (C_e)

Snow Load Importance Factor (I)

.....

.....

.....

.....

25 psf

17 psf

0.8

1.0
- Wind load:

Basic Wind Speed

Wind Load Importance Factor

Wind Exposure Category

Wind Design Pressure (P)

.....

.....

.....

.....

107 mph

1

D

30 psf

Soil borings

1.

For location of soil borings see Civil or Architectural Plans.
2.

For boring logs and foundation report see the appendix to the project manual.

Excavation and Backfilling

1.

Minimum required net bearing capacity is: 3000 psf
3000 psf - for spread footings
2.

Where foundation is over excavated, remove all disturbed foundation soil and replace with lean concrete or compacted structural backfill.
3.

Over excavate unsuitable foundation soil where required by the E/A and replace with compacted structural backfill. See specifications.

Removal and Protection

1.

Provide shoring and bracing for structural elements during partial removal to avoid any damage to the existing facilities.
2.

Existing structures shall be protected from overloading due to construction loadings. Heavy equipment shall not be operated close to existing tanks to avoid high lateral earth pressures on walls.
3.

Damage to adjacent facilities during construction shall be repaired at no additional cost to the owner.

Cast-in-place concrete

1.

Concrete work on this project shall conform to all requirements of ACI 301, standard specifications for structural concrete, published by the American Concrete Institute (ACI), Detroit, Michigan, except as modified by the requirements of these contract documents.
2.

All concrete shall be provided with a minimum ultimate compressive strength at 28 days (f'c) of 3000 psi
3.

All exterior concrete, building foundations and concrete subject to freeze-thaw shall have 4% to 7% air content by volume measured in accordance with ASTM C231. Air entraining admixtures shall conform to ASTM C260. The slump shall not exceed 4 inches measured in accordance with ASTM C143.
4.

Reinforcing steel shall conform to ASTM A-615 Grade 60. Welded wire fabric shall conform to ASTM A-185.
5.

Submit shop drawings of the reinforcement bars prepared in accordance with ACI 315, details and detailing of concrete reinforcement.
6.

Welding of reinforcing bars shall not be permitted.
7.

No calcium chloride will be used in concrete.
8.

Dusting with any material to absorb surface water is prohibited.
9.

Curing procedures in accordance with ACI 301 shall continue for a period of at least 7 days.

10.

Do not mix salt, chemicals or other foreign materials with the concrete to prevent freezing. Maintain the temperature of the concrete above 50 degrees Fahrenheit for five days after placement.
11.

Cover for reinforcement for cast-in-place concrete shall be as follows:

	Minimum Cover, Inches
Slabs and joists:	
Top and bottom bars for dry conditions: #11 bars and smaller	3/4
Formed concrete surfaces exposed to earth, water, or weather, and over or in contact with sewage and for bottoms bearing on work mat, or slabs supporting earth cover: #5 bars and smaller	1 1/2
#6 through #11 bars	2
Beams and Columns:	
For dry conditions: stirrups, spirals, and ties principal reinforcement	1 1/2 2
Exposed to earth, water, sewage, or weather: stirrups and ties principal reinforcement	2 2 1/2
Walls:	
For dry conditions: #11 bars and smaller	3/4
Formed concrete surfaces exposed to earth, water, sewage, weather, or in contact with ground:	2
Footings and base slabs:	
At formed surfaces and bottoms bearing on concrete work mat	2
At unformed surfaces and bottoms in contact with earth	3
Top of footings - same as slabs over top of piles	2

12.

Unless shown otherwise on plans, lap splices of uncoated reinforcement bars shall be as follows:

		Lap length - inches (smaller bar)*									
Bar Size		#3	#4	#5	#6	#7	#8	#9	#10	#11	
A)	horizontal bars so placed that <u>more</u> than 12 inches of concrete will be cast below the bars	24	32	40	48	70	80	91	102	113	
B)	Horizontal bars so placed that <u>less</u> than 12 inches of concrete will be cast below the bars	19	25	31	37	54	62	70	79	87	
C)	Vertical Bars	19	25	31	37	54	62	70	79	87	

* Lap lengths are calculated for uncoated bars in accordance with ACI 318, class B splices and f'c = 4000 psi. Minimum clear spacing between bars is two bar diameters and minimum cover is one bar diameter. For other conditions, calculate splices in accordance with ACI 318, class b splices required unless noted otherwise.

13.

Obtain E/A's written approval for any additional or relocated construction joints other than those shown on drawings.
14.

Unless shown otherwise, chamfer all exposed edges of concrete 3/4 inch.

INDEX OF SHEET

- C174

Stairs – General Notes and Bill of Materials
- C175

Stairs – General Plan, Foundation Plan and Framing Plan
- C176

Stairs – Structural Details (Sheet 1 of 2)
- S177

Stairs – Structural Details (Sheet 2 of 2)

"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."



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(847) 823-0500

Issued for	Rev. Date
100% Submittal	6/28/24
Bidding and Constr.	7/19/24

Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale

Scale

Drawing Title

STAIRS -
GENERAL NOTES
AND BILL OF
MATERIALS

Sheet No.

C-174

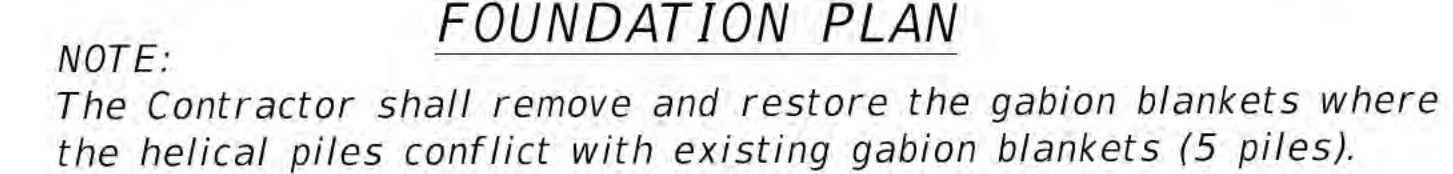


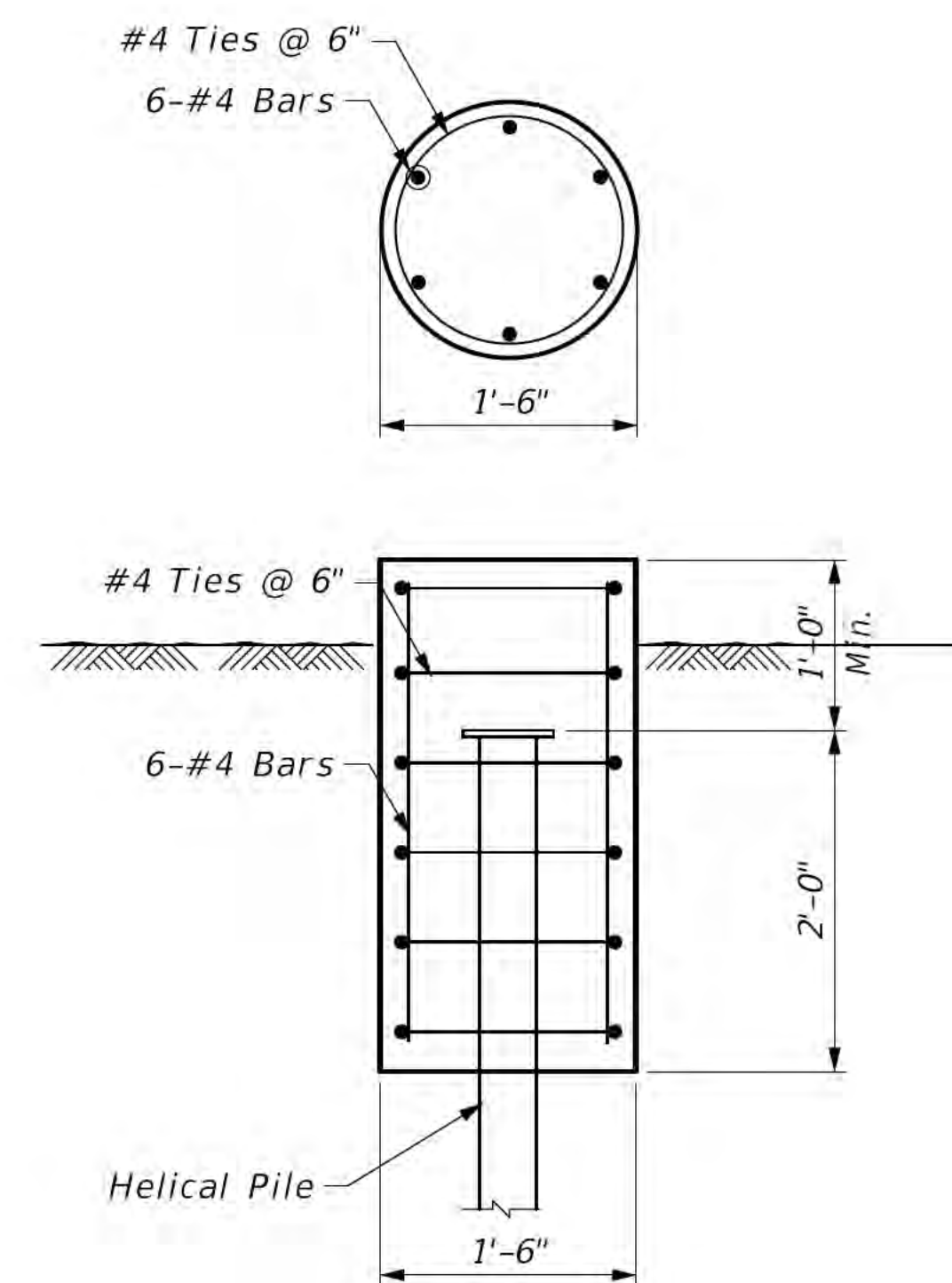
Issued for	Rev. Date
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Sheet No. C-175

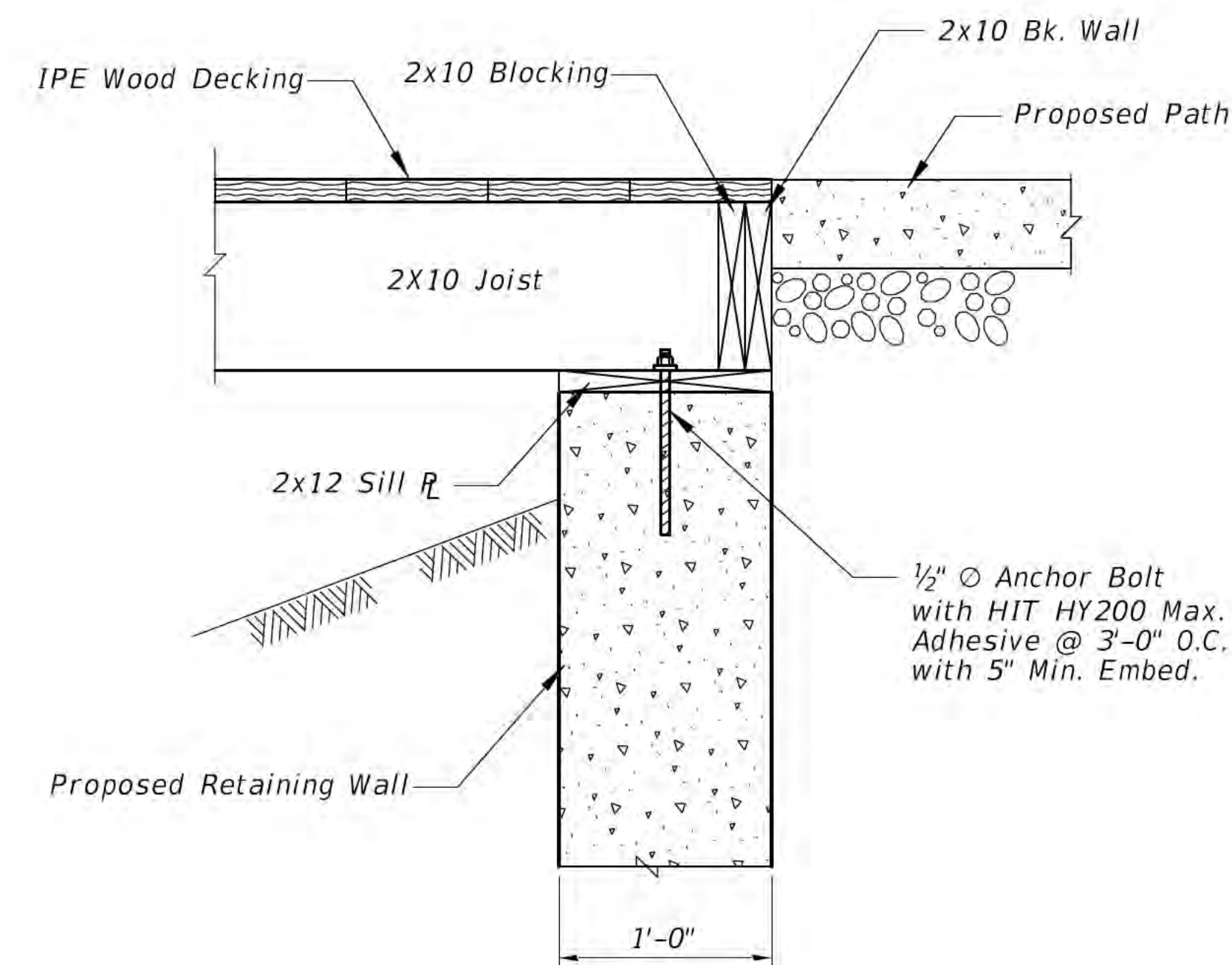


811 Know what's below.
Call before you dig.

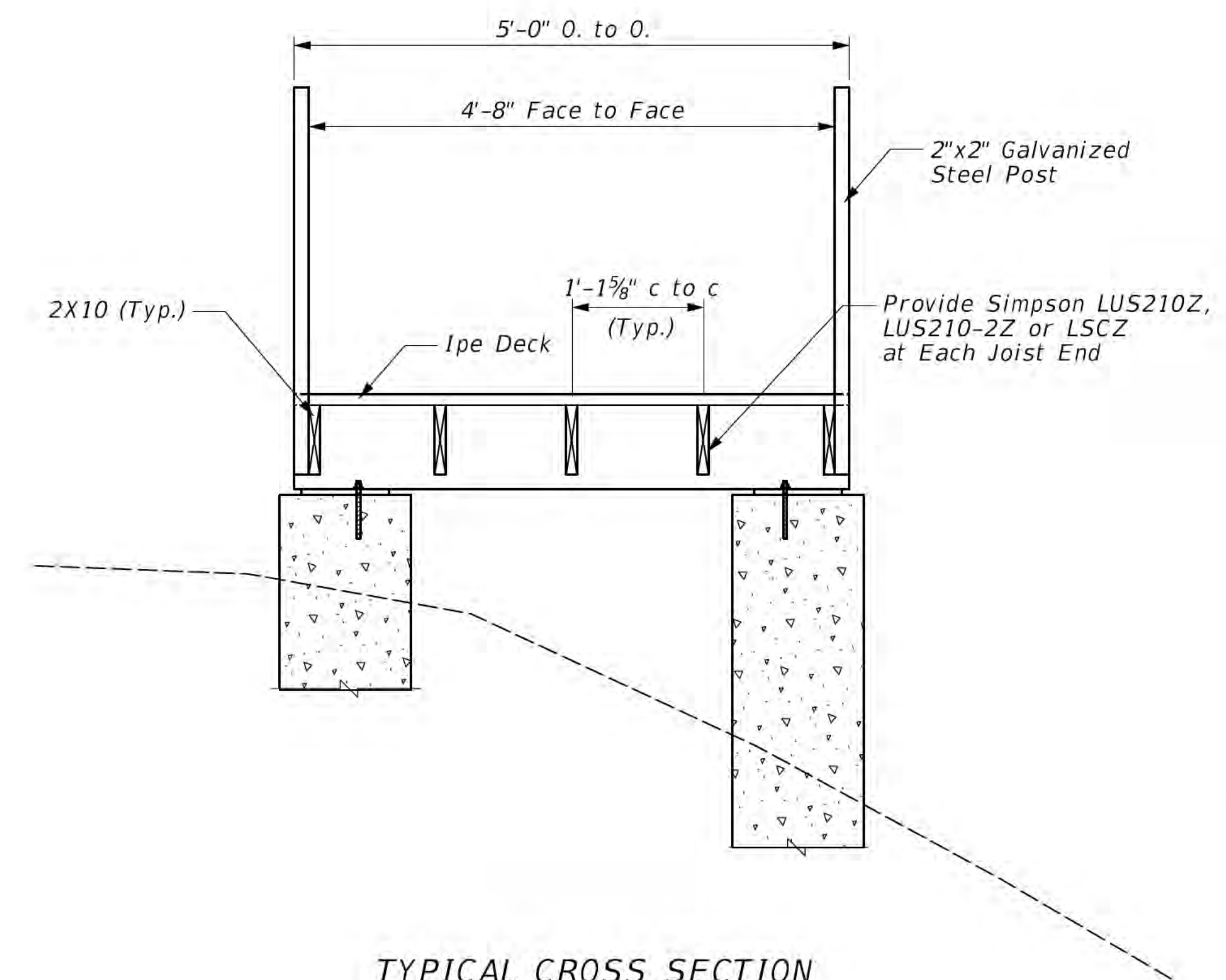




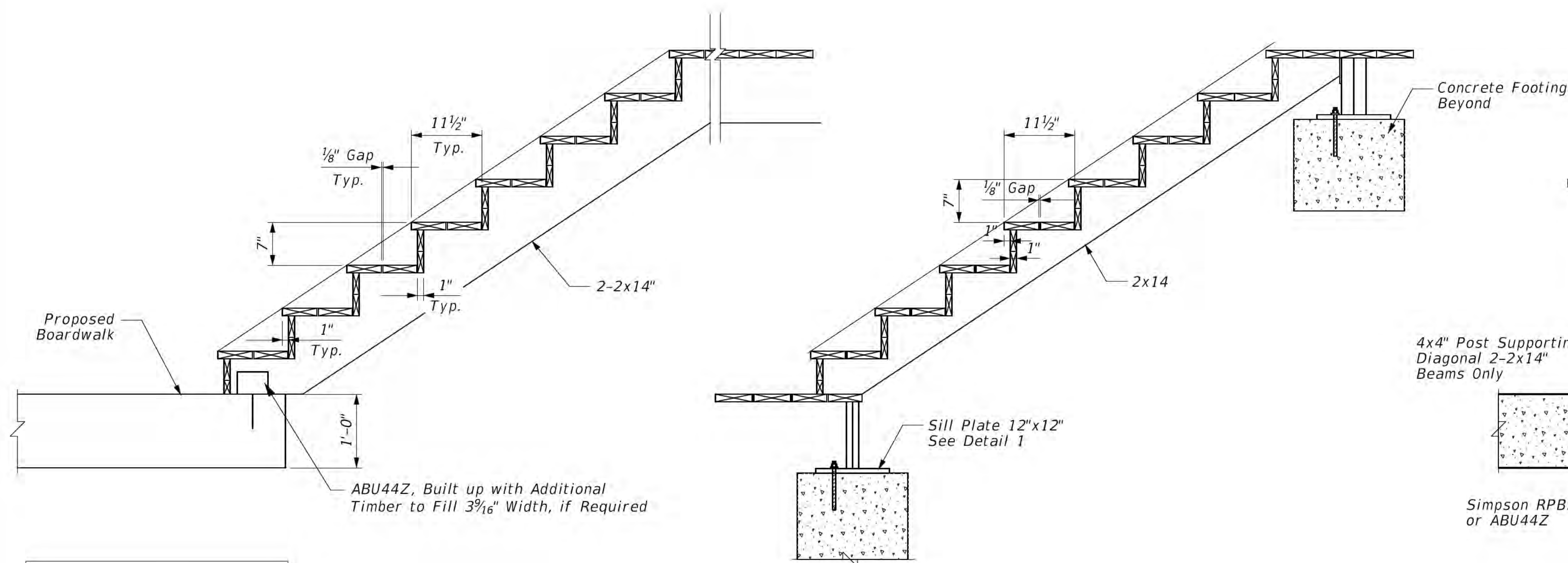
FOOTING DETAIL
*Typical Concrete Encasement for
Helical Piles Supporting Timber Posts*



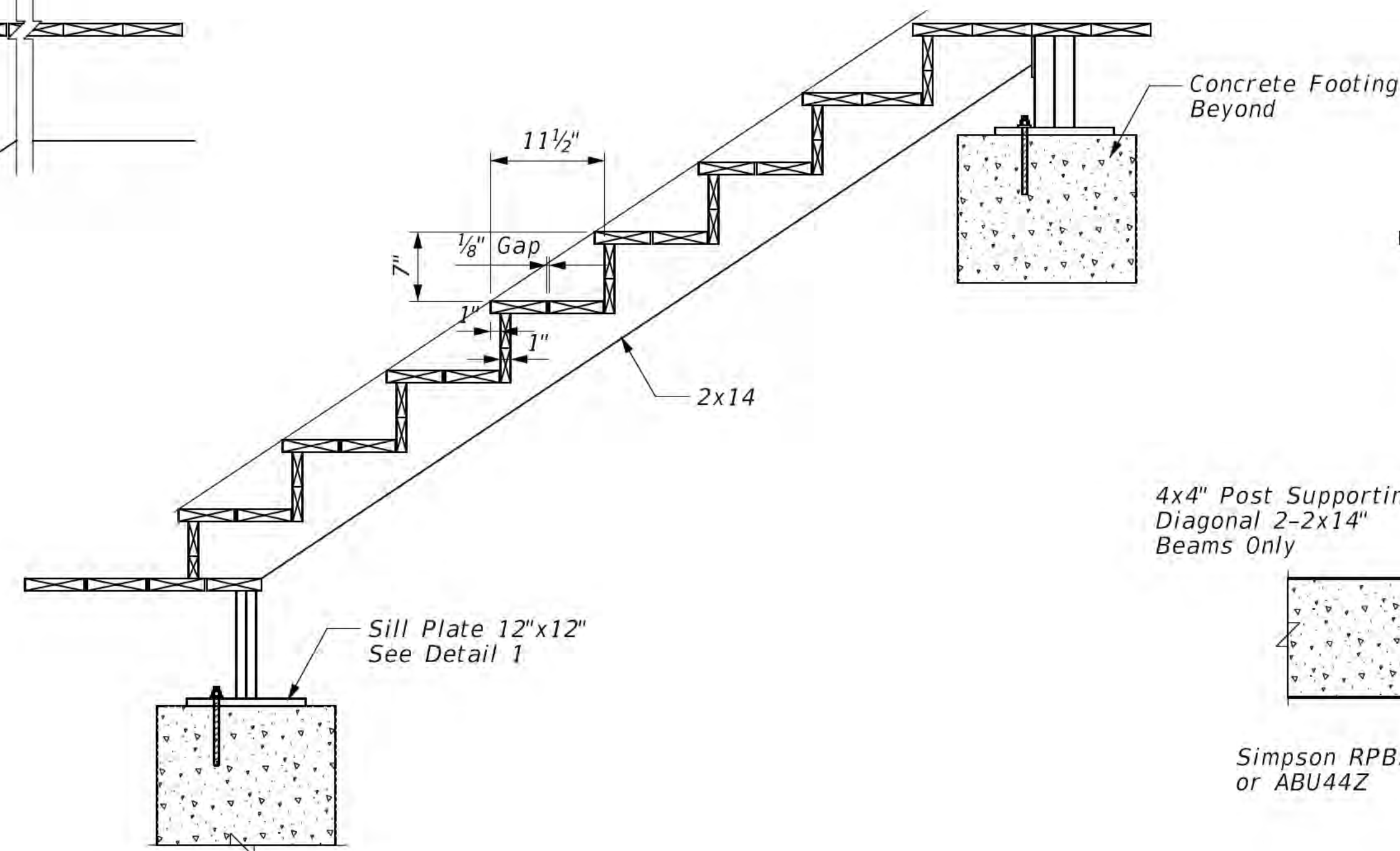
DECK SUPPORT DETAIL AT TOP STAIRS



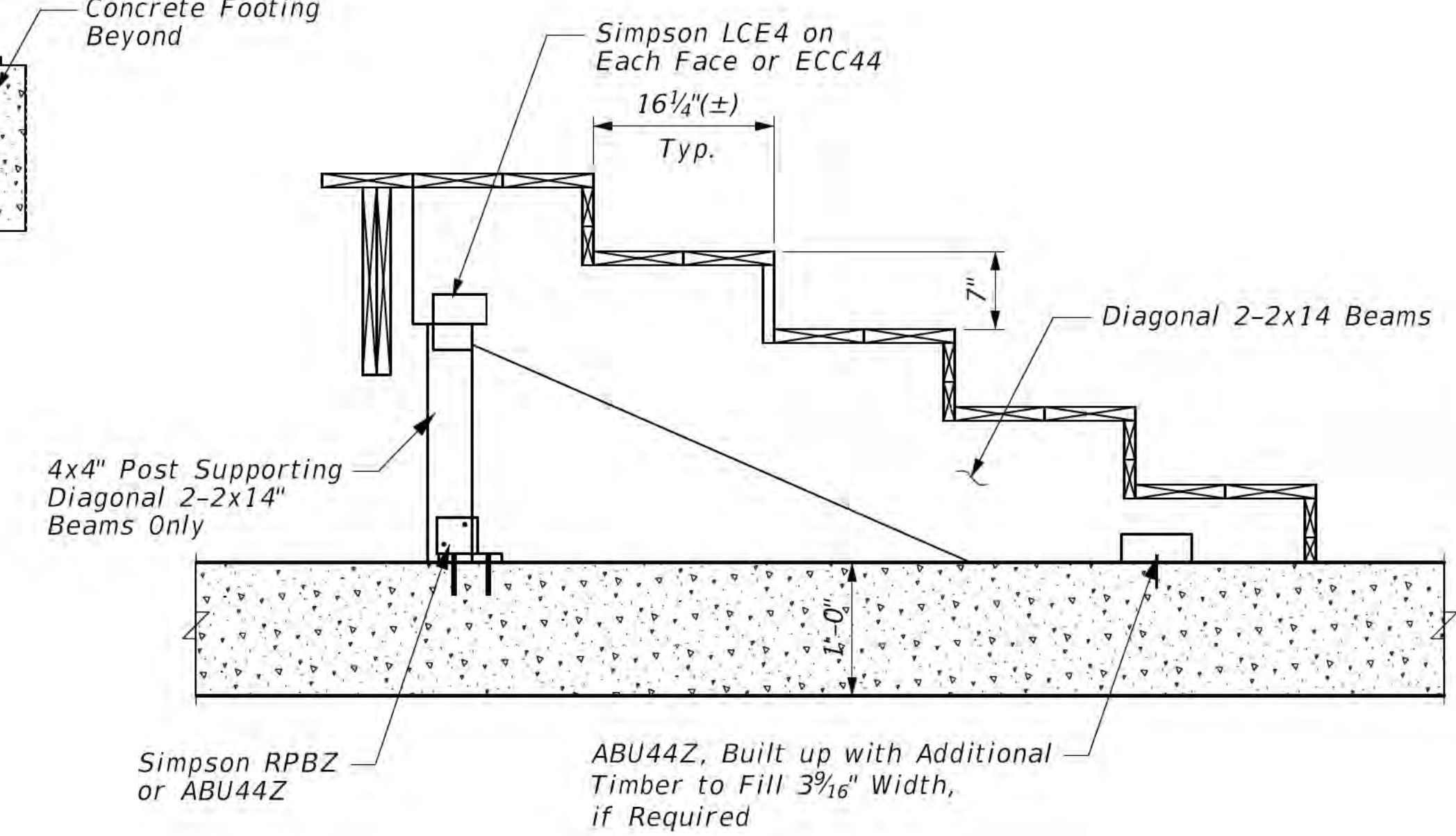
TYPICAL CROSS SECTION



SECTION A-A



SECTION B-B



SECTION C-C

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Winnetka Park District
Winnetka, IL

Graphic Scale

Scale

Drawing Title

STAIRS -
STRUCTURAL
DETAILS
(SHEET 1 OF 2)

Sheet No. **C176**



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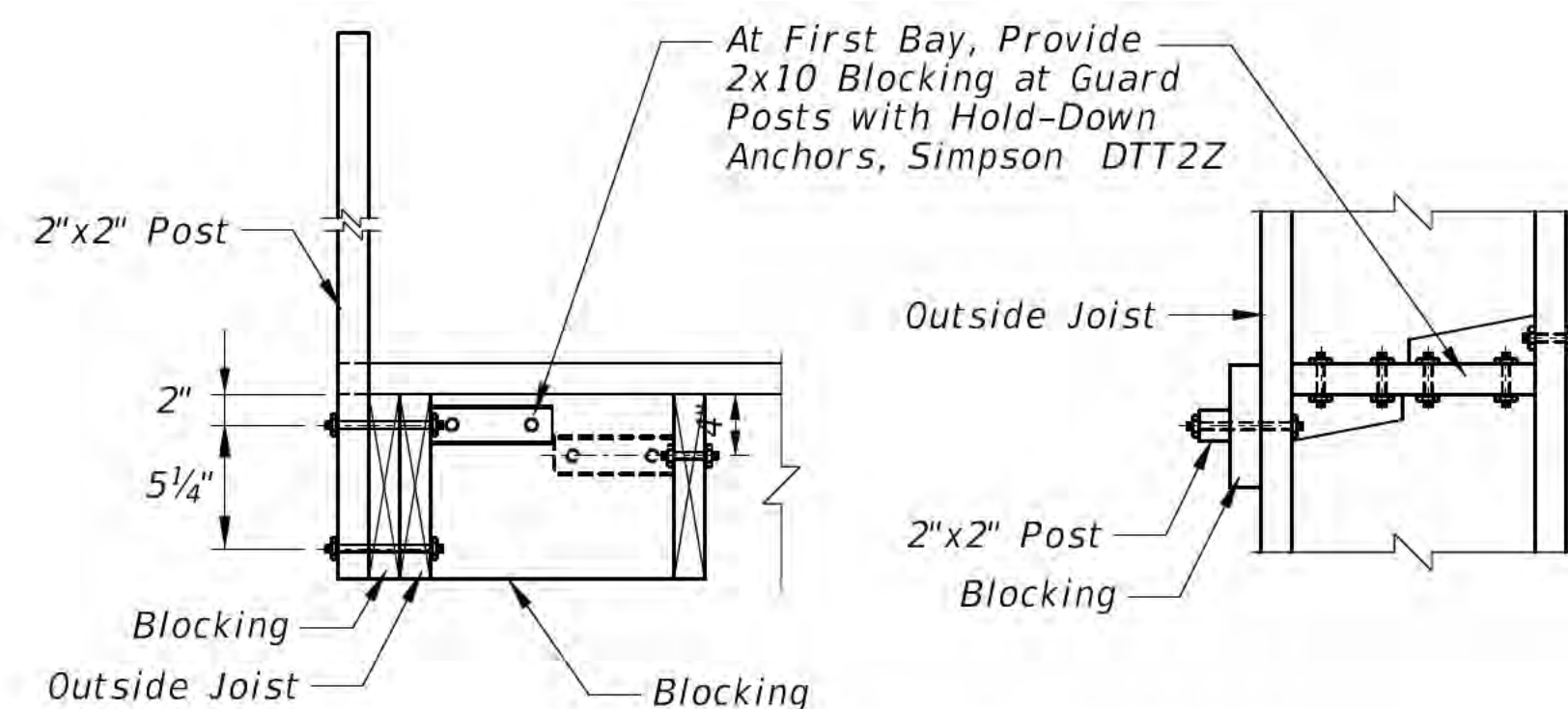
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Drawing Title

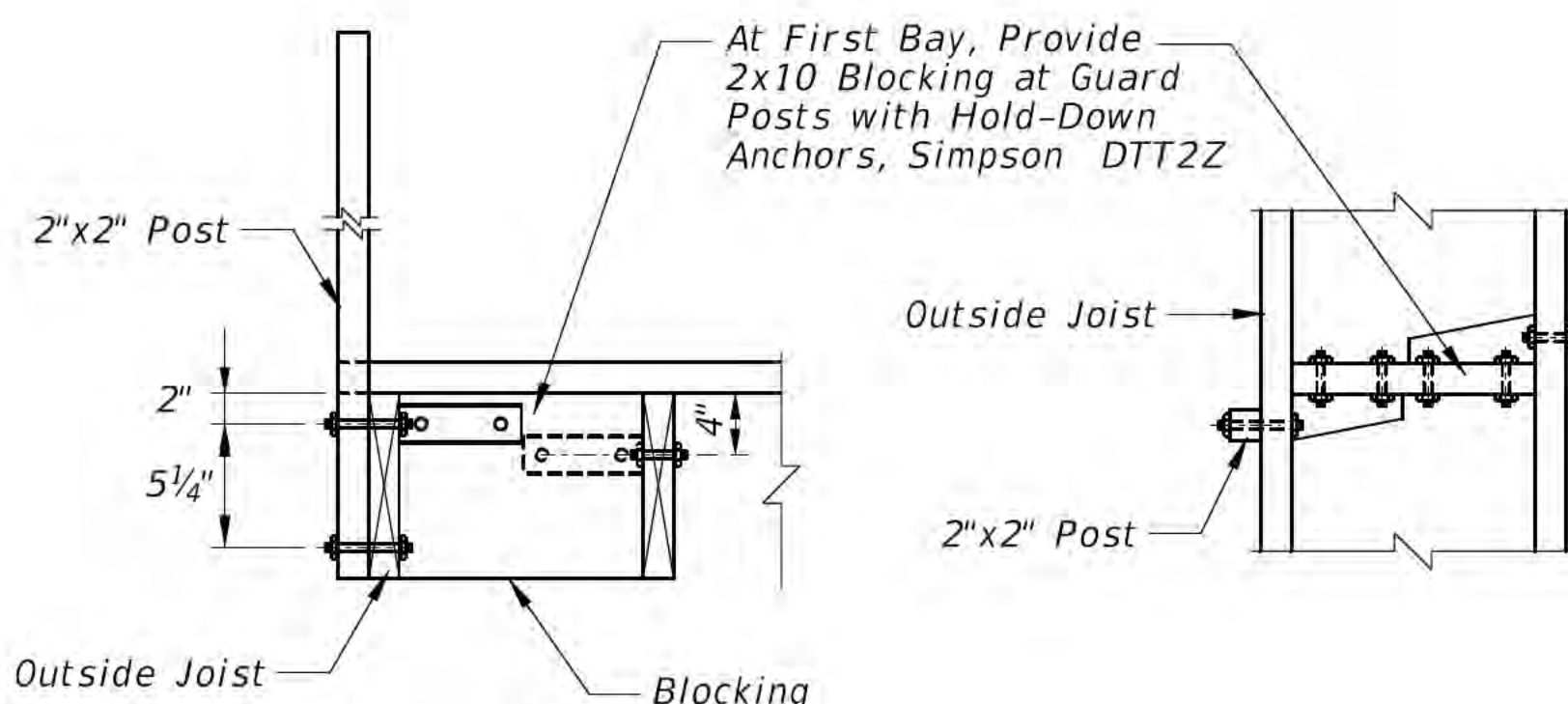
STAIRS-
STRUCTURAL
DETAILS
(SHEET 2 OF 2)

Sheet No.

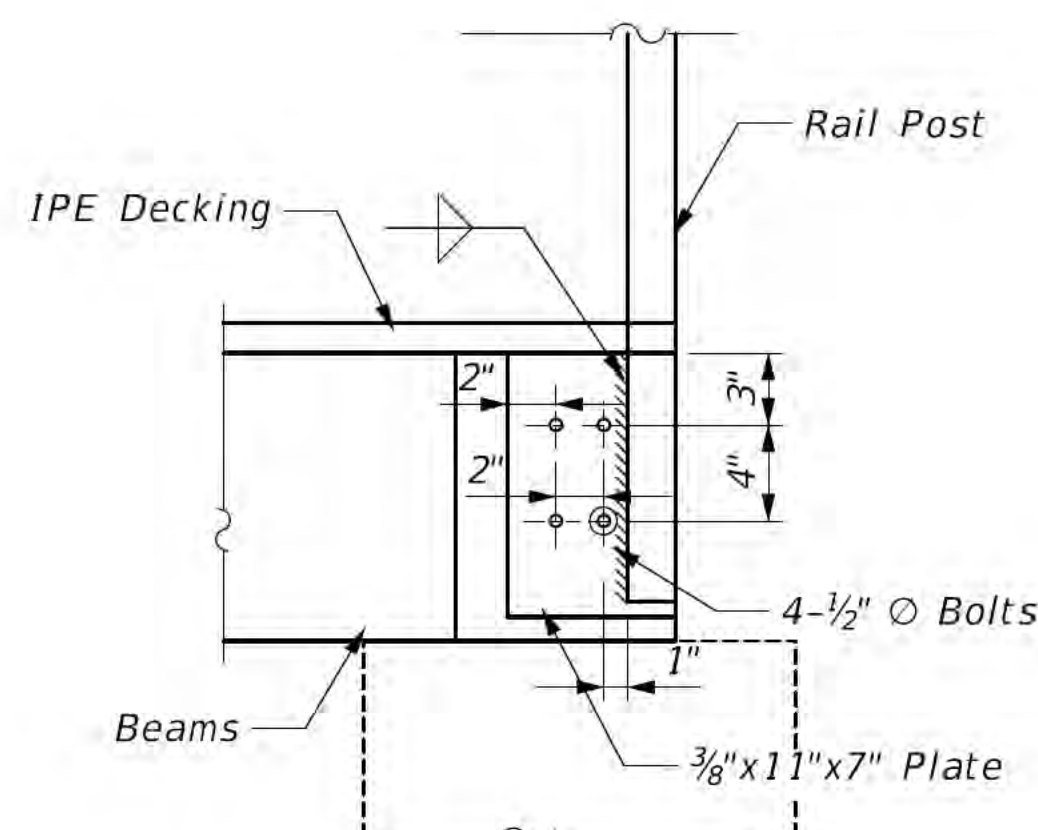
C177



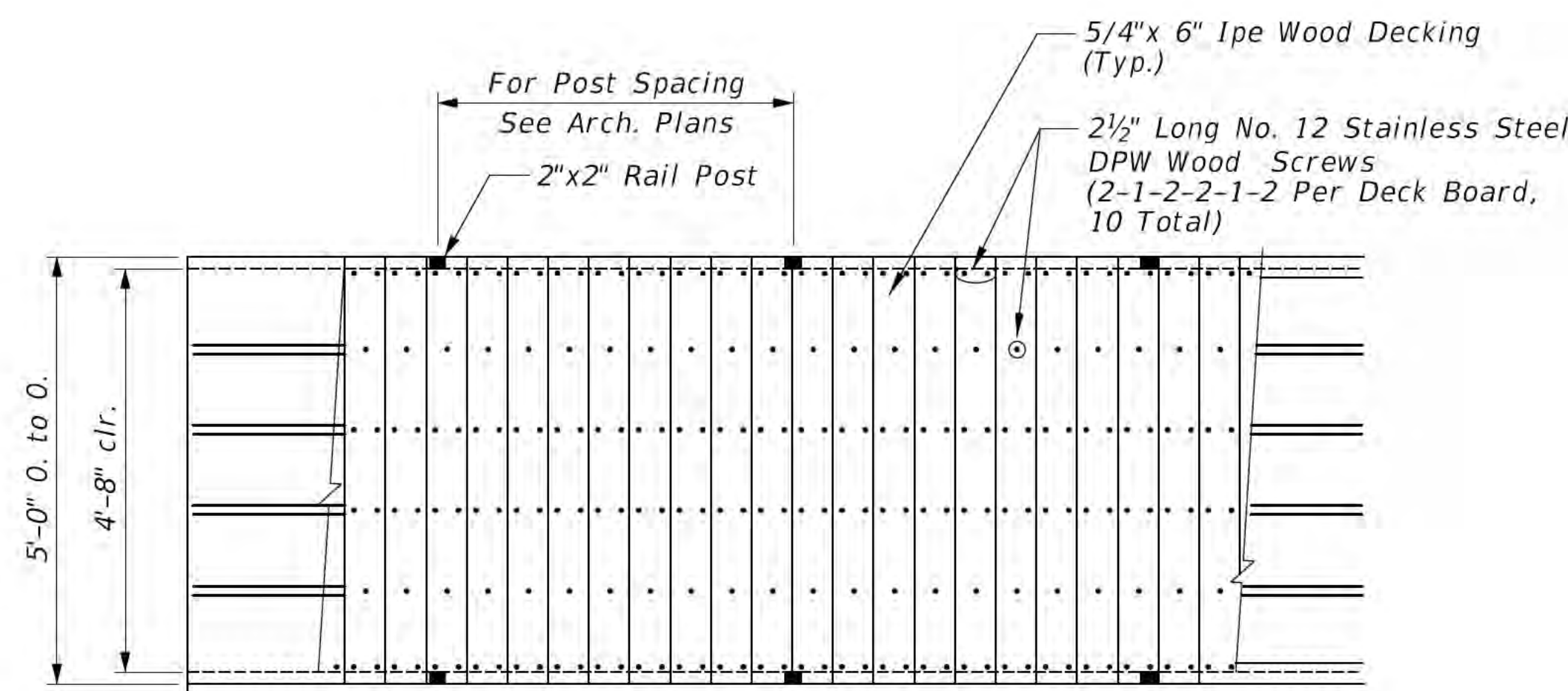
TYPICAL RAILING DETAIL



TYPICAL RAILING DETAIL



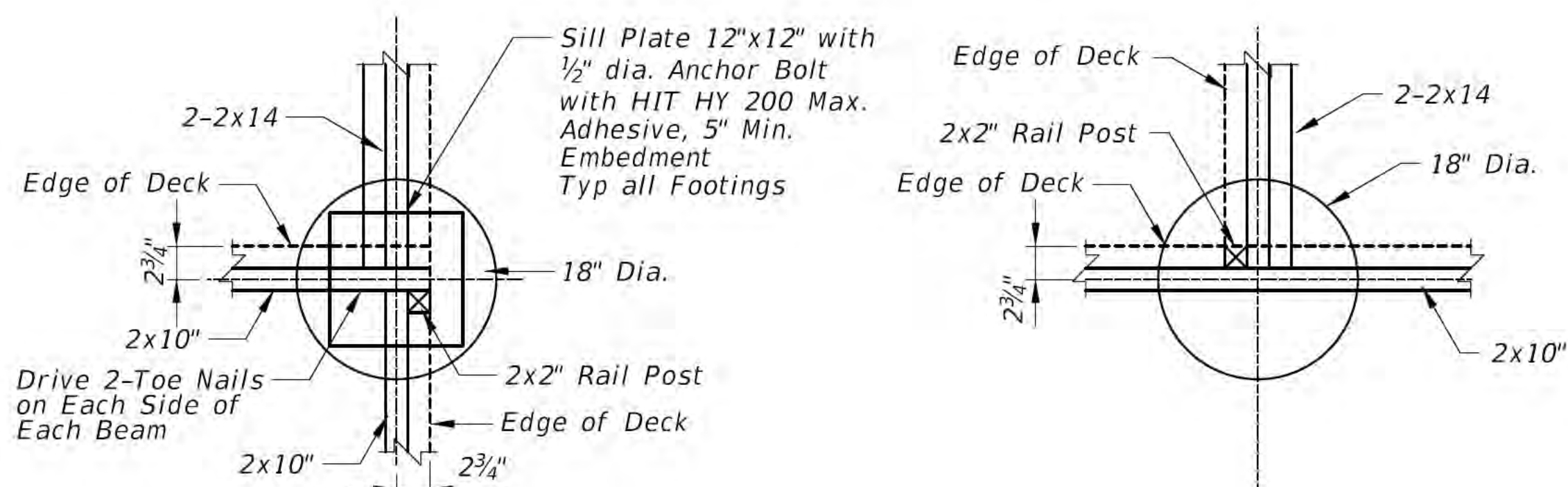
RAIL POST DETAIL AT DECK CORNERS



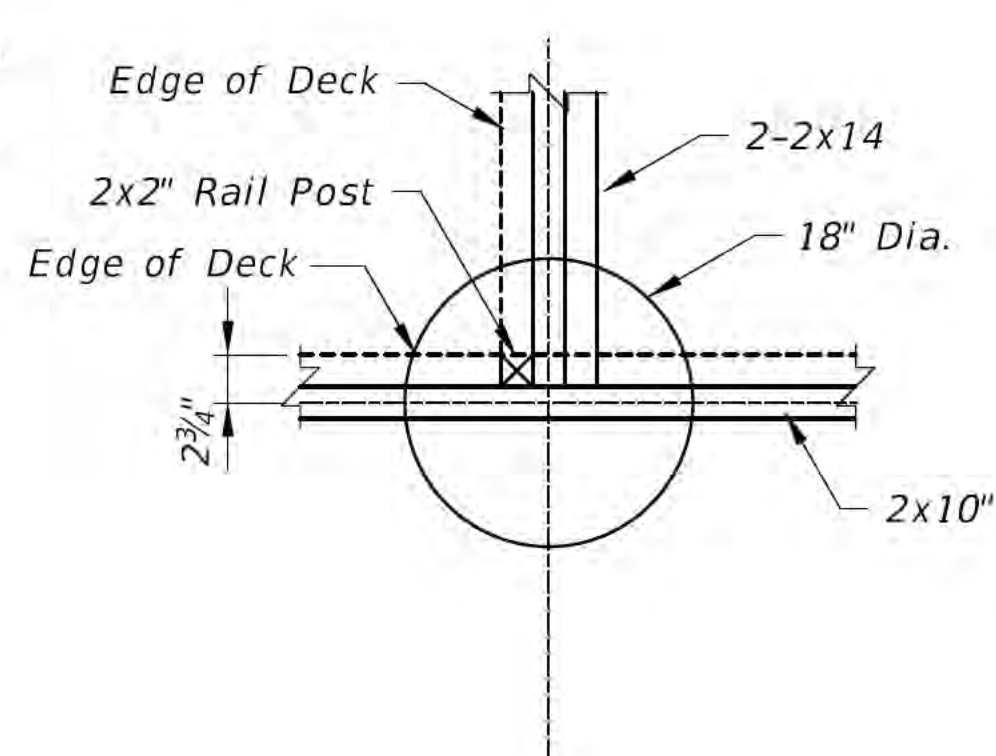
* NOTE: All Boards Must Be Pre-Drilled

PARTIAL DECKING PLAN

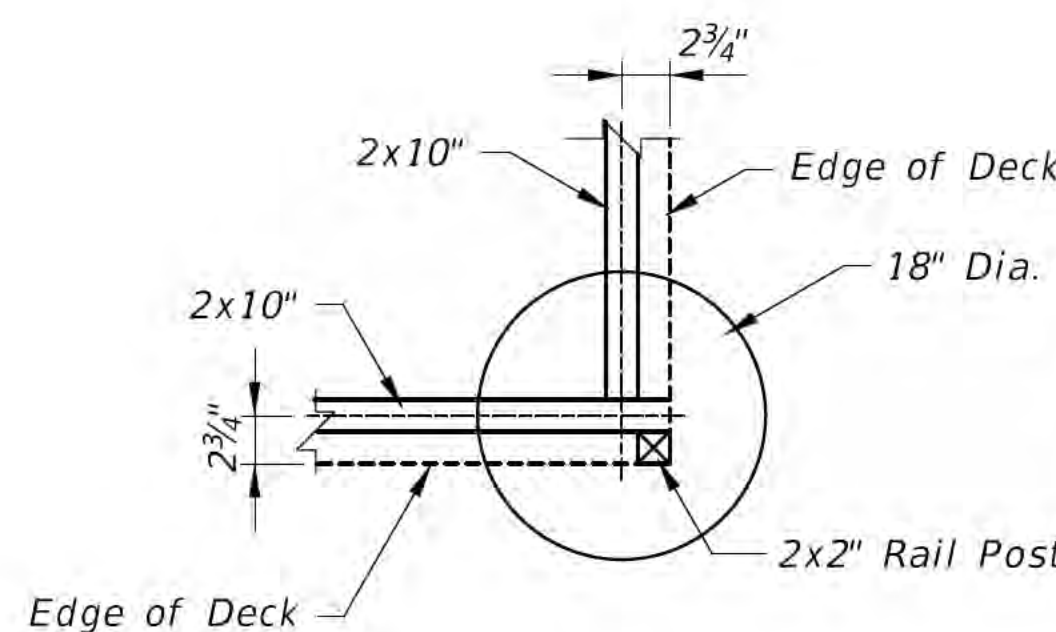
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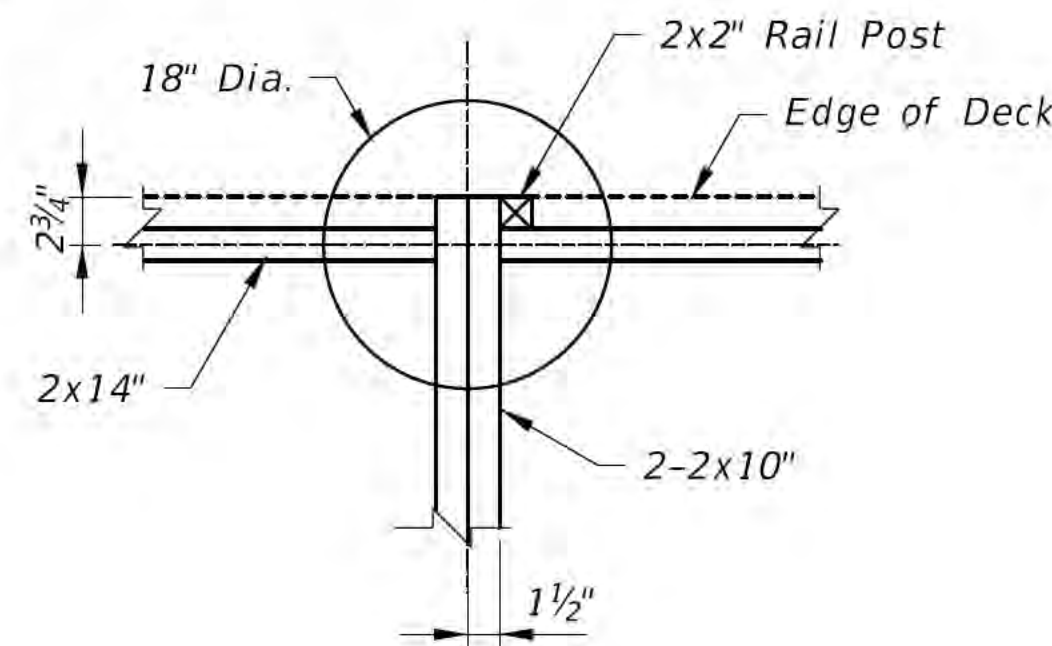
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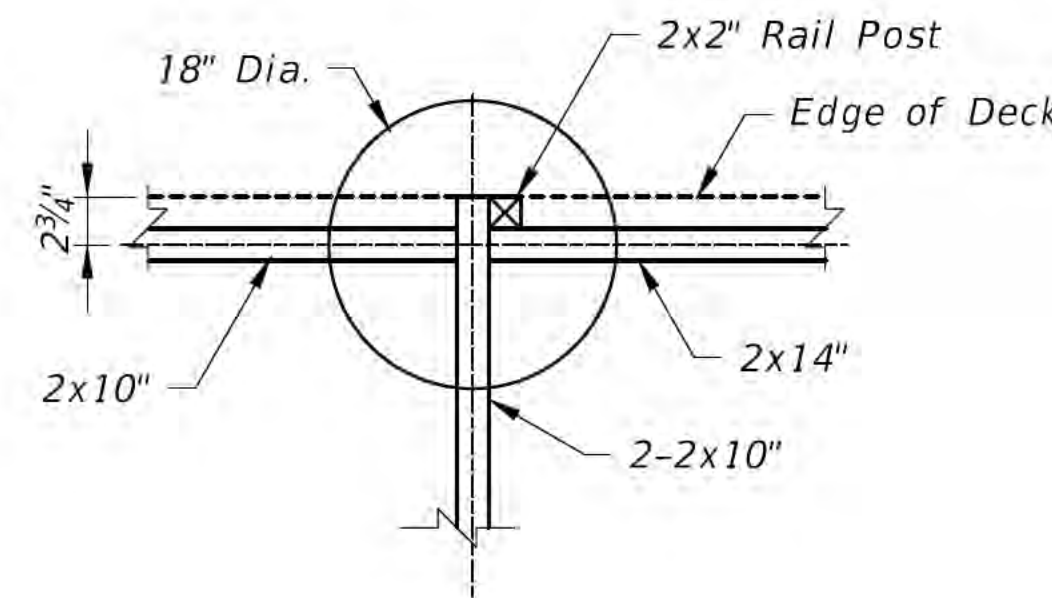
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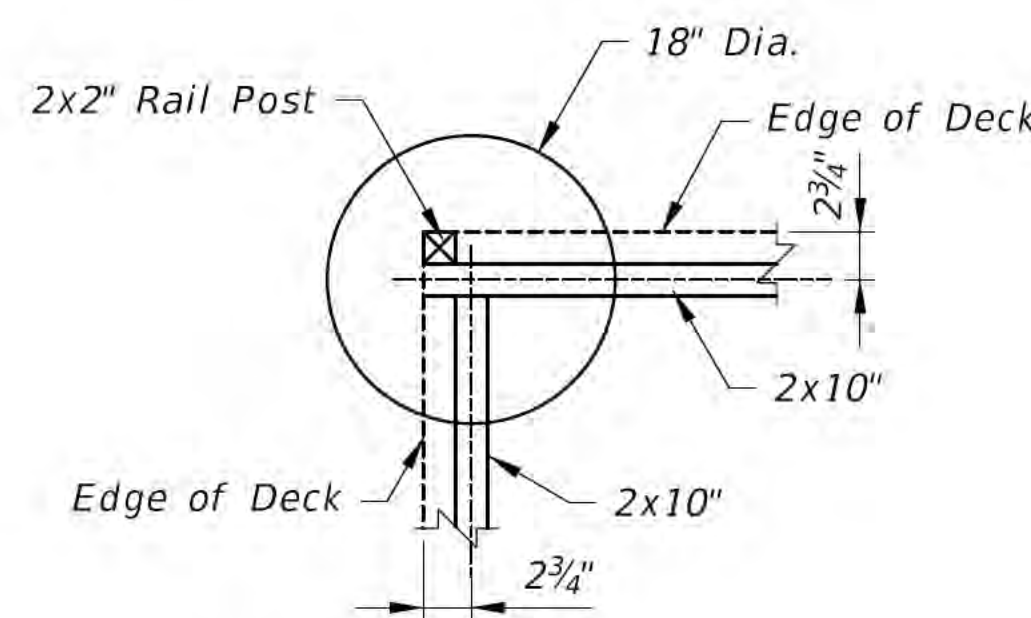
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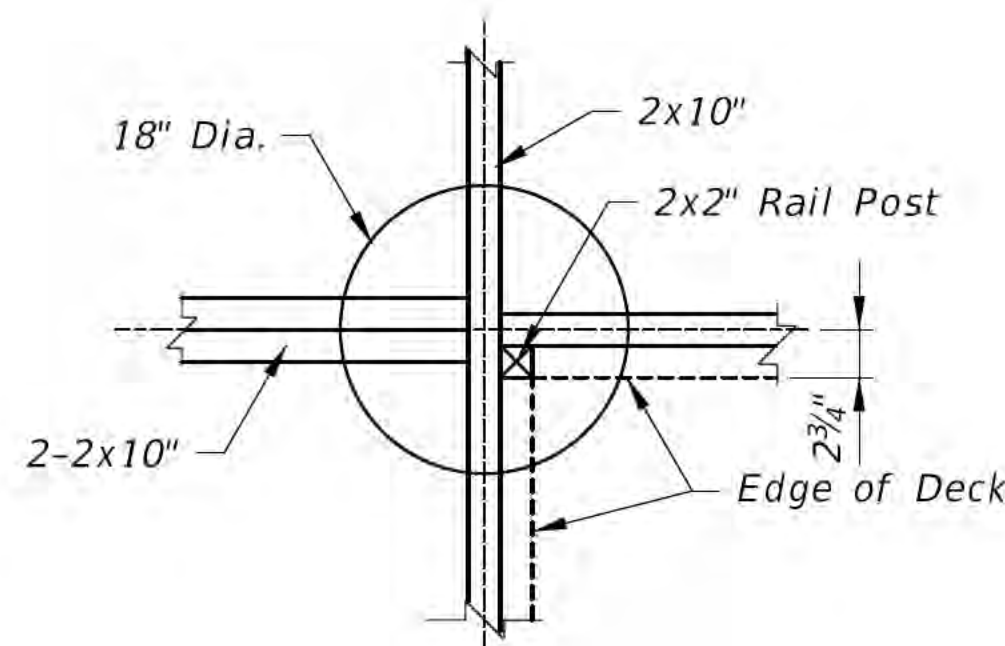
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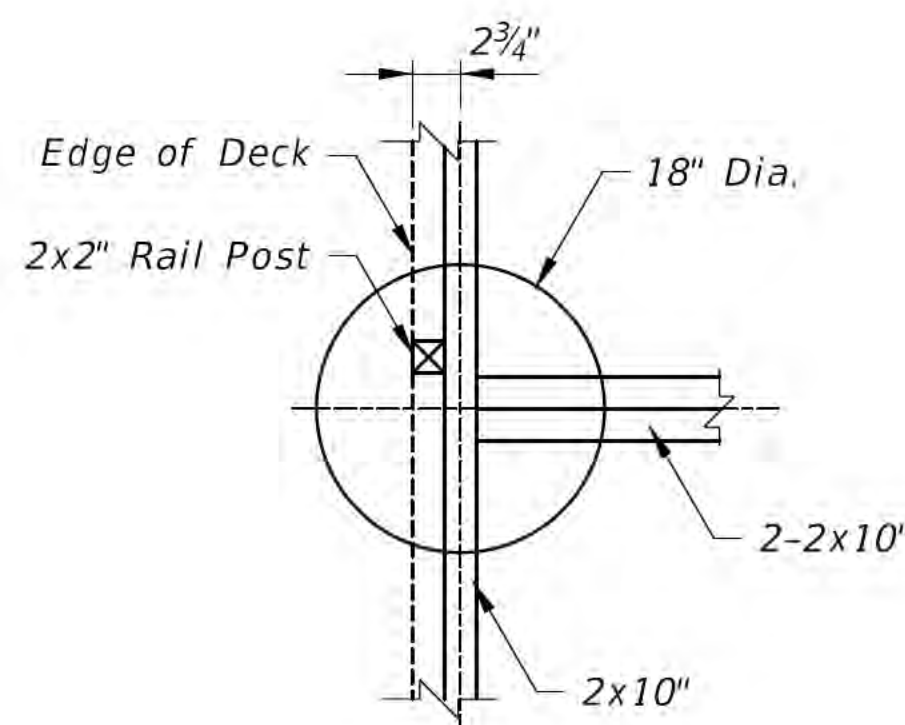
DETAIL 5



DETAIL 6



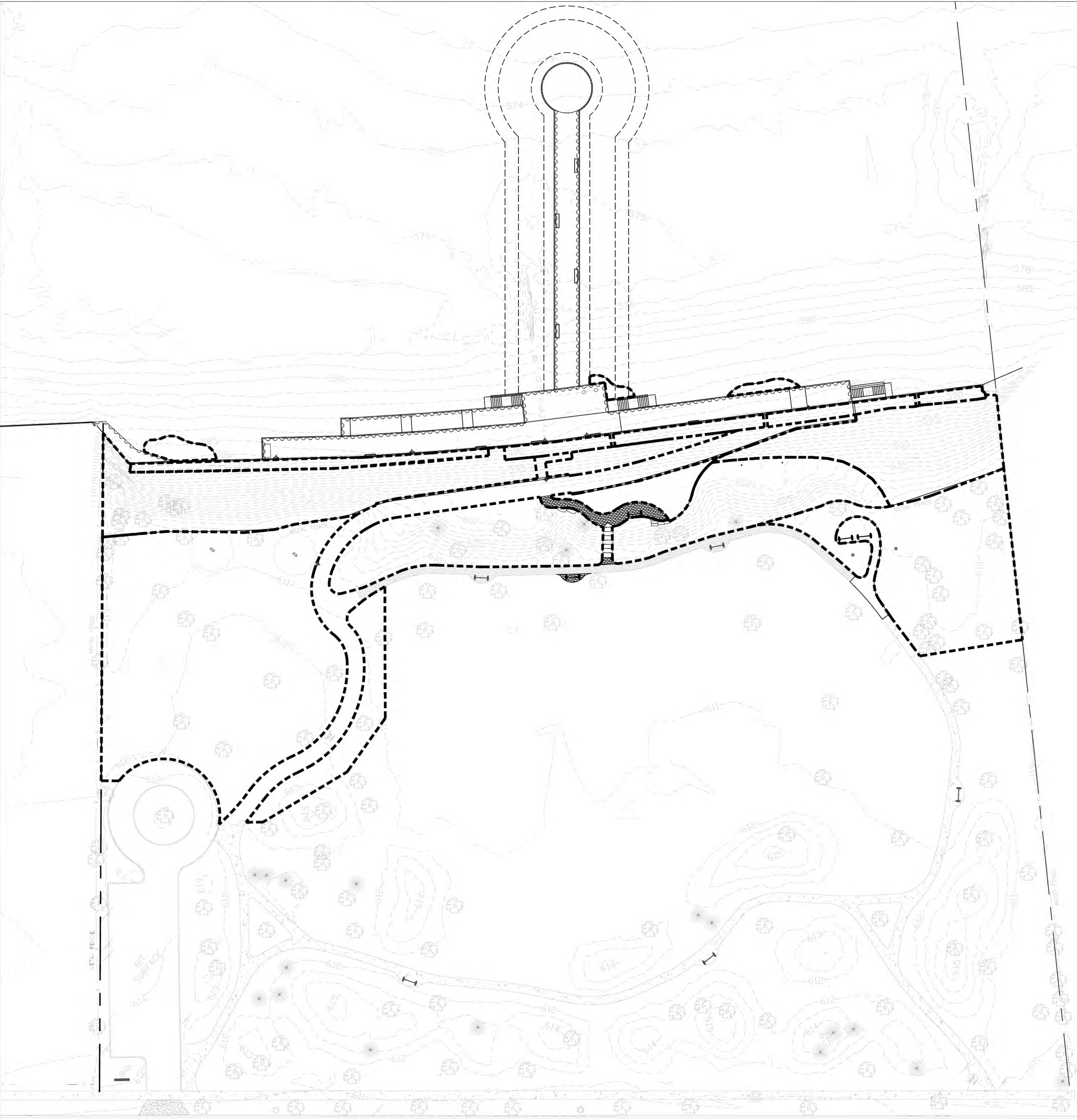
DETAIL 7



DETAIL 8

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LEGEND

----- PROJECT EXTENT BOUNDARY



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Building and Construction	07/19/24

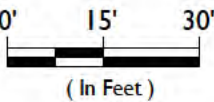
Project Title:

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Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1 inch = 30 Ft.

Drawing Title

OVERALL RESTORATION
PLAN

Sheet No.

C178

PLANTING AND SEEDING NOTES

Bluff Restoration Zone - 23,755 sq. ft.

- Green Gabion Wall - 3210 sq. ft**

- Dune Grass Planting Zone - 800 sq. ft.**

- Turf Restoration Zone - 31,162 sq. ft.**

- | Bluff Restoration Zone Planting List | | |
|--------------------------------------|--------------------|-------------|
| Centennial Park | | |
| Species | Common Name | Plug Amount |
| <i>Asclepias tuberosa</i> | Butterfly weed | 1432 |
| <i>Calamovilfa longifolia</i> | Sand Reed Grass | 2046 |
| <i>Clematis virginiana</i> | Virgin's bower | 409 |
| <i>Elymus virginicus</i> | Virginia Wild Rye | 2046 |
| <i>Euphorbia corollata</i> | Flowering Spurge | 409 |
| <i>Helianthus occidentalis</i> | Western sunflower | 614 |
| <i>Monarda fistulosa</i> | Wild bergamot | 409 |
| <i>Panicum virgatum</i> | Switch grass | 1227 |
| <i>Penstemon hirsutus</i> | Hairy beard-tongue | 409 |
| <i>Potentilla simplex</i> | Common cinquefoil | 409 |
| <i>Ruellia humilis</i> | Wild petunia | 409 |
| <i>Schizachyrium scoparium</i> | Little Bluestem | 2046 |
| <i>Symphytichtrichum ericoides</i> | Heath Aster | 409 |
| <i>Symphytichtrichum sericeum</i> | Silky aster | 409 |
| <i>Tephrosia virginiana</i> | Goat's rue | 409 |
| <i>Tradescantia ohiensis</i> | Ohio spiderwort | 409 |
| <i>Verbena stricta</i> | Hoary vervain | 409 |
| Total | | 13910 |

Bluff Restoration Zone Seed List	
Centennial Park	
Species	Common Name
<i>Asclepias tuberosa</i>	Butterfly weed
<i>Calamovilfa longifolia</i>	Sand Reed Grass
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Monarda fistulosa</i>	Wild bergamot
<i>Panicum virgatum</i>	Switch grass
<i>Penstemon hirsutus</i>	Hairy beard-tongue
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Tradescantia ohienis</i>	Ohio spiderwort
<i>Verbena stricta</i>	Hoary vervain

RESTORATION NOTES

INVASIVE SPECIES NOTES

Invasive and Noxious Species Removal and Control - 1.34 ac.

1. The Bluff Restoration Zone has steep, irregular slopes, and a relatively dense understory with some significant stands of invasive shrubs, trees, and vines. The native herbaceous plant community here is not particularly well established throughout most portions of the bluff restoration zone. There are small clusters of native spring ephemeral species that should be avoided during late-winter and early-spring target species treatment applications. The Turf Restoration and Dune Grass Planting Zones are included in the total acreage but do not require any target species treatments.
2. The contractor shall be responsible for submitting an Invasive Species Control Plan for review and approval prior to the start of any target species control. This plan will include the contractor's proposed schedule and treatment methodology for both woody and herbaceous target species.
3. All target non-native and invasive species are to be treated within the limits of the restoration project area as shown on the plan.
4. Only non-native tree and shrub species with a DBH < 8" are to be removed/treated as part of this project. Exceptions to the size class limit apply to invasive and highly aggressive species noted in the target species list.
5. All trees, shrubs, and vines greater than 1' in height shall have their stumps cut to a height less than or equal to 2" above the ground surface. Trees, shrubs, and vines less than 1' in height shall receive a foliar treatment with an appropriate selective herbicide once the leaves have fully emerged.
6. All cut woody species will be chipped and disposed of at an appropriate off-site area.
7. All cut stumps will be treated with an herbicide containing glyphosate as an active ingredient and applied at the manufacturer's recommended rate for dormant stump treatment. If the area of treatment is within 50' of the lakeshore, an herbicide approved for aquatic use shall be used. Cut stumps will be treated within 30 minutes of cutting. Contractors may propose the use of alternative herbicides as part of the Invasive Species Control Plan. The use of alternative herbicides would require the approval of the project engineer and would be done at no additional cost.
8. Any cut stumps that are not treated within the specified time limit, or cut to the correct height, should be recut and treated.
9. Target woody species removal and cut stump treatment will be conducted during the winter season of the contracted construction year when plants are dormant. Woody and herbaceous target species foliar treatments to begin in spring season of contracted construction year.
10. Quantity and timing of herbicide treatments will be dependent upon species to be controlled and should follow industry standard practices and herbicide manufacturer's recommendations to achieve an 95% reduction in target species cover by the end of the growing season of the contracted construction year.

Maintenance

1. Monthly inspections of the three restoration zones will be conducted to identify any areas with insufficient plant growth and/or areas of erosion.
2. Any bare areas larger than 4 square feet will be reseeded and/or replanted and mulch as necessary to obtain an even and vigorous stand of vegetation.
3. Any areas of erosion will be repaired as deemed appropriate to stabilize the eroded area in coordination with the engineer.
4. The contractor shall control non-native and invasive species to maintain a 5% or lower areal cover of the Bluff Restoration and Dune Grass Planting zones.

Target Species List		
Species	Common Name	Tree Removal Size Limit (If Applicable)
<i>Acer platanoides</i>	Norway Maple	≤8" DBH
<i>Ailanthus altissima</i>	Tree-of-Heaven	All Sizes
<i>Alliaria petiolata</i>	Garlic Mustard	
<i>Arctium minus</i>	Common Burdock	
<i>Artemisia vulgaris</i>	Common Mugwort	
<i>Berberis thunbergii</i>	Japanese Barberry	
<i>Celastrus orbiculatus</i>	Asian Bittersweet	
<i>Centaurea stoebe</i>	Spotted Knapweed	
<i>Cirsium arvense</i>	Canada Thistle	
<i>Conium maculatum</i>	Poison hemlock	
<i>Dipsacus</i> spp.	Teasel	
<i>Elaeagnus umbellata</i>	Autumn Olive	
<i>Euonymus alatus</i>	Winged Euonymus	All Sizes
<i>Euonymus fortunei</i>	Winter creeper	
<i>Hedera</i> spp.	Ivy	
<i>Humulus japonicus</i>	Japanese Hop	
<i>Leymus arenarius</i>	European Lyme Grass	
<i>Ligustrum</i> spp.	Privet	All Sizes
<i>Lonicera japonica</i>	Japanese honeysuckle	
<i>Lonicera</i> spp.	Bush honeysuckles	All Sizes
<i>Lotus corniculatus</i>	Bird's Foot Trefoil	
<i>Lysimachia nummularia</i>	Moneywort	
<i>Lythrum salicaria</i>	Purple Loosestrife	
<i>Melilotus</i> spp.	Sweet Clover	
<i>Morus alba</i>	White Mulberry	All Sizes
<i>Pastinaca sativa</i>	Wild Parsnip	
<i>Phalaris arundinacea</i>	Reed Canary Grass	
<i>Phragmites australis</i>	Common Reed	
<i>Reynoutria</i> spp.	Knotweed	
<i>Rhamnus cathartica</i>	Common Buckthorn	All Sizes
<i>Rhus typhina</i>	staghorn sumac	≤4" DBH
<i>Robinia pseudoacacia</i>	Black Locust	All Sizes
<i>Rosa multiflora</i>	Multiflora Rose	
<i>Securigera varia</i>	Crown Vetch	
<i>Solidago sempervirens</i>	Seaside Goldenrod	
<i>Typha</i> spp.	Cattail	
<i>Ulmus pumila</i>	Siberian Elm	All Sizes
<i>Vinca</i> spp.	Periwinkle	
<i>Vitis</i> spp.	Grapevines	
*List includes some of the region's commonly encountered noxious and invasive species, but not limited to this list.		



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Building and Construction	07/19/24

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Graphic Scale

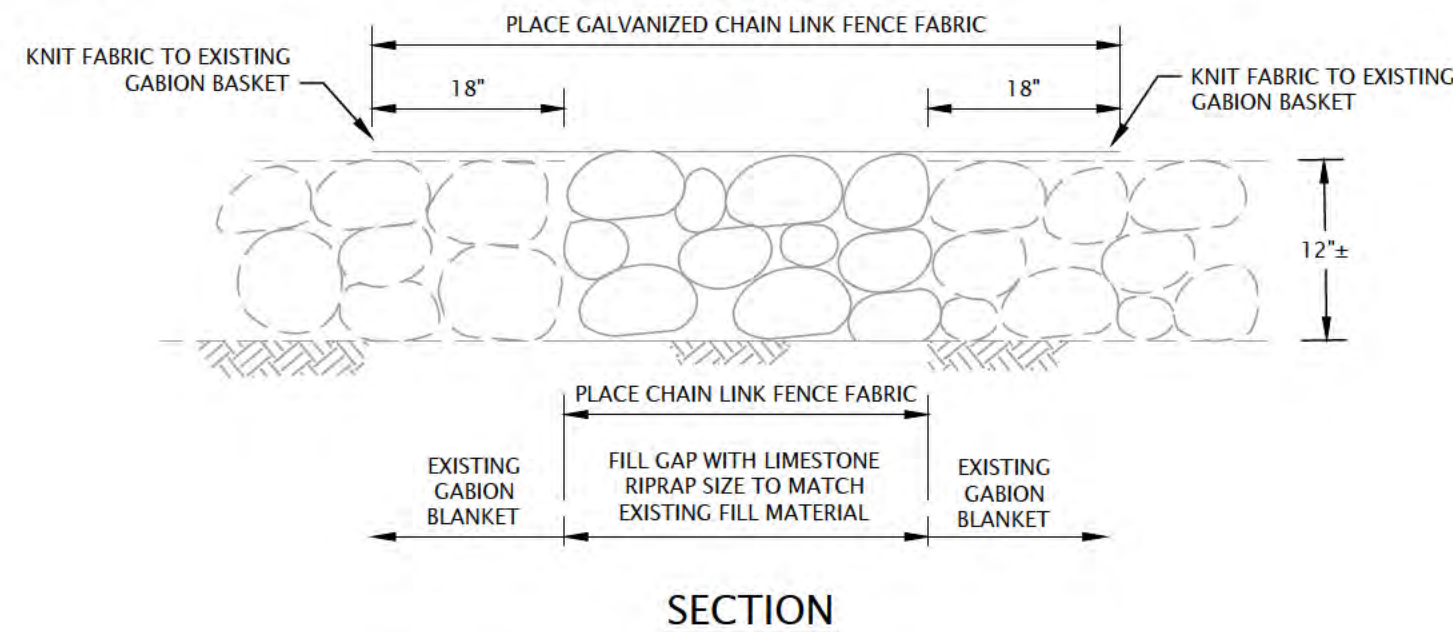
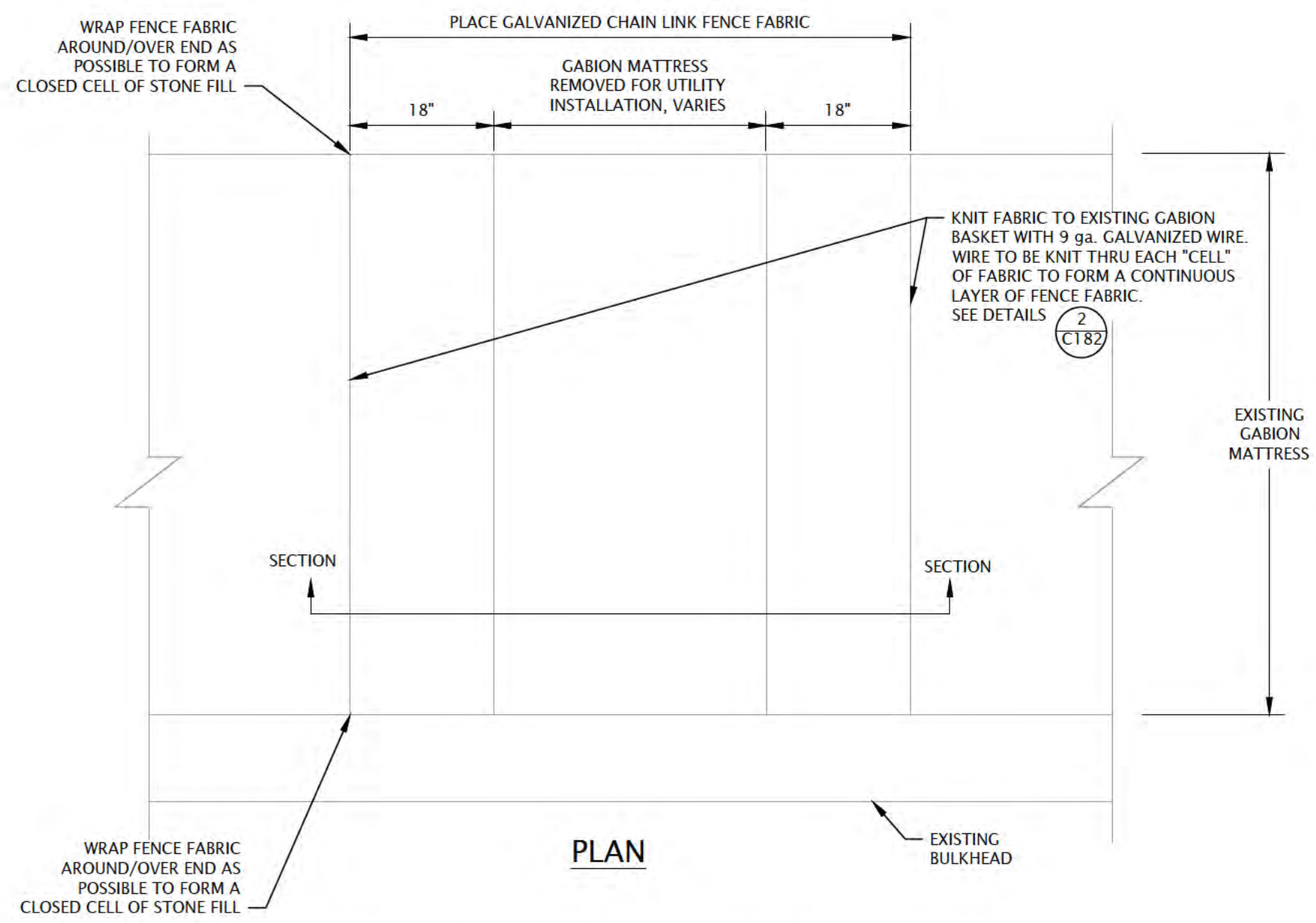
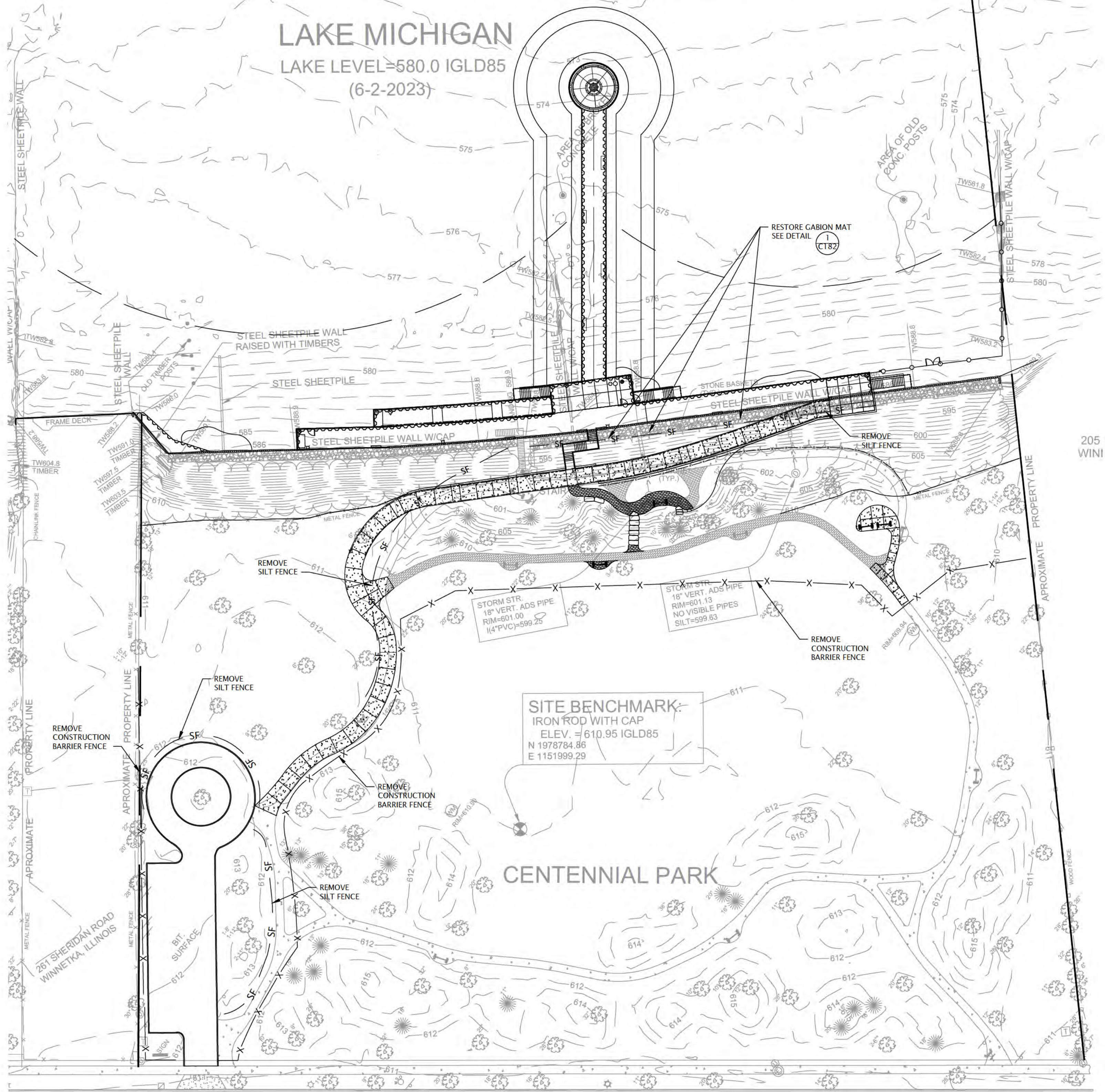
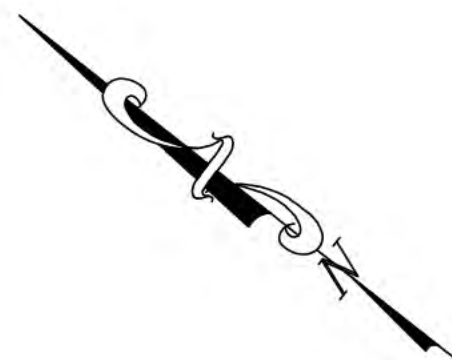
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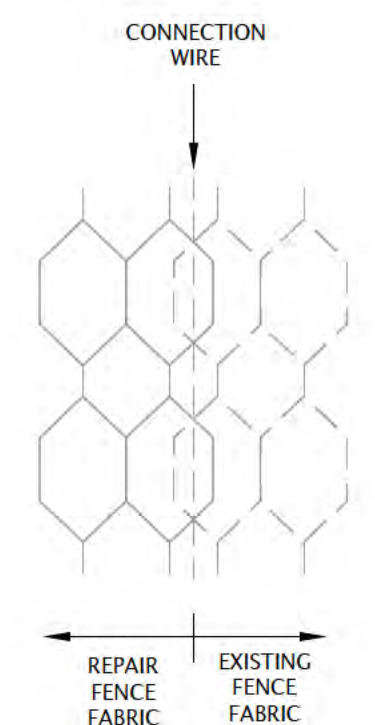
RESTORATION NOTES

Sheet No.

C181



1 GABION MATTRESS RESTORATION
SCALE : NOT TO SCALE



2 FENCE FABRIC CONNECTION
NOT TO SCALE

- NOTES:**
- SEE SHEET C100 FOR LEGEND OF EXISTING CONDITIONS.
 - CONTRACTOR WILL BE PROVIDED AUTOCAD DRAWING FILE FOR CONSTRUCTION LAYOUT AFTER AWARD OF CONTRACT.
 - LIMITS OF CONSTRUCTION ARE AS SHOWN UNLESS OTHERWISE NOTED.
 - BEFORE EXCAVATION OR DEMOLITION, CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING JULIE AND APPROPRIATE UTILITY COMPANIES FOR UTILITY LOCATIONS.



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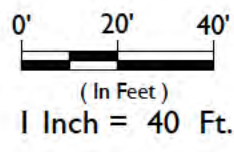
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Prepared For:

Winnetka Park District
Winnetka, IL

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Scale 1 Inch = 40 Ft.

Drawing Title

Site Closure Plan

Sheet No.

C182

"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."

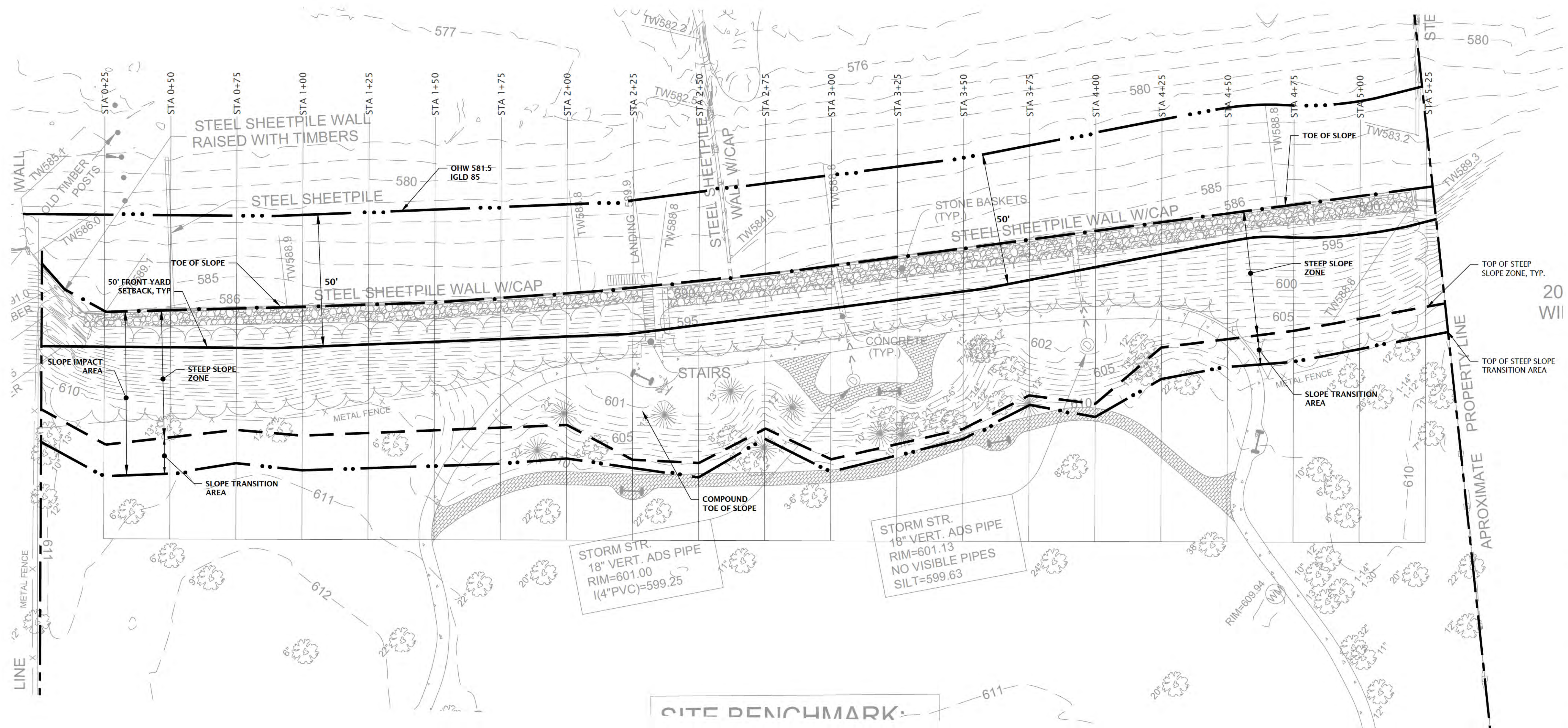


SHERIDAN ROAD

NOTE:
RESTORE/SEED/MULCH ALL TRENCHING AND DISTURBANCE FROM SILT FENCE INSTALLATION AND REMOVAL.



