Silver Lake Water & Sewer District

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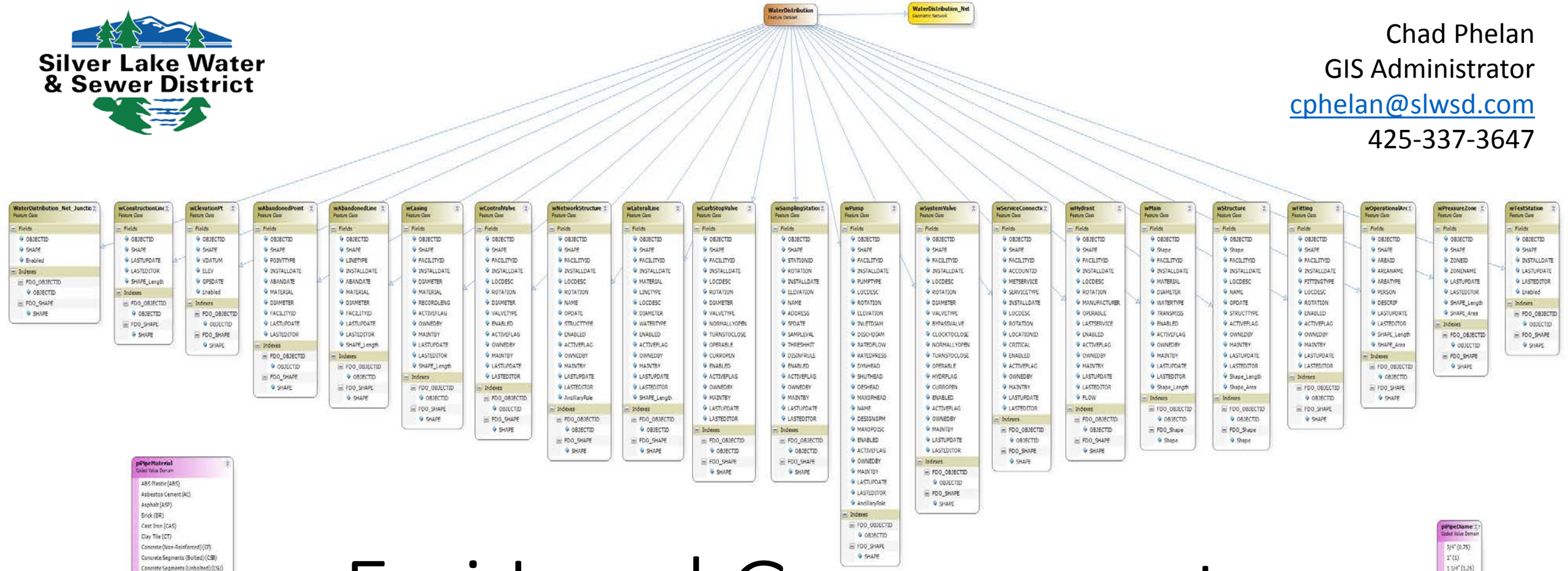
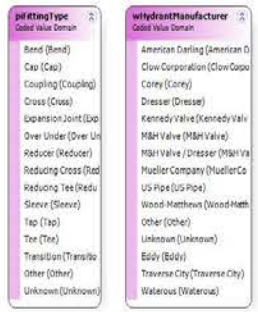
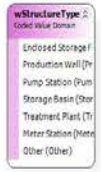
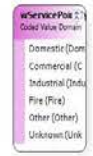


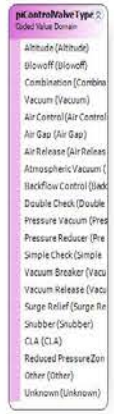
Esri Local Government Information Model

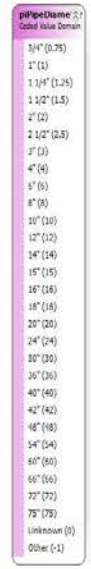
7/14/2015











What is it?

“ArcGIS for Local Government is based on a harmonized information model of GIS datasets, web services, and maps that we commonly refer to as the Local Government Information Model. It includes a series of essential foundation layers and operational information that support a range of key maps and apps within a local government.”

