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| --- | --- | --- | --- | --- |
| DOTLOGO2 | | | **Annual Precast Plant Inspection** | |
|  | | | | |
|  | Plant Name | | Plant Address Line 1 |  |
|  |  | |  |  |
|  | Date of Inspection | P/S# | Plant Address Line 2 |  |
|  |  |  |  |  |
|  | Inspector Contact Information | | |  |
|  | Phone: | Fax: | E-mail: |  |
|  | **GENERAL**  Precast concrete products depend on process controls and inspection during manufacturing to ensure quality and uniformity. This checklist is a system for evaluating the facilities of plants. It can be used for Departmental Inspection of a Producer that is attempting to obtain Initial Approval, for an Annual Departmental Inspection, or for a Special Departmental Inspection. Items are referenced to the Producer’s QC Plan, the BMPR Policy Memorandum: QC/QA Program for Precast Concrete Products (Precast Memo), AASHTO, Approved Shop Drawings (Shop Drawings), Highway Standards (Highway Std), Standard Specifications for Road and Bridge Construction (Std. Specs.), etc., as appropriate.  Each item on the checklist shall be marked in the appropriate space or column. Items can typically be marked: Yes, No, Not Applicable (NA), OK, or No Good (NG). There are also areas where Inspector comments may be provided. | | |  |
|  | Inspection Review Personnel: | | |  |
|  |  | | |  |
|  | Weather Conditions: | | |  |
|  |  | | |  |
|  | Products Being Produced During Inspection: | | |  |
|  |  | | |  |
|  | Findings and Recommendations: | | |  |
|  |  | | |  |

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| **QC PERSONNEL CERTIFICATION/TRAINING (List Type: ACI, etc)** | | | | | | | | | | | | |
|  | | Name | | | ACI I | 3 Day Agg. | | 5 Day Agg. | | Concrete Tester | | Other |
| Plant Manager | |  | | |  |  | |  | |  | |  |
| QC Manager | |  | | |  |  | |  | |  | |  |
| QC Technician 1 | |  | | |  |  | |  | |  | |  |
| QC Technician 2 | |  | | |  |  | |  | |  | |  |
| QC Technician 3 | |  | | |  |  | |  | |  | |  |
| QC Technician 4 | |  | | |  |  | |  | |  | |  |
| QC Technician 5 | |  | | |  |  | |  | |  | |  |
| **QUALITY CONTROL** | | | | | | | | | | | | |
| APPR. COMPONENT MATERIALS & CONFORMANCE W/ QC PLAN | | | | QUALITY CONTROL TESTING & CONFORMANCE W/ QC PLAN AND PRECAST MEMO ATTACHMENTS F & C | | | | | | | | |
|  | *Yes,  No, NA* | | Comments |  | | | Test Proc. *OK, NG, NA* | | Freq. *OK, NG, NA* | | Comments | |
| Cement |  | |  | Air Content | | |  | |  | |  | |
| Fine Agg. |  | |  | Slump | | |  | |  | |  | |
| Coarse Agg. |  | |  | Cylinder | | |  | |  | |  | |
| Fly Ash |  | |  | Aggregate Moisture | | |  | |  | |  | |
| Microsilica |  | |  | 3-Edge | | |  | |  | |  | |
| GGBF Slag |  | |  | Density | | |  | |  | |  | |
| HRM |  | |  | Core | | |  | |  | |  | |
| Admixtures: Air, A to G, S |  | |  | Temperature | | |  | |  | |  | |
| Weld Wire Fab. |  | |  | Absorption | | |  | |  | |  | |
| Black Re-bar |  | |  | Permeability | | |  | |  | |  | |
| Epoxy Coated Re-bar |  | |  | Hydrostatic | | |  | |  | |  | |
| Repair Materials |  | |  | Freeze/Thaw | | |  | |  | |  | |
| Mastic |  | |  | Linear Drying Shrinkage | | |  | |  | |  | |
| Other: |  | |  | Abrasion Re sistance | | |  | |  | |  | |
| Other: |  | |  | Slump Flow (SCC) | | |  | |  | |  | |
| Other: |  | |  | J-Ring(SCC) or L-Box(SCC) | | |  | |  | |  | |
|  |  | |  | HVSI (SCC) | | |  | |  | |  | |

