



Review of the MIG for Prefabricated Structural Materials

MTD – Prefabricated Structural Materials



- Who knows what the MIG is? Who is using it?
- Where the MIG is located: <https://ftp.txdot.gov/pub/txdot/mtd/mig.pdf>
 - External: Home/ Business / Project development resources / Materials
 - Internal: Crossroads Home / Division / Material and Tests Division
- Purpose of the MIG.
 - Outline: gives district responsibilities and MTD responsibilities.
 - Doesn't include all fabricated products.
 - Provides spec references and MPL links.spea

Precast and Prestressed Concrete Materials



District Responsibilities:

- MPL: Reinforced Concrete Pipe and Precast Box Culvert Fabrication Plants.
 - Verify Fabricator's designated approval stamp.
 - Inspects precast box culverts received on the jobsite for the following:
 - excessive cracking and other damage,
 - proper size and fill height (size and fill height are marked on box culverts), and
 - proper installation.
- TOOL:** DMS-7305 Annex Criteria For Evaluation of Precast Drainage Structures.
- Attach SiteManager **QM test report.**



District Responsibilities:

- MPL: Reinforced Concrete Pipe and Precast Box Culvert Fabrication Plants.
(applies to circular, elliptical, or arch pipe)
 - Verify Fabricator's designated approval stamp.
 - Inspects RCP received on the jobsite for the following:
 - Damage or defects, and
 - Verify the proper size and class.
- TOOL:** DMS-7305 Annex Criteria For Evaluation of Precast Drainage Structures.
- Attach SiteManager **QM test report.**



District Responsibilities:

- MPL: Junction Boxes, Manholes, and Inlets Fabrication Plants (Multi-Project).

NOTE: Item 424 defines multi-project fabrication plants.

- Verify Fabricator's designated approval stamp.
- Attach SiteManager **QM test report**.

NOTE: For precast manhole and inlet steel and iron appurtenances, see SECTION 31 – FRAMES, GRATES, RINGS, AND COVERS.



District Responsibilities:

- MPL: Concrete Traffic Barrier Fabrication Plants (Multi-Project). Permanent or temporary barrier retained by the TxDOT must be fabricated from an approved plant.
- Verify Fabricator's designated approval stamp.
- NOTE: When portable barrier is to be furnished and then retained by the Contractor, barrier from non-approved sources or previously used barrier may be provided if the Contractor submits written certification of specification compliance. (See Item 512, "Portable Traffic Barrier")
- Attach SiteManager **QM test report**.



Retaining walls, Railing, and Sound/Noise Walls

District Responsibilities:

- MPL: Nonstressed Member Fabrication Plants (Multi-Project).
- Verify Fabricator's designated approval stamp.
- Inspects precast items received on the jobsite for the following:
 - excessive cracking and other damage,
 - ensures proper fit and aesthetics, and
 - proper installation.
- Inspects precast items at project-specific nonstressed member fabrication plants.
- Attach SiteManager **QM test report**.



Columns, C-span Culverts, etc.

District Responsibilities:

- MPL: Nonstressed Member Fabrication Plants (Multi-Project).
- Verify Fabricator's designated approval stamp.
- Inspects precast items received on the jobsite for the following:
 - excessive cracking and other damage,
 - ensures proper fit and aesthetics, and
 - proper installation.
- Inspects precast items at project-specific nonstressed member fabrication plants.
- Verify SiteManager **Structural test report**.



Minor: Piling & Deck Panels

District Responsibilities:

- MPL: [Prestressed Member Fabrication Plants \(Multi-Project\)](#).
- Verify Fabricator's designated approval stamp.
- Inspect prestressed concrete items received on the jobsite for the following:
 - cracking that exceeds the specification tolerance or spalled concrete,
 - ensures proper fit and aesthetics, and
 - proper installation.
- **Attach SiteManager QM test report.**



Major: Bridge Beams (Girders), Columns, C-span Culverts, etc.

District Responsibilities:

- MPL: Prestressed Member Fabrication Plants (Multi-Project).
- Verify Fabricator's designated approval stamp.
- Inspects prestressed concrete items received on the jobsite for the following:
 - cracking that exceeds the specification tolerance or spalled concrete,
 - ensures proper fit and aesthetics, and
 - proper installation.
- Inspect prestressed concrete items fabricated at project-specific prestressed member fabrication plants.
- Verify SiteManager **Structural test report**.

Bridge and Non-Bridge Structural Steel Materials



District Responsibilities:

- MPLs:
 - Roadway Illumination Pole and Luminaire Arm Fabrication Plants.
 - High Mast Illumination Pole Fabrication Plants.
 - Traffic Signal Pole Assembly Fabrication Plants.
 - Intelligent Transportation System (ITS) Pole Fabrication Plants.
- Verify Fabricator's designated approval stamp.
- Inspect poles received on the jobsite for the following:
 - verify proper dimensions and general fabrication, and
 - damage or defects in the galvanized coatings such as bare spots, peeling, flaking, etc.



District Responsibilities:

- Verifies that anchor bolts are lubricated and tightened when erecting the pole.
- Verifies tack-welds on each nut to washer in 2 places and each washer to the base plate in 2 places.
- Verifies galvanizing damage caused by tack-welding on nuts, washers, and baseplate is repaired.
- Verify SiteManager **Structural test report**.



