



American Concrete Industries
1717 STILLWATER AVE. VEAZIE, ME. 04401
TEL: 207-947-8334
FAX: 207-947-3580
WWW.AMERICANCONCRETE.COM

ITEM		QTY	BILL OF MATERIALS
1	(1)	4'-11" UPSTREAM END (28,090 #)	
2	(15)	4'-11" MID SECTION (27,580 # EA.)	
3	(9)	4'-11" DOWNSTREAM END (27,070 #)	
4	(2)	1' x 2' x 17'-4" TOEWALL (5,895 # EA.)	
5	(16)	#8 x 20" TOEWALL PIN (9 EA. END)	

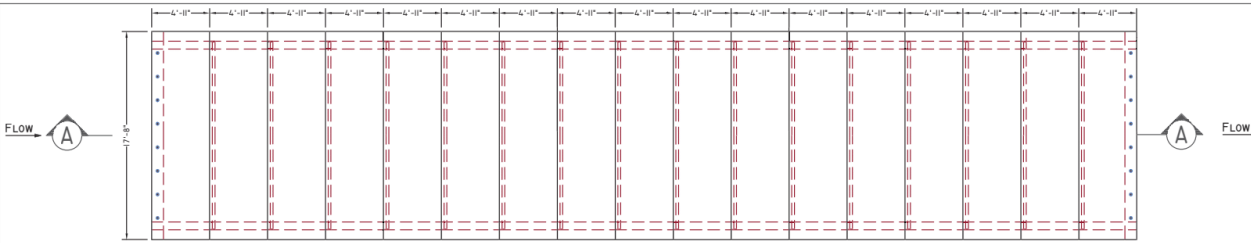
- DESIGN NOTES:
- Concrete:
 - COMP. STRENGTH MIN. 5,000PSI @ 28 DAYS
 - AIR-ENTRAIMENT: 5.5% MIN - 7.5% MAX
 - Structural Reinforcement:
 - BAR PER ASTM A615, GRADE 60
 - WWR PER ASTM A615, GRADE 70
 - INTEGRATE REBAR WITH LIFTING INDETS(S)
 - INTERRUPTED BAR AREAS WILL BE REPLACED EACH SIDE WITH HALF THE AFFECTED AREA
 - DESIGNED FOR HL-93 WHEEL LOAD RATING (+25% LL)
 - Manufacturing / Installation:
 - JOINTS SEALED WITH BUTYL RUBBER SEALANT
 - CONFORMS STRICTLY TO ASTM & MDOT
 - MINIMUM SOIL COVER = 2'
 - MAXIMUM SOIL COVER = 5'

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

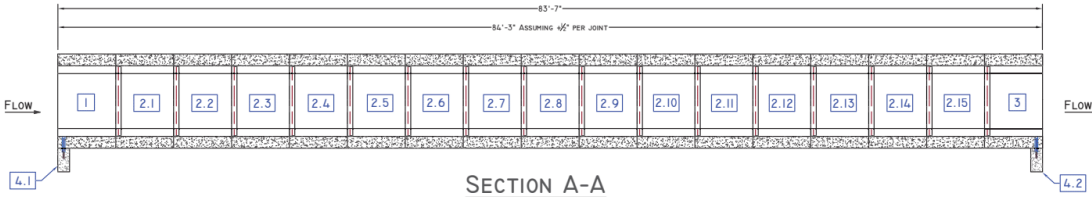
STRUCTURE NAME:		16' x 6' x 83'-7" BOX CULVERT
JOB NAME:		S. CROOKED ROAD BRIDGE
LOCATION:		DANFORTH, ME
CONTRACTOR:		MDOT
DRAWN BY:	DATE:	CI.0
AAG	04/23/2019	
REV. #:	DATE:	
0.00	04/23/2019	

STANTEC CONSULTING SERVICES INC.

