

STATE OF MAINE
IAN R. RILEY
No. 13729
2-1-26
LICENSED
PROFESSIONAL ENGINEER



ITEM	QTY	DESCRIPTION	WEIGHT# EAS
1	1	UPSTREAM END TOP	11,610
2	1	UPSTREAM END BOTTOM	11,770
3	8	MID SECTION TOP	11,345
4	8	MID SECTION BOTTOM	11,520
5	1	DOWNSTREAM END TOP	11,030
6	1	DOWNSTREAM END BOTTOM	11,190
7	2	1' x 2' x 9'-4" TOEWALL	2,730
8	14	#8 x 18" TOEWALL PIN (SHIPPED LOOSE)	

1. **Concrete**
 - 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
 - 1.2. AIR-ENTRAINMENT: 5% MIN - 8% MAX
2. **Structural Reinforcement:**
 - 2.1. BAR PER ASTM A615, GRADE 60
 - 2.2. WWF PER ASTM A1064, GRADE 75
 - 2.3. SUPPLEMENTAL REINFORCING AS SHOWN
 - 2.4. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
 - 2.5. 2" CLR EXT., 1 1/2" CLR INT. UNLESS NOTED OTHERWISE
3. **Manufacturing / Installation:**
 - 3.1. *PROJECTED LENGTH WHEN FACTORING 1/2" GROWTH PER JOINT
 - 3.2. JOINTS SEALED WITH BUTYL RUBBER SEALANT.
 - 3.3. ALL JOINTS FILLED W/ NON-SHRINK GROUT AFTER INSTALLATION.
4. **Soil / Fill Requirements:**

MINIMUM ALLOWABLE FILL:	3.25'
MAXIMUM ALLOWABLE FILL:	4.50'

STRUCTURE NAME:
8' x 6' x 72' CLAMSHELL CULVERT

JOB NAME: FOREST AVE. (WIN: 27194.10)

LOCATION: ORONO, ME

CONTRACTOR: ME DOT

DRAWN BY:	DATE:
CSM	02/02/2024

SSM	02/09/2026
REV. #:	DATE:

C1.0



STANTEC
PROJECT # 195311735

This review by Stantec is for general
conformance with the design concept of
Stantec's design of the:

☐ Architectural	☐ Electrical
☒ Structural	☐ Civil
☐ Mechanical	☐ Other _____

component(s) only and does not mean that Stantec has
verified or approves the shop drawing(s). The Contractor
remains solely responsible for the shop drawing(s) and
this review by Stantec does not relieve the Contractor of
the Contractor's responsibility for errors or omissions in
the shop drawing(s) or for meeting all requirements of
the contract documents. This review does not mean that
Stantec approves the detailed design inherent in the
shop drawing, responsibility for which shall remain with
the Contractor submitting same, nor does this review
mean that Stantec accepts any deviation of the shop
drawing(s) from the contract documents. The Contractor
is responsible for confirming all dimensions and
correlating them at the job site, for all construction
methods, methods and techniques, and for coordination of
construction work of all trades, including coordination of
all shop drawings.



☒ REVIEWED

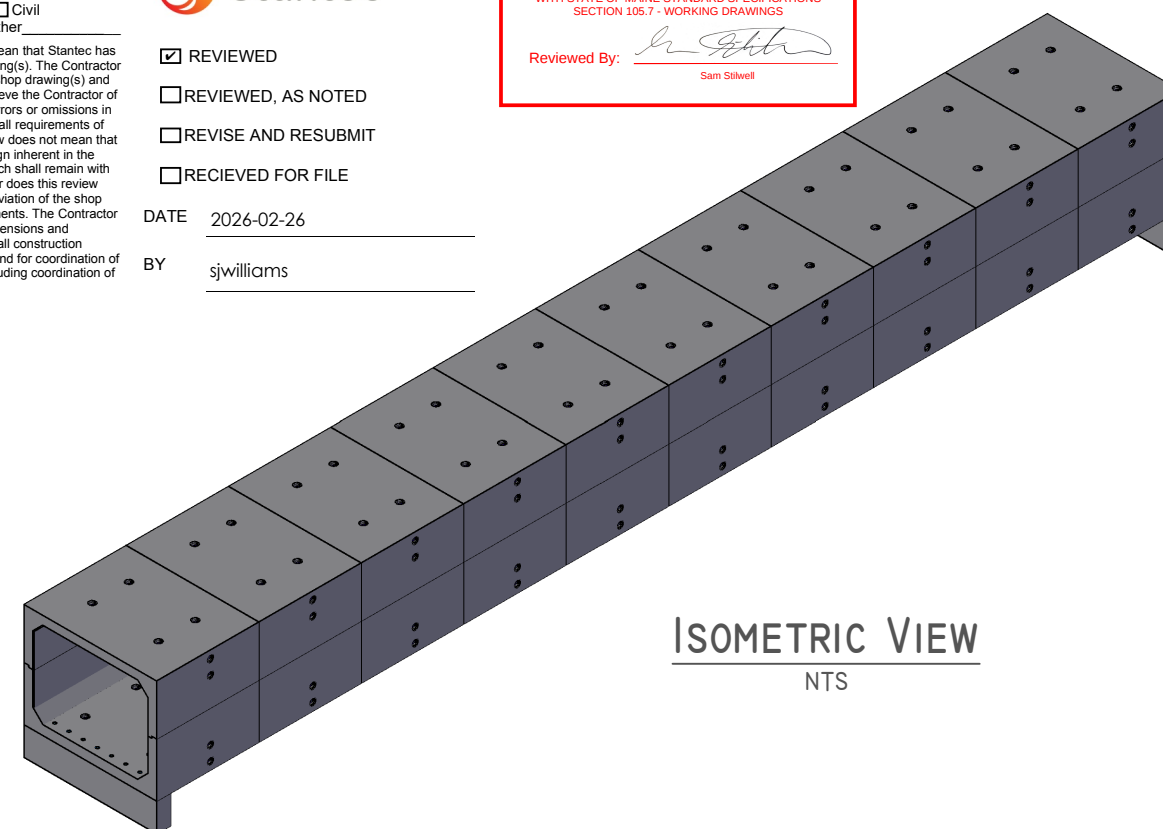
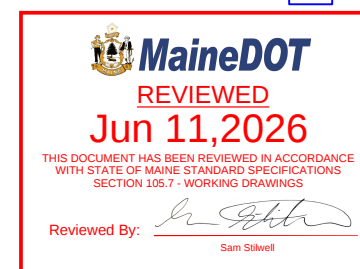
☐ REVIEWED, AS NOTED

