SWLRT Plan / RCSC Form

Plan / Document Phas: Municipal Consent Plans
Reviewer: Paul Miller - (612) 673-3603
Review Date: 6/5/2014
Reviewer Organizatio: City of Minneapolis - Department of Public Works

SPO Comment Code June 16, 2014
1 - Incorporate requested change in future phase of design (identify phase
2 - No change to the design is implemented at this time
3 - SPO requests staff level discussion with reviewer
4 - Comment identifies a Locally Requested Capital Investment (LRCI
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Number	Segment	Sheet / Page Number	Discipline	Reviewer Comment Code	Comment	SPO Response Code	PEC-E Technical Response
1	E3		Civil	I - Inaccuracy / Omission	Vertical dimensioning is missing at many critical points, such as vertical clearances to bridge structures (it is understood that underground public utilities have not been shown in profile at this point in the design process).	2	Vertical clearances under bridges will be reflected in the PE Plans. Utilities will be addressed during advanced design.
2	E3		Civil	I - Inaccuracy / Omission	Right-of-way and property lines are not clearly defined in some critical areas, such as the station locations and where property acquisitions are proposed (acquisitions are shown on the "roll-plots", but not on the plans). The City limits (Minneapolis and St. Louis Park) are not shown in the plans.	2	Existing right-of-way lines will be reflected in the PE Plans. Private property acquisitions and impacts to public-owned properties will not be shown in the PE Plans. City limits will be identified.
3	E3		Civil	D - Design Criteria	City Standard driveway aprons should be provided at the entrance and exit of all Kiss & Ride/Drop-off locations (this eliminates the need for Pedestrian Ramps at these locations).	2	Address during advanced design.
4	E3		Civil	D - Design Criteria	All parking drop-offs shall be designed with 3:1 tapers.	2	Address during advanced design.
5	E3		Civil	D - Design Criteria	All proposed curb & gutter shall be Minneapolis standard B624 Curb & Gutter.	2	Address during advanced design.
6	E3		Civil	D - Design Criteria	The bottoms of the tunnels are shown below the estimated groundwater elevations for the areas. These preliminary design plans do not have enough detail to provide detailed comments on the impacts of the tunnels to the groundwater, surface water drainage, and the storm and sanitary sewer systems. Additional comments will need to be made at the submission of the SDEIS and subsequent plan submittals. Temporary and permanent dewatering discharge will need to be identified and reviewed for rate and water quality impacts including water balance with appropriate mitigation provided by the project. Any discharge to sanitary sewers will need to be reviewed for capacity of existing infrastructure and metered for payments of treatment costs.	2	Address during advanced design. The PE Plans will include a preliminary water resources report that will define storm wate impacts associated with the project, assess existing and proposed conditions and prepare initial recommendations for advanced design.
7	E3		Civil	D - Design Criteria	The project is subject to the stormwater treatment requirements of Chapter 54 of the Minneapolis Code of Ordinances. Review and comment of proposed stormwater management system(s) will be provided upon development of the plans.	2	See Comment #6
8	E3		Civil	D - Design Criteria	The current plans do not indicate relocation of any existing City storm or sanitary sewers that may be in conflict or are affected by the proposed improvements. Comment and review of any necessary relocations will be provided as design progresses.	2	Water and Sanitary Sewers impacted by the project will be shown in PE Plans. Storm sewers impacted by the project will be addressed during advanced design.
9	E4		Civil	D - Design Criteria	The proposed retaining walls and supports are in close proximity to the existing Bassett's Creek Storm Water Tunnel. As design progresses, structural analysis and any necessary protective measures are expected ensuring the proposed improvements and rail traffic will not negatively impact the tunnel.	2	Address during advanced design.
10	E3		Civil	D - Design Criteria	Drainage of any new impervious surfaces or changes to the existing drainage patterns that affect the City storm sewer system will be evaluated as more information is provided on future plan sets. Additional comments will be provided at that time.	2	Address during advanced design.
