

PER: ASTM 2656-07, SPECIFICALLY 7.2.2; THE FOUNDATION SHALL BE POURED ON UNDISTURBED SOIL, OR CONTROLLED AND COMPACTED FILL TO A DENSITY OF NOT LESS THAN 90% MAXIMUM DRY DENSITY IN ACCORDANCE WITH TEST METHODS D1556 AND D2922 AND AASHTO METHOD OF TEST T099.

SIDES OF FOUNDATION SHALL BE FORMED IN EXCAVATED MAT'L., IF POSSIBLE. OTHERWISE, SIDEWALLS SHALL BE FORMED WITH INDICATED DIMENSIONS. ALL BACKFILL MATERIAL AND REPLACEMENT METHODS MUST COMPLY WITH STATED CODES LISTED ABOVE.

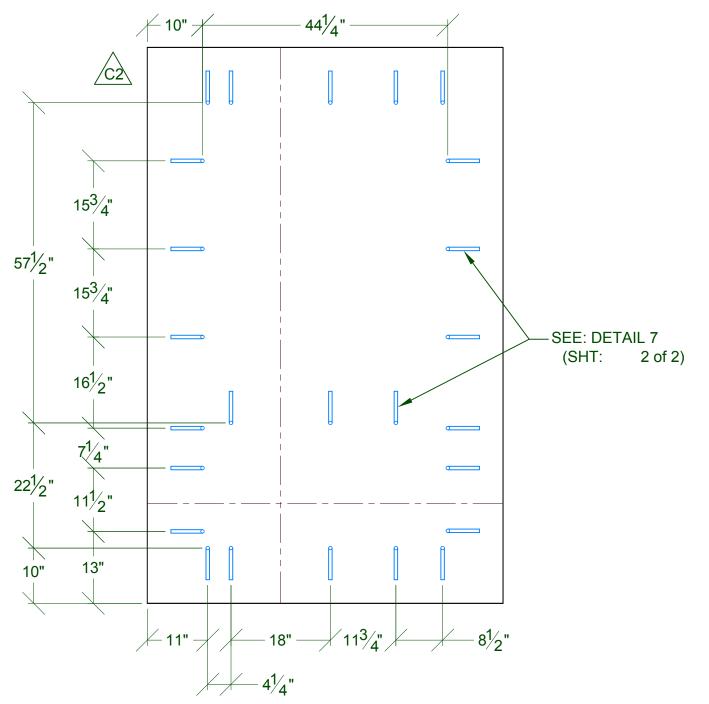
INSTALL REBAR ITEMS 5, 6, AND 7 WITH FIRST 6" CONC. LEVELING PAD POUR. BEFORE INSERTING THE STEEL BOLSTER ASSEMBLY AND FINAL REBAR.

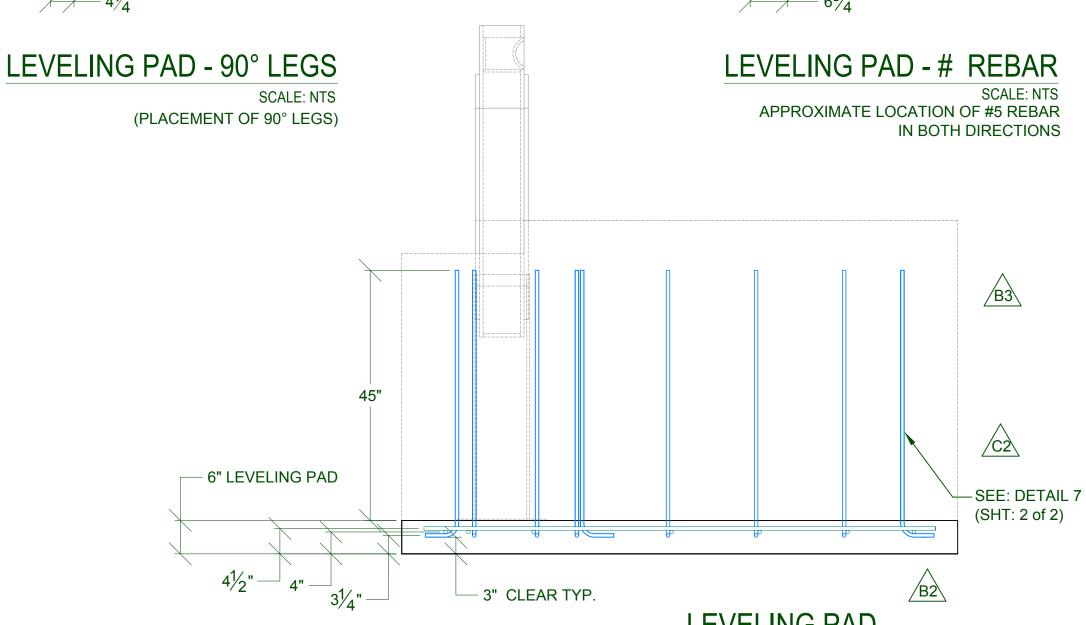
ALL CONCRETE SHALL BE A CONTROLLED STONE GRAVEL MIX PRODUCED, TESTED, TRANSPORTED, PROTECTED, AND PLACED IN ACCORDANCE WITH THE LATEST AMERICAN CONCRETE INSTITUTE RECOMMENDATIONS. FOLLOW ACI RECOMMENDATIONS FOR CURING AND MIX DESIGN WITH CONSIDERATION FOR CLIMATE AND CONDITIONS.