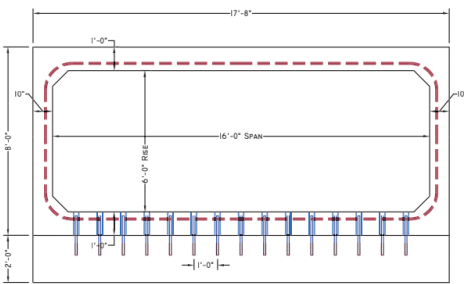
NOTE: 1/2"± GROWTH PER JOINT IS EXPECTED DURING INSTALLATION



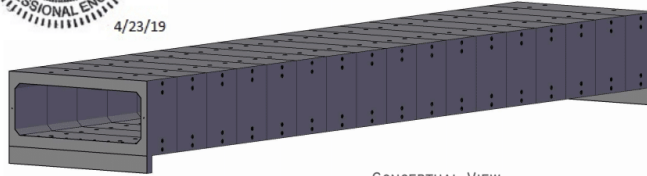
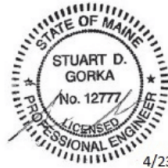
PLAN VIEW



SECTION A-A



END VIEW
SCALE: 1/4" = 1'-0"



CONCEPTUAL VIEW
SCALE: NTS

- ☐ NO EXCEPTION TAKEN
☒ MAKE CORRECTIONS NOTED
☐ REVISE & RESUBMIT
☐ RESUBMIT CERTIFIED

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By: K.Wight Date: 4/25/19

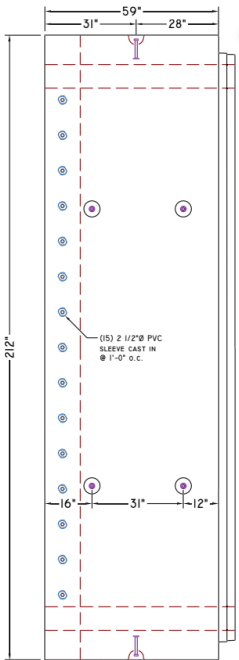
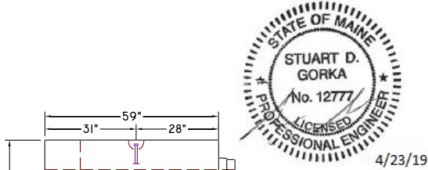
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ITEM		QTY	BILL OF MATERIALS
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4	(1)	1' x 2' x 17'-4" TOEWALL (5,895 #)	
(15)		#8 x 20" TOEWALL PIN	

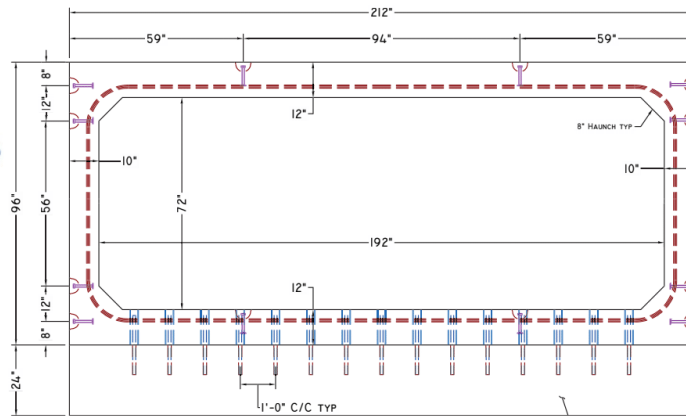
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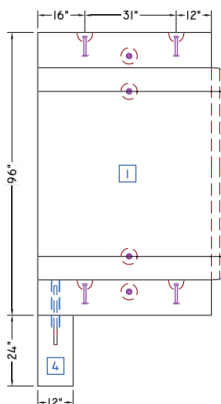
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LOCATION:		DANFORTH, ME
CONTRACTOR:		MDOT
DRAWN BY:	DATE:	CI.2
AAG	04/23/2019	
REV. #:	DATE:	
0.00	04/23/2019	



