CITY OF PEORIA
GENERAL NOTES

- **GENERAL INFORMATION**
- **GENERAL NOTES**
- **GRADING & DRAINAGE**
- **PAVING**
- **SIGNING & STRIPING**
- **TRAFFIC SIGNAL**
- **WATER**
- **WASTEWATER**
- **RECLAIMED WATER**
- **LANDSCAPE & IRRIGATION**
- **BRIDGES**
- **UTILITY CONSTRUCTION**

The following general information and general notes must be placed on the detail sheet or cover sheet of each set of construction plans. The Design Engineer is responsible to include these notes accurately without modification, on the plans.

The latest version of the City's General Notes can be found on the City of Peoria Development and Engineering Services Website. These Notes may be periodically updated by the City.

GENERAL INFORMATION

1. No person, Corporation, Contractor, or utility shall work within the right-of-way, road, street, or easements granted for public use or alleys without securing an Engineering Construction Permit from the Development & Engineering Department.

2. Engineering Construction Permits are required for grading, drainage, erosion control, flood control structures, hauling material in excess of 100 cubic yards, oiling, graveling or any surfacing of any street, alley, water system, wastewater system, storm drain system, trenching, gas or any other types of pipe lines, drywells, paving, curb, gutter, sidewalks, driveways (concrete), flood irrigation, landscape/irrigation, traffic signals, striping and signage, bank stabilization and channelization, street lights, well abandonment, utility lines such as electric, telephones, television, communications and other franchised facilities.

3. The City Code establishes construction work hours as follows:

CONSTRUCTION TYPE:		April 2-September 29	September 30-April 1
A	Concrete Work	5:00 am to 7:00 pm	6:00 am to 7:00 pm
B	Construction Other Than Concrete (residential zones or within 500 ft. of residential zone)	6:00 am to 7:00 pm	7:00 am to 7:00 pm
C	Construction Other Than Concrete (commercial and industrial zones – more than 500 ft. from residential zone)	5:00 am to 7:00 pm	5:00 am to 7:00 pm

4. The City Code also establishes work hours in the public right-of-way as follows:

   No interference with traffic flow on arterial streets shall be permitted during the hours of 6:00 am to 8:30 am or from 4:00 pm to 7:00 pm unless prior authorization is obtained in writing by the City of Peoria Traffic Engineer.

5. Prior to issuance of Engineering Construction Permits, the Contractor/Developer must provide the City of Peoria with the specific information and payment of fees as listed in Chapter 2 of the City Code. Any person, Corporation, Contractor, or utility company working in the right-of-way, road, street, or easements granted for public use or alleys without securing a permit is subject to a fine in accordance with Chapter 23 of the City Code.

6. The Contractor shall submit a traffic control plan per the Phoenix Traffic Barricade Manual. Barricades must be continually maintained throughout the duration of the project (refer to Chapter 23 of the City Code). If any part of the traffic control plan falls within 300' of a signalized intersection, an off-duty officer will be required for traffic control. A Traffic Control Plan (TCP) shall be submitted to the Development & Engineering Department and accepted a minimum of three working days; 72-hours prior to construction. An accepted TCP will be stamped and a copy returned to the Contractor. A copy of the accepted plan must remain on the job site at all times.

7. Refer to the "General Information-Final Acceptance of Projects Checklist" for a list of the required close out items. Any questions should be directed to the Engineering Inspector.

GENERAL NOTES

1. All construction shall conform to the latest edition of the Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Details for Public Works Construction. The latest edition of the City of Peoria Engineering Standards Manual, the City of Peoria Supplement to Maricopa Association of Governments Uniform Standards Details and City of Phoenix Standard Details will continue to apply where such details were not adopted or included by MAG. Alternate details and specifications may be submitted for review and acceptance by the Development & Engineering Department. If accepted, alternate details will be shown as part of the approved plans/detail sheets.

2. This set of plans has been reviewed for compliance with City requirements prior to issuance of Engineering Construction Permits. However, such review shall not prevent the Development & Engineering Director from requiring correction of errors or omissions in plans found to be in violation of any law or ordinance.

3. Approval by the Development & Engineering Director means for general layout in right-of-way only. This approval of construction plans is valid for a period of 9-months. Engineering Construction Permits shall be obtained within this period or the plans shall be resubmitted for approval. Work shall also be continuously pursued in order to maintain a valid plan approval and permit. Approval is only for work within the jurisdiction of the City of Peoria.

4. The Development & Engineering Director does not warrant any quantities shown on these plans.

5. Engineering Construction Permits for any work within the right-of-way and easements, and any grading and drainage, whether on-site or off-site, is required prior to commencing work. The building permit shall not be construed in any way as permission to commence work covered by an Engineering Construction Permit. It shall be the responsibility of the Contractor/Developer to understand the work covered by various permits.

6. The Development & Engineering Department, Inspection Division, shall be notified 24-hours prior to any construction work by telephone at (623) 773-8445. Any work concealed without inspection shall be subject to removal and replacement at the Contractor's/Developer's expense.

7. An approved set of plans must be available on the job site at all times. The Contractor's/Developer's representative (capable of communicating with the City's representatives) shall be on the job at all times the work is being pursued.

8. The Contractor/Developer is responsible to provide emergency telephone numbers to the City of Peoria at time of issuance of Engineering Construction Permits and have personnel available 24-hours a day to respond to emergencies. If the City is required to respond and make emergency repairs on behalf of the Contractor/Developer, the Contractor/Developer is responsible to reimburse the City for all costs incurred.

9. It shall be the responsibility of the permittee to arrange for the relocation and relocation costs of all utilities, and submit a utility relocation schedule prior to the issuance of an Engineering Construction Permit.

10. All underground tanks require a permit from the Fire Department prior to removal.

11. The procedures and methods used to sample, test materials, and report test results will be determined by the Development & Engineering Department. For all phases of construction, the type, scheduling, frequency and location of all materials testing and sampling shall be determined by the Development & Engineering Department. All test results shall be reported directly (in writing) to the Development & Engineering Department. For each phase of construction, test results (in writing) must be received from the testing laboratory, prior to start of the next phase of construction.

12. The Contractor/Developer must give a location for wasting excess excavation and a letter from the owner giving permission for dumping prior to starting on-site construction

13. It is the Contractor/Developer's sole responsibility to verify the presence and location of all existing overhead and/or underground utilities that may interfere with this construction, whether or not said utilities are shown on the construction plans for this project and to adequately protect and maintain any such utilities.

14. The Development & Engineering Department does not assume any liability for errors of line and/or grade on any staking which has been disturbed in any way, nor does the Design Engineer assume any liability for errors of line and/or grade on any staking that has been in place for a period of 24-hours or more without the commencement of the construction for which it was set.

15. The Contractor/Developer shall contact Blue Stake (602) 263-1100 prior to construction. It is the responsibility of the Contractor to maintain current Blue Stake markings throughout construction.

16. The Contractor/Developer shall obtain a fire hydrant meter for construction from the Management Services Department, Customer Services. Contact Customer Service at (623) 773-7160 to schedule the relocation of hydrant meters. Contractors shall not relocate hydrant meters themselves.

