Arizona Department of Transportation



INTERMODAL TRANSPORTATION DIVISION Construction Group

CONSTRUCTION BULLETIN 02-04

To: District Engineers

Construction & Materials Orgs

Date: November 27, 2002

From: Julio Alvarado, Assistant State

Engineer, Construction

Subject: Documentation Using Checklists

The intent of these requirements is to affirm quality requirements at the beginning of a project, assure construction processes are in control and stabilized and that the product meets quality goals. The requirements compliment the ADOT Construction Manual and Standard Specifications, Section 105.11, Authority and Responsibility of Project Supervisor and Inspectors, as follows:

- 1. Construction Inspection Checklists shall be completed and submitted as a part of the Daily Diary, in addition to current diary and documentation requirements. Paper copies of the checklists must be included in the project files along with other documentation.
- 2. Inspectors shall obtain current copies of the checklists and discuss quality expectations with the contractor before the beginning of construction of each product covered by the checklists.
- Standard Construction Inspection Checklists are available on the Microsoft Outlook Public Folders file, entitled Computerized Checklists. Instructions to access these checklists are shown on Exhibit 1.
- 4. One checklist shall be completed after each construction process change until the process is in control and stabilized to the satisfaction of the Engineer. Once the process is in control, the Minimum Checklist Frequency for Controlled Processes (Exhibit 2), shall be used. Exhibit 2 also shows the file name and most recent version of each checklist.
- 5. Checklists are constantly being developed and updated as new information becomes available, as the checklists are improved or as manufacturers change requirements. Review the MS Outlook Site before each inspection to assure the most current standard version of the checklist is being used. The version is designated by the date code shown in the upper right corner of the checklist header.
- 6. Project Checklists, which address specific project requirements, may be developed using the designer function on the MS Outlook Site. Computerized versions of checklists can be loaded into the inspector's computers and used in the field for completion of the checklists. Also, suggestions for improvement of Standard Checklists will be appreciated.
- 7. For assistance or suggestions, call Guillermo Silva in Construction Operations at 602.712.7618.

Exhibit 1

ADOT CHECKLIST ACCESS THROUGH MS OUTLOOK

- 1. Open *Microsoft Outlook*.
- Click on *Public Folders* and you will see under Public Folders the following subfolders:
 - Favorites
 - All Public Folders
- 3. Click on All Public Folders and you will see a list of subfolders under it.
- Find and click on *Construction* and the following subfolders will be shown:
 - Construction Operations
 - Inspection Reports
 - Safford Construction
- 5. Find and click on *Construction Operations* and the following subfolders will appear:
 - Checklist Instructions
 - Computerized Checklist
 - Designers
 - Templates
- 6. Find and click on Computerized Checklist.

Note: If you have a need to be in this file, click and hold the left button on computerized checklist and then drag it to the desktop or task bar and release the left button on mouse. At this time when Outlook is open, you can just click on the "**ICON**" of the "**Computerized Checklist**" and it will open for you. This is just a "**short cut**" to the folder.

- 7. Find the file you need and double click on it to open.
- 8. Once open, find either on your "Word" tool bar "Save As" or click on "File" and "Save As".
- 9. Locate where you want to "Save it to" and click "Save".

Now you can start using it or print out copies.

Note: This approach will only work if you are "**connected**" to the "**network**" and not on "**stand-alone**" mode (off line).

These files inside "Computerized Checklist" are "Read Only" and cannot be saved. If you cannot open the "Construction Operation" folder or "Computerized Checklist" folder or open a file, call your "help desk".

Exhibit 2

Status of Standard Construction Inspection Checklists June 20, 2003

| | 33223,233 | | |
|--|--|---------------------------------|---|
| CHECKLIST NAME | NEW FILE NAME | VERSION(date of last change) | Minimum Checklist Frequency for Controlled Processes |
| | General Provisions Division | on I | Trocesses |
| Bulletin Board Job Site | (107) Bulletin Board | 062403 | One per project |
| | Grading – Division II | | i i j |
| Grading | (205) Grading | 070501 | One per material type change |
| Sub | grade, Subases and Bases – D | ivision III | |
| Aggregate Bases and Subbases | (303) Aggregate Bases and Subbases | 070501 | One per day |
| Geocomposite Wall Drain | (307) Geocomposite Wall Drain | 121803 | One per member |
| | Asphalt Roadways - Divisio | n IV | |
| Asphalt Batch Plant | (406-417) Batch Plant | 070301 | One per week |
| Asphalt Continuous Flow Plant | (406-417) Continuous Flow Plant | 040401 | One per week |
| Asphalt Drum Plant | (406-417) Drum Plant | 040501 | One per week |
| Asphaltic Concrete 406 | (406) Asphaltic Concrete | 050401 | One per week |
| Asphaltic Concrete Friction Course(407) | (407) Asphaltic Concrete Friction Coarse | 051001 | One per day |
| Asphalt Rubber (413) | (413) Asphalt Rubber | 030503 | One per day |
| Asphalt Rubber Friction Course (414) | (414) Asphalt Rubber Friction Coarse | 030503 | One per day |
| Asphaltic Concrete (416) | (416) Asphaltic Concrete | 040901 | One per week |
| Asphaltic Concrete (SHRP 417) | (417) Asphaltic Concrete Shrp | 40901 | One per week |
| Asphalt Rubber Blending & Hot Mix Plant | (413-414) Asphalt Rubber Blending & Hot Mix Plant | 040803 | One per week |
| Chip Seal Coat | (404) Chip Seal Coat | 070301 | One per day |
| Bituminous Tack Coat | (404) Tack Coat | 071703 | One per day |
| | Concrete Roadways - Divisio | on IV | |
| PCCP (Pre-Paving Quality | (401) PCCP (Pre-Paving | 02022006 | One per |