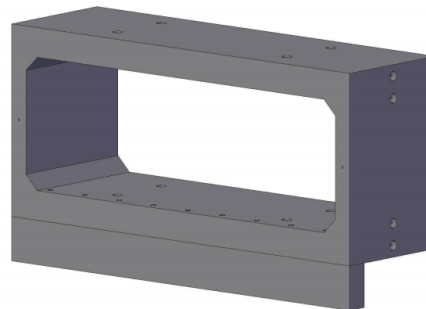
PLAN VIEW



END VIEW



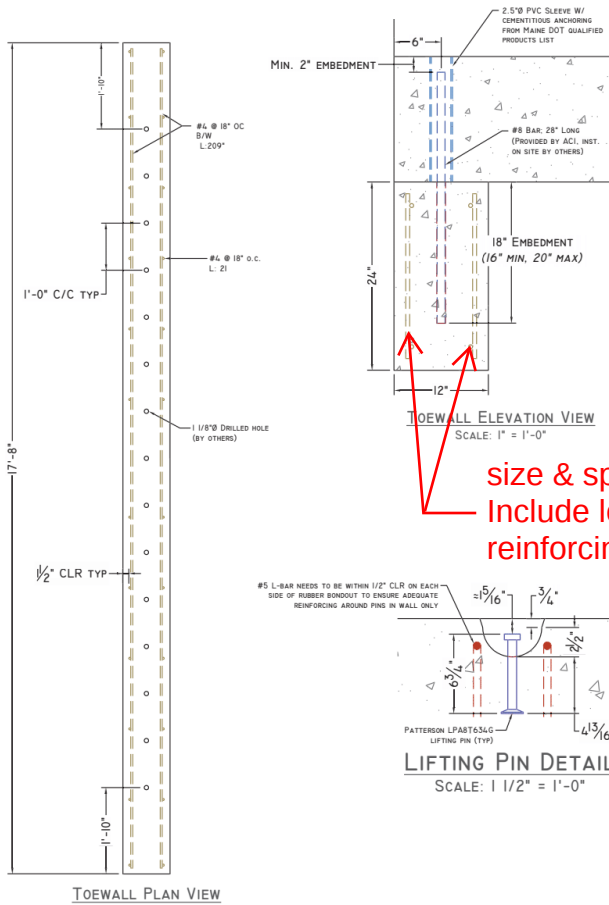
SECTION A



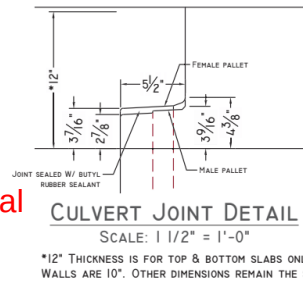
CONCEPTUAL VIEW - NTS

[illegible]

