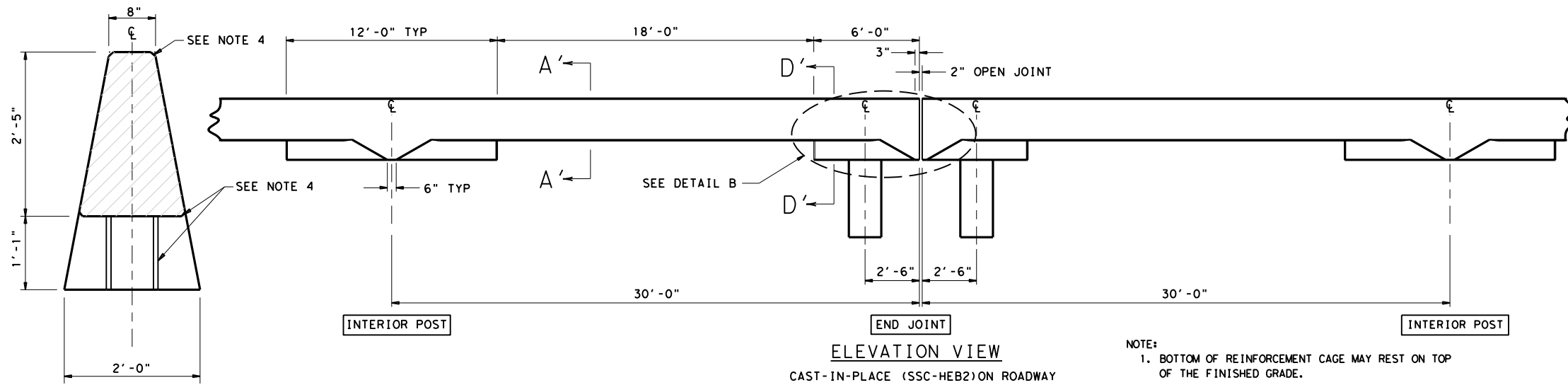


DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY TXDOT FOR ANY PURPOSE WHATSOEVER. TXDOT ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

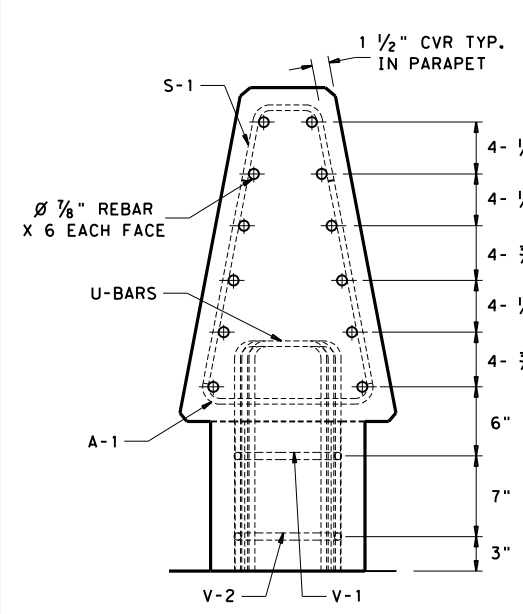
DATE: FILE:



