



Construction Enhancement – May 2009

Engineering Services Hot Topics

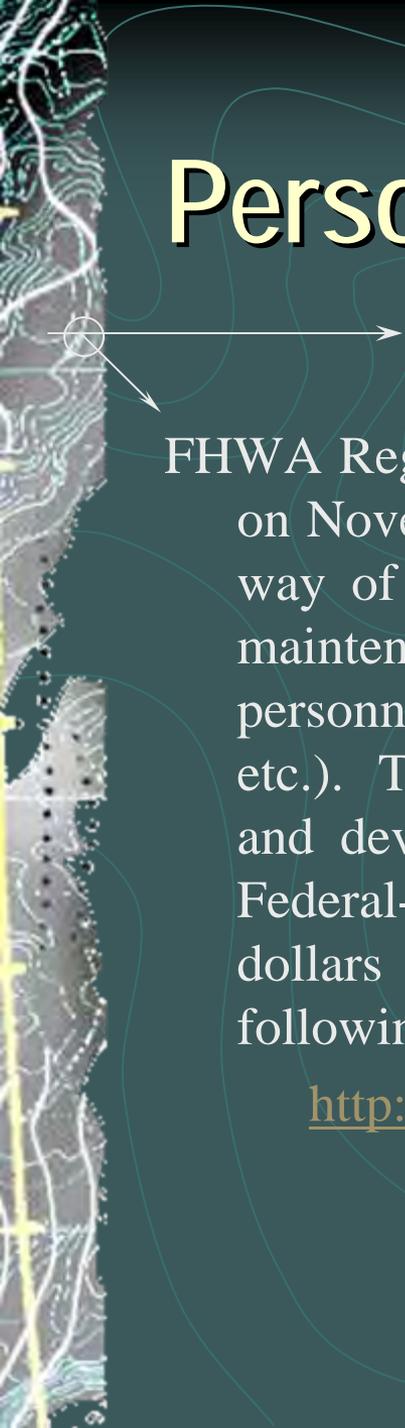
1. Traffic Control / Street Closures
2. Personal Protection Equipment
3. Change Order Policy
4. Potholing / Vacuum Excavations
5. New Materials for Stormwater pipes
6. Spec Book Changes coming

Traffic Control / Street Closures

- Need to contact Project Manager – WEEKLY!
- If not a city project – then you need to call Greg Topil at 441-8237
- Important with the amount of street rehab being proposed, your work area may already be a detour route.



Personal Protection Equipment



FHWA Regulation 23 CFR Part 634 – Worker Visibility went into effect on November 24, 2008 and applies to **all** personnel within the right of way of a Federal-aid highway (i.e. highway/street construction and maintenance crews - including flaggers, inspectors, engineering personnel, survey crews, utility crews, emergency responders, etc.). This regulation applies to all projects, including private utilities and developments, which are located within the right of way of a Federal-aid highway or are funded in whole or in part by Federal dollars regardless of location. More information is available at the following web site:

<http://www.thefederalregister.com/d.p/2008-11-21-E8-27671>

Personal Protection Equipment

- 
- Currently the Federal Law refers to *Federal-aid highways*, which means highways on the Federal-aid highway systems and all other public roads not classified as local roads or rural minor collectors. (ie 14th Street yes, 15th street, no).
 - City has a policy for its employees and a special provision will be developed to address other situations.
 - Rather that is becoming a how can we get around this, or trying to figure out when do we “have to”, just start wearing the proper

Personal Protection Equipment

- There will be a 0% tolerance
- No warnings will be given to the City.
- Contractors will be responsible for making sure all of their employees, including subcontractors, are in compliance with the regulation at all times.

Class 3 vs. Class 2

NDOR's web site at the following link:

<http://www.dor.state.ne.us/ref-man/WorkerVisibility.pdf>

- Type 3 are needed at night and speeds over 50 mph
- Type 2 are needed at all other times.



Personal Protection Equipment

Unacceptable

little or no reflectivity, and soiled and faded material

Marginal

good reflectivity although the vest has some soiling and light-fading

Acceptable

vivid color contrast and high reflectivity



Personal Protection Rules

Personal Protection Equipment Rules (High visibility vests, shirts, and coats)

- 1. Wear the equipment
- 2. If any doubt, wear the equipment
- 3. Refer all others to rules #1 and #2
- Remember this is for your and others' protection!

Change Order Policy



When are Change Orders Required?