- esri

http://solutions.arcgis.com/local-government/help/local-government-information-model/

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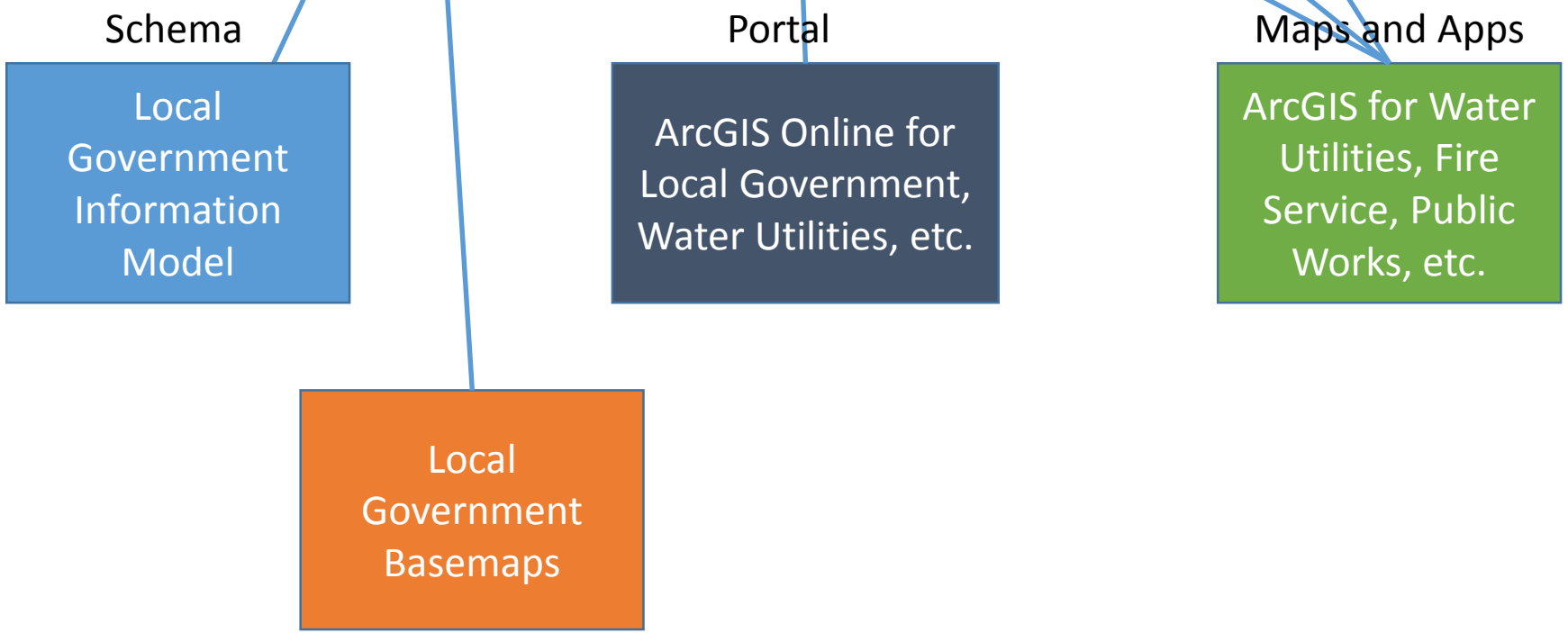
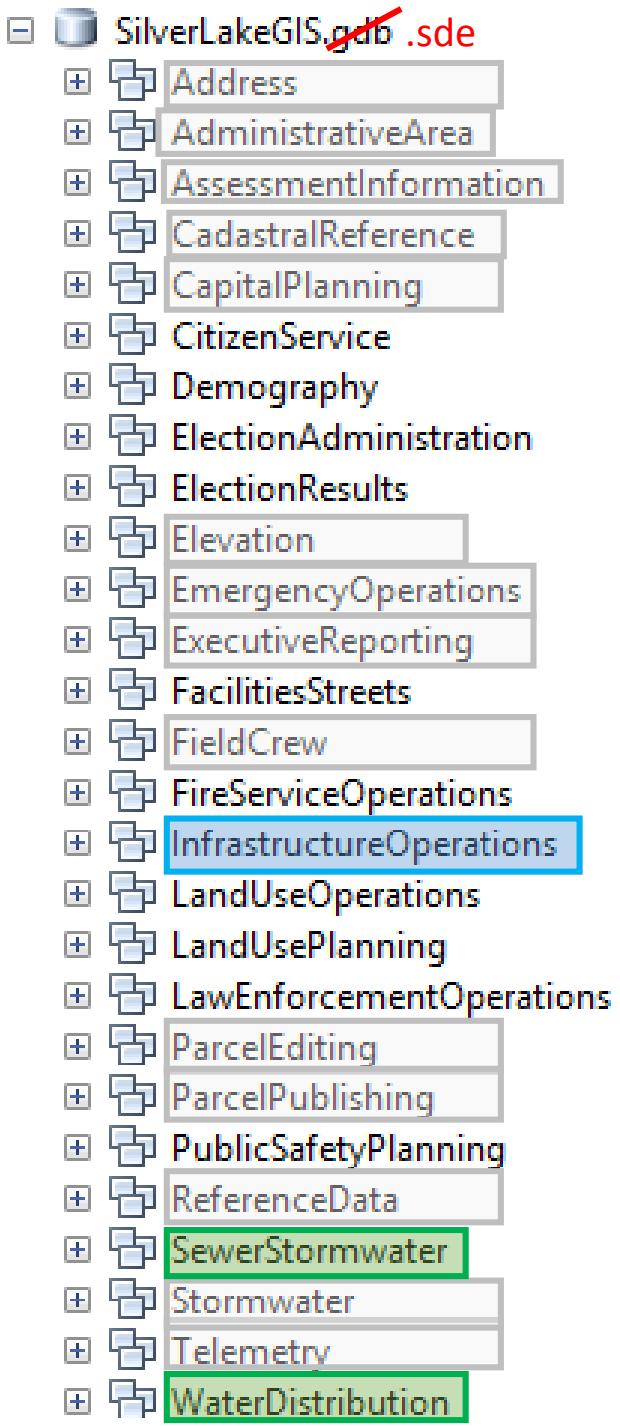



