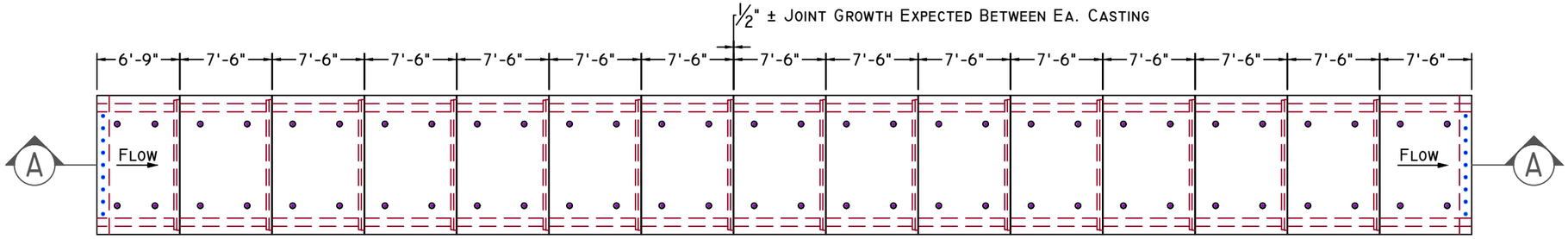
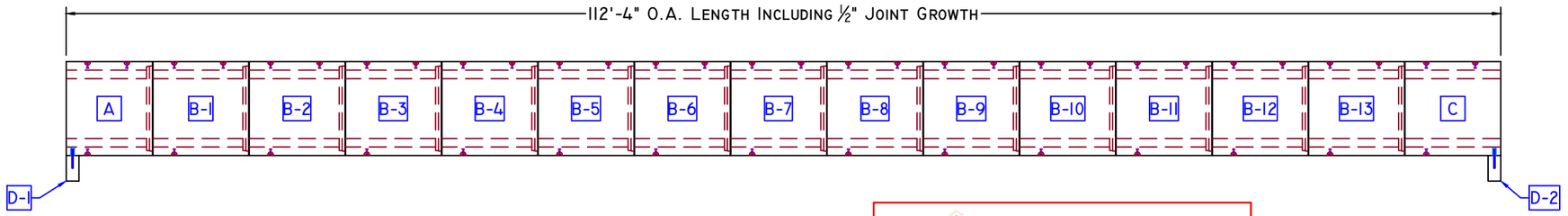
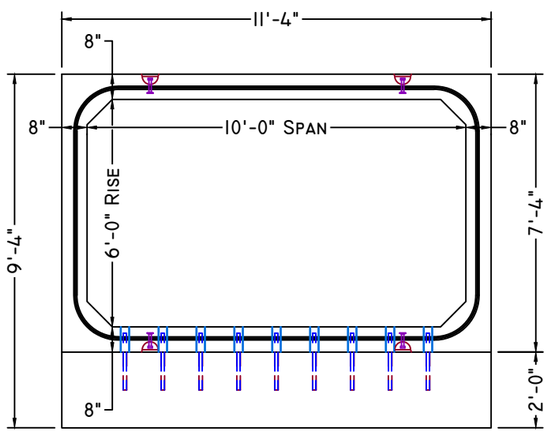


Plan View

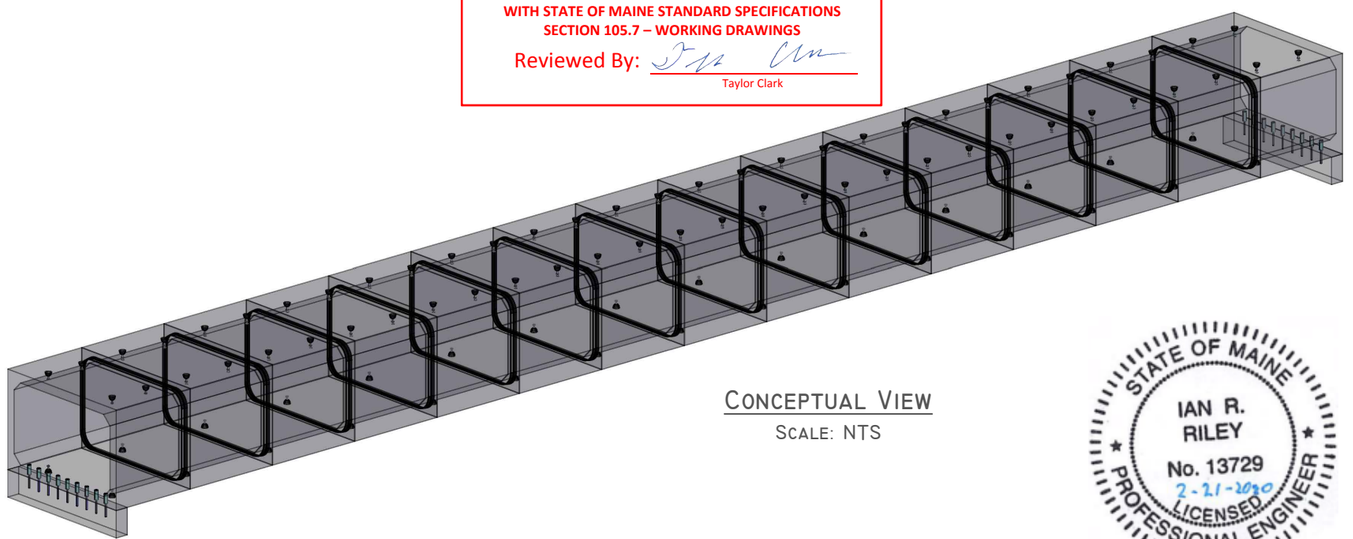


Section A-A



End View

Scale: 1/4" = 1'-0"



Conceptual View

Scale: NTS

MaineDOT
REVIEWED
February 25th, 2020
THIS DOCUMENT HAS BEEN REVIEWED IN ACCORDANCE WITH STATE OF MAINE STANDARD SPECIFICATIONS SECTION 105.7 – WORKING DRAWINGS
Reviewed By: Taylor Clark

STATE OF MAINE
IAN R. RILEY
No. 13729
2-21-2020
LICENSED
PROFESSIONAL ENGINEER

Superior Concrete, LLC
982 Minot Ave. Auburn, ME
Tel: 207-784-1388
Fax: 207-783-4039

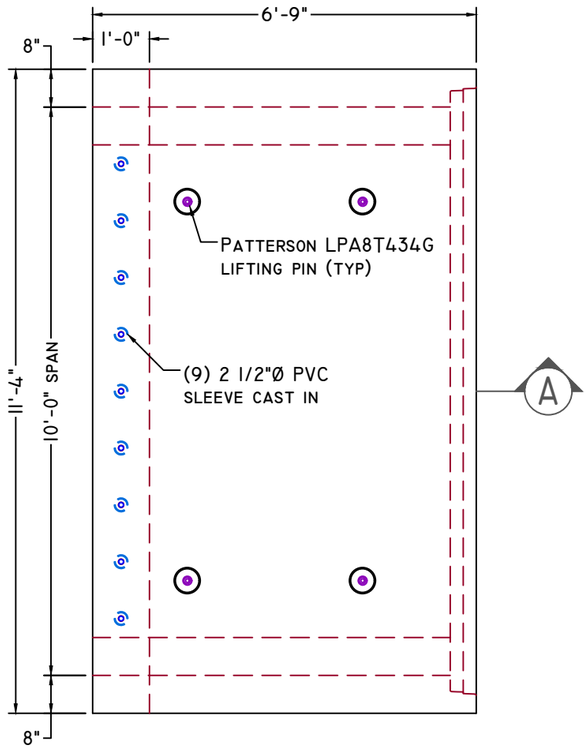
ITEM	QTY	Bill Of Materials
A	(1)	6'-9" Upstream end Wt: (23,561 #)
B	(13)	7'-6" Mid section Wt: (26,988 # ea.)
C	(1)	7'-6" Downstream end Wt: (27,633 #)
D	(2)	1' x 2' x 11'-4" Toewall (3,395 # ea.)
	(18)	#8 x 18" Toewall pin (9 ea. end)

