



Shabica & Associates, Inc.
WE BUILD BEACHES

RECEIVED
MAR 14 2016

**OFFICE OF WATER RESOURCES
DIVISION OF RESOURCE MANAGEMENT**

Federal Consistency Coordinator
Illinois Coastal Management Program
Illinois Department of Natural Resources
160 N. LaSalle Street, Suite 700
Chicago, IL 60601

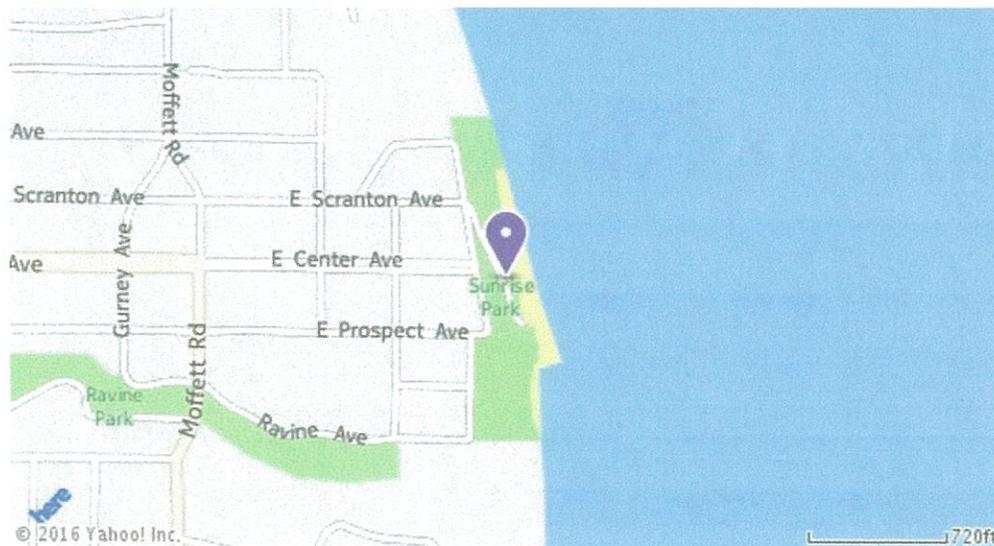
To Whom It May Concern:

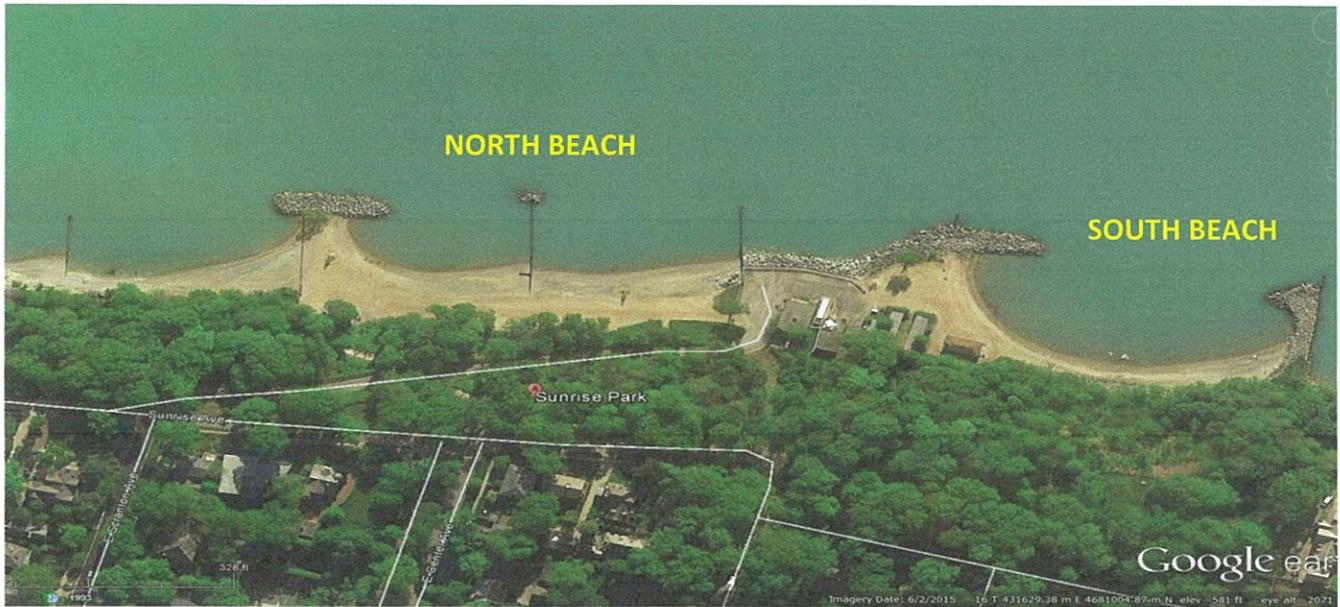
March 9, 2016

In compliance with the Illinois Coastal Management Federal Consistency Review Procedures, we provide the following information for maintenance work at Sunrise Park Beach located at 455 Sunrise Drive in Lake Bluff, Illinois, owned by the Lake Bluff Park District.