SilverLakeGIS.gdb .sde
Address
AdministrativeArea
AssessmentInformation
CadastralReference
CapitalPlanning
CitizenService
Demography
ElectionAdministration
ElectionResults
Elevation
EmergencyOperations
ExecutiveReporting
FacilitiesStreets
FieldCrew
FireServiceOperations
InfrastructureOperations
LandUseOperations
LandUsePlanning
LawEnforcementOperations
ParcelEditing
ParcelPublishing
PublicSafetyPlanning
ReferenceData
SewerStormwater
Stormwater
Telemetry
WaterDistribution

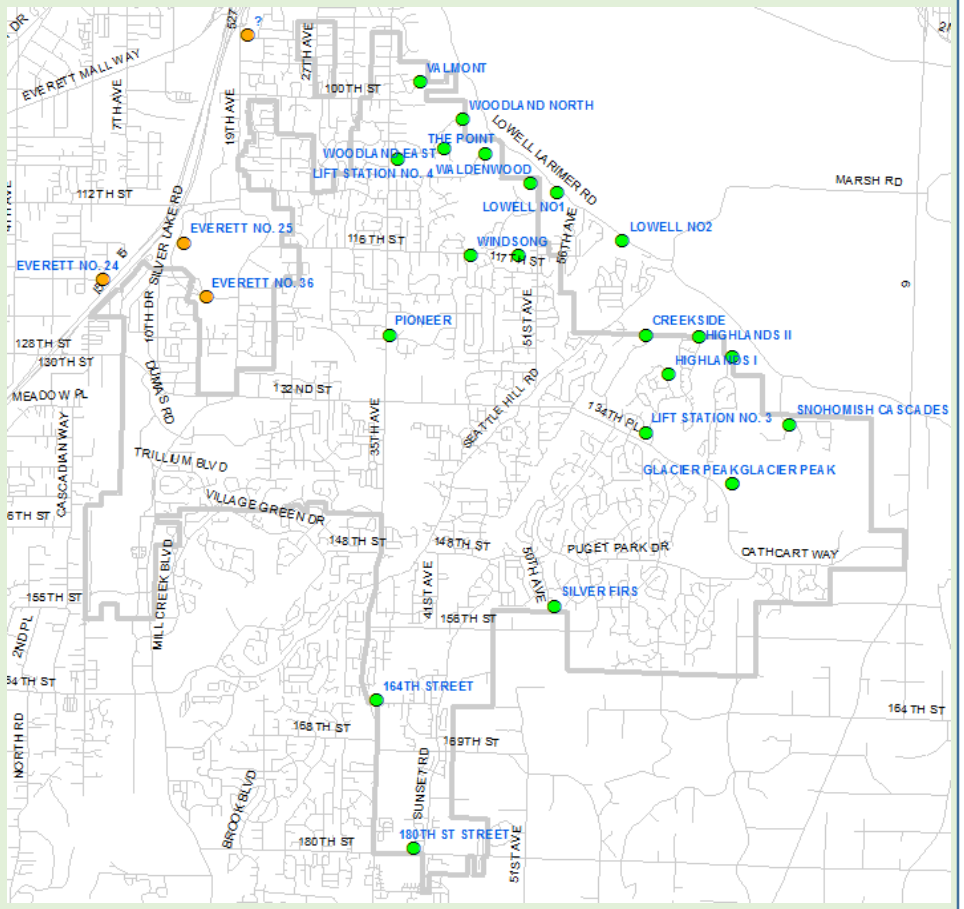
Information Model Structure

- SilverLakeGIS.gdb
  - Address
  - AdministrativeArea
  - AssessmentInformation
  - CadastralReference
  - CapitalPlanning
  - CitizenService
  - Demography
  - ElectionAdministration
  - ElectionResults
  - Elevation
  - EmergencyOperations
  - ExecutiveReporting
  - FacilitiesStreets
  - FieldCrew
  - FireServiceOperations
  - InfrastructureOperations
  - LandUseOperations
  - LandUsePlanning
  - LawEnforcementOperati
  - ParcelEditing
  - ParcelPublishing
  - PublicSafetyPlanning
  - ReferenceData
  - SewerStormwater
  - Stormwater
  - Telemetry
  - WaterDistribution

- SewerStormwater
  - SewerStormwater_Net
  - SewerStormwater_Net_Junctions
  - ssBend
  - ssCasing
  - ssCleanOut
  - ssControlValve
  - ssDetention
  - ssDischargePoint
  - ssFitting
  - ssGravityMain
  - ssInlet
  - ssLateralLine
  - ssManhole
  - ssNetworkStructure
  - ssOpenDrain
  - ssPressurizedMain
  - ssPump
  - ssServiceConnection
  - ssSystemValve
  - ssTap
  - ssTestStation
  - ssValveOperator
  - ssVault
  - ssVirtualDrainline

- WaterDistribution
  - wAbandonedLine
  - wAbandonedPoint
  - Water_Net
  - Water_Net_Junctions
  - wCasing
  - wConstructionLine
  - wControlValve
  - wCurbStopValve
  - wElevationPt
  - wFitting
  - wHydrant
  - wLateralLine
  - wMain
  - wNetworkStructure
  - wOperationalArea
  - wPressureZone
  - wPump
  - wSamplingStation
  - wServiceConnection
  - wStructure
  - wSystemValve
  - wTestStation

FieldName	Type	Length	Description
FACILITYID	String	20	Locally assigned Facility Identifier
INSTALLDATE	Date	8	The date the asset was installed
LOCDESC	String	200	Text Description of the geographic location
ROTATION	Double	8	Map Symbol Rotation value
NAME	String	20	The name of the network structure
OPDATE	Date	8	Date when the facility was put into service
STRUCTTYPE	String	30	Type of Sewer Network structure
ENABLED	SmallInteger	2	Enabled
ACTIVEFLAG	SmallInteger	2	Indicates if the feature is in use/active
OWNEDBY	SmallInteger	2	Indicates which organization owns the asset
MAINTBY	SmallInteger	2	Indicates which organization maintains the asset
LASTUPDATE	Date	8	The date the feature was last updated in the main
LASTEDITOR	String	50	The user who performed the last update
AncillaryRole	SmallInteger	2	AncillaryRole



Why Would We Use This Hulking Beast?

Pros:

- Get access to Esri Maps, Apps and Templates built for it
- Reasonably well thought out schema based on Esri's experience with many other local governmental entities
- Be able to share more easily with other organizations….?

