Proposal

A Design-Build Project

I-64/Route 15 (Zion Crossroads) Interchange Improvement

State Project Number: 0064-054-703, P101, R201, and C501
Federal Project Number: IM-064-2 (155)
Contract ID Number: C00086453DB48

Prepared for:

VDOT

Prepared by:

General Excavation Inc.
540-439-2202

In association with:

Kimley-Horn and Associates, Inc.

Volume I
July 2012

4.1 Letter of Submittal

July 6, 2012

Commonwealth of Virginia
Department of Transportation (VDOT)
1401 East Broad Street
Main Building, 4th Floor
Richmond, Virginia 23219
Attention: Ian Millikan, P.E.

Re: I-64/Route 15 (Zion Crossroads) Interchange Improvement
State Project No.: 0064-054-703, P101, R201, and C501

Dear Mr. Millikan and Members of the Selection Committee:

General Excavation, Inc. (GEI) is pleased to submit our technical proposal for the I-64/Route 15 (Zion Crossroads) Interchange Improvement Project in Louisa County, VA. This letter of submittal has been assembled in response to the department's request for proposals (RFP) including all addenda, responses to written questions, and questions documented in proprietary meeting minutes.

The GEI Team

As presented in our qualifications on December 6, 2011, GEI has repeatedly been recognized for delivering award winning projects on time and within budget. GEI along with our lead designer, **Kimley-Horn and Associates, Inc.**, and our key subconsultants will be referred to as the "GEI Team" throughout this proposal. We are prepared to begin work immediately on this challenging yet exciting project.

Why The GEI Team

The GEI Team has completed a conceptual design that meets or exceeds every criterion and standard in the I-64/Route 15 Interchange Improvement RFP. Our design includes innovative approaches and reductions in quantities over the RFP plans resulting in reduced construction and right-of-way costs. The following notable elements of the design provide VDOT with sound solutions to meet the challenges of this project:

- Improved Safety: The GEI Team's concept enhances safety of the motoring public by removing the unnecessary reverse curves at the diverging diamond interchange (DDI) approaches along Route 15. These reverse curves were found to be unnecessary and unsafe, since they would lead to 'over-tracking' of the numerous trucks maneuvering through the DDI intersections.
- Maximize Use of Existing Pavement: The GEI Team's concept uses the existing pavement for resurfacing to the extent possible. Using existing pavement simplifies construction, reduces costly full depth pavement, reduces the number and duration of lane closures on Route 15, and limits the delay and inconvenience to the traveling public.

- Eliminate Right-of-Way Acquisition: The GEI Team's concept eliminates the need for off-site right-of-way or easement acquisition within the project corridor, which reduces the overall cost of the project.
- Enhanced DDI Signal Operation: The GEI Team's concept reduces the cross-street width by pulling in the left- and right-turn I-64 off-ramp movements as tightly as possible. This will effectively reduce all-red clearance times for both traffic signal phases.

The GEI Team offers the following information as requested in Section 4.1 of the RFP. The attachments can be found in the Appendix. The electronic version of our submittal is contained in the enclosed CD-ROM in the front cover of the original copy of Volume I. The information in this proposal is fully compliant with the requirements outlined by the department in the RFP.

Section 4.1.1: The full legal name and address of the offeror is:

General Excavation, Inc., 9757 Rider Road, Warrenton, VA 20187

Section 4.1.2: It is GEI's intention to enter into a contract with VDOT for the project in accordance with the terms of the RFP.

Section 4.1.3: The offer represented by the technical and price proposal will remain in full force and effect for 120 days after the date the technical proposal is actually submitted to VDOT.

Section 4.1.4: The point of contact for the offeror is:

Scott C. Hunter, Vice President
General Excavation, Inc.
9757 Rider Road
Warrenton, VA 20187

Telephone: (540) 439-2202
Fax: (540) 439-3795
Email: shunter@gei-va.com

Section 4.1.5: The principal officer for the offeror is:

Scott C. Hunter, Vice President
General Excavation, Inc.
9757 Rider Road
Warrenton, VA 20187

Telephone: (540) 439-2202

Section 4.1.6: The final completion date for the project is April 15, 2014.

Section 4.1.7: The proposal payment agreement is located in the Appendix on page A-7.

