

# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT End Treatment Component Checklist

Date Created: 4/1/2024

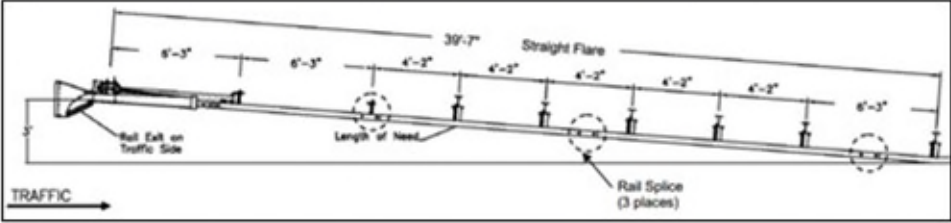
MFLEAT Inspection Checklist



Convex Radius

Concave Radius

1. Is there radius rail within the MFLEAT 39'-7" length?



39'-7" Straight Flare

6'-3" 6'-3" 4'-2" 4'-2" 4'-2" 4'-2" 4'-2" 4'-2" 6'-3"

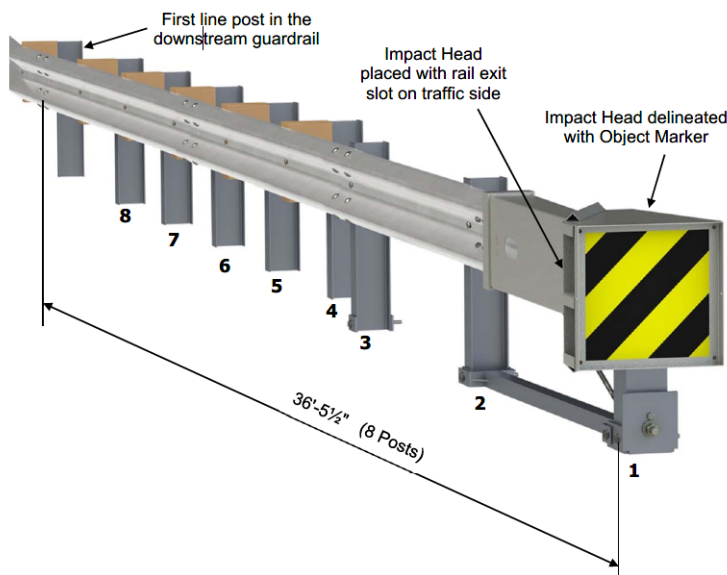
Rail Exit on Traffic Side

Length of Head

Rail Splice (3 places)

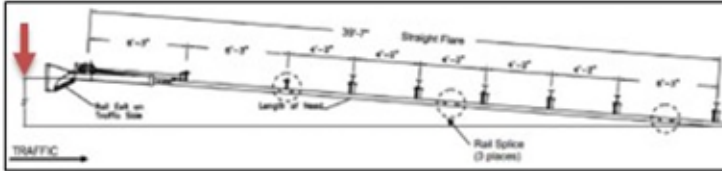
TRAFFIC →

<b>Answer:</b> Yes / No (circle answer)
<b>Correct Checklist Answer:</b> No
<b>Manufacturer Checklist Item: #2</b>
There is no radiused rail within the MFLEAT 39'-7" length.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



2. Has the MFLEAT been placed with a 3'-0" straight flare offset between posts #1 and #9 over the 39'-7" length?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #4**

The MFLEAT has been placed with a 3'-0" straight flare offset between posts #1 and #9 over the 39'-7" length.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

3. Is the end rail panel attached to post #1?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** No

**Manufacturer Checklist Item:** #5

The end rail panel is not attached to post #1.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

4. Are all other posts (2-8) attached to the rail?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #5**

All other posts are attached to the rail.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