17. All Contractors/Developers are responsible to construct stabilized construction entrances in order to reduce or eliminate the tracking of sediment onto public rights-of-ways or streets. Gravel track-out pads shall meet current Maricopa County standards.

18. All drainage protective devices such as swales, interception ditches, pipes protective berms, concrete channels or other measures designed to protect improvements, whether existing or proposed, from runoff or damage from storm water, must be constructed prior to the construction of any improvements.

19. Traffic control shall conform to the City of Phoenix Traffic Barricade Manual, MUTCD, and the City of Peoria Engineering Standards Manual.

20. Any and all obstructions within the rights-of-way and easements shall be removed before any construction is commenced.

21. All Contractors/Developers are responsible to obtain a National Pollution Discharge Elimination System (NPDES) Permit in accordance with Federal and State Regulations, including Notice of Intent (NOI), Notice of Termination, and Storm Water Pollution Prevention Plan (SWPPP). A copy of the NOI and SWPPP shall be available on the job site at all times. All SWPPP plans must include the NOI tracking number administered by Arizona Department of Environmental Quality (ADEQ) on the bottom right hand corner of the sheet.

22. All contractors/developers are responsible to obtain the necessary 401 and 404 permits. A copy of the permit shall be submitted to the City prior to approval of the Grading and Drainage plans.

23. Contractor/Developer shall obtain any and all permits as required by other agencies which have jurisdiction at the Contractor/Developer's expense. The Contractor/Developer shall meet the requirements of these permits as set forth therein.

24. The Contractor/Developer is solely responsible for all job site safety, including but not limited to meeting all requirements of OSHA and ADOSH. The City of Peoria Engineering Inspector is not authorized to advise or direct the Contractor/Developer regarding matters of job site safety. Should the Contractor/Developer act on such advice or direction, it is at the risk of the Contractor/Developer.

25. Per the Maricopa County Air Pollution Control Rules and Regulations on Earth Moving Equipment Permits, no person shall cause or permit the use of any power of mechanical equipment for commercial purposes to clear, excavate or level land, including but not limited to blasting, demolition, road and street construction, swimming pool excavating, trenching, vegetation removal, or engage in any other earth moving activities without first obtaining a permit from the Maricopa County Environmental Services Department. The property owner, lessee, developer, or prime contractor will be responsible for acquiring the permit.

    If the above referenced development has work that needs to be done in the Maricopa County rights-of-way, please obtain all permits from the Maricopa County Department of Transportation. The Engineering Construction Permits issued by the City of Peoria do not cover the Maricopa County rights-of-way.

GRADING AND DRAINAGE

1. The Grading and Drainage plans must be approved by the Development & Engineering Director. The Engineering Inspections Office shall be notified at (623) 773-8445, 48-hours before any on-site construction begins.

2. A separate permit is required prior to any on-site grading, including custom homes.

3. Grading and Drainage Plan approval includes:

    a. Construction of all surface improvements shown on the approved grading and drainage plan, including but not limited to, retention areas and/or other drainage facilities, drainage patterns, channels, walls, curbing, asphalt pavement, bank protection and channelization, and building floor elevations.

    b. Contractor shall provide minimum slope to the bottom in all retention basins at elevations as shown on the plans. Retention basin side slopes shall not exceed 3:1 (under special circumstances – refer to Section 4.7.3 of the Engineering Standards Manual), as confirmed through the geotechnical report, on private property and 6:1 adjacent to public right-of-way unless noted otherwise on plans.

4. All drainage protective devices such as swales, interceptor ditches, pipes, protective berms, concrete channels or other measures designed to protect homes or other improvements whether existing or proposed, from runoff or damage from storm water, must be constructed prior to the construction of any improvements.

5. Drywells must be drilled a minimum of 10-feet into permeable porous strata and percolation tests will be required. The Engineering Inspector must be present before backfill or wall pipes are placed within any drywell. Percolation tests must be conducted by an independent laboratory and results provided to the Development & Engineering Department. All drywells must be registered with ADEQ. Copies of drilling logs and ADEQ registration information must be provided to the City.

6. All finish floor elevations shown are a minimum of 14-inches above the point of outfall, or 1-foot above the 100-year base flood elevation as shown on the approved plan.

7. A FEMA Elevation Certificate for all new and substantially improved construction in the floodplain shall be submitted to the Development & Engineering Department prior to final acceptance of the project.

8. Soils compaction test results must be submitted to the Development & Engineering Department for all building pads that have 1-foot or more of fill material indicated.

9. Staking pad and/or finish floor elevations is the responsibility of the developer and his engineer. No minimum finish floor elevation will be raised or lowered without approval of the Development & Engineering Director. In noncritical areas, developer's engineer shall submit certification of constructed building pad elevations prior to request for final inspection. In critical drainage areas or in the 100-year floodplain, substitute building floor elevation in above note, or FEMA Elevation Certificate.

10. The Contractor is responsible for locating and confirming depth of all existing utility lines within proposed retention and drainage facility areas. If the drainage facilities cannot be constructed per plan as a result of conflict with underground utilities, the Contractor should contact the Development & Engineering Director and the Design Engineer and request modification of the drainage facility design.

11. All bank protection and channelization must be completed prior to final acceptance of the project.

12. A separate haul permit shall be required whenever hauling in excess of 100-cubic yards of material in or out of a site. A haul route must be submitted and approved by the Development & Engineering Department. Additional requirements as set forth by the Development & Engineering Department shall be met.

13. The developer is responsible to obtain a Nation Pollution Discharge Elimination System (NPDES) permit in accordance with Federal and State Regulations, including Notice of Intent (NOI), Notice of Termination (NOT), and Storm Water Pollution Prevention Plan (SWPPP). A copy of the NOI and SWPPP shall be available on the job site at all times. All SWPPP must include the NOI tracking number assigned by Arizona Department of Environmental Quality (ADEQ).

14. Once an existing shoulder is disturbed by the grading operation or any other phase of construction, the shoulder shall be barricaded. Such barricading shall remain in place until final acceptance of the project.

15. A separate stockpile permit shall be requested if storing material for future use. Additional requirements as set forth by the Development & Engineering Department shall be met.

PAVING

1. Exact point of pavement matching, termination and/or overlay, if necessary, shall be determined in the field by the Engineering Inspections Division.

2. All frames, covers, valve boxes and manholes shall be adjusted to finished grade upon completion of paving or related construction. The concrete collar shall be adjusted level with existing bituminous pavement. Adjustment of existing Type "A" or Type "B" water valve boxes in right-of-way shall be considered incidental.

3. All Contractors/Developers shall comply with the City of Peoria Detail PE-211 for Trench Plating.

4. Paving shall not start until all appropriate testing has been completed and accepted (pressure testing of utilities, density testing, videoing of wastewater line, etc.). Service stubs to all platted lots shall be extended, and all conflicting utility construction completed prior to start of paving.

5. Trees and shrubbery in the right-of-way, which conflict with the improvements proposed herein, are not to be removed or relocated without prior approval of the City of Peoria. The permittee shall be responsible for obtaining the necessary authorization to remove and/or relocate said trees or shrubbery.