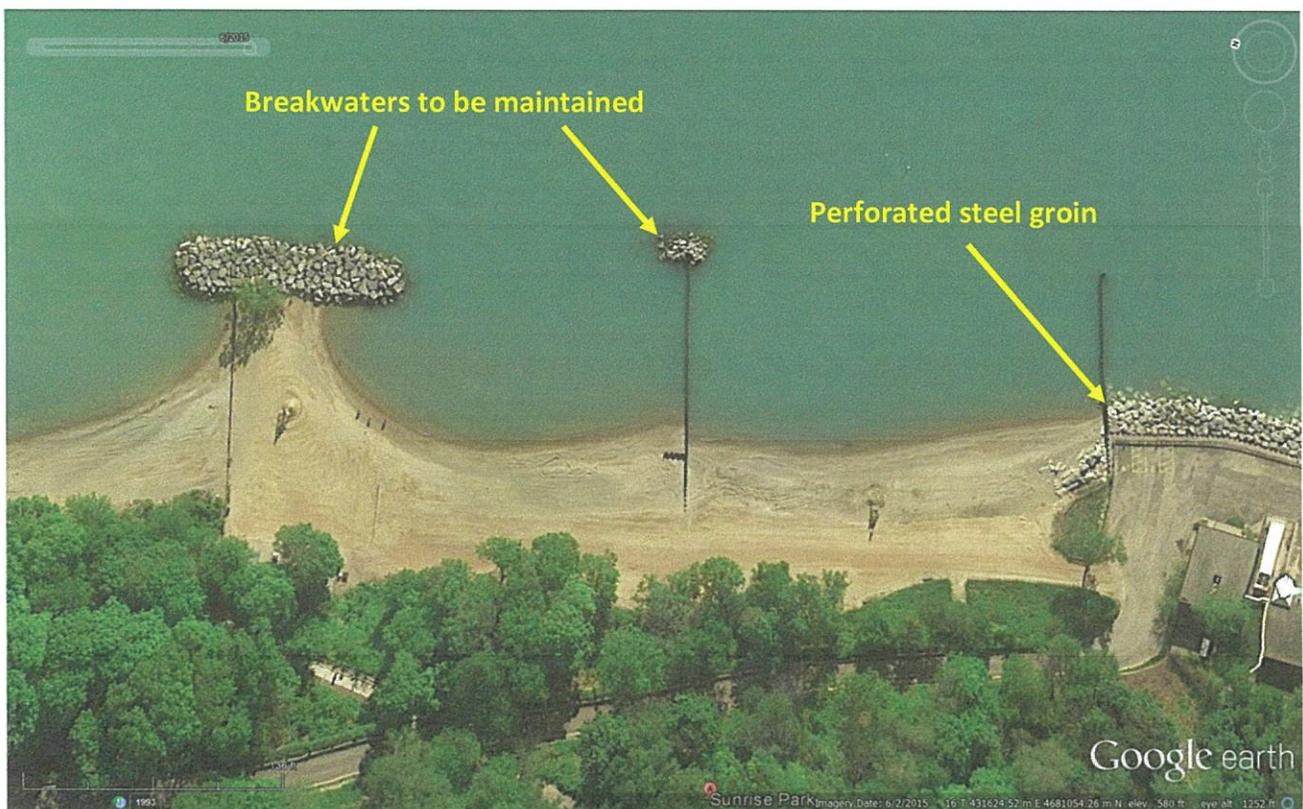
Location of Project

The proposed maintenance work is for Sunrise Park Beach located at 455 Sunrise Drive in Lake Bluff, Illinois, owned by the Lake Bluff Park District.





2015 Google Earth Aerial Photograph – Entire Sunrise Park Beach



2015 Google Earth Aerial Photograph – North Beach (showing work areas)

Project Start Date and Duration

Work will begin immediately after all permits have been authorized. This work will require 2 to 4 weeks to complete.

Extent of Work to be Conducted

There is cobble and broken concrete littered on the lakebed north of the steel groin at the north side of the parking lot. This is the groin that has corroded and now has large perforations in the steel. This granular material will be removed from the lakebed and placed along with the steel groin in the area of the holes. Approximately 200 tons of new 1 – 3 ton quartzite will be placed over the reused material in the form of a low revetment to cover the existing holes. The crest elevation will not exceed 583' with a slope of 1:1. The stone placement will extend to approximately 50' west from the lakeward (east) end of the groin.

The North Beach breakwaters will be maintained by resetting loose stones and bringing in approximately 20 tons of new stone to fill the void spaces. This work will be within the permitted specification for the original construction of the breakwaters.

Sand nourishment of up to 1,000 tons of clean sand will be placed throughout Sunrise Park beaches as necessary to better protect existing infrastructure as well as make the beaches safer for swimmers by creating a gently sloped sandy bottom to the swimming beach bays. The Lake Bluff Park District requests a permit to allow for up to 1,000 tons of sand to be placed annually if necessary pending erosion from lake level impacts and lake storms.

All of the proposed work will be completed using land- or marine-based heavy machinery pending bid pricing and site conditions. A crane on a barge or trucks over roads will deliver clean stone and sand to the site. A backhoe will place the stone. If a sandbar is encountered for marine construction, up to 40 yards of sand will be sidecast downdrift into the lake.

Contact Information

All questions pertaining to this project can be submitted to:

Jon Shabica
Shabica & Associates, Inc.
550 Frontage Road, Suite 3735
Northfield, IL 60093
jon@shabica.com
847-446-1436 Tel

The proposed activity complies with Illinois' approved Coastal Management Program and will be conducted in a manner consistent with such policies.