11	E3	4, 6, 15, 44	Civil	I - Inaccuracy /	Show City of Minneapolis boundary St. Louis Park	2	Address in PE Plans
12	E3	5	Civil	I - Inaccuracy /	Track labeling is incorrect	1	Address in PE Plans
13	E3	18	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trai	1	Address during advanced design.
14	E3	18	Civil	I - Inaccuracy /	The height of the fence should be shown	2	Address during advanced design.
15	E3	18	Civil	I - Inaccuracy / Omission	Kenilworth Trail mislabeled as Cedar Lake Trail.	3	Needs clarification. Kenilworth Trail begins at Midtown Greenway junction.
16	E3	19	Civil	I - Inaccuracy /	Where is the perforated drain tile going? Is it draining to a ditch or storm drain	2	Address during advanced design.
17	E3	19	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trai	1	Address during advanced design.
18	E3	19	Civil	I - Inaccuracy /	The height of the fence should be shown	2	Address during advanced design.
19	E3	19	Civil	I - Inaccuracy / Omission	Kenilworth Trail mislabeled as Cedar Lake Trail.	3	Needs clarification. Kenilworth Trail begins at Midtown Greenway junction.
20	E3	20	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trai	1	Address during advanced design.
21	E3	20	Civil	I - Inaccuracy /	The height of the fence should be shown	2	Address during advanced design.
22	E3	20	Civil	I - Inaccuracy / Omission	Kenilworth Trail mislabeled as Cedar Lake Trail.	3	Needs clarification. Kenilworth Trail begins at Midtown Greenway junction.
23	E3	21	Civil	I - Inaccuracy /	Exact vertical dimensions are needed for each bridge portal	2	Address in PE Plans
24	E3	21	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trai	1	Address during advanced design.
25	E3	21	Civil	I - Inaccuracy /	The height of the fence should be shown	2	Address during advanced design.

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26	E3	21	Civil	I - Inaccuracy / Omission	Kenilworth Trail mislabeled as Cedar Lake Trail.	3	Needs clarification. Kenilworth Trail begins at Midtown Greenway junction.
27	E3	22	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trai	1	Address during advanced design.
28	E3	22	Civil	I - Inaccuracy /	The height of the fence should be shown	2	Address during advanced design.
29	E3	22	Civil	I - Inaccuracy /	The height of the railing should be shown	2	Address during advanced design.
30	E3	22	Civil	I - Inaccuracy / Omission	Kenilworth Trail mislabeled as Cedar Lake Trail.	3	Needs clarification. Kenilworth Trail begins at Midtown Greenway junction.
31	E3	23	Civil	I - Inaccuracy / Omission	Is 2.5 feet wide enough width for an emergency walkway?	2	Yes. This meets code requirements for emergency walkway widths in tunnels for transit facilities
32	E3	23	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
33	E3	23	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
34	E3	24	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
35	E3	24	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
36	E3	25	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
37	E3	25	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
38	E3	26	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
39	E3	26	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
40	E3	27	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
41	E3	27	Civil	I - Inaccuracy /	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
42	E3	28	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
43	E3	28	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
44	E3	29	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
45	E3	29	Civil	I - Inaccuracy /	The height of the railing should be shown.	2	Address during advanced design.
46	E3	30	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
47	E3	30	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
48	E3	30	Civil	I - Inaccuracy /	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
49	E3	31	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
50	E3	31	Civil	I - Inaccuracy /	The height of the fence should be shown.	2	Address during advanced design.
51	E3	32	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
52	E3	32	Civil	I - Inaccuracy /	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
53	E3	32	Civil	I - Inaccuracy /	The height of the railing should be shown.	2	Address during advanced design.
54	E3	33	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
55	E3	34	Civil	I - Inaccuracy /	Vertical dimensions should be shown for each bridge portal.	2	Address in PE Plans
56	E3	35	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
57	E3	36	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
58	E3	37	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
59	E3	38	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
60	E3	39	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
61	E3	39	Civil	I - Inaccuracy /	The height of the railing should be shown.	2	Address during advanced design.
62	E3	39	Civil	D - Design Criteria	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
63	E3	40	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
64	E3	40	Civil	I - Inaccuracy /	The height of the railing should be shown.	2	Address during advanced design.
65	E3	40	Civil	D - Design Criteria	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
66	E3	41	Civil	I - Inaccuracy /	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
67	E3	47	Civil	I - Inaccuracy / Omission	Potential conflict with the existing storm sewer crossing and the tunnel. How this will be addressed must be identified. Review and comments will be provided as design progresses.	2	Address during advanced design.
