



CITY OF MADISON

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS

MONONA CAUSEWAY BIKE AND
PEDESTRIAN PATH IMPROVEMENTS

CITY PROJECT NO. XXXXXXXX
CONTRACT NO. XXXX

PUBLIC IMPROVEMENT PROJECT
PENDING APPROVAL
BY THE COMMON COUNCIL OF MADISON,
WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

CITY ENGINEER

DATE

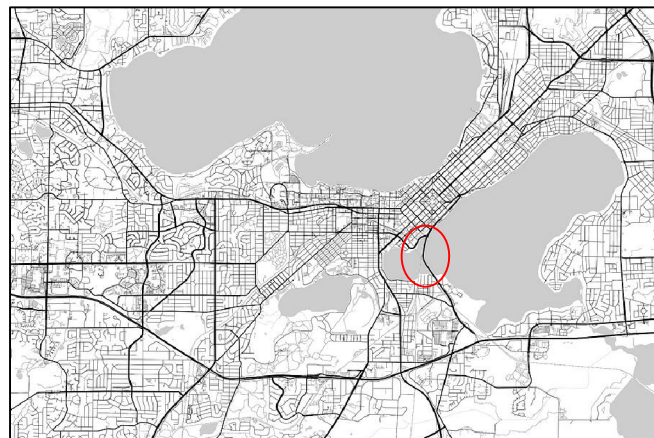


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* NOT INCLUDED IN PLAN SET

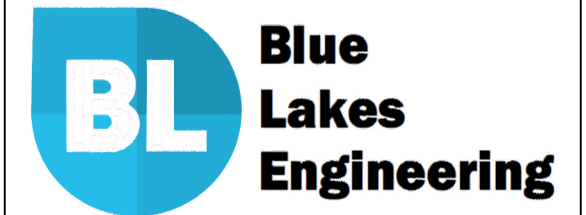
PROJECT LOCATION



DESIGNED BY:

BLUE LAKES ENGINEERING

2317 ENGINEERING HALL
1415 ENGINEERING DRIVE
MADISON, WI 53706





NOTE:

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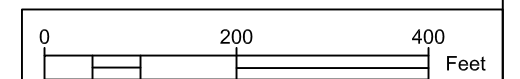


LEGEND

-  REMOVE ASPHALTIC PATH
-  REMOVE TREE

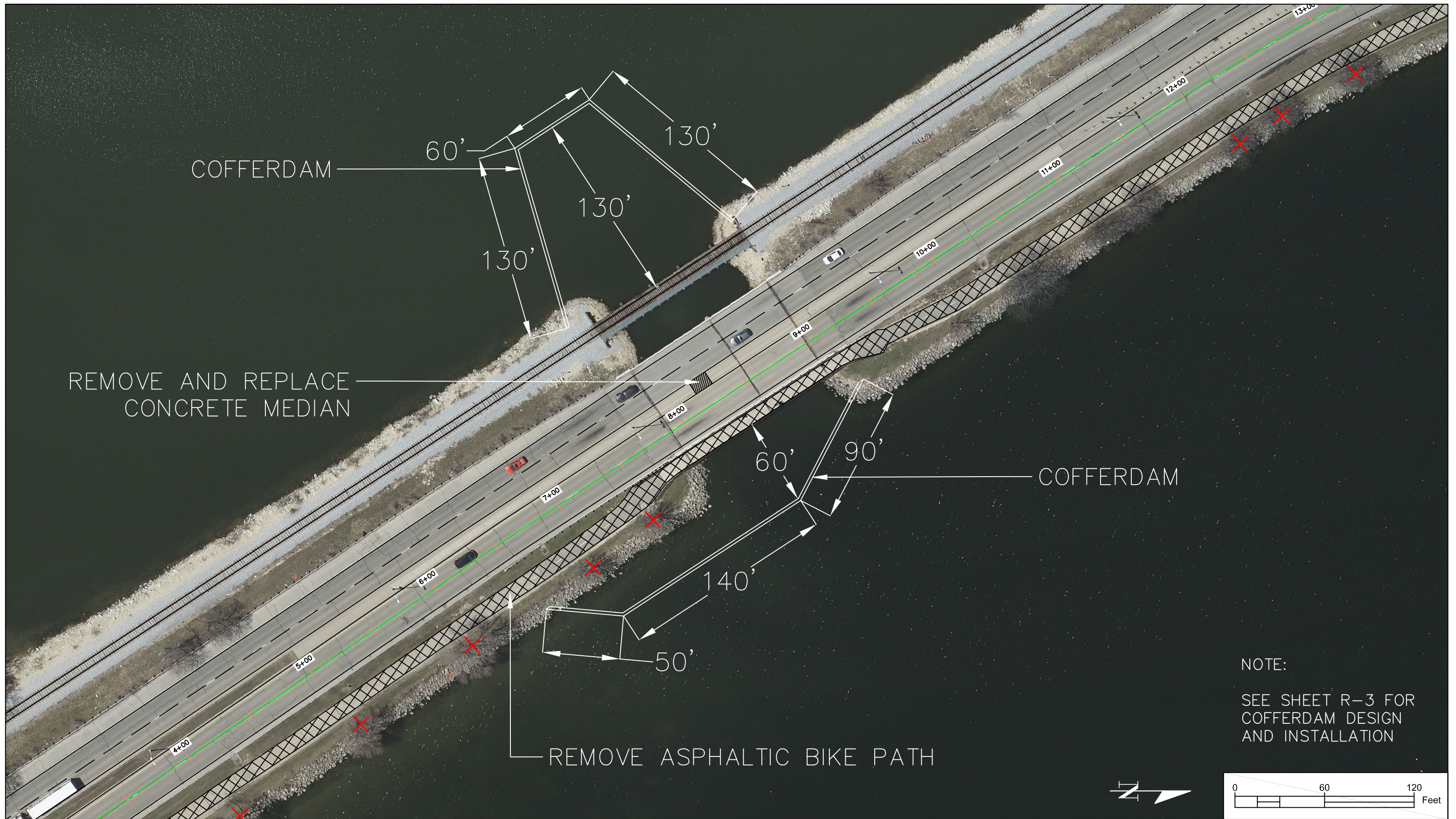
BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – DEMOLITION PLAN

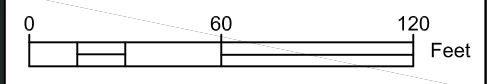


SHEET NO. R-1
 SCALE 1" : 200'

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NOTE:
SEE SHEET R-3 FOR
COFFERDAM DESIGN
AND INSTALLATION



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CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – DEMOLITION PLAN DETAIL

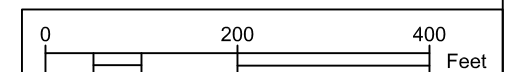
SHEET NO. R-2
SCALE 1":60'

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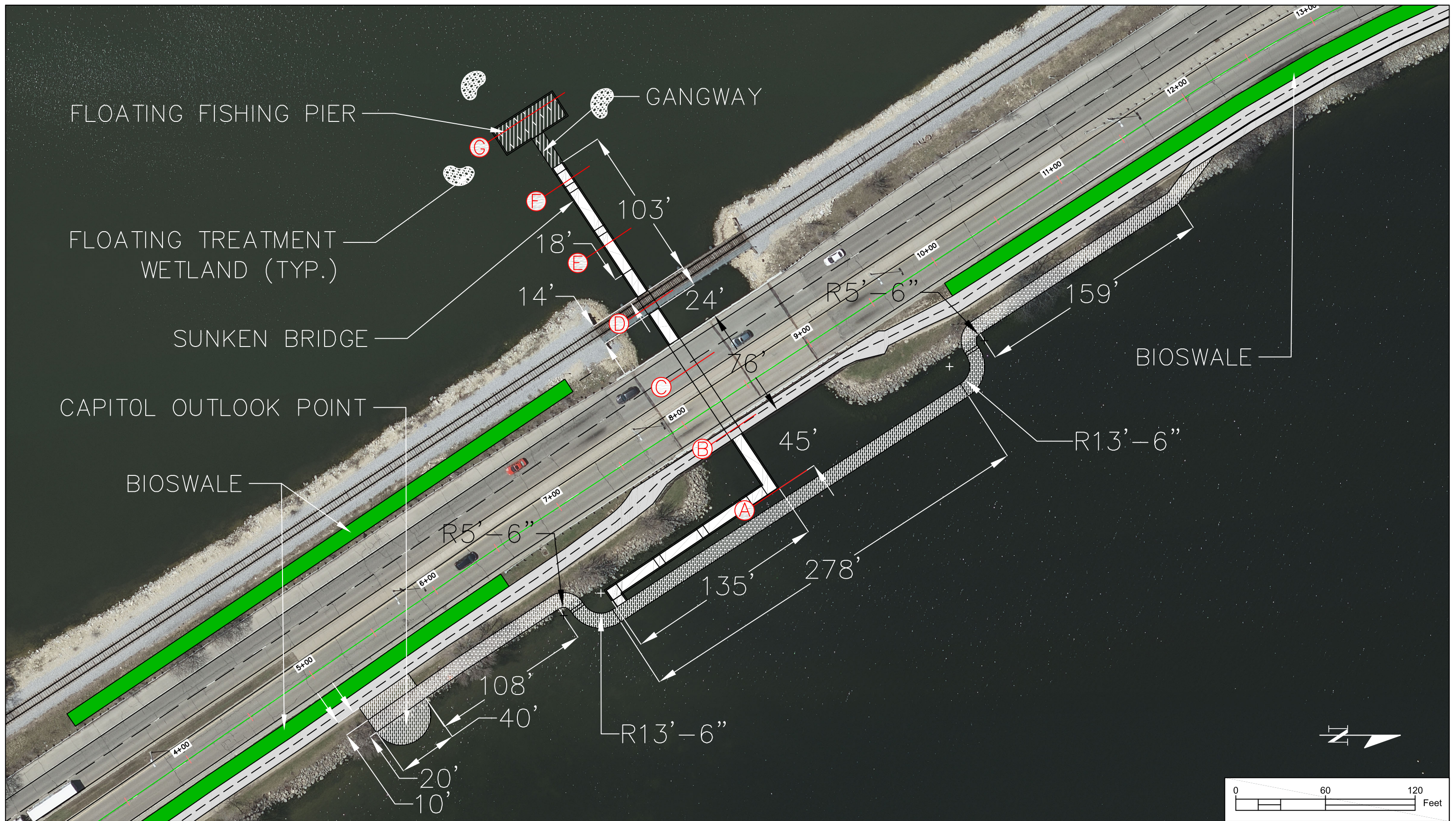
BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – PLAN OVERVIEW



SHEET NO. P-1
 SCALE 1":200'

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FLOATING FISHING PIER

GANGWAY

FLOATING TREATMENT WETLAND (TYP.)