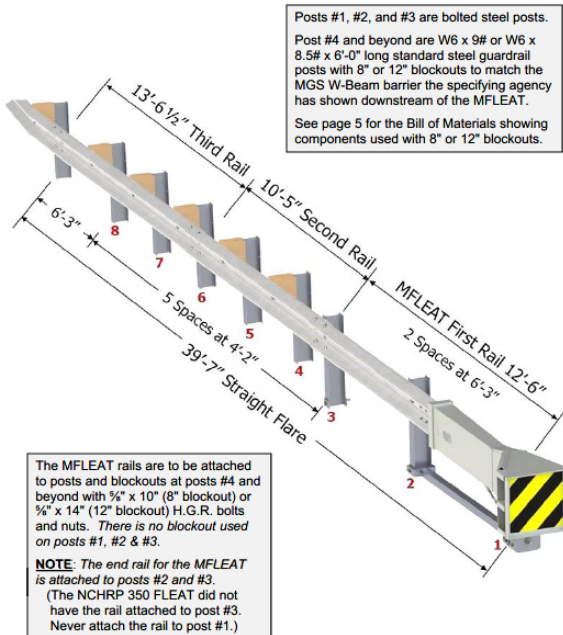
5. Does the end rail panel have ½" x 4" slots and is 12'-6" long?

Answer: Yes / No (circle answer)

Correct Checklist Answer: Yes

Manufacturer Checklist Item: #6

The end rail panel has ½" x 4" slots and is 12'-6" long.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



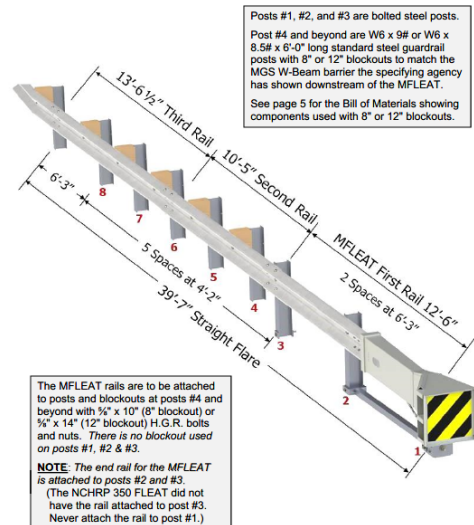
6. Is the second rail panel 10'-5" long to establish the mid-span splice between posts #5 & #6.

Answer: Yes / No (circle answer)

Correct Checklist Answer: Yes

Manufacturer Checklist Item: #6

The second rail must be 10'-5" long to establish the mid-span splice between posts #5 & #6.



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## MFLEAT Inspection Checklist

7. Is the third rail length 13'-6 1/2" long?

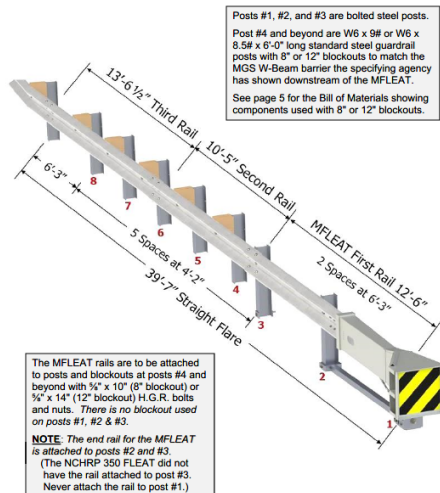


Answer: Yes / No (circle answer)

Correct Checklist Answer: Yes

Manufacturer Checklist Item: #6

The third rail length is 13'-6 1/2" long.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



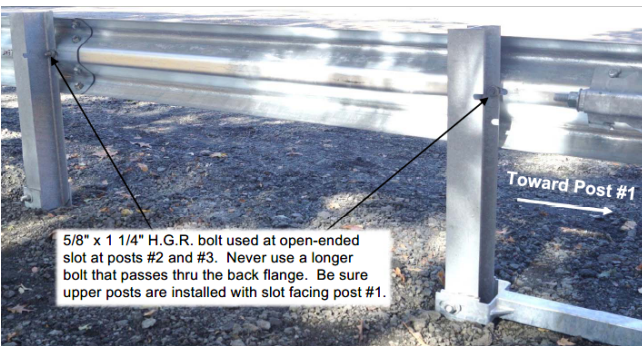
8. Is the  $\frac{3}{4}$ " x 8  $\frac{1}{2}$ " hinge bolt at posts #2 and #3 on the downstream sides of the posts?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #7**

The  $\frac{3}{4}$ " x 8  $\frac{1}{2}$ " hinge bolt at posts #2 and #3 is on the downstream sides of the posts.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

9. Is the  $\frac{5}{8}$ " x 9" bolt connecting upper and lower post #1 on the upstream side of the post?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #8

The  $\frac{5}{8}$ " x 9" bolt connecting upper and lower post #1 is on the upstream side of the post.