Sheet No. CS - 6A

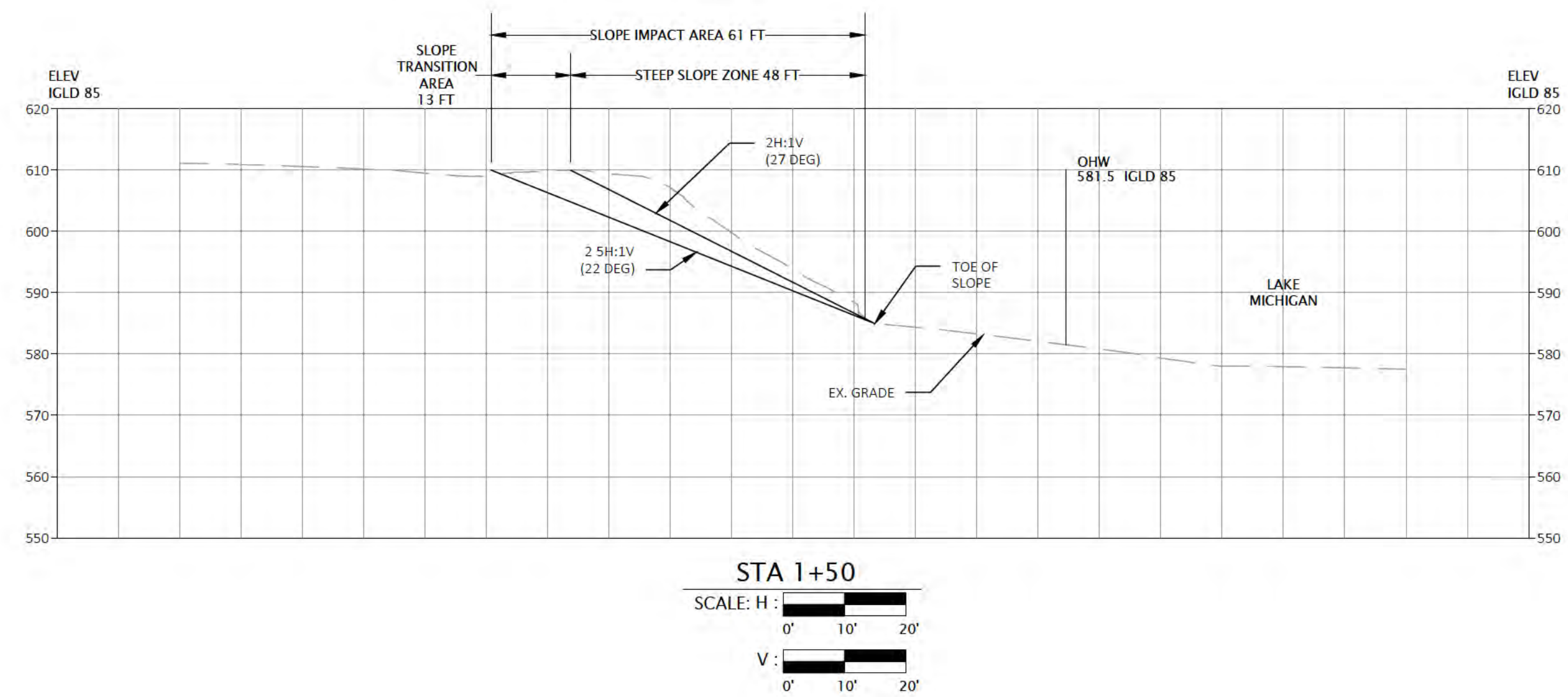
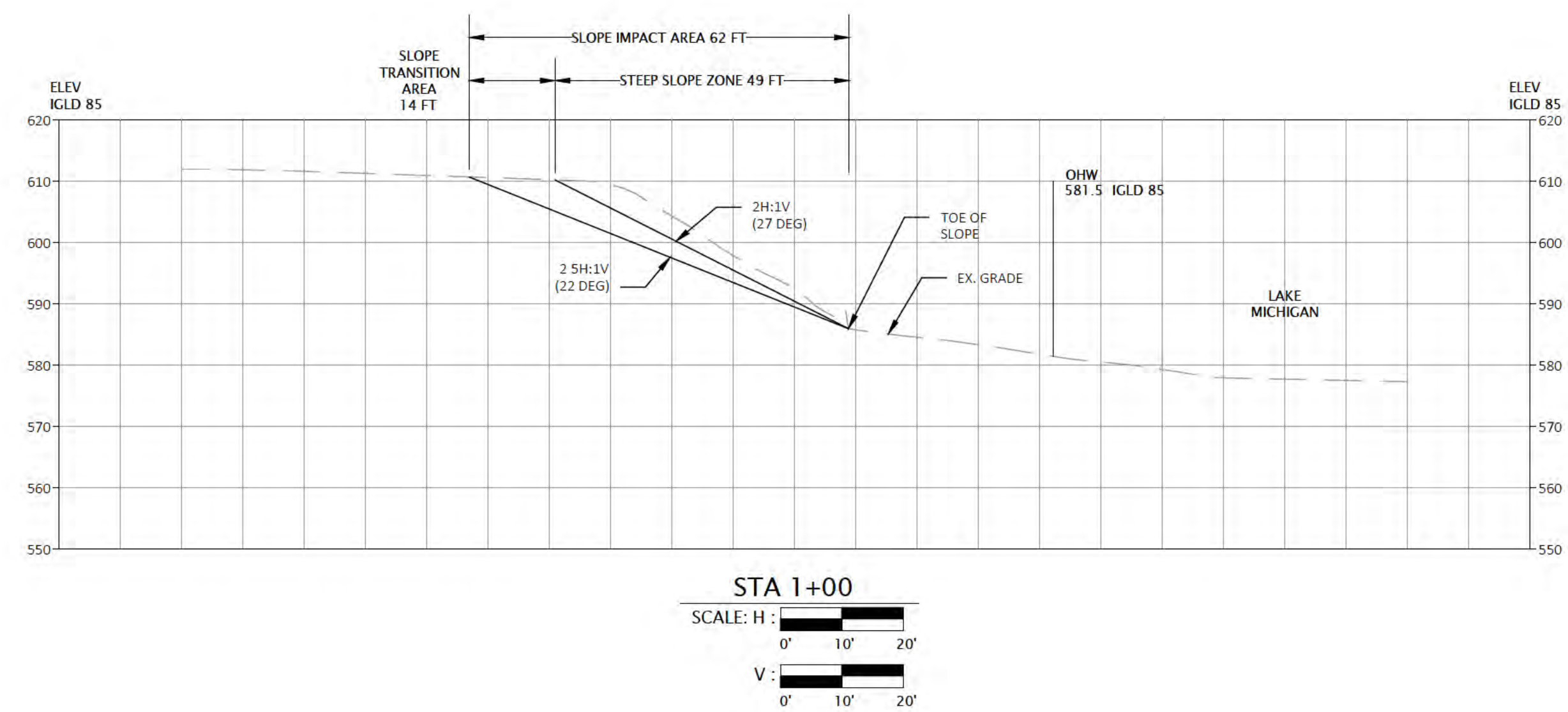
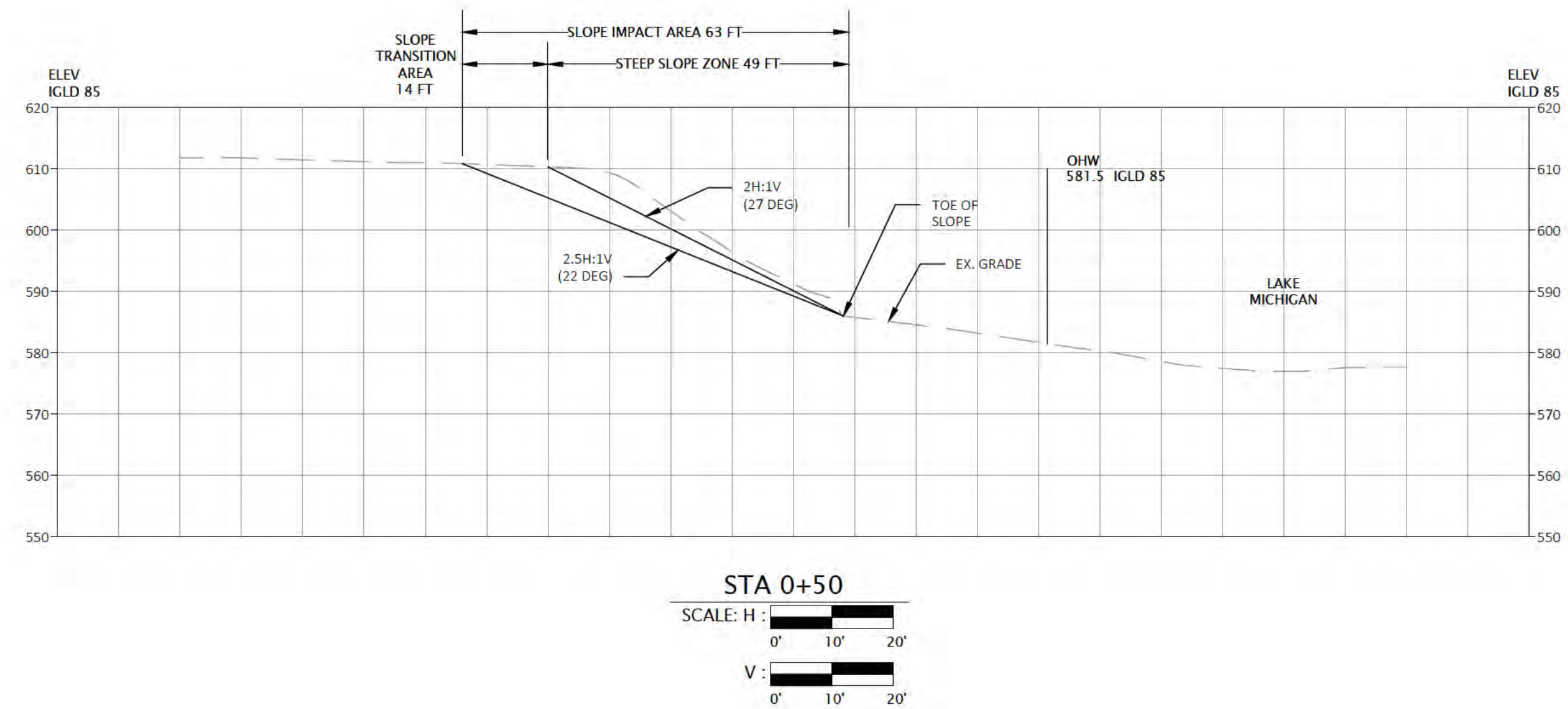
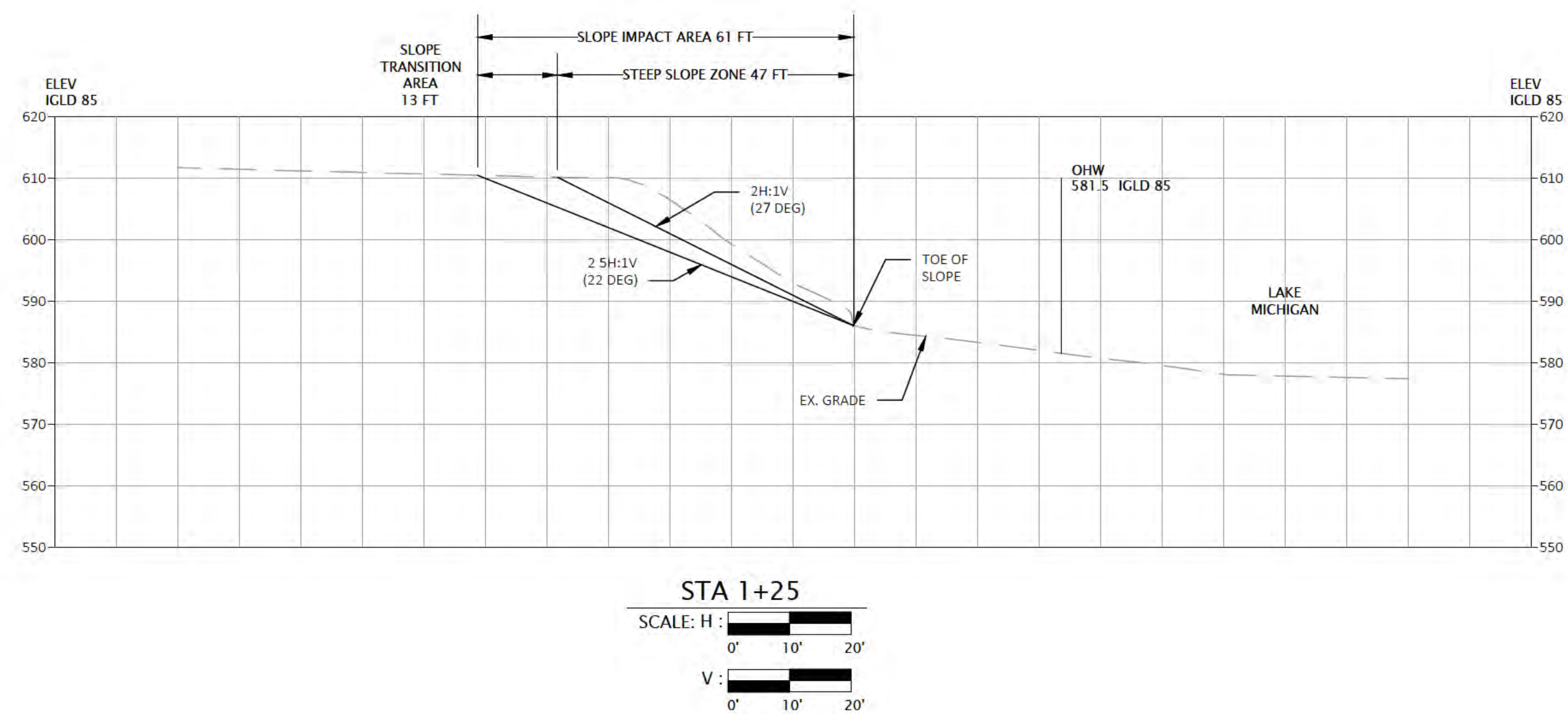
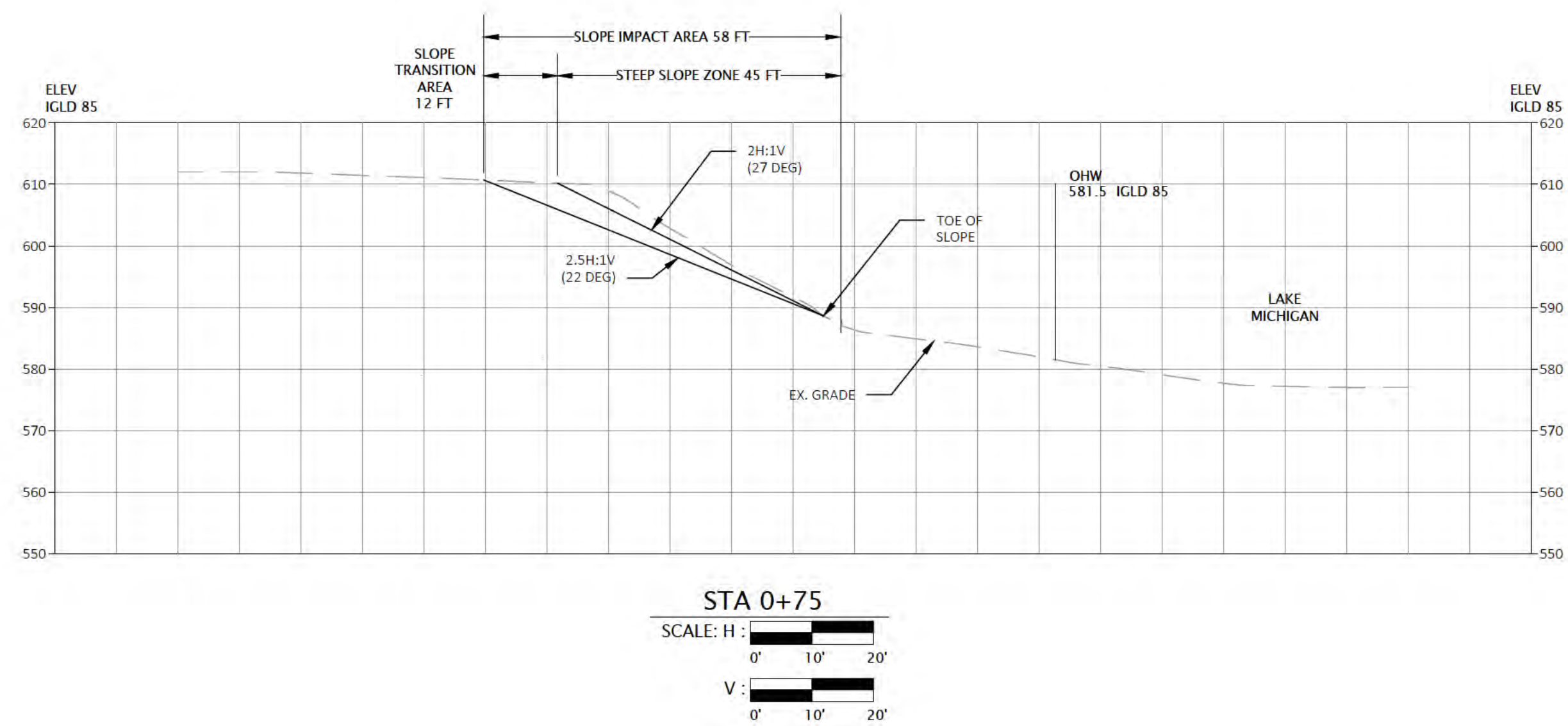
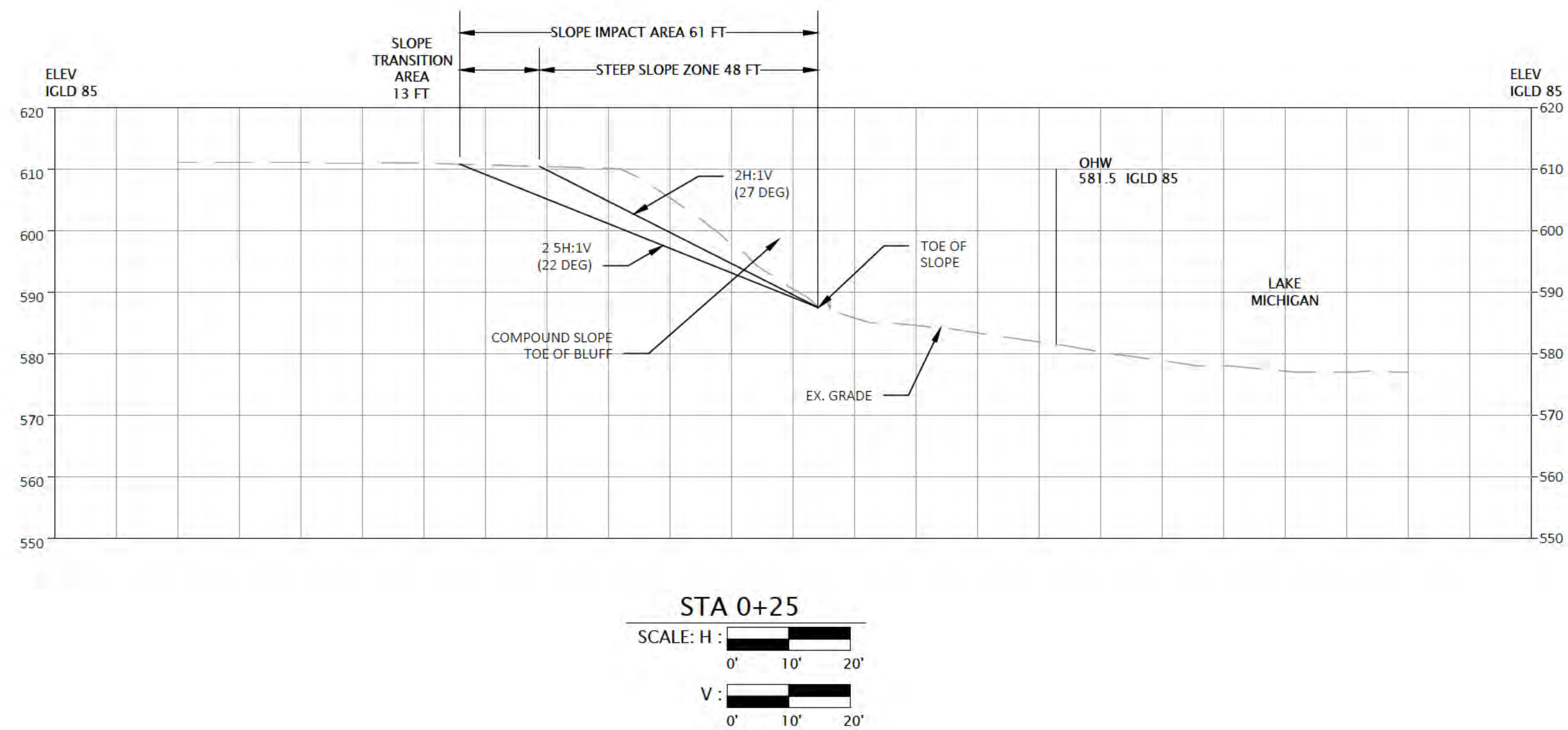


CITE BENCHMARK

	TOE OF SLOPE
	TOP OF STEEP SLOPE ZONE
	TOP OF SLOPE TRANSITION AREA
	OHW 581.5 IGLD 85
	50' FRONT YARD SETBACK

"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."





6750 Woodland Drive
Waukegan Wisconsin 53597
p. 608.849.2042
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redbarnde@tds.net

Consultants	
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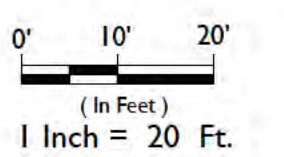
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

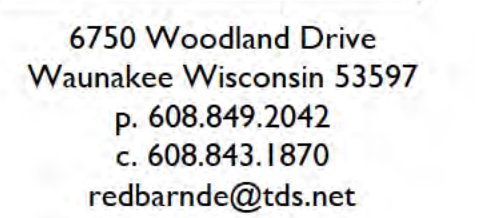
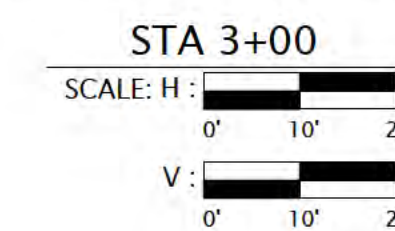
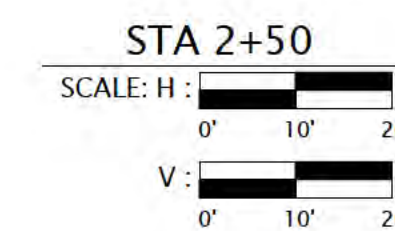
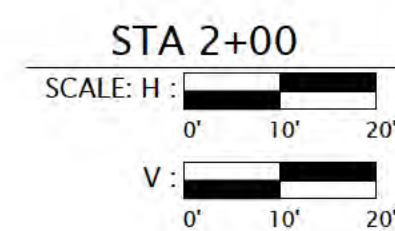
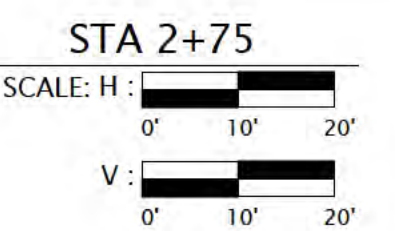
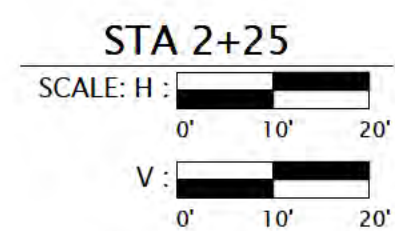
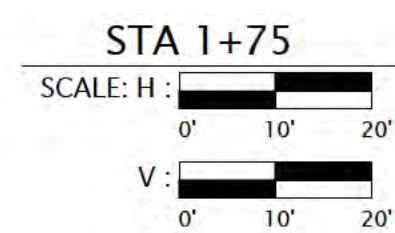
Graphic Scale



Scale 1" = 20'

Drawing Title
Cross Sections

Sheet No. CS -7



Consultants	
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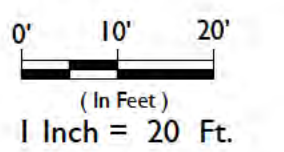
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

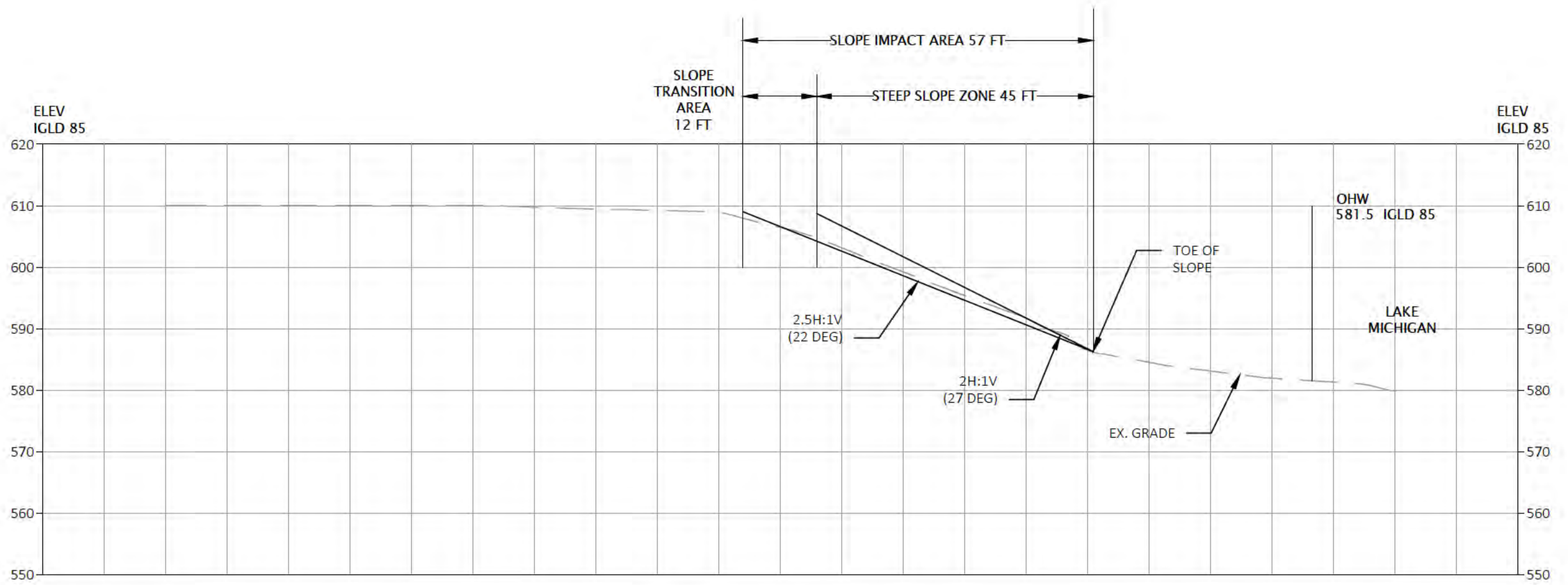
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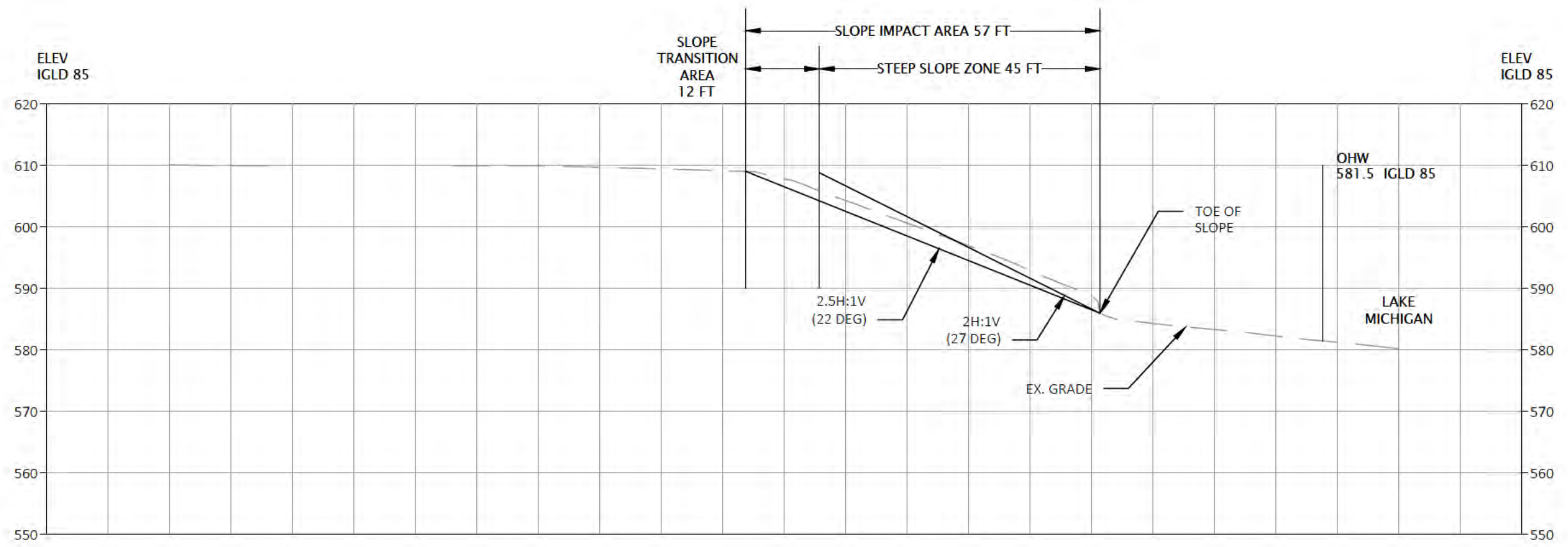
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Drawing Title
Cross Sections

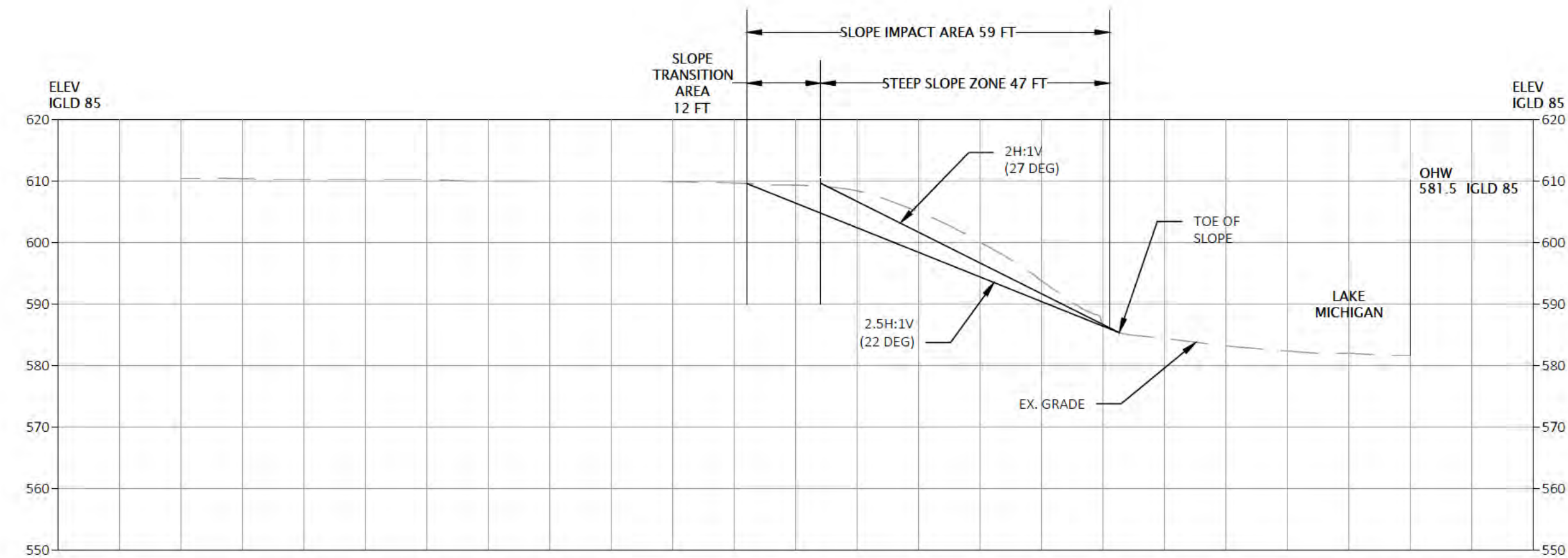
Sheet No. CS - 8



STA 4+75
SCALE: H : 0' 10' 20'
V : 0' 10' 20'



STA 5+00
SCALE: H : 0' 10' 20'
V : 0' 10' 20'



STA 5+25
SCALE: H : 0' 10' 20'
V : 0' 10' 20'



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Issued for	Rev. Date
Village Response	07/19/24
Village Revisions	08/02/24

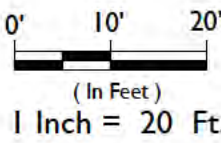
Project Title:

Site Improvements
Centennial Park
Winnetka, IL

Prepared For:

Winnetka Park District
Winnetka, IL

Graphic Scale



Scale 1" = 20'

Drawing Title
Cross Sections

Sheet No.
CS - 10



MEMORANDUM VILLAGE OF WINNETKA

COMMUNITY DEVELOPMENT DEPARTMENT

TO: VILLAGE COUNCIL

**FROM: DAVID SCHOON, COMMUNITY DEVELOPMENT DIRECTOR
PETER FRIEDMAN, VILLAGE ATTORNEY**

DATE: AUGUST 1, 2024

**SUBJECT: REVIEW OF SPECIAL USE PROCESS - ROLE OF VILLAGE STAFF,
BOARDS/COMMISSIONS, AND COUNCIL IN THE CENTENNIAL PARK &
BEACH ZONING RELIEF APPLICATION**

INTRODUCTION

Given recent public comments regarding the Village's role in the review and approval of the zoning relief necessary for the proposed improvements to Centennial Park and Beach, Village staff and the Village Attorney have prepared this memorandum summarizing the Village's process and the various roles of the advisory bodies and Village Council. At the August 6, 2024, Village Council meeting, we plan to review the following materials with the Village Council.

WINNETKA PARK DISTRICT AS ZONING ENTITLEMENT APPLICANT

As Council members know, the Winnetka Park District ("WPD") is a separate and distinct governmental entity from the Village of Winnetka government. The WPD Board of Commissioners ("Board") is the governing body of the WPD, which Board members are elected by the residents located within the WPD borders. As a separate governmental body, the Board makes all decisions regarding the WPD's use of the land that it owns, such as Centennial Park and Beach.

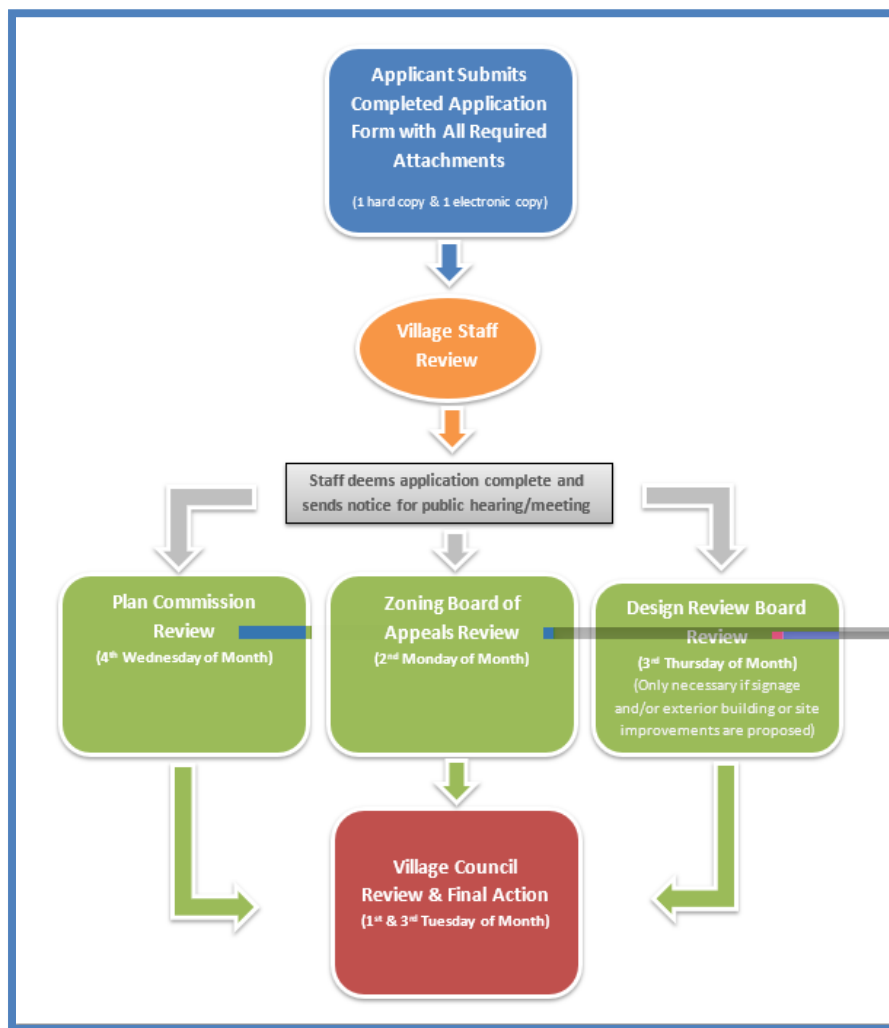
In Winnetka, a park or recreation facility, such as those operated by WPD, are allowed as a special use within any zoning district within the Village. This means any new facility or any major changes to an existing facility, such as with Centennial Beach and Park, requires approval of the proposed use by the Village Council, but not before the Village Council receives recommendations from its advisory bodies - the Plan Commission and the Zoning Board of Appeals. (If physical improvements are proposed to the property, the Design Review Board would also provide a recommendation regarding a certificate of appropriateness for the design of exterior physical improvements.)

The Village Attorney has advised that WPD's request for Village approval will include at least one official public hearing before each of the three advisory bodies. Public notice will be provided for all public hearings. Public hearings are designed to allow the applicant (here, WPD) to present all of its materials and testimony in support of its request, and to allow any other interested persons, including of course Village residents, to provide comments and testimony regarding the

requested zoning relief. The Village Attorney has also explained that it is important for the Council to allow the public hearing process to proceed and to begin Council deliberations only after the public hearings and all testimony before the applicable advisory bodies has been completed and the advisory bodies have made their respective recommendations. This is important to ensure that due process protections are afforded to the WPD and to any other interested parties who provide testimony at the hearings. Accordingly, the Village Attorney recommends against any substantive public discussions by the Council regarding WPD's requested zoning relief until the matter is officially before the Council for consideration.

As with any proposed use, the property owner or an entity with contractual interest in a property and with the property owner's consent ("property owner") has the right to submit an application requesting special use permit approval of a proposed use that is an allowed special use within a particular zoning district. The property owner has the right under our Zoning Ordinance to also request other zoning relief such as zoning variations and exceptions. Once a property owner has submitted such zoning relief applications, the Village has an obligation to process the application according to the rules of procedure established in the Village's Zoning Ordinance. A general flow chart of the review process is provided below.

General Zoning Relief Reviews Process



ZONING RELIEF PROCESS FOR CENTENNIAL PARK AND BEACH

The Park District has chosen to first proceed with a zoning relief application for Centennial Park and Beach, which is allowed since Centennial is a separate legal parcel from Elder Lane Park and Beach. The Park District has submitted a zoning relief application for Centennial Park and Beach, which is under review by staff and the Village's consultants. At the end of June, staff completed its second review of materials submitted by the Park District and provided the Park District staff with comments and informed them that additional information is necessary prior to determining that the application is ready for review by the advisory bodies. In mid-July, the Park District submitted revised plan sheets and some of the revised narrative materials. This week we anticipate receiving additional materials associated with the zoning relief application. Village staff is in the process of reviewing the revised materials to determine if the application is complete and ready for review by the advisory bodies. It is not unusual for a special use permit application involving site improvements to require multiple staff reviews prior to the application being ready for review by the advisory bodies. At this time, the earliest the Zoning Board would begin reviewing this application would be in September.

With any development project there are various types of review – some are administrative reviews handled by staff and as mentioned above, other reviews involve a public review process. If a proposed development is allowed by right and does not require approval of a special use, variation, certificate of appropriateness or other zoning or subdivision entitlement ("zoning entitlement"), the development can proceed to the building permit approval stage, which is administratively handled by staff. At the building permit approval stage, staff determines if the project complies with all requirements of the Village Code, such as storm water detention and drainage requirements, building code requirements, Village utility service requirements, lakefront construction regulations, steep slope regulations, etc., before a building permit can be issued.

If a proposed development does require approval of some type of zoning entitlement relief, during Village staff's review of the zoning entitlement application we will conduct a preliminary review of the project for code requirements to determine if the development should be able to, in general terms, comply with administrative code requirements. Detailed construction plans are not required at this point, but the applicant is required to provide sufficient information so staff can determine that the proposed site layout can be achieved and still comply with other Village regulations as noted above. If after the Village Council approves a special use permit and during the building permit process an applicant changes the design of the project to such an extent that it would be considered a major change, the applicant would need to go through the full special use permit process again prior to the building permit being issued by staff. (Attachment B)

With any proposed development project, the property owner will submit a proposal for the Village's review. If during Village staff's review of a project, staff determines that the project does not comply with Village zoning or subdivision requirements, the applicant:

- a) may seek relief from the requirement, if the Village Code provides for such ability, or

- b) may request that the Village Council amend the Village Code to allow the development as proposed.

During the zoning entitlement process the Village advisory bodies determine if the requested relief is consistent with the applicable Village Code standards. During this process, each advisory body may identify changes to the plans that would be necessary before the body could make a favorable recommendation of the project. Though the advisory body may suggest changes or include conditions with their recommendation, the applicant determines:

- a) if it wishes to make the changes or agree to the conditions of the advisory bodies, or
b) if it would rather move forward to the Village Council with a recommendation of approval with conditions or a recommendation of denial from the advisory body.

In the end, the Village Council will determine if the project as proposed by the applicant is appropriate for the proposed location. Again, the property owner has the right to make requests as it sees fit, and in the end it is within the Council's legislative authority to determine whether to approve the zoning relief requested by the property owner.

Below, please see a matrix summarizing the role of Village staff, each Village advisory body, and the Village Council in the various aspects of Village approval process for the proposed Centennial Park project. Attachment A contains the standards, findings of fact, or criteria that staff, the advisory bodies, or Village Council will use when considering whether to grant approval to the project.

**Involvement of Village Staff, the Village Advisory Bodies, and the Village Council
in the Centennial Park & Beach Project Process**

	Staff	ZBA	PC	DRB	Village Council
Special Use Permit	X	X	X		X
Exceptions – Steep Slope Zoning	X	X	X		X
Variations – Other Zoning (e.g. front yard setbacks)	X	X			X
Certificate of Appropriateness	X			X	X
Lakefront Construction Permit (Lakefront work requiring USACE, IDNR, MWRD, or IEPA permits)	X				
Site Improvement Permit (All other site improvements not requiring lakefront construction permit)	X				

Each advisory body will review the application based upon the applicable standards for that advisory body, which are identified in Attachment A. Their review is based upon these broad standards and not based upon a review of the technical code requirements for such items as the Village's stormwater requirements, building code requirements, lakefront construction approval criteria, or steep slope regulation development standards. Those items are reviewed in detail administratively by staff during the building permit process. As previously stated, if the Village Council were to approve zoning relief for the Centennial Park and Beach improvements and then during the building permit process the WPD changed the design of the project to such an extent that it would be considered a major change, the WPD would need to go through the full special use permit process again prior to the building permit being issued by staff.

Finally, the applicant, in this case the Park District, will be required to submit all required information, analysis, and evaluations for the Village's review. This required information is then evaluated by professional staff, consultants, and the Council to render a decision on the project. The Village would not undertake independent studies, but rather evaluate required information when required for submittal. Also, a construction permit from the Village would not be issued for any of the improvements until after the Village Council granted the applicable zoning relief and then staff and the Village's consultants completed their administrative function of reviewing the permit for compliance with all applicable Village regulations including, but not limited to, the lakefront construction regulations and the steep slope regulations.

ATTACHMENTS

- Attachment A Applicable Standards, Findings of Fact, or Criteria and Standards for Staff, the Advisory Bodies or Village Council for Review of Zoning Applications – Village Code Excerpts
- Attachment B Amendments to Special Use Permits – Major Changes

ATTACHMENT A
**Applicable Standards, Findings of Fact, or Criteria and Standards for Staff, the Advisory
Bodies, or Village Council for Review of Zoning Applications - Village Code Excerpts**

SPECIAL USE STANDARDS

– APPLICABLE TO PLAN COMMISSION AND ZONING BOARD OF APPEALS

Section 17.56.120 Standards for Granting of Special Use Permits.

A. General Standards for the Granting of Special Use Permits. No special use permit shall be granted unless it is found:

1. That the establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, comfort, morals or general welfare;
2. That the special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the district or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;
3. That the establishment of the special use will not impede the normal and orderly development or improvement of other property in the immediate vicinity for uses permitted by right in the district or districts of concern;
4. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimizes pedestrian and vehicular traffic congestion in the public ways;
5. That adequate parking, utilities, access roads, drainage and other facilities necessary to the operation of the special use exist or are to be provided;
6. That the special use in all other respects conforms to the applicable regulations of this and other Village ordinances and codes. In the event that the application for special use permit involves a request for variation from the terms of this title, such request, subject to required notification procedures, may be considered at the same public hearing at which the proposed special use is reviewed by the Board of Appeals.

VARIATION STANDARDS

– APPLICABLE TO ZONING BOARD OF APPEALS & VILLAGE COUNCIL

Section 17.60.050 Standards for Granting Variations.

C. Variation Standards for Zoning Board of Appeals and Zoning Administrator. The Zoning Board of Appeals shall not grant a standard variation, and the Zoning Administrator shall not grant a minor variation, unless the Board or the Zoning Administrator, as the case may be, makes an affirmative finding, based on evidence in the record or in a public document, that the variation requested is in harmony with the general purpose and intent of the Zoning Ordinance and that each of the eight conditions on which evidence is required pursuant to Section 17.60.050 of this Code has been met in connection with the variation application.

D. Variation Standards for Village Council. The Village Council shall have the discretion to grant variations, without further public hearing, upon finding that the variation requested is in harmony with the general purpose and intent of the Zoning Ordinance and in accordance with general or specific rules contained in this chapter, and upon finding that there are practical difficulties or particular hardships in the way of carrying out the strict letter of any of the provisions or regulations of the Zoning Ordinance; provided that, the passage of any ordinance granting a variation or application for variation that failed to receive a recommendation of approval by the Zoning Board of Appeals shall require the favorable vote of four Village Trustees.

Section 17.60.040 Variation Procedures: Standard and Major Variations.

C. Evidence Required at Hearing. The Zoning Board of Appeals shall require evidence on the following issues:

1. that the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that district;
2. that the plight of the owner is due to unique circumstances;
3. that the variation, if granted, will not alter the essential character of the locality;
4. that an adequate supply of light and air to adjacent property will not be impaired;
5. that the hazard from fire and other damages to the property will not be increased;
6. that the taxable value of land and buildings throughout the Village will not diminish;
7. that the congestion in the public street will not increase; and
8. that the public health, safety, comfort, morals and welfare of the inhabitants of the Village will not be otherwise impaired.

D. Recommendation by the Zoning Board of Appeals. The Zoning Board of Appeals shall not recommend that the Village Council grant a variation unless the Zoning Board of Appeals makes an affirmative finding, based on evidence in the record or in a public document, that each of the foregoing eight conditions is met in connection with the variation application. The findings of the Zoning Board of Appeals shall comply with Section 17.60.050.

CERTIFICATE OF APPROPRIATENESS FINDING OF FACTS

– APPLICABLE TO DESIGN REVIEW BOARD & VILLAGE COUNCIL

Section 15.40.010 Certificate of appropriateness of design.

F. Scope of Hearing, Findings of Fact. At the hearing, the Board shall consider the application materials, including construction documents, and any additional evidence including, in the Board's discretion, testimony given under oath, regarding the following issues:

(1) whether the proposed external architectural features and site improvements are appropriate to and compatible with the character of the immediate neighborhood;

(2) whether the proposed external architectural features and site improvements are appropriate to and compatible with adopted Village plans for and improvements in the immediate neighborhood, and including both urban design and site arrangement considerations;

(3) whether the proposed external architectural features and site improvements are consistent with applicable Village design guidelines and such standards and criteria as may be adopted by the Board; and

(4) the probable effect of the proposed external architectural features on the integrity of the immediate vicinity.

I. Denial of Certificate.

1. Criteria. The Board or, where applicable, the Village Council, may deny a request for a certificate of appropriateness of design only upon findings that external architectural features of the proposal when completed will be:

(a) so inconsistent with applicable Village design guidelines and such standards and criteria as may be adopted by the Board for the review of such external architectural features and site improvements as to be inappropriate and incompatible with the character of the immediate neighborhood; or

(b) so inappropriate and incompatible with adopted Village plans or public improvements in the immediate neighborhood as to cause substantial depreciation in the effectiveness and value of such plans or improvements; or

(c) so inappropriate and incompatible with the existing character of the immediate neighborhood as to cause substantial depreciation in property values in such neighborhood.

STEEP SLOPE EXCEPTION STANDARDS

- APPLICABLE TO PLAN COMMISSION AND ZONING BOARD OF APPEALS

Section 17.82.110 Exceptions.

If a development that requires a special use permit includes construction activity that does not comply with the requirements of this Chapter, the Village Council may grant exceptions to the regulations set forth in this Chapter as part of granting the special use permit. [Note: This means, the special use standards are used when considering an exception associated with a special use permit request.]

LAKEFRONT CONSTRUCTION APPROVAL CRITERIA

– APPLICABLE TO STAFF’S ADMINISTRATIVE REVIEW FOR PERMITTING.

Section 15.78.080 Criteria for Permit Approval.

The Village Engineer (and, if applicable on appeal, the Village Council) will issue a permit (with or without conditions) only if the following requirements are satisfied:

- A. Permitting Agency Permits. The applicant has received and provided to the Village all required permits for the covered construction from the permitting agencies.
- B. Height. The height of the covered construction and any related structures will be no greater than what is minimally necessary to achieve the intended and proper purpose of the project and to be consistent with the purposes set forth in Section 15.78.010 of this chapter.
- C. Conformity with Code. The covered construction and any related structures comply with all other applicable provisions of the Village Code, including, without limitation, the construction permitting requirements of Chapter 15.32 of this title.
- D. Project Scope. The covered construction and any related structures include only what is minimally necessary to achieve the intended and proper purpose of the project and to be consistent with the purposes set forth in Section 15.78.010 of this chapter.
- E. No Public Safety Hazard. The covered construction and any related structures will not create any public safety hazards, including, without limitation, by unreasonably obstructing or otherwise interfering with ingress or egress to adjacent public beaches or private property.
- F. Interference with Public Safety Operations. The covered construction and any related structures will not block or otherwise unreasonably interfere with the ability of public safety personnel to conduct search and rescue or other public safety operations.
- G. Existing Sight Lines. The covered construction and any related structures will alter existing sight lines along the Lake Michigan shoreline no more than is minimally necessary to achieve the intended and proper purpose of the project and to be consistent with the purposes set forth in Section 15.78.010 of this chapter.

STEEP SLOPE DEVELOPMENT STANDARDS

– APPLICABLE TO STAFF’S ADMINISTRATIVE REVIEW.

Section 17.82.050 Development Standards.

A. Any application for development in the slope impact area will be reviewed by the Director, who will consider such application in light of the standards of this section relating to landscape planning, soil mechanics engineering, hydrology, geology, environmental design, structural and coastal engineering, and structural architecture. The Village recognizes each slope impact area may have different characteristics and features that affect its stability and preservation. Therefore, the Director may determine that certain standards of this Section do not apply to every application. Whenever the Director waives or alters otherwise applicable requirements in this Section, the waiver or alteration will be memorialized in a written decision that provides the rationale for the waiver or alteration. Before the Director finalizes the waiver or alteration, the Director will confer with the Village Manager and the Director of Community Development. The Director will have the authority to determine if the application in its totality satisfies the purposes of this Chapter to a substantial degree without creating an economic hardship as provided in Section 17.82.090.

B. Development standards for the slope impact area are as follows:

(1) Safety control of steep slopes.

- a. The development will not jeopardize slope stability on the subject site or neighboring properties.
- b. Except as necessary for an approved development, no filling, grading, or earth moving is permitted in a slope impact area.
- c. A fence must be erected temporarily along the top edge of the steep slope zone, during any construction or demolition activity in the steep slope zone or adjacent to the steep slope zone.

(2) Construction techniques. All proposed structures must have foundations designed in a manner consistent with sound engineering and geological principals. Additionally, the following techniques must be used to enhance bluff stabilization:

- a. Planning the development to recognize and fit the natural topography, soils, geology, hydrology, and other existing conditions on the proposed sites;
- b. Orienting development so that filling, grading, and earth moving, landscaping and other site preparation is kept to an absolute minimum;
- c. Preserving and enhancing the landscape through minimized disruption of natural terrain and existing vegetation;
- d. Minimizing disruption or alteration of natural drainage ways;
- e. Minimizing the time during which areas are bare and exposed;
- f. Designing and properly locating structures so that the structure's weight does not negatively impact slope stability; and
- g. Considering the effect of undercutting at the base of a slope impact area caused by wave action, storm water flow, erosion, or channel changes.

(3) Hydrological controls.

- a. Natural channels. Natural drainage ways must be preserved to the maximum extent possible.
- b. Controlled runoff. Concentrated runoff from impervious surfaces will be collected and transported in a pipe or other approved manner to a municipal storm sewer system, if available or to the toe of the bluff as determined by the Director.
- c. Water discharge into steep slope. Whenever stormwater is transported across a property for discharge into a steep slope zone, the conveyance pipe material must be installed below ground by directional boring where possible.
- d. Trenching. No pipe can be installed within a steep slope zone by excavating a trench unless such trench is approved by the Director.
- e. Pipe materials. Flexible corrugated pipes may not be used within a slope impact area unless directional boring is found to be infeasible in the sole determination of the Director.
- f. Water Quality. The Director will determine the appropriate water quality requirements for all stormwater that is discharged to Lake Michigan.
- g. Interceptor ditches. When required by the Director pursuant to sound professional engineering principles, interceptor ditches will be established above steep slopes in order that soil will not become saturated and the intercepted water will be conveyed in a pipe or other approved manner to a municipal storm sewer system, if available, or to the toe of the bluff as determined by the Director.
- h. Discharge point stabilization. Natural drainage ways will be stabilized by landscape integration and rip-rap or other means consistent with sound professional engineering practice, to a distance below drainage and culvert discharge points sufficient to convey the discharge without channel erosion and in such a manner as to dissipate the energy of the discharge as approved by the Director.
- i. Energy dissipater. All outflow from a stormwater conveyance pipe must discharge into an energy dissipater.
- j. Early completion. The overall drainage system must be completed and made operational at the earliest possible time during construction, the schedule of which will be approved by the Director.
- k. Impact on adjacent property. The natural or usual flow of surface or subsurface water must not be altered or obstructed in any way by grade changes that may adversely affect the property of another by contributing either to pooling or collection of waters or to the concentration or intensification of surface water discharge. However, development which might otherwise be prohibited hereinabove may be allowed if such waters are properly drained by a pipe or other approved manner to a municipal storm sewer system, if available, or to the toe of the bluff as determined by the Director. All grade changes must comply with the Village Code.

(4) Vegetation and revegetation.

- a. Native vegetation will be maintained to the greatest extent possible within the slope impact area.
- b. Smallest area. At all times, the smallest practical area of raw soil will be exposed for as short a duration of time as practical.

c. Revegetation. A mixed planting of native perennial grasses and woody species with deep root systems will be used to landscape steep slope areas disturbed by construction, demolition or earth moving. When sound engineering practices dictates and when required by the Director, temporary vegetation, or other acceptable cover shall be used to protect areas of raw soils exposed during development and to prevent erosion.

d. Erosion control mat. Temporary erosion control matting properly staked and trenched must be provided over raw soil areas until new vegetation is established.

(5) Filling, grading, and earth moving.

a. Minimum alterations. Filling, grading, and earth moving will be limited to the minimum required for building foundations, driveways, drainage control structures, and immediate yard areas. With the exception of restoration efforts, substantial filling, grading, and earth moving is prohibited.

b. Erosion control. All filling, grading, and earth moving will be accomplished in a manner that will create the lowest possible potential for airborne or waterborne transportation of soil.

c. Soil fill in steep slope zone. All fill in steep slope zone is prohibited, other than back-fill which will be determined by the Director to be necessary for slope stabilization or re-establishment of the steep slope zone as part of general maintenance.

d. Soil fill on table land. In conformance with generally accepted engineering standards, all fill on table land will be stabilized to at least 90% of maximum dry density as determined in ASTM procedure D-1557 or equivalent.

e. Prompt completion. All filling, grading, and earth moving will be accomplished in the shortest practical period of time, the schedule of which will be approved by the Director. All excavated material must be removed from the slope impact area and no temporary or permanent material storage will be permitted within the slope impact area. No existing natural vegetation will be destroyed, removed or disturbed prior to the commencement of development activities.

Attachment B
Amendments to Special Use Permits – Major Changes

“Section 17.56.130 Amendments to Special Use Permits.

- A. Definitions. For purposes of this Section, the following terms are defined as follows:

“Major Change” means any change in the uses, site plan, design details, or operations of an approved special use which is not a Minor Change.

“Minor Change” means any change in the uses, site plan, design details, or operations of an approved special use which is (i) consistent with the standards and conditions applicable to the special use, (ii) does not alter the concept or intent of the special use, and (iii) does not materially:

1. increase the special use’s density;
2. increase the special use’s operational intensity;
3. change programming in a way that alters the fundamental character of the existing special use;
4. change the use or add new uses;
5. increase the extent of the measurement of any applicable bulk regulation;
6. reduce open space;
7. expand, relocate, or add new parking areas;
8. relocate pedestrian walkways or access points;
9. alter alignment of roads, utilities, or drainage; or
10. change or conflict with any standard or condition imposed by the Village Council in approving the special use.

ATTACHMENT C1

From: [REDACTED]
To: [Robert Bahan](#); [David Schoon](#); [James Bernahl](#); [Kristin Kazenas](#); [contactus](#)
Subject: WPD Unlawful Elder Bluff Clearing
Date: Thursday, September 26, 2024 2:17:21 PM
Attachments: [Re Weeds upkeep at Elder & Centennial.pdf](#)
[Re Elder Steep Slope Cutting_Redacted.pdf](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Please enter into the public record and share with trustees, thank you.

Mr. Bahan:

On August 14, 2024 WPD had staff conduct an un-permitted clearing of a section of Elder's bluffs in violation of the Steep Slope Ordinance.

I am attaching before and after photos.

The reported impetus for this unlawful action was a female citizen's phone call asking WPD to clear Elder's and Centennial's bluffs prior to upcoming events; apparently, three one hour family exercise classes at Elder running from mid-August into September, and a single nighttime movie event at Centennial—so 'people can see what they're missing.'

This is unacceptable and really strange. If I were to call up WPD and ask them to violate a Village Code provision I would hope and expect that the answer would be "no." What made this female citizen's call different?

What steps are being taken by the Village to address WPD's actions?

By the way when I raised questions about Elder's bluffs with Shannon Nazzal she wrote about buckthorn berries causing stomach distress in some birds, and that although they are tree-sized, until they've grown they're shrub-sized. This was in response to my presenting her with information on buckthorn removal in a scientifically appropriate way so as not to harm migratory birds.

Thank you.

Kris Schriesheim

June 3 2024 View of Elder with intact bluffs



August 21 2024 View of Elder bluffs after unlawful clearing



Sent from my iPad





Shannon Nazzal

From: Shannon Nazzal
Sent: Wednesday, August 7, 2024 8:49 AM
To: Greg Fields; Costa Kutulas
Subject: Re: "Weeds" / upkeep at Elder & Centennial



Internal (snazzal@winpark.org)



[Report This Email](#) [FAQ](#) [Protection by INKY](#)

Thanks Greg!

Shannon Q. Nazzal, CPRE (she / her)

Executive Director

Office: +1.847.501.2074

Email: snazzal@winpark.org

Winnetka Park District | winpark.org



From: Greg Fields <GFields@winpark.org>
Sent: Wednesday, August 7, 2024 6:31 AM
To: Shannon Nazzal <snazzal@winpark.org>; Costa Kutulas <CKutulas@winpark.org>
Subject: RE: "Weeds" / upkeep at Elder & Centennial

Shannon,

The last large scale selective clearing that I can remember along the bluffs at Elder and Centennial were at least 6 or 7 years ago. At this time the park district in conjunction with an eagle scout project and volunteer group removed a large amount of woody material from the bluffs. Since then woody material has again established along these slopes. As the planning process for construction has been underway large removals have been on hold until the final plans materialize. I will take a look at the two sites and see what we can do to spruce up the appearance of the parks tableland and bluff edge for the upcoming events.

Thanks

Greg Fields, CPRP

Superintendent of Parks

Office: +1.847.501.2057

Email: gfields@winpark.org

Winnetka Park District | winpark.org



From: Shannon Nazzal <snazzal@winpark.org>
Sent: Tuesday, August 6, 2024 4:49 PM
To: Greg Fields <GFields@winpark.org>; Costa Kutulas <CKutulas@winpark.org>
Subject: "Weeds" / upkeep at Elder & Centennial

Gentlemen, no rush on this, but wanted to see what (if any) maintenance plan or work is conducted for the tableland / bluff areas of the closed beaches. I had a call today from a resident with the thought of maybe if it's cleaned up a bit, people will realize what they are missing. I get that. She mentioned that work had been done with the junk on the bluff in past years. Wanted to get an idea of what we've done in the past while the areas have been closed, if it's the same/different this year, and what we may be able to do? I know there are a couple rec events planned coming up, so would like to see what may be scheduled for maintenance at those sites. Thank you!

Shannon Q. Nazzal, CPRE (she / her)
Executive Director
Office: +1.847.501.2074
Email: snazzal@winpark.org
Winnetka Park District | winpark.org



Shannon Nazzal

From: Costa Kutulas <CKutulas@winpark.org>
Sent: Monday, August 19, 2024 10:32 AM
To: Shannon Nazzal
Cc: Greg Fields
Subject: Re: Elder Steep Slope Cutting



Internal (ckutulas@winpark.org)



[Report This Email](#) [FAQ](#) [Protection by INKY](#)

I have a call with Jim at 11am, I was going to ask him exactly what the violation was now that Andrew Lueck (Village of Winnetka Forester) has reviewed the site.

I'll circle back once I connect with Jim.

Costa Kutulas

Director of Parks and Maintenance

P: (847) 501-2052

E: ckutulas@winpark.org

Winnetka Park District | winpark.org

From: Shannon Nazzal <snazzal@winpark.org>
Sent: Monday, August 19, 2024 9:53 AM
To: Costa Kutulas <CKutulas@winpark.org>
Cc: Greg Fields <GFields@winpark.org>
Subject: Re: Elder Steep Slope Cutting

Section 17.82.070 B.(2)

I don't see any other sections that apply. No trees were removed, slope was not modified, no structures were impacted...

Shannon Q. Nazzal, CPRE (she / her)

Executive Director

Office: +1.847.501.2074

Email: snazzal@winpark.org

Winnetka Park District | winpark.org



From: Costa Kutulas <CKutulas@winpark.org>
Sent: Friday, August 16, 2024 2:41 PM
To: Shannon Nazzal <snazzal@winpark.org>
Cc: Greg Fields <GFields@winpark.org>
Subject: Fw: Elder Steep Slope Cutting

FYI, I'll follow up with you next week on this.

Thanks,

Costa Kutulas
Director of Parks and Maintenance

P: (847) 501-2052
E: ckutulas@winpark.org

Winnetka Park District | winpark.org

From: James Bernahl <JBernahl@winnetka.org>
Sent: Friday, August 16, 2024 1:41 PM
To: Costa Kutulas <CKutulas@winpark.org>
Subject: FW: Elder Steep Slope Cutting

Costa,

As a follow-up from our conversation, below is a copy of the email that was sent to the Village about the vegetation clearing at the Elder Park. Can you please work with your team and provide me an update on how this removal work all went down, and what is the Park District's next steps for restoration. As part of the Steep Slope Ordinance this type of clearing would fall within the steep slope permitting process so we would be looking for a restoration/stabilization plan.

Let me know what the Park District's next steps will be as the Village will need to respond to this inquiry.

Thanks

James J. Bernahl, P.E., CFM
Director of Engineering/Village Engineer
Village of Winnetka, Illinois
1390 Willow Road
Winnetka, IL 60093
Phone: (847) 716-3261
Email: jbernahl@winnetka.org

Begin forwarded message:

From: Willy Franzen <[REDACTED]>
Date: August 15, 2024 at 8:21:18 AM CDT
To: Robert Bahan <RBahan@winnetka.org>
Cc: ContactCouncil <ContactCouncil@winnetka.org>
Subject: Elder Steep Slope Cutting

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Hi Rob,

I hope you're enjoying this beautiful summer we've been having. Yesterday I noticed that the Park District did some very substantial cutting in the steep slope area between Elder Park and Elder Beach. While I really appreciate that the view of Lake Michigan has been opened up, I am concerned about how this work may affect the stability of the bluff. It's unclear to me whether this level of work is permitted within the recently adopted Steep Slope Ordinance. It also feels like odd timing for such substantial cutting considering where the Park District is in the permitting process for their planned Elder + Centennial projects. I've attached a number of photos below to show the scope of the work.

With the recent launch of the Park District's "On the Horizon" marketing push to garner support for their plans, the timing of this project indicates that it may not be routine maintenance or tree work, but instead an attempt to change the character of one of our parks to align with their campaign. Like I said before, I love the new view of the lake. It looks great, but I think it's important to ask why the Park District is cutting? Why they are cutting now? And what effect will this cutting have on a very sensitive area of the steep slope? If today's rain becomes heavy, we may be able to see an immediate impact.

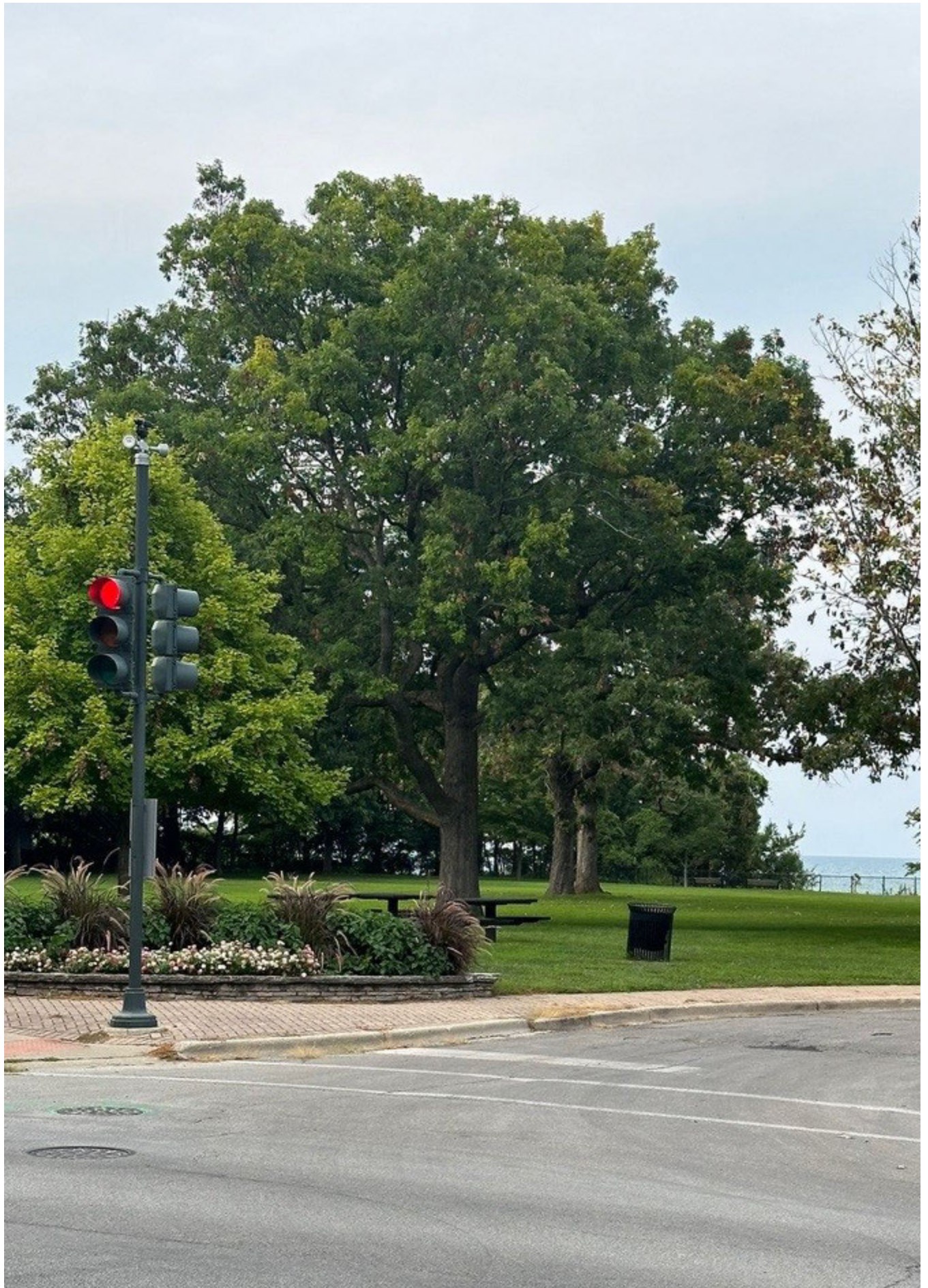
I'll also note that bluff area in Centennial Park that would be affected by the proposed Land Swap Agreement has not been cut or maintained since I moved here two years ago. For some reason they have let this area grow to obstruct the view, but have now cleared a significant portion of Elder (which appears to me based on tree size to have been last cut much longer ago).

I've copied the Trustees on this. I think it's very important that the Village ensures that the Park District complies with all relevant regulations and is held to the same standard as other land owner's through what will likely be a very contentious permitting process for their proposed projects.

Thank you,

Willy Franzen


August 14/15 2024



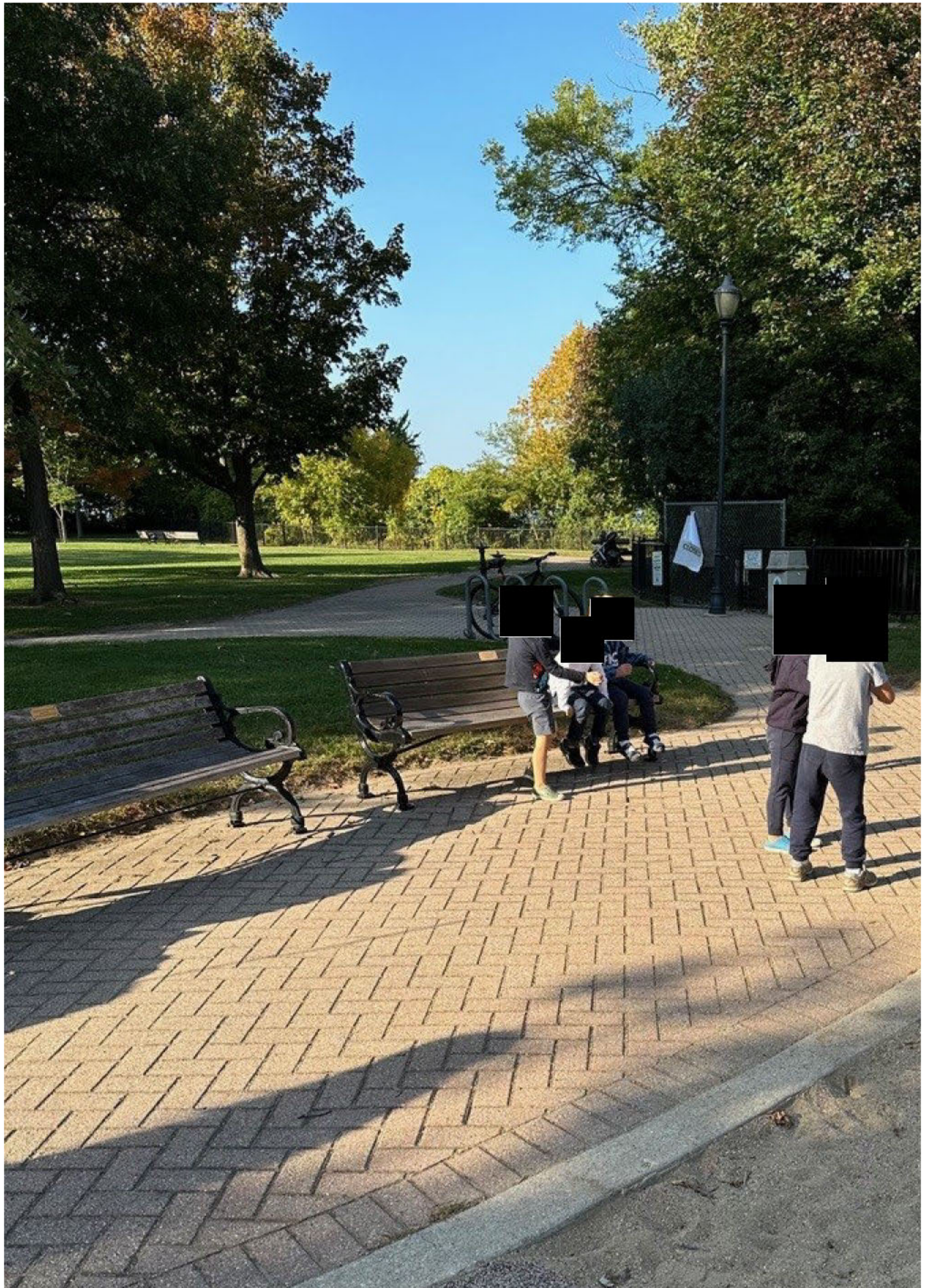








Fall 2022



From: [REDACTED]
To: [Planning](#); [David Schoon](#); [Ann Klaassen](#)
Subject: Centennial Park
Date: Wednesday, October 9, 2024 3:15:56 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Winnetka Planning Department, Ann Klaassen, David Schoon, and ZBA Members:

As a resident at 226 Sheridan Road and owner at 232 Sheridan Road, I have serious concerns about the proposed Winnetka Park District plan for Centennial Park and Beach. I know that you have been inundated with materials and comments on this project, so I am doing my best to keep it short and stick to the standards outlined in the Village Code. I am unable to make the meeting on 10/14, but if I could, I would also make these points in person.

Special Use Permit

The Park District says they are seeking a Special Use Permit to "ratify and expand the public recreational use of Centennial Park and Beach within the R-2 single-family residential district." However, when you look at their narrative in response to the Standards for Granting of Special Use Permits, you will see that they repeatedly insist that there will be no increase in intensity of use. The level of investment that they are making in this park tells you everything that you need to know about their plans for use. Below I have included my responses to the project as they pertain to each of the six standards:

Section 17.56.120 Standards for Granting of Special Use Permits.

A. General Standards for the Granting of Special Use Permits. No special use permit shall be granted unless it is found:

1. That the establishment, maintenance and operation of the special use will not be detrimental to or endanger the public health, safety, comfort, morals or general welfare;

The proposed rock structures are inherently more dangerous for people on land and water. As an avid paddle boarder, I find navigating the lake much more difficult around these rock structures than around the existing steel structures. The way that waves bounce off of them is very dangerous for swimmers, kayakers, paddle boarders and boaters. The rock structures also offer far more opportunity for children to slip, fall, or go out of the line of sight of their parents.

The line of sight issue is also very important from a safety standpoint. My wife was the person who called 911 during an emergency situation last year. She was hesitant to call because it didn't really look like an emergency, but something looked off, so she called out of an

abundance of caution. Unfortunately, the incident resulted in the tragic death of one of our community members, but the response from our first responders was very fast. The proposed rock structures would block this line of sight, and my wife would not have seen the dangerous situation unfolding. It would have taken far longer for first responders to arrive.

The Park District has proposed signage and temporary barricades as a solution for keeping people off of the pier during dangerous conditions. If the structures are inherently dangerous, maybe they should leave what exists and not build anything new. Signs and barriers are not sufficient for these types of structures.

I also think that John Root has done an excellent job of outlining the public health and safety issues surrounding the proposed designs.

2. That the special use will not be substantially injurious to the use and enjoyment of other property in the immediate vicinity which are permitted by right in the district or districts of concern, nor substantially diminish or impair property values in the immediate vicinity;

We purchased our home largely because of Centennial Park as it exists. We see it as providing immense value to us, our neighbors, and the community. The proposed changes to the park are a net negative that will make living in near proximity to Centennial Park less desirable. The Park District points to the neighbor to the south as proof that their plan is not injurious to neighbors, yet here I am, a direct neighbor to the park saying that I invested in my home with the hope that Centennial will be preserved largely as it is now, not improved based on restrictive covenants and design input from a single neighbor. What is favorable for that one neighbor is not favorable for the majority of close neighbors.

The Park District alleges that "the Proposed Improvements will not increase vehicular traffic or parking demand in a manner that would be injurious to the use or reduce the property values of neighboring properties." Later in this letter, I will demonstrate why that is completely untrue.

3. That the establishment of the special use will not impede the normal and orderly development or improvement of other property in the immediate vicinity for uses permitted by right in the district or districts of concern;

The proposed rock structures will deprive neighbors to South of sand flow and keep them from having beaches in front of their homes.

The Park District claims that the project at 205 Sheridan is "an investment that would not occur if the Project impeded the normal and orderly development in the immediate vicinity." Nothing about what has happened at 205 Sheridan is normal and orderly. If anything, it is now quite clear that the WPD Project has promoted abnormal and disorderly development in the neighborhood.

4. That adequate measures have been or will be taken to provide ingress and egress in a manner which minimizes pedestrian and vehicular traffic congestion in the public ways;

“The Applicant does not expect the Proposed Improvements to create new parking demand or materially increase traffic.” To add any more pavement or non-permeable surfaces to this beautiful parkland would be a huge mistake, but the Park District is asking to drastically increase the intensity of use by offering both a swimming and a dog beach. This neighborhood is already inundated with traffic 7 days a week. During the school year we have New Trier students coming and going (and often driving irresponsibly) from 7 AM to 7 PM. Sheridan Road is also a state highway, and there is a constant flow of drivers speeding and looking at their phones. Centennial Park and its beach are a destination that many people walk to, but even crossing the street to get to the park is hazardous and often takes many minutes of waiting if you are not at the crosswalk by Elder. There is no crosswalk option to the south unless you include the one all the way at Winnetka Ave. (which is also very difficult to cross because of the congestion at this intersection). We already have a congestion problem, and these proposed changes are not accounting for an increased intensity of use.

The Park District has claimed that there will be no increase in intensity of use. This is impossible with the proposal to going from solely a Dog Beach to a Dog Beach and a Swimming Beach. How can they propose spending millions of dollars on “improvements” without the expectation that they will increase the intensity of use? Additionally, the fact that Elder has been closed and will seemingly remain closed will put more pressure on Centennial. This is a de facto increase in intensity of use by restricting access to one of our beaches for dubious safety concerns. I am convinced that the proposed changes to both Elder and Centennial will be far more dangerous than any existing conditions at the beaches.

I have seen multiple car and bike accidents on Sheridan near Centennial. These will likely increase if the park is “improved” and receives more use—whether people are arriving by car, bike, or foot.

My family chose to live in a busier part of town. We are ok with people coming and going to school, parks, and up and down the North Shore; however, there is a point where it will be too much and create both congestion and safety hazards. If the Park District is going to propose a plan to dramatically change how these parks are used, then they must provide a plan for how they will prevent congestion without paving over large swathes of existing green space in one of the most important areas to have permeable surfaces.

5. That adequate parking, utilities, access roads, drainage and other facilities necessary to the operation of the special use exist or are to be provided;

There is no plan for additional parking in any of the documents that I have seen. While I am happy about that specifically (please no more parking lots!), it must be viewed in the context of the proposed plan. The Park District can’t just hand wave and say that there will be sufficient parking at Elder when that lot is entirely full much of the year. Residents in our neighborhood barely have enough parking for themselves, construction workers are forced to park streets away (or be bussed in), and students are paying many thousands of dollars a year

to park in our neighborhood to be close to New Trier. There is no parking on Sheridan. There isn't really parking on Fuller Lane. Elder Lane and all of the other surrounding streets have restricted parking during the school year. The Park District can't propose a project of this magnitude and at this cost level, and then say they expect no increase in intensity of use.

Additionally, the Village is in the process of planning its storm sewer projects. The direction that they choose may have significant impact on drainage in our neighborhood that will have to go through Elder/Centennial. How can we approve these plans before we have figured out how to deal with the stormwater. I am certain that adding more concrete to the bluff where the water seeps out into Lake Michigan is not the solution.

Finally, the proposed swimming beach has no toilets or changing areas. The Park District will point to Elder and say that those will be provided there, but then both projects should be considered together—not separately.

6. That the special use in all other respects conforms to the applicable regulations of this and other Village ordinances and codes. In the event that the application for special use permit involves a request for variation from the terms of this title, such request, subject to required notification procedures, may be considered at the same public hearing at which the proposed special use is reviewed by the Board of Appeals.

I'm not sure if this is the best place to make this point, but it must be considered that a significant portion of the land that is being considered for this Special Use Permit is subject to a Land Swap Agreement. This means that some of the land that is planned to be improved could be conveyed to a private party at any time. It seems untruthful to apply for this permit with a plan that includes land that the Park District has agreed to give to another party at some unclear time in the future. If this land is conveyed to a private party, it would be subject to the Lakefront Preservation Overlay District which would require the land to be open and unobstructed from ground to sky. This proposal does not provide for that.

Additionally, all zoning calculations for Centennial Park include this parcel of land, but should they? If the Park District is going to potentially swap this land, then the land subject to the Land Swap Agreement should be excluded from Special Use Permits, Zoning Variations, and Steep Slope Exceptions until that agreement is nullified or completed.

I truly love Centennial Park as it exists right now. The Park District is not being honest in claiming that they don't intend to increase the intensity of use. Why else would they aim to spend many millions of dollars to improve a park with no clear deficiencies?

Steep Slope Exception

The Steep Slope Ordinance was passed while this Park District plan was being circulated around the community. The Village Council saw this coming, and gave themselves a tool to

ensure that the Park District and other residents respect our bluffs. The Park District has already illegally cleared a portion of Elder and shown their disdain for the Steep Slope Ordinance. I do not think this project will merit an exception to this ordinance until it has far more community support. 60% of Caucus survey respondents said they want a temporary solution to reopen Elder until the Park District can come up with a better proposal. There are so many problems with this plan for our community—I have tried to focus on the ones that are the purview of the ZBA here.

If time permits, I will send another note with a deeper dive on the Steep Slope Exception and other Zoning Variation requests, but for now I will share these thoughts.

Thank you for your consideration.

Willy Franzen

[REDACTED]

226 + 232 Sheridan Rd.

From: [REDACTED]
To: [Planning](#); [David Schoon](#); [Ann Klaassen](#)
Cc: [REDACTED]
Subject: Centennial Park: Special Use Permit
Date: Thursday, October 10, 2024 5:59:06 PM

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To Winnetka Planning Department, Ann Klaassen, David School, and ZBA Members

As a longtime Winnetka owner at 228 Sheridan Road, I'm grateful to my neighbor, Willy Franzen, for his thoughtful, comprehensive, persuasive positions. I can question but can't take issue with anything argued. I look forward to your response.

Mona Golub
228 Sheridan Rd.

From: [REDACTED]
To: [Planning](#); [David Schoon](#); [Ann Klaassen](#)
Subject: Caucus Survey Results and Centennial Zoning Standards
Date: Friday, October 11, 2024 4:57:18 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Winnetka Planning Department, Ann Klaassen, David Schoon, and ZBA Members:

I apologize for adding another e-mail to what I'm sure is a growing mountain of material, but I think this is too important not to bring up.

While Caucus Survey Results may not typically be relevant to a ZBA meeting, I do think they are in this case. In a number of instances, the Park District makes the case that their proposed improvements "will clearly enhance the public's use and enjoyment of Centennial Park and Beach and benefit the public's health and welfare." The Caucus Survey results strongly refute this point. You can see here -- <https://files.constantcontact.com/f85e5d6e001/da6f193b-c420-419f-906f-c1b1f4d83259.pdf?rdr=true> -- skip forward to page 67 and start reading the comments. The overwhelming theme in the comments is skepticism about this plan in terms of benefit to the community and maintaining the character of the parks.

The Park District is relying on this argument for both their Variation request and Special Use Permit request.

1. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that district

The Park District is defining a reasonable return in terms of delivering enjoyment to citizens. I agree with that definition. I don't agree that their plan does this. The Caucus Survey results indicate that the Park District is already getting a reasonable return on the property and that the proposed "improvements" would actually detract from that return.

3. The variation, if granted, will not alter the essential character of the locality;

The Park District claims that the use will remain the same, which is not entirely true. However, it is far more important to consider the outcry by citizens about how much these plans will alter the essential character of the park, beach, and neighborhood.

6. The taxable value of land and buildings throughout the Village will not diminish;

The Park District claims that: "The proposed improvements in the front yard setback area for which variances are required will not diminish the taxable value of land and buildings in the Village. Just the opposite, the creation of an enhanced beach is an additional community amenity that will make Winnetka a more attractive place to live and enhance property values."

The Caucus Survey results refute this, many citizens think this plan will make Winnetkans worse off.

8. The public health, safety, comfort, morals and welfare of the inhabitants of the Village will not be otherwise impaired.

The Park District contends: "the proposed improvements are compatible with the community and will enhance the general welfare by improving the District's facilities and the quality of the applicants' programming in service of the community."

One again the Caucus Survey results indicate that the opposite will happen.

Since I already went point by point about the Special Use Permit Standards in my previous e-mail, I'll save you from having to go through all of that again. Any time that the Winnetka Park District asserts that this project meets a given standard because it offers a public benefit (and that's what the Special Use Permit process is largely about determining--especially Standards #1, #2, #3, and #4), they are offering a point of view that is not aligned with the citizens and taxpayers they are supposed to represent.

I understand that this issue is very controversial across Winnetka. Everybody has a unique opinion about what should happen with Elder/Centennial, and it's not the ZBA's place to wade in the waters of public opinion to determine what is most popular. However, it is in the ZBA's purview to ensure that an application meets the standards set out in the Village Code. The WPD's narrative repeatedly points to public benefit as a reason that this project meets the standards for Zoning Variations and a Special Use Permit. The Caucus Survey results strongly indicate that this project as proposed is seen by a large portion of the village (and likely a majority) as being a net negative.

I am not asking you to reject these requests from WPD because they are unpopular, but I am asking you to consider their perceived benefit in the community in the context of the standards that the application is required to meet. If the citizens of Winnetka don't think this project will benefit them, then I don't see how the standards for a Variation or Special Use Permit can be met.

Thank you,

Willy Franzen
226 + 232 Sheridan Rd



The Village of Winnetka has approved a Steep Slope Ordinance (SSO) to protect our lakefront bluffs, both now and for future generations. Additionally, compliance with the Americans with Disabilities Act (ADA) is vital in all our Village projects. The ADA emphasizes universal design—making environments accessible to everyone without intrusive or specialized modifications.

However, the proposed ADA pathway at Centennial Park, as requested by the Applicant, is seeking a zoning variance from the SSO and presents a significant threat to the bluff. It involves a long stretch of steel and concrete that contradicts the very purpose of the SSO. If a zoning variation is granted, the integrity of the bluff, as seen at the property immediately to the south of Centennial, will be compromised. As members of the ZBA, your review of a requested zoning variance must consider certain standards, one of which addresses the public health, safety, and welfare. In my opinion, this pathway poses serious safety risks, becoming an attractive nuisance for skateboarders, dogs, children, and those challenged individuals for whom it is proposed to be constructed. I can envision the mayhem of excited dogs tearing down the ramp to the dog beach, while skateboarding teens careen the same path occupied by small children, Seniors and the challenged.

One better and safer alternative is an ADA lift from the top of the bluff to the beach, combined with a Mobi mat for beach access. This option is simple, non-invasive, and fully compliant with both the SSO and ADA. There is no need to grant the zoning variance requested by the Applicant as a lift is a much less invasive alternative to the destruction of the Centennial bluff. The ADA pathway, as proposed, is an attractive nuisance and is without a doubt - an accident waiting to happen. Please deny the Applicant's request for a zoning variance. It is unnecessary.

Thank you.

Mary Garrison

From: [REDACTED]
To: [Planning](#); [Ann Klaassen](#); [David Schoon](#)
Subject: Centennial Park Project
Date: Monday, October 14, 2024 1:46:46 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Winnetka Planning Department, Ann Klaassen, David Schoon, and ZBA Members:

As a resident and owner at 206 Sheridan Road, I have concerns about the proposed WPD plan for Centennial Park and Beach. I am sure you have received many emails with concerns about how the planned improvements will impact the parks. I am sure there are many that are in favor of the plans, but there are also many, like myself, that have concerns regarding how much these plans will alter the essential character of the park, beach, and neighborhood. My family and I walk across the street and spend many days and nights enjoying the parks. We know most of the neighbors and love all the familiar faces. We have little to no concerns about safety while enjoying time with our children, family members, and neighborhood friends. We value this experience and we want to ensure that we don't lose this level of comfort in our community. Please keep this in mind while making your decision(s) and please know that it is imperative to me and my family that the community value within the park is preserved.

I appreciate you taking the time to read my general concern and am hopeful that your decision(s) will be in line with protecting what we value most, community!

Best,
Ankur Joshi
206 Sheridan Rd.

From: [REDACTED]
To: [Planning](#); [David Schoon](#); [Ann Klaassen](#)
Subject: Park District Zoning Appeal
Date: Monday, October 14, 2024 4:55:51 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ann Klaassen, David Schoon, and the Members of the Zoning Board of Appeals
Village of Winnetka Planning Department
510 Green Bay Road
Winnetka, IL 60093

Dear Members of the ZBA and Planning Department:

I am a new resident of 200 Fuller Lane in Winnetka. Since moving here, I have visited Centennial Park's dog beach every day to watch the sunrise and enjoy time with my dog. This daily ritual has highlighted for me just how special Centennial Beach is to this community. The old adage, "if it's not broken, don't fix it," feels particularly relevant here. Centennial Beach, as it exists, is a wonderful space for residents, and I question the need for such extensive changes.

I have three main concerns regarding the current proposal:

1. Increased Intensity of Use (Zoning Ordinance §17.56.120.A.2)

The Park District asserts that the proposed changes will not increase the intensity of use. However, the planned changes will undoubtedly draw more visitors, leading to further congestion and potential overcrowding. This increase will negatively impact the peaceful enjoyment of this public space for residents like myself who appreciate the serenity Centennial currently offers. That serenity is already under threat from incredibly bright night security lights to the south and constant construction related traffic and noise.

2. Parking and Traffic Congestion (Zoning Ordinance §17.56.120.A.4)

Sheridan Road and the surrounding streets already face considerable traffic. The plan does not account for the additional demand on parking and infrastructure that these improvements will bring. Without proper provisions, the area could face significant congestion, compromising the safety and accessibility of the park.