OPTIMUM CONCRETE MIX: 4000 PSI COMPRESSIVE STRENGTH. MINIMUM 600 LB./CU.YD. CEMENT CONTENT MAXIMUM 0.50 WATER CONTENT. **6% AIR CONTENT** 4" SLUMP

REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM A-615) WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.

CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".





LEVELING PAD REINFORCEMENT PLAN SECTION

SCALE: NTS

3" CLEAR TYP.

12"

 $15^{3}/_{4}$ "

 $15^{3}/_{4}$ "

243/4"

111/2"

73/4"

41/2"-

Rev.:	Revisions:	Date:	Drn.By:
F	STRAIGHT REBAR #5 WAS 94" LG. & #6 WAS 58" LG.	07/18/14	MKS
Е	ADDED NOTE THAT ALL REBAR IS TO BE #5	12/12/13	MKS
D	L/H in titleblock was wrong - corrected the hand to R/H	10/02/13	MKS
C2	Changed location of Item 7 hook	1/28/13	SLD

C1 Added rebar hook

Ckd. By:

EGS

DMR

DMR

KLL

KLL

1/28/13

SLD

Rev.:

		DO NO	T SCALE	NOTICE
Revisions:	Date:	Drn.By:	Ckd. By:	THE INFORMATION CONTAINED ON THIS DOCUMENT IS
Changed the rebar style from T1 to S3 per ECR 010-13	1/28/13	SLD	KLL	CONFIDENTIAL. ANY DISSEMINATION, UNAPPROVED
Changed the rebar style	12/27/12	SLD	KLL	DISCLOSURE OR COPYING OF THIS INFORMATION IS
Changed leveling pad from 3" to 6"	08/24/12	MKS	DMR	STRICTLY PROHIBITED
Changed pad shape	08/24/12	MKS	DMR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
Revised - Engineered K4 Crash Foundation Details	12/22/08	MKS	DMR	ANGLES ± 1° X/X ± 1/32, .XX ± .01, .XXX ± .005

Date: 12/27/12 Drn. By: SLD Ckd. By: KLL



SEE: DETAIL 5 (SHT: 2 of 2

SEE: DETAIL 6

2 of

(SHT:

Dwg.: M-30 FOUNDATION-Pad Details-OperEnd-R/H Title: M-30 SHIELD Crash Gate Foundation-OperEnd PER: ASTM 2656-07, SPECIFICALLY 7.2.2; THE FOUNDATION SHALL BE POURED ON UNDISTURBED SOIL, OR CONTROLLED AND COMPACTED FILL TO A DENSITY OF NOT LESS THAN 90% MAXIMUM DRY DENSITY IN ACCORDANCE WITH TEST METHODS D1556 AND D2922 AND AASHTO METHOD OF TEST T099.

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INSTALL REBAR ITEMS 5, 6, AND 7 WITH FIRST 6" CONC. LEVELING PAD POUR. BEFORE INSERTING THE STEEL BOLSTER ASSEMBLY AND FINAL REBAR.