Design Notes:

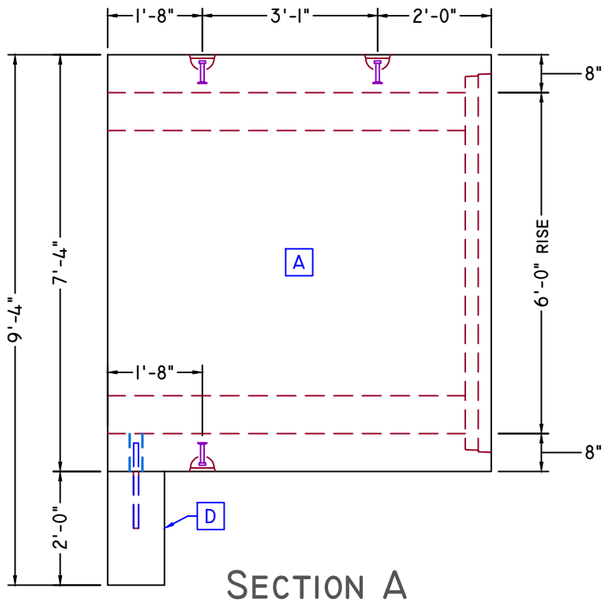
1. **Concrete**
   - 1.1. Comp. strength min. 5,000psi @ 28 days
   - 1.2. Air-Entrainment: min. 5.5%
2. **Structural Reinforcement:**
   - 2.1. Bar per ASTM A615, grade 60
   - 2.2. WWF per ASTM A1064, grade 70
   - 2.3. Integrate rebar with lifting insert(s)
   - 2.4. Interrupted bar areas will be replaced each side with half the affected area
   - 2.5. Designed for 125% HL-93 wheel load rating
   - 2.6. 2" CLR Exterior, 1 1/2" CLR Interior
3. **Manufacturing / Installation:**
   - 3.1. Joints sealed with butyl rubber sealant
   - 3.2. *112'-4" Projected length when factoring 1/2" max. growth per joint
   - 3.3. Each exterior joint to be wrapped in min. 12" CS-212 Joint Wrap by contractor
   - 3.4. All exposed surfaces to have a rubbed finish or approved equal in accordance with Spec. section 534.17
   - 3.5. Rebar clear cover = 1.5" interior & 2" Exterior
4. **Soil / Fill Requirements:**
   - 4.1. Minimum = 1.5'

Note: Some details not shown for clarity
SCALE: 3/32" = 1'-0" Unless otherwise noted

Structure Name:	10' x 6' x 112' Box Culvert	
Job Name:	Hay Brook Bridge Route 202/A4	
Location:	Sanford - Alfred, ME. (WIN: 21823.00)	
Contractor:	Maine D.O.T.	
Drawn By: JWP	Date: 12/20/2019	Project Mgr: C.H.
Rev.#: 0.01	Date: 02/21/2020	Sheet: 1 of 5



PLAN VIEW



SECTION A

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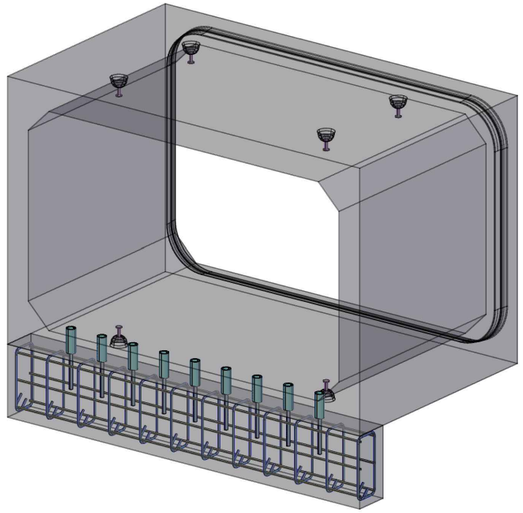
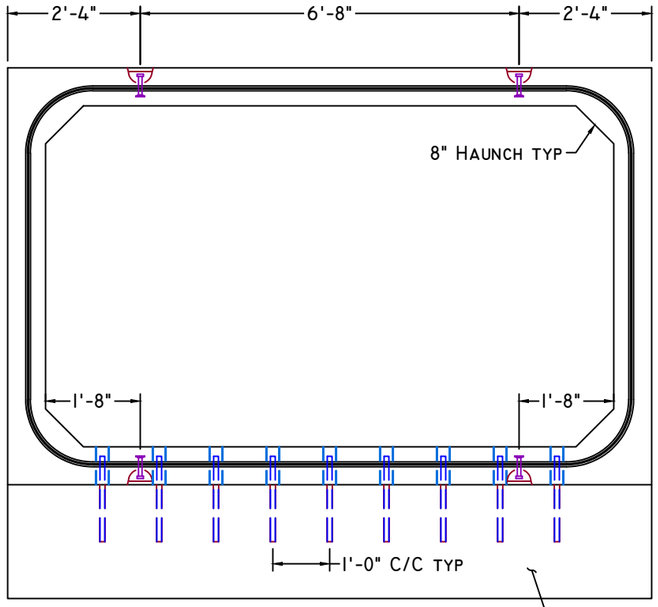
Taylor Clark



CONCEPTUAL VIEW - NTS

FOR ADDITIONAL INFORMATION
SEE SHEET: 5 OF 5



END VIEW

STATE OF MAINE
IAN R. RILEY
No. 13729
2-21-2020
LICENSED
PROFESSIONAL ENGINEER

Superior Concrete, LLC
982 Minot Ave. Auburn, ME
Tel: 207-784-1388
Fax: 207-783-4039

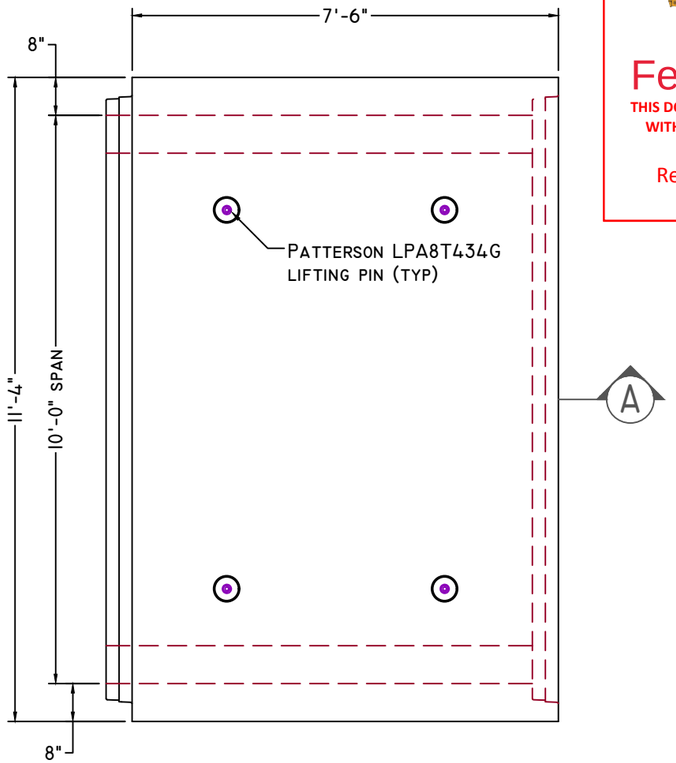
ITEM	QTY	BILL OF MATERIALS
A	(1)	6'-9" UPSTREAM END WT: (23,561 #)
D	(1)	1' x 2' x 11'-4" TOEWALL (3,395 # EA.)
	(9)	#8 x 18" TOEWALL PIN