3. Public Lands

Furthermore, Centennial Beach is public land, and all decisions regarding its future should be made through a transparent public process. There is some ambiguity surrounding private party land swaps and donations associated with the plan. If any portion of this project hinges on such arrangements, those details should be made clear to the public and subject to rigorous review by all relevant agencies.

Thank you for your consideration of these concerns.

Sincerely,
Rob Miller
200 Fuller Lane
Winnetka, IL

Rob Miller

A black rectangular redaction box covering the signature of Rob Miller.

From: [REDACTED]
To: [Ann Klaassen](#)
Subject: Tonight's ZBA meeting Insurance risk assessments stone breakwaters Lloyd Centennial Elder beaches
Date: Monday, October 14, 2024 5:17:01 PM
Attachments: [PDRMA letter re risks and dangers of breakwaters at swimming beaches.pdf](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Ann,

Hope it is not too late to include the letter attached in the packet for tonight's zoning Board of appeals letter. PDRMA is the insurer for the Winnetka Park District. Apparently, after the Lloyd boating beach was completed, there were problems keeping people off the rock breakwaters. And accompanying liability, which is what PDRMA is all about.

PDRMA in the attached, while trying to sound supportive the the Park District's new beach plans at Elder and Centennial, says rock breakwaters are hazards for swimmers (Lloyd is not a swimming beach). PDRMA's main solutions for limiting injury and liability is to fence the breakwaters and modify the groins (and increase signage, etc.). The letter is dated October, 2021, but it is still relevant today.

So far as I can tell the Winnetka Park District's proposed Elder/Centennial designs include rock breakwaters and piers. And don't take into account the advice of PDRMA's legal counsel regarding how to limit injury when proposing breakwater designs.

I feel this information should be shared with members of the ZBA at tonight's meeting. Your attention to this is appreciated.

Best,

Laurie Morse

October 22, 2021

Via E-mail and U.S. Mail

Mr. John Peterson
Executive Director, Winnetka Park District
540 Hibbard Road
Winnetka, Illinois 60093

Re: Breakwall Risk Management

Dear John:

Thank you for hosting me recently at Winnetka Park District's Lloyd Beach, Elder Lane Beach, and Centennial Beach as part of PDRMA's on-going discussions regarding the beaches and ways to safely manage beach erosion disrupting the Winnetka Park District's shoreline recreation programming. We understand that the Park District is presently in the process of combining the beaches at Elder and Centennial into a single continuous beach ("Elder-Centennial Beach") and is presently in the design/permit phase of an erosion mitigation project at Elder-Centennial Beach. In connection with that project you have asked me to evaluate the design from a risk management perspective. Based on my review of the site and the plans current as of the date of this letter, I find that the Elder-Centennial Beach Project contains important and meaningful safety features.

Background

As background, the proposed breakwater barrier shown in the current design of the Elder-Centennial Beach project will provide substantial benefits to the Park District, including improved safety for beach users and protection of the Park District's beach asset, through mitigation of beach and shoreline erosion, and beach enhancement for community users of the beaches and water areas. The Breakwater was part of the Park District's Winnetka Waterfront 2030 Plan Master Plan, adopted in 2016. An example of the benefits of the breakwall can be shown by comparing photos of the Park District's Lloyd Beach before and after completion of its extensive erosion mitigation project in 2020. (*Compare* 2019 Lloyd Beach at **Photo A** with 2021 Lloyd Beach at **Photo B**).

Lloyd Beach

To address severe erosion and other issues at Lloyd Beach, the Park District designed and constructed large breakwalls using Armor Stone (large boulders) that extend into Lake Michigan 250 feet from the toe of the bluff to the most eastern placed stone, and well above the surface at current water levels. The Lloyd Beach breakwater design includes a variety of features intended to reduce risks to beach users and the general public, including (but not limited to) clear signage instructing individuals in word and picture not to climb the rocks. (**Photo C**) The Park District also regularly inspects the site and employs beach attendants and lifeguards to actively manage general use patrons

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pdrma.org

and organized user groups. The Park District clearly delineates what activities can and cannot be performed in the beach area, which, in the case of Lloyd Beach, is limited to walking on the shoreline and the use of the beach and water for boating activity. Lloyd Beach is not a swimming beach.

Notwithstanding those efforts, we understand there have been incidents in which patrons visiting Lloyd Beach climb onto the rock-constructed breakwalls, either by disregarding the beach area or by climbing from the water when on boats or when swimming in violation of clearly posted rules. The risks created by the rock breakwaters include most notably a drop-off from heights exceeding four to six feet in certain locations, depending on a variety of factors, as well as potentially uneven, slippery footing conditions, and wave forces. On land, the drop-off is steeper on the southern side of the breakwall because of the accumulation of sand due to littoral drift on the northern side. (Compare northern side of Lloyd breakwall at **Photo D** with southern side of breakwall at **Photo E**). While patrons should not be on the breakwall in the first place, the reality is that if patrons disregard the safety steps already taken by the Park District to discourage access onto the breakwall, a risk of injury exists. The Park District understandably wants to take steps to avoid such injuries, even to those who are not intended, permitted users of the property.

As such, the Elder-Centennial Beach project design attempts to further improve the breakwater's safety characteristics over the Lloyd design, based on the problems encountered at Lloyd after completion of the Lloyd project. We have assessed the Park District's Elder-Centennial breakwater design plans, current as of the date of this letter, and believe the breakwater design at Elder-Centennial Beach is an improvement over the Lloyd design, due in part to its inclusion of barriers at drop-offs and enhanced deterrence against patrons attempting to climb breakwall rocks from the beach or water. Notably, Elder-Centennial Beach will feature a swimming beach, which may allow easier access to the breakwalls from the water, which is one (among many) considerations in deciding what steps may help further deter such unauthorized access. The groin extensions in the Elder-Centennial Beach project plans will provide benefits comparable to those contained in suggestions 1 and 2 below.

We have assembled a list of potential mitigation measures that could be employed – either singly or in combination, and whether retroactively at Lloyd Beach and/or in the future at other shoreline sites, including Elder-Centennial Beach. Obviously, the appropriate mitigation measures for each beach may vary depending on a host of circumstances (e.g., authorized beach use, supervised vs. unsupervised usage, geography and topography, unique design/erosion concerns, littoral drift, etc.). There is no “one size fits all” solution to any beach along Lake Michigan, even among beaches owned or operated by a single local public entity. Further, PDRMA has not evaluated the financial implications applicable to each of the following options, which may change considerably depending on the factors unique to each beach location along Lake Michigan and each local public entity that owns land along Lake Michigan.

PDRMA ideas include:

1. **Install Fencing to Keep Patrons off the Breakwalls.** This step, which is a suggested enhancement to the Elder-Centennial Beach breakwater design and which could perhaps be retroactively fitted to Lloyd Beach, would have the substantial benefit of physically deterring patrons from climbing out on the rocks of the breakwall and avoiding the drop-offs. Of course, like all fences, for a patron intent on getting past the safety device, a fence can be climbed. However, fencing would deter access, enhance non-intended/non-permitted user status for those who attempt to climb it, and increase willful and wanton defenses in litigation. Further, it would act as a clear visual indication of the information the signage conveys, which is that climbing onto the breakwalls is not permitted.
2. **Install a Groin Extension System to Keep Patrons off the Breakwalls:** This measure would provide the same benefits as fencing (above) but with the added benefit of being difficult to climb onto in the first place and, thus, further reducing fall hazard. Given their height and design, the groin extensions will be more difficult to climb or jump over versus other fence designs (chain link fence, cable cords, etc.), and they can be extended further onto the breakwall, thereby addressing hazards created by patrons accessing the breakwall from the beach and from the lake.

The risk of climbers on the breakwall will be more pronounced at beaches where swimmers are in the water (Elder-Centennial) than at beaches where only boating is allowed (Lloyd), though the problem could occur at either type of beach. Depending on their design, coloring, etc., groin extensions also may increase visibility for those providing swimmer supervision (whether by Park District lifeguards at bathing beaches or by parents/family members onshore for unguarded bathing beaches).

Thus, we believe the groin extensions could improve safety and reduce the Park District's risk, by reducing fall risk, enhancing intended/non-permitted user status, making it physically more difficult to breach the breakwall, and helping lifeguards and others (parents, etc.) to monitor swim activities.

3. **Additional Signage: Installation of additional signage, particularly farther along the breakwall and on the beach itself.** Right now, the signage understandably appears at the most likely access point to the breakwall at Lloyd beach, i.e., the base of the breakwall. However, signage in areas further along the breakwall and/or along the beach could also assist in communicating the expectations to patrons. This step is expected to have the benefit of notifying patrons of the risks/requirements before the patrons venture near the drop-offs. Additional signage will also be helpful in those instances where patrons try to climb onto the breakwall from the water or the shore. This step could be used at both locations.

4. **Website Warnings: Reinforcing signage on the Park District's website.** Currently, the Park District's website discusses the uses of the Park District's various beaches (e.g., designations as swimming beach, boating beach, dog beach, etc.). However, to our knowledge, the website does not discuss restricted access on the breakwalls. Adding website warnings could be beneficial both for discouraging access, as well as enhancing non-intended/non-permitted user defenses in litigation.
5. **Adoption of Ordinance:** Board of Park Commissioners' adoption of an ordinance declaring the purpose of the breakwalls and ordering patrons to not access them in violation of signage. This has similar benefits to the website warning option, but with the added benefit that an ordinance will create a stronger non-intended/non-permitted user defense.

As always, each of these potential changes should be weighed against any potential negative impacts from adopting them.

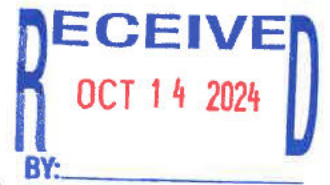
Please do not hesitate to contact me or the Park District's assigned Risk Management Consultant for any additional questions or if you want to discuss specific or additional options. We appreciate the Park District's efforts on the important topic of patron safety and asset protection.

Very truly yours,



Sara P. Yager
General Counsel
Park District Risk Management Agency

cc: Steven B. Adams, Counsel for Winnetka Park District (via e-mail)



TO: VILLAGE OF WINNETKA ZBA

FROM: KRISTINE SCHRIESHEIM

RE: WPD CENTENNIAL PLAN

**VIOLATES CODE REQUIREMENTS
FOR VARIANCE APPROVAL**

DATE: OCTOBER 14, 2024

**WPD'S Centennial Plan materially
departs from what is reasonably
necessary for a dog or human beach,
threatening:**

1. PUBLIC HEALTH—NO

**BATHROOMS in WPD plan will result
in beachgoers using the lake
instead. This is a PUBLIC NUISANCE
under Village Code Section**

9.16.010—A public nuisance includes the pollution of any lake or body of water by sewage or other substances.

2. SAFETY—Piers and breakwaters create rip tides, structural currents, block sight lines, and make it harder to carry out rescues.

3. WELFARE—Piers/breakwaters create drowning risks, yet WPD's plan fails to incorporate modern safety measures such as specified pier closure procedures and warnings during storms, or using robots for water rescues.

4. WPD LIFEGUARDS ARE NOT PROFESSIONALS—they are our children and our neighbors' children, largely high school and college students whose own welfare would be threatened by attempting rescues in waters made more dangerous by WPD's proposed pier and breakwater-impacted beaches.

EXPERTS AGREE: THE U.S. ARMY CORPS OF ENGINEERS WARNS OF MULTIPLE DANGERS FROM PIERS AND BREAKWATERS:

1. WEATHER CONDITIONS MAY KNOCK/WASH PEOPLE INTO THE WATER

2. DANGERS INCLUDE SLICK SURFACES, JAGGED/SHARP EDGES+STRUCTURAL CURRENTS

3. SEVERE RISK OF GETTING WEDGED BETWEEN ARMOR STONES OR SLAMMING INTO THEM, PARTICULARLY AT TIMES OF LOWER WATER LEVELS

4. FALLING & JUMPING OFF STRUCTURES: GRIM DANGERS- DEATH AND SERIOUS INJURIES

The USACE is currently studying the impact of waves on piers and breakwaters—if USACE feels it

needs to address this, WPD should certainly have to establish the matter of its plan's safety, effectiveness and usefulness prior to getting a zoning variance.

THE GREAT LAKES WATER SAFETY CONSORTIUM HAS STUDIED DANGEROUS CURRENTS IN THE CONTEXT OF PIERS AND BREAKWATERS. Significantly, it states that “In the Great Lakes, there are permanent currents and variable currents. Permanent currents are always found in certain locations—and only vary in strength. For example, strong currents are always

present along piers and break walls . . . [].” Structural currents are dangerous on their own, but when paired with others like . . . rip currents, the combination can create a washing machine effect, moving the swimmer from one dangerous current to another with no clear path to safety. Avoid jumping off or swimming near piers. The currents found along these structures are often dangerously strong.” WPD’s Centennial plan would create and magnify these risks to people, boaters, and pets.

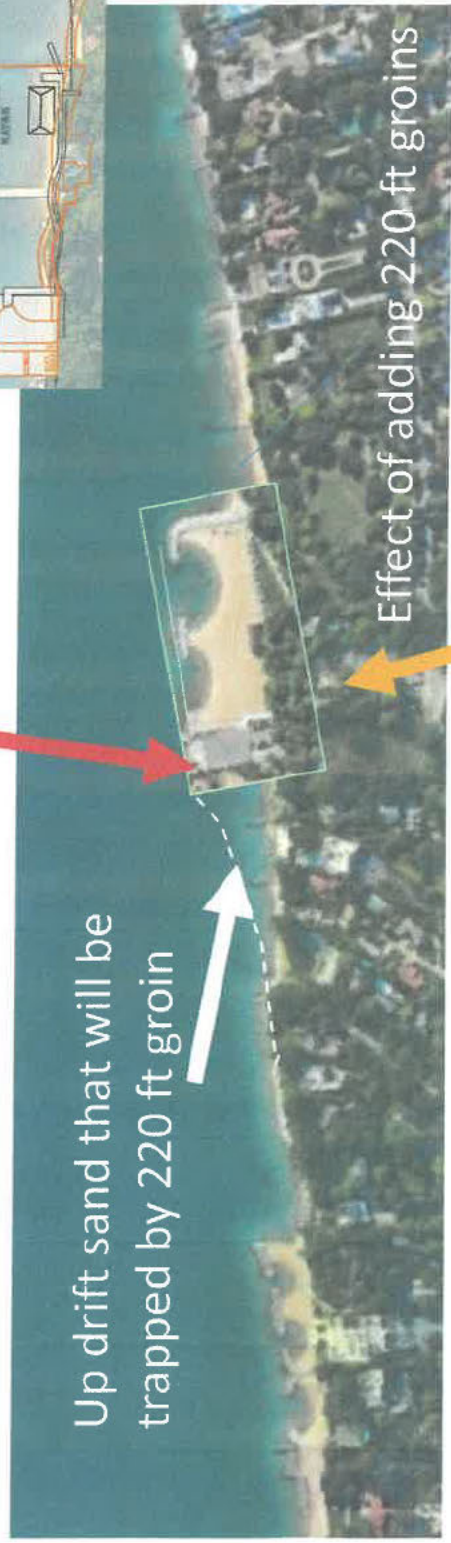
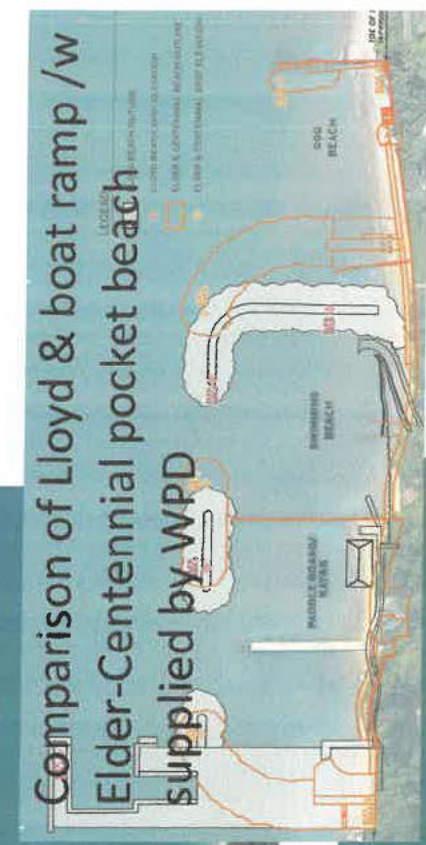
WPD's PLAN LACKS LAKE MICHIGAN SAFETY MEASURES CURRENTLY IN PLACE AT OTHER PUBLIC BEACHES:

- 1. Double red flags online with text alerts.**
- 2. Safety light towers connected to NWS.**
- 3. Website link to NWS rip current forecasts.**
- 4. Lifesaving robots ("E.M.I.L.Y.").**
- 5. Signs + barriers closing off piers and enforcement mechanisms.**

Chicago has a population of roughly three million people. Navy Pier is a half mile long structure in Chicago's deeper Lake Michigan waters.

Winnetka is a village with a population of roughly 12,400 people, which is ^{a tiny percentage} ~~roughly 0.4%~~ of Chicago's size—yet WPD's Elder-Centennial scheme is jarringly similar to Chicago's Navy Pier's. Granting a variance to build a "Navy Pier"-like project in Winnetka would violate its R-2 Zoning and be wildly out of place.

A 220 ft long armor stone groin is similar to adding a power plant sized sand dam



Good Evening. I am Susie Schreiber, former Winnetka Park Board Commissioner, and member of a lead team involved over the last 30 plus years for the cleanup of the Waukegan Harbor Area of Concern and Extended Area of Concern on the Great Lakes under the governance of the International Joint Commission for Canada and the United States.



Zoning Board of Appeals

Communities around the Great Lakes Basin are looking at maintaining and enhancing [Ecosystem Integrity](#) as we deal with the coastal hydrology of the entire Great Lakes Basin.

- Lake Michigan is a part of the Great Lakes Watershed. This watershed represents 20% of the world's fresh water supply. Illinois has 63 miles of shore on the 1,638 miles of the Lake Michigan coast.
- Winnetka's piece of the Lake Michigan portion of the Great Lakes coastline must be responsibly managed for the macroinvertebrate and microorganism communities, and for the avian and fisheries communities living within the nearshore tableland, slopes and ravines and nearshore in-lake habitat.
- The property to the south of Centennial and Elder Lane Parks recently removed the entire natural bluff area, replacing it with concrete, steel pilings and stone.
- The Winnetka Park District's current proposal on the bluffs of Centennial Park is to extensively remove and pave a great deal more of this important bluff habitat for a poorly designed equipment access road running diagonally across the steep slope. This same road is to be used for ADA access, although it has **not been properly** vetted to meet ADA standards to date.
 1. Contrary to the Winnetka Park District statement in recent PR pieces that their plan is State of the Art for shoreline protection, **this is not the case**. It is an older technology.
 2. Their plan exacerbates the ecological functioning of the steep slope land intersecting with the shoreline for the floristic and faunal communities. Hardening the steep slope interface between the land and waters is not a healthy option from the already impacted Lake Michigan coast, and this in turn, affects the Great Lakes ecosystem and hydrology as a whole.
- There are other options, ones far more studied and advanced scientifically, than those under consideration in the Winnetka Park District's proposal before you:

1. The NOAA (National Oceanic Atmospheric Association) Basin studies of offshore islands designed with natural underwater habitat within their footings is an example. 22 of these islands have recently been installed offshore of Illinois Beach State Park after years of careful study by federal, state, regional and binational agencies.
2. We should have in hand the Winnetka portion of the bathymetrics of our entire shoreline prior to advancing proposed infrastructures on our bluffs and out into the lakebed.
3. Locally, regionally, nationally and internationally we **ARE** a part of the Bi-National Great Lakes Watershed. We need to set high standards in all of our remediations and renovations within our local holdings. [The Winnetka Shoreline IS part of this BIG picture.](#)

Thank you for your thoughtful and studied consideration of data and documents presented to you this evening regarding the Permit Request of the Winnetka Park District for Centennial Park.

David Schoon

From: Kris Schriesheim <[REDACTED]>
Sent: Wednesday, October 16, 2024 10:09 AM
To: David Schoon; Robert Bahan; Ann Klaassen
Subject: 10/14/24 ZBA remarks—please provide to ZBA members

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[Download Attachment](#)
[Available until Nov 15, 2024](#)

Good morning:

Would you please include my remarks and supporting documentation with ZBA members for its next meeting, along with the following additional comments:

1. WPD has publicly stated twice that it expects Centennial beach patrons to wade through the waters of Lake Michigan in order to reach a bathroom. Not only is this unsafe, as well as impossible for parents/caregivers with children and/or physically challenged individuals, threatening public health and creating a public nuisance, it also would likely constitute an OSHA violation. Please see attached OSHA interpretation in the context of WPD's expectation that employees would have to enter the waters of the Great Lakes in order to reach a bathroom during their shifts.
2. On a personal note I would add that the 8% pitch of WPD's pathway would be really hard for most people pushing wheelchairs with anyone heavier than a young child, whether going up or down the path. The steep pitch would also be challenging for parents/babysitters/caregivers/grandparents pulling wagons or pushing strollers up and down the path, particularly given the path's length.
3. The plan's use of steps as the only means of accessing the dog beach makes that area inaccessible—why would WPD do this?
4. This and other egregious flaws are the result of WPD's concessions to private input into the Elder and Centennial plans' overall designs.

Thank you.

Kris Schriesheim

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Sent from my iPad

TO: VILLAGE OF WINNETKA ZBA
FROM: KRISTINE SCHRIESHEIM
RE: WPD CENTENNIAL PLAN
VIOLATES THE CODE'S
REQUIREMENTS FOR VARIANCE
APPROVAL
DATE: OCTOBER 14, 2024

**/ WPD'S MISREPRESENTATION THAT
CENTENNIAL'S THREE-SIDED
FENCING PLAN MEETS COOK
COUNTY'S FOUR-SIDED FENCING
REQUIREMENT IS A THREAT TO
PUBLIC MORALS**

2. WPD's Centennial Plan materially departs from what is reasonably necessary for a dog or human beach, threatening:

1. Public health (NO BATHROOMS)

2. Safety (RIP TIDES, SITE LINES BLOCKED, HARDER TO CARRY OUT RESCUES)

3. Welfare (PIERS/BREAKWATERS INCREASE DROWNING RISKS, CREATE STRUCTURAL CURRENTS, PLAN LACKS MODERN SAFETY MEASURES LIKE PIER CLOSURES DURING STORMS, ROBOT RESCUES).

3. Baird required changes to 205 Sheridan's Shoreline Protection System's Original Site Line Impact ranging from 5-7.8 feet, based on limited views, blocked access and impaired rescue access.

WPD's proposed Centennial plan includes a 10.5' barrier, massive fenced off breakwaters/pier that are bigger than 205 Sheridan's, with blocked views, impaired public access and impacting rescues—similarly public nuisances and a threat to health/safe/welfare.

**4. U.S. ARMY CORPS OF ENGINEERS
WARNS OF DANGERS FROM PIERS
AND BREAKWATERS:**

**1. WEATHER CONDITIONS MAY
KNOCK/WASH PEOPLE INTO THE
WATER**

**2. DANGERS INCLUDE SLICK
SURFACES, JAGGED/SHARP
EDGES, STRUCTURAL CURRENTS**

**3. SEVERE RISK OF GETTING
WEDGED BETWEEN ARMOR STONES
OR SLAMMING INTO THEM**

**4. FALLING & JUMPING OFF
STRUCTURES: GRIM DANGERS-
DEATH AND SERIOUS INJURIES**

5. GREAT LAKES WATER SAFETY CONSORTIUM DANGEROUS CURRENTS DISCUSSION

6. WPD PLAN LACKS LAKE MICHIGAN SAFETY MEASURES CURRENTLY IN PLACE AT OTHER PUBLIC BEACHES

- 1. DOUBLE RED FLAGS ONLINE
WITH TEXT ALERTS**
- 2. SAFETY LIGHT TOWERS
CONNECTED TO NWS**
- 3. WEBSITE LINK TO NWS RIP
CURRENT FORECASTS**
- 4. LIFESAVING ROBOT E.M.I.L.Y.**
- 5. EDUCATION/TRAINING ON RIP
CURRENTS**
- 6. SIGNS+BARRIERS CLOSING OFF
PIERS+ENFORCEMENT**

TO: VILLAGE OF WINNETKA ZBA

FROM: KRISTINE SCHRIESHEIM

RE: WPD CENTENNIAL PLAN

VIOLATES THE CODE'S

REQUIREMENTS FOR VARIANCE

APPROVAL

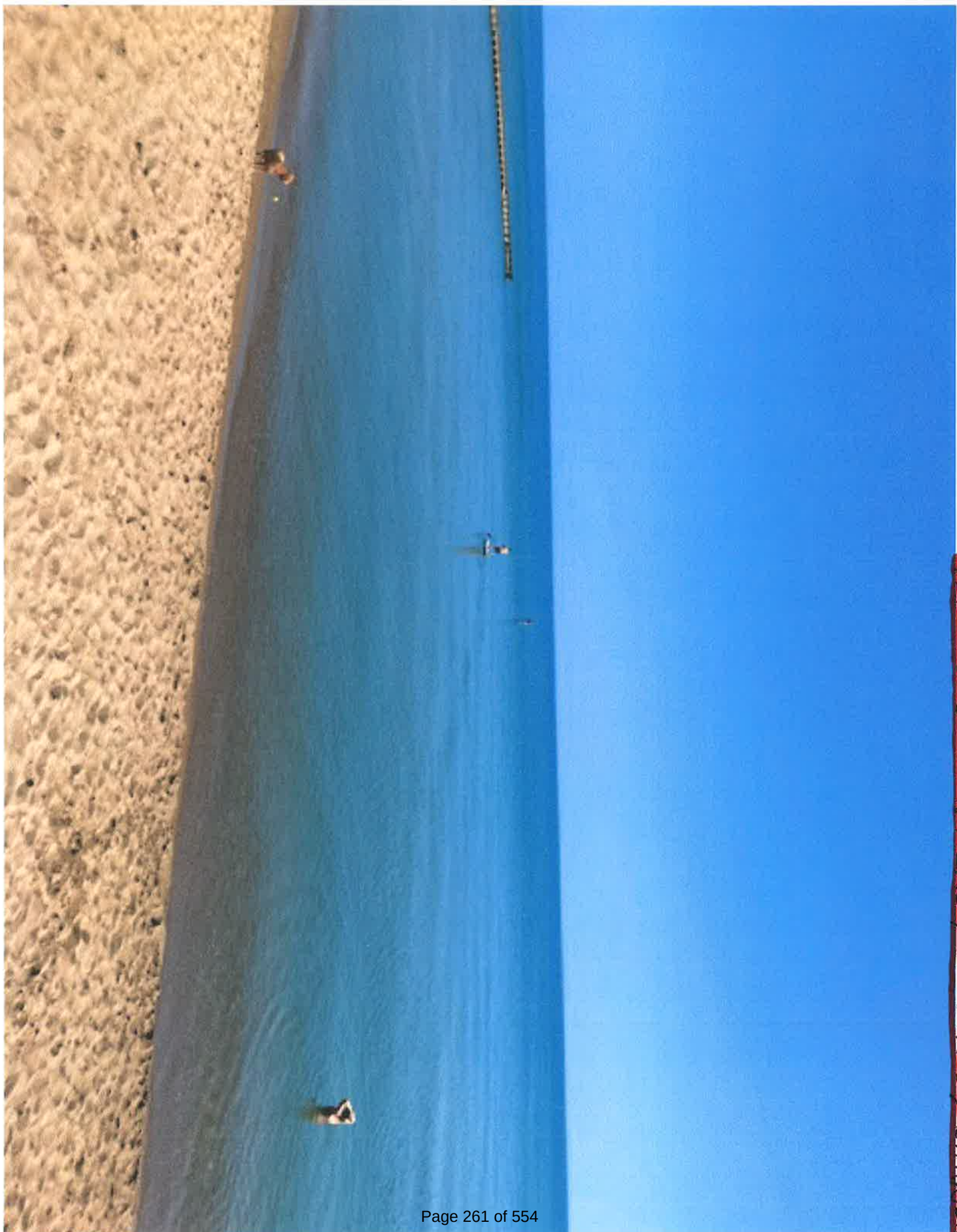
DATE: OCTOBER 14, 2024

ATTACHMENTS 1-6

**/ WPD'S MISREPRESENTATION THAT
CENTENNIAL'S THREE-SIDED
FENCING PLAN MEETS COOK
COUNTY'S FOUR-SIDED FENCING
REQUIREMENT IS A THREAT TO
PUBLIC MORALS**

Title 9

Public Peace, Morals and Welfare



ARE MICHIGAN'S MATTERS AT FENCE / BARBIE

After Cook County passed Dog Park regulations in 2004, WPD resolved never to establish a “Dog Park” in Winnetka because of the regulations’ four-sided fencing requirement.

Cook County allows “Dog Friendly Areas” (“DFA”) on Lake Michigan, with health/vaccination requirements but without fencing. Centennial Park meets DFA requirements.



This post was contributed by a community member. The views expressed here are the author's own.

[Sports](#)

Suburban Stadiums: Centennial Park's Dog Beach

Pass holders can unleash their canines to dig, roam and frolic in the lakefront sand.



Ross Jacobson, Neighbor

Posted Wed, Aug 3, 2011 at 12:23 am CT Updated Thu, Aug 4, 2011 at 12:19 pm CT



CENTENNIAL PARK'S DOG BEACH

must purchase a season dog pass, which cost \$30 for residents and \$160 for nonresidents. The pass opens a locked gate, allowing access to the dog park along Lake Michigan.

The procedure was implemented in the summer of 2005 because of new regulations by Cook County. Owners now have to prove that their dogs have been immunized, have a village-issued tag and have been tested for rabies before a season pass can be purchased.

The Park District distinguishes between Centennial Park and the dog beach. While dogs are allowed to roam at the beach, they must remain leashed in the park at 225 Sheridan Rd.

“We investigated putting in a dog park, but to put up a permanent fence on any park would be difficult,” Volpe said.

Because of its status as the Winnetka Park District’s only dog beach and the fact that so many dog owners walk their pets through the park to the beach, Volpe doesn’t schedule any events or programs in the area. They keep the park open and allow dogs to have their space.

Before the Cook County rules came into effect, the Park District did hold an annual dog party along the beach for a couple years.

Volpe says the dog beach has been widely successful as sales of more than 300 passes occur each summer to owners, whose current access is valid through March 31.



Accessibility

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Dog Friendly Area (DFA) Frequently Asked Questions

Supporting Information Facts

Department:

Animal Care and Control

People We Serve:

Residents

Families

1. **Question: What is the permit and tag fee?**

Answer: The permit and tag fee is a total of \$5.00

2. **Question: How long is a permit and tag good for?**

Answer: Any permit and registration tag will be valid only for a single season no matter when purchased. A single season is defined as the period running from January 1st of any year through December 31st of the same year.

3. **Question: Will there be a sliding scale for seniors or visitors?**

Answer: There will not be a sliding scale. Visitors must follow the same procedures for obtaining a permit and tag.

4. **Question: Where can I get a permit and tag?**

Answer: Permits and tags will only be available at participating Chicagoland veterinary offices. If you are an out-of-state resident you must also contact one of the participating Chicagoland veterinary offices to determine what paperwork is necessary to obtain the permit and tag. Most of these veterinarians will help those whose own vets are not participating. You should call them first to confirm that they will assist you and to determine how much they charge for an office visit.

5. **Question: When can I get a permit and tag?**

Answer: Permits and tags will be available at participating Chicago veterinary offices beginning February 1st, 2006.

6. **Question: Will there be visitor or day passes?**

Answer: There are no visitor or day passes. Any visitor wishing to bring their pet to a Chicago Park District Dog Friendly Area must follow the same procedures for obtaining a permit and tag.

7. **Question: What are the permit requirements?**

Answer: Pursuant to regulations under the new Cook County Ordinance, dog owners must show proof of:

- a. Current dog license issued by the City of Chicago, or proof that the dog has a current rabies vaccination.
- b. Examination within the past year for any communicable diseases including an examination of a stool specimen for internal parasites.
- c. Current vaccination or titer if possible for Distemper, Hepatitis, Para-influenza, Parvovirus, and Bordatella (kennel cough) unless an exemption to this requirement has been granted by the Administrator upon the written recommendation from the Owner's veterinarian.

8. **Question: Who will enforce the rules and regulations?**

Answer: The Cook County Department of Animal and Rabies Control will enforce DFA rules and regulations and issue tickets to violators.

Violators, along with the Chicago Park District, will face a possible fine of \$500. Dog owners must carry their permits at all times when attending DFAs. Each DFA will have a sign posted at the entrance stating all DFA rules and regulations.

9. **Question: What happens if I lose my permit or tag?**

Answer: If a patron loses their dog tag or permit, they must reapply for a permit and tag for a \$5.00 fee with a participating Chicagoland veterinarian.

10. **Question: Why do I need a permit and tag for my dog to enter a DFA?**

Answer: Pursuant to a regulation issued by the Administrator of the Cook County Department of Animal and Rabies Control, all dogs entering a DFA must have a permit and registration tag from a licensed veterinarian. People bring dogs into a Chicago Park District DFA must have both a permit with them and a registration tag for each dog. The registration tag must be on the dog's collar or harness. The permit and registration tag may be used at any officially sanctioned Chicago Park District DFA.

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2. WPD's Centennial Plan materially departs from what is reasonably necessary for a dog or human beach, threatening:

1. Public health (NO BATHROOMS)

2. Safety (RIP TIDES, SITE LINES BLOCKED, HARDER TO CARRY OUT RESCUES)

3. Welfare (PIERS/BREAKWATERS INCREASE DROWNING RISKS, CREATE STRUCTURAL CURRENTS, PLAN LACKS MODERN SAFETY MEASURES LIKE PIER CLOSURES DURING STORMS, ROBOT RESCUES).

#2 CONTINUED

4. WPD LIFEGUARDS ARE NOT PROFESSIONALS—THEY ARE LARGELY HIGH SCHOOL AND COLLEGE STUDENTS WHOSE OWN WELFARE WOULD BE THREATENED BY ATTEMPTING RESCUES IN MORE DANGEROUS, PIER/BREAKWATER IMPACTED WATERS OF LAKE MICHIGAN.

Section 9.16.010 Public nuisances prohibited.

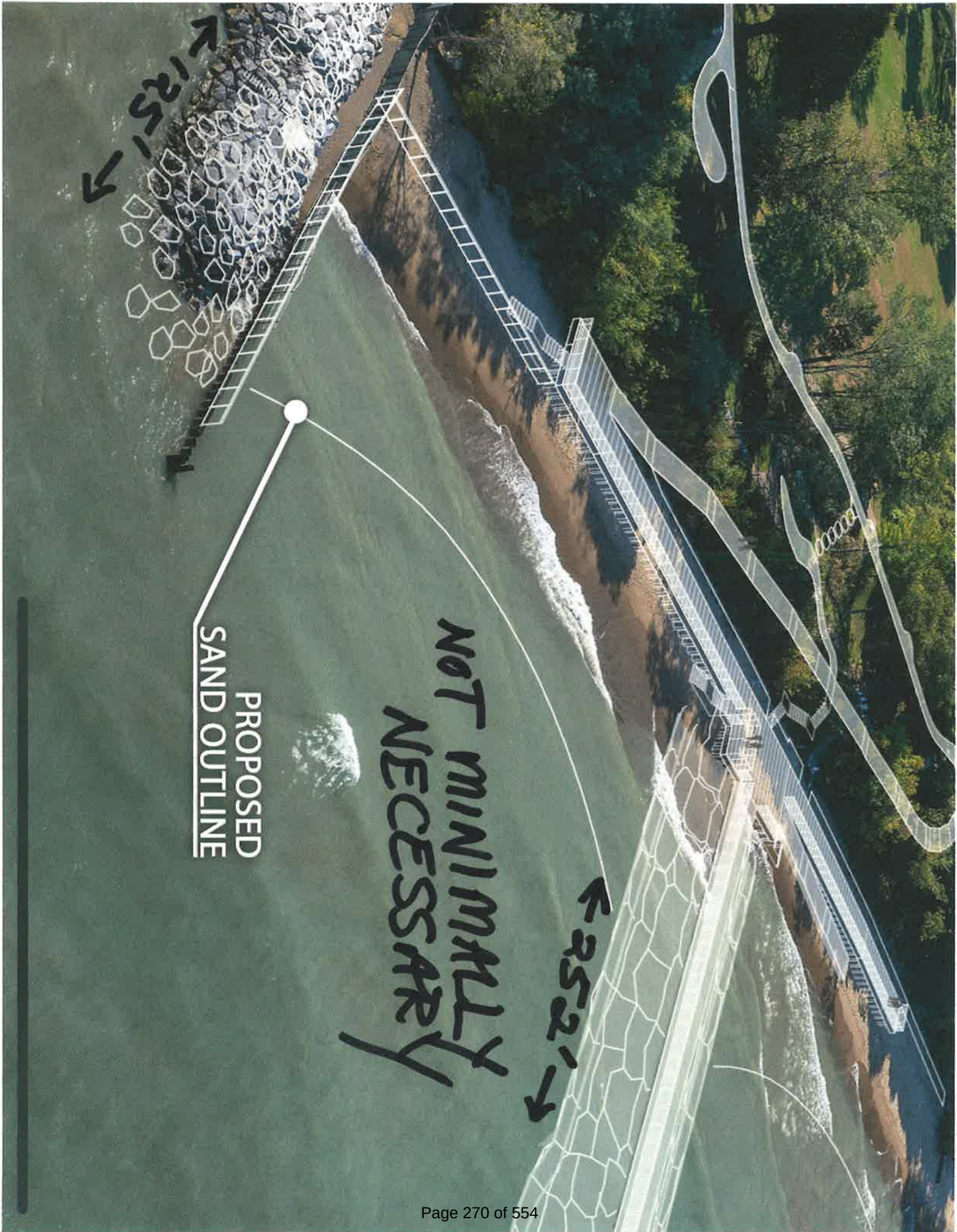
No person shall erect, contrive, cause, continue, maintain or permit to exist any public nuisance within the Village or within the police jurisdiction of the Village.
(Prior code § 12.01)

Section 9.16.020 Public nuisances defined.

A. General. A public nuisance is a thing, act, occupation, condition or use of property which shall continue for such length of time as to:

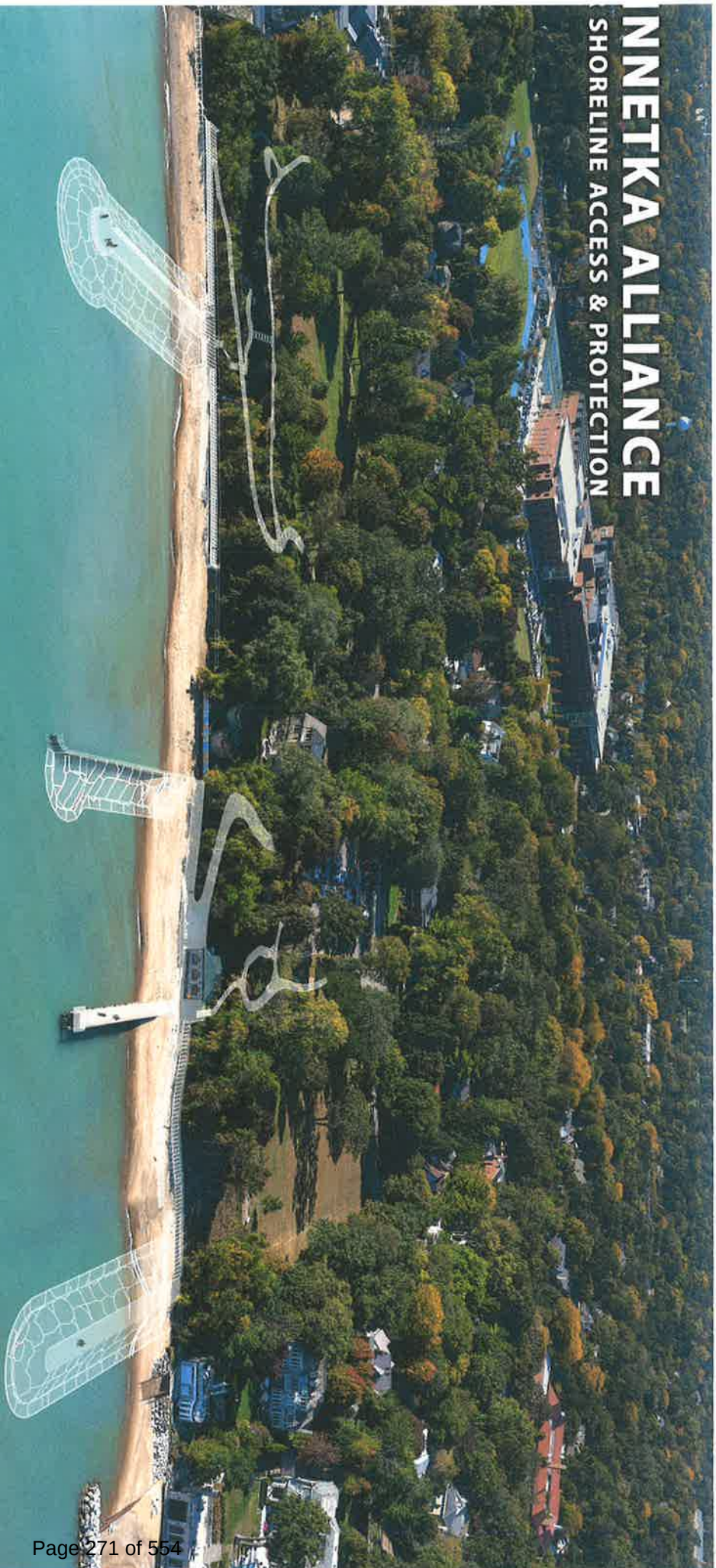
1. Substantially annoy, injure or endanger the comfort, health, repose or safety of the public; or
 2. In any way render the public insecure in life or in the use of property; or
 3. Greatly offend the public morals or decency; or
 4. Unlawfully and substantially interfere with, obstruct or tend to obstruct or render dangerous for passage any street, alley, highway, navigable body of water or other public way.
- B. Public Nuisances Affecting Health. The following acts, omissions, places, conditions and things are specifically declared to be public health nuisances, but shall not be construed to exclude other health nuisances coming within the definition of subsection A of this section:

1. All decayed, harmfully adulterated or unwholesome food or drink sold or offered for sale to the public;
2. Carcasses of animals not buried or otherwise disposed of in a sanitary manner within twenty-four (24) hours after death;
3. Accumulations of decayed animal or vegetable matter, trash, rubbish, rotting lumber, bedding, packing material, abandoned vehicles or machinery, scrap metal or any material in which flies, mosquitoes, disease-carrying insects, rats or other vermin may breed or which create a fire hazard;
4. All stagnant water in which mosquitoes, flies or other insects can multiply;
5. Garbage cans which are not fly-tight;
6. The escape of smoke, soot, cinders, noxious acids, fumes, gases, fly ash or industrial dust within the Village limits in such quantities as to endanger the health of persons of ordinary sensibilities, or any act in violation of the Illinois Environmental Protection Act (415 ILCS 5/1, et seq.);
7. The pollution of any public well or cistern, stream, lake, canal or body of water by sewage, industrial wastes or other substances; or any act in violation of the Illinois Environmental Protection Act;
8. Any use of property, substances or things within the Village emitting or causing any foul, offensive, noisome, nauseous, noxious or disagreeable odors, effluvia or stenches repulsive to the physical senses of ordinary persons which annoy, discomfort, injure or inconvenience the health of persons within the Village;
9. All abandoned wells not securely covered or secured from public use;
10. Any barn, stable or shed used for keeping animals;



NETKA ALLIANCE

SHORELINE ACCESS & PROTECTION



NOT REASONABLY
NECESSARY

PHOTOGRAPH
CURRENT PLAN OVERL



Nathan Blue Skies @NathanKelly90 · 2h

Imploring everyone in Winnetka to go take a dump on the billionaire's private beach.

Chicago Tribune @chicagotribune · 4h

The Winnetka Park District's plan to improve Centennial beach does not call for washroom facilities. So visitors seeking a toilet will be directed to wade into Lake Michigan to avoid the private beachfront property owned by billionaire Justin Ishbia. trib.al/wv1Fppu



32



Molly @mollyfleck · 3h

After living pretty much my entire adult life in Chicago and Sydney, two places that ban private ownership of the shoreline, I firmly believe private beaches on large bodies of water should be outlawed. Beaches are for the people!

Chicago Tribune @chicagotribune · 4h

The Winnetka Park District's plan to improve Centennial beach does not call for washroom facilities. So visitors seeking a toilet will be directed to wade into Lake Michigan to avoid the private beachfront



Dr. Jeanne Beckman @DrJeanneBeckman · 7h

Hey Winnetka

Have you considered restoring Winnetka as a shining historical star? Newport, RI can show you the way with their public access Cliff Walk. Winnetka Park District considering making beachgoers walk in the lake to avoid walking on giveaway beach



No bathrooms planned for Winnetka's Centennial Beach; plans for two beaches continue

From chicagotribune.com

Post



Chris @carlcicahn1 · 3h

people will end up wading into Lake Michigan to use the bathroom, but I think not in the way the park district is intending...

👍 123 🗨️ 9 ↕️



AndrewMFC @LiarOfOrpheus · 3h

Or, we can just use the private lakefront property owned by billionaire Justin Ishbia as the restroom. Problem solved.

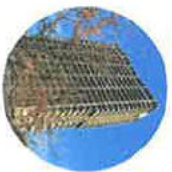
👍 86 🗨️ 6 ↕️



Charles Ross Pearson @charles_preset · 32m

Michigan solved this with having the “highwater mark,” as the limit of public access within reason. Illinois should follow suit.

👍 8 🗨️ 0 ↕️



Robert A. Koch 🚀💣 @RobertAKoch001 · 2h

Pee and poop in the rich guy's water?

Are they trying to get him to donate a bathing facility for the beach?

👍 44 🗨️ 0 ↕️

3. Baird required changes to 205 Sheridan's Shoreline Protection System's Original Site Line Impact ranging from 5-7.8 feet, based on limited views, blocked access and impaired rescue access.

WPD's proposed Centennial plan includes a 10.5' barrier, massive fenced off breakwaters/pier that are bigger than 205 Sheridan's, with blocked views, impaired public access and impacting rescues—similarly public nuisances and a threat to health/safe/welfare.

Table 1: Changes to the Height of North Stone Groin in Response to Permit Reviews

Approx. distance from toe of bluff	Elevation of sand north of existing groin (NAVD88) ¹	Original Crest Elevation (NAVD88)	Original Site Line Impact	Permit Review 2 Revision - Proposed Crest Elevation (NAVD88)	Permit Review 2 Revision - Site Line Impact	Final Revised Crest Elevation (NAVD88)	Final Site Line Impact
0 ft	586 ft	591 ft	5 ft	589 ft	3 ft	588 ft	2 ft
40 ft	582 ft	591 ft	9 ft	589 ft	7 ft	586 ft	4 ft
70 ft	579 ft	587 ft	7.8 ft ²	587 ft	7.8 ft ²	586 ft	6.8 ft ²
100 ft	577 ft	587 ft	7.8 ft ²	587 ft	7.8 ft ²	586 ft	6.8 ft ²

¹ The elevations provided for comparison are existing sand elevations according to the permit plans. The Permittee is expected to place sand north of the proposed North Stone Groin where sand is expected to accrete post-construction, which will reduce the site line impact.

² The Site Line Impact calculation for in-water sections of the groin is height above long-term average lake level (579.18 ft NAVD88).



2022 Elder Lane + Centennial Development Plan with Park District



IDNR Permit Submittal for 205 Sheridan Rd. Proposed Project - March, 2023



Approved 205 Sheridan Rd. Proposed Project - September, 2023

*All depicted elements are to scale

**4. U.S. ARMY CORPS OF ENGINEERS
WARNS OF DANGERS FROM PIERS
AND BREAKWATERS:**

**1. WEATHER CONDITIONS MAY
KNOCK/WASH PEOPLE INTO THE
WATER**

**2. DANGERS INCLUDE SLICK
SURFACES, JAGGED/SHARP
EDGES,STRUCTURAL CURRENTS**

**3. SEVERE RISK OF GETTING
WEDGED BETWEEN ARMOR STONES
OR SLAMMING INTO THEM**

**4. FALLING & JUMPING OFF
STRUCTURES: GRIM DANGERS-
DEATH AND SERIOUS INJURIES**



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News Releases

Stay off piers, breakwaters during high winds, storms, wave action

DETROIT DISTRICT

Published Oct. 30, 2018



[PRINT](#) | [E-MAIL](#)

DETROIT – The U.S. Army Corps of Engineers, Detroit District, strongly urges people to use caution around breakwaters, piers or jetties in the Great Lakes and to adhere to posted warning signs. Do not swim near or jump off any structure, the life you save may be your own.

Most accidents and incidents near harbor structures occur during the turbulent weather season from late August through December. The lakeshore attracts local residents and visitors alike. Visitors may not be aware of the powerful impacts that high winds and storms can bring to the shoreline and harbor structures. Weather conditions during this time can cause waves to wash over the top of structures, creating slippery surfaces and enough force to knock a person off and into the water. Even low waves washing over a person's feet can knock them down and cause a situation where they are unable to react. All of these factors combine to make a trip to the breakwater a risky proposition.

It's beautiful, but dangerous. Fishermen, swimmers, nature lovers and sightseers all love the beauty and pleasure of walking on a breakwater. Although the structures were primarily built for ship navigation, they are also often used for recreation. It is imperative that users know the risks and responsibilities to safely use them. The beauty and majesty of the waves crashing and spraying against the breakwaters, piers and jetties mask the hazards. Harbor structures pose various dangers: slick surfaces, jagged and sharp edges, structural currents, as well as large rocks hidden beneath the water's surface.

Designed for protection. Breakwaters are designed to reduce wave action in channels and harbors. These structures can withstand over 50 years of pounding waves, several feet of piled ice and even an occasional ship collision. Their design hides their robust nature. Just like an iceberg, most of a breakwater is below water and the pleasant view above the water disguises the danger below.

Hazards below. Enormous armor stones, quarried rock buttressing the pier or breakwater, provide support for the structure's steel and concrete, and are hidden beneath the waves. Individually, these rocks weigh between one and 40 tons. Danger is always present regardless of the water level, but low water makes the situation more dangerous, as the rock is closer to the surface. There is severe risk of getting wedged between armor stones or slamming into them should an individual fall or jump into the water.

Water Dangers. While many victims who have fallen or jumped off these structures were said to have been very good swimmers, the reality of past statistics paint a sad picture. In 2018 so far, there have been 102 drownings in the Great Lakes. Though not all of these drownings occurred at harbor structures, it is a grim reminder of the risks and dangers that are present when in and around water.

Rip currents, structural currents, and cold water shock are a common cause of drowning. Rip currents are fast-moving, narrow currents of water that flow away from shore. Structural currents can occur at fixed structures such as breakwaters and piers, and flow away from shore parallel to the structure. Cold water temperatures can also be very

- [2024 \(141\)](#)
- [2023 \(174\)](#)
- [2022 \(159\)](#)
- [2021 \(104\)](#)
- [2020 \(52\)](#)
- [2019 \(22\)](#)
- [2018 \(71\)](#)
- [2016 \(3\)](#)
- [2014 \(1\)](#)

dangerous. Becoming suddenly immersed in cold water (60°F degrees and colder) can cause cold water shock during the first minute of exposure. Cold water shock causes gasping and difficulty in breathing, followed by muscle failure, all of which can lead to drowning.

Stay Safe. For more information on water and pier safety, the Great Lakes Beach & Pier Safety Task Force's video, "Respect the Power", is a great resource. Please contact the Director of Public Affairs for the Detroit District, Lynn Rose, at [313-226-4680](tel:313-226-4680), for more information.

Corps of Engineers

Breakwater Safety Precautions---

- Closely supervise your children
- Life jackets are recommended to be worn when on any structure
- Do not jump, dive off, or swim near structures
- Stay off structures during high winds or when waves are washing over them
- Avoid walking upon wet slippery areas
- Stay away from the edge
- Do not run or climb upon structures

Note: Local ordinances may prohibit swimming in navigational channels

-30-

Contact

Lynn Rose

[313-226-4680](tel:313-226-4680)

[313-300-0662](tel:313-300-0662) (cell)

Lynn.M.Rose@usace.army.mil

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THROUGH DEEDS, NOT WORDS, WE ARE BUILDING STRONG®

Coastal Hazard Message
National Weather Service Chicago IL
949 AM CDT Sun Sep 1 2024

ILZ006-103-104-012300-
/O.CON.KLOT.BH.S.0014.000000T0000Z-240903T0000Z/
Lake IL-Northern Cook-Central Cook-
949 AM CDT Sun Sep 1 2024

..BEACH HAZARDS STATEMENT REMAINS IN EFFECT THROUGH MONDAY
EVENING...

* WHAT.. **Life threatening waves and currents** occurring at Lake
Michigan beaches.

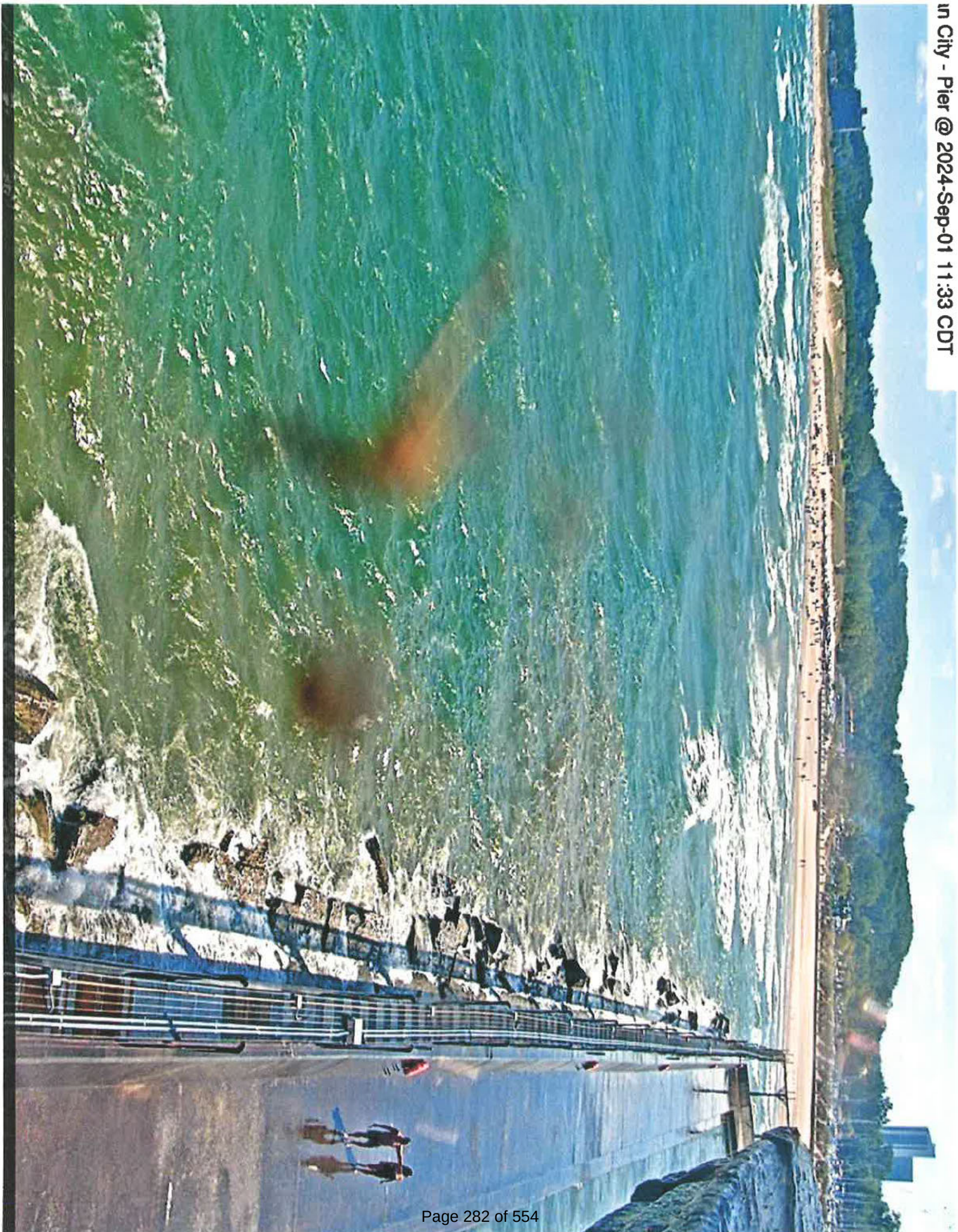
* WHERE...Lake IL, Northern Cook and Central Cook Counties.

* WHEN...From 7 AM CDT this morning through Monday evening.

* IMPACTS.. **Swimming conditions will be life threatening,**
especially for inexperienced swimmers. For information on swim
advisories or bans at Chicago beaches: [www. cpdbeaches. com](http://www.cpdbeaches.com).

PRECAUTIONARY/PREPAREDNESS ACTIONS...

Remain out of the water to avoid dangerous swimming conditions
and do not venture out onto piers, jetties, breakwalls, or other
shoreline structures.





LAKE MICHIGAN

Water safety in sharp focus after multiple Lake Michigan drownings in recent days

At least three people are believed to have died in tragedies on Lake Michigan in recent days

By NBC Chicago Staff •

Published June 17, 2024 •

Updated on June 17, 2024 at 4:22 pm



A series of tragedies on Lake Michigan this week, with multiple victims drowning and experts offering tips to stay safe as hot weather sends people toward the water.

Trending Stories



CHICAGO

Will the Northern Lights be visible again tonight? Latest chances for Chicago area

One of the tragedies occurred near Montrose Beach when a 16-year-old boy died [after the raft he was riding on capsized](#), leading to a dramatic rescue of a 16-year-old girl that was with him.

"I heard somebody yelling help," Megan, who witnessed the incident, said. "It's traumatizing to see this and to see that happen is going to stick with me for quite some time."

In another incident, a 12-foot sailboat capsized a few miles off shore in suburban Winnetka. Authorities say a woman, who was wearing a life vest, was

where she called for help at approximately 2 a.m. Monday.

She told authorities that a 50-year-old woman was still missing, and the U.S. Coast Guard found her approximately a mile offshore. [She was pronounced dead at the scene](#), according to Chicago Fire officials.

A third incident occurred Saturday when a 58-year-old man [fell off a boat in Chicago's "playpen."](#) He remains missing after several days of searching, according to authorities.



RECALLS

10 million pounds of meat, chicken sold nationwide at popular grocery stores, restaurants recalled



CHICAGO

Where can you see the Northern Lights again Friday? Here's a map of what to expect



CHICAGO WEATHER

La Niña latest: New forecast released by NOAA and what it means for Chicago winter



HOLIDAYS

What is open, closed on Columbus Day and Indigenous Peoples Day? Full list



CHICAGO

LOCAL

WEATHER

VIDEO

INVESTIGATIONS

On Monday afternoon, yet another incident occurred at Montrose Beach, where a man and woman went into the water in a no-swimming area. A woman was pulled from the water, with a Good Samaritan performing CPR until authorities arrived.



Local



DAYLIGHT SAVING TIME • 1 MIN AGO

Daylight saving time: Doctor...



SKOKIE • 2 MINS AGO

School bus crashes into...

She was resuscitated and taken to an area hospital in fair condition, while the man was treated and released at the scene.

According to Dave Benjamin, cofounder of the Great Lakes Surf Rescue Project, these incidents become more common as the weather gets warmer.

"If it's warm and it's windy and there are waves on a weekend, we're going to have a higher increase in drowning incidents," he said.

Weather Forecast

CHICAGO, IL

Temperatures in the Chicago area will exceed 90 degrees for most of the week, with heat indices approaching 100 degrees at times.

Residents seek out relief on the water, but Benjamin warns that most fatalities involve victims not wearing lifejackets, and that approximately 50% of boating fatalities are alcohol-related. He advises residents to be sure to wear proper lifejackets and to abstain from drinking when out on the water.

"Imagine trying to put your seatbelt on during a car crash," he said. "It's the same thing if you're trying to put on a life jacket during boating incident or water emergency, it's going to be very difficult."

He also urges residents to be careful when they witness a water emergency.

"Most people assume that knowing how to swim is water safety," he said. "Water safety is knowing a survival strategy."

That strategy involves using the best possible methods to save someone, and that doesn't always involve diving into the water.

82°

Partly Cloudy
0% Precip

TONIGHT
58°

TOMORROW
66°



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"If someone is struggling in water over their head, what we recommend is flip, float, follow," he said. "If you see someone struggling in the water, call 911, alert a lifeguard, reach something to that person or throw something that floats. It's dangerous to enter water to rescue someone."

He even says that the fact water is colder than air can play a role in turning a scary situation into a tragedy.

"Generally if someone is wearing life jacket and it turns into fatal drowning incident its generally associated with cold water, it can cause hypothermia," he said. "Even though it's warmer air temps we have cold water temps so hypothermia can be a contributing factor."

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LAKE MICHIGAN



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IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS
COUNTY DEPARTMENT, LAW DIVISION

CLAYTON SCHERB,)
)
Plaintiff,)
)
v.) No.: 2023 L 008053
)
WINNETKA PARK DISTRICT,)
)
Defendant,) **JURY TRIAL DEMANDED**

FIRST AMENDED COMPLAINT AT LAW

NOW COMES the Plaintiff, CLAYTON SCHERB, by and through his attorneys,
HURLEY, MCKENNA & MERTZ, P.C., complaining of the defendant, WINNETKA PARK
DISTRICT, and states as follows:

1. On or about August 28, 2022, and at all times material, defendant WINNETKA
PARK DISTRICT, was a Municipal Corporation duly licensed and existing under the laws of the
State of Illinois.
2. On or about August 28, 2022, and at all times material, defendant WINNETKA
PARK DISTRICT owned, operated, managed, maintained and controlled a beach on Lake
Michigan commonly known as Lloyd Beach, in the City of Winnetka, County of Cook, and State
of Illinois.
3. On or about August 28, 2022, and at all times material, defendant WINNETKA
PARK DISTRICT owned, operated, managed, maintained and controlled a boat launch at Lloyd
Beach, in the City of Winnetka, County of Cook, and State of Illinois.

4. On or about August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT owned, operated, managed, maintained and controlled a concrete pier on the northwest and northeast borders of its boat launch at Lloyd Beach.

5. On or about August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT owned, operated, managed, maintained and controlled a fence or barrier at the perimeter of its concrete pier on the northwest and northeast borders of its boat launch at Lloyd Beach.

6. On August 28, 2022, and at all times material, MATTHEW BARTON, in his position as defendant's Lakefront Manager, acted as the agent and employee of defendant WINNETKA PARK DISTRICT in the operation, management, maintenance and control of defendant's lakefront, including but not limited to the boat launch at Lloyd Beach.

7. On August 28, 2022, and at all times material, PETER ROBERTS acted as the agent and employee of defendant WINNETKA PARK DISTRICT in the operation, management, maintenance and control of defendant's boat launch at Lloyd Beach.

8. On August 28, 2022, Plaintiff, CLAYTON SCHERB, was lawfully on defendant WINNETKA PARK DISTRICT's concrete pier at its boat launch at its Lloyd Beach.

9. In the summer of 2022, CLAYTON SCHERB worked at the boat launch at Lloyd Beach as a Boat Launch and Beach Attendant.

10. Defendant WINNETKA PARK DISTRICT has acknowledged that on August 28, 2022, at all times relevant hereto, CLAYTON SCHERB was not acting within the scope of any employment with defendant WINNETKA PARK DISTRICT, and therefore, was not an employee or agent of defendant WINNETKA PARK DISTRICT.

11. Throughout the summer of 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and

PETER ROBERTS, created an unsafe atmosphere at defendant's boat launch at Lloyd beach where it instructed, coordinated, arranged, encouraged, supervised, praised, and rewarded those on the premises to participate in dangerous acts and dangerous activities.

12. Throughout the summer of 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, instructed, coordinated, arranged, encouraged, supervised, praised, and rewarded persons on the premises, including CLAYTON SCHERB, to surf when conditions were unsafe for surfing, to use the golf cart to pull persons on wake boards up the boat ramp, to ride said jet skis when conditions were unsafe to ride jet skis, and to use defendant's equipment to video record persons race the golf cart down the hill, slam on the brakes, and try to spin out without tipping.

13. Throughout the summer of 2002, defendant WINNETKA PARK DISTRICT accumulated skateboards at its boat launch at Lloyd Beach.

14. Throughout the summer of 2002, people brought skateboards to defendant WINNETKA PARK DISTRICT's boat launch at Lloyd Beach and left said skateboards on the premises.

15. Throughout the summer of 2002, WINNETKA PARK DISTRICT treated the skateboards left at the boat launch at Lloyd Beach as the property of the WINNETKA PARK DISTRICT.

16. Throughout the summer of 2002, WINNETKA PARK DISTRICT, by and through its agents and employees, including MATTHEW BARTON and PETER ROBERTS, provided its aforementioned skateboards for the use by persons on the premises, on the concrete and wood piers of defendant WINNETKA PARK DISTRICT's boat launch at Lloyd Beach.

17. Throughout the summer of 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, intended and permitted persons on the premises to ride skateboards throughout the boat ramp at Lloyd Beach, including upon the wooden and concrete piers.

18. For several weeks prior to August 28, 2022, on dozens of occasions, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, provided the skateboard at issue to persons to ride on the concrete pier of defendant's boat launch at Lloyd Beach.

19. For several weeks prior to August 28, 2022, on dozens of occasions, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, instructed, coordinated, arranged, encouraged, supervised, praised, and rewarded persons to ride the skateboard at issue in this case on the concrete pier of defendant's boat launch at Lloyd Beach.

20. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, instructed persons on the premises to remove defendant's fence from the perimeter of its concrete pier at its boat launch at Lloyd Beach.

21. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, instructed persons on the premises, including CLAYTON SCHERB, to ride a skateboard across defendant's concrete pier and into the water of Lake Michigan.

22. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, coordinated persons on the premises, including CLAYTON SCHERB as they

attempted to ride a skateboard across defendant's concrete pier and into the water of Lake Michigan.

23. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, arranged for persons on the premises, including CLAYTON SCHERB to ride a skateboard across defendant's concrete pier and into the water of Lake Michigan.

24. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, encouraged persons on the premises, including CLAYTON SCHERB to ride a skateboard across defendant's concrete pier and into the water of Lake Michigan.

25. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, supervised persons on the premises, including CLAYTON SCHERB riding a skateboard across defendant's concrete pier and into the water of Lake Michigan.

26. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, praised persons on the premises, including CLAYTON SCHERB for riding a skateboard across defendant's concrete pier and into the water of Lake Michigan.

27. On August 28, 2022, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, rewarded persons on the premises, including CLAYTON SCHERB for riding a skateboard across defendant's concrete pier and into the water of Lake Michigan.

28. On August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW

BARTON and PETER ROBERTS, by its removal of its fence, and by its instruction, coordination, arrangement, encouragement, supervision, praise, and reward, intended that plaintiff CLAYTON SCHERB would ride a skateboard across its concrete pier and into the water of Lake Michigan.

29. On August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, by its removal of its fence, and by its instruction, coordination, arrangement, encouragement, supervision, praise, and reward, permitted plaintiff CLAYTON SCHERB to ride a skateboard across its concrete pier and into the water of Lake Michigan.

30. On August 28, 2022, pursuant to the instruction, coordination, arrangement, encouragement, supervision, praise, and reward by defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, CLAYTON SHERB placed his hat and shirt into a golf cart on the concrete pier, that at the time MATTHEW BARTON occupied, and proceeded to ride the skateboard supplied by defendant WINNETKA PARK DISTRICT, as instructed by defendant WINNETKA PARK DISTRICT.

31. On August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT knew the water surrounding its pier was too shallow to accommodate persons descending from its pier.

32. On or about August 28, 2022, and at all times material, Defendant, WINNETKA PARK DISTRICT, individually and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, knew that by instructing, coordinating, arranging, encouraging, supervising, praising, and/or rewarding persons to and for riding a

skateboard across its concrete pier and into the water of Lake Michigan, said persons would be unaware that the water surrounding its pier was too shallow to accommodate persons descending from the pier.

33. On August 28, 2022, and at all times material, defendant WINNETKA PARK DISTRICT, individually and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, knew that instructing, coordinating, arranging, encouraging, supervising, praising, and/or rewarding persons to and for riding a skateboard across its concrete pier and into the water of Lake Michigan was extremely dangerous.

34. The aforementioned actions by defendant WINNETKA PARK DISTRICT, individually, and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, constitute willful and wanton conduct and they acted recklessly and with utter indifference to or a conscious disregard for the safety of others, including plaintiff CLAYTON SCHERB.

35. On August 28, 2022, pursuant to the instruction and encouragement of defendant WINNETKA PARK DISTRICT, by and through its agents and employees, including but not limited to MATTHEW BARTON and PETER ROBERTS, plaintiff CLAYTON SCHERB attempted to ride a skateboard across defendant's concrete pier and into the water of Lake Michigan.

36. On August 28, 2022, the skateboard stopped abruptly, causing CLAYTON SCHERB to flip and descend head-first into the water below, and strike his head, causing plaintiff CLAYTON SCHERB to suffer extreme injuries, including a spinal cord injury.

37. On or about August 28, 2022, and at all times material, it was the duty of the Defendant, WINNETKA PARK DISTRICT, to refrain from acting recklessly or with utter indifference to or a conscious disregard for the safety of others during the ownership, operation,

management, maintenance and control of its skateboard and of its the concrete pier at its boat launch at Lloyd Beach, in order to avoid causing injury to persons lawfully present, including plaintiff, CLAYTON SCHERB.

38. On and before August 28, 2022, and at all times material, it was the duty of the Defendant, WINNETKA PARK DISTRICT, once it placed, or authorized the placement of the aforementioned fence, to maintain said condition in a safe and/or non-negligent manner.

39. On or about August 28, 2022, and at all times material, Defendant WINNETKA PARK DISTRICT, breached its duties in one or more of the following respects:

- a. Willfully and wantonly removed the fence at the perimeter of its concrete pier;
- b. Willfully and wantonly caused the removal of the fence at the perimeter of its concrete pier;
- c. Willfully and wantonly instructed plaintiff to ride a skateboard across its concrete pier and into the water of Lake Michigan;
- d. Willfully and wantonly coordinated plaintiff to ride a skateboard across its concrete pier and into the water of Lake Michigan;
- e. Willfully and wantonly arranged for plaintiff to ride a skateboard across its concrete pier and into the water of Lake Michigan;
- f. Willfully and wantonly encouraged plaintiff to ride a skateboard across its concrete pier and into the water of Lake Michigan;
- g. Willfully and wantonly supervised plaintiff ride a skateboard across its concrete pier and into the water of Lake Michigan;
- h. Willfully and wantonly praised plaintiff for riding a skateboard across its concrete pier and into the water of Lake Michigan;
- i. Willfully and wantonly rewarded plaintiff for riding a skateboard across its concrete pier and into the water of Lake Michigan;
- j. Willfully and wantonly failed to warn the plaintiff that the water surrounding its pier was too shallow to accommodate persons descending from the pier; and

k. Willfully and wantonly improperly maintained its property and premises.

40. As a direct and proximate result of one or more of the aforesaid willful and wanton acts or omissions of the Defendant, WINNETKA PARK DISTRICT, the Plaintiff, CLAYTON SCHERB, suffered severe injuries of a personal and pecuniary nature, including but not limited to a severe and permanent spinal cord injury, paralysis, the reasonable expense of necessary medical care and services, wage loss, pain and suffering, loss of a normal life, disability and disfigurement.

WHEREFORE, Plaintiff CLAYTON SCHERB prays for judgement against the Defendant, WINNETKA PARK DISTRICT, a Municipal Corporation, for a sum in excess of FIFTY THOUSAND (\$50,000.00) DOLLARS, plus costs.

Respectfully submitted,

/s/ Michael T. Mertz _____
Michael T. Metz

HURLEY MCKENNA & MERTZ, PC
Attorneys for the Plaintiff
20 S. Clark Street, Suite 2250
Chicago, IL 60603
312-553-1900
Atty. No. 41267

5. GREAT LAKES WATER SAFETY CONSORTIUM DANGEROUS CURRENTS DISCUSSION



Dangerous currents and breaking waves are common in the Great Lakes region. Rip currents and other currents found near piers are extremely dangerous for swimmers and can lead to drownings. Michigan Sea Grant is a proud member of the Great Lakes Water Safety Consortium, a group dedicated to promoting water safety and ending drowning in the region. Learn more about the consortium in the information box on this page.

Rip Currents

The Great Lakes may not have tides, but they can still experience strong currents. Terms like “rip currents,” “rip tides,” and “undertows” are often used to describe different types of hazards in the Great Lakes. However, the most accurate term for them is “dangerous currents.”

The Science of Currents

Currents in the Great Lakes can form from any

Great Lakes Water Safety Consortium (GLWSC)

The GLWSC is a community of best practice that aims to help people safely enjoy the Great Lakes, with a long-term vision of ending drowning. The community brings together water enthusiasts, first responders, community leaders, park rangers,

combination of wind, waves, bottom formation, beach slope, water temperature, man-made structures, and natural outlets. For example, during rip currents, the water “piles up” between a sandbar and the beach. It has to find a way back out to sea.

After the pressure builds up, the water creates a pathway and gushes from the shore back out to open water. That’s a rip current: a narrow but powerful stream of water and sand moving (ripping) swiftly away from shore. Rip currents vary in size and speed and can be found on many beaches every day.

In the Great Lakes, there are permanent currents and variable currents. Permanent currents are always found in certain locations — and only vary in strength. For example, strong currents are always present along piers and breakwalls, and they can be found where rivers and streams empty into the lake.

Other currents can be more variable, dependent upon the bathymetry (shape of the lake bottom) and the wind and wave conditions. The location and strength of variable currents is difficult to predict, but check the [National Weather Service’s Great Lakes Beach Hazard](#) page for up-to-date warnings during the swimming season.

research
scientists,
lifeguards,
meteorologists,
drowning
survivors,
parents and
loved ones of
drowning
victims, and
other water
safety
advocates.

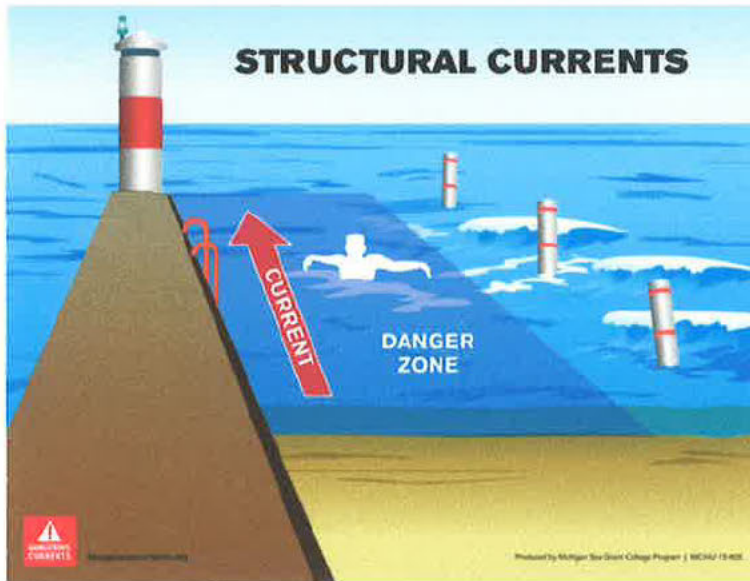
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En Español

LEE MÁS

Beach Signs

A limited supply of beach safety signs is available free of charge from the [Michigan Coastal Management Program](#). These signs are for use



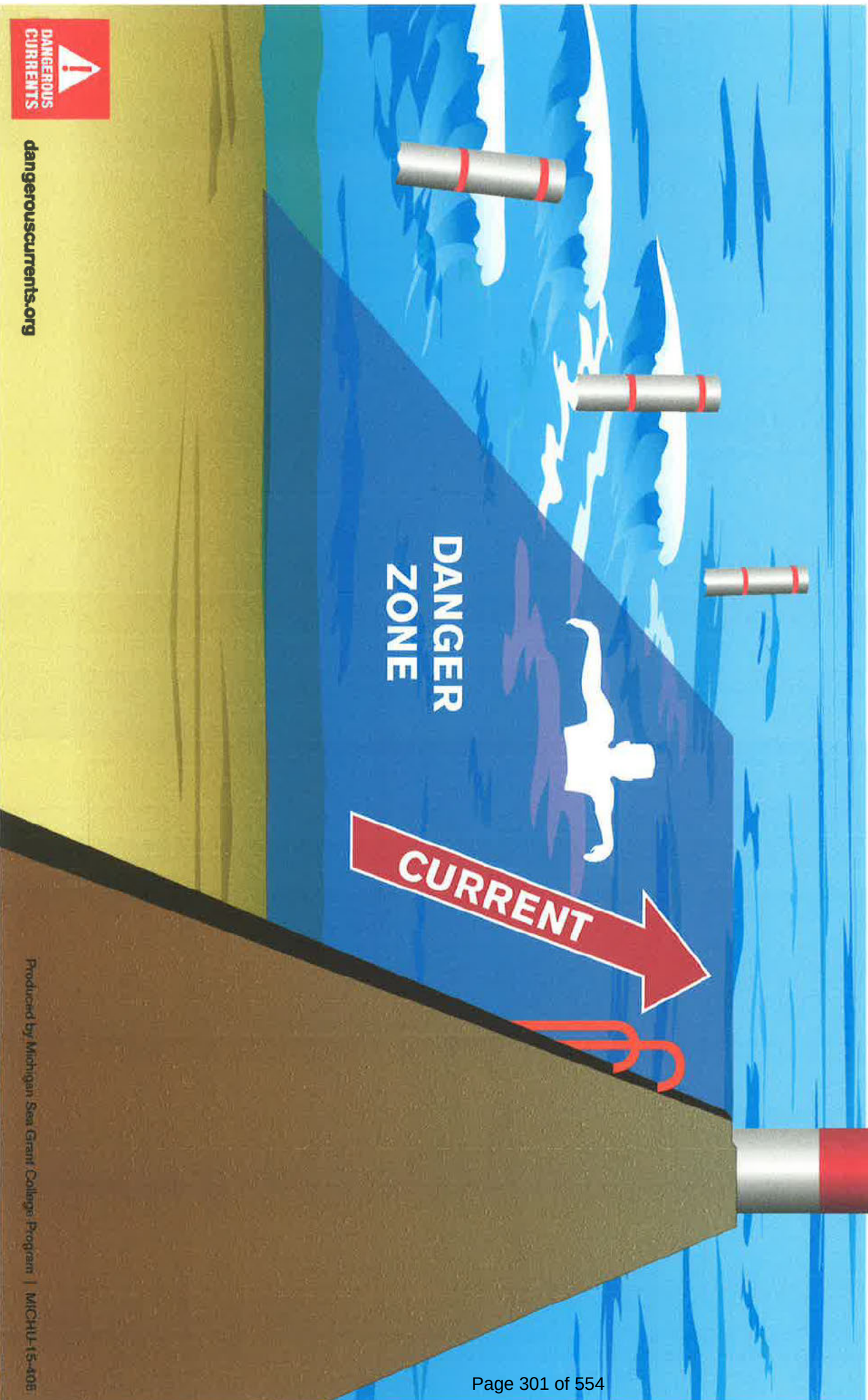
Structural Currents

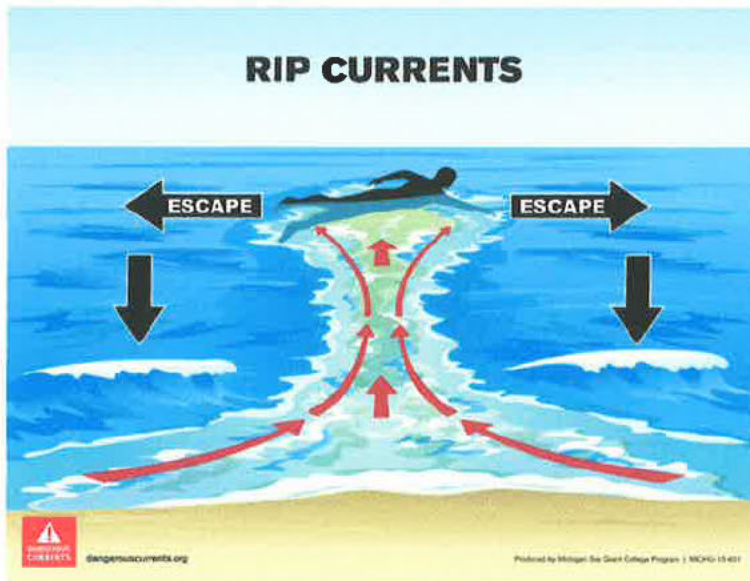
While it can be difficult to predict when and where most currents will occur, the opposite is true for structural currents. The currents found alongside or as a result of structures like piers and breakwalls — called structural currents — are usually always present. Structural currents are dangerous on their own, but when paired with others like longshore or rip currents, the combination can create a washing machine effect, moving the swimmer from one dangerous current area to another with no clear path to safety.

Avoid jumping off or swimming near piers. The currents found along these structures are often dangerously strong.

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STRUCTURAL CURRENTS





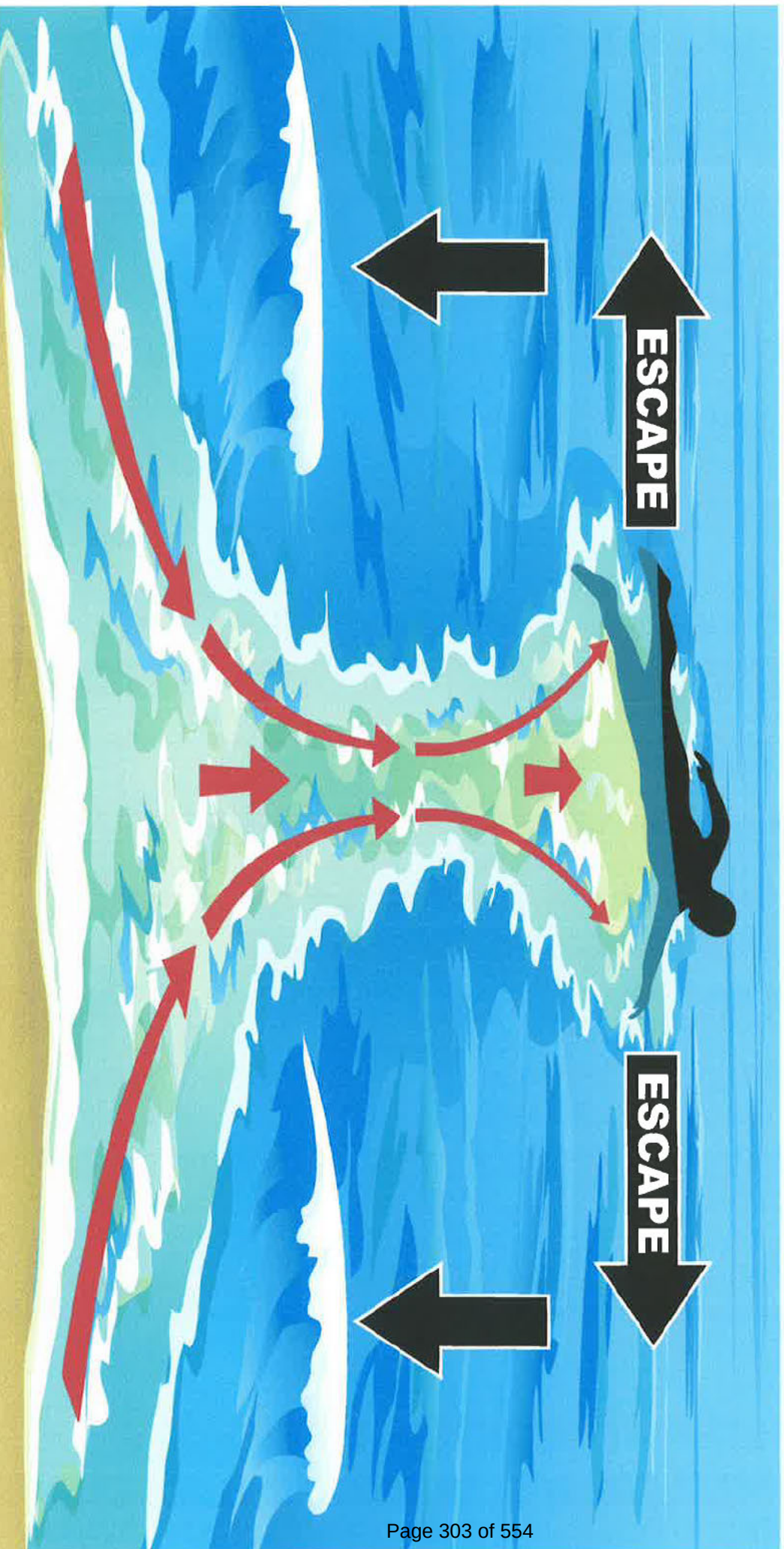
Rip Currents

Rip currents form when waves break over a sandbar near the shoreline and the water and its momentum get trapped between sandbar and shore. When the water and the momentum build up, the water has to go somewhere. One of the ways the pressure is relieved is when water returns to the lake in the form of a rip current, a narrow but powerful stream of water and sand moving (ripping) swiftly away from shore. Rip currents that vary in size and speed can be found on many beaches every day.

Rip currents will not pull a swimmer under the water. Instead, it will carry them out to the open water, away from shore.

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RIP CURRENTS



dangerouscurrents.org

6. WPD PLAN LACKS LAKE MICHIGAN SAFETY MEASURES CURRENTLY IN PLACE AT OTHER PUBLIC BEACHES

- 1. DOUBLE RED FLAGS ONLINE
WITH TEXT ALERTS**
- 2. SAFETY LIGHT TOWERS
CONNECTED TO NWS**
- 3. WEBSITE LINK TO NWS RIP
CURRENT FORECASTS**
- 4. LIFESAVING ROBOT E.M.I.L.Y.**
- 5. EDUCATION/TRAINING ON RIP
CURRENTS**
- 6. SIGNS+BARRIERS CLOSING OFF
PIERS+ENFORCEMENT**

A “No Lifeguard On Duty” warning sign that also talks about water safety and rip currents at Olive Shores an Ottawa County park in Port Sheldon Twp., Michigan on Thursday, Aug. 10, 2023. (Joel Bissell | MLive.com) Joel Bissell | MLive.com

South Haven and other communities have instituted beach flag warning systems to alert people when officials see conditions becoming dangerous.

Related: [What do new double red flags mean at Great Lakes beaches?](#)

People who ignore the warnings are putting their lives — and the lives of rescuers — at risk, Hosier said.

“Beachgoers must take responsibility for their actions and do their part to stay safe,” Hosier said. “This means understanding the flag system and their personal limitations and staying out of the water when conditions are unsafe.”

People can now see [South Haven’s beach warning flag status online](#) and sign up for text alerts.

[Grand Haven’s warning system](#) is more high tech, with safety light towers that are connected to the National Weather Service.

Another innovation is from NWS, which allows [visitors to look at rip current forecasts](#) before heading to the beach to avoid weather-related trouble. Rip currents can occur even on nice and sunny days, per the NWS.

Still, critics of warning systems say they’re only as good as the information that updates them. People must watch and evaluate the weather and water to update the warning status, Benjamin said.

Lifesaving technology

Drones, robots, beach traffic lights and text alerts represent some new examples of the [technology used on Michigan beaches](#) to curb tragic water-related deaths.

The new technology comes with a financial cost and requires training. Wind and other weather can cause challenges for some of the technology — for example, a drone that aims to launch a flotation device from the sky to struggling swimmers below can be hindered by wind.

Safety advocates say tools, like lifesaving robot E.M.I.L.Y. (Emergency Integrated Lifesaving Lanyard), work best when paired with an established lifeguard program.

The E.M.I.L.Y. robots, [coming to Lake Michigan beaches through a private donation](#), can be remotely directed to struggling swimmers, so they have something to hold onto. But they are not designed to bring a swimmer back

to shore, Benjamin said.

RELATED: Parents of couple who drowned in Lake Michigan use life insurance money to buy beach safety robots

The robots can help rescuers on shore by getting help to a struggling swimmer quickly.

“If they are 50 to 100 yards offshore and there’s waves and they get caught in a rip current, this will absolutely get there faster,” Benjamin said.

E.M.I.L.Y. is a remote-controlled water device that can be sent out to help save people in the water. The device is coming to the shores of Lake Michigan after a donation to Berrien County. (Courtesy | Hydronalix)

Education and training

Berrien County Sheriff Chuck Heit is encouraged to see the number of drownings down in the Great Lakes and also locally.

To target drownings, Berrien County has been doing more education on things like rip currents.

Training instructs people not to fight if they're stuck in a rip current, but to float instead, the sheriff said.

In South Haven, there's a team called the South Haven Area Emergency Services who get water rescue training, Hosier said.

The city is also expanding its beach enforcement attendant program this year, adding more attendants on beaches from 9 a.m. to 9 p.m. every day.

City employees monitor the water conditions so they can update the beach warning flags, warning flag website and text alert system, Hosier said. Attendants educate beachgoers about the flag system, swim area and other beach rules. They are sworn code enforcement officials who may write tickets for entering a closed swim area or closed pier.

"The education on water safety and beach rules by staff, combined with enforcement, have been very successful," Hosier said.

More lifeguards?