68	E3	47	Civil	I - Inaccuracy / Omission	Potential conflict with the existing sanitary sewer crossing and the tunnel. How this will b addressed must be identified. Review and comments will be provided as design progresses.	2	Sanitary Sewers impacted by the project will be shown in PE Plans. Address during advanced design.
69	E3	48	Civil	I - Inaccuracy / Omission	Potential conflict with the bridge supports and the existing sanitary sewer. How this will be addressed must be identified. Review and comments will be provided as design progresses.	2	Sanitary Sewers impacted by the project will be shown in PE Plans. Address during advanced design.
70	E3	50	Civil	I - Inaccuracy / Omission	Potential conflict with the existing storm sewer crossing and the tunnel. How this will be addressed must be identified. Review and comments will be provided as design progresses.	2	Address during advanced design.

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71	E3	50	Civil	I - Inaccuracy / Omission	Potential conflict with the existing sanitary sewer crossing and the tunnel. How this will b addressed must be identified. Review and comments will be provided as design progresses.	2	Sanitary Sewers impacted by the project will be shown in PE Plans. Address during advanced design.
72	E3	53	Civil	D - Design Criteria	City of Minneapolis Standard B624 Curb should be identified.	2	Address during advanced design.
73	E3		Civil	I - Inaccuracy / Omission	Public right-of-way and private property lines converge at this location in a confusing jumble that is not shown completely in the plans. All Right-of-way and property lines should be clearly defined on both the existing conditions and proposed plans.	1	Existing right-of-way lines and proposed property acquisitions and temporary easements will be reflected in the PE Plans.
74	E3		Civil	I - Inaccuracy / Omission	Proposed platform spaces and sidewalk appear to be on private property but acquisitions have not been identified at this location.	1	Existing right-of-way lines and proposed property acquisitions and temporary easements will be reflected in the PE Plans.
75	E3		Civil	D - Design Criteria	The re-aligned TC&W freight rail is located close to the bridge piers (second span from the west); dimensioned as +/- 11 feet. What is the minimum horizontal clearance required at this location? Is the existing crashwall protection at the piers adequate for both freight rail and LRT?	2	Bridge piers less than 12' but more than 8.5' from the rail alignments must be "heavy construction" or have "crash walls". The existing bridge design/pier protection meets MnDOT heavy construction criteria and is adequate for LRT and freight at this location.
76	E3		Civil	I - Inaccuracy / Omission	Minimum vertical and horizontal clearances should be shown from all related bridge structural components (piers and superstructure	2	Vertical and horizontal clearances under bridges will be reflected in the PE Plans.
77	E4	20	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
78	E4	20	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
79	E4	21	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
80	E4	21	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
81	E4	22	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
82	E4	23	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
83	E4	23	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
84	E4	24	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
85	E4	24	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
86	E4	27	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
87	E4	27	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
88	E4	28	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
89	E4	28	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge.	2	Address in PE Plans
90	E4	28	Civil	I - Inaccuracy / Omission	The ROW here is very confusing. A plan detail showing ownership and easements relative to the freight, LRT, and trail near I-394 would be helpful	1	Existing right-of-way lines and proposed property acquisitions and temporary easements will be reflected in the PE Plans.
91	E4	29	Civil	I - Inaccuracy / Omission	The height of the fence should be shown.	2	Address during advanced design.
92	E4	29	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
93	E4	31	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge.	2	Address in PE Plans
94	E4	34	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge.	2	Address in PE Plans

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95	E4	35	Civil	I - Inaccuracy / Omission	Vertical depth of Bassets Creek tunnel should be shown.	2	Address in PE Plans
96	E4	36	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge. How far is the catenary pole from the bottom of the bridge?	2	Address in PE Plans. OCS pole shown as typical. PE Plans will indicate OCS pole locations.