☐ REVISE AND RESUBMIT

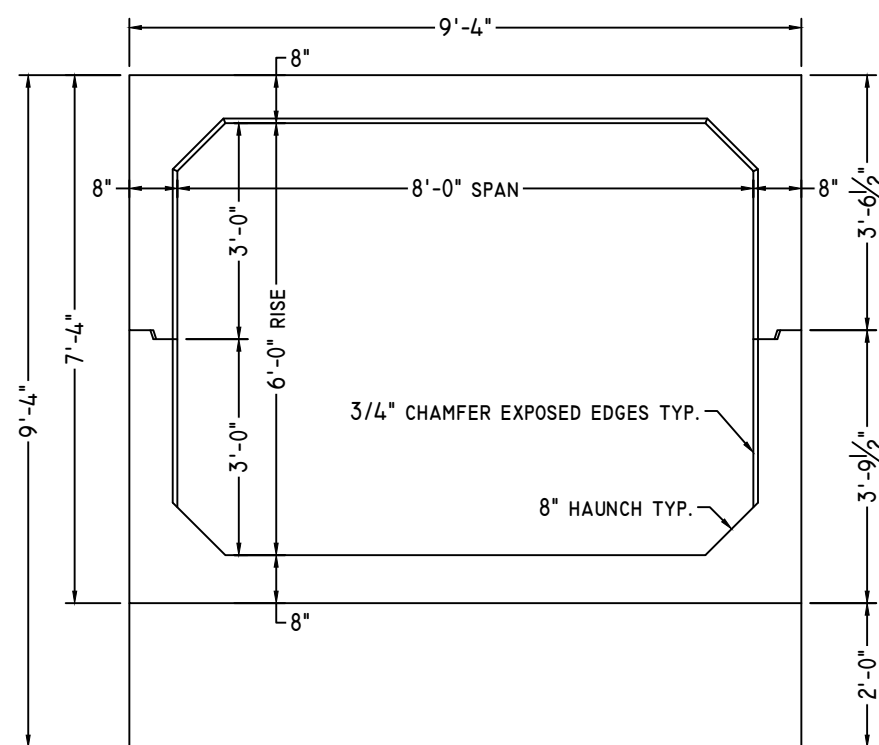
☐ RECIEVED FOR FILE

DATE 2026-02-26

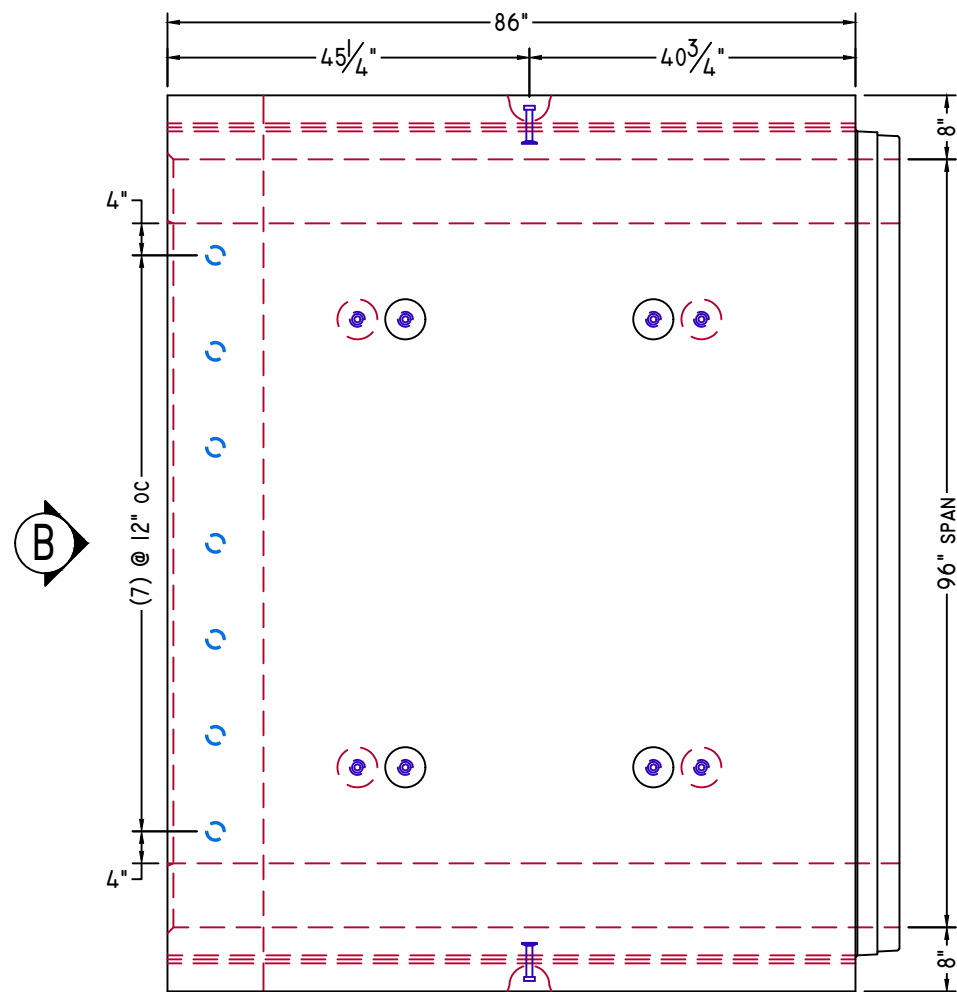
BY sjwilliams



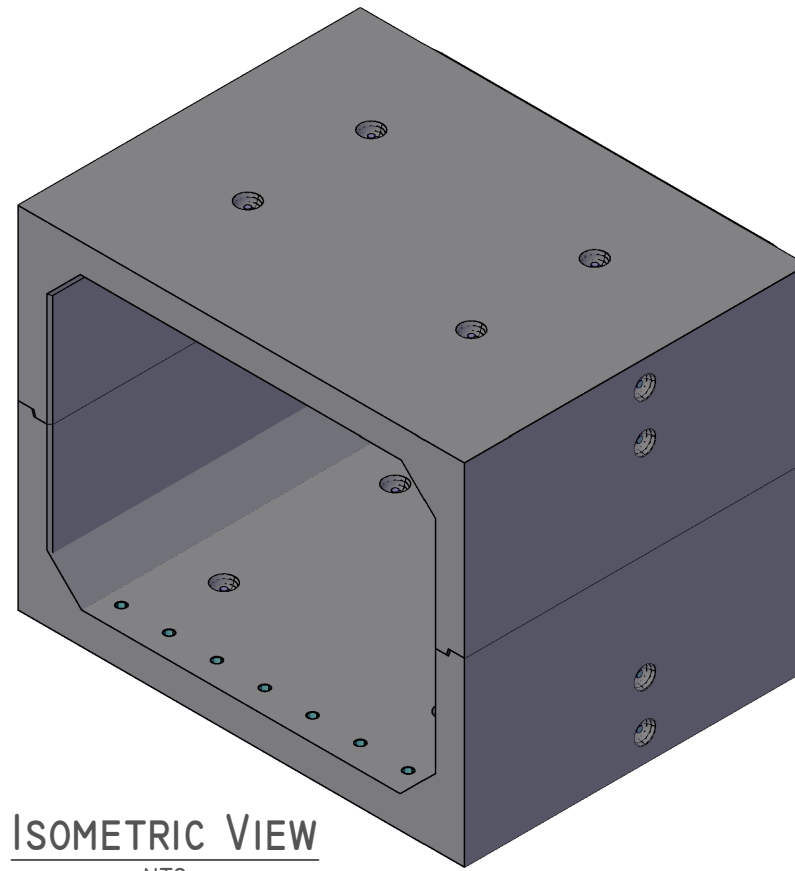
NTS


$$\frac{3}{8}'' = 1'-0''$$

C1.0

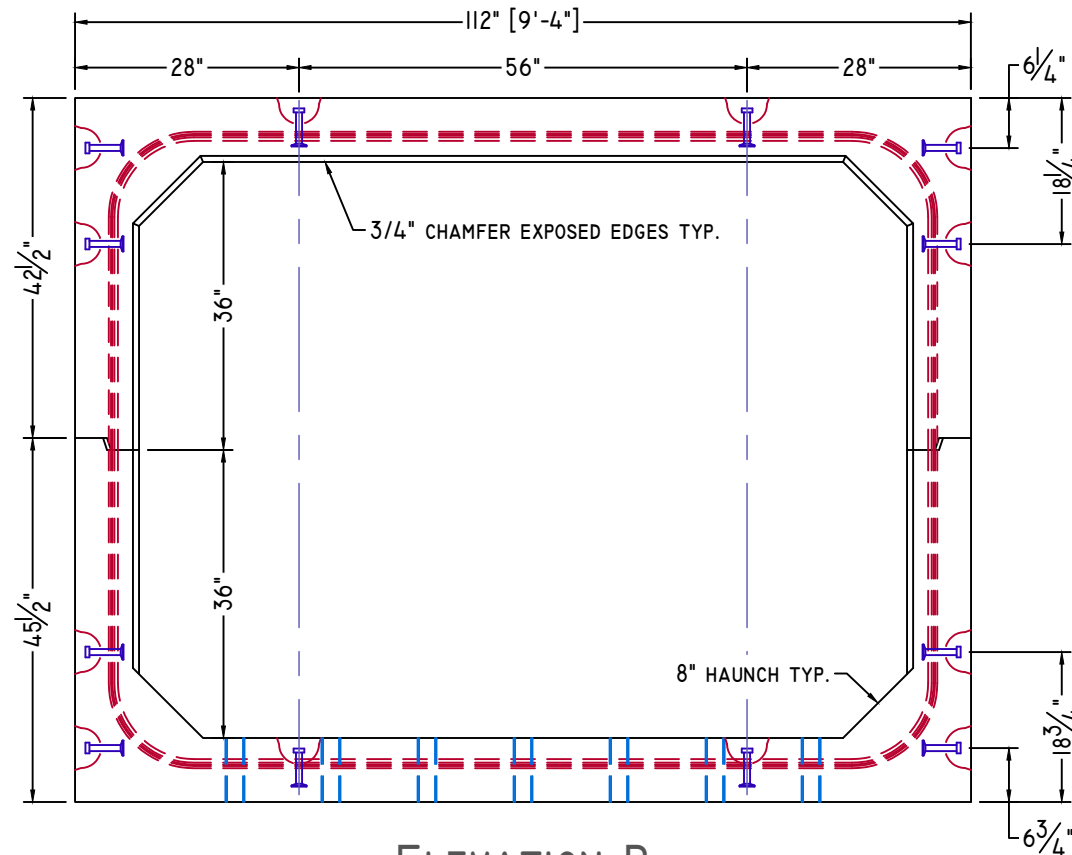


PLAN VIEW

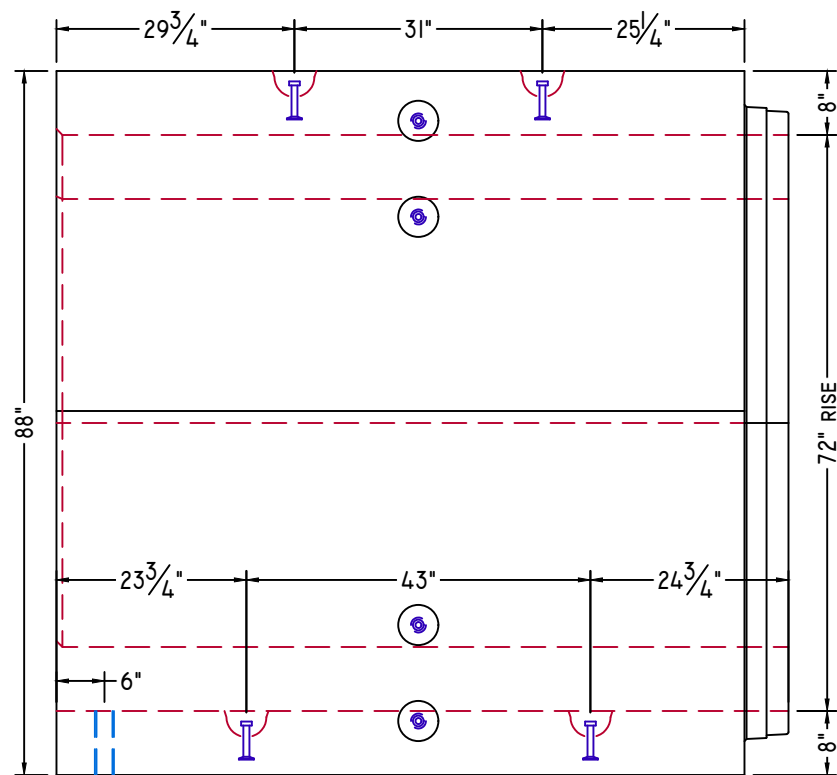


ISOMETRIC VIEW

NTS



ELEVATION-B



ELEVATION-A

UPSTREAM END



American Concrete Industries

1717 STILLWATER AVE. VEAZIE, ME. 04401

TEL: 207-947-8334

FAX: 207-947-3580

WWW.AMERICANCONCRETE.COM

BILL OF MATERIALS

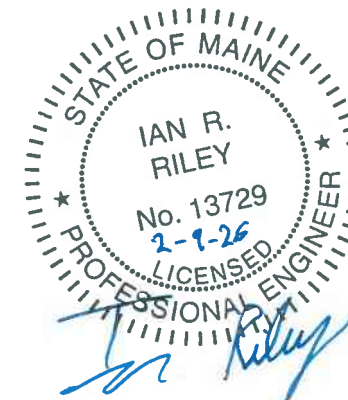
ITEM	QTY	DESCRIPTION	WEIGHT# EA
1	1	UPSTREAM END TOP	11,610
2	1	UPSTREAM END BOTTOM	11,770