Sincerely, 

Jon Shabica
Vice President



Shabica & Associates, Inc.
WE BUILD BEACHES

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OFFICE OF WATER RESOURCES
DIVISION OF RESOURCE MANAGEMENT

Ms. Kathy Chernich
East Section Chief, Regulatory Branch
Chicago District
U.S. Army Corps of Engineers
231 S. LaSalle Street, Suite 1500
Chicago, IL 60604

Dear Ms. Chernich:

March 9, 2016

Please find enclosed a permit application for maintenance work to existing breakwater beach structures and 10-years of beach nourishment at Sunrise Park Beach located at 455 Sunrise Drive in Lake Bluff, Illinois, owned by the Lake Bluff Park District. The proposed activity complies with the approved Illinois Coastal Management Program and will be conducted in a manner consistent with such policies.

Project Purpose Statement:

Due to the extreme 4' increase in Lake Michigan water levels since 2013 and ongoing intense stormwaves, it is necessary for the Lake Bluff Park District to perform minor maintenance to the existing beach breakwaters including the placement of beach sand nourishment as necessary. Breakwater maintenance includes resetting armorstones that have settled or been dislodged from the structures due to stormwaves and ice, installation of new armorstone where necessary to bring the breakwater structures back to original design specifications, and installation of a small amount of new armorstone along an existing steel groin where stormwaves have eroded holes in the steel groin compromising the stability of the groin which helps to hold sand on the public beach. Additionally, with the reduced amount of sand in the natural littoral system (recently calculated at ~14,400 cy/yr per the 2015 Corps of Engineers sand survey) the public beach has lost sand over time and the Park District would like to request permission to nourish the beach with new sand as storm events and public safety dictate.



2016 photos of the deflated beach sand and exposed concrete rubble (left) and the degraded existing steel groin that is adjacent to the swimming beach which is to be encapsulated with armorstone (arrows)

Type of Permit:

We ascertain the scope of this project requires an individual permit for the sand placement.

Description of Proposed Activity:

There is cobble and broken concrete littered on the lakebed north of the steel groin at the north side of the parking lot. This is the groin that has corroded and now has large perforations in the steel. This granular material will be removed from the lakebed and placed along with the steel groin in the area of the holes. Approximately 200 tons of new 1 – 3 ton quartzite will be placed over the reused material in the form of a low revetment to cover the existing holes. The crest elevation will not exceed 583' with a slope of 1:1. The stone placement will extend to approximately 50' west from the lakeward (east) end of the groin.

The North Beach breakwaters will be maintained by resetting loose stones and bringing in approximately 20 tons of new stone to fill the void spaces. This work will be within the permitted specification for the original construction of the breakwaters.

Sand nourishment of up to 1,000 tons of clean sand will be placed throughout Sunrise Park beaches as necessary to better protect existing infrastructure as well as make the beaches safer for swimmers by creating a gently sloped sandy bottom to the swimming beach bays. The Lake Bluff Park District requests a permit to allow for up to 1,000 tons of sand to be placed annually if necessary pending erosion from lake level impacts and lake storms.

All of the proposed work will be completed using land- or marine-based heavy machinery pending bid pricing and site conditions. A crane on a barge or trucks over roads will deliver clean stone and sand to the site. A backhoe will place the stone. If a sandbar is encountered for marine construction, up to 40 yards of sand will be sidecast downdrift into the lake.

Schedule of Activity:

Work will begin immediately after all permits have been authorized. This work will require 2 to 4 weeks to complete.

Type and Quantity of Fill/Measures Taken to Avoid Impact/Erosion and Sediment Control Plan:

All material will be clean and from inland quarries. Approximately 220 tons of new, clean quartzite armor will be placed along the steel groin and to maintain the breakwaters. There will be no excavation of lakebed clay.

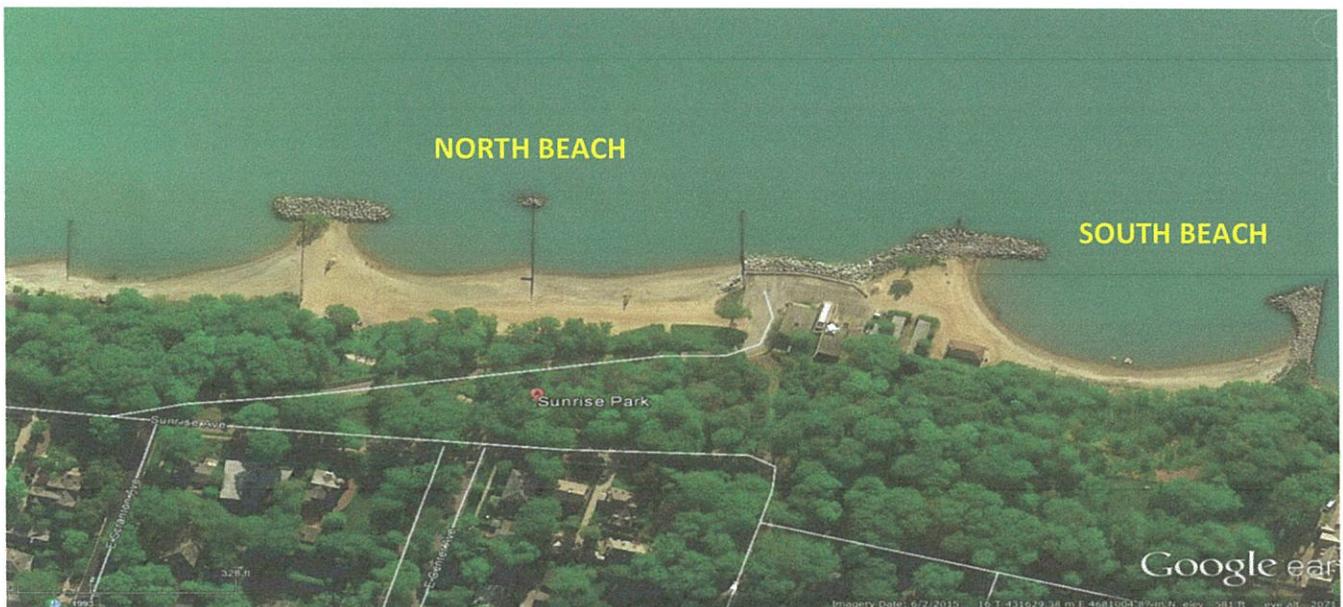
All of the above described activities and plans will follow RPP and IPP terms and conditions. All of the proposed work adheres to the guidelines prescribed by the Illinois Environmental Protection Agency and its Anti-Degradation Assessment. U.S. Fish & Wildlife Service and the Illinois Historic Preservation Association will be updated on all relevant correspondence.

