

Meeting Notes

EXHIBIT NUMBER MH-028
 File Name: MMTP
 Date: March 2019
 Received by: [Signature]
 (Commission Secretary)

ENIGNEERING

Reliability

Reliability was proximity and amount of parallel. AY and SIL parallel D602F others don't.

DECISION: The following were scores for the reliability criteria in the expert judgment table:

URV 1, URQ 1, SGZ 1, AY 1.5 SIL 1.5

Cost – took average of all costs (using construction costs from the metrics, added acquisition, specialty mitigation, number of TLine crossings, house acquisition).

If actual within 5% of average than 1, if greater than 10% over, was a 2.

DECISION: The following were scores for the Cost criteria in the expert judgment table:

AY, SGZ, URQ, URV 1, SIL at 2.

EXPERT JUDGMENT for routes URV, URQ, SIL, AY and SGZ

Criteria	Weight	Routes				
		URV	SIL	AY	URQ	SGZ
Cost*	40%	1	2	1	1	1
Weighted		0.4	0.8	0.4	0.4	0.4
System Reliability	10%	1	1.5	1.5	1	1
Weighted		0.1	0.15	0.15	0.1	0.1
Risk to Schedule	5%	1	1	2	1	2
Weighted		0.05	0.05	0.1	0.05	0.1
Environmental (Natural)	7.50%	1.2	2.2	3	1	2.7
Weighted		0.09	0.165	0.225	0.075	0.2025
Environment (Built)	7.50%	3	2.7	1	3	2
Weighted		0.225	0.2025	0.075	0.225	0.15
Community	30%	2	1	2	3	3
Weighted		0.6	0.3	0.6	0.9	0.9
TOTAL		1.465	1.6675	1.55	1.75	1.8525

Based on the inputs to the expert judgment model, URV is the preferred route.

all cost

$$\text{Total} = 709.8 / 5 = \$141.96 \rightarrow \text{average cost}$$

$$141.96 \times 1.05 = 149 - \text{if lower gets a 1}$$

Meeting Notes

GENERAL DISCUSSION REVIEW and COMMENTS ON URV and the process:

Are there any other soft issues that should be considered?

If calculation for cost used, instead of a rank (as has been done previously), then:

AY 1.05
 SGZ 1
 SIL 1.14
 URQ 1.03
 URV 1.01

Handwritten calculations and notes:

$$\frac{142.8}{155.8}$$

$$\frac{139.5}{135.8} \text{ lowest} = 1$$

137.5 154.2 142.8 139.5 135.8

Criteria	Weight	Routes				
		URV	SIL	AY	URQ	SGZ
Cost*	40%	1.01	1.14	1.05	1.03	1
Weighted		0.404	0.456	0.42	0.412	0.4
System Reliability	10%	1	1.5	1.5	1	1
Weighted		0.1	0.15	0.15	0.1	0.1
Risk to Schedule	5%	1	1	2	1	2
Weighted		0.05	0.05	0.1	0.05	0.1
Environmental (Natural)	7.50%	1.2	2.2	3	1	2.7
Weighted		0.09	0.165	0.225	0.075	0.2025
Environment (Built)	7.50%	3	2.7	1	3	2
Weighted		0.225	0.2025	0.075	0.225	0.15
Community	30%	2	1	2	3	3
Weighted		0.6	0.3	0.6	0.9	0.9
TOTAL		1.469	1.3235	1.57	1.762	1.8525

Then SIL becomes the winner.

BREAK TO REVIEW PREFERRED ROUTE