

NORTH CAROLINA

Department of Transportation



Considerations for Establishing Contract Time

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Passing the Baton





The Puzzle and the Dart Board



Topic Outline

- Typical Project Requirements
- Temperature / Seasonal Restrictions
- ROW / Utility Considerations
- Traffic Restrictions / Phasing
- Moratoria Restrictions
- Strategic Lettings





Typical Project Requirements

- Plans & Provisions
- Quantity Estimate
- CFI or PLFI Questionnaire
- Phasing & ICTs
- GeoTech Recommendations
- Earthwork Balance Sheet
- Permits (401, 404, CAMA, Coast Guard, CCPCUA, etc.)
- Right of Way Certification
- Utility by Other Special Provision



Project Specific Requirements

- Structure Working Days
- Railroad Agreements / Certification
- Grants or other Special Funding Sources
- Alternate Contracting Methods or Alternative Project Deliveries
- Municipal Agreements / Commitments
- Series 200 Items
- Federal Agreements / National Forest Provision
- FERC
- Cooperation between Contractor Provision



Typical Project Requirements (cont'd)

- Quantity Estimate (100% FINAL)
- [Contract Time Guidelines - Combined.pdf \(ncdot.gov\)](#)



Typical Project Requirements (cont'd)

- Guidelines use the following rates for Resurfacing & Surfacing projects:
 - Base Course (Widening or Leveling) 100 to 400 Tons/Day
 - Intermediate Course 500 to 1,000 Tons/Day
 - Surface Course 500 to 1,000 Tons/Day
 - AST 5,000 to 10,000 SY/Day
- Factors to consider when selecting an appropriate rate include, but are not limited to, plant location, type of roadway/facility, length of project, lane closure restrictions, asphalt mix's temperature requirements, milling requirements, and/or other projects located in the area.

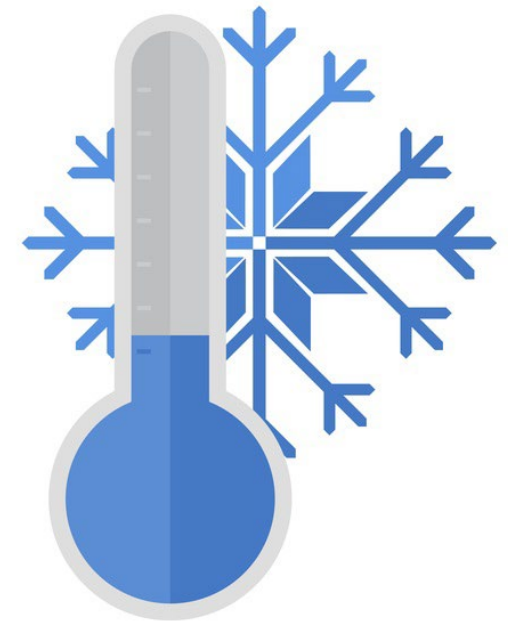


Typical Project Requirements (cont'd)

- 50,000 Tons Required @ 500 Tons per Day =
100 Working Days
- Typically, the Department allows for sixteen (16)
Working Days per Month.
- 100 divided by 16 = 6.25 Months

Temperature Restrictions

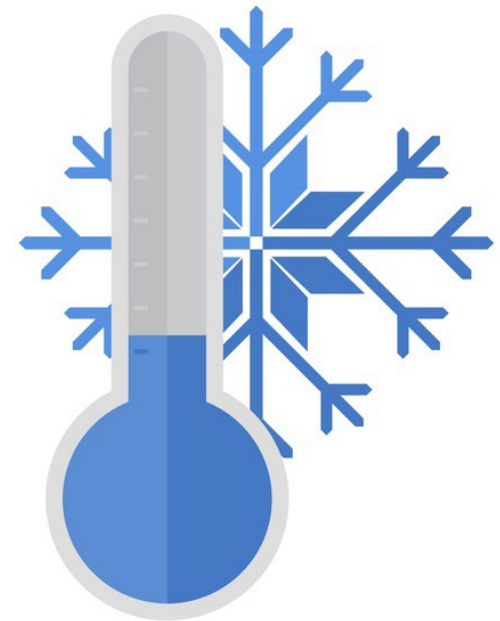
- 2024 SPECS Temperature Restrictions for Placement:
- Base Course (B25.0C) 35°F
- Intermediate Course (I19.0C) 35°F
- Surface Course (S4.75A, S9.5B, S9.5C) 40°F
- Surface Course (S9.5D) 50°F
- Asphalt Surface Treatment 55°F
- Open-Graded Friction Course (FC-1 Mod.) 60°F
- Ultra-Thin Bonded Wearing Course 60°F





