

July 1, 2022

MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) Provisionally Approved Products

ANY MODIFICATION OF MATERIAL OR CONFIGURATION OF ANY VDOT APPROVED PRODUCT OR CHANGE IN THE MANUFACTURER'S NAME AND ADDRESS MUST BE CONVEYED TO VDOT IMMEDIATELY. FAILURE TO DO SO CAN RESULT IN REMOVAL FROM THE APPROVED LIST. VDOT RESERVES THE RIGHT TO AND AT ANY TIME REMOVE A PRODUCT FROM THE APPROVED LIST AFTER ANY DISCLOSED CHANGES ARE REVIEWED.

Changes are shaded.

TERMINALS

MANUFACTURER PROVIDED TRAINING TO VDOT STAFF AND APPROVED INSTALLERS IS REQUIRED FOR ALL MASH TERMINALS PRIOR TO THE FIRST INSTALLATION

ROAD SYSTEMS, INC.	TL-3 MASH SEQUENTIAL KINKING TERMINAL (MSKT) 50'-0", No Flare, 8" or 12" Blockouts as provided by Manufacturer.	VDOT ST'D. GR-MGS2
ROAD SYSTEMS, INC.	TL-2 < 40 MPH, MASH SEQUENTIAL KINKING TERMINAL (MSKT) 25'-0", No Flare, 8" or 12" Blockouts as provided by Manufacturer.	WHEN SPECIFIED IN THE PLANS OR BY THE ENGINEER ON ROADWAYS WITH DESIGN/POSTED SPEEDS OF LESS THAN 40 MPH. INSTALLED IN ACCORDANCE WITH VDOT ST'D. GR-MGS2
TRINITY HIGHWAY	TL-3 SOFTSTOP, No Flare, 12" Blockouts.	VDOT ST'D. GR-MGS2
SPIG INDUSTRY, LLC	TL-3 SGET, No Flare, 8" Blockouts	VDOT ST'D. GR-MGS2

BLOCKOUTS

MONDO POLYMER TECHNOLOGIES	12" DEEP COMPOSITE	FOR USE WITH VDOT ST'D. GR-MGS1
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POST CAPS

AWN SAFETY PRODUCTS	N-CAP	POST COVER
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IMPACT ATTENUATOR
(MASH 2016)

<u>TYPE 1 (RE-DIRECTIVE LOW-MAINTENANCE)</u>	
WORK AREA PROTECTION CORP.	TL-3 SCI - 100 GM
TRINITY HIGHWAY PRODUCTS, LLC	TL-3 QUADGUARD ELITE M10 (24" WIDE)
	TL-3 QUADGUARD ELITE M10 (69" WIDE)
	TL-3 REACT M
<u>TYPE 1 (RE-DIRECTIVE)</u>	
WORK AREA PROTECTION CORP.	TL-3 SCI - 100 GM
	TL-2 SCI - 70 GM
TRINITY HIGHWAY PRODUCTS, LLC	TL-3 QUADGUARD M10 (24" WIDE)
	TL-3 QUADGUARD M WIDE (69" WIDE)
	TL-2 QUADGUARD M10 (24" WIDE)
LINDSAY TRANSPORTATION SOLUTIONS	TL-3/TL-2 TAU-M

TYPE II (NON RE-DIRECTIVE)

<u>SAND BARRELS</u>	
TRINITY HIGHWAY PRODUCTS, LLC	TL-3 ENERGITE III (12 Barrel Array)*

*** USE OF SAND BARREL ARRAYS SHALL BE APPROVED BY THE STANDARDS AND SPECIAL DESIGN SECTION (CENTRAL OFFICE LOCATION AND DESIGN). SAND BARRELS ARE NOT FOR USE IN LOCATIONS WHERE HIGH SPEED HIGH ANGLE IMPACTS ARE LIKELY. A SPECIAL DESIGN INSERTABLE SHEET FOR THE SAND BARREL ARRAY WILL BE REQUIRED IN THE PLAN ASSEMBLY.**

