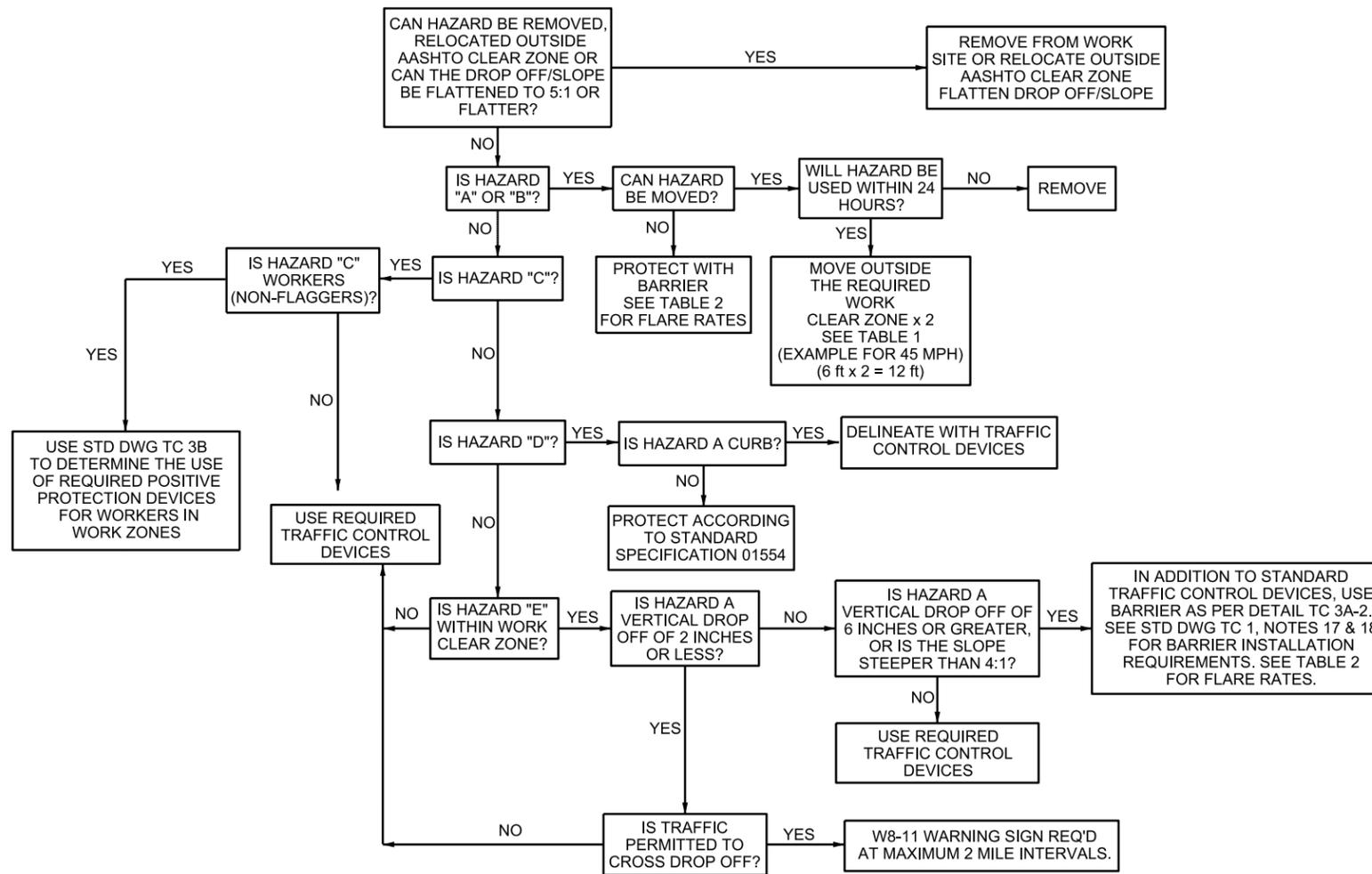


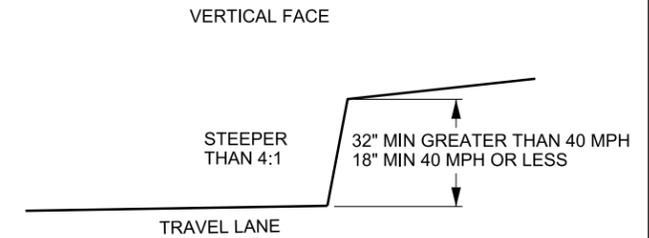
# HAZARD MITIGATION

- USE DETAIL TC 3A-1 AND TABLE 1 (WORK CLEAR ZONE) WHEN MITIGATING THE FOLLOWING HAZARDS:
  - NON-WORKING EQUIPMENT OR VEHICLES
  - STOCKPILED MATERIAL
  - WORKING VEHICLES AND WORKERS (NON-FLAGGERS)
  - OTHER OBJECTS AND FEATURES (I.E.: INCOMPLETE CURBS, BRIDGE PARAPETS, BARRIER BLUNT ENDS, POLES)
  - SLOPES STEEPER THAN 4:1 OR A VERTICAL DROP OFF\* OF LESS THAN 48 INCHES (SEE DETAIL TC 3A-2 FOR EXAMPLES)
- MITIGATE ALL OTHER HAZARDS, SLOPES STEEPER THAN 4:1, OR VERTICAL DROP OFFS\* 48 INCHES OR GREATER WITHIN AASHTO CLEAR ZONE AS APPROVED BY THE REGION TRAFFIC ENGINEER.



DETAIL TC 3A-1

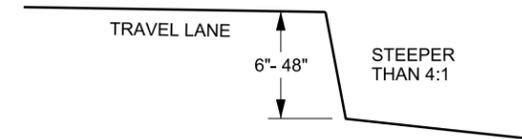
\* DROP OFF IS A VERTICAL DIFFERENCE THAT MAY BE FROM THE WORK TO THE ROADWAY OR THE ROADWAY TO THE WORK.



BARRIER REQUIRED FOR SLOPES STEEPER THAN 4:1 AND GREATER THAN INDICATED HEIGHT UNLESS BACKSLOPE IS A SMOOTH UNIFORM SURFACE OF SUITABLE MATERIAL.

SLOPE MUST REMAIN STABLE AND NOT SPALL AT HEIGHT AND SPECIFIED SPEED.

