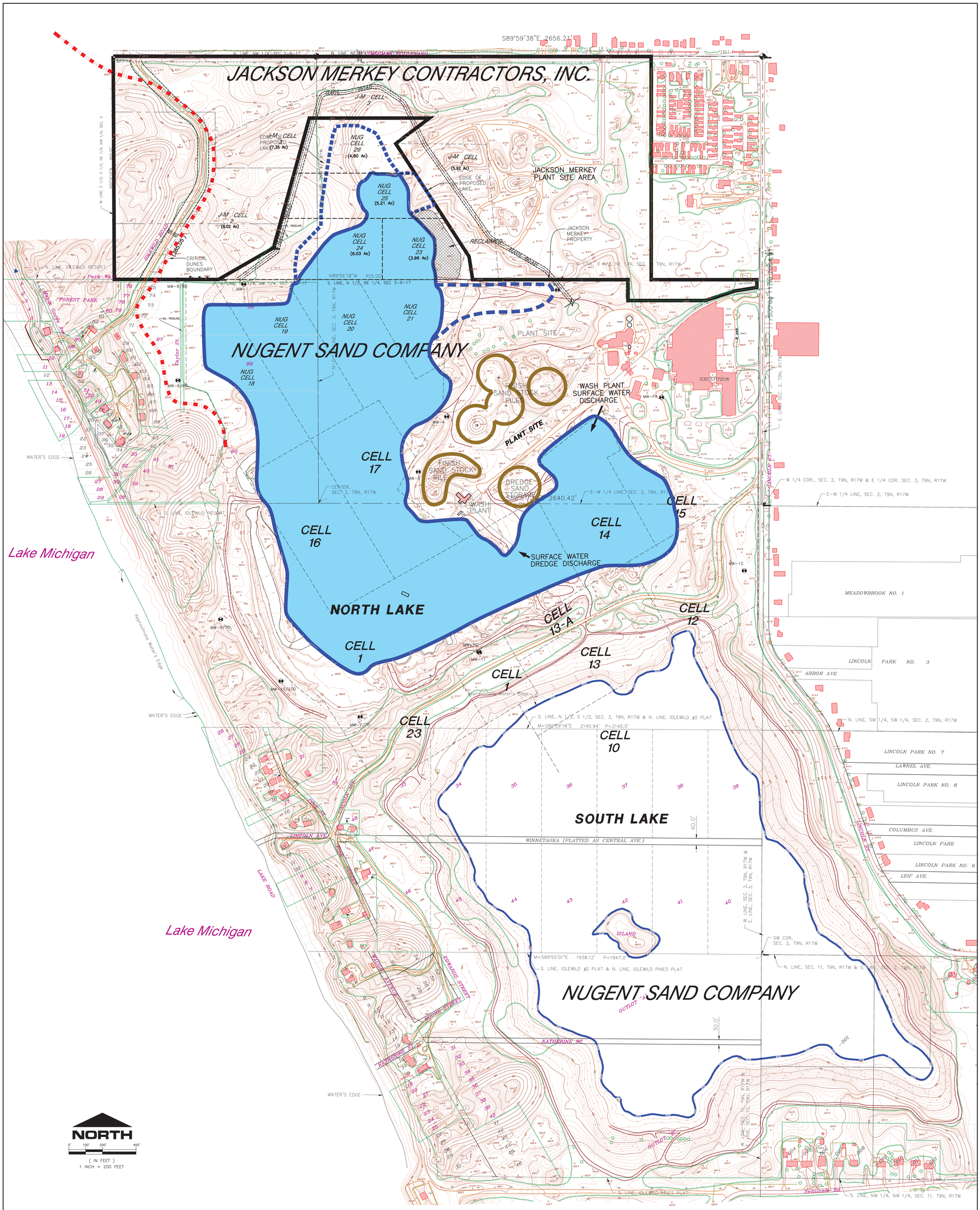

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SITE LOCATION MAP	PROJECT NAME: NUGENT SAND COMPANY NORTON SHORES MICHIGAN	WESTSHORE CONSULTING Engineers ▪ Scientists ▪ Surveyors ▪ Planners	WESTERN MICHIGAN OFFICE 2534 Black Creek Road Muskegon, MI 49444 Ph: (231) 777-3447 Fax: (231) 773-3453 E-mail: westshore1@aol.com	DRAWN BY: BJA	DATE: 01/31/14						