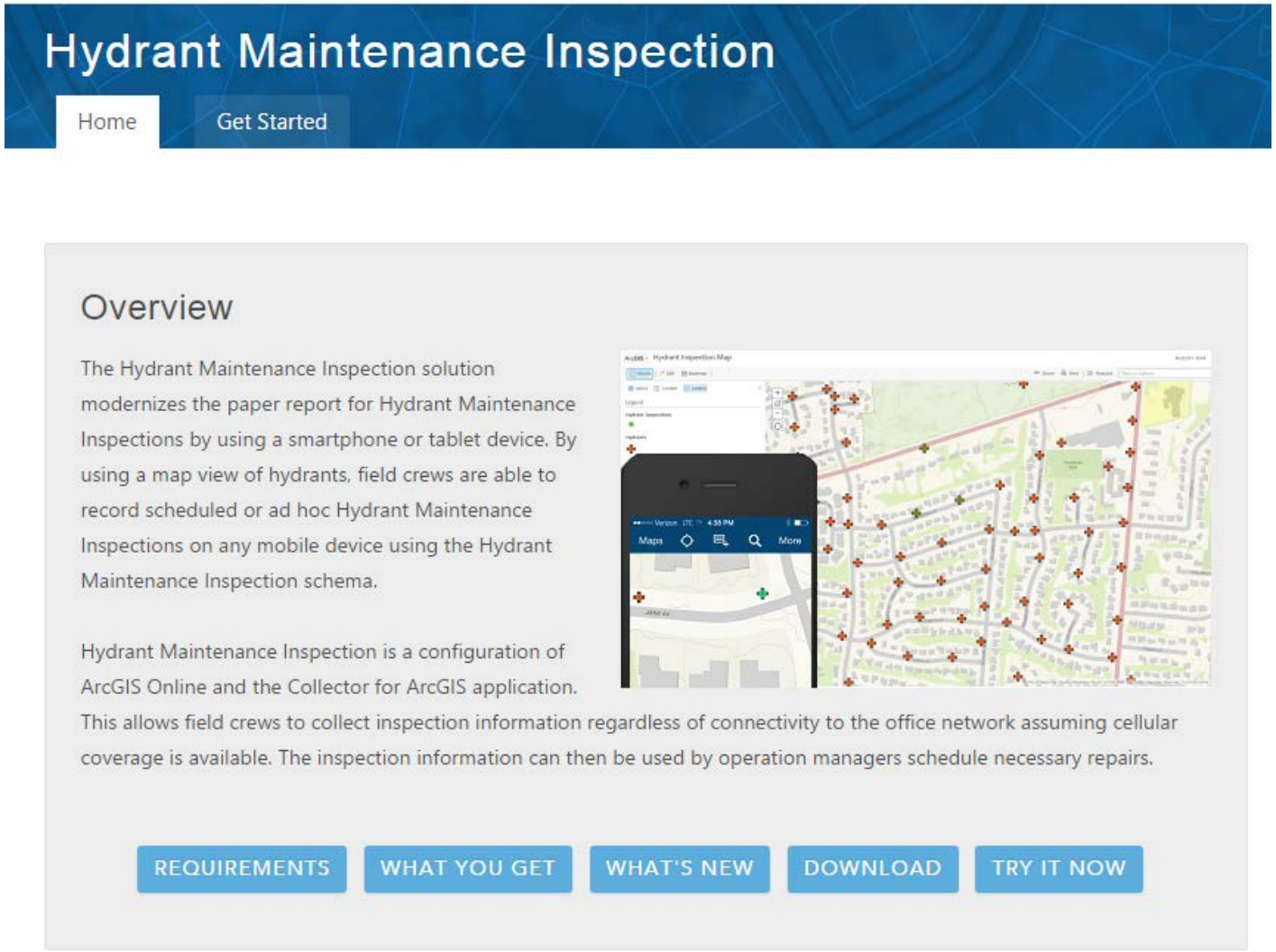
Cons:

- There will be many data structures that are not well suited to your organization
  - Esri's recommendation is that you don't delete anything…
- It is an evolving structure, and might evolve in a different direction than you had planned for…
  - I haven't used the update utility yet…

