APPENDIX G

WATER FACILITIES HYDRAULIC MODEL

Hydraulic Model Results and Data Summary

Project Name: _____ Date: _____

MUPB Project ID#: _____ Model Preparer Name: _____

or Preliminary Plan # _____ Preparer Email: _____

Software Package/Version used: _____ Model Iteration/Submission #: _____

Hydraulic modeling method used: _____ (e.g. steady state (default), extended, manual, etc.)

Description of Project:

Approx LF of <u>proposed</u> mains:

_____ <= 6"
_____ 8"
_____ 12"
_____ 16"
_____ >= 24"

Source of Demands: (Place "X" which applies)

_____ Using ERU unit rates and Ex. Zoning and Ex. uses
_____ Other: (explain in box below, e.g. rezoning, special demand, ...)

*Attach project Demands table with phasing as Attachment A with a map depicting node labels.

Model Start Point: (Place "X" which applies and explain in text box)

_____ Existing constructed main utilizing minimum Zone HGL as start condition. In box below, list the Zone, reservoir, and Low HGL assumed and the source of this data. [Default modeling basis]

_____ Existing Main with Two-Point Flow Test generated pump curve. In box below, list fire flow test number, date of test, static, residual and flow. Provide the model produced pump curve as Attachment B. [Alternate modeling basis, only as approved by MUPB]

_____ Extension from other existing modeled point. In box below, list the name and approval date of that existing model and other pertinent information. [Only as approved by MUPB]

Explanation / Detail of selection made above:

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Scenario Description:

Describe each "Parent" scenario below and the purpose of each scenario in the model. Single phase developments will generally have a basic model with one parent scenario and "child" scenarios for avg, max, peak and max+fire. Multi-phased developments will have multiple parent scenarios corresponding to each phase of project. Very complex or complicated models should have separate attachments with details as appropriate. Please note that only one water source (reservoir) is permitted, except where allowed by MUPB.

Scenario Name:	Description / Purpose / Phasing / Interim Condition
Scenario 1 ----------	
Scenario 2 ----------	
Scenario 3 ----------	
Scenario 4 ----------	
Scenario 5 ----------	
Scenario 6 ----------	

Scenario Results:

Each parent scenario generally will have critical node(s) (i.e. node with the lowest pressure in system/zone, node at the highest elevation, node at most distant location from the source, at important locations of demand). Max+Fire should indicate the node at which minimum available fire flow was determined and then which node was the resultant critical pressure node (which could be the same node). Repeat this page for models with more than six scenarios.

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		Scenario Name					
		Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6
Max Day + Fire	Fire Flow Node Name:						
	Fire Flow Available gpm						
	Critical Node #1 Name:						
	Critical Node #1 Description:						
	Residual Pressure: psi						
	Demand at node: gpm						
	Node elevation: ft						
	Critical Node #2 Name:						
	Critical Node #2 Description:						
	Residual Pressure: psi						
	Demand at node: gpm						
	Node elevation: ft						
	Critical Node #3 Name:						
	Critical Node #3 Description:						
	Residual Pressure: psi						
	Demand at node: gpm						
	Node elevation: ft						
	Critical Node #4 Name:						
	Critical Node #4 Description:						
	Residual Pressure: psi						
	Demand at node: gpm						
	Node elevation: ft						

Closing Statement:

Submitter should provide any appropriate closing statement here, such as opinion of adequate pressure, flow, fire flow, meeting EDM criteria or other pertinent closing information.