6. In all areas where new construction of curb, gutter, sidewalks, and driveways is required, and the engineer determines the existing grade to consist of soils with swelling characteristics, the moisture content shall be brought as close as possible to optimum required for compaction by the addition of water, blending of dry suitable material or by drying of existing material. The material shall then be compacted to a relative density of 75% minimum to 85% maximum with 80% as ideal.

7. Construction loads: During construction operations, heavy equipment may cross existing or proposed pipe. In this case, an earth fill should be constructed to at least 3-feet above pipe. The fill must be sufficient to prevent the lateral displacement of the pipe.

8. Unless otherwise specified, the City of Peoria requires that the asphaltic concrete mix design meet the current mix design specified in the City of Peoria Engineering Standards Manual.

9. All street improvements for custom homes must be completed in accordance with the City of Peoria policy on unpaved roads. All private access must be constructed with an acceptable dust palliative.

10. All Contractors/developers are responsible to construct stabilized construction entrances in order to reduce or eliminate the tracking of sediment onto public rights-of-ways or streets. Gravel track-out pads shall meet current Maricopa County standards. The contractor/developer shall immediately remove any sediment tracked onto public rights-of-ways or streets.

11. If any existing barricades, traffic signs or street name signs need to be removed during construction, notify the City of Peoria Public Works Streets Division at (623) 773-7432. A minimum of 48-hours' notice is needed for removals. If signs and barricades belong to another agency, it is the responsibility of the contractor/developer to notify them.

12. No water supply hose or ramps shall be placed across or in the arterial or collector streets. Approval in writing from the Development & Engineering Director is required for placement of the supply hose or ramps in local streets. Applications shall include submittals of the manufacturer's specifications, materials used, dimensions of the ramp, proposed location, proposed barricading and signage.

13. All new curb shall be imprinted with the words "PRIVATE STREET – NO CITY MAINTENANCE" in 2-inch high letters at every curb return and at every entrance into a new private property subdivision.

SIGNING & STRIPING

Signing and striping installations shall be in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) adopted by the Arizona Department of Transportation (ADOT) and the City of Peoria Engineering Standards Manual.

Signing and striping layout shall be approved by the Engineering Inspector prior to any installation. The contractor shall notify the City of Peoria's Engineering Inspection Division, 623-773-8445, at least 48-hours in advance of any signing or striping installation. Signing or striping installations completed prior to contacting the City's Engineering Inspection Division shall be removed and/or modified if it is not deemed adequate by the Engineering Inspector.

STRIPING

1. All road surfaces shall be prepared per manufacturer's instruction or to the satisfaction of the Engineering Inspector prior to application of pavement markings. At a minimum surfaces shall have debris removed, be cleaned and dried prior to application.

2. All pavement markings shall be installed in accordance with the City of Peoria Engineering Standards Manual and the manufacturer's recommendations.
    - **Longitudinal line markings** shall be installed using water-based paint applied at a minimum of .15 Mil thickness.
    - **Short-line markings**, including crosswalks, stop bars, chevrons, and crosshatch markings shall be installed using alkyd thermoplastic material applied at a minimum .90 Mil thickness or 3M Stamark Pavement Marking Tape.
    - **Word symbol and other legend markings** shall be installed in 3M Stamark Pavement Marking Tape.

3. The obliteration of prior or conflicting thermoplastic striping shall be accomplished by water blasting with vacuum recovery or other methods approved by the Engineering Inspector. A Type II micro seal treatment approved by the Engineering Inspector shall be applied in a minimum 3-foot wide, continuous application to the portions of the affected asphalt following obliteration.

   The Type II micro seal treatment can be applied directly over water-based paint without paint obliteration. All Type II micro seal treatment shall be approved by the Engineering Inspector.

SIGNING

1. All sign blanks shall be .080 gauge aluminum, unless otherwise noted and all signs shall be ASTM Type IV high intensity sheeting, unless otherwise noted.

2. All signs shall be installed per City of Peoria Standard Detail PE-050 and PE-060. The contractor shall contact Blue Stake before digging. Care shall be taken to ensure unobstructed views for all signs installed.

3. Signs installed on street light poles shall be installed per PE-061, using a minimum ½" wide stainless steel banding (C20499) with a minimum thickness of .030, a banding buckle (C25499) and a (D02189) banding bracket. Street name signs shall be installed using banding listed above except replacing the banding bracket with a (KC250) cantilever bracket, round bracket (922SF), and a cross bracket (990SF); 6" signs shall have 6" wide brackets and 9" signs shall have 12" wide brackets.

4. Parking restriction signs shall be set at an angle of not less than 30 degrees or more than 45 degrees with the line of traffic flow in order to be visible to approaching traffic, per guidance in Section 2B of the MUTCD.

5. All signs shall be provided and installed by the developer per the approved permitted plans.

6. The contractor shall return all traffic signal equipment and signs that are removed to the City of Peoria Municipal Operations Center (MOC), 8850 N. 79th Avenue. Contact the Streets Administrations Office at 623-773-7456 to set up a drop-off time.

7. The sign types and sizes included in the Peoria Sign Reference Guide provide additional guidance and clarification to the MUTCD, as it is applied in the City of Peoria.

8. Unless otherwise noted, all dimensions are to the face of curb and the center of the stripe. In the case of a double stripe, dimension is to the center of the double stripe.

9. The Engineering Inspector may require the contractor to make any adjustments deemed necessary to address conditions not included in the approved permitted plans.

TRAFFIC SIGNAL

GENERAL NOTES

1. All Material, equipment and installation shall conform to:
    a. The latest edition of ADOT's traffic signals and lighting standard drawings.
    b. The Manual on Uniform Traffic Control Devices (MUTCD). Latest edition adopted by ADOT.
    c. The City Phoenix Barricade Manual.
    d. The City of Peoria Traffic Signal Special Provisions and Standard Details.
    e. The City of Peoria bid documentation and these plans.

2. The contractor shall contact all Utilities and Blue Stake 48-hours before starting any construction. It is the responsibility of the contractor to contact all involved agencies and field verify exact locations of all utilities. Prior to construction, the contractor shall pothole and verify the location of existing utilities. If discrepancies exist the contractor shall notify the Engineer immediately.

3. Prior to construction, the contractor shall verify all foundation and pole locations. Contractor shall pot hole and perform site visit to determine any potential overhead or underground conflicts, and coordinate with the City of Peoria Project Manager and the Design Consultant prior to ordering equipment.

4. The contractor shall contact Arizona Public Service (APS) at (602) 371-7546, or Salt River Project (SRP) at (602) 236-4830 for electric service installation requirements.

5. The contractor shall replace in like and kind, per MAG Standard existing landscaping and/or irrigation system disturbed by construction of this project. The contractor shall coordinate this work with the Landscape Maintenance Supervisor, City of Peoria Community Services Department at (623)773-7137.

6. All signal equipment shall be in place and operational prior to removing existing stop signs. Stop signs shall be removed shortly after activation as approved by the City of Peoria Engineering Inspector.

7. The contractor shall provide traffic control during construction per the MUTCD and the City of Phoenix Barricade Manual. A police officer is to be provided by the contractor any time the construction occurs within 300' of a signalized intersection, or as determined by the City of Peoria Engineering Inspector/Engineer.