Like the waves constantly lapping at the shore of South Haven, there's no end in sight for the debate over beach safety.

Some safety advocates have keyed in on the importance of having lifeguards. Benjamin, for example, said establishing a lifeguard program should be the top priority for every beach.

"If you have a parking lot and you charge for parking, then you should have a lifeguard program," Benjamin said.

After some public pressure, the South Haven City Council has taken a step toward bringing back lifeguards, more than 20 years since a previous program disbanded. The issue has been named a top priority for the city this year, although it will take time to get a program launched.

In Berrien County, municipal beaches in New Buffalo and St. Joseph already have lifeguards.

Heit believes the “watchful eyes” of lifeguards make a difference.

He sees how different facets of beach safety can come together to help prevent drownings — with lifeguards, education, technology and more.

“Lifeguards will give direction and intervene if something happens,” Heit said.

Hosier said television shows like “Baywatch” left us with inaccurate impressions of the role of lifeguards.

“Lifeguards are on duty primarily to prevent bad behaviors,” Hosier said. “For example, they might move people who are swimming too close to the pier or intervene when children are playing too roughly. Rescue operations are a secondary function.”

So for any system to work, all efforts must be coordinated and collaborative, she said.

“Some community advocates seem to think that lifeguards are a silver bullet,” Hosier said. “But they are only one part of the system.”

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Most Popular Stories by Brad Devereaux



The sun sets behind the South Haven pier on Tuesday, March 28, 2023. (Garret Ellison | MLive)



By **Brad Devereaux** | bdeverea@mlive.com

SOUTH HAVEN, MI -- The good news: Lake Michigan drownings were down in 2023 — both on Michigan shores and in other states.

The bad news: Dozens of people still die from drowning every year in Lake Michigan, which is consistently the deadliest of the Great Lakes.

In 2023, 85 people drowned in the Great Lakes, according to unofficial tallies kept by [a beach safety advocacy group](#). That's fewer drownings than any of the last seven years.

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Weekends were particularly rainy, too, when beaches are typically at their fullest.

From June 10 to Aug. 6, six of the nine weekends had at least 0.15 inches of rain — and often more.

So how about something humans can control?

Local and state laws

New rules in communities along the lakeshore are also helping, officials say.

South Haven instituted changes in 2022, allowing the city to close its piers during unsafe conditions and ticket people who won't obey. Piers create strong underwater currents, per [the Michigan DNR](#).

The state also passed a new law making it [illegal to go into the water under dangerous conditions](#), as denoted by a flag warning system.

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The rules only work when people follow them.

It's disappointing when visitors ignore decisions from local leaders meant to increase beach safety, Hosier said.



South Haven's ordinance allows the city to close the pier and ticket people who don't obey the closure. (Brad Devereaux | bdeverea@mlive.com)

To address that, the city is working with a contractor to have permanent pier gates installed this summer, Hosier said.

Warning systems

Another warning to watch for: signals alerting people about conditions of the water.

Signage up and down Lake Michigan beaches warn people of hazards like rip currents. An increased number of life vest stations also offer free access to loaner floatation devices.



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Standard

- **Number:**

1910.141(c)(1)(i)

OSHA requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at <https://www.osha.gov>.

April 6, 1998

MEMORANDUM FOR: REGIONAL ADMINISTRATORS
STATE DESIGNEES

FROM:	JOHN B. MILES, JR., Director Directorate of Compliance Programs
SUBJECT:	Interpretation of 29 CFR 1910.141(c)(1)(i): Toilet Facilities

OSHA's sanitation standard for general industry, 29 CFR 1910.141(c)(1)(i), requires employers to provide their employees with toilet facilities:

Except as otherwise indicated in this paragraph (c)(1)(i), **toilet facilities**, in toilet rooms separate for each sex **shall be provided** in all places of employment in accordance with Table J-1 of this section [emphasis added]

This memorandum explains OSHA's interpretation that this standard requires employers to make toilet facilities available so that employees can use them when they need to do so. The employer may not impose unreasonable restrictions on employee use of the facilities. OSHA believes this requirement is implicit in the language of the standard and has not previously seen a need to address it more explicitly. Recently, however, OSHA has received requests for clarification of this point and has decided to issue this memorandum to explain its position clearly.

Background

The sanitation standard is intended to ensure that employers provide employees with sanitary and available toilet facilities, so that employees will not suffer the adverse health

effects that can result if toilets are not available when employees need them. Individuals vary significantly in the frequency with which they need to urinate and defecate, with pregnant women, women with stress incontinence, and men with prostatic hypertrophy needing to urinate more frequently. Increased frequency of voiding may also be caused by various medications, by environmental factors such as cold, and by high fluid intake, which may be necessary for individuals working in a hot environment. Diet, medication use, and medical condition are among the factors that can affect the frequency of defecation.

Medical studies show the importance of regular urination, with women generally needing to void more frequently than men. Adverse health effects that may result from voluntary urinary retention include increased frequency of urinary tract infections (UTIs), which can lead to more serious infections and, in rare situations, renal damage (see, e.g., Nielsen, A. Waite, W., "Epidemiology of Infrequent Voiding and Associated Symptoms," *Scand J Urol Nephrol Supplement* 157). UTIs during pregnancy have been associated with low birthweight babies, who are at risk for additional health problems compared to normal weight infants (see, Naeye, R.L., "Causes of the Excess Rates of Perinatal Mortality and the Prematurity in Pregnancies Complicated by Maternity Urinary Tract Infections," *New England J. Medicine* 1979; 300(15); 819-823). Medical evidence also shows that health problems, including constipation, abdominal pain, diverticuli, and hemorrhoids, can result if individuals delay defecation (see National Institutes of Health (NIH) Publication No. 95-2754, July 1995).

OSHA's field sanitation standard for Agriculture, 29 CFR 1928.110, based its requirement that toilets for farmworkers be located no more than a quarter mile from the location where employees are working on similar findings. This is particularly significant because the field sanitation standard arose out of the only OSHA rulemaking to address explicitly the question of worker need for prompt access to toilet facilities.

The Sanitation Standard

The language and structure of the general industry sanitation standard reflect the Agency's intent that employees be able to use toilet facilities promptly. The standard requires that toilet facilities be "provided" in every workplace. The most basic meaning of "provide" is "make available." See **Webster's New World Dictionary, Third College Edition**, 1988, defining "provide" as "to make available; to supply (someone with something);" **Borton Inc. V. OSHRC**, 734 F.2d 508, 510 (10th Cir. 1984) (usual meaning of provide is "to furnish, supply, or make available"); **Usery v. Kennecott Copper Corp.**, 577 F.2d 1113, 1119 (10th Cir, 1978) (same); **Secretary v. Baker Concrete Constr. Co.**, 17 OSH Cas. (BNA) 1236, 1239 (concurring opinion; collecting cases); **Contractors Welding of Western New York, Inc.**, 15 OSH Cas. (BNA) 1249, 1250 (same).¹ Toilets that employees are not allowed to use for extended periods cannot be said to be "available" to those employees. Similarly, a clear intent of the requirement in Table J-1 that adequate numbers of toilets be provided for the size of the workforce is to assure that employees will not have to wait in long lines to use those facilities. Timely access is the goal of the standard.

The quoted provision of the standard is followed immediately by a paragraph stating that the toilet provision does not apply to mobile work crews or to locations that are normally unattended, "provided the employees working at these locations have transportation immediately available to nearby toilet facilities which meet the other requirements" of the standard (29 CFR 1910.141(c)(1)(ii) (emphasis supplied). Thus employees who are members of mobile crews, or who work at normally unattended locations must be able to leave their work location "immediately" for a "nearby" toilet facility. This provision was obviously intended to provide these employees with protection equivalent to that the general provision provides to employees at fixed worksites. Read together, the two provisions make clear that all employees must have prompt access to toilet facilities.

OSHA has also made this point clear in a number of letters it has issued since the standard was promulgated. For example, in March 1976, OSHA explained to Aeroil Products

Company that it would not necessarily violate the standard by having a small single-story building with no toilet facilities separated by 90 feet of pavement from a building that had the required facilities, so long as the employees in the smaller building had "unobstructed free access to the toilet facilities." Later that year, it explained again, in response to a question about toilet facilities at a U-Haul site, "reasonableness in evaluating the availability of sanitary facilities will be the rule." Again in 1983, OSHA responded to a request for a clarification of the standard by stating, "[i]f an employer provides the required toilet facilities ... and provides unobstructed free access to them, it appears the intent of the standard would be met."

In light of the standard's purpose of protecting employees from the hazards created when toilets are not available, it is clear that the standard requires employers to allow employees prompt access to sanitary facilities. Restrictions on access must be reasonable, and may not cause extended delays. For example, a number of employers have instituted signal or relief worker systems for employees working on assembly lines or in other jobs where any employee's absence, even for the brief time it takes to go to the bathroom, would be disruptive. Under these systems, an employee who needs to use the bathroom gives some sort of a signal so that another employee may provide relief while the first employee is away from the work station. As long as there are sufficient relief workers to assure that employees need not wait an unreasonably long time to use the bathroom, OSHA believes that these systems comply with the standard.

Citation Policy

Employee complaints of restrictions on toilet facility use should be evaluated on a case-by-case basis to determine whether the restrictions are reasonable. Careful consideration must be given to the nature of the restriction, including the length of time that employees

are required to delay bathroom use, and the employer's explanation for the restriction. In addition, the investigation should examine whether restrictions are general policy or arise only in particular circumstances or with particular supervisors, whether the employer policy recognizes individual medical needs, whether employees have reported adverse health effects, and the frequency with which employees are denied permission to use the toilet facilities. Knowledge of these factors is important not only to determine whether a citation will be issued, but also to decide how any violation will be characterized.

It is important that a uniform approach be taken by all OSHA offices with respect to the interpretation of OSHA's general industry sanitation standard, specifically with regard to the issue of employee use of toilet facilities. Proposed citations for violations of this standard must be forwarded to the Directorate of Compliance Programs (DCP) for review and approval. DCP will consult with the Office of Occupational Medicine. DCP will approve citations if the employer's restrictions are clearly unreasonable, or otherwise not in compliance with the standard. ***(NOTE: See 08/11/00 Memorandum to RAs attached below.)---Added this note***

State Plan States are not required to issue their own interpretation in response to this policy, however they must ensure that State standards and their interpretations remain "at least as effective" as the Federal standard. Regional Administrators shall offer assistance to the States on this issue, including consultation with the Directorate of Compliance programs, at the State's request.

If you have any questions, contact Helen Rogers in the Office of General Industry Compliance at (202) 219-8031/41 x106.

Footnote(1) This decision was later vacated pursuant to a settlement, but the Commission has continued to cite it. **See Secretary v. Baker Concrete Constr. Co.**, supra. The issue in **Contractors Welding** and the other cited cases has been whether the meaning of the term "provide," in various standards requiring employers to provide certain equipment or other materials, is not limited to making something available, but may also mean that the employer must pay for what it provides and must require it to be used. Those broader meanings are not relevant to this issue, however, where the sanitary facilities the employer is required to provide are a physical part of its workplace, and the question is not whether employees must be required to use those facilities, but whether they will be allowed to do so. ([Back to Text](#))

August 11, 2000---**Added this memo**

MEMORANDUM FOR:	REGIONAL ADMININSTRATORS
FROM:	RICHARD E. FAIRFAX, Director Directorate of Compliance Programs
SUBJECT:	Interpretation of 29 CFR 1910.141(c)(1)(i): Toilet Facilities

On April 6, 1998 we issued an interpretation of 1910.141(c)(1)(i), which requires employers to make toilet facilities available so that employees can use them when they need to do so. A copy of that memorandum is attached.

The 1998 memorandum states that proposed citations for violations of this standard are to be forwarded to the Directorate of Compliance Programs (DCP) for review and approval. Shortly after the interpretation was issued, it was decided that the review and approval was to be at the Regional Office level, but that copies of any citations issued based on the April 6, 1998 interpretation should still be sent to DCP.

This topic continues to generate interest from the public. Early this year we had a Freedom of Information Act (FOIA) request for copies of citations issued. Therefore, please continue to send copies of any citations issued pursuant to the 1998 interpretation to the National Office. If you have any questions, please contact Helen Rogers at (202) 693-1850. The copies should be sent to the following address:

Richard E. Fairfax, Director
 Directorate of Compliance Programs
 U.S. Department of Labor - OSHA
 200 Constitution Avenue, NW Room N-3603
 Washington, DC 20210

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Sent via Regular Mail and Electronic Mail

May 31, 2023

Ms. Mary Garrison
350 Ridge Avenue
Winnetka, Illinois 60093

RE: Freedom of Information Act Request Received May 16, 2023

Dear Ms. Garrison:

The Winnetka Park District is in receipt of your Freedom of Information Act request and attachment dated May 16, 2023 in which you request the following via Exhibit "A" attached to your FOIA request:

1. Please provide all documents, inclusive of drafts, and communications relative "to the area by the north breakwater that will be licensed to John Edwardson for 20 years," as described in the March 11, 2021 Minutes of Closed Meeting of the WPD that have been released to the public.
2. Please provide all communications to/from John Edwardson or his representatives dealing with construction of a stone breakwater on the northern boundary of Elder Lane Beach, inclusive but without limitation of Mr. Edwardson sharing in the cost of the breakwater, between the years of 1/1/2019 to current date.
3. Please provide all documents and communications that relate to or describe the 13 requests made by Mr. Edwardson or his representative to the WPD associated with his facilitation toward the purchase of 261 Sheridan as referenced in the May 14, 2020 Minutes of Closed Meeting of the WPD that have been released to the public.
4. Please provide all documents and communications associated with Mr. Edwardson or his representatives' view that "a 225 foot breakwater at Elder [was] is critical to the commitment," and that without the breakwater the deal would not go through as described in the June 11, 2020 Minutes of Closed Meeting of the WPD that have been released to the public.
5. Please provide all documents and communications to/from John Edwardson or his representatives requiring that Shabica & Associates be involved in the planning, design or construction of a breakwater at Elder Lane Beach.



6. Please provide all documents and communications to/from John Edwardson or his representatives dealing with the relocation of the Elder Lane stormwater pipe.
7. Please provide a copy of the "10 talking points that are available to Board Members to be used for any third-party conversations to maintain consistency," as set forth in the last paragraph on page 1 of the August 27, 2020 Minutes of Closed Meeting of the WPD released to the public.
8. Please provide a copy of the illustration shared by Commissioner James to explain the "mid, min or max" approaches in working with Mr. Edwardson concerning Elder Lane Beach as referenced in the September 10, 2020 Minutes of Closed Meeting of the WPD released to the public.
9. Please provide a copy of the slide presented by Commissioner James "to display the property lines along with groin and breakwater placement to explain the Elder layout," as set forth in the November 19, 2020 Minutes of Closed Meeting of the WPD.

The Park District grants your request in part and denies your request in part. Your request is granted for the records referenced immediately below. The number in parenthesis at the end of each item refers to the paragraph number of your request to which the document is responsive. There are no documents responsive to paragraphs 1, 5, 6, 8 or 9.

1. 20210722 Overall Plan (2)
2. 20210722 Updated Elder Centennial Plan – North Breakwater Overall Plan (2)
3. Emails:
 - a. Draft things to do list (6).
 - b. Elder Centennial Feasibility Study as of January 18, 2021 (2).
 - c. Elder Centennial Plans (2).
 - d. Final Talking Points (7).
 - e. Good Afternoon John Edwardson (3), (4)
 - f. Good News to Share (2), (6),
 - g. John Edwardson signed letter of support (2)
 - h. Letter of Authorization – Elder Lane Park and Beach Breakwater Construction (2).
 - i. Letter of Authorization – Elder Lane Park and Beach Breakwater Construction (2).
 - j. Winnetka Park District – Sale of a portion of Elder Park (3), (4).

Certain records sought by your request are exempt from disclosure pursuant to FOIA 7(1)(f) and 7(1)(m), specifically:

1. Emails and memoranda between the Park District's legal counsel and the Board President, the Executive Director and/or other park commissioners.
2. Emails and memoranda between and among employees and commissioners of the District.



3. Emails and memoranda between and among executive employees of the District and District's legal counsel.

The foregoing records are exempt pursuant to FOIA Sections 7(1)(f) and 7(1)(m). FOIA Section 7(1)(f) allows withholding of "[p]reliminary drafts, notes, recommendations, memoranda, or other documents in which opinions are expressed, or policies or actions are formulated, except that a specific record or relevant portion of a record shall not be exempt when the record is publicly cited and identified by the head of the public body...". FOIA Section 7(1)(m) permits a public body to withhold "[c]ommunications between a public body and an attorney or auditor representing a public body that would not be subject to discovery in litigation, and materials prepared or compiled by or for a public body in anticipation of criminal, civil or administrative proceedings upon request of an attorney advising the public body, and materials prepared or compiled with respect to internal audits of public bodies." The records referenced in paragraphs 1-3 immediately above, fall within each of these statutory exemptions and are exempt from disclosure.

Specifically, these records are exempt from disclosure pursuant to FOIA Section 7(1)(f) because (1) they include the expression of opinions, statements, and thoughts about a potential project that has not been approved by the Park District and is still under consideration; (2) they reveal negotiating strategy for a transactions that are still ongoing; and (3) they have not been publicly cited and identified by the head of the District. Illinois courts have determined this exemption to be the equivalent of the federal deliberative process exemption, which applies to predecisional materials used by a public body in its deliberative process. *Harwood v. McDonough*, 344 Ill.App.3d 242; 799 N.E.2d 859; 279 Ill.Dec. 56 (1st Dist., 2003). The records are "predecisional" materials that have been used by the District to formulate action. They include frank and open discussion among the Park District's employees and commissioners before a final decision is made, precisely the type of communication protected by Section 7(1)(f). *Watkins v. McCarthy*, App. 1 Dist.2012, 366 Ill.Dec. 650, 980 N.E.2d 733, Consistent with *Harwood* and *Watkins*, the records being withheld by the District are exempt under FOIA Section 7(1)(f) because they are part of and reflect the District's deliberative processes regarding a potential construction project which is not yet underway, and potential ongoing land transaction negotiations. The records are deliberative in the sense that they are actually related to the process by which policies are formulated. *Watkins*, at 743; *Harwood*, at 374-75.

Finally, the withheld records are exempt because disclosure of such documents would reveal confidential communications between the District and its legal counsel and would directly conflict with the protections of the attorney-client privilege. The information contained in these records is exempt from disclosure under FOIA Section 7(1)(a), and Illinois Supreme Court Rule 201(b)(2). 5 ILCS 7(1)(a). The Illinois Appellate Court's decision in *People ex rel. v. Ulrich v. Stukel*, 294 Ill.App.3d 193; 689 N.E.2d 319; 228 Ill.Dec. 447 (1st Dist. 1997) supports the



District's assertion that information pertaining to specific matters upon which the District consulted its attorneys is exempt from disclosure under FOIA. 294 Ill. App. 3d 193 (1st Dist. 1997).

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Public Access Bureau
Office of the Attorney General
500 S. 2nd Street
Springfield, IL 62701
public.access@ilag.gov
1-877-299-FOIA

You also have the right to administrative review by a court of law pursuant to FOIA Section 11.

Sincerely,

A large black rectangular box redacting the signature of John Peterson.

John Peterson
Executive Director / FOIA Officer
Winnetka Park District

John Peterson

From: John Peterson
Sent: Wednesday, May 31, 2023 11:46 PM
To: 'mary garrison'
Cc: Steven Adams
Subject: Response to Freedom of Information Act request = Email No. 1
Attachments: M Garrison FOIA response letter 05 31 2023.docx

Good evening, Mary.

Please accept the following in response to your recent Freedom of Information Act request.

As a follow-up to our conversation earlier today:

- a. Attached is a letter in response to your FOIA request;
- b. Information will be forthcoming to respond to your FOIA request; and
- c. Additional information will be forthcoming to respond to your FOIA request.

Thank you for your time and consideration.

Kind regards

John Peterson

Executive Director
Office: +1.847.501.2074
Email: jpeterson@winpark.org
Winnetka Park District | winpark.org





Sent via Regular Mail and Electronic Mail

May 31, 2023

Ms. Mary Garrison
350 Ridge Avenue
Winnetka, Illinois 60093

RE: Freedom of Information Act Request Received May 16, 2023

Dear Ms. Garrison:

The Winnetka Park District is in receipt of your Freedom of Information Act request and attachment dated May 16, 2023 in which you request the following via Exhibit "A" attached to your FOIA request:

1. Please provide all documents, inclusive of drafts, and communications relative "to the area by the north breakwater that will be licensed to John Edwardson for 20 years," as described in the March 11, 2021 Minutes of Closed Meeting of the WPD that have been released to the public.
2. Please provide all communications to/from John Edwardson or his representatives dealing with construction of a stone breakwater on the northern boundary of Elder Lane Beach, inclusive but without limitation of Mr. Edwardson sharing in the cost of the breakwater, between the years of 1/1/2019 to current date.
3. Please provide all documents and communications that relate to or describe the 13 requests made by Mr. Edwardson or his representative to the WPD associated with his facilitation toward the purchase of 261 Sheridan as referenced in the May 14, 2020 Minutes of Closed Meeting of the WPD that have been released to the public.
4. Please provide all documents and communications associated with Mr. Edwardson or his representatives' view that "a 225 foot breakwater at Elder [was] is critical to the commitment," and that without the breakwater the deal would not go through as described in the June 11, 2020 Minutes of Closed Meeting of the WPD that have been released to the public.
5. Please provide all documents and communications to/from John Edwardson or his representatives requiring that Shabica & Associates be involved in the planning, design or construction of a breakwater at Elder Lane Beach.



6. Please provide all documents and communications to/from John Edwardson or his representatives dealing with the relocation of the Elder Lane stormwater pipe.
7. Please provide a copy of the "10 talking points that are available to Board Members to be used for any third-party conversations to maintain consistency," as set forth in the last paragraph on page 1 of the August 27, 2020 Minutes of Closed Meeting of the WPD released to the public.
8. Please provide a copy of the illustration shared by Commissioner James to explain the "mid, min or max" approaches in working with Mr. Edwardson concerning Elder Lane Beach as referenced in the September 10, 2020 Minutes of Closed Meeting of the WPD released to the public.
9. Please provide a copy of the slide presented by Commissioner James "to display the property lines along with groin and breakwater placement to explain the Elder layout," as set forth in the November 19, 2020 Minutes of Closed Meeting of the WPD.

The Park District grants your request in part and denies your request in part. Your request is granted for the records referenced immediately below. The number in parenthesis at the end of each item refers to the paragraph number of your request to which the document is responsive. There are no documents responsive to paragraphs 1, 5, 6, 8 or 9.

1. 20210722 Overall Plan (2)
2. 20210722 Updated Elder Centennial Plan – North Breakwater Overall Plan (2)
3. Emails:
 - a. Draft things to do list (6).
 - b. Elder Centennial Feasibility Study as of January 18, 2021 (2).
 - c. Elder Centennial Plans (2).
 - d. Final Talking Points (7).
 - e. Good Afternoon John Edwardson (3), (4)
 - f. Good News to Share (2), (6),
 - g. John Edwardson signed letter of support (2)
 - h. Letter of Authorization – Elder Lane Park and Beach Breakwater Construction (2).
 - i. Letter of Authorization – Elder Lane Park and Beach Breakwater Construction (2).
 - j. Winnetka Park District – Sale of a portion of Elder Park (3), (4).

Certain records sought by your request are exempt from disclosure pursuant to FOIA 7(1)(f) and 7(1)(m), specifically:

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2. Emails and memoranda between and among employees and commissioners of the District.



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Finally, the withheld records are exempt because disclosure of such documents would reveal confidential communications between the District and its legal counsel and would directly conflict with the protections of the attorney-client privilege. The information contained in these records is exempt from disclosure under FOIA Section 7(1)(a), and Illinois Supreme Court Rule 201(b)(2). 5 ILCS 7(1)(a). The Illinois Appellate Court's decision in *People ex rel. v. Ulrich v. Stukel*, 294 Ill.App.3d 193; 689 N.E.2d 319; 228 Ill.Dec. 447 (1st Dist. 1997) supports the



District's assertion that information pertaining to specific matters upon which the District consulted its attorneys is exempt from disclosure under FOIA. 294 Ill. App. 3d 193 (1st Dist. 1997).

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Public Access Bureau
Office of the Attorney General
500 S. 2nd Street
Springfield, IL 62701
public.access@ilag.gov
1-877-299-FOIA

You also have the right to administrative review by a court of law pursuant to FOIA Section 11.

Sincerely,

John Peterson

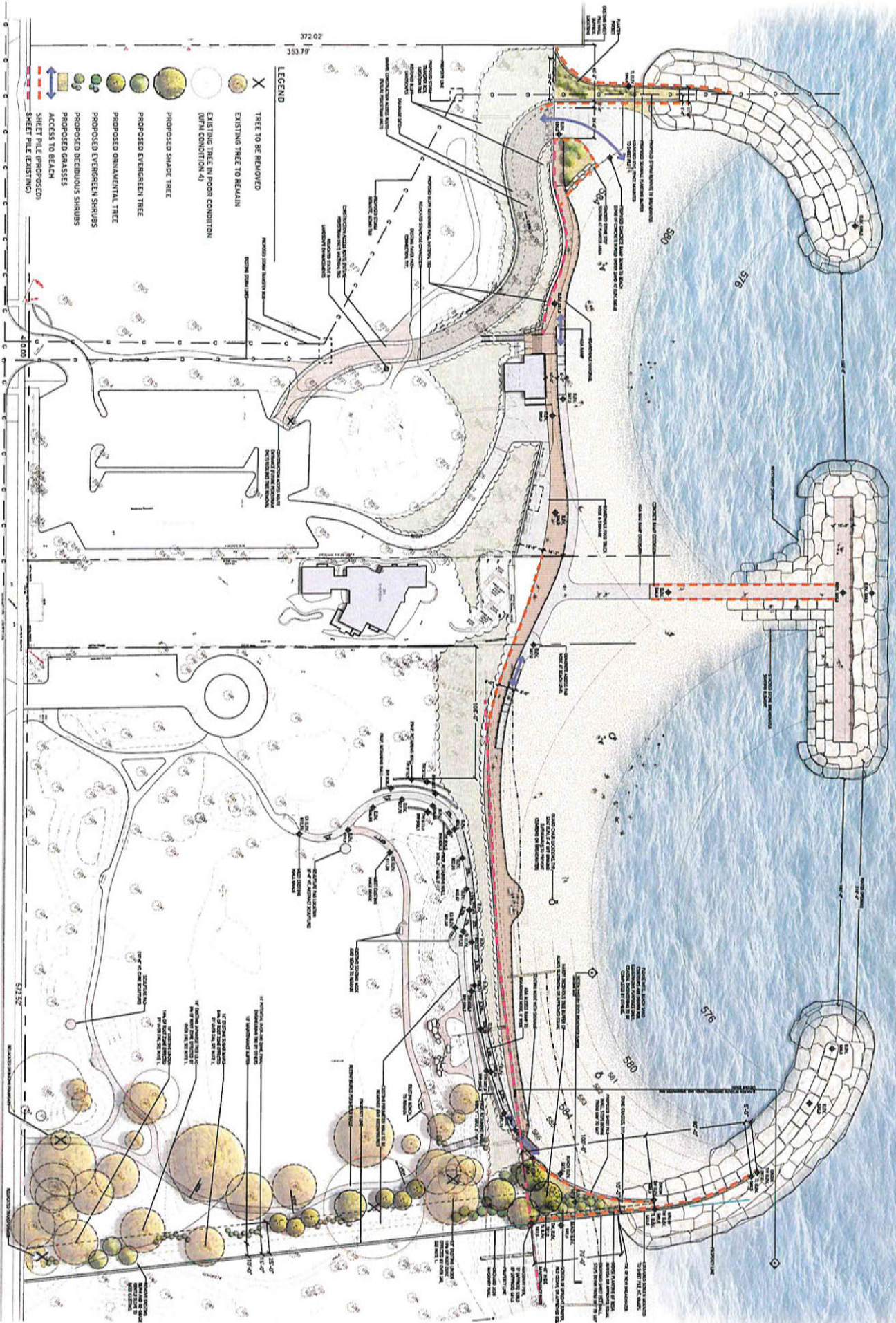
John Peterson
Executive Director / FOIA Officer
Winnetka Park District

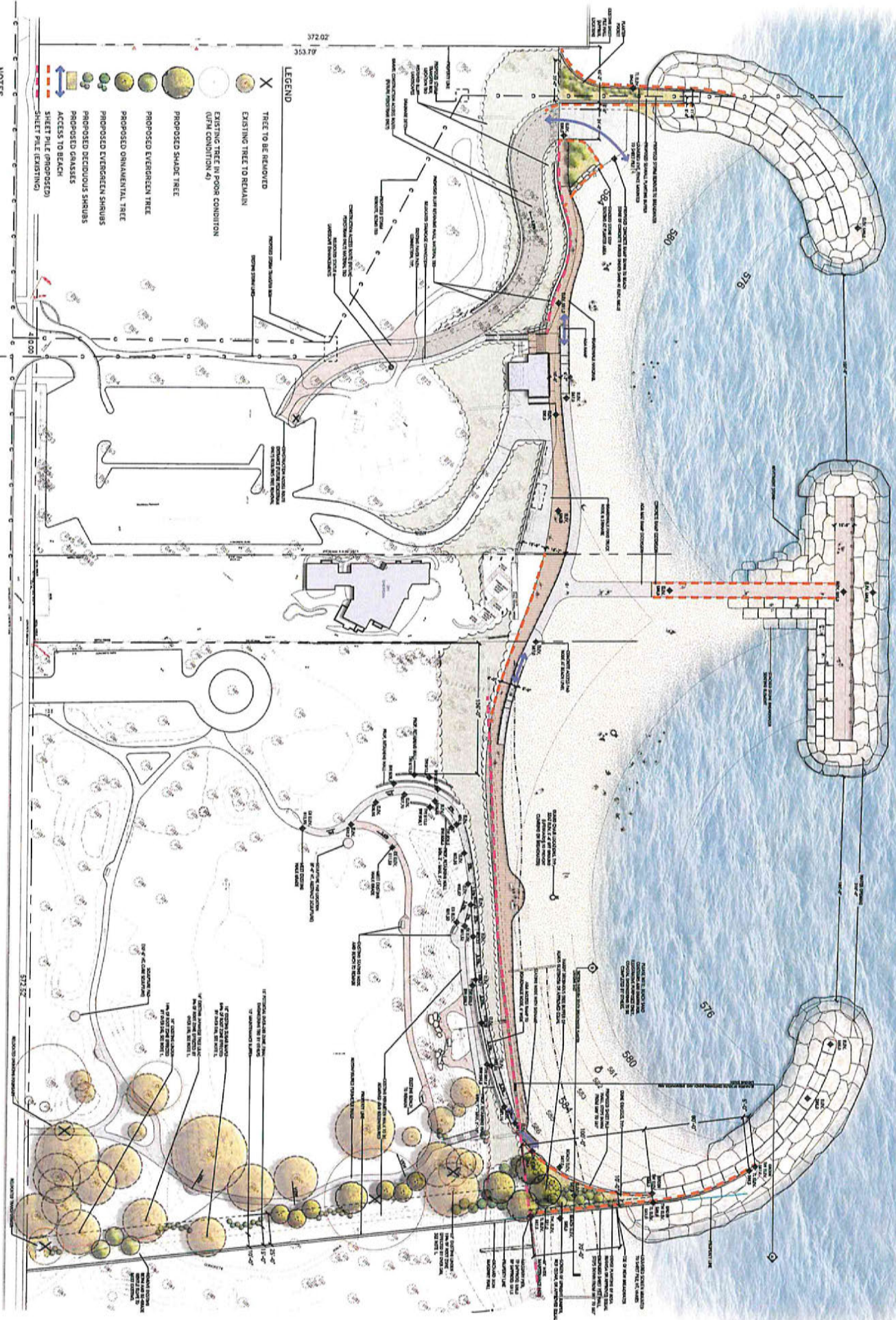
John Peterson

From: John Peterson
Sent: Wednesday, May 31, 2023 11:49 PM
To: mary garrison
Cc: Steven Adams
Subject: Mary Garrison FOIA Response = Email No. 2
Attachments: 20210722 Updated Elder Centennial Plan -- north Breakwater Overall Plan 4883-5642-3015, v1.pdf; 20210722 Overall Plan 4889-3543-3319, v1.pdf

John Peterson
Executive Director
Office: +1.847.501.2074
Email: jpeterson@winpark.org
Winnetka Park District | winpark.org







LEGEND

- X TREE TO BE REMOVED
- EXISTING TREE TO REMAIN (UPH CONDITION 4)
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN SHRUBS
- PROPOSED DECIDUOUS SHRUBS
- PROPOSED GRASSES
- ACCESS TO BEACH
- SHEET PILE (PROPOSED)
- SHEET PILE (EXISTING)

NOTES

1. Elder/Centennial Beach Feasibility Study is proposed and is not to be constructed until the final design is approved by the City of Winnetka. The final design shall be prepared by the City of Winnetka and shall include all necessary engineering, architectural, and landscape architectural details. The final design shall be prepared by the City of Winnetka and shall include all necessary engineering, architectural, and landscape architectural details. The final design shall be prepared by the City of Winnetka and shall include all necessary engineering, architectural, and landscape architectural details.

2. Where a retaining wall or other structure is required, the design shall be prepared by a registered professional engineer. The design shall be prepared by a registered professional engineer. The design shall be prepared by a registered professional engineer. The design shall be prepared by a registered professional engineer. The design shall be prepared by a registered professional engineer.

ELDER/CENTENNIAL BEACH FEASIBILITY STUDY
FEASIBILITY STUDY | PRELIMINARY CONCEPT PLAN

WINNETKA, ILLINOIS

SHERIDAN ROAD

SCALE: 1"=20'
PROJECT TEAM: LAKOTA GROUP
PREPARED FOR: WINNETKA PARK DISTRICT
DATE: JULY 22, 2021



John Peterson

From: John Peterson
Sent: Wednesday, May 31, 2023 11:51 PM
To: mary garrison
Cc: Steven Adams
Subject: FOIA response = Email No. 3
Attachments: Winnetka Park District Elder_Centennial Breakwater Louver Concept Renderings 4_27_21 4861-7820-2727, v1.pdf; FW: Winnetka Park District - Sale of a portion of Elder Park; FW: FINAL! Talking points - ; FW: Letter

John Peterson

Executive Director

Office: +1.847.501.2074

Email: jpeterson@winpark.org

Winnetka Park District | winpark.org



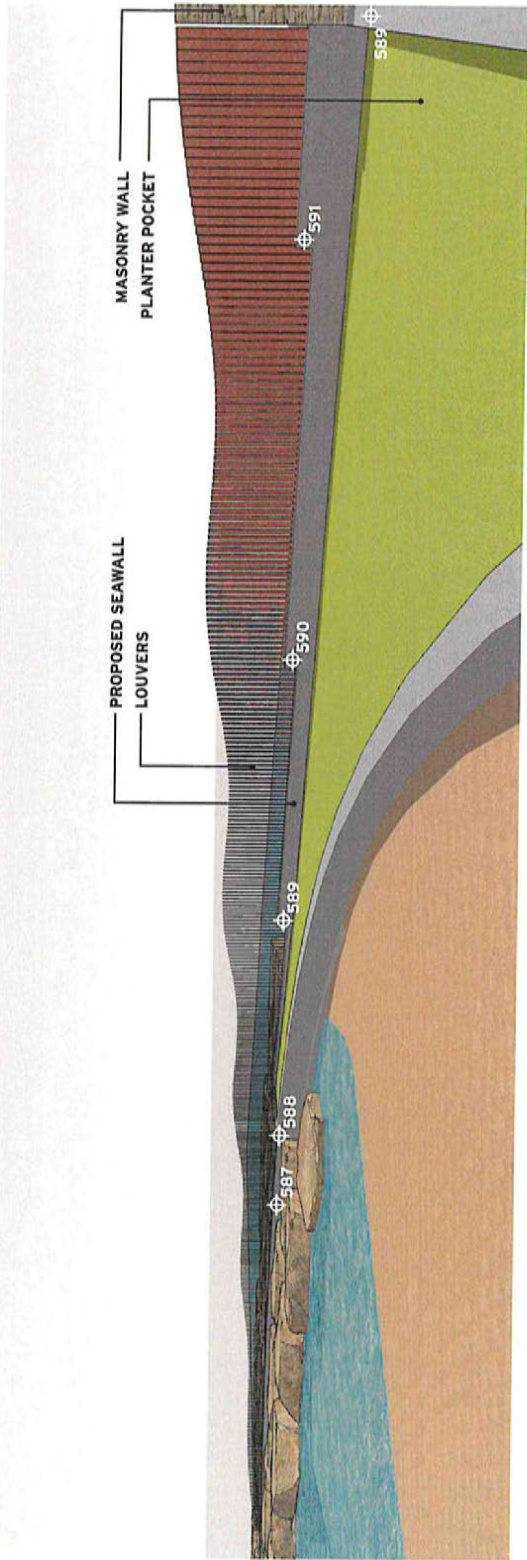


FIGURE 1: VIEW LOOKING SOUTHEAST FROM CENTENNIAL BEACH ACCESS POINT

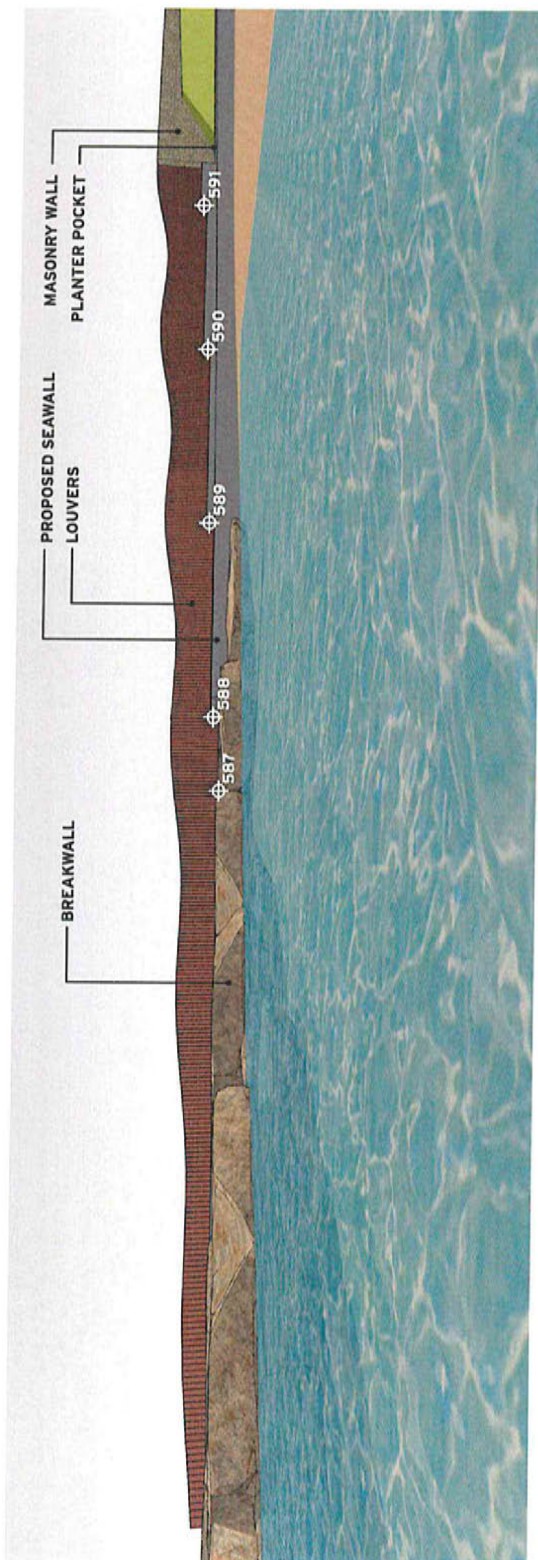


FIGURE 2: VIEW LOOKING SOUTH FROM CENTENNIAL BEACH

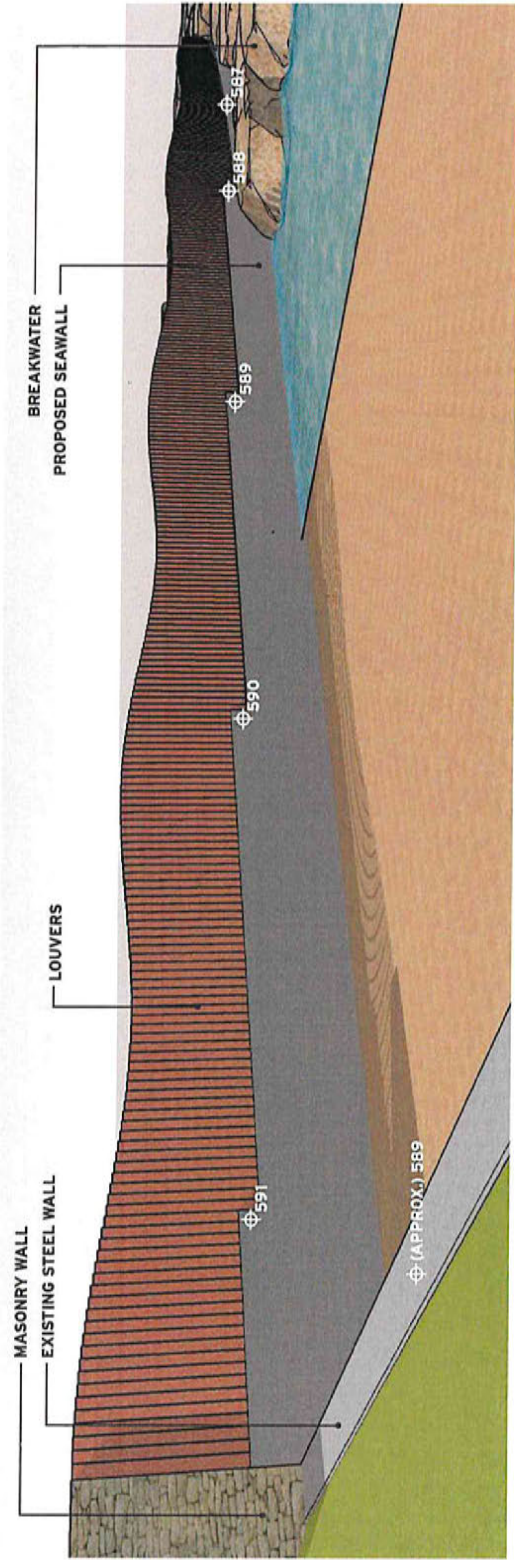


FIGURE 1: VIEW LOOKING NORTHEAST FROM ORCHARD 2020 BLUFF TOE

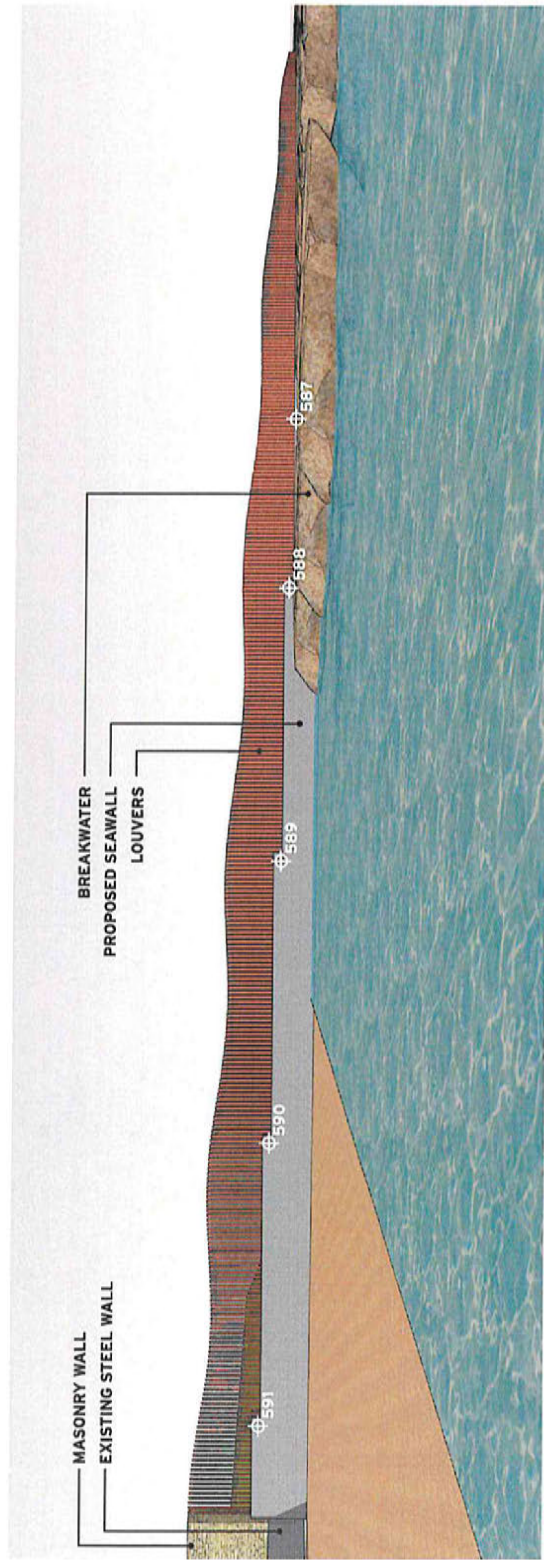


FIGURE 2: VIEW LOOKING NORTHWEST FROM ORCHARD 2020 BEACH

John Peterson

Subject: FW: Winnetka Park District - Sale of a portion of Elder Park

From: John Peterson <JPeterson@winpark.org>
Sent: Wednesday, May 31, 2023 2:17 PM
To: John Peterson <JPeterson@winpark.org>
Subject: FW: Winnetka Park District - Sale of a portion of Elder Park

From: Bruce Waldman <bwaldman@cshlegal.com>
Sent: Tuesday, June 30, 2020 11:22 AM
To: Steven Adams <sadams@robbins-schwartz.com>
Subject: RE: Winnetka Park District - Sale of a portion of Elder Park

Steve, unfortunately, the uncertainty of the "if and when" the park district will construct the breakwater is a deal killer for my client. My client tells me that the lake water level has gone up more than a foot since the discussions of this deal first began over 18 months ago. In his words, he's not going to buy a lot that disappears if the breakwater is not built. He's asked me to hold off from any further work at this time.

Let us know if the park district is able to make a firm commitment to constructing the breakwater by a date certain. Don't you think the \$300,000 figure we proposed to put in a construction escrow would cover the cost? If not, we could allocate more of the price or donation to that project without changing the bottom line being paid by my client.

Isn't it to the benefit of both of our clients to make sure the breakwater is constructed as soon as possible?

Bruce J. Waldman
Cohen, Salk & Huvar, P.C.
630 Dundee Road, Suite 120
Northbrook, Illinois 60062

Direct: 847-480-7872
Fax: 847-480-7882
E-Mail: bwaldman@cshlegal.com
Web: www.cshlegal.com

Confidentiality/Privilege Notice:

This email may contain material that is confidential, privileged and/or attorney work product for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender and delete all copies of this email.

From: Steven Adams <sadams@robbins-schwartz.com>
Sent: Monday, June 29, 2020 10:21 AM
To: Bruce Waldman <bwaldman@cshlegal.com>
Cc: Steven Adams <sadams@robbins-schwartz.com>
Subject: RE: Winnetka Park District - Sale of a portion of Elder Park

Hi Bruce,

Below is the Park District's response to your latest installment on the issues under consideration. I have removed the colloquy for the questions where there appears to be agreement. The Park District's current responses are in large black bold font. As previously communicated, all of the Park District's comments and responses and the Park District's previously submitted draft agreement remain subject to final approval by the Board of Park Commissioners. Please call me if you want to discuss any of the points below.

1. OK.

2. OK.

3. I will send you a simple cash donation agreement for your consideration. OK, PLEASE SEND THE BLANK FORM OF AGREEMENT FOR OUR REVIEW. **Will send shortly.**

4. Does the Park District intend to use and re-purpose the home you are buying at 261 Sheridan for park purposes or does the Park District intend to build some other new structure? We ask that as my client is interested in naming rights for any such park building as part of the donation. **The Park Board has not decided whether to retain the home. There has been no decision concerning whether, or if so when, to construct a new structure there. The Park District will discuss this request after the transaction terms are finalized. WE NEED OUR AGREEMENT TO INCLUDE A COMMITMENT BY THE PARK DISTRICT TO NAME ANY BUILDING, STRUCTURE OR FACILITY IN EITHER PARK USING THE EDWARDSON NAME. WE NEED TO FIGURE THIS OUT AND MAKE IT PART OF THIS DEAL AND AS PART OF THE CHARITABLE DONATION. The Park District appreciates your client's request regarding naming rights. There are significant public relations concerns associated with the Park District's sale of cherished public property to a private individual, which will be exacerbated if the terms of the deal include naming rights on retained public property for that individual. Moreover, this request is inconsistent with your client's insistence on anonymity in the contract and as far into the process as possible. As you know, the Park District is subject to the Illinois Open Meetings Act and Freedom of Information Act, and will not be able to shield your client's identity of as the party for whom its new facility will be named. The Park District's representatives would like to discuss this issue directly with your client when possible.**

5. We had an engineer look at the beach/lake front area and he advised that a breakwater structure is needed on the park property which will benefit both our new Elder lot and the remaining public beach area. **The current plan is to construct a 225' stone groin/breakwater such that the center line is no further south than existing steel jetty and no further north than the new property line. This transaction may need to include the Village of Winnetka (a legally separate and distinct unit of local government); the parties will likely require a separate easement for construction, access and maintenance of the breakwater I'm told that the master plan for the park includes the construction of such a structure. We would want a sufficient amount of the purchase price (\$300,000) held in a joint order escrow at Closing to insure that the Park District completes this construction in an agreed period of time. What time frame does the Park District envision? The Park Board cannot agree to the escrow of any funds for construction of the breakwater. The parties have treated the breakwater and the real estate purchase as separate transactions from the outset. PLEASE UNDERSTAND THAT THIS ISSUE IS CRITICAL TO THE ENTIRE DEAL AND MUST BE RESOLVED NOW AS PART OF OUR CONTRACT. MY CLIENT IS NOT GOING TO CONTINUE TO SPEND MONEY ON THE VARIOUS PROFESSIONALS INVOLVED UNTIL WE ARE COMFORTABLE THAT WE WILL HAVE AN ACCEPTABLE COMMITMENT FROM THE PARK DISTRICT. IT IS ONE OF THOSE ISSUES THAT'S**

A "DEAL BREAKER" AND SO WE HAVE TO FIGURE OUT HOW TO RESOLVE IT AS MY CLIENT WILL NOT BUY THE LOT WITH THE POSSIBILITY OF DESTRUCTIVE EROSION NOT PROPERLY ADDRESSED AND REMEDIED. THIS ENGINEERS HAVE BEEN CLEAR THAT A CERTAIN BREAKWATER STRUCTURE MUST BE CONSTRUCTED ON THE PARK PROPERTY TO PROTECT BOTH OF OUR BEACH AREAS. WE NEED A COMMITMENT FROM THE PARK DISTRICT TO CONSTRUCT WHAT'S NEEDED BY A DATE CERTAIN. I'M TOLD THAT THIS HAS BEEN IN THE PARK DISTRICT'S MASTER PLAN FOR MANY YEARS AND HAS NEVER BEEN DONE. CAN'T THE PARK DISTRICT GET THIS CONSTRUCTION APPROVED AS PART OF THE ENTIRE DEAL? THE \$300,000 FROM THE BUYER COULD BE DEPOSITED AT CLOSING INTO A CONSTRUCTION ESCROW WITH CHICAGO TITLE TO BE USED TO PAY THE CONTRACTORS FOR THE WORK. ALSO, WE NEED TO UNDERSTAND THE SCOPE AND LOCATION OF THE EASEMENT YOU WANT ON OUR LOT AND THE TIMING OF THE WORK AS MY CLIENT IS CONCERNED ABOUT HEAVY MACHINERY COMING IN ACROSS HIS LOT AND CAUSING DAMAGE. WE NEED TO FOCUS OUR EFFORTS ON RESOLVING ALL OF THESE ISSUES NOW AS THESE ISSUES ARE CRITICAL TO MAKING THE WHOLE DEAL WORK FOR US. I ASSUME THAT THIS ISSUE IS ALSO VERY IMPORTANT FOR THE PARK DISTRICT

AS WELL TO PROTECT THE PUBLIC BEACH AREAS. **The Park District is committed to constructing the breakwater which will be of benefit to both parties. The project is contained in the Master Plan and the Park District has commenced discussions with Shabica & Associates concerning the project. However, commencement of the project is a long way off. Before commencing construction, the Park District must first establish a detailed cost estimate and a complete financing plan, which will include issuance of public debt and pursuit of grants. The project must be fully designed, permitted, sequenced and prioritized with other lakefront projects. The project must be competitively bid and awarded in accordance with strict laws pertaining to public construction projects. There are many other variables related to when and how the project will be constructed, which the Park District's representatives would like to discuss directly with your client.**

6. The Park District will seek to remove the tree promptly due to its unsafe condition. OK, THANK YOU.

7. We are concerned with the future use of the park land that will be bordering our new Elder lot. We would want a restriction to be placed on the 150 foot area of park land next to us to prohibit any parking lot or drives in that area. My client is fine if that area is continued to be used for youth soccer activities. Use restrictions, if any, would be limited to within fifty (50) feet of the new property line, limited to 25 years, and would not allow construction of parking or roadway improvements, roofed structures or playground equipment without the express written consent of the adjacent owner. Use of the Park District property for passive and active recreational purposes including but not limited to organized sports will be allowed. WE NEED A BIGGER BUFFER AREA THAN 50 FEET AND WE PROPOSE THAT THE USE RESTRICTIONS EXTEND TO 100 FEET. WITH THE BIGGER BUFFER AREA WE CAN COMPROMISE AND ACCEPT THE TIME LIMITATION OF 25 YEARS. **The Park District has concerns regarding this requested covenant. Convincing the public of the sale's benefits is a hard sell to begin with. Adding an extensive restrictive covenant to the transaction further complicates the case for the sale. Nevertheless, the Park District's representatives are prepared to propose to the Park Board that a restriction be included in the agreement as follows: A 75-foot, 25-year restriction on roadway/driveway/parking**

improvements, roofed structures, and permanent playground equipment without approval by adjoining property owner.

8. OK, WE WILL PURSUE THE ENTITLEMENT APPROVALS FIRST AND MY CLIENT'S ARCHITECT IS ALREADY REVIEWING THE NEW SURVEY TO LAY OUT WHAT MY CLIENT WANTS TO BUILD ON THE LOT WHICH I THINK IS A GUEST HOUSE AND A POOL.

9. OK, THE BUYER WILL DO, AT HIS COST, ANY DUE DILIGENCE INVESTIGATIONS AND TESTING THAT HE FEELS ARE NECESSARY TO MAKE SURE THE LOT IS SUITABLE FOR HIS USE. AS STATED ABOVE HOWEVER, THE BUYER ISN'T GOING TO CONTINUE TO SPEND MORE MONEY ON THESE ITEMS UNLESS WE GET THE BREAK WATER ISSUE RESOLVED AS PART OF THE WHOLE DEAL.

10. geotechnical soil test reports? No. OK.

11. OK

12. What is the status of your efforts to get an executed contract to buy 261 Sheridan? Still in negotiations. Nothing in the contract draft for that transaction makes any reference to this potential sale of park property. OK, BUT HOW ARE WE GOING TO COORDINATE GETTING THESE 2 SEPARATE TRASCTIONS UNDER CONTRACT AT THE SAME TIME? **Presently we are at the same stage on both transactions—extended contract negotiations. Contingencies that will enable the transactions to proceed in a coordinated manner are included in the current draft of the other agreement.**

13. As I mentioned before, we intend to form a new Delaware LLC to be the buyer and the manager of the LLC will be John's accountant, Bob Pasquesi, who has already been involved in the negotiations of this deal. Ok. John wants his personal name to be left out of the process of getting public hearing approval for the sale. The court proceedings for the sale will only mention the contract purchaser, but the PD cannot guarantee what additional information the court may require as a condition to issuing the necessary order. I'm not sure how the charitable contribution would be set up but I think it will be a personal contribution from John or his Trust but maybe it could be made in the name of his LLC. I'm not sure about that part yet. Ok, we will need an additional condition in the purchase and sale contract related to the donation, but the source of the donation is not an issue for us. OK.

Just to be clear, sale and closing on the subject parcel must be contingent on simultaneous delivery of the donated funds, and both the donation agreement and the real estate purchase and sale contract should so indicate.

Thank you for your continuing assistance on this transaction.

Steve Adams

Steven B. Adams
Attorney
Robbins Schwartz
55 W. Monroe St., Suite 800
Chicago, Illinois 60603-5144
p: 312.332.7760
c: 630.890.9700
f: 312.332.7768
sadams@robbins-schwartz.com

From: Bruce Waldman <bwaldman@cshlegal.com>
Sent: Thursday, June 11, 2020 10:41 AM
To: Steven Adams <sadams@robbins-schwartz.com>
Cc: John Edwardson <john@johnedwardson.com>
Subject: RE: Winnetka Park District - Sale of a portion of Elder Park
Importance: High

Steve, below in ALL CAPS and green font are my client's replies to the list of issues.

1. The purchase price for the real estate will be based on an appraisal. We propose to use Michael Sullivan as the appraiser. His credentials are attached. Are you ok with Sullivan? The balance of the \$5.2 M would then be allocated to the charitable donation. **No issue with Michael Sullivan and the balance of the \$5.2M being allocated to the charitable deduction. Our appraiser Michael Marous will provide us with an appraisal to address our fair market value due diligence. Based on this structure, the contract will be for a purchase price at or near the parties' appraisals, and a separate agreement for a cash, deductible charitable donation to the Winnetka Park District Foundation. OK.**
2. As soon as you get the new survey of the land to be sold to us, please e-mail me a PDF so I can send it to the appraiser. **The survey of the subject parcel is attached. Sorry for the delay, we were slowed due to an ordering mix-up. OK.**
3. Does the Park District (or the Village) have a separate agreement format it uses for charitable donations? If so, please send to me to review. **The donation should go through WPD Foundation, a separate NFP 501(c)(3) organization. I will send you a simple cash donation agreement for your consideration. OK, PLEASE SEND THE BLANK FORM OF AGREEMENT FOR OUR REVIEW.**
4. Does the Park District intend to use and re-purpose the home you are buying at 261 Sheridan for park purposes or does the Park District intend to build some other new structure? We ask that as my client is interested in naming rights for any such park building as part of the donation. **The Park Board has not decided whether to retain the home. There has been no decision concerning whether, or if so when, to construct a new structure there. The Park District will discuss this request after the transaction terms are finalized. WE NEED OUR AGREEMENT TO INCLUDE A COMMITMENT BY THE PARK DISTRICT TO NAME ANY BUILDING, STRUCTURE OR FACILITY IN EITHER PARK USING THE EDWARDSON NAME. WE NEED TO FIGURE THIS OUT AND MAKE IT PART OF THIS DEAL AND AS PART OF THE CHARITABLE DONATION.**
5. We had an engineer look at the beach/lake front area and he advised that a breakwater structure is needed on the park property which will benefit both our new Elder lot and the remaining public beach area. **The current plan is to construct a 225' stone groin/breakwater such that the center line is no further south than existing steel jetty and no further north than the new property line. This transaction may need to include the Village of Winnetka (a legally separate and distinct unit of local government); the parties will likely require a separate easement for construction, access and maintenance of the breakwater I'm told that the master plan for the park includes the construction of such a structure. We would want a sufficient amount of the purchase price (\$300,000) held in a joint order escrow at Closing to insure that the Park District completes this construction in an agreed period of time. What time frame does the Park District envision? The Park Board cannot agree to the escrow of any funds for construction of the breakwater. The parties have treated the breakwater and the real estate purchase as separate transactions from the outset. PLEASE UNDERSTAND THAT THIS ISSUE IS CRITICAL TO THE ENTIRE DEAL AND MUST BE RESOLVED NOW AS PART OF OUR CONTRACT. MY CLIENT IS NOT GOING TO CONTINUE TO SPEND MONEY ON THE VARIOUS PROFESSIONALS INVOLVED UNTIL WE ARE COMFORTABLE THAT WE WILL HAVE AN ACCEPTABLE COMMITMENT FROM THE PARK DISTRICT. IT IS ONE OF THOSE ISSUES THAT'S A "DEAL BREAKER" AND SO WE HAVE TO FIGURE OUT HOW TO RESOLVE IT AS MY CLIENT WILL NOT BUY THE LOT WITH THE POSSIBILITY OF DESTRUCTIVE EROSION NOT PROPERLY ADDRESSED AND REMEDIED. THIS ENGINEERS HAVE BEEN CLEAR THAT A CERTAIN BREAKWATER STRUCTURE MUST BE CONSTRUCTED ON THE PARK PROPERTY TO PROTECT BOTH OF OUR BEACH AREAS. WE NEED A COMMITMENT FROM THE PARK DISTRICT TO CONSTRUCT WHAT'S NEEDED BY A DATE CERTAIN. I'M**

TOLD THAT THIS HAS BEEN IN THE PARK DISTRICT'S MASTER PLAN FOR MANY YEARS AND HAS NEVER BEEN DONE. CAN'T THE PARK DISTRICT GET THIS CONSTRUCTION APPROVED AS PART OF THE ENTIRE DEAL? THE \$300,000 FROM THE BUYER COULD BE DEPOSITED AT CLOSING INTO A CONSTRUCTION ESCROW WITH CHICAGO TITLE TO BE USED TO PAY THE CONTRACTORS FOR THE WORK. ALSO, WE NEED TO UNDERSTAND THE SCOPE AND LOCATION OF THE EASEMENT YOU WANT ON OUR LOT AND THE TIMING OF THE WORK AS MY CLIENT IS CONCERNED ABOUT HEAVY MACHINERY COMING IN ACROSS HIS LOT AND CAUSING DAMAGE. WE NEED TO FOCUS OUR EFFORTS ON RESOLVING ALL OF THESE ISSUES NOW AS THESE ISSUES ARE CRITICAL TO MAKING THE WHOLE DEAL WORK FOR US. I ASSUME THAT THIS ISSUE IS ALSO VERY IMPORTANT FOR THE PARK DISTRICT AS WELL TO PROTECT THE PUBLIC BEACH AREAS.

6. There is a very large old tree on the park land which will be on the lot you are selling to us and it is in a dangerous condition. We are concerned that very large limbs could break off or that the entire tree could topple over. We would like the Park District to have it removed soon. **The Park District will seek to remove the tree promptly due to its unsafe condition.** OK, THANK YOU.

7. We are concerned with the future use of the park land that will be bordering our new Elder lot. We would want a restriction to be placed on the 150 foot area of park land next to us to prohibit any parking lot or drives in that area. My client is fine if that area is continued to be used for youth soccer activities. **Use restrictions, if any, would be limited to within fifty (50) feet of the new property line, limited to 25 years, and would not allow construction of parking or roadway improvements, roofed structures or playground equipment without the express written consent of the adjacent owner. Use of the Park District property for passive and active recreational purposes including but not limited to organized sports will be allowed.** WE NEED A BIGGER BUFFER AREA THAN 50 FEET AND WE PROPOSE THAT THE USE RESTRICTIONS EXTEND TO 100 FEET. WITH THE BIGGER BUFFER AREA WE CAN COMPROMISE AND ACCEPT THE TIME LIMITATION OF 25 YEARS.

8. Is it your conclusion that a court order is needed for this sale? **Yes** Wouldn't it make sense for you to seek the court order up front, before the buyer applies for Entitlement approval? **I'm open to discussing this with you further. That would make the potential sale known to public sooner, and could serve to mobilize public participation in the zoning/entitlement process ahead of the customary zoning notice period. A court might condition its approval on village approval of entitlements anyway.** No point in the buyer asking for Entitlement approval if we have not been authorized to buy the lot. **Unless there is extreme public opposition or inadequate consideration, the court will likely approve. Let's discuss.** OK, WE WILL PURSUE THE ENTITLEMENT APPROVALS FIRST AND MY CLIENT'S ARCHITECT IS ALREADY REVIEWING THE NEW SURVEY TO LAY OUT WHAT MY CLIENT WANTS TO BUILD ON THE LOT WHICH I THINK IS A GUEST HOUSE AND A POOL.

9. Does the Park District have an existing Phase I environmental report? **No.** We will need to add a rep and warranty from the Park District that it has no knowledge/notice of any environmental concerns etc. **In keeping with customary practice, due diligence including Phase I Environmental Site Assessment, geotechnical survey and/or sampling along with historical use investigation is conducted by the Purchaser at Purchaser's expense.** OK, THE BUYER WILL DO, AT HIS COST, ANY DUE DILIGENCE INVESTIGATIONS AND TESTING THAT HE FEELS ARE NECESSARY TO MAKE SURE THE LOT IS SUITABLE FOR HIS USE. AS STATED ABOVE HOWEVER, THE BUYER ISN'T GOING TO CONTINUE TO SPEND MORE MONEY ON THESE ITEMS UNLESS WE GET THE BREAK WATER ISSUE RESOLVED AS PART OF THE WHOLE DEAL.

10. Does the Park District have any geotechnical soil test reports? **No.** OK.

11. Please send up an historical map showing the location of the North Shore Hospital sanitarium that was previously located in the area. **I am not aware of any history regarding the referenced sanitarium. The park district has advised me it does not have any records regarding this. What information do you have indicating that any part of the sanitarium was on the subject property or Elder Park?** It looks like it was demolished in 1969 or so. Was the entire structure including foundation and basement removed or were parts of it buried. **No information and nothing to indicate this structure was on Elder Park.** Were there any USTs as part of the hospital and if so were the removals documented? **See above answer.** Was the hospital located on any part of the existing Elder Park or was it south on the land that is now Centennial Park? **See above answer.** OK, I'M ATTACHING AN ARTICLE OBTAINED ONLINE FROM THE WINNETKA HISTORICAL SOCIETY THAT SHOWS THE FACILITY AND THAT IT WAS DEMOLISHED IN 1969 WHICH IN MY VIEW IS NOT THAT LONG AGO. WE SUSPECT IT WAS

FURTHER SOUTH ON THE CENTENNIAL PARK PROPERTY BUT WE WERE HOPING THAT YOU COULD GET US SOME INFO TO CONFIRM THAT. OUR CONCERN IS FINDING THE FOUNDATION OR BASEMENT ETC. BURIED UNDERGROUND ON OUR LOT.

12. What is the status of your efforts to get an executed contract to buy 261 Sheridan? **Still in negotiations. Nothing in the contract draft for that transaction makes any reference to this potential sale of park property. OK, BUT HOW ARE WE GOING TO COORDINATE GETTING THESE 2 SEPARATE TRASACTIONS UNDER CONTRACT AT THE SAME TIME?**

13. As I mentioned before, we intend to form a new Delaware LLC to be the buyer and the manager of the LLC will be John's accountant, Bob Pasquesi, who has already been involved in the negotiations of this deal. **Ok. John wants his personal name to be left out of the process of getting public hearing approval for the sale. The court proceedings for the sale will only mention the contract purchaser, but the PD cannot guarantee what additional information the court may require as a condition to issuing the necessary order.** I'm not sure how the charitable contribution would be set up but I think it will be a personal contribution from John or his Trust but maybe it could be made in the name of his LLC. I'm not sure about that part yet. **Ok, we will need an additional condition in the purchase and sale contract related to the donation, but the source of the donation is not an issue for us. OK.**

Bruce J. Waldman
Cohen, Salk & Huvard, P.C.
630 Dundee Road, Suite 120
Northbrook, Illinois 60062

Direct: 847-480-7872
Fax: 847-480-7882
E-Mail: bwaldman@cshlegal.com
Web: www.cshlegal.com

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From: Steven Adams <sadams@robbins-schwartz.com>
Sent: Friday, June 5, 2020 7:19 PM
To: Bruce Waldman <bwaldman@cshlegal.com>
Subject: RE: Winnetka Park District - Sale of a portion of Elder Park

Hi Bruce,

See my responses below in red font. Give me a call at your convenience after you have an opportunity to review.

Steven B. Adams
Attorney
Robbins Schwartz
55 W. Monroe St., Suite 800
Chicago, Illinois 60603-5144
p: 312.332.7760
c: 630.890.9700
f: 312.332.7768
sadams@robbins-schwartz.com

From: Bruce Waldman <bwaldman@cshlegal.com>
Sent: Thursday, April 23, 2020 10:02 AM
To: Steven Adams <sadams@robbins-schwartz.com>
Cc: John Edwardson <john@johnedwardson.com>; Pasquesi <lrp@ps-cpa.com>
Subject: RE: Winnetka Park District - Sale of a portion of Elder Park
Importance: High

Steve, I reviewed your draft of the proposed contract and in discussing the details of the transaction with my client we have put together the list below of certain important issues and questions. Please reply so we can then work on including these matters in our contract.

1. The purchase price for the real estate will be based on an appraisal. We propose to use Michael Sullivan as the appraiser. His credentials are attached. Are you ok with Sullivan? The balance of the \$5.2 M would then be allocated to the charitable donation. **No issue with Michael Sullivan and the balance of the \$5.2M being allocated to the charitable deduction. Our appraiser Michael Marous will provide us with an appraisal to address our fair market value due diligence. Based on this structure, the contract will be for a purchase price at or near the parties' appraisals, and a separate agreement for a cash, deductible charitable donation to the Winnetka Park District Foundation.**
2. As soon as you get the new survey of the land to be sold to us, please e-mail me a PDF so I can send it to the appraiser. **The survey of the subject parcel is attached. Sorry for the delay, we were slowed due to an ordering mix-up.**
3. Does the Park District (or the Village) have a separate agreement format it uses for charitable donations? If so, please send to me to review. **The donation should go through WPD Foundation, a separate NFP 501(c)(3) organization. I will send you a simple cash donation agreement for your consideration.**
4. Does the Park District intend to use and re-purpose the home you are buying at 261 Sheridan for park purposes or does the Park District intend to build some other new structure? We ask that as my client is interested in naming rights for any such park building as part of the donation. **The Park Board has not decided whether to retain the home. There has been no decision concerning whether, or if so when, to construct a new structure there. The Park District will discuss this request after the transaction terms are finalized.**
5. We had an engineer look at the beach/lake front area and he advised that a breakwater structure is needed on the park property which will benefit both our new Elder lot and the remaining public beach area. **The current plan is to construct a 225' stone groin/breakwater such that the center line is no further south than existing steel jetty and no further north than the new property line. This transaction may need to include the Village of Winnetka (a legally separate and distinct unit of local government); the parties will likely require a separate easement for construction, access and maintenance of the breakwater I'm told that the master plan for the park includes the construction of such a structure. We would want a sufficient amount of the purchase price (\$300,000) held in a joint order escrow at Closing to insure that the Park District completes this construction in an agreed period of time. What time frame does the Park District envision? The Park Board cannot agree to the escrow of any funds for construction of the breakwater. The parties have treated the breakwater and the real estate purchase as separate transactions from the outset.**
6. There is a very large old tree on the park land which will be on the lot you are selling to us and it is in a dangerous condition. We are concerned that very large limbs could break off or that the entire tree could topple over. We would like the Park District to have it removed soon. **The Park District will seek to remove the tree promptly due to its unsafe condition.**
7. We are concerned with the future use of the park land that will be bordering our new Elder lot. We would want a restriction to be placed on the 150 foot area of park land next to us to prohibit any parking lot or drives in that area. My client is fine if that area is continued to be used for youth soccer activities. **Use restrictions, if any, would be limited to within fifty (50) feet of the new property line, limited to 25 years, and would not allow construction of parking or roadway improvements, roofed structures or playground equipment without the express written consent**

of the adjacent owner. Use of the Park District property for passive and active recreational purposes including but not limited to organized sports will be allowed.

8. Is it your conclusion that a court order is needed for this sale? **Yes** Wouldn't it make sense for you to seek the court order up front, before the buyer applies for Entitlement approval? **I'm open to discussing this with you further. That would make the potential sale known to public sooner, and could serve to mobilize public participation in the zoning/entitlement process ahead of the customary zoning notice period. A court might condition its approval on village approval of entitlements anyway.** No point in the buyer asking for Entitlement approval if we have not been authorized to buy the lot. **Unless there is extreme public opposition or inadequate consideration, the court will likely approve. Let's discuss.**

9. Does the Park District have an existing Phase I environmental report? **No.** We will need to add a rep and warranty from the Park District that it has no knowledge/notice of any environmental concerns etc. **In keeping with customary practice, due diligence including Phase I Environmental Site Assessment, geotechnical survey and/or sampling along with historical use investigation is conducted by the Purchaser at Purchaser's expense.**

10. Does the Park District have any geotechnical soil test reports? **No.**

11. Please send up an historical map showing the location of the North Shore Hospital sanitarium that was previously located in the area. **I am not aware of any history regarding the referenced sanitarium. The park district has advised me it does not have any records regarding this. What information do you have indicating that any part of the sanitarium was on the subject property or Elder Park?** It looks like it was demolished in 1969 or so. Was the entire structure including foundation and basement removed or were parts of it buried. **No information and nothing to indicate this structure was on Elder Park.** Were there any USTs as part of the hospital and if so were the removals documented? **See above answer.** Was the hospital located on any part of the existing Elder Park or was it south on the land that is now Centennial Park? **See above answer.**

12. What is the status of your efforts to get an executed contract to buy 261 Sheridan? **Still in negotiations. Nothing in the contract draft for that transaction makes any reference to this potential sale of park property.**

13. As I mentioned before, we intend to form a new Delaware LLC to be the buyer and the manager of the LLC will be John's accountant, Bob Pasquesi, who has already been involved in the negotiations of this deal. **Ok.** John wants his personal name to be left out of the process of getting public hearing approval for the sale. **The court proceedings for the sale will only mention the contract purchaser, but the PD cannot guarantee what additional information the court may require as a condition to issuing the necessary order.** I'm not sure how the charitable contribution would be set up but I think it will be a personal contribution from John or his Trust but maybe it could be made in the name of his LLC. I'm not sure about that part yet. **Ok, we will need an additional condition in the purchase and sale contract related to the donation, but the source of the donation is not an issue for us.**

This is obviously a bit of a complicated an unusual set of transactions. Once I have the new survey and your replies to the above matters we can proceed to revise the contract to address all concerns. Thanks.

Thanks, I look forward to working with you on this transaction.

Steve Adams

Bruce J. Waldman
Cohen, Salk & Huvard, P.C.
630 Dundee Road, Suite 120
Northbrook, Illinois 60062

Direct: 847-480-7872
Fax: 847-480-7882
E-Mail: bwaldman@cshlegal.com

Web: www.cshlegal.com

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From: Steven Adams <sadams@robbins-schwartz.com>
Sent: Monday, April 20, 2020 2:00 PM
To: Bruce Waldman <bwaldman@cslegal.com>
Cc: Steven Adams <sadams@robbins-schwartz.com>
Subject: Winnetka Park District - Sale of a portion of Elder Park

Hi Bruce,

Attached for your review is the Contract for the above transaction. Please note I expect the survey in the next day or two. After you review, I'm sure there will be much we need to discuss, so please call me to discuss next steps.

Thank you and I look forward to working with you on this transaction.

Steve Adams

Steven B. Adams
Attorney
Robbins Schwartz
55 W. Monroe St., Suite 800
Chicago, Illinois 60603-5144
p: 312.332.7760
c: 630.890.9700
f: 312.332.7768
sadams@robbins-schwartz.com

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John Peterson

Subject: FW: FINAL! Talking points -

From: John Peterson

Sent: Thursday, August 27, 2020 5:14 PM

To: Mickey Archambault <MArchambault@winpark.org>

Cc: Steven Adams <sadams@robbins-schwartz.com>

Subject: FINAL! Talking points - Attorney Client Privileged Communication

1. The property exchange achieves a long-desired goal for the Winnetka Park District and, in so doing, provides remarkable value to residents.
2. More specifically and more recently, the property exchange will accomplish one of the major objectives of the Winnetka Waterfront 2030 Lakefront Master Plan.
3. When finalized, the combination of Elder Lane Beach and Centennial Beach will provide public access to nearly 1,000 feet of continuous shoreline.
4. Once completed, the community will enjoy a single, integrated park of nearly 8 acres, between the Lake Michigan shoreline and Sheridan Road, enabling easier access to a broad range of recreational uses within the combined park.
5. The Park District will receive real estate of considerably greater value - - more than \$6 million in value - - than the value of the property the Park District is conveying.
6. Aside from transaction costs, the property exchange will be completed without expending additional Park District funds, thanks to the generosity of a Winnetka resident.
7. Once finalized, the Park District will be positioned to construct shoreline breakwaters in a cost-effective, efficient manner.
8. The Winnetka Park District is committed to work with the Village of Winnetka to ensure all property exchange and land use issues are fully addressed.
9. The Winnetka Park District board is being measured in its approach before final approval of the property exchange. This announcement represents the beginning of the process. The Park District must - - and will - - take additional action before the exchange is binding and ultimately completed, including exchange agreement approval, property valuations, due diligence investigations, a public meeting to discuss the transaction and receive public comment, and Park Board approval of an ordinance authorizing the exchange closing to proceed. A referendum for approval or funding is not required for the exchange.
10. The proposed property exchange will be in conformance with applicable Illinois law and, separately, Village of Winnetka ordinances.

John Peterson
Executive Director
Winnetka Park District

+1.847.501.2074

jpetereson@winpark.org

www.winpark.org



John Peterson

Subject: FW: Letter
Attachments: image002.png; image002.png; John Edwardson Draft Letter 10 07 2021 amended 02 05 2022 v2.docx

From: John Edwardson <[REDACTED]>
Sent: Thursday, February 10, 2022 7:36 PM
To: John Peterson <JPeterson@winpark.org>
Subject: Re: Letter

Yes. Thx.

Sent from my iPad

On Feb 10, 2022, at 7:27 PM, John Peterson <jpeterson@winpark.org> wrote:

Thanks, John, for your email.

Does the attached work?

Thanks.

John Peterson
Executive Director
Office: +1.847.501.2074
Email: jpeterson@winpark.org
Winnetka Park District | winpark.org

From: John Edwardson <[REDACTED]>
Sent: Thursday, February 10, 2022 3:25 PM
To: John Peterson <JPeterson@winpark.org>
Subject: Re: Letter

John-can you combine some paragraphs? When I print this, the last two line of text and then the signature line roll over to a 2nd page. If you can take some whites pace out, I can print it on one page only. Thanks, John.

Sent from my iPad

On Feb 10, 2022, at 12:48 PM, John Peterson <jpeterson@winpark.org> wrote:

Thank you for your teamwork.

John Peterson

Executive Director

Office: +1.847.501.2074

Email: jpeterson@winpark.org

Winnetka Park District | winpark.org

October 7, 2021

Mr. Soren Hall
United States Army Corps of Engineers
Chicago District, Regulatory Branch
231 South LaSalle Street, Unit 1500
Chicago, Illinois 60604

James P. Casey, Chief
Lake Michigan Management Section
Illinois Department of Natural Resources
Office of Water Resources
160 N. LaSalle Street, Suite S-703
Chicago, Illinois 60601

RE: Letter of Support for Elder Lane Park and Beach + Centennial Park and Beach Project

Dear United States Army Corps of Engineers and Illinois Department of Natural Resources:

Please accept this letter as evidence of my full support for the Winnetka Park District's plan dated September 9, 2021 to combine Elder Lane Park and Beach and Centennial Park and Beach, which will improve available lakefront recreation programming for Winnetka residents and the community at large to enjoy for decades to come. The Park District's work to create the new park is a wonderful culmination of the vision and strategy adopted by the Winnetka Park District in its Winnetka Waterfront 2030 Plan. I understand the plan is the product of numerous community engagement and planning sessions dating back to 2011 for the Park District and a Village of Winnetka strategy since the 1990s. As a Winnetka resident and a neighbor to the north of Elder Lane Park, I often visit the two parks and beaches. I have great appreciation for the design plan to combine the parks and beaches; it is a transformative plan for the benefit of the entire community and the public at large.

As a resident along the shoreline, I am keenly aware of Lake Michigan's high water levels and the damage resulting therefrom. The recent water levels and severe storms have deteriorated the steel groins currently on the Elder and Centennial shorelines and have significantly eroded the shorelines and bluffs at Elder and Centennial. I support the Park District's breakwater plan for the new, combined park to protect the shorelines and bluffs and, at the same time, provide a remarkable recreation environment. The most important component of this new park is that the plan has many thoughtful design features to prevent further erosion of the beaches and bluffs while accomplishing the long-stated goal of creating a unified park with unparalleled amenities for the community.

Importantly, this new Park as designed accomplishes the following key objectives:

- Combines two beach-front parks currently separated by a private residence (rendering the beach front impassable) into one contiguous parcel, with nearly 1,000 feet of shoreline;
- Creates distinct recreation activities: a swimming area, a non-motorized watercraft area, 800 feet of continuous boardwalk, a large "T-shaped" sunbathing pier, and a new beachfront event space; and
- Generates significant new beach area and protects against further erosion of the beach, bluff and tableland by including thoughtfully designed, soil protecting planting pockets and breakwaters with enhancements at the northern and southern boundaries of the Park.

I fully support the plan for Elder and Centennial, as designed. The new park likely will attract thousands of visitors per year. The public's use of all parts of this park is of the utmost importance, and I support the extra steps taken by the Winnetka Park District to proactively provide such for Winnetka residents and all park patrons.

This letter of support does not grant any easements to the Winnetka Park District.

Thank you for your work with the Winnetka Park District.

Sincerely,

John Peterson

From: John Peterson
Sent: Thursday, June 1, 2023 12:41 PM
To: mary garrison
Cc: Steven Adams
Subject: Mary Garrison FOIA Response - Email No. 4
Attachments: John Edwardson signed letter of support 10 08 2021.pdf; Letter of Authorization - Elder Lane Park and Beach Breakwater Construction.pdf; Good news to share email and attachments 04 29 2021.pdf

John Peterson

Executive Director

Office: +1.847.501.2074

Email: jpeterson@winpark.org

Winnetka Park District | winpark.org



John Peterson

Subject: FW: John Edwardson signed letter of support
Attachments: John Edwardson signed letter of support 10 08 2021.pdf

From: John Peterson
Sent: Friday, October 8, 2021 1:53 PM
To: Steven Adams <sadams@robbins-schwartz.com>
Cc: Warren James <WJames@winpark.org>
Subject: John Edwardson signed letter of support

John Peterson
Executive Director
Office: +1.847.501.2074
Email: jpeterson@winpark.org
Winnetka Park District | winpark.org



October 8, 2021

Mr. Soren Hall
United States Army Corps of Engineers
Chicago District, Regulatory Branch
231 South LaSalle Street, Unit 1500
Chicago, Illinois 60604

James P. Casey, Chief
Lake Michigan Management Section
Illinois Department of Natural Resources
Office of Water Resources
160 N. LaSalle Street, Suite S-703
Chicago, IL 60601

RE: Letter of Support for Elder Lane Park and Beach + Centennial Park and Beach Project

Dear United States Army Corps of Engineers and Illinois Department of Natural Resources:

Please accept this letter as evidence of my support for the Winnetka Park District's plan dated September 9, 2021 to combine Elder Lane Park and Beach and Centennial Park and Beach, which will improve available lakefront recreation programming for Winnetka residents and the community at large to enjoy for decades to come.

The Park District's work to create the new park is a wonderful culmination of the vision and strategy adopted by the Winnetka Park District in its Winnetka Waterfront 2030 Plan. I understand the plan is the product of numerous community engagement and planning sessions dating back to 2011 for the Park District and a Village of Winnetka strategy since the 1990s. As a Winnetka resident and a neighbor to the north of Elder Lane Park, I often visit the two parks and beaches. I have significant appreciation for the design plan to combine the parks and beaches; it is a transformative plan for the benefit of the entire community and the public at large.

As a resident along the shoreline, I am keenly aware of Lake Michigan's high water levels and damage resulting therefrom. The recent water levels and severe storms have deteriorated the steel groins currently on the Elder and Centennial shorelines and have significantly eroded the shorelines and bluffs at Elder and Centennial. I support the Park District's breakwater plan for the new, combined park to protect the shorelines and bluffs and provide a safe recreation environment.

In my opinion, the most important component of this new park is that the plan has many thoughtful design features to prevent further erosion of the beaches and bluffs while accomplishing the long-stated goal of creating a unified park with unparalleled amenities for

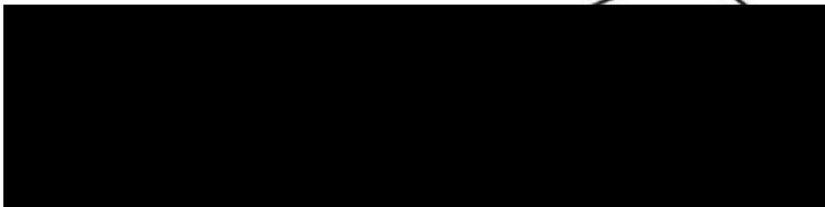
the community. Importantly, this new Park as designed accomplishes the following key objectives:

- Combines two beach-front parks that are currently separated by a private residence (rendering the beach front impassable) into one contiguous parcel, with nearly 1,000 feet of safe shoreline;
- Creates distinct recreation activities including a swimming area, a non-motorized watercraft area, 800 feet of continuous boardwalk, a large "T-shaped" sunbathing pier, and a new beachfront event space; and
- Generates significant new beach area and protects against further erosion of the beach, bluff and tableland by including thoughtfully designed, soil protecting planting pockets and breakwaters with safety enhancements at the northern and southern boundaries of the Park.

I support the way this plan for Elder and Centennial, as designed, addresses potential safety concerns. The new park likely will attract thousands of visitors per year. The public's safe use of all parts of this park is of the utmost importance, and I support the extra steps taken by the Winnetka Park District to proactively protect Winnetka residents and all park patrons.

This letter of support does not grant any easements to the Park District.

Thank you for your work with the Winnetka Park District.



JOHN A. EDWARDS
301 SHERIDAN ROAD
WINNETKA, IL
60093

John Peterson

Subject: FW: Letter of Authorization - Elder Lane Park and Beach Breakwater Construction
Attachments: image001.png

From: John Edwardson <[REDACTED]>
Sent: Tuesday, July 20, 2021 9:08 PM
To: John Peterson <JPeterson@winpark.org>; Jon Shabica <jon@shabica.com>
Subject: Re: Letter of Authorization - Elder Lane Park and Beach Breakwater Construction

When will you have a final plan I can see so I understand what I'm actually allowing you to do?

Sent from my iPad

On Jul 12, 2021, at 12:50 PM, John Peterson <jpeterston@winpark.org> wrote:

Good afternoon, John. Here's hoping Fran and you enjoyed a terrific weekend and that your week is off to a great start.

As we continue working to file an application with the U.S. Army Corps of Engineers and state regulators for the breakwater construction at Elder Lane Park and Beach and Centennial Park and Beach, one piece of the puzzle required to file a complete application is your authorization for sand and stone to be placed on your property. Please find attached a draft letter of support as provided by Jon Shabica.

Please call Jon or me if you have any questions regarding the letter or require additional information. Otherwise, please print and sign the letter and return the hard copy to Jon at the following address:

Shabica & Associates, Inc.
550 Frontage Road, Suite #3735
Northfield, IL 60093

Thank you, John, for your time and consideration.

Kind regards.

John Peterson
Executive Director
Winnetka Park District
+1.847.501.2074
jpeterston@winpark.org
www.winnpark.org
<image001.png>

<2021.7.12 Edwardson Authorizes Sand and Stone Placement.docx>

John Peterson

Subject: FW: Good news to share
Attachments: Winnetka Park District Elder_Centennial Breakwater Project Plan 4_27_21.pdf; Winnetka Park District Elder_Centennial Breakwater Louver Concept Renderings 4_27_21.pdf

From: John Peterson
Sent: Thursday, April 29, 2021 9:49 AM
To: John Edwardson [REDACTED]
Cc: Warren James <WJames@winpark.org>
Subject: RE: Good news to share

Thanks, John, for making time to connect Monday.

Here are two exhibits for use Monday morning.

Make it a great day and enjoy the forthcoming weekend.

Kind regards.

John Peterson
Executive Director
Winnetka Park District
+1.847.501.2074
jpeterson@winpark.org
www.winnpark.org



From: John Edwardson [REDACTED]
Sent: Thursday, April 29, 2021 7:56 AM
To: John Peterson <JPeterson@winpark.org>
Cc: Warren James <WJames@winpark.org>
Subject: Re: Good news to share

Works for me.

Sent from my iPad

On Apr 29, 2021, at 8:51 AM, John Peterson <jpeterson@winpark.org> wrote:

Thank you, John, for the reply.

How about a Zoom session 8:00 a.m. Eastern, Monday, May 3rd?

Thanks.

John Peterson

Executive Director
Winnetka Park District
+1.847.501.2074
jpeterson@winpark.org

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: John Edwardson [REDACTED] >
Date: 4/29/21 7:46 AM (GMT-06:00)
To: John Peterson <JPeterson@winpark.org>
Cc: Warren James <WJames@winpark.org>
Subject: Re: Good news to share

Does either Monday or Tuesday next week work? We also come back north on May 12.

Sent from my iPad

On Apr 28, 2021, at 11:26 AM, John Peterson <jpeterson@winpark.org> wrote:

Good morning, John. Here's hoping this email finds Fran and you enjoying the warm environs of Florida or the emerging spring in Winnetka.