ALL CONCRETE SHALL BE A CONTROLLED STONE GRAVEL MIX PRODUCED, TESTED, TRANSPORTED, PROTECTED, AND PLACED IN ACCORDANCE WITH THE LATEST AMERICAN CONCRETE INSTITUTE RECOMMENDATIONS. FOLLOW ACI RECOMMENDATIONS FOR CURING AND MIX DESIGN WITH CONSIDERATION FOR CLIMATE AND CONDITIONS.

OPTIMUM CONCRETE MIX: 4000 PSI COMPRESSIVE STRENGTH. MINIMUM 600 LB./CU.YD. CEMENT CONTENT MAXIMUM 0.50 WATER CONTENT. **6% AIR CONTENT** 4" SLUMP

REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM A-615) WITH A MINIMUM YIELD STRENGTH OF 60.000 PSI.

OPERATOR PAD IS ELEVATED

-SEE: DETAIL 2

-SEE: DETAIL 1

-SEE: DETAIL 5

REINFORCEMENT SECTION "A-A"

-SEE: DETAIL 7

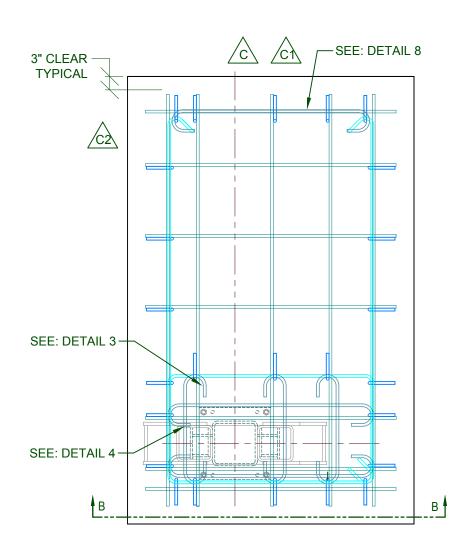
NO HORIZ. REBAR IN

TOP 12" OF THE PAD.

-SEE: DETAIL 8

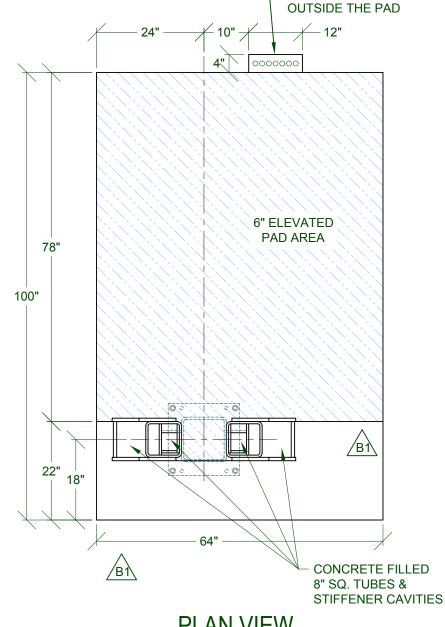
6" OVER THE ROAD LEVEL

CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".