- Any adjustment (either an increase or decrease) in a unit price. This is not an adjustment of units, but in the price of those units
- Any change in the time allowed to complete the project.
- Substantial revisions, which increase or decrease either the amount of the work or the price of the contract.
- Determination of when a Change Order is needed

Original Contract Amount

Less than \$25,000

> \$25,000, but < \$200,000

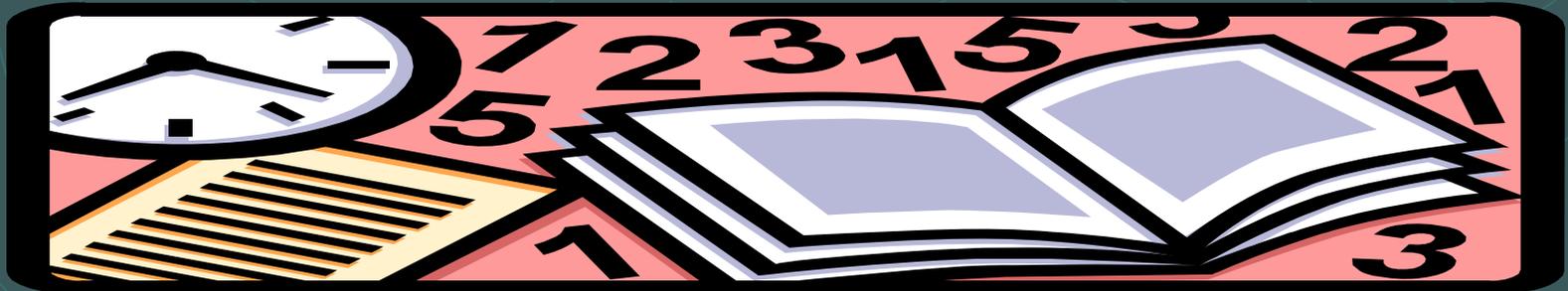
Greater than \$200,000

% Change Requiring a Change Order

20% of the contract amount

15% or anything greater than \$25,000

Anything greater than \$25,000

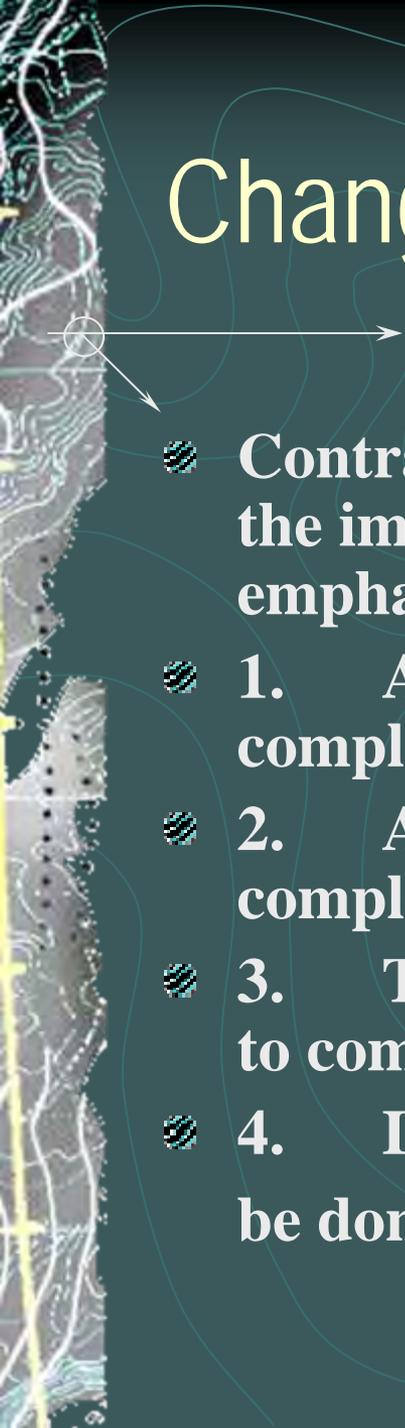


Change Order Process

- Executive Order (E.O.) Process is used if amount is over \$25,000 or involves an issue of Liquidated Damages.
- 1. Change Order reviewed by Project Manager with Project Sponsor(s) and signed by Project Sponsor(s)
- 2. Signed by Contractor
- 3. Reviewed and Signed by Contract Administrator
- 4. Reviewed by Purchasing
- 5. Reviewed by Finance
- 6. Reviewed by Law
- 7. Executed by Mayor
- 8. Filed with the City Clerk
- 9. Copy Returned to Contract Administrator, who in turn sends copy to the Contractor.