PROJECT # 668-05J			NORTHERN MICHIGAN OFFICE 238 Parkdale Avenue, Suite 2 Manistee, MI 49660 Ph: (231) 723-2202 Fax: (231) 723-2291 E-mail: westshore@voyager.net	CHECKED BY: RLS	SURVEYED BY: WESTSHORE						
SHEET # 1 OF 6				DWG NAME.: 668-12B-DREDGE POND PERMIT	DESIGNED BY:	NO.	DATE	DESCRIPTION	BY	CHK'D	DATE

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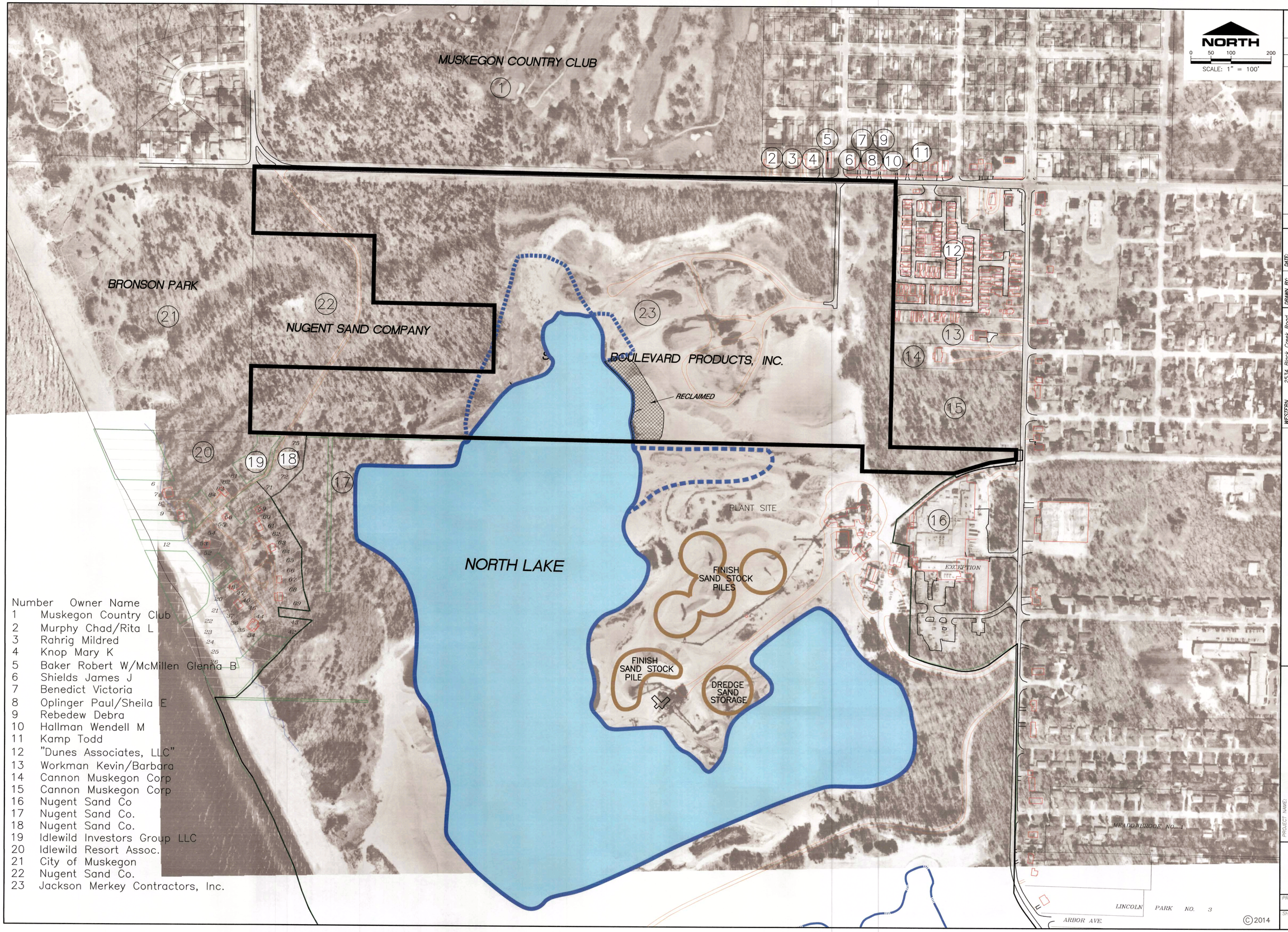