Section 4.1.8: The certification regarding debarment forms are located in the Appendix on page A-12.

Together, the GEI Team is 100 percent committed to this project and to delivering the first DDI in Virginia on time and within budget. We trust you will find our commitment to VDOT is focused and we look forward to partnering with you on this prestigious project.

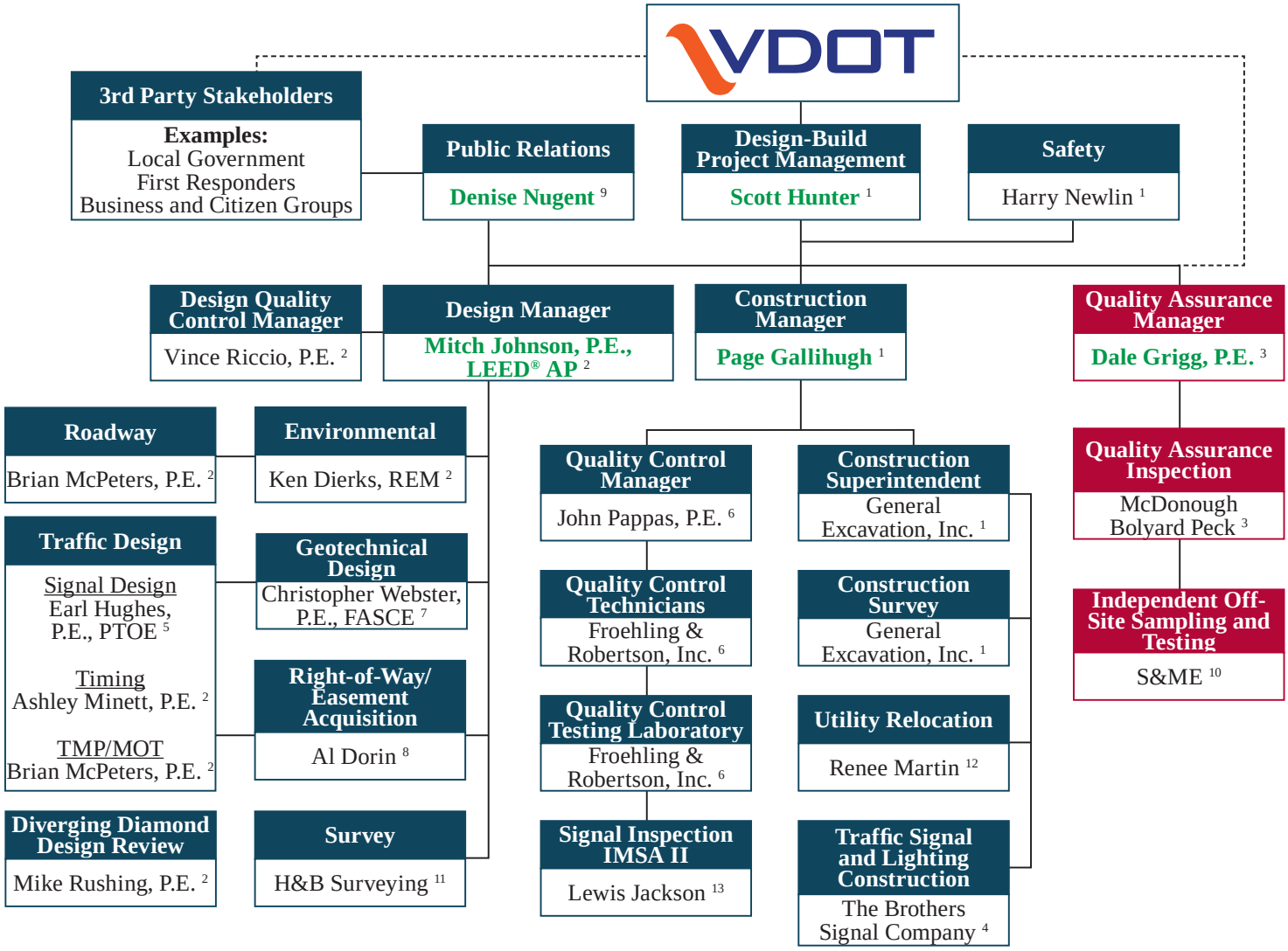
Sincerely,
GENERAL EXCAVATION, INC.

