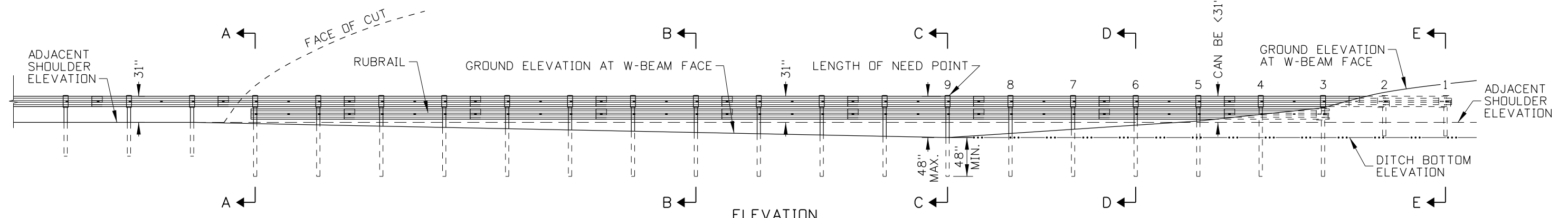
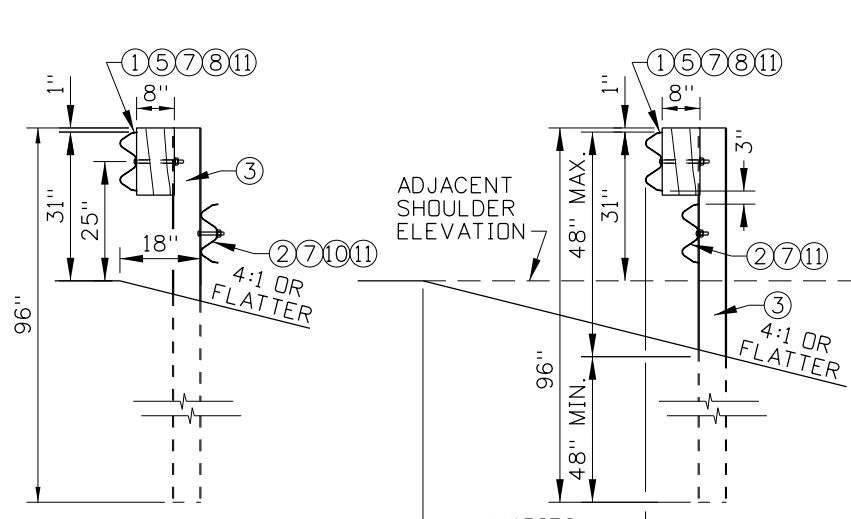


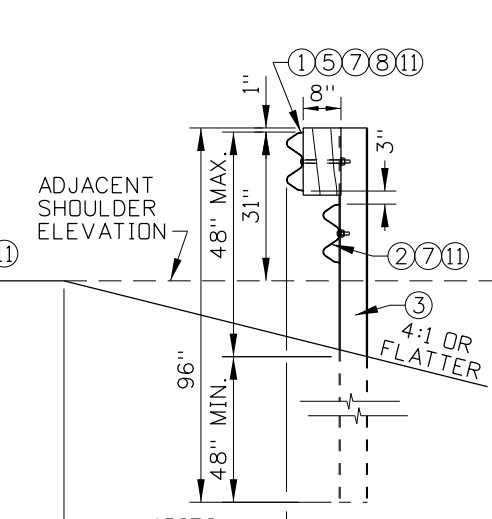
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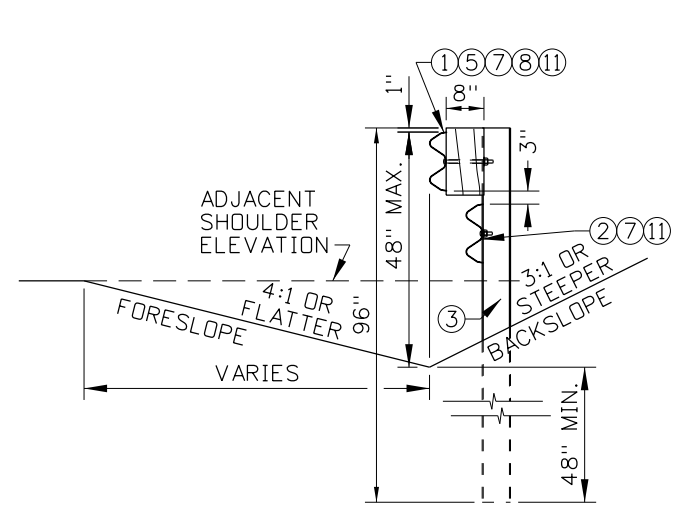
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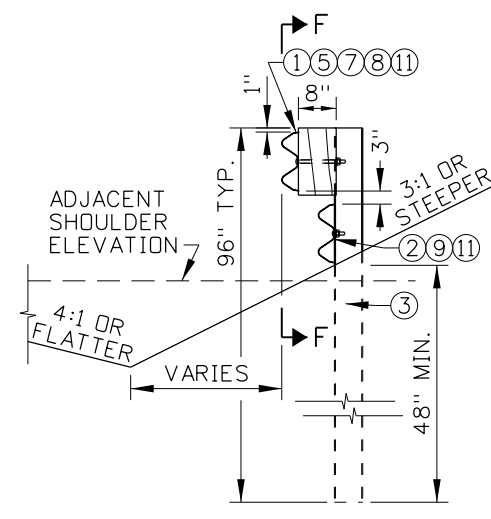
SECTION A-A