Maps and Apps

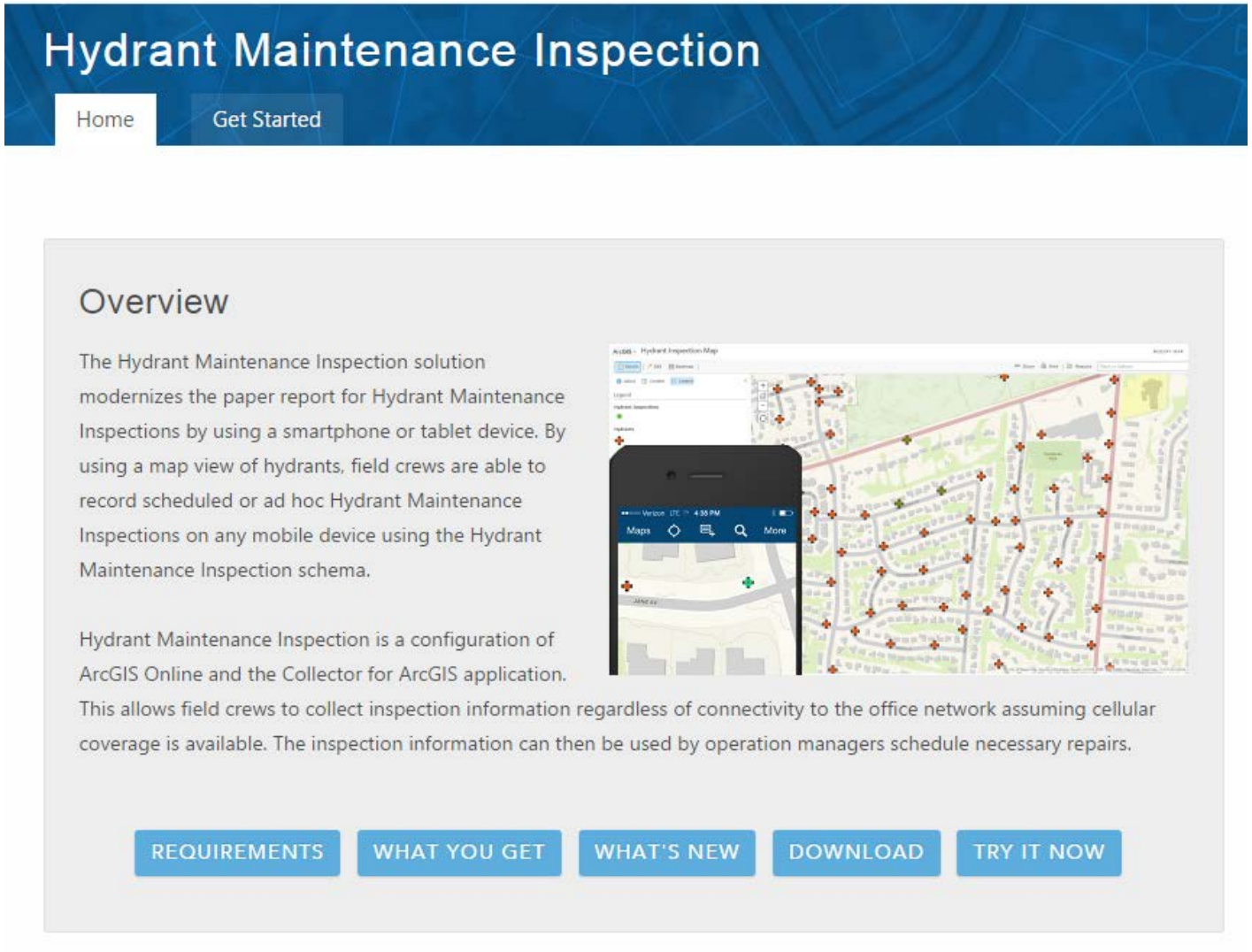
- http://solutions.arcgis.com/utilities/water/
- These vary from an MXD to scripts and coded applications
- They are good templates.

Work Order/ Asset Management…?



- SilverLakeGIS.DBO.InfrastructureOperations
  - SilverLakeGIS.DBO.BridgeMaintAgreement
  - SilverLakeGIS.DBO.CallVolumeDistrictReport
  - SilverLakeGIS.DBO.CallVolumeSnowMapReport
  - SilverLakeGIS.DBO.CatchbasinInspection
  - SilverLakeGIS.DBO.DrinkingWaterAdvisory
  - SilverLakeGIS.DBO.EngineeringGrid
  - SilverLakeGIS.DBO.ExternalAgencyProject
  - SilverLakeGIS.DBO.LandscapeMaintAgreement
  - SilverLakeGIS.DBO.MarkupPolygon
  - SilverLakeGIS.DBO.OutfallInspection
  - SilverLakeGIS.DBO.PaveMarkMaintAgreement
  - SilverLakeGIS.DBO.piAlert
  - SilverLakeGIS.DBO.piBoundary
  - SilverLakeGIS.DBO.piBoundaryLine
  - SilverLakeGIS.DBO.piProject
  - SilverLakeGIS.DBO.piServiceArea
  - SilverLakeGIS.DBO.piWorkorder