Change Order – Contract Time

- 
- **Contract Time -- Every Change Order should address the impact on time in some fashion. It should emphatically state there is either:**
 - 1. An increase in the amount of time allowed to complete the contract**
 - 2. A decrease in the amount of time allowed to complete the contract**
 - 3. There is no change in the amount of time allowed to complete the contract**
 - 4. If any internal phases need addressed, this should be done within the change order.**

How can contractors help?

- Get prices agreed to right away!
- Stay on top of extra work or time requests
- Justifications or Explanations -- Document the need for the particular situation. Be concise in your description, but make sure someone reading it for the first time that is unfamiliar with what went on with the project could understand the need for the change order, what we are paying for, and the ramifications
- Liquidated Damages -- Liquidated damages questions and discussions with the contractor should not be put off to the end of the project. Liquidated Damages should be addressed in a change order in a timely fashion.
- Support the process reform – software, change mods

Potholing / vacuum excavations

- In the pavement -- filling holes with fill sand and replacing the core into the hole leaving the circumference of the core exposed to the elements and freeze/thaw in the winter, which is unacceptable.
- Need to follow Chapter 1 and fill with L-3500!

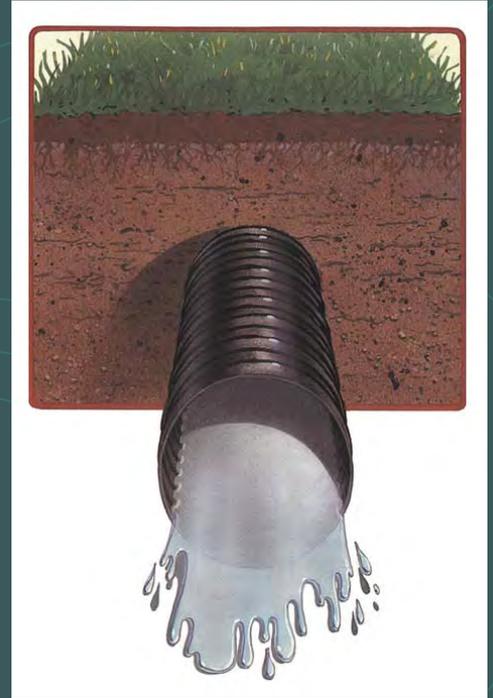


New Materials for Stormwater drainage



● HDPE pipe

- Used as a special provision
- Minimum final cover when located in ROW is 2 feet. *(case by case exceptions may be granted)*
- Testing no sooner than 30 days
 - 5% deflection
 - Low points
- Repairs as approved



New Materials for Stormwater drainage

Steel Reinforced Polyethylene Pipe

- Outside it will look the same
- Minimum final cover when located in ROW is 1 foot
- Testing no sooner than 30 days
 - 5% deflection
 - Low points
- Repairs as approved



Purposed Spec Change – Pavement Sawing

- 
- Rather than having multiple bid items for type "A", "B", "C" sawing, purpose going to just one bid item with the multiple descriptions.
 - Similar to NDOR
 - Seeing same price for the different types
 - Paying twice on asphalt plus base areas?
 - Asphalt for Patching - Changing

Get added to the GPP Website Updates



 Lincoln.ne.gov

-  Keyword Search: GPP
-  Follow the step by step directions

Project Initiation & Start-Up

Project Scheduling

Project Funding & Cost Estimating

Project Design Information Memos

Project Management Plan

Design Aides

Permits

GP&P Discussion

Standard Forms & Documents

Special Provisions

Appendix

Guiding Principles and Procedures for Public Works & Utilities

"A Project Management Tool on the Web"

This website is intended to be used as a project management tool in order to improve consistency in how the City of Lincoln Public Works & Utilities Department (PW&U) approaches the management of public infrastructure projects. The experiences of the past, coupled with the expectations of the present, have been documented here so that each and every future project may be approached in a similar manner.

Having construction plans, specifications, and estimates (PS&E documents) that are prepared alike, organized uniformly, look the same, feel equivalent, and approached similarly will result in users of those PS&E documents feeling comfortable and familiar in their use. Unexpected changes, cost increases, and delays should be reduced through the use of this project management tool.

This tool is intended to be active and living documentation that will require consistent review, constant refinement, and timely additions as needed. Please feel free to contact the Design/Construction Section of Engineering Services with your suggestions and comments.

[RSS Help](#)

[Updated May 11, 2009](#)

- [How to Sign Up for Update Notifications](#)
- [How to Navigate the GP&P Website](#)

Questions?



● Contact Thomas Shafer,
Design/Construction Section Manager

● 441-7837 (office)

● tshafer@lincoln.ne.gov