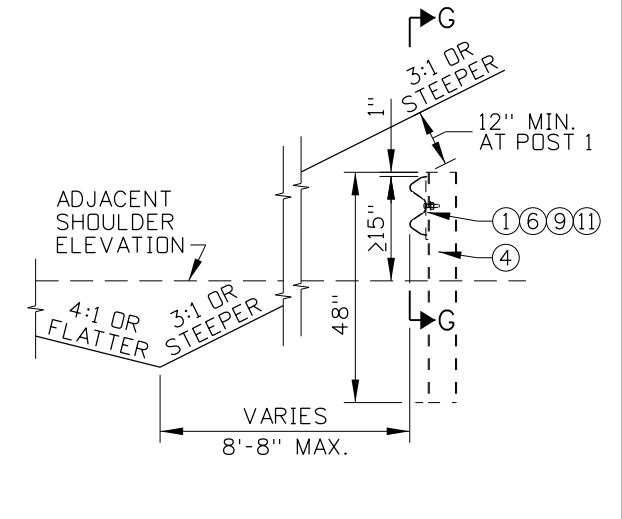
SECTION B-B



SECTION C-C  
POST 9



SECTION D-D  
POSTS 3 TO 8  
(SEE NOTE NO. 6)



SECTION E-E  
POSTS 1 TO 2

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	03-19	RDL						

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 DRAWING DATE: JUNE, 2017

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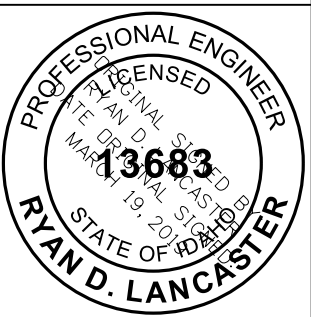


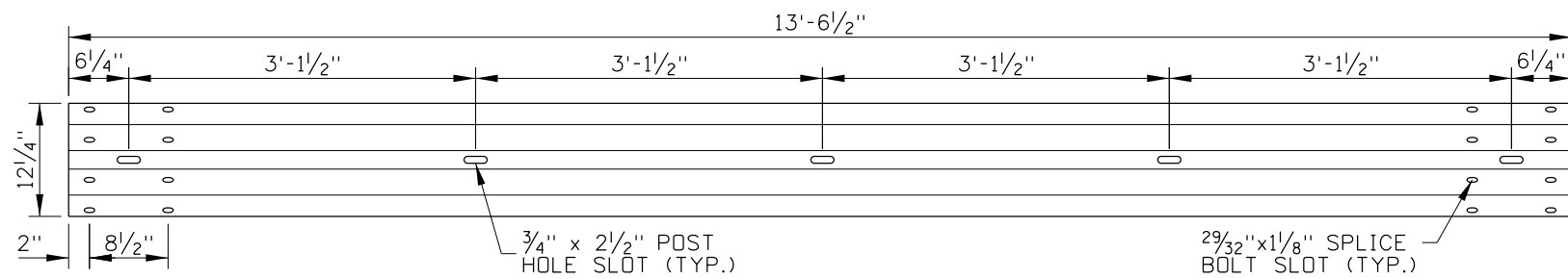
ORIGINAL SIGNED BY: KEVIN SABLAN  
 DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING  
**GUARDRAIL TERMINAL BURIED-IN-BACKSLOPE**

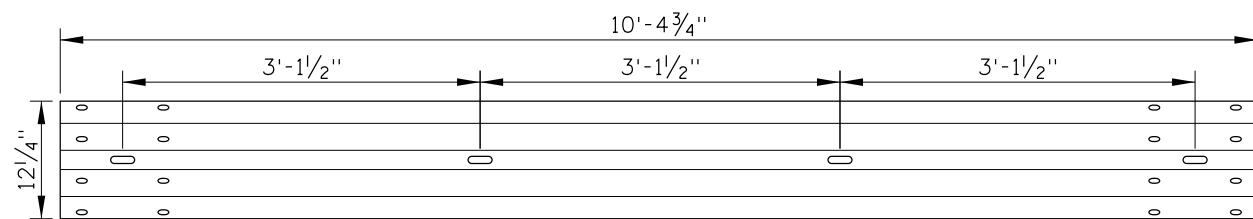
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 STANDARD DRAWING NO. 612-6  
 SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