DESIGN NOTES:

- Concrete**
 - 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
 - 1.2. AIR-ENTRAINMENT: 5% MIN - 8% MAX
- Structural Reinforcement:**
 - 2.1. BAR PER ASTM A615, GRADE 60
 - 2.2. WWF PER ASTM A1064, GRADE 75
 - 2.3. SUPPLEMENTAL REINFORCING AS SHOWN
 - 2.4. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
 - 2.5. 2" CLR EXT., 1 1/2" CLR INT. UNLESS NOTED OTHERWISE
- Manufacturing / Installation:**
 - 3.1. *PROJECTED LENGTH WHEN FACTORING 1/2" GROWTH PER JOINT
 - 3.2. JOINTS SEALED WITH BUTYL RUBBER SEALANT.
 - 3.3. ALL JOINTS FILLED W/ NON-SHRINK GROUT AFTER INSTALLATION.
- Soil / Fill Requirements:**

MINIMUM ALLOWABLE FILL: 3.25'

MAXIMUM ALLOWABLE FILL: 4.50'



NOTE: Some details not shown for clarity.
SCALE: 1/2" = 1'-0" Unless noted otherwise.

STRUCTURE NAME:
8' x 6' x 72' CLAMSHELL CULVERT

JOB NAME:
FOREST AVE. (WIN: 27194.10)

LOCATION:
ORONO, ME

CONTRACTOR:
ME DOT

DRAWN BY:
SSM

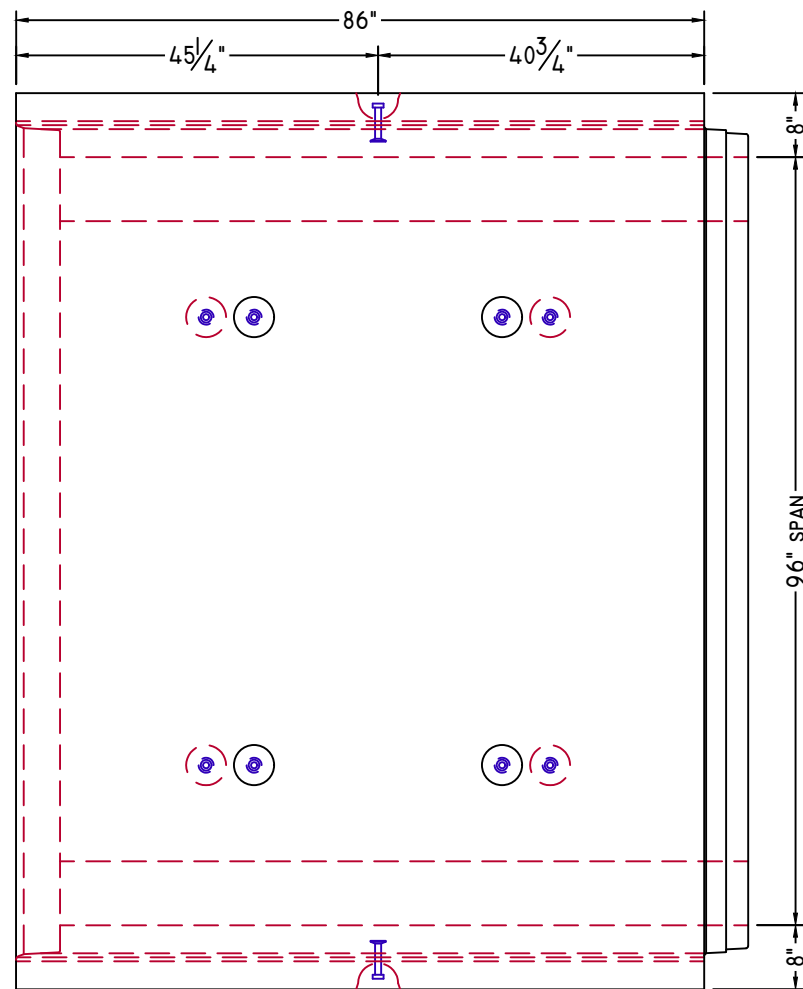
DATE:
02/09/2026

REV.#:
0.00

DATE:
02/09/2026

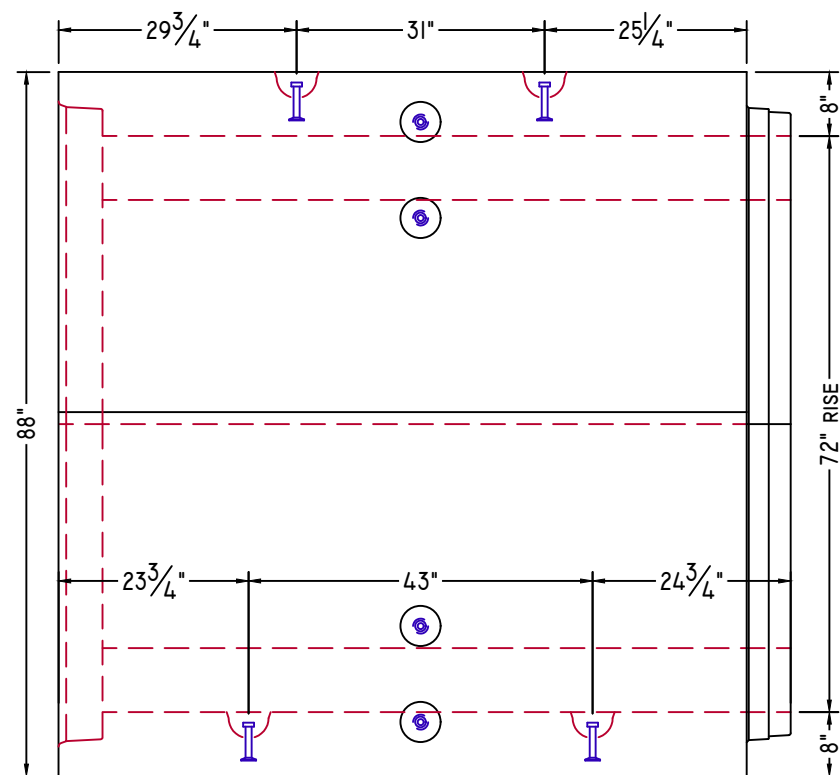
CI.1

B



A

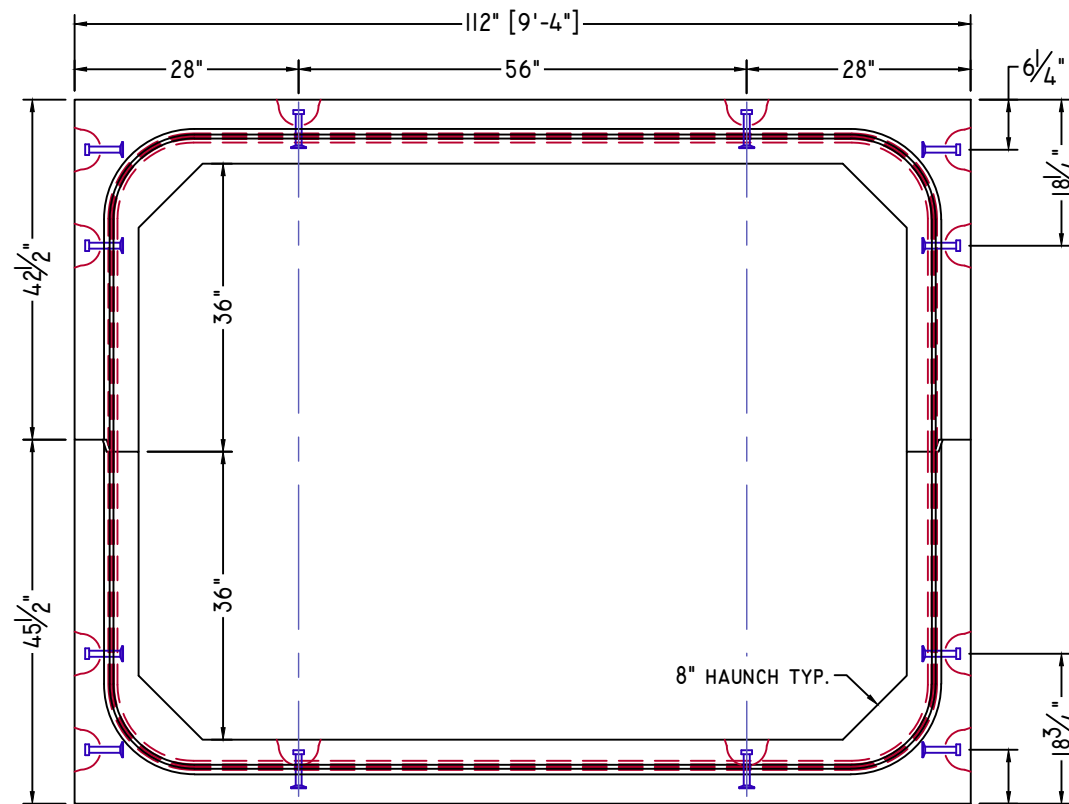
PLAN VIEW



ELEVATION-A

ISOMETRIC VIEW

NTS



ELEVATION-B

MID SECTION



American Concrete Industries

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BILL OF MATERIALS

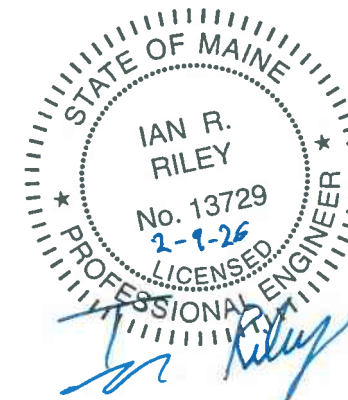
ITEM	QTY	DESCRIPTION	WEIGHT# EA
3	8	MID SECTION TOP	11,345
4	8	MID SECTION BOTTOM	11,520