DI.0



size & spacing?
Include longitudinal
reinforcing



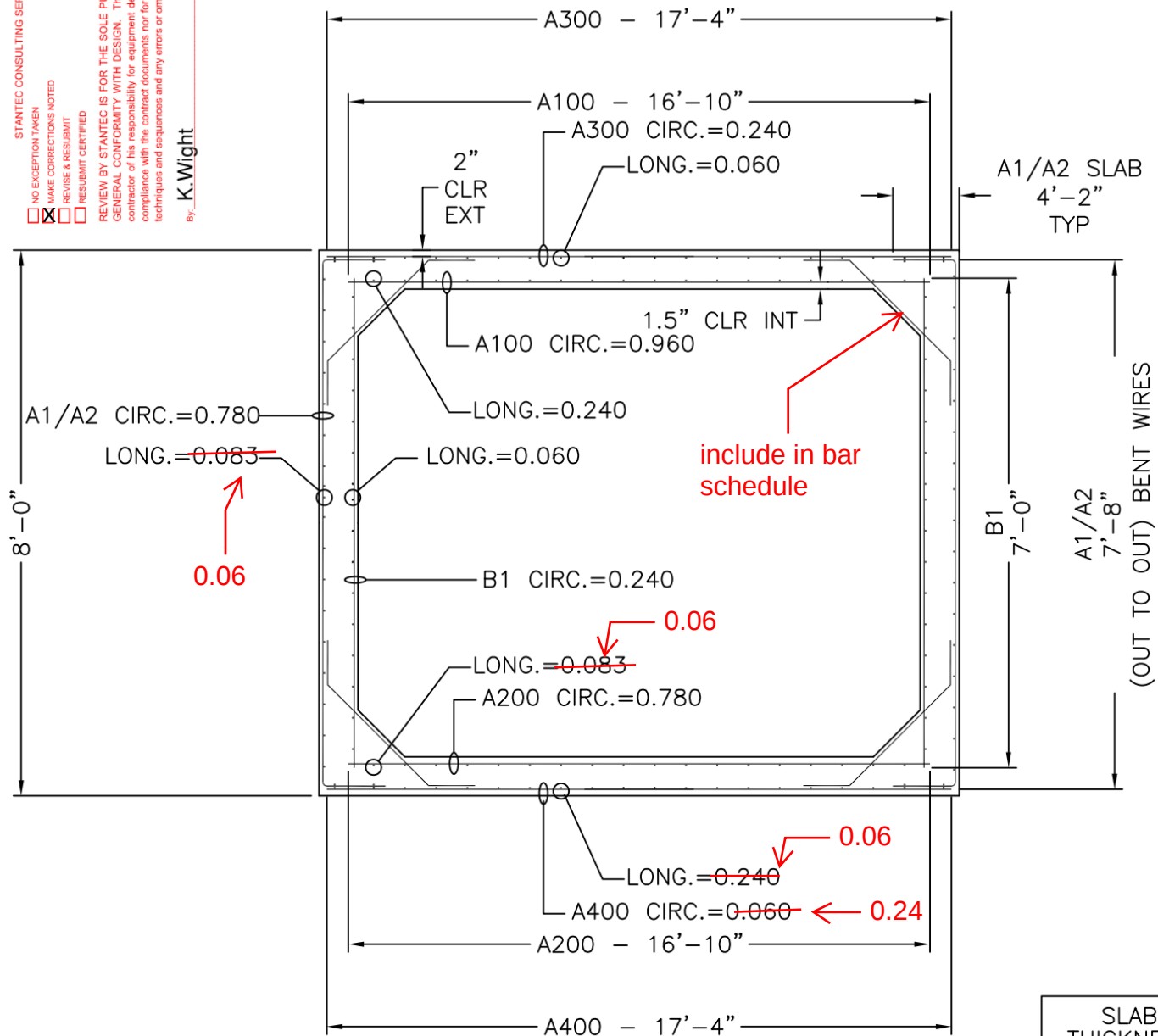
4/25/2019

STANTEC CONSULTING SERVICES INC.

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By: **K. Wight** Date: **4/25/19**



16' x 6' x 4'-8"

CROSS SECTION WITH AREAS OF STEEL

SLAB THICKNESS	
TOP	12"
BOTTOM	12"
WALLS	10"

CAGE WEIGHT PER 4'-8" JOINT = 1197.7 lbs

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

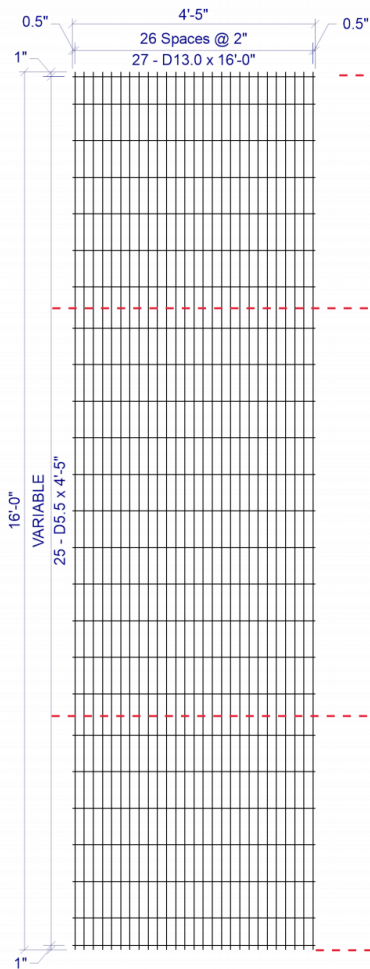
BOX SIZE:	ASTM:	TABLE:	FILL:
16' X 6' X 4'-8"	HL-93	125%	1'-4'



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	BWA	4/10/2019	COVER	
PROJECT:	DATE:	REVISION DATE:	FILE NAME:	
16' X 6' X 4'-8"	3/11/2019	R1	94182	
DANFORTH	CHECKED BY:	SCALE:	PROJECT #:	SHEET #:
	BWA	NTS	94182	1 OF 6