8. The contractor shall notify the City of Peoria's Traffic Engineering Inspector at (623) 773-8445, and the City of Peoria's Engineering Inspection Supervisor at (623) 773-8439 at least 48-hours in advance of any construction.

9. The contractor shall obtain all permits from the City of Peoria and other applicable agencies prior to construction.

10. The contractor shall comply with all provisions for traffic control, barricading, signing and striping as per the City of Phoenix Barricade Manual and the Manual on Uniform Traffic Control Devices (MUTCD) latest edition adopted by the Arizona Department of Transportation.

11. The quantities and site conditions on these plans are for informational purposes only and are subject to error and omissions. Contractors shall satisfy themselves as to the actual quantities and site conditions prior to bidding the work for construction covered by these plans.

12. The contractor shall return all removed/unused traffic signal equipment to the City of Peoria Municipal Operations Center, 8850 N. 79th Avenue. For additional information, please contact the Traffic Maintenance Supervisor at (623) 773-7432.

13. Electrical service address _____.

14. All signs associated with protected arrows or flashing yellow arrows shall be the responsibility of the contractor for installation. Contact the City of Peoria Signal Maintenance Division at (623) 773-7432 for details and specifications.

EQUIPMENT NOTES

1. Prior to construction, the contractor shall verify all foundation and pole locations. Contractor shall pot hole and perform site visit to determine any potential overhead or underground conflicts and coordinate with the City of Peoria Project Manager and the Design Consultant prior to ordering equipment.

2. All traffic signal equipment will be new with full warranty, used or refurbished equipment will not be permitted.

3. All Red, Yellow, Green vehicle indications and inline filled in man/hand pedestrian indications shall be Dialight LED indications.

4. The contractor shall provide and install an extended riser on all F Heads, Type XI that are located where the mast arm attaches to the signal pole to accommodate for future G Head installation.

5. All new 12-inch signal heads hall have 5-inch metal louvered back plates.

6. All signal heads shall be McCain or Eagle/Siemens.

7. The contractor shall provide and install single channel 721 optical detectors (Opticom) with all appropriate mounting hardware, interface cables, optical cables, and any other equipment required for a fully functioning pre-emption system. Contractor shall provide and install A 764 CARD (Opticom) in cabinet.

8. The contractor is responsible for providing and installing video detection equipment. The video detection camera (see project special provisions for model and type) to be mounted on mast arm. Install all necessary equipment including all wiring, cameras, mounting hardware and any controller interface equipment necessary for a fully functioning and operational video detection system. All equipment shall be pre-approved by the City of Peoria Traffic Engineering Division prior to installation.

9. Luminaries are to be LED GE ERL2 0 16 C3 40A Gray LR<65ft or GE ERL2 0 23 C3 40 A Gray LF>65ft.

10. The pedestrian push buttons shall conform to ADOT Standard Drawings TS11-1 except that the push button shall be a minimum of 2-inch in diameter. The push button shall be raised from the face of the push button housing. The force required to activate the control shall be no greater than 5-lbs. of force. Push buttons must meet ADA requirements and be mounted at ADA required height. The contractor is responsible for installing the R10-3e pedestrian push button signs.

11. Contractor is responsible for installation of the illuminated street name signs. The signs are to be flag mounted on the signal pole. Confer with the City of Peoria mounting instructions. The

contractor shall consult with the City of Peoria Signal Maintenance Division at (623) 773-7477, for design approval of the signs prior to ordering of signs.

12. The contractors shall provide a 6-foot coiled control cord in the police panel of the controller cabinet.

13. The contractor shall install a Cabinet "Courtesy pad". This shall consist of a 4-inch PCC pad in front of the cabinet (door side). Pad shall be set a minimum of 2-inches below the cabinet foundation elevation. Slope pad away from cabinet. See ADOT Standard Drawing TS 2-1 for pad details. In addition, the contractor shall provide a 4-inch thick concrete walkway between the sidewalk and the PCC pad.

14. All equipment shall be approved by the City of Peoria through the electrical/equipment submittal process prior to the ordering of the equipment.

DETAIL NOTES (WHEN APPLICABLE):

1. All interconnect conduit is to be installed per City of Peoria Standard Detail PE-070.

2. All mid run interconnect pull boxes to be installed per City of Peoria Standard Detail PE-071-1 and 071-2.

3. All communication vaults to be installed per City of Peoria Standard Detail PE-073.

4. All signs and sign posts shall be installed per City of Peoria Standard Details PE-060 and PE-061.

CONSTRUCTION NOTES

1. The Contractor shall provide new IMSA conductors. No splicing of conductors in conduit run will be allowed. Pull new conductors into conduit as specified in the conductor schedule. All splices shall be scotch coat sealed and all conductors shall be labeled per the City of Peoria color code and wiring detail. All IMSA conductors shall be installed without splicing from the signal head to the pull boxes. TS blocks shall not be used as a connection point between the pull box and the vehicle or pedestrian indications.

2. All pull boxes shall be left in a clean condition. Free of dirt and debris upon completion of work.

3. Drilling height for signal faces shall be per ADOT Standard Drawing T.S. 4-21. Type XI mounts shall be used for all vehicle signal indications attached to vertical poles. The contractor shall confer with the City of Peoria Inspector for side-mount drilling locations. The contractor shall provide and install an extended riser on all Type XI mounts for all F Heads that are located where the mast arm attaches to the signal pole to accommodate for future G Head installation. Type "V" and or Type "VII" mounts shall be used for the pedestrian indications.

4. All signal heads will be bagged/covered with a material that does not allow light penetration when not in full operation.

5. The top of new pole foundations shall be installed 4-inches below adjacent sidewalk elevation and finished in with apron. Leveling nuts will be blocked/formed out during concrete apron installation and grouted back in to provide for future access. Grout to be installed level with the base of the pole.

6. Prior to turn on, the contractor is responsible for the positioning, leveling and aligning of the individual signal heads, so they are completely visible to the approaching driver that the signal is intended to control.

7. The contractor shall contact Arizona Public Service (APS) or Salt River Project (SRP) for the electrical service. The contractor is responsible for installing all electrical service conductors, unless otherwise directed by APS or SRP.

8. Video cable to run continuous from cabinet to respective camera without splices. The contractor shall contact the City of Peoria Signal Maintenance Division at (623) 773-7432 to coordinate the mounting and installation of the video detection devices.

9. The contractor shall coordinate with the City of Peoria's Signal Maintenance Division at (623) 773-7432; 3-working days prior to signal activation for pre-turn on inspection (refer to special provisions). Installation of ALL equipment wiring and alignment of heads shall be done prior to pre-turn on inspection. It is the City of Peoria's policy that new signal activation shall not occur on a Monday or Friday. The contractor shall coordinate the activation of any new signal, so that it occurs on a Tuesday, Wednesday, or Thursday.

10. The contractor shall provide and install "Traffic Control Change" signs with flags 500-feet prior to the intersection for all affected approaches for 30-days. Contractor is responsible for the removal and return signs to the City of Peoria Public Works Department at 8850 N. 79th Avenue.