SUNKEN BRIDGE

CAPITOL OUTLOOK POINT

BIOSWALE

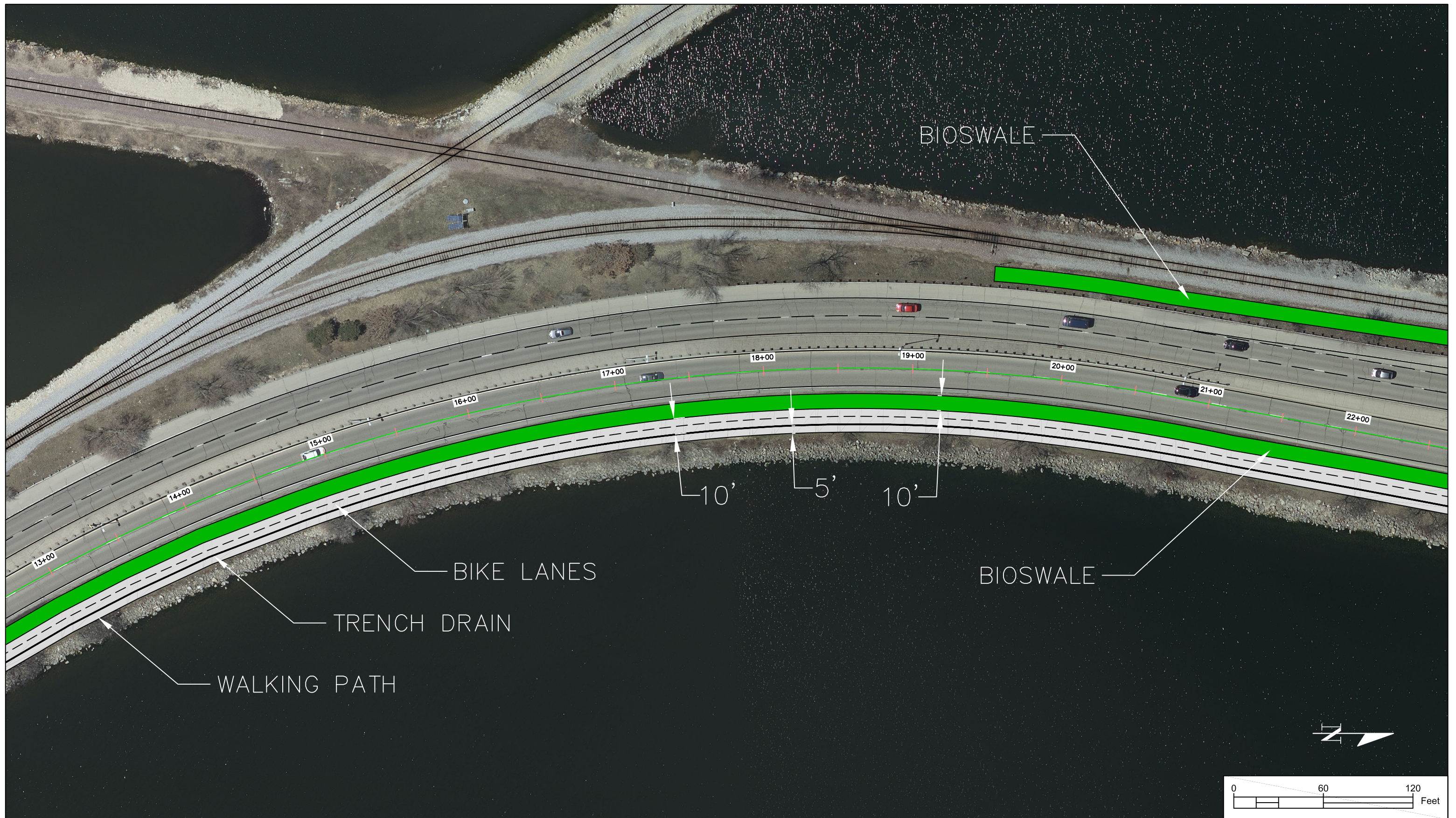
BIOSWALE

BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – PLAN DETAIL A

SHEET NO. P-2
SCALE 1":60'

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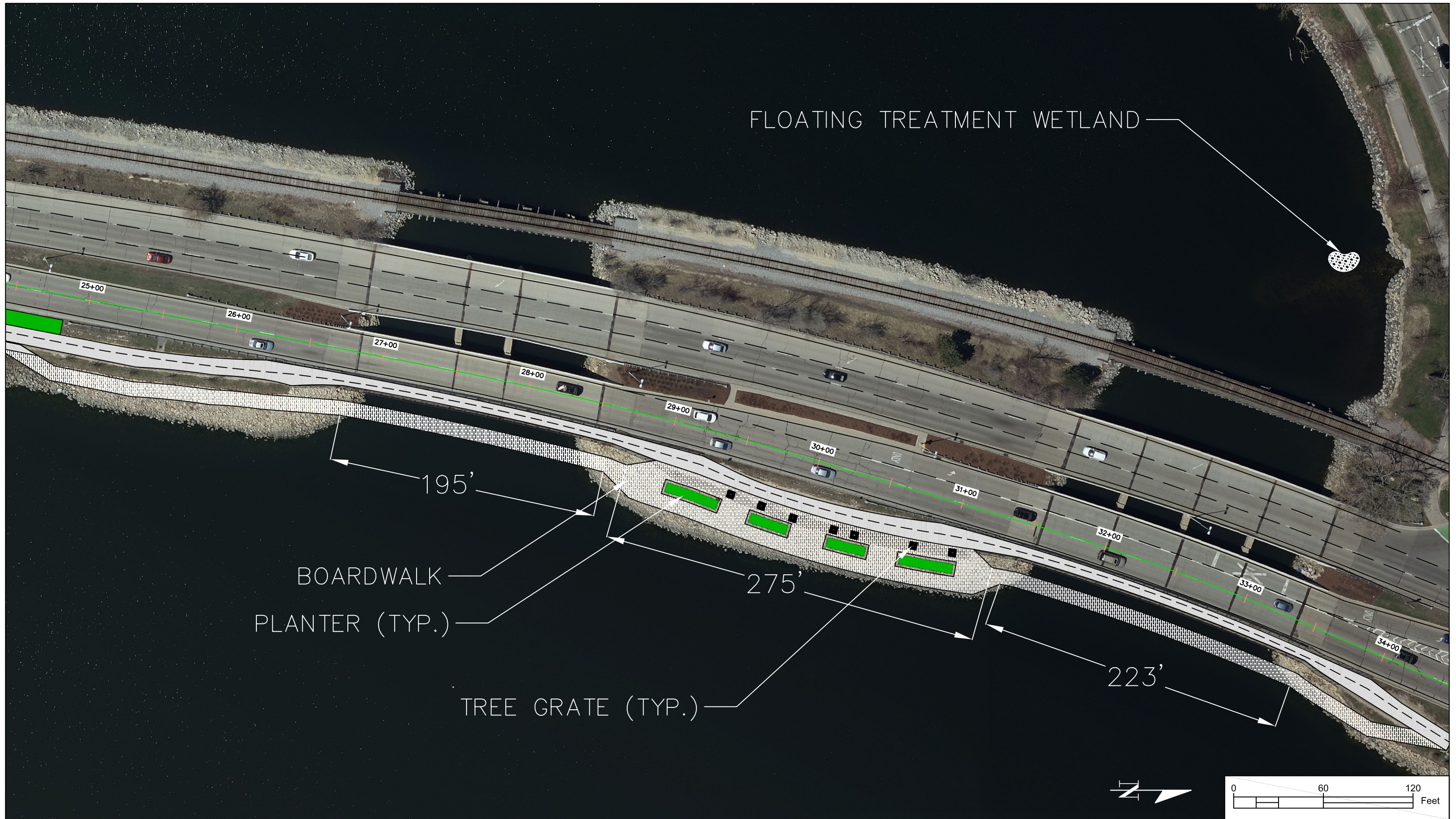


BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – PLAN DETAIL B

SHEET NO. P-3
 SCALE 1":60'

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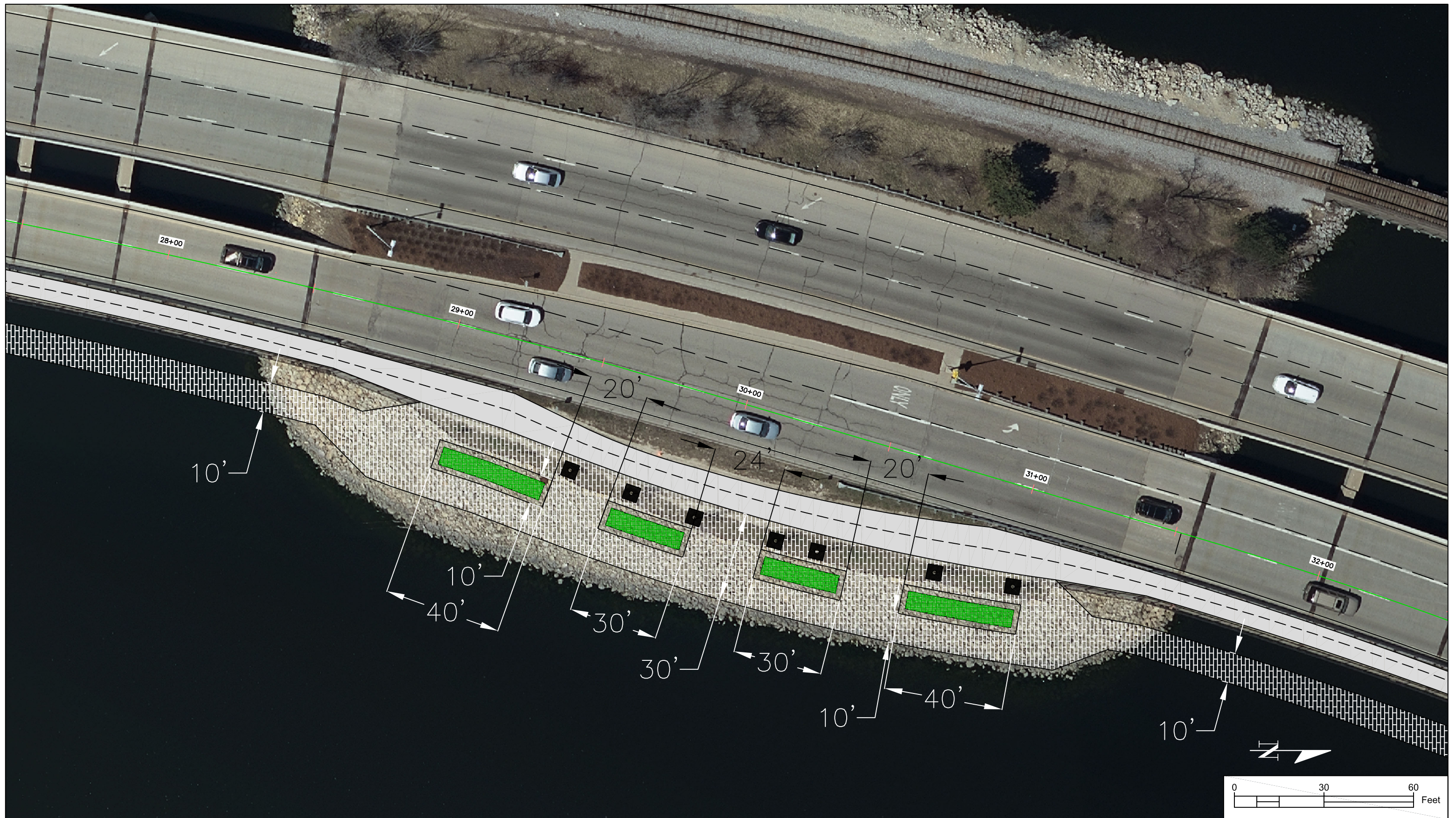


BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – PLAN DETAIL C

SHEET NO. P-4
 SCALE 1":60'

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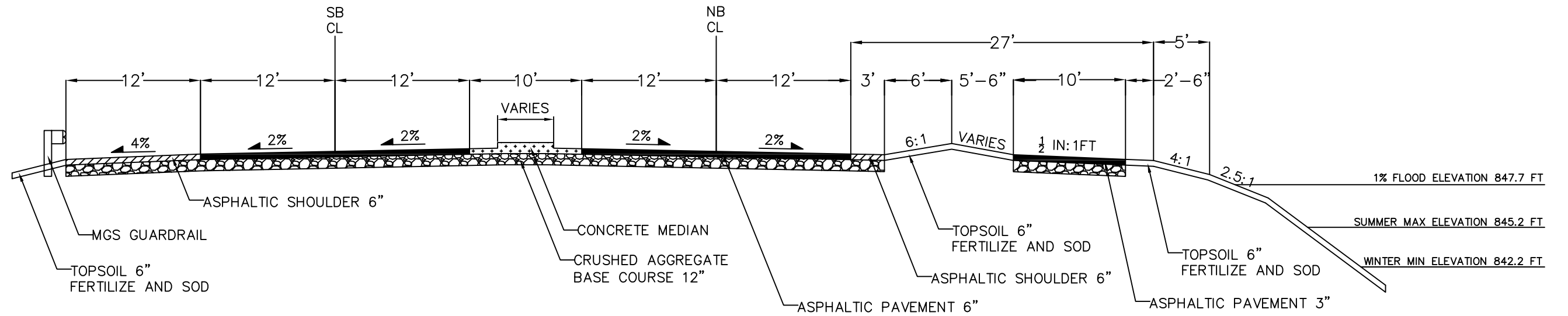


BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

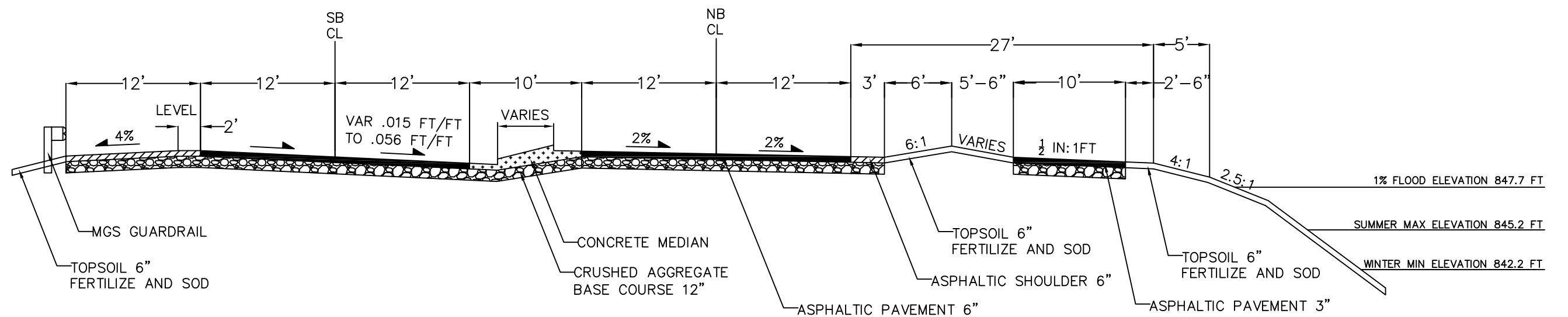
MONONA CAUSEWAY – PLAN DETAIL D

SHEET NO. P-5
 SCALE 1": 30'

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EXISTING CROSS SECTION A
 STA 3+50 TO STA 7+50
 STA 19+50 TO STA 23+50

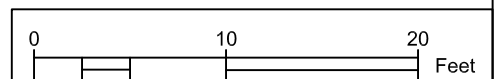


EXISTING CROSS SECTION B
 STA 0+00 TO STA 3+50
 STA 7+50 TO STA 19+50
 STA 23+50 TO STA 34+62

NOTE:

MGS – MIDWEST GUARDRAIL SYSTEM

WATER LEVELS FROM THE DANE COUNTY
 LAKE AND WATER RESOURCES
 DEPARTMENT

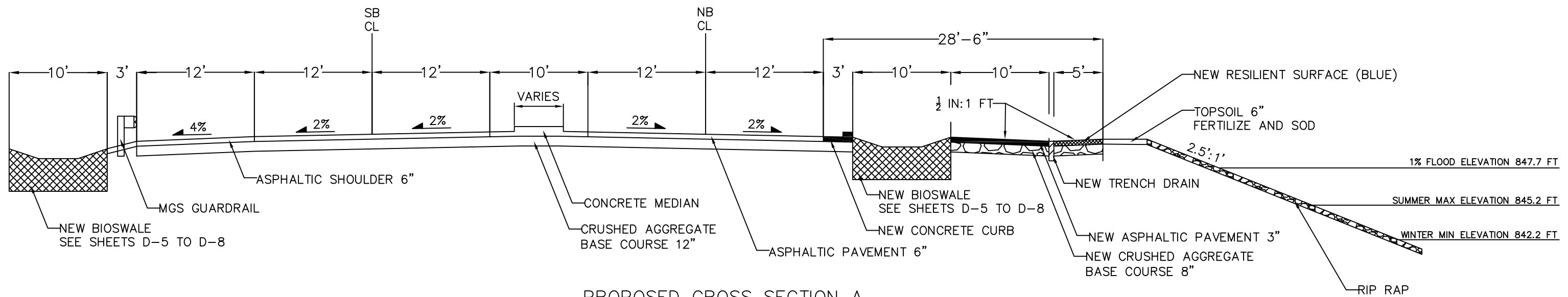


BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

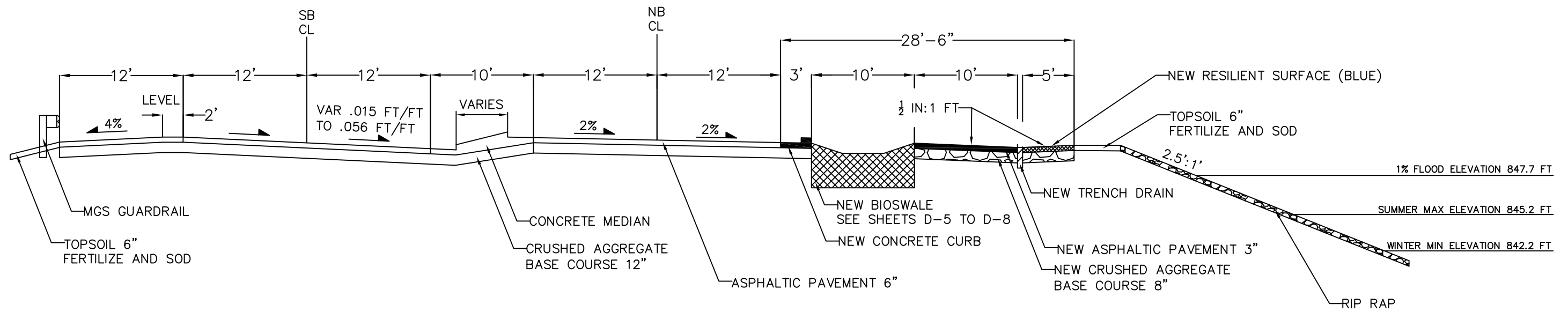
MONONA CAUSEWAY – TYPICAL CROSS SECTIONS

SHEET NO. D-1
 SCALE 1":10'

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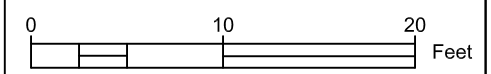


PROPOSED CROSS SECTION A
 STA 3+50 TO STA 7+50
 STA 19+50 TO STA 23+50



PROPOSED CROSS SECTION B
 STA 0+00 TO STA 3+50
 STA 7+50 TO STA 19+50
 STA 23+50 TO STA 34+62

NOTE:
 MGS – MIDWEST GUARDRAIL SYSTEM
 WATER LEVELS FROM THE DANE COUNTY
 LAKE AND WATER RESOURCES
 DEPARTMENT

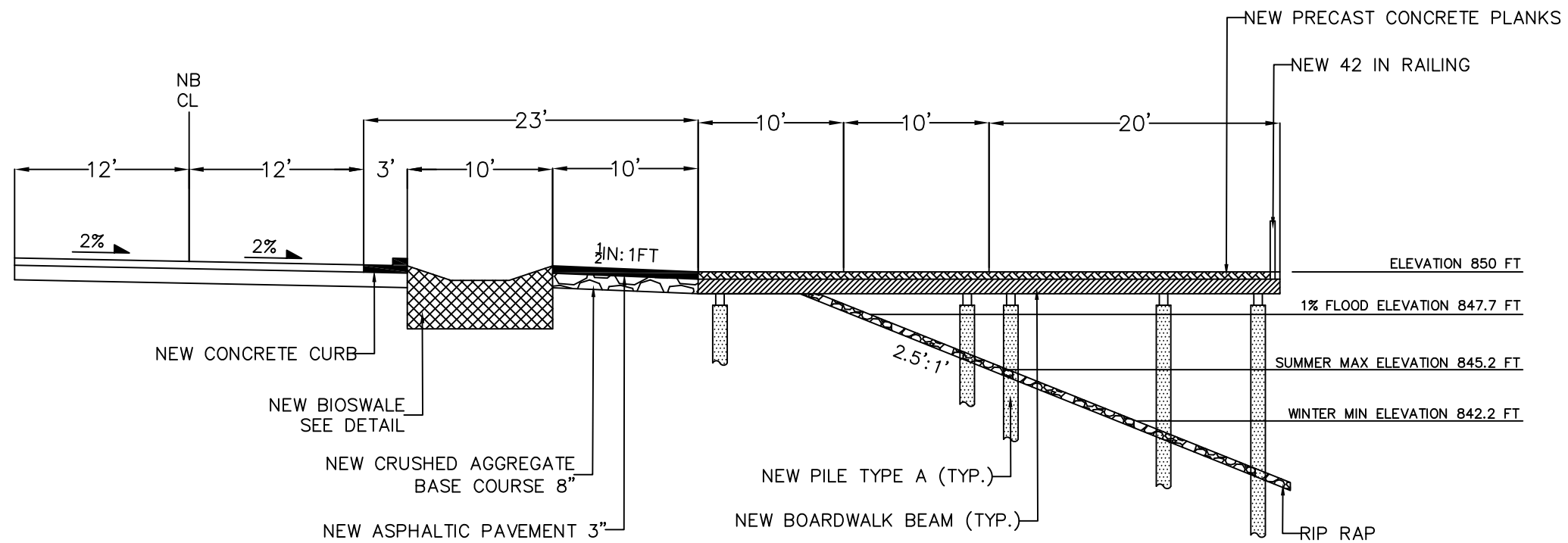


BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – TYPICAL CROSS SECTIONS

SHEET NO. D-2
 SCALE 1":10'