5/8" x 9" hex bolt, nut, & washer at post #1 on upstream side of the post

5/8" x 9" hex bolt, nut, & two washers through the extended side plates of lower post #1 to attach the ground strut to lower post #1

# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

10. Do the lower stubs at posts #1, #2, and #3 protrude more than 4" above the ground line? (Measured by the AASHTO 5' cord method)

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** No

**Manufacturer Checklist Item: #9**

The lower stubs at posts #1, #2, and #3 does not protrude more than 4" above the ground line (measured by the AASHTO 5' cord method). Site grading may be necessary to meet this requirement.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

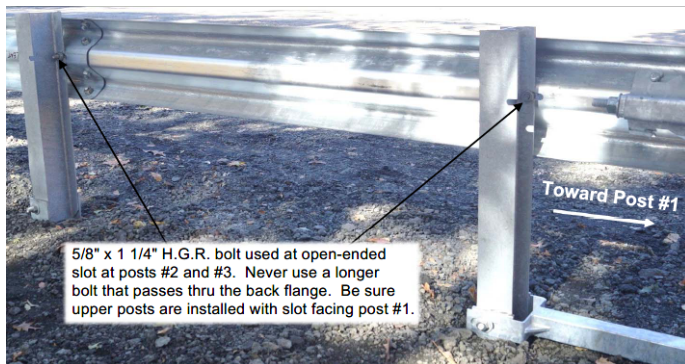
11. At posts #2 and #3, are the open-ended slots at the post bolts on the upstream side of the posts?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #10**

At posts #2 and #3, the open-ended slot at the post bolts are on the upstream side of the posts.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

12. Are standard steel W6x9# x 6'-0" guardrail posts used at post locations #4 to #8?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

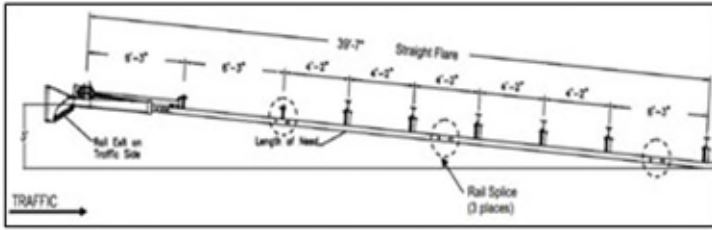
**Manufacturer Checklist Item:** #11

Standard steel W6x9# x 6'-0" guardrail posts are used at post locations #4 to #8.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



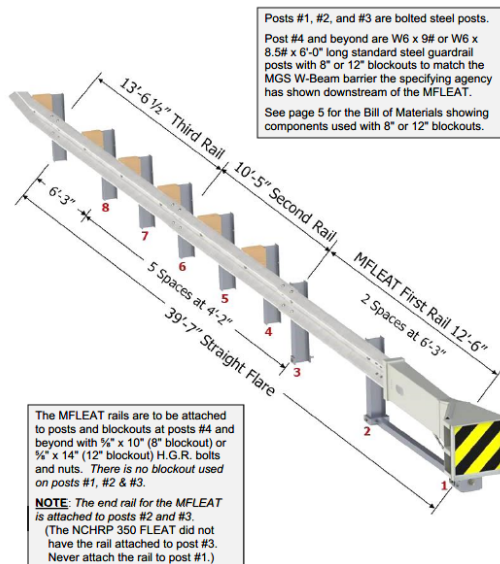
13. Is the post spacing within the MFLEAT (beginning at Post #1) 2 spaces at 6'-3" centers, 5 spaces at 4'-2" centers, and at Post #8 continuing 6'-3" centers thru the guardrail?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #12**