Number	Owner Name
1	Muskegon Country Club
2	Murphy Chad/Rita L
3	Rahrig Mildred
4	Knop Mary K
5	Baker Robert W/McMillen Glenna B
6	Shields James J
7	Benedict Victoria
8	Oplinger Paul/Sheila E
9	Rebedew Debra
10	Hallman Wendell M
11	Kamp Todd
12	"Dunes Associates, LLC"
13	Workman Kevin/Barbara
14	Cannon Muskegon Corp
15	Cannon Muskegon Corp
16	Nugent Sand Co
17	Nugent Sand Co.
18	Nugent Sand Co.
19	Idlewild Investors Group LLC
20	Idlewild Resort Assoc.
21	City of Muskegon
22	Nugent Sand Co.
23	Jackson Merkey Contractors, Inc.

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NO.	DATE	DESCRIPTION	BY	CHK'D	DATE

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DATE: 08/01/14
CHECKED BY: RLS
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DWG NAME.: ---
DESIGNED BY: ---

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WESTSHORE CONSULTING
Engineers ▪ Scientists ▪ Surveyors

PROJECT NAME:
NUGENT SAND COMPANY
NORTON SHORES
MUSKEGON COUNTY
MICHIGAN

ADJACENT PROPERTY OWNERS

PROJECT: 668-5J
SHEET: 2 OF 6

S89°59'38"E 2656.21'

NORTH

0 50 100 200

SCALE: 1" = 100'

N. LINE, NW 1/4, SEC 3-9-17

N. LINE, NE 1/4, SEC 3-9-17

W. LINE, E 1/2, S 1/2, NE 1/4, NW 1/4, SEC. 3

N00°16'14"W 664.00'

JACKSON MERKEY
PLANT SITE AREA

J-M CELL 3 (23.83 Ac)

EDGE OF PROPOSED LAKE

NUG CELL 26 (4.80 Ac)

N-S 1/4 LINE, SEC 3-9-17

NUG CELL 22A (5 Ac)

NUGENT SAND COMPANY

NUG CELL 25 (5.21 Ac)

EDGE OF PROPOSED LAKE

J-M CELL 1 (10.00 Ac)

RECLAIMED

JACKSON MERKEY PROPERTY

J-M CELL 2 (7.49 Ac)

NUG CELL 24 (6.03 Ac)

NUG CELL 23 (3.96 Ac)

CRITICAL DUNES BOUNDARY

JACKSON MERKEY CONTRACTORS, INC.

S. LINE, NE 1/4, NW 1/4, SEC 3-9-17

NUGENT SAND COMPANY

NUG CELL 19

NUG CELL 20

NUG CELL 21

NUG CELL 18

PLANT SITE

FINISH SAND STOCK PILES

WASH PLANT SURFACE WATER DISCHARGE

81 75 74 73 72 71 70 59 60 61 62 63 64 65 66 67 68 47

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NO.	DATE	DESCRIPTION	CHK'D	DATE

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CHECKED BY: RLS
DWG NAME: ---
DATE: 08/01/14
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PROJECT NAME:
NUGENT SAND COMPANY
NORTON SHORES
MICHIGAN

