

DESIGN REVIEW COMMENT AND RESOLUTION FORM

PROJECT NO.: 607411

DESCRIPTION: Tisbury - Beach Road

DESIGNER: Greenman-Pedersen, Inc.

SUBMITTAL: Revised 25% Design

REVIEW SECTION: D5 Projects

PROJ. MANAGER Tom Currier



CONSULTANT EVALUATION SCORE: **6 out of 10**

DATE: February 26, 2016

REVIEWER NAME: S. Serpa

NO.	SHEET OR ITEM	COMMENT	INITIAL ACTION	RESPONSE	QC REVIEW INITIAL	FINAL ACTION VERIFIED
COMPLETED BY REVIEWER			COMPLETED BY DESIGNER			BY REVIEWER
		Design Exception Report				
1		The Design Criteria Workbook incorrectly identifies Beach Road as a Non NHS roadway. Revise the report, workbook and Summary of Impacts to correctly identify the roadway as Other NHS and revise the request for lane and shoulder width exceptions to identify the minimum width requirements (12'/8') for this NHS (MAP 21) roadway.	A	This comment has been incorporated into the revised Design Exception Report.	CLS	
2		P.8 Design Criteria Workbook Summary Of Impacts The Minimum Alternative should be stated as having 5.5' sidewalks, not shoulders.	A	This comment has been incorporated into the revised Design Exception Report.	CLS	
3		On pages 2 and 7, it is not necessary to request formal design exceptions for the Shared Use Path's separation distance and width/shoulder elements, as these are not technically in the AASHTO Controlling Criteria. District Projects recommends breaking these out as separate paragraphs that ultimately document the approval of these design features by the MassDOT Complete Streets Engineer.	A	This comment has been incorporated into the revised Design Exception Report.	CLS	
4		On Sheet 14, before the end of the proposed sidewalk on the left side (Sta 24+40±), a label identifies the sidewalk as 4.5 feet wide, although it scales to be the same 5.5 feet as nearby standard-width sidewalk. If the narrowing of sidewalk below the 5.5 foot standard (including curb) is needed (due to the adjacent proposed retaining wall and ROW), include the substandard width in the DER, with the requisite justifications and impacts. E-14-006 requires a design exception for sidewalk less the standard width. Redraw the sidewalk to scale on plans, and add a note to the applicable Typical Section.	A	The note on Sheet 14 has been revised to read "PROP. 6.5' CEM. CONC. SIDEWALK", because the sidewalks have been widened by request.	JAT	

5		P.9 Design Criteria Workbook Summary Of Impacts Given the value of real estate on the island, the \$2.75 M ROW cost for the major realignment seems quite low. Please justify basis of the cost and/or provide additional discussion in the narrative to document the ROW impacts.	A	The cost per square foot was estimated from an average of parcel values in the area. As noted the impacts to the buildings were not included. This would raise the cost substantially.	CLS	
6		P.9 Design Criteria Workbook Summary Of Impacts - Add Stopping Sight Distance to the Controlling Criteria line for Horizontal Alignment.	A	This comment has been incorporated into the revised Design Exception Report.	CLS	
		Pavement Design Checklist				
7	pg. 1	Correct the functional classification identified for Beach Road.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
8		Correct the recommended pavement structure to identify the Superpave Intermediate Course-19.0 (SIC 19.0) as included in the pavement notes.	A	The plans have been revised. SIC 19 is no longer proposed on this project.	JFO	
		General Comments				
9	5	HMA Walk is included in the Pavement Notes, but the item is not in the Estimate and no locations are identified on the Plans. District Projects recommends that for cost savings and maintenance purposes, the proposed cement concrete sidewalk and SUP be built with HMA throughout. The Pavement Note for the HMA Walk needs to be corrected to identify 1" Superpave Surface Course - 9.5 over 1-1/2" Superpave Intermediate Course -12.5.	A	The shared use path will be HMA and the plans have been revised accordingly. Through discussions with the project manager it was discussed to keep the sidewalks in the area from five corners to the beginning of the shared use path as cement concrete. At this point we would transition to HMA for the SUP to the end of the project.	JAT	
10		Label the bearings, distances and curve data for the record baseline on the plans.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
11		Provide a detail of the "Proposed Cement Concrete Retaining Wall with Steel Handrail" between STAs 23+00 to 23+93 LT with the next submission.	A	The design has been revised and a detail is included in the 75% Design Submission.	JFO	
12		Review the proposed crossings at WCR #8, 9 and 10, which do not provide a reciprocal ramp and direct pedestrians into a narrow shoulder. At a minimum, a reciprocal ramp or accessible landing area is required for all proposed crossings.	A	The Town would like to see crosswalks in these locations where there is no sidewalk across the street. We have provided accessible landing areas for these WCR's.	JAT	
13	6, 14-16, 33	Shared Use Path: In order to prevent a pronounced roller coaster effect along the SUP, we recommend using a sidewalk-through-driveway type that brings the sidewalk across the driveway without ramping down on either side. This will be most possible beginning Sta 26+40 (per the typical section), where the vegetated strip widens such that the vertical rise can be mitigated to avoid cars bottoming out on the driveway apron. Please review. Open to discussion at the CRM.	A	After discussions with the Town, project manager and complete streets engineer the following changes are proposed. From Sta. 20+50 (+/- the beginning of the SUP) to Sta. 25+50, the buffer has been increased to provide a 3' vegetated strip. This is accomplished by reducing the width of the SUP to 8' and taking an additional 0.5' of private property. The curb height has also been reduced to 4", this will allow for the driveway transitions to meet the sidewalk grade within the 3' buffer and not affect the elevation of the SUP. This will eliminate any roller coaster effect.	JAT	
14	54-55	The sections between STA 31+50 to 32+00 propose to match the existing cross slopes, which includes an abrupt change for a short segment. Review the feasibility of modifying the existing cross slopes at this location.	A	Full depth construction and typical 2.0% cross slopes are proposed throughout the project.	JFO	
15	54-55	The same cross sections also show a net pavement loss and abrupt shift of the crown. Full depth construction should be extended to Sta 32+50	A	See above, full depth construction will be proposed throughout the project.	JAT	