11. All signing and striping that pertains to the operation of the traffic signal shall be installed immediately prior to the activation of the signal. The contractor shall contact the City of Peoria Engineering Inspector at (623) 773-7536, 3-working days prior to installation for approval of layout and sign locations.

12. All ADA facilities shall be in place prior to the activation of the traffic signal.

WATER

1. A City of Peoria Engineering Construction Permit is required. Other permits, as required, shall be secured from the appropriate agency; i.e. County permits for County Right-of-Way.

2. Acceptable Water Line Materials are per City of Peoria Engineering Standards. Contractor shall not deviate from the materials specified by the Design Engineer on the contract documents without written approval from the Design Engineer and the Water Services Department.

3. Water line and grade stakes shall be set by a qualified Arizona Registered Land Surveyor and/or their representative prior to the construction of wastewater lines. The qualified Arizona Registered Land Surveyor and/or their representative shall verify that the grades conform to the approved construction plans, and provide cut sheets to the Contractor and Engineering Inspector. After installation and prior to the Development & Engineering Department acceptance, the Engineer of Record shall certify that water line installation conforms to the approved construction plans.

4. Trench excavation, backfilling and compaction shall conform to MAG Standard Specification Section 601 except as modified herein.

5. Bedding and backfill for water lines shall conform to the requirements of the City of Peoria Standard Detail PE-401, Bedding and Backfill.

6. Backfill shall be Type I as defined in Section 601.4.3 of the MAG Standard Specifications.

7. The minimum cover from finish grade to top of pipe for all waterlines which are less than 12-inches in diameter located in major streets shall be as specified by the Design Engineer, but no less than 48-inches unless approved in writing by the Water Services Director.

8. The minimum cover from finish grade to top of pipe for all waterlines which are 12-inches in diameter or larger, located in major streets shall be as specified by the Design Engineer, but no less than 60-inches unless approved in writing by the Water Services Director.

9. The minimum cover from finish grade to top of pipe for all waterlines in other locations shall be as specified by the Design Engineer, but no less than 36-inches for lines less than 12-inches in diameter and 48-inches for lines 12-inches and larger in diameter. Any proposed changes to this requirement must be approved in writing by the Water Services Director.

10. All stub-outs shall have a 2-inch brass ball corp-stop as a blow-off, left in place with a 2-inch riser, per MAG Standard Detail 390 "A," and shall be accessible to use.

11. Fire Hydrants shall conform to City of Peoria Standard Details PE-360-1 or PE-360-2, as applicable. The fire hydrant manufacturer shall be per City of Peoria Engineering Standards.

12. All valves 16-inches and smaller shall be per MAG 630 with resilient seat AWWA approved gate valves and shall open by turning counter-clockwise.

13. Valves shall not be located in sidewalks, gutters, curb, or valley gutters.

14. All valve boxes shall conform to MAG Standard Detail 391-1, Type A and City of Peoria Standard Detail PE-270.

15. Contractors shall not operate valves on the existing City system.

16. To request a water system shut down a “Water System Shut Down Request” form must be submitted. This form shall be submitted 10-days in advance of any requests to shut down any lines in the City of Peoria’s potable water distribution system. The form is to be submitted through the Engineering Inspector assigned to the project, which will in turn coordinate with necessary Utility staff. Failure to complete this form may result in delays to construction activities.

17. Water lines shall be installed in such a manner to minimize dips or high points. All water lines shall be parallel to the street centerlines or property lines, or as close as possible, unless the design documents indicate otherwise. All horizontal deflections in water lines shall comply with the pipe manufacturer’s recommendations for deflection at joints.

18. All joints restraints shall be inspected prior to backfill. For thrust restraints, reinforcing steel and form work shall be inspected prior to placing concrete for thrust blocks. Thrust restraint shall conform to MAG Standard Specification 610.4 and MAG Standard Details 301,340, 380 and 381.

19. Water services 2-inches and smaller in diameter shall conform to the City of Peoria Standard Detail PE-363. The minimum size service connection shall be 1-inch.

20. Water service lines shall not be located under driveways, concrete aprons, scuppers, catch basins, or the like.

21. Water lines shall not be located within Retention/Detention basin areas.

22. All water valves located outside paved areas shall have a concrete collar, and Utility Marker per City of Peoria Engineering Standards.

23. All water lines require the installation of metallic locating tape, which shall be installed in accordance with MAG Spec. 616.4 with the following exceptions: the tape shall be solid blue in color, printed with the words “CAUTION POTABLE WATER LINE BELOW”, and installed directly above the ABC course, approximately 1-foot above the top of the pipe.

24. All pavement replacement shall conform to MAG Standard Detail 200 with a “T-Top” - modified with a ½- sack Portland Cement ABC slurry, which conforms to MAG Standard Specification 728, (modified for ½-sack Portland cement), for trench backfill from 1-foot above the top of pipe to the existing pavement subgrade. Pavement replacement thickness shall be as specified by the Design Engineer on the contract documents 4-inches, or the existing asphalt pavement thickness; whichever is greater.

25. Pressure testing shall not be conducted until after the Contractor has pretested 100% of the lines. Inspection testing must be called for 24-hours in advance. Water lines must pass pressure testing after Dry Utilities are installed and prior to any concrete work, street work, or final acceptance of the wastewater.

26. All mains shall be chlorinated in conformance with the City of Peoria Engineering Standards Manual.

27. The contractor shall not connect to any existing public water lines without prior approval of the Engineering Inspector.

28. The following MAG Uniform Standard Details are specifically <u>NOT</u> approved.
    No. 345-2 4-inch, 6-inch Water Meter
    No. 360 Fire Hydrant Installation
    No. 389 Curb Stop with Valve Box & Cover
    No. 391-1 Valve Box Installation and Grade Adjustment, Types “B" & “C"

29. The Contractor is responsible to notify the Engineer of Record before the water line or fittings are backfilled so "as-built" measurements may be taken. Any changes to the approved plans must be authorized by the Engineer of Record and the Development & Engineering Director before the change is made in the field.

30. A Certificate of Approval of Construction (AOC) issued by the Maricopa County Environmental Services Department, is required prior to final project acceptance. A copy shall be provided to the City Engineering Inspector. NOTE: It should be noted that the Engineer of Record or designee shall be present during testing procedures so that the requirements of the AOC can be completed in full.

WASTEWATER

1. A City of Peoria Engineering Construction Permit is required for all wastewater line construction. Other permits, as required, shall be secured from the appropriate agency, i.e. County permits for County right-of-way.

2. Acceptable wastewater line materials are per City of Peoria Engineering Standards. Contractor shall not deviate from the materials specified by the Design Engineer on the contract documents without written approval from the Design Engineer and the Development & Engineering Department.

3. Wastewater line and grade stakes shall be set by a qualified Arizona Registered Land Surveyor and/or their representative prior to the construction of wastewater lines. The qualified Arizona Registered Land Surveyor and/or their representative shall verify that the grades conform to the approved construction plans, and provide cut sheets to the Contractor and Engineering Inspector. After installation and prior to the Development & Engineering Department acceptance, the Engineer of Record shall certify that wastewater installation conforms to the approved construction plans.

4. The Contractor shall uncover all existing wastewater lines to be connected and verify invert elevations before any other construction.