DESIGN NOTES:
1. **Concrete**
   - 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
   - 1.2. AIR-ENTRAINMENT: MIN. 5.5%
2. **Structural Reinforcement:**
   - 2.1. BAR PER ASTM A615, GRADE 60
   - 2.2. WWF PER ASTM A1064, GRADE 70
   - 2.3. INTEGRATE REBAR WITH LIFTING INSERT(S)
   - 2.4. INTERRUPTED BAR AREAS WILL BE REPLACED EACH SIDE WITH HALF THE AFFECTED AREA
   - 2.5. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
   - 2.6. 2" CLR EXTERIOR, 1 1/2" CLR INTERIOR
3. **Manufacturing / Installation:**
   - 3.1. JOINTS SEALED WITH BUTYL RUBBER SEALANT
   - 3.2. *112'-4" PROJECTED LENGTH WHEN FACTORING 1/2" MAX. GROWTH PER JOINT
   - 3.3. EACH EXTERIOR JOINT TO BE WRAPPED IN MIN. 12" CS-212 JOINT WRAP BY CONTRACTOR
   - 3.4. ALL EXPOSED SURFACES TO HAVE A RUBBED FINISH OR APPROVED EQUAL IN ACCORDANCE WITH SPEC. SECTION 534.17
   - 3.5. REBAR CLEAR COVER = 1.5" INTERIOR & 2" EXTERIOR
4. **Soil / Fill Requirements:**
   - 4.1. MINIMUM = 1.5'

Note: Some details not shown for clarity
SCALE: 3/8" = 1'-0" Unless otherwise noted

STRUCTURE NAME:	10' x 6' x 112' BOX CULVERT
JOB NAME:	HAY BROOK BRIDGE ROUTE 202/A4
LOCATION:	SANFORD - ALFRED, ME. (WIN: 21823.00)
CONTRACTOR:	MAINE D.O.T.

DRAWN BY:	DATE:	PROJECT MGR:
JWP	12/20/2019	C.H.
REV.#:	DATE:	SHEET:
0.01	02/21/2020	2 OF 5



PLAN VIEW

MaineDOT
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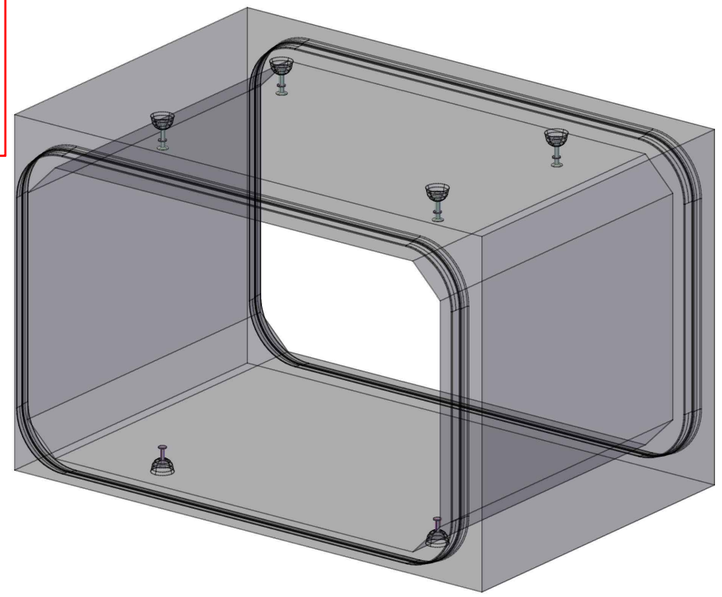
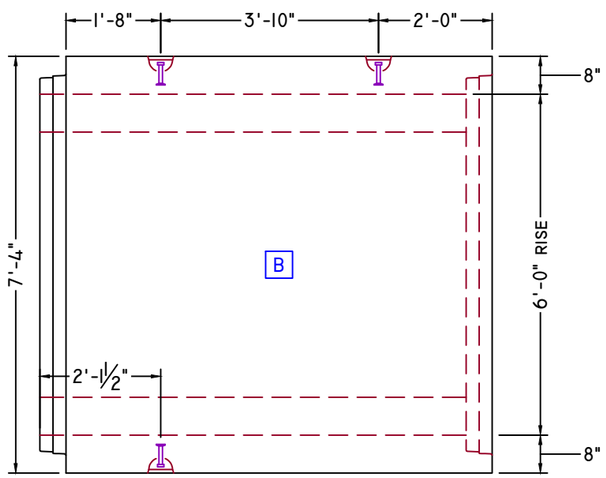
Taylor Clark



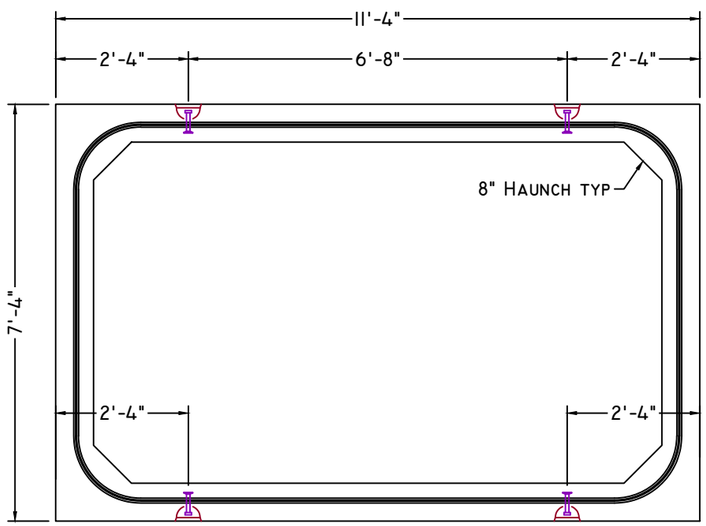
CONCEPTUAL VIEW - NTS

FOR ADDITIONAL INFORMATION
SEE SHEET: 5 OF 5



SECTION A

STATE OF MAINE
IAN R. RILEY
No. 13729
2-21-2020
LICENSED PROFESSIONAL ENGINEER



END VIEW

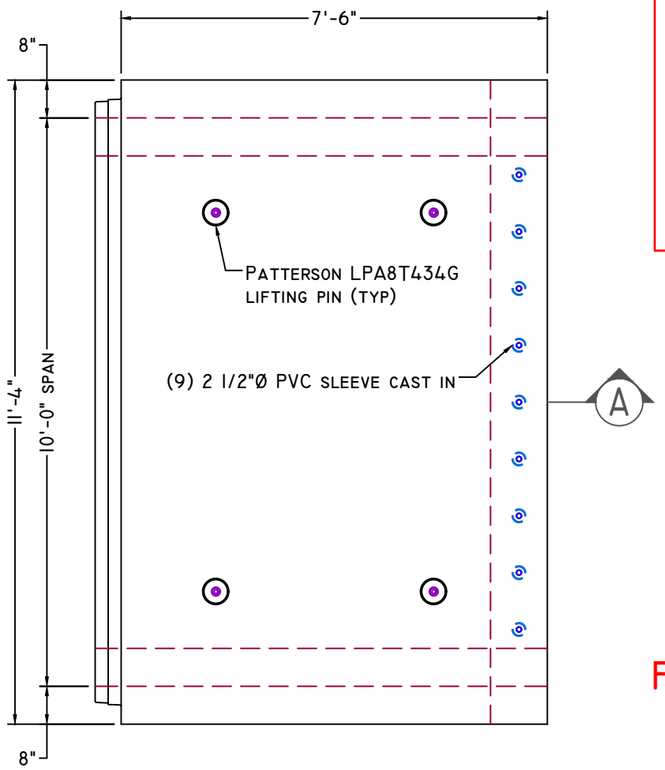
Superior Concrete, LLC
982 Minot Ave. Auburn, ME
Tel: 207-784-1388
Fax: 207-783-4039

ITEM	QTY	BILL OF MATERIALS
B	(13)	7'-6" MID SECTION WT: (26,988 # EA.)