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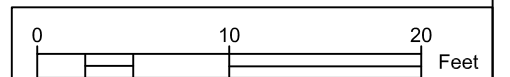
PROPOSED CROSS SECTION C
STA 5+33

NOTE:

PILES MUST BE BATTERED AT A SLOPE 1' HORIZONTAL: 5' VERTICAL

SEE SHEET S-4 FOR CAPITOL OUTLOOK DETAILS AND PLAN VIEW

WATER LEVELS FROM THE DANE COUNTY LAKE AND WATER RESOURCES DEPARTMENT

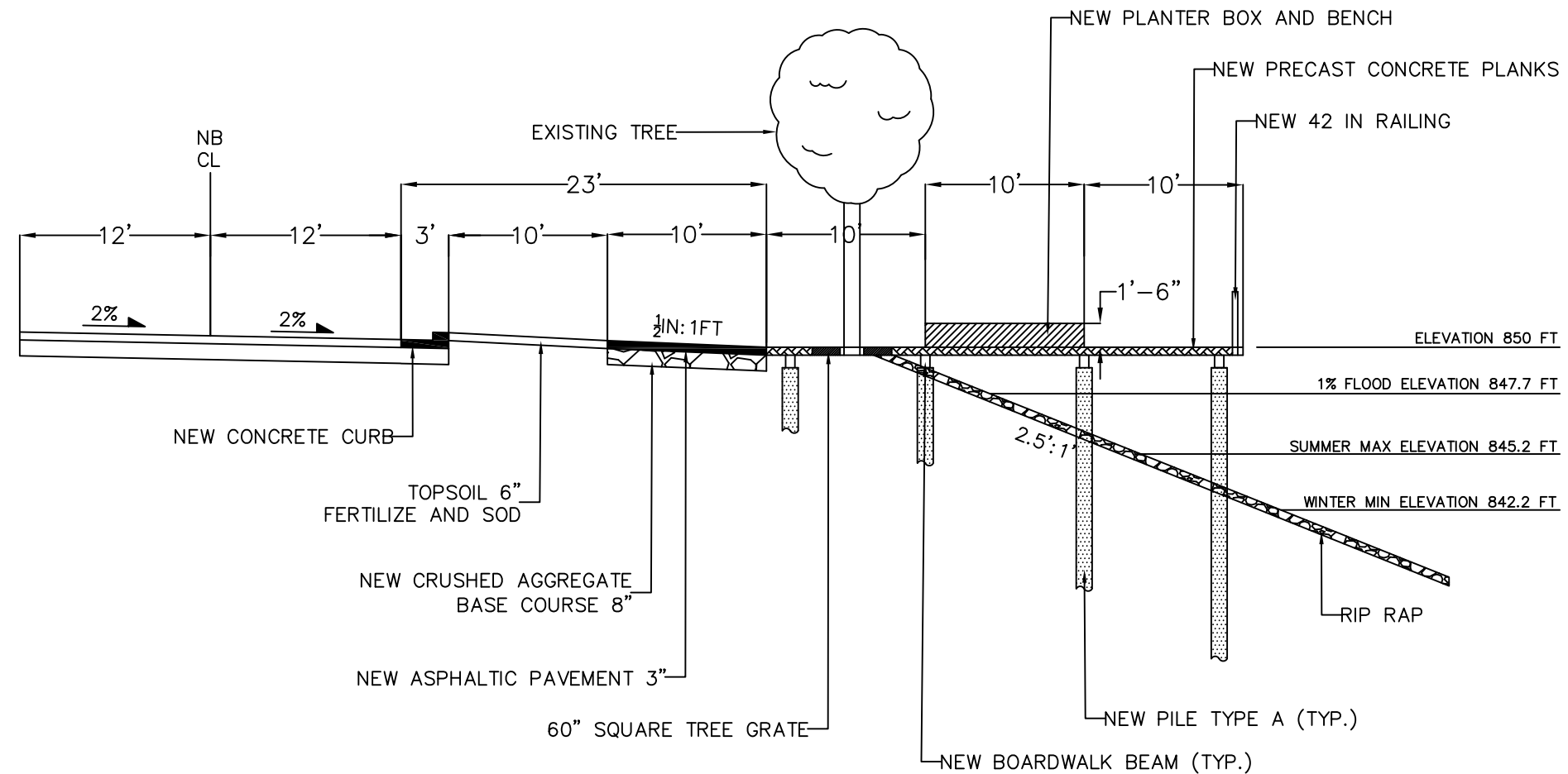


BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – CAPITOL OUTLOOK CROSS SECTION

SHEET NO. D-3
SCALE 1":10'

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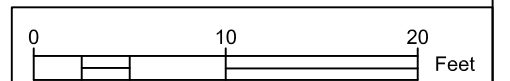


PROPOSED CROSS SECTION D
 STA 29+00 TO STA 31+00

NOTE:

PILES MUST BE BATTERED AT A SLOPE
 1' HORIZONTAL: 5' VERTICAL

WATER LEVELS FROM THE DANE COUNTY
 LAKE AND WATER RESOURCES
 DEPARTMENT



BLUE LAKES ENGINEERING
 CLEAN LAKES ALLIANCE

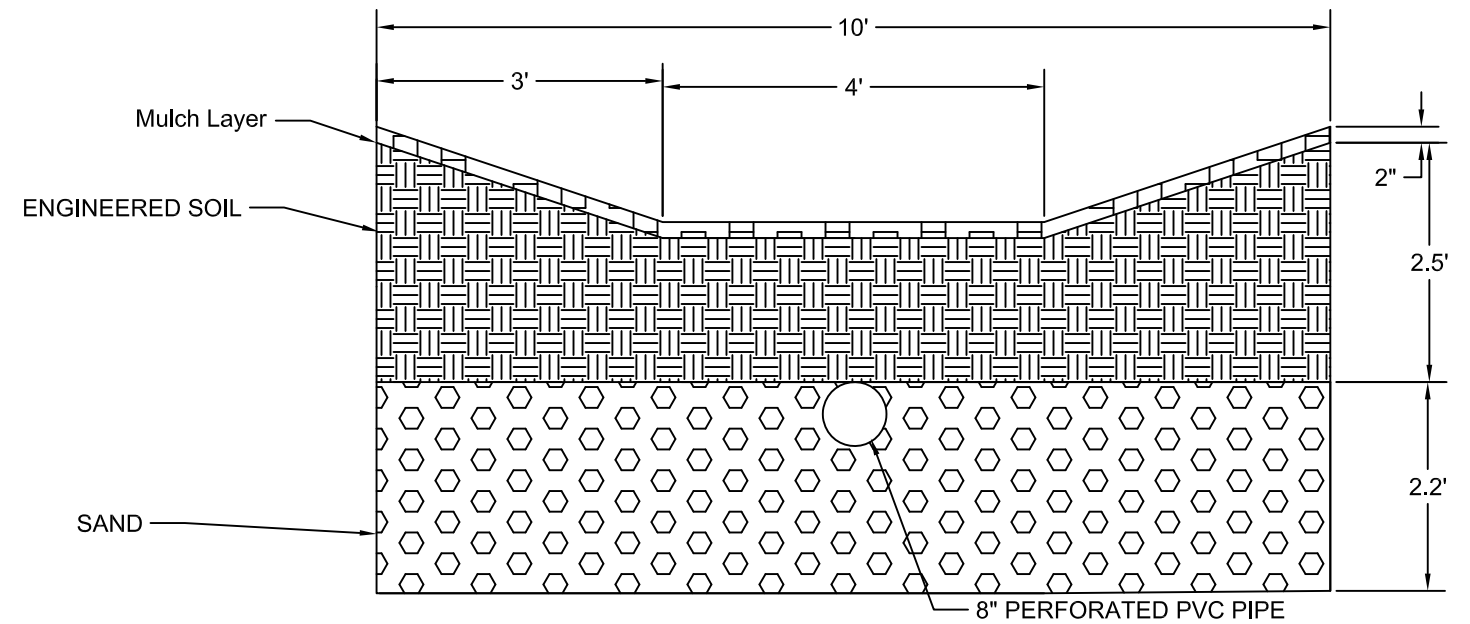
MONONA CAUSEWAY – PROPOSED CROSS SECTION

SHEET NO. D-4
 SCALE 1":10'

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NOTES

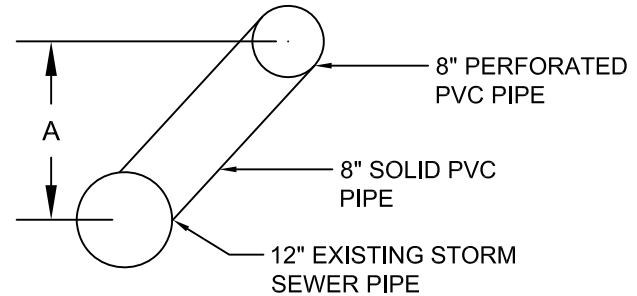
1. ENGINEERED SOIL AND SAND PER WI DNR TECHNICAL STANDARD 1004
2. BIOSWALE AND OUTFALL LOCATION SHOWN AT
3. OUTFALLS TO BE 6" PERFORATED PVC PIPE. DISCHARGE THROUGH RIP RAP AT ADJACENT WATERBODY.