COLUMN "NO." PREFIX FOR COMMENT NO'S - PLANS =P, SPEC. PROVS=S, EST.=E, CALC BOOK=C, BRIDGE CALCS=D, OTHER = O

"ACTION" A=WILL INCORPORATE, B=WILL EVALUATE, C=DELETE COMMENT

		Comments By Plan Sheet				
		Typical Sections				
P16	5	Revise the pavement notes for the HMA Driveway to identify 1 1/2" Superpave Surface Course -9.5 (SSC 9.5).	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P17	5	Correct the label on the right side of the Beach Rd section STA 15+00 to 17+68 to identify the edge treatment as loam and seed, not "Prop Walk".	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P18	5	Correct the shoulder widths and right sidewalk labels on the Beach Rd section STA 19+28 to 20+53 to identify the variable shoulder and sidewalk/path widths as shown on the plans.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P19	6	The Beach Rd section STA 22+14 to 24+40 incorrectly shows the shared use path within the existing SHLO limits. This section of the path is shown on the plans as beyond the existing layout limits and requires an alteration. Correct the layout labels on the right side accordingly and also correct the sidewalk width label on the left side to indicate the variable sidewalk width of 5.5' to 4.5' as shown on the plans.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P20	6	The proposed pavement improvements shown on section STA 26+40 to 36+64 is not applicable for the length of this section. Provide a section for the proposed mill and overlay between STAs 31+00 and 36+64. This section should also identify the variable shoulder widths , cross slopes and alteration to the existing layout required on the right side for the proposed shared use path.	A	The limits of full depth reconstruction have been revised and incorporated into the typical sections.	JAT	
		Construction Plans & Profiles				
P21	13 & 15	The driveways at STAs 16+08 RT and 27+72 RT overlap property lines. Review the shared access at these locations.	A	The driveway at Sta. 16+08RT accesses two properties (#45 Tisbury Marina and #49 Vineyard Harbor Associates) #45 has rights to 20qROW (driveway) and #49 is parking for #60 Vineyard Harbor Condominium. The driveway design was revised to provide better separation with access to the property further east. The driveway at 27+72 appears to access parking for properties #151 & #159. There is no driveway easement unless it is shown on PB 299 PL 301 which is not available on line.	JFO	
P22	13	Identify the treatment of the "Conc Ret Wall", which is shown on the cross section as relocated curbing.	A	The Conc Ret Wall was mislabeled. It is a concrete paver wall that will be removed and rebuilt.	JAT	
P23	16	Correct the leader arrows for the labels on the left and right side at approximately STA 32+00 for the shared use path and temporary easement.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
		Drainage & Utility Plans				
P24		District Projects prefers to locate CBs or GLs outside of a driveway opening. In some cases on this project, low points dictate that CB locations are within driveway openings. Please investigate the feasibility of altering profile/low points to address these particular CB locations. Open to discuss at the Comment Resolution Meeting (CRM).	A	All efforts have been made to minimize the amount of CBs located within a driveway opening.	JAT	
P25		Label the direction of flow for the existing drainage system.	A	This comment has been incorporated into the 75% Design Submission.	JAT	