DESIGN NOTES:
1. **Concrete**
   - 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
   - 1.2. AIR-ENTRAINMENT: MIN. 5.5%
2. **Structural Reinforcement:**
   - 2.1. BAR PER ASTM A615, GRADE 60
   - 2.2. WWF PER ASTM A1064, GRADE 70
   - 2.3. INTEGRATE REBAR WITH LIFTING INSERT(S)
   - 2.4. INTERRUPTED BAR AREAS WILL BE REPLACED EACH SIDE WITH HALF THE AFFECTED AREA
   - 2.5. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
   - 2.6. 2" CLR EXTERIOR, 1 1/2" CLR INTERIOR
3. **Manufacturing / Installation:**
   - 3.1. JOINTS SEALED WITH BUTYL RUBBER SEALANT
   - 3.2. *11'-4" PROJECTED LENGTH WHEN FACTORING 1/2" MAX. GROWTH PER JOINT
   - 3.3. EACH EXTERIOR JOINT TO BE WRAPPED IN MIN. 12" CS-212 JOINT WRAP BY CONTRACTOR
   - 3.4. ALL EXPOSED SURFACES TO HAVE A RUBBED FINISH OR APPROVED EQUAL IN ACCORDANCE WITH SPEC. SECTION 534.17
   - 3.5. REBAR CLEAR COVER = 1.5" INTERIOR & 2" EXTERIOR
4. **Soil / Fill Requirements:**
   - 4.1. MINIMUM = 1.5'

Note: Some details not shown for clarity
SCALE: 3/8" = 1'-0" Unless otherwise noted

STRUCTURE NAME: 10' x 6' x 112' BOX CULVERT		
JOB NAME: HAY BROOK BRIDGE ROUTE 202/A4		
LOCATION: SANFORD - ALFRED, ME. (WIN: 21823.00)		
CONTRACTOR: MAINE D.O.T.		
DRAWN BY: JWP	DATE: 12/20/2019	PROJECT MGR: C.H.
REV.#:	DATE:	SHEET: 3 OF 5



PLAN VIEW

MaineDOT
REVIEWED
February 25th, 2020
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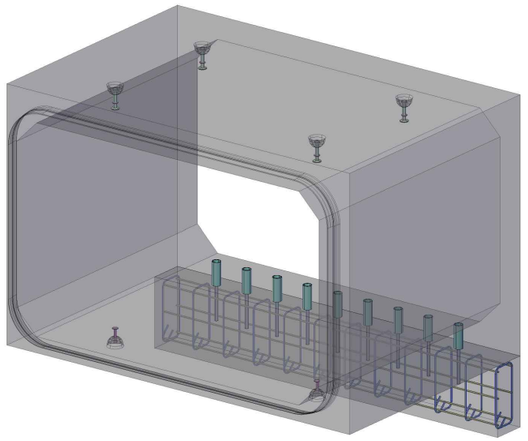
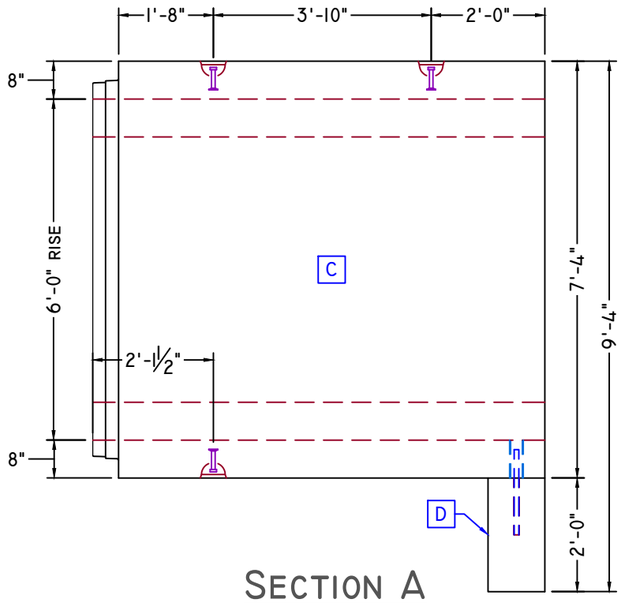
Reviewed By:
Taylor Clark

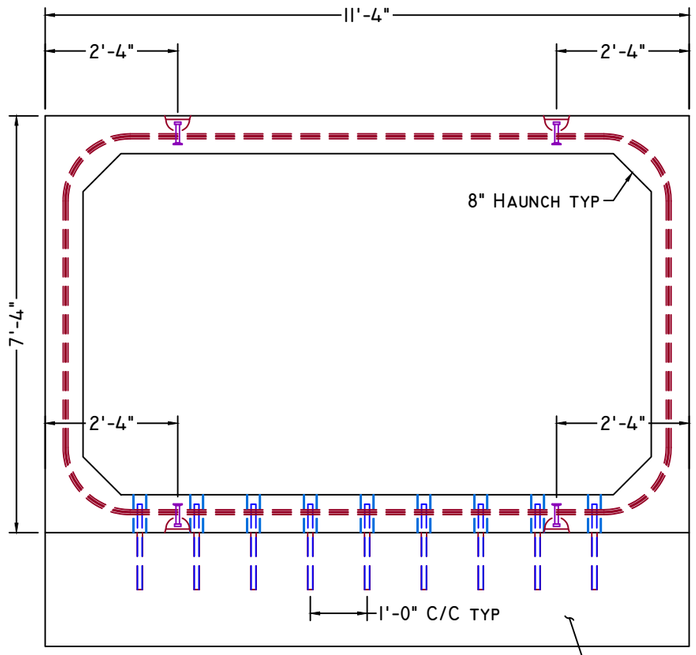


CONCEPTUAL VIEW - NTS

FOR ADDITIONAL INFORMATION
SEE SHEET: 5 OF 5



SECTION A



END VIEW

STATE OF MAINE
IAN R. RILEY
No. 13729
2-21-2020
LICENSED PROFESSIONAL ENGINEER

Superior Concrete, LLC
982 Minot Ave. Auburn, ME
Tel: 207-784-1388
Fax: 207-783-4039

ITEM	QTY	BILL OF MATERIALS
C	(1)	7'-6" DOWNSTREAM END WT: (27,633 #)
D	(1)	1' x 2' x 11'-4" TOEWALL (3,395 #)
	(9)	#8 x 18" TOEWALL PIN

DESIGN NOTES:

1. Concrete
- 1.1. COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
- 1.2. AIR-ENTRAINMENT: MIN. 5.5%

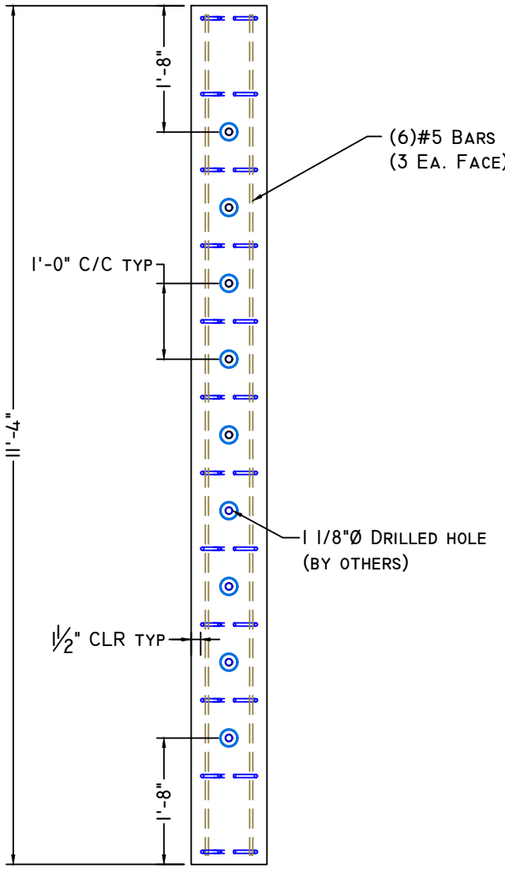
2. Structural Reinforcement:
- 2.1. BAR PER ASTM A615, GRADE 60
- 2.2. WWF PER ASTM A1064, GRADE 70
- 2.3. INTEGRATE REBAR WITH LIFTING INSERT(S)
- 2.4. INTERRUPTED BAR AREAS WILL BE REPLACED EACH SIDE WITH HALF THE AFFECTED AREA
- 2.5. DESIGNED FOR 125% HL-93 WHEEL LOAD RATING
- 2.6. 2" CLR EXTERIOR, 1 1/2" CLR INTERIOR