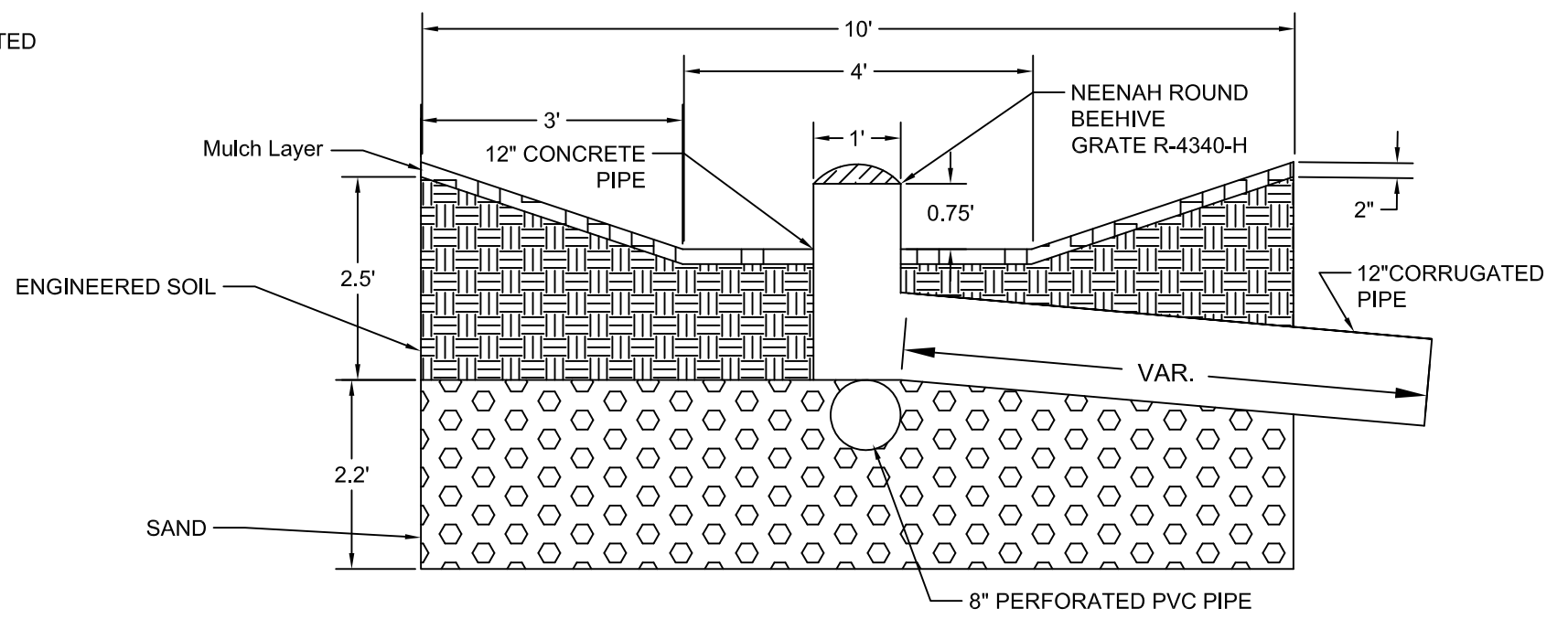
TYPICAL BIOSWALE CROSS SECTION

NOTE

A. STORM SEWER ELEVATION AND CONNECTION DETAIL TO BE DETERMINED IN THE FIELD AND CONFIRMED BY ENGINEER PRIOR TO CONSTRUCTION



BIOSWALE CONNECTION TO EXISTING STORM SEWER



TYPICAL BIOSWALE CROSS SECTION WITH OVERFLOW STRUCTURE

BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

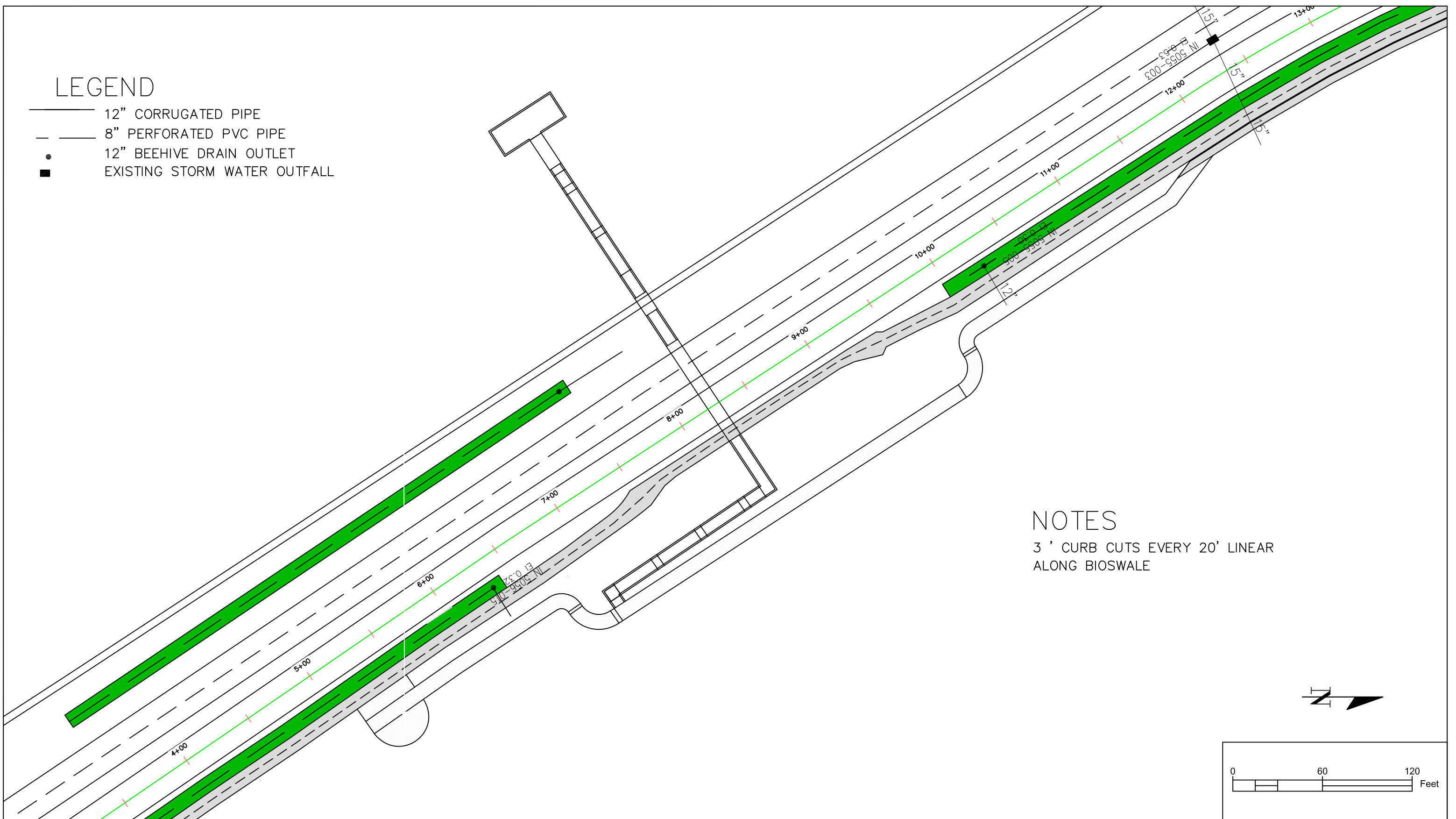
MONONA CAUSEWAY - BIOSWALE DETAIL A

SHEET NO. D-5
SCALE 1":2'

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LEGEND

- 12" CORRUGATED PIPE
- - - 8" PERFORATED PVC PIPE
- 12" BEEHIVE DRAIN OUTLET
- EXISTING STORM WATER OUTFALL



NOTES

3' CURB CUTS EVERY 20' LINEAR
ALONG BIOSWALE



BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

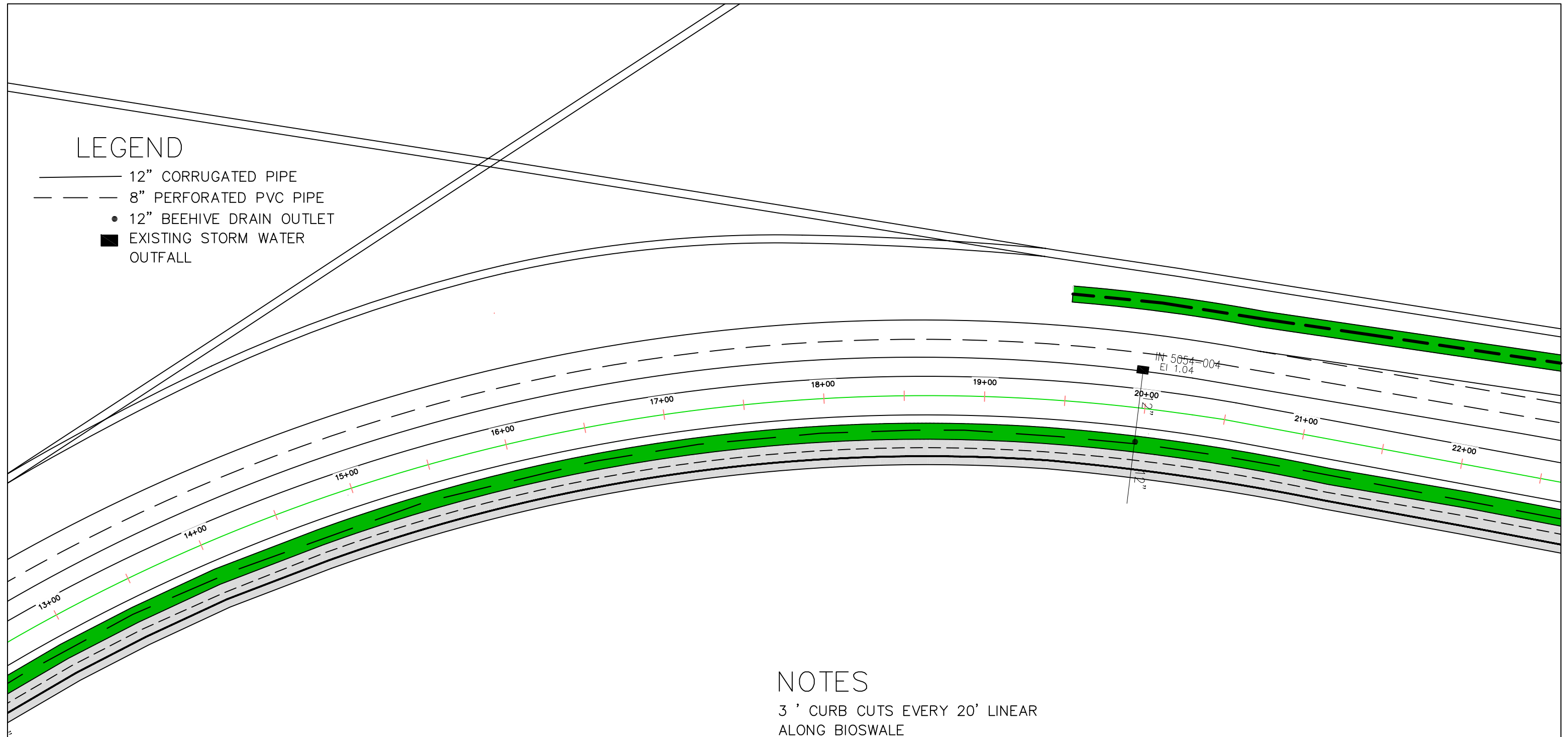
MONONA CAUSEWAY – BIOSWALE DETAIL B

SHEET NO. D-6
SCALE 1":60'