If you have any questions please feel free to call me at the phone number below.

Sincerely,

JON SHABICA
Managing Director

C: IDNR, Water Resources (Casey)
IEPA (Heacock)
U.S. Fish & Wildlife Service
Illinois Historic Preservation Agency (Haaker)
Ron Salski, LBPD
Jim Lakeman, LBPD



2015 Google Earth Aerial Photograph – Entire Sunrise Park Beach



2015 Google Earth Aerial Photograph – North Beach (showing work areas)



SA Photo: View of Groin at North Side of Parking Lot.
Note: See Holes in the Steel at the Waterline (yellow arrows)



SA Photo: Deflated Section of Breakwater



SA Photo: Sand Scarp ranges 18" to 36"

JOINT APPLICATION FORM FOR ILLINOIS

ITEMS 1 AND 2 FOR AGENCY USE

1. Application Number <div style="font-size: 1.5em; font-family: cursive;">C20160009</div>	2. Date Received <div style="font-size: 1.5em; font-family: cursive;">3/14/16</div>
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3. and 4. (SEE SPECIAL INSTRUCTIONS) NAME, MAILING ADDRESS AND TELEPHONE NUMBERS		
3a. Applicant's Name: Ron Salski, Director Company Name (if any) : Lake Bluff Park District Address: 355 W. Washington Ave. Lake Bluff, Illinois 60044 Email Address:	3b. Co-Applicant/Property Owner Name (if needed or if different from applicant): Company Name (if any): Address: Email Address:	4. Authorized Agent (an agent is not required): Jon Shabica Company Name (if any): Shabica & Associates, Inc. Address: 550 Frontage Road Suite 3735 Northfield, IL 60093 Email Address:
Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Agent's Phone Nos. w/area code Business: Residence: Cell: Fax:

STATEMENT OF AUTHORIZATION

I hereby authorize, Shabica & Associates, Inc. to act in my behalf as my agent in the processing of this application and to furnish, upon request, _____ application.

Applicant's Signature _____ Date 3-9-16

5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)		
Name	Mailing Address	Phone No. w/area code
a. see attached list and map		
b.		
c.		
d.		

6. PROJECT TITLE:
Beach and Beach Structures Maintenance

7. PROJECT LOCATION:
Lakefront at Sunrise Park, 455 Sunrise Drive, Lake Bluff

LATITUDE: 42.27818 °N LONGITUDE: -87.82915 °W	UTM's Northing: 4680995.16m Easting: 16T 431628.10m										
STREET, ROAD, OR OTHER DESCRIPTIVE LOCATION Lakefront at Sunrise Park, 455 Sunrise Drive, Lake Bluff	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">LEGAL DESCRIPT</th> <th style="width: 15%;">QUARTER</th> <th style="width: 15%;">SECTION</th> <th style="width: 15%;">TOWNSHIP NO.</th> <th style="width: 15%;">RANGE</th> </tr> <tr> <td style="text-align: center;">NE</td> <td style="text-align: center;">21</td> <td style="text-align: center;">44N</td> <td style="text-align: center;">12E</td> <td></td> </tr> </table>	LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE	NE	21	44N	12E	
LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE							
NE	21	44N	12E								
<input checked="" type="checkbox"/> IN OR <input type="checkbox"/> NEAR CITY OF TOWN (check appropriate box) Municipality Name Lake Bluff	WATERWAY Lake Michigan										
COUNTY: Lake STATE: IL ZIP CODE: 60044	RIVER MILE (if applicable)										

8. PROJECT DESCRIPTION (Include all features):

The steel groin at the north end of the parking lot has corroded leaving large holes in the steel. In this location, approximately 200 tons of new 1 – 3 ton quartzite will be placed over existing granular material (to be picked up from the lakebed in the immediate area and reused) in the form of a low revetment to cover the existing holes. The crest elevation will not exceed 583' with a slope of 1:1. The stone placement will extend to approximately 50' west from the lakeward (east) end of the groin.
 The North Beach breakwaters will be maintained by resetting loose stones and bringing in approximately 20 tons of new stone to use as necessary. This work will be within the permitted specification for the original construction of the breakwaters.
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9. PURPOSE AND NEED OF PROJECT:

Several structures at Sunrise Park in Lake Bluff are in need of maintenance for safety and long-term stability of the structures. Periodic sand nourishment will help maintain a stable and profile in the beach beach system.

COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

10. REASON(S) FOR DISCHARGE:

To stabilize existing structures and beach.

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

TYPE: Stone/Sand
 AMOUNT IN CUBIC YARDS:
 Stone 120 cu. yds., Sand 800 cu. yds.

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See Instructions)

less than .01 acres

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See Instructions)

Maintenance work consists of the minimal work necessary to stabilize the structures, by adding 220 tons of clean quartzite. No excavation of the lakebed will be necessary.

14. Date activity is proposed to commence
 June 1, 2016

Date activity is expected to be completed
 June 30, 2016

15. Is any portion of the activity for which authorization is sought now complete? Yes No
 Month and Year the activity was completed

NOTE: If answer is "YES" give reasons in the Project Description and Remarks section. Indicate the existing work on drawings.

16. List all approvals or certification and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application.

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval	Date of Denial
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17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED.

Yes No

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

 Signature of Applicant or Authorized Agent

 Date

 Signature of Applicant or Authorized Agent

 Date

 Signature of Applicant or Authorized Agent

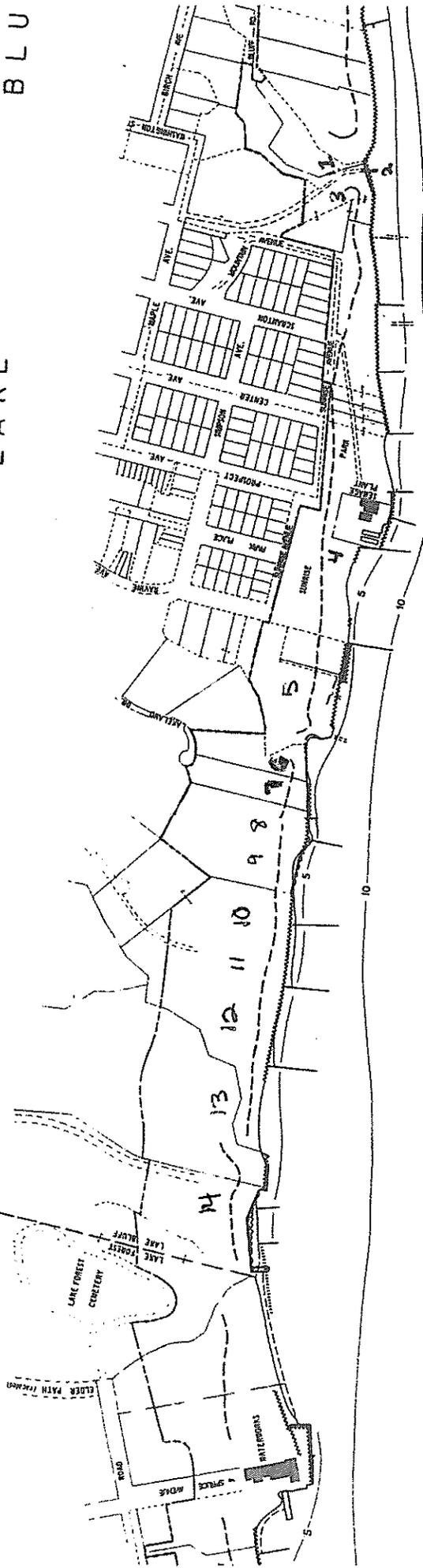
 Date

- Corps of Engineers Revised 2010 IL Dep't of Natural Resources IL Environmental Protection Agency Applicant's Copy