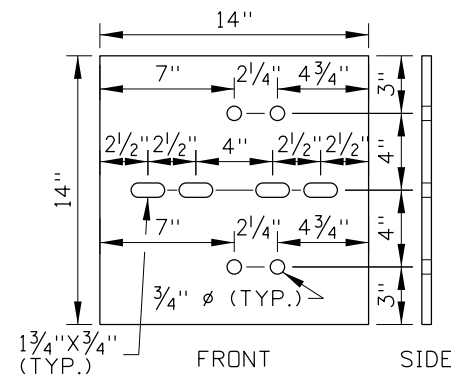




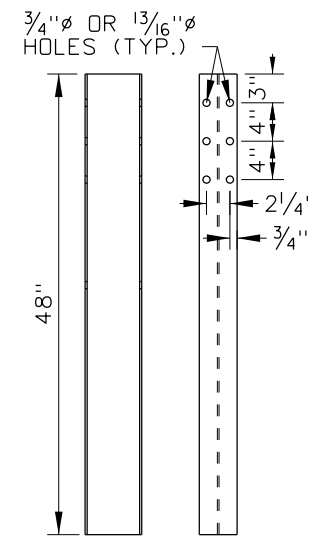
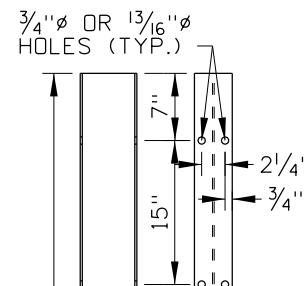
①② 4-SPACE W-BEAM GUARDRAIL  
RWM04a



①② MODIFIED 4-SPACE W-BEAM GUARDRAIL DETAIL  
RWM14a (MODIFIED)  
(DIMENSIONS NOT SHOWN ARE UNMODIFIED FROM RWM14a)



⑥ GALVANIZED STEEL PLATE DETAIL



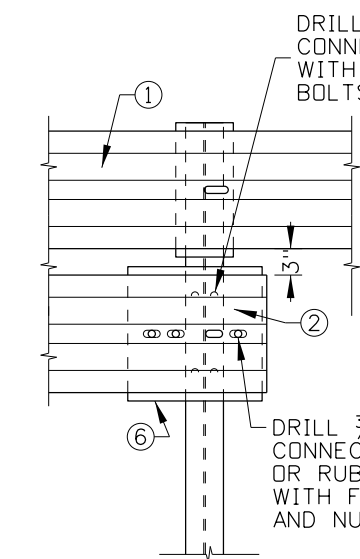
W6x9 OR W6x8.5 STRUCTURAL SHAPE  
POSTS 1 AND 2 PWE--  
W6x9 OR W6x8.5 STRUCTURAL SHAPE  
POST 3 TO SECTION A-A PWE--

③④ WIDE-FLANGE POST DETAILS

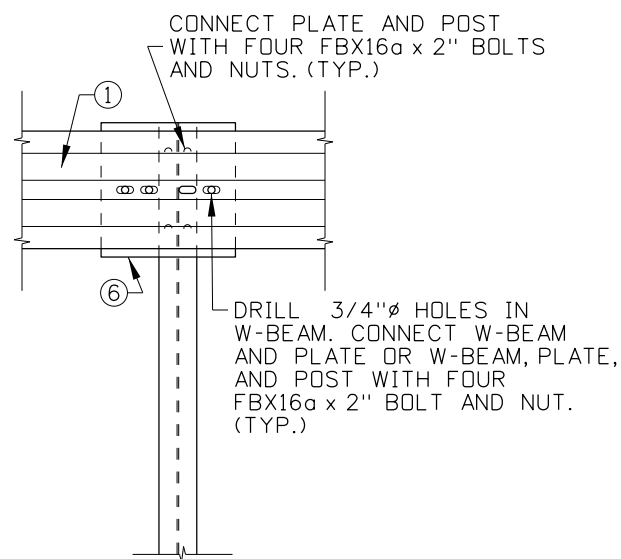
BURIED-IN-BACKSLOPE TERMINAL HARDWARE COMPONENTS TABLE		
ITEM NO.	COMPONENT DESCRIPTION	TF-13 NAME
①	4-SPACE W-BEAM GUARDRAIL (W-BEAM)	RWM14a
②	4-SPACE W-BEAM GUARDRAIL (RUBRAIL)	RWM14a
③	96" WIDE-FLANGE GUARDRAIL POSTS	PWE--
④	48" WIDE-FLANGE GUARDRAIL POSTS	PWE--
⑤	W-BEAM BLOCKOUT	PDB01b OR POLYETHYLENE
⑥	GALVANIZED STEEL PLATE	-
⑦	5/8" GUARDRAIL SPLICE BOLT AND RECESSED NUT	FBB01
⑧	5/8" GUARDRAIL BOLT AND RECESSED NUT	FBB03
⑨	5/8" X 2" HEX HEAD BOLT & NUT	FBX16a
⑩	5/8" X 5" HEX HEAD BOLT & NUT	FBX16a
⑪	5/8" FLAT WASHER	FWC16a