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P26		Where there is inadequate cover over drainage pipes, use CL V RCP or Ductile Iron Pipe.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P27		At the intersection to which the upgraded drainage system on Beach Rd. is directed at the western limit of the project, existing inverts are not complete. In addition, the drainage system along the Beach St. Extension should be included to depict the outlet location, per the PDDG. District Projects will be provide a plan of the existing drainage easement along this part of Beach St. Please update drainage plans accordingly.	A	The inverts have been completed and the drainage system has been updated.	JAT	
P28	17	Revise the proposed drainage between STAs 13+30 and 14+00 to address the following: - Adjust the DMH-104 location in order to provide room for a pair of CBs at the low point and a pair upstream on the flatter approach grade (up station). An additional DMH and trunk line adjustments required.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P29	18	Approximately 150 ft. up station of the low point, a pair of existing CBs (14+98) are connected. As prescribed by the PDDG, eliminate the CB-CB conditions whenever possible; further, connecting them within the trunk line downstream to a low point CB is similarly not desirable. Please investigate alternatives to the drainage design to mitigate these issues. Open to discuss at the CRM.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P30	18	Eliminate the CBCI-211. It is unnecessary in close proximity to the high point.	C	There will be a low point at this location created by the transition to superelevation around the curve.	CLS	
P31	18	Add CB to high side of WCR #4 and 10.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P32	19	The plans identify the removal of the existing connection to the state drainage system, but proposes a swale to a leaching basin in close proximity to the gas pumps. Due to the high water table, it is doubtful that a LB will function properly. Please review to revise with an alternative drainage design for this location. Open to discuss at the CRM.	A	We have revised this area to include a 2.5' planting area behind the sidewalk. We have eliminated the swale and leaching basin, as well as the existing connection to the state drainage system. The District Permits section said they would notify the owner that the private drain connection must be removed.	JAT	
P33	19	Add low point catch basins at STA 21+21.76 as required by the PDDG.	C	This area is located in the runout/runoff portion of the superelevation and the structures are located at the low points.	CLS	
P34	19	Identify the existing CB at STA 25+04 LT as to be removed.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P35	19	Label the existing SMH at STA 25+55 LT as to be adjusted.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P36	19 & 20	Check the proposed location of CBCI-201, CBCI-311 and CB-308 for conflicts with the existing water main.	A	The existing water main has been proposed to be relocated in these areas.	JAT	
P37	20	Show the proposed location of CB-316 on the plan and revise the label to require a curb inlet.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P38	20, 21	Drainage System - Sta 25+00± to 31+00± Determine if the existing 15"outlet at Sta 30+85± Rt. will have adequate capacity to accommodate additional drainage proposed to be tied in. In addition, please investigate retaining the existing 12" RCP as a trunk line to the extent feasible.	A	The existing 15" outlet will have adequate capacity to accommodate the additional drainage. We investigated retaining the existing 12" RCP as a trunk line, however, we determined that it would not be practical. Trying to retain portions of the 12" RCP would cause manholes and CBs to be too close together and pipe angles not feasible.	JAT	