OREST

LAKE BLUFF

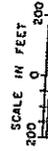
LAKE BLU



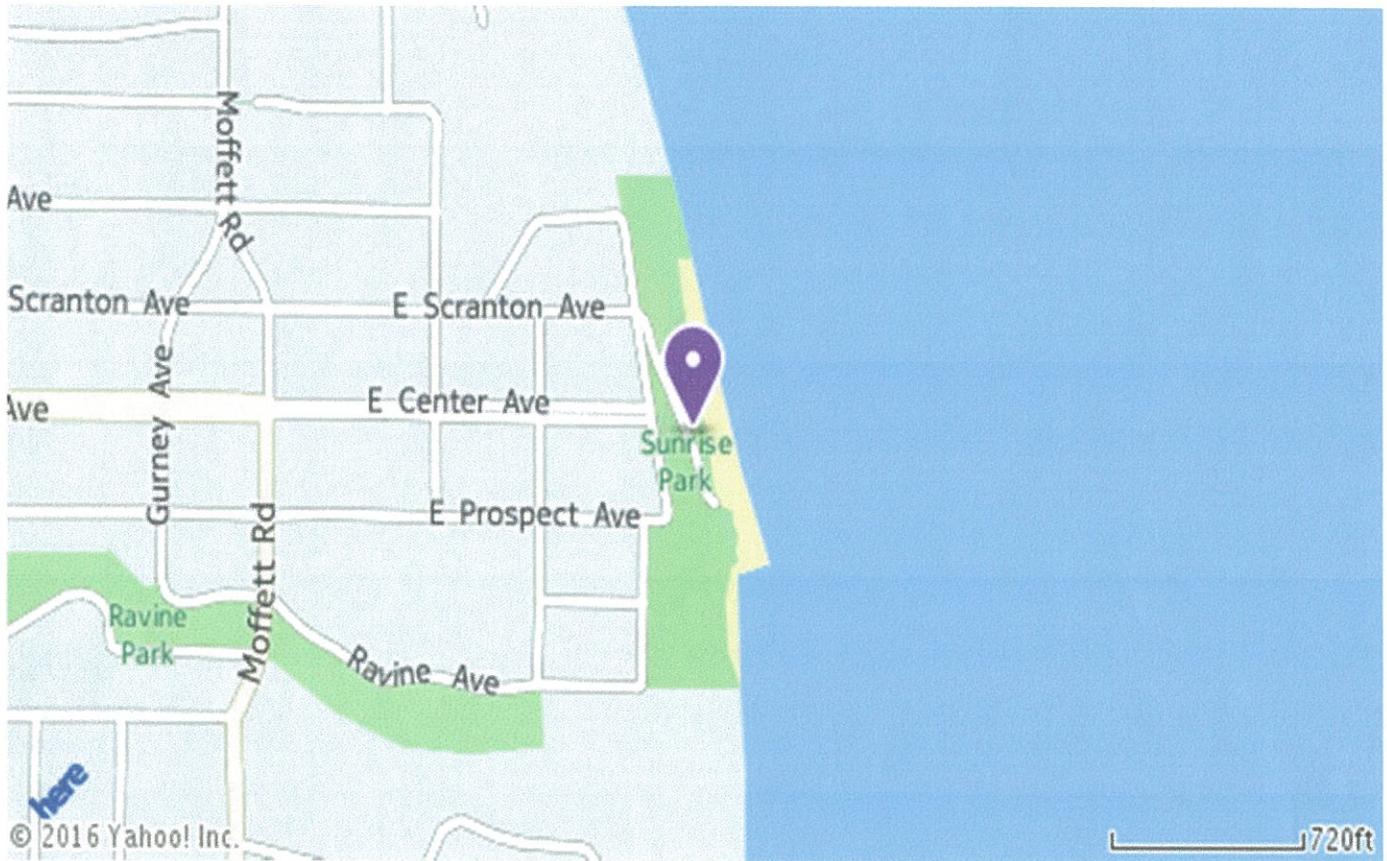
E MICHIGAN

LAKE

MICHIGA



Vicinity Map



Beach and Beach Structures
Maintenance

455 Sunrise Ave.
Lake Bluff, IL

LAKE MICHIGAN

EXISTING BREAKWATERS

LAKE MICHIGAN

GROIN PROTECTION

AREA TO BE REBUILT

EXISTING PARKING LOT

PUMPING STATION

TRACT NO. 2

TRACT NO. 1

BATH HOUSE

TRACT NO. 3

TRACT NO. 4A

TRACT NO. 4B

TRACT NO. 5

TRACT NO. 6

SUNRISE PARK LAKE BLUFF PARK (DISTRICT)

LAKE BLUFF PARK DISTRICT

PROSPECT AVE

CENTER ST

SCRANTON AVE

MOUNTAIN AVE

LOT 1

LOT 2

LAKE MICHIGAN

VILLAGE OF LAKE BLUFF

SECTION 21, TOWNSHIP 44 NORTH, RANGE 13, EAST 100' PRINCIPAL MERIDIAN, VILLAGE OF LAKE BLUFF, LAKE COUNTY, ILLINOIS

NAME	DATE	Project Location:
DRAWN	2/29/16	SUNRISE PARK, LAKE BLUFF
REVISED		

Shabica & Associates, Inc.
550 Frontage Rd., Suite 3735
Northfield, Illinois 60093
www.shabica.com

COMMENTS:
DIMENSIONS ARE IN INCHES
TOLERANCES: +.5" -1.0"
ALL ELEVATIONS IN IGD1985

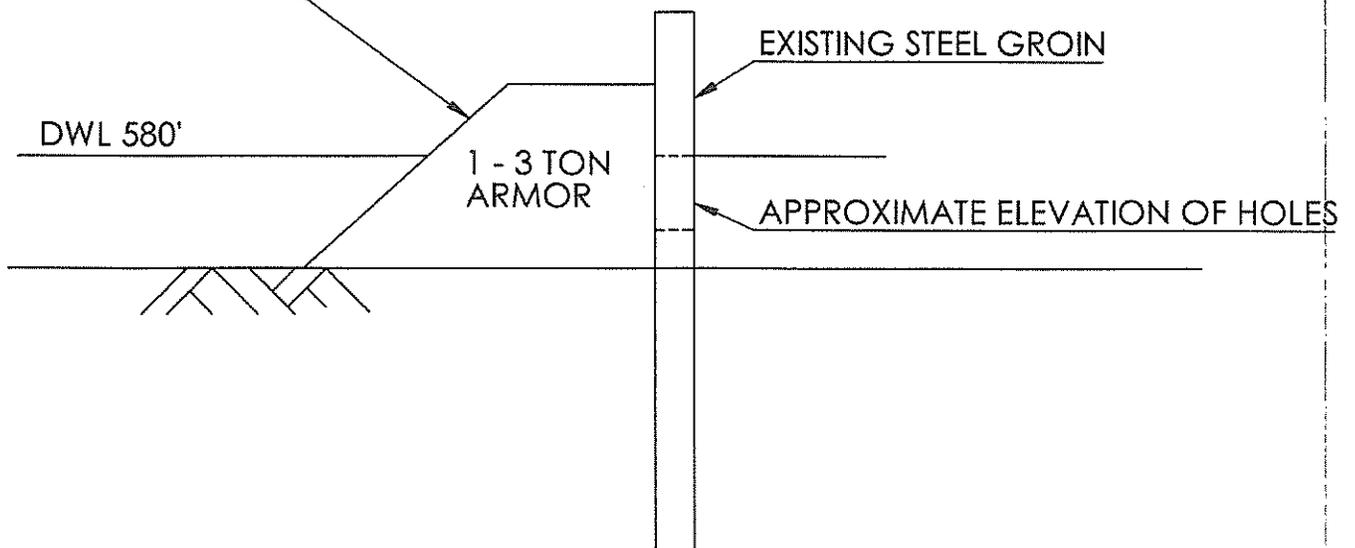
PROPRIETARY AND CONFIDENTIAL
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PLAN VIEW

