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- Unless noted otherwise in this RFP, the Design-Build Team shall design and construct five-foot sidewalk on ten-foot berms along the curb and gutter sections of the following roadways. The Design-Build Team shall install the aforementioned features (sidewalk, berm and curb and gutter) within the outermost construction limits of all proposed widening and construction, including any gaps along the facility where construction activities are not required.
 - US 29 / US 601 – Both sides
 - South Ridge Avenue between US 29 / US 601 and the Transit Station – West side only (Shoulder section on the east side)
 - South Main Street – Both sides south of Stewart Street - West side only north of Stewart Street (Shoulder section on the east side north of Stewart Street)
 - Winecoff School Road – South side and along the outside of the roundabout (Shoulder section on the north side)
 - Connector Road – Both sides
 - Country Club Drive – Both sides from US 29 / US 601 to the first mall entrance
 - Lake Concord Road / Branchview Drive (NC 3) – Both sides
 - Copperfield Boulevard / Dale Earnhardt Boulevard – Excluding the section between the I-85 eastern ramp termini and Roxie Street, both sides from Vinehaven Drive to Old Earnhardt Road. Between the I-85 eastern ramp termini and Roxie Street, only on the widened side(s), providing logical sidewalk termini. The Design-Build Team shall indicate the proposed sidewalk configuration through the I-85 / Copperfield Boulevard / Dale Earnhardt Boulevard interchange in the Technical Proposal.
 - Lane Street – Both sides
- The Design-Build Team shall design and construct 14-foot wide outside through lanes on the roadways noted below:
 - Lake Concord Road / Branchview Drive (NC 3) – Both sides
 - Lane Street – Both sides
 - South Main Street - Both sides south of Stewart Street - West side only north of Stewart Street
- The Design-Build Team shall design and construct concrete pads for new bus stop locations. These pads shall be 8.0' long by 4.0' wide by 4.0" thick and constructed approximately at locations shown on the Rider Transit - Current & Potential I-85 Impacts & Considerations Maps provided by the Department. The Design-Build Team shall coordinate the actual concrete pad locations with Mr. L. J. Weslowski of Concord Kannapolis Area Transit (704-920-5878).
- The Design-Build Team shall provide milled rumble strips along the mainline outside and median paved shoulders, including ramp and loop terminals, and acceleration, deceleration and auxiliary lanes, in accordance with the January 2012 Roadway Standard Drawings.
- For all bridges over roadways, railroads and / or greenways, including the future greenway under the Irish Buffalo Creek bridge noted elsewhere in this RFP, the Design-Build Team shall submit vertical and horizontal clearance design calculations at all critical points. The

- Concrete ballasted, deck atop girder bridge with a minimum 3'-6" girder spacing shall be used for all railroad bridges.
- No concrete girders will be permitted.
- Proposed railroad bridges must be designed and constructed to allow a minimum of 25 feet of clearance (edge of superstructure to edge of superstructure) from the existing railroad bridges or 50 feet between the closest track realignment centerline and existing track alignment centerline, whichever is greater.
- Inspection walkways shall be provided on both sides.
- Vandal fencing shall be provided on both sides of all railroad bridges.
- Abutments walls (MSE, soil nail, etc.) or temporary shoring that rely on activation of anchors in the railway embankment for strength or stability will not be permitted in front of railroad bridge end bents or to support railroad embankment.
- One 4-inch signal conduit shall be provided in each bridge rail parapet.

All roadway bridges shall meet approved roadway typical sections and grades. Bridge geometry (width, length, skew, span arrangement, etc.) shall be in accordance with the accepted Structure Recommendations prepared by the Design-Build Team.

A live load rating chart for proposed girders shall be included with the highway bridge plans and shall state design assumptions and methodology used in the load rating calculations. A live load rating chart shall be prepared for the existing girders of the structures to be widened; however, no rehabilitation or repair required even if the rating falls below 1.0. The load rating shall be in accordance with the NCDOT *Structures Management Unit Manual* (including policy memos) and *AASHTO's Manual for Bridge Evaluation*.

Regardless of wall height, sound barrier walls shall be designed in accordance with AASHTO LRFD Bridge Design Specifications. The traffic side of all sound barrier walls shall be form lined with a pattern to be determined by the Engineer. Unless otherwise approved by the Department, the top of the sound barrier wall shall be constructed to provide a continuous elevation transition in increments no greater than one-foot. The Design-Build Team shall adhere to the additional sound barrier wall requirements noted below:

- Ground mounted sound barrier walls shall be detailed in accordance with Structure Standards SBW1 and SBW2, and concrete piles shall be used.
- Bridge mounted sound barrier walls shall be designed in accordance with the *Sound Barrier Wall (Bridge Mounted)* Project Special Provisions found elsewhere in the RFP.

The following will not be permitted on the project:

- Cored slab, box beam, fracture critical, cast-in-place deck slab and integral deck/girder bridges
- Precast barrier rails
- Empirical method for deck design.
- Precast Culverts
- Interior pile bents for grade separations.
- Monotube or cantilever DMS (if required on project) support structures.
- Attachment of sign structures to bridges.
- Bridge attachments (e.g. ITS conduit, waterlines) in the overhang of bridge structures
- Casting of conduit in the bridge deck or barrier rail for roadway bridges

Bridge Widening and Rehabilitation for Roadway Bridges

The Design-Build Team shall provide closure pours with cross-joint reinforcement / dowels. Intermediate diaphragms are not required in the closure bay. The Design-Build Team shall provide bent diaphragms in the closure bay and the plans shall reflect that these diaphragms be