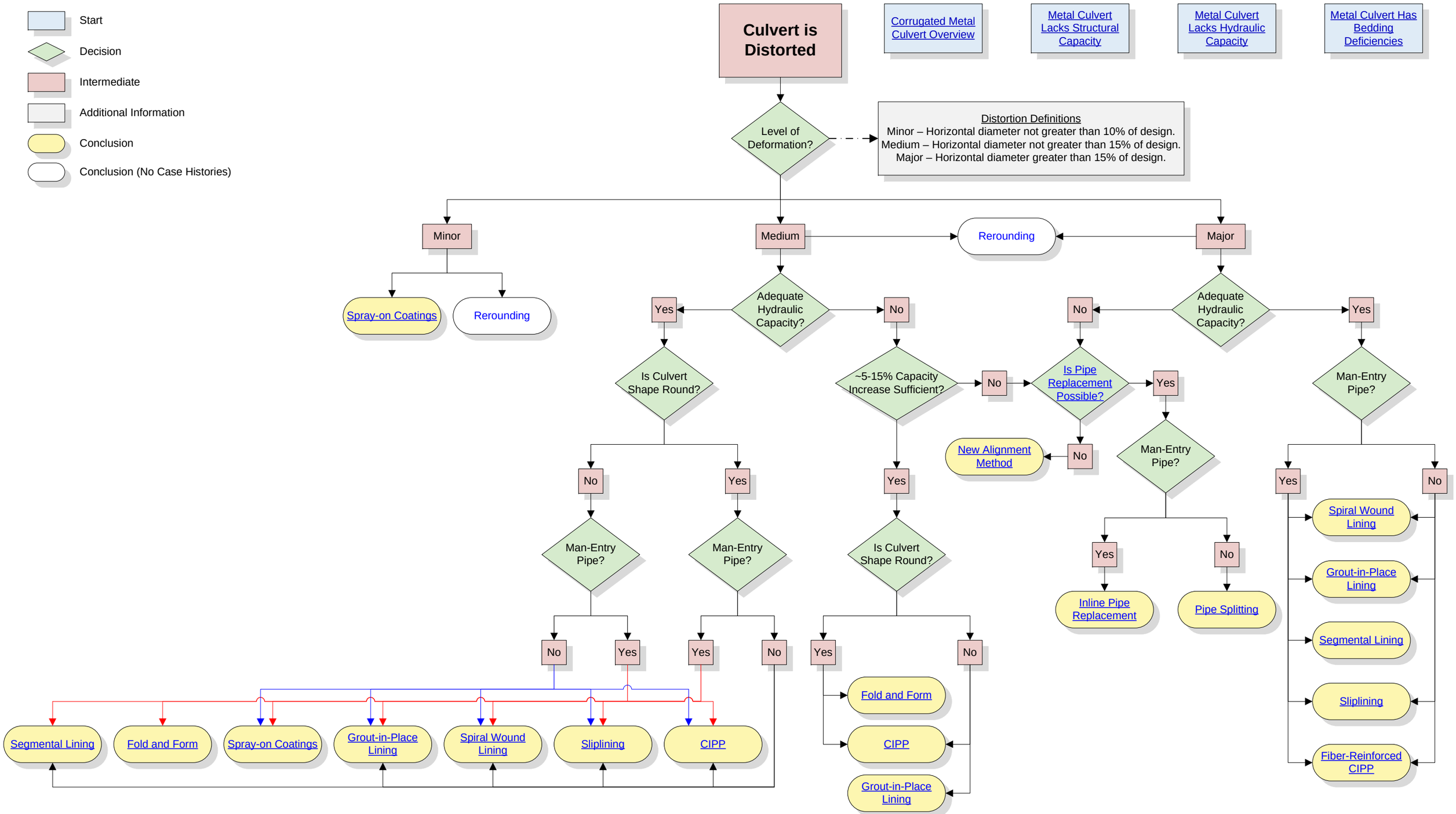
Start
Decision
Intermediate
Additional Information
Conclusion
Conclusion (No Case Histories)
Culvert is Distorted
Corrugated Metal Culvert Overview
Metal Culvert Lacks Structural Capacity
Metal Culvert Lacks Hydraulic Capacity
Metal Culvert Has Bedding Deficiencies
Level of Deformation?
Distortion Definitions
Minor – Horizontal diameter not greater than 10% of design.
Medium – Horizontal diameter not greater than 15% of design.
Major – Horizontal diameter greater than 15% of design.
Minor
Medium
Rerounding
Major
Spray-on Coatings
Rerounding
Adequate Hydraulic Capacity?
Yes
No
Is Culvert Shape Round?
~5-15% Capacity Increase Sufficient?
No
Is Pipe Replacement Possible?
Yes
New Alignment Method
No
Man-Entry Pipe?
Yes
No
Inline Pipe Replacement
Pipe Splitting
Man-Entry Pipe?
Yes
No
Spiral Wound Lining
Grout-in-Place Lining
Segmental Lining
Sliplining
Fiber-Reinforced CIPP
Man-Entry Pipe?
Is Culvert Shape Round?
Fold and Form
CIPP
Grout-in-Place Lining
Segmental Lining
Fold and Form
Spray-on Coatings
Grout-in-Place Lining
Spiral Wound Lining
Sliplining
CIPP