



Questions and Answers from March 1st, 2016 Roadbuilders Introduction Webinar

No.	Question	Answer
1	Is it mandatory to have an Engineer sign off on all TMP's containing a lane closure even in a 50 or 60 Km zone?	No, engineering sign off is dependent on the Project Category and the assessment of the project impacts. A lane closure is one of many components considered when determining the requirement for engineering sign-off.
2	Drop off Table 6.1-why does this apply only to "Non-Construction" speed limits and not to construction zone speed limits?	<p>Section 6.5.1 (Drop-offs) breaks the treatment of drop-offs into five sections which deal with increasing depths. 6.5.1.5 deals with the greatest depth represented by depths of ≥ 300 mm (12"). Table 6.1 only applies to Section 5 depth treatments ≥ 300 mm (12").</p> <p>Table 6.1 was developed to be used by engineers and designers of work zones as a "<i>design tool</i>" to determine the treatments that can be used for these deeper drop-offs.</p> <p>The "Non-Construction" speed limit is used as it represents highway class where for example a speed limit of 110km/h or</p>

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		<p>greater is a good indicator of a freeway class highway.</p> <p>Absolute compliance with reduced construction speed limits on higher class highways does not occur, especially during times when a work zone is inactive such as at night.</p> <p>As a consequence, the Ministry has found that a speed limit reduction, by itself, is an inadequate treatment (for long duration work) for deep excavations immediately adjacent to the traveled way as we have had intrusions into these deep drop-offs. Therefore, options have been developed for designers and engineers to deal with those highways where deep drop-offs are being utilized for long periods of time.</p>
3	What size vehicle is required for the shadow and buffer vehicle?	There is no size restriction for shadow or buffer vehicles however they need to be equipped with the appropriate lighting devices and be able to adequately display any necessary signage.
4	Do the taper lengths based on speed limits refer to existing speed limits before reduction or the reduced speed limits? For Example: When there is a reduction from 100 km/h to 80 km/h would the original speed determine the taper length or the reduced construction speed?	The taper lengths approaching a work zone are established based on the regular, non-construction speed limit. In your example, the taper would be based on 100 km/h. After entering the work zone and the speed reduction has been established and complied to, a reduced device spacing based on the construction speed limit may be appropriate.
5	The manual references NCHRP 350. This is being replaced with M.A.S.H. very soon. Will this manual reflect these higher standards?	As with all standards that change from highway design to highway operations, adoption and conversion by the Ministry is handled over time, and in most cases in consultation with stakeholders. This also is true of the move from NCHRP-350 to MASH.

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6	When sweeping on a high speed roadways, the previous requirements were either a shadow vehicle or the appropriate signage. Is a shadow vehicle now a requirement in this situation?	There is still an option to use signage with the appropriate speed reduction. However it may be more efficient to use a shadow vehicle.
7	Can Vertical Panels be substitute for drums on the highway?	Drums provide 360 degree night time delineation and are sized for visibility on all highway classes. Vertical panels provide only directional delineation and are sized in a variety of heights. In some situations, vertical panels can be used as a substitute for barrels when sized correctly (panel height) for the highway class (speed), and with the right weights to counter wind blast based on vehicle class (truck traffic). When putting together the traffic management plan, the choice of delineation devices to be used would be part of that process.
8	Do you have a resource list of Certified Traffic Engineers available? At times it is difficult to find one that is knowledgeable in this field.	No, the Ministry does not collect this information.
9	Who completes the Risk Assessment to determine if a plan requires a traffic engineers approval?	The individual who is putting together the contract will determine the need for an engineer's approval.
10	Will Worksafe officers be trained in these changes?	Yes we plan to include WorkSafe BC Officers in the seminars the Ministry is delivering to internal staff.

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11	Using Table 6.1, if the "non-construction" speed limit is 110km/hr and a construction zone speed limit is posted at 60km/hr, is the distance from the edge of travel lane to drop-off reduced to 0.5m?	<p>Table 6.1 is applied when the drop-off is at a depth of ≥ 300 mm (12"). The table is a <i>“design tool”</i> to be used by work design engineers when determining the drop-off treatments they will be able to use.</p> <p>Therefore, a speed reduction is not used in the design treatment for deep drop-offs as discussed in 6.5.1.5. The design for these deep drop-offs is based on the non-construction speed of the highway. A speed reduction will likely be used in these deep drop-off areas; however the speed reduction is not used in the determination of the treatment.</p> <p>The new manual provides an example (see below) on how the design process works for these deep drop-offs. As noted in the example, a design engineer can sign off on alternative design treatments from what are listed as treatments in 6.5.1.5 covering deep drop-offs.</p> <p>Example: On a 110 km/h highway, a 60 cm (24") deep excavation is required alongside the travel lane. The project team determines that if they apply a lane shift to move traffic away, traffic will be shifted by only 1.8 metres.</p> <p>Since a 3-metre offset is the minimum required for a 110 km/h highway, the lane shift is not an acceptable option. Instead, the project team should consider closing a lane or installing a temporary barrier.</p> <p>If a highway design Engineer prepares a design that deviates from the above guidelines, the design shall include a written, stamped, and documented decision that provides the rationale for the alternative strategy.</p>

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		Possible reasons for using an alternative strategy may include very low traffic volumes, very short work duration, or mitigation of risk through the use of enhanced signing or enhanced enforcement.
12	Can you provide some clarity on the vehicle requirements for buffer and shadow vehicles, such as minimum weight/size relative to speed and roadway volume?	The Ministry has stayed silent on sizing buffer vehicles as well as specifying the type and size of the optional crash attenuators so often used with buffer vehicles so as to allow industry to assess the circumstances, the vehicle choice, and the choice of technology used in crash attenuators.
13	Who in the MOTI will be required to approve TMPs and what will be the expected timeline to get an approval?	The Ministry does not approve TMPs but will accept or reject TMPs based on whether it meets the requirements of the contract, and the work. It is up to the person developing the TMP to ensure it meets requirements and that it can meet the objectives of implementation. Timelines for review will vary based on workload and the quality of the TMP.
14	Will the Ministry offer formal training to Traffic Control companies?	No, The Ministry is not a training organization.
15	When will the new manual be implemented in the TCP training classes and will current TCPs have to undergo any formal training?	Any training for TCPs is handled by the BCCSA. Please contact them with questions regarding training.
16	In determining the traffic volumes, is consideration given to the work period - ie. at night, outside of peak times? Does the lower volume equate to reduced traffic control requirement?	Yes, if you refer to Table 3.1, volumes are shown on a per-hour basis. Work may be scheduled outside of peak hours to avoid higher volumes. However if these times are during night, additional requirements are necessary which may offset the benefits of scheduling in the low volume times.

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17	If training is not offered to all companies, how can we expect consistency across the province?	The Ministry is not a training organization. Traffic Control Person training is available through the BCCSA.
18	On what signs can flags be used?	Flags are typically used on C-001-1, C-003, C-004 and C-058. There may be others and information can be found at 4-51 of the Interim TMM. The use of flags on signs is no longer a minimum standard.
19	Did the TMM not specifically mention the Highways Manager would approve the TMP's?	The Interim TMM is being used by Road Authorities outside of the Ministry. TMPs are accepted by the Road Authority issuing the work. It is the responsibility of the Road Authority to assign appropriate responsibility for this task.
20	Some current contracts out for bid specify Category 2, but do not state if it requires an engineer's approval. Is Engineering Approval required?	If the contract does not specify engineering approval, it is not required.
21	Is this years BCCSA TCP instructor training up to date with the new MOTI manual?	All TCP training question can be directed to the BCCSA
22	Will a field edition be published?	A field edition will not be published at this time.
23	For the use of Verticle Panels, does the manual identify when they can be subsituted for a drum?	Contact your local road authority for the project(s) in question and they can work with you do determine if the vertical panels are appropriate for the work.
24	Will the Worksafe BC Officers be trained or made aware of the three year implementation period for non-construction contract manual users (ie. maintenance contractors)?	Yes, the Ministry has been working with WorkSafeBC with regards to the implementation of the manual.
25	Has the TMM been approved and adopted by WorksafeBC?	Yes, the Ministry has been working with WorkSafeBC with regards to the implementation of the manual.

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26	On Table A what is meant by Lr; run-in length on centreline?	Please refer to Figure 6.5.
27	Does WorkSafeBC know that these new TMM requirements do not come into effect for Road Maintenance Operations until 2019?	Yes.
28	There was a issue with my question earlier. Is it not mentioned in the TMM that the District Manager of Transportation or Designate will approve TMPs? I believe it is mentioned a few times, but certainly in Section 2.2.4 - 3. Review Process, Point 2.	For Ministry projects, the district manager or designate approves any lane closures. This may be different for other Road Authorities using the Interim TMM.