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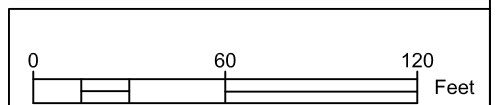
LEGEND

- 12" CORRUGATED PIPE
- - - 8" PERFORATED PVC PIPE
- 12" BEEHIVE DRAIN OUTLET
- EXISTING STORM WATER OUTFALL



NOTES

3' CURB CUTS EVERY 20' LINEAR
ALONG BIOSWALE

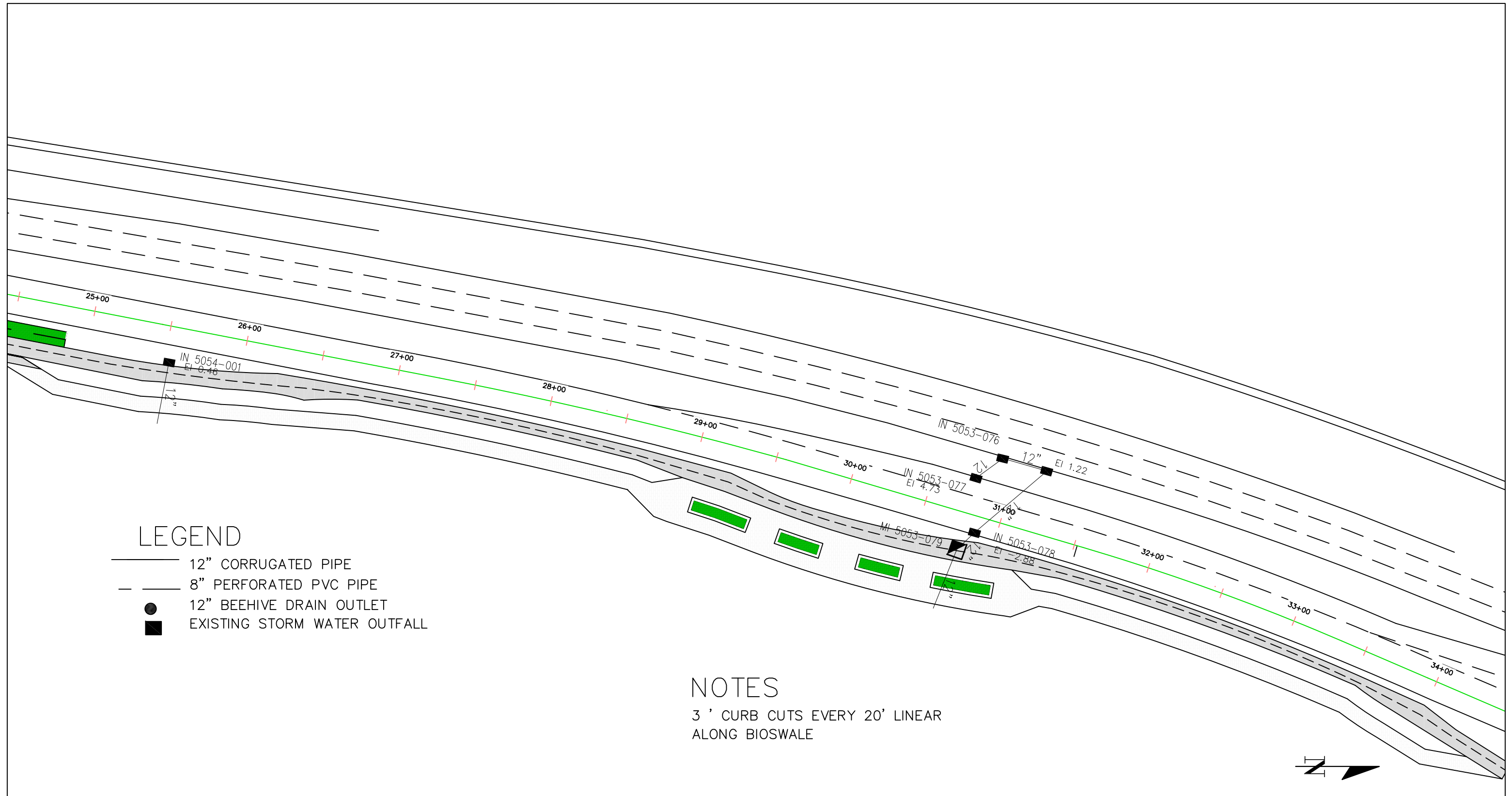


BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – BIOSWALE DETAIL C

SHEET NO. D-7
SCALE 1":60'

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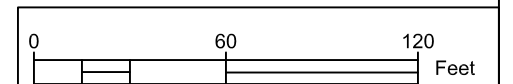
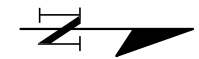


LEGEND

- 12" CORRUGATED PIPE
- - - 8" PERFORATED PVC PIPE
- 12" BEEHIVE DRAIN OUTLET
- EXISTING STORM WATER OUTFALL

NOTES

3' CURB CUTS EVERY 20' LINEAR
ALONG BIOSWALE



BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

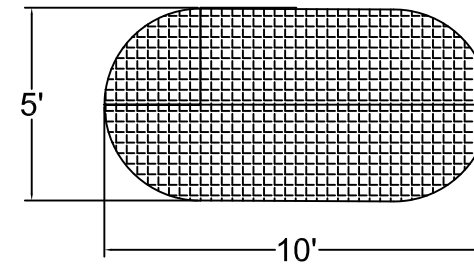
MONONA CAUSEWAY – BIOSWALE DETAIL D

SHEET NO. D-8
SCALE 1":60'

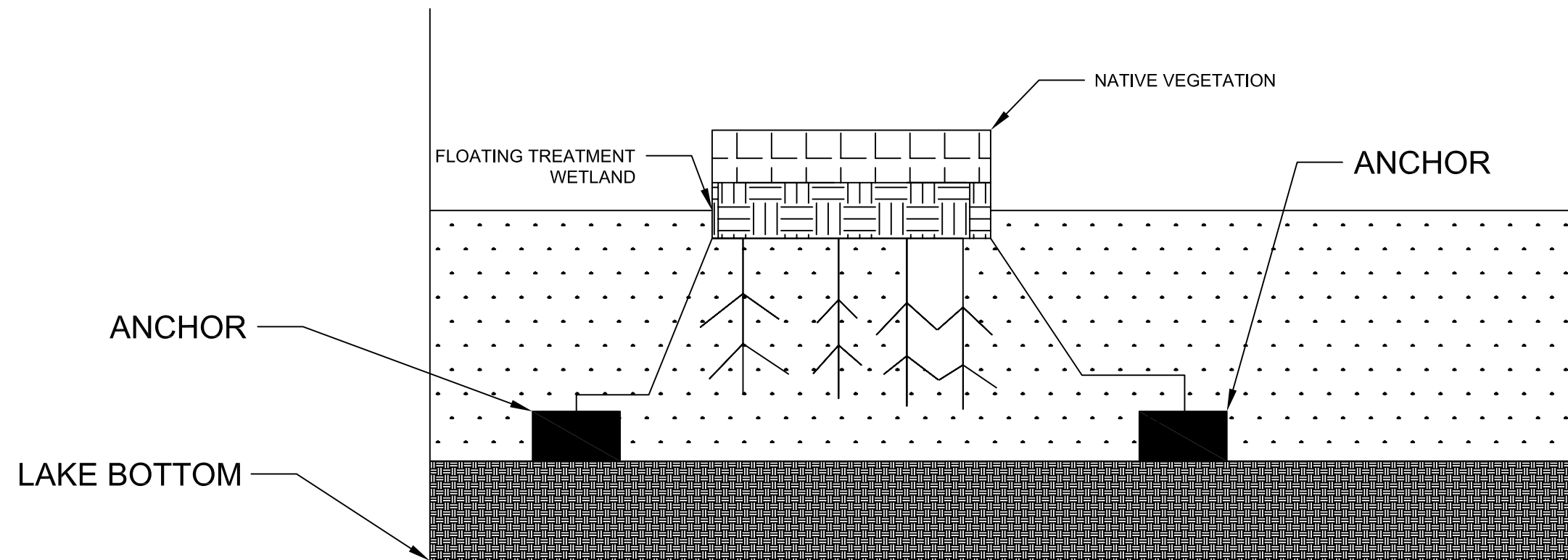
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Notes

- 1. LOCATIONS SEEN IN DRAWING P-2 AND P-4



Floating Treatment Wetland Plan View



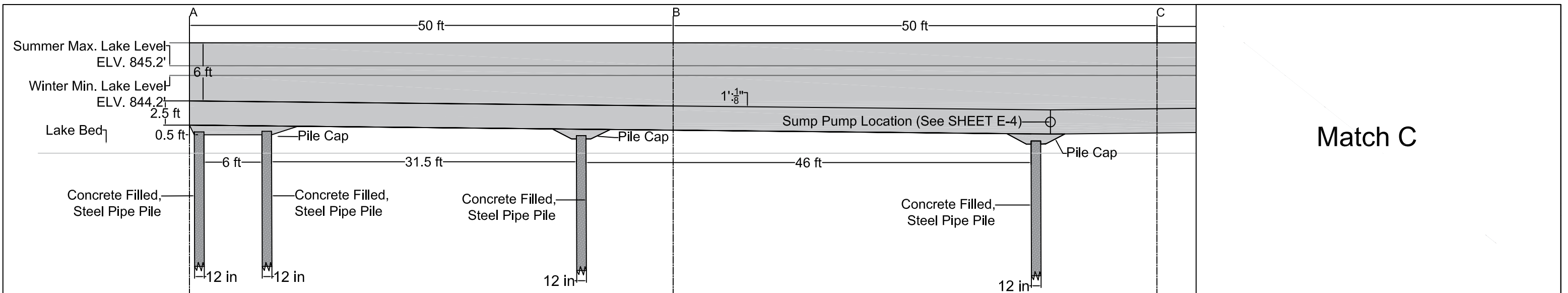
Floating Treatment Wetland Cross Section

BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

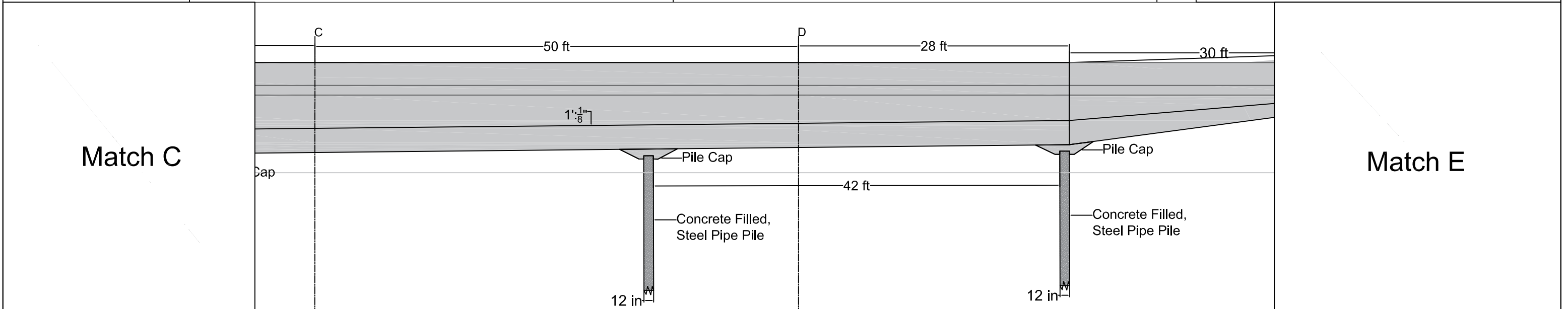
MONONA CAUSEWAY - FLOATING TREATMENT WETLAND DETAIL

SHEET NO. D-9
SCALE 1":5'

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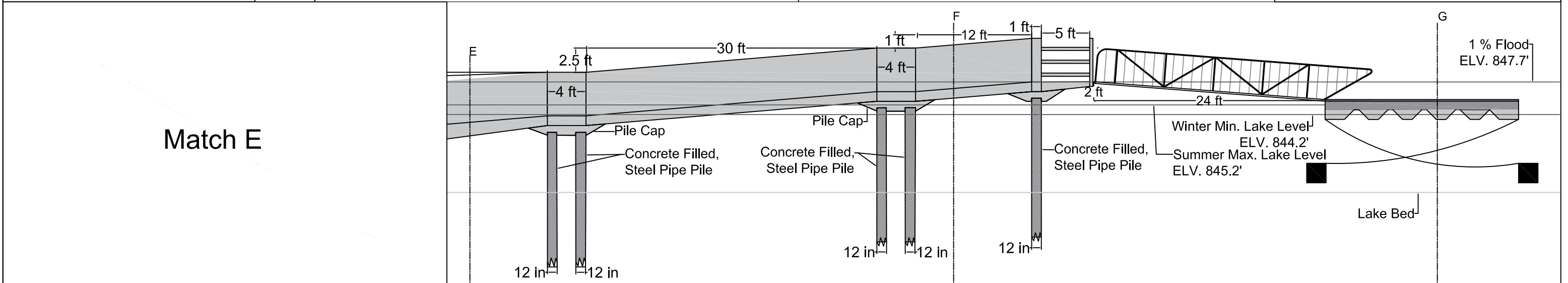


Match C



Match C

Match E



Match E

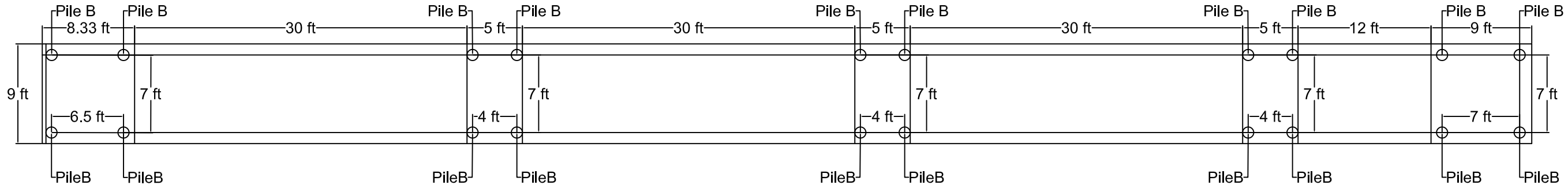
BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY - E-W SUNKEN BRIDGE STRUCTURE DRAWING

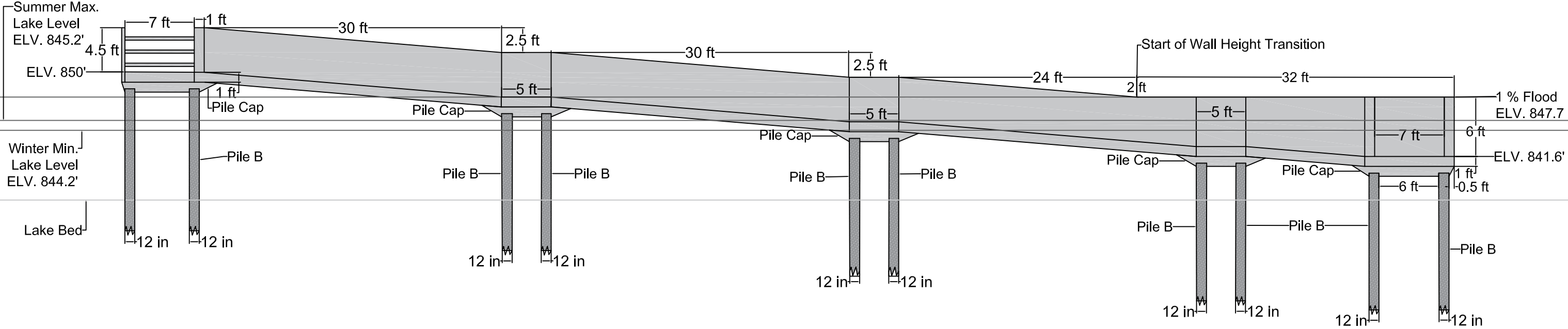
SHEET NO. S-1
SCALE 1":10'

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PLAN VIEW DETAIL E



PROPOSED CROSS SECTION F



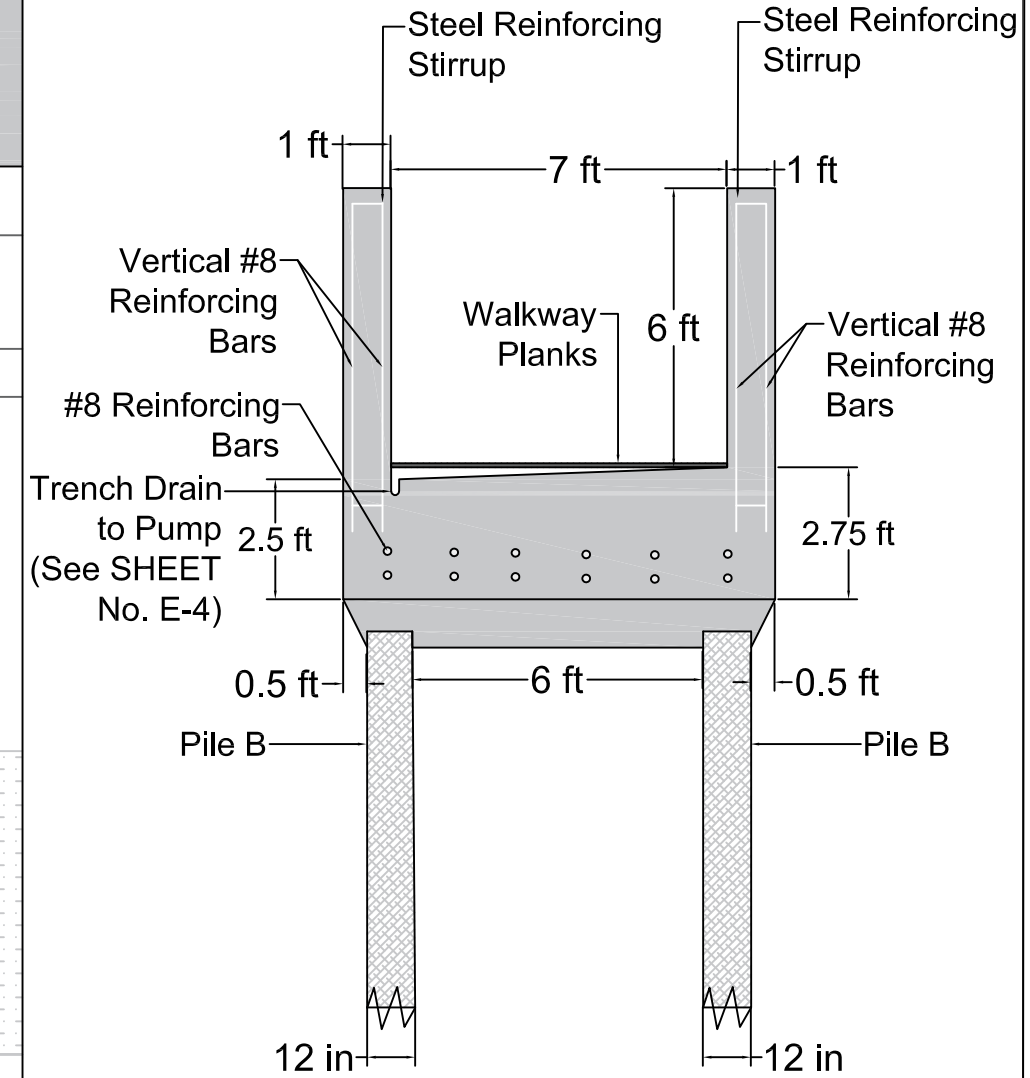
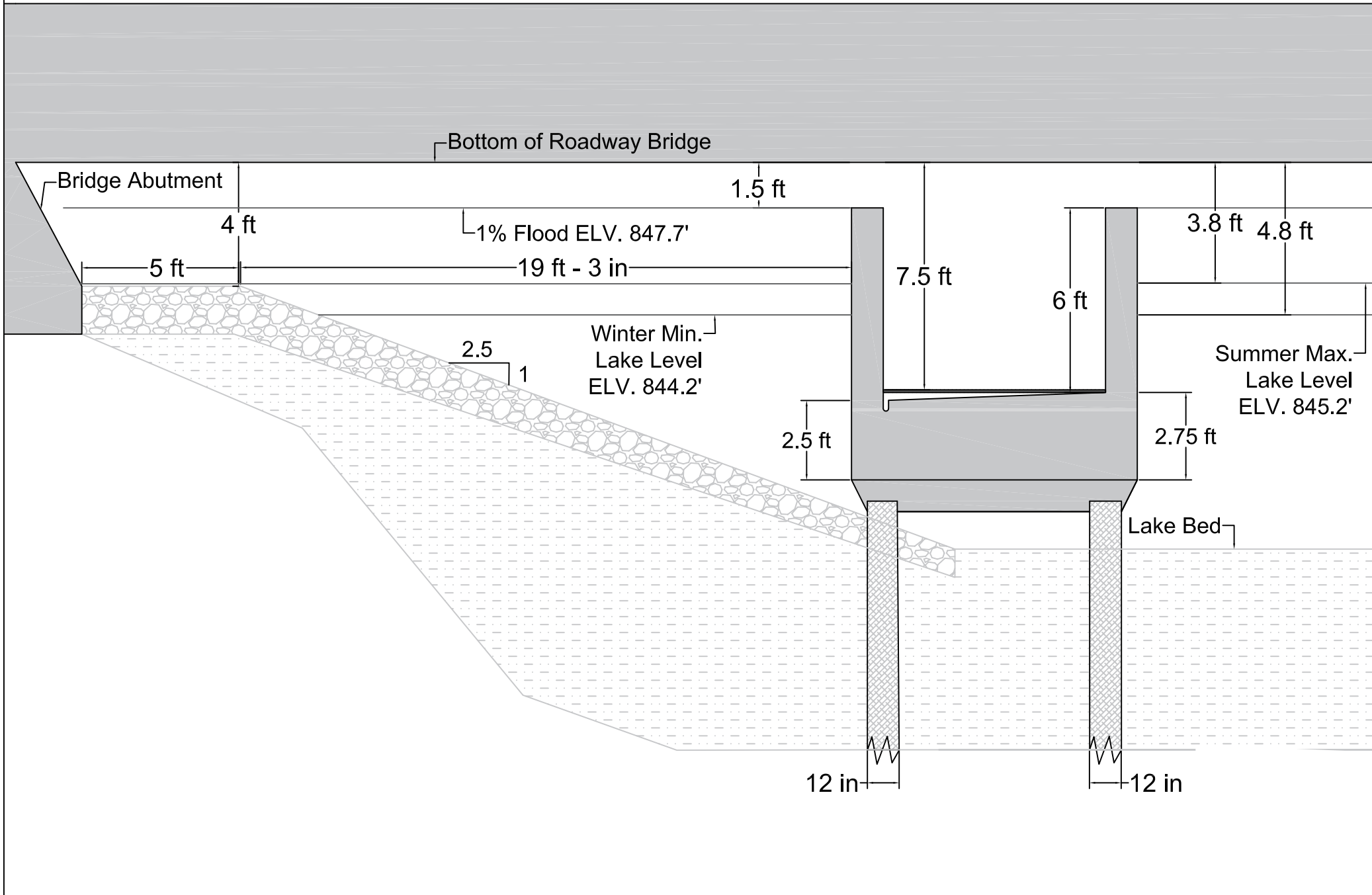
BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY - N-S SUNKEN BRIDGE STRUCTURE DRAWING