District Responsibilities:

- MPL: [High Mast Rings and Support Assembly Fabrication Plants.](#)
- Verify Fabricator's designated approval stamp.
- Inspect poles received on the jobsite for the following:
 - verify proper dimensions and general fabrication,
 - damage or defects in the galvanized coatings such as bare spots, peeling, flaking, etc.
 - verify proper fit of items such as motors, cables, etc.
- Verify SiteManager **Structural test report.**



District Responsibilities:

- MPL: [Overhead Sign Support Structure and Sign Walkway Fabrication Plants.](#)
- Verify Fabricator's designated approval stamp.
- Inspect OSS and walkways received on the jobsite for the following:
 - verify proper dimensions and general fabrication,
 - verify proper camber of overhead sign support spans, and
 - damage or defects in the galvanized coatings such as bare spots, peeling, flaking, etc.
- Verify that fasteners for field bolted connections are properly installed.
- Verify that anchor bolts are lubricated and tightened when erecting the structure.
- Verify tack-welds on each nut to washer in 2 places and each washer to the base plate in 2 places.
- Verify galvanizing damage caused by tack-welding on nuts, washers, and baseplate is repaired.
- Verify SiteManager **Structural test report.**



District Responsibilities:

- No MPL
- Verify Department monogram approval stamp.
- Inspect LRSS and bridge mounted supports received on the jobsite for the following:
 - verify proper dimensions and general fabrication,
 - damage or defects in the galvanized coatings such as bare spots, peeling, flaking, etc.
- Verify SiteManager **Structural test report**.



District Responsibilities:

- MPL: [Metal Railing Fabrication Plants](#)
- Verify Fabricator's designated approval stamp.
- Inspect metal railing received on the jobsite for the following:
 - proper dimensions, hole sizes and location, general fabrication,
 - damage or defects in the galvanized coatings such as bare spots, peeling, flaking, etc.
- Obtain a completed Form 1818 for the steel anchor bolts.
- Verify SiteManager **Structural test report**.



District Responsibilities:

- MPL: [Steel Bridge Fabrication Shops](#).
- Verify Fabricator's designated approval stamp.
- Inspect structural steel rolled beams, welded I-section plate girders, box girders, tub girders, bent caps, and diaphragms for the following:
 - damage such as dents, bends or twists, and missing studs
 - damage or deterioration to the paint
 - markings that would affect uniform weathering on weathering steel
 - match marks, according to erection plans, for bolted connections
 - proper fit during and after erection
- Verify that fasteners for field bolted connections are properly installed.
- Verify SiteManager **Structural test report**.

Miscellaneous Structural Materials



District Responsibilities:

- MPL: [Elastomeric Bridge Bearing Pad Manufacturers.](#)
- Verify Fabricator's designated approval stamp.
- Inspect plain or laminated pads for shipping damage.
- Verify proper field installation of pads (e.g., direction of pad slope, location).
- Verify SiteManager Structural test report.



Sliding Elastomeric Bearings, High Load Multi-Rotational (HLMR) Bearings, Pedestals, and Shoes

District Responsibilities:

- No MPL.
- Verify Department monogram approval stamp is placed on the material.
- Inspect plain or laminated pads for shipping damage.
- Check for damage in required coatings.
- Verify SiteManager Structural test report.



District Responsibilities:

- MPLs:
 - Timber Treating Plants and Suppliers for timber blocks and posts,
 - Composite Material Blocks and Posts for Metal Beam Guard Fence, and
 - Metal Beam Guard Fence Rail Element Manufacturers for rail elements.
- Timber Blocks and Posts:
 - Visually inspects timber posts and blocks.
 - Receive Form 2148, “Certification of Compliance (Treated Timber Products).”



District Responsibilities:

- Rail Element:
 - Visually inspects galvanized coating on steel items for bare spots, peeling, flaking, or handling damage.
 - Obtain a completed Form 1818 (D-9-USA-1), “Material Statement,” with mill test reports (MTRs), certifications, and galvanizing reports for all steel components of metal beam guard fence.
- Attach SiteManager **QM test report**.



District Responsibilities:

- MPLs:
 - [Reinforcing Steel Mills](#) for uncoated reinforcing steel, and
 - [Epoxy Applicators for Reinforcing Steel](#) for epoxy coated reinforcing steel.
- Documentation Requirements:
 - Obtain mill test reports (MTRs).
 - Form 1818 (D-9-USA-1), “Material Statement,” is **NOT** required to be furnished for reinforcing steel.



District Responsibilities:

- Inspection Requirements:
 - Inspect proper size and grade of steel is used for uncoated and epoxy coated reinforcing steel.
 - Ensure all visible damage to epoxy coating from handling or placement is properly repaired before the placement of concrete.
 - Obtain a copy of a written certification and the epoxy applicator's control tests for epoxy coated reinforcing steel furnished to the project.
- Attach SiteManager **QM test report**.



HELP

#EndTheStreakTX

End the streak of daily deaths on Texas roadways.

[TxDOT.gov](https://www.txdot.gov) (Keyword: #EndTheStreakTX)



#EndTheStreakTX Toolkit