EXISTING MINING CELL CONFIGURATION

PROJECT: 668-05J

SHEET: 3 OF 6

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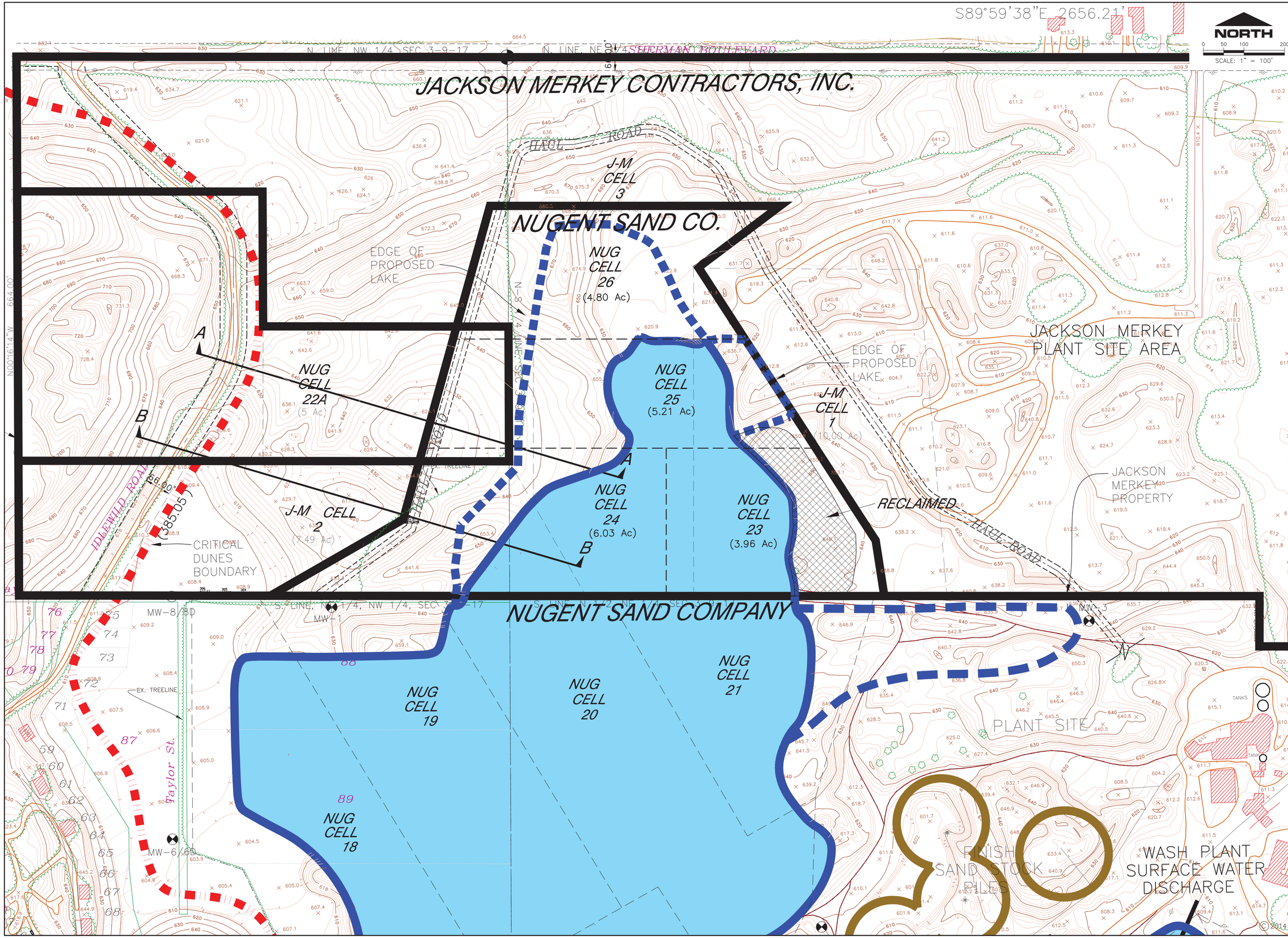

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NO.	DATE	DESCRIPTION	CHK'D	DATE