Scott C. Hunter
Vice President

4.2 OFFEROR'S QUALIFICATIONS

Section 4.2.1: The information contained in the GEI Team's statement of qualifications remains true and accurate in accordance with Section 11.4.

Section 4.2.2: A revised organizational chart has been furnished to identify two changes from that submitted with our statement of qualifications. The first change involves the representative from **On-Time Utility Solutions, LLC (OUS)**. Renee Martin, the president and owner of OUS will replace Shea Ridings as the utility manager. All utility coordination will still be provided by OUS. This revision to the organizational chart is required because Shea is no longer employed by OUS. The second change involves the addition of **Ken Dierks, REM**, from Kimley-Horn, who will provide environmental services to ensure compliance with the National Environmental Policy Act commitments.



Name = Key Personnel

1. General Excavation, Inc. (SWaM)
2. Kimley-Horn and Associates, Inc.
3. McDonough Bolyard Peck, Inc. (SWaM)
4. The Brothers Signal Company (DBE/MBE/SWaM)
5. Traffic Signals Plus, PLLC (DBE/MBE/SWaM)
6. Froehling & Robertson, Inc. (SWaM)
7. Schnabel Engineering Consultants, Inc.
8. KDR Real Estate Services, Inc. (SWaM)
9. Travesky & Associates, Ltd. (MBE/SWaM)
10. S&ME, Inc.
11. H&B Surveying and Mapping, LLC (DBE/WBE/SWaM)
12. On-Time Utility Solutions, LLC (SWaM)
13. NXL Construction Co., Inc. (DBE/MBE/SWaM)

4.3 DESIGN CONCEPT

The GEI Team's concept meets or exceeds all criteria identified in the design criteria table (RFP Attachment 2.3) and the technical requirements of the RFP. **The GEI Team certifies the design concept presented in Volume II is fully compliant and will meet all RFP requirements.** The design concept presented in Volume II offers significant benefits to our means and methods, to the department and to the public. This includes improvements that enhance safety, maximize use of existing pavement, eliminate unnecessary right-of-way acquisition, and optimize DDI signal operations.

The RFP plans contain a feature seen on most DDIs in the United States, which is the double reverse curve prior to the crossover point that swings the alignments apart before crossing them. No recommendations in the Missouri Lessons Learned document indicate a requirement for this reverse curve. The double reverse curve is a geometric application used to create an intersection approach angle in the recommended range of 40-50 degrees when the median is very narrow. Since Route 15 currently has a 40-foot median and our concept provides a 45-degree DDI crossover angle, the reverse curves are unnecessary. **Our team's design eliminates these curves and allows parallel WB-67 trucks to traverse on Route 15 through the crossover points safely.** An additional benefit of removing these double reverse curves is the reduction of new areas of full-depth pavement, which reduces the complexity and duration of construction.

Second, the GEI Team's concept maximizes the use of existing pavement where possible along Route 15 and the interchange ramps. Since the existing asphalt can be used as a base with milling, overlay, and build-up to finished grades, project cost is decreased. Less full-depth pavement is required and the construction duration will be shortened, thereby reducing impacts and delay to the traveling public. Similarly, the GEI Team's concept **minimizes the amount of full-depth pavement required by only providing the required storage length along Ramps A and C. We evaluated the interchange modification report (IMR) to verify the required queue length and reduced the storage length accordingly.** The utilization of the existing pavement and minimization of full-depth pavement provides improvements for the lowest cost and limits the disruption to the motoring public by shortening construction duration.

Third, the GEI Team's concept widens all four interchange ramps to the inside to maximize the use of the existing pavement and simplify maintenance of traffic. This widening configuration also allows for the **elimination of all off-site easement and right-of-way acquisition within the project corridor; thereby shortening the construction schedule and mitigating potential delays** due to unforeseen acquisition challenges.