1/5

5 4 3 2 1

PROPOSED STONE
GROIN PROTECTION



NAME DATE
DRAWN SN 2/25/16
CHECKED

Project Location:
SUNRISE PARK, LAKE BLUFF

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COMMENTS:
DIMENSIONS ARE IN FEET
TOLERANCES: +.5, -.1'
ALL ELEVATIONS IN
IGLD 1985

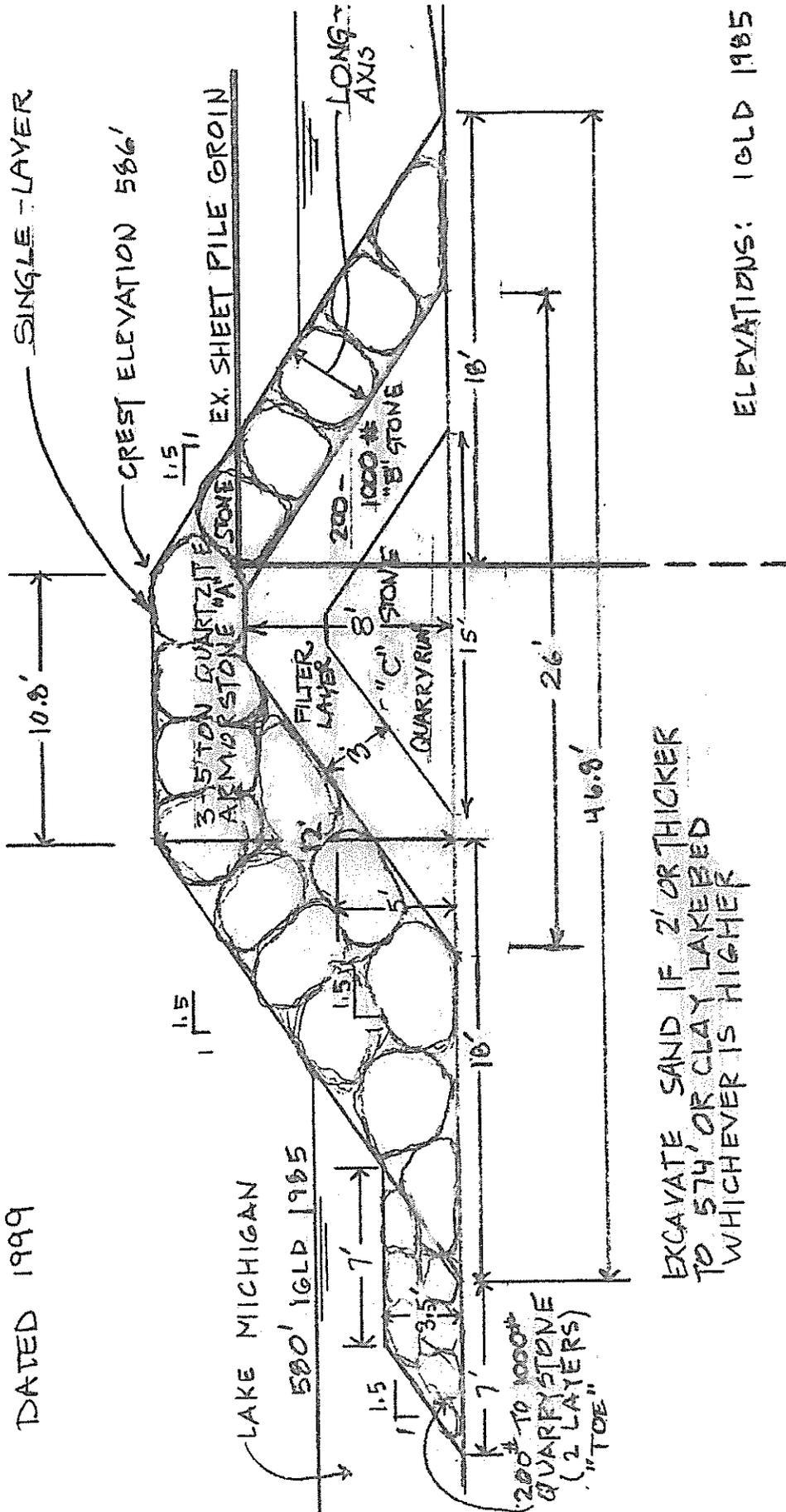


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847-446-1436
www.shabica.com