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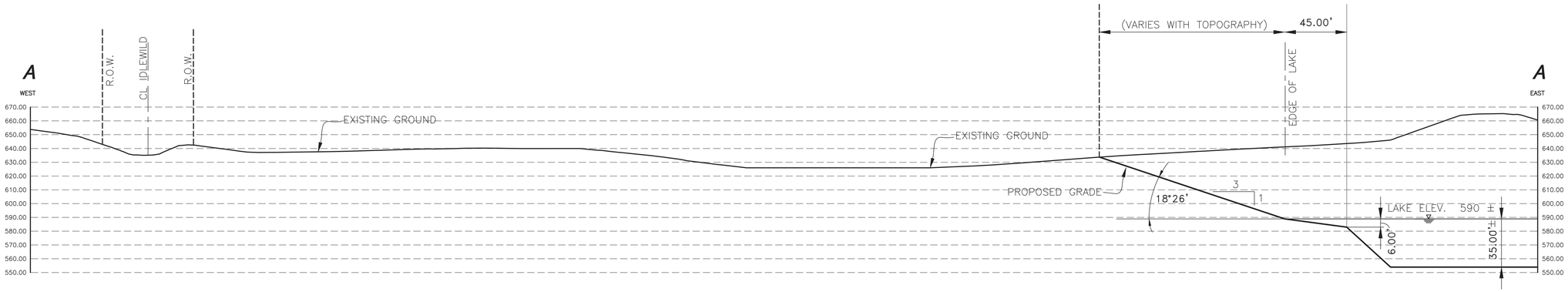
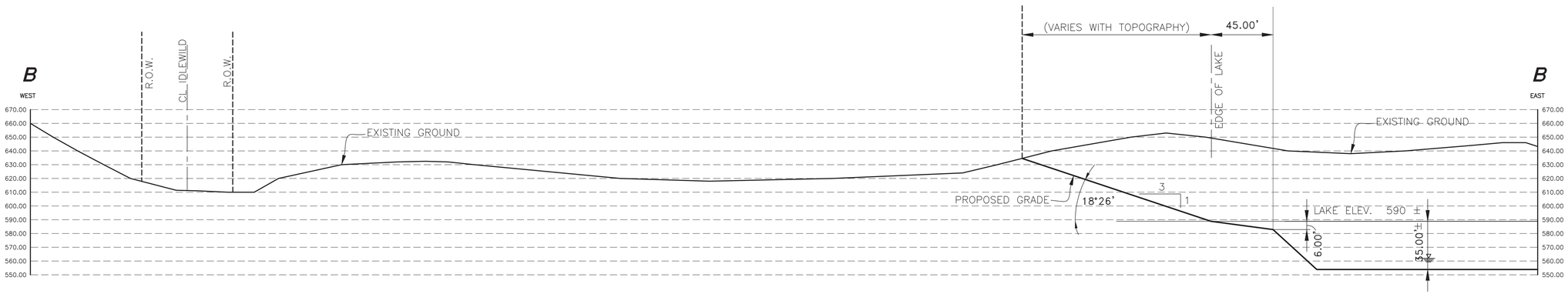
CHECKED BY: RLS
SURVEYED BY: ---
DWG NAME: ---
DESIGNED BY: ---

PROJECT NAME:
NUGENT SAND COMPANY
NORTON SHORES
MICHIGAN

PROPOSED SITE PLAN

PROJECT: 668-05J
SHEET: 4 OF 6





0 20 40 80

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 40'

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NO.	DATE	DESCRIPTION	CHK'D	DATE

DRAWN BY: BJA
CHECKED BY: RLS
DATE: 08/01/14
SURVEYED BY: ---
DESIGNED BY: ---
DWG NAME: ---

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WESTSHORE CONSULTING
Engineers ■ Scientists ■ Surveyors