5. All utility installations in conflict with these plans shall be removed or relocated at the Contractor/Developer's expense. Any utility removals or relocations must be approved by the governing municipality and utility purveyor.

6. Trench excavation, backfilling and compaction shall conform to MAG Standard Specification Section 601 except as modified herein.

7. Bedding and backfill for wastewater lines shall conform to the requirements of the City of Peoria Standard Detail PE-401, Bedding and Backfill.

8. Backfill shall be Type I as defined in Section 601 of the MAG Standard Specifications.

9. Service line connections to the wastewater main shall have a "Y" fitting. Saddles are not acceptable.

10. Wastewater service lines shall not be located under driveways, concrete aprons, scuppers, catch basins, or similar structures.

11. Wastewater Lines shall not be located within Retention/Detention basin areas.

12. All wastewater lines require the installation of metallic locating tape, which shall be installed in accordance with MAG Spec. 616.4 with the following exceptions: the tape shall be solid green in color, printed with the words “CAUTION SANITARY SEWER (and/or WASTEWATER) LINE BELOW”, and installed directly above the ABC course, approximately 1-foot above the top of the pipe.

13. New wastewater taps shall be per MAG Standard Detail 440-1 and per the allowable materials stated in the City of Peoria Engineering Standards. Tap location shall be supplemented by a curb stamp per MAG Standard Detail 440-4 (stamped S on top of curb).

14. All wastewater manhole connections shall be installed with a gasket, joint sealer, or water stop between the base and riser section.

15. All manholes and components shall be constructed of Class A Concrete in conformance with MAG Standard Specification Section 725.

16. Workmanship on manhole bottoms will be closely inspected for uniformity and smoothness of channel. The preferred method for construction of manhole invert channels is to place pipe in manhole bottom and remove top of pipe after manhole is constructed. Failure to provide smooth, uniform channels shall be cause for rejection, removal and re-construction.

17. Manholes which: exceed 10-feet in depth, are 5-feet in diameter, are located in an arterial road, or as indicated per the plans shall have an approved manhole liner per City of Peoria Engineering Standards.

18. Manholes in paved and non-paved areas shall be adjusted to the finish grade upon the completion of pavement work.

19. All manholes located outside paved areas shall have a locking cover, a concrete collar, and Utility Marker per City of Peoria Engineering Standards.

20. Installation of manhole steps is not permitted.

21. Adjusting rings in manholes should be a minimum of 12-inches and a maximum of 24-inches per MAG Standard Detail 420-2.

22. Contractor shall mandrel, air pressure test, and provide a closed circuit television (CCTV) inspection in accordance with NASSCO Pipeline Assessment Certification Program. The CCTV inspection should be provided in digital (DVD) format utilizing a measuring device ahead of the camera to identify deflections in the line. The measuring device shall be able to measure water depth from 0- to 2-inches in ¼-inch increments. Contractor shall perform tests after Dry Utilities are installed and prior to any concrete work, street work, or final acceptance of the wastewater.

23. Wastewater lines shall remain “plugged” at the point(s) of connection to existing lines (outfalls) until all phases of the project have been accepted by the Development & Engineering Director.

24. No flow shall be released into the City wastewater system until after all tests have been passed and approved by the Engineering Inspector.

25. The following MAG Uniform Standard Details are specifically NOT allowed:
    No. 425 24-inch aluminum manhole frame and cover
    No. 428 Manhole steps - "Cast Iron"
    No. 440 Wastewater building connection - Type "B"
    No. 441 Wastewater clean out - wastewater tap with C.O.

26. All pavement replacement shall conform to MAG Standard Detail 200 with a “T-Top” - modified with a ½-sack Portland Cement ABC slurry, which conforms to MAG Standard Specification 728, (modified for ½-sack Portland cement), for trench backfill from 1-foot above the top of pipe to the existing pavement subgrade. Pavement replacement thickness shall be: as specified by the Design Engineer on the contract documents, 4-inches, or the existing asphalt pavement thickness; whichever is greater.

27. The Contractor is responsible to notify the Engineer of Record before the wastewater line is backfilled so "as-built" measurements may be taken. Any changes to the approved plans must be authorized by the Engineer of Record and the Development & Engineering Director before the change is made in the field.

28. A Certificate of Approval of Construction (AOC) issued by the Maricopa County Environmental Services Department, is required prior to final project acceptance. A copy shall be provided to the City Engineering Inspector. NOTE: It should be noted that the Engineer of Record or designee shall be present during testing procedures so that the requirements of the AOC can be completed in full.

RECLAIMED WATER

1. A City of Peoria Engineering Construction Permit is required. Other permits, as required, shall be secured from the appropriate agency; i.e. County permits for County Right-of-Way.

2. Acceptable reclaimed and non-potable waterline materials are per City of Peoria Engineering Standards. Contractor shall not deviate from the materials specified by the Design Engineer on the contract documents without written approval from the Design Engineer and the Water Services Department.

3. Waterline and grade stakes shall be set by a qualified Arizona Registered Land Surveyor and/or their representative prior to construction. The qualified Arizona Registered Land Surveyor and/or their representative shall verify that the grades conform to the approved construction plans, and provide cut sheets to the Contractor and Engineering Inspector. After installation and prior to the Development & Engineering Department acceptance, the Engineer of Record shall certify that the installation conforms to the approved construction plans.

4. Trench excavation, backfilling and compaction shall conform to MAG Standard Specification Section 601 except as modified herein.

5. Bedding and backfill for reclaimed and non-potable water lines shall conform to the requirements of the City of Peoria Standard Detail PE-401, Bedding and Backfill.

6. Backfill shall be Type I as defined in Section 601.4.3 of the MAG Standard Specifications.

7. The minimum cover from finish grade to top of pipe for all reclaimed and non-potable waterlines which are less than 12-inches in diameter located in major streets shall be as specified by the Design Engineer, but no less than 48-inches unless approved in writing by the Water Services Director.

8. The minimum cover from finish grade to top of pipe for reclaimed and non potable waterlines which are 12-inches in diameter or larger, located in major streets shall be as specified by the Design Engineer, but no less than 60-inches, unless approved in writing by the Water Services Director.

9. The minimum cover from finish grade to top of pipe for all reclaimed and non-potable waterlines in other locations shall be as specified by the Design Engineer, but no less than 36-inches (for lines less than 12-inches in diameter), and no less than 48-inches (for 12-inch diameter and larger lines), unless approved in writing by the Development & Engineering Director.

10. All stub-outs shall have a 2-inch brass ball corp-stop as a blow-off, left in place with a 2-inch riser, per MAG Standard Detail 390 "A," and shall be accessible to use.

11. All valves 16-inches and smaller shall be per MAG 630 with resilient seat AWWA approved gate valves and shall open by turning counter-clockwise.

12. Valves shall not be located in sidewalks, gutters, curb, or valley gutters.

13. All valve boxes shall conform to MAG Standard Detail 391-1, Type A and City of Peoria Standard Detail PE-270. All reclaimed water valve boxes shall utilize square covers with the words “Reclaimed Water” imprinted on them. Covers shall be painted ‘reclaimed water’ purple utilizing an acceptable paint listed in City of Peoria Engineering Standards.