Seasonal Restrictions

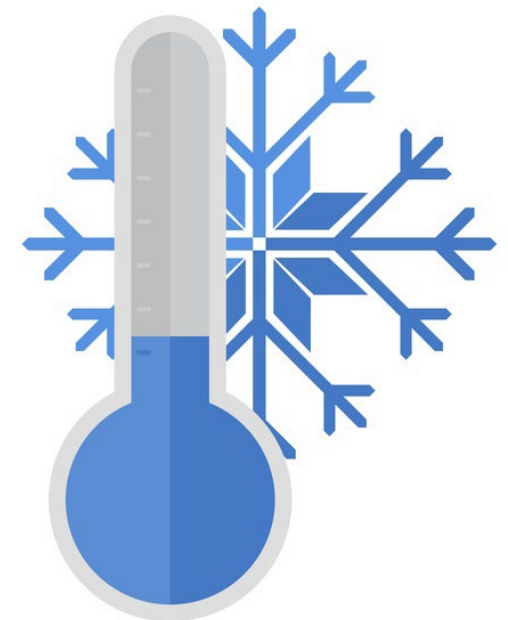
- OGFC & Ultra-Thin None to be placed between October 31st and April 1st
- AST None to be placed between October 15th and April 1st, except when immediately overlaid
- Surface Course (Final Layer) None between December 15th and the following March 16th; nor between November 15th and April 1st (if less than 1" thickness)





Additional Seasonal / Temperature Restrictions

- Pavement Marking Consideration: What type of PMs are required after the Final Surface Course? Do the Pavement Markings have Seasonal or Temperature Restrictions?
- For Thermoplastic, the area of the state you work matters! Construction Season's Completion Date ranges from November 15th until December 15th.
- Polyurea has a Temp. Restriction (40°F), but also has a fifteen (15) day waiting period, per Specs.





Right-of-Way & Utility Considerations

So, which came first ... Right-of-Way Acquisition or Utility Relocations?

Speak with your Resident Engineers ... how expensive is a claim for idle equipment?

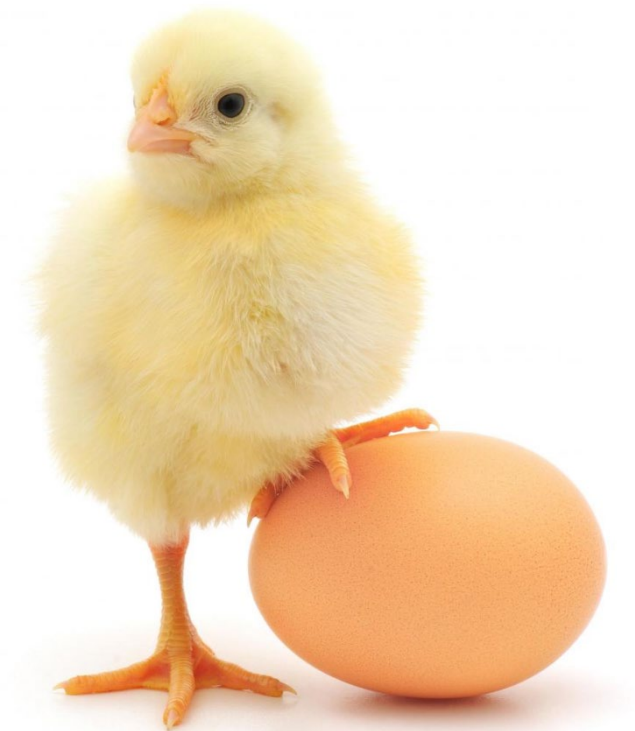




Right-of-Way Acquisition

One item that is required to calculate a Contract Time Recommendation is a ROW Cert (Form FRM3-C).

This Cert shall tell you when the parcels will be available. It may not be the date you want, but it's important that these dates are accurate.