3. Manufacturing / Installation:
- 3.1. JOINTS SEALED WITH BUTYL RUBBER SEALANT
- 3.2. *11'-4" PROJECTED LENGTH WHEN FACTORING 1/2" MAX. GROWTH PER JOINT
- 3.3. EACH EXTERIOR JOINT TO BE WRAPPED IN MIN. 12" CS-212 JOINT WRAP BY CONTRACTOR
- 3.4. ALL EXPOSED SURFACES TO HAVE A RUBBED FINISH OR APPROVED EQUAL IN ACCORDANCE WITH SPEC. SECTION 534.17
- 3.5. REBAR CLEAR COVER = 1.5" INTERIOR & 2" EXTERIOR

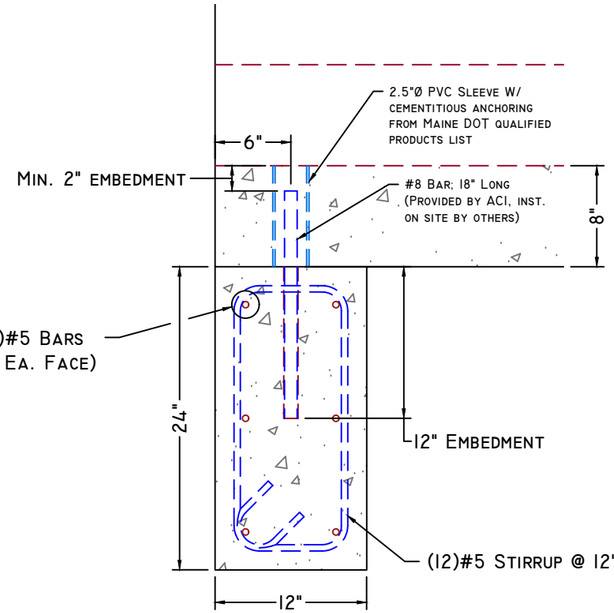
4. Soil / Fill Requirements:
- 4.1. MINIMUM = 1.5'

Note: Some details not shown for clarity
SCALE: 3/8" = 1'-0" Unless otherwise noted

STRUCTURE NAME:	10' x 6' x 112' BOX CULVERT	
JOB NAME:	HAY BROOK BRIDGE ROUTE 202/A4	
LOCATION:	SANFORD - ALFRED, ME. (WIN: 21823.00)	
CONTRACTOR:	MAINE D.O.T.	
DRAWN BY: JWP	DATE: 12/20/2019	PROJECT MGR: C.H.
REV.#: 0.01	DATE: 02/21/2020	SHEET: 4 OF 5

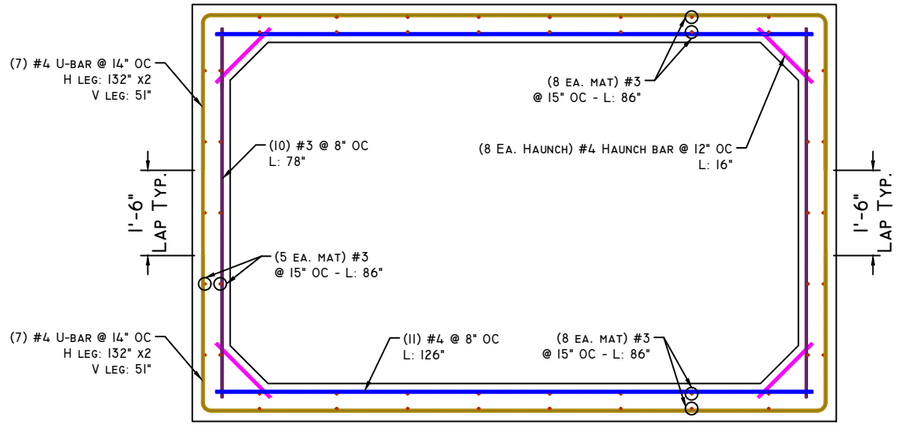


Toewall Plan View



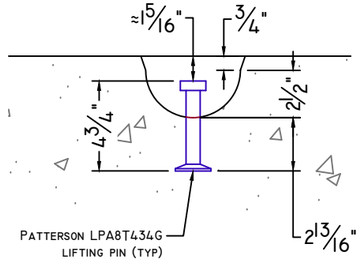
Toewall Elevation View

Scale: 1" = 1'-0"



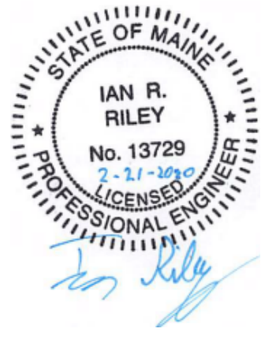
Typical Culvert Reinforcing

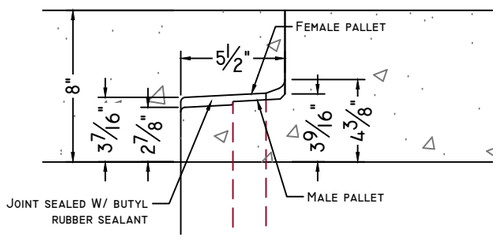
Scale: 3/8" = 1'-0"



Lifting Pin Detail

Scale: 1 1/2" = 1'-0"





Culvert Joint Detail

Scale: 1 1/2" = 1'-0"

MaineDOT
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Reviewed By:
Taylor Clark

Superior Concrete, LLC
982 Minot Ave. Auburn, ME
Tel: 207-784-1388
Fax: 207-783-4039

ITEM	QTY	BILL OF MATERIALS

Design Notes:

1. **Concrete**
   - 1.1. Comp. strength min. 5,000psi @ 28 days
   - 1.2. Air-Entrainment: min. 5.5%
2. **Structural Reinforcement:**
   - 2.1. Bar per ASTM A615, grade 60
   - 2.2. WWF per ASTM A1064, grade 70
   - 2.3. Integrate rebar with lifting insert(s)
   - 2.4. Interrupted bar areas will be replaced each side with half the affected area
   - 2.5. Designed for 125% HL-93 wheel load rating
   - 2.6. 2" CLR Exterior, 1 1/2" CLR Interior
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   - 3.2. *112'-4" Projected length when factoring 1/2" max. growth per joint
   - 3.3. Each exterior joint to be wrapped in min. 12" CS-212 Joint Wrap by contractor
   - 3.4. All exposed surfaces to have a rubbed finish or approved equal in accordance with Spec. section 534.17
   - 3.5. Rebar clear cover = 1.5" interior & 2" Exterior
4. **Soil / Fill Requirements:**
   - 4.1. Minimum = 1.5'

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

Structure Name:	10' x 6' x 112' Box Culvert	
Job Name:	Hay Brook Bridge Route 202/A4	
Location:	Sanford - Alfred, ME. (WIN: 21823.00)	
Contractor:	Maine D.O.T.	
Drawn By:	Date:	Project Mgr:
JWP	12/20/2019	C.H.
Rev.#:	Date:	Sheet:
0.01	02/21/2020	5 of 5