14. Contractors shall not operate valves on the existing City system.

15. To request a water system shut down a “Water System Shut Down Request” form must be submitted. This form shall be submitted 10-days in advance of any requests to shut down any lines in the City of Peoria’s distribution system. The form is to be submitted through the Engineering Inspector assigned to the project, who will in turn coordinate with necessary Utility staff. Failure to complete this form may result in delays to construction activities.

16. The term ‘reclaimed water purple’ refers to the standard reclaimed water color (Pantone 512).

17. New reclaimed waterlines must maintain minimum separation (both vertical and horizontal) from potable waterlines and wastewater mains per MAG Standard Detail 404 except as modified: When it comes to separation from wastewater mains, reclaimed and non-potable waterlines shall use the same requirements as potable waterlines. When it comes to separation from potable waterlines, reclaimed and non-potable waterlines shall use the same requirements as wastewater mains.

18. All reclaimed and non-potable waterlines require the installation of metallic locating tape, which shall be installed in accordance with MAG Spec. 616.4. The required color for reclaimed water pipelines is reclaimed water purple. The color to be used for non-potable pipelines varies and will be determined by the City’s Water Services Department on a case by case basis.

19. Standard chlorination procedures for potable waterlines do not apply to reclaimed water. Prior to being put into service, new reclaimed waterlines should be pressure tested per MAG 610-1. The line should also be flushed to remove any construction debris.

20. No fire hydrants will be permitted on the reclaimed water system unless approved by the Development & Engineering Director.

21. The contractor shall not connect to any existing public reclaimed waterline without prior approval of the Engineering Inspector.

22. Cross connection testing shall be required prior to the delivery of reclaimed water.

23. All above ground reclaimed water infrastructure shall be reclaimed water purple in color.

24. All new landscape and turf irrigation infrastructure (above and below ground) shall be reclaimed water purple in color.

25. Reclaimed water systems on private property must complete the requirements in the City’s ‘Reclaimed Water Checklist’ before delivery of reclaimed water can occur.

LANDSCAPE AND IRRIGATION

1. All landscape and irrigation installed within the public right-of-way or other City maintained areas shall be installed per the approved plans. All landscaping approved as a part of the site plan process shall be installed per the approved plans. Any deviations to the approved plans require City approval.

2. Permits are required for electrical connections, including electric meter installation, backflow preventers, and work within the City right-of-way or City dedicated property. The Contractor is responsible for obtaining these permits prior to the commencement of any work.

3. All landscape projects requiring City maintenance or within the City right-of-way shall be inspected for the following:

    A. Plant locations: these locations shall be staked in the field with identification as to trees or shrubs; or holes for the plant materials may be dug with identification of plant type. Use of this method does not relieve the Contractor of any plant relocations made by the City.

    B. Irrigation installation: Inspections shall be made at the point the irrigation system is installed. Inspections of the pipe depth, automatic valve installation and emitter/spray installations will be made.

    C. Substantial Completion: An inspection at completion of the landscape and irrigation installation will be made. Any deficiencies in the installation will be noted and corrected by the Contractor during the maintenance period.

    D. Final Acceptance: A final inspection is required prior to City acceptance of the landscape and irrigation improvements.

The above inspections require a minimum of 48-hours prior notification to the City. Call the City of Peoria Planning and Community Development Department at (623) 773-7662 and leave a message including the subdivision, location and type of inspection to arrange for these inspections.

4. Separate inspections are required for the backflow preventer and electrical connections. Please schedule inspections via the planning inspection request line (623) 773-7662 a minimum of 24-hours prior.

5. Landscape and irrigation, which is installed on private property in conjunction with a City approved site plan, will be inspected by the Community Development Department for conformance to the approved site plan prior to issuance of a Certificate of Occupancy (C of O).

6. The landscape and irrigation for this project will be maintained by the Homeowners Association per the approved plans.

7. All City maintained projects require a 90-day maintenance period to begin at the date of substantial completion as determined by the City.

8. Right-of way and City maintained areas require separate water meter connections. Right-of-way areas designated for maintenance by the adjacent property owners for commercial, industrial and multi-family developments shall have the right-of-way irrigation isolated or separated from the on-site irrigation system.

9. The Contractor shall be responsible for installation, cost and required permit fees for the water meter(s) designated to serve the irrigation system.

10. All plantings at maturity shall maintain a minimum 6-foot clearance around all fire hydrants and fire suppression devices.

11. Plantings shall not interfere with any traffic control signs and shall maintain a maximum height of 2.5-feet within any sight distance triangles.

12. Installation of the landscape and irrigation system including addition of ground plant materials shall not impede the flow of designed drainage facilities nor decrease the design volume of any detention/retention basins.

13. The Contractor is responsible for the location and protection of all underground utilities during the landscape and irrigation installation.

14. All trees shall maintain a minimum of 6-foot clearance from any City water or wastewater line. All plantings shall maintain a sufficient distance to any sanitary and storm sewer manholes to allow access by maintenance vehicles.

15. A swale a minimum of 6-inches in depth shall be provided in all landscape areas within the City right-of-way per City detail to promote water harvesting.

16. All planting areas (except turf areas) to be maintained by the City shall be treated with a pre-emergent herbicide by a licensed applicator prior to and after the placement of the decomposed granite, river rock etc. Application documentation will be required prior to acceptance of the landscaping by the City.

17. As-built drawings of the landscape and irrigation system are required prior to acceptance by the City and for projects within the City right-of-way or City owned property. The as-built drawings shall show the locations of all plantings and the dimensions to fixed points of all irrigation equipment, piping etc.

BRIDGES

1. Construction Specification – Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Edition of 2008 as amended.

2. Design Specification - AASHTO Standard Specifications for Highway Bridges, 17th Edition 2002. AASHTO LRFD Bridge Design Specifications, 4th Edition with latest Revisions.

3. Loading Class - HS25-44 HL-93.

4. Inventory and operating ratings for HS25-44 are in accordance with AASHTO Manual for condition evaluation of bridges, Edition of 1994 and the 1995, 1996, 1998 and 2000 interims, in accordance with the load factor method. For HL-93 are in accordance with AASHTO Manual for condition evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges, Edition of 2003 with 2005 interim revisions. In accordance with the LRFD Method.

   Inventory Rating HS - XX.XX
   Operating Rating HS - XX.XX

5. Seismic Performance Category A (ACC = X.XXG).

6. All concrete shall be Class “S” unless noted otherwise.

7. Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60.

8. All bends and hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

9. All reinforcing steel shall have 2-inch clear cover unless noted otherwise.

10. Barriers shall be constructed after spans have taken dead load deflection. Barriers shall not be slip formed.

11. Chamfer all exposed corners ¾-inch unless noted otherwise.

12. Dimensions shall not be scaled from drawings.

13. Standards list:

    ADOT Bridge Group Structure Detail (SD) drawings and B-Standard drawings.

14. Contractor shall submit Oversize/Overweight Route Permit Application to the City of Peoria Capital Improvements Engineer as required for all excessive vehicle size, weight, and load per the following:

    - Arizona revised Statutes Title 28, Transportation; Chapter 3, Traffic and Vehicle Regulation; Article 18, Vehicle Size, Weight, and Load.

    - City of Peoria City Code Chapter 14, Motor Vehicles and Traffic; Section 14-72 Permits for the movement of over-dimensional loads.

15 Bridge and Culvert Design are in accordance with the City of Peoria Engineering Standards Manual, current revision.

ADDITIONAL NOTES FOR CONCRETE BRIDGES

1. Dead Load – dead load allowance of 25 pounds per square foot for wearing surface.

2. The bridge design has an assumed dead load of 16 pounds per square foot for the stay-in-place deck forms and additional concrete needed for deck option.

3. Composite Design – dead load carried by girders only. Girders are designed with transformed section properties.

4. Stresses:

Superstructure Except Barriers	f'c = 4500 PSI
Deck	f'c = 1400 PSI
Barriers	f'c = 4000 PSI
Abutments and Piers	f'c = 3500 PSI
Drilled Shafts	f'c = 3500 PSI
Grade 60 Transverse Deck Reinforced	f'c = 20000 PSI
All other grade 60 Reinforced Steel	f'c = 24000 PSI
Prestressing Steel	f'c = 270000 PSI (1/2-inch diameter 7 wire low relaxation strand)

5. The cost of stay-in-place forms is incidental to the cost of deck concrete. Approximate deck concrete quantities are based on the removal forms option. No payment will be made for any additional concrete necessary for the stay-in-place metal deck forming system.

ADDITIONAL NOTES FOR STEEL BRIDGES

1. Dead Load – dead load allowance of 25-pounds per square foot for wearing surface.

2. The bridge design has an assumed dead load of 16-pounds per square foot for the stay-in-place deck forms and additional concrete needed for deck option.

3. Composite Design – dead load carried by girders only. Girders are designed with transformed section properties.

4. Welding Code:

   All welding shall conform to the requirements of the American Welding Society ANSI/AASHTO/AWS D1.5-02 Bridge Welding Code

5. Steel CVN Impact Test Note:

   Main Span Truss Components including top chords, bottom chords verticals, diagonals, lateral braces, gusset and connection plates shall meet the longitudinal Charpy V-Notch Impact values, specified in Section 604-2.01 of ADOT Standard Specifications.

6. Stresses:
   Steel A36 _____ f's = 20000 PSI
   Structural Steel Grade 50W _____fs = 27000 PSI

7. Structural steel shall be weathering Class ASTM A709 Grade 50W.

8. All bolts shall conform to ASTM Specification A325. All bolts, nuts and washers shall be Type III corrosion resistant weathering Steel Grade.

9, All bolted connections shall be Type X (Thread excluded from shear plane).

10. The cost of stay-in-place forms is incidental to the cost of deck concrete. Approximate deck concrete quantities are based on the removal forms option. No payment will be made for any additional concrete necessary for the stay-in-place metal deck forming system.

ADDITIONAL NOTES FOR MASONRY WALLS

1. Construction shall conform to ACI 530.1, specifications for Masonry Structures.

2. Stresses:
   Concrete _____ f'c = 3500 PSI
   Masonry _____ f'm = 1500 PSI
   Grade 60 Reinforcing Steel _____ fs = 24000 PSI

3. Materials:
   Masonry: f'm = 1500 PSI, ASTM C90, medium or normal weight, running bond, slump block unless noted otherwise.
   Mortar: ASTM C270, Type S, cube strength 1800 PSI, ASTM C91.
   Grout: ASTM C476, Type: Coarse, cube strength 2000 PSI.
   Reinforcing Steel: ASTM A615, Grade 60.
   Joint Reinforcing: 9 gauge ladder or truss type, standard weight, fy=33,000 PSI, wire: ASTM A82.

ADDITIONAL NOTES FOR RETAINING WALLS

Stresses:
Concrete_____ f'c = 3500 PSI
Grade 60 Reinforcing Steel _____ fs = 24000 PSI

ADDITIONAL NOTES FOR BOX CULVERTS

Stresses:
Concrete_____ f'c = 3500 PSI
Grade 60 Reinforcing Steel _____ fs = 24000 PSI

UTILITY CONSTRUCTION

1. All work performed in the City of Peoria ROW and alleys will require an accepted traffic control plan prepared by a barricade company approved to work in the City of Peoria and shall be governed by the latest City of Phoenix Traffic Control and Barricade Manual. The contractor/utility company shall have a copy of the approved construction plans, approved traffic control permit/plans and construction permit at the project site at all times.
2. Plan approval by the City of Peoria for compliance with City requirements shall not prevent the City from requiring correction of errors found to be in violation of any law, ordinance, or City of Peoria requirements for utility construction in the ROW. The City of Peoria does not warrant any of the quantities shown on these plans.
3. All utility construction shall conform to the latest Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Work construction and to the City of Peoria Supplements to MAG details.
4. All utility work crossing existing streets must be accomplished by horizontal directional drilling, unless otherwise approved by City. All utilities crossing streets or roads being bored/horizontal directional drilled shall comply with MAG 608 and MAG 212 where possible. All street or road crossings shall be placed within conduit(s) or sleeves.
5. The Inspection Division must be notified no more than 5- business days and not less than 24-hours prior to commencement of construction. The permit number and location must be provided.
6. Proper notification must be made to all effected residents. This includes notification/information signs and hanging of door notices. Door hangers shall be hung prior to blue-staking and commencing non-emergency work.
7. All work requiring asphalt replacement, concrete replacement or resurfacing in the ROW will require a final inspection with the utility company representative at the time of completion. Temporary pavement replacement that uses cold-mix asphalt shall be replaced no later than 7-business days after initial placement. This also includes pavement markings.
8. All potholes for existing utility crossings or soil borings for future utilities will be repaired with a full depth T-top per MAG Standard Detail 212. The City may require additional repairs, as required by the Engineering Inspector.
9. The following items shall be approved in the field by the Engineering Inspector to account for unforeseen conditions;
    a. Backfill and compaction;
    b. Concrete repair and curing;
    c. Asphalt repair and pavement matching.
10. When excavating in or adjacent to landscaping within the ROW, the contractor shall contact the property owner, HOA or management company regarding the location of underground irrigation facilities.
11. All trenches in existing and future pavement are require to be backfilled with a minimum of ½ sack slurry controlled low strength material and all trenching within 2-feet of the back of curb or edge of pavement will require ABC compacted to 95% or ½ sack slurry controlled low-strength material per MAG sections 604 and 728.
12. Any damage to public or private property shall be reported to the City of Peoria and the property owner. Repair and/or replacement, in kind, shall be coordinated with the property owner and/or the City.
13. All work that lies within a special flood hazard area (SFHA) will require a floodplain review by the Floodplain Administrator or their designee and additional stipulations may be required.
14. The jobsite shall be cleaned of any debris or spoils resulting from this project at the completion of the project.

15. The utility provider is responsible for obtaining a Nation Pollution Discharge Elimination System (NPDES) permit in accordance with Federal and State Regulations, including Notice of Intent (NOI), Notice of Termination (NOT), and Storm Water Pollution Prevention Plan (SWPPP), as necessary.
16. The utility provider is responsible for obtaining a Dust Control Permit in accordance with Maricopa County Rule 310.