PROJECT NAME:
NUGENT SAND COMPANY
NORTON SHORES
MICHIGAN

CROSS SECTIONS

PROJECT: 668-05J
SHEET: 5 OF 6

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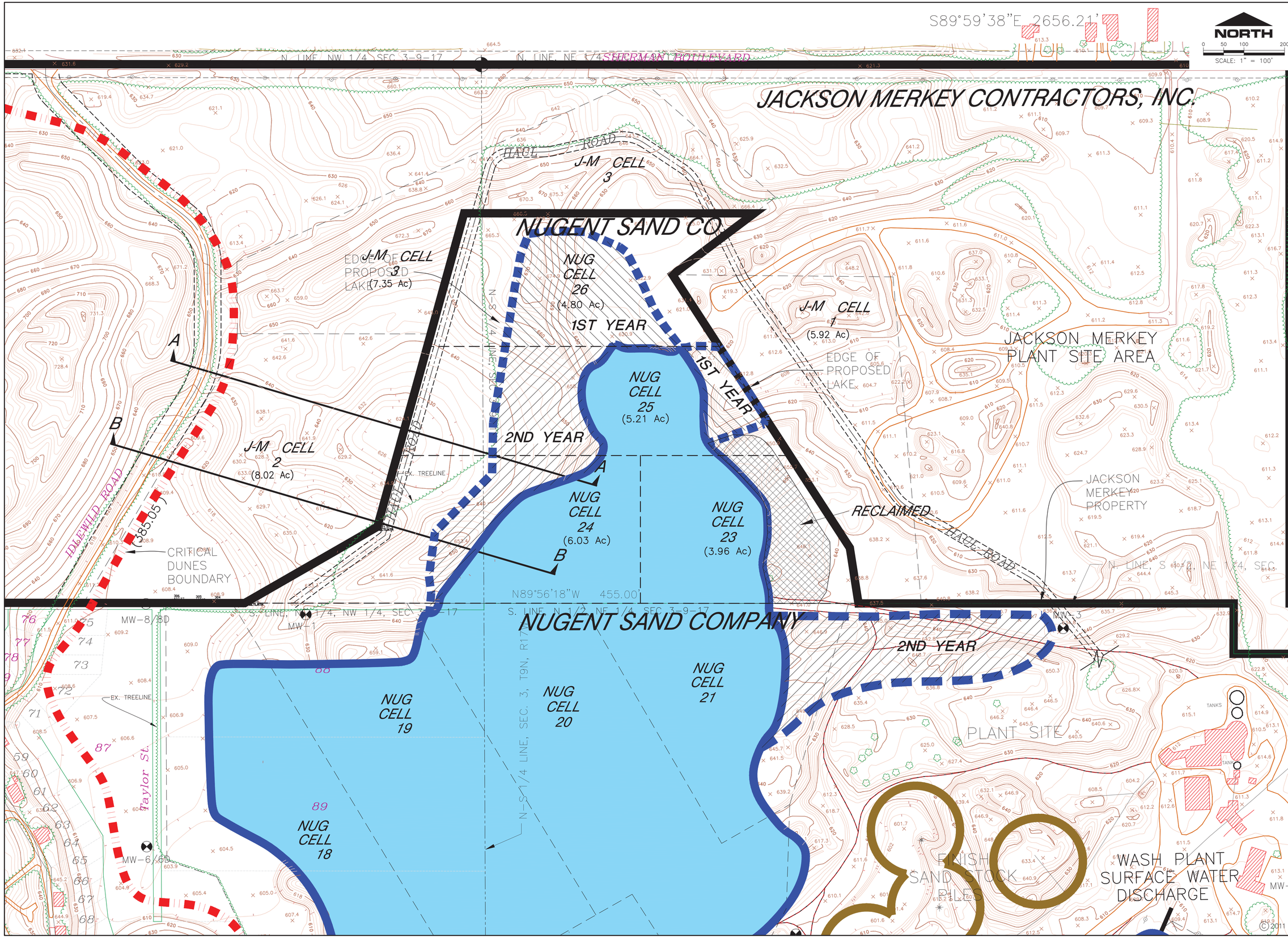

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NO.	DATE	DESCRIPTION	CHK'D	DATE

DRAWN BY: wov | DATE: 1/17/11
CHECKED BY: --- | SURVEYED BY: ---
DWG NAME: --- | DESIGNED BY: ---

PROJECT NAME: NUGENT SAND COMPANY
NORTON SHORES MICHIGAN

MINING SEQUENCE PLAN

PROJECT: 668-12B
SHEET: 6 OF 6