| Assurance) | Quality Assurance) | | week |
|--------------------------------|---|------------|-------------------|
| PCCP (Slip Form Placement | (401) PCCP (Slip Form | 02022006 | One per |
| and Curing) | Placement and Curing) | | week |
| PCCP (Fixed Form Placement | (401) PCCP (Fixed Form | 02022006 | One per |
| and Curing) | Placement and Curing) | | week |
| PCCP (Joints, Dowels and Tie | (401) PCCP (Joints, Dowels | 02022006 | One per |
| Bars) | and Tie Bars) | | week |
| PCCP (Sawing and Sealing) | (401) PCCP (Sawing and | 02022006 | One per |
| | Sealing) | | week |
| PCCP (Crack Repair) | (401) PCCP (Crack Repair) | 02022006 | One per |
| 1 / | | | shift when |
| | | | required |
| | Drainage Facilities – Division | ı V | |
| Cast-in-Place Pipe | (501) Cast in Place Pipe | 5162001 | One per |
| Cust III 1 1000 1 1p0 | (6 6 1) 6 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0102001 | week |
| Plastic Pipe | (501) Plastic Pipe | 5162001 | One per |
| Tiustic Tipe | (501) Thistie Tipe | 3102001 | week |
| Corrugated Metal Pipe | (501) Corrugated Metal Pipe | 5162001 | One per |
| Corrugated Wetar Fipe | (501) Corragated Wetar Tipe | 3102001 | week |
| Reinforced Concrete Pipe | (501 Reinforced Concrete Pipe | 02202001 | One per |
| Remioreed Concrete 1 spe | (301 Kennoreed Concrete 1 spe | 02202001 | week |
| | Structures – Division VI | | WCCK |
| Approach /Anchor Slab with | (601) Approach - Anchor Slab | 121803 | One per |
| Joint | with Joint | 121003 | member |
| Joint | with John | | member |
| Bridge Deck Joint | (601) Bridge Deck Joint | 121803 | One per |
| Bridge Beek Joint | (001) Bridge Deck Joint | 121003 | member |
| Bridge Deck (Superstructure) | (601) Bridge Deck | 121803 | One per |
| Bridge Beek (Superstructure) | (Superstructure) | 121003 | member |
| Cast in Place Box Girder | (601) Cast in Place Box Girder | 121803 | One per |
| Bridge | Bridge | 121003 | member |
| Precast Concrete I-Beams & | (601) Precast Concrete I- | 121803 | One per |
| Box Beams | Beams & Box Beams | 121003 | member |
| Substructure | (601) Substructure | 121803 | One per |
| Substructure | (001) Substructure | 121003 | member |
| Reinforcing Steel Placement | (605) Steel Reinforcement | 10252004 | |
| Reinforcing Steel Flacement | (003) Steel Reinforcement | 10232004 | One per member |
| Drilled Shaft (Dry Excavation) | (609) Drilled Shaft (Dry | 07282005 | |
| Diffied Shaft (Dry Excavation) | ` ' | 07282003 | One per week |
| Duilled Chaft (Wat Engagetion) | Excavation) | 07292005 | |
| Drilled Shaft (Wet Excavation) | 609) Drilled Shaft (Wet | 07282005 | One per |
| T-1 | Excavation) | 4252001 | week |
| Falsework | (601) Falsework | 4252001 | One per |
| Compute Do- C-1 | (601) Compared a Page C 1 | A050001 | setup |
| Concrete Box Culverts | (601) Concrete Box Culvert | 4252001 | One per |
| 0 1 10' 0' | (606) 0 1 16: | 070<2004 | member |
| Overhead Sign Structures | (606) Overhead Sign | 07262004 | One per |
| W 1 0 5 1 | Structures | 070 (000 4 | unit |
| Warning Marker & Regulatory | (606) Warning Marker & | 07262004 | One per |
| Sign Panels | Regulatory Sign Panels | | unit |
| Overhead Tapered Tube | (606) Overhead Tapered Tube | 07262004 | One per |
| Structure | Structure | | unit |
| Roadside Sign Supports: | (607) Breakaway Posts | 07262004 | One per |
| | | | |

| Breakaway Posts S & W | S & W | | unit |
|--|---|----------|----------------------------|
| Milepost Markers | (607) Milepost Markers | 07262004 | One per project |
| Roadside Sign Supports: Perforated | (607) Perforated Sign Posts | 07262004 | One per project |
| Overhead Sign Panels | (608) Overhead Sign Panels | 07262004 | One per unit |
| Tr | raffic Control Facilities – Divisi | on VII | |
| Long Term Traffic Control > 3 Days | (701) Traffic Control Long- Term | 06012004 | One per setup change |
| Short Term Traffic Control | (701) Short-Term Traffic Control | 05192004 | One per setup change |
| Double Fines in Work zone, SA-12 | (701) Double Fines | 05192004 | One per setup change |
| Roadway Striping | (701) Roadway Striping | 05242004 | One per application |
| Temporary Concrete Barrier | (701) Temporary Concrete Barrier | 03182004 | One per setup change |
| Arrow Panel Changeable Message Board | (701) Arrow Panel Changeable Message Board | 012704 | One per setup change |
| Flagging Station Traffic Control | (701) Traffic Control Flagging Station | 05252004 | One per setup change |
| Truck Mounted Attenuator | (701) Traffic Control Truck Mounted Attenuator | 03182004 | One per setup change |
| Sand Barrel Crash Cushions | (701) Sand Barrel Crash Cushions | 05242004 | One per setup change |
| R | oadside Development – Division | n VIII | |
| Landscape Construction-Phase 1 | (801-8-6 & 808) Landscape Phase-1 | 080801 | One per project |
| Landscape Establishment Phase-2 | (807) Landscape Phase-2 | 072501 | One per project |
| Class 11 Seeding | (805) Class11Seeding | 061702 | One per project |
| Storm Water Administrative Checklist | (810) Storm Water Administrative Checklist | 06282005 | One per project |
| Storm Water Erosion /Sediment Control | Storm Water Erosion /Sediment Control | 08022005 | One per month |
| | Concrete Incidentals – Division | | T |
| Curb and Sidewalks | (908) Curb & Sidewalk | 040201 | One per week |
| Concrete Curing | (1006) Cure | 040301 | One per week |
| Concrete Class S or B | (1006) Concrete Class S or B | 01312006 | One per |

| | | | week |
|-------------------------------|---------------------------------|----------|-----------|
| | Guardrail Incidentals - Divisio | n IX | |
| ET-Plus End Treatment HBA | (905) ET Plus (AC) | 040803 | All units |
| Post (AC) | | | on the |
| | | | project |
| ET-Plus End Treatment | (905) ET Plus (Concrete) | 030303 | All units |
| (Concrete) | | | on the |
| | | | project |
| SRT-350 HBA Post | (905) SRT 350 HBA Post | 092002 | All units |
| | | | on the |
| | | | project |
| FLEAT-350 End Treatment | (905) Fleat 350 | 091802 | All units |
| | | | on the |
| | | | project |
| SKT-350 End Treatment | (905) SKT350 | 082503 | All units |
| | | | on the |
| | | | project |
| SKT-350 End Treatment (AC) | SKT-350 (AC) | 030304 | All units |
| | | | on the |
| | | | project |
| SKT-350 End Treatment | SKT-350 (Concrete) | 030304 | All units |
| (Concrete) | | | on the |
| | | | project |
| Quadguard System | (905) Quadguard | 022002 | All units |
| | | | on the |
| | | | project |
| Thrie Beam Guardrail | (905) Thrie-Beam | 120202 | All units |
| | | | on the |
| | | | project |
| W-Beam Guardrail | (905) W-Beam | 100202 | One per |
| | Guardrail | | run |
| | Other Incidentals – Division | IX | |
| Median Cable Barrier and | (905) Cablebarrier | 010600 | One per |
| Anchor System | | | run |
| Wire Rope Safety Fence | (905) Wire Rope Safety Fence | 112503 | One per |
| | | | run |
| Chain Link Fence and Gates | (902) Chain Link Fence and | 04182005 | One per |
| | Gates | | week |
| Wire Fence and Gates | (903) Wire Fence and Gates | 04182005 | One per |
| | | | week |
| Mechanically Stabilized Earth | (914) Mechanically Stabilized | 04272005 | One per |
| Walls | Earth Walls | | run |

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