The GEI Team is proposing to construct the DDI traffic signals based on our Team's current DDI experience in Georgia. The signals will consist of pre-approved VDOT traffic signal equipment and will be located outside of existing pavement so traffic is maintained in both directions throughout construction. The permanent traffic signals will be constructed and operational once the DDI traffic pattern is initiated. All of the proposed traffic signal equipment will be located outside of the clear zone or protected by guardrail to reduce future maintenance as a result of errant vehicle collisions. Additionally, the GEI Team's signal design will include nearside, ground mounted, supplemental signal heads, mounted along Route 15 and targeted upstream towards vehicles approaching the intersection prior to the DDI geometry. These nearside, ground-mounted, supplemental signal heads will **improve visibility of the signal indication** when large vehicles are stacked upstream. This feature **reduces the likelihood of rear-end crashes** and ultimately improves safety at the DDI.

Lastly, the DDI intersections have been pulled tightly together (allowing for WB-67 movements) to reduce the all-red clearance times for both signal phases and optimize signal operations at the intersections. The GEI Team's concept for the DDI at Zion Crossroads **enhances safety, maximizes existing pavement, eliminates the need for right-of-way acquisition, and optimizes signal operations.**

4.4 PROJECT APPROACH

4.4.1 Public Relations Management

The proposed DDI at Zion Crossroads will be the first in Virginia and serve as a pilot for future interchanges. It will be imperative to reach out early and often to affected stakeholders to educate them about what a DDI is, how they will be affected, and the benefits of improved traffic operations and safety. Our **Public Information/Outreach Plan** will strategically guide the communications effort to: (1) inform and educate the public about the interchange and (2) address concerns that arise among affected stakeholders. The GEI Team's Public Information/Outreach Plan consists of the following:

- Minimally, the GEI Team will conduct one citizen information meeting prior to commencing construction activities to share roadway plans, a detailed transportation management plan (TMP), traffic simulations, graphics, and video of driving through the DDI with the general public.
- Minimally, the GEI team will hold one partnering meeting with the major local stakeholders (to include business owners, schools, county officials, and EMS) prior to commencing construction activities to review the TMP and sequence of construction. The GEI Team will be available for one-on-one partnering meetings with specific major stakeholders.
- Minimally, the GEI Team will hold one stakeholder meeting to provide updates on the project and future work to be completed.
- The GEI Team will develop an ongoing education and outreach program to educate drivers about travelling through a DDI. Minimally, this will include the creation of a pamphlet and paid advertisements in local print and media three weeks in advance and one week in advance of switching traffic to the DDI configuration.

4.4.2 Utilities

The GEI Team has a complete working knowledge of utility relocations for VDOT projects and implements VDOT's *Right of Way and Utilities Manual*'s protocols and standards on all VDOT projects. The GEI Team will establish with the utility owners that all utility relocations are performed under the VDOT system for cost-effective and timely relocation.

The GEI Team conducted a site visit to understand all existing utilities identified on the plans and any others that were not noted on the plans. The GEI Team, with clear understanding of the cut and fill areas, grade changes, milling and overlaying, designed a cost-effective, minimal utility relocation plan keeping all utilities as they exist today within the limited access right-of-way via VDOT permit. We assume that VDOT will not require existing utilities to be relocated outside of limited access right-of-way.

Upon Notice to Proceed from VDOT, the GEI Team will immediately begin the process of field verification. We will supplement the ground survey by performing subsurface utility investigations test-holes and engineering. Once the subsurface exploration is complete, we will update the color-coded plan that reflects the actual locations and type of utilities within the project limits and prepare the UT-9s. We will then initiate a preliminary utility field inspection (UFI) meeting with the utility owners within the proposed right-of-way to discuss the project and their facilities using the color-coded plan as a guide. The preliminary UFI meeting will be held with all utilities within the project limits without regard to impacts. The purpose of the preliminary meeting will be to open dialogue with the utility companies, gather enough information to hold the official "UFI" and kick-off the utility relocation process in accordance with the VDOT Utilities Manual.

The GEI Team identified the following potential conflicts and offers our intended mitigation measures:

- The existing underground communication and power lines serving the traffic signals at the terminus of each I-64 ramp will be replaced to accommodate the realignment of the road into the DDI configuration; however, it should be noted that the existing facilities will remain in place to provide temporary signalization until such times as the DDI signals are functioning. The construction will be phased and performed to allow continuous signal operation.
- The existing electric pole (BDIA5) will stay in place; however, the cables may need to be raised to ensure adequate vertical clearance.
- The hand-holes/pull boxes at stations 120+50 northbound and 219+75 southbound will be adjusted in the field.
- Test holes will be performed on the communication

line between stations 125+00 northbound to 230+25 southbound to verify adequate cover from finished grade. If adequate coverage can be maintained, then relocation is not required. If adequate cover cannot be provided, a simple offset will mitigate the issue.