Warren James' has been a warrior in working to design a first-of-its-kind planter pocket and breakwater for use at Elder Lane Beach and Centennial Beach. The collaboratively-developed plans include hard work and expertise from Orchard 2020, Orchard 2020's owner's representative, Mariani Landscape, Jon and Charlie Shabica, The Lakota Group team members, and others.

Yesterday, the plans were presented for the first time to decision-makers with the Illinois Department of Natural Resources and the Army Corps of Engineers. The IDNR and Army Corps provided a positive initial opinion for the design.

To that end, we want to share with you the current design and related information.

Do you time for a Zoom session this week or next week?

Thanks, John, for your time and consideration. Here's hoping all is well with the Edwardson family, notably your mother.

Kind regards.

John Peterson

Executive Director

Winnetka Park District

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jpeterson@winpark.org

www.winpark.org

<image003.png>

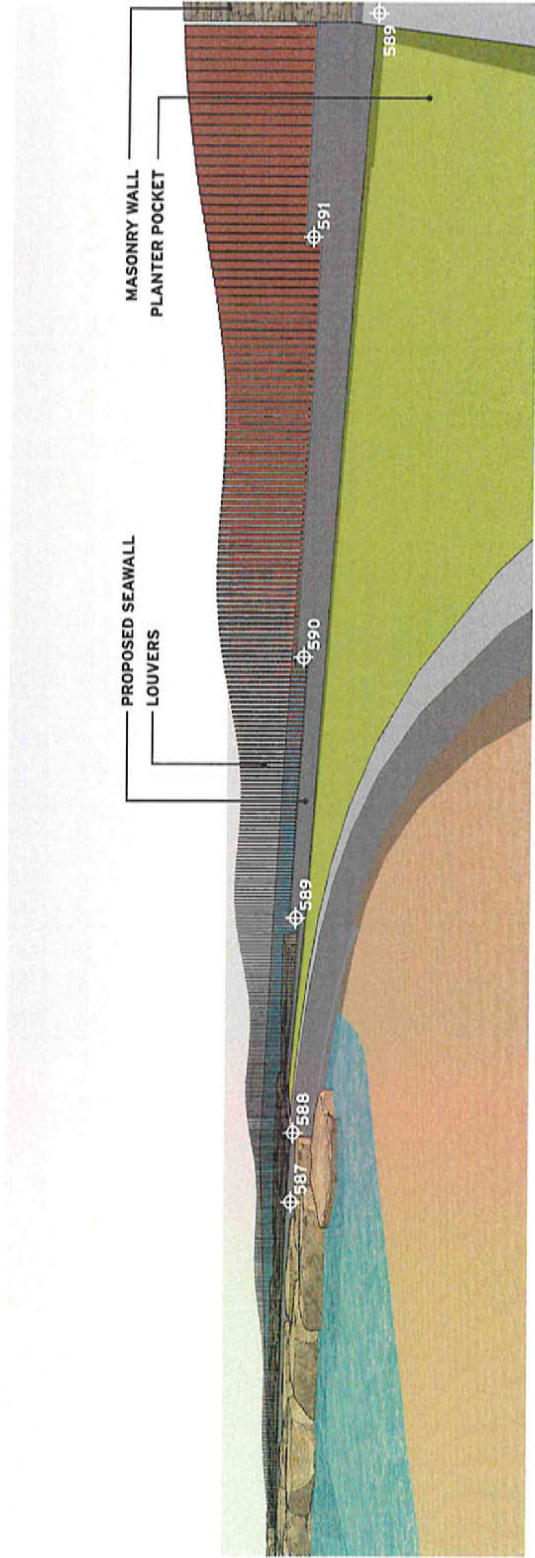


FIGURE 1: VIEW LOOKING SOUTHEAST FROM CENTENNIAL BEACH ACCESS POINT

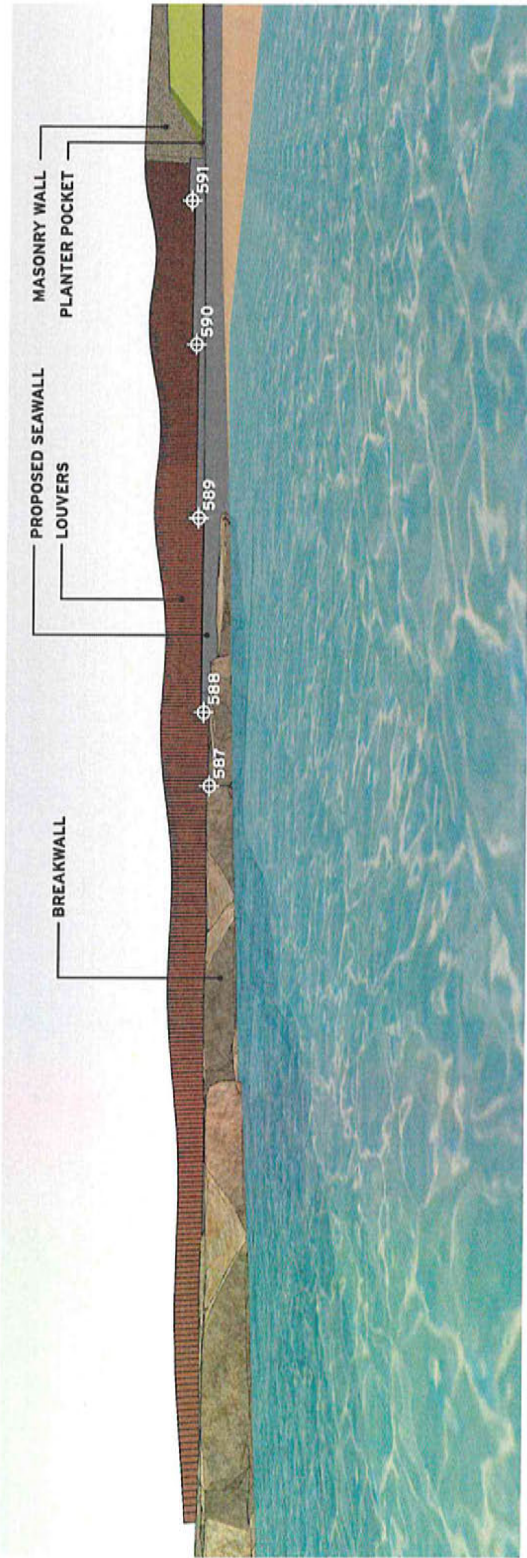


FIGURE 2: VIEW LOOKING SOUTH FROM CENTENNIAL BEACH

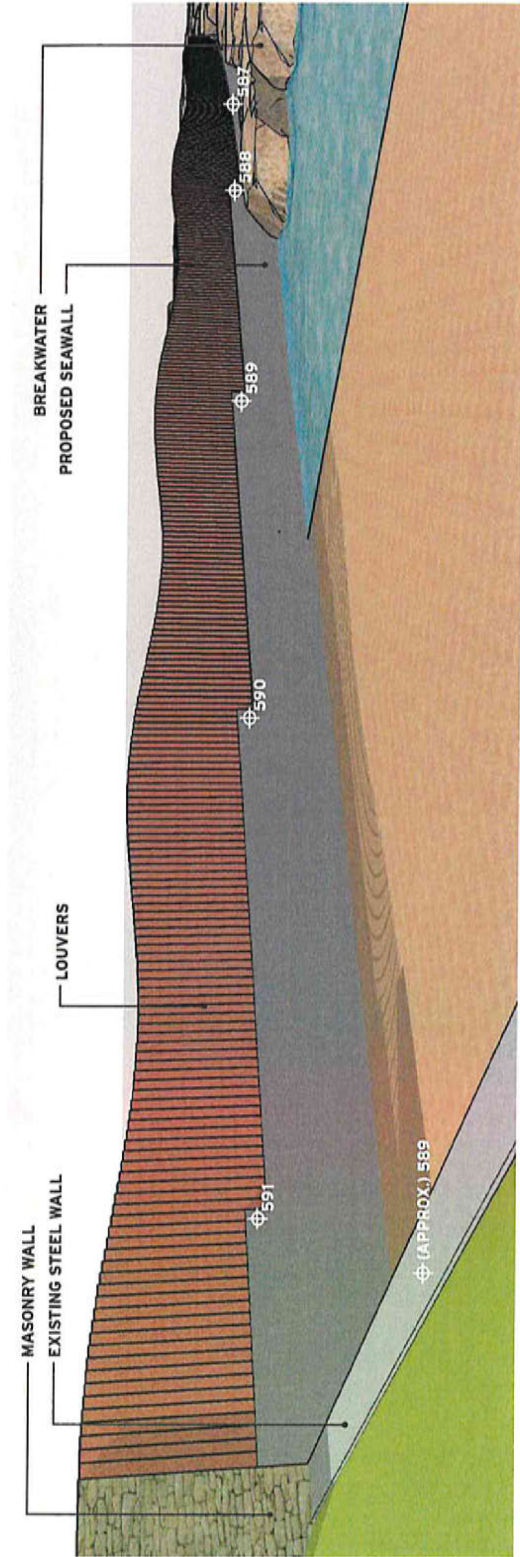


FIGURE 1: VIEW LOOKING NORTHEAST FROM ORCHARD 2020 BLUFF TOE

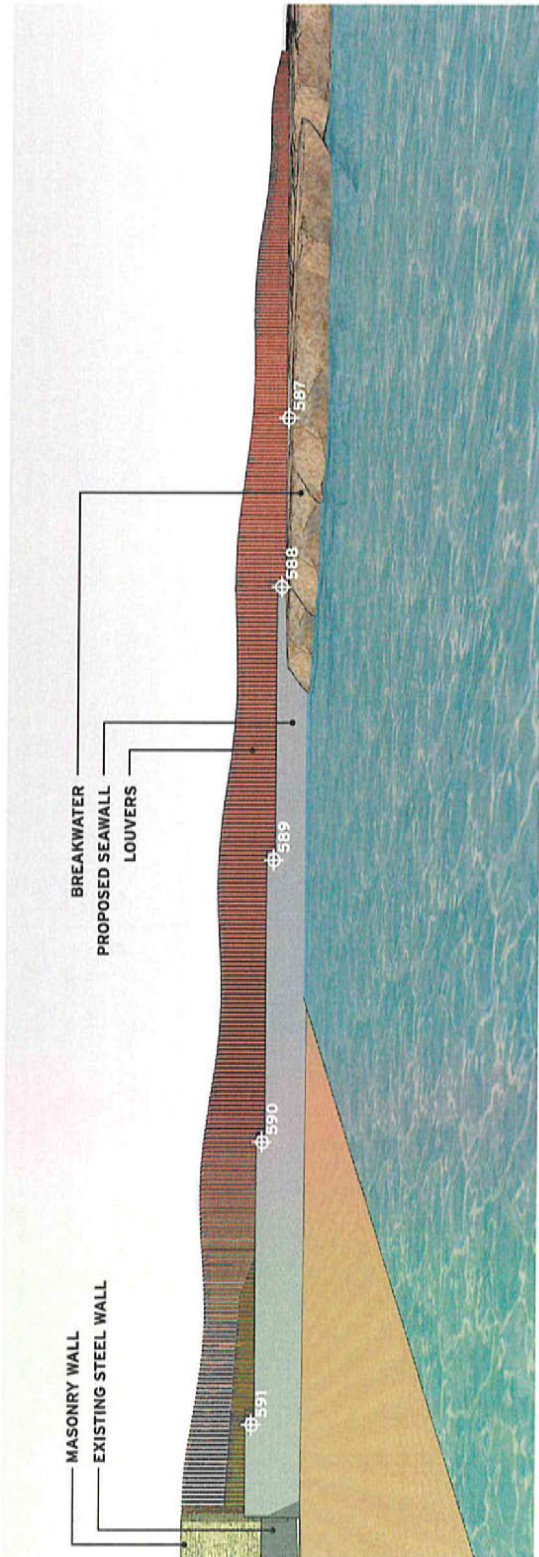


FIGURE 2: VIEW LOOKING NORTHWEST FROM ORCHARD 2020 BEACH

John Peterson

From: John Peterson
Sent: Thursday, June 1, 2023 12:54 PM
To: mary garrison
Cc: Steven Adams
Subject: Mary Garrison FOIA Response - Email No. 5
Attachments: Draft Things To Do List Internal Email July 3 2020.pdf; Elder Centennial Feasibility Study as of January 18, 2021.pdf; Good afternoon, John Edwardson! Email July 1, 2020.pdf

John Peterson

Executive Director

Office: +1.847.501.2074

Email: jpeterson@winpark.org

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John Peterson

Subject: FW: Draft Things To Do List

From: John Peterson

Sent: Friday, July 3, 2020 12:55 PM

To: Steven Adams <sadams@robbins-schwartz.com>

Cc: Warren James <WJames@winpark.org>

Subject: Draft Things To Do List = Attorney Client Privileged Communication

Good afternoon, Steve and Warren.

Happy Friday afternoon. By no means is this an exhaustive list, and I can confirm 100% I'm not using the exact terms, but I'm simply trying to get a draft "things-to-do" list going to get rocks in the water at Elder / Centennial. Y'all are gonna tear apart this list - - I hope y'all run out red ink! ☺

As I developed the initial list, I believe it may be useful to use to group the "things-to-do": Village items + Edwardson items + Shabica items + bid / construction items, etc. Or, do you prefer to list the items in somewhat chronologically? What do y'all think is best?

Thanks.

- Terra Technology Surveying = secure surveys required for the breakwater discussion.
- Obtain proposal from Jon Shabica and finalize service agreement. Agreement is intended to include Shabica's to coordinate plans between the Winnetka Park District and John Edwardson so as to best represent each party's interest(s).
- Finalize the Village of Winnetka's decision for a new outfall pipe, properly positioned within the southern edge of the breakwater along the northern end of Elder Lane Beach.
- Ensure proper coordination between the Village of Winnetka, John Edwardson, and the WPD for a number of key issues (planning / zoning, etc.).
- Finalize exact details of breakwater options:
 - Option A: Breakwater only along the north end of Elder Lane Beach; or
 - Option B: Breakwaters along north end of Elder Lane Beach, the south end of Centennial Beach, and the island between the two beaches.
- Work with Michels Corporation to develop pricing projections for each breakwater option.
- Develop bid specifications.
- Secure permits = Army Core of Engineers review and approval, Illinois Department of Natural Resources + Illinois Environmental Protection Agency, etc.
- Secure agreement to each property contract associated with Elder / Centennial project.
- Develop a public relations plan.

- Address with John Edwardson and, if required, the WPD board the naming rights issue, using the WPD naming rights policy accordingly.
- Issue bids for rock / construction.
- Rocks in the water date.

John Peterson

Executive Director

Winnetka Park District

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jpeterson@winpark.org

www.winpark.org



John Peterson

Subject: FW: Elder Centennial Feasibility Study as of January 18, 2021
Attachments: 20210118 Elder Centennial Feasibility Study.pdf

From: John Peterson
Sent: Monday, January 18, 2021 6:32 PM
To: John Edwardson [REDACTED]
Cc: Warren James <WJames@winpark.org>
Subject: Elder Centennial Feasibility Study as of January 18, 2021

Good evening, John.

Warren James has been working and working and working in collaboration with Costa Kutulas (Winnetka Park District) and various third parties to secure a CAD drawing for Elder / Centennial. Hot off the press is a CAD drawing which provides a better representation of the Elder steel groins + planter pocket + breakwater, along with other items, notably the shoreline boardwalk.

In the next few days, we expect to receive another version of the CAD drawing reflecting a few tweaks; we'll share that document with you upon receipt.

Please let Warren and me know if you have a few minutes early Friday, or, next week to walk through the design work details.

Thank you, John, for your time and consideration. Best to Fran and you.

Kind regards.

John Peterson
Executive Director
Winnetka Park District
+1.847.501.2074
jpeterson@winpark.org
www.winpark.org



John Peterson

Subject: FW: Good afternoon, John Edwardson!

From: John Peterson

Sent: Wednesday, July 1, 2020 2:35 PM

To: John Edwardson [REDACTED]

Cc: Warren James <WJames@winpark.org>

Subject: Good afternoon, John Edwardson!

Good afternoon, John.

Another Chamber of Commerce day in Winnetka. It's been an incredible run of great sunshine and nice temperatures. We truly have been blessed, and there's more of the summer ahead of us.

Warren James and I are extremely respectful of the recent communications between lawyers. The communications and coordination should get things across the finish line in due course. That said, Warren and I want to meet with you and, if available, Jon Shabica, to talk about various aspects of the Winnetka Waterfront 2030 Lakefront Master Plan as it relates to Elder Lane Park and Beach, and the related costs to execute the Lakefront Master Plan at Elder. Of particular interest is an opportunity to talk about opportunities to lower the cost to mobilize rock to the shoreline via a marine-based delivery method (vs. a land-based delivery method).

Are you available for:

- An in-person meeting tomorrow between 7:00 – 9:30 a.m. (bacon in Glenview? It's open . . . FYI);
- An in-person meeting tomorrow between 12:30 – 3:00 p.m.; or
- A Zoom session any day from Friday, July 3rd to Saturday, July 11th ?

Thank you, John, for your consideration of a conversation with Warren and me. Looking forward to your thoughts. Until then, enjoy the wonderful afternoon and evening weather.

Kind regards, JP

John Peterson

Executive Director

Winnetka Park District

+1.847.501.2074

jpeterson@winpark.org

www.winnpark.org



John Peterson

From: John Peterson
Sent: Thursday, June 1, 2023 1:05 PM
To: 'mary garrison'
Cc: Steven Adams
Subject: Mary Garrison FOIA Response - Email No. 6
Attachments: Preliminary Concept Plan March 4 2021.pdf

John Peterson

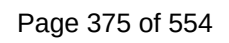
Executive Director

Office: +1.847.501.2074

Email: jpeterson@winpark.org

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From: [REDACTED]
To: [Robert Bahan](#); [Ann Klaassen](#); [David Schoon](#)
Subject: Attachment for the ZBA
Date: Saturday, October 19, 2024 8:11:18 PM
Attachments: [Speech to ZBA 101424.pages](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Friends -

I was out of town last week when the ZBA met on October 14. My presentation was read by Kim Marsh. Would you please send my attached letter to all the ZBA members. And please let them know how much I appreciated their attention and their professionalism. ZBA runs a fine meeting.

Best,
Irene Smith
[REDACTED]

Though I may not be here with you, I urge you to answer the highest calling of your heart and stand up for what you truly believe. In my life I have done all I can to demonstrate that the way of peace, the way of love and nonviolence is the more excellent way. Now it is your turn to let freedom ring.

When historians pick up their pens to write the story of the 21st century, let them say that it was your generation who laid down the heavy burdens of hate at last and that peace finally triumphed over violence, aggression, and war. So I say to you, walk with the wind, brothers and sisters, and let the spirit of peace and the power of everlasting love be your guide.

John Lewis, from the essay he wrote shortly before his death on July 17, 2020.

October 14, 2024

I am speaking tonight on behalf of Irene Smith, who couldn't be here this evening.

I propose that you, members of the Zoning Board of Appeals, table the Winnetka Park District's application for a Special Use Permit for Centennial Beach and Park. You simply do not have all the information you need.

I hope you will all visit Elder and Centennial before you make a decision.

The Park District wants to build an outlandishly expensive and over-engineered design at Centennial at the behest of the property owner at 205 Sheridan. The WPD wants to do a similar plan at Elder.

In the meantime, the property at 261 Sheridan between the 2 parks, cuts the Park District's plans in half. That home also belongs to Orchard 2020 Revocable Trust, Mr. Ishbia's fund.

And what about the swap of 261 Sheridan for the southernmost 71' of Centennial Park? That arrangement is now "dormant," which has no legal meaning, and is subject to ongoing litigation. How can you consider a project that completes the Park District's plan to combine the 2 beaches until you know whether the swap is going to happen?

There is no rush to do the Centennial project. Tower, Lloyd, and Maple beaches are functioning and beautiful. Centennial Park and dog beach are just fine the way they are.

Elder Beach should be repaired and re-opened. There are stairs to the beach as well as a beach house with bathrooms, which Centennial does not have. Elder has been closed for 4 years. It should be opened before the ZBA gets involved in an enormous project which is woefully incomplete.

Thank you very much.

From: [REDACTED]
To: [Planning](#)
Subject: ZBA Centennial
Date: Tuesday, October 22, 2024 9:57:03 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning! I am writing in support of the centennial project. Unfortunately, I will be out of town at the time zoning board meeting, but would very much liked to show my support of the project.

Thank you very much!
Susan Davis
604 Willow Road

Cell: [REDACTED]

Sent from my iPhone

From: [REDACTED]
To: [Planning](#)
Subject: Support of the WPD's Centennial Beach Plans
Date: Tuesday, October 22, 2024 1:54:32 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I am writing to express my full support for the Winnetka Park District's plans for enhancing Centennial Beach. As a longtime resident and a long time user of our beaches, it is really important to see this plan through and stop the vocal minority from trying to stop progress and improvements to our village. The Park District has worked tirelessly and developed a very thoughtful plan. The village should allow this plan to proceed.

Sincerely,

Robert Horne
340 Birch Street
Winnetka, IL 60093
[REDACTED]

From: [REDACTED]
To: [Planning](#)
Cc: snazzal@winpark.org; [David Schoon](#); [Ann Klaassen](#)
Subject: November 11 ZBA Meeting for WPD Elder/Centennial Beach Plans
Date: Wednesday, October 30, 2024 8:41:12 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Members of the Zoning Board of Appeals:

Matthew Bradley, Chair, Zoning Board of Appeals
Todd Vender
Mark Haller
Lynn Hanley
Kathryn Leister
Mike Nielsen
Kate Casale MacNally

Before I begin, I want to thank all of you so much for your service to the Village. My late husband I both assumed numerous *volunteer* roles in the community over the past 30 + years, and I think many residents do not appreciate the time and effort which volunteer roles such as yours require. Thank you.

That said, my first ZBA meeting was the last one held regarding approving a variance for the latest iteration of the Winnetka Park District's plan for Elder and Centennial Beaches. I have been a bystander with regard to this issue and have friends who support and others who object to the plan. Since I cannot attend your next ZBA meeting on Nov. 11, I am writing to express my support for the plan presented. Here are my thoughts from 40,000 feet, observing for the first time:

- 1) The initial presentation was most impressive--and I know the Park Board has gone back to the drawing board a number of times, trying to accommodate various interests--such as adding back in a dog park.
- 2) There are limits they must adhere to in their plans, such as fencing in an off leash dog park from the County. Yet many expressed anger over having a fence go to water's edge. If you want a dog beach, you need a fence.
- 3) I believe they are doing the "right" and legally mandated thing by providing accessibility to those with physical limitations--and it works for young parents with strollers, too.
- 4) As someone who learned to swim in a lake and life guarded at a lake as a teenager, I do not believe having rocks as a breakwater presents any more of a safety hazard than having a pier. Bluntly, if (usually young people) take foolish risks, swim when and where they are not supposed to and as a result have accidents, there is no beach design that can guard against that, other than blocking off access to the lake altogether--it is an "attractive nuisance" in insurance parlance. Sad as it was, it is also impossible for lifeguards or the Park District to be responsible for people who

have boating accidents outside of designated swimming areas.

5) In my opinion, comments about why the ZBA should reject the proposal based on conflicts with the R2 zoning code are irrelevant. Of course a public beach cannot possibly meet the zoning codes for residential buildings--that is why they are requesting a VARIANCE.

6) I have no expertise in coastal engineering and breakwater construction--and neither did most of the speakers. I think paid experts' opinions should prevail when it comes to evaluating things like beach erosion, high and low water implications, etc.

7) The patience and calmness exhibited by your board in hearing so many people speak was exemplary. However, I did take exception to having to hear the opinions of Laurie (?) who is not a Winnetka resident, not a certified expert on any part of the design or construction and probably does not own a non-resident beach pass although she claims to be on our beaches all the time. I think it would be appropriate to cut off speakers like that who really have no skin in the game.

8) I think it is unfair to tax paying Village residents that we have not had access to Elder Beach for so many years. The delay is due to objections of a handful of neighbors who seem to want nothing done--I assume they enjoy not having crowds there and competition for parking, but the Park was there when they moved in, so they need to share the public space we all pay for.

9) I also know that much of the antagonism for this project is generated by the massive home being built at the south end of the beaches. Honestly, I think it is out of character for the Village and unnecessarily obstructive, but the horse is out of the barn on this issue. It was lack of Village restrictions which allowed it to be permitted, not the Park District. It seems the Park District and Winnetka residents are bearing the consequences of the objections and delays, not the property owner himself.

Thank you for listening to my voice, and again for all you do for the community.

Leslie Farmer
388 Berkeley Ave.

From: [REDACTED]
To: [Robert Bahan](#); [David Schoon](#); [Ann Klaassen](#); [REDACTED]
Subject: Fwd: Scale comparisons of the Centennial Breakwater for your review
Date: Thursday, October 31, 2024 8:40:03 AM
Attachments: [20241029 Winnetka Scale Comparisons.pdf](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Centennial Breakwater Design

Dear all,

Please review the attached **scale comparisons** of the proposed Centennial Rubble Breakwater that the Zoning Board of Appeals is currently reviewing, and, if possible can this attachment be forwarded to all ZBA members?.

As you know, there are community concerns regarding the need for the Centennial Breakwater, and the lack of hydrological studies that would justify the current design.

The beach is resilient and stable and that was demonstrated during the high waters of 2020.

Few residents, I believe, have grasped the scale of this proposed breakwater, which is larger , longer and wider than any other pier or breakwater along Winnetka's lakefront. In addition, the scale and width of the 10' wide ADA walkway also requires discussions. Why is everything so aggressively oversized for a quiet neighborhood park?

The attached scale comparisons show the proposed Centennial Breakwater overlaid onto Elm Street, Chestnut Street, The Tower Road Pier, and Maple Pier to help the community understand the scale of this proposal.

You can see that the width of the breakwater is wider than the right of way of Elm Street.

The length of the breakwater is far longer and wider than Tower Road Pier or Maple Pier.

The walkway on top of the breakwater is 15' wide with 6' wide shoulders on either side making the top of the breakwater 27' wide, almost the width of three lanes of moving traffic.

Centennial Beach has always been a quiet, open, sandy beach with great expansive views. The proposed design is out of scale, overly engineered, and is insensitive to the current park and lakefront ecology.

Please review when time allows.

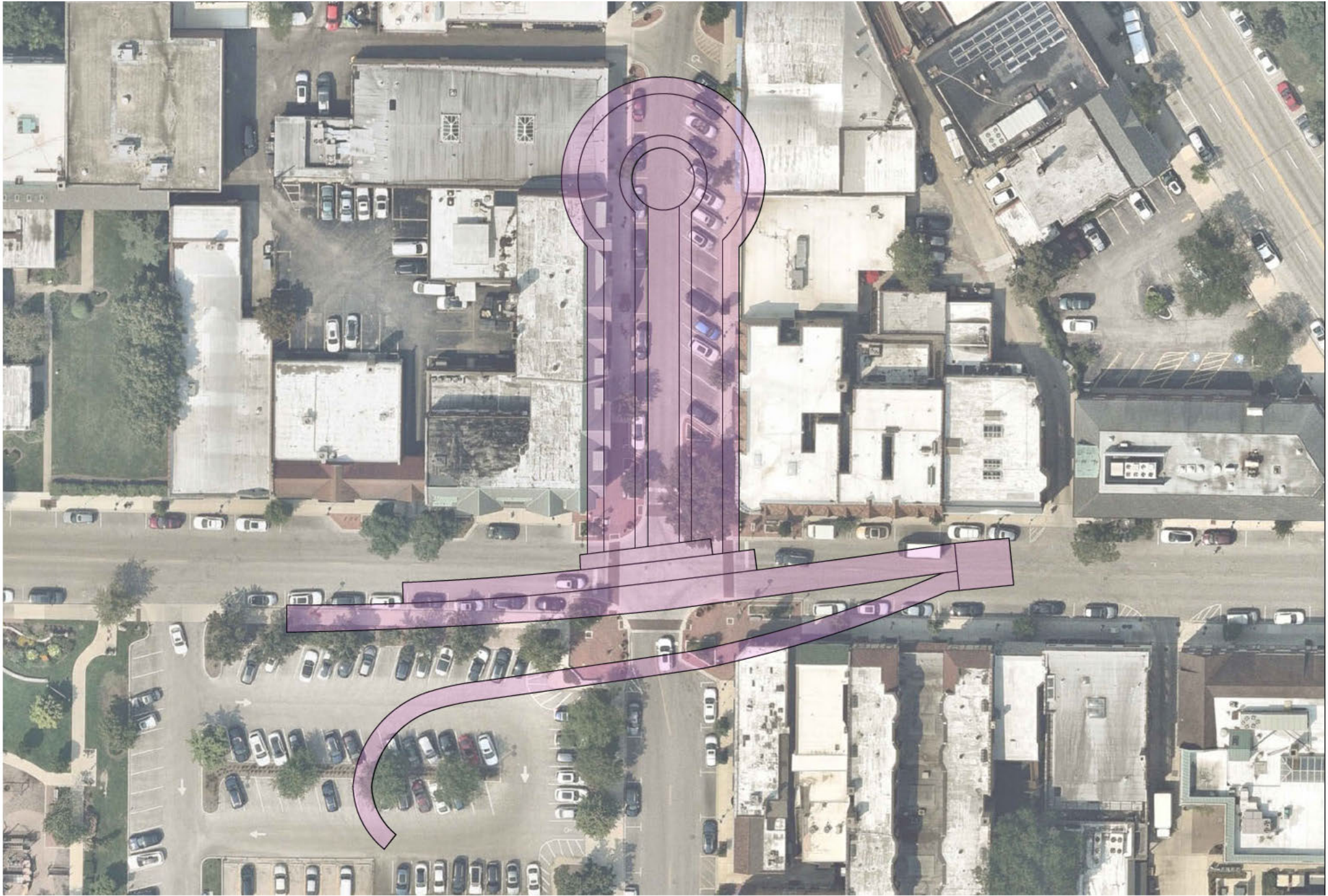
Thank you for your time and consideration.

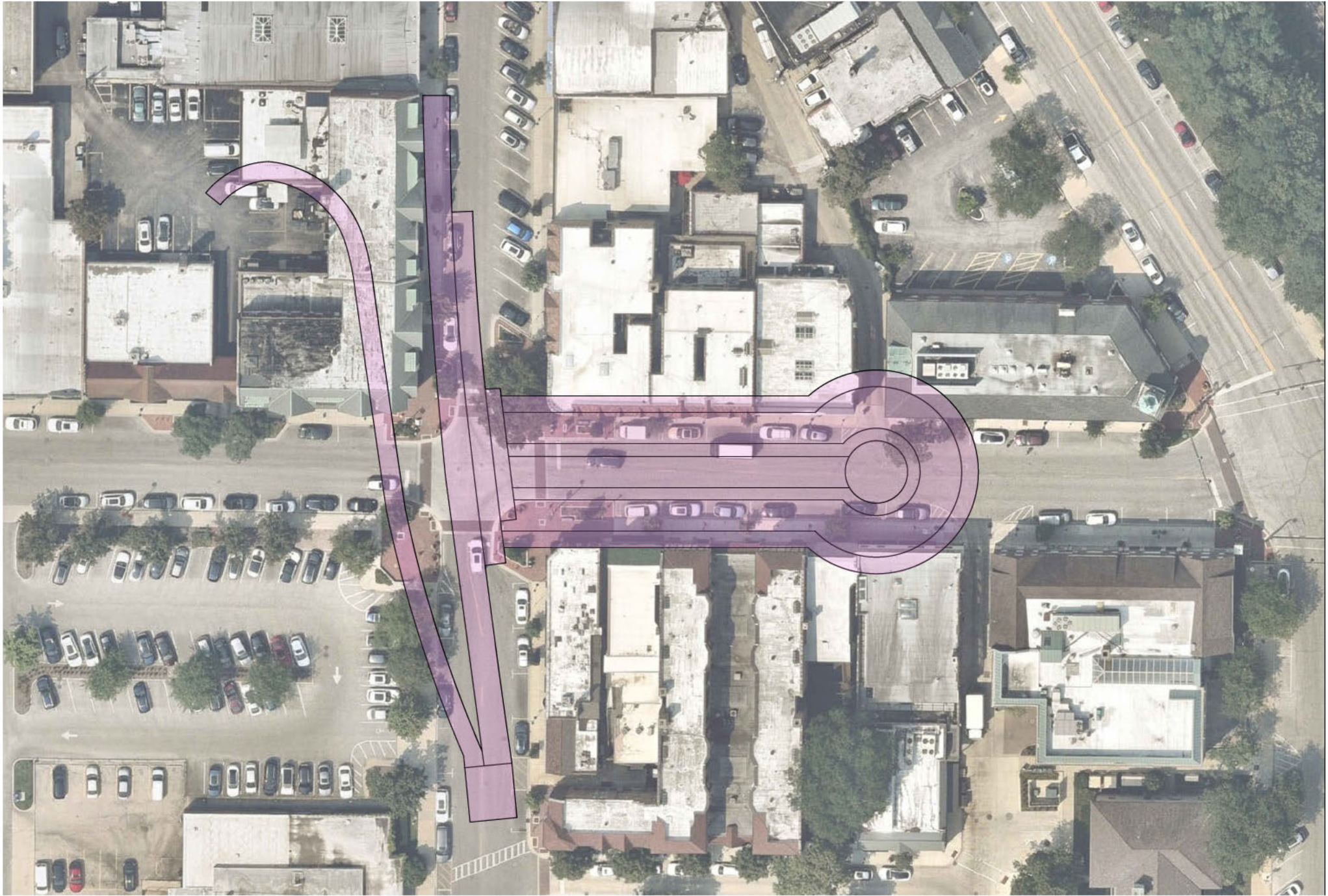
Philip Enquist, FAIA
Architect/ Urban Planner
Winnetka Resident

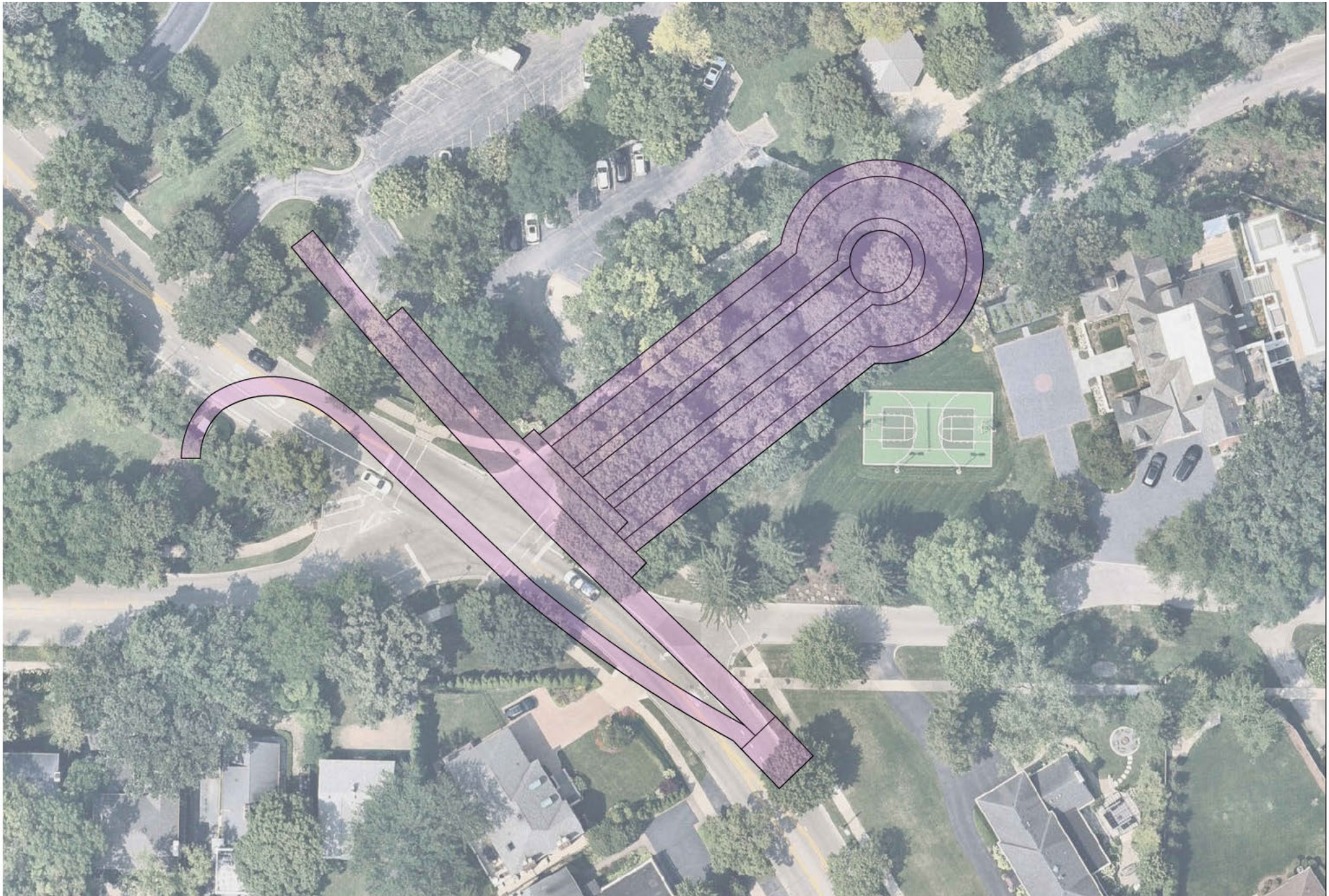
Scale Comparisons

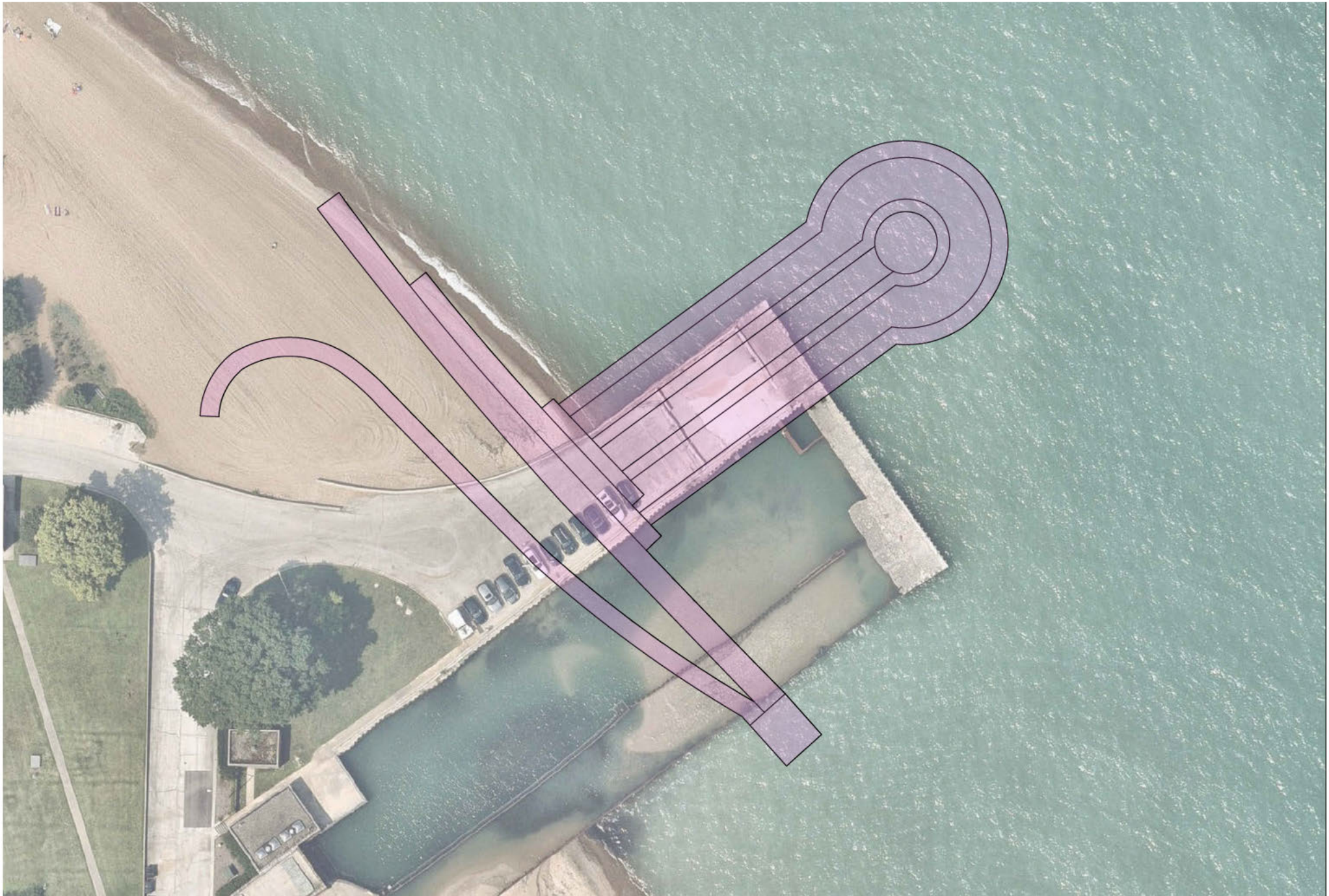
**Centennial Beach
Proposed Rubble Mound Breakwater**

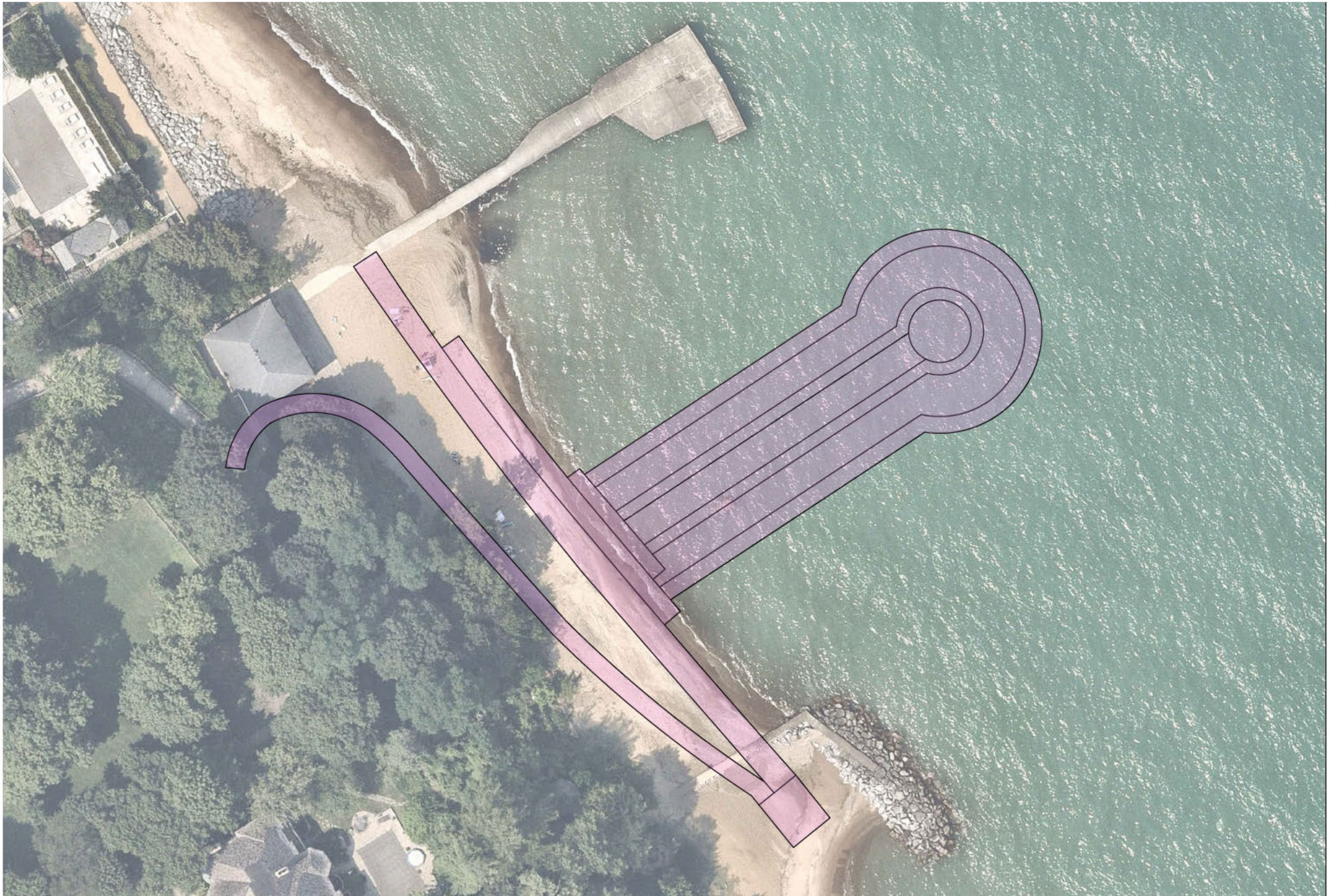
**Winnetka Alliance for Shoreline Safety, Access and Protection
WASSAP**











From: [REDACTED]
To: [Planning](#)
Cc: snazzal@winpark.org; [David Schoon](#); [Ann Klaassen](#)
Subject: ZBA Centennial
Date: Thursday, October 31, 2024 11:21:18 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Zoning Board of Appeals Members,

We currently live at 555 Provident Avenue and have been Winnetka residents for 27 years. My husband Sid and I have been volunteers in the community for the park district, all local schools our 3 children attended, church, Hadley, the Chamber and more. At 65 years of age, we still care deeply for our village and are proud to have raised children here. We plan to continue to live in Winnetka.

We have been waiting and waiting for the lake front project proposed by the WPD to be approved and completed at Elder and Centennial. Please approve any necessary permits to allow the construction of the beach front plans to move forward now. We love the beach, dog beach park and believe the beach plans will be a community building opportunity to gather residents and families today and for future generations.

We choose to live in Winnetka decades ago because of beaches and schools. We can not let our beach front be ignored. The lake front should be the Village and Park Board's highest priority for improvements. NOW is the time to approve the WPD Centennial and Elder Lake Front plans. Please don't let silly, small codes and permit issues delay this approval process any longer, it's time to move forward to enhance our true treasure of Winnetka, our beach front.

Thank you.

Laura & Sid Glenn
[REDACTED]

From: [REDACTED]
To: [Planning](#)
Subject: Park District vote
Date: Saturday, November 2, 2024 11:34:05 AM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Nancy Johnson
455 Sunset Rd.
Winnetka, IL 60093

It's time to approve the lakefront permits to move forward and open Elder Beach.

Thank you,
Nancy Johnson

Theodore Wynnnychenko
1086 Oak Street
Winnetka, IL 60093-2165

November 2, 2024

Ann Klaassen
Staff Liaison, Zoning Board of Appeals
Assistant Director
Community Development
Village of Winnetka
510 Green Bay Road
Winnetka, IL 60093

VIA EMAIL: aklaassen@winnetka.org

Ms. Klaassen:

I am taking this opportunity to bring the Zoning Board of Appeals' ("ZBA") attention to assertions made by the Winnetka Park District ("WPD") during the hearing before the ZBA on October 14, 2024 regarding a Special Use Permit for Centennial Park and Beach (Case No. 24-08-SU).

I request that this communication be forwarded to all members of the ZBA.

During its presentation, the WPD stated, at time index 1:34:47 of the hearing's recording available at <https://www.youtube.com/watch?v=WqZoj7QoXIM>:

You'll see the fence being shown on the south perimeter side. Once again, that contours all the way around the site, doubling as dog fencing for the dog park, so that we can comply with Cook County regulations. We were able to reach out to Cook County, and they responded back to us in writing that our plan design would meet those regulations as well. So that was something, just to, kind of note.

It appears that this statement was based on a series of communications with the Cook County Department of Animal and Rabies Control ("CCARC"). Unfortunately, the statements made by the WPD at the hearing appear to be a misrepresentation of the guidance or authority provided to the WPD by the CCARC.

The WPD first contacted the CCARC on July 23, 2024 (email attached). At that time, the WPD was "looking for direction from Cook County on how Cook County views dog beaches in relation to [the Cook County Animal and Rabies Control Ordinance] last updated in 2010."

After receiving no reply, the WPD then contacted the CCARC again on September 11, 2024 (email attached). At that time, the WPD stated

that it was contacting CCARC "regarding a waiver request for a portion of a Section in Regulation VIII - Dog Parks and Areas," and explained:

[T]he [Village of Winnetka] has requested an opinion from Cook County regarding the full enclosure requirement as a stipulation of our application. The proposed area will meet all other requirements outlined in the Ordinance and Regulation VIII, and we are seeking this waiver to allow the lake to serve as a natural boundary.

In reply, on September 13, 2024, CCARC replied (email attached) and stated "[CCARC] would not view the lake barrier as a violation of our current dog park ordinance."

This statement from CCARC, which vaguely references a "lake barrier" not being a violation of "the current dog park ordinance" appeared to be substantially incongruous with the statements by the WPD at the ZBA hearing on October 14, 2024, where the WPD stated that CCARC responded, "in writing," that the WPD "plan design would meet those regulations."

Therefore, I contacted CCARC on October 20, 2024 (email attached), requesting:

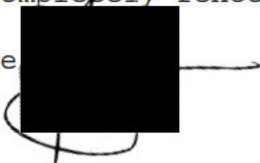
[A] confirmation that your correspondence to the WPD dated September 13, 2024, affirmatively allows the WPD to create an off-leash dog area that is not contiguously fenced, as required by Regulation VIII, and the exact requirements that the WPD would be required to meet to be in compliance with the Regulation or any waiver of it.

The CCARC replied to my request for clarification on November 1, 2024 (email attached) and informed me that my "statement requesting confirmation misstates the September 13 correspondence," and that "[n]o affirmative permissions were Intended (*sic.*)" by the CCARC in the September 13 correspondence.

As such, the statements by the WPD regarding the "approval" of the incomplete and non-contiguously fenced "dog beach" appear to be misleading, and appear to misrepresent the direction it had been provided by the CCARC in its testimony at the ZBA Hearing on October 24, 2024.

In addition, this reply from CCARC suggests that the WPD has not received the approval requested by the Village of Winnetka regarding an incompletely fenced "dog beach."

Sincere

A handwritten signature in black ink, appearing to read "Theodore Wynnnychenko", is written over a solid black rectangular redaction box.

Theodore Wynnnychenko

Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

From Shannon Nazzal <snazzal@winpark.org>

Date Tue 7/23/2024 3:52 PM

To Mamadou.diakhate@cookcountyil.gov <Mamadou.diakhate@cookcountyil.gov>

Cc Simon, Adam <ASimon@ancelglink.com>; Costa Kutulas <CKutulas@winpark.org>

Dr. Diakhate,

I am reaching out on behalf of the Winnetka Park District within Cook County. The Winnetka Park District is subject to the Cook County Animal and Rabies Control Ordinance which refers to Regulation VIII. Dog Parks and Areas which was last updated in 2010. This regulation indicates in B. Requirements, Number 2. that: *A Dog Park must be completely enclosed by a contiguous fence...*

In Winnetka, and many other lakefront communities, a location on the lakefront for an off-leash dog area is seen typically as only enclosed on three sides, with no fence in the lake itself. We are in the process of a beach improvement project at Centennial Park & Beach that would enclose the three sides on land with the lake being open in hopes that can be an off-leash dog area. The area in our plan includes all other stipulations of the Ordinance and Regulation VIII.

I am looking for direction from Cook County on how Cook County views dog beaches in relation to this regulation last updated in 2010. Your assistance is greatly appreciated, and we'd be happy to share more information on the project plan that is currently in permitting with the Village of Winnetka.

I look forward to hearing back from you.

Shannon Q. Nazzal, CPRE (she / her)

Executive Director

Office: +1.847.501.2074

Email: snazzal@winpark.org

Winnetka Park District | winpark.org



Waiver Request - Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

From Shannon Nazzal <snazzal@winpark.org>

Date Wed 9/11/2024 1:53 PM

To Mamadou.diakhate@cookcountyil.gov <Mamadou.diakhate@cookcountyil.gov>; Mark.Rosenthal@cookcountyil.gov
<Mark.Rosenthal@cookcountyil.gov>

Cc Simon, Adam <ASimon@ancelglink.com>; Costa Kutulas <CKutulas@winpark.org>

Dr. Diakhate,

I hope this message finds you well. I am reaching out on behalf of the Winnetka Park District regarding a waiver request for a portion of a Section in Regulation VIII – Dog Parks and Areas, from the Administrative Regulations of the Cook County Animal and Rabies Control Ordinance.

The Winnetka Park District is subject to the Cook County Animal and Rabies Control Ordinance, which, under Regulation VIII, last updated in 2010, stipulates in Section B, Number 2, that dog parks must be completely enclosed by a contiguous fence. As we are located along the lakefront, we, like many other lakefront communities, envision an off-leash dog area where the lake serves as the natural barrier, enclosing the park on three sides with the lake left open.

We are currently in the permitting process with the Village of Winnetka through their Special Use Permit process for our beach improvement project at Centennial Park & Beach (225 Sheridan Road, Winnetka). As part of this process, the Village has requested an opinion from Cook County regarding the full enclosure requirement as a stipulation of our application. The proposed area will meet all other requirements outlined in the Ordinance and Regulation VIII, and we are seeking this waiver to allow the lake to serve as a natural boundary.

We appreciate your consideration of this request and are happy to provide any additional information or answer questions to facilitate the process.

Thank you for your time and attention to this matter.

Sincerely,

Shannon Q. Nazzal, CPRE (she / her)

Executive Director

Office: +1.847.501.2074

Email: snazzal@winpark.org

Winnetka Park District | winpark.org



From: Shannon Nazzal <snazzal@winpark.org>

Sent: Tuesday, July 23, 2024 3:52 PM

To: Mamadou.diakhate@cookcountyil.gov <Mamadou.diakhate@cookcountyil.gov>

Cc: Simon, Adam <ASimon@ancelglink.com>; Costa Kutulas <CKutulas@winpark.org>

Subject: Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

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RE: Waiver Request - Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

From Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>

Date Fri 9/13/2024 3:07 PM

To Shannon Nazzal <snazzal@winpark.org>

Cc Mamadou Diakhate (Animal Control) <Mamadou.Diakhate@cookcountyil.gov>; Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>; Samantha May (Animal Control) <samantha.may@cookcountyil.gov>



Caution: External (mark.rosenthal@cookcountyil.gov)

First-Time Sender [Details](#)



[Report This Email](#) [FAQ](#) [Protection by INKY](#)

Dear Ms. Nazzal,

Thank you for your recent email regarding the Winnetka Park District dog friendly area.

We appreciate your notification and request.

Based on the information that you have provided to our department; we would not view the lake barrier as a violation of our current dog park ordinance.

Dr. Mamadou Diakhate

From: Shannon Nazzal <snazzal@winpark.org>

Sent: Wednesday, September 11, 2024 1:54 PM

To: Mamadou Diakhate (Animal Control) <Mamadou.Diakhate@cookcountyil.gov>; Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>

Cc: Simon, Adam <ASimon@ancelglink.com>; Costa Kutulas <CKutulas@winpark.org>

Subject: Waiver Request - Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

External Message Disclaimer

This message originated from an external source. Please use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Dr. Diakhate,

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We appreciate your consideration of this request and are happy to provide any additional information or answer questions to facilitate the process.

Thank you for your time and attention to this matter.

Sincerely,

Shannon Q. Nazzal, CPRE (she / her)
Executive Director

Theodore Wynnnychenko
1086 Oak Street
Winnetka, IL 60093-2165

October 20, 2024

Mamadou Diakhate
Administrator
Cook County Department of Animal and Rabies Control
10220 South 76th Avenue
Bridgeview, IL 60455

Dr. Diakhate:

We briefly corresponded in February of this year. At that time, I requested, and your Department provided via US Mail, a copy of "A Booklet Containing an Ordinance, Guidelines, and Related Information" dated "Approved as Amended" on September 21, 2004.

I then corresponded and, ultimately, spoke with Mark Rosenthal on or about April 2, 2024. At that time, my question and our discussion centered on the fencing requirements for off-leash dog areas abutting bodies of water, specifically Lake Michigan. Mr. Rosenthal indicated that your Department was working on updating its regulations.

I then contacted Mr. Rosenthal on August 6, 2024, asking if there had been any progress on updating these regulations. I did not receive a reply.

It has now come to my attention that on September 11, 2024 the Winnetka Park District ("WPD") contacted your office regarding a "Waiver Request." In their correspondence, the WPD acknowledges the regulatory requirement under Regulation VIII, Section B, Number 2 that "a Dog Park must be completely enclosed by a contiguous fence."

The WPD stated that it envisions an off-leash dog area adjacent to Lake Michigan only enclosed on 3 sides, with the "lake left open," and is "seeking [a] waiver to allow the lake to serve as a natural boundary."

In your reply, transmitted by Mr. Rosenthal to the WPD on September 13, 2024, you state "based on the information that you provided our department; we would not view the lake barrier as a violation of our current dog park ordinance."

I would like to understand the basis for this statement.

Has your Department updated its Ordinance?

Does the Ordinance now include a section allowing the issuance of "waivers" to recorded and approved animal control regulations?

Exactly what would be required of any entity in this type of situation?

Is there a minimum or maximum distance any fencing must extend out into a body of water to serve as a "lake barrier?" I note that the WPD correspondence does not describe the proposed fencing in any detail.

Is this "waiver" conditioned on whether or not a body of water is held in Public Trust, or on the characteristics of that particular body of water?

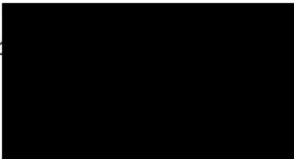
What is the process an applicant for a "waiver" would be required to follow to ask for, and be granted, such a waiver?

I request that you provide me an updated copy of any Ordinance that documents your Department's authority to issue "waivers" of requirements to the regulations for off-leash dog areas, and the process employed in making such a determination.

Ultimately, I request a confirmation that your correspondence to the WPD dated September 13, 2024, affirmatively allows the WPD to create an off-leash dog area that is not contiguously fenced, as required by Regulation VIII, and the exact requirements that the WPD would be required to meet to be in compliance with the Regulation or any waiver of it.

Finally, I would request that, if you are unwilling or unable to answer the questions posed above, you provide me copies of any documents that concern this matter, including any communications between your Department and the WPD. If necessary, please consider this a request pursuant to the Illinois Freedom of Information Act (5 ILCS 140, et. seq.).

Sincerely,


Theodore Wynnychenko



COOK COUNTY
BUREAU OF
ADMINISTRATION

Dr. Mamadou Diakhate D.V.M.
Administrator
(708) 974-6140
mamadou.diakhate@cookcountyil.gov

10220 S. 76Th.Avenue
Suite 251
Bridgeview, Illinois 60455

TONI PRECKWINKLE

President

Cook County Board
of Commissioners

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15th District

FRANK J. AGUILAR
16th District

SEAN M. MORRISON
17th District

Nov 1, 2024

Dear Theodore Wynnnychenko

In response to your recent letter our department has not updated the Cook County Animal and Rabies Control ordinance.

The statement requesting confirmation misstates the September 13 correspondence. The September 13 e-mail states " we would not view the lake barriers as a violation of our current dog park ordinance." No affirmative permissions were Intended.

Sincerely,

Mamadou Diakhate, D.V.M.
Adminstrator
Cook County Animal and Rabies Control

From: [REDACTED]
To: [Planning](#)
Subject: ZBA Centennial
Date: Sunday, November 3, 2024 10:05:00 PM

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To Whom It May Concern,

I urge the Zoning Board of Appeals to approve the zoning variances and exceptions requested by the Winnetka Park District for the Centennial Beach project. The Park District has spent a considerable amount of time and resources producing plans that meet the needs of many constituencies. The variances and exceptions that the Park District has requested are entirely reasonable and will vastly improve the environment and accessibility at Centennial Beach.

My family are active users of all of Winnetka's beaches. We use Centennial Beach most often with our dogs. The beaches on Lake Michigan are an extraordinary resource for our community and should be maintained for everyone's benefit. Centennial Beach is currently in poor condition. It is inaccessible for many Winnetka residents. The improvements requested by the Park District will enhance experiences for all Winnetka's constituencies. The sooner the Park District is able to proceed with their plans, the sooner the beach will be open for everyone.

Thank you for your speedy consideration,

Carla Kahler
1221 Elm Street

From: [REDACTED]
To: [David Schoon](#); [Ann Klaassen](#); [Robert Bahan](#)
Subject: Please share with ZBA and all Trustees re: 11/11/24 ZBA Meeting
Date: Monday, November 4, 2024 1:16:22 PM
Attachments: [WPDPlanDiscussionNovember2024.pdf](#)
[opengraph-content-icon-file-link-landscape.png](#)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mr. Schoon and Ms. Klaassen:

Please share my attached submission with ZBA and the Trustees, in which I examine the Winnetka Park District's Centennial Special Use Permit application variance request following ZBA's 10/14/24 meeting comments.

Please note that Discussion Point 4 concerns the City of Kenosha's September 2024 adoption of a water safety ordinance prohibiting swimming within 50 feet of "jetties"—defined as any structure above Lake Michigan's water line.

Please also note Red Barn's involvement in Kenosha's 2018 coastal study as a precursor to embarking on a Lake Michigan shoreline project, which may have involved the construction of "jetties" that now require 50 foot no swimming zones.

I respectfully request that the Village investigate the history and decision-making process that led to Kenosha's new safety ordinance.

Thank you.

Kris Schriesheim

*With respect to below, correct name is "Winnetka Alliance for Shoreline Safety, Access and Protection."



[watch.url](#) Great Lakes Surf Rescue News
[Video.url](#)
dropbox.com

Sent from my iPad

WPD's Variance Request Issues— 11/11/24 ZBA Meeting

- 1. Issues with WPD's variance request in the context of how it impacts Centennial Park and neighbors—**
 - A. The elevated boardwalk will block views, light and site lines. Persons standing at the dog beach stairs will be caught in the stairs' and boardwalk's shadows, looking up at steps rather than the north-facing horizon. The same is true of the boardwalk's impact on views, site lines and light looking south from the ramp. See attached images of plan overlay on existing beach.**
 - B. Building a land-based concrete roadway/path and extending steel sheet piling to construct the boardwalk and stairs will increase impervious surfaces and affect drainage, potentially damaging neighboring properties and the beach.**
 - C. Dog pen gate at 5' high would be too high to see over or even to reach for smaller people. WPD provided limited graphics showing a 5'10" person's size relative to the 5' dog pen fence, and not the average woman's height (5'4") or a child's height.**
 - D. Relocating electrical for the dog beach's fob-based entry system from the tabletop to the beach creates the risk of it being underwater after heavy rains and/or at times of high lake levels. WPD's Restrictive Covenant would require WPD to leave the relocated electrical on the beach for half a century, even if it is regularly underwater, continuously damaged, creates electrocution risks, is difficult to maintain, and prevents meaningful access to**

the dog beach. This is unreasonable, unsafe and sufficient to deny WPD's variance request.

- E. WPD's variance request would create a nuisance. Mr. Kutulas's response to ZBA's questions about the 10' roadway's simultaneous use by maintenance vehicles, persons in wheelchairs and dogs, was to say that it would perform Centennial beach maintenance at 6 a.m. This violates Village Code nuisance provisions governing noise and restricting the use of leaf blowers. The Code's only leaf-blower noise exceptions are for the golf course and playfields (until 2025), neither of which exception applies to Centennial Park and Beach.**
- F. Not only does WPD's 2030 LMP respect and endorse the R-2 nature of Winnetka's stately lakefront neighborhoods, so does the Village's 2040 Futures Plan. This is in keeping with over 100 years of careful Village reviews of 225 Sheridan's variance requests, dating back to the North Shore Health Resort, as included in your 10/14/24 meeting packet. Granting a variance now would damage the neighborhood's character after over 100 years of carefully preserving it— by converting it into a commercialized entertainment zone; by increasing noise and maintenance traffic early in the morning; by subjecting the neighborhood to increased overall traffic and park usage; and by expecting the neighborhood to endure longer term construction-related disruption and damage. This combination is unreasonable and sufficient to deny WPD's variance requests.**

2. WPD failed to get professional ADA input into its Centennial design. What WPD does have is a 2010 staff report on its website discussing ADA issues at each of its parks. WPD's 2010 Centennial-specific ADA review called for access to the water itself—yet WPD's current variance request would prevent ADA dog beach and water access for half a century. This is highly unreasonable.

WPD's 2010 ADA staff report calls for community input from WPD constituents with challenged family members. To date WPD has rebuffed input from these concerned individuals. If granted, WPD's variance would unreasonably tie future boards' hands should they determine a lift or other accessible design is desirable, or that an inaccessible dog beach is undesirable.

- 3. The rubble mound breakwater-based concrete roadway is 15' wide. We measured the road leading down to the Tower Road Beach and the Village's water treatment plant at 15'6" at the top, to 17', and then 18' wide at the bottom. This road is designed to handle two-way traffic, including trucks and maintenance vehicles. A similarly sized concrete road in the lake is neither minimal nor reasonable, and the variance request should be denied.**

4. Granting a variance for WPD’s proposed breakwater would needlessly, unreasonably, and recklessly introduce novel drowning and safety risks to the lakefront. See attached information on the City of Kenosha’s 2024 adoption of a critical water safety ordinance in response to drownings. The ordinance prohibits swimming within 50 feet of a “jetty”—defined as any structure above the lake’s waterline, including breakwaters, piers, and revetments. Minimal anti-drowning measures like Kenosha’s 50 foot “NO SWIMMING” zones on either side of WPD’s proposed breakwater would drastically shrink Centennial’s 525’ wide lakefront and beach. A variance would also create a 50’ danger zone for swimmers and other water-goers attempting to go around the end of the 252’ long proposed breakwater, forcing them to swim, paddle or boat more than 300 feet out into Lake Michigan. ZBA should deny WPD’s request based on these risks, loss of usable swimming area, and its overall non-minimal nature.

5. WPD's design reflects a lack of 21st century shoreline techniques. WPD's design engineer—Red Barn—should have obtained the coastal studies that are required to assess such designs. See attached UW Coastal Study discussion involving Red Barn which assesses reasonable and effective Lake Michigan shoreline project parameters and requirements. The lack of even minimal studies of the design's potential consequences on the tabletop, shoreline, overall ecosystem, and general lakefront area should prevent variance approval.

6. WPD's variance request for purported "Dog Park" compliant fencing under Cook County's Animal Control ordinance and regulations, is misleading and wrong. The Cook County's Animal Control administrator's recent response to WPD's inquiry about whether a supposed "water barrier" would violate Cook County's four-sided fencing requirement for dog parks, described Centennial dog beach as a "dog friendly area," while saying calling the water a "barrier" would not violate dog park provisions. WPD did not receive a waiver entitling it to qualify as a dog park. Cook County had previously informed WPD's Mr. Kutulas that its "Beck Lake Dog Park" is fenced on all four sides. It did not offer him any examples of permitted "dog parks" with less than four-sided fencing.

In summary, WPD's variance request is based on flawed designs that are unsafe, unnecessary, unfounded, create nuisances, and violate the Village's 2040 Futures Plan.

Please do not grant the variance.

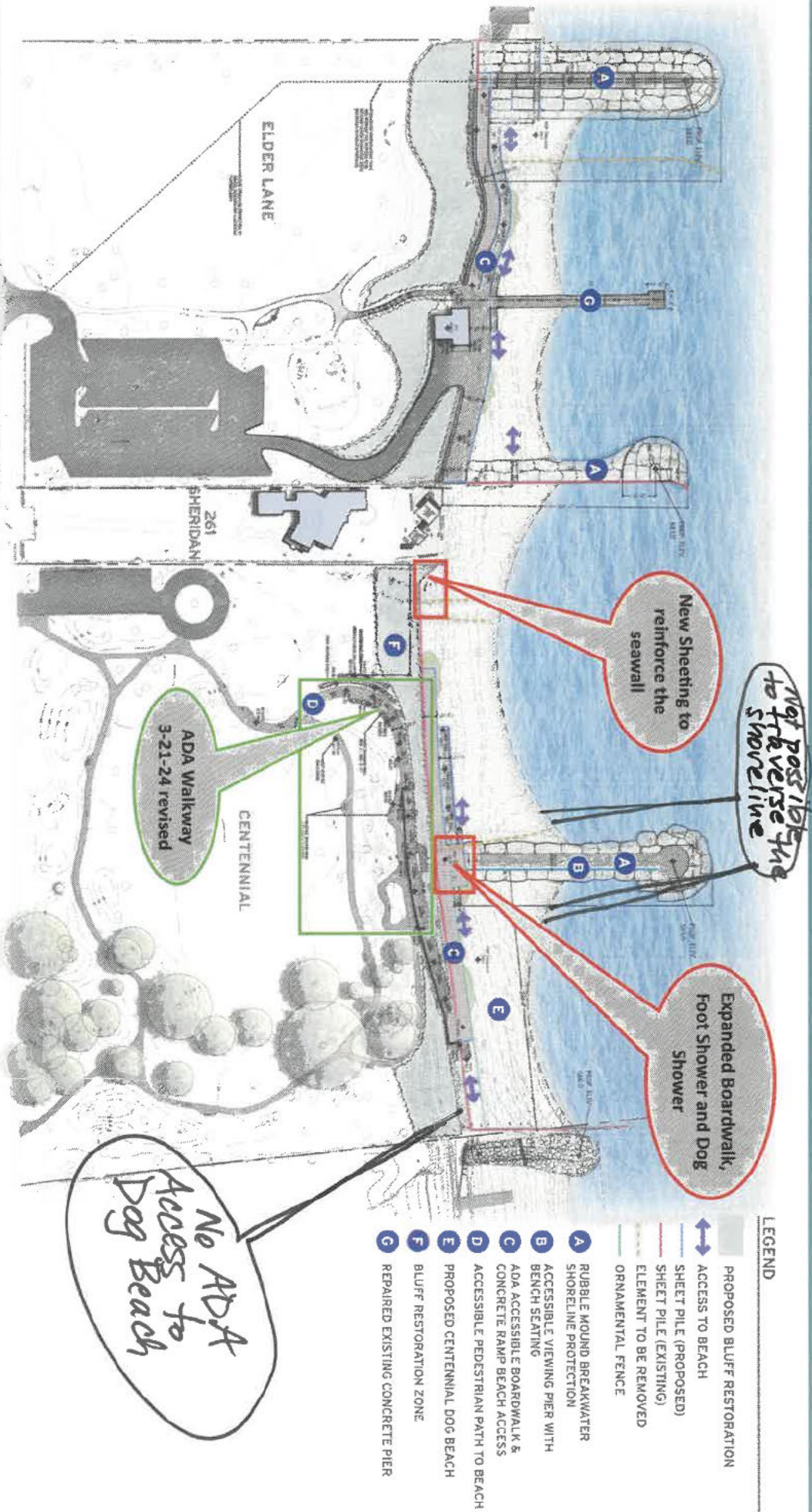
Sincerely,

Kristine Schriesheim

WPD Plan is Excessive and Unsafe

Elder + Centennial | Schematic Design

ELDER | CENTENNIAL BEACH FEASIBILITY STUDY



WINNETKA ALLIANCE FOR SHORELINE ACCESS & PROTECTION

Massive amounts of concrete paving, bluff destruction

WPD Plan Overlay

Shoreline permanently blocked

*light views and
life lines blocked*

ENCLOSED
DOG BEACH

PROPOSED
SAND OUTLINE

UNDERWATER
AT 578'

PHOTOGRAPHY

CURRENT PLAN OVERLAY
DATA & MEASUREMENTS
FOR ILLUSTRATION ONLY

- WPD adding sand to Privately owned 261 Sheridan?

PROPOSED SAND OUTLINE

Football Field

Sheridan Road
is 28'-30' wide.

Road to Tiger Beach
is 15' 6" - 18' wide -

Loss of current back

ENCLOSED
DOG BEACH

15' wide concrete roadway

Unsafe steep,
shared roadway
all the way down
to the beach.

CURRENT PLAN OVERLAY
DATA & MEASUREMENTS

FOR ILLUSTRATION ONLY

I-A through I-F

Current Lakefront View



1 A-F Discussion + Graphics

WPD's Variance Request Issues— 11/11/24 ZBA Meeting

1. Issues with WPD's variance request in the context of how it impacts Centennial Park and neighbors—

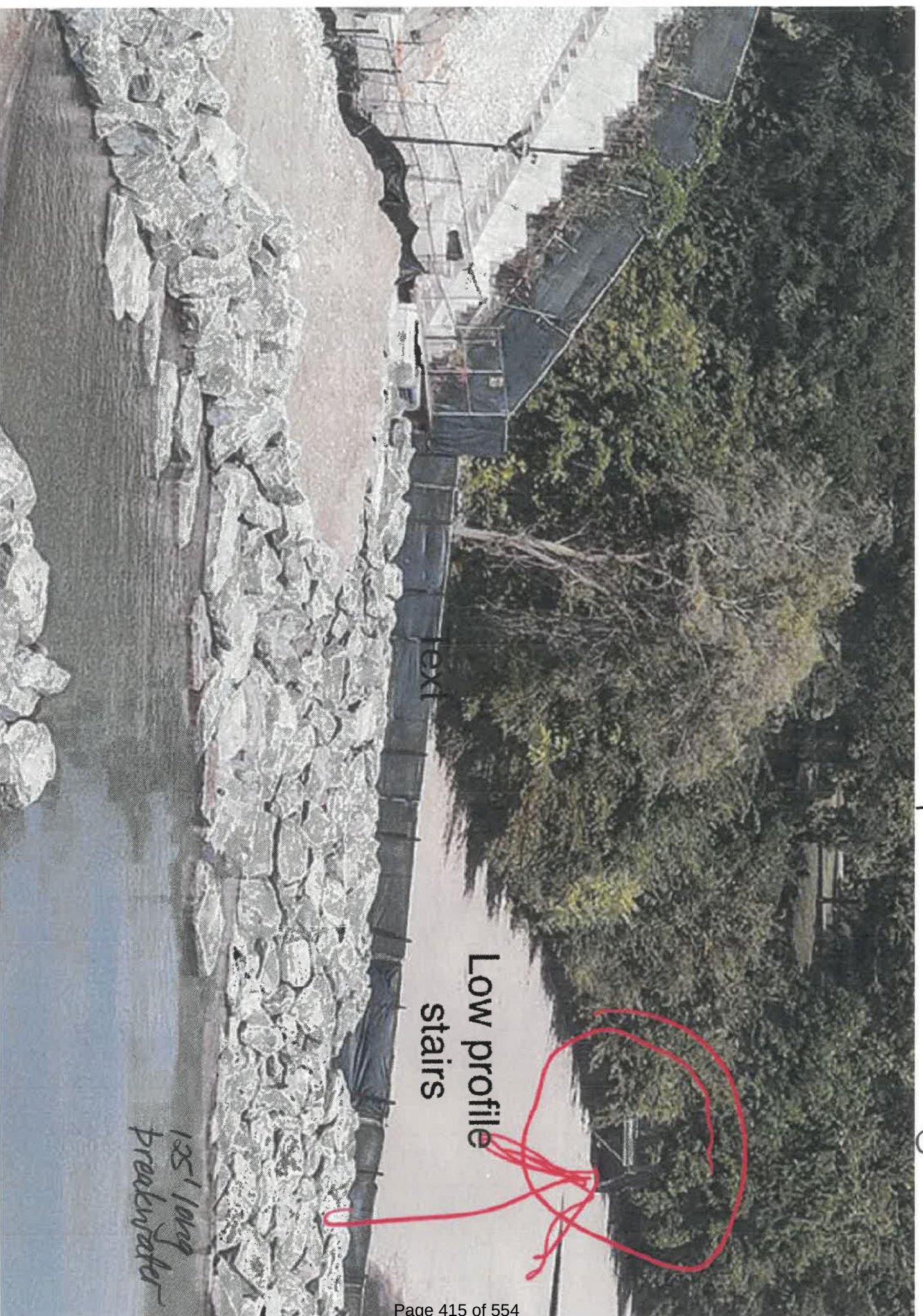
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1-A

Current View - Low profile stairs at Dog Beach



text

Low profile
stairs

135' long
breakwater

1-A Current Centennial Beach Shoreline Access and Views - North-facing



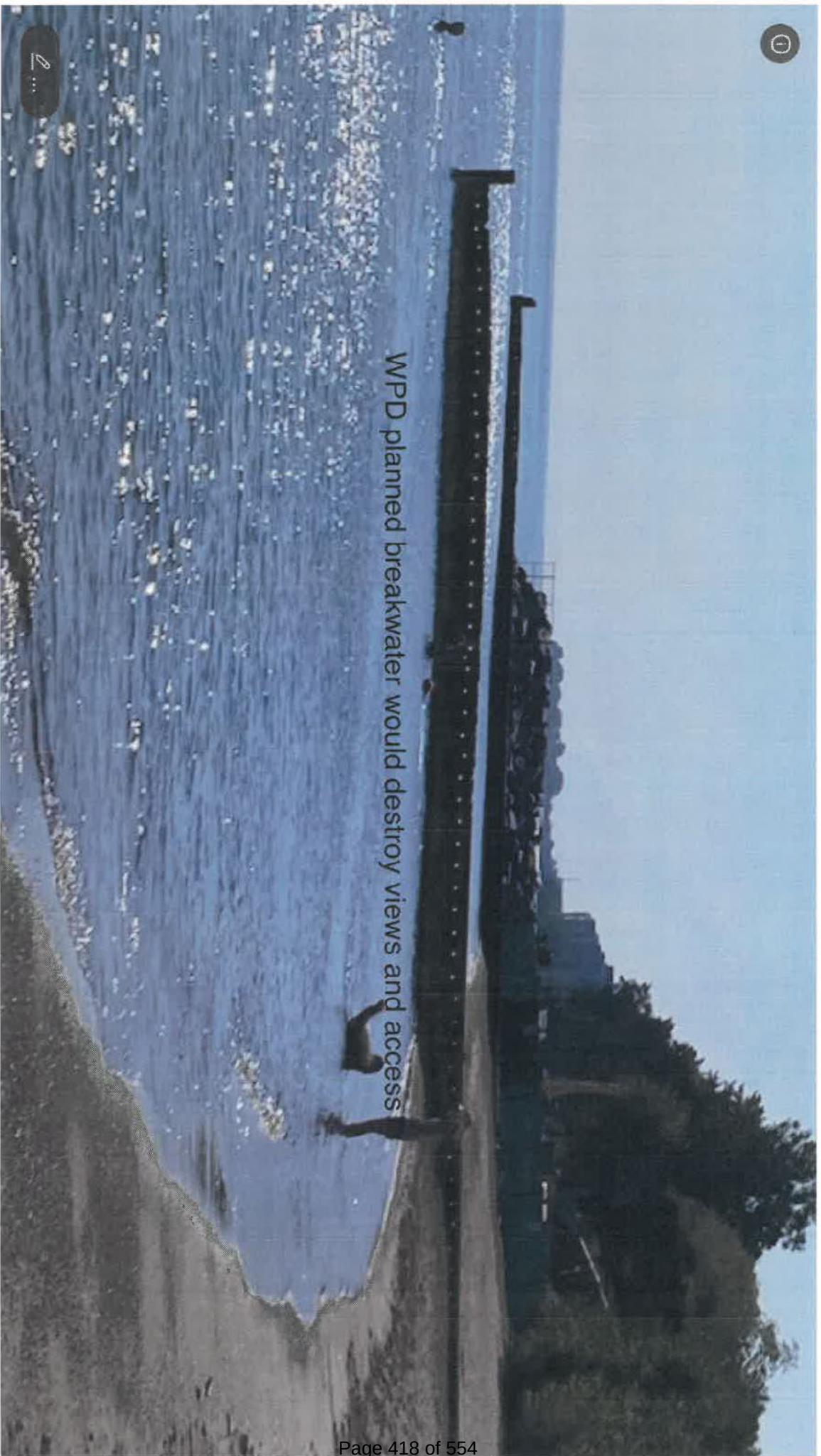
I-A

Current Centennial Beach Views and Access - North Facing



2-4

Current view looking south from Centennial



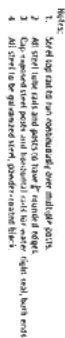
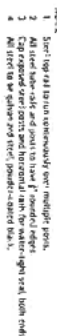
1A+B

Current view from Centennial southern lot line



WPD Schematic is Misleading - It only
Presents a man's view of
Dog Beach Gate

winpark.org — Private

Scale: $3/4" = 1'-0"$ Scale: $1\text{ m} = 1''$ (0)

Scale: 1 1/2" = 1'-0"

**THE
LAKOTA
GROUP.**

Issued for	Rev. Date
XXS Subtotal	01/20/02
200% Subtotal	06/22/02
Revised and Construction	02/18/02

Project Title

Site Improvement:
Centennial Park
Winnetka, IL

Prepared For:
Winnetka Park District
Winnetka, IL

Graphic Scale

Scale	Name
Drawing Title	

FENCING DETAILS

Sheet No.

I-D

Tabletop WPD Dog Beach Emergency Exit Box



1-D WPD - Broken Emergency Exit Box at Dog Beach Gate





All are BCC'd. [ATTACHMENTS LINKED AT BOTTOM]

• **Constituent concerns this past week:**

- Mr. Sean Phillips, Colin Cross, Ed Gjertsen, Mark Warren, and Patrick Heraty of the Winnetka Paddle Tennis Club reached out to voice concern over the platform tennis facilities. Working on responding after we spoke with our maintenance company on options to either patch or resurface and close for approximately one week. We will see what the most desirable remedy will be for the club and schedule appropriately.
- Mr. Victor Glava reached out regarding leaf blower noise at golf / Skokie playfield at 6am. Affirming with golf their current practice and will respond to resident. The golf course is not subject to the noise ordinance.

• **Major Concerns/Items the Board may be contacted about:**

- Comprehensive Master Plan engagement continues on 10/25/24 at Pumpkins in the Woods and 10/28/24 for an open house event at the Community House. The social pinpoint website can be accessed here: www.winpark.org/planwinnetkpark
- Making progress on the Paddle Tennis contract. Hopeful to be on the agenda in November.
- Separately advised the Board that the Village Zoning Board of Appeals continued the meeting to review Centennial Park to 11/11/2024.

• **Non-reoccurring open session items being briefed to the Board in the next 30 days:**

- Consent - Happ Road Corridor Improvements Temporary Construction Easement. Scheduled 10/24/2024
- Consent - Board Meeting Dates for 2025. Scheduled 10/24/2024
- Consent - Delegate Selection for Annual Business Meeting of Illinois Association of Park Districts. Scheduled 10/24/2024
- Presentation - FY 2025 Proposed Budget Presentation (Corporate, Golf). Scheduled 10/24/2024
- Unfinished Business - Declaring a Board Vacancy [Ordinance 2024-005]. Tentative 10/24/2024
- Unfinished Business - Declaring a Board Vacancy [Policy Manual 4.12]. Tentative 10/24/2024
- Unfinished Business - Crow Island Woods Restoration. Scheduled 10/24/2024
- New Business - Personnel Policy Manual Update. Scheduled 10/24/2024
- Presentation - FY 2025 Proposed Budget Presentation (Recreation, Tennis, Platform Tennis, Ice Arena). Scheduled 11/14/2024
- New Business - Red Barn Engineering Contract Amendment. Tentative 11/21/2024
- New Business - New Agreement with the Winnetka Platform Tennis Club. Tentative 11/21/2024
- New Business - Auditing Services RFP Recommendation. Tentative 11/21/2024
- Unfinished Business - Ethics Ordinance. Tentative 11/21/2024
- Unfinished Business - 2025 Tax Levy. Scheduled 11/21/2024

• **Upcoming Events / Registrations:**

- Pumpkins in the Woods: Oct 25
- Foundation Family Skate: Nov 15

• **Media Touches / Outreach since last week:**

1-E+F

Breakwater Construction in Progress



Winnetka Futures 2040 Plan Ten Community Pillars, Goal 1.7: The Village will continue to ensure that open space uses, such as Park District parks, beaches, and facilities, are compatible with the residential neighborhoods in which they are located.

2. WPD failed to get professional ADA input into its Centennial design. What WPD does have is a 2010 staff report on its website discussing ADA issues at each of its parks. WPD's 2010 Centennial-specific ADA review called for access to the water itself—yet WPD's current variance request would prevent ADA dog beach and water access for half a century. This is highly unreasonable.

WPD's 2010 ADA staff report calls for community input from WPD constituents with challenged family members. To date WPD has rebuffed input from these concerned individuals. If granted, WPD's variance would unreasonably tie future boards' hands should they determine a lift or other accessible design is desirable, or that an inaccessible dog beach is undesirable.

2010 WPD ADA Facilities Report - Centennial



AA

winparkdistrict-my.sharepoint.com



ADA Facilit...Reduced.pdf

Share



Location		Cost of Materials	Cost of Labor	Total Cost	Work in-House	Work Contracted	Work Timeline
<u>Centennial Park</u>							
Park Items							
Add an accessible ramp to the lower bluff and beach		\$200,000	\$150,000	\$350,000		Yes	Fall, 2015
Adjust height of north drinking fountain		\$300	\$320	\$620	Yes		Fall, 2015
Add accessible removable path to beach & water's edge		\$2,000	\$0	\$2,000	Yes		Fall, 2015
Total				\$352,620			


adainfo.org


...

does not exceed 1:12 (8.33%). A trail segment can run for a distance of 30 feet at slopes between 1:2 and 1:10 (10%), and for 10 feet at slopes between 1:10 and 1:8 (12%).

Highlights: Beach Access

When an entity that administers or manages a beach undertakes a beach nourishment project, or constructs or alters circulation paths or parking, toilet, or bathing facilities to serve the beach, at least one beach access route needs to be provided for each 1/2 mile of beach shoreline.

The entity does not have to spend more than 20% percent of the cost of the beach nourishment, construction, or alteration costs to provide beach access routes, and the number of beach access routes does not have to be greater than the number of pedestrian access points provided (pedestrian access points include parking facilities that serve the beach, dune crossings, and stairways or ramps leading from boardwalks to the beach).

Beach access routes should connect an entry point to the beach with the:

- Mean high water level at river beaches; or
- Normal recreation water level at lake, pond, and reservoir beaches.

Beach access routes, like outdoor recreation access routes, can have steeper slopes or longer running segments than typical accessible routes or ramps. A beach access route can run for a distance of 50 feet at slopes between 1:20 (5%) and 1:12 (8.33%), and for a distance of 30 feet at slopes between 1:12 and 1:10 (10%).

Where the slope of a beach access route at a dune crossing is steeper than 1:20 (5%), handrails need to be provided, and curbs or other barriers to prevent the passage of a 2-inch diameter sphere.

Find Out More

These are just a few highlights of the new requirements. Visit the [Access Board](#) to find more details, background, and resources related to outdoor access.

Pack a picnic basket, air out the tent, and have a good summer!

Condition for Exception 4

Compliance is limited or precluded by any of the following laws, or by decisions or opinions issued or agreements executed pursuant to any of the following laws:

- Endangered Species Act (16 U.S.C. §§ 1531 et seq.)
- National Environmental Policy Act (42 U.S.C. §§ 4321 et seq.)
- National Historic Preservation Act (16 U.S.C. §§ 470 et seq.)
- Wilderness Act (16 U.S.C. §§ 1131 et seq.)
- Other Federal, State, or local law, the purpose of which is to preserve threatened or endangered species; the environment; or archaeological, cultural, historical, or other significant natural features

The laws specified in this condition prescribe certain activities or require certain analyses to be prepared or procedures to be followed when planning projects that may impact features protected under the laws. The condition does not require full compliance with a specific provision in the technical requirements where compliance is limited or precluded by the laws, or by decisions or opinions issued or agreements executed pursuant to the laws.

Condition for Exception 1

Compliance is not practicable due to terrain. The phrase "not practicable" means not reasonably doable.

For example, where a trail is constructed in a steeply sloped area, compliance with the running slope provision may not be practicable on parts of the trail where it would require extensive cuts or fills that are difficult to construct and maintain, cause drainage and erosion problems, significantly lengthen the trail, and create other adverse environmental impacts.

Condition for Exception 2

Compliance cannot be accomplished with the prevailing construction practices.

This condition does not require the use of construction equipment or methods other than those typically used in a particular type of setting.

For example, where handtools would normally be used to construct a trail in order to minimize the impact on a sensitive adjacent stream and the prevailing construction practices for this type of setting do not include blasting, blasting

or to be on an accessible route.

203.11 Water Slides. Water slides shall not be required to comply with these requirements or to be on an accessible route.