  - SilverLakeGIS.DBO.PlanDrawing
  - SilverLakeGIS.DBO.PlowActivityDistrictReport
  - SilverLakeGIS.DBO.PlowActivitySnowMapReport
  - SilverLakeGIS.DBO.PrintGrid
  - SilverLakeGIS.DBO.RoadBlock
  - SilverLakeGIS.DBO.RoadBlockPoint
  - SilverLakeGIS.DBO.RoadDetour
  - SilverLakeGIS.DBO.SanitaryMaintAgreement
  - SilverLakeGIS.DBO.SCADASite
  - SilverLakeGIS.DBO.SignalMaintAgreement
  - SilverLakeGIS.DBO.SignMaintAgreement
  - SilverLakeGIS.DBO.SLLatecomerAreas
  - SilverLakeGIS.DBO.SLPremiseID
  - SilverLakeGIS.DBO.ssBackupEvent
  - SilverLakeGIS.DBO.ssManholeInspection
  - SilverLakeGIS.DBO.ssOverflowEvent
  - SilverLakeGIS.DBO.StormwaterMaintAgreement
  - SilverLakeGIS.DBO.StreetlightMaintAgreement
  - SilverLakeGIS.DBO.StreetMaintAgreement
  - SilverLakeGIS.DBO.TapPoint
  - SilverLakeGIS.DBO.WaterMaintAgreement
  - SilverLakeGIS.DBO.wHydrantInspection
  - SilverLakeGIS.DBO.wLeak
  - SilverLakeGIS.DBO.wValveInspection