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| **PRE-POUR CHECKS** | | | | | | | | **POST-POUR CHECKS** | | | | | | | | |
| CONFORMANCE W/ HIGHWAY STD, AASHTO STD, OR SHOP DRAWINGS & PRECAST MEMO | | | | | | | | CONFORMANCE W/ HIGHWAY STD, AASHTO STD, OR SHOP DRAWINGS & PRECAST MEMO | | | | | | | | |
|  | | *OK,  NG, NA* | | | Comments | | |  | | | | *OK,  NG, NA* | | | Comments | |
| Area of Reinforcement | |  | | |  | | | Product Defects | | | |  | | |  | |
| Placement of Reinforcement | |  | | |  | | | Product Condition | | | |  | | |  | |
| Tying of Reinforcement | |  | | |  | | | Dimensions | | | |  | | |  | |
| Welding of Reinforcement | |  | | |  | | | Curing | | | |  | | |  | |
| Form Dimensions | |  | | |  | | | Storage | | | |  | | |  | |
| Rebar clean | |  | | |  | | | Other: | | | |  | | |  | |
| Mix Design | |  | | |  | | | Other: | | | |  | | |  | |
| Other: | |  | | |  | | | Other: | | | |  | | |  | |
| **RECORDS** | | | | | | | | **PRODUCT MARKINGS** | | | | | | | | |
| CONFORMANCE W/ PRECAST MEMO  SECTION 26.0 | | | | | | | | CONFORMANCE W/ PRECAST MEMO  ATTACHMENT E | | | | | | | | |
|  | | | *Yes, No, NA* | | | Comments | |  | | | | | *Yes, No, NA* | | | Comments |
| Diary – Kept 3-Years | | |  | | |  | | Producer Mark | | | | |  | | |  |
| Tests and Equip. Calibration: Kept 3-Years | | |  | | |  | | Date of Manufacture | | | | |  | | |  |
| Invoices: Kept 2-Years | | |  | | |  | | AASHTO or ASTM | | | | |  | | |  |
| Shop Drawings, Shipping Records, and QC Plans, etc.: Kept 3-Years | | |  | | |  | | Span, Rise, Table, and Design Earth Cover | | | | |  | | |  |
| Other: | | |  | | |  | | Class or Marking | | | | |  | | |  |
| Remarks/Comments: | | | | | | | | | | | | | | | | |
| **DOCUMENTATION AND SPECIFICATIONS** | | | | | | | | | | | | | | | | |
|  | | | | | | | Available | | Current | | Comments | | | | | |
| *Yes,  No, NA* | | *Yes,  No, NA* | |
| Std. Specs. For Road and Bridge Construction | | | | | | |  | |  | |  | | | | | |
| Supplemental Specifications and Recurring Special Provisions | | | | | | |  | |  | |  | | | | | |
| D&E and GBSP Special Provisions | | | | | | |  | |  | |  | | | | | |
| QC/QA Precast Policy Memorandum | | | | | | |  | |  | |  | | | | | |
| QC Plan | | | | | | |  | |  | |  | | | | | |
| AASHTO and/or ASTM Stds. | | | | | | |  | |  | |  | | | | | |
| **QA**  **PRECAST MEMO ATTACHMENT F, and SECTIONS 11.0, 18.0 and 22.0; and Art. 508.03** | | | | | | | | | | | | | | | | |
|  | Freq. | | | Comments | | | |  | | Freq. | | | | Comments | | |
| Cement |  | | |  | | | | GGBF Slag | |  | | | |  | | |
| Fine Agg. |  | | |  | | | | HRM | |  | | | |  | | |
| Coarse Agg. |  | | |  | | | | Admixtures | |  | | | |  | | |
| Fly Ash |  | | |  | | | | Welded Wire | |  | | | |  | | |
| Microsilica |  | | |  | | | | Black Re-bar | |  | | | |  | | |

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| **QA PRECAST MEMO ATTACHMENT F, and SECTIONS 11.0, 18.0 and 22.0; and Art. 508.03 (continued)** | | | | | | | | |
|  | Freq. | Comments | | | |  | Freq. | Comments |
| Epoxy Coated Re-bar |  |  | | | | Mastic |  |  |
| Repair Materials |  |  | | | | Other: |  |  |
| Other: |  |  | | | | Other: |  |  |
| Other: |  |  | | | | Other: |  |  |
| Other: |  |  | | | | Other: |  |  |
| Other: |  |  | | | | Other: |  |  |
| Remarks/Comments: | | | | | | | | |
| **EQUIPMENT**  **PRECAST MEMO ATTACHMENTS C & D** | | | | | | | | |
|  | | | IDOT  Appr. | Calibr.  Date | Comments | | | |
| *Yes,  No, NA* |
| Compression Test Machine (Cylinder) | | |  |  |  | | | |
| Compression Test Machine (Concrete Masonry Units) | | |  |  |  | | | |
| 3-Edge Bearing | | |  |  |  | | | |
| Air Meter | | |  |  |  | | | |
| Cylinder Molds | | |  |  |  | | | |
| Slump | | |  |  |  | | | |
| Aggregate Moisture | | |  |  |  | | | |
| Sieves | | |  |  |  | | | |
| Balance | | |  |  |  | | | |
| Thermometer | | |  |  |  | | | |
| Tamping Rod | | |  |  |  | | | |
| Mallet | | |  |  |  | | | |
| Tools (Shovel, Vibrator, etc.) | | |  |  |  | | | |
| SCC J-Ring | | |  |  |  | | | |
| SCC Slump Flow | | |  |  |  | | | |
| SCC Saw | | |  |  |  | | | |
| SCC Core Drill | | |  |  |  | | | |
| SCC Balance | | |  |  |  | | | |
| Measuring Tape | | |  |  |  | | | |
| Sieve Shaker | | |  |  |  | | | |
| Oven/Hot Plate | | |  |  |  | | | |
| Coarse Aggregate Splitter with Pans | | |  |  |  | | | |
| Fine Aggregate Splitter with Pans | | |  |  |  | | | |
| Other: | | |  |  |  | | | |
| Other: | | |  |  |  | | | |
| Other: | | |  |  |  | | | |
| Other: | | |  |  |  | | | |