DESIGN NOTES:

- Concrete**
 - 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
 - 1.2. AIR-ENTRAINMENT: 5% MIN - 8% MAX
- Structural Reinforcement:**
 - 2.1. BAR PER ASTM A615, GRADE 60
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 - 2.3. SUPPLEMENTAL REINFORCING AS SHOWN
 - 2.4. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
 - 2.5. 2" CLR EXT., 1 1/2" CLR INT. UNLESS NOTED OTHERWISE
- Manufacturing / Installation:**
 - 3.1. *PROJECTED LENGTH WHEN FACTORING 1/2" GROWTH PER JOINT
 - 3.2. JOINTS SEALED WITH BUTYL RUBBER SEALANT.
 - 3.3. ALL JOINTS FILLED W/ NON-SHRINK GROUT AFTER INSTALLATION.
- Soil / Fill Requirements:**

MINIMUM ALLOWABLE FILL: 3.25'

MAXIMUM ALLOWABLE FILL: 4.50'



NOTE: Some details not shown for clarity.
SCALE: 1/2" = 1'-0" Unless noted otherwise.

STRUCTURE NAME:
8' x 6' x 72' CLAMSHELL CULVERT

JOB NAME:
FOREST AVE. (WIN: 27194.10)

LOCATION:
ORONO, ME

CONTRACTOR:
ME DOT

DRAWN BY: SSM
DATE: 02/09/2026

REV.#: 0.00
DATE: 02/09/2026

CI.2

DOWNSTREAM END



American Concrete Industries
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FAX: 207-947-3580
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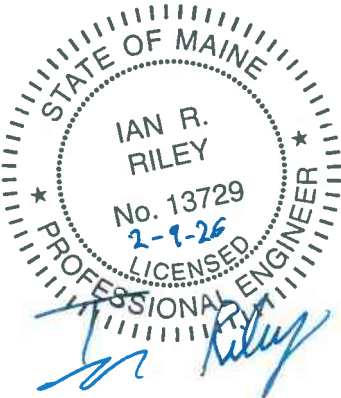
BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	WEIGHT# EA
5	1	DOWNSTREAM END TOP	11,030
6	1	DOWNSTREAM END BOTTOM	11,190

- DESIGN NOTES:
- Concrete
 - COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
 - AIR-ENTRAINMENT: 5% MIN - 8% MAX
 - Structural Reinforcement:
 - BAR PER ASTM A615, GRADE 60
 - WWF PER ASTM A1064, GRADE 75
 - SUPPLEMENTAL REINFORCING AS SHOWN
 - DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
 - 2" CLR EXT., 1 1/2" CLR INT. UNLESS NOTED OTHERWISE
 - Manufacturing / Installation:
 - *PROJECTED LENGTH WHEN FACTORING 1/2" GROWTH PER JOINT
 - JOINTS SEALED WITH BUTYL RUBBER SEALANT.
 - ALL JOINTS FILLED W/ NON-SHRINK GROUT AFTER INSTALLATION.
 - Soil / Fill Requirements:

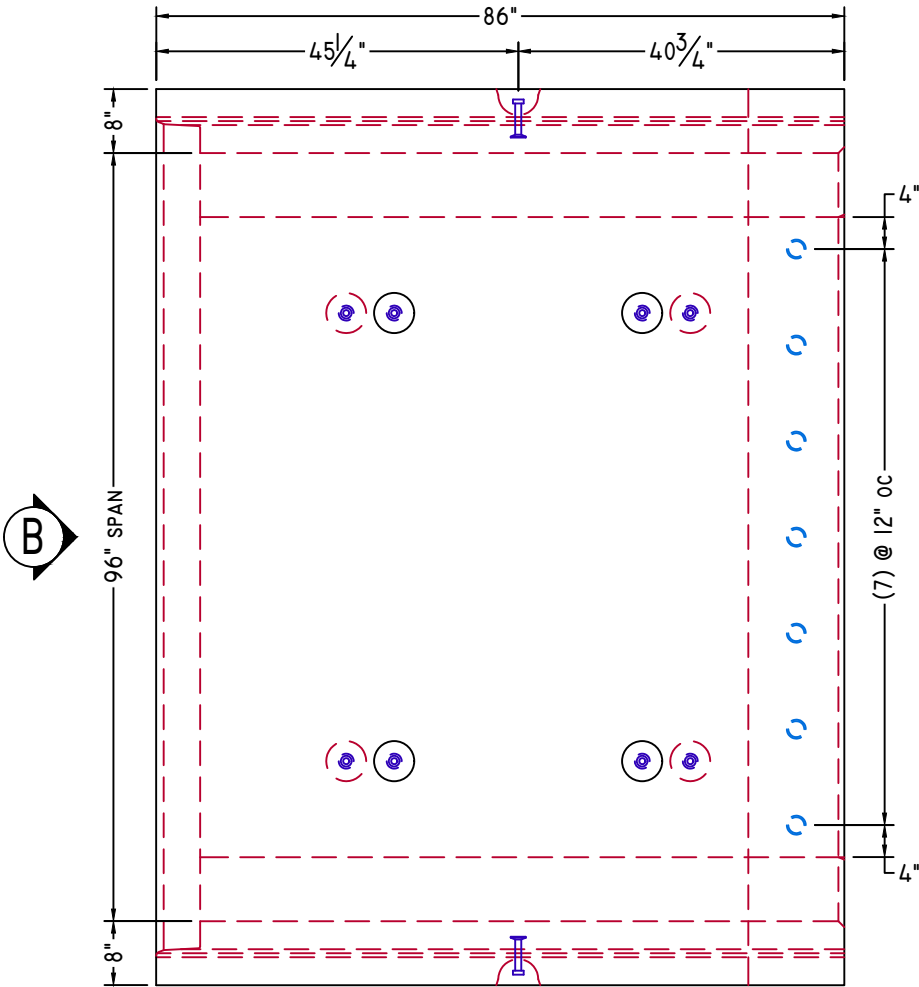
MINIMUM ALLOWABLE FILL: 3.25'

MAXIMUM ALLOWABLE FILL: 4.50'

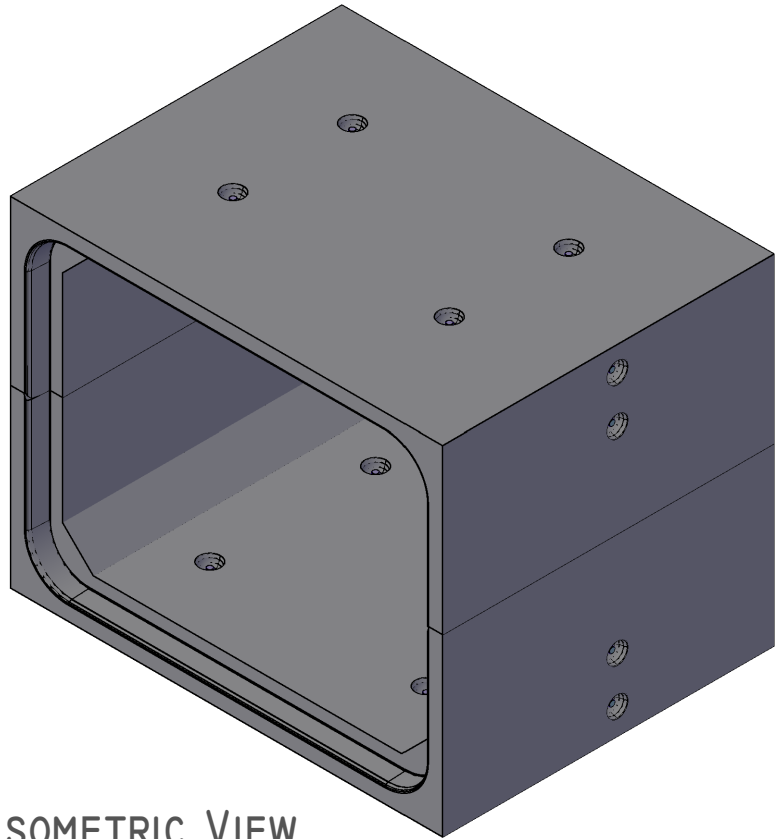


NOTE: Some details not shown for clarity.
SCALE: 1/2" = 1'-0" Unless noted otherwise.