Work Order/ Asset Management…?



Removed at July 2015 update of LGIM

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  - SilverLakeGIS.DBO.wLeak
  - SilverLakeGIS.DBO.wValveInspection

Initial Setup

- Download: http://solutions.arcgis.com/local-government/help/local-government-information-model/
  - XML Data Dictionary
  - XML Schema
  - Release Notes
- X-Ray for ArcCatalog: Use to set spatial reference
- Schema Migration Wizard
  - Updates are made to the schema, this updates your schema to latest version
- New version of the Information Model just released (July 7th)

What do you want to add/ change?

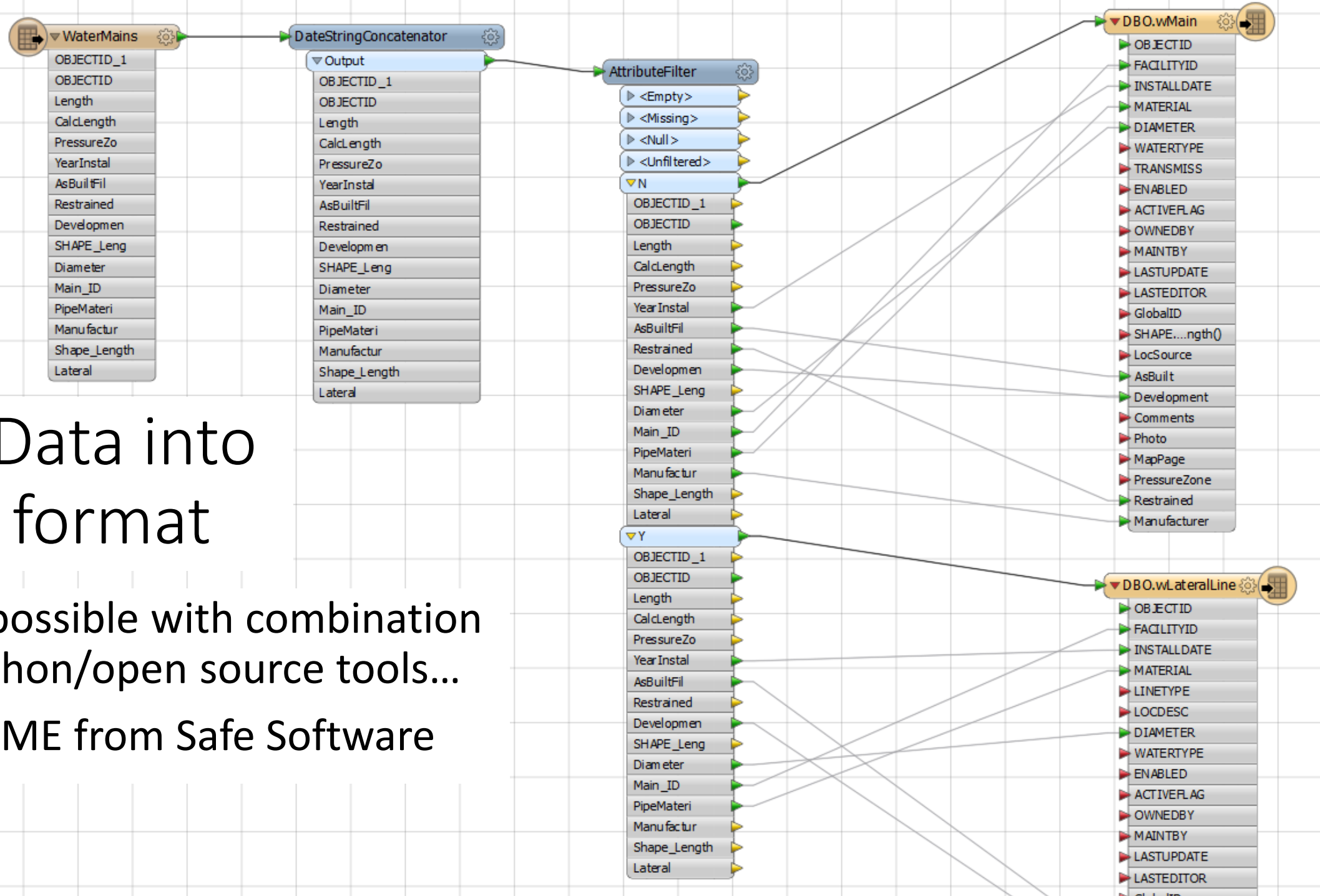
Original fields

Fields added to most feature classes

Feature class – specific fields

Sewer Gravity Mains

FieldName	Type	Length	Description	AliasName	DomainName	DefaultValue	IsNullable
FACILITYID	String	20	Locally assigned Facility Identifier	Facility Identifier	null	null	true
INSTALLDATE	Date	8	The date the asset was installed	Install Date	null	null	true
MATERIAL	String	20	Material the asset is manufactured with	Material	piPipeMaterial	null	true
DIAMETER	Double	8	The diameter of the asset	Diameter	piPipeDiameter	null	true
MAINSHAPE	String	50	The shape of the gravity main	Main Shape	piPipeShape	null	true
LINEDYEAR	String	4	Year the pipe was lined	Year Lined	null	null	true
LINERTYPE	String	20	The type of liner	Liner Type	piLiningMethod	null	true
FROMMH	String	11	From Manhole	From Manhole	null	null	true
TOMH	String	11	The downstream manhole	To Manhole	null	null	true
WATERTYPE	String	30	Indicates the type of water in the pipe	Water Type	ssWaterType	null	true
ENABLED	SmallInteger	2	Enabled	Enabled	EnabledDomain	1	true
ACTIVEFLAG	SmallInteger	2	Indicates if the feature is in use/active	Active Flag	BooleanDomain	1	true
OWNEDBY	SmallInteger	2	Indicates which organization owns the asset	Owned By	AssetOwner	1	true
MAINTBY	SmallInteger	2	Indicates which organization maintains the asset	Managed By	AssetManager	1	true