203.12 Animal Containment Areas. *Animal cages, pens, corrals, and similar areas in which animals are contained shall be on an accessible route but shall not otherwise be required to comply with these requirements. Public circulation routes where animals may travel, such as in*

2018 ILLINOIS ACCESSIBILITY CODE

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CHAPTER 2: SCOPING REQUIREMENTS

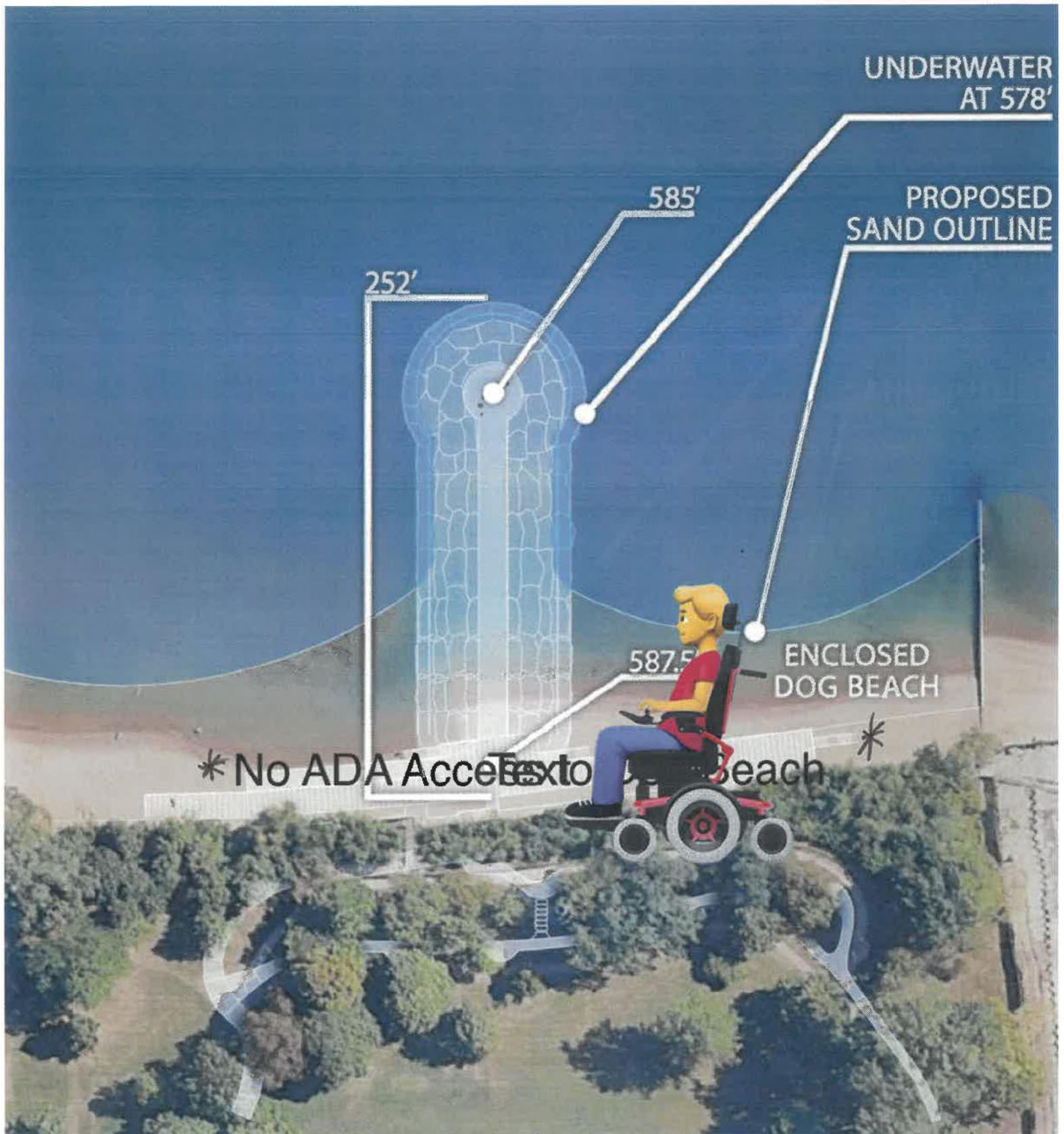
petting zoos and passageways alongside animal pens in State fairs, are not eligible for this exception.

203.13 Raised Boxing or Wrestling Rings. Raised boxing or wrestling rings shall not be required to comply with these requirements or to be on an accessible route.

203.14 Raised Diving Boards and Diving Platforms. Raised diving boards and diving platforms shall not be required to comply with these requirements or to be on an accessible route.

2-

WAD's Plan - ADA Issues



* No ADA Access to Dog Beach For 50 Years
* No ADA Access to Water For 50 Years From Dog Beach

2- ADA

WPD Lacks ADA Report
for Centennial Plans

On Sep 16, 2024, at 9:40 AM, Shannon Nazzal

<snazzal@winpark.org> wrote:

Ms. Schriesheim,

Thank you for your suggestion regarding the ADA report. I appreciate the insight you've provided by sharing the Wilmette Park District's approach. We are committed to transparency and accessibility in all our projects and will certainly consider the best way to ensure that all relevant reports are made available to the public. Your input is valuable as we continue to enhance our communications and project information sharing.

Shannon Q. Nazzal, CPRE (she / her)

Executive Director

Office: [+1.847.501.2074](tel:+18475012074)

Email: snazzal@winpark.org

Winnetka Park District | winpark.org

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From: Kris Schriesheim

Sent: Monday, September 9, 2024 8:26 AM

To: Shannon Nazzal <snazzal@winpark.org>; James Hemmings

<jhemmings@winpark.org> **Subject:**

Park District ADA Report

<Outlook-

<Outlookfngu3hxo.gif>

ghgfub32.gif>

External (krisschriesheim@gmail.com)

Report This Email FAQ Protection by INKY

→ Hello Ms. Nazzal:

I am writing to request that WPD post its ADA report on the website, which is where I found the attached Wilmette Park

2-ADA

District's equivalent report. The report is included along with all the other reports, letters, plans and other information related to its park construction projects.



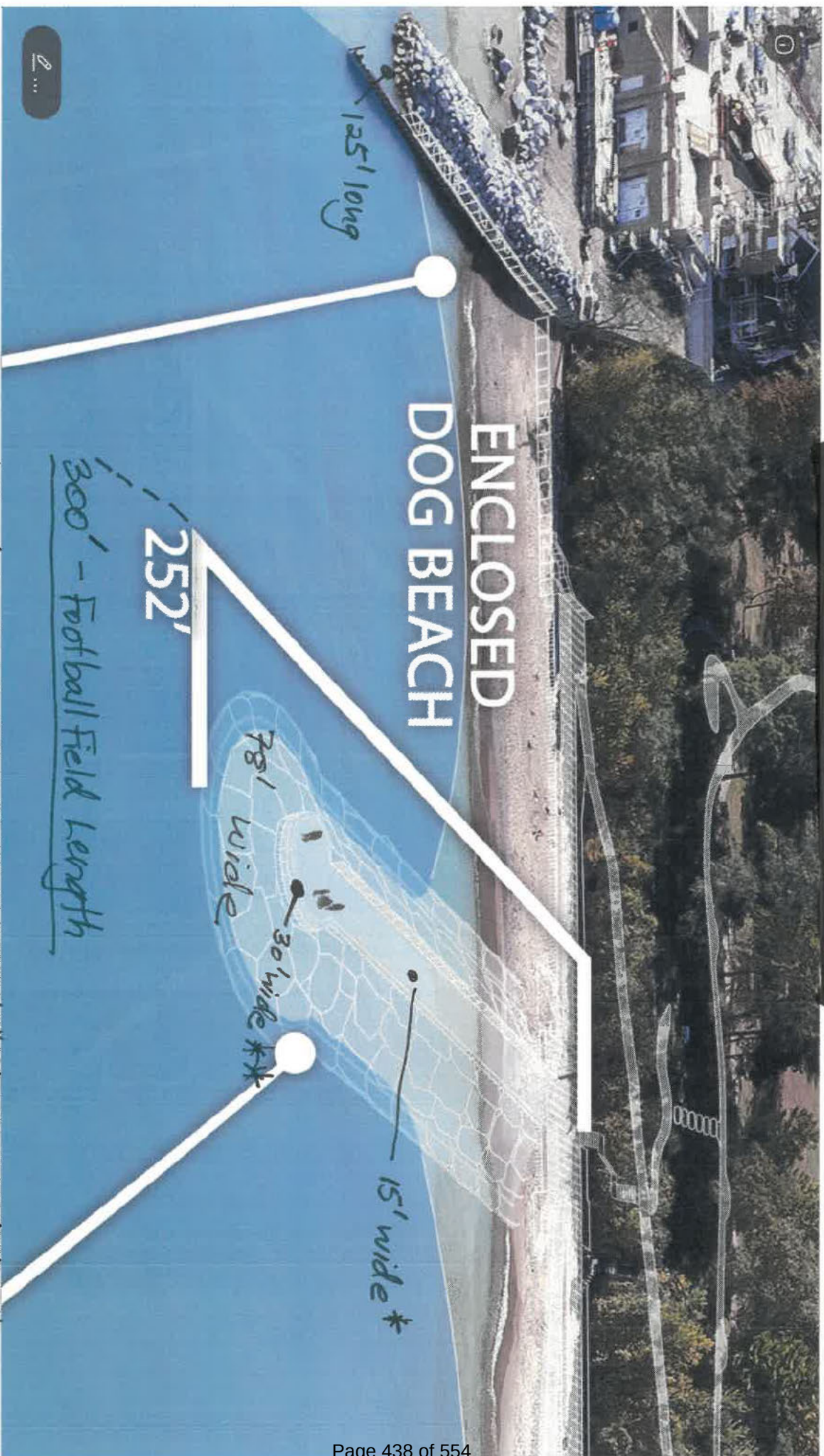
3 - Discussion + Graphics

3. The rubble mound breakwater-based concrete roadway is 15' wide. We measured the road leading down to the Tower Road Beach and the Village's water treatment plant at 15'6" at the top, to 17', and then 18' wide at the bottom. This road is designed to handle two-way traffic, including trucks and maintenance vehicles. A similarly sized concrete road in the lake is neither minimal nor reasonable, and the variance request should be denied.

③

WPD Plan Overlay - Design is not minimal

WPS-PM002 Aerial Looking West NOTES_241014.jpg
File 1 of 12



* Road leading to Tower Beach is 15' at top to 18' at bottom
** Sheridan Road is 28'-30' wide, handles major traffic
and is a state road

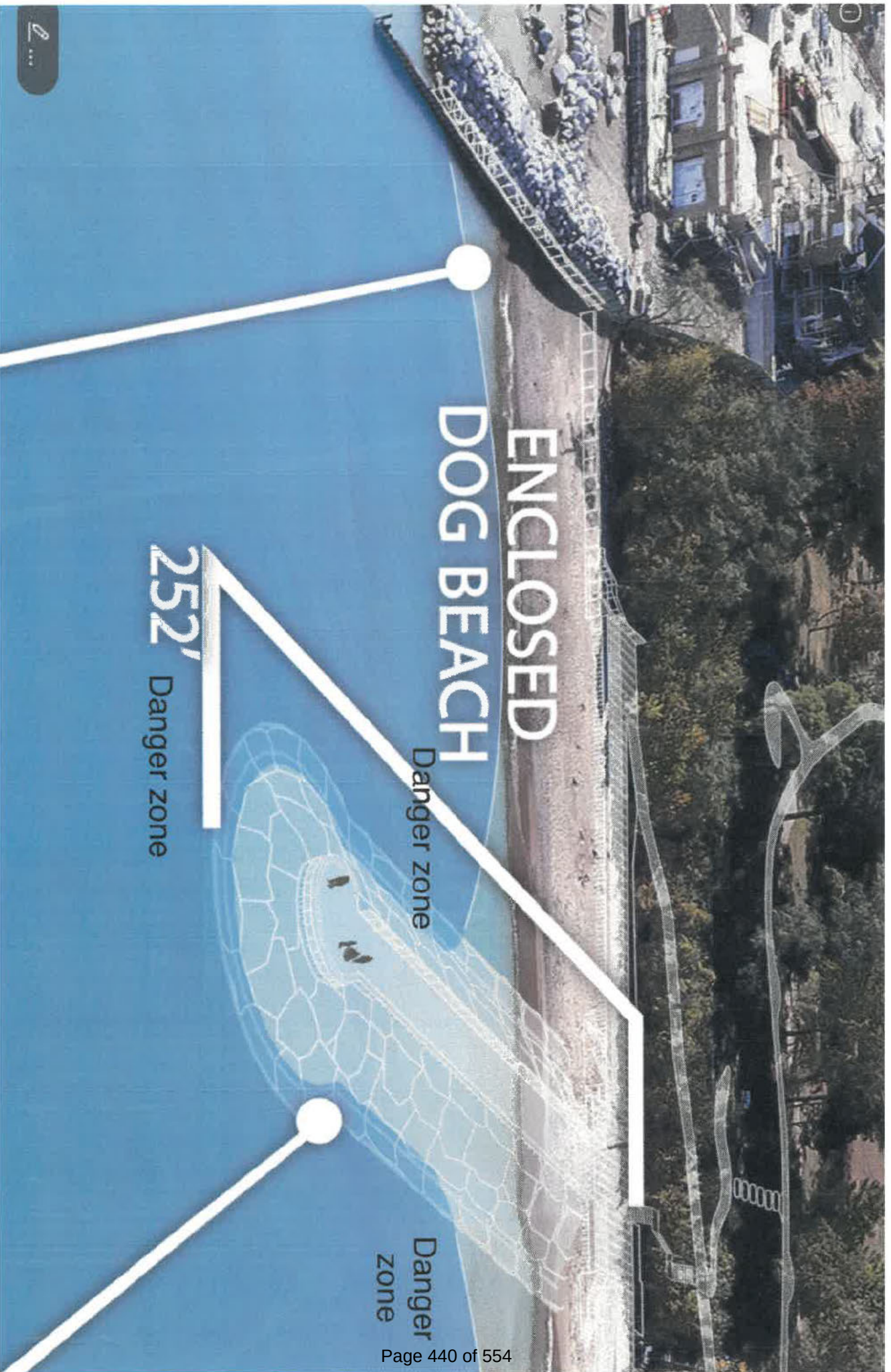


Share

4. Granting a variance for WPD’s proposed breakwater would needlessly, unreasonably, and recklessly introduce novel drowning and safety risks to the lakefront. See attached information on the City of Kenosha’s 2024 adoption of a critical water safety ordinance in response to drownings. The ordinance prohibits swimming within 50 feet of a “jetty”—defined as any structure above the lake’s waterline, including breakwaters, piers, and revetments. Minimal anti-drowning measures like Kenosha’s 50 foot “NO SWIMMING” zones on either side of WPD’s proposed breakwater would drastically shrink Centennial’s 525’ wide lakefront and beach. A variance would also create a 50’ danger zone for swimmers and other water-goers attempting to go around the end of the 252’ long proposed breakwater, forcing them to swim, paddle or boat more than 300 feet out into Lake Michigan. ZBA should deny WPD’s request based on these risks, loss of usable swimming area, and its overall non-minimal nature.

④

WPD Plan Creates Safety and Drowning Risks



④

WPD Plan Overlay - Design is Not Minimal

Design Creates Longshore + Structural Currents

UNDERWATER
AT 578'

PROPOSED
SAND OUTLINE

50' Danger Zone 585'

252'

78' wide underlay

30' wide bulb

15' wide roadway

50' Danger Zone

Shoreline Access Impossible

50' Danger Zone

587.5'

ENCLOSED
DOG BEACH

No ADA access

Steep Slope Zone
Damage, Paving,
Ecosystem Destruction

GOOGLE EARTH

CURRENT PLAN OVERLAY
DATA & MEASUREMENTS

FOR ILLUSTRATION ONLY

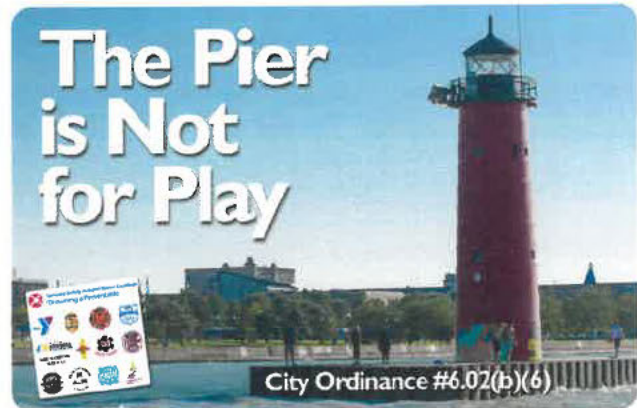
④

WPD's Proposed Breakwater is Dangerous

May is Safety Around Water Month. The Kenosha Safety Around Water Coalition Continues to Raise Awareness and is Offering Tips To Keep Our Community Safe in and Around Water this Summer.

In order to keep the residents of our community safe, Kenosha passed **Kenosha City Ordinance #6.02(b)(6)** states that no person should be in the water within 50 feet in any direction of the pier; this includes jumping off of the pier.

"Enter or remain in the water when an area is posted "No Swimming". Enter or remain in the water during times when swimming is not permitted. Swim more than fifty (50) yards from shore. Swim outside of markers that designate a swimming area. Enter or remain in the water within fifty (50) feet, measured in any direction, of a pier, jetty, breakwater, or seawall, or within one hundred fifty (150) feet of the mouth of the Pike River. For purposes of this prohibition, "swim" includes wade. For purposes of this prohibition, jetty means a structure that



is above the water line. For purposes of this prohibition, "water" means waters of Lake Michigan adjacent to the City of Kenosha".

There has been considerable effort to create awareness of the dangers of jumping off the pier and the currents found in Lake Michigan. The city has installed permanent signs on the pier warning visitors about the dangers of jumping into the water and strong underwater currents. Also, in order to help facilitate the enforcement of the ordinance, the pier and lighthouse are patrolled by numerous agencies including the Kenosha Police Department and the fine for swimming within 50 feet of North Pier is \$1000.00.

Due to its location and construction, the pier is affected by several types of currents with the most common being longshore and structural.



→ A **longshore current** is a current that moves parallel to the shore. Winds and waves hit the shoreline at angle and push the water down the length of the beach in one direction. Often, the longshore current is strong enough to keep on your feet on the bottom and may make it difficult for you to return to shore as it will move you sideways rather than allowing you to swim towards the beach. The longshore current can also move swimmers into other types of currents. One such current that is prevalent at North Pier is structural currents.

→ **Structural currents** often occur at manmade
(materials presented at 10/14/24
ZBA meeting)

④

Breakwaters Increase Water Hazards

Safety group blasts restoration project for Beach State Park

‘You just spent \$73 million to increase the water hazards for your beachgoers,’ co-founder of nonprofit says

BY JOSEPH STATES

In late October, Gov. JB Pritzker stood in the event hall of the Illinois Beach Hotel to celebrate the completion of a \$73 million Illinois Beach State Park shoreline restoration project.

He praised it as a “model” for the country. The breakwaters will save the beach from erosion, rejuvenate area communities and provide habitat for endangered species, the governor said.

But now, water-safety nonprofit Great Lakes Surf Rescue is sounding an alarm over a spate of drownings at the park over the summer, pointing to the recently installed breakwaters as the culprit and calling for improved safety measures.

Meanwhile, local officials, who generally attribute the increase in water incidents to the jump in beachgoers since the restoration, said they’re hoping the state will provide support as small area municipalities shoulder an anticipated increase in water-safety-related calls.

Dave Benjamin is the co-founder of Great Lakes Surf Project, which tracks Great Lakes drowning statistics, provides water safety training and works to raise awareness about water safety. An advocate for water safety for well over a decade, he is critical of the breakwater project.

“You just spent \$73 million to increase the water hazards for your

beachgoers, and you didn't do anything to protect the beachgoers," he said.

Benjamin said the breakwaters force water to flow around them, creating stronger currents that can be difficult for swimmers to deal with, and digging deep channels underwater near the shore.

Breakwaters can also draw curious swimmers, he said, as was the case for 26-year-old Akshith Reddy Bhandra, who drowned July 20 after attempting to swim to the breakwater with friends, according to authorities.

Over the summer, Beach Park had eight water-rescue incidents and two fatal drownings, including Bhandra, according to Beach Park Fire Department Fire Chief Thomas Stahl. They were the first fatal drownings in Beach Park since 2020, he said.

Stahl said he couldn't "absolutely confirm" the breakwaters directly contributed to the drownings, but said a meteorologist with the National Weather Service told him breakwaters can create artificial rip currents.

Nonetheless, he said the stark increase in beachgoers since the restoration is going to increase the number of water incidents.

"More people creates more chances for incidents," Stahl said.

A statement from the Illinois Department of Natural Resources (IDNR) echoed that sentiment. There are "inherent risks" swimming in Lake Michigan, and "precautions should always be taken," it said. With the increase in visitors, the IDNR said it should be expected that calls for service will increase as well.

In response to that increase, the statement said IDNR is working on a lakefront safety plan to, "help visitors understand the risks," and educate them on safety measures and what to do in an emergency. That will include informational signage and additional warnings that no lifeguards are on duty, the statement said.

Work on educational signage in English and Spanish about rip currents

are also in development, the agency said.

The statement went on to say IDNR plans to install about 50 new signs with throw rings and rope bags, with about a quarter already installed. Several have since been stolen, a likely “ongoing challenge for site staff,” the agency said.

“Our plan is to have as much signage as possible in place prior to the season-opening late next spring,” it said.

Illinois Beach State Park staffers are also utilizing the park’s social media outlets to inform people about hazardous weather conditions and other safety information for the beach and the park, the statement said.

“They especially want to reach people who aren’t as familiar with the hazards and conditions of an inland sea like Lake Michigan,” the agency said.

Support needed

Winthrop Harbor Village Administrator David Alarcon said officials have a “beautiful state park” that is becoming popular again, and they want to “keep water safety at the forefront.”

He highlighted collaborative efforts with various emergency responders in the region to address the increase in calls.

“Most importantly, people should know and understand that if they do get in trouble, there’s a significant collaborative effort between all the regional fire departments, IDNR, the Lake County Sheriff’s Office and also the Coast Guard,” Alarcon said. “They’ll be there when people need help.”

A news conference featuring area fire departments and officials regarding the increase in water incidents was originally scheduled for Oct. 3, just days after Pritzker was in Beach Park, but it was ultimately canceled.

Winthrop Harbor Fire Chief Rocco Campanella said they put off the conference after meeting with IDNR officials during the governor’s visit to Beach State Park who, “expressed interest in helping.”

The IDNR statement said the agency and the Illinois Conservation Police were aware local fire departments and rescue teams were concerned about increased activity at the beach.

“Staff have sat in on several logistical meetings with them. We value those partnerships and are eager to continue those discussions,” the statement said.

Since then, Campanella said local politicians have also reached out to offer support, “and make sure our needs are met.”

The news conference information packet provided by Campanella indicated representatives from the Winthrop Harbor, Beach Park, Zion and Pleasant Prairie, Wisconsin, fire departments were scheduled to attend, as well as local and state officials.

According to the packet, the departments were going to thank the IDNR for investing in Beach Park, creating “beautiful” beaches and “exponentially” increasing usage, but that their “responsibilities as the responding fire departments have increased ten-fold.”

Winthrop Harbor Fire Department water rescue responses have more than doubled since 2019, after dropping to just one incident in 2022. This year has seen 14 calls thus far.

Even with local and Mutual Aid Box Alarm System resources, which go beyond the county and state borders, local first responders, “cannot effectively respond to the challenges Lake Michigan presents,” the information packet statement said.

They don’t have the necessary equipment between area emergency responders, and the nearest Coast Guard station, in Kenosha, Wisconsin, is 25 minutes away by boat and has reduced hours, the statement added.

The packet also outlined the resources needed between Beach Park and Winthrop Harbor, from life rings to Lake Michigan-capable boats, with the total cost projected in the millions. Such amounts are far out of reach for the departments, the packet statement said.

The IDNR statement said agency officials will be “happy to share information” on any potential grant funding opportunities. Some municipalities have already begun reaching out to their legislators on their own to get funding, the statement said, and the IDNR is “in support of these efforts.”

Lifeguards needed

To Benjamin, the restoration is a case of “good intentions” with “unintended consequences.”

“Yes, we need to protect the shoreline. We need to restore habitats,” he said. “But at the same time, you’re doing it in an unnatural way, and you’re increasing the hazards.”

The beachfront with the largest population of visitors will need lifeguards, Benjamin said. But he warned even if the process of hiring and training began soon, there still likely would not be lifeguards ready for the next swimming season.

“The beach reconfiguration project should not be a model for other beaches unless they understand the hazards that they will create and add lifeguards,” he said.

According to Alarcon, decisions regarding lifeguards at the beach will be under IDNR’s authority.

The Governor’s Office referred questions regarding the concerns from the Great Lakes Surf Project and local officials, along with the calls for funding, to the IDNR.

Lake County Board member Gina Roberts, whose district includes Beach State Park, said she is concerned with the lack of lifeguards at Beach Park, and hopes to speak with state officials about getting funding.

The beaches remain without lifeguards, Stahl said, meaning “swimming is at your own risk.”

5 - Discussion + Coastal Assessment Report

5. WPD's design reflects a lack of 21st century shoreline techniques. WPD's design engineer—Red Barn—should have obtained the coastal studies that are required to assess such designs. See attached UW Coastal Study discussion involving Red Barn which assesses reasonable and effective Lake Michigan shoreline project parameters and requirements. The lack of even minimal studies of the design's potential consequences on the tabletop, shoreline, overall ecosystem, and general lakefront area should prevent variance approval.

Coastal Assessment of Southeastern Wisconsin's Lake Michigan Shoreline

Final Report

Chin Wu, University of Wisconsin-Madison

2018

1. Project Overview

1.1 Study Area

The study area is a 5-mile-long reach located in southern Kenosha County, Wisconsin on the southwestern coast of Lake Michigan. The northern border of the study area is 75th Street in Kenosha, Wisconsin, and the southern border of the study area is the Wisconsin-Illinois state line. Most of the reach is in the Village of Pleasant Prairie, apart from the northernmost mile of the reach, which is a part of the City of Kenosha. A previous shoreline inventory in 1977 identified much of this study reach at the most critically eroding reach in Wisconsin, based on shoreline erosion rates and property damage. A follow-up inventory in 1995 found the reach to be almost entirely protected against erosion with shoreline protection measures.

The coast in the study area is predominantly sandy and low-lying. On average, the bluff behind the beach, where present, is 4-5 feet tall and composed of unconsolidated sand. The maximum bluff height is 20 feet in the northern portion of the reach. The sand present in low-lying areas was deposited at a much higher lake stage, though sands that form the taller bluffs are dune sands. Glacial tills are not present in any of the bluffs, though a gray till and thin peat layers have been exposed under dune sands in the northern portion of the study area in Kenosha Dunes State Natural Area.

Beach width in the study area is variable, and beach widths ranging from 0-150 ft have been noted by previous shoreline inventories. Beaches that rapidly narrow and widen are common in the reach, especially near coastal structures. Areas up-drift (north) of structures typically have wide beaches, while down-drift areas commonly have narrower or non-existent beaches. Beaches are largely absent in front of revetments and other shore-parallel structures.

Shoreline defense in the study area has become ubiquitous on the shoreline. The 1977 shoreline inventory reports a high density of structures along the shoreline, while the 1995 report noted that shoreline protection structures nearly covered the entire shoreline. In 2015, 91% of the shoreline was protected by some form of coastal structure, while 9% of the shoreline was classified as sandy beach. The length of shoreline influenced by coastal structures is even greater, as areas that are near structures but not defended are not included in the estimate. The development of the shoreline has largely gone hand in hand with development of the hinterland since the 1950s. Presently, the coastal area is mostly composed of low-density suburban development, with a few public parks and beaches along the shoreline.

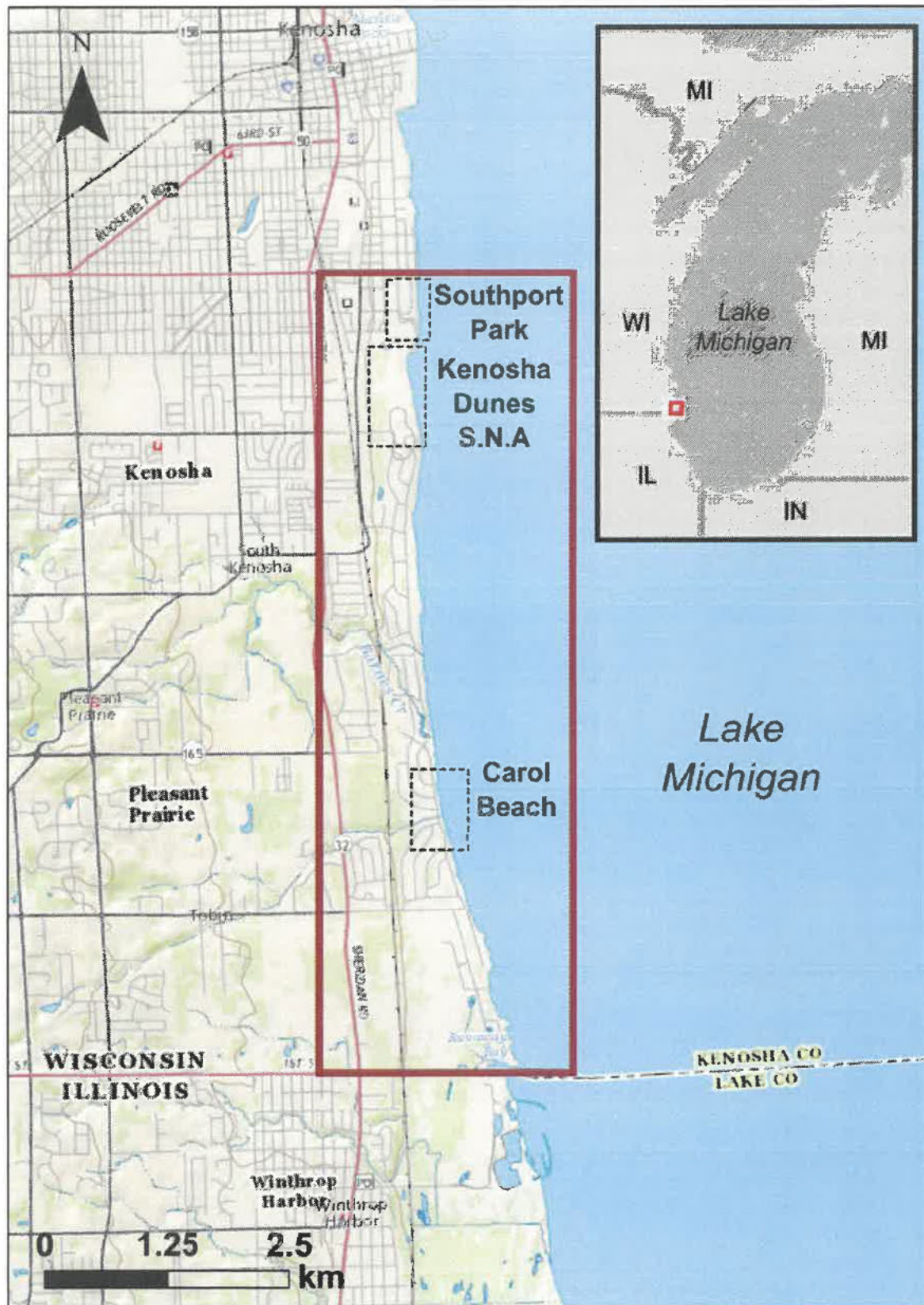


Figure 1. Map of the study area and the three study sites in southern Kenosha County

1.2 Project Scope and Purpose

The project is to evaluate coastal processes and dynamics including natural and artificial shoreline structures, pollution sources, and storm water runoff influence shoreline slope stability and erosion, sediment transport, and water quality in southern Kenosha County. Furthermore, we will develop a consensus plan and implementation strategy for shoreline restoration and water quality improvement, which will provide short and long-term solutions to area stakeholders.

To date, we have addressed the following activities listed in the project

- (A) Framework planning workshop
- (B) Baseline observations of coastal morphology
- (C) Sediment budget analysis
- (D) Hydrodynamic modeling
- (E) Sediment transport and water quality modeling.

Details of these activities are summarized in the report. Section 2 describes the framework planning activities. Baseline observations and sediment budget analysis at the regional area and local study sites will be documented in Section 3 and 4, respectively. Modeling and assessment for hydrodynamics and sediment transport/water quality will be presented in Section 5. At last, Summary and recommendations are given at Section 6.

2. Framework Planning Workshop

A framework planning workshop organized by National Resources Foundations of Wisconsin, Wisconsin Department of Natural Resources, UW-Sea Grant, and UW-Madison, took place in March 30th, 2016. The participants include City of Kenosha, City of Racine, Village of Pleasant Prairie, Carol Beach Property Association, the Friends of Chiwaukee Prairie, Red Barn Design Engineering, We Energies, DNR Natural Heritage Conservation Bureau and Office of Great Lakes, Wisconsin Coastal Management Program, and Illinois Coastal Management Program. The purpose of the workshop is to discuss the concerns of stakeholders and share the plan of the project.

Another project meeting consisting of the steering committee (WDNR, National Resources Foundations of Wisconsin, and UW-Sea Grant, UW-Madison) took place on June 12th, 2017. We worked together to arrive at a consensus on project goals/objectives. Currently, the project team has been working with Red Barn Design Engineering to develop three alternative concept plans: (i) restoration of native dune and natural shoreline habitats; rehabilitation of existing stone revetments; (ii) underwater submerged structures perpendicular to the shoreline; sill structures and reef balls; (iii) peninsular hardened headlands forming large protected pocket beaches and shore-parallel segmented low profile breakwaters with scalloped beaches. All these conceptual planning are to address severe Kenosha Dune Erosion issue.

3. Baseline Observations of Study Area (Regional Perspective)

3.1.1 Coastal Structure Inventory

Coastal structures are ubiquitous in the study area and have been present for several decades. Previous research has ascertained that coastal structures play large roles in subsequent coastal erosion, and that different types of structures impact coasts in various ways. In 1955, less than 20% of the regional shoreline was hardened, mostly in the extreme northern and southern portions of the reach. Rapid development of the coastal zone, particularly after 1976, has led to defense of nearly the entire shoreline. The only significant length of non-hardened shoreline is along Carol Beach. The number of coastal structures increased from 15 in 1955 to 78 in 1976 and 128 in 1995, and 149 structures were present in 2015 (Figure 23). Structure types are roughly evenly split between revetments and groins between 1955 and 2015.

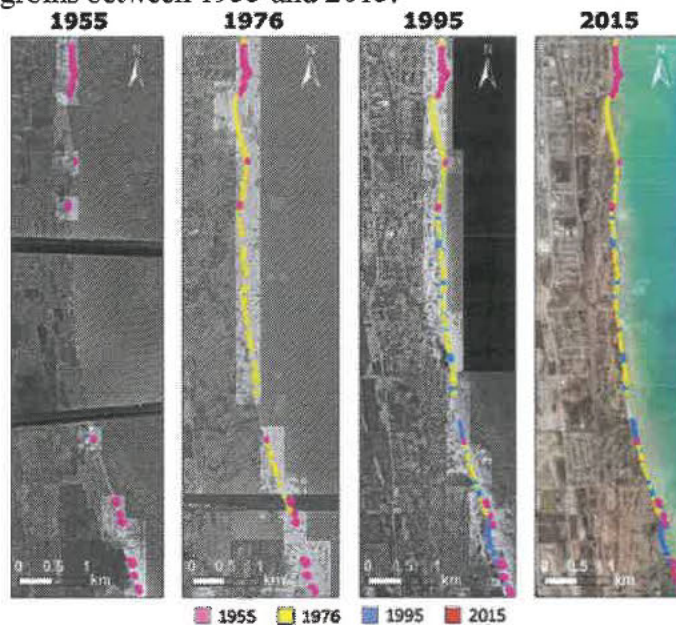


Figure 1. Coastal structures in the study reach from 1955-2015.

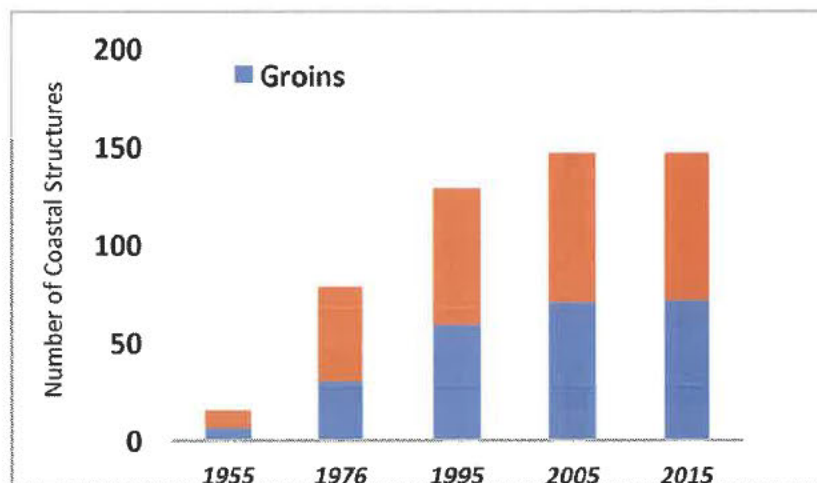


Figure 2. Number and type of coastal structures present in the study area from 1955-2015.

3.1.2 Coastal Structure Condition

Coastal structure condition in 2015 was assessed using 6-inch resolution color aerial orthophotos. Structures were categorized at “good”, “fair”, or “poor”, based on evidence of material failure, overtopping, and apparent stability. Of the 146 structures present in the reach in 2015, 46% were categorized as being in good condition, meaning that there was no evidence of failure (Figure 34). 25% of the structures were in fair condition, with some evidence of failure, and 29% of the structures were in poor condition, where structure failure was evident. The condition of the structures does not depend on the type of structure, as both types display similar distributions of condition (**Error! Reference source not found.1**).

2015 Structure Condition

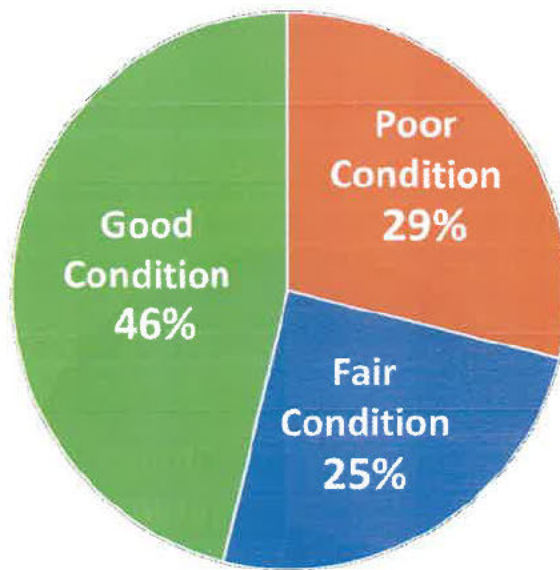


Figure 3. Coastal structure condition in 2015.

Table 1. Condition of coastal structures in 2015 (n = 146).

Condition	% Groins	% Revetments
Poor	24	33
Fair	31	19
Good	44	48

3.2.1 Historical Shoreline Change

Spatial variation of shoreline change is evident, particularly in the 1955-1976 epoch. Figure 45 *Figure 4. Map of shoreline erosion rates between 1955 and 2015.* shows maps of 200 m spatial averages of shoreline erosion rates for all epochs considered in this study. During the 1955-1976 epoch, shorelines advance or remain stationary in some places, but severely erode at nearby locations. Shoreline changes became much more uniform after 1976, with only 2 locations experiencing shoreline erosion rates greater than 0.5 m/year. A plot of non-spatially averaged recession rates shows three main areas of extreme shoreline erosion between 1955-1976, which are absent in subsequent time periods (

).

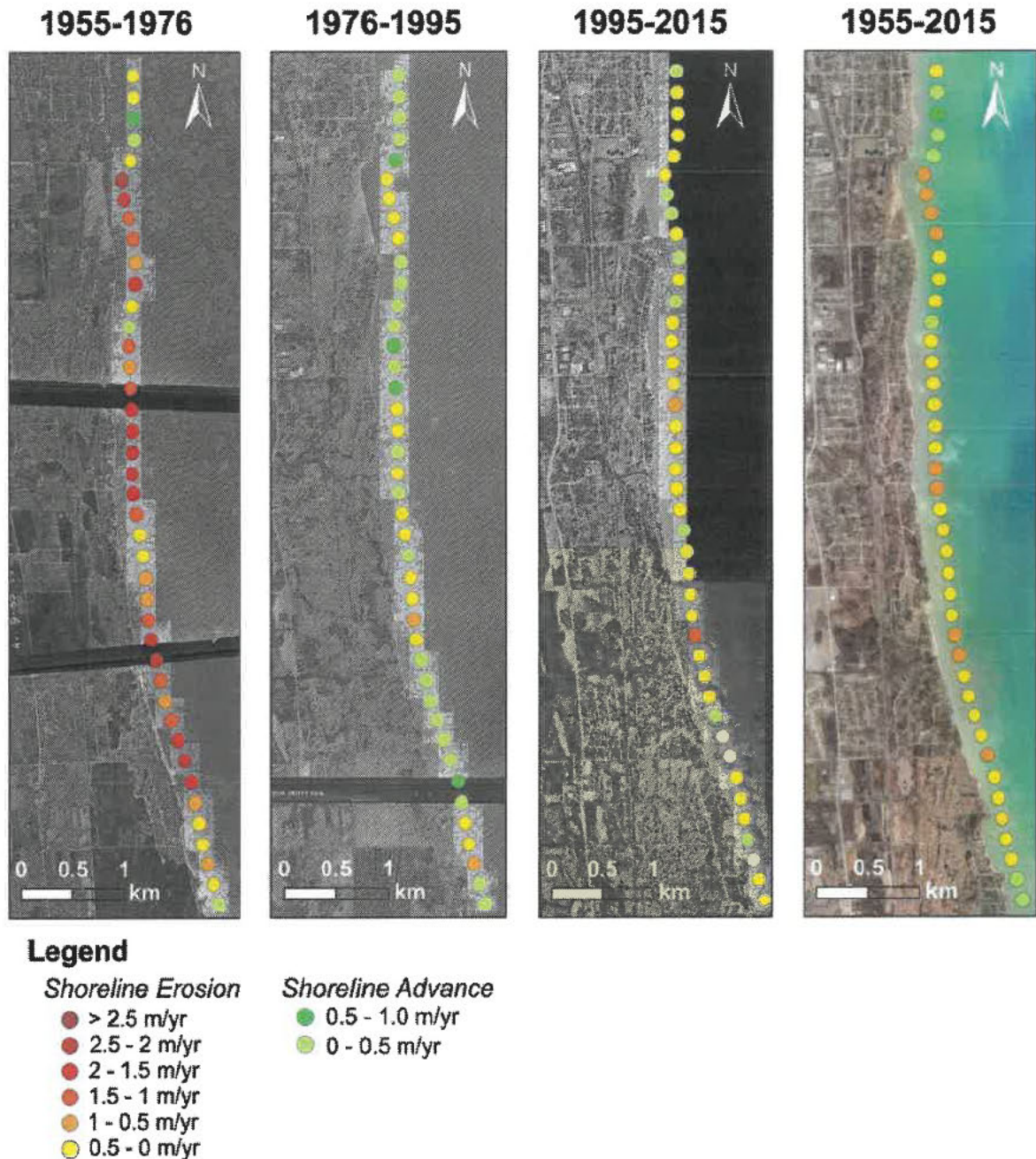


Figure 4. Map of shoreline erosion rates between 1955 and 2015.

Table 2 summarizes shoreline changes obtained from historical aerial photography in the study reach over four periods: 1955-1976, 1976-1995, 1995-2015, and 1955-2015. On average, shoreline erosion between 1955 and 2015 eroded at rates of -0.29 ± 0.06 m/year (Table 2). Overall, much of that erosion occurred between 1955 and 1976, when shorelines eroded by 1.05 ± 0.19 m/year. Since 1976, shorelines have generally remained stable or even slightly accreted, with averages of 0.09 ± 0.11 and 0.15 ± 0.09 m/year, for 1976-1995 and 1995-2015, respectively. Since 1976, shorelines in the study reach have experienced less variable erosion, greater amounts of shoreline accretion, and less severe shoreline erosion events (Table 2).

Table 2. Statistics of shoreline change for the four epochs measured in this study.

Epoch	Mean Shoreline Change (m/yr)	Shoreline Change Std. Dev. (m/yr)	Max. Shoreline Accretion (m/yr)	Max. Shoreline Erosion (m/yr)
1955-1976	-1.05	0.83	0.87	-2.62
1976-1995	0.09	0.37	0.93	-0.83
1995-2015	0.15	0.22	1.04	-0.18
1955-2015	-0.29	0.31	0.55	-0.92

Overall, the history of regional shoreline changes in the study reach can be divided into two phases: before and after shoreline development. Before 1976, much of the shoreline was undeveloped and the shoreline was rapidly eroding at an average rate of -1.05 m/year. Shoreline erosion was variable during this time, and high rates of erosion and deposition could occur along shorelines near each other. After 1976, shoreline changes were minor, and accreted on average by about 10 cm per year. In addition, variability of shoreline erosion was small, as were the maximum rates of shoreline erosion (Figure 6). High rates of shoreline change before 1976 suggest that the regional sediment budget was disturbed during this time, and the relatively large proportion of unprotected shoreline eroded to supply sediment to the littoral system. Largely stable shorelines after 1976 indicate that shoreline protection were successful in reducing shoreline erosion rates.

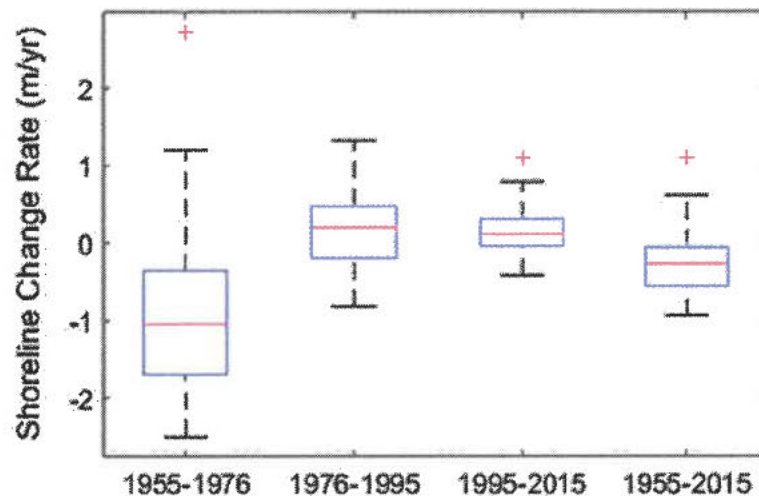


Figure 6. Box and whisker plot of shoreline erosion in southern Kenosha County from 1955 to 2015.

3.2.2 Shoreline Erosion Hotspots

Shoreline erosion hotspots were found in the study reach as the top quartile of spatially averaged shoreline erosion rates from 1955-2015 (eight of 41 transect groups). Shoreline erosion in these most severely eroded areas ranges from 60 to 39 m of erosion between 1955 and 2015. The area with four of the eight hotspots was Kenosha Dunes State Natural Area (shown in **Error! Reference source not found.**7), where ~55 m of shoreline change occurred between 1955 and 1976 and little change occurred from 1976-2015.

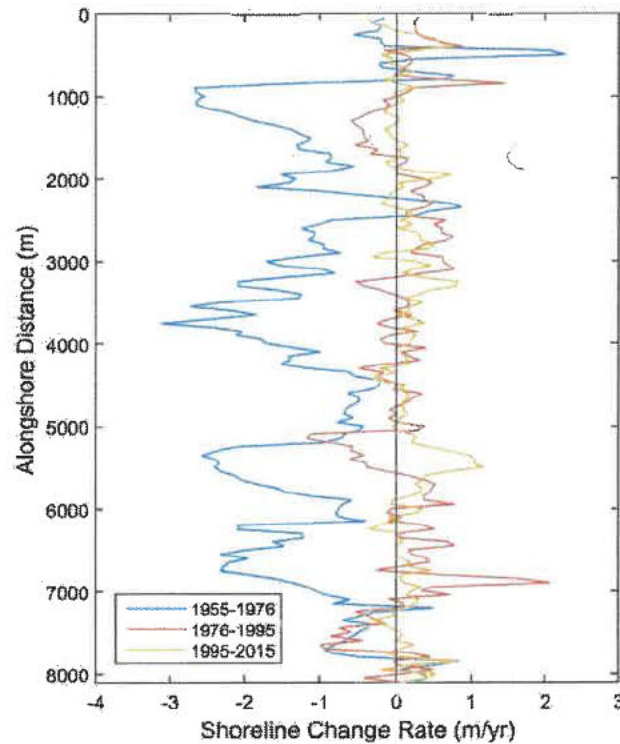


Figure 7. Plot of shoreline erosion rates in the study reach. Alongshore Distance (AD) of 0 m corresponds to the northern boundary of the study reach at 75th St., and AD = 8100 m corresponds to the WI/IL state line at the southern boundary of the study reach.

3.3 Relationships between Shoreline and Structure

Shoreline defense measures have long been recognized to influence shoreline erosion and deposition, though the impacts depend on coastal conditions and structure design (Kraus and McDougal, 1996). Structures certainly influence sediment budgets, as revetments and other shore-parallel structures impound terrestrial sediments and groins, jetties, and other shore-perpendicular structures interrupt longshore sediment transport.

On a regional scale, shoreline structures have stabilized the shoreline in the study area. A clear inverse relationship can be seen in Figure 8 between the percentage of eroding shoreline and the percentage of protected shoreline. As of 2015, 85-95% of the shoreline is protected by shoreline structures, depending on classification methods. Given that nearly the entire shoreline is protected, large shoreline erosion events in the area are likely to occur where structures fail or along the small areas of unprotected shoreline.

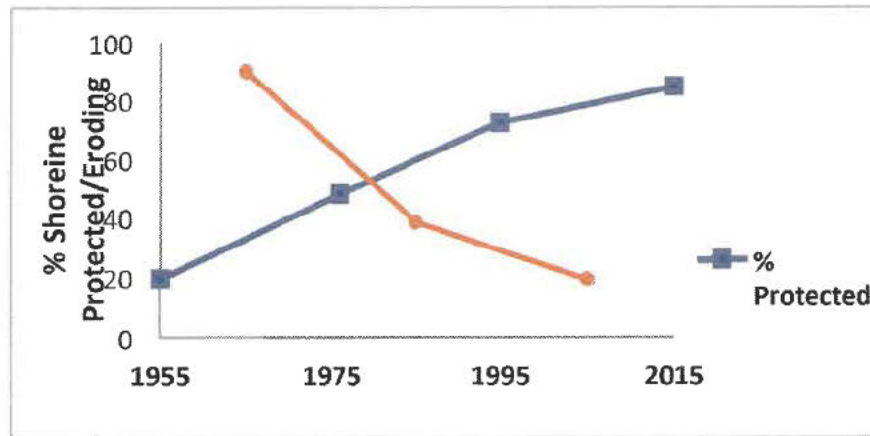


Figure 8. Comparison of the percentage of eroding and protected shoreline in southern Kenosha County from 1955-2015.

Local shoreline changes adjacent to coastal structures are often the result of disruptions of coastal sediment pathways and altered hydrodynamic conditions that may change bathymetry and sediment conditions (Jordan and Wu, 2017). Shoreline erosion was often most severe on the south (down-drift) side of coastal structures in the study area. Figure 9 shows a box and whisker plot of shoreline changes for the areas 50 m north and south of structures from 1955-2015. Structure information is taken for the beginning of the shoreline change epoch (i.e., 1976 structures for the 1976-1995 period). Areas adjacent to groins show nearly even accretion and erosion, showing that characteristic updrift/downdrift behavior occurs. On the other, areas near revetments erode more frequently. Areas further than 50 m from structures show the greatest variability between epochs, reflecting the overall average shoreline change for the reach. From 2000-2015, little variation exists in shoreline change rates because of the nearly complete defense of the shoreline.

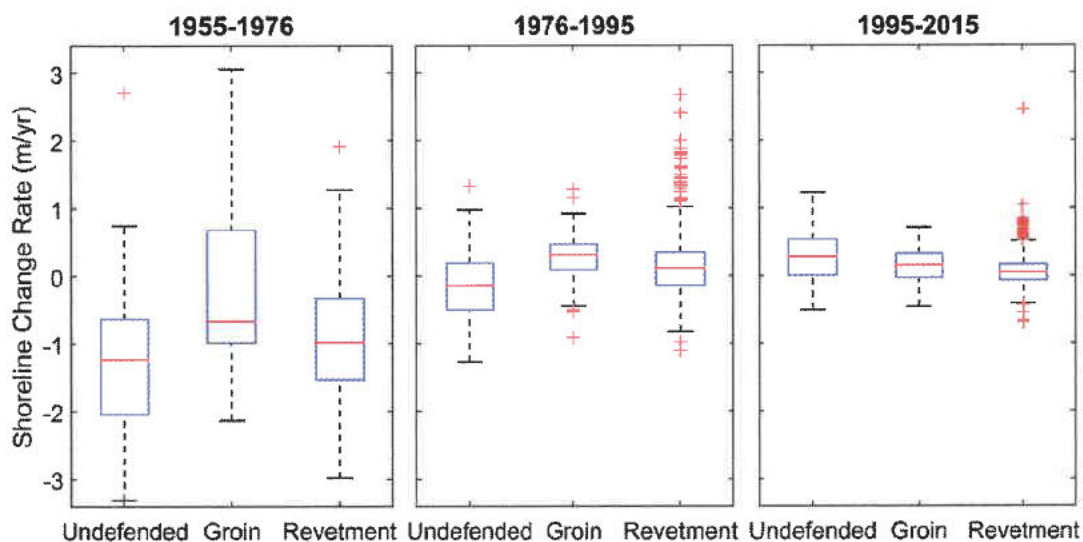


Figure 9. Box and whisker plot of shoreline change rates near different types of coastal structures.

4. Baseline Observations of the three Study Sites (Local Perspective)

The three study sites are: Southport Park, Kenosha Dunes State Natural Area, and Carol Beach (See Figure 1). Measurements were made in the summer and fall of 2016 and consisted of bathymetry/beach profiles, beach sediment characteristics, coastal structure conditions, and subsurface investigations, where appropriate. The following sections detail the baseline observations at the three study sites.

4.1 Kenosha Dunes

Kenosha Dunes State Natural Area is located in the northern portion of the study area. The park has a shoreline length of 860 m (~0.5 miles). The park contains important coastal wetlands and several rare and endangered species of plants. Kenosha Dunes S.N.A. also contains the rare ecological community type of unstable natural dunes. A revetment was built at the park between 1970 and 1975 in response to severe erosion of the dunes. That revetment began failing in the early 2000s. As of today, the middle 200 m of the revetment is completely failed (see Figure 10). Active failure of the unconsolidated sand bluff is occurring where the revetment has failed, and presents a danger to park-goers. Concerns at this area are focused on mitigating failures of the revetment and sand bluff in ways while considering economic, political, social, and ecological values.



Figure 10. Revetment failure and coastal erosion at Kenosha Dunes State Natural Area. Images obtained from Google Earth for 2015 and 2017.

4.1.1 Beach Profiles

Figure 11 shows the thirteen bluff, beach, and nearshore profiles measured at Kenosha Dunes State Natural Area in August 2016 (0). Profiles KD1-5 are along transects where the revetment is intact and erosion of the bluff or nearshore is not evident. Profiles KD6-10 were taken where the revetment is actively failing, and profiles KD11-13 were taken where the revetment is again intact. Figure 62 shows an example of the eroding transect KD-6.

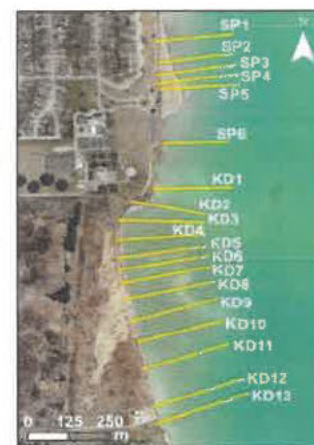


Figure 51. Map of beach profile transect locations at Southport Park and Kenosha Dunes

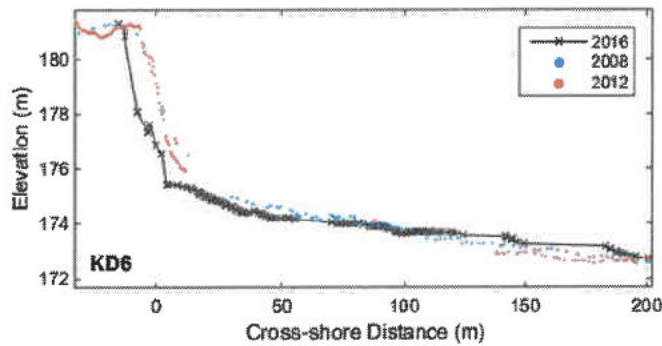


Figure 62. Example topographic/bathymetric profile from the failing section of the structure at Kenosha Dunes State Natural Area.

4.1.2 Beach and Dune Sediments

Figure 73 show an example of sediment particle size distribution at KD-6 transect. Beach and dune sediments were analyzed at Kenosha Dunes State Natural Area. Dune sand was found to be uniform fine and medium sand with a D_{50} of 0.27 mm (

Table 3). Where exposures of the eroded dunes were not covered with sloughed sediments, bedding was evident, suggesting aeolian deposition processes. Beach sediments were coarser and more poorly sorted in front of the revetment and failed revetment, with a D_{50} of 0.72 mm. The clayey glacial till underlying the dunes is exposed at the shoreline, and gravel and cobbles are the only sediments that remain on this exposed platform.

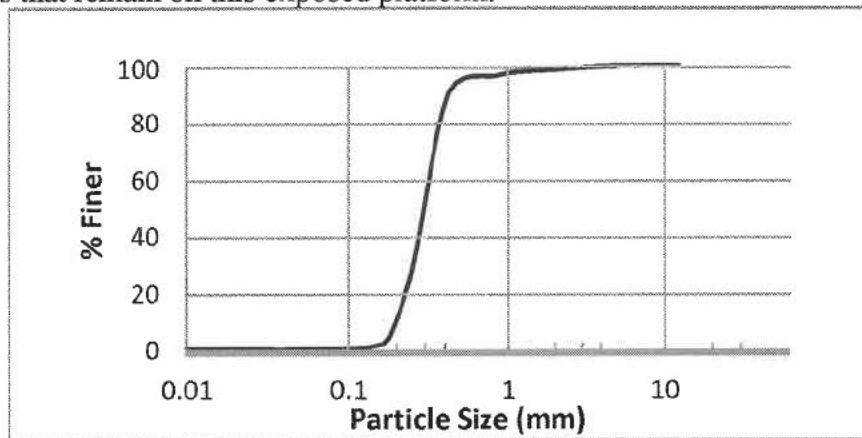


Figure 73. Grain size distribution curve at KD-6 transect

Table 3. Grain size characteristics of beach and dune sediments at Kenosha Dunes.

	D_{50} (mm)	D_{30} (mm)	D_{60} (mm)	D_{10} (mm)	C_c	C_u	Classification
<i>Dune</i>	0.27	0.23	0.30	0.19	0.94	1.57	SP
<i>Nearshore</i>	0.72	0.48	0.77	0.28	0.90	3.16	SP-SW

4.1.3 Subsurface Investigations

The ground-penetrating radar (GPR) investigation at Kenosha Dunes State Natural Area occurred on November 12th, 2016. Transects were measured parallel and perpendicular to the trend of the shoreline (Figure 114) surrounding the area where the revetment was failing. In all, twelve transects were recorded. The raw GPR outputs showing signal strength were analyzed to determine the elevation of the ground surface, groundwater table, and sand/clay interface every 5 m along the transects (**Error! Reference source not found.15**).

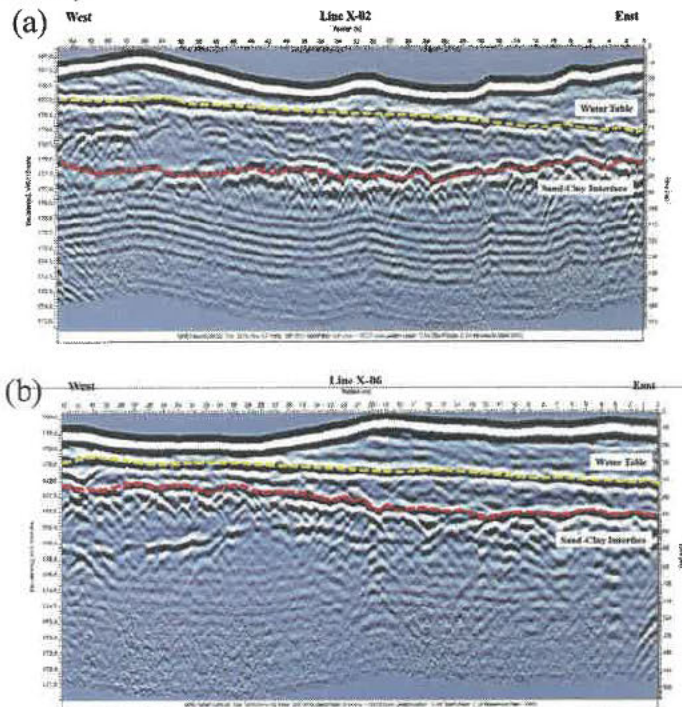
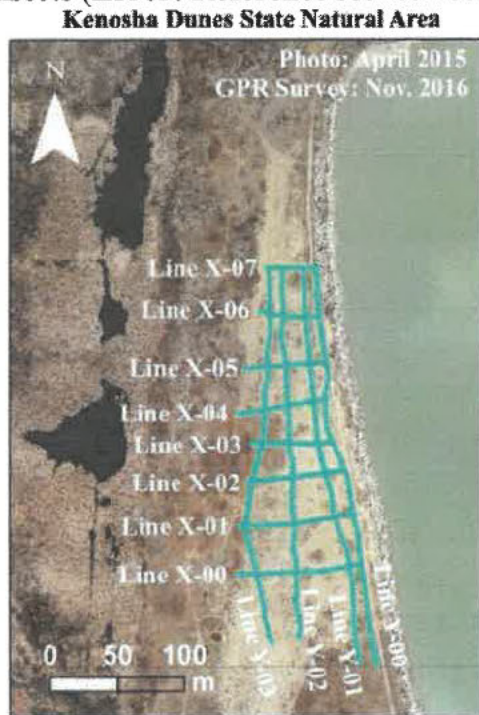


Figure 15 Raw GPR output with geologic interpretation for the transect line (a) X-02 and (b) X-06

The GPR results show a complete picture of the subsurface at Kenosha Dunes. The uniform medium sand that composes the dunes is present throughout the site, and appears to be slightly thicker to the east. The water table is present in the sandy layer and sits about 1.5 m above the lake at the easternmost edge of the dunes (Table 4). The gradient of the water table is 0.018 m/m. The grey clayey glacial till layer is present beneath the entire park. At the easternmost edge of the dunes, the sand/clay interface is about 0.5 m above lake level. The surface of the till is observed to be somewhat irregular beneath Kenosha Dunes. A thin (~5 cm thick) discontinuous peat layer is occasionally found in the lower sand and upper till layers along the exposed face.

Table 4. Average parameters of subsurface features at Kenosha Dunes.

	Kenosha Dunes Average
Lake Level	176.72 m above NAVD88
Water Table Elevation	178.31 m above NAVD88 (at dune crest)
Water Table Gradient (West to East)	0.018 m/m (to the east)
Clay Surface Elevation	177.14 m above NAVD88 (at dune crest)

4.1.4 Dune Recession

Dune recession and volumetric sediment losses from eroding dunes were measured at Kenosha Dunes State Natural Area. Recession rates and sediment volumes are calculated from historical shoreline change and dune crest measurements, beach profile surveys, and ground penetrating radar surveys. Historical changes of the shoreline were used as a proxy for dune crest recession in photos taken before 2000, when photo resolution limited identification and digitization of the dune crest. From 2000-2015, the dune crest was digitized from aerial photos. The dune crest line was measured with a differential GPS on November 12th, 2016. Statistics of dune crest recession rates are shown in Table 55.

Table 5. Dune crest recession rate statistics at Kenosha Dunes State Natural Area.

	Average Recession Rate (m/year)	Average Recession Rate of Eroding Transects (m/year)	Maximum Dune Recession Rate (m/year)	Recession Rate Uncertainty (m/year)
1955-1976	-2.33	-2.33	-2.98	+/- 0.8
1976-2000	-0.09	-0.14	-0.32	+/- 0.4
2000-2015	-0.06	-0.08	-0.29	+/- 0.3
April 2015- Nov. 2016	-0.55	-1.77	-6.89	+/- 0.4

Table 66 shows eroded sediment volumes for selected time periods and associated uncertainties. From 1955-1976, over 200,000 m³ of dune sediments entered the nearshore, at rates of -100-150 m³/m/year. From April 2015 to November 2016, 2386 m³ of dune sediments eroded in the area where the revetments were failing. The maximum erosion rate for this time period is -230.9 m³/m/year.

Table 6. Eroded sediment volumes and associated uncertainties at Kenosha Dunes State Natural Area.

	Total Eroded Sediment Volume (m ³)	Volume Uncertainty (m ³)	Maximum Dune Erosion Rate (m ³ /m/year)	Volume Rate Uncertainty (m ³ /m/year)
1955-1976	-200,959	+/- 74,960	-153.3	+/- 4.7
1976-2000	-2133	+/- 5950	-3.2	+/- 0.3
2000-2015	-3,842	+/- 1080	-15.5	+/- 0.1
April 2015- Nov. 2016	-2,386	+/- 1720	-230.9	+/- 4.4

Figure6 shows the alongshore distribution of volumetric erosion rates in Kenosha Dunes State Natural Area.

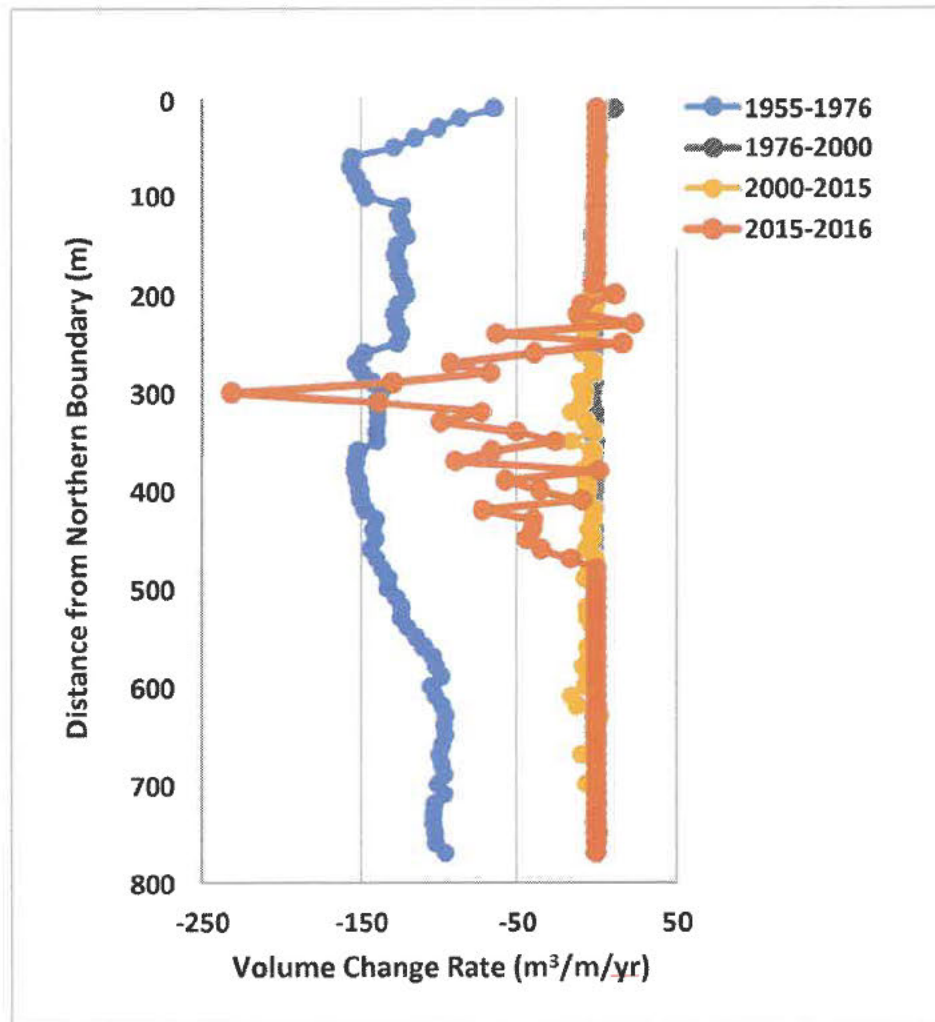


Figure 16. Volumetric erosion rates of dune sediments at Kenosha Dunes State Natural Area.

4.2. Carol Beach

Carol Beach is a popular recreational beach about 1 mile north of the Wisconsin/Illinois state line (Figure 17). The beach is about 600 m long. The northern half of the beach is not protected by shoreline structures, although a buried revetment lies near the road at the back of the beach. South of the small creek that divides the beach, a series of concrete groins serve to retain beach sediments. These groins were built in the 1990s. During the summer of 2016 (see Figure 18), the groin field appeared to be completely filled, and the shoreline is lakeward of the groins. Concerns at this area are focused on preserving beach health and beach width as surrounding areas develop and modify the shoreline.



Figure 97. Oblique aerial photo of Carol Beach in 2012. Image courtesy of USACE.



Figure 88. Photo of Carol Beach in August 2016. View is to the north

4.2.1 Shoreline Changes

Shoreline changes at Carol Beach follow trends that are similar to those of the overall reach. From 1955-1976, Carol Beach was the site of severe erosion as shoreline structures were built nearby. On average, the shoreline eroded at a rate of -1.92 m/year from 1955-1976. However, the shoreline accreted after 1976, including at a rate of 0.58 m/year from 1995-2015 (Table 7).

Table 7. Summary of shoreline change at Carol Beach.

Epoch	Mean Shoreline Change (m/yr)	Shoreline Change Std. Dev. (m/yr)	Max. Shoreline Accretion (m/yr)	Max. Shoreline Erosion (m/yr)
1955-1976	-1.92	0.50	--	-2.42
1976-1995	0.05	0.37	0.41	-0.46
1995-2015	0.58	0.34	1.04	--
1955-2015	-0.59	0.08	--	-0.67

The shoreline in the northern part of the reach continued to accrete from 2010-2015, despite a 1 m rise in water level between 2013 and 2014. The groin field at the southern portion of the reach is maintaining a relatively constant shoreline position (Figure 19)



Figure 19. Shoreline positions at Carol Beach from 1995-2015.

4.2.2 Beach Profiles

Beach profiles were taken along three transects at Carol Beach. Beach surveys were taken from the back of the dry beach to about 2 m water depth. All profiles were taken in August 2016 and compared to Lidar-derived profiles obtained in 2012 and 2008. Figure 20 shows an example of a beach profile showing little erosion of the beach. Beach profiles taken at Carol Beach did not show signs of erosion between 2012 and 2016, consistent with aerial photo measurements taken between 2010 and 2015.

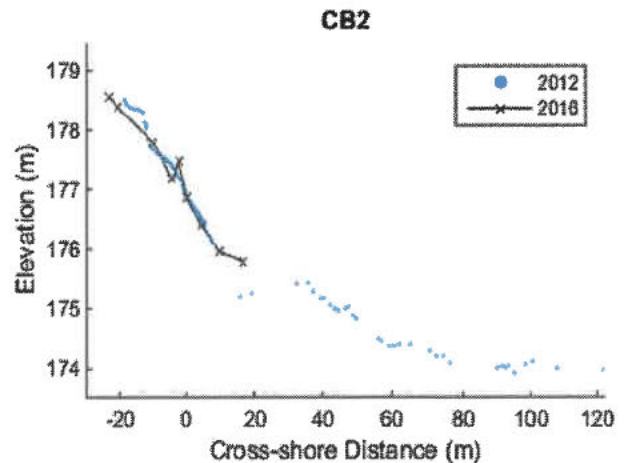


Figure 20. Beach profile taken at transect 2 at Carol Beach

4.2.3 Beach Sediments

Beach sediment samples were taken at the berm crest at Carol Beach along beach profile transects. Beach sediments were found to be uniform medium to fine sand (Figure 221 and Table 8). Sediment size distributions do not appear to be significantly influenced by the groins present at the southern end of Carol Beach.

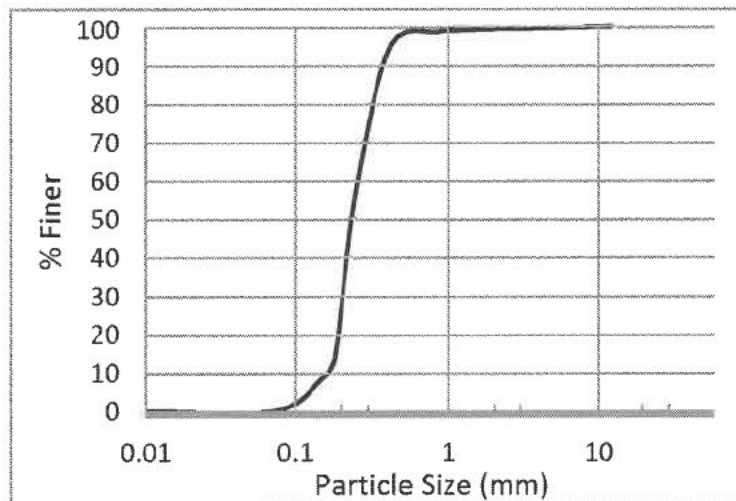


Figure 21. Grain size distribution for Carol Beach sediments.

Table 8. Statistics of grain size distribution for Carol Beach sediments.

	D ₅₀ (mm)	D ₃₀ (mm)	D ₆₀ (mm)	D ₁₀ (mm)	C _c	C _u	Classification
<i>Carol Beach</i>	0.38	0.25	0.36	0.18	0.73	4.05	SP-SW

4.3 Southport Park

Southport Park (**Error! Reference source not found.**22) is a popular park located at the northern boundary of the study area at the southern edge of the City of Kenosha. The shoreline of the park is about 850 m long. The park features an abandoned bathhouse and a large breakwater structure built in the 1920s. The breakwater originally served to protect a recreational beach, but was completely filled with sand after 2000, making shoreline access difficult in the area. The breakwater did create a large fillet beach to the north, which continues to be popular with recreational beachgoers. A series of long groins were built along the shoreline before 1955. All the groins have failed, and are present only a few feet beneath the water surface in many places. A revetment is present along the back of the beach north of the bathhouse. Several hundred feet of this revetment failed and was replaced in 2014 (Figure 23). South of the bathhouse a revetment protects the Kenosha Water Utility Wastewater Treatment Plant. The beach at Southport Park is popular, especially during the summer months. However, the beach is often contaminated with *E.coli* and other bacteria, and beach health and water quality is the primary concern.



Figure 22. Oblique aerial photo of Southport Park. Image courtesy of USACE



Figure 23. The breakwater structure in Southport Park.

4.3.1 Shoreline Changes

Shoreline changes at Southport Park have mostly been controlled by the shoreline structures present in the area. Much of the shoreline change at Southport Park is due to changing configuration of the breakwater structure, which has alternatively filled in and eroded. Overall, the shoreline change rate for this area is +0.13 m/year from 1955-2015 (Table 9).

Table 9. Summary of shoreline change at Southport Park

Epoch	Mean Shoreline Change (m/yr)	Shoreline Change Std. Dev. (m/yr)	Max. Shoreline Accretion (m/yr)	Max. Shoreline Erosion (m/yr)
1955-1976	0.01	0.47	0.87	-0.50
1976-1995	0.30	0.15	0.54	--
1995-2015	0.08	0.18	0.38	-0.18
1955-2015	0.13	0.22	0.55	-0.06

The fillet beach on the north side of the structure has remained relatively stable or slightly accreted since 1955 and has accreted since 1995 (Figure 24). Figure 25 shows the beach condition in 2016.



Figure 24. Shoreline position at Southport Park from 1995-2015.



Figure 25. Beach conditions at Southport Park in August 2016. View is to the northeast

4.3.2 Beach Profiles

Beach profiles were taken along six transects at Southport Park. Beach surveys were taken from the top of the berm crest to about 2 m water depth. All profiles were taken in August 2016 (see Figure 26) and compared to Lidar-derived profiles obtained in 2012 and 2008. Figure 24 shows an example of a beach profile showing little erosion of the beach. Beach profiles at Southport Park show little change between 2012 and 2016.

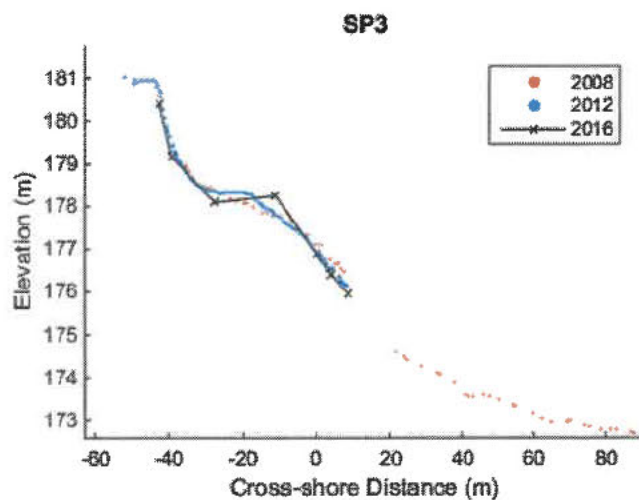


Figure 26. Beach profile taken at transect 3 at Southport Park.

4.3.3 Beach Sediments

Beach sediment samples were obtained from the berm crest at Southport Park where a beach was present on beach profile transects. Beach sediments include coarse sand, gravel, and cobbles, with little medium or fine sand (Figure 27). Table 10 summarizes the statistics off particle size distributions at transect 3 at Southport Park. In general, sediments farther north consisted of gravel and cobble while sediments nearer the breakwater consist mostly of coarse sand. Such spatial distribution suggests that longshore currents have transported easily mobilized sediments to the south, depleting northern reaches of sand.

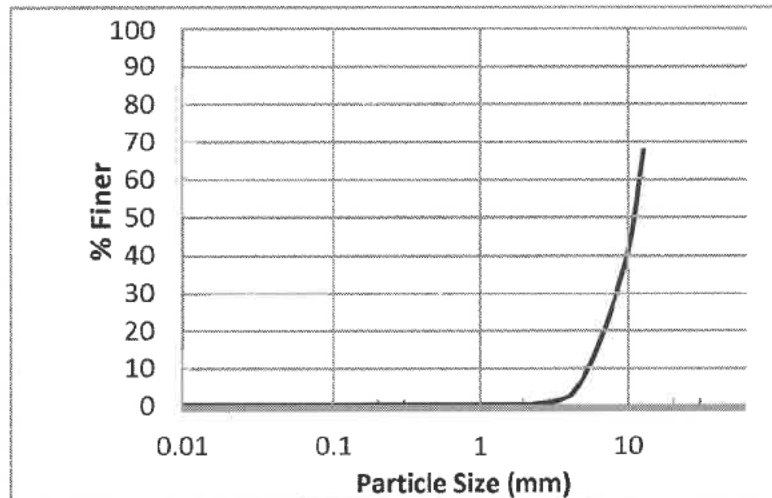


Figure 27. Grain size distribution of beach sediments at transect 3 at Southport Park.

Table 10. Statistics of grain size distributions for beach sediments at Southport Park.

	D ₅₀ (mm)	D ₃₀ (mm)	D ₆₀ (mm)	D ₁₀ (mm)	C _c	C _u	Classification
<i>Southport Park</i>	19.61	3.76	45.05	2.08	0.72	149.93	GP-GW

4.4 Summaries of the three study sites

Detailed coastal assessments have been conducted at three public shoreline areas in the larger Kenosha County study area. The three sites are affected to different degrees by nearby shoreline protection structures due to differences in coastal geology and shoreline protection measures.

Kenosha Dunes State Natural Area, is experiencing severe dune erosion where a revetment is failing. Dune crest recession between April 2015 and November 2016 has occurred at rates of up to 6.9 m/year where the revetment is failing. As a result, about 2400 m³ of dune sediments have entered the nearshore system. The rates of dune recession are similar to dune recession rates that occurred before the dune system was protected by a revetment. Geological field investigations show a glacial till layer underlying the dunes. This till layer is more resistant to erosion than the unconsolidated sand, but is itself prone to lakebed downcutting in the nearshore. Action is urgently needed to protect fragile ecosystems at Kenosha Dunes from dune erosion.

Carol Beach is mostly unprotected, apart from a series of filled-in groins in the southern section of the beach. Since 1995, the beach has accreted sediments at an average rate of 0.58 m/year. Although the beach has been stable for over 20 years, shoreline position in this area is susceptible to fluctuations in lake level and potential impacts of nearby shoreline protection structures.

Southport Park is located at the far northern reaches of the study area. Several types of coastal structures are present in the area and have led to mostly stabilized shorelines. Shoreline stability is also likely due to the abundant gravel and cobble present on the beach. These materials create steeper beach slopes, leading to smaller shoreline position changes when lake levels fluctuate. The structures present at Southport Park are crumbling in some areas, and should be repaired before they fail. Failure of the breakwater structure would lead to significant up-drift beach erosion and the loss of an important recreational beach in Kenosha.

5. Modeling and Assessment for Hydrodynamics, Sediment, and Water Quality

5.1 Model validation

Validation of the WWMIII-SCHISM (coupled wave- 3D hydrodynamic model) model conducted for the month of July, 2016. In order to capture the nearshore hydrodynamic conditions, a detailed grid with a high-resolution interpolated bathymetry is constructed for Kenosha. In particular, grid sizes range from 800 m, in offshore deep areas of Lake Michigan, to 10 m in Kenosha shoreline. A bathymetry survey with lidar observations was employed to interpolate the high-resolution model mesh, which is crucial for accurate representation of the nearshore hydrodynamic conditions. The validation was conducted by comparing wave direction and significant wave height offshore and nearshore of Kenosha between the well validated Great Lakes Coastal Forecasting System (GLCFS) and our model (Figure 25).

Results indicate the well agreement between both models, offshore (Figure 28 a and b) and 100 m away from Kenosha shoreline at a depth of 7 m (Figure 28 c and d). A comparison at a location closer to shore was not possible given the low spatial resolution of the GLCFS in nearshore areas. Overall, WWMIII-SCHISM exhibits an excellent agreement with the well validated GLCFS model both in terms of wave direction and significant wave height, thus being a validated tool to investigate water quality in Kenosha shoreline.

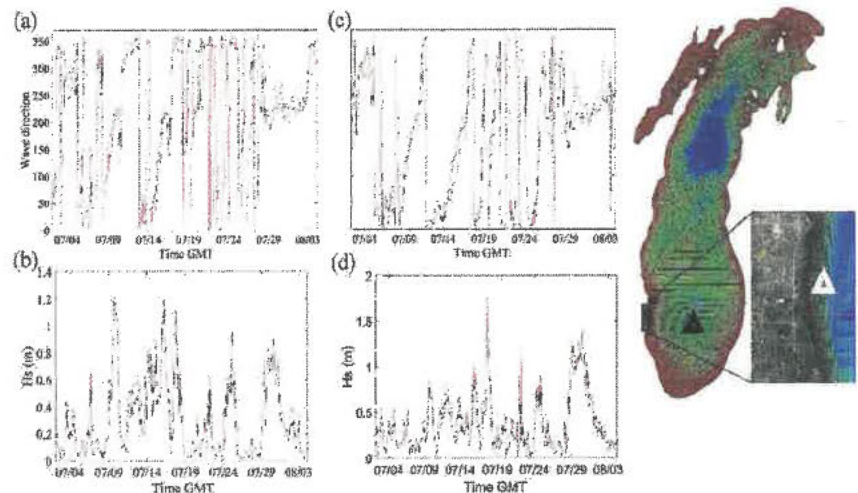


Figure 28. Wind wave direction and significant wave height of the Great Lakes Coastal Forecasting system (red) and WWMIII-SCHISM at offshore (a,b) and nearshore (c,d) locations.

5.2 Nearshore hydrodynamics

The nearshore of Kenosha Dunes, Carol Beach, and Southport Park exhibit shallow complex geometries where the interactions between wind waves and currents dictate the hydrodynamic conditions. Currents, which correspond to large-scale circulation patterns in the Great Lakes, are the major transport mechanism of dissolved nutrients, contaminants and sediments within the Great Lakes basins. Nevertheless, in the nearshore, where wind waves amplify due to nearshore transformations such as soaling or reflection and wave superposition, waves play a crucial role on the transport processes even modifying the circulation patterns induced by currents. In this study, we investigated the importance of wave-current interactions on hydrodynamic conditions in Kenosha nearshore by comparing the nearshore currents induced by a 3D hydrodynamic model (currents only) against a coupled 3D hydrodynamic – wave model (wave-currents interactions).

The difference of nearshore currents in Kenosha when the effect of waves is included in the analysis is illustrated in Figure 29. During a southerly (wind blowing from south to north) wind day the circulation pattern in the southern basin of Lake Michigan induce currents with a northward direction along the west coast (Figure 29a). The same northward pattern of the currents is obtained if we zoom in Kenosha shoreline (Figure 29b) when conducting the simulation with the hydrodynamic model only. In contrast, when coupling hydrodynamic and wave models that although the northward pattern remains present for the alongshore currents about 100 meters offshore, the currents in the very nearshore tend to reverse exhibiting a southward pattern. Additionally, a counterclockwise gyre is formed by South Port Park. This significant change of current patterns in Kenosha nearshore is caused by the effect of waves, which becomes more important as the bathymetry is shallower. These results indicate that to accurately assess the transport processes in Kenosha shoreline, wind-current interactions and the use of a precise bathymetry are necessary, and thus they will be included in the analysis.

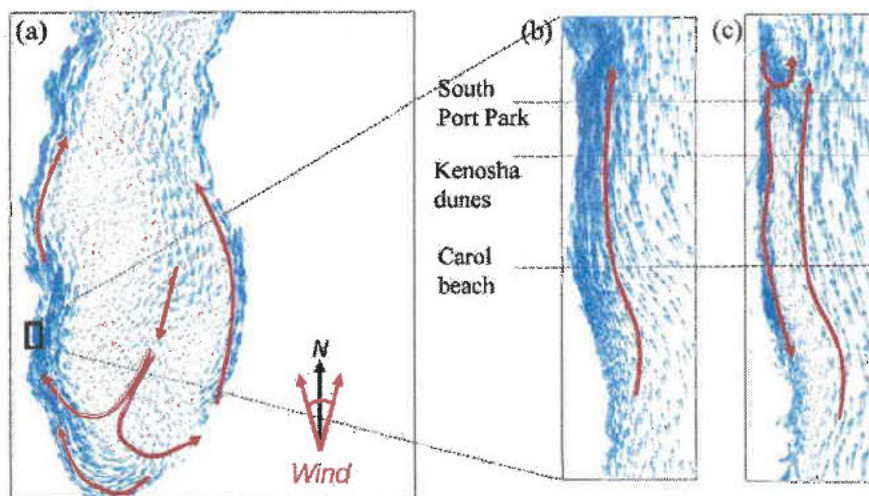


Figure 29. Currents induced by a southerly wind in (a) Lake Michigan basin. Currents in Kenosha modeled with (b) a hydrodynamic model and (c) a coupled hydrodynamic-wave model. Red lines indicate the major current direction.

5.3 Sediment transport assessment

Sediment transport in Kenosha Dunes, Carol Beach, and Southport Park is assessed with a sediment particle tracking model (PMT). The sediment PTM employs the hydrodynamic conditions as inputs and calculates the pathway of each particle. Ten thousand particles are initialized at each of the 3 locations under northerly and southerly wind conditions.

Under northerly wind conditions (Figure 30c), sediments at Southport Park are transported to Kenosha dunes and further south in about 2 – 3 days. Similarly, sediments at Carol Beach are transported southward. Interestingly, sediments at Kenosha dunes exhibit 2 types of behavior. Sediments located in the southern portion of Kenosha Dunes are transported rapidly, while sediments located in the northern portion tend to become trapped. Under southerly wind conditions (Figure 30d), sediments from Carol Beach are transported to

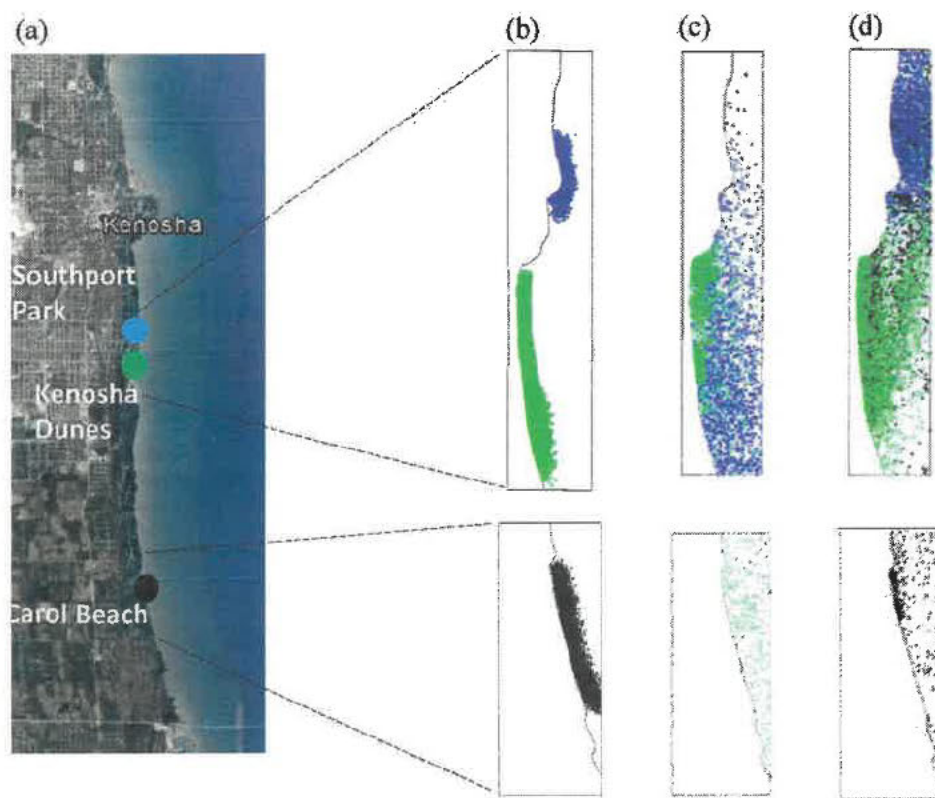


Figure 30. Location of particles at Southport Park, Kenosha Dunes, and Carol Beach at the initial time of the simulation (b), and after 4 days under northerly (c) and southerly (d) winds.