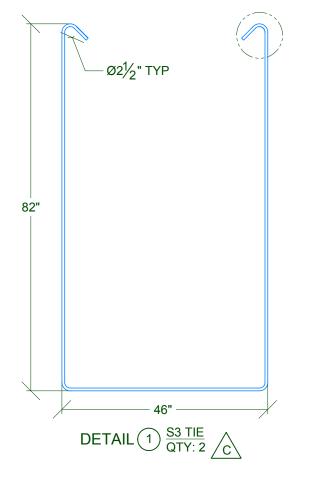


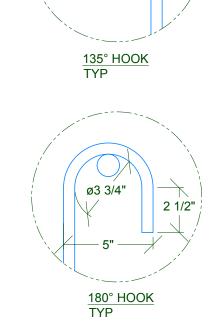
REINFORCEMENT PLAN

SCALE: NTS



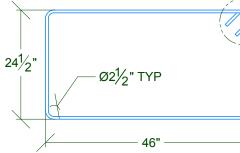
LOCATE CONDUITS



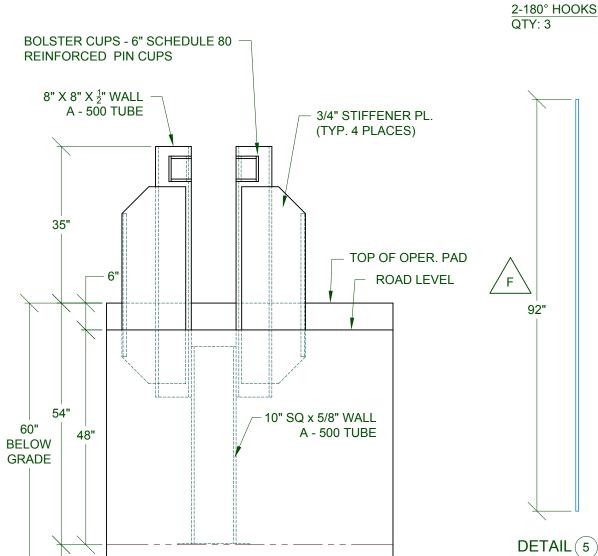


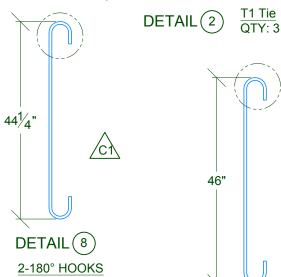
ø2 1/2"

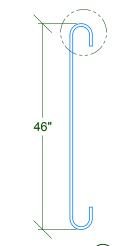




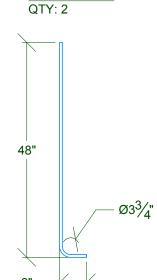
PLAN VIEW







QTY: 2 DETAIL (4) 2-180° HOOKS



DETAIL (7)

90° LEG QTY: 22

REINFORCEMENT SECTION "B-B" SCALE: NTS

ELEVATION VIEW

SCALE: NTS

- 6" THICK LEVELING PAD

NOTE: ALL REBAR TO BE #5

Rev.:	
F	STRAIC
Е	ADDED

Rev.:	Revisions:	Date:	Drn.By:	Ckd. By:	Rev.:	Revisions:
F	STRAIGHT REBAR #5 WAS 94" LG. & #6 WAS 58" LG.	07/18/14	MKS	EGS	С	Changed the rebar style from T1 to S3 per ECR 010-13
Е	ADDED NOTE THAT ALL REBAR IS TO BE #5	12/12/13	MKS	DMR	В3	Changed the rebar style
D	L/H in titleblock was wrong - corrected the hand to R/H	10/03/13	MKS	DMR	B2	Changed leveling pad from 3" to 6"
C2	Changed location of Item 7 hook	1/28/13	SLD	KLL	B1	Changed pad shape
C1	Added rebar hook	1/28/13	SLD	KLL	Α	Revised - Engineered K4 Crash Foundation Details

SEE: DETAIL 6

				-	
		DO NO	T SCALE	NOTICE	Г
	Date:	Drn.By:	Ckd. By:	THE INFORMATION CONTAINED ON THIS DOCUMENT IS	H
13	1/28/13	SLD	KLL	CONFIDENTIAL. ANY DISSEMINATION, UNAPPROVED	L
	12/27/12	SLD	KLL	DISCLOSURE OR COPYING OF THIS INFORMATION IS	
	08/24/12	MKS	DMR	STRICTLY PROHIBITED	[
	08/24/12	MKS	DMR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
	12/22/08	MKS	DMR	ANGLES ± 1° X/X ± 1/32, .XX ± .01, .XXX ± .005	T

B2

12/27/12 Date: Drn. By: SLD Ckd. By: KLL

DETAIL 6

STRAIGHT

QTY: 7



Dwg.: M-30 FOUNDATION-OperEnd-R/H Title: M-30 SHIELD Crash Gate Foundation-OperEnd

- 3" TYP

41"

 $12\frac{1}{4}$ "

12 1/4"