SUMFLOW	Double	8	The sum of flow	Flow Summary	null	null	true
LASTUPDATE	Date	8	The date the feature was last updated in the maintenance database	Last Update Date	null	null	true
LASTEDITOR	String	50	The user who performed the last update	Last Editor	null	null	true
DOWNELEV	Double	8	The downstream pipe elevation	Downstream Elevation	null	null	true
UPELEV	Double	8	The upstream pipe elevation	Upstream Elevation	null	null	true
SLOPE	Double	8	The slope of the pipe	Slope	null	null	true
LocSource	String	8	Source of location information-implies level of accuracy	Location Source	LocSource	null	true
AsBuilt	String	30	As Built Number	As Built	null	null	true
Development	String	50	Development name	Development	null	null	true
Comments	String	150	Comments	Comments	null	null	true
Attachments	String	150	Location of attachments folder	Attachments	null	null	true
MapPage	String	4	Map page containing asset	Map Page	null	null	true
URL	String	150	File location of as-built PDF for project when asset installed	URL	null	null	true
Easement	Integer	2	Yes/No does main lie in an easement		BooleanDomain	null	true
EasementNum	String	30	Easement ID Number	Easement Number	null	null	true
BasinName	String	30	Sewer Basin flows flow to	Basin Name	SLssBasin	null	true
Treatment	String	30	Agency which receives sewer flows	Treatment	SLssTreatment	null	true
Datum	String	30	Vertical Datum	Datum	SLpiDatum	null	true
LastFlushed	Date	8	Date the line was last flushed		null	null	true
FlushFrequency	String	30	Planned flush frequency	Flush Frequency	SLpiFlushFreq	null	true
Manufacturer	String	30	Pipe Manufacturer	Manufacturer	SLpiPipeManufacturer	null	true
UtilityTax	String	30	Utility Tax designation	Utility Tax	SLssUtilityTax	null	true



Getting Data into the new format

- Might be possible with combination of esri/python/open source tools…
- We used FME from Safe Software

Thanks!

Questions?

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