Kenosha Dunes, Southport Park, and further north in the order of 2 – 3 days. Part of the sediments in the southern portion of Kenosha Dunes are transported to Southport Park, where most part become trapped. The morphometry of the shoreline between Kenosha Dunes and Southport Park blocks the alongshore currents reducing the transport of sediments from Southport Park. Similarly, to the northerly wind case, sediments in the northern portion of Kenosha dunes are trapped exhibiting minimal transport. These results suggest that sediments located in the southern portion of Kenosha Dunes are more vulnerable to be eroded than sediments within the rest of the Dunes.

5.4 Water quality assessment

Water quality is assessed on the Kenosha nearshore by modeling the transport of dissolved particles from outfall locations that are present at the shoreline with the use of a particle tracking model. Outfalls are modeled as point sources by initializing hundreds of particles at each location. Figure 31 shows particle locations after 1 h of the initiation of the run under northerly (Figure 31c) and southerly winds (Figure 31d). Results indicate that dissolved particles such as nutrients or contaminants brought by the storm outfalls to Kenosha shoreline would rapidly mix and transport through long distances.

For instance, dissolved particles coming from Carol Beach, Kenosha Dunes, and the Kenosha Water treatment plant are able to cross the Wisconsin-Illinois state line in only 1 h under northerly winds (Figure 31c). Note how the outfall particles from the Water treatment plant (gray) travel at similar speed than those from the nearshore (light blue) at Southport Park, even if the outfalls are located at different depths. Similarly, under southerly winds, particles coming from different outfalls mix and reach Kenosha harbor in about 1 h.

Overall, this water quality assessment shows the rapid mixing of dissolved particles such as contaminants, and the long distances that they can dispersed in a matter of hours.

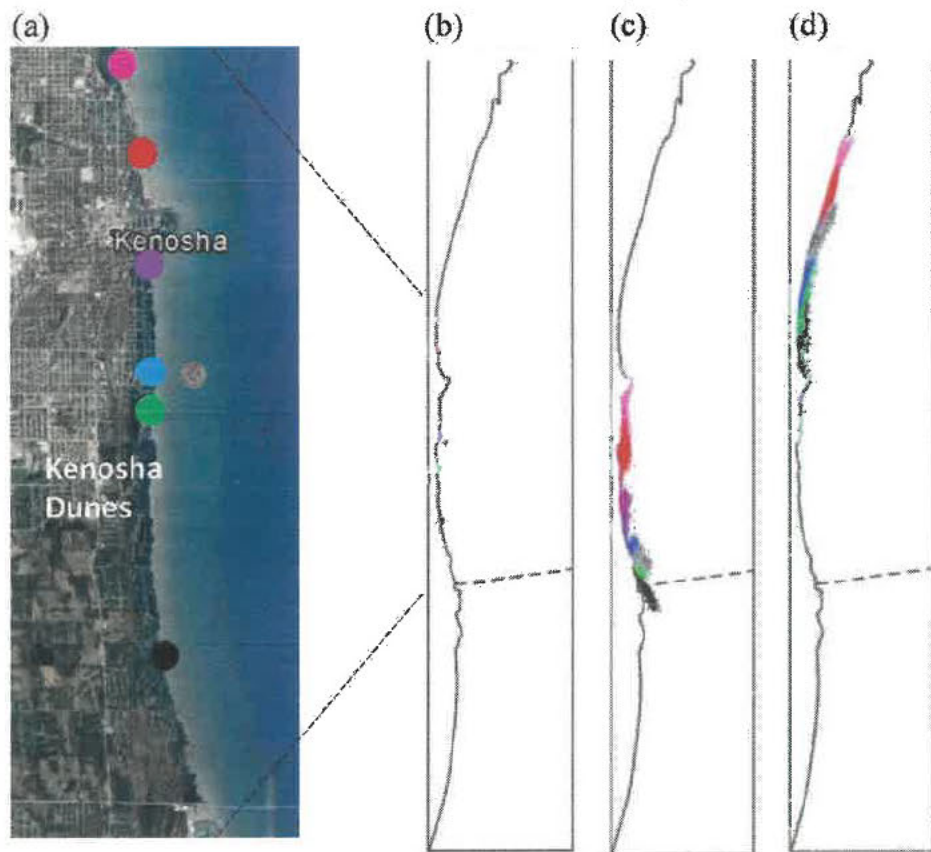


Figure 31. Location of particles at (from top to bottom) Alford Park outfall, Pennoyer Park outfall, 60th street outfall, Southport Outfall (light blue), water treatment plant outfall (gray), Kenosha Dunes, Carol Beach outfall at the initial time of the simulation (b), and after 1 day under northerly (c) and southerly (d) winds. Dashed line indicates the state border

6. Summary and Suggestions

During the project period, we have addressed the activities (A) Framework planning workshop; (B) Baseline observations of coastal morphology; (C) Sediment budget analysis; (D) hydrodynamic modeling; and (E) Sediment and water quality modeling and assessment. Specifically, we have completed (A), (B) and (C). Nevertheless, a few more observations of wind and sediment transport are needed to further validate the hydrodynamic and sediment/water quality models. Furthermore, we suggest to develop a set of scenarios with longer time (monthly and yearly) to assess the sediment and water quality impacts.

The project teams are working with Red Barn Design Engineering to develop three alternative concept plans: (i) restoration of native dune and natural shoreline habitats; rehabilitation of existing stone revetments; (ii) underwater submerged structures perpendicular to the shoreline; sill structures and reef balls; (iii) peninsular hardened headlands forming large protected pocket beaches and shore-parallel segmented low profile breakwaters with scalloped beaches. All these conceptual planning to mitigate severe Kenosha Dune Erosion issue will be presented to the Kenosha-Chiwaukee Coastal Steering Committee in the fall 2017. After the meeting, we will develop a refined draft plan with recommendations for shoreline improvements, comparative cost estimates, and ecological impacts on both natural and hydrodynamic processes will be further done in the future.

6. WPD's variance request for purported "Dog Park" compliant fencing under Cook County's Animal Control ordinance and regulations, is misleading and wrong. The Cook County's Animal Control administrator's recent response to WPD's inquiry about whether a supposed "water barrier" would violate Cook County's four-sided fencing requirement for dog parks, described Centennial dog beach as a "dog friendly area," while saying, calling the water a "barrier" would not violate dog park provisions. WPD did not receive a waiver entitling it to qualify as a dog park. Cook County had previously informed WPD's Mr. Kutulas that its "Beck Lake Dog Park" is fenced on all four sides. It did not offer him any examples of permitted "dog parks" with less than four-sided fencing.

In summary, WPD's variance request is based on flawed designs that are unsafe, unnecessary, unfounded, create nuisances, and violate the Village's 2040 Futures Plan.

Please do not grant the variance.

Sincerely,

Kristine Schriesheim



Outlook

WPD'S Centennial Dog Beach is a
"Dog Friendly Area" according to
Cook County Animal Control

RE: Waiver Request - Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

From: Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>

Date: Fri 9/13/2024 3:07 PM

To: Shannon Nazzal <snazzal@winpark.org>

Cc: Mamadou Diakhate (Animal Control) <Mamadou.Diakhate@cookcountyil.gov>; Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>;
Samantha May (Animal Control) <samantha.may@cookcountyil.gov>



Caution: External (mark.rosenthal@cookcountyil.gov)

First-Time Sender [Details](#)



[Report This Email](#) [FAQ](#) [Protection by INKY](#)

Dear Ms. Nazzal,

Thank you for your recent email regarding the Winnetka Park District dog friendly area.

We appreciate your notification and request.

Based on the information that you have provided to our department; we would not view the lake barrier as a violation of our current dog park ordinance.

Dr. Mamadou Diakhate

From: Shannon Nazzal <snazzal@winpark.org>

Sent: Wednesday, September 11, 2024 1:54 PM

To: Mamadou Diakhate (Animal Control) <Mamadou.Diakhate@cookcountyil.gov>; Mark Rosenthal (Animal Control) <Mark.Rosenthal@cookcountyil.gov>

Cc: Simon, Adam <ASimon@ancelglink.com>; Costa Kutulas <CKutulas@winpark.org>

Subject: Waiver Request - Cook County Animal and Rabies Control Ordinance, Regulation VIII. Dog Parks and Areas - Beaches

External Message Disclaimer

This message originated from an external source. Please use proper judgment and caution when opening attachments, clicking links, or responding to this email.

Dr. Diakhate,

I hope this message finds you well. I am reaching out on behalf of the Winnetka Park District regarding a waiver request for a portion of a Section in Regulation VIII – Dog Parks and Areas, from the Administrative Regulations of the Cook County Animal and Rabies Control Ordinance.

The Winnetka Park District is subject to the Cook County Animal and Rabies Control Ordinance, which, under Regulation VIII, last updated in 2010, stipulates in Section B, Number 2, that dog parks must be completely enclosed by a contiguous fence. As we are located along the lakefront, we, like many other lakefront communities, envision an off-leash dog area where the lake serves as the natural barrier, enclosing the park on three sides with the lake left open.

We are currently in the permitting process with the Village of Winnetka through their Special Use Permit process for our beach improvement project at Centennial Park & Beach (225 Sheridan Road, Winnetka). As part of this process, the Village has requested an opinion from Cook County regarding the full enclosure requirement as a stipulation of our application. The proposed area will meet all other requirements outlined in the Ordinance and Regulation VIII, and we are seeking this waiver to allow the lake to serve as a natural boundary.

We appreciate your consideration of this request and are happy to provide any additional information or answer questions to facilitate the process.

Thank you for your time and attention to this matter.

Sincerely,

Shannon Q. Nazzal, CPRE (she / her)
Executive Director

⑥

Re: Dogs - Forest Preserves of Cook County

Costa Kutulas <CKutulas@winpark.org>

Wed 2/21/2024 1:03 PM

To: Shannon Nazzal <snazzal@winpark.org>

Shannon,

After speaking with one of their representatives and reviewing their website, I confirmed that the Beck Lake site is completely fenced off to secure the "off-leashed dogs" from leaving the designated area. The link below outlines this information as well.

<https://fpdcs.com/things-to-do/dogs/#off-leash>

Kris suggests we are out of compliance because we require leashes once a member is beyond the electronic gate on the beach.

Based on the outreach from David regarding the questions asked by Kris Schresheim, the Winnetka Park District is following the Cook County Animal Control Ordinance (https://library.municode.com/il/cook_county/codes/code_of_ordinances?nodeId=PTIGEO_CH10AN) (Section 10.4 & Section 10.8_P), which requires pets to be leashed, similar to the Village of Winnetka Ordinance. The current Centennial Beach site is not secured on all sides but only on the western border and allows dogs, if off-leashed, to travel either north or south beyond the boundaries of the Park District. For reference, the CCFPD Beck Lake Off-Leash Dog Park site is secured with a fence on all sides of the off-leash area.

Because of the inherent risk, the Park Board motioned to keep the dog beach operating as long as owners keep their pups on leash.

Please let me know if you need additional information to follow up with David.

I will note that our approved plan for Centennial Dog Beach does secure the "off-leash dog beach" per our 10/19/23 Park Board approved Schematic Design Plans and would conform with the Cook County Ordinance.

Thanks,

Costa Kutulas
Director of Parks and Maintenance

COOK County "Dog Parks" must be Fully Fenced. "Dog Friendly Areas" do not need such fencing.

John William Root
326 Woodland Avenue
Winnetka, IL 60093
Telephone: [REDACTED]
Email: [REDACTED]

Sent by electronic mail: dschoon@winnetka.org

Mr. David Schoon
Village of Winnetka
Director of Community Development
510 Green Bay Road
Winnetka, IL 60093

November 4, 2024

Re: Case No. 24-08-SU
225 Sheridan Road – Centennial Park & Beach
Comments for 11/11/24 Hearing

Dear Mr. Schoon:

The following comments summarize my concerns about the 10/14/2024 ZBA review of the Centennial SUP beach design. I have also included comments on WPD's SUP for the Elder beach design and how this design conflicts with Village ordinances, particularly the Village zoning ordinances. I would appreciate your assistance in sharing my comments as part of the official packet to be delivered to the members of the Village of Winnetka Zoning Board of Appeals for the continued hearing on Case No. 24-08-SU to be held 11/11/24.

Comments on ZBA Review of Centennial SUP during October 14th Hearing

The WPD claims that Village staff have issued an opinion that the WPD's proposed Centennial Park vertical improvements of boardwalk and pier to be in the front yard setback are characterized as either a wall or a fence. In his presentation to the ZBA on October 14, 2024, David Schoon supported this position by claiming that an elevated boardwalk does not violate the 50' front yard setback if the boardwalk and fencing on the boardwalk does not exceed 6.5' in elevation. A member of the ZBA Board challenged Mr. Schoon's position stating that permitting an elevated boardwalk without a variance was at odds with the front yard setback ordinances. Mr. Schoon argued that the boardwalk is a "wall" topped by a fence. Figure 1 below is a cross section through the proposed boardwalk and ADA access ramp and illustrates Mr. Schoon's argument.

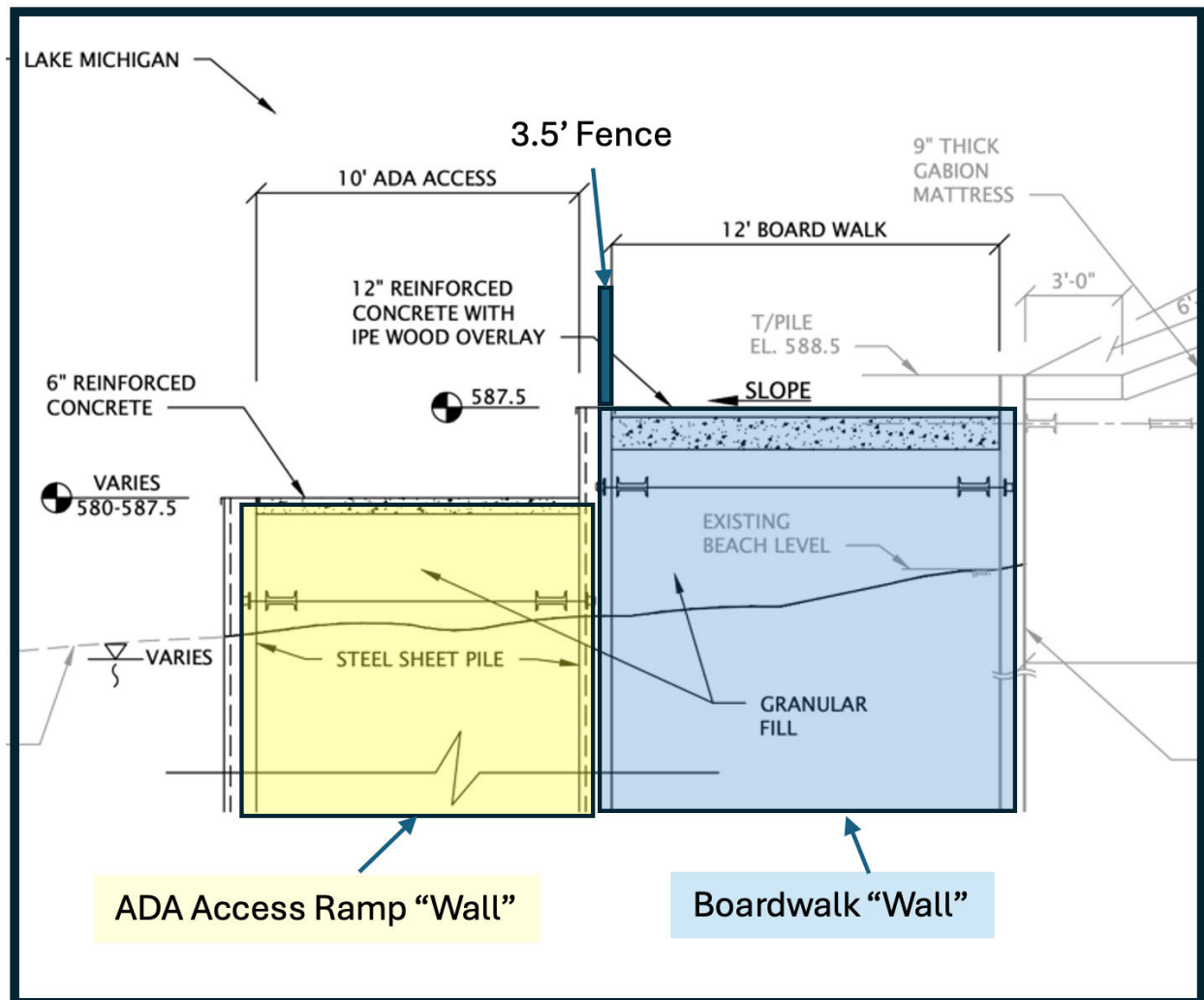


Figure 1: Cross section through ADA access ramp and boardwalk.

Mr. Schoon would have you believe an elevated boardwalk, the area shaded in blue, is a “wall”. This “wall” consists of two steel sheet piles and is topped by a concrete deck. There are no definitions for “wall” or “fence” in the front yard setback sections of the code but the common meaning of wall in a front yard means a masonry fence around a garden, park, or estate. Characterizing all vertical improvements as a wall or fence would gut the front yard setback ordinances for all residential properties. The ZBA and Village Trustees should instruct Village Staff to follow Village ordinances.

In his October 14th presentation to the ZBA concerning the Centennial SUP Mr. Schoon also stated:

“If a proposed development does require approval of some type of zoning entitlement relief, during Village staff’s review of the zoning entitlement application we will conduct

a preliminary review of the project for code requirements to determine if the development should be able to, in general terms, comply with administrative code requirements.”

By his statement, Mr. Schoon has asserted that the elevated boardwalk and pier only require a variance for the guard rails and fences that are proposed to be installed on the top of these structures. He argues that the structures themselves do not violate the front yard setback ordinances. Assuming Mr. Schoon is correct, then one must assume that Village Staff has made a preliminary review of these structures and that these structures generally comply with the Lakefront Construction ordinances. I strongly disagree that these structures meet the test of what is minimally necessary to accomplish the purpose of the project. The proposed boardwalk and pier block sightlines and pose significant safety hazards to the public. There is little evidence in Village Staff’s comments on the SUP that their preliminary review applied the Lakefront Construction ordinances. The only reference to the ‘minimally necessary standard’ was made by Mr. Nairn, the Village’s consulting coastal engineer, when discussing the height of the pier. Mr. Nairn states that the pier, as designed, will be subject to overtopping (high waves washing over the pier) and the pier elevation would be what is minimally necessary for a pedestrian viewing pier. Mr. Nairn makes no acknowledgment of the existing Elder pier that is located 500’ away from the proposed pier to be constructed at Centennial and that another viewing pier is not needed. Mr. Nairn also fails to discuss whether it is appropriate to build a massive 79’ wide pier on Centennial for the primary purpose of separating the dog beach from the people beach, which is the WPD’s justification for the pier.

WPD’s Elder SUP

The Elder SUP was submitted to Village staff on 9/6/2024 and to my knowledge Staff has not yet submitted comments on the Elder SUP. Mr. Schoon stated at the Centennial SUP ZBA review that Centennial and Elder were two distinct parcels and the applicant had the right to submit separate permit applications. I agree with the ZBA board member who stated that the two SUPs should be considered together. This is particularly true when the WPD continues to assert that the Orchard 2020 Property Exchange Agreement is still valid such that when it awakens from its ‘dormant’ state and is performed the two beaches will be united. There should be nothing preventing ZBA board members from reading the Elder SUP application and from submitting questions to the WPD when they see relevant issues where design from Elder affects designs planned for Centennial. I have read the Elder SUP and I will share my comments and concerns with the ZBA.

Elder Lakefront Design Defects

Elder Stone Groins Design Defects

The WPD’s October 2023 construction plan for Elder/Centennial includes a rubble stone pier on Centennial and two rubble stone groins on Elder (figure 2).

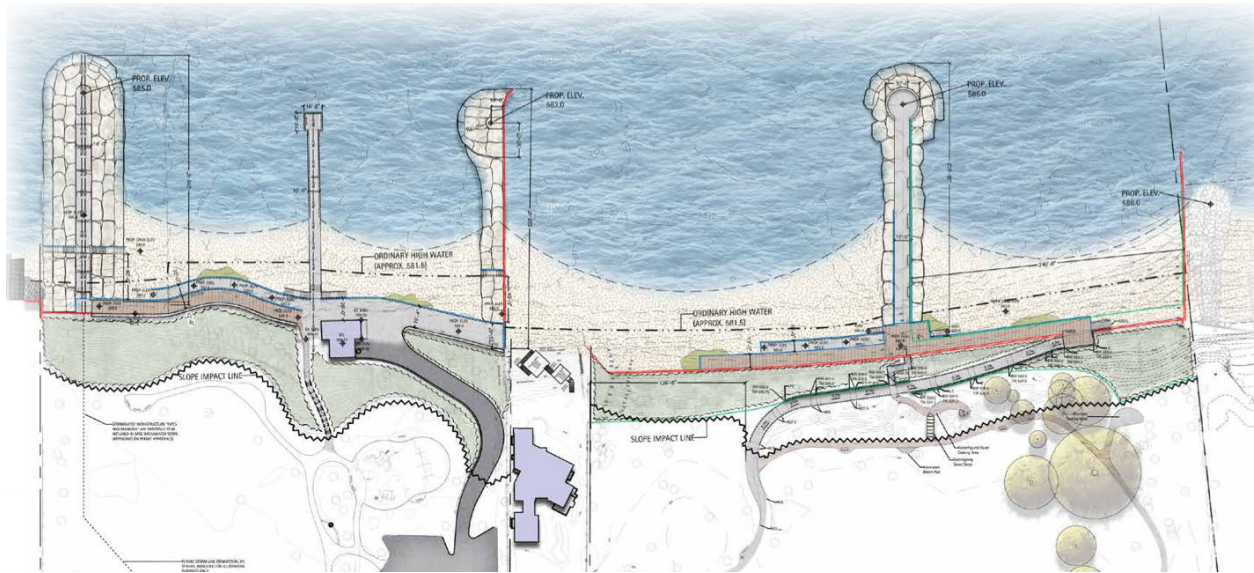


Figure 2: WPD's October 2023 plan

The proposed northern stone groin starts at the toe of the bluff with an elevation of 586' and extends 219' eastward into the lake with an elevation of 585' at its terminus. The proposed southern stone groin starts at the boardwalk with an elevation of 585' and extends 208' eastward into the lake with an elevation of 583' at its terminus. Both stone groins are less than 6.5' above grade within the front yard setback zone. Please note that the WPD is not seeking a variance for these structures. The WPD characterizes these structures as "walls" that are allowed in the front yard setback and refers to its August 2024 SUP permit for Centennial where it claims that Village staff have issued an opinion that the WPD's vertical improvements of boardwalk and pier in the front yard setback are characterized as either a wall or a fence:

"As outlined in Chapter 17.30, Section 17.30.050(C)(7) Front yard setback for Lakefront Properties, it's noted that the required front yard setback is the toe of the bluff or 50 feet from the ordinary high-water mark, whichever results in the line farthest from the ordinary high-water mark. Nonetheless, Section 17.30.130(A) describes permitted obstructions in required yards. Village staff have issued an opinion that the District's vertical improvements in the front yard are characterized as either a wall or a fence, as described in Section 17.30.130(A)(10). (*highlighting for emphasis*). Based on the District's review of these sections and staff's code interpretation, we propose including the following project elements as variations since they exceed a height of 6.5' from grade." (August 2024 SUP permit for Centennial)"

The WPD may be correct in assessing Village staff's opinion. Mr. Schoon's comments on the elevated boardwalk to the ZBA on 10/14/24 (*that I have described above*) would appear to support WPD's interpretation.

In my opinion, the characterization of boardwalk and pier structures as a “wall” or “fence” is ludicrous. Section 17.30.130(A)(10) states which structures are permitted in the front yard setback:

“ A. Obstructions Permitted in All Required Yards and Required Inner and Outer Courts. The following obstructions shall be permitted in all required yards, provided they comply with all other applicable standards of this Chapter:

10. Fences and walls not exceeding 6½ feet above natural grade located along a front or corner lot lines, except that no fence or wall shall extend within 10 feet of the intersection of a driveway and sidewalk or within 25 feet of the intersection of the street line of two intersecting streets: (17.30.130(A)(10)).”

There are no definitions for “wall” or “fence” in the zoning code. Section 17.30.130(A)(10) was passed on 4/2/96 long before the Lakefront Construction ordinances and the Steep-Slope Construction ordinances were passed. The context of the ordinance indicates that “wall” means a masonry fence around a garden, park, or estate. The elevated boardwalk, northern stone groin, and southern stone groin are not “walls” or “fences” within the meaning of the front yard setback ordinance. The boardwalk falls entirely in the front yard setback and 30’ of the northern stone groin and 40’ of the southern groin falls within the front yard setback. These structures require an SUP because they are structures that are prohibited by 17.30.130(A). The ZBA should require the WPD to file a variance in their SUP for Elder for the northern and southern stone groins and insist that Village staff follow 17.30.130(A)(10).

Elder North & South Stone Groin Defects

WPD’s October 2023 design for Elder (figure 3) in its SUP, the North and South rubble stone groins are perpendicular to shore and will cover a wide swath of beach.

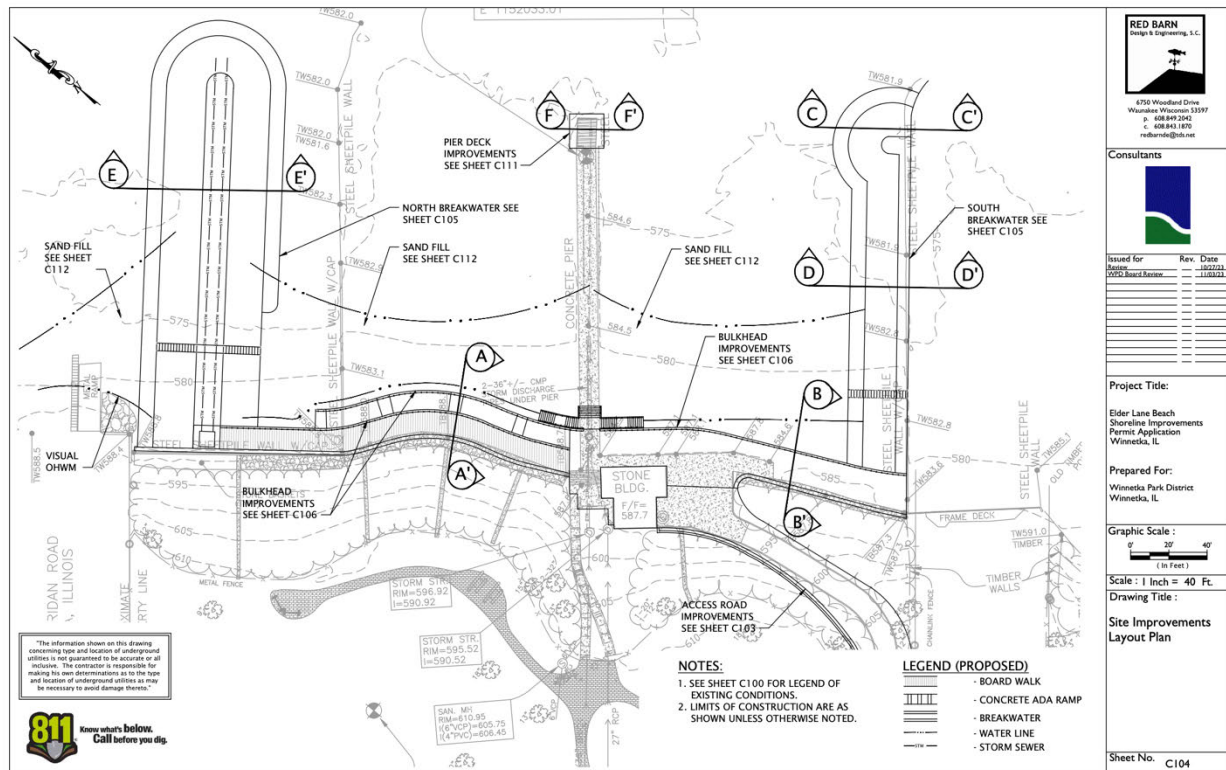


Figure 3: October 2023 Elder lakeshore construction plan

The massive Northern groin pier has a width of 61' (figure 4). A 61' swath of beach and lake will be covered with cement, steel, and stone and will be unavailable to swimmers.

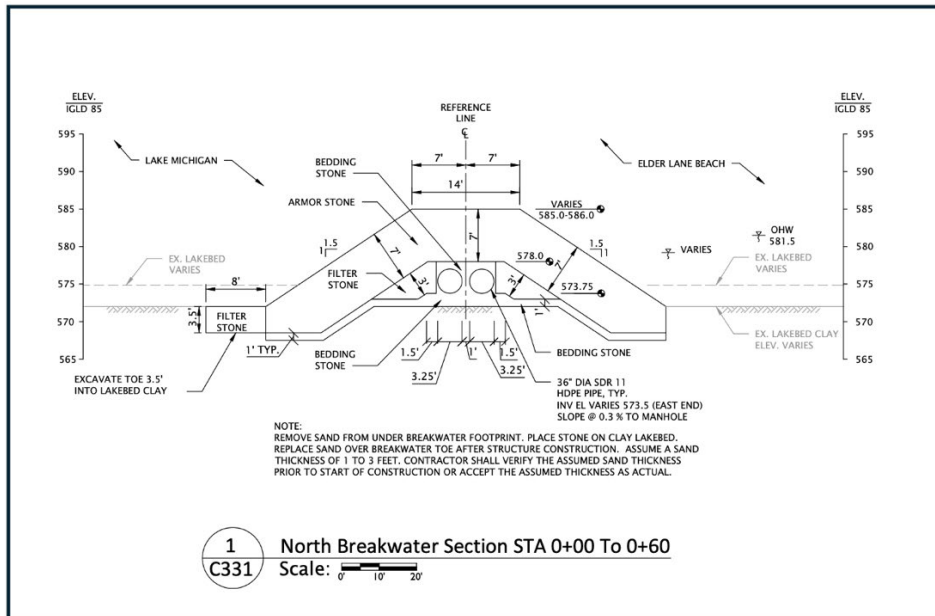


Figure 4: Cross section through proposed Northern groin

The Northern groin extends 219' into the lake and will cover an area of 13,359 square feet of lakebed and beach. The Southern stone extends 207' into the lake, is 31' wide and will cover an area of 6,439 square feet of lakebed and beach. (figure 5).

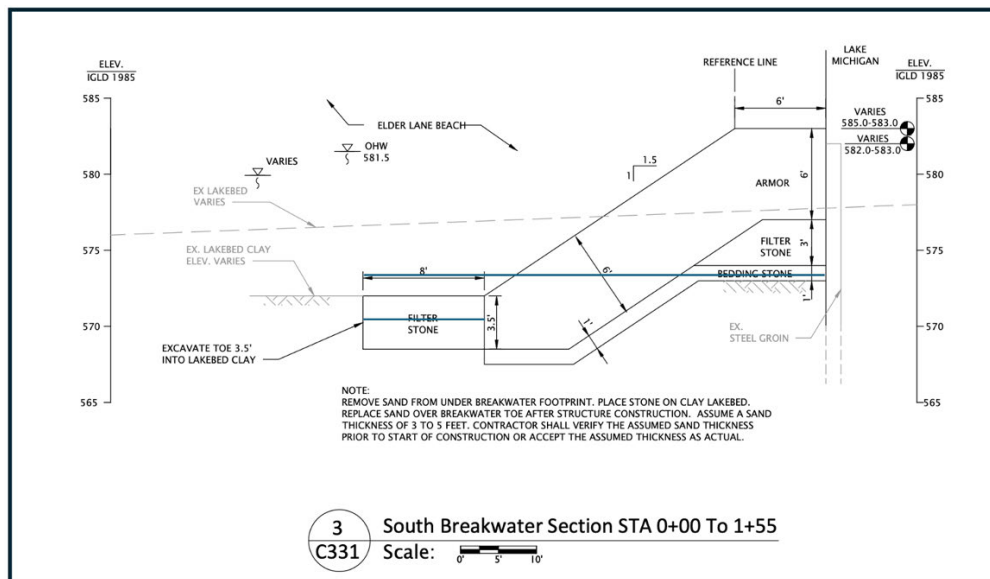


Figure 5: Cross section through proposed Northern groin

By covering so much area of the lake with the two stone groins the WPD is harming the lakefront environment and the welfare of the community by obstructing sight lines (Section 15.78.080(G)) with these massive structures.

The WPD claims in its Elder SUP that its design will provide shoreline stabilization:

Shoreline Stabilization: Steel sheet pile repairs, armor stone groins with pedestrian access stairs, sheet piling boardwalk with intergraded concrete wave wall, duneland grass plantings, and native bluff land revegetation program.

The WPD makes further claims for the Southern stone groin:

The stone groin is designed with a small 15-foot north buildout to allow for greater sand retention for the beach.

As I have noted in my objections to the Centennial SUP design, the Elder-Centennial beach design is not a headland beach system designed to retain sand on the beach. At the April 27, 2023, WPD board meeting, the board was reviewing and adopting a design concept for Elder/Centennial beaches that is the precursor for WPD's current design in the Elder & Centennial SUPs. The conceptual plan involved three phases: Phase 1 involved construction of one stone groin on Elder, a stone knob on Elder and a stone knob on Centennial (figure 6), Phase 2 involved construction of a stone groin on Centennial separating the dog beach from the people beach (figure 7) and, Phase 3 involved the construction of a stone groin parallel to shore between Elder and Centennial (figure 8).

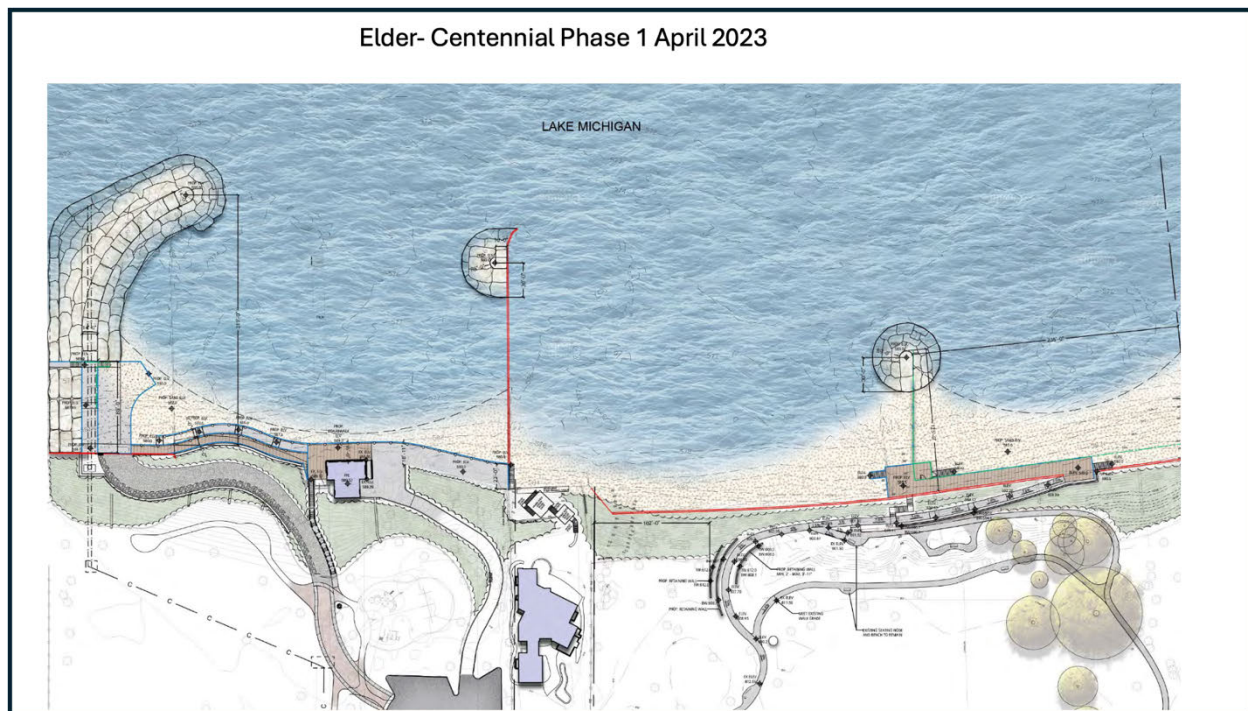


Figure 6: Phase 1 Elder-Centennial concept April 2023

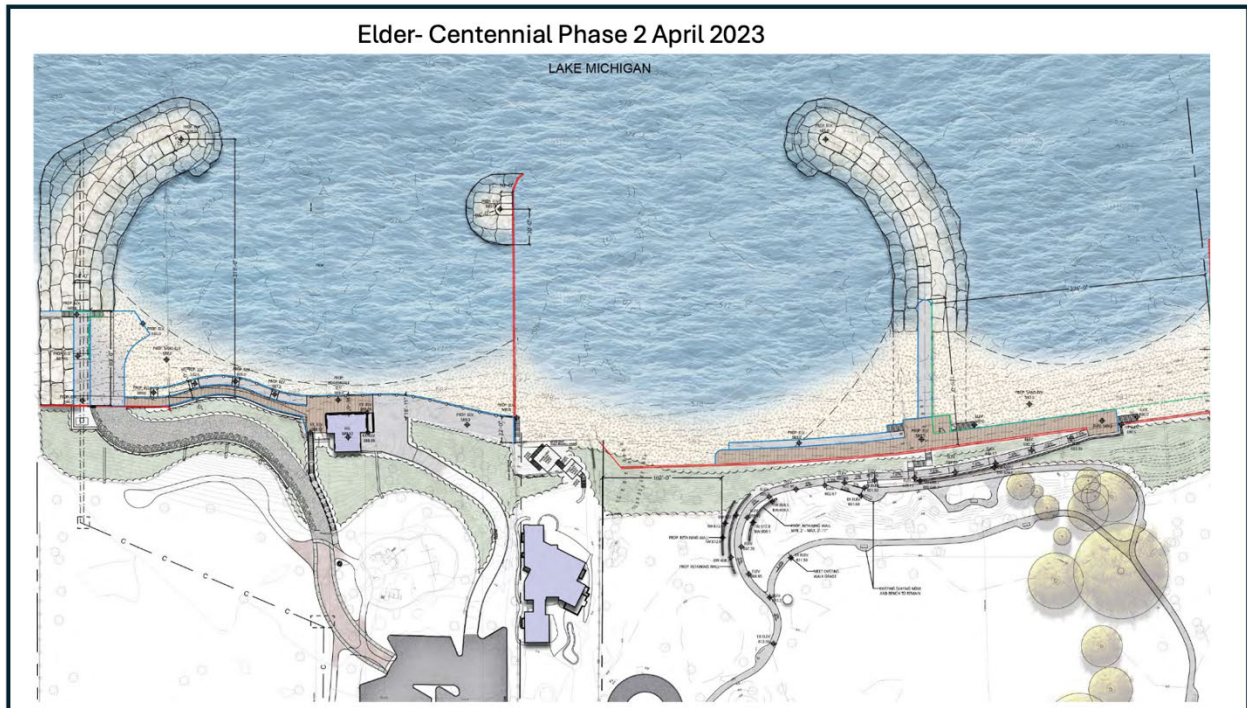


Figure 7: Phase 2 Elder-Centennial concept April 2023

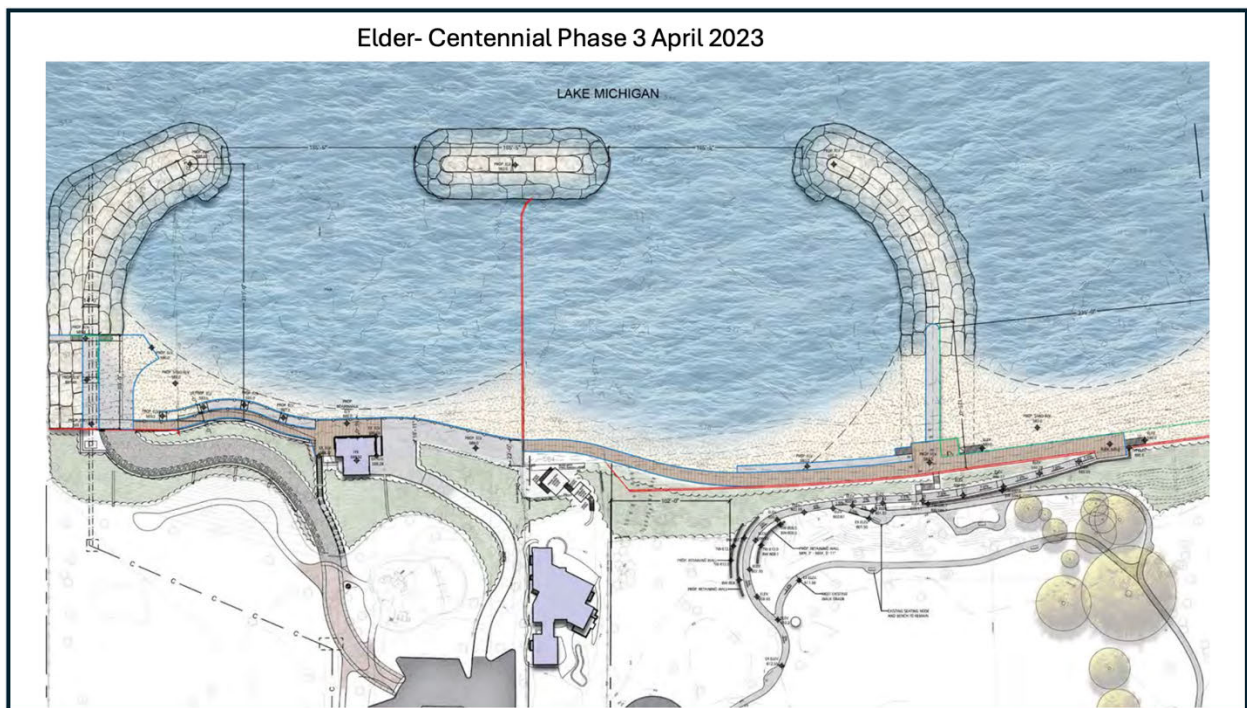


Figure 8: Phase 2 Elder-Centennial concept April 2023 – a Headland Beach System

Only Phase 1 of the Elder/Centennial beach plan was before the WPD Board at the April 27, 2023, meeting. Mathew Wright, the consulting civil engineer engaged by the WPD for the Elder-Centennial project, stated that the stone structures in the Phase 1 April 2023 plan would not retain sand (time stamp 4:21:10 <https://youtu.be/pzXYUaceJCc?t=15668>). Only upon the completion of Phase 3 of the April 2023 plan would protected beach cells be created that are capable of holding sand. Phase 3 of the April 2023 beach plan is a headland beach design. Mr. Wright also notes that it is the steel sheet piling that will be driven into the bluff that will provide bluff protection, not the stone groins. However, the WPD is unable to build the Phase 3 April 2023 plan without first acquiring 261 Sheridan, the property separating Elder & Centennial parks.

WPD staff and consultants continued work on the conceptual design for both Elder and Centennial beaches and finalized the design for both beaches in October 2023. It is this Phase 2 October 2023 plan that is currently before the ZBA for Centennial and is filed for review by Village staff at Elder (figure 9).

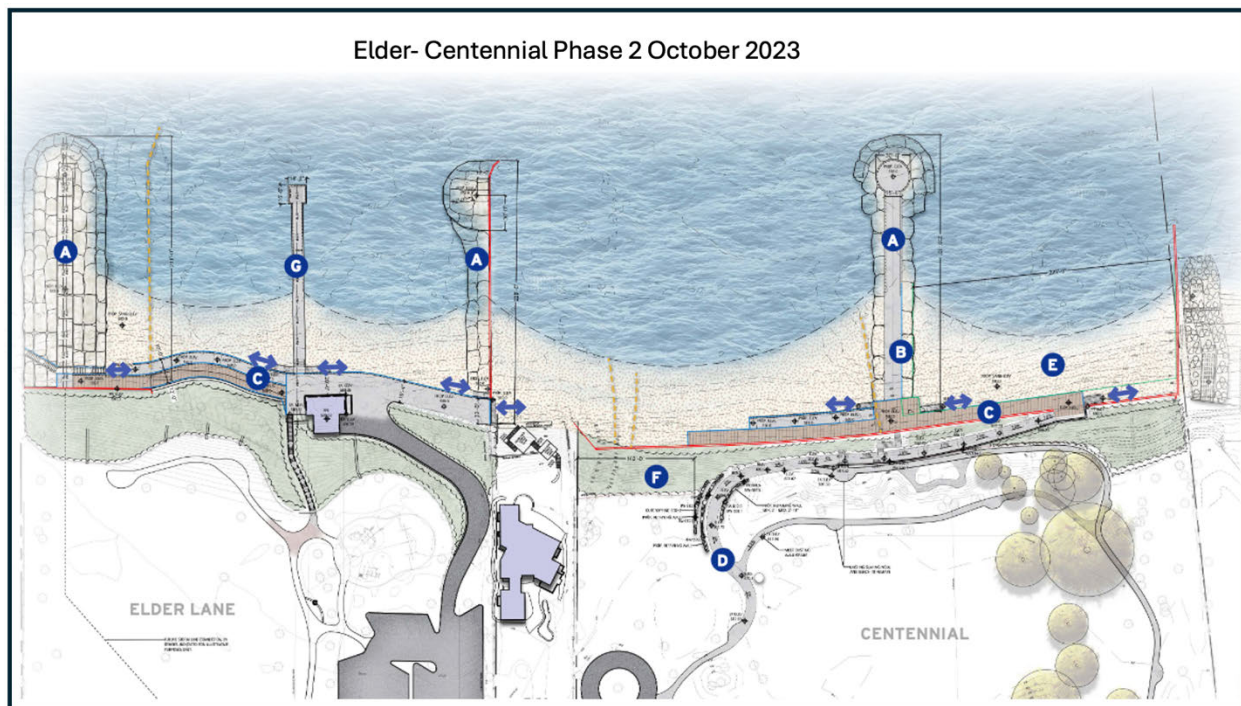


Figure 9: Phase 2 Elder-Centennial design October 2023

The Phase 2 October 2023 plan is not a headland beach design and the stone groins in the design should not hold sand better than the existing sheet metal groins on Elder & Centennial. Replacing existing steel sheet pile groins with stone groins with no added sand retention violates the Lakefront construction ordinances that require designs that are minimally necessary to achieve their intended proper purpose. In October of 2023, WPD staff also updated the Phase 3

design should the WPD acquire 261 Sheridan and this updated Phase 3 design retains some elements of a headland beach system (figure 10).

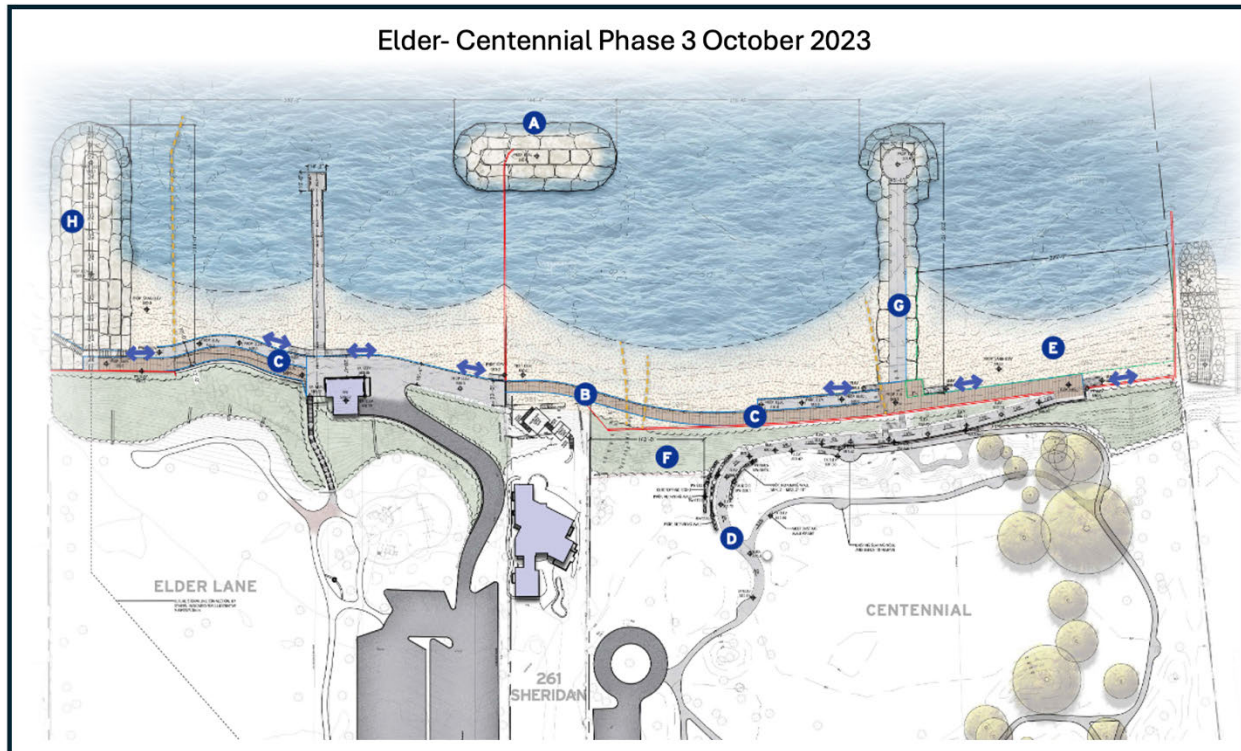


Figure 10: Phase 3 Elder-Centennial design October 2023.

As you can see the October 2023 Phase 3 Elder-Centennial design adds the stone groin parallel to shore that will retain sand. However, the October Phase 3 design provides less protection for the beach than the April 2023 Phase 3 concept. The WPD should have engaged a coastal engineer for its technical team to arrive at a beach design of what would have been minimally necessary. Both Phase3 - April 2023 and Phase 3 -October 2023 are not feasible unless and until WPD acquires 261 Sheridan.

The proposed North and South stone groins on Elder will create a public safety hazard for swimmers, paddle boarders, and kayakers, (Section 15.78.080 (E)). The South stone groin will obstruct sight lines between swimming beaches. This obstructed sight line will create a safety hazard if a swimmer on one beach is in distress and persons on the adjoining beach are unable to see the distressed swimmer. The rubble stone used to construct the North and South groins on Elder will create a hazard for swimmers, paddle boarders, and kayakers when waves wash them into the groins. Swimmers and wildlife are likely to climb on the stones and can injure themselves by falls. If the stone groins will not retain sand and if the steel sheet piling on the bluff will protect the bluff, how are the stone groins minimally necessary for this beach plan?

Elder Boardwalk & Plaza Design Defects

The WPD SUP for the boardwalk & plaza on Elder should not be granted because it violates the Special Use Permit Standards' prohibition against harming the general welfare of the community. The boardwalk & plaza covers the lake and blocks sight lines along the beach, degrading the environment of the lakeshore. Furthermore, the Special Use Permit Standards require that the special use conforms to all other Village ordinances and the boardwalk violates **Section 15.78.080 (D)**'s requirement that only designs that are minimally necessary to achieve their intended proper purpose are permissible on the Lakefront.

The elevated boardwalk-plaza-ramp (Figure 11) is 345' in length and has an average width of 20' and will cover approximately 6,960 square feet of Elder beach.

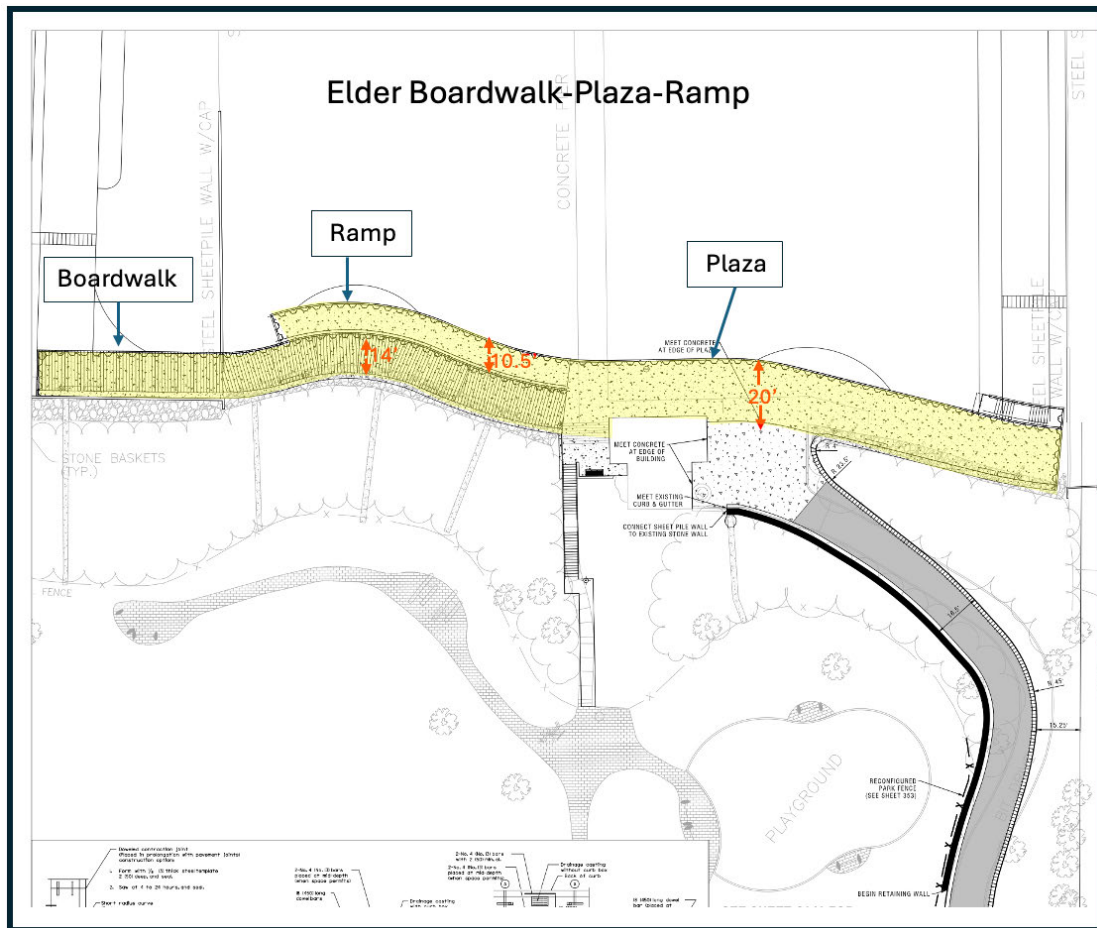


Figure 11: Elder elevated boardwalk, plaza, and ramp

The WPD has chosen to sacrifice useable beach for these amenities. The pier at Elder that provides excellent views of the lake renders a boardwalk-plaza viewing platform unnecessary. As with all the Elder designs, the WPD has not surveyed the public on whether they want this amenity nor have they submitted their plan for referendum to see if the public wishes to pay for it

despite numerous repeated requests for a referendum from the public during Public Comment at WPD meeting for the past three years.

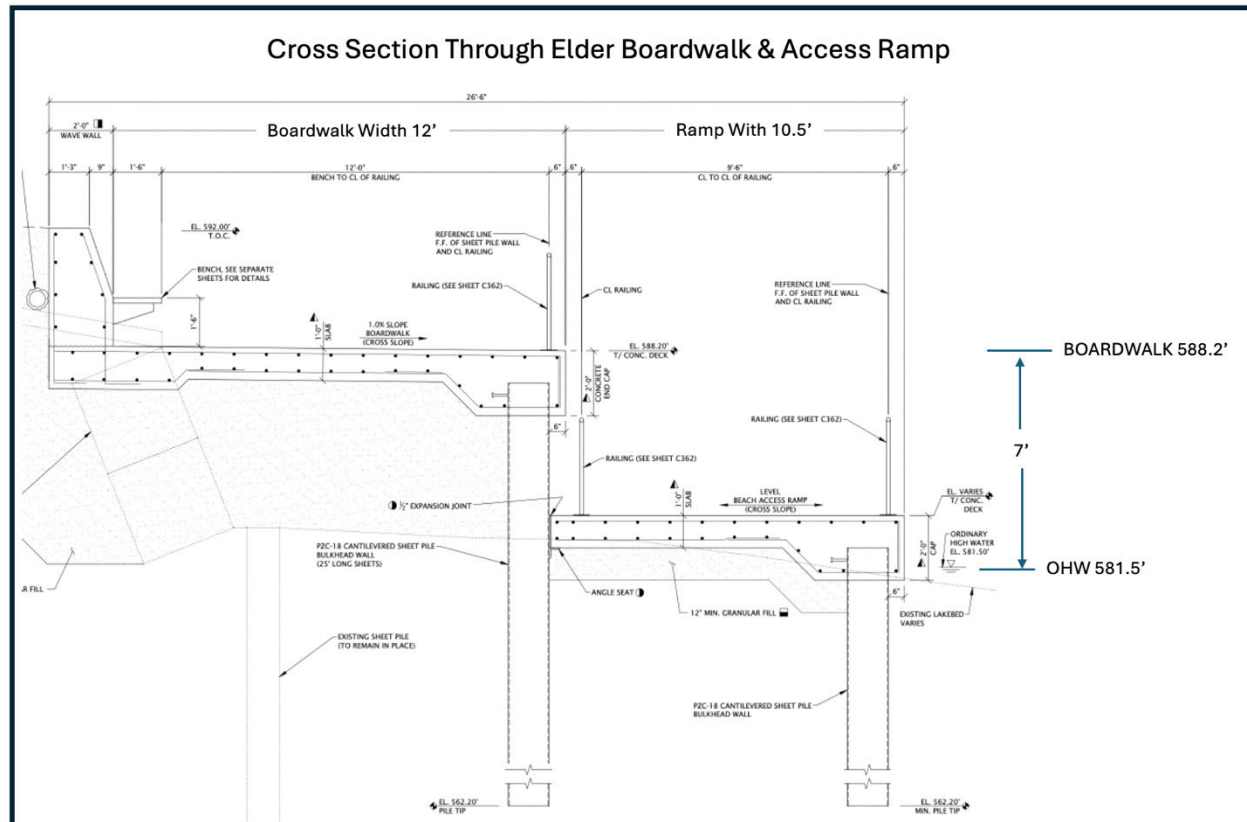


Figure 12: Cross section through boardwalk & access ramp

From figure 12 above, you can see that the boardwalk-plaza is elevated 7' above the OHW mark and requires steel sheet pile to be driven to support the boardwalk. There are boardwalks at Lloyd and Maple, and neither is elevated. Elevating the boardwalk goes counter to 15.78.080 (D) that permits only designs that are minimally necessary to achieve the intended proper purpose.

Montrose beach uses an alternate design of a Mobi-mat for pedestrians and mobility impaired individuals to access the lake (figure 13). A 6.5' wide Mobi-mat could serve the same function as the 20' wide 345' long boardwalk-plaza, but the Mobi-mat would cover 67% less beach area compared to the boardwalk-plaza.

Montrose Dog Beach Chicago



Figure 13: Mobi-mat utility mat

Elder Temporary Haul Road

The WPD has included a temporary haul access road in its SUP for Elder (figure 14).

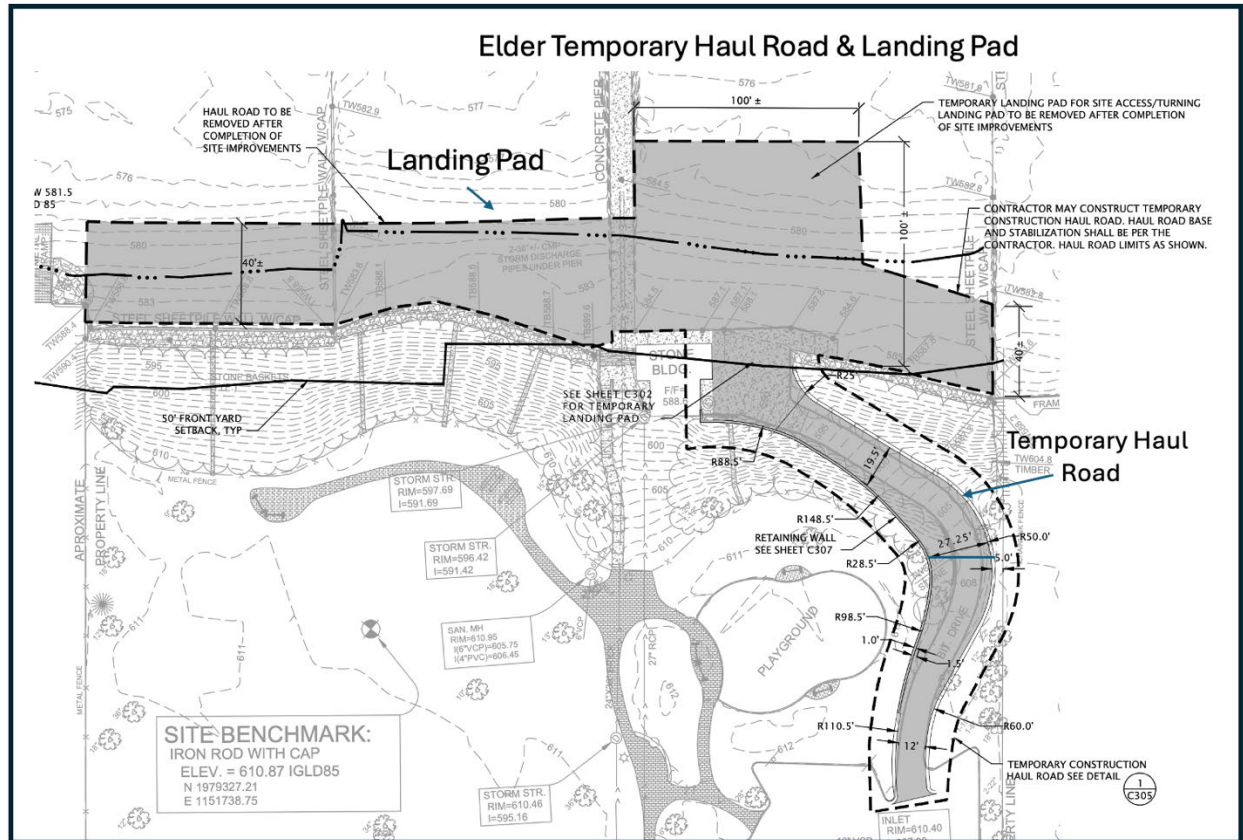


Figure 14: Elder temporary haul road & landing pad

The WPD plans to use land-based construction for Elder and will temporarily widen Elder's current access road from its current width of 12' to a maximum of 27' within the steep slope zone. The WPD's SUP for the temporary haul road should not be granted because the design proposed violates Special Use Permit Standards. Specifically, the temporary haul road harms the general welfare of the residents by degrading the bluff and the Lake Michigan shoreline. My calculations show that 1,200 sq. ft. of bluff will be disturbed to construct the temporary haul road. The large scope of this excavation and construction will detrimentally impact the ecology of the bluff and the bluff's structural integrity in contravention to SUP Standards. Road construction is not an authorized structure in the steep slope zone and alternatives for this road are available to the WPD. The WPD could use marine based construction instead of land-based construction for Elder. The WPD is already planning to use marine based construction for Centennial. Marine based construction will preserve the bluff, will require less diesel fuel to transport the stone for the rock groins, and will eliminate the need for trucks to haul the stone to Elder, and reduce air pollution and traffic congestion in Winnetka.

Stormwater Hazards Elder Beach

Discharge of stormwater from the 54" pipe at the pier at Elder creates a serious health risk for swimmers should the Elder swimming beaches be reopened. I have serious concerns for public health due to stormwater contaminated by E. Coli and PCBs that are discharged into the Lake from the Elder Lane stormwater outfall pipe. The WPD could mitigate this health risk by designating Elder as its dog beach and transforming Centennial Beach into a continuous swimming beach, moving the dog beach segment of the park currently planned from Centennial to Elder Lane Beach. However, the WPD intends to reopen Elder as a people swimming beach as evidence by their SUPs for Centennial & Elder. The Village should revoke WPD's SUP for a swimming beach at Elder until the stormwater contamination is resolved.

Elder Lane Beach Contamination from E. Coli

E. Coli. can cause a variety of diseases from gastro enteritis to skin infections, urinary tract infections, respiratory illnesses, and even pneumonia. Elder Lane Beach has a history as being one of the most polluted beaches on the North Shore of Lake Michigan. A beach is safe if the maximum E. coli level allowed – 235 colony-forming units per 100 milliliters (cfu/100mL) is not exceeded which is based on guidelines established by the U.S. Environmental Protection Agency for recreational waters. Below is Table 1 based on Illinois Department of Public Health data that shows the percentage of days Elder Lane Beach and five surrounding beaches exceeded the maximum E. Coli level for safe swimming.

PERCENTAGE OF DAYS WHERE E. COLI EXCEEDS 235 CFU/100ML								
	2014	2015	2016	2017	2018	2019	2020	2021
TOWER	11.9%	5.1%	2.2%	7.5%	8.1%	3.6%	0.0%	3.2%
LLOYD	9.8%	5.2%	4.5%	6.5%	8.7%	7.1%	CLOSED	4.3%
MAPLE ST	9.6%	8.2%	5.7%	10.0%	10.4%	6.8%	1.1%	3.2%
ELDER LN	16.4%	24.7%	7.5%	8.6%	11.6%	8.8%	CLOSED	CLOSED
CENTENNIAL	11.0%	16.2%	3.8%	8.6%	4.5%	4.4%	2.2%	4.3%
KENNELWORTH	12.0%	6.7%	2.9%	7.7%	9.4%	6.4%	0.0%	3.4%

Table 1: Percentage of days when E. coli. Exceeded 325CFU/100 ml

Note from the table above that in five of the six years data was collected for Elder Lane Beach (2014-2019), Elder Lane had the highest number of days of E. coli exceeding the safe level of 235 cfu/100mL. In 2015, this unsafe level of bacteria at Elder occurred 25% of the time. In a conversation with Mr. Costa Kutulas of the WPD on May 11, 2022, Mr. Kutulas stated that the cause of the high bacteria counts originated from the stormwater sewer discharge pipe at Elder Lane. Mr. Kutulas stated that the Village had done work on the stormwater sewer system in 2015 and had discovered a number of interconnections between the sanitary and stormwater systems and that these interconnections had been eliminated where identified. E. Coli did drop after the Village closed storm and sanitary interconnections that it discovered in 2015. However, bacteria levels remained high relative to surrounding beaches during the period from 2016-2019.

There was no sampling of Tower, Lloyd, Maple and Centennial beaches in 2020 through 2022 due to beach closure. Elder Lane beach has been officially closed from 2020 to present day. Some sporadic testing has occurred in 2023 and 2024 at Elder, however these tests are insufficient to make meaningful comparisons to nearby beaches. Also note, that apart from 2017, Centennial Beach has had significantly lower levels of bacteria than Elder Lane beach as seen in table 1 above. I believe this is due to the dilution of the stormwater discharge before it is carried by littoral currents towards Centennial. Figure 15 below shows the Elder/Centennial beach with the area of water currently affected by bacterial contamination from stormwater discharge at the end of the existing pier with red (high bacteria), orange (moderate bacteria), and yellow (low bacteria).

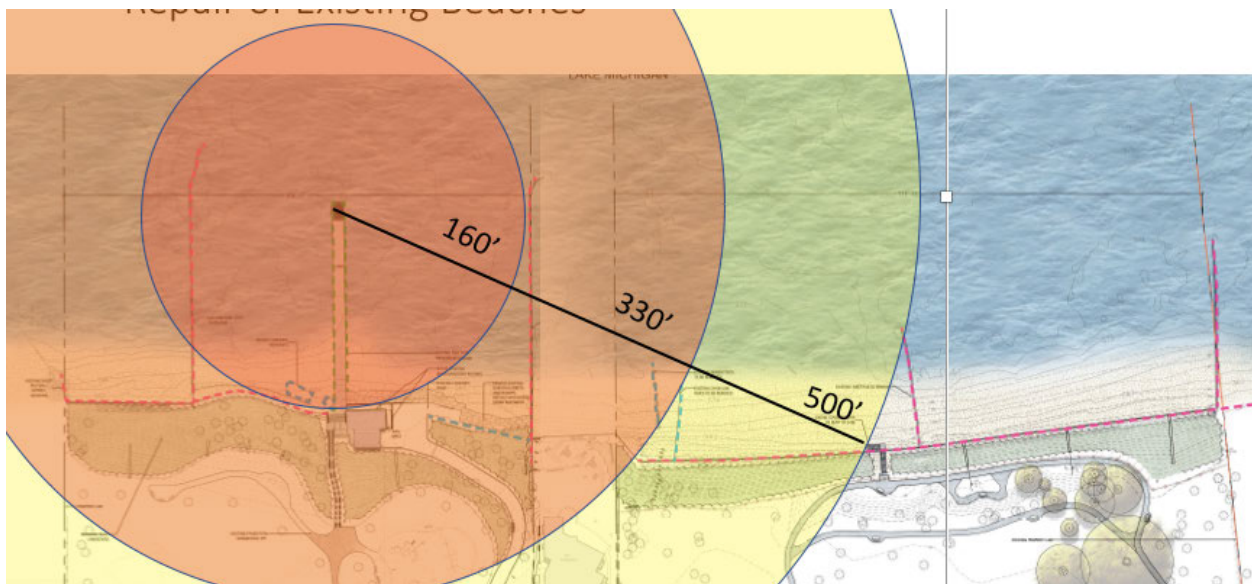


Figure 15: Zone of contamination from existing stormwater discharge

Elder Lane Contamination from PCBs

In 2018, the Illinois Environmental Protection Agency (IEPA) produced guidelines that mandate the reduction of polychlorinated biphenyls (PCBs). PCBs are a probable human carcinogen. Studies of PCBs in humans have found increased rates of melanomas, liver cancer, gall bladder cancer, biliary tract cancer, gastrointestinal tract cancer, and brain cancer, and may be linked to breast cancer. PCBs are known to cause a variety of types of cancer in rats, mice, and other study animals. Women exposed to PCBs during pregnancy can give birth to children with lower birth weight, lower IQ, and impaired psychomotor skill. PCBs have been shown to impair the immune system and disrupt hormones such as estrogen and testosterone.

In 2018, the IEPA developed Total Maximum Daily Loads (TMDL) for polychlorinated biphenyls (PCBs) in which it sets limits for the quantity of PCBs that can be discharged by municipal separate storm sewer systems (MS4S) into Lake Michigan. PCBs are present in a gaseous form in the atmosphere and then absorbed by rainwater and deposited in soil or can coat

external surfaces. Stormwater gathered by Winnetka's MS4S carries the PCBs and other pollutants and discharges these pollutants into the Lake. The IEPA's focus on PCBs has been the uptake of the chemical by wildlife that concentrates the compound up the food chain and endangers humans who then eat contaminated fish. However, a separate concern is for water quality at the discharge point into the Lake, specifically the discharge from the pipe at Elder Lane Park where swimming will occur once the park reopens.

The IEPA in its TMDL for PCBs, has estimated the concentration of PCBs in stormwater discharged into Lake Michigan from municipalities to be 7,270 pg/L. The Illinois Pollution Control Board sets Lake Michigan basin water quality standards for Human Health Standard at 26 pg/L for PCBs. **The Elder Lane concentration of PCBs is 280 times greater than the Human Health Standard** (*highlighting for emphasis*). The IEPA has adopted the Human Health Standard at 26 pg/L for PCBs for discharged stormwater in the Lake that will require a 99.6% reduction of PCBs from Winnetka's stormwater. Undiluted stormwater poses a health risk from PCBs. However, the stormwater discharged into Lake Michigan will be diluted by the Lake, but it is unknown how much time and distance from discharge will dilute stormwater to a "safe" level of 26 pg/L. As noted above, E. Coli contamination from the stormwater at Elder resulted in a closure rate for swimmers at twice the rate of surrounding parks. There is no testing program for PCBs by the WPD to see if Human Health Standards are being met at Elder Beach.

In April 2024, the Village selected Strand and Associates to make an evaluation of eastern Winnetka for flooding and ensure that water quality at its Lake Michigan stormwater discharge improves. The Strand proposed study notes that the Elder Lane area sub-watershed is the most problematic for flooding and for significant water quality concerns at the discharge into Lake Michigan. Strand makes the following observation in its proposal:

"Prior recommendations for this (Elder) sub-watershed called for increasing pipe sizes and stormwater flow towards the outfall. We are concerned those increases will raise scrutiny and objections from the regulatory agencies. And prior recommendations to provide water quality treatment at the downstream end of the system are unreasonable. We have shown through our prior work with the Village implementing underground storage at Duke Childs and Little Duke fields that there is a viable option to tackle both flooding and water quality in a single project. The success of that project can be duplicated in this sub-watershed in a similar partnership with New Trier High School, who owns much of the open space in this sub-watershed. A similar design would provide significant pollutant capture in the underground storage and control flow rates to an appropriately sized water quality separator. This has the potential to maintain current pipe sizing and discharge rates, gaining public and regulatory support."

In its proposal, Strand does not list what pollutants it is planning to capture, nor does it outline what if any pollutants it would test in stormwater, but I believe PCBs would certainly be one the pollutants Strand would recommend targeting. To meet the IEPA's 26 pg/L for PCBs, discharged stormwater in the lake will require a 99.6% reduction of PCBs. We will have to see whether this ambitious target can be met as Strand's study proceeds. If the project is feasible and

achieves the 26 pg/L for PCBs, then Elder would have acceptable water quality as to PCBs at the point of discharge. However, stormwater pollution carries a stew of other petroleum products, heavy metals, insecticides, pathogens, and other chemicals that would have to be removed before Elder would be safe for humans to swim and as mentioned above Strand does not identify which pollutants it is targeting.

Another question that needs to be addressed is the timing of the East Winnetka stormwater improvements. Mr. Bernahl's cover letter for the Strand proposed study for East Winnetka stormwater notes the timing and process of the West Winnetka stormwater project:

Due to the scale and severity of flooding in western and southwestern Winnetka, the Village Council prioritized this area for improvements. In 2015, the Council approved an agreement with Strand Associates, Inc. for a stormwater management study, which was substantially completed in 2016. Thereafter, four intergovernmental agreements and one license agreement were negotiated and approved by the Council with our area local governments to cooperatively design and construct stormwater improvements for the benefit of the community. To date, significant progress has been made and construction and design are ongoing. Given the progress that has been made in western Winnetka, we are now initiating a stormwater evaluation for eastern Winnetka, which also has areas where stormwater flooding is an ongoing issue to be addressed.

The west Winnetka stormwater project is now in its ninth year and Mr. Bernahl's comments describe some of the complexities of this project. All the complexities encountered in the west Winnetka project will again be revisited in the east Winnetka project together with issues of discharging stormwater into Lake Michigan and an ongoing lawsuit where the Village has sued Monsanto (*City of Evanston et al v. Monsanto*) to recover damages for expenses required to remove PCBs from the Village's stormwater.

Even if stormwater treatment brought all pollutants within Human Health Standards, there still might be danger from PCBs in the sediment at Elder. PCBs were discharged into Waukegan Harbor by Outboard Marine Corporation (OMC) and these PCBs contaminated the sediment which had to be dredged and capped in the cleanup of the harbor. As noted above, the six discharge points of East Winnetka's stormwater could be six hotspots for PCBs. The scale of OMC's PCB discharge is much greater than Winnetka's discharge of PCBs in its stormwater and Waukegan Harbor is a lower energy environment compared with the high energy littoral zone along Winnetka's shoreline. However, the pier on Elder was constructed in 1945 and discharge of stormwater with PCB pollutants has continued for 79 years. The WPD should test for PCBs or other pollutants in the sediment at Elder before reopening Elder for people to swim.

The National Institute of Safety and Health states that there may be no safe level of exposure to a carcinogen, so all contact should be reduced to the lowest level possible. The WPD should follow this policy and prohibit swimming at Elder due to PCBs and other pollutants from the stormwater outfall. I suggest that a dog beach would be a more appropriate use for Elder Lane Beach. Swimmers would then have an unobstructed 540-foot Centennial Beach to enjoy for

bathing recreation which would eliminate the need to construct a large pier in the center of Centennial Beach which Commissioner James has repeatedly stated in public meetings is necessary to separate swimmers from dogs.

On June 14, 2024, I sent the previous paragraphs above in a letter to Shannon Nazzal, Executive Director of the WPD, with a copy to each of the commissioners of the WPD. During the June 20, 2024, WPD Board Meeting Commissioner Root proposed that the WPD investigate the water quality issues at Elder and reconsider reopening Elder as a swimming beach suggesting that it might be more appropriate to move the dog beach from the southern part of Centennial Beach to Elder so that the public could swim in cleaner water and relegating canines to more contaminated water. The other commissioners at the meeting expressed no interest in Commissioner Root's proposal. WPD President Codo made the following statement in the discussion:

Quality of the (storm) water is 100% in the wheelhouse of the Village. That is the Village's stormwater pipe, that is the Village's water quality. We will test water at swimming beaches. (June 20, 2024, WPD Board Meeting, link: [@Time Stamp 1.01.11\)](https://winpark.diligent.community/document/12305/?splitscreen=true&media=true)

From the Park Commissioners' comments and SUP applications for Centennial and Elder it is apparent that the WPD intends to move forward to make Elder a swimming beach and will knowingly place the public in water polluted by stormwater effluent that is known to contain carcinogens, pathogens, and other hazardous chemicals. One would hope that the WPD would have the prudence to delay beach designs for both Elder and Centennial parks until the Village had completed its East Winnetka stormwater study and potentially the completed East Winnetka stormwater project as it impacts Elder and Centennial parks. Unfortunately, and for whatever reason, the WPD seems determined to aggressively move forward with its SUPs for Centennial and Elder. I believe that if the WPD is permitted to proceed with this plan, the health and safety of members of the public swimming at Elder will be endangered. I do concur with President Codo's assertion that the Village is responsible for the stormwater; however, I believe that the WPD and Village have joint responsibility for the health and safety of members of the public who choose to swim at Elder beach. The WPD has chosen to shirk their responsibility, but I hope that you as members of the ZBA, will inquire as to these health issues and that our Village Trustees will step-up and protect the public on Elder and prohibit swimming at Elder beach until health and safety issues are properly investigated and addressed. In the interim and as suggested above, Centennial Beach could be opened as a swimming beach and dogs moved to Elder Lane Beach.

cc: *Courtesy Copy sent via email:* Mr. Robert Bahan, Winnetka Village Manager

From: [Ann Klaassen](#)
To: [Ann Klaassen](#)
Subject: FW: Please add this to my Centennial SUP comments shared with ZBA, Trustees
Date: Tuesday, November 5, 2024 11:38:57 AM
Attachments: [fema_tlb5_free_obstruction_requirements.pdf](#)

From: Kris Schriesheim <[REDACTED]>
Sent: Monday, November 4, 2024 9:09 PM
To: David Schoon <DSchoon@winnetka.org>; Ann Klaassen <AKlaassen@winnetka.org>; Robert Bahan <RBahan@winnetka.org>
Subject: Please add this to my Centennial SUP comments shared with ZBA, Trustees

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Hello:

I was remiss in not providing the Community Development Department and ZBA with some appropriate references for defining what a “fence” or “wall” is, versus a “structure.”

There was considerable skepticism on 10/14/24 regarding how an enormous boardwalk that (1) would take up a large part of Centennial’s existing sandy beach and (2) is being advanced as a means of access to reach the beach via concrete roadway, ramp or stairs, and/or provide elevated views, rather than (3) a means of delineating property lines or keeping people/animals/water in or out of a specific area, could (4) possibly be categorized as a “fence” or “wall.” It cannot. Please read below.

> Here is a Village Code reference to what a fence is—akin to a “railing” or “barricade.” A huge boardwalk that maintenance vehicles and persons in wheelchairs can use is not a fence, railing or barricade.

6:41 PM Mon Nov 4

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2024 S-42 (current)

CONSTRUCTION

Section 12.12.010 Driveway Permits

Section 12.12.020 Design Standards

Section 12.12.030 Denial of Permit: Review of Denial

Chapter 12.16 EXCAVATIONS

Section 12.16.010 Excavations in streets

Chapter 12.20 STREET OCCUPATION PERMITS

Section 12.20.010 Occupation of streets.

Chapter 12.24 AWNINGS AND CANOPIES

Chapter 12.28 PUBLICLY OWNED TREES, SHRUBS AND PLANTS

Title 13 MUNICIPAL UTILITY SERVICES

Title 14 TELECOMMUNICATIONS, CABLE TELEVISION AND OTHER UTILITIES

Title 15 BUILDINGS AND CONSTRUCTION

G. Street and Alley Kept Clear. Except as otherwise provided in this code, the person to whom a building permit is issued shall, at all times during the life of the permit, maintain that portion of the street, alley, parkway, sidewalk or other right-of-way abutting upon and adjacent to the lot upon which such structure or addition is being erected, in a safe condition and clear of all building materials, rubbish, dirt or snow. At no time shall any construction activity obstruct the gutter or waterway of any street so as to prevent the free passage of water along the same, and if the gutter shall be shaded or covered so that ice accumulates in such gutter, the gutter shall be cleared so as to allow water to pass freely at all times.

H. Limitation of Use. No person shall mix mortar, concrete or any other building materials on the surface of any sidewalk or pavement in the Village.

I. Barricades and Lights. Any person to whom a building or street occupation permit is issued shall erect and maintain such substantial and suitable fences, railings or barricades to guard all excavations, embankments or obstructions along any street, alley, parkway or sidewalk abutting upon or adjacent to such lot as the Director of Engineering or other building officer deems necessary for the protection of the public, and shall maintain proper and sufficient lights from dusk to sunrise to protect the public using such street or sidewalk.

No person shall remove, extinguish, diminish or disturb such lights or remove or disturb such barricades.

(MC-5-2020, § 10, Amended 11/17/2020: prior code § 7.17)

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>
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>
>
>
> See also the Illinois “Fence Act”—a boardwalk designed to serve as a pathway, promenade and/or a “vantage point for viewing” (per WPD description at its last board meeting) would not fall into the “fence” categories described in the “Fence Act,” which include a “division fence,” an “inclosure,” a “floodgate” or a “hedge fence.” All of these things are designed to keep living things or water, in or out.

Finally, FEMA’s floodplain guidelines clearly distinguish between “fences and walls,” and other “structures” such as ramps, stairs, patios, decks, etc. Attachment to other structures does not define them. The boardwalk and its ancillary ramp and stairs would definitely not be a “fence” or “wall”—the

boardwalk appears to be an “elevated deck,” with stairs and a ramp intended to carry traffic.

It is incumbent upon the Village to correct its error and properly define the boardwalk, ramp and stairs, as a “structure” for zoning purposes.

Thank you.

Kristine Schriesheim



Free-of-Obstruction Requirements

For Buildings Located in Coastal High Hazard Areas
in Accordance with the National Flood Insurance
Program

NFIP Technical Bulletin 5 / *March 2020*



FEMA

Comments on the Technical Bulletins should be directed to:

DHS/FEMA

Federal Insurance and Mitigation Administration (FIMA) Risk Management Directorate

Building Science Branch

400 C Street, S.W., Sixth Floor

Washington, DC 20472-3020

NFIP Technical Bulletin 5 (2020) replaces NFIP Technical Bulletin 5 (2008), *Free-of-Obstruction Requirements*.

Cover photograph: Area beneath an elevated building that is free of obstruction.

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It is incumbent upon the Village to correct its error and properly define the boardwalk, ramp and stairs, as a “structure” for zoning purposes.

Thank you.

Kristine Schriesheim

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Acronyms

ASCE	American Society of Civil Engineers
BFE	base flood elevation
CFR	Code of Federal Regulations
DFE	design flood elevation
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
IBC	International Building Code®
ICC	International Code Council®
I-Codes	International Codes®
IRC	International Residential Code®
ISPSC	International Swimming Pool and Spa Code®
NFIP	National Flood Insurance Program
PFD	primary frontal dune
SEI	Structural Engineering Institute
SFHA	Special Flood Hazard Area

1 Introduction

This Technical Bulletin provides guidance on the National Flood Insurance Program (NFIP) free-of-obstruction requirements in Coastal High Hazard Areas, which are designated as Zone V (V, VE, VI-30, and/or VO) on a community's Flood Insurance Rate Map (FIRM), as well as the NFIP requirements for construction in Zone V to minimize flood damage potential that is applicable to construction in Zone V. The free-of-obstruction requirements were instituted to minimize the transfer of flood forces to an elevated building's foundation and also to minimize the diversion or deflection of floodwater or waves that could damage the elevated building or neighboring buildings.

This Technical Bulletin also discusses how the presence or absence of obstructions can affect NFIP flood insurance premiums.

Coastal waves and flooding can exert strong hydrodynamic forces on building elements in their path. Therefore, the NFIP requires that all new and Substantially Improved structures in Coastal High Hazard Areas (Zone V) be elevated on pilings or columns with the bottom of the lowest horizontal structural members of the lowest floor elevated to or above the base flood elevation (BFE). These open foundations allow floodwater and waves to pass beneath the elevated structure.

NFIP TECHNICAL BULLETIN 0

NFIP Technical Bulletin 0, *User's Guide to Technical Bulletins*, should be used as a reference in conjunction with this Technical Bulletin. Technical Bulletin 0 describes the purpose and use of the Technical Bulletins, includes common concepts and terms, lists useful resources, and includes a crosswalk of the sections of the NFIP regulations identifying the Technical Bulletin that addresses each section of the regulations and a subject index.

Readers are cautioned that the definitions of some of the terms that are used in the Technical Bulletins are not the same when used by the NFIP for the purpose of rating flood insurance policies.

EFFECTS OF OBSTRUCTIONS

The NFIP requires the area beneath elevated structures in Zone V to remain *free of any obstructions that would prevent the free flow of coastal floodwater and waves* during a base flood event. An area beneath a structure elevated on an open foundation is considered to be free of obstructions if flood flow and waves can pass through the area without significant **flow diversion, wave reflection, or wave runup**.

- **Flow diversion.** Change in the course of flood flow when it encounters an object or structure. Diversion can be accompanied by an increase in the local flood level and/or flood velocity when the blockage is large relative to the area through which the flow would otherwise pass.
- **Wave reflection.** Return or redirection of a wave striking an object.
- **Wave runup.** Rush of water up a slope or structure following wave breaking.

Some flow diversion, wave reflection, and wave runup can occur even with open foundations, but if the guidance in this Technical Bulletin is followed, the effects should be minimized during flood conditions up to the base flood event.

Any element constructed below the BFE that is attached to a building in Zone V is considered part of the building and must meet the free-of-obstruction requirements.

Standard solid foundation walls, such as masonry, concrete, and wood-frame walls, are not permitted in Zone V because they would obstruct flow and be at risk of damage from high-velocity flood forces. In addition, solid foundations and other obstructions could cause wave runoff or reflection or divert floodwater into the elevated portion of the building or nearby buildings.

The NFIP interprets the free-of-obstruction requirements to apply to certain site development practices that prevent the free flow of coastal floodwater and waves under or around buildings or increase flood loads on nearby buildings. Construction elements outside the perimeter (footprint) of and not attached to a coastal building (e.g., bulkheads, retaining walls, decks, swimming pools, accessory structures) and site development practices (e.g., addition of fill) may alter the physical characteristics of flooding or significantly increase wave or flood forces affecting nearby buildings. As part of the design certification process for a building in Zone V, the registered design professional must consider the effects these elements and practices will have on the building and on nearby buildings.

The NFIP requires buildings to be constructed using methods and materials that minimize the potential for flood damage. Therefore, any construction element placed on a building site in Zone V (see Sections 6 and 7) has the potential to affect the building and nearby buildings, which must be taken into account. In addition to potential wave and floodwater diversion effects, obstructions can break free and become floodborne debris that may strike and damage other buildings.

The building elements and site development issues in regard to obstruction that are discussed in this Technical Bulletin include:

Building elements below the BFE

- Access stairs and ramps
- Decks, porches, and patios
- Elevators
- Enclosed areas
 - Below elevated structures
 - Above-grade (elevated)
 - Two levels
- Equipment and tanks
- Foundation bracing
- Grade beams
- Shear walls
- Slabs

Site development: Practices and issues

- Accessory storage structures
- Detached garages
- Erosion control structures
- Fences and privacy walls
- Fill
- Ground elevations at or above the BFE
- On-site septic systems
- Restroom buildings and comfort stations
- Swimming pools and spas

Building elements and site development practices that are not specifically prohibited by the NFIP may be used as long as they will not adversely affect other structures. However, some building elements and site development practices may increase flood-related loading on the building where those practices are proposed. In such cases, the building must be designed to withstand the additional flood-related loading and the registered design professional must provide the required Zone V certification for the building.

Questions about free-of-obstruction requirements should be directed to the appropriate local official, NFIP State Coordinating Office, or Federal Emergency Management Agency (FEMA) Regional Office.