The post spacing within the MFLEAT (beginning at Post #1) is 2 spaces at 6'-3" centers, 5 spaces at 4'-2" centers, and at Post #8 continuing 6'-3" centers thru the MGS Guardrail.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

14. Are the blockouts 8" or 12" deep?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #13

The blockouts are 8" or 12" deep depending on State or local agency standards.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



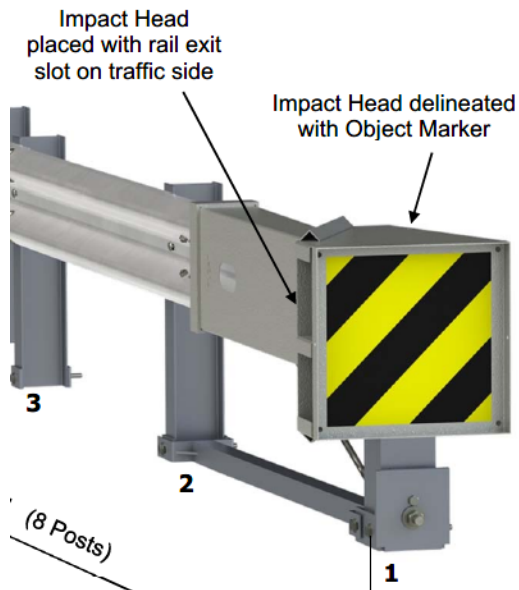
15. Is the MFLEAT impact head exit slot pointed toward traffic?

**Answer:** Yes / No (circle answer)


**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #14**

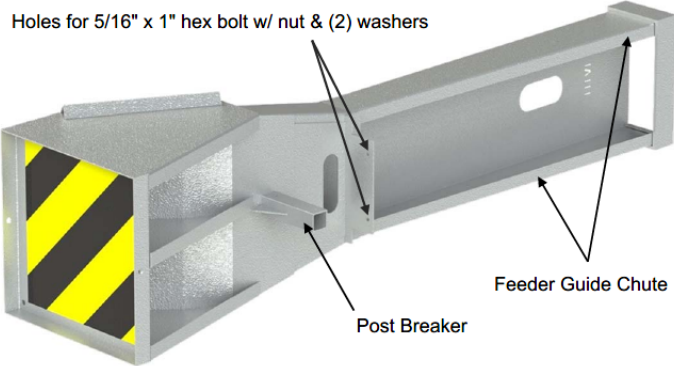
The MFLEAT impact head exit slot is toward traffic.



# ON-SITE GUARDRAIL GARDEN TRAINING

	<b>MFLEAT Inspection Checklist</b>
	16. Are there two 5/16" x 1" hex bolts attaching the impact head to the 6" x 6" x 1/8" upper post #1?

<b>Answer:</b> Yes / No (circle answer)
<b>Correct Checklist Answer:</b> Yes
<b>Manufacturer Checklist Item:</b> #15
Two 5/16" x 1" hex bolts attaching impact head to 6" x 6" x 1/8" upper post #1 are secured.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

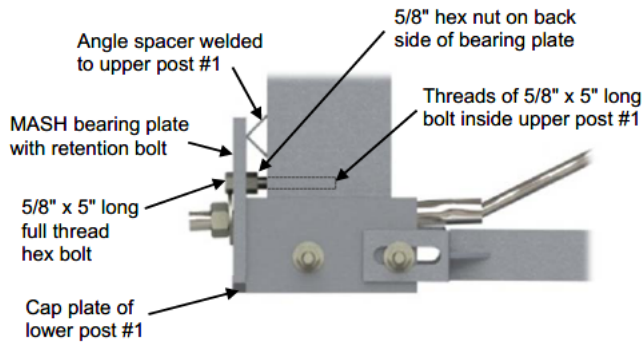
17. Is the 8" x 8" bearing plate at post #1 correctly positioned with the 5" dimension up and 3" dimension down and setting on the extended cap plate of lower post #1?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #16

The 8" x 8" bearing plate at post #1 is correctly positioned with the 5" dimension up and 3" dimension down and setting on the extended cap plate of lower post #1.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

18. Is the anchor cable taut and correctly installed?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #16

The anchor cable is taut and correctly installed.