- The existing power pole BDIA8, feeding the existing signal, will remain until such time as the existing signal is taken out of service. Pole BDIA8 is not required to provide service to the new signals.
- The existing pole BDIA9 is in conflict with the future grades. It is within a "cut" condition. Consideration will be given to providing a retaining wall, in accordance with VDOT standards, to avoid the need to relocate pole BDIA9. In addition, the overhead line from pole BDIA9 to BDIA7 will be raised to provide the minimum VDOT vertical clearance requirements.
- The GEI Team anticipates the need to adjust sewer lids, water valve covers, etc., within the project limits.

The GEI Team will facilitate the relocation activities by coordinating any necessary easement requirements, plans, and estimate documents from the utilities for construction. We will self-perform conduit installation, coordinate the pulling of cables and splicing, issue any unpaid balances, and obtain final permits. We will coordinate with the utility companies to ensure utility relocation occurs in advance of construction activities at the conflict.

4.4.3 Geotechnical

The exploration program includes additional borings and laboratory testing, developed to meet the requirements of the RFP and Chapter 3 of the 2011 VDOT Manual of Instructions (MOI). The number, depth, and frequency of borings will be developed following Table 3-1 Guidelines for Minimum Number of Investigation Points and Depths of Investigation as included in the MOI.

Earthwork associated with widening and reconstruction of the existing ramps and slopes will involve cuts and fills of typically less than 10 feet. Borings in proposed fill areas indicate soft existing fill up to about 8.5 feet; however, since underlying natural soils are relatively stiff, settlements of the existing fill due to surcharges are expected to be less than 2 inches, and are expected to occur quickly. Undercutting of soft and wet near-surface soils (up to 3 feet) should be anticipated prior to fill placement. As an alternative to undercutting unsuitable soils and replacement with new compacted structural fill, these areas may be mitigated by placing geotextile fabric, installing Tensar TX-5 Geogrid or equal over the geotextile fabric, and constructing a working platform 12 to 18 inches thick of dense-graded aggregate. In areas where wet conditions are encountered prior to filling, crushed stone may be used in lieu of dense-graded aggregate; however, a minimum thickness of 24 inches of crushed stone should be considered in areas where a drainage layer is required.

On-site soils include highly plastic clays and silts unsuitable for use as embankment fill. Moisture conditioning of fill materials also will likely be needed. Due to the limited area available for working materials, drying materials using lime treatment may not be practical. Project planning should consider the need to import fill materials.

The planned slopes are 2H:1V. Shear strength testing is proposed for off-site borrow materials to confirm that soil strengths are adequate to meet the minimum factors of safety for slope stability. Lower factors of safety may necessitate flatter slopes or use of reinforced slopes. We anticipate that conventional retaining structures such as VDOT RW-2 or RW-3 walls may be used to protect existing utilities.

4.4.4 Quality Assurance/Quality Control (QA/QC)

The design QA/QC process that the GEI Team will follow was proven successful from the last Design-Build project that we produced together for the Pacific Boulevard widening project in Loudoun County, VA. We will implement a regimented, checklist-driven system of color-coded markups; verified by cover sheets; and signed off by the originator, checker, back-checker, and rechecker. By using this method, the design manager will have to accept each document and calculation before they are entered into the design. All project documents, computations, plans, and specifications will undergo a quality audit. This process ensures the effectiveness of the design QA/QC procedures and provides a record of the QA/QC process for the design, thereby minimizing VDOT's efforts in the design stage.

One unique design element for project is the design of

the DDI crossover points along Route 15. The design team will provide a comprehensive set of plans and elevation computations to the quality assurance manager (QAM) to verify that the DDI crossover points line up in elevation. The DDI crossover points will be accurately modeled in the Geopak Cross Sections for Route 15 and in Geopak Site in 3D. The attention to detail at the design stage will decrease the likelihood of an elevation discrepancy in the field slowing or stopping construction progress and negatively impacting the travelling public due to additional lane closures or detours.