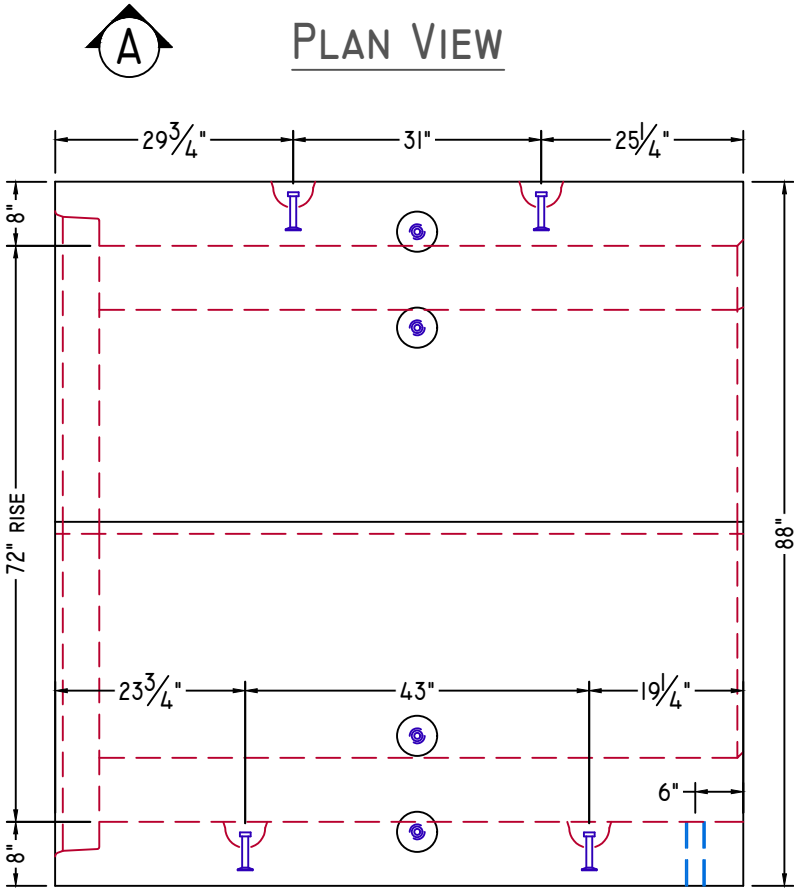
STRUCTURE NAME: 8' x 6' x 72' CLAMSHELL CULVERT		
JOB NAME: FOREST AVE. (WIN: 27194.10)		
LOCATION: ORONO, ME		
CONTRACTOR: ME DOT		
DRAWN BY: SSM	DATE: 02/09/2026	CI.3
REV.#: 0.00	DATE: 02/09/2026	