SHOP DRAWING/SUBMITTAL REVIEW

[X] APPROVED [ ] APPROVED WITH CHANGES NOTES

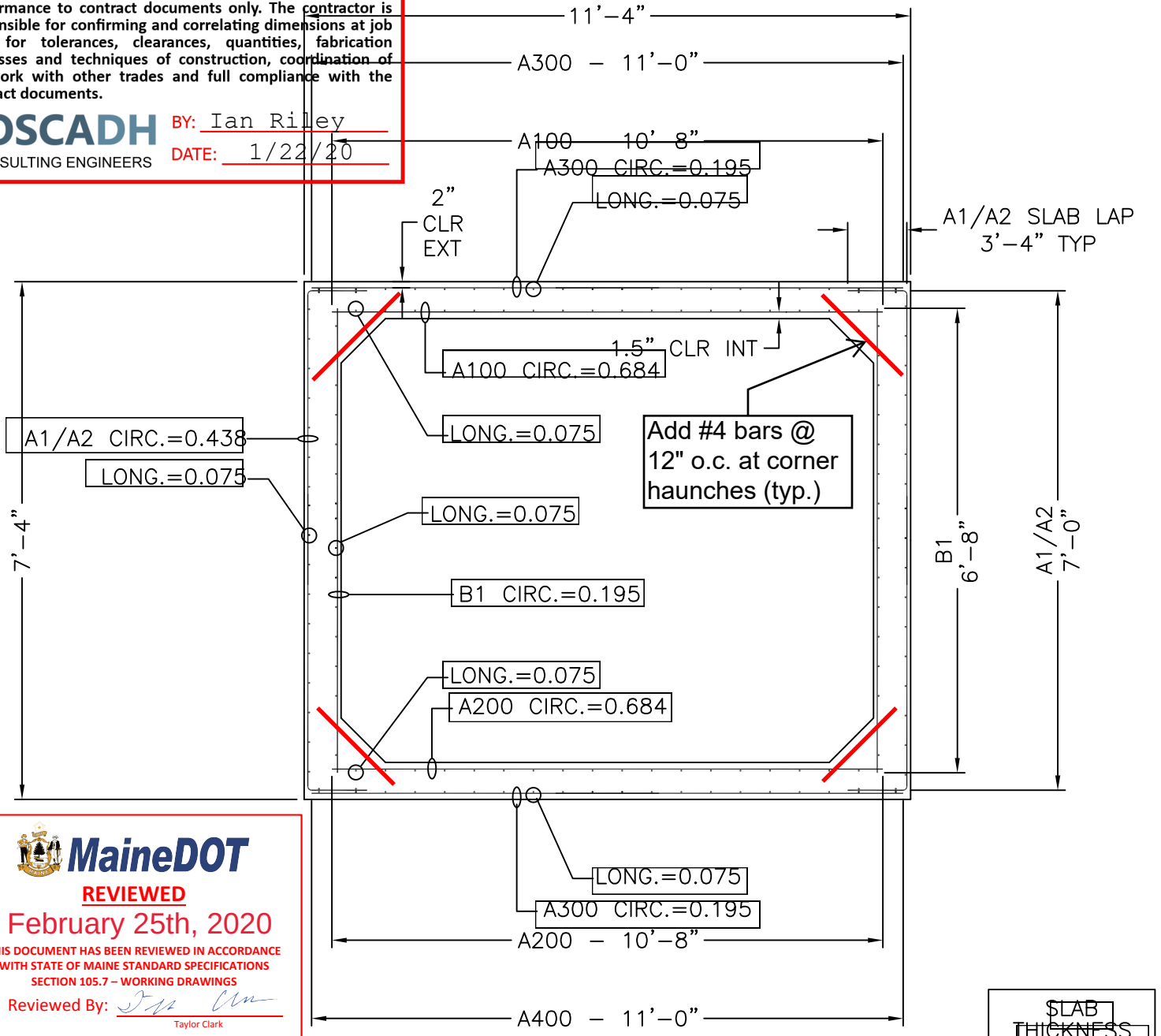
[ ] REVISE AND RESUBMIT [ ] REJECTED: _____

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.

FOSCADH CONSULTING ENGINEERS

BY: Ian Riley

DATE: 1/22/20



MaineDOT

REVIEWED

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Reviewed By: Taylor Clark

10' x 6' x 7'-6"

CROSS SECTION WITH AREAS OF STEEL

SLAB THICKNESS	
TOP	8"
BOTTOM	8"
WALLS	8"

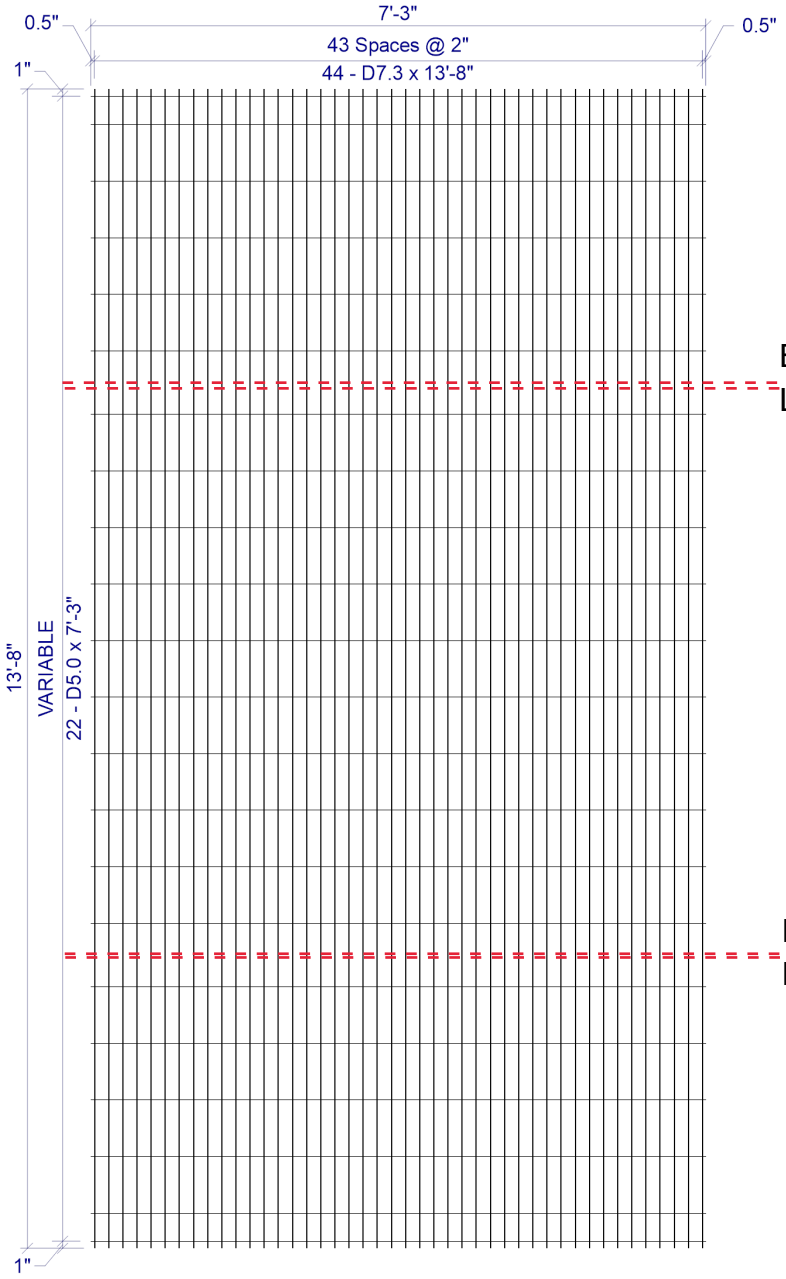
CAGE WEIGHT PER 7'-6" JOINT = 1013.8 lbs