SLOPE STEEPER THAN 4:1 AND VERTICAL EXCAVATION



WITHIN WORK CLEAR ZONE USE BARRIER  
OUTSIDE WORK CLEAR ZONE USE DEVICES  
GREATER THAN 48 INCH OBTAIN APPROVAL FROM REGION TRAFFIC ENGINEER

## TYPE "E" VERTICAL DROP OFF HAZARDS DETAIL TC 3A-2

POSTED MPH	FT
40 & LESS	3
45	6
50	6.5
55	7.5
60	8
65	8.5
70	9
75	10.5
80	12

POSTED MPH	FLARE
70 OR GREATER	20:1
65	18:1
60	17:1
55	16:1
50	14:1
45	10:1
40 OR LESS	6:1

NO.	DATE	APPR.	REMARKS
1	08/30/12	SDD	REVISED TC 1 NOTE CALL OUTS, DELETED 01558 MARKING
2	02/28/13	SDD	VERTICAL DROP OFF REQUIREMENT. ADDED INCOMPLETE CURB TO TYPE "D" HAZARD IN DETAIL TC 3A-1. REVISED DETAIL TC 3A-2 VERTICAL FACE DESCRIPTION.

UTAH DEPARTMENT OF TRANSPORTATION  
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION  
SALT LAKE COUNTY, UTAH

RECOMMENDED FOR APPROVAL  
*[Signature]*  
CHAIRMAN STANDARDS COMMITTEE

DATE: FEB. 28, 2013  
APPROVED: *[Signature]*  
DEPUTY DIRECTOR

HAZARD MITIGATION

STANDARD DRAWING TITLE

STD. DWG. NO.  
TC 3A

SUPPLEMENTAL DRAWING