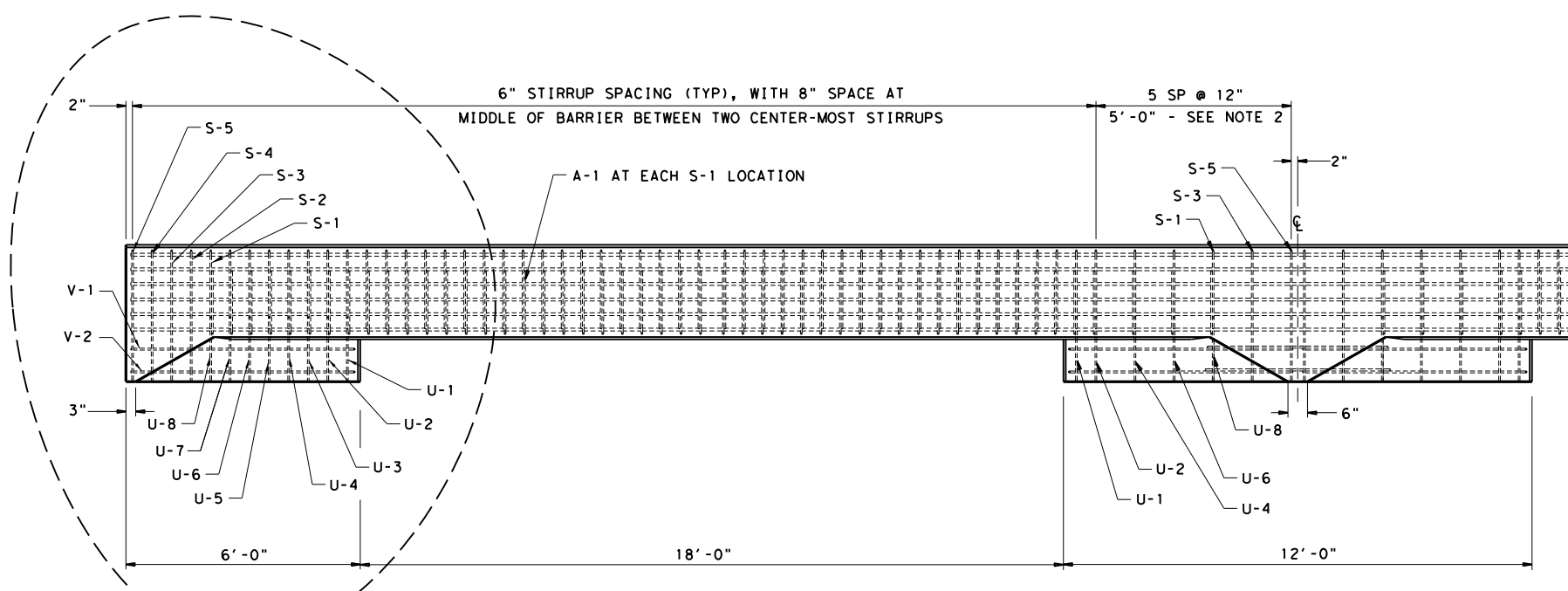
- GENERAL NOTES**
1. CONCRETE SHALL BE CLASS C. UNLESS OTHERWISE SPECIFIED IN THE PLANS. CONCRETE STRENGTH IS 3600 PSI.
 2. THESE DETAILS COVER BARRIER PER ITEM 514, "PERMANENT CONCRETE TRAFFIC BARRIER".
 3. CAST-IN-PLACE BARRIER MAY BE SLIP FORMED. BRACING MAY BE TIED OR TACK WELDED TO THE REINFORCEMENT CAGE TO PROVIDE CAGE STABILITY. DO NOT WELD TO ANCHORAGE.
 4. 1" CHAMFER (3/4" EACH WAY) ON EDGES OF PARAPET AND CORNERS OF POSTS WHERE INDICATED.
 5. SOME REBAR NOT SHOWN FOR CLARITY.
 6. ALL REBAR IS GRADE 60 AND SHALL CONFORM TO ASTM A615. REBAR DIMENSIONS IN ELEVATION AND SECTION VIEW ARE TO CENTER UNLESS OTHERWISE INDICATED BY "CVR" (COVER). LAP LENGTH FOR 7/8" DIAMETER BARS IS 52".
 7. THIS BARRIER SYSTEM HAD APPROXIMATELY 9.5 INCHES OF MAXIMUM DYNAMIC DEFLECTION FOR MASH TL-4 IMPACT CONDITIONS FOR THE SHORTEST SEGMENT LENGTH OF 30 FT. LONGER SEGMENT LENGTHS WILL HAVE LESS DEFLECTION.

- NOTE:**
1. BOTTOM OF REINFORCEMENT CAGE MAY REST ON TOP OF THE FINISHED GRADE.
 2. BARRIER MAY BE A MINIMUM OF 30' LONG, OR A MAXIMUM OF 90' LONG BETWEEN JOINTS.