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

BOX SIZE:	ASTM:	TABLE:	FILL:
10' X 6' X 7'-6"	HL-93	125%	3'-4'

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

CUSTOMER:	DRAWN BY:	REVISION:	SHEET DESCRIPTION:	
SUPERIOR CONCRETE	BWA	1/24/2020	COVER	
PROJECT:	DATE:	REVISION DATE:	FILE NAME:	
10' X 6' X 7'-6" SANFORD	1/20/2020	R1	94826	
	CHECKED BY:	SCALE:	PROJECT #:	SHEET #:
	BWA	NTS	94826	1 OF 6



2 x VAR D7.3 / D5.0 (GRADE 70) 86(+0.5, +0.5) x 13'-8"(1, 1)

VAR = 1" OH, 1@4", 4@8", 1@9", 9@8", 1@9", 4@8", 1@4", 1" OH

SHEET DESIGN

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

CUSTOMER: Superior Concrete

PROJECT: 94826 - Drawings - 10x6 Sanford - Superior Concrete - 1-20-2020

LOCATION: Auburn, ME

DATE: 01-24-2020 MARK NUMBER: A1/A2 (-01)

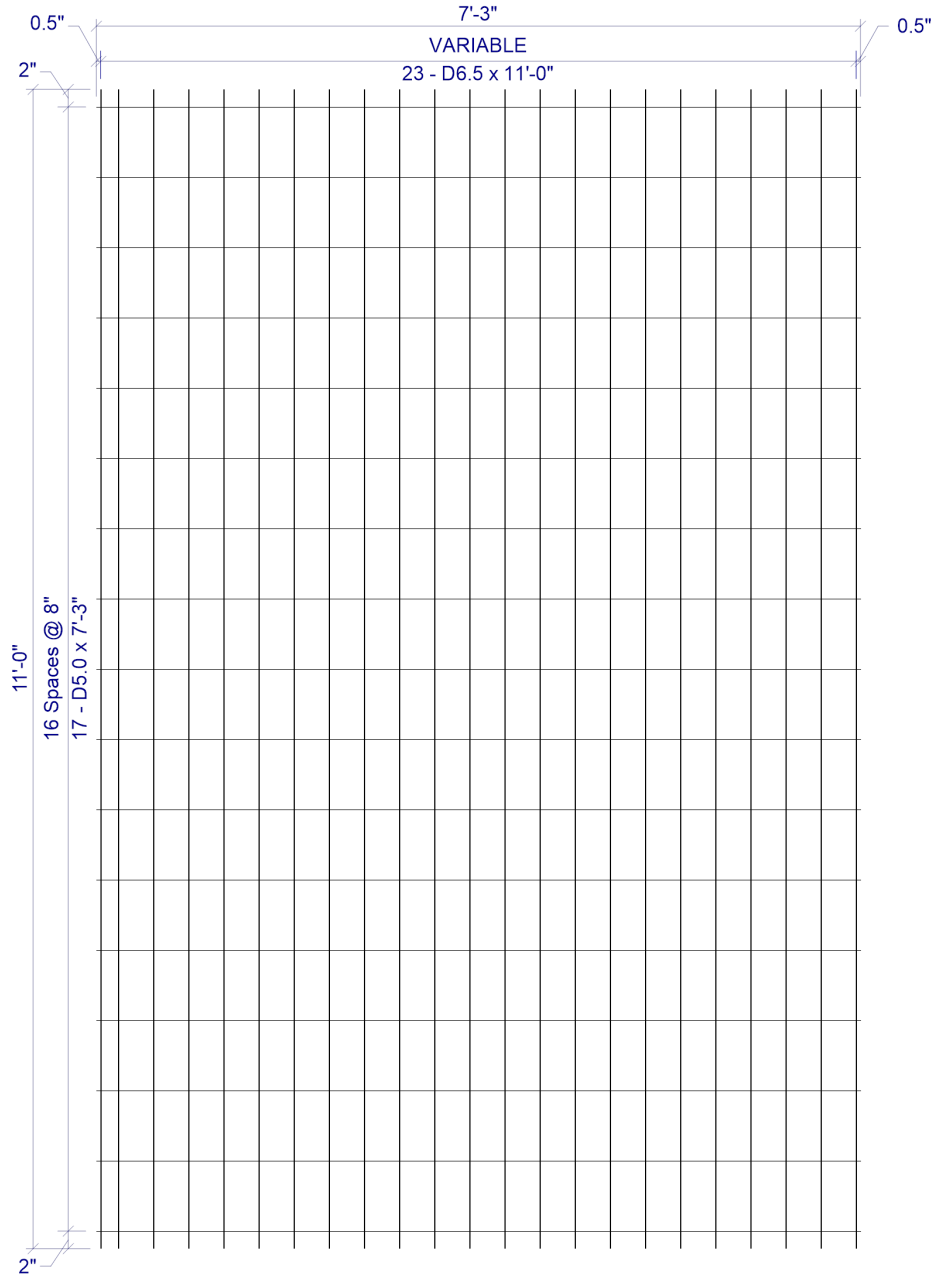
L.W.SPACE	2
C.W.SPACE	VAR
L.W.1 SIZE	D7.3
L.W.2 SIZE	N/A
C.W.SIZE	D5.0
WIDTH	7'-3"
LENGTH	13'-8"
OH.LEFT	0.5"
OH.RIGHT	0.5"
OH.TOP	1"
OH.BOTTOM	1"
YIELD	70,000psi
BENT	-
CUT	-
ROLL	-

WIRES	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	44	N/A	22
SIZE	D7.3	N/A	D5.0
LENGTH	13'-8"	-	7'-3"
W.T./SHEET			
SHEET W.T.	180.50#		
QUANTITY	30		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:
BEND DIMS: WALL=84", SLABS=40"

MaineDOT
REVIEWED
February 25th, 2020
THIS DOCUMENT HAS BEEN REVIEWED IN ACCORDANCE WITH STATE OF MAINE STANDARD SPECIFICATIONS SECTION 105.7 – WORKING DRAWINGS
Reviewed By:
Taylor Clark

APPROVED



VAR x 8 D6.5 / D5.0 (GRADE 70) 86(+0.5, +0.5) x 11'-0"(2, 2)

VAR = 0.5" OH, 1@2", 21@4", 0.5" OH

SHEET DESIGN

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

CUSTOMER Superior Concrete

PROJECT 94826 - Drawings - 10x6 Sanford - Superior Concrete - 1-20-2020

LOCATION Auburn, ME

DATE 01-24-2020 MARK NUMBER A300/A400 (-02)

L.W.SPACE	VAR
C.W.SPACE	8
L.W.1 SIZE	D6.5
L.W.2 SIZE	N/A
C.W.SIZE	D5.0
WIDTH	7'-3"
LENGTH	11'-0"
OH.LEFT	0.5"
OH.RIGHT	0.5"
OH.TOP	2"
OH.BOTTOM	2"
YIELD	70,000psi
BENT	-
CUT	-
ROLL	-

WIRES	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	23	N/A	17
SIZE	D6.5	N/A	D5.0
LENGTH	11'-0"	-	7'-3"
W.T./SHEET			
SHEET W.T.	76.90#		
QUANTITY	30		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

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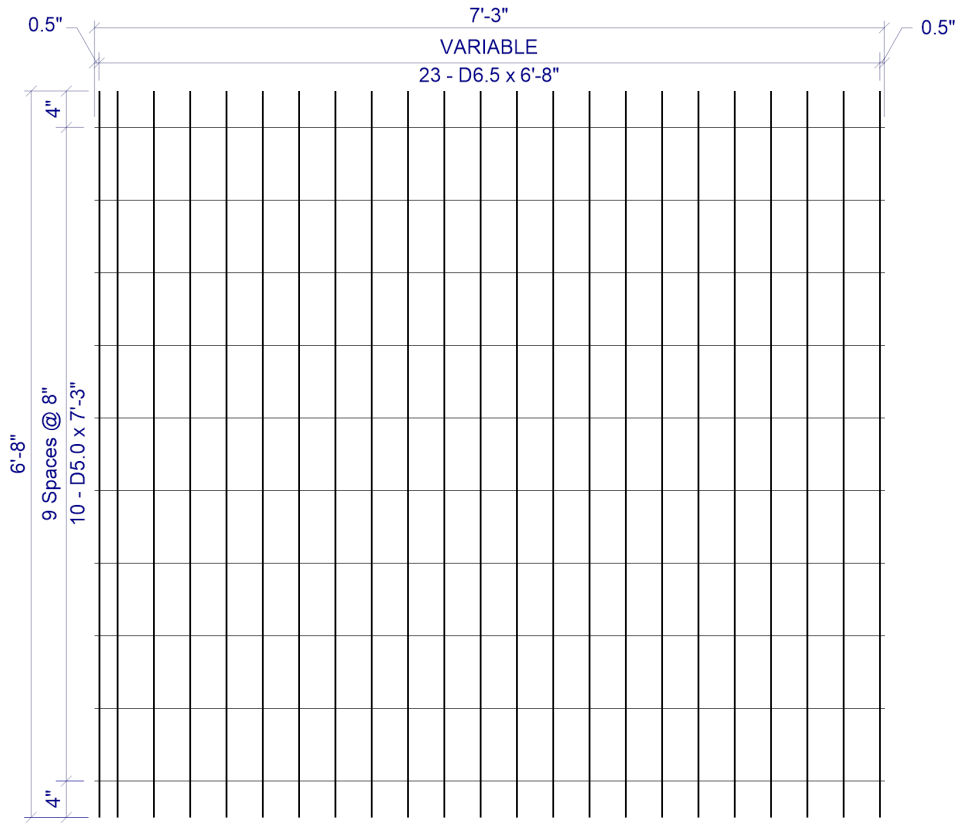

VAR x 8 D6.5 / D5.0 (GRADE 70) 86(+0.5, +0.5) x 6'-8"(4, 4)
VAR = 0.5" OH, 1@2", 21@4", 0.5" OH

CUSTOMER Superior Concrete

PROJECT 94826 - Drawings - 10x6 Sanford - Superior Concrete - 1-20-2020

LOCATION Auburn, ME

DATE 01-24-2020 MARK NUMBER B1 (-03)

L.W.SPACE	VAR
C.W.SPACE	8
L.W.1 SIZE	D6.5
L.W.2 SIZE	N/A
C.W.SIZE	D5.0
WIDTH	7'-3"
LENGTH	6'-8"
OH.LEFT	0.5"
OH.RIGHT	0.5"
OH.TOP	4"
OH.BOTTOM	4"
YIELD	70,000psi
BENT	-
CUT	-
ROLL	-

WIRES	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	23	N/A	10
SIZE	D6.5	N/A	D5.0
LENGTH	6'-8"	-	7'-3"
W.T./SHEET			
SHEET W.T.	46.20#		
QUANTITY	30		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

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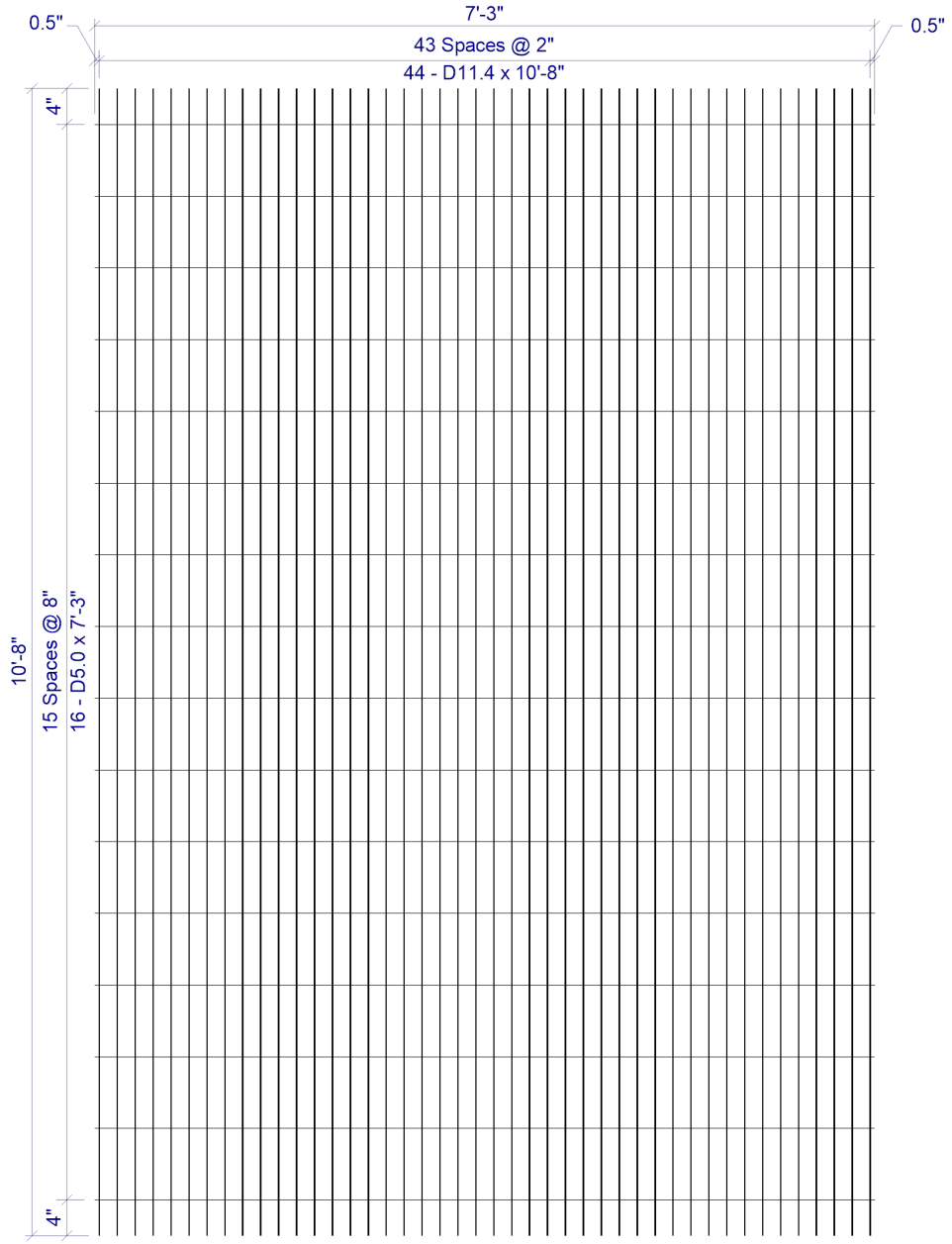

2 x 8 D11.4 / D5.0 (GRADE 70) 86(+0.5, +0.5) x 10'-8"(4, 4)

SHEET DESIGN

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CUSTOMER Superior Concrete

PROJECT 94826 - Drawings - 10x6 Sanford - Superior Concrete - 1-20-2020

LOCATION Auburn, ME

DATE 01-24-2020 MARK NUMBER A100/A200 (-04)

L.W.SPACE	2
C.W.SPACE	8
L.W.1 SIZE	D11.4
L.W.2 SIZE	N/A
C.W.SIZE	D5.0
WIDTH	7'-3"
LENGTH	10'-8"
OH.LEFT	0.5"
OH.RIGHT	0.5"
OH.TOP	4"
OH.BOTTOM	4"
YIELD	70,000psi
BENT	-
CUT	-
ROLL	-

WIRES	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	44	N/A	16
SIZE	D11.4	N/A	D5.0
LENGTH	10'-8"	-	7'-3"
W.T./SHEET			
SHEET W.T.	203.30#		
QUANTITY	30		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

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