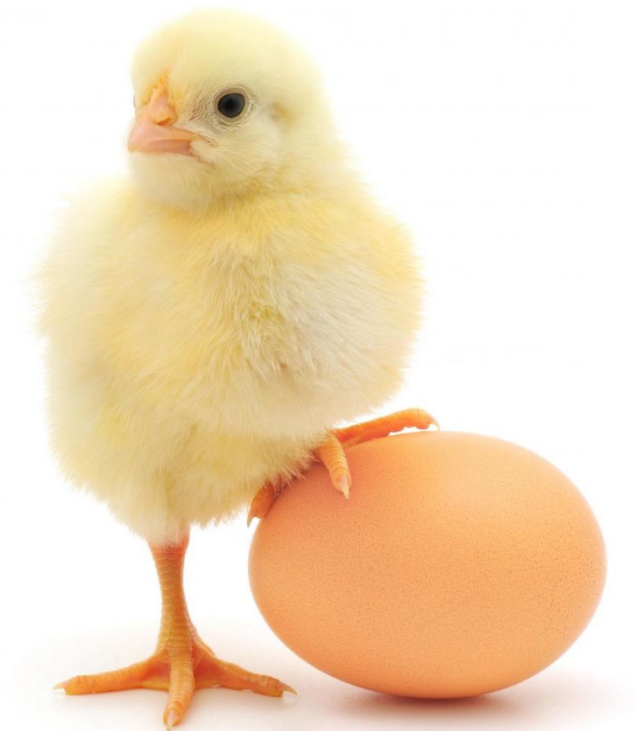




Utility Relocations

How can the Department expedite Utility Relocations?

1. Are there Utilities that will need to be relocated prior to the project's construction?
2. Can Utilities' and the Contractor's work be completed concurrently?
3. How long will Utility companies need to complete relocation?
4. Have "piggybacking" operations been considered?