Anchor cable is fed inside through the MFLEAT feeder chute.

# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

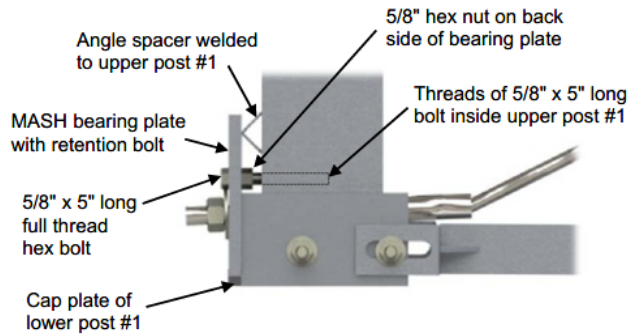
19. Is a 5/8" x 5" long bolt secured to the bearing plate and placed in the hole of upper post #1?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #17

A 5/8" x 5" long bolt is secured to the bearing plate and placed in the hole of upper post #1.



# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

20. Is a ground strut secured between posts #1 & #2 using the  $\frac{3}{4}$ " x  $8\frac{1}{2}$ " hinge bolt at post #2 and a second  $\frac{5}{8}$ " x 9" hex bolt at post location #1?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item: #18**

A ground strut is secured between posts #1 & #2 using the  $\frac{3}{4}$ " x  $8\frac{1}{2}$ " hinge bolt at post #2 and a second  $\frac{5}{8}$ " x 9" hex bolt at post location #1.



$\frac{5}{8}$ " x 9" hex bolt, nut, & washer at post #1 on upstream side of the post

$\frac{5}{8}$ " x 9" hex bolt, nut, & two washers through the extended side plates of lower post #1 to attach the ground strut to lower post #1

Longer tabs on Ground Strut attached to post #2

$\frac{3}{4}$ " x  $8\frac{1}{2}$ " hex bolt, & nut at post #2 on downstream side of the post. A  $\frac{3}{4}$ " washer is not needed but may be used.

# ON-SITE GUARDRAIL GARDEN TRAINING



## MFLEAT Inspection Checklist

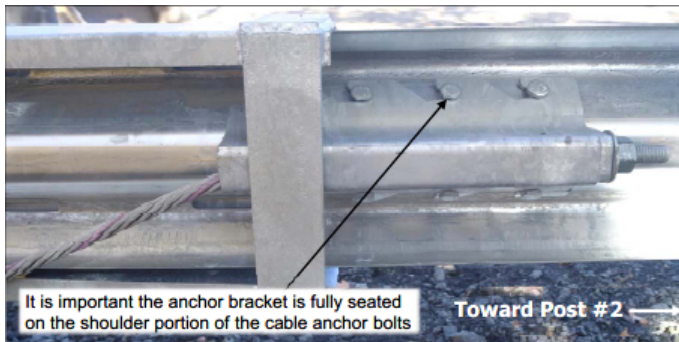
21. Are the cable anchor bracket shoulder bolts properly attached to the W-Beam guardrail and the cable anchor bracket fully seated on the shoulder portion of the bolts?

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** Yes

**Manufacturer Checklist Item:** #19

The cable anchor bracket shoulder bolts are properly attached to the W-Beam guardrail and the cable anchor bracket is fully seated on the shoulder portion of the bolts.



# ON-SITE GUARDRAIL GARDEN TRAINING

## MFLEAT Inspection Checklist



22. Are washers used on the face of the rail apart from the cable anchor bracket bolts? (The face of the rail can only have washers within the teal square.)

**Answer:** Yes / No (circle answer)

**Correct Checklist Answer:** No

**Manufacturer Checklist Item:** #21

No washers are used on the face of the rail except at the cable anchor bracket bolts.