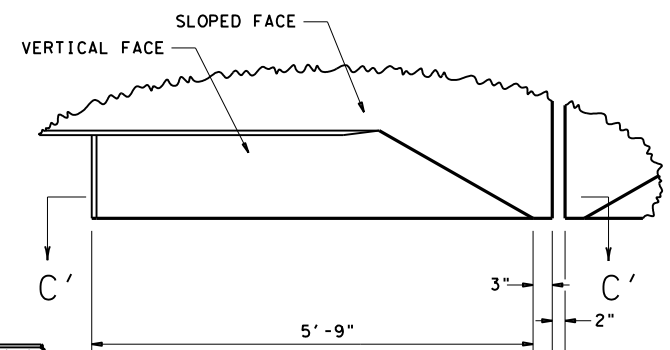
SECTION A'-A'
CAST-IN-PLACE (CIP) BARRIER
BARRIER IS SYMMETRICAL ABOUT THE CENTER LINE



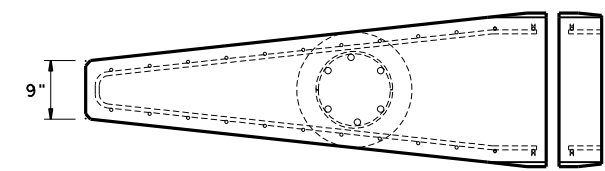
SECTION D'-D'



ELEVATION VIEW AT ENDS AND INTERIOR

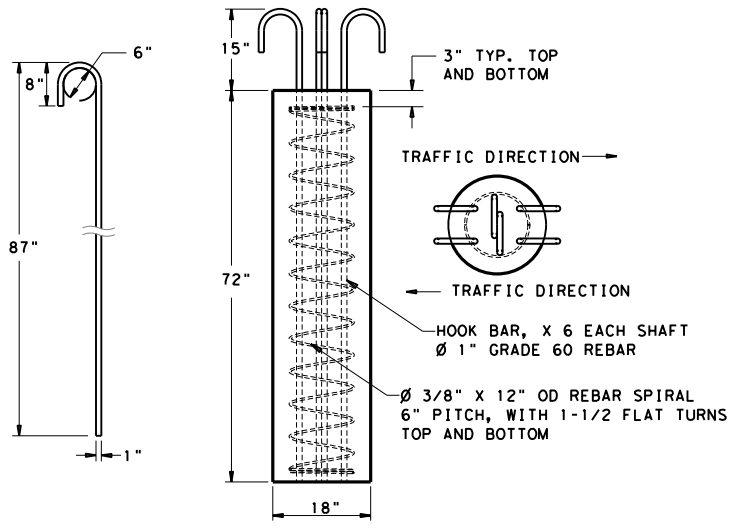


DETAIL B
DIMENSIONS TYPICAL AT EACH END OF EACH SECTION. 2" OPENING TYPICAL AT EACH JOINT.

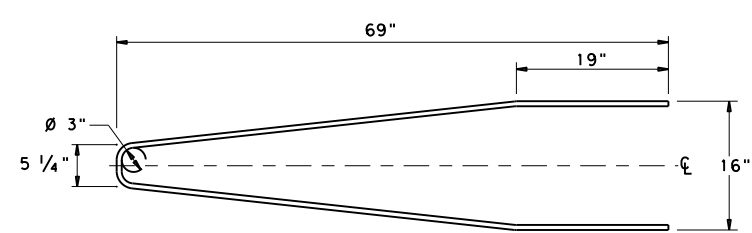


SECTION C'-C'

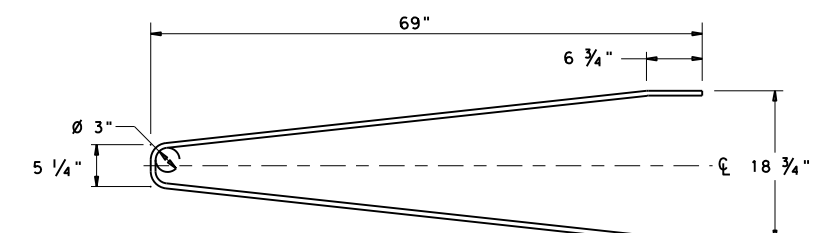
- NOTES:**
1. 12" STIRRUP SPACING ONLY AT INTERIOR POSTS, AS SHOWN. 6" STIRRUP SPACING IS REQUIRED AT ALL END POSTS AND EACH SIDE OF ALL 2" JOINTS.