NOTES

- USE THE BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL WHERE A NATURAL BACKSLOPE IS REASONABLY CLOSE TO THE POINT WHERE THE BARRIER IS INTRODUCED. THE BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL ELIMINATES THE POSSIBILITY OF AN END-ON IMPACT WITH THE GUARDRAIL END AND REDUCES THE LIKELIHOOD OF VEHICULAR INTRUSION BEHIND THE BARRIER. THE BURIED-IN-BACKSLOPE TERMINAL SHOWN IS A MASH TEST LEVEL 3 TERMINAL.
- HAZARD MAY BE THE SLOPE EMBANKMENT OR OTHER ROADSIDE HAZARD. PROVIDE THE FOLLOWING TERMINAL LENGTHS BETWEEN THE LENGTH OF NEED POINT AND THE HAZARD FOR THE FOLLOWING BACKSLOPE CONDITIONS:
  - 2:1 BACKSLOPE - 75' OR MORE TO HAZARD
  - 2.5:1 OR FLATTER BACKSLOPE - PROVIDE LENGTH OF NEED CALCULATED BY FORMULA
  - 1:1 OR STEEPER BACKSLOPE - ANCHOR AS SOON AS PRACTICAL
- THE FLARE RATES SHOWN CAN BE FLATTENED IF POST 1 CAN BE BURIED 12" DEEP WHILE KEEPING THE TOP OF THE W-BEAM RAIL PARALLEL TO THE ROADWAY (OR DITCH) ELEVATION.
- SPACE POSTS 6'-3". SPLICE W-BEAM AND RUBRAIL SECTIONS BETWEEN POSTS.
- ENSURE THAT THE TOP OF THE GUARDRAIL IS 31" ABOVE THE ADJACENT SHOULDER ELEVATION UNTIL THE DISTANCE BETWEEN THE TOP OF THE GUARDRAIL AND THE DITCH SURFACE DIRECTLY BENEATH THE GUARDRAIL IS 48". BEYOND THAT POINT, REDUCE THE HEIGHT OF THE GUARDRAIL RELATIVE TO THE SHOULDER ELEVATION TO ENSURE 48" MAXIMUM GUARDRAIL HEIGHT. THE HEIGHT OF THE GUARDRAIL BETWEEN POSTS 8 AND 1 MAY BE REDUCED, IF NECESSARY AND ON A STRAIGHT TAPER, TO ENSURE THE GUARDRAIL IS BURIED 12" DEEP AT POST 1 AND THE RUBRAIL END IS BURIED AT POST 3.
- POSTS 3 THROUGH 8 CAN BE SHORTER THAN 96" IF THE GUARDRAIL HEIGHT IS IN ACCORDANCE WITH NOTE NO. 5 AND AT LEAST 48" OF THE POST IS EMBEDDED IN SOIL.
- ATTACH THE RUBRAIL TO THE BACK OF THE LAST 96" POST. FIELD BEND THE RUBRAIL TO ATTACH IT TO THE BACK OF THE LAST 96" POST.
- PAINT DRILLED HOLES WITH TWO THICK APPLICATIONS OF ZINC-RICH PAINT THAT MEETS MIL-P-21035.
- DRAWING NOT TO SCALE.



SECTION F-F  
POST 3 ONLY  
NO BOLTS SHOWN FOR CLARITY



SECTION G-G  
POSTS 1 AND 2  
NO BOLTS SHOWN FOR CLARITY

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
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IDAHO TRANSPORTATION DEPARTMENT  
BOISE IDAHO

ORIGINAL SIGNED BY: KEVIN SABLAN  
DESIGN/TRAFFIC SERVICES ENGINEER

STANDARD DRAWING  
GUARDRAIL TERMINAL BURIED-IN-BACKSLOPE

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho  
English  
STANDARD DRAWING NO. 612-6  
SHEET 2 OF 2

PROFESSIONAL ENGINEER  
LICENSED  
13683  
RYAN D. LANCASTER  
STATE OF IDAHO