CRASHWORTHY LONGITUDINAL CONCRETE BARRIERS

ONLY ONE TYPE OF TEMPORARY BARRIER SYSTEM IS PERMITTED IN A RUN. MIXING TEMPORARY BARRIERS WITH DIFFERENT CRASH TEST APPROVALS, LENGTHS, OR CONNECTION TYPES SHALL NOT BE USED IN THE SAME RUN OF BARRIER. CONNECTION TYPES SHALL REMAIN UNIFORM THROUGHOUT THE INSTALLATION. TRANSITION SECTIONS TO CONNECT DIFFERENT BARRIER CONNECTIONS ARE PROHIBITED.

<p align="center">SMITH-MIDLAND</p>	<p>TL-3 MASH TEMPORARY CONCRETE MEDIAN BARRIER F-SHAPE WITH 18" TALL J-J HOOK CONNECTION</p> <p>12'-0" & 12'-6" LONG FOR USE AS MB-11A</p> <p>BRIDGE DECK (BOLT-DOWN) APPLICATION SHALL BE USED WITH APPROVAL BY THE DISTRICT STRUCTURE AND BRIDGE ENGINEER.</p> <p>WHEN USED AS AN ALTERNATIVE TO ST'D. 502.14 (BRIDGE DECK APPLICATIONS) 2 BOLTS (1" DIAMETER X 10" LONG) SHALL BE INSTALLED IN SLEEVES WITH HILTI ADHESIVE ON THE TRAFFIC SIDE PER THE MANUFACTURER'S RECOMMENDATIONS</p> <p>WHEN USED AS AN ALTERNATIVE TO ST'D. 502.15 (ROADWAY APPLICATIONS) 3 PINS (1-1/2" DIAMETER X 48" LONG) ON THE TRAFFIC SIDE PER THE MANUFACTURER'S RECOMMENDATIONS.</p>
<p align="center">SMITH-MIDLAND</p>	<p>TL-3 MASH TEMPORARY CONCRETE MEDIAN BARRIER F-SHAPE WITH 18" TALL J-J HOOK CONNECTION</p> <p>Free Standing 12'-0" Long</p> <p>Free Standing 20'-0" Long</p>
<p align="center">SMITH-MIDLAND</p>	<p>TL-3 MASH TEMPORARY CONCRETE MEDIAN BARRIER F-SHAPE WITH 18" TALL J-J HOOK CONNECTION</p> <p>20'-0" LONG FOR USE AS MB-11A</p> <p>WHEN USED AS AN ALTERNATIVE TO ST'D. 502.15 (ROADWAY APPLICATIONS) 4 PINS (1-1/2" DIAMETER X 48" LONG) ON THE TRAFFIC SIDE PER THE MANUFACTURER'S RECOMMENDATIONS.</p> <p>NOT FOR USE ON BRIDGE DECKS.</p>

<p>ROCKINGHAM PRECAST</p>	<p>TL-3 MASH T-LOK™ F-Shape Portable Concrete Barrier</p> <p>Free Standing 12'-0" Long</p>
<p>ROCKINGHAM PRECAST</p>	<p>TL-3 MASH T-LOK™ 11A Temporary Concrete Barrier</p> <p>12'-0" LONG FOR USE AS MB-11A FOR ROADWAY SECTIONS ONLY</p> <p>WHEN USED AS AN ALTERNATIVE TO ST'D. 502.15 (ROADWAY APPLICATIONS) 8 PINS (1" DIAMETER X 24" LONG) 4 PINS ON EACH SIDE OF THE BARRIER DRIVEN INTO FULL DEPTH PAVEMENT PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.</p>

Note: All Work Zone products previously listed can be found on the Traffic Engineering Divisions TCD Pre-Approved Listing on the Traffic Engineering – Traffic Asset Program webpage <http://www.virginiadot.org/business/trafficeng-productlists.asp>