SHAFT DETAILS



V-1 BAR (Ø 5/8" GRADE 60 REBAR)



V-2 BAR (Ø 5/8" GRADE 60 REBAR)

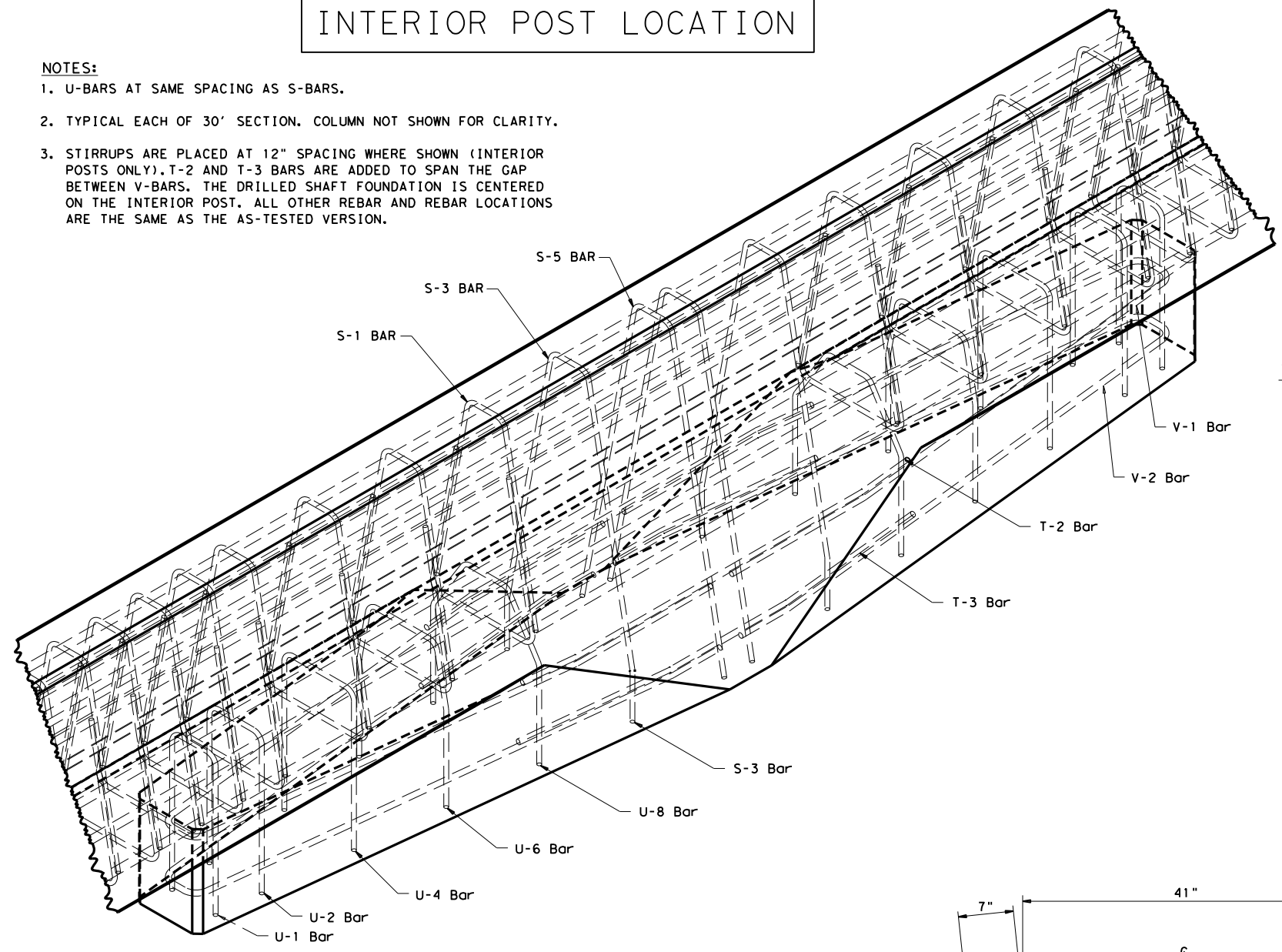
		Design Division Standard	
SINGLE SLOPE CONCRETE HYDRAULICALLY EFFICIENT BARRIER (HEB) CAST-IN-PLACE (FLEXIBLE PAVEMENT) TL-4 MASH COMPLIANT			
SSCHEB2-21			
FILE: sscheb221.dgn	DN: TXDOT	CK: KM	DW: AG
© TXDOT: FEBRUARY 2021	CONT	SECT	JOB
REVISIONS		HIGHWAY	
DIST	COUNTY	SHEET NO.	