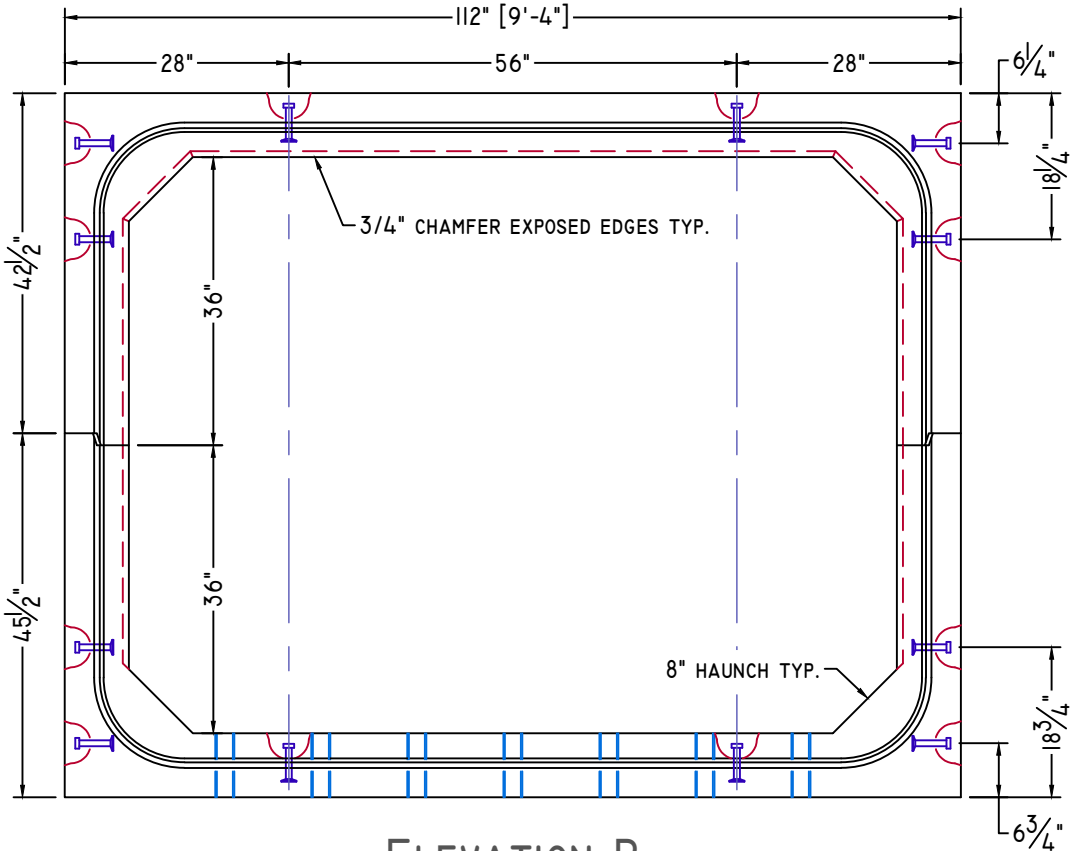
PLAN VIEW



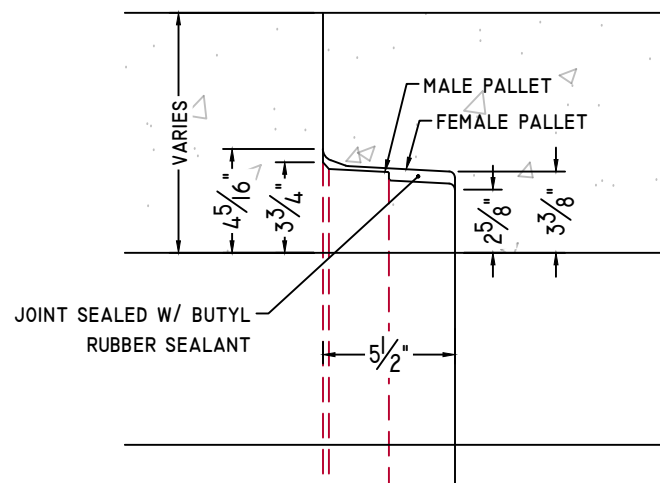
ISOMETRIC VIEW
NTS



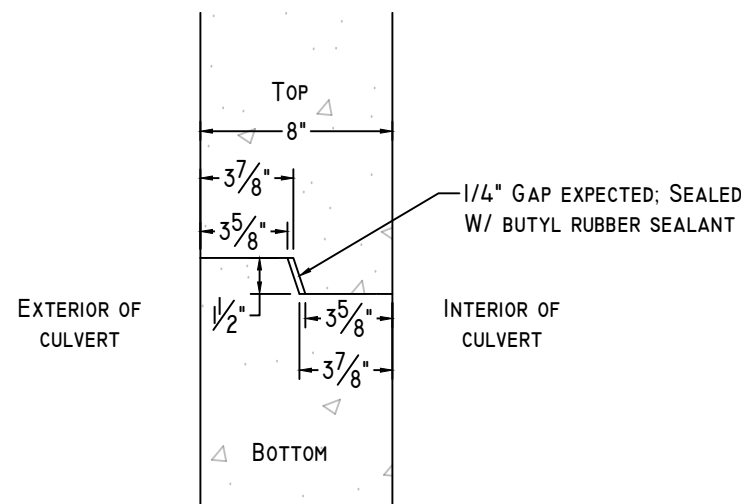
ELEVATION-A



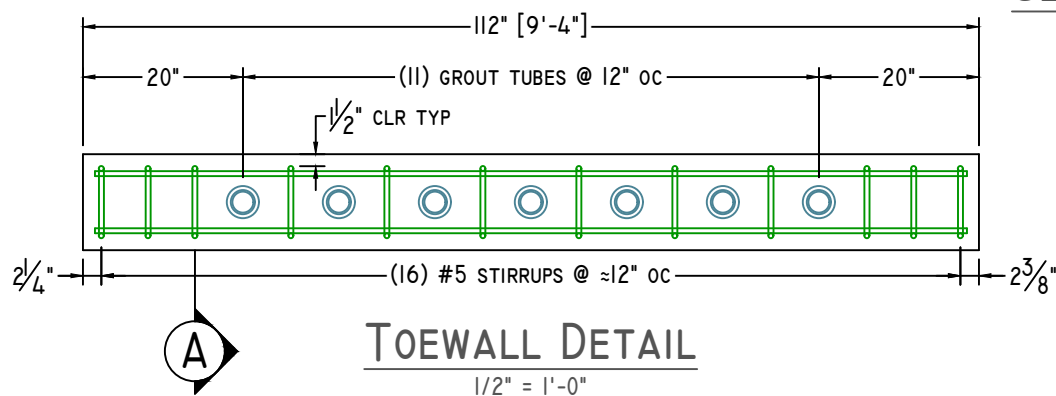
ELEVATION-B



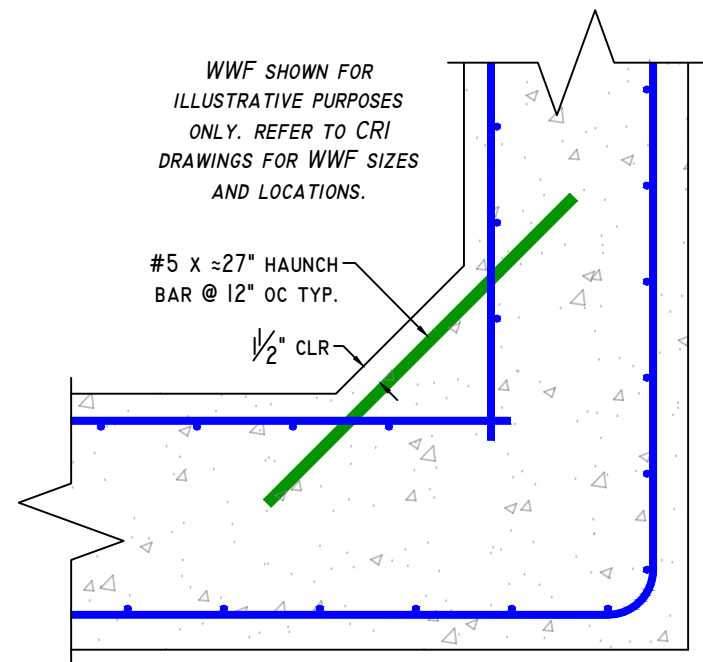
CULVERT JOINT DETAIL



CLAMSHELL JOINT DETAIL

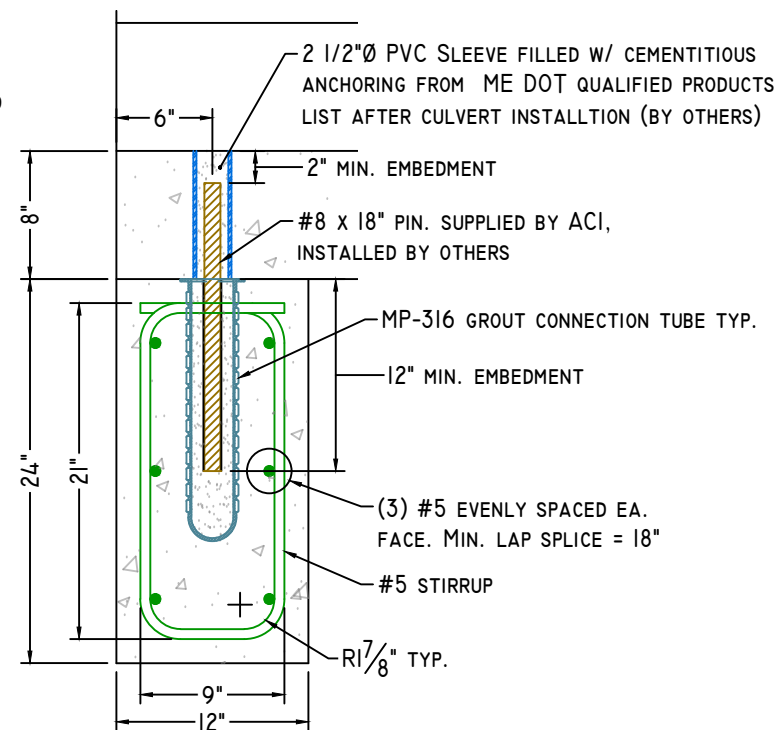


TOEWALL DETAIL
1/2" = 1'-0"



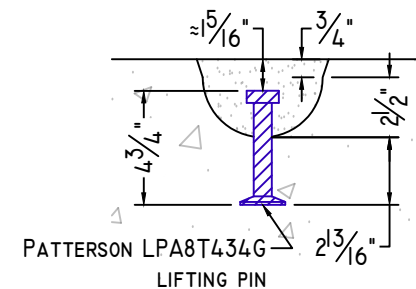
HAUNCH BAR DETAIL

1" = 1'-0"

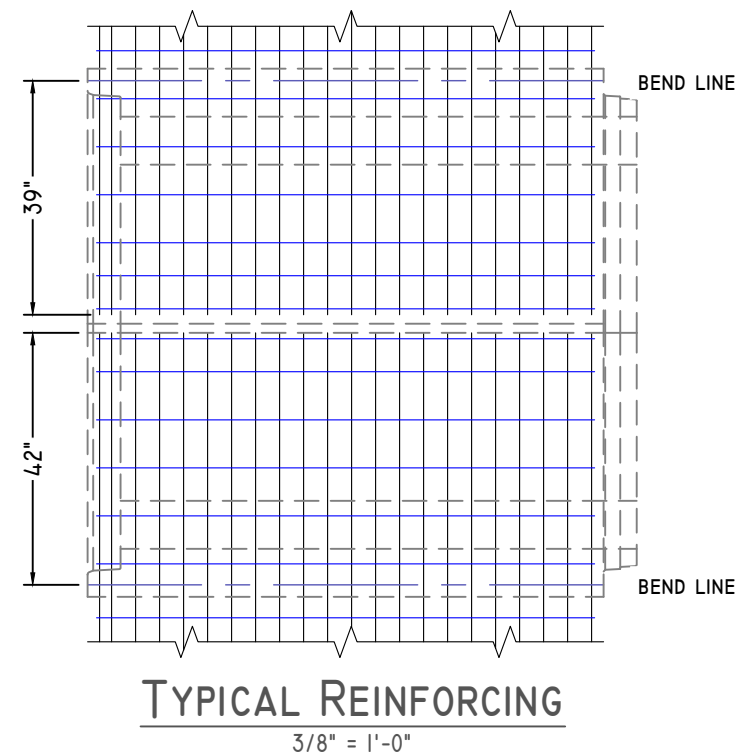


SECTION-A

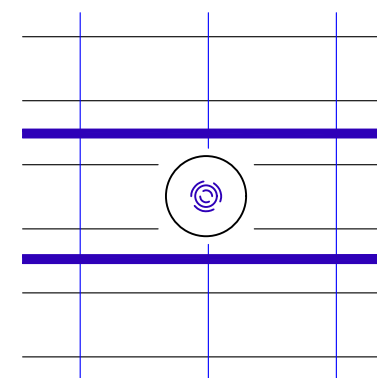
STANDARD DETAILS



8T 4 3/4" LIFTING PIN DETAIL



TYPICAL REINFORCING



SUPPLEMENTAL REINFORCING

NOTE: NO SUPPLEMENTAL REINFORCING REQUIRED



American Concrete Industries

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TEL: 207-947-8334

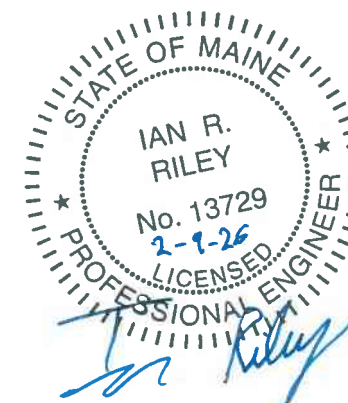
FAX: 207-947-3580

WWW.AMERICANCONCRETE.COM

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	WEIGHT# EA
------	-----	-------------	------------

INTENTIONALLY LEFT BLANK



NOTE: Some details not shown for clarity.
SCALE: 1 1/2" = 1'-0" Unless noted otherwise.

STRUCTURE NAME: 16' x 10' x 92' CLAMSHELL CULVERT		
JOB NAME: ROUTE 16 (WIN: 021794.10)		
LOCATION: KINGSBURY, ME		
CONTRACTOR: ME DOT		
DRAWN BY: SSM	DATE: 02/09/2026	DI.0
REV.#: 0.00	DATE: 02/09/2026	

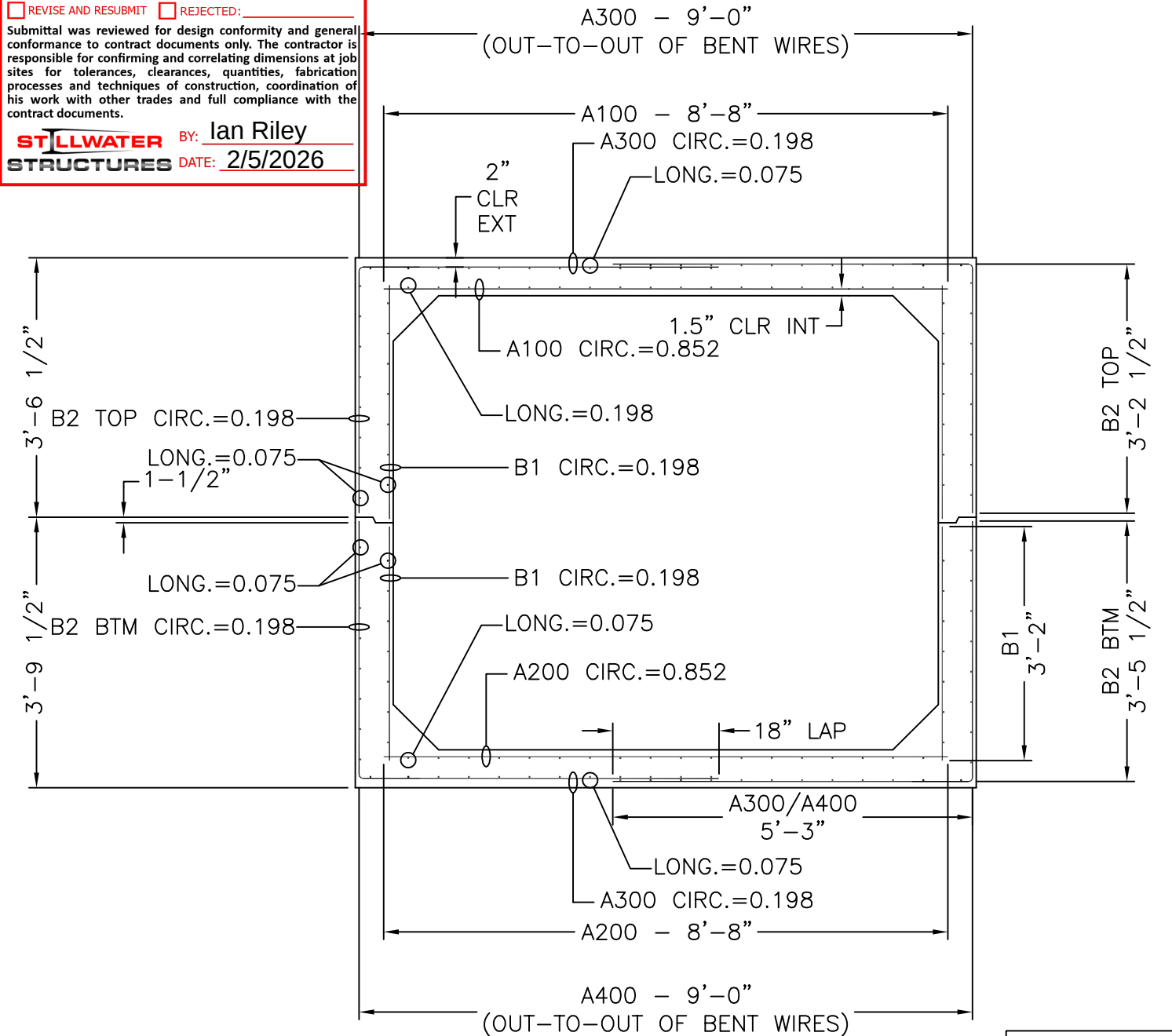
DI.0

SHOP DRAWING/SUBMITTAL REVIEW

☒ APPROVED ☐ APPROVED WITH CHANGES NOTES
☐ REVISE AND RESUBMIT ☐ REJECTED:

Submittal was reviewed for design conformity and general conformance to contract documents only. The contractor is responsible for confirming and correlating dimensions at job sites for tolerances, clearances, quantities, fabrication processes and techniques of construction, coordination of his work with other trades and full compliance with the contract documents.