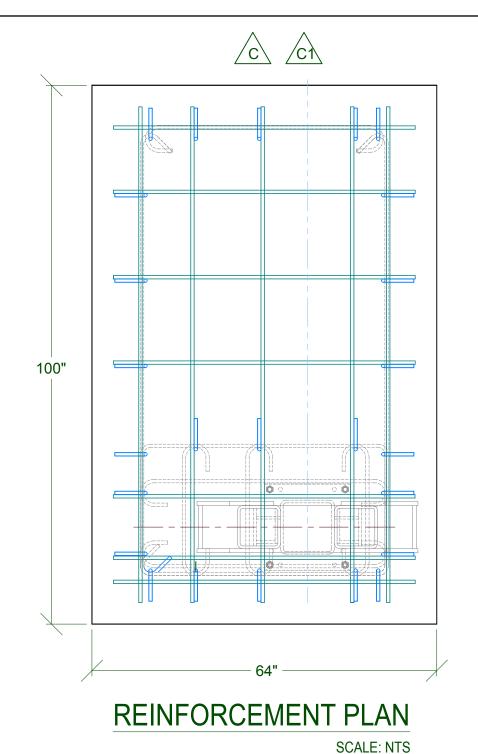
 $9\frac{1}{2}$ " $10\frac{1}{4}$ "

 $24\frac{1}{2}$ "

36" HOLD

Ç OF PIN

STRAIGHT QTY: 5



PER: ASTM 2656-07, SPECIFICALLY 7.2.2;

THE FOUNDATION SHALL BE POURED ON UNDISTURBED SOIL, OR CONTROLLED AND COMPACTED FILL TO A DENSITY OF NOT LESS THAN 90% MAXIMUM DRY DENSITY IN ACCORDANCE WITH TEST METHODS D1556 AND D2922 AND AASHTO METHOD OF TEST T099.