DISCLAIMER: THE USE OF THIS STANDARD IS COVERED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY TXDOT FOR ANY PURPOSE WHATSOEVER. TXDOT ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

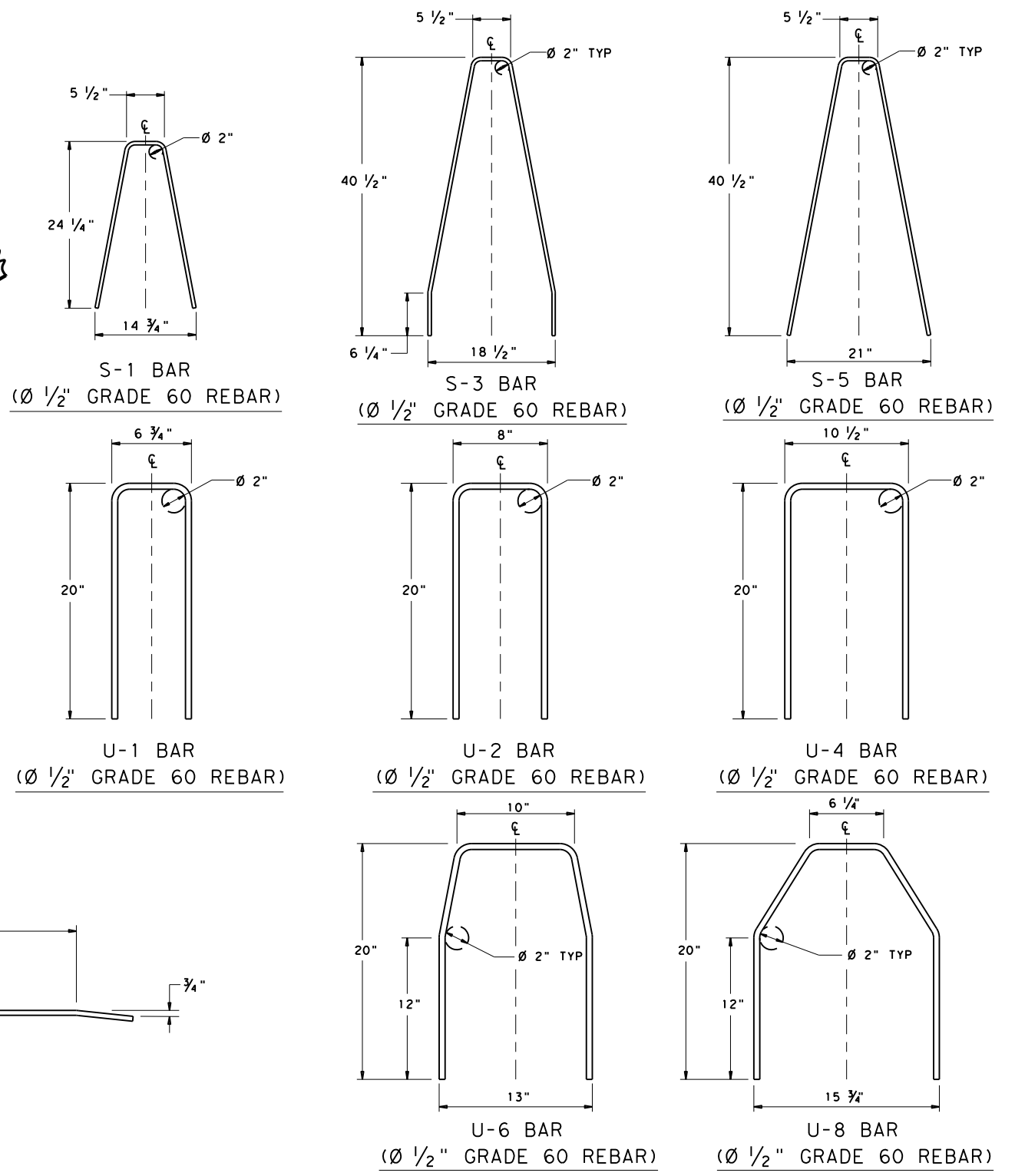
INTERIOR POST LOCATION

NOTES:

1. U-BARS AT SAME SPACING AS S-BARS.
2. TYPICAL EACH OF 30' SECTION. COLUMN NOT SHOWN FOR CLARITY.
3. STIRRUPS ARE PLACED AT 12" SPACING WHERE SHOWN (INTERIOR POSTS ONLY). T-2 AND T-3 BARS ARE ADDED TO SPAN THE GAP BETWEEN V-BARS. THE DRILLED SHAFT FOUNDATION IS CENTERED ON THE INTERIOR POST. ALL OTHER REBAR AND REBAR LOCATIONS ARE THE SAME AS THE AS-TESTED VERSION.