2 x VAR D13.0 / D5.5 (GRADE 70) 52(+0.5, +0.5) x 16'-0" (1, 1)
 VAR = 1" OH, 1@6", 5@8", 1@9", 10@8", 1@9", 5@8", 1@6", 1" OH

SHEET DESIGN



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verify with calculations

CUSTOMER	American Concrete
PROJECT	94182 - Drawings - 16x6 Danforth - American Concrete - 3-11-2019
LOCATION	Veazie, ME
DATE	04-18-2019
MARK NUMBER	A1/A2 (-01)
L.W.SPACE	2
C.W.SPACE	VAR
L.W.1 SIZE	D13.0
L.W.2 SIZE	N/A
C.W.SIZE	D5.5
WIDTH	4'-5"
LENGTH	16'-0"
OH.LEFT	0.5"
OH.RIGHT	0.5"
OH.TOP	1"
OH.BOTTOM	1"
YIELD	70,000psi
BENT	-
CUT	-
ROLL	-

WIRE	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	27	N/A	25
SIZE	D13.0	N/A	D5.5
LENGTH	16'-0"	-	4'-5"
W.T./SHEET			
SHEET W.T.	213.50#		
QUANTITY	36		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:
 BEND DIMS: WALL=92", SLABS=50"

APPROVED _____

Page 2 of 6

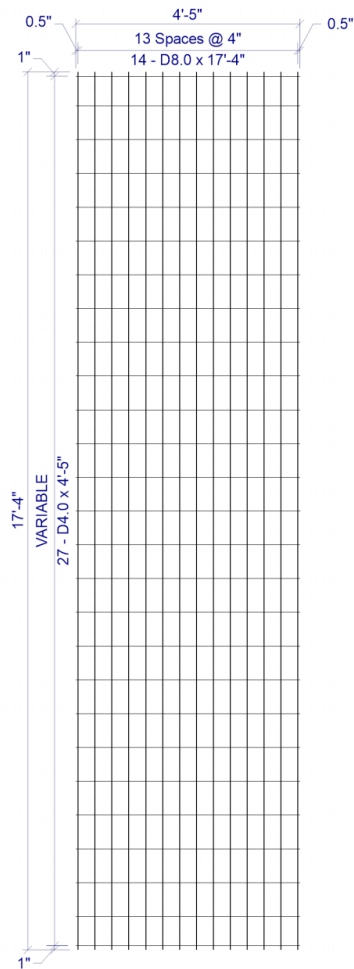
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By: **K. Wight**

Date: **4/25/19**



4 x VAR D8.0 / D4.0 (GRADE 70) 52(+0.5, +0.5) x 17'-4"(1, 1)
VAR = 1" OH, 1@7", 24@8", 1@7", 1" OH

SHEET DESIGN



Concrete Reinforcements, Inc.
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CUSTOMER American Concrete

PROJECT 94182 - Drawings - 16x6 Danforth - American Concrete - 3-11-2019

LOCATION Veazie, ME

DATE 04-10-2019 MARK NUMBER A300/A400 (-02)

L.W.SPACE	4	W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
C.W.SPACE	VAR				
L.W.1 SIZE	D8.0	NO. PER SHEET	14	N/A	27
L.W.2 SIZE	N/A	SIZE	D8.0	N/A	D4.0
C.W.SIZE	D4.0	LENGTH	17'-4"	-	4'-5"
WIDTH	4'-5"	W.T./SHEET			
LENGTH	17'-4"	SHEET W.T.	86.30#		
OH.LEFT	0.5"	QUANTITY	36		
OH.RIGHT	0.5"	SUB TOTAL WEIGHT			
OH.TOP	1"	TOTAL WEIGHT			
OH.BOTTOM	1"	S.F./SHEET			
YIELD	70,000psi	LBS./CSF			
BENT	-	Ast/LF			
CUT	-	ST.DENSITY			
ROLL	-				

SPECIAL REMARKS:

APPROVED _____

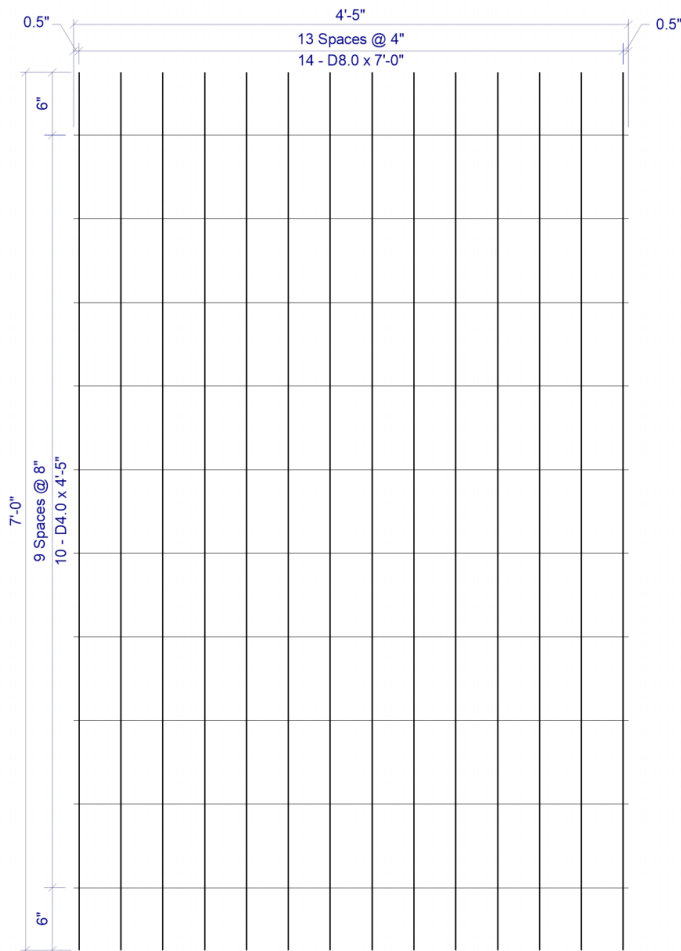
Page 3 of 6

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By: K. Wight Date: 4/25/19



4 x 8 D8.0 / D4.0 (GRADE 70) 52(+0.5, +0.5) x 7'-0" (6, 6)

SHEET DESIGN



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CUSTOMER American Concrete

PROJECT 94182 - Drawings - 16x6 Danforth - American Concrete - 3-11-2019

LOCATION Veazie, ME

DATE 04-10-2019 MARK NUMBER B1 (-03)

L.W.SPACE 4

C.W.SPACE 8

L.W.1 SIZE D8.0

L.W.2 SIZE N/A

C.W.SIZE D4.0

WIDTH 4'-5"

LENGTH 7'-0"

OH.LEFT 0.5"

OH.RIGHT 0.5"

OH.TOP 6"

OH.BOTTOM 6"

YIELD 70,000psi

BENT -

CUT -

ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	14	N/A	10
SIZE	D8.0	N/A	D4.0
LENGTH	7'-0"	-	4'-5"
W.T./SHEET			
SHEET W.T.	34.20#		
QUANTITY	36		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

APPROVED _____

Page 4 of 6

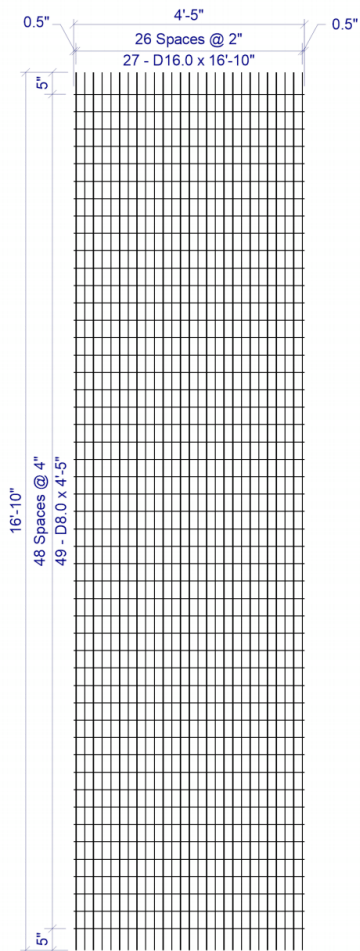
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By: K.Wight