NFIP TERMS USED IN THIS TECHNICAL BULLETIN

- **Special Flood Hazard Area (SFHA):** Area subject to flooding by the base flood (1-percent-annual-chance flood) and shown on FIRMs as Zone A or Zone V.
- **Zone A:** Flood zones shown on FIRMs as Zone A, AE, A1-30, AH, AO, A99, and AR.
- **Zone V:** Flood zones shown on FIRMs as Zone V, VE, V1-30, and VO.
- **Coastal High Hazard Area:** Area shown on FIRMs and other flood hazard maps as Zone V, VO, VE, or V1-30.

2 National Flood Insurance Program Regulations

An important NFIP objective is protecting buildings constructed in Special Flood Hazard Areas (SFHAs) from damage caused by flooding. The SFHA is the land area subject to flooding by the base flood. SFHAs are shown on Flood Insurance Rate Maps (FIRMs) prepared by FEMA as Zones A and V. The base flood is the flood that has a 1 percent chance of being equaled or exceeded in any given year (commonly called the “100-year” flood).

The NFIP floodplain management regulations include minimum building design criteria that apply to:

- New construction
- Work determined to be Substantial Improvements such as improvements, alterations, and additions
- Repair of buildings determined to have incurred Substantial Damage

A defining characteristic of the NFIP regulations applicable in Zone V is the requirement for the lowest horizontal structural member of the lowest floor to be elevated to or above the BFE. This requirement applies to both residential and non-residential buildings. Furthermore, the area beneath elevated structures must be free of obstructions that would prevent the free flow of coastal floodwater and waves during a base flood event.

ZONE V CERTIFICATION OF STRUCTURAL DESIGN AND METHODS OF CONSTRUCTION

The NFIP regulations require communities to ensure that construction meets Zone V requirements, including the free-of-obstruction requirement. Registered professional engineers or architects must develop or review structural designs, specifications, and plans for new construction and Substantial Improvements and certify that designs and methods of construction are in accordance with the accepted standards of practice. Building engineers and architects should consult with communities on their certification requirements before starting design, and communities must obtain and retain the certifications.

Satisfying the NFIP free-of-obstruction requirement is part of the certification. Local officials should determine that construction and/or site plans show all proposed site improvement elements described in this Technical Bulletin. The NFIP requires Zone V certification prior to construction. The community must ensure that what is constructed is compliant; some jurisdictions may require post-construction certification by the registered design professional.

See Technical Fact Sheet 1.5 in the *Home Builder's Guide to Coastal Construction* (FEMA P-499) (2010a) for a discussion of Zone V certification requirements.

The NFIP regulations for Zone V construction are codified in Title 44 Code of Federal Regulations (44 CFR) Part 60 Criteria for Land Management and Use. Specific to this Technical Bulletin, Section 60.3(a)(3) of the NFIP regulations states:

If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall ... (iii) be constructed by methods and practices that minimize flood damages ...

Section 60.3(e)(4) states that a community shall require (emphasis added):

... that **all new construction and substantial improvements** in Zones V1-V30, VE, and also Zone V if base flood elevation data is available, on the community's **FIRM, are elevated on pilings and columns so that (i) the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level; and (ii) the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.** Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of paragraphs (e)(4)(i) and (ii) of this section.

Section 60.3(e)(5) further states that a community shall require (emphasis added):

... that **all new construction and substantial improvements within Zones V1-V30, VE, and V on the community's FIRM have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse,**

displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions: (i) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and (ii) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards. Such enclosed space shall be useable solely for parking of vehicles, building access, or storage.

Section 60.3(e)(6) states that a community shall “prohibit the use of fill for structural support of buildings within Zones VI-30, VE, and V on the community’s FIRM.”

Section 60.3(e)(7) states that a community shall “prohibit man-made alteration of sand dunes and mangrove stands within Zones VI-30, VE, and V on the community’s FIRM which would increase potential flood damage.”

For more information on NFIP regulations, refer to the following for:

- Guidance on coastal construction in the *Coastal Construction Manual* (FEMA P-55) (2011) and in the *Home Builder’s Guide to Coastal Construction* (FEMA P-499) (2010a)
- Guidance on design considerations, buildings codes and regulations, and best practices for coastal communities in *Local Officials Guide for Coastal Construction* (FEMA P-762) (2009)
- Guidance on the breakaway wall requirements of Section 60.3(e)(5) of the NFIP regulations in NFIP Technical Bulletin 9, *Design and Construction Guidance for Breakaway Walls Below Elevated Buildings Located in Coastal High Hazard Areas*
- Guidance on the requirement that building materials used below the BFE must meet the flood damage-resistant materials requirement of Section 60.3(a)(3) of the NFIP regulations in NFIP Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas*

NFIP REQUIREMENTS AND HIGHER REGULATORY STANDARDS

State and Local Requirements. State or local requirements that are more restrictive or stringent than the minimum requirements of the NFIP take precedence. The Technical Bulletins and other FEMA publications provide guidance on the minimum requirements of the NFIP and describe best practices. Design professionals, builders, and property owners should contact local officials to determine whether more restrictive provisions apply to buildings or sites in question. All other applicable requirements of the state or local building codes must also be met for buildings in flood hazard areas.

Substantial Improvement and Substantial Damage. As part of issuing permits, local officials must review not only proposals for new construction but also for work on existing buildings to determine whether the work constitutes Substantial Improvement or repair of Substantial Damage. If the work is determined to constitute Substantial Improvement or repair of Substantial Damage, the buildings must be brought into compliance with NFIP requirements for new construction. Some communities modify the definitions of Substantial Improvements and/or Substantial Damage to be more restrictive than the NFIP minimum requirements. For more information on Substantial Improvement and Substantial Damage, see FEMA P-758, *Substantial Improvement/Substantial Damage Desk Reference* (2010b), and FEMA 213, *Answers to Questions About Substantially Damaged/Substantially Damaged Buildings* (2018a).

Higher Building Elevation Requirements. Some communities require that buildings be elevated above the NFIP minimum requirements. The additional elevation is called freeboard. Design professionals, builders, and property owners should check with local officials to determine whether a community has freeboard requirements. References to building elevations in this Technical Bulletin should be construed as references to the community's elevation requirement in areas where freeboard is required.

3 Building Codes and Standards

In addition to complying with the NFIP requirements, all new construction, Substantial Improvements, and repair of Substantial Damage must comply with applicable building codes and standards that have been adopted by states and communities.

The International Codes® (I-Codes®), published by the International Code Council® (ICC®), are a family of codes that includes the International Residential Code® (IRC®), International Building Code® (IBC®), International Existing Building Code® (IEBC®), and codes that govern the installation of mechanical, plumbing, fuel gas service, and other aspects of building construction. FEMA has deemed that the latest published editions of the I-Codes meet or exceed NFIP requirements for buildings and structures in flood hazard areas. Excerpts of the flood

I-CODES AND COASTAL A ZONES

The 2018 International Codes (I-Codes) treat Coastal A Zones like Zone V if a Limit of Moderate Wave Action (LiMWA) is delineated on FIRMs. If a community designates an area as a Coastal A Zone through its building code or floodplain management regulations, buildings in that area are required to comply with the Zone V requirements for foundations, including the free-of-obstruction requirement, with an exception that permits filled stem wall foundations.

Note: Per the I-Codes and ASCE 24-14, breakaway walls in the Coastal A Zone and Zone V must have flood openings.

provisions of the I-Codes are available on FEMA’s Building Code Resource webpage (<https://www.fema.gov/building-code-resources>).

3.1 International Residential Code

The IRC applies to one- and two-family dwellings and townhomes not more than three stories above grade plane. The IRC’s free-of-obstruction requirements are summarized in Table 1 and compared to NFIP requirements.

Table 1 refers to selected requirements of the 2018 IRC and notes changes from the 2015 and 2012 editions.

IRC COMMENTARY

ICC publishes companion commentary for the IRC. Although not regulatory, the commentary provides guidance that is useful in complying with, interpreting, and enforcing the requirements of the code.

Table 1: Comparison of Selected 2018 IRC Requirements and NFIP Requirements

Topic	Summary of Selected 2018 IRC Requirements and Changes from 2015 and 2012 Editions	Comparison with NFIP Requirements
Free of obstruction	Section R322.3.3 Foundations. Requires in Coastal High Hazard Areas (Zone V) and Coastal A Zones that areas below elevated buildings be either free of obstructions or constructed of breakaway walls. In Coastal A Zones, filled stem wall foundations must be designed to resist flood loads, erosion, and scour. <u>Change from 2015 to 2018 IRC:</u> Changes to subsection numbering due to insertion of new subsections expanding requirements for 322.3.4, Concrete slabs; R322.3.7, Stairways and ramps; and R322.3.8, Decks and porches. <u>Change from 2012 to 2015 IRC:</u> Applies Zone V requirements in Coastal A Zone, if delineated, with an exception that permits stem wall foundations.	Equivalent to NFIP 44 CFR §§ 60.3(e)(4) and (5), except that 2018 IRC applies in both Zone V and Coastal A Zones, with an exception that permits stem wall foundations in Coastal A Zones.
Use of fill	Section R322.3.2 Elevation requirements [excerpt]. Prohibits the use of fill for structural support in Coastal High Hazard Areas (Zone V) and Coastal A Zones, while allowing minor quantities of nonstructural fill to be used for drainage and landscaping purposes under and around buildings and for support of parking slabs, pool decks, patios, and walkways. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> No change.	Equivalent to NFIP 44 CFR § 60.3(e)(6), with more specificity for use of fill for specific, nonstructural purposes.
Enclosed areas	Section R322.3.5 Walls below design flood elevation. In Coastal High Hazard Areas (Zone V) and Coastal A Zones, (1) requires that enclosures below elevated buildings be designed to break away under certain wind and flood loads without damaging the elevated building or the building foundation and (2) prohibits mounting of electrical, mechanical, and plumbing system components on breakaway walls or penetration of the breakaway walls. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> Clarifies that attachment or penetration by electrical, mechanical or plumbing systems to breakaway walls is not permitted.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying components that are not to be mounted on or penetrate through breakaway walls and by requiring flood openings in breakaway walls.

Table 1: Comparison of Selected 2018 IRC Requirements and NFIP Requirements (continued)

Topic	Summary of Selected 2018 IRC Requirements and Changes from 2015 and 2012 Editions	Comparison with NFIP Requirements
Equipment and tanks	Section R322.1.6 Protection of mechanical, plumbing, and electrical systems. Requires that new electrical, plumbing, and mechanical system elements, along with replacements due to Substantial Improvements, be elevated to the design flood elevation (DFE) or if below the DFE, to be designed and installed to prevent water from entering or accumulating within the element and be able to withstand certain loads and stresses. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> No change. Section R322.3.7 Tanks. Requires tanks to either be located underground or elevated to the DFE. When located underground, tanks must be anchored to resist flotation, collapse, and lateral movement during the base flood. If elevated, tanks must be on platforms that are cantilevered or knee-braced against the building or on a platform with a foundation that resists certain wind and flood loads. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> Added requirements for tanks.	Equivalent to NFIP 44 CFR § 60.3(a)(3)(iv) but with more specificity: components are not to be mounted on or penetrate through breakaway walls and there are explicit requirements for tanks.
Concrete slabs	Section R322.3.4 Concrete slabs. Requires that slabs used for parking, floors of enclosures, landings, decks, walkways, patios, and similar uses that are beneath buildings or located such that they could be undermined or displaced and could cause damage be either (1) structurally independent of foundations and no more than 4 inches thick, have no turn-downed edges, have no reinforcing, and have isolation joints at pilings and columns and control or construction joints in both directions no more than 4 feet apart or (2) self-supporting and will remain intact under base flood conditions, taking into account scour and erosion, and have building foundations capable of resisting any added loads due to the presence of the slabs. <u>Change from 2015 to 2018 IRC:</u> Moved specifications for slabs from R322.3.3. to separate subsection. <u>Change from 2012 to 2015 IRC:</u> No change.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying requirements for concrete slabs.
Swimming pools and spas	Section R326.1 [Swimming Pools, Spas and Hot Tubs] General. Requires pools and spas to comply with the <i>International Swimming Pool and Spa Code®</i> (ISPSC), which requires compliance with American Society of Civil Engineers (ASCE) 24. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> Added requirement to comply with the ISPSC.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying requirements for door at top of stairway.
Building envelope	Section R322.3.6.1 Protection of building envelope. Requires an exterior door at the top of stairs that provides access to the building. <u>Change from 2015 to 2018 IRC:</u> No change. <u>Change from 2012 to 2015 IRC:</u> Added requirement for door.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying requirements for door at top of stairway.

Table 1: Comparison of Selected 2018 IRC Requirements and NFIP Requirements (continued)

Topic	Summary of Selected 2018 IRC Requirements and Changes from 2015 and 2012 Editions	Comparison with NFIP Requirements
Stairways and ramps	Section R322.3.7 Stairways and ramps. Provides four options for stairs and ramps located below the lowest floor elevation: (1) open or partially open risers and guards, (2) breakaway, (3) retractable, or (4) designed to resist flood loads. In all cases, the area below stairs and ramps must not be enclosed with walls unless the walls are designed to break away. <u>Change from 2015 to 2018 IRC:</u> New section for stairways and ramps incorporating language from R322.3.3.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying requirements for stairways and ramps.
Decks and porches	Section R322.3.8 Decks and porches. Requires attached decks and porches to meet lowest floor elevation requirement and either have compliant foundations or be cantilevered from or knee-braced to the building. Self-supporting decks and porches must be designed to remain in place or break away and may be below the BFE if not enclosed by solid walls (including breakaway walls). <u>Change from 2015 to 2018 IRC:</u> New section for decks and porches incorporating language from R322.3.3.	Exceeds NFIP 44 CFR § 60.3(e)(5) by specifying requirements for decks and porches.
Elevators and foundation bracing	No explicit provisions; see free-of-obstruction requirement in the first row of this table (Table 1).	Meets NFIP 44 CFR § 60.3(e)(5), which has no specific requirements.

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3.2 International Building Code and ASCE 24

The flood provisions of the International Building Code® (IBC®) meet or exceed the NFIP requirements for buildings largely through reference to the ASCE 24, *Flood Resistant Design and Construction*. The IBC applies to all applicable buildings and structures. While primarily used for buildings and structures other than dwellings within the scope of the IRC, the IBC may be used to design dwellings. ASCE 24 applies to structures subject to building code requirements. The ASCE 24 requirements, summarized in Table 2, are more specific than the NFIP free-of-obstruction requirements.

IBC AND ASCE COMMENTARIES

ICC publishes companion commentary for the IBC, and ASCE publishes companion commentary for ASCE 24. Although not regulatory, the commentaries provide information and guidance that are useful in complying with, interpreting, and enforcing requirements.

Table 2: Comparison of Selected 2018 IBC and ASCE 24-14 Requirements with NFIP Requirements

Topic	Summary of Selected 2018 IBC / ASCE 24-14 Requirements and Changes from 2015 and 2012 IBC / ASCE 24-05	Comparison with NFIP Requirements
General design requirement	2018 IBC Section 1612.2 Design and construction. Requires design and construction of buildings and structures located in Coastal High Hazard Areas (Zone V) and Coastal A Zones to comply with Chapter 5 of ASCE 7 and ASCE 24. <u>Change from 2015 to 2018 IBC:</u> No change except renumbering of section. <u>Change from 2012 to 2015 IBC:</u> Applies Coastal High Hazard Area requirements in Coastal A Zones if delineated.	Exceeds NFIP 44 CFR § 60.3(e) by referring to ASCE 24, which has more specificity for some foundation elements and higher minimum building elevations, and which requires meeting Zone V design and construction standards in Coastal A Zones (which are not defined in the NFIP).
Obstruction	ASCE 24-14 Section 1.2 Definitions. “Obstruction – Any object or structural component attached to a structure below the DFE that can cause an increase in flood elevation, deflect floodwaters, or transfer flood loads to any structure.” The DFE in the definition of obstruction is the Design Flood Elevation, which will be equal to or higher than the BFE. <u>Change from ASCE 24-05:</u> No change.	The NFIP does not define “obstruction.”
Free of obstruction	ASCE 24-14 Section 4.5.1 Foundation Requirements, General. • Applies to foundation systems in Coastal High Hazard Areas (Zone V) and Coastal A Zones. • Requires foundations to be designed to minimize forces acting on foundations, to minimize damage to the foundations and the elevated structures, and to adequately transfer all loads imposed on the foundations and elevated structures to the supporting soils. With the exception of certain bracing and shear walls, requires foundation system to be free of obstructions that will restrict or eliminate free passage of high-velocity flood waters and waves during design flood conditions. <u>Change from ASCE 24-05:</u> No change.	Equivalent to NFIP 44 CFR § 60.3(e)(5).

Table 2: Comparison of Selected 2018 IBC and ASCE 24-14 Requirements with NFIP Requirements (continued)

Topic	Summary of Selected 2018 IBC / ASCE 24-14 Requirements and Changes from 2015 and 2012 IBC / ASCE 24-05	Comparison with NFIP Requirements
Use of fill	2018 IBC Section 1804.5 Grading and fill in flood hazard areas. Specifies that fill is only allowed where constructed and placed to avoid diversion of water and waves toward any building or structure. Where allowed, fill is required to be stable under conditions of flooding, including rapid rise and drawdown and wave action. Change from 2015 to 2018 IBC: Clarifies that fill where allowed must be stable under conditions of flooding. Change from 2012 to 2015 IBC: No change. ASCE 24-14 Section 4.5.4 Use of Fill. • Specifies that placement of nonstructural fill for minimal site grading and landscaping and to meet local drainage requirements is permitted. • Specifies that placement of nonstructural fill under and around a structure for dune construction or reconstruction is permitted if an engineering report documents that the fill will not result in wave runup, ramping, or deflection of floodwaters that can cause damage to structures. <u>Change from ASCE 24-05:</u> Clarifies that an engineering report is necessary to document the effect of fill, and the commentary clarifies that the intent is to allow minor amounts of nonstructural fill for specific purposes.	Equivalent to NFIP 44 CFR § 60.3(e)(6), with more specificity for use of fill for specific, nonstructural purposes.
Enclosed areas	ASCE 24-14 Section 4.6 Enclosed Areas Below Design Flood Elevation. Requires enclosed areas below DFE to be designed and constructed with breakaway walls, with flood openings in those walls, and requires stairways within the enclosed area to have an exterior door at the top of the stairs. Change from ASCE 24-05: Modified to refer to subsections for requirements and adds the requirement for an exterior door at the top of the stairs. ASCE 24-14 Section 4.6.1 Breakaway Walls. Change from ASCE 24-05: No change. ASCE 24-14 Section 4.6.2 Openings in Breakaway Walls. Change from ASCE 24-05: Modified to require flood openings in breakaway walls forming an enclosure.	Exceeds NFIP 44 CFR § 60.3(e)(5) by requiring flood openings in breakaway walls and a door at the top of stairways within enclosures.
Utilities and equipment	ASCE 24-14 Section 7.1 General. Requires attendant utilities and equipment to be at or above specified elevations or be specifically designed, constructed, and installed to prevent floodwaters from entering or accumulating within components. <u>Change from ASCE 24-05:</u> No change	Exceeds NFIP 44 CFR § 60.3(a)(3)(iv) with freeboard requirements for utility system platforms and equipment for most buildings.
Tanks	ASCE 24-14 Section 9.7 Tanks. Requires tanks in Coastal High Hazard Areas (Zone V) and Coastal A Zones to be (1) elevated on platforms meeting certain requirements or (2) installed and anchored below the eroded ground surface. <u>Change from ASCE 24-05:</u> Consolidated requirements for tanks in Section 9.7.	Exceeds NFIP 44 CFR § 60.3(a)(3)(iv) with specificity for platforms and requirements for tanks.

Table 2: Comparison of Selected 2018 IBC and ASCE 24-14 Requirements with NFIP Requirements (continued)

Topic	Summary of Selected 2018 IBC / ASCE 24-14 Requirements and Changes from 2015 and 2012 IBC / ASCE 24-05	Comparison with NFIP Requirements
Slabs	ASCE 24-14 Section 9.3 Concrete Slabs. Requires in Coastal High Hazard Areas (Zone V) and Coastal A Zones that concrete slabs be either (1) designed as frangible, not structurally connected to structure, and not capable of creating debris that would cause significant damage to other structures or (2) be self-supporting and remain in place and functional after the design flood. <u>Change from ASCE 24-05:</u> Slabs were moved from Section 4.8 to Section 9.3. New text permits (non-building-foundation) self-supporting structural slabs for parking/enclosure/deck/patio in Zone V and Coastal A Zone.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements for concrete slabs.
Swimming pools and spas	2018 IBC Section 3109.1 General. Requires, within Coastal High Hazard Areas (Zone V) and Coastal A Zones, that the design and construction of swimming pools, spas, and hot tubs comply with the ISPSC, which requires pools to be designed in accordance with ASCE 24. <u>Change from 2015 to 2018 IBC:</u> No change <u>Change from 2012 to 2015 IBC:</u> Replaces specific requirements with reference to the ISPSC. ASCE 24-14 Section 9.6.2 Pools in Coastal High Hazard Areas, Coastal A Zones and Other Flood Hazard Areas. Requires pools to be (1) elevated, (2) designed to break away without producing damaging debris, or (3) designed to remain in the ground without obstructing flow that could cause damage. Pools must be structurally independent of buildings and structures unless located in or on elevated floors or roofs that are above the DFE. <u>Change from ASCE 24-05:</u> Clarifies pool requirements for pools within Coastal High Hazard Areas, Coastal A Zones, and other flood hazard zones.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements for swimming pools and spas.
Elevators	2018 IBC Section 3001.3 Referenced standards. Requires the design, construction, installation, alteration, repair, and maintenance of elevators and conveying systems and their components to comply with the standard specified in 2018 IBC Section 3001.3, Table 3001.3, and ASCE 24 unless the code states otherwise. <u>Change from 2015 to 2018 IBC:</u> Standards moved to Table 3001.3. <u>Change from 2012 to 2015 IBC:</u> No change.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements for elevators.
Access stairs and ramps	ASCE 24-14 Section 8.1 General. In Coastal High Hazard Areas (Zone V) and Coastal A Zones provides four options for the design and construction of stairways and ramps below the required elevation. <u>Change from ASCE 24-05:</u> Adds option for retractable stairways and ramps.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements and alternatives for stairways and ramps.

Table 2: Comparison of Selected 2018 IBC and ASCE 24-14 Requirements with NFIP Requirements (continued)

Topic	Summary of Selected 2018 IBC / ASCE 24-14 Requirements and Changes from 2015 and 2012 IBC / ASCE 24-05	Comparison with NFIP Requirements
Decks and porches	ASCE 24-14 Section 9.2 Decks and Porches 9.2.1 Attached Decks and Porches. In coastal high hazard areas (Zone V) and Coastal A Zones, specifies that attached decks and porches be elevated on certain foundations or cantilevered from the main structure. ASCE 24-14 Section 9.2.2 Detached Decks and Porches. In Coastal High Hazard Areas (Zone V) and Coastal A Zones, specifies that detached decks and porches be (1) designed and constructed to remain intact and in place during the base flood or (2) be designed to be frangible, minimizing debris capable of causing significant damage to any structure. <u>Change from ASCE 24-05:</u> Clarifications with no new requirements or limitations.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements for decks and porches.
Foundation bracing	ASCE 24-14 Section 4.5.11 Bracing. <u>Change from ASCE 24-05:</u> No change.	Exceeds NFIP 44 CFR § 60.3(e)(5) with requirements for bracing.

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4 NFIP Flood Insurance Implications

Meeting the minimum NFIP floodplain management requirements does not necessarily result in the lowest NFIP flood insurance premium. NFIP flood insurance premiums depend on the presence, location, construction, size, age, and use of enclosures and other building components and equipment. Floodplain management regulations allow enclosures greater than 300 square feet, but structures with these enclosures have higher NFIP flood insurance premiums. Designers should consult a qualified insurance agent and review FEMA's *NFIP Flood Insurance Manual* to determine insurance implications of design and construction decisions.

EFFECT OF CONSTRUCTION BELOW THE BFE

Any construction or site development practice below the BFE (even piles and columns permitted by the NFIP) will cause a localized disruption of flow and waves during the base flood. The question is whether the localized disruption will be great enough to harm the elevated building or surrounding buildings.

NFIP floodplain management regulations allow certain construction elements below the BFE that may or may not break away during the base flood (e.g., stairwells, elevator shafts, shear walls). These elements may or may not be considered obstructions for NFIP flood insurance rating purposes. For example:

- The NFIP floodplain management regulations in 44 CFR § 60.3(e) allow open wood lattice, insect screening, and solid, non-load-bearing, breakaway walls below elevated buildings in Coastal High Hazard Areas. Even though floodplain management regulations permit solid breakaway walls, garage doors, and slats or lattice (with less than 40 percent of the area open), building designers and owners

should be aware that these elements can result in higher NFIP flood insurance premiums. See the text box “NFIP Flood Insurance Free-of-Obstruction Rate” below for details.

- The NFIP floodplain management regulations in 44 CFR § 60.3(e) restrict uses of space below the BFE to parking of vehicles, building access, and storage. Stairs, ramps, and elevators are permitted. However, depending on how stairs, ramps, and elevators are constructed, they may be considered obstructions for NFIP flood insurance rating purposes and could result in higher premiums.

DETERMINING FLOOD INSURANCE IMPLICATIONS BEFORE THE DESIGN

Design professionals and property owners may wish to contact a qualified insurance agent or the NFIP regarding the flood insurance rating and premium implications of obstructions before a building is designed.

NFIP FLOOD INSURANCE FREE-OF-OBSTRUCTION RATE

In order for a structure to qualify for the NFIP flood insurance free-of-obstruction rate, the space below the lowest elevated floor must be free of obstructions with the following exceptions:

- Insect screening provided that no additional supports are required for the screening
- Wooden or plastic lattice with at least 40 percent of its area open and constructed of material no thicker than ½ inch
- Wooden or plastic slats or shutters with at least 40 percent of their area open and constructed of material no thicker than 1 inch
- One solid breakaway wall or garage door with the remaining sides of the enclosure constructed of the above-mentioned insect screening, wooden or plastic lattice, slats, or shutters

5 Free-of-Obstruction Requirement Considerations

Some NFIP flood-resistant design and construction requirements, including free-of-obstruction requirements, are performance related and are not prescriptive. In other words, the expected building performance is stated, but how to achieve the performance is not specified. It is up to the design professional to create a design that complies with the free-of-obstruction performance requirements and up to the local official to determine whether the design satisfies the community’s requirements.

It is not always clear whether a particular building element or a site development practice would create a significant obstruction that would prevent the free passage of floodwater and waves. “Significant” is used because *any* construction element or site development practice below the flood level would cause a localized disruption of flow and waves during the base flood. Determining whether the disruption would be significant is not always easy because in most cases, there are no analytical or readily usable numerical

tools to answer the question with certainty. Local experience, results of post-disaster assessments, and application of coastal processes and building science principles must be relied on to reach a conclusion.

Some local floodplain management regulations require potential obstructions below or near a building to be evaluated to determine their effects on flow and waves. Fluid mechanics and coastal engineering references, such as the U.S. Army Corps of Engineers *Coastal Engineering Manual* (2002), provide some guidance, but the methods in these references are not generally capable of evaluating the potential effects of small building elements or small amounts of fill on flooding and waves during a base flood. Numerical coastal storm surge and wave models used in Flood Insurance Studies do not have sufficiently detailed resolution to discern building-sized disruptions to flow and wave fields.

Currently, developing models with fine enough resolution is technically challenging, time consuming, and cost prohibitive. And although recently developed, sophisticated numerical models show some promise in analyzing flow around buildings, their use is not economically feasible for most communities, owners, or designers interested in examining the potential obstructions discussed in this Technical Bulletin.

6 Building Elements Below the Base Flood Elevation

This section discusses common building elements under elevated buildings that can impede the free passage of flood flow and waves. Following the guidance in this section will minimize potential obstructive effects and satisfy the NFIP free-of-obstruction requirement.

6.1 Access Stairs and Ramps

Access stairs and ramps that are attached to or beneath an elevated building may be enclosed with breakaway walls or unenclosed. However, like foundation bracing (see Section 6.8), stairs and ramps can impede breakaway walls from breaking away cleanly as intended. To minimize this possibility, unenclosed stairs and ramps are preferred, but if enclosures are used, the design should be such that the stairs and

ENTRY DOOR AT TOP OF ACCESS STAIRS

Access stairs to elevated buildings are often constructed inside a breakaway enclosure with an entry door at the bottom of the enclosure but no entry door into the building at the top of the stairs. The lack of an entry door at the top results in a large opening in the building envelope when enclosures break away. Numerous post-disaster damage assessments have shown that loss of breakaway enclosures exposes building interiors to higher internal wind pressures and wind-driven rain. Loss of breakaway enclosures can also provide an easy path for floodwater to enter buildings, resulting in damage that can be avoided when doors are provided at the top of the access stairs.

Beginning with the 2015 IRC and ASCE 24-14, solid entry doors capable of resisting all design loads are required to be installed at the top of access stairs inside breakaway enclosures.

ramps do not interfere with breakaway wall performance. Enclosing stairways also affects NFIP flood insurance rates.

Stairs and ramps are not required to break away, but it is a design option. Stairs and ramps must be designed and constructed to either:

- Resist flood loads and remain in place during floods up to and including the base flood. If this option is selected, the elevated building and its foundation must be designed to resist any flood loads that are transferred from the stairs or ramp to the building, or
- Break away during base flood conditions without causing damage to the building or its foundation.

Figure 1 shows an example of an elevated building that was damaged as a result of stairs that did not break away cleanly; the stairway pulled out the exterior wall of the elevated building as the stairway failed.

Figure 1:
Damage to an elevated building as a result of stairs that not break away cleanly



Constructing access stairs with open sides (open guards and railings) and risers, to the extent allowed by building codes, minimizes the potential for flood loads acting on the stairs, thereby minimizing flood damage and also minimizing transfer of flood loads to the elevated building. Open stairs should be considered whenever possible (see Figure 2). Note that building codes may have maximum opening size limits on stair risers and railings, necessitating a longer run. Check with the local jurisdiction for requirements.

Ramps must be designed and constructed to minimize the obstruction of floodwater and waves and configured so that floodwater and waves cannot flow directly up the ramp toward the elevated building. This means that ramps should be positioned to avoid a straight alignment from the elevated building to the likely direction of wave and surge approach.



Figure 2:
Open stairs, which minimize
transfer of flood and wave
forces

Massive exterior stairs are not permitted because they are inconsistent with the free-of-obstruction requirement and because other types of stairs can provide access. Figure 3 shows massive stairs that are attached to an elevated coastal home. These massive stairs will act as an obstruction and increase the likelihood of trapping or reflecting waves and flood flow beneath the elevated building.

In some cases, life-safety code requirements dictate that stairs and stairwells in structures of certain occupancy categories be constructed to be fire resistant and structurally stable even if portions of the adjacent structure fail. Stairs and stairwells that meet these requirements are usually constructed of some combination of steel, reinforced masonry, and reinforced concrete and will not break away under



Figure 3:
Massive stairs attached to
an elevated coastal home,
which act as an obstruction

expected base flood loads and conditions. These stairs and stairwells, typically found in mid- and high-rise buildings, must be designed to withstand all base flood loads, including flow, waves, and floodborne debris impacts.

6.2 Decks, Porches, and Patios

Decks, porches, and patios are typically outside the footprint of elevated residential and commercial buildings and may be constructed at grade, above grade but below the BFE, at the BFE, or above the BFE.

In Coastal High Hazard Areas, decks and porches outside the building footprint must meet one of the following conditions:

- If structurally attached to a structure, the bottom of the lowest horizontal structural member of the deck or porch must be at or above the BFE. Deck and porch supports that extend below the BFE (e.g., pilings, bracing) must comply with Zone V design and construction requirements, and the structure must be designed to accommodate any increased loads resulting from the attached deck or porch.
- If an attached deck or porch is located above the BFE but relies on support elements (posts, columns, braces) that extend below the BFE, the supports must comply with Zone V design and construction requirements.
- If a deck, porch, or patio (not counting its supports) lies in whole or in part below the BFE, it must be structurally independent from the structure and its foundation system.

Decks that are constructed within the building footprint between the ground and the elevated building are sometimes referred to as mezzanine decks. In Coastal High Hazard Areas, mezzanine decks should be treated similar to the floors of above-grade (elevated) enclosures (see Section 6.5). If directly below the footprint, a mezzanine deck that is structurally attached to the host building is treated as the lowest floor elevation for NFIP flood insurance rating purposes.

From a floodplain management perspective, mezzanine decks must meet building code requirements for dead, live, and other applicable loads and must be designed to either:

- 1) Break apart into small pieces without causing collapse, displacement, or other structural damage to the elevated building or the supporting foundation under flood loads less than those that occur during the base flood or
- 2) Along with the building foundation, accommodate flood loads transferred from the mezzanine deck to the building foundation during flooding up to and including base flood conditions.

Mezzanine decks may be independently supported on an open foundation and must be designed to either withstand flooding up to and including the base flood or break apart into small pieces under base flood or lesser conditions. Structurally independent decks below the BFE and below a structure's footprint are not considered the lowest floor for NFIP flood insurance purposes.

Decks, porches, and patios must not adversely affect the structure with which they are associated, or nearby structures, by diverting floodwater and waves during flood conditions up to and including the base flood. Some decks and patios, such as low-profile decks and patios constructed at natural grade or on minor quantities of fill necessary to level the site (see the textbox in Section 7.5), are deemed to comply by minimizing harmful diversion of floodwater or wave runup and reflection. A low-profile deck or patio, as used here, has a floor system depth of 12 inches or less, some of which may be below the

adjacent finished grade. The depth does not include railings, which should be open to allow water to flow through. Attaching seats, benches, tables, planters, or similar features will cause a deck or patio to lose its deemed-to-comply low-profile classification. These features may or may not be obstructions (depending on size, number, and configuration) and should be evaluated for potential effects on flow and waves.

Decks, porches, and patios must be designed and constructed so that when subject to flooding up to and including base flood conditions, they do not create debris capable of causing significant damage to nearby structures. This means that decks, porches, and patios must remain intact and in place during base flood conditions or break apart into small pieces so the resulting debris does not lead to structural damage to nearby structures.

Decks and porches that are structurally attached to structures in Zone V must be supported to resist the simultaneous action of design wind loads and base flood loads. Most attached decks and porches are supported on piles or columns embedded in the ground and are capable of surviving anticipated erosion and scour. Post-storm assessments frequently identify decks and porches that were elevated on posts whose diameters were too small or on structural elements without sufficient embedment into the ground. The result of inadequate support is loss of decks and porches and sometimes damage to elevated structures. Unless the building code or local community prescribes otherwise, the foundation for an elevated deck or porch attached to a structure in Zone V should be similar to the structure's foundation. Attached decks and porches may be cantilevered from main structures instead of supported on piles or columns.

6.3 Elevators

Elevators attached to or beneath elevated structures in Zone V must comply with building, fire, electrical, and mechanical code requirements. Elevators and elevator shafts are not required to break away but must meet flood damage-resistant material and equipment requirements.

Flood loads acting on elevator components, any non-breakaway shaft walls, and potential wave runup and reflection effects must be accounted for in the design of the elevated structure and its foundation system. Therefore, it is advantageous to minimize the size of elevators, especially residential elevators in one- and two-family structures. Elevators should be designed and installed to satisfy the requirements of ASCE 24, which FEMA has determined meets or exceeds the minimum NFIP requirements. Additional guidance can be found in NFIP Technical Bulletin 4, *Elevator Installation for Buildings Located in Special Flood Hazard Areas*.

NFIP FLOOD INSURANCE AND ELEVATOR SHAFTS AND ELEVATOR EQUIPMENT

Elevator shafts and elevator equipment below the BFE will result in higher NFIP flood insurance premiums. The presence of elevators always increases the premium, regardless of how the shafts are constructed.

6.4 Enclosed Areas

The types of enclosed areas that are discussed in this section are:

- Enclosed areas below elevated structures
- Above grade (elevated) enclosures
- Two-level enclosures

6.4.1 Enclosed Areas Below Elevated Structures

The use of enclosed areas below elevated structures is restricted to parking of vehicles, building access, and storage. Enclosed areas must not be used for habitable purposes. Enclosed areas, including foyers, must be constructed of flood damage-resistant materials and not be finished. All enclosed areas below elevated buildings will be considered when the NFIP flood insurance premium is determined.

The NFIP regulations in 44 CFR § 60.3(e)(5) state that the area beneath the elevated portion of a structure in Zone V may be enclosed only with open lattice, insect screening, or non-supporting breakaway walls (see NFIP Technical Bulletin 9, *Design and Construction Guidance for Breakaway Walls Below Elevated Buildings in Coastal High Hazard Areas*). However, while NFIP regulations permit all enclosure walls to be solid breakaway walls, construction of such will lead to a With-Obstruction rating by the NFIP.

FEMA guidance states that the following lattice and slats are acceptable:

- Wood or plastic lattice no thicker than ½ inch with at least 40 percent of its area open
- Wood or plastic slats or fixed louvers no thicker than 1 inch that, when installed, have at least 40 percent of their area open

Figure 4 and Figure 5 show examples of compliant slats, which are typically installed flat against foundation pilings (see Figure 4) or angled like louvers between the pilings (see Figure 5). Percent open area of a lattice or louver wall should be calculated based on the area through which water can flow through lattice or louvers, divided by the total area of the enclosure wall (see Figure 6).

PRIVACY SCREENING

Privacy screening around outdoor shower areas is permitted if the sides are open at top and bottom and the screening will break away under base flood or lesser conditions. If a space under the building footprint is enclosed with privacy screening, there will be an NFIP flood insurance premium increase.

SIZE OF ENCLOSURES AND NFIP FLOOD INSURANCE

The NFIP does not limit the size of enclosures under elevated structures. However, higher NFIP flood insurance premiums will generally be assessed for structures in Zone V with enclosed areas of any size (including stairwells and elevator enclosures), even if enclosed by breakaway walls. Annual NFIP premiums can be even higher when buildings have enclosures that are 300 square feet or larger. Some communities have adopted restrictions or prohibitions on enclosures. Designers, contractors, and owners should check local requirements prior to construction.

The NFIP does not require flood openings in the walls of enclosures in Zone V. However, beginning with ASCE 24-14 and the 2015 IRC and IBC, enclosures in Zone V require flood openings.



Figure 4:
Compliant wood slats
installed flat against
foundation pilings



Figure 5:
Compliant, fixed, wood
louvers installed between
pilings

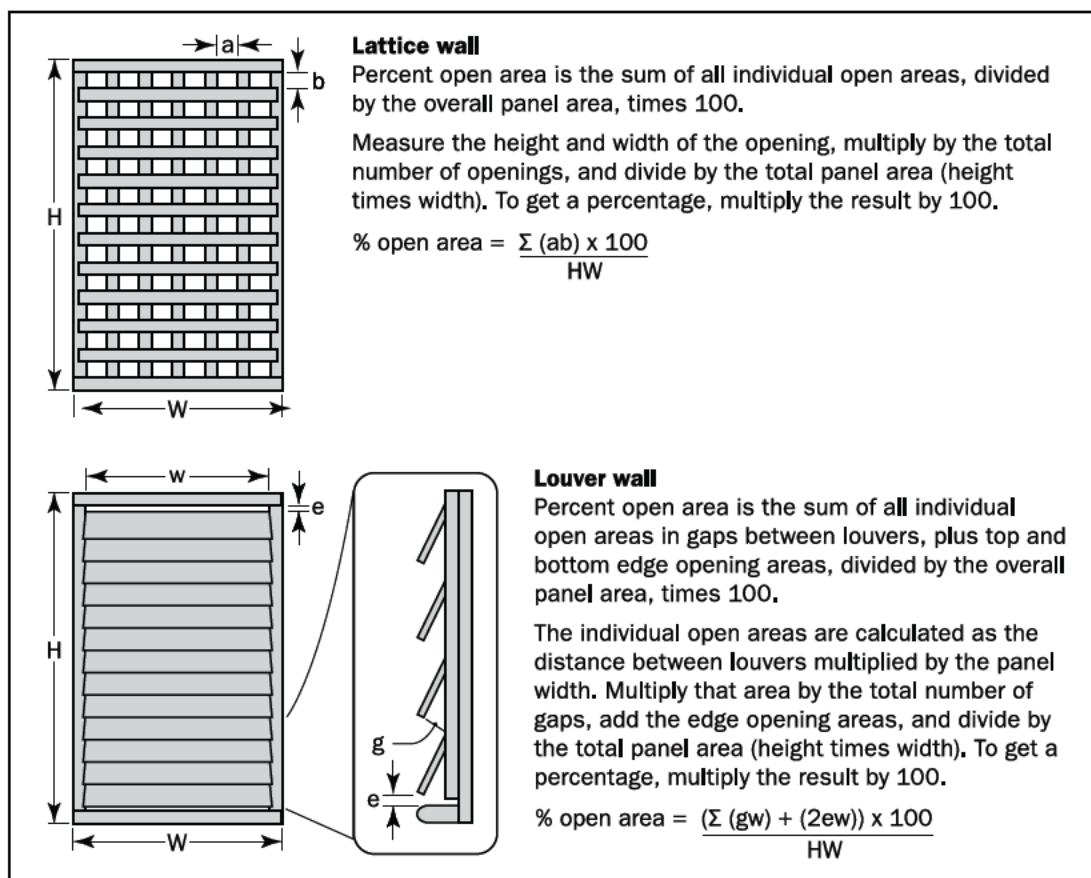


Figure 6: Determination of the percentage of open area for a lattice or louver wall

Figure 7 shows an elevated building in which a portion of a solid breakaway wall enclosure did not break away. Waves were not able to pass beneath the elevated structure, and wave runoff against the enclosure wall likely caused damage above the elevated floor.

Figure 7:
Breakaway wall that did not break away, which led to wave runoff and contributed to flood damage on the side of the elevated building



6.4.2 Above-Grade Enclosed Areas (Elevated)

Another enclosure option is to construct enclosures with floor systems that are elevated above grade and are not in contact with the ground (see Figure 8). Placing the enclosure floor above grade minimizes the potential for damage to the enclosure and contents during frequent, low-level flood events.



Figure 8:
Above-grade enclosure

An above-grade enclosed area (sometimes referred to as a hanging enclosure) is any enclosure with its floor system above grade. The enclosure may be supported by a foundation beneath the enclosure or by the elevated building and/or building foundation. A hanging floor is the lowest floor elevation for NFIP flood insurance rating purposes.

Above-grade enclosures may be used only for storage and building access and must meet all other requirements applicable to enclosures, including the use of breakaway walls and flood damage-resistant materials below the BFE. Additionally, mechanical and electrical systems in the enclosure must be elevated to or above the BFE. A floor grate should be installed in the enclosure floor, and flood openings should be installed in breakaway enclosure walls. The grate will reduce vertical uplift (buoyancy) loads on the enclosure floor before water flows through the openings in the enclosure walls and allow the elevated enclosure to drain fully, reducing the downward load caused by water that would otherwise be trapped above the enclosure floor.

ABOVE-GRADE ENCLOSURES AND NFIP FLOOD INSURANCE

NFIP flood insurance policies for elevated buildings with above-grade enclosures are rated assuming the floor of the above-grade enclosure is the lowest floor (or based on the elevation of the lowest horizontal structural member of the enclosure instead of the lowest horizontal structural member of the lowest floor of the elevated building). Owners should ask their insurance companies to submit requests to the NFIP for a special rating for buildings with above-grade enclosures.

The design of the foundation and enclosure floor system for above-grade enclosures that are in Zone V must meet one of the following conditions:

- The floor system is designed to break away under flood loads less than those that occur during the base flood without causing collapse, displacement, or other structural damage to the elevated building or the supporting foundation (see Figure 9), or
- The floor system is designed to remain in place and intact, and the building foundation is designed to accommodate flood loads transferred from the enclosure floor system to the foundation during flood conditions up to and including the base flood (see Figure 9), or
- The enclosure floor system is independently supported on an open foundation (see Figure 10).

Flood openings in above-grade enclosure walls are required by the building code but do not reduce NFIP flood insurance premiums for the enclosure.

6.4.3 Two-Level Enclosed Areas

In flood hazard areas where the BFE is very high above the ground or where owners elect to elevate buildings very high, some owners opt to build two-level enclosures (see Figure 11 and Figure 12). Two-level enclosures are permitted but not recommended due to their more complicated construction and increased potential for

TWO-LEVEL ENCLOSURES

Two-level enclosures are also known as two-story enclosures, double enclosures, and stacked enclosures.

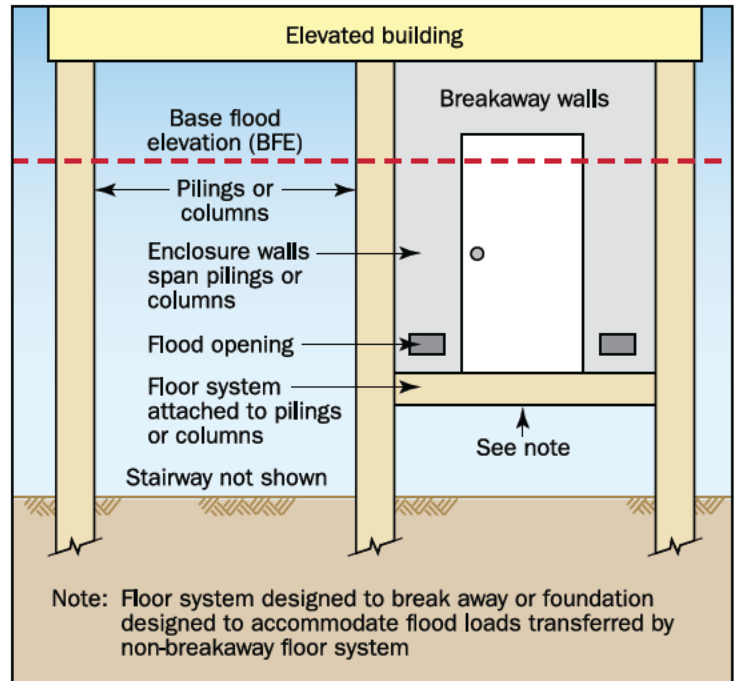


Figure 9: Above-grade enclosure floor system attached to building foundation

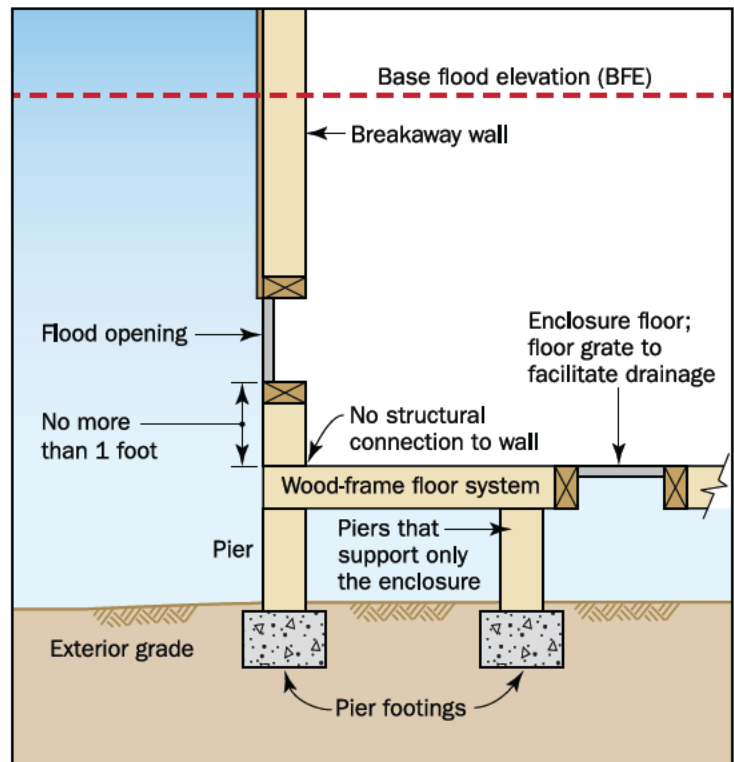


Figure 10: Above-grade enclosure supported by independent foundation



Figure 11:
Two-level enclosure

floodborne debris. Two-level enclosures could also result in the floor of the upper level being considered the lowest floor for NFIP flood insurance rating purposes.

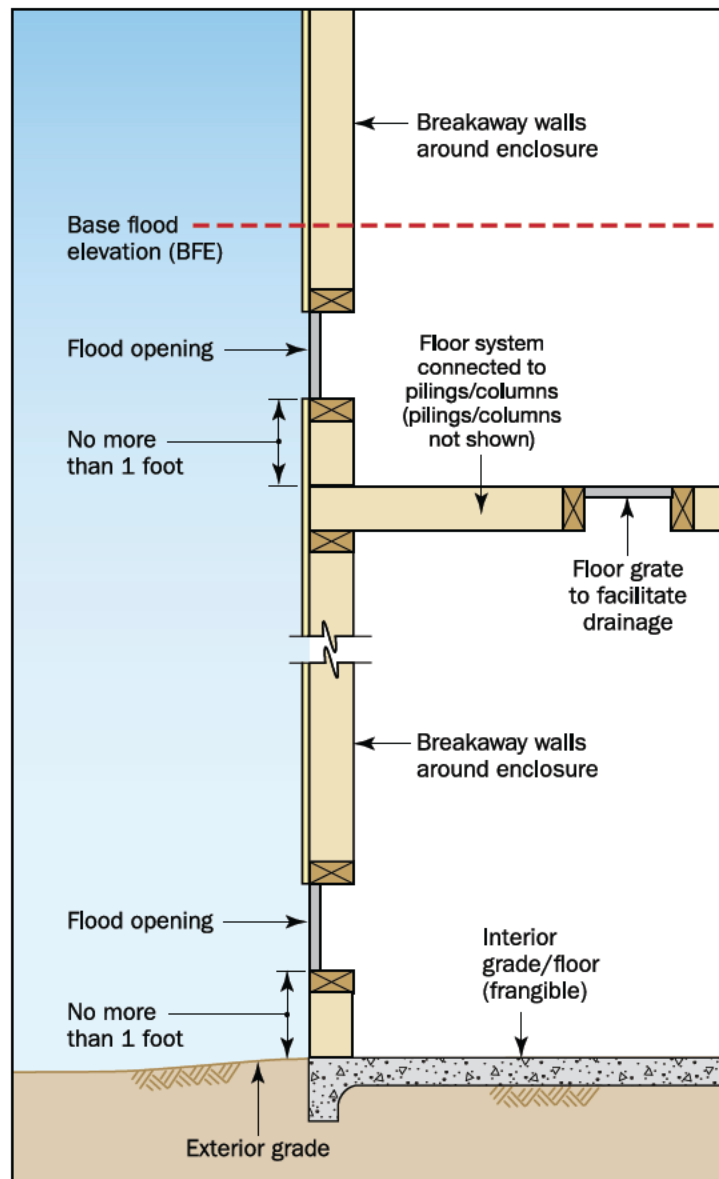
Both levels of the enclosure must meet all of the floodplain management and building code requirements for enclosed areas, including breakaway walls, elevated utilities, flood damage-resistant materials, and limitations on use (parking of vehicles, building access, and storage). The floor system of the upper enclosure level must be designed to meet one of the options for above-grade (elevated) enclosed areas (see Section 6.4.2).

Openings with grates should be installed in the floor to facilitate drainage from the upper level enclosure. In the event that floodwater enters the upper level but does not cause failure of the breakaway walls, the floor grates will allow trapped water to drain to the lower level and not overload the upper level floor system.

TWO-LEVEL ENCLOSURES AND NFIP FLOOD INSURANCE

Designers and owners should be aware that a building with a two-level enclosure, even if allowed by permit, could result in higher NFIP flood insurance premiums than if the building has a one-level enclosure. Even if a two-level enclosure complies with building code and floodplain management requirements for enclosures, the upper floor of the two-level enclosure could be deemed the lowest floor for NFIP flood insurance rating purposes (the lowest floor elevation for flood insurance purposes is the first floor elevated above ground). Owners should ask their insurance companies to submit requests to the NFIP for a special rating for buildings with two-level enclosures.

Figure 12:
Two-level enclosure schematic



6.5 Mechanical, Electrical, and Plumbing Equipment, Ducts, Tanks, and Fixtures

Mechanical, electrical, and plumbing equipment, ducts, tanks, and fixtures serving elevated buildings are required to be elevated to or above the BFE or protected from water entry during the base flood.

There are exceptions for elevator equipment that cannot be elevated (see NFIP Technical Bulletin 4, *Elevator Installation for Buildings Located in Special Flood Hazard Areas*, and ASCE 24).

EQUIPMENT BELOW AN ELEVATED BUILDING AND NFIP FLOOD INSURANCE

Designers and owners should be aware that elevator equipment and other equipment below an elevated building will result in higher NFIP flood insurance premiums, even if the equipment is allowed by permit.

Utility lines, pipes, risers, and chases may need to extend below the BFE but should be installed to minimize potential damage from flooding (some utility companies place meters below the BFE so they can be easily accessed). The following help minimize potential damage:

- Utility lines, pipes, risers, and chases are not allowed to be attached to or penetrate through breakaway walls (see Figure 13).
- Utility lines, pipes, risers, and chases should be located on the sides of piles and columns that are opposite the anticipated direction of flood flow and wave approach, where possible.

Fuel tanks and other tanks serving elevated buildings and located under or adjacent to the buildings must be in-ground or elevated above the BFE. In both cases, tanks should be anchored to prevent flotation or lateral movement during base flood conditions. Platforms supporting elevated tanks should resist flooding up to and including base flood conditions.

To satisfy free-of-obstruction requirements, above-ground tanks must not be located beneath elevated buildings or attached to elevated buildings below the BFE. This requirement also applies to permanently

UTILITY CHASES

For floodplain management and NFIP flood insurance purposes, utility chases designed to protect utility lines from freezing are not considered enclosures. Utility chases must be small and not allow access for a person to enter the space (access panels for servicing the lines are appropriate).

Because a utility chase is not considered an enclosure, it does not have to meet the requirement of breakaway walls, louvers, or open latticework; however, the chase may be breakaway under flood conditions.

The utility chase must be constructed of flood damage-resistant materials below the BFE, and the enclosed utility lines must meet the requirement to be watertight and capable of withstanding flood loads (hydrostatic, hydrodynamic, wave). Additionally, the portions of the utility system located below the BFE and the utility chase should not be attached to, mounted on, pass through, or be located along breakaway walls.



Figure 13:
Utilities mounted on wall, which prevented the wall from breaking away cleanly

installed fuel tanks for outdoor kitchens. Portable gas grills and associated propane fuel tanks and similar devices for which building permits are not required are not subject to these requirements. However, communities may have other fire and life-safety requirements that must be met. In addition, when flooding is anticipated, owners should move portable grills and propane fuel tanks to a safe location where they will not pose a hazard or become floodborne debris.

Additional guidance can be found in FEMA P-348, *Protecting Building Utilities from Flood Damage* (2017), and FEMA P-259, *Engineering Principles and Practices for Retrofitting Flood-Prone Residential Structures* (2012).

6.6 Foundation Bracing

Foundation bracing is often used to stiffen pile foundations and/or improve comfort and reduce sway in elevated buildings. However, foundation designs without bracing are preferred in coastal areas because they minimize obstructions to flow and waves.

Free-of-obstruction considerations call for using only the minimum amount of foundation bracing necessary to achieve a stable design, and such bracing should be designed to withstand flood conditions up to and including the base flood. Additional bracing may be used to improve the comfort of building occupants (i.e., reduce building sway under non-flood conditions), but the additional bracing should not be as strong as that required for structural stability and should not be relied on to yield a stable design, as it may be lost during a flood.

Many coastal construction experts and design references advise relying on shore-perpendicular bracing and minimizing the use of shore-parallel bracing. However, because wind and seismic loads can act in any direction, this alternative may not always provide the structural stability that is required in some locations. Increasing the number of piles (by decreasing horizontal spacing), detailing moment connections at the tops of the piles (in the case of concrete piles and beams), and using grade beams are accepted ways of eliminating or reducing the need for foundation bracing. Designers may determine other ways to minimize the amount and type of bracing.

Diagonal timber cross-bracing is the most common type of bracing used on foundations under coastal homes. Unfortunately, timber braces frequently fail during severe flood events as a result of wave or debris impacts. If they survive, they can interfere with breakaway wall failure, trap debris, and transfer lateral flood loads to the foundation. Metal rod braces, while less susceptible to failure, can also trap floating debris (see Figure 14). Knee braces at the tops of pilings are sometimes preferred (Figure 15) because their position higher up on the pilings will present less obstruction to flow and waves.

When foundation bracing below the BFE is used, it must be placed so as not to interfere with the intended failure of breakaway wall panels (see Figure 16). Avoiding interference may require eliminating breakaway walls, shifting the location of breakaway walls, or redesigning the foundation so the need for certain braces is eliminated. Breakaway walls and foundation bracing should not be placed close to each other if either could adversely affect the intended performance of the other.



Figure 14:
Floating debris trapped by metal rod
cross bracing



Figure 15: Knee bracing



Figure 16: Cross bracing that interfered with the
failure of a breakaway wall

6.7 Grade Beams

Grade beams are horizontal elements at or below the ground surface that tie the foundation piles or columns together and provide additional lateral support. They are typically reinforced concrete or wood.

Grade beams that are placed with their upper surfaces flush with or below the natural grade (the grade before the site is altered by fill or grading, if any) are not considered obstructions and are allowed by NFIP. However, storm erosion and local scour can expose and undermine grade beams, sometimes leaving them suspended above the post-storm ground profile. Designers must anticipate this circumstance and design grade beams to resist flood, wave, and debris loads and to remain in place and functional when undermined by scour and erosion (see Figure 17). Grade beams must also be designed and constructed so the vertical thickness is minimized, thereby reducing the lateral flood, wave, and debris loads acting on the beam and minimizing the transfer of these loads to the foundation.

Figure 17:
Grade beams that were exposed to flood forces during hurricane-induced scour; grade beams must resist flood, wave, and debris loads when undermined



6.8 Shear Walls

The NFIP regulations in 44 CFR § 60.3(e) state that only pile and column foundations are permitted in Zone V. In practice, this requirement has been relaxed by the NFIP and building codes for mid- and high-rise structures to allow certain types of solid walls, called shear walls, if detailed engineering calculations demonstrate that such walls are required to transfer lateral loads acting on upper stories to the ground, particularly in extreme-wind zones (see Figure 18). Even in these cases, shear walls should be used only if foundations and buildings are designed to resist all base flood conditions, all other design loads, and all appropriate load combinations.

Shear walls should be constructed parallel to the anticipated direction of flood flow and wave attack (typically perpendicular to the shoreline) to allow floodwater and waves to pass freely. In some cases, building designs require both shore-perpendicular and shore-parallel shear walls. Use of shore-parallel shear wall segments should be limited to the minimum length required to transfer upper-story loads to

SHEAR WALLS

ASCE 24 contains flood-related requirements and limitations for shear walls used to support buildings in Zone V. Contact your local building department for rules and building code requirements for shear walls in Zone V.



Figure 18:
High-rise buildings elevated on
shore-perpendicular shear walls

the foundation. Shore-parallel shear walls should be designed with openings in the walls or gaps between shear wall segments to minimize trapping of floodwater, waves, and debris and minimize the total flood loads acting on the building. In any case, designs of these walls must be certified by registered design professionals as part of the requirement for certification of foundation designs.

Low-rise buildings in Zone V should be designed with pile or column foundations that are consistent with the NFIP regulations. Post-flood assessments have found that shear walls supporting older low-rise buildings often do not survive severe storm events. See Figure 19, which shows the failure of a wall section of a building supported on columns and shore-perpendicular walls. Wall failure led to failure of the elevated floor beam and floor. In this instance, the building was an older non-conforming building, and the solid walls rested on shallow footings (a means of support not permitted by the NFIP or building codes for buildings in Zone V). The wall failure was likely due to both lateral flood loads and foundation undermining.

Figure 19:
Failure of a shore-perpendicular
solid foundation wall that
supported a low-rise building,
which resulted in failure of the
beam and floor system that
were supported by the shore-
perpendicular wall



6.9 Slabs

Concrete slabs are commonly used beneath elevated buildings in Zone V for vehicle parking and as floors of enclosed storage or building access areas. The vertical elements elevating the building should not rest on the slab to avoid an NFIP flood insurance rating of “non-elevated.”

Post-disaster assessments conducted by FEMA have concluded that unreinforced slabs less than 4 inches thick tend to break up into small pieces without causing adverse effects to elevated buildings (see Figure 20). Reinforced concrete slabs thicker than 4 inches tend not to break up into small pieces, can become dislodged and act as obstructions, and can transfer unanticipated loads to building foundations (see Figure 21).

SLABS AND NFIP FLOOD INSURANCE

There is no difference in NFIP flood insurance premiums between having a frangible slab or a self-supporting structural slab for two otherwise identical elevated buildings.



Figure 20:
Damage to building foundation
caused in part by failure of the
reinforced slab undermined by
erosion



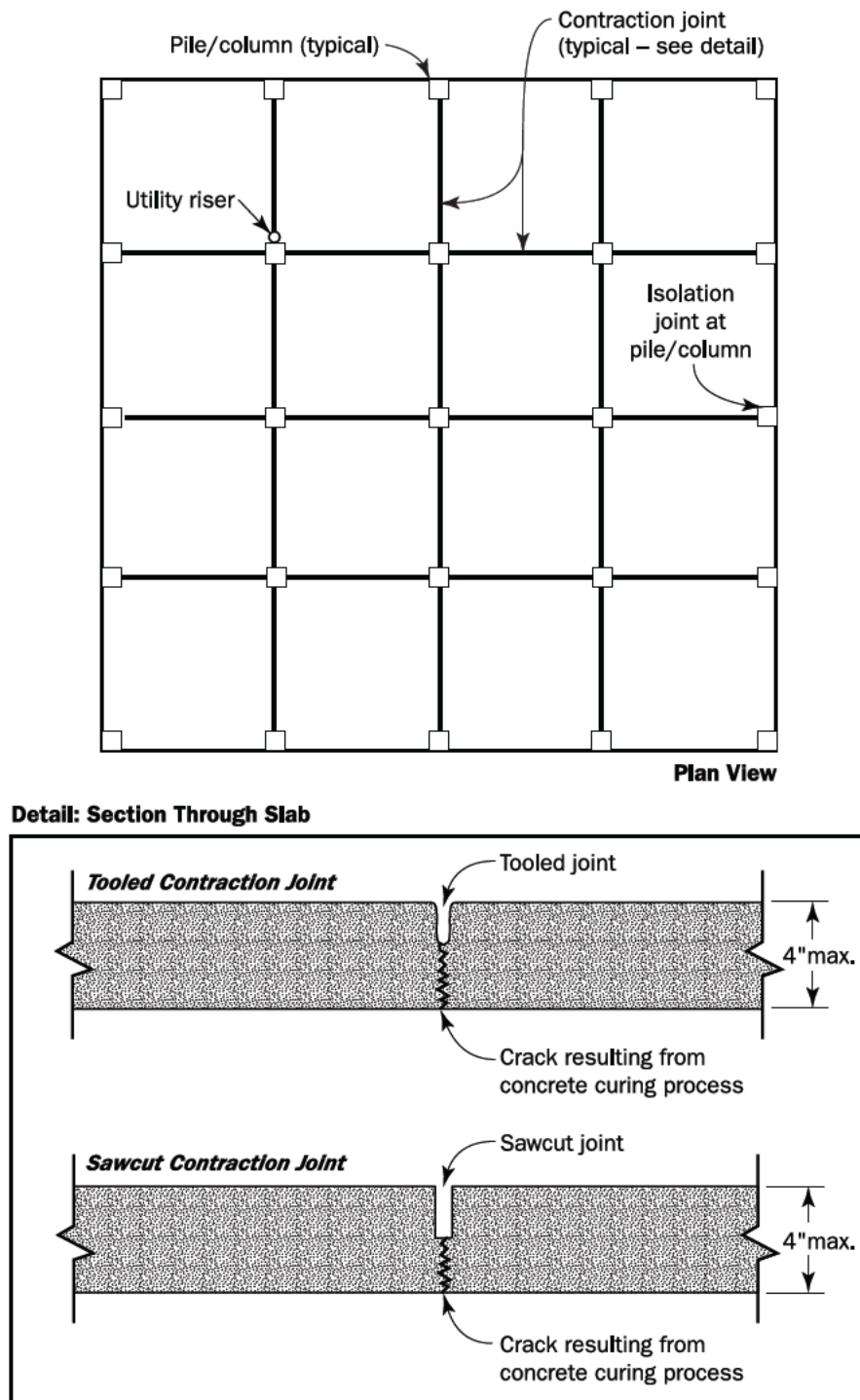
Figure 21:
Unreinforced slab that broke apart
without imposing loads on the
foundation

Post-disaster assessments have determined that slabs perform well if they meet the requirement in ASCE 24-14, Section 9.3, to either:

- Be frangible (break into small pieces), floating slabs supported by compacted soil, not attached to the building foundation, and designed and constructed with a maximum thickness (traditionally 4 inches), without reinforcement and without turned down edges, or
- Be designed and constructed as self-supporting structural slabs capable of remaining intact and functional during flooding up to and including base flood conditions, including expected erosion.

Building foundations must be capable of resisting any added loads and increase in local scour due to the presence of the slabs.

In most circumstances, and for low-rise buildings in Zone V (including residences), the best alternative is to use frangible slabs. This alternative is also appropriate for other uses of slabs, such as pool decks, sidewalks, and patios. Figure 22 illustrates one possible design for such a slab.



NOTE: Install expansion and isolation joints as appropriate in accordance with standard practice or as required by state and local codes.

Figure 22: Example of frangible slab design

Reinforced, self-supporting structural slabs below the BFE may be appropriate for large mid- and high-rise structures that are supported on deep piles because these structures are typically much heavier and less prone to damage from flood loads. If a frangible parking slab is constructed beneath such a structure, reoccupation of an otherwise intact and usable structure after a severe coastal storm event may be delayed due to loss of parking. A self-supporting structural slab could be considered in such situations.

Reinforced, self-supporting structural slabs and grade beams beneath large buildings should be designed to be only as thick as necessary to support vehicle loads and other design loads. The slabs and beams should be connected and integral to the foundations, and all below-BFE components should be designed to act together to resist flood loads and other design loads. Obstructive effects will be minimized as long as the slab systems remain intact and horizontal so floodwater and waves pass above and below the slabs.

7 Site Development: Practices and Issues

This section discusses common site development practices and issues that may significantly affect the free passage of flood flow and waves under or around elevated buildings. When these practices are undertaken in accordance with the guidance in this section, they will be deemed to satisfy the NFIP free-of-obstruction requirement, and the potential obstructive effects will be minimized.

7.1 Accessory Storage Structures

In Zone V, certain small accessories structures (as defined in a community's floodplain management ordinance, which has been approved by FEMA) may be permitted below the BFE. Small accessory structures include small storage structures such as metal, plastic, or wood sheds that are disposable. FEMA considers "small" to mean less than or equal to 100 square feet.

If accessory storage structures below the BFE do not meet the size considerations mentioned above, or if the structures are of significant size and made of material that is likely to create either damaging debris or flow and wave-diversion problems, communities could consider granting variances in accordance with their floodplain management ordinances and 44 CFR § 60.6. Alternatively, a best practice is to have accessory storage structures constructed and elevated in compliance with NFIP requirements.

ADDITIONAL ACCESSORY STRUCTURE CONSIDERATIONS

Some communities have FEMA-approved regulations that specify limitations on the size of accessory structures that are allowed in SFHAs without having to comply with elevation requirements. Other considerations for accessory structures are set forth in FEMA policies and guidance.

Local officials should consult NFIP State Coordinators or FEMA Regional Offices for additional guidance and for appropriate size limits and language to include in local regulations.

Small accessory storage structures that are not elevated must be anchored to resist wind loads (see Figure 23) and designed to resist flotation that may occur even under relatively shallow flood depths. However, because small accessory storage structures are unlikely to withstand wave loads, their loss should be anticipated during the base flood, and the effects that resultant debris may have on nearby structures must be considered.

Figure 23:
Small accessory structure that was moved by flood and wind forces



In addition, small accessory storage structures must be unfinished on the interior, constructed of flood damage-resistant materials, and used only for storage; moreover, if a structure is provided with electricity, the service must be above the BFE with all branch circuits descending below the BFE fed from ground-fault circuit interrupter breakers. Accessory storage structures must not be used for any habitable or other prohibited purpose.

Separate accessory storage structures must not be located directly under elevated buildings. An alternative is to create storage space below the elevated structure by enclosing an area with breakaway walls.

7.2 Detached Garages

Detached garages, such as those typically built for single-family homes or multi-family structures, are too large to qualify as accessory structures that are allowed below the BFE (see Section 7.1). Therefore, detached garages must be elevated on piles or columns and comply with other requirements for structures in Zone V.

Large, fully engineered, free-standing parking garages that satisfy Zone V design and construction requirements are permitted, even if portions lie below the BFE (e.g., vehicle ramps, stairwells, elevator shafts, parking spaces). These structures are not walled and roofed in the traditional sense and can be designed to allow the free passage of floodwater and waves.

ALTERNATIVE TO DETACHED GARAGES

Garages may be constructed under elevated buildings and enclosed with breakaway walls (see Technical Bulletin 9, *Design and Construction Guidance for Breakaway Walls*).

7.3 Erosion Control Structures

Erosion control structures, such as bulkheads, seawalls, retaining walls, and revetments, are obstructions when installed beneath elevated coastal buildings and are not permitted even if not attached to the building foundations. Erosion control structures can transfer damaging flood loads to building foundations and greatly increase the potential for redirecting flood flow and waves onto the elevated portions of coastal buildings). Figure 24 shows an example of waves running up and overtopping an erosion control structure. Figure 25 shows an example of timbers attached to a pile foundation (constituting a bulkhead), which is not permitted.

EFFECT OF EROSION CONTROL STRUCTURES ON WAVES

Guidance for evaluating potential effects of erosion control structures on waves is contained in the U.S. Army Corps of Engineers *Coastal Engineering Manual* (2002 and updates). Generally, erosion control structures with a steep face (1:2 [vertical to horizontal] or steeper) result in the greatest wave runup.



Figure 24:
Wave runup and overtopping
at an erosion control
structure

Although the NFIP does not prohibit bulkheads, seawalls, retaining walls, or revetments outside a building's footprint, communities and design professionals must carefully consider the potentially significant effects of these structures. A general rule of thumb is the greater the horizontal distance between an erosion control structure and a building, the less likely that wave runup and overtopping will adversely affect the building. Although local or state regulations may prohibit the construction of erosion control structures until erosion is within a few feet of a building foundation (to maximize the recreational beach area seaward of the structure), the proximity of erosion control structures to buildings may contribute to wave runup and wave reflection damage.

Figure 25:
Shore-parallel timbers attached to a pile foundation that were intended to act as a bulkhead but constituted an obstruction and are not permitted



FEMA's coastal mapping guidance suggests that a 30-foot-wide "VE overtopping splash zone" (the area where waves breaking on or running up the seaward face of an erosion control structure land or splash down) be mapped landward of erosion control structures, but the guidance also contains site-specific calculations that can lead to a narrower splash zone. For floodplain management purposes, a 30-foot minimum splash zone width is desirable for new construction landward of existing erosion control structures, but this width may not be feasible for existing buildings situated close to erosion control structures. There is no established minimum distance between a building and an erosion control structure, but a reasonable minimum width is 10 to 15 feet. States and communities should take local conditions and observed building damage into account when establishing minimum distances.

7.4 Fences and Privacy Walls

Fences and privacy walls, including walls separating one property from another, may obstruct or divert flood flow and waves toward buildings. Their potential effects on buildings, including debris generation, should be evaluated. Open fences (e.g., wood, plastic, open masonry units, metal slat fencing with generous openings) are presumed to not cause harmful diversion of floodwater or wave runup and reflection. Fences with small openings and solid fences and walls may divert flow and waves and can trap debris.

Solid fences, privacy walls, and fences prone to trapping debris must be designed and constructed to fail under base flood conditions without causing harm to nearby buildings. Where building or fire codes require ground-level walls for tenant fire separation, designers should strive to satisfy code requirements while minimizing potential adverse effects from flood diversion.

Siting of new buildings near fences and privacy walls should be reviewed carefully given the impact that these structures could have on a building if they fail during a flood event. Figure 26 shows an example of a shore-perpendicular solid privacy wall that failed during a coastal flood event and damaged the pile foundation of an adjacent elevated building.

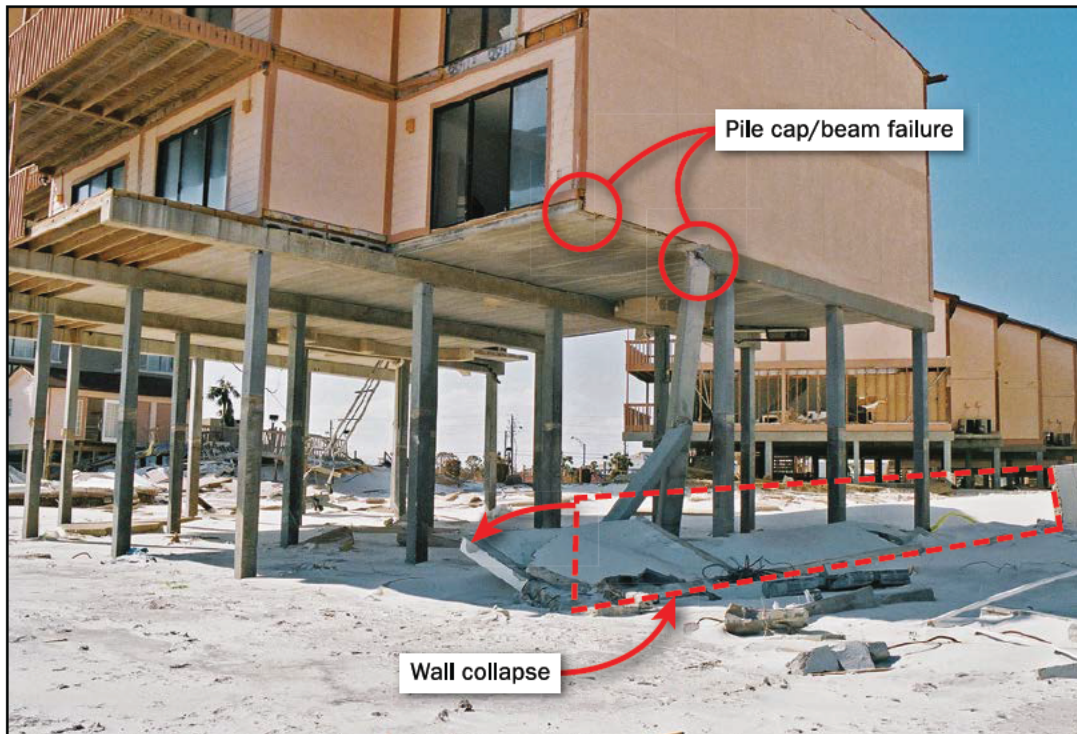


Figure 26: Shore-perpendicular reinforced masonry privacy wall that collapsed into the foundation of an adjacent building and contributed to failure of the corner foundation piling and pile cap/beam

7.5 Fill

NFIP regulations prohibit the use of fill for structural support of buildings in Zone V. Minor grading and the placement of minor quantities of nonstructural fill are allowed in Zone V but only for landscaping, drainage under and around buildings, and support of parking slabs, pool decks, patios, walkways, and similar site elements. Nonstructural fill should not prevent the free passage of floodwater and waves beneath elevated buildings, divert floodwater or waves such that building damage is exacerbated, or lead to damaging flood and wave conditions on a site or adjacent sites. Nonstructural fill should be assumed to wash away and should not be used in foundation design calculations.

Determining whether the placement and shaping of nonstructural fill will be detrimental is complicated. Therefore, some state and local

MINOR GRADING AND MINOR QUANTITIES OF NONSTRUCTURAL FILL

Minor grading: Minimum grading necessary to provide for landscaping and drainage purposes required or allowed by community regulations, subject to the limitations described in this Technical Bulletin.

Minor quantity of fill: Minimum quantity necessary to provide for adequate drainage of areas below and around elevated buildings; support of parking slabs, in-ground pool decks, decks, patios, walkways, and similar site elements; and for site landscaping, subject to the limitations described in this Technical Bulletin.

regulations essentially prohibit placement of any nonstructural fill in Zone V. However, such limits on nonstructural fill can also lead to problems such as ponding of rainfall around or under buildings. Other states and communities accept some (unspecified) amount of nonstructural fill provided an engineering analysis is performed and an engineer certifies that the fill will not lead to damaging flow diversion or wave runup and reflection. However, credible and defensible analyses are difficult to perform using current engineering methods and models for the small quantities of fill typically used on individual lots.

The placement of nonstructural fill in Zone V for landscaping, drainage, and slab support may be acceptable under certain circumstances using the evaluation criteria described below. Unless in conflict with state or local limitations, local officials are expected to apply these criteria using discretion to achieve the desired performance while giving deference to the general intent of the following criteria as described in the paragraphs that follow. Several criteria are listed, and they may not all agree, depending on specific circumstances.

7.5.1 Type of Fill

Fill placed on Zone V sites should be similar to natural soils in the area. In many coastal areas, natural soils are clean sand or sandy soils free of large quantities of clay, silt, and organic material. Nonstructural fill should not contain large rocks and debris. If the fill is similar to and compatible with natural soils, there is no need to require designers to investigate or certify whether the fill has a tendency for excessive natural compaction; an investigation or certification is a common requirement in many floodplain regulations. If the fill material is similar to natural soils, its behavior under flood conditions will be similar to the behavior of natural soils.

7.5.2 Fill Thickness

The addition of small thicknesses of site-compatible, nonstructural fill in Zone V is not likely to lead to adverse effects on buildings. There are no established rules as to what constitutes an acceptable fill thickness, so it must be addressed on a case-by-case basis and in some cases may require an engineering analysis of flow and wave effects of the fill. Designers should check with the community about fill thickness thresholds triggering engineering analyses.

Placement of up to 2 feet of fill under or around an elevated building can generally be assumed to comply with free-of-obstruction requirements and be acceptable without engineering analysis or certification, provided basic site drainage principles are not violated (see Section 7.5.4) and provided there are no other site-specific conditions or characteristics that would render the placement of the fill damaging to nearby buildings (e.g., if local officials have observed that the placement of similar quantities of fill has led to building damage during coastal storm events).

If fill is proposed for a site, the proposed final grade should be compared to local topography. If the proposed final fill configuration is below the threshold established by the community and the fill configuration is similar to grades and slopes in the immediate vicinity, a detailed analysis of the effects on flood flow and waves may not be needed. However, if the proposed fill configuration exceeds the community's configuration deemed to comply fill thickness threshold or the proposed fill configuration exceeds local grade heights and variations, an engineering analysis may be required by the community.

In cases where site development involves removing a layer of soil and fill is added to the site later, the fill thickness should be evaluated relative to the pre-removal soil elevation, not the removed soil elevation.

7.5.3 Prevention of Ponding

Most communities establish minimum floor elevations to ensure that water does not collect at or under buildings. Floor elevation requirements are frequently tied to nearby road elevations, and the quantity of fill required to raise building footprint areas typically falls within the fill height allowance mentioned in Section 7.5.2. There is no compelling reason to restrict the placement of site-compatible, nonstructural fill beneath buildings in Zone V if the fill will prevent ponding and saturated soil conditions, as long as other drainage requirements for grades and slopes can be satisfied.

7.5.4 Site Drainage Requirements

Most communities establish minimum slopes for building sites to facilitate drainage away from buildings (typically 1 unit vertical to 20 units horizontal [5 percent]). Slopes of 1 unit vertical to 3 units horizontal (or steeper) can produce appreciable wave runup. Conversely, slopes shallower than 1 unit vertical to 5 units horizontal (regardless of fill height) will probably not cause or worsen wave runup or wave reflection capable of damaging adjacent buildings. Figure 27 shows an example of fill placement that is considered acceptable because the fill depth is modest and the side slopes are gentle. FEMA's Hurricane Ivan Mitigation Assessment Team concluded that the presence and configuration of the fill did not cause additional flood or wave damage to either the elevated building or the nearby older non-elevated building (FEMA, 2005). The adjacent older, non-elevated building in Figure 27 would likely sustain structural damage during a coastal flood, even if the fill were not present. Swales and conventional site drainage practices should be used to mitigate potential effects of runoff from filled areas.



Figure 27:
Post-hurricane photo showing an elevated building surrounded by gently sloping fill and an adjacent, damaged, older, non-elevated building

7.5.5 Vertical Clearance between Top of Fill and Bottom of Lowest Horizontal Structural Member of Lowest Floor

There are no established rules as to what constitutes acceptable vertical clearance, so it must be addressed on a case-by-case basis. Designers should check with the jurisdiction about minimum vertical clearance requirements.

When the BFE is above the existing ground, placement of nonstructural fill between the ground and the lowest horizontal structural member of the lowest floor may be permitted, but it is advisable to maintain some vertical clearance between the bottom of the lowest horizontal structural member and the top of the fill. Vertical clearance should be established to ensure that base flood flow and waves will pass beneath the elevated building and the fill will not contribute to wave runup and flood damage to the elevated building.

When the BFE is below the existing ground elevation (see Section 7.6), vertical clearance between the ground (including any nonstructural fill) and the lowest horizontal structural member of the lowest floor may not be needed as long as adequate site drainage is provided.

7.5.6 Fill Compaction

The NFIP regulations are explicit in that fill must not be used for structural support of buildings in Zone V. However, compaction of fill below and around elevated buildings used to support parking slabs, in-ground pool decks, patios, sidewalks, and similar site amenities is consistent with the intent of the regulations.

7.5.7 Dune Construction, Repair, and Reconstruction

Dunes are natural features in many coastal areas, and they can erode during storms and recover naturally over time. The natural recovery process can be accelerated by replacing the eroded dune with compatible sand, planting dune grasses, and installing sand fences (see Chapter 5 of *The Dune Book* [Rogers and Nash, 2003]). In general, these activities should not be considered detrimental even if part of the dune lies under a building's footprint. The addition of sand to restore a site to its pre-storm grades and stabilization with dune vegetation will likely do more good than harm in terms of flood damage reduction.

Concerns about placement of nonstructural, clean sand under and around beachfront buildings should not be the basis for prohibiting dune maintenance and construction, beach nourishment, or similar activities. Dune construction, repair, and reconstruction under or around elevated buildings may be assumed to be acceptable as long as the scale and location of the dune work is consistent with local beach-dune morphology and reasonable vertical clearance is maintained between the top of the dune and the elevated building's floor system. ASCE 24-14 permits

DUNE EXCAVATION MAY INCREASE POTENTIAL FLOOD DAMAGE

Communities must prohibit manmade alteration of sand dunes in Zone V if such alteration would increase potential flood damage (per 44 CFR § 60.3(e)(7)). Where the ground (dune) elevation is at or above the BFE, excavation to place the bottom of the lowest horizontal structural member of lowest floor at the BFE is not recommended and may in fact violate the limitation on alterations that increase potential flood damage.

dune construction and reconstruction under and around elevated buildings but requires an engineering report documenting that the fill placement will not cause building damage by wave runoff or reflection or deflection of floodwater.

7.5.8 Timing of Fill Placement

Sometimes fill is placed on a site months or years before building construction begins. This can be problematic unless the community tracks site improvements and fill placement. If the original natural grade elevation is unknown, borings or other site investigations may be required to determine the depth of fill and ensure adequate foundation depth.

7.6 Ground Elevations At or Above the Base Flood Elevation

In some Zone V areas, ground elevations are at or above the BFE, particularly along shorelines with well-developed dune fields. Mapped Zone V areas with ground above the BFE seem counterintuitive, but they are possible because of two Zone V mapping considerations:

- **Dune erosion.** Dunes can erode during the base flood (or lesser floods), resulting in a substantial lowering of the pre-storm grade to a level below the BFE. The BFE is mapped based on surge and waves passing over the eroded and inundated ground surface.
- **Presence of a primary frontal dune (PFD).** Zone V is mapped at a minimum to the inland extent (heel) of the PFD, even where the dune elevation is higher than the BFE (FEMA, 2014).

A ground elevation at or above the BFE may complicate the need to comply with Zone V design and construction requirements but does not eliminate it. It does raise the question of how the free-of-obstruction requirement applies in this situation: Because the soil at the site may erode during a coastal flood event, the area under the building will be exposed, and the exposed area must be free of obstructions.

The same free-of-obstruction considerations that apply to buildings elevated above grade apply to buildings where the BFE is below grade. Buildings must still be designed and constructed on pile or column foundations that are embedded deep into the ground, and the bottoms of the lowest horizontal structural members supporting the lowest floor must still be at or above the BFE. Vertical clearance between the bottom of the lowest horizontal structural member and the ground (see Section 7.5.5) is not required by the NFIP where ground elevations are at or above the BFE; however, communities should be contacted because they may have vertical clearance requirements. Any lowest horizontal structural members that come in contact with the fill must be composed of materials that can resist ground contact moisture levels. Minor site grading to drain water away from the foundation will also be necessary.

7.7 On-Site Septic Systems

On-site buried septic systems and mounded septic systems in Zone V are frequently exposed and/or displaced. In addition to compromising their subsequent use, damage can cause release of contents. Septic systems are often destroyed if they are near a shoreline. Therefore, septic systems should be located outside areas subject to erosion during the base flood or, if placed in an area subject to erosion, installed below the depth of expected erosion. The latter stipulation may conflict with septic system groundwater considerations, in which case an on-site septic system is not appropriate for the area, and alternate designs may be necessary.

On-site septic system tanks serving elevated buildings must not be structurally attached to building foundations. Plumbing and piping connections are required, and these items are allowed in Zone V. However, plumbing and piping components must not be attached to or pass through breakaway wall panels.

If mounded septic systems are used, they can require significant volumes of fill, which, if placed under or immediately adjacent to buildings, may constitute obstructions that divert flood flow and waves. An analysis of flow and wave effects should be undertaken. Mounded septic systems may be allowed in Zone V if they will not worsen flood and wave conditions for the buildings they serve or nearby buildings (see Section 7.5.2 for guidance on evaluating mounded systems near elevated buildings).

An additional consideration for on-site septic systems in Zone V is stated in 44 CFR § 60.3(a)(6)(ii) of the NFIP regulations, which requires “on-site waste disposal systems to be located to avoid impairment to them or contamination from them during flooding.” FEMA P-348 provides additional guidance.

7.8 Restroom Buildings and Comfort Stations

Restroom buildings and comfort stations must be treated the same as other types of structures in Zone V and must meet the same elevation and design requirements as other buildings, even when the facilities are situated in public parks or recreation areas.

7.9 Swimming Pools and Spas

Three primary considerations relate to the placement of swimming pools and spas under or adjacent to buildings in Zone V:

- Whether the pool or spa will cause increased flood loads on buildings or exacerbate scour and erosion near buildings.
- Whether the pool or spa configuration is subject to NFIP use limitations for enclosed areas under elevated buildings.
- Whether a removable enclosure is placed around a pool or spa (usually in the winter) that will cause increased flood loads on buildings or exacerbate scour and erosion near buildings. NFIP flood insurance treats these enclosures as permanent enclosures even if they are only used seasonally or for short periods of time.

SWIMMING POOLS AND SPAS

Pools and spas adjacent to coastal buildings are allowed only if they will not act as obstructions that could lead to damage to nearby buildings. This effectively means that most pools and spas must be installed in-ground (either frangible or immovable) or completely elevated above the BFE. Swimming pools, spas, and related equipment are not covered by NFIP flood insurance.

Pools, pool decks, and walkways that are placed under or adjacent to coastal buildings must be structurally independent of the buildings and their foundations and must not contribute to building or foundation damage during the base flood. Three options, also recognized by ASCE 24-14, Section 9.6.2, satisfy this requirement:

- The pool can be elevated so the bottom of the lowest horizontal structural member supporting the pool (and the pool itself) is at or above the required flood elevation, or

- The pool can be designed and constructed to break away without producing debris capable of damaging nearby buildings, or
- The pool can be designed and constructed to remain in the ground and not divert flow or waves that can damage nearby buildings.

Registered design professionals must certify that pools or spas beneath or near buildings in Zone V will not be subject to flotation or displacement that will damage building foundations during a base flood or lesser event. In cases where pools are empty part of the year, flotation calculations should assume that pools are empty. Figure 28 shows a spa that was displaced and likely caused the failure of two piles that supported an elevated deck.



Figure 28:
Failure of two piles supporting an elevated deck that was likely caused by movement of a spa

The NFIP permits swimming pools and spas beneath elevated building only if the top of the pool or spa and accompanying deck or walkway are flush with the existing grade and the area around the pool or spa remains unenclosed. However, some states and communities may prohibit or restrict unenclosed pools and spas beneath elevated buildings. Designers should check with the local jurisdiction for any additional requirements.

The NFIP limits the use of enclosures under elevated buildings to parking of vehicles, building access, and storage. Because pools and spas do not satisfy these limitations, they are not allowed to be enclosed, even if enclosed by glass or breakaway walls. Use of lattice and insect screening is permitted around pools and spas below elevated buildings.

8 References

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Technical Bulletin 0, *User's Guide to Technical Bulletins*

Technical Bulletin 2, *Flood Damage-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas*

Technical Bulletin 4, *Elevator Installation for Buildings Located in Special Flood Hazard Areas*

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