General

Top and Datum surface models have been completed for all of the intersection locations. 3D clearance analysis has only been completed for the St Croix Falls round-a-bout. All other locations will be analyzed and adjustments made, if necessary, after 60% review comments are received.

Item 602.2400 Concrete Safety Islands (8-inch depth), is currently proposed for all islands and medians. This depth matches the modified gutter pan thickness for Type D C&G and concrete truck aprons recommended at round-a-bout over tracking areas. The item is estimated at $7.50/sf and is approximately 15% of the total cost of construction ($47,115.00). Is this the proper item to use for these locations? Maybe concrete pavement should be used? Maybe different thickness?

Should all Concrete Safety Islands be colored "RED"? I believe the coloring indicates to the truck driver that the surface is available for over tracking and indicated to the public that the area is not normal driving surface. There is currently 6,366 sf of proposed Concrete Safety Islands, the cost to color is estimated at 160 cy *$70/cy = $11,200.

Location #1: USH 8/CTH SS (S 1st St & W Main St. Intersection - Village of Cameron)

This location has 9" concrete pavement underlying the asphaltic surface as seen in the survey photos. Therefore, the truck apron is designed as concrete pavement to match the adjacent pavement structure per Randy Luedtke email to Phil Keppers on August 24, 2015. Concrete pavement apron reduced from 9" to 8" to be consistent with round-a-bout concrete pavement truck over tracking aprons.

Assumed the concrete truck apron is to be colored "RED", similar to the design comment for the NW quadrant of the STH 35/77 intersection in Danbury and for round-a-bout over tracking areas.

To maximize the size of the truck apron, scoping comment from Phil Keppers email on September 4, 2015 stated that some sort of barrier would be needed along the RW to prevent parking of cars. The 60% plan shows saw cutting along the RW line and installing pedestrian curb placed one foot inside RW. The RW at this location is not easily defined, therefore, the RW shown on the 60% plan is only approximate. NWBE is working with Ripley Land Surveying, Inc. to define the actual RW location.

Location #2: USH 2 / USH 63 Intersection (Town of Keystone)

There is ongoing coordination on the placement location of the overhead monotube arm and Type 12 pole and street lighting. The enclosed plan sheet shows a possible 35' arm located over the right turn lane.

I am questioning why the NW quadrant in Danbury and the over tracking areas in St Croix Falls were specified as colored concrete. This is not consistent with Randy Luedtke's email to match the adjacent pavement structure. If Danbury NW quad is concrete why not the SW quad? Is it

because the SW quad over tracking is behind the proposed C&G? The over tracking area in ST Croix Falls behind the C&G is scoped as concrete pavement and is adjacent to asphalt pavement. Should all over tracking areas be concrete or match adjacent unless specified by DOT?

If the over tracking areas are asphalt pavement, should 12" diagonal pavement markings be used as suggested in the June 16, 2015 email from Dave Delaeby to Phil Keppers?

Is there a minimum height that the monotube arm and street light arm need to be for OSOW accommodations?

Location #3: USH 63/STH 77/STH 27 Intersection (City of Hayward)

5,138 sf of concrete safety island is currently proposed for the medians.

I matched the proposed back of curb to existing back of curb on STH 77. SSD states that Type T & R face is measured to 6" from back so the face will be in the same location. Existing STH 77 has Type J curb, therefore, the flag line of the Type T curb will be 2.5' into the adjacent lanes. If the flag line is matched to the existing Type J face the backs of the Type T curbs basically touch, eliminating the median.

Location #4: USH 8/STH 73 Intersection

I am questioning why the NW quadrant in Danbury and the over tracking areas in St Croix Falls were specified as colored concrete. This is not consistent with Randy Luedtke's email to match the adjacent pavement structure. If Danbury NW quad is concrete why not the SW quad? Is it because the SW quad over tracking is behind the proposed C&G? The over tracking area in ST Croix Falls is behind the C&G is scoped as concrete pavement and is adjacent to asphalt pavement. Should all over tracking areas be concrete or match adjacent unless specified by DOT.

If the over tracking areas are asphalt pavement should, 12" diagonal pavement markings be used as suggested in the June 16, 2015 email from Dave Delaeby to Phil Keppers?

Location #5: STH 35/STH 77 Intersection (Danbury)

I am questioning why the NW quadrant in Danbury and the over tracking areas in St Croix Falls was specified as colored concrete. This is not consistent Randy Luedtke email to match the adjacent pavement structure. If Danbury NW quad is concrete why not the SW quad? Is it because the SW quad over tracking is behind the proposed C&G? The over tracking area in ST Croix Falls is behind the C&G is scoped as concrete pavement and is adjacent to asphalt pavement. Should all over tracking areas be concrete or match adjacent unless specified by DOT.

If the over tracking areas are asphalt pavement should 12" diagonal pavement markings be used in as suggested in the June 16, 2015 email from Dave Delaeby to Phil Keppers?

Location #6: USH 8 (Lake Avenue & E 3rd St. Intersection - City of Ladysmith)

The current plans shows eliminating the single curb ramp in the SE corner of the existing island and replacing with two ramps, Type 6 per SDD. This would require the existing crosswalk pavement marking be removed and replaced to align with the new ramp locations. Should the proposed ramps be installed or replaced in kind?

September 4, 2015 email of detailed scoping documents state modify island if possible so MT loads can make the corner and not go up on the sidewalk and not encroach on to the island. Templates show that approximately the north 1/3 of the island is impacted, therefore, I replaced the island at the same location.

Location #7: USH 8/STH 35 Round-about (City of St Croix Falls)

Existing typical shows geogrid (Project No. 1570-30-72). Will need to get the special provisions for the geogrid used to include in the plan.

C&G originally scoped as Concrete Curb and Gutter 4-inch Sloped 36-inch Type G. Type G C&G has a 2" vertical lip at the face of the curb. Per the OSOW meeting conducted by Bill Wondrachek, this type of G&C is very hard on OSOW tires. Therefore the C&G type was changed to Concrete Curb and Gutter 4-inch Sloped 36-inch D Modified.

To date, this is the only location that I have completed the 3D clearance analysis. I wanted to make sure that there are no conflicts with the round-a-bout center island. Analysis shows that a minimum clearance of 0.10' exists when running the ST Low Boy vehicle. Therefore, no work is required in center island.