DETAIL C: ISOMETRIC VIEW AT INTERIOR POST

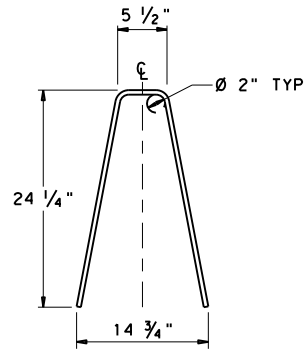


		Design Division Standard	
SINGLE SLOPE CONCRETE HYDRAULICALLY EFFICIENT BARRIER (HEB) CAST-IN-PLACE (FLEXIBLE PAVEMENT) TL-4 MASH COMPLIANT			
SSCHEB2-21			
FILE: sscheb221.dgn	DN: TXDOT	CK: KM	DW: AG
© TXDOT: FEBRUARY 2021	CONT	SECT	JOB
REVISIONS		HIGHWAY	
DIST		COUNTY	SHEET NO.

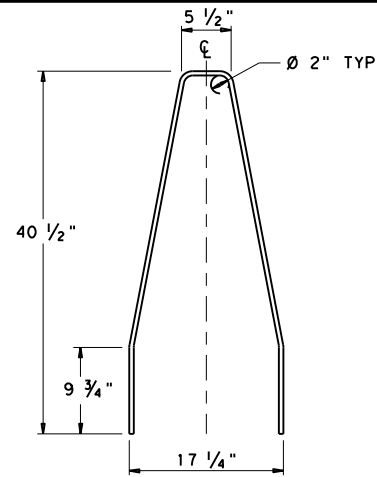
DATE:
FILE:

DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY TXDOT FOR ANY PURPOSE WHATSOEVER. TXDOT ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

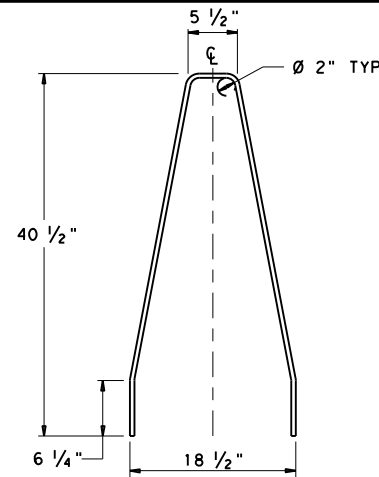
DATE:
FILE:



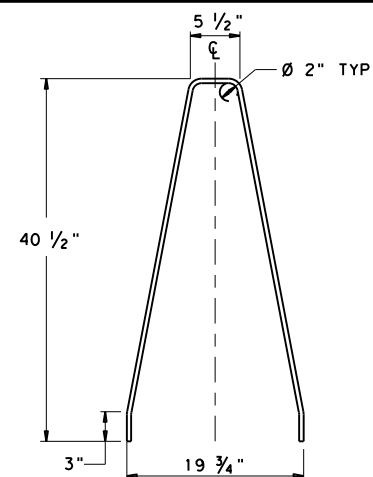
S-1 BAR
(Ø 1/2" GRADE 60 REBAR)



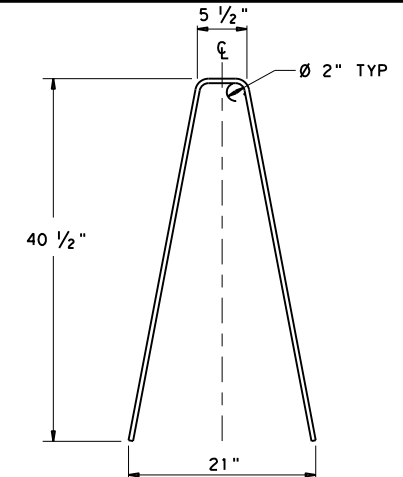
S-2 BAR
(Ø 1/2" GRADE 60 REBAR)



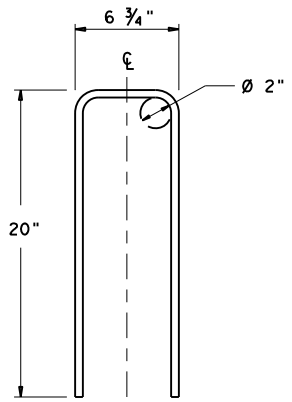
S-3 BAR
(Ø 1/2" GRADE 60 REBAR)