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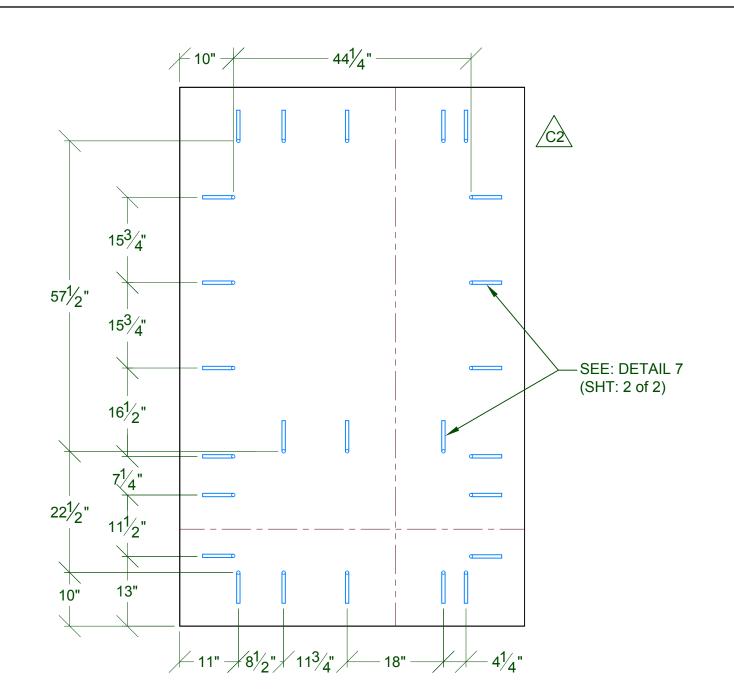
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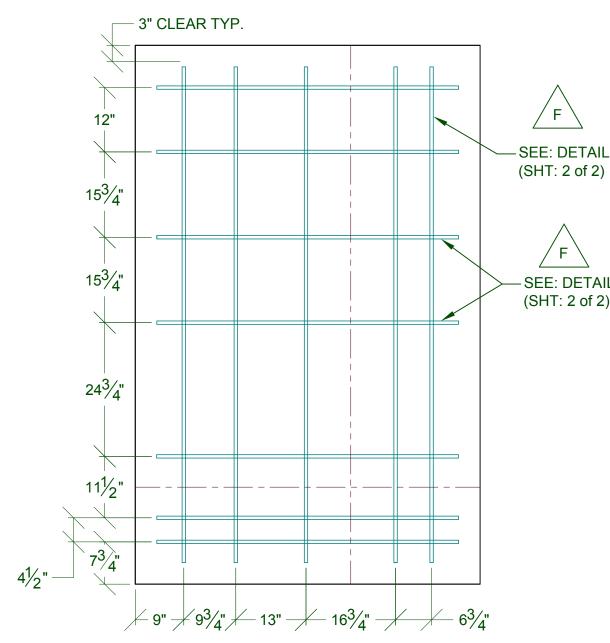
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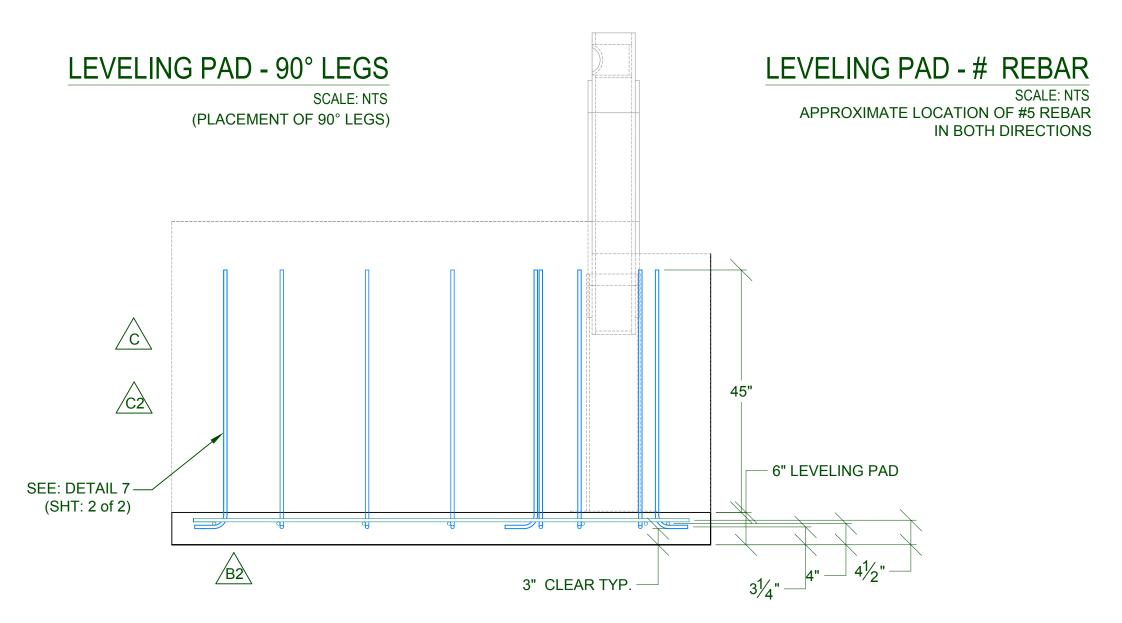
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MAXIMUM 0.50 WATER CONTENT.
6% AIR CONTENT
4" SLUMP

REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM A-615) WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.

CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".







LEVELING PAD REINFORCEMENT PLAN SECTION

SCALE: NTS

								DO NO	OT SCALE	NOTICE	Date:	12/27/12	AutoGate
Rev.:	Revisions:	Date:	Drn.By:	Ckd. By:	Rev.:	Revisions:	Date:	Drn.By:	Ckd. By:	THE INFORMATION CONTAINED ON THIS DOCUMENT IS	Date Di		Gate Entry Systems
F	STRAIGHT REBAR #5 WAS 94" LG. & #6 WAS 58" LG.	07/18/14	MKS	EGS	С	Changed the rebar style from T1 to S3 per ECR 010-13	1/28/13	SLD	KLL	CONFIDENTIAL. ANY DISSEMINATION, UNAPPROVED	Dm. By	/: SLD	
Е	ADDED NOTE THAT ALL REBAR IS TO BE #5	12/12/13	MKS	DMR	В3	Changed the rebar style	12/27/12	SLD	KLL	DISCLOSURE OR COPYING OF THIS INFORMATION IS	Ckd. B	y: KLL	Berlin Heights, Ohio FAX (419) 588-3514
D	R/H in titleblock was wrong - corrected the hand to L/H	10/02/13	MKS	DMR	B2	Changed leveling pad from 3" to 6"	08/24/12	MKS	DMR	STRICTLY PROHIBITED	Dwg.:	M-30 FOUND	ATION-Pad Details-OperEnd-L/H
C2	Changed location of Item 7 hook	1/28/13	SLD	KLL	B1	Changed pad shape	08/24/12	MKS	DMR	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			'
C1	Added rebar hook	1/28/13	SLD	KLL	Α	Revised - Engineered K4 Crash Foundation Details	12/22/08	MKS	DMR	ANGLES ± 1° X/X ± 1/32, .XX ± .01, .XXX ± .005	Title: IV	/I-30 SHIELD	Crash Gate Foundation-OperEnd