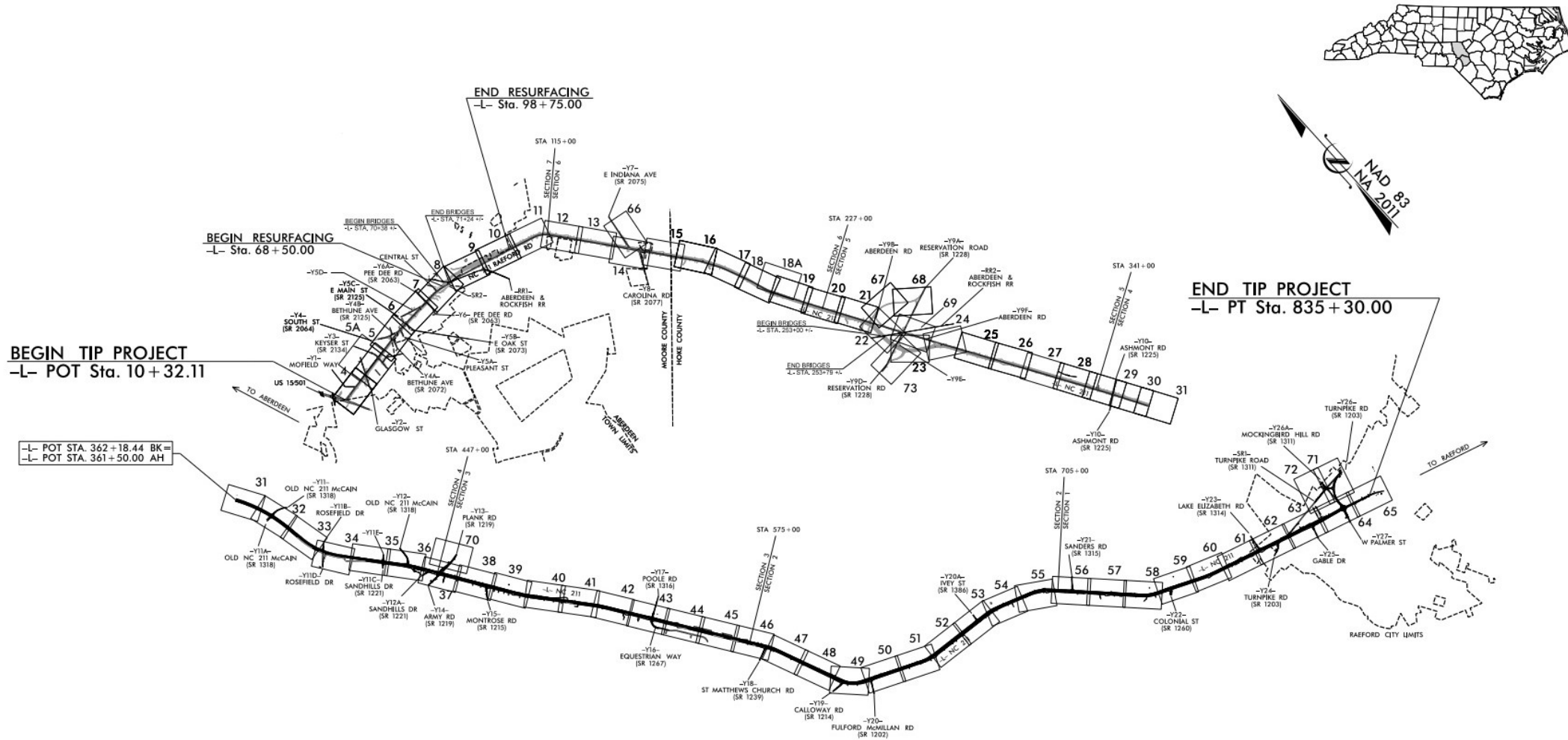


Bridge Replacement Examples





Rural / Urban Example

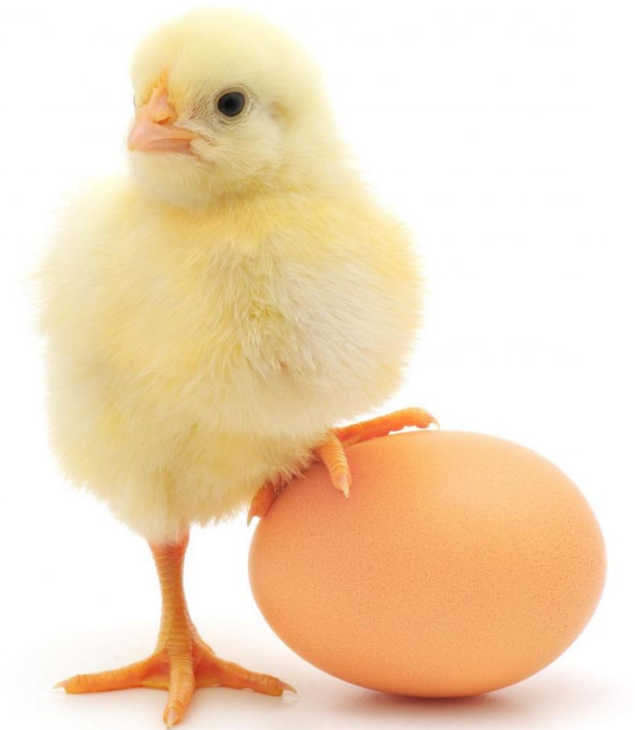




Rural and/or Urban Example

If sufficient work is available such that a Contractor shall not become idle, then use the following example as language in the Contract Time Provision:

The date of availability for this contract is **April 1st, 2023, except from –Y-TBD- (Halfway Point Road) to the end of the project is March 1, 2024.**





Traffic Restrictions



- Due to traffic volume (AADT) on a typical Interstate, most work within a travel lane is completed at night (or away from traffic).
- This is not always the case on US-Routes, NC-Routes, and/or secondary roads. Other lane closure restrictions may be considered, such as Peak Hour or Directional.

Traffic Restrictions Example



- Downtown Raleigh is predominantly commercial. Night Work may be the best option for lane closure restrictions.
- Near the I-540 Interchange, there is a mixture of commercial and residential. Peak Hour restrictions may be a good option for lane closure restrictions.

Traffic Restrictions Example



- Rolesville is predominantly residential and US-401 acts as a commuter route in this area. So, Directional restrictions may be a good option.
- So, do heavier traffic volumes affect the production rates?



Phasing

- Phasing specifies how to manage traffic throughout construction of a project.
- By review of the Phasing, a Contractor determines how a project is expected to be constructed.





Phasing

- Solutions:
 - Ensure Plans are designed so that a Contractor has work available
 - Delayed DOA
 - Schedule Change Request





Moratoria Restrictions





Moratoria Restrictions





Strategic Letting

- Strategic Letting is purposely letting one or more projects during a specific time of year.
- Advantages:
 - Balance the Letting over the course of a Fiscal Year.
 - Avoid a Special Event, Holiday or Moratorium.
 - Ensure a Division (or regional area) is not overly saturated with construction projects.
 - Allows Contractors a more competitive chance for bidding (the opportunity to bid on more projects).
 - Completion of specific Pay Items or roadways in preparation for other projects or a special event.





Strategic Letting



- Say Bladen County (Division 6) has allocated funds for three (3) Resurfacing Packages to be Advertised during a single Fiscal Year. Each package is estimated at \$3 million; each includes similar number of maps with the same amount & type of work, and each should take approx. eighteen (18) months to complete.
- Why should all three packages not be in the same Letting (say January so the typical DOA would coincide with the beginning of the Construction Season)?



Strategic Letting



- Factors: Currently, there are no asphalt plants located in Bladen County. So, if each package was let at the same time, then materials & hauling cost may increase due to demand on hauling.
- What happens if a Contractor bids on and wins all three packages? Will the Contractor's forces be stretched too thin? Will a single Contractor be able to achieve the same Completion Date for each package?



Strategic Letting



- So, by using Strategic Letting, the Department may place one (1) resurfacing in the July Letting, another in January and the last in April.
- Every Contractor will have a chance to bid on each package. If a Contractor won the package in the July Letting and has sufficient work, then other Contractors will have a more competitive chances to win either the January or April resurfacing package.



Q & A

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