One unique construction element for this project is the requirement to phase and complete each construction activity with the interim step of 'switching' the existing traffic pattern into its ultimate DDI configuration. While the ultimate goal for the project is final completion on or ahead of schedule, the interim step is the most important milestone in achieving that goal. All efforts leading up to the interim goal will be made with this planned time and date in mind. Our QA/QC program will take appropriate extra steps to work the construction activities in concert with all other efforts, including public involvement and awareness, and successfully achieve the interim goal. The steps will include stringent review of scheduled activities, anticipation of any potential impacts or delays by the Design-Build team and QAM, and proactively pursuing the project and resolving any issues that could impact our ability to meet the interim goal. Our intent is to minimize, if not completely remove, the need for VDOT to provide oversight beyond the IA/IVST role; therefore, our Team's QA/QC plan will strongly reinforce a comprehensive QC inspection program and equally comprehensive QA oversight. This concept will be reinforced at the preparatory inspection meetings during the course of construction. The autonomy of our QAM in addressing QC in addition to QA, including staffing levels and qualifications, means VDOT will not be burdened with any unanticipated additional workload.

4.5 CONSTRUCTION OF THE PROJECT

4.5.1 Sequence of Construction

The project has been divided into five construction phases as noted below. A few of the elements affecting construction that deserve noting are:

- The GEI Team's proposed schedule allows for all earthwork operations to occur during seasonal periods of low precipitation.
- The document prepared by the Missouri Department of Transportation, entitled *Missouri's Experience with a Diverging Diamond – Lessons Learned*, recommends an early transition to the DDI configuration. An early transition to the DDI configuration will reduce the inconvenience to the stakeholders traveling through the corridor by minimizing the length of time maintenance of traffic (MOT) measures will be in place.
- The resurfacing, instead of full-depth pavement replacement, associated with Route 15 should facilitate the switch to the DDI and reduce the amount of temporary pavement needed.
- It will be critical upon the final surfacing of the road identified in Phase 4 that all pavement joint lines follow the general alignment of the permanent pavement striping. This technique will further reinforce the traffic pattern, help to minimize the potential for drivers to follow the pavement joint through the DDI, minimize the potential for drivers to proceed in the wrong direction, and prolong the pavement life, thereby reducing future maintenance costs to the department.
- Placement of the proposed traffic signal equipment will occur outside of the existing pavement to separate signal construction from other construction activities.
- Continuous construction sequences will minimize the area required for staging and storage of equipment and materials. Scheduling will consider the timing of the mobilization of equipment and delivery of materials to avoid downtime of equipment and long-term storage of materials.

Phase 1

Phase 1 does not contemplate the need for any lane closures except for intermittent single-lane closures that are initially required to eradicate the existing pavement striping, reduce the lane width, install temporary pavement striping, and install the concrete traffic barrier service in accordance with the TMP described in Section 4.5.2. Upon installation of the temporary pavement striping and the concrete traffic barrier service, we will construct the required infrastructure for the median on the north side of the I-64 bridge, generally between northbound stations 129+00 to 137+50, and the south side of the I-64 bridge, generally between northbound stations 106+00 to 117+50. The infrastructure installed at this phase will follow the sequence of construction outlined below.

1. Install the temporary traffic control devices (TTC).
2. Install the required erosion and sediment control devices.
3. Strip topsoil and remove unsuitable material from the subgrade of the road. The excess topsoil will be used to either complete the backfill of the recently constructed medians along the mainline of Route 15 or to flatten slopes off the existing roadway slopes within the project limits. Excess topsoil and unsuitable material will be hauled off-site to a permitted location.
4. Perform earthwork activities until the proposed elevation of subgrade is reached. During earthwork activities, storm drainage pipes and structures, including underdrain, will be installed.
5. Place the stone base for the traveled way widening and the inside shoulder once subgrade is reached and compaction results have been verified.
6. Construct the median curb (MS-2) around the perimeter of the center island.
7. Place the stone base for the pavement widening within the median once the concrete has cured. Dump trucks delivering the stone will be staged appropriately to minimize back-ups on Route 15. Delivery access will be provided at the ends of the medians.
8. Complete the remaining pavement operations for the widening in the median upon authorization from the QAM that the stone base has been placed properly. At this stage, the final surface