Date: 4/25/19



2 x 4 D16.0 / D8.0 (GRADE 70) 52(+0.5, +0.5) x 16'-10"(5, 5)

SHEET DESIGN



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CUSTOMER American Concrete

PROJECT 94182 - Drawings - 16x6 Danforth - American Concrete - 3-11-2019

LOCATION Veazie, ME

DATE 04-10-2019 MARK NUMBER A100 (-04)

L.W.SPACE	<u>2</u>	W	LINE	LINE	CROSS
C.W.SPACE	<u>4</u>	I	WIRE 1	WIRE 2	WIRE
L.W.1 SIZE	<u>D16.0</u>	R			
L.W.2 SIZE	<u>N/A</u>	E			
C.W.SIZE	<u>D8.0</u>	S			
WIDTH	<u>4'-5"</u>	NO. PER	27	N/A	49
LENGTH	<u>16'-10"</u>	SHEET			
OH.LEFT	<u>0.5"</u>	SIZE	D16.0	N/A	D8.0
OH.RIGHT	<u>0.5"</u>	LENGTH	16'-10"	-	4'-5"
OH.TOP	<u>5"</u>	W.T./SHEET			
OH.BOTTOM	<u>5"</u>	SHEET W.T.	306.20#		
YIELD	<u>70,000psi</u>	QUANTITY	18		
BENT	<u>-</u>	SUB TOTAL			
CUT	<u>-</u>	WEIGHT			
ROLL	<u>-</u>	TOTAL			
		WEIGHT			
		S.F./SHEET			
		LBS./CSF			
		Ast/LF			
		ST.DENSITY			

SPECIAL REMARKS:

APPROVED _____

Page 5 of 6

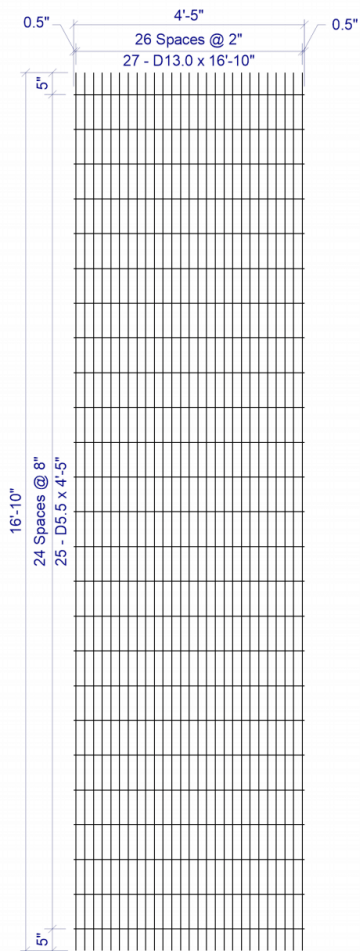
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SHEET DESIGN



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CUSTOMER American Concrete

PROJECT 94182 - Drawings - 16x6 Danforth - American Concrete - 3-11-2019

LOCATION Veazie, ME

DATE 04-10-2019 MARK NUMBER A200 (-05)

L.W.SPACE 2

C.W.SPACE 8

L.W.1 SIZE D13.0

L.W.2 SIZE N/A

C.W.SIZE D5.5

WIDTH 4'-5"

LENGTH 16'-10"

OH.LEFT 0.5"

OH.RIGHT 0.5"

OH.TOP 5"

OH.BOTTOM 5"

YIELD 70,000psi

BENT -

CUT -

ROLL -

W I R E S	LINE WIRE 1	LINE WIRE 2	CROSS WIRE
NO. PER SHEET	27	N/A	25
SIZE	D13.0	N/A	D5.5
LENGTH	16'-10"	-	4'-5"
W.T./SHEET			
SHEET W.T.	223.50#		
QUANTITY	18		
SUB TOTAL WEIGHT			
TOTAL WEIGHT			
S.F./SHEET			
LBS./CSF			
Ast/LF			
ST.DENSITY			

SPECIAL REMARKS:

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