STILLWATER BY: Ian Riley
STRUCTURES DATE: 2/5/2026



8' x 6' x 7'-2"

CROSS SECTION WITH AREAS OF STEEL

SLAB THICKNESS	
TOP	8"
BOTTOM	8"
WALLS	8"

MECHANICAL DIMENSIONS	
DIM. 'L'	= 18"
DIM. 'M'	= N/A
DIM. 'R'	= N/A
DIM. 'S'	= N/A

CAGE WEIGHT PER 7'-2" JOINT = 805.2 lbs

BOX SIZE:	ASTM:	TABLE:	FILL:
8' X 6' X 7'-2"	HL-93	125%	3.25'-4.5'



Concrete Reinforcements, Inc.
 3830 Presidents Way
 Jacksonville, FL 32220
 PH. 904-520-7100 FAX. 904-520-7101

CUSTOMER:	DRAWN BY:	REVISION:	SHEET DESCRIPTION:	
AMERICAN CONCRETE	TC	R1	COVER	
PROJECT:	DATE:	REVISION DATE:	FILE NAME:	
8' X 6' X 7'-2"	01/29/2026	02/03/2026	F26-3046	
8X6 ORONO MDOT	CHECKED BY:	SCALE:	PROJECT #:	SHEET #:
	TC	NTS	F26-3046	1 OF 5

SHEET DESIGN



Concrete Reinforcements, Inc.
3830 Presidents Way • Jacksonville, FL 32220
Phone: 904-520-7100 • Fax: 904-520-7101

CUSTOMER American Concrete Industries
PROJECT F26-3046 - Drawings - 8x6 Orono MDOT - American Concrete - 01-29-2026
LOCATION Veazie, ME
DATE 01-29-2026 MARK NUMBER B2 TOP

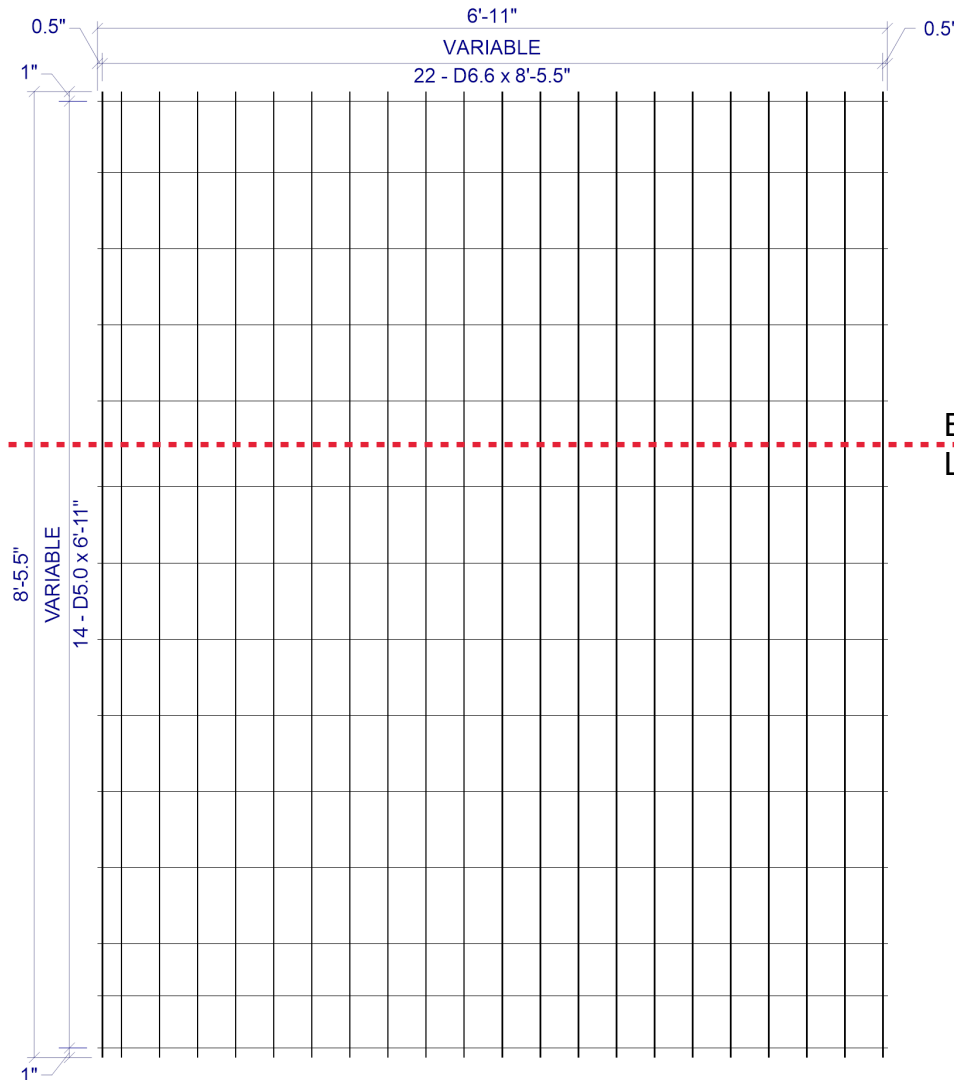
L.W.SPACE VAR
C.W.SPACE VAR
L.W.1 SIZE D6.6
L.W.2 SIZE N/A
C.W.SIZE D5.0
WIDTH 6'-11"
LENGTH 8'-5.5"
OH.LEFT 0.5"
OH.RIGHT 0.5"
OH.TOP 1"
OH.BOTTOM 1"
YIELD 75,000psi
BENT -
CUT -
ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	22	N/A	14
SIZE	D6.6	N/A	D5.0
LENGTH	8'-5.5"	-	6'-11"
W.T./SHEET		-	
SHEET W.T.	60.8#		
QUANTITY	20		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS/CSF			
Ast/LF			
ST.DENSITY			

BEND
LINE

SPECIAL REMARKS:
BEND DIMS: SLAB: 63" WALL: 39.5

APPROVED _____



VAR x VAR D6.6 / D5.0 (GRADE 75) 82(+0.5, +0.5) x 8'-5.5"(1, 1)
VAR = 0.5" OH, 1@2", 20@4", 0.5" OH
VAR = 1" OH, 1@7.5", 3@8", 1@9", 6@8", 2@5.5", 1" OH

SHEET DESIGN



Concrete Reinforcements, Inc.
3830 Presidents Way • Jacksonville, FL 32220
Phone: 904-520-7100 • Fax: 904-520-7101

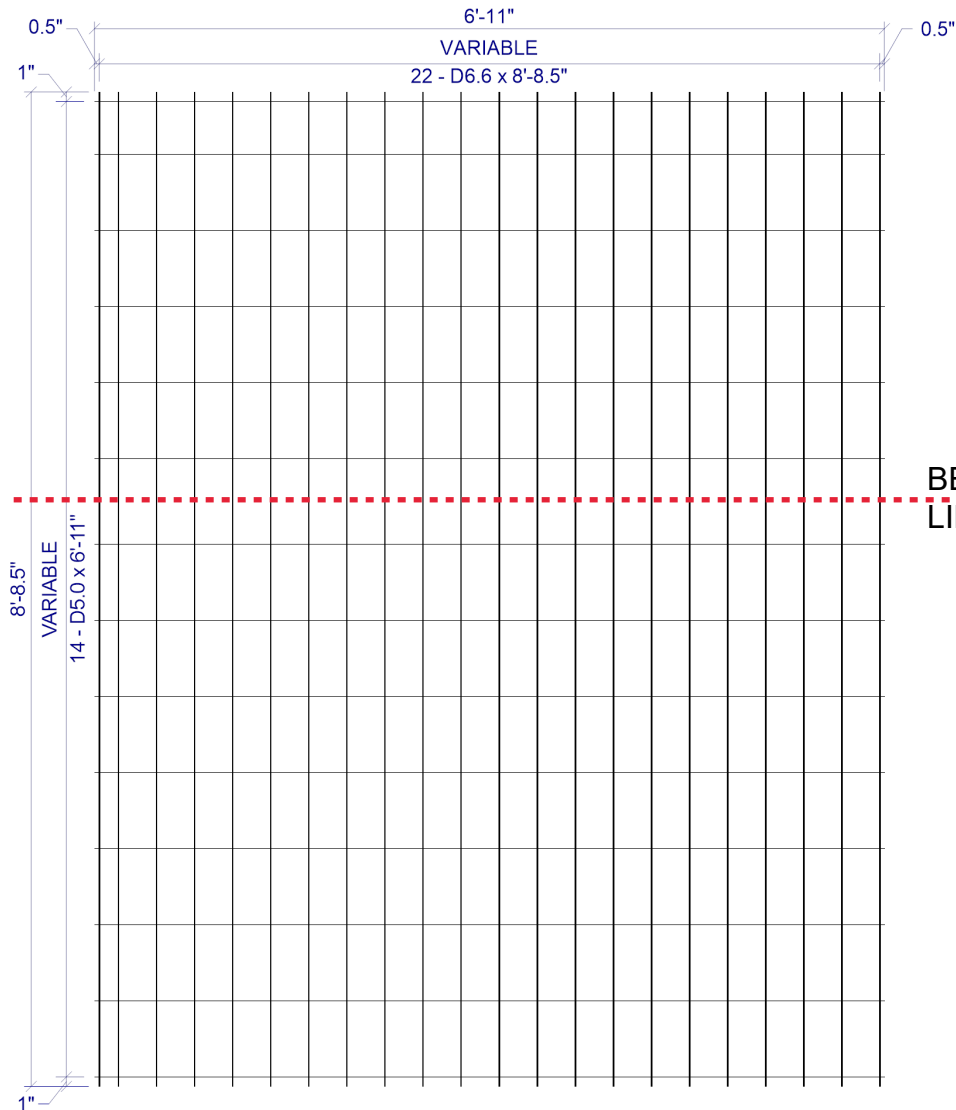
CUSTOMER American Concrete Industries
PROJECT F26-3046 - Drawings - 8x6 Orono MDOT - American Concrete - 01-29-2026
LOCATION Veazie, ME
DATE 01-29-2026 MARK NUMBER B2 BTM