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REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM A-615) WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.

OPERATOR PAD

ROAD LEVEL

IS ELEVATED 6" OVER

SEE: DETAIL 1-

SEE: DETAIL 7-

NO HORIZ. REBAR IN

TOP 12" OF THE PAD.

SEE:

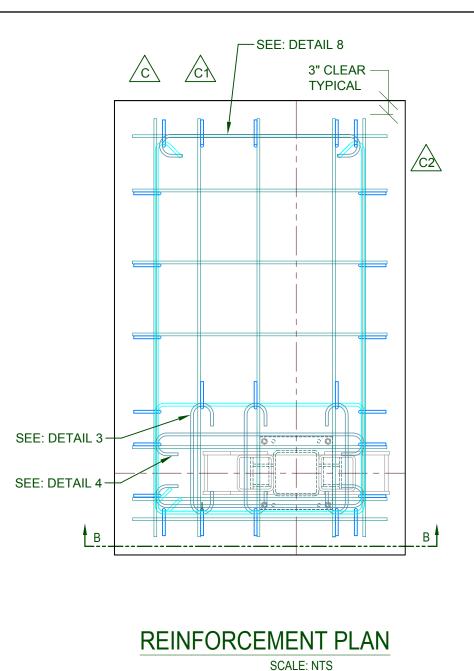
DETAIL 8

<u>/c</u>λ

SHEET 2 of 2

SEE: DETAIL 2-

CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".



3/4" STIFFENER PL.

(TYP. 4 PLACES)

TOP OF OPER. PAD

ROAD LEVEL

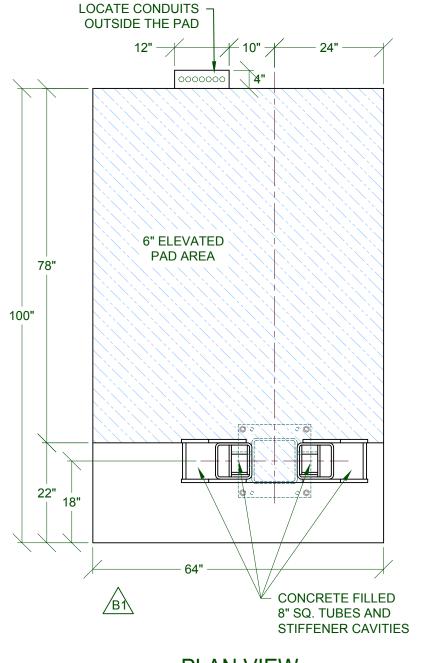
36" HOLD

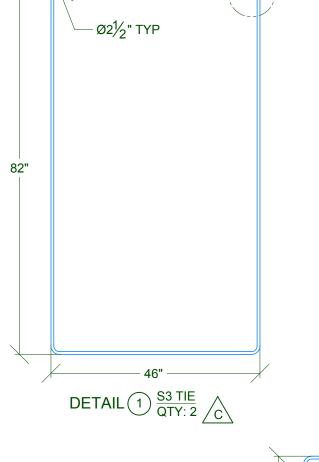
Ç OF PIN

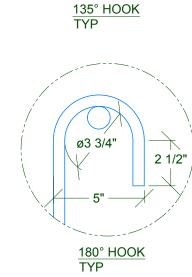
 $12\frac{1}{4}$ "

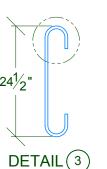
Added rebar hook

 $24\frac{1}{2}$ "





