City of Tempe Community Development Building Safety PO Box 5002 Tempe, AZ 85280 480-350-4311 www.tempe.gov

PRIVATE DEVELOPMENT ENGINEERING PRE-CONSTRUCTION MEETING



Welcome to the City of Tempe Private Development Engineering Pre-Construction meeting. This document will provide you with information to help keep construction progressing smoothly. Please ensure you sign and return the "Acknowledgement of Receipt of Engineering Pre-Construction Notes" before you leave today.

PACKAGE CONTENTS

Purpose	2
Construction	2
Safety	2
Traffic Control Plan	2
Traffic Control Plan Continued	3
Inspection Requests	3-4
Haul Permits and Grading	4
Construction Criteria	5
Drywells	5
Concrete Installation	5
Sewer Line Installation	5
Water Line Installation	6-9
Paving	9
Trenching	10
Street and Path Lighting	10
Revisions to Approved Plans	
Project Release	11
As-Built Plan Requirements	12-13
Final Inspection and Acceptance Checklist	
Pre-Construction Meeting Attendance	16
Acknowledgement of Receipt of Engineering Pre-Construction Notes	
Stormwater Construction Pre-Inspection Checklist	
(For the 2020 Construction General Permit)	

<u>PURPOSE</u>

Welcome to the City of Tempe. You will find we are a city committed to our citizens. With that in mind, the Private Development Engineering Division acts as caretaker to ensure public safety as well as quality work during construction projects. This document gives the Contractor the basic pre-construction requirements in order to meet those goals.

Prior to beginning construction, it is the responsibility of the Contractor to review all information contained on the cover sheet of the plans, the permit(s) and any contractual agreements.

The Contractor shall keep a current copy of the "Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details" (<u>www.mag.maricopa.gov/publications.cms</u>) and the "Tempe Standard Details Supplement to the MAG Uniform Standard Details" (<u>www.tempe.gov/engineering</u>) at the project site for reference throughout the construction process. The Tempe Supplements can also be purchased at the Engineering and Transportation Department Office.

CONSTRUCTION

All construction requires the following:

- Permit(s)
- Approved plans signed by the Tempe City Engineer or Principal Civil Engineer
- Approved and current traffic control plan when applicable
- Competent supervision by the Contractor
- Blue stake marking prior to any underground construction. Call 811.
- As-built plans

SAFETY

The City of Tempe has placed safety as the highest concern. Occupational Safety and Health Administration (OSHA) Standards must be followed completely. For complete OSHA requirements refer to "OSHA Standards for the Construction Industry" or online at <u>www.osha.gov.</u>

Important safety guidelines to note:

- Shoring and access ladders are required for trenches five feet or greater in depth.
- All personnel working in the right-of-way, including police officers, must wear safety vests at all times.
- Construction may be halted if safety guidelines are not followed.

TRAFFIC CONTROL PLAN

A current traffic control plan must be at the construction site at all times. For traffic control and barricading information, contact the City of Tempe Transportation Division at (480) 350-8219.

When installing plates refer to MAG Standard Detail 211, but note that Tempe requires the pavement to be milled and plates to be depressed at speeds of 25 mph and greater. Plates shall be secured to ensure they will not shift. An after-hours contact name and phone number shall be shown on the traffic control plan in the event the plates need to be re-secured.

Americans with Disabilities Act (ADA) compliant pedestrian access shall be maintained continuously along public streets during construction.

INSPECTION REQUESTS

All MAG, City of Tempe and special details noted on the construction plans require inspection by the Private Development Engineering Inspector.

The Contractor shall contact the Engineering Inspector by 1:30pm on the previous day prior to any construction work requiring inspection

Schedule the inspection by calling the Interactive Voice Response (IVR) at Offsite IVR (480) 350-8072

480-350-8072. <u>No exceptions. Plan accordingly</u>. After receiving the inspection request, the Engineering Inspector will return the call and schedule the requested inspection within 24 hours. For inspection codes, visit <u>https://www.tempe.gov/government/community-development/building-safety/inspections/interactive-voice-response-system-ivr</u> Select "Private

Development IVR brochure"

When the Engineering Inspector must request the Water Utilities Department to perform inspections or shutdown water lines, additional time may be required to schedule the work.

Construction work concealed without inspection by the Engineering Inspector and/or the Water Utilities Department will be subject to exposure at the Contractor's expense.

INSPECTION REQUEST OUTSIDE OF NORMAL WORKING HOURS

In order to request an Inspector to perform an inspection before or after normal working hours on an overtime basis, please contact your inspector for additional information.

NORMAL CONSTRUCTION HOURS

Concrete

• From April 15 to October 15 inclusive, concrete may be poured, and concrete mixing trucks may be idled, each day between the hours of 5:00 a.m. and 7:00 p.m. or at such other times pursuant to written authorization. From October 16 to April 14 inclusive, concrete may be poured, and concrete mixing trucks may be idled, each day between the hours of 6:00 a.m. to 7:00 p.m. or at such times pursuant to written authorization.

All other construction/residential zones in or within five hundred (500) feet

• From April 15 to October 15 inclusive, all other construction or repair work shall not begin prior to 6:00 a.m. and must stop by 7:00 p.m. each day in or within five hundred (500) feet of a residential zone or at such other times pursuant to written authorization. From October 16 to April 14 inclusive, all other construction or repair work shall not begin prior to 7:00 a.m. and must stop by 7:00 p.m. each day in or within five hundred (500) feet of a residential zone or at such other times pursuant to written authorization.

For work outside of these hours, the contractor must obtain a Letter of Noise Authorization. It is necessary to submit a formal written request using company letterhead to the City of Tempe. If approved, you will receive a signed Letter of Noise Authorization via fax or email from the Neighborhood Services Division, and internal appropriate City staff will be provided an unsigned copy (via e-mail), as a formal notification of your permission to work evenings and/or early morning hours., please submit your request by email or fax to Neighborhood Services at 480-350-8996 (fax) or <u>neighborhoods@tempe.gov</u>. In the event you have any questions regarding this process, please contact Shauna Warner at 480-350-8883 or <u>shauna_warner@tempe.gov</u>.

HAUL PERMITS AND GRADING

A Special Use Permit for hauling construction waste and excavated material is required.

To obtain a Special Use Permit for hauling, the Contractor shall contact the City of Tempe Transportation Division at (480) 350-8219 to discuss the haul route. Once the Transportation Division approves the haul route, the Contractor shall obtain the Special Use Permit from the Community Development Permit Center. Call 480-350-8341 and ask for the Community Development permit center if you need further assistance. They can also be emailed at permitcenter@tempe.gov

Conditions of the **Special Use Permit** for hauling include but are not limited to:

- Streets and sidewalks shall be kept clean at all times.
- No ramping over curb, gutter or sidewalk at anytime.
- Sidewalks shall be kept open at all times.
- Dust control shall be maintained at all times.

CONSTRUCTION CRITERIA

DRYWELLS

- 1. Ensure all drywells are constructed per the approved plan (including settling chamber depth, overall depth and grate elevation relative to finished grade.)
- 2. Submit a copy of the drilling log and certification letter.
- 3. Remove the "fabric seal" from the inlet when construction is complete.

CONCRETE INSTALLATION

- 1. All concrete shall be in accordance with MAG specifications. When requesting concrete from a supplier, specify "MAG concrete" as opposed to just "concrete."
- 2. Prior to pouring concrete, the Engineering Inspector must inspect the forms. It is not advised to schedule concrete delivery until the forms have been approved by the Engineering Inspector.
- 3. The City's contracted soils testing lab will take concrete cylinders and densities of the sub-grade soil. The contractor shall coordinate testing with the Engineering inspector. If an independent company is used, then the results of the testing shall be forwarded to the inspector within 24 hours
- 4. Concrete older than 90 minutes will be rejected.

SEWER LINE INSTALLATION

- 1. <u>Bedding, pipe, and wyes</u> will be inspected together.
 - A. Bedding must be 8 inches deep or 2/3 of the distance to the springline, whichever is greater, to 1 foot above the top of the pipe.
 - B. The pipe shall be straight and have proper slope as indicated on the approved plans. No bends or deviation allowed except at manholes or wyes with cleanouts.
 - C. The wyes shall be pointed in the proper direction.
 - D. Services are NOT allowed in manholes or cleanouts. Reference Tempe Standard Detail T-115.
 - E. Bells shall be pointed upstream. Spigot ends shall be pointed in the direction of the flow.
 - F. The City's contracted soils testing lab must perform soil compaction tests for sewer lines at 500 feet intervals (one test minimum for shorter sewers) at the depths shown in Table 601-2 of the MAG specifications and for each 4 foot lift.
- 2. <u>Taps</u> must be inspected by the Engineering Inspector. Core drilling or cut-infactory wyes only (no chisels or jack hammers allowed.) All "donuts" shall be submitted and inspected.
- 3. <u>Shading</u> for pipe must be inspected by the Engineering Inspector. The pipe shall be shaded to at least 1 foot above the top of pipe.
- 4. <u>Services</u> must be inspected by the Engineering Inspector in accordance with MAG Standard Details 440-1 thru 440-4.

- A. Services shall be straight and clean (minimum slope of 1/4 inch per foot.)
- B. 1/8 bends are allowed at wyes and require clean-outs per MAG Standard Detail 441 and Tempe Standard Detail T-115.
- C. Maximum slope is 12.5% on all services.
- D. Services shall not be connected directly to manholes or cleanouts.
- E. Compaction tests for sewer services must be performed by the City's contracted soil testing lab at least every fifth service at 1 foot below grade and requires 95% compaction at +/- 2% optimum moisture. All Aggregate Base Course (ABC) bedding and cover requires 100% compaction.
- F. Services shall be marked per MAG Standard Details 440-1 and 440-4 using metal studs and electronic markers.
- 5. <u>Manhole bases</u> must be inspected by the Engineering Inspector BEFORE they are poured.
 - A. Proper depth will be verified.
 - B. The sub-grade shall be native, undisturbed ground (no pea gravel, ABC, cups or dirt clogs allowed in base.)
 - C. The City's contracted soils testing lab will test the density of the sub-grade soil and take concrete cylinders for testing to verify concrete strength. The contractor shall coordinate testing with the Engineering inspector. If an independent company is used, then the results of the testing shall be forwarded to the inspector within 24 hours
 - D. A chute, pipe or elephant trunk shall be used if the bottom of the manhole base is over 6 feet deep.
 - E. Inverts shall be formed.
 - F. Water stops are required when connecting PVC or HDPE pipe to concrete manholes or other concrete structures.
- 6. <u>Manholes</u> shall conform to MAG Standard Details 420, 421 or 422 (unless shown otherwise on plans.)
 - A. The concrete for the manhole base shall be MAG Class A concrete.
 - B. The concrete ticket from the supplier shall be submitted to the Engineering Inspector.
 - C. All manholes shall be 5 feet in diameter with no steps.
 - D. Drop sewer manholes shall be used only when absolutely necessary, as indicated on the plans and shall comply with MAG Standard Detail 426.
- 7. <u>Testing of sewer lines</u> will be required after they have been in the ground 20 days.
 - A. The entire sewer line shall be air tested and mandreled by the contractor and witnessed by the Engineering Inspector after all dry utilities are in place and backfilled.
 - B. The entire sewer line will undergo camera testing by the City.

WATER LINE INSTALLATION

1. For new water meters, complete the water meter request form and return to inspector. The inspector will send the request to customer service along with site plan of water meter locations

- 2. <u>Trench width</u> must be inspected by the Engineering Inspector and must conform to MAG Standard Specification 601-1.
- 3. <u>Bedding, Pipe, Valves and Fittings</u> must be inspected together.
 - A. Bedding shall be 4 inches deep. (Only the Engineering Inspector can determine if bedding is not needed.)
 - B. Valves and fire hydrants must be approved by the Engineering Inspector.
 - C. All fire hydrant valves shall be flanged to the tee or 90° elbow.
 - D. Pipe shall be ductile iron class 52 and shall be wrapped in high-density polyethylene, folded and taped every 3 feet per MAG Standard Specification 610.
 - E. Mainline valves at line intersections shall be flanged to fittings in accordance with Tempe Standard Detail T-115.
- 4. <u>Shading</u> for pipe must be inspected by the Engineering Inspector. The pipe must be shaded to the springline.
- 5. Pipe Cover Minimums
 - A. Staking is required and coverage shall be as indicated.
 - B. Water lines smaller than 12" shall have a minimum cover of 36".
 - C. Water lines 12" and larger shall have a minimum cover of 48".
- 6. <u>Potable and non-potable separation and protection</u> shall conform to MAG Standard Details 404-1 and 404-2.
 - A. Encasements must be inspected.
 - B. Potable water shall not be placed horizontally within 10 feet of non-potable water.
- 7. Vertical Bends
 - A. Mechanical joints require inspections and may be modified with megalugs and all thread with I bolts. Refer to MAG Standard Details 370 and 381.
 - B. Profile with stationing and offsets for all bends shall be shown on the as-built plans.
- 8. <u>Services</u> shall be installed in conformance with Tempe Standard Detail T-212 and T-212a. Double strap bronze saddle, corporation stops, and angle stops will be inspected by the Engineering Inspector.
- 9. Water and Fire Line Testing
 - A. Pressure and Leakage testing at a minimum of 200 psi for two hours shall be performed by the Contractor and witnessed by the Engineering Inspector (see the Water Leakage Test Worksheet included in this document.)
 - B. High and low chlorine tests must be scheduled with the Engineering Inspector.
 - C. Bacteria testing must be scheduled with the Engineering Inspector.
 - D. Failed tests will result in re-test fees as indicated in the Tempe City Code Appendix A – Schedule of Fees and Charges, Table 2-A – Building Permit Flat Fees, under Re-testing and inspection.

- 10. <u>Water Taps</u> must be scheduled with the Engineering Inspector and witnessed by Water Utilities Department.
 - A. Water line taps shall be the Contractor's responsibility.
 - B. All "donuts" shall be submitted and inspected. Only core drilling is permissible. (No chisels or jack hammers allowed.)
- 11. <u>Compaction and Moisture-Density Testing</u> must be performed by the City's contracted soil testing lab at every fifth service. One test must be performed for every 500 feet per lift.
- 12. <u>Water Meter Boxes</u> shall be placed per Tempe Standard Detail T-212.
 - A. Meter boxes shall not be installed within a driveway.
 - B. Stakes shall be installed at each service until meter boxes are set. The stake shall be a 2 inch by 4 inch wooden stake that is painted blue.
- 13. <u>Valve boxes</u> shall be installed in accordance with MAG Standard Detail 391-1, Type C and Tempe Standard Detail T-445.
 - A. Valves shall have concrete collars and shall be accessible at all times during construction.
 - B. Concrete collars shall be flush to grade.
- 14. <u>Backflow Preventors:</u> If there is a BP permit, then the building inspectors will look at the backflow. They will obtain the testing results and send to Environmental Services. The test needs to be submitted before they can get the Certificate of Occupancy (CofO)

If there is NO BP permit and they are tying into the city's water system, then the below items apply.

- Contractor needs to test the backflow
- The test results need to be emailed to backflow@tempe.gov every year
- If they have an approved tester, then that company can enter the information into the city's system.
- Contact Richard Dalton at 480-350-2851 or richard_dalton@tempe.gov for any questions
- 15. Water Line Mock and Shutdown Process:
 - A. Email Jed Such (Jed_Such@Tempe.gov) and José Tarango (<u>Joset1@Tempe.gov</u>) with a plan sheet showing where the Mock Shutdown needs to occur and include the following:
 - 1. PROJECT #: EN
 - 2. PROJECT NAME:
 - 3. PROJECT ADDRESS:
 - 4. CONTRACTOR:
 - 5. CONTACT NAME:
 - 6. CONTACT NUMBER:
 - 7. CONTACT EMAIL:

- B. This will then be submitted to the Water Dept. to complete. This can take up to 10 business days.
- C. Once Mock process is complete, then the contractor will receive a list of affected services and hydrant.
- D. The contractor will then need to send Jed Such (Jed_Such@Tempe.gov) and José Tarango (Joset1@Tempe.gov) the list of hydrants affected to be provided to the Fire Department. This needs to be done with a minimum of 48 hours notice in advance of the shutdown.
- E. The contractor will also notify all of the affected services via door hangers and allow a minimum of 48 hours for their response. (If the contractor receives comments back from the affected addresses, then the contractor will need to coordinate with them for the shutdown)
- F. Once the shutdown date and times has been confirmed, then submit the shutdown request by following step 1. Include the desired start time and an estimated shutdown duration.
- G. The shutdown request needs a minimum of 48 hours' notice for the Water Dept. to complete.

PAVING

- 1. A <u>traffic control plan</u> shall be submitted to the Traffic Engineering Department 72 hours prior to the start of work in a right-of-way. (See previous section of this document regarding the traffic control plan.)
- 2. The <u>sub-grade</u> must be inspected.
 - A. The Engineering Inspector will string-line the sub-grade.
 - B. The Engineering Inspector will proof roll the sub-grade to check for pumping.
 - C. The City's contracted soils testing lab will test the sub-grade for compaction. It must be a minimum 95%.
- 3. The <u>Aggregate Base Course</u> (ABC) must be inspected.
 - A. The Engineering Inspector will string-line the ABC.
 - B. The Engineering Inspector will proof roll the ABC to check for pumping.
 - C. The City's contracted soils testing lab will test the ABC for compaction. It shall be 100%.
- 4. The base course of asphalt must be inspected.
 - A. The edges of the concrete shall be tacked.
 - B. The temperature will be checked.
 - C. The material ticket will be checked for correct mix in accordance with the MAG Specifications. See Tempe Standard Details T-311 through T-317 for approved mixes.
 - D. The City's contracted soils testing lab will take material samples of asphalt for testing.
 - E. The City's contracted soils testing lab will test the base asphalt for compaction. It must be at least 95%.
- 5. The <u>surface course of asphalt</u> must be inspected.
 - A. The base course shall be tacked prior to applying surface course.

- B. The temperature will be checked.
- C. The material ticket will be checked for correct mix. See Tempe Standard Details T-311 through T-317 for approved mixes.
- D. The City's contracted soils testing lab will take material samples of asphalt for testing.
- E. The City's contracted soils testing lab will test the surface course of asphalt for compaction. It must be at least 95%.

TRENCHING

- 1. Trench backfill, excavation and compaction must be performed in accordance with MAG Standard Specification 601 and Tempe Standard Detail T-450.
- 2. Trench backfill in the right-of-way:
 - A. Pipe bedding shall be ABC to one foot above pipe.
 - B. Lean mix backfill shall be used per Tempe Standard Detail T-450 from ABC to bottom of asphalt.
 - C. Slurry shall cure for at least 72 hours prior to paving.

STREET AND PATH LIGHTING:

- 1. Schedule a pre-construction meeting with the Streets and the Private Development Engineering Inspector (PDE) before any work occurs with the streetlights. Use code 751.
- 2. The inspectors for PDE and Streets will verify if existing light poles and/or existing traffic signals can be reused. If spare parts are needed, then PDE will coordinate with Streets.
- 3. T-653 streetlights (antique style) around the downtown area will be inspected by Private Development Engineering. See map on following page for general locations of T-653.
- 4. Streetlights powered by APS or SRP will be inspected by the Dry Utilities group. Contact them at 480-350-8200 and apply for UT permit.

REVISIONS TO APPROVED PLANS:

- 1. The contractor shall coordinate with the PDE Inspector
- 2. If field changes are allowed, then provide the following:
 - A. Provide 8.5" x 11" plan of changes
 - B. Provide description of changes
 - C. Plan must be signed and sealed by the design engineer
 - D. Submit to the PDE Inspector. The Principal Civil Engineer will review it and approve it
 - E. Once the field change is approved, then keep the approved change in the inspection file and provide one for the contractor
- If formal plan review is required, then see "Requirements for Civil Plan Revisions to Approved Plans" <u>https://www.tempe.gov/government/community-</u> <u>development/building-safety/applications-forms</u> Scroll down webpage and look the for the requirements under "Civil Engineering & Right of Way Private Development"



Antique type streetlight poles do extend beyond the "downtown" limits along Mill Ave from University south to 10th Street.

PROJECT RELEASE

The project will be released when the following is completed:

- Construction is completed per MAG and Tempe requirements
- As-built plans submitted and accepted
- Drywell certification submitted
- Water line mechanical final completed
- Final checklist items completed
- Final inspection performed by the Engineering Inspector verifying that all outstanding items have been completed.

AS-BUILT PLAN REQUIREMENTS

The Engineer or Surveyor completing the "as-built" plans shall indicate "AB" next to the following items on the plans:

AS-BUILT REVIEW CHECKLIST:

- 1. Verify that all permit fees are paid.
- 2. Submit full set of plans (24" x36") including all city approved revisions in pdf format
- 3. Show City approval stamps with City signature on cover sheets
- 4. Required and Provided Retention Calculations will need to be noted as (AB) asbuilted.
- 5. An Arizona registered civil engineer will need to seal and sign the As-Built stamp.
- 6. All structures on the Grading and Drainage plan sheets must be noted as AB including the Finish Floor Elevation.
- 7. All Structures, connections, bends, meter boxes, and Fire hydrants will need to be noted as AB.
- 8. If the permit set of plans includes On-Site Grading and Drainage general notes, then Note 4 must be signed off by RLS or Civil Engineer.
- 9. If an existing Sewer service stub is used, then Note 10 of the Utility General Notes will need to be signed off or noted as N/A by the Civil Engineer.
- 10. Cloud and delta all asbuilt items

WATER:

- 1. Street centerline stations and offset dimensions to all valves and fittings (i.e. tees, bends, plugs, meters, taps, fire hydrants, stub extensions, flushing boxes, etc.)
- 2. The size and type of all services, valves and laterals
- 3. Profiles of all water line realignments and bores with all existing utility pothole information
- 4. Locations and dimensions of all encasements and easements

SEWER:

- 1. Street centerline stations and offset dimensions on all manholes, clean-outs and fittings (i.e., tees, wyes, bends, etc.)
- 2. Elevations for all manhole and clean-out rims, inverts and drops
- 3. Offset locations and invert elevations at the end of all stub extensions, connections and services
- 4. Sizes and types of all pipes and extensions
- 5. Locations and dimensions of all encasements and easements

Note: All as-built plans for water and sewer lines must be submitted to and accepted by the Private Development Engineering Division prior to water line testing and disinfecting.

STORM DRAIN:

- 1. Street centerline stations and offset dimensions for all manholes, catch basins, laterals and bends
- 2. Offset locations and invert elevations for all pipe, stubs, headwalls, catch basins and scuppers
- 3. Sizes, types and classes of all pipes and catch basins and scuppers
- 4. Locations and types of all dry wells with rim elevations
- 5. Calculations for retention volumes, high water, lot outfall and basin bottom elevations for all retention and areas
- 6. Drainage patterns and finished floor and pad elevations

PAVING:

- 1. Elevations of all grade breaks, curbs, returns, driveways and invert elevations of all valley gutters, catch basins, gutters and scupper inlets
- 2. Stations and offsets for curb and property lines, all intersections, tangents, curves and monuments
- 3. Offset location and top of curb elevations on all median curbs
- 4. Include a benchmark (use and note City of Tempe datum)

STREET AND PATH LIGHTING:

- 4. Street centerline stations and offset dimensions on all poles, pedestals and light base locations.
- 5. Size and type of light poles, luminaries and mast arms.

PLEASE NOTE:

- The Contractor shall note any changes made during the construction phase on the "blue line" as-built plans.
- The Contractor is responsible for coordinating the as-built plans with the Contractor's Engineer or Surveyor.
- The as-built information listed above, in addition to all fitting location information and verification, shall be transferred in a timely manner to the as-built drawing prior to back filling and must be certified by the Engineer.
- Any additional required information per the City of Tempe design criteria that was not provided on the original approved plans shall also be included on the as-built plans per the Inspector's direction.

FINAL INSPECTION CHECKLIST/ACCEPTANCE

The Contractor shall contact the Engineering Inspector at least <u>5 working days</u> prior to the final inspection to schedule the final inspection. Prior to scheduling the final inspection, the Contractor must verify conformance with the following items:

GENERAL:

- ✓ All as-built plans are submitted and approved.
- ✓ All required tests are complete.

<u>WATER</u>

- □ All valve boxes are located, confirmed to be correct type, set to grade, centered, clean and have concrete collars per Tempe Standard Detail T-445.
- □ All fire hydrants are set to proper grade, oriented and have the paint touched-up.
- Meter and flushing boxes are set to finished curb or sidewalk, unbroken and located at the back of curb or sidewalk per Tempe Standard Detail T-212 and T-212a.
- □ Mechanical inspection is performed by the City of Tempe Water Department.

<u>SEWER</u>

- □ All manholes and clean-outs are located, clean, set to grade and have concrete collars per Tempe Standard Detail T-446 and MAG Standard Detail 270.
- □ Sewer services are marked with 2"x 4" metal stud and electronic ball markers per MAG Standard Detail 440-1.

STORM DRAINS

- □ All manholes are located, clean and adjusted to grade.
- □ All lids are secure; catch basins and inverts are clean and smooth.

CONCRETE (SIDEWALK, CURB AND GUTTER)

- \Box All concrete is water flow tested.
- □ Check for broken or chipped curb, gutter and sidewalk.
- All parkway grading is depressed a minimum of 1-inch per Tempe Standard Detail T-345.
- □ All curbs, gutters, pavement and sidewalks have been swept clean of all dirt and debris.
- □ All finished flat work shall be cleaned before water testing. Inspector will check for grade problems, cracking, joints and appearance.

<u>PAVING</u>

- Asphalt is clean and preservative sealed per MAG Standard Specification 334. During final inspection, the asphalt will be water tested, and the inspector will check for ponding, bad joints, grade problems and overall surface texture.
- □ All monuments are in and punched per MAG Standard Detail 120-1 and 120-2.
- □ Alleys are checked for grade, cross-section and base thickness.
- □ Traffic pull-boxes are in and set to grade per Tempe Standard Detail T-453.

GRADING AND DRAINAGE

- Parkway grading per Tempe Standard Detail T-345 behind curbs, sidewalks and bicycle paths
- □ Lot grading as per drainage plans and grading detail.
- □ Catch basins, storm drain manholes, dry wells, interceptors and pipes are checked for cleanliness and conformance to specification and details.

STREET AND PATH LIGHTING

- □ All J-box's, wires, connections, fuse holders, ground rods+ wires, conduits and ground claps are installed per City of Tempe Standard Detail T-650.
- Street light poles and bases are installed per Tempe Standard Details T-645, T-651, T-652 and T-653.
- Path lights and pedestals are installed per Tempe Standard Details T-656 and T-658.
- □ All streetlights, path lights and J-boxes are clean.

BUS SHELTER. LIGHTING AND BUS PULL OUTS

□ All installed per Tempe Standard Detail T-654

FINAL ACCEPTANCE

- □ 2 copies of as-built plans must be submitted and certified before issuance of the letter of acceptance.
- Dry well certification and drilling log must be submitted.

PRE-CONSTRUCTION MEETING ATTENDANCE

Project:

City of Tempe staff in attendance:

Attendees:

	Name	Company	Emergency Phone Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

ACKNOWLEDGEMENT OF RECEIPT OF ENGINEERING PRE-CONSTRUCTION NOTES

,(print name),
epresenting(pr	int
company name), acknowledge that I have received and understand	the
Private Development Engineering Pre- Construction Notes from	the
City of Tempe Community Development Department. I a	also
acknowledge the responsibility to adhere to the guidelines outlined	d in
he Private Development Engineering Pre-Construction Notes.	Гhe
estimated completion date for this project is	

Signed:	Date:



Your construction project has been selected for an inspection to determine compliance with the 2020 ADEQ Stormwater Construction General Permit. This **OPTIONAL** checklist is intended to assist facility owners/operators with preparing for an inspection by ADEQ. The items listed below are common permit violations observed by ADEQ and often result in either an informal or formal enforcement action following the inspection. **Use of this checklist is not required and it will not be part of the official inspection.** However, ADEQ encourages you to use this checklist to identify and correct potential deficiencies prior to ADEQ's inspection to reduce potential violations and enforcement actions.

INSTRUCTIONS:

Evaluate your project by answering the following questions. **"NO" answers are POTENTIAL permit violations** and should be corrected immediately. If assistance is needed with how to answer a question or how to correct an issue, contact the Stormwater Inspector who scheduled the inspection or call the ADEQ Stormwater & General Permits unit at (602) 771-4509.

SWPPP and Documentation Review

- □ YES □ NO 1. Have Routine Inspections been performed and documented in the SWPPP? (Part4.0)
- □ YES □ NO 2. Is the Corrective Action Log current with all items adequately addressed? (Part 5.0)
- □ YES □ NO 3. Is the signature page signed by a Duly-Authorized Representative? (Part 6.1(3) and Appendix B Subsection 9)
- □ YES □ NO 4. Is the Summary of Potential Pollutant Sources present and complete? (Part 6.3(9))
- □ YES □ NO 5. Is the Site Map current with installed Control Measures in their current locations? (Part 6.3(5))
- □ YES □ NO 6. Are all documents/permits available in the SWPPP (e.g., ADEQ NOI, 404, Dust Control)? (Part 6.4)
- □ YES □ NO 7. Does the SWPPP meet the requirements of the 2020 ADEQ Construction General Permit? (Part 6.0)

Site Assessment

- □ YES □NO 8. Are trackout prevention controls sized properly and in adequate condition? (Part 3.5(3))
- □ YES □NO 9. Have all spills (e.g. engine oil, paint, etc.) been addressed? (Part 3.1.3.4)
- □ YES □NO 10. Is all wastewater from concrete washout being captured in a lined container or basin? (Part 3.5(5))
- □ YES □NO 11. Is the AZCN number posted in a location visible to the public (e.g. on the dust permit board)?
- □ YES □NO 12. Is good housekeeping maintained (e.g. street sweeping, proper containers, labeling, drip pans, garbage, etc.)?
- □ YES □NO 13. Are all control measures maintained in good condition (e.g. straw wattles, silt fences, etc.)?
- □ YES □NO 14. Are the current site conditions (locations of control measures, etc.) updated on the Site Map?

Avoid common violations:

Perimeter control • Concrete washout • Trackout pads • Housekeeping • Spills • Documentation



2020 CGP Pre-Inspection Checklist

May 2020