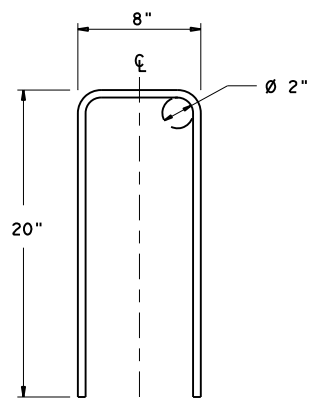
S-4 BAR
(Ø 1/2" GRADE 60 REBAR)



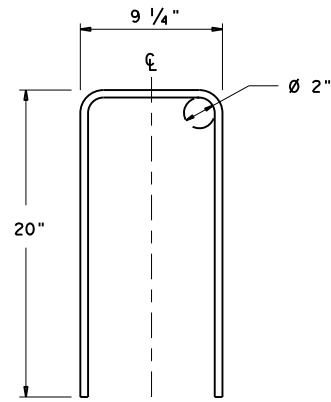
S-5 BAR
(Ø 1/2" GRADE 60 REBAR)



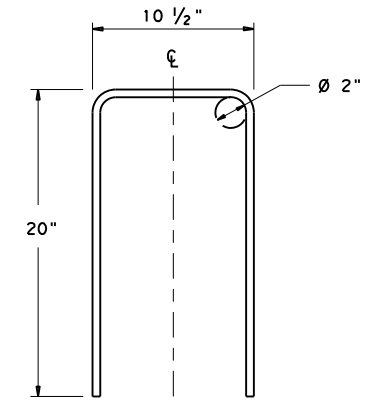
U-1 BAR
(Ø 1/2" GRADE 60 REBAR)



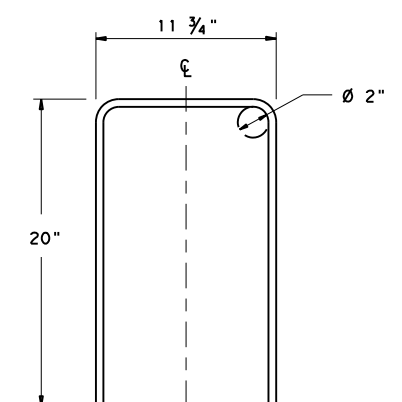
U-2 BAR
(Ø 1/2" GRADE 60 REBAR)



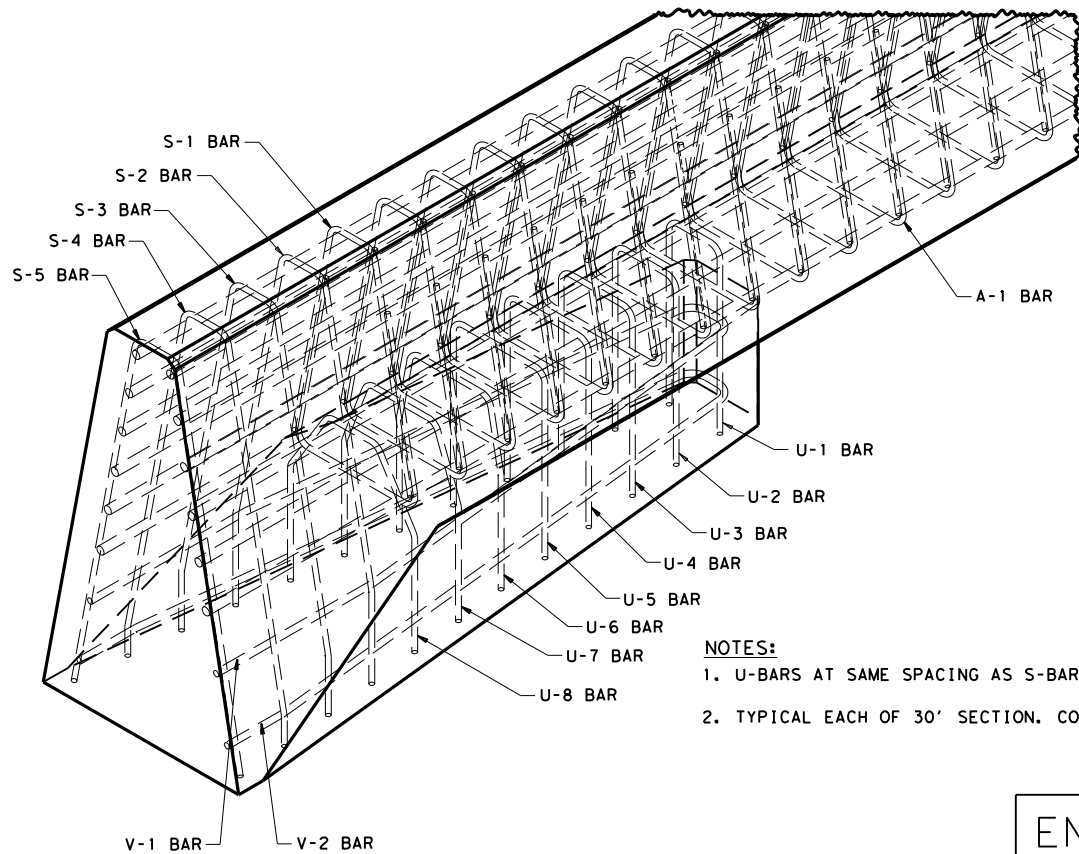
U-3 BAR
(Ø 1/2" GRADE 60 REBAR)