P39	21	Retain existing CB at Sta 35+50± Lt. as a CIT to MH. Add a new CB adjacent in order to eliminate the CB-CB connection.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
		Traffic Signs & Pavement Markings				
P40	24	Show the 405' of SWL between STAs 20+09 and 24+15 LT.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
		Driveway Details				
P41	33	Detail on left side - Correct the designation of WCR #23 to be #24, and the offset to LT. instead of RT. Detail on right side - Correct the column heading: WCR # to be DWY # .	A	This comment has been incorporated into the 75% Design Submission.	JAT	
		Cross Sections				
P42		Critical cross sections alone are required at 25% design. The following comments are based on review of the cross sections provided.	N/A	No response necessary.		
P43	35	Add the location of the temporary easement on the left side of the section at STA 11+50 and show the limits of work for the brick sidewalk.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P44	37	Add the HMA driveway apron to the right side of section at STA 13+50.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P45	38-43	Please justify proposed full depth construction from Sta 15+00 to 18+00. The cross sections indicate either a fill condition or a match to the existing section. Also, it appears that full depth construction could be limited to the right lane/shoulder and leveling proposed for the left lane and shoulder between STAs 18+00 to 19+00. Review and revise limits of full depth construction. Identify a leveling course where necessary.	B	The depth of existing asphalt at B-1 (Sta. 14+30 +/-) is 8.5", at B-2 (Sta. 19+55 +/-). There is a reduction in pavement depth at some point between these two borings. Sta. 15+00 was chosen as a conservative alternative. However, after discussion with MassDOT, it has been determined to provide full depth construction throughout the entire project.	CLS	
P46	38	Correct the left side of section at STA 15+21 to show the limit of HMA driveway apron, gravel driveway and temporary easement line.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P47	40, 41, 49	Add the location of the building to the sections at STAs 16+50 LT, 17+50 LT and 25+50 RT.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P48	42	Correct the left side of section 18+50 to show the proposed limits of HMA driveway.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P49	44, 45	Add the location of the temporary easement to the right side of sections at STAs 20+50, 21+00 and 21+13. Also, show the limits of HMA driveway on section 21+13 RT.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P50	46	Correct the location of the temporary easement on the right side of section 22+50.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P51	47	Add the existing stone wall/edging to the right side of the section at STA 23+00.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P52	47	The driveway apron at STA 23+35 RT is shown extending beyond the limit shown on the construction plan and beyond the temporary easement. Correct the limits on the plan for consistency with the section and revise the location of the temporary easement as required.	A	The construction plans have been revised to show the correct driveway limit.	JAT	
P53	48	The driveway apron at STA 24+70 RT is not consistent with the limit shown on the plan. Revise plan for consistency.	A	This comment has been incorporated into the 75% Design Submission.	JAT	

P54	48-50	The typical section notes for STAs 24+40 to 26+40 identify this segment of the project as in an area of transition, but the cross sections provided indicate proposed improvements similar to adjacent segments, full depth construction with a normal crown. Label the cross slopes on the sections within this segment or provide a typical section.	A	There is no transition between these stations. It is full depth construction with normal crown. The typical sections have been updated.	JAT	
P55	49	Add the existing stone wall to the section at STA 25+00 RT and correct the symbol for the proposed relocation of the stone wall.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P56	51, 55, 56, 58	Add the location of the temporary easement to the right side of sections at STAs 27+76, 31+83, 32+00, 32+50, 33+00, 33+50, 34+00 and 36+00.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P57	52	Add the limits of loam and seed to the right side of section at STA 28+50.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P58	53, 54	Correct the location of the temporary easement on the left side of sections at STAs 29+00, 29+34, 29+50, 30+50, 31+00 and 31+50 for consistency with the construction plans.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P59	53, 54	Extend the existing grade and add the limits of proposed walk/gravel to the sections at STAs 29+93 RT and 30+00 RT.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P60	54	Correct the location of the permanent easement on the left side of section at STA 30+00 for consistency with the construction plans.	A	There is no longer a permanent easement required at this location.	JAT	
P61	54	Correct the limit of loam and seed/gravel on the right side of section at 31+50 and add the location of the temporary easement.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P62	56	Add the location of the wall to the left side of sections at STAs 33+50 and 34+00.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P63	57	Correct the limit of loam and seed on the left side of section at STA 34+50 for consistency with the plans.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P64	58	Add the proposed shared use path limits to the section at STA 36+50 RT.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
P65	58	Add the location of the existing wall to the left side of sections at STAs 36+00, 36+50 and 36+64.	A	This comment has been incorporated into the 75% Design Submission.	JAT	
		Estimate				
E66		Item prices for projects on Martha's Vineyard should be increased 25-30% - to be reflected in the next submission.	A	This comment has been incorporated into the 75% Design Submission.	EMR	
E67		Add the Class A Trench Excavation item (141.) for the proposed retaining wall.	C	A wall is no longer being proposed, therefore, Class A Trench Excavation is no longer required.	EMR	
E68	142.	Evaluate the need for Item 142. Class B Trench Excavation, based on the proposed drainage inverts.	A	Class B Trench has been kept as a contingency in the event it is needed.	EMR	
E69	144.	The item for Class B Rock Excavation is not likely to be needed on this project.	A	Class B Rock Excavation has been removed from the estimate.	EMR	
E70		Add item 220.7-Sanitary Structure Adjusted to the estimate as necessary.	A	Item 220.7 has been added to the estimate.	EMR	
E71		Add item 767.12-Compost Filter Tubes as necessary for erosion control.	A	Item 767.12 has been added to the estimate	EMR	
E72	691. & 706.1	The unit prices for Items 691. and 706.1 appear low compared to the weighted average unit prices. Review and adjust as necessary.	A	This comment has been incorporated into the 75% Design Submission.	EMR	