L.W.SPACE VAR
C.W.SPACE VAR
L.W.1 SIZE D6.6
L.W.2 SIZE N/A
C.W.SIZE D5.0
WIDTH 6'-11"
LENGTH 8'-8.5"
OH.LEFT 0.5"
OH.RIGHT 0.5"
OH.TOP 1"
OH.BOTTOM 1"
YIELD 75,000psi
BENT -
CUT -
ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	22	N/A	14
SIZE	D6.6	N/A	D5.0
LENGTH	8'-8.5"	-	6'-11"
W.T./SHEET		-	
SHEET W.T.	62.1#		
QUANTITY	20		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS/CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:
BEND DIMS: SLAB: 63" WALL: 41.5"

APPROVED _____



VAR x VAR D6.6 / D5.0 (GRADE 75) 82(+0.5, +0.5) x 8'-8.5"(1, 1)
VAR = 0.5" OH, 1@2", 20@4", 0.5" OH
VAR = 1" OH, 1@5.5", 4@8", 1@9", 7@8", 1" OH

SHEET DESIGN



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Phone: 904-520-7100 • Fax: 904-520-7101

CUSTOMER American Concrete Industries
PROJECT F26-3046 - Drawings - 8x6 Orono MDOT - American Concrete - 01-29-2026

LOCATION Veazie, ME

DATE 01-29-2026 MARK NUMBER B1 TOP/BTM

L.W.SPACE VAR

C.W.SPACE VAR

L.W.1 SIZE D6.6

L.W.2 SIZE N/A

C.W.SIZE D5.0

WIDTH 6'-11"

LENGTH 3'-2"

OH.LEFT 0.5"

OH.RIGHT 0.5"

OH.TOP 1"

OH.BOTTOM 4"

YIELD 75,000psi

BENT -

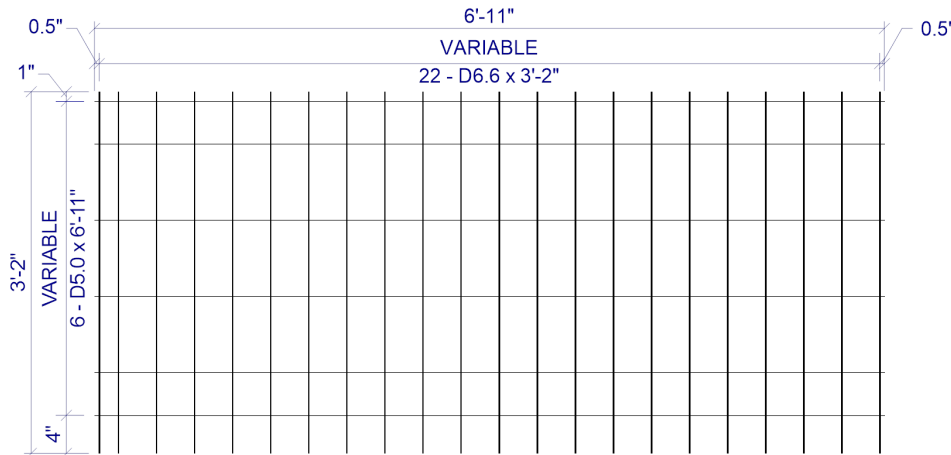
CUT -

ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	22	N/A	6
SIZE	D6.6	N/A	D5.0
LENGTH	3'-2"	-	6'-11"
W.T./SHEET		-	
SHEET W.T.	23.7#		
QUANTITY	40		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS/CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

APPROVED _____



VAR x VAR D6.6 / D5.0 (GRADE 75) 82(+0.5, +0.5) x 3'-2"(1, 4)

VAR = 0.5" OH, 1@2", 20@4", 0.5" OH
VAR = 1" OH, 1@4.5", 3@8", 1@4.5", 4" OH

SHEET DESIGN



Concrete Reinforcements, Inc.
3830 Presidents Way • Jacksonville, FL 32220
Phone: 904-520-7100 • Fax: 904-520-7101

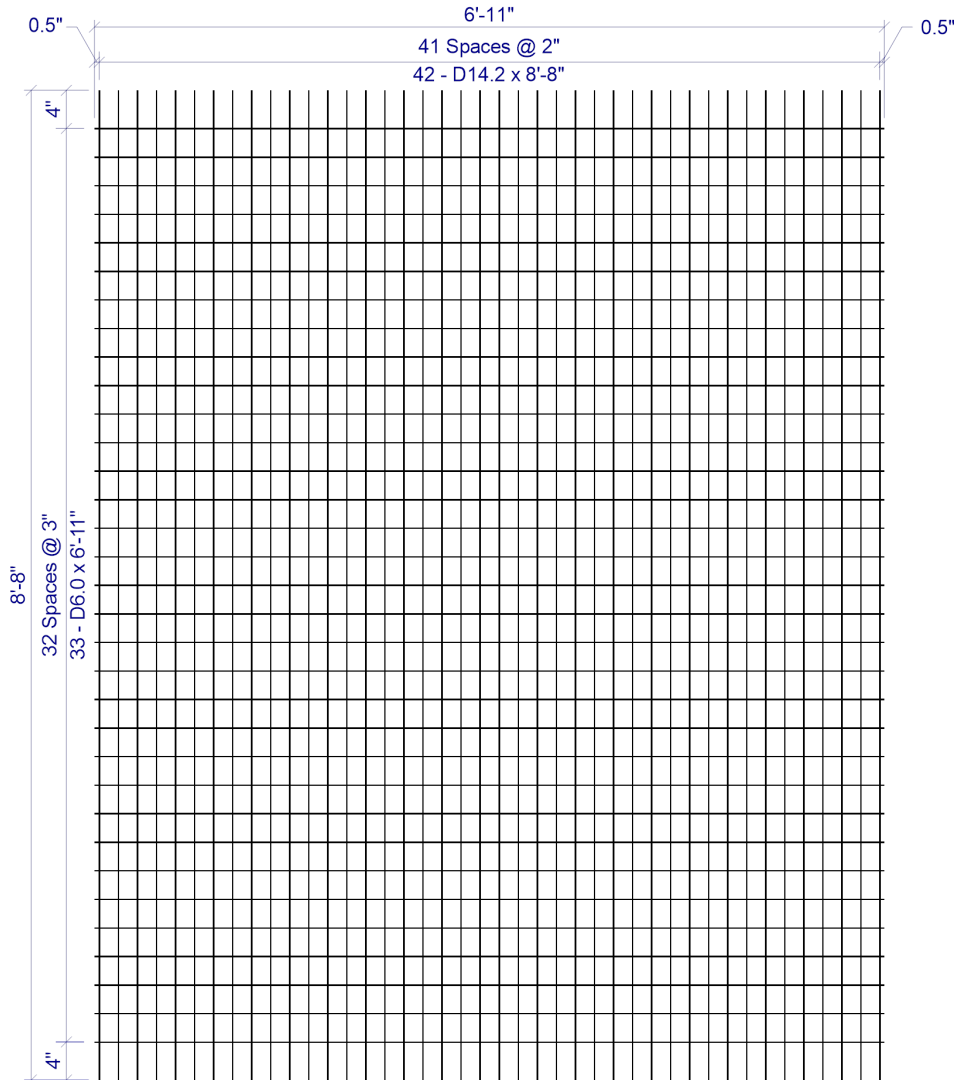
CUSTOMER American Concrete Industries
PROJECT F26-3046 - Drawings - 8x6 Orono MDOT - American Concrete - 01-29-2026
LOCATION Veazie, ME
DATE 01-29-2026 MARK NUMBER A100/A200

L.W.SPACE 2"
C.W.SPACE 3"
L.W.1 SIZE D14.2
L.W.2 SIZE N/A
C.W.SIZE D6.0
WIDTH 6'-11"
LENGTH 8'-8"
OH.LEFT 0.5"
OH.RIGHT 0.5"
OH.TOP 4"
OH.BOTTOM 4"
YIELD 75,000psi
BENT -
CUT -
ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	42	N/A	33
SIZE	D14.2	N/A	D6.0
LENGTH	8'-8"	-	6'-11"
W.T./SHEET		-	
SHEET W.T.	232.3#		
QUANTITY	20		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS/CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

APPROVED _____



2 x 3 D14.2 / D6.0 (GRADE 75) 82(+0.5, +0.5) x 8'-8"(4, 4)