U-4 BAR
(Ø 1/2" GRADE 60 REBAR)



U-5 BAR
(Ø 1/2" GRADE 60 REBAR)

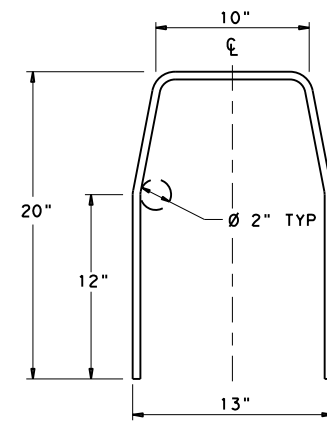


DETAIL C: ISO VIEW AT END

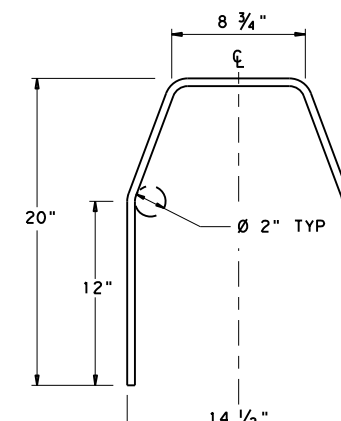
NOTES:

1. U-BARS AT SAME SPACING AS S-BARS.
2. TYPICAL EACH OF 30' SECTION. COLUMN NOT SHOWN FOR CLARITY.

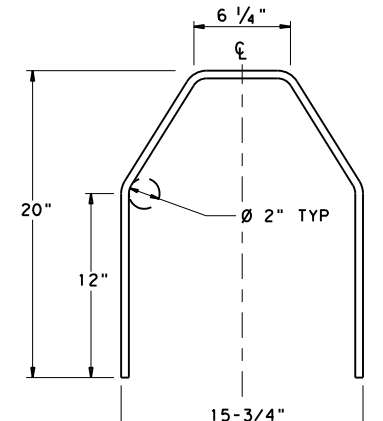
END POST LOCATION



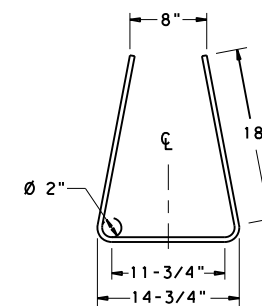
U-6 BAR
(Ø 1/2" GRADE 60 REBAR)



U-7 BAR
(Ø 1/2" GRADE 60 REBAR)



U-8 BAR
(Ø 1/2" GRADE 60 REBAR)



A-1 BAR (Ø 1/2" GRADE 60 REBAR)

SHEET 3 OF 3

		Design Division Standard	
SINGLE SLOPE CONCRETE HYDRAULICALLY EFFICIENT BARRIER (HEB) CAST-IN-PLACE (FLEXIBLE PAVEMENT) TL-4 MASH COMPLIANT			
SSCHEB2-21			
FILE: sscheb221.dgn	DN: TXDOT	CK: KM	DW: AG
© TXDOT: FEBRUARY 2021	CONT	SECT	JOB
REVISIONS			
DIST	COUNTY	SHEET NO.	