97	E4	37	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge. How far is the catenary pole from the bottom of the bridge?	2	Address in PE Plans. OCS pole shown as typical. PE Plans will indicate OCS pole locations.
98	E4	38	Civil	I - Inaccuracy / Omission	Vertical dimensions need to be shown for each portal of the bridge. How far is the catenary pole from the bottom of the bridge?	2	Address in PE Plans. OCS pole shown as typical. PE Plans will indicate OCS pole locations.
99	E4	39	Civil	D - Design Criteria	How far are the retaining walls from the Bassett's Creek Tunnel?	2	The face of retaining wall ranges from approximately 44' to 5' from the edge of the tunnel Design of the walls and addressing impacts will occur during advanced design.
100	E4	40	Civil	D - Design Criteria	How far are the retaining walls from the Bassett's Creek Tunnel?	2	The face of retaining wall ranges from approximately 44' to 5' from the edge of the tunnel Design of the walls and addressing impacts will occur during advanced design.
101	E4	40	Civil	D - Design Criteria	Where is the perforated drain tile going? Is it draining to a ditch or storm drain?	2	Address during advanced design.
102	E4	40	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
103	E4	41	Civil	I - Inaccuracy / Omission	The trail needs to be sloped at 2% not 1% to prevent ponding on the trail.	1	Address during advanced design.
104	E4	41	Civil	D - Design Criteria	Vertical depth of Bassets Creek tunnel should be shown. How far are the retaining walls from the Bassett's Creek Tunnel?	2	The face of retaining wall ranges from approximately 44' to 5' from the edge of the tunnel Design of the walls and addressing impacts will occur during advanced design.
105	E4	43	Civil	D - Design Criteria	Painted Tubular Catenary Poles and embedded track should be used along Royalston Avenue.	4	LRCI
106	E4	44	Civil	D - Design Criteria	Painted Tubular Catenary Poles and embedded track should be used along Royalston Avenue.	4	LRCI
107	E4	45	Civil	D - Design Criteria	Painted Tubular Catenary Poles and embedded track should be used along Royalston Avenue.	4	LRCI

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108	E4	46	Civil	D - Design Criteria	Painted Tubular Catenary Poles and embedded track should be used along Royalston Avenue.	4	LRCI
109	E4	64	Civil	I - Inaccuracy / Omission	Missing typical section for Royalston Ave.	2	Addressed in PE Plans
110	E4	69	Civil	D - Design Criteria	It is not clear if the railroad gate arms will block the sidewalk when down. When gates are up there needs to be adequate space behind the gate to meet ADA standards on the bridge.	2	A minimum ADA path behind the lowered gate arm mechanisms is provided. Additional details will be developed during advanced design.
111	E4	69	Civil	D - Design Criteria	What will the roadway striping look like?	2	Address during advanced design. Additional coordination with Hennepin County required.
112	E4	74	Civil	I - Inaccuracy / Omission	Parallel lines (not Zebra x-walks) should be used for crosswalks at the intersection of 5th Street/7th Street.	1	Address in PE Plans
113	E4		Civil	D - Design Criteria	The Wayzata Blvd. roadway curvature and turning radius into the Kiss and Ride are less than desirable for buses - turning templates for buses should be provided.	2	Address during advanced design. Geometrics and truck turning will be included in MnDOT Level 2 layout for this area.
114	E4		Civil	D - Design Criteria	City Standard driveway aprons should be provided at the entrance and exit of the Kiss & Ride (this eliminates the need for Pedestrian Ramps at these locations). Concrete aprons should be oriented 90 degrees to Wayzata Blvd.	2	Address during advanced design.
115	E4		Civil	D - Design Criteria	City Standard driveway aprons should be provided at the entrance and exit of the Kiss & Ride (this eliminates the need for Pedestrian Ramps at these locations).	2	Address during advanced design.