



## **DEPARTMENT OF PUBLIC DEVELOPMENT**

### ***Environmental Compliance***

In order to establish a more consistent problem solving method to our everyday procedure of inspection, the following has been compiled. This list is not intended to address all the problems that may be experienced, but hopefully will address the most common.

#### **PRE-CONSTRUCTION MEETING:**

##### **A. WHAT SHOULD BE ON THE LIST GIVEN?**

We have a standard form letter that will be used for all pre-construction meetings. Of course there will be specialized items that will need to be included for each project. The main thing to be emphasized is that we control the quality of the operation and do not manage the project for the owner. Poor construction will not be tolerated.

##### **B. WHAT SHOULD BE DISCUSSED?**

The letter should be prepared in a clear and precise manner. The letter should be read out-loud to all participants and time allowed for individualized discussion and or questions. At the end of open discussion, ask one more time if there are any additional questions to be discussed. If there is no response, thank everyone for coming and close the meeting making sure that everyone has a copy of the letter.

##### **C. WHO SHOULD BE PRESENT?**

The owner or engineer shall be contacted to find out who the General Contractor is and any Subs that will be under contract. Inner departments i.e.: Water Authority, Health Department, and Road Department shall be requested to attend. A sign-in sheet will be given to document attendance.

##### **D. SPECIAL ITEMS TO BE DISCUSSED.**

#### **1. 24 HOUR NOTIFICATION:**

##### **A. WHAT DOES THIS APPLY TO?**

The 24 hour notification is on the standard form letter that will be used. It is important to expound that any work proceeded without such notice is subject to removal and replacement under your direct supervision. This primarily applies to Storm sewer, Curb & gutter, Sub-grade preparation, Base and paving.

##### **B. WHAT IF THE CONTRACTOR HAS TO PULL OFF THE SITE?**

If the contractor pulls off the project site for any reason, i.e.: rain, other work obligations etc. a new 24 hour notification shall be required prior to him moving back onto the site.



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#### **2. SEDIMENT AND EROSION CONTROL:**

GENERAL: Sediment and erosion control is one of the most important aspects to our job. Not only is strict compliance required by Jackson County, we are acting as the eyes of the State for there enforcement requirements. At every site visit, Sediment and erosion control will be check. It is of major importance to check for sediment or erosion problems immediately after a storm of any consequence.

##### A. WHAT SHOULD BE DONE FIRST?

All Tree save and silt fence needs to be in place before ANY earth disturbance takes place. The silt fencing will be inspected and correction measures taken prior to grading. The first item of grading shall be the ponds. After the pond is dug, it should be grassed immediately to ensure that it will be established prior to the storm sewer tie-in. At the end of all graded area, temporary gassing will be enforced to stay within compliance.

##### B. HOW IS ENFORCEMENT DOCUMENTED?

Upon discovering a sediment or erosion problem the Contractor or 24 hour contact will be notified verbally in person or on the telephone to install corrective measures. This correction shall be accomplished within 24 hours. If correction has not been made within the specified time limit, you will then prepare a written "Notice to Comply". The notice will give the contractor or owner 24 hours from receipt to take corrective measures. If upon re-inspection the problem has not been taken care of, you will shut down the project by placement of signs. You will then immediately contact the Marshall of the shutdown.

##### C .WHAT DO WE DO AFTER WE SHUT DOWN A PROJECT?

After shut-down is complete, you will need to drive through the site at least once a day to ensure that the Stop Work Order is being respected.

#### **3. ROUGH GRADE APPROVAL**

##### A. PROOF ROLLING

A proof roll along the curb line for rough grade is required before installation of curb and gutter. The proof roll shall be rolled with a loaded tandem of a minimum of 15 Tons provided by the contractor.

##### B. ARE THERE OTHER OPTIONS?

If the contractor wishes or if we deem necessary, certified compaction tests from an approval soil testing firm may be done in lieu of a proof roll. The testing lab shall establish the amount, location and types of test necessary to justify there certification of approval. All expenses associated with the testing will be paid by the contractor or owner.

##### C. HOW DO WE KNOW THAT THE GRADE IS CORRECT?

The engineer of record shall supply to the department a certification that grade is within 1 foot plus or minus to the approved design grades on the plans. After receipt of such letter, we will allow for them to go forward with their curb and gutter if they passed the proof roll.



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#### **UTILITY SERVICE LINE DITCHES:**

##### A. WHAT TYPE OF COMPACTION TEST ARE NEEDED FOR TRENCHES?

A proof roll is not an acceptable testing measure for compaction of deep cut trenches. While proof rolling will be required, if any failure appears at a utility crossing, a certified compaction test will be required.

#### **STORMWATER CONTROL DEVICES:**

##### A. WHEN MAY THE CONTRACTOR INSTALL STORMWATER LINES AND DEVICES?

Under no conditions may a contractor install storm drain pipe, catch basins, junction boxes or headwalls without the proper equipment on site including hand tamps and hand rollers.

##### B. WHAT IF THE CONSTRUCTION IS NOT COMPLETE AT THE END OF THE DAY?

All pipes, boxes etc. will be inspected, backfilled and tamped at the end of each working day. There will be no exceptions to this requirement.

##### C. HOW SHOULD THE PIPE TIE INTO THE JUNCTION BOX?

The invert out of the box is required to be at the same invert as the box. This alignment may be constructed at the time the pipe connection is made, or you may come back and pour a new bottom in the inlet boxes.

##### D. WHAT IS THE BEST SEAL FOR STORMWATER MANHOLE RINGS?

No doubt, the best way to seal manhole rings is with Kenseal and most contractors prefer to use it. However, grouting with cement is also allowed if the contractors wishes. All lift holes shall also be grouted.

##### E. HOW DO I COMPACT AROUND THE STORMWATER MANHOLES?

Hand tamping only is allowed around all manholes. There is no exception to this policy. All manholes shall also be backfilled and tamped at the end of each workday.

#### **CURB AND GUTTER:**

##### A. FINISH GRADE PROOF ROLL

A proof roll request and certification from the developer's engineer/surveyor is required prior to installation of any concrete curb and gutter. You must give a 24 hour notice in requesting a proof roll.

##### B. WHAT ARE COLD WEATHER PROCEDURES?

Cold weather procedures are per the DOT manual. The main factor is to have all concrete covered with an installation blanket if the temperature is expected to go down to 32 degrees or lower.



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#### C. IS COMPACTION UNDER CURB AND GUTTER REQUIRED?

YES! A proof roll is required to be performed prior to laying of curb and gutter. A request must be made 24 hours in advance of when you wish to pour.

#### C. AT WHAT GRADE IS THE CURB TO BE LAID?

In all cases, curb shall be installed per the latest approved plans. Curb line and grade elevations must be set in the field and verified by the Jackson County inspector. However: it is ultimately the responsibility of the contractor to ensure grades are per plan.

#### D. AFTER INSTALLING CURB, CAN I START LAYING BASE?

No base material is to be allowed prior to backfilling all new curb and gutter.

#### E. WILL CONCRETE WEIGHT TICKETS BE REQUIRED?

YES! The inspector shall require all weight tickets to be collected, as he directs, and check them for proper strength and amount of concrete delivered per load.

#### F. HOW DEEP DO WE HAVE TO SCORE THE CURB?

In all cases when working with concrete, score joints are to be 1/4 the depth of the concrete. Since the concrete lip is 6" thick; scores shall be approximately 1-1/2 "s in depth. This ensures that if breakage occurs, it will be within the score joints.

#### G. HOW ABOUT EXPANSION JOINTS, HOW OFTEN DO WE NEED THEM?

Expansion joints are to be placed every 50' or closer depending on the soil types. In all cases, any old curb abutting a new pour; will be matched with a mastic expansion joint even if it is closer than 50'.

#### H. HOW WILL I BE TESTED FOR PROPER CONSTRUCTION OF CONCRETE?

At the completion of the curb and gutter, the contractor needs to know of its acceptance. Prior to our acceptance, the contractor may be required to provide a water test under our observation if the slope is less than 1%. All cracking sections will be removed (saw-cut) at the nearest score mark and replaced. Remember, since this is new concrete abutting old; a mastic expansion joint shall be required.

#### **SUB-GRADE:**

#### A. WILL THE SUB-GRADE BE TESTED FOR COMPACTION?

Sub-grade will be tested and required to meet minimum compaction requirements prior to the aggregate base being placed on the proposed roadway area. While proof-rolling is not an actual compaction test, the sub-grade shall be proof-rolled first to assist the inspector in determining the density of the compaction. If the inspector sees any deviation in the soil, he may at his discretion require the contractor to provide certified compaction tests by an approved soil testing firm or dig it out and re-compact under his observation.



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B. IF AFTER I PASS MY PROOF-ROLL RAIN SETS IN. AM I REQUIRED TO DO ANOTHER WHEN I MOVE BACK ON SITE?

If after you pass the proof-roll, rain sets in or if you pull off the site for any reason for an extended period, another proof-roll shall be required.

#### **UTILITY INSTALLATION:**

A. WHO IS TO BE NOTIFIED PRIOR TO UTILITIES BEING PLACED?

In all cases, whenever a new construction phase starts, the inspector is to be notified. The utility company doing the work is required to contact the inspector so that proper location and compaction is accomplished. A 24 hour advance notice is required and all construction shall be in strict conformance with Jackson County Water Authority standards and requirements.

B. WHAT TYPE OF COMPACTION IS REQUIRED FOR THE UTILITY COMPANIES?

As with all utility compaction, a Wicker Packer shall be used in 6" lifts for trench backfill.

#### **AGGREGATE BASE MATERIAL:**

A. WILL BASE QUANTITY BE VERIFIED?

All base tickets shall be provided to the inspector if directed and he will compare them to the approximated weight quantity to verify that sufficient material has been delivered to the site.

B. HOW WILL COMPACTION BE VERIFIED?

As with the sub-base, the inspector will require a proof-roll prior to acceptance. However; if any deviation is noticed by the inspector, he may at his discretion, require certified compaction tests by an approved soil testing firm or the failing area to be dug up and compacted under his observation. Base shall be approved prior to any start of paving.

C. WHAT IF IT RAINS OR I HAVE TO PULL OFF SITE FOR A FEW DAYS?

As with the sub-base, if rain occurs prior to paving or if the contractor is required to pull off-site for any reason, another proof-roll or additions compaction tests will be required.

D. IF DURING CONSTRUCTION DIRT OR MUD CONTAMINATES THE AGGREGATE, WHAT DO I HAVE TO DO.

No contaminated material will be accepted. This means no mud, pine-straw; silt or roots will be allowed in the material. If it is noticed by the contractor or the inspector, the material will be removed and new material will be put in its place. This material shall be subject to the same compaction requirements as the entire base that is in place.



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#### ASPHALT PAVING:

##### A. WHAT TEMPERATURE IS THE ASPHALT REQUIRED TO BE?

Temperature of asphalt prior to being placed shall be per Georgia Department of Transportation requirements. Asphalt trucks will be tested by an asphalt thermometer randomly to insure strict compliance to this requirement. Normally, temperatures will not be allowed to deviate plus or minus 20 degrees from the plant mix design.

##### B. WILL WEIGHT TICKETS BE REQUIRED FOR ASPHALT ALSO?

Yes, weight tickets must be provided to the inspector at his request. These tickets will then be computed to assist the inspector to determine if the proper amount of asphalt has been delivered and that proper mix design has been installed on site

##### C. MY ASPHALT CREW CHECKS THE DEPTH, WILL THE INSPECTOR ALSO?

Yes, it is the responsibility of the inspector to ensure that the proper amount of asphalt is laid upon the road surface. The inspector will check or verify the depth by various methods. He may also ask your men to check depths and verify their findings at locations where he feels necessary.

##### D. HOW MUST I COMPACT THE ASPHALT?

While compaction of the asphalt is of up-most importance, the Development Inspector does not require any firm set method of compaction. The contractor is responsible to ensure compaction. If compaction is not achieved, the contractor shall remove and replace the asphalt at his own expense. However; a traffic roller must be used to ensure proper oil distribution of the asphalt.

##### E. CAN I LAY ASPHALT AT ANYTIME?

No. Temperature of the air is critical to ensure proper adhesion of the asphalt. All temperature control shall be as per Georgia's Department of Transportation requirements.