SIZE | **A** | GROIN PROTECTION
SCALE 1"=5' | TYPICAL SECTION

REV.
SHEET **2/5**

BREAKWATER SECTION A-A
DATED 1999



ELEVATIONS: 10LD 1985

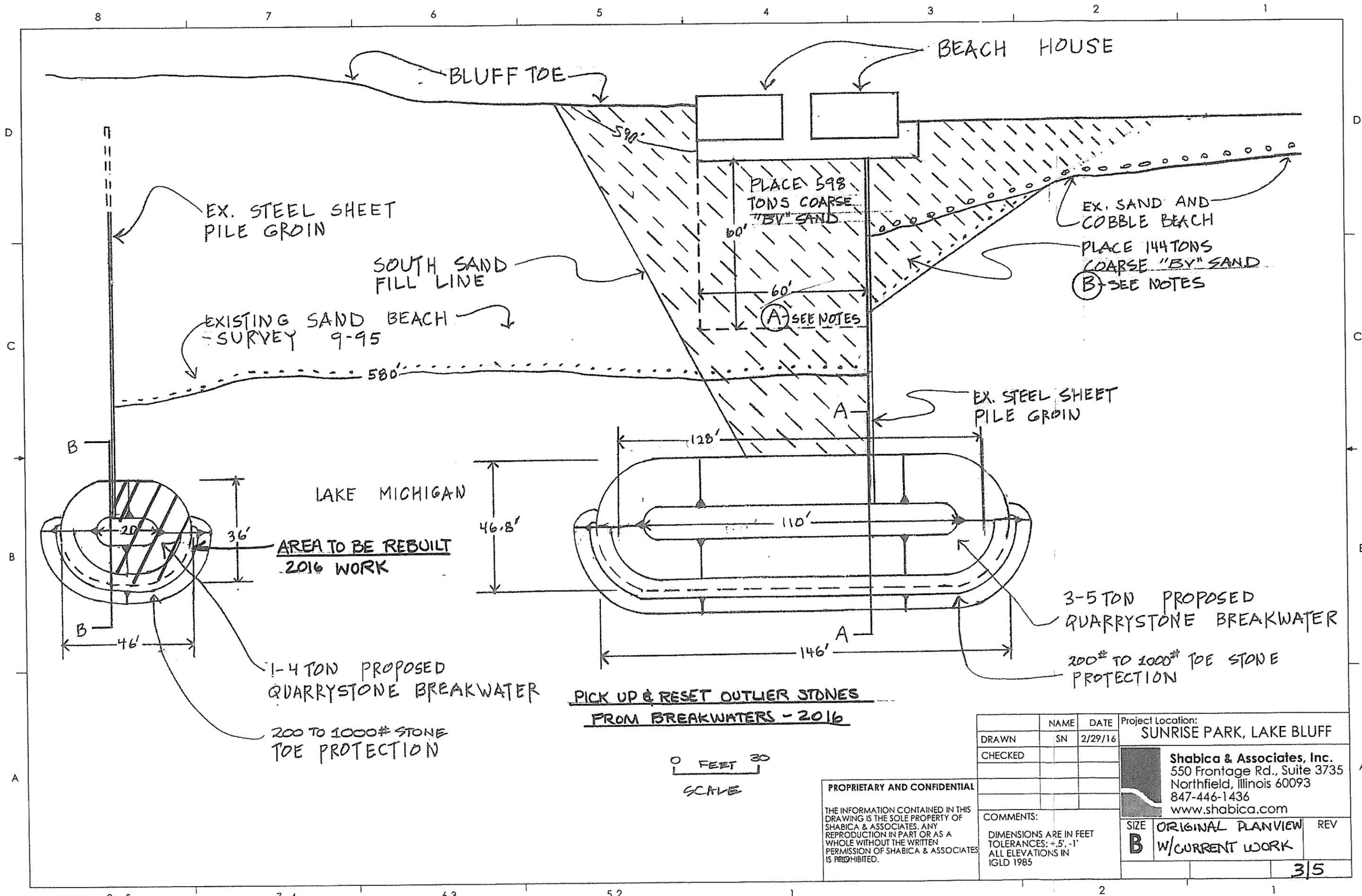
EXCAVATE SAND IF 2' OR THICKER
TO 574, OR CLAY LAKE BED
WHICHEVER IS HIGHER

NAME	DATE	Project Location:
DRAWN SN	1 2/29/16	SUNRISE PARK, LAKE BLUFF
REVISED		
COMMENTS: DIMENSIONS ARE IN INCHES TOLERANCES: +.5, -.10 ALL ELEVATIONS IN 10LD1985		

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 Northfield, Illinois 60093
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SIZE A
 BREAKWATER A-A
 REV 4/5



EX. STEEL SHEET PILE GROIN

SOUTH SAND FILL LINE

EXISTING SAND BEACH - SURVEY 9-95

BEACH HOUSE

BLUFF TOE

PLACE 598 TONS COARSE "BY" SANDS

EX. SAND AND COBBLE BEACH

PLACE 144 TONS COARSE "BY" SAND (B) SEE NOTES

(A) SEE NOTES

EX. STEEL SHEET PILE GROIN

LAKE MICHIGAN

AREA TO BE REBUILT 2016 WORK

1-4 TON PROPOSED QUARRYSTONE BREAKWATER

200 TO 1000# STONE TOE PROTECTION

PICK UP & RESET OUTLIER STONES FROM BREAKWATERS - 2016

3-5 TON PROPOSED QUARRYSTONE BREAKWATER

200# TO 1000# TOE STONE PROTECTION



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	NAME	DATE
DRAWN	SN	2/29/16
CHECKED		

COMMENTS:
DIMENSIONS ARE IN FEET
TOLERANCES: +.5', -1'
ALL ELEVATIONS IN IGLD 1985

Project Location:
SUNRISE PARK, LAKE BLUFF

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SIZE	ORIGINAL PLANVIEW	REV
B	W/CURRENT WORK	