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| **PRECAST PRODUCTS** | | | | | |
| Product | Prod. Key | In MISTIC | Manufact. at Plant | In QC Plan | On Appr. List |
| *Yes, No, NA* | *Yes, No, NA* | *Yes, No, NA* | *Yes, No, NA* |
| Bridge Slabs | A:1 |  |  |  |  |
| Pile Caps | A:2 |  |  |  |  |
| Other Structural Members | A:3 |  |  |  |  |
| Piles & Extensions | A:4 |  |  |  |  |
| Decorative Bridge Structural Elements | A:5 |  |  |  |  |
| Three-Sided Precast Conc. Structures | A:6 |  |  |  |  |
| Box Culvert Sections | B:1 |  |  |  |  |
| Box Culvert End Sections | B:2 |  |  |  |  |
| Reinf. Conc. Culvert, Storm Drain, and Sewer Pipe (Includes Elbows and Tees) | C:1 |  |  |  |  |
| Reinf. Conc. Elliptical Culvert, Storm Drain, and Sewer Pipe | C:2 |  |  |  |  |
| Reinf. Conc. Arch Culvert, Storm Drain, and Sewer Pipe | C:3 |  |  |  |  |
| Conc. Sewer, Storm Drain, and Culvert Pipe | C:4 |  |  |  |  |
| Concrete Drain Tile | Note: This product is no longer applicable and will be deleted from the Standard Specifications. | | | | |
| Reinf. Conc. Flared End Sections | C:6 |  |  |  |  |
| Reinf. Conc. Elliptical Flared End Sections | C:7 |  |  |  |  |
| Inlet Boxes for Pipe Culverts and Medians (Types 24A-G, 36A, 48A, Flush Inlet Box for Median, and Shoulder Inlet) | D:1 |  |  |  |  |
| Headwall for Pipe Drain | D:2 |  |  |  |  |
| Catch Basins (Types A-D) | D:3 |  |  |  |  |
| Manhole (Type A) | D:4 |  |  |  |  |
| Inlets (Types A & B) | D:5 |  |  |  |  |
| Drainage Structures (Types 1-6) | D:6 |  |  |  |  |
| Valve Vault (Type A) | D:7 |  |  |  |  |
| Bridge Appr. Drains | D:8 |  |  |  |  |
| *Reserved* | D:9 |  |  |  |  |
| Other Inlets (Applies when there is no Design and Environment Highway Standard) | D:10 |  |  |  |  |
| Remarks/Comments: | | | | | |

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| **PRECAST PRODUCTS** | | | | | |
| Product | Prod. Key | In MISTIC | Manufact. at Plant | In QC Plan | On Appr. List |
| *Yes, No, NA* | *Yes, No, NA* | *Yes, No, NA* | *Yes, No, NA* |
| Right of Way Markers | E:1 |  |  |  |  |
| Drainage Markers | E:2 |  |  |  |  |
| Permanent Survey Markers | E:3 |  |  |  |  |
| Section Markers | E:4 |  |  |  |  |
| Temporary Concrete Barrier | F:1 |  |  |  |  |
| Precast Block Rev. Mats | G:1 |  |  |  |  |
| Precast Art. Rev. Mats | G:2 |  |  |  |  |
| Concrete Brick | G:3 |  |  |  |  |
| Concrete Masonry Units | G:4 |  |  |  |  |
| Concrete Pavers | G:5 |  |  |  |  |
| Segmental Conc. Block Walls | G:6 |  |  |  |  |
| Mech. Stabilized Earth Retaining Walls | H:1 |  |  |  |  |
| Noise Abatement Walls (Reflective) | H:2 |  |  |  |  |
| Modular Retaining Walls | H:3 |  |  |  |  |
| Bumper Blocks (Wheels Stops For Cars) | I:1 |  |  |  |  |
| Picnic Tables, Trash Rec., Planters | I:2 |  |  |  |  |
| Splash Blocks | I:3 |  |  |  |  |
| Handholes | I:4 |  |  |  |  |
| Other: |  |  |  |  |  |
| Other: |  |  |  |  |  |
| Other: |  |  |  |  |  |
| Other: |  |  |  |  |  |
| Remarks/Comments: | | | | | |