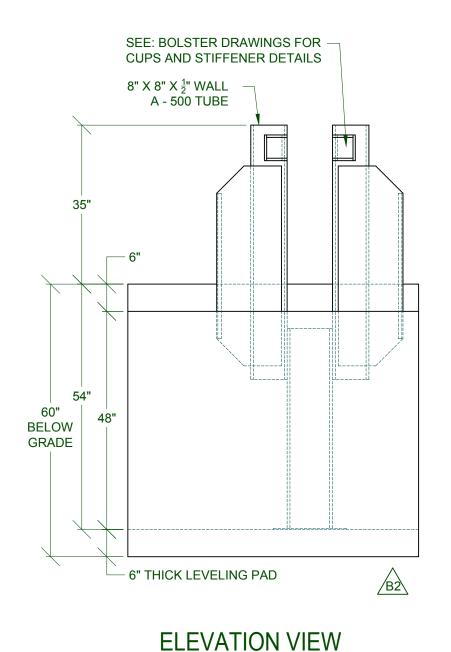




QTY: 3

 $24\frac{1}{2}$ " $\emptyset 2\frac{1}{2}$ " TYP DETAIL 2 $\frac{\text{T1 Tie}}{\text{QTY: 3}}$

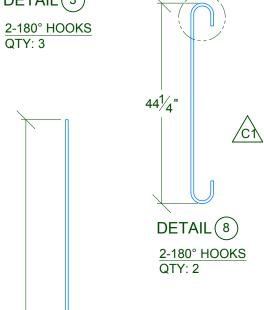
PLAN VIEW SCALE: NTS

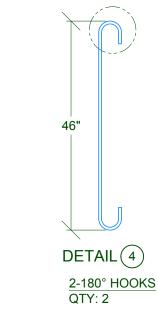


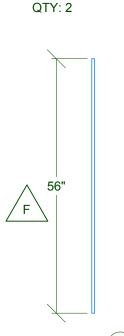
SCALE: NTS

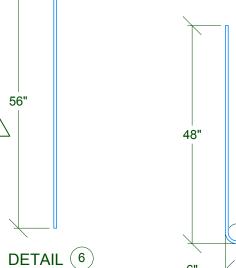
12/22/08

MKS









DETAIL 7

90° LEG QTY: 22

Date:

Ckd. By:

STRAIGHT QTY: 5

NOTICE

ON THIS DOCUMENT IS

CONFIDENTIAL, ANY

THIS INFORMATION IS STRICTLY PROHIBITED

ANGLES ± 1°

 $X/X \pm 1/32$, $.XX \pm .01$, $.XXX \pm .005$

NOTE: ALL REBAR TO BE #5

12/27/12

Drn. By: SLD

STRAIGHT

QTY: 7

REINFORCEMENT SECTION "A-A"
SCALE: NTS

-SEE: DETAIL 5

REINFORCEMENT SECTION "B-B"

1/28/13

SLD

-SEE: DETAIL 6

KLL

DO NOT SCALE THE INFORMATION CONTAINED Drn.By: Ckd. By: Ckd. By: Revisions: Date: Rev.: Date: Drn.By: STRAIGHT REBAR #5 WAS 94" LG. & #6 WAS 58" LG. 07/18/14 MKS EGS Changed the rebar style from T1 to S3 per ECR 010-13 |1/28/13 SLD DISSEMINATION, UNAPPROVED DISCLOSURE OR COPYING OF DMR ADDED NOTE THAT ALL REBAR IS TO BE #5 12/12/13 MKS B3 Changed the rebar style 12/27/12 SLD DMR R/H in titleblock was wrong - corrected the hand to L/H | 10/03/13 | B2 | Changed leveling pad from 3" to 6" DMR MKS 08/24/12 MKS 1/28/13 SLD KLL 08/24/12 MKS DMR DIMENSIONS ARE IN INCHES Changed location of Item 7 hook B1 | Changed pad shape

Revised - Engineered K4 Crash Foundation Details



Title: M-30 SHIELD Crash Gate Foundation-OperEnd

AutoGate

Dwg.: M-30 FOUNDATION-OperEnd-L/H JNLESS OTHERWISE SPECIFIED