SHEET NO. S-2
SCALE 1":10'

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Pile Type	No. of Piles	Estimated Depth (ft)
A	210	125
B	38	97

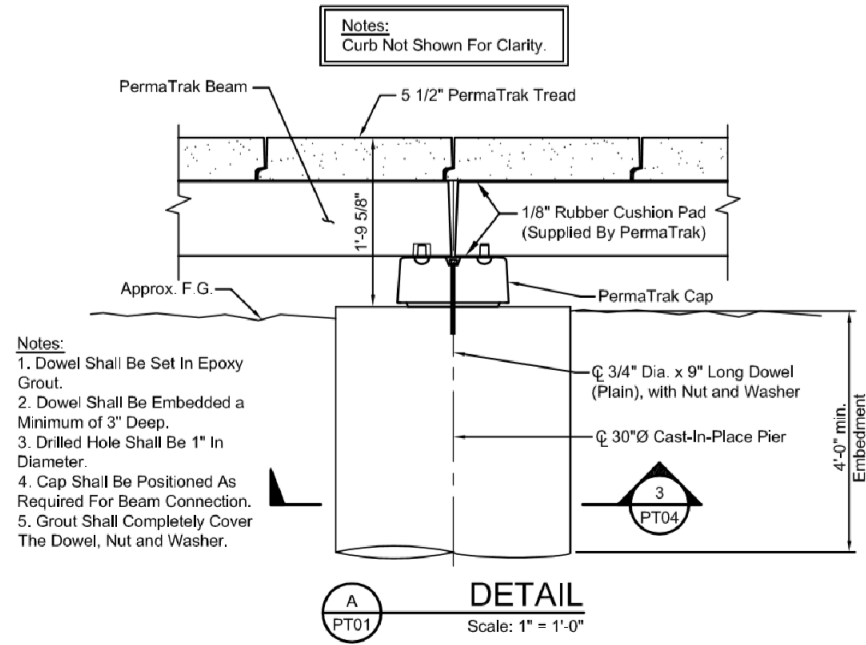


BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

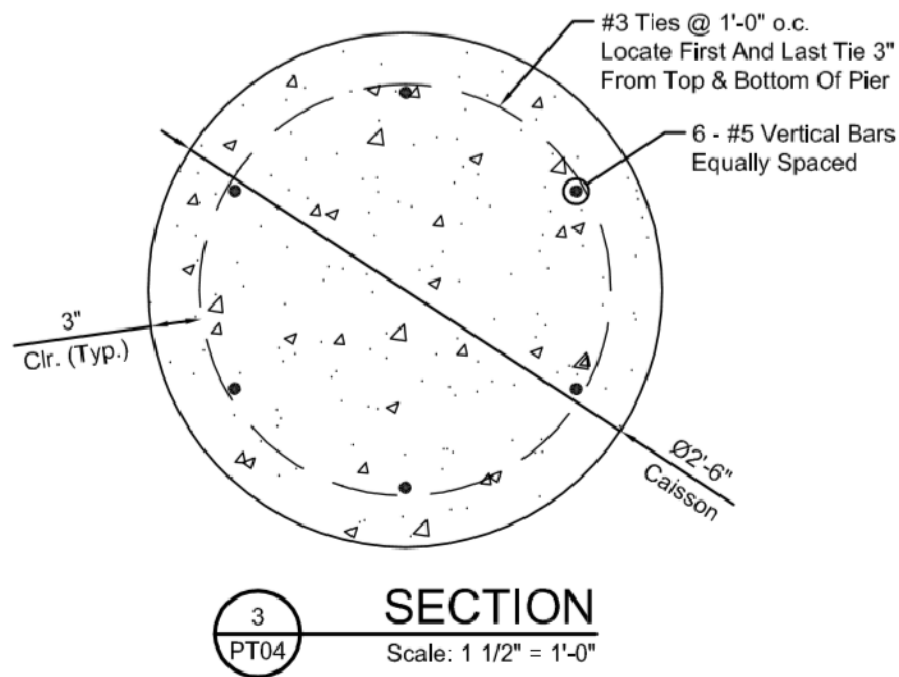
MONONA CAUSEWAY - SUNKEN BRIDGE STRUCTURE CROSS SECTION

SHEET NO. S-3
SCALE 1":4'

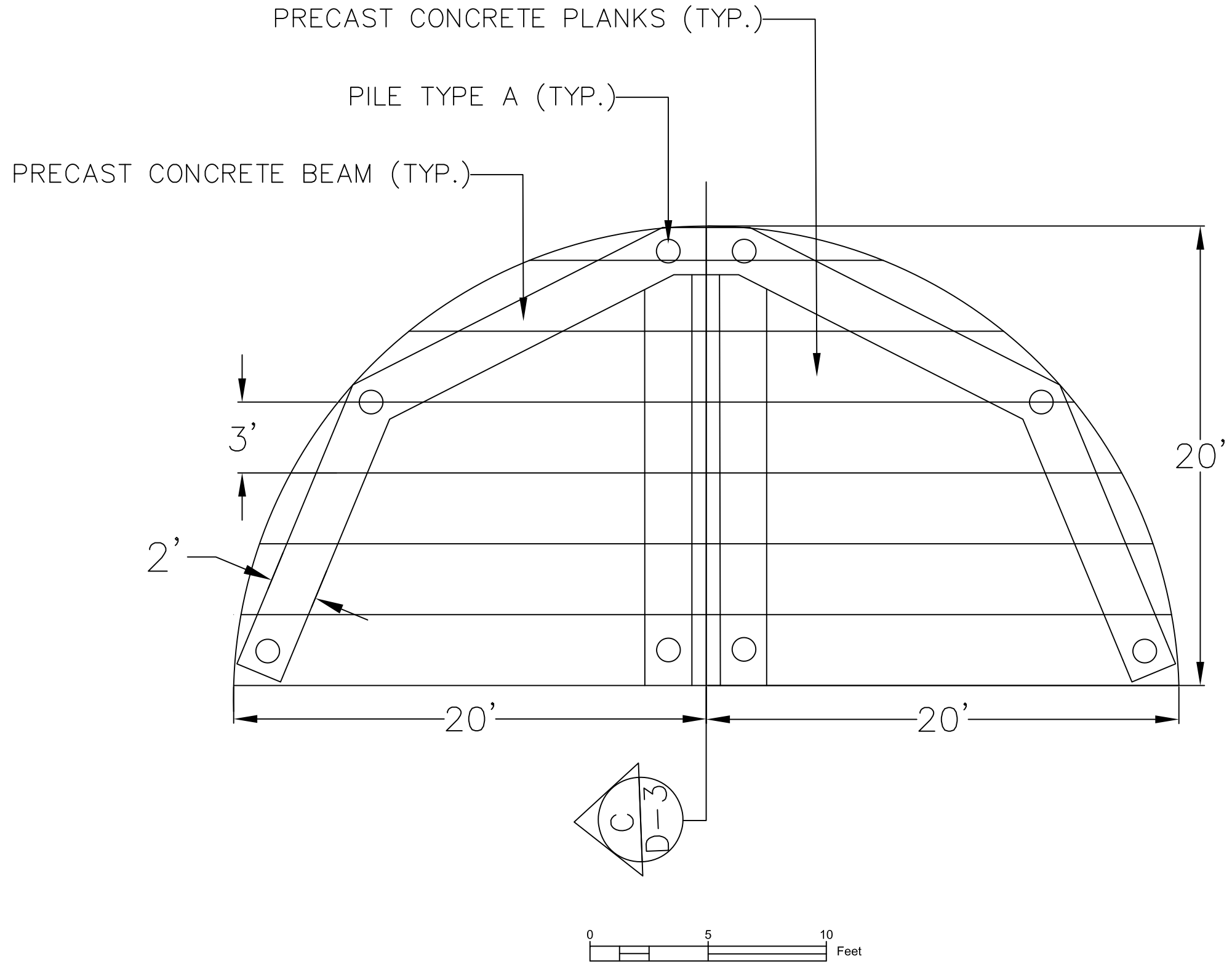
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DETAIL DRAWING BY PERMATRAK



DETAIL DRAWING BY PERMATRAK
NOTE: STEEL PIPE PILES (TYPE A) USED INSTEAD OF CAISSONS



BLUE LAKES ENGINEERING
CLEAN LAKES ALLIANCE

MONONA CAUSEWAY – OUTLOOK POINT STRUCTURE

SHEET NO. S-4
SCALE VARIES

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