Amtrak®	ENGINEERING PRACTICES
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TITLE

WAYSIDE ASSET DATABASE CHANGE MANAGEMENT

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2/19/19		
REVISED DATE		5902
3/5/19	3902	
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NATURE AND SCOPE

To establish a uniform system for reporting and documenting changes to feature locations and attributes contained in Amtrak's wayside asset database.

SPECIAL REFERENCE

Wayside Asset Change Request Form

PROCEDURE

Amtrak's Wayside Asset Database contains a complete inventory and geographic locations for, but not necessarily limited to, the following track and signal features: Switches, Crossings, Signals, Insulated Joints, Track, Structures, Mileposts, Diamonds, Signage, and Derails. The Wayside Asset Database is used for multiple purposes, including use in Amtrak's Positive Train Control systems. To maintain the asset data's integrity and usefulness, it is imperative that managers responsible for changing any of the assets listed below submit a Wayside Asset Change Request Form before making any planned field changes or immediately after making any unplanned field changes that may affect the location of Critical Features associated with these assets.

Critical Features covered by this instruction:

- Points of Derail on controlled tracks or on tracks leading directly onto a controlled track
- Diamonds
 - Edge of railroad or center of railroad crossing type information are not collected
- Insulated Joints
 - Associated with a Derail
 - At an ABS Block Point location
 - If used as a Clearance Point without a Signal
- Milepost Signs
- Other signage
 - Block Limit or Operating Stations
 - Control Point
 - Method of Operation Boundary
 - Permanent Speed Change
 - State Line Sign
 - Yard Limit

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- Point of Switch for turnouts
- Edges of Public and Private At-Grade Road Crossings
- Signals
- Track Centerline
- Limits of Permanent Speed Restrictions
- Changes to MAS or Permanent Speed Restriction speed limits

Planned Modifications

Refer to Figure 1 – Planned Modification Process Flow.

When work is planned that will add, relocate or remove any of the critical features covered by these instructions more than **six inches**, the manager responsible for the change will complete a Wayside Asset Change Request Form and submit the form to the Wayside Asset Database Manager, Deputy Chief Engineer Track and Deputy Chief Engineer C&S. The office of Deputy Chief Engineer Track will provide surveyor support as necessary to obtain new GPS coordinates for planned asset additions and/or relocations.

The manager responsible for the change will layout reference marks for the addition or relocation of any assets prior to the field modification. In the case of more complex and/or new installations, i.e. "green field", the manager shall contact the office of the Deputy Chief Engineer Track for surveyor support to assist in locating these reference marks.

The Deputy Chief Engineer C&S will ensure that all wayside asset modifications are updated in affected PTC systems. The C&S PTC Manager will maintain a PTC change log and coordinate with others to ensure PTC systems are prepared to implement the PTC system changes concurrently with field changes. The C&S PTC Manager will coordinate PTC System Change Management meetings to coordinate planned field installation dates with the manager responsible for a proposed modification, C&S PTC staff and Operating Practices. The C&S PTC Manager will coordinate required testing to ensure proposed revisions to the PTC track database are correct before being placed inservice. The manager responsible for the modification must place proposed modifications in-service during the installation date established by the C&S PTC Manager. The manager responsible for the change must communicate any deviations from the planned field installation date to the C&S PTC Manager.

Following the modification, the manager responsible for the change will field verify asset(s) added or relocated as a result of the modification, were installed within six inches of the planned location according to the provided reference marks. If any asset deviates more than **six inches** from its planned location, the manager responsible for the change must **immediately** reinitiate the change process notifying the Wayside Asset Database Manager, Deputy Chief Engineer Track and Deputy Chief Engineer C&S and obtain updated coordinates.

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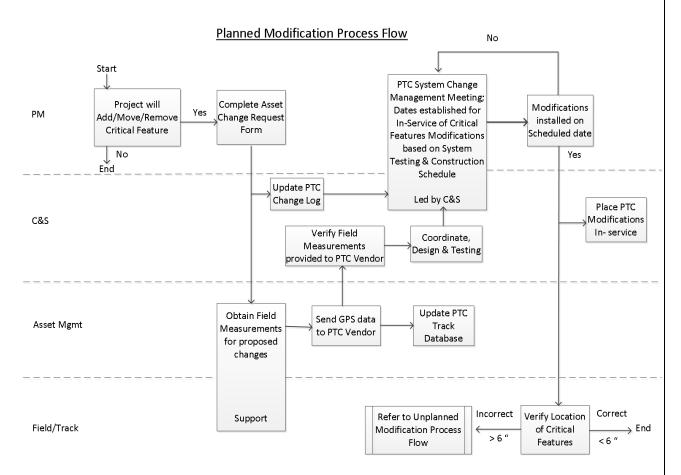


Figure 1

Unplanned Modifications

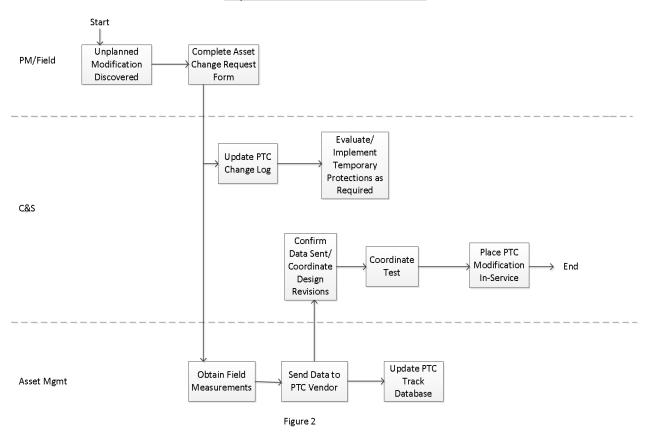
Refer to Figure 2 – Unplanned Modification Process Flow.

When assets covered by these instructions are relocated or removed as a result of unplanned work, the manager responsible for the unplanned work must <u>immediately</u> complete and submit the Wayside Asset Change Request Form to the Wayside Asset Database Manager, Deputy Chief Engineer Track and Deputy Chief Engineer C&S. The Wayside Asset Database Manager will ensure that an updated field measurement is obtained.

The Wayside Asset Database Manager may provide the initial GPS data to the assigned Vendor responsible for PTC database modifications and will maintain the final GPS data in the Amtrak databases. The GPS data may also be transmitted directly to the vendor by the Amtrak surveyor via the GPS data gathering tool. The C&S PTC Manager is responsible to ensure that GPS data is transmitted to the vendor by the appropriate party.

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Unplanned Modification Process Flow



RESPONSIBILITYS

Title\Role	Authority	Responsibility	Planned Assignments
Project Manager	Various	Provide initial asset information of field change	Complete Wayside Asset Change Request Form and send to Deputy Chief Engineer Track, Deputy Chief Engineer C&S and Wayside Asset Database Manager.
			Attend PTC System Change Management meetings
			Coordinate changes to in-service date of modifications to critical features with the C&S PTC Manager

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Title\Role	Authority	Responsibility	Planned Assignments
Wayside Database Asset Manager		Ensure asset data is accurate and maintained in Amtrak Databases	Obtain field measurements for planned and unplanned work.
			Ensure updated field measurement is received and sent to PTC Vendor for Subdivision file development
			Update Amtrak Databases
C&S PTC	Deputy Chief	Ensure timely updates occur to affected PTC systems and support	Maintain PTC change log.
Manager	Engineer C&S		Ensure revised GIS data is provided to the Wayside Asset Database Manager and PTC Vendor.
		operational integrity of PTC	Coordinate PTC System Change Management meetings
		systems	Ensure PTC Systems are prepared to implement PTC system changes with field changes.
			Coordinate planned field installation dates with PMs, C&S PTC staff, Operating Practices and Vendor
PTC Vendor	Engineer	Support modification to PTC track database	Process GPS data and prepare PTC track database file.
C&S	C&S		Support PTC system testing.
Track Surveyor	Deputy Chief Engineer Track	Support collection of asset location data	Obtain field measurements for planned and unplanned work as required
Field Supervisors	AVP Engineering	Verify field location of assets	Verify critical feature location post construction.
	Maintenance and Construction	potification for	Complete Wayside Asset Change Request Form for unplanned changes and send to Deputy Chief Engineer Track, Deputy Chief Engineer C&S and Wayside Asset Database Manager.



Wayside Asset Change Request Form

	noose an item. Subdiv: Supervisor:
	Plan: Choose an item.
	Work Date:
	From Milepost: To Milepost
	Add: Modify: Delete:
Modification	Description
Tue als True as	Change on items. Treals Cide (Heading to increasing MD). Change on items
	Choose an item. Track Side (Heading to increasing MP): Choose an item.
Direction of	Move: Choose an item. Distance Moved:
Switch	Switch Type: Choose an item. Turnout #: Turnout Direction: Choose an item.
	Frog Type: Choose an item.
Signal	Signal Type: Choose an item. Signal Direction: Choose an item.
Signal	Signal Type: Choose an item. Signal Direction: Choose an item.
Signal Milepost	
_	
Milepost	Milepost Number:
Milepost	Milepost Number: