



CITY OF KINGMAN

ENGINEERING DEPARTMENT

STREET / PAVING PLAN CHECKLIST

310 N. 4th Street Kingman, AZ 86401 Ph: (928) 753-8122 Fax: (928) 753-8118

Project Name: _____ Project Number(s): _____

Reviewed By: _____ Phone: _____ Date: _____

Engineer: _____ Phone: _____

The purpose of this checklist is to offer comments on plan design for construction of streets and paving projects within public right-of-way. Source of the design policy for street and paving construction are City of Kingman Streets and Sidewalks Development Rules and Regulations, MAG Standard Specifications & Details, City of Kingman Addendums to MAG Standard Specifications & Details, AASHTO, MUTCD and Kingman Area Master Drainage Plan Design and Administrative Manual.

This checklist serves to minimize redline comments on the check prints and to maintain consistency among plan reviewers on plans for streets and paving construction in the public right-of-way or public easements. Plan approval and issuing permits depends on compliance with the comments made on the check prints and this checklist. The engineer of record shall satisfy themselves of the completeness and accuracy of the design.

A completed checklist must be attached to the street plans when submitted for first review. The following Certification Statement must be signed by the Engineer of Record certifying that all applicable requirements on this checklist have been met.

CERTIFICATION

I CERTIFY THAT THE REFERENCED PLANS COMPLY WITH ALL APPLICABLE CITY ORDINANCES AND STANDARDS, INCLUDING FEDERAL, STATE AND COUNTY REQUIREMENTS AND REGULATIONS. IN ADDITION, I CERTIFY THAT THIS CHECKLIST HAS BEEN COMPLETED ENSURING ALL ITEMS LISTED ARE PROPERLY ADDRESSED. I UNDERSTAND THAT IF I FAIL TO ADDRESS ALL APPLICABLE ITEMS IN THIS CHECKLIST, THE PLANS MAY BE IMMEDIATELY RETURNED TO ME WITHOUT ANY FORMAL REVIEW BEING PERFORMED.

Engineer's Name: _____

Engineer's Signature: _____ Date: _____

Please complete and return this checklist and the check prints with your next submittal. Discussion of redline comments on plans or this checklist should be directed to the plan reviewer listed above.

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Engineer of record (**ENG**) must fill out all boxes in the first column as either (Addressed) or (Not Applicable).

Civil plan reviewer (**RVW**) shall check the second column as (Required) when requirements have not been properly addressed.

REQUIRED SUBMITTALS

ENG RVW

Plan sheets shall be 24" X 36"; submit four (4) sets of Street/Paving plans, a sealed cost estimate and a completed and signed Street/Paving Checklist.

GENERAL REQUIREMENTS

Symbols shall be per City of Kingman Uniform Standard Details for Public Works Construction or MAG Standard Details for Public Works Construction as applicable.

Orientation of each plan sheet shall be shown by a north arrow and scale of drawing. (North arrow is to be up or to the right.)

A cover sheet is required on plans of two (2) sheets or more.

Provide a plan view and a profile on each plan sheet.

Each sheet shall be identified by sheet number, project name, and match lines.

All sheets shall have the Civil Engineer's Arizona registration seal with original signature and date prior to any plan submittal.

All plan sheets shall be sufficiently clear to allow legible prints to be reproduced from microfilm. The size of lettering and symbols shall be 1/8 inch minimum. Shading or zip tape is not permitted.

A soils report must be submitted to the Engineering Department. The Plasticity Index and percentage passing 200 sieve must be submitted OR provide a Private Laboratory investigation for R values of pavement section recommendation for Major and Collector Streets. At least one test for every 2500 square yards of new pavement is required. This information must be supplied prior to plan approval/signature. Compaction test results must be furnished to the city prior to request for final inspection and permit final.

Refer to the City of Kingman Streets and Sidewalk Development Rules and Regulations and Kingman Area Drainage Master Plan Design and Administrative Manual for drainage design policy, details, and calculations. See appropriate manual for required guidelines and submittals unless otherwise modified herewith.

A drainage study of the site and contributing areas shall be submitted unless included as part of the Grading and Drainage Plan submittal. The study should include hydrology parameters and assumptions and include methodology for developing quantities. Also include computer runs from HEC-1, TR-20, or other programs utilized to develop flows from contributing area. Storm water routing through channels should include HEC-2, including backwater computations.

Should city require right-of-way for tapers, temporary turn-around, sidewalks and/or other street improvements, right-of-way documents are required. If this right-of-way is not included on plat or map of dedication, it will need to be dedicated by a separate instrument. These items should be submitted as soon as possible. No right-of-way permits will be issued until dedication is complete.

Show all existing and proposed concrete work for accommodation of disabled persons. On-site and offsite access/sidewalk ramps shall match, and align, to provide easiest practical access. Form inspections are required, prior to pouring concrete, for alignment and grade inspection.

Cover for underground utilities shall meet current City of Kingman minimums. For utility relocations, show the specific utility affected and the utility owner responsible.

Show the location of proposed traffic signal conduit and junction boxes.

This project is subject to the National Pollution Discharge Elimination System (NPDES) requirements for construction sites under the Environmental Protection Agency (EPA) General Permit for Arizona. Owners, developers, engineers, architects, and/or contractors are required to prepare all documents required by this regulation, including but not limited to: SWPPP/SWMP, NOI, NOT.

COVER SHEET REQUIREMENTS

ENG RVW

Engineering plan review project number (ENG#) in lower right corner.

Provide a project title block with name and address of project.

Provide the Owner/Developer's name, address, and telephone number.

Provide Engineer's name, address, and telephone number.

Provide a vicinity map with a north arrow oriented up or to the right.

Provide an index of plan sheets if more than one plan sheet is included.

Provide a legend identifying grades, symbols, lines, etc.

Provide Signature Approval Block. (In lower right-hand corner)

**APPROVED FOR:
THE CITY OF KINGMAN**

CITY ENGINEER (OR DESIGINEE)

Provide an As-Built Certification Statement as follows:

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**REGISTERED ENGINEER
REGISTRATION NUMBER**

DATE

Key map is required on plans with more than two (2) sheets. A key map is a small-scale map of the project site that provides a system overview and is used to index the plan sheets. The key map shall clearly show the following:

- All streets with names, alleys, easements, tracts, and parcels shall be identified or shown "unsubdivided."
- Water mains with types and sizes, fire hydrants, valves and production facilities (tanks, boosters, etc.) proposed and existing.
- Index of plan sheets indicated by single line with arrows showing beginning and end of each sheet.
- Identify all pressure zones.

Provide a Blue Stake notification decal.

Elevation datum and bench marks (city datum required). Please dial (928) 753-8139, to obtain city datum for the existing benchmark closest to the project site. Equations cannot be used.

Provide a material list for Right-of-Way or easement work.

**NOTES FOR STREET/PAVING PLANS:
(ALL notes to appear on cover sheet)**

Engineering Department's Civil/Site Inspection Staff shall be notified 48 hours before any construction begins telephone (928) 753-8195.

All construction to conform to M.A.G. Specifications and Details and City of Kingman Supplement to M.A.G. Specifications and Details, unless modified on the plans.

Compaction shall comply with M.A.G. Section 601 & City of Kingman Supplements.

ENG RVW

This set of plans has been initially reviewed by the City of Kingman. Such review is part of the process that developer(s)/contractor(s) must go through in order to obtain a Construction Permit. The results of such initial review shall not dictate the City of Kingman's final determination as to the acceptability of the plans, nor shall it prevent the City of Kingman from requiring errors and omissions, as found on plans, be addressed by developer(s) /contractor(s), where such errors and omissions cause the plans to be in violation of or inadequate under applicable federal/state/county/local codes, ordinances, regulations, or other laws. This reviewed and stamped set of plans must be kept at the construction site at all times.

Construction quantities on these plans are not verified by the city.

All work must comply with requirements of the Manual on Uniform Traffic Control Devices (MUTCD).

Existing or newly damaged and/or displaced concrete curb, gutter, sidewalk, or driveway slab that is within the right-of-way shall be repaired or replaced, as noted by city inspectors, before final acceptance of the work.

Exact point of pavement matching, termination and overlay, if necessary shall be determined in the field by the City Engineer or his/her authorized representative.

An approved Paving Plan shall be on the job site at all times. Deviations from the plan must be preceded by an approved plan revision.

Obstructions to proposed improvements in the right-of-way shall be removed or relocated before beginning construction of the proposed improvements.

All existing catch basins must be re-located when they are shown in a newly proposed driveway.

Any and all more stringent requirements required by Federal, State, County, or Local codes or ordinances take precedence.

No paving construction shall be started until all utility lines are completed under proposed paved areas.

The permit holder shall arrange for the relocation and relocation costs of all utilities, including any street lights, and submit a utility relocation schedule prior to the issuance of a construction permit.

Utility facilities in conflict with this work shall be relocated by the developer. This activity shall be coordinated with the owner of the utility to prevent any unnecessary interruption of service.

The paving contractor shall be responsible for the adjustment and placement of concrete collars, frames, covers, and valve boxes as necessary for a complete job as approved by the City Engineer or his/her authorized representative.

Concrete or asphalt damaged during the course of construction shall be removed and replaced in kind prior to final inspection.

Grading between back of curb and property line shall be limited to 4:1 slope

Base course shall not be placed until sub-grade has been approved by the City Engineer or his/her authorized representative.

No job will be considered completed until, curbs, pavements and sidewalks have been swept clean of all dirt and debris; and survey monuments are installed.

The location of all water valves, fire hydrants and manholes must at all times during construction be referenced by the contractor and made available to the City.

Existing street and traffic signs will be maintained during construction and relocated by the contractor as directed by the City Engineer or his/her authorized representative.

Certificate of Occupancy (C of O) and/or final electrical clearance for any building is denied until all offsite improvements are completed.

Trees and shrubbery in the right-of-way that conflict with proposed improvements shall not be removed without approval of the Engineering Inspector.

ADDITIONAL NOTES (REQUIRED WHEN USING HDPE IN RIGHT-OF-WAY):

ENG RVW

All HDPE storm drain pipe shall be manufactured, designed and installed in accordance with AASHTO M252, AASHTO M294, MAG and these special provisions.

All HDPE storm drain pipe shall be Type 'S' corrugated, with watertight joints.

At a minimum, all HDPE storm drain pipe joints shall meet the ASTM D-3212 watertight requirement of 10.8 psi (25 column feet of water head).

The contractor shall provide a copy of an accepted independent 3rd party lab certification that all the pipe and joints to be used on the project meet the ASTM D-3212 watertight standard.

All HDPE pipe connections to manholes shall meet ASTM C-923 requirements.

PLAN SHEETS REQUIREMENTS:

The plan sheets shall show the following to proper scale:

Provide a title block on all sheets.

All sheets shall be numbered with match lines (if required) and street names.

Orientation of each water line shall be shown by a north arrow (up or to the right) and a scale of the drawing.

All existing and proposed utilities shall be shown with size, material, and location in right-of-way in plan and profile.

The vertical scale shall be 1" = 2' or 1" = 4'. The horizontal scale shall not be smaller than 1" = 40'. For major and collector streets, cases of unusual topography, or complex situations where more detail is necessary, the scale shall be 1" = 20'.

Call out and show in plan view, and profile, the difference and to what elevation the contractor must grade to drain (and pick up drainage) at the pavement terminations of this project.

Paving Plans showing existing natural washes shall also show existing conditions including line and grade of the wash flow line at the right-of-way line and at 50 ft. intervals. Show distances between banks and elevations at 50 ft. intervals on the banks of the wash.

Submit a letter from adjacent property owners upon whose property the contractor will have to enter in order to grade to match existing ground (i.e. along _____ and at the end of _____). The letter must give the contractor permission to grade on his property and hold the city harmless.

If streets are designed to drain onto private property under separate ownership, special considerations must be made to insure drainage and maintenance access.

Show the location, by station, dimension, and offset, of all proposed and existing utilities, structures, concrete, paving, drainage facilities, and other topographic features affected by construction, to include traffic signals and street lights. All utilities shall be dimensioned from street monument lines. Stationing must begin at a platted intersection.

Show and label all existing and proposed easements, dedications, right-of-way, streets, and alleys with stationing, dimensions, and offsets. Streets shall be identified by name. Streets, alleys, and easements shall be dimensioned at least once and at all breaks. Monument line of streets shall be shown. Stationing must begin at a platted intersection.

All abutting lots shall be identified by lot #, tract, and subdivision or shown un-subdivided.

The proposed paving plan should be designed with slopes and topographic features which match the natural grade and boundary area to minimize erosion and sediment transport on to city streets or neighboring properties.

Specify full structural pavement section on tapers so that they will not have to be removed with future construction. For phased developments, show tapers and removals needed for each phase.

ENG RVW

Phased developments shall indicate interim slopes and grades to match proposed work to existing conditions.

Show top of curb and gutter elevations (both sides), existing and proposed crown elevations, cross slopes, and longitudinal slopes every 100 feet plus all grade breaks and angle points.

Provide spot elevations sufficient to depict existing conditions at right-of-way lines and 50 feet beyond property line at 100' intervals. Show cross-section if necessary.

Show flow arrows and grade breaks on pavements and shoulders to indicate drainage patterns.

Pavement replacement thickness and type are to be per City of Kingman Detail 200-1. Curb and gutter replacement shall be a minimum of one (1) full section, per M.A.G. Standard Detail 220. Sidewalk replacement shall be a minimum of one (1) full panel per City of Kingman Detail 230.

Discussion of redline comments on plans or in this checklist should be directed to the plan reviewer.

PLANS FOR REVISION

All original plan approvals, signatures, and seals are to remain on the revised plans.

All plans revised after the original approval shall be resubmitted for review and approval. The nature of the revisions must be called out on the cover sheet and on the sheet(s) which have been revised. The revision number itself shall consist of a numeral within a triangle next to each revision. Δ Changes on each plan sheet shall be highlighted with "clouding".

All revised sheets, including the cover sheet are to be re-sealed, signed and dated.

New approval signature block is required to be added to the cover sheet for approval of the revisions.

**APPROVED FOR:
THE CITY OF KINGMAN**

CITY ENGINEER OR DESIGNEE