

## WATER DEPTH (FT) AERIAL VIEW

LAKE DEPTH LEGEND		
	MAXIMUM DEPTH (FT)	COLOR
0.0	2.0	
2.0	4.0	
4.0	6.0	
6.0	8.0	
8.0	10.0	
10.0	12.0	
12.0	13.5	

### © 2021 BOGIA ENGINEERING INC.

WRITTEN DIMENSIONS SHALL HAVE PRIORITY OVER SCALED DIMENSIONS. ALL DIMENSIONS, ELEVATIONS, LOCATIONS, AND CONDITIONS, SHALL BE VERIFIED BY THE OWNER AND BOGIA ENGINEERING, INC. SHALL BE NOTIFIED OF ANY DISCREPANCIES WITH THE INFORMATION SHOWN ON THE DRAWINGS.

INFORMATION SHOWN ON THIS PLAN REPRESENTS PROFESSIONAL SERVICES EXPRESSING IDEAS AND SURVEYED INFORMATION, OWNED AND COPYRIGHTED BY BOGIA ENGINEERING, INC. REPRODUCTION OF THIS PLAN WITHOUT WRITTEN APPROVAL OF BOGIA ENGINEERING, INC. IS NOT PERMITTED. UNAUTHORIZED REPRODUCTION OF A COPY OF THIS PLAN FOR ANY PURPOSE WILL BE CONSIDERED A VIOLATION OF THE COPYRIGHT LAWS AND A THEFT OF CORPORATE ASSETS. UNAUTHORIZED ALTERATIONS OF THE PLAN WILL BE CONSIDERED A VIOLATION OF THE PROFESSIONAL CODE OF ETHICS. ANY VIOLATION WILL BE PROSECUTED TO THE FULLEST EXTENT OF CURRENT STATUTES.

# SEDIMENT THICKNESS (FT) AERIAL VIEW

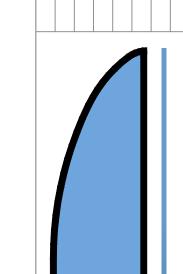
SEDIMENT THICKNESS LEGEND			
MINIMUM THICKNESS (FT)	MAXIMUM THICKNESS (FT)	AREA (ACRES)	COLOR
0.0	0.25	55.2	
0.25	0.75	24.4	
0.75	1.25	4.2	
1.25	1.75	0.3	
1.75	2.20	0.1	

#### EXISTING CONDITIONS INFORMATION

- 1. THE BATHYMETRIC SURVEY WAS PERFORMED USING SONAR AND MANUAL MEASUREMENTS WITH GPS DEVICES BY F.X. BROWNE/BOGIA ENGINEERING, INC. DURING THE MONTH OF MAY 2021.
- 2. HORIZONTAL DATUM: NAD83
  VERTICAL DATUM: FROM WSE (WATER/SEDIMENT DEPTHS)
- 4. WATER SURFACE ELEVATION (WSE) VARIES. THE MEASURED LOW WATER SURFACE ELVATION (WSE) DURING THE BATHYMETRIC SURVEY WAS APPROXIMATELY 0.1" ABOVE THE DAM LOCATED AT: 41° 9' 31.36", -75° 34' 2.07".
- 5. ALL EXISTING UTILITIES WITHIN THE PROJECT AREAS ARE TO BE FIELD VERIFIED AND MARKED PRIOR TO MOBILIZATION OF DEWATERING SITES, LAKE DREDGING AND OTHER ACTIVITIES WITHIN THE LAKE BOUNDARIES.
- 6. PROPERTY OWNERS:

ARROWHEAD COMMUNITY ASSOCIATION 961 ARROWHEAD DR. POCONO LAKE, PA 18347

- 7. LAKE AREA (OPEN WATERS) = 84.2 ACRES (APPROXIMATELY)
- 8 TOTAL VOLUME OF SEDIMENT = 29,822 CUBIC YARDS (APPROXIMATELY)
- 9. SEDIMENT LEVELS MAY VARY THROUGHOUT THE LAKE OVER TIME, AND WILL VARY AT THE INLETS INTO EACH SECTION ON ARROWHEAD LAKE. DUE TO THE VARIABLE NATURE OF SEDIMENT ACCUMULATION, ESPECIALLY AT THE INLET AREAS, ELEVATIONS SHOULD BE VERIFIED PRIOR TO ANY DREDGING.



BOGIA ENGINEERING, INC



NORTH ARROWHEAD LAKE
BATHYMETRIC SURVEY MAF
AERIAL VIEW

LOCATION:

COOLBAUGH TOWNSHIP, MONROE COUNTY, PENNSYLVANIA

#### ADDRESS:

SHEET:

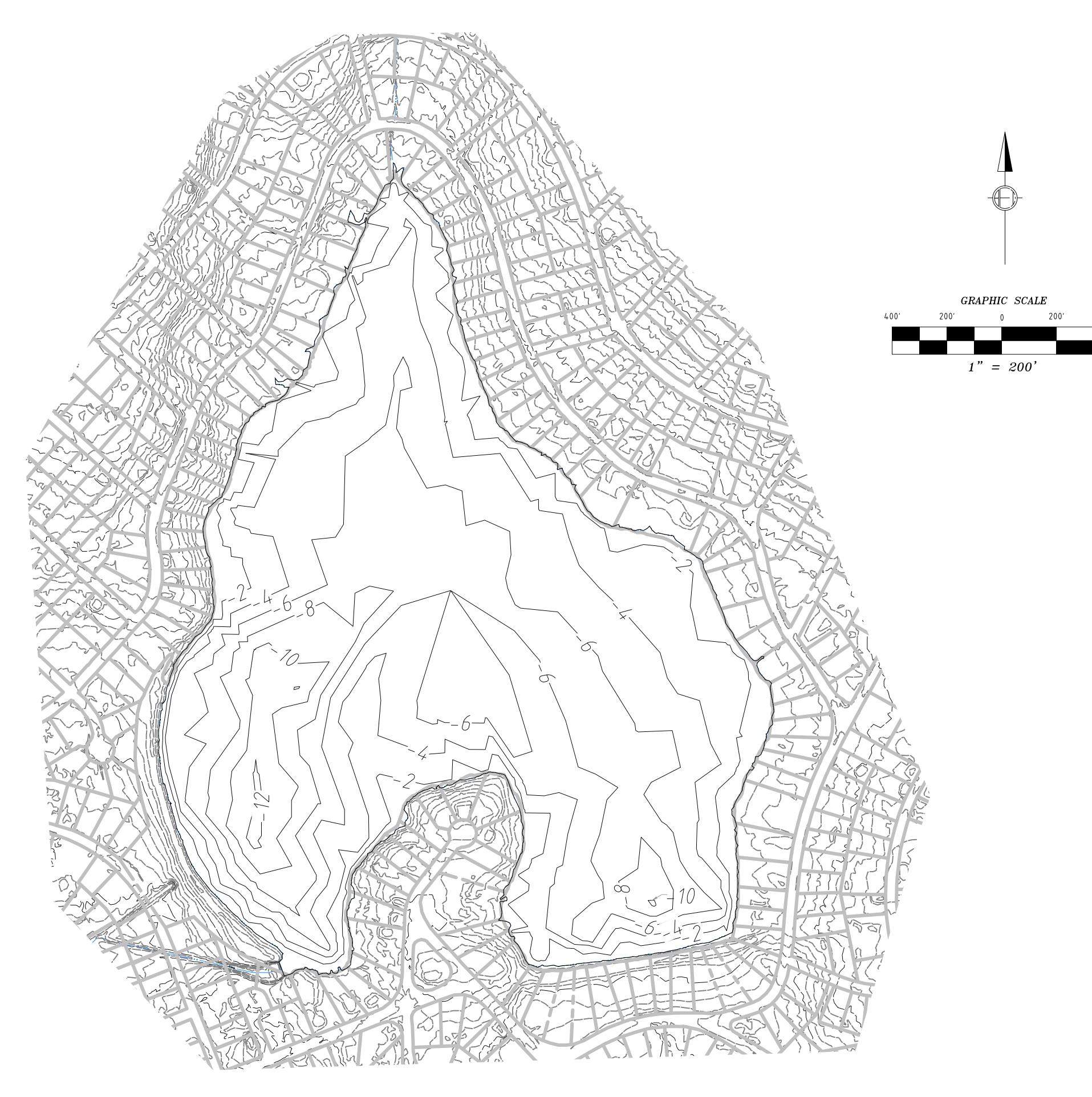
961 ARROWHEAD LAKE DRIVE POCONO LAKE, PA 18347

CLIENT:

ARROWHEAD LAKE
COMMUNITY ASSOCIATION

CHECKED BY:	FX
DRAWN BY:	JM/A
DATE:	06/07/2
SCALE:	1" = 20
DRAWING:	
PROJECT:	PA 1522-1

1 OF 1



WATER DEPTH (FT) AERIAL VIEW

#### © 2021 BOGIA ENGINEERING INC.

WRITTEN DIMENSIONS SHALL HAVE PRIORITY OVER SCALED DIMENSIONS. ALL DIMENSIONS, ELEVATIONS, LOCATIONS, AND CONDITIONS, SHALL BE VERIFIED BY THE OWNER AND BOGIA ENGINEERING, INC. SHALL BE NOTIFIED OF ANY DISCREPANCIES WITH THE INFORMATION SHOWN ON THE DRAWINGS.

INFORMATION SHOWN ON THIS PLAN REPRESENTS PROFESSIONAL SERVICES EXPRESSING IDEAS AND SURVEYED INFORMATION, OWNED AND COPYRIGHTED BY BOGIA ENGINEERING, INC. REPRODUCTION OF THIS PLAN WITHOUT WRITTEN APPROVAL OF BOGIA ENGINEERING, INC. IS NOT PERMITTED. UNAUTHORIZED REPRODUCTION OF A COPY OF THIS PLAN FOR ANY PURPOSE WILL BE CONSIDERED A VIOLATION OF THE COPYRIGHT LAWS AND A THEFT OF CORPORATE ASSETS. UNAUTHORIZED ALTERATIONS OF THE PLAN WILL BE CONSIDERED A VIOLATION OF THE PROFESSIONAL CODE OF ETHICS. ANY VIOLATION WILL BE PROSECUTED TO THE FULLEST EXTENT OF CURRENT STATUTES.

#### EXISTING CONDITIONS INFORMATION

- 1. THE BATHYMETRIC SURVEY WAS PERFORMED USING SONAR AND MANUAL MEASUREMENTS WITH GPS DEVICES BY F.X. BROWNE/BOGIA ENGINEERING, INC. DURING THE MONTH OF MAY 2021.
- 2. HORIZONTAL DATUM: NAD83 VERTICAL DATUM: FROM WSE (WATER/SEDIMENT DEPTHS)
- 4. WATER SURFACE ELEVATION (WSE) VARIES. THE MEASURED LOW WATER SURFACE ELVATION (WSE) DURING THE BATHYMETRIC SURVEY WAS APPROXIMATELY 0.1" ABOVE THE DAM LOCATED AT: 41° 9' 31.36", -75° 34' 2.07".
- 5. ALL EXISTING UTILITIES WITHIN THE PROJECT AREAS ARE TO BE FIELD VERIFIED AND MARKED PRIOR TO MOBILIZATION OF DEWATERING SITES, LAKE DREDGING AND OTHER ACTIVITIES WITHIN THE LAKE BOUNDARIES.
- 6. PROPERTY OWNERS:

ARROWHEAD COMMUNITY ASSOCIATION 961 ARROWHEAD DR. POCONO LAKE, PA 18347

7. LAKE AREA (OPEN WATERS) = 84.2 ACRES (APPROXIMATELY)

8 TOTAL VOLUME OF SEDIMENT = 29,822 CUBIC YARDS (APPROXIMATELY)

9. SEDIMENT LEVELS MAY VARY THROUGHOUT THE LAKE OVER TIME, AND WILL VARY AT THE INLETS INTO EACH SECTION ON ARROWHEAD LAKE. DUE TO THE VARIABLE NATURE OF SEDIMENT ACCUMULATION, ESPECIALLY AT THE INLET AREAS, ELEVATIONS SHOULD BE VERIFIED PRIOR TO ANY DREDGING.

THE SE) DURING Y O 1" ABOVE

RING, INC

OF BOGIA ENGINEERING, INC



ROWHEAD LAKE

NORTH ARROWHE
BATHYMETRIC SUF

LOCATION:

COOLBAUGH TOWNSHIP, MONROE COUNTY, PENNSYLVANIA

ADDRESS:

961 ARROWHEAD LAKE DRIVE POCONO LAKE, PA 18347

CLIENT:

ARROWHEAD LAKE
COMMUNITY ASSOCIATION

 CHECKED BY:
 FXB

 DRAWN BY:
 JM/AB

 DATE:
 06/07/21

 SCALE:
 1" = 200'

 DRAWING:
 PROJECT:

 PROJECT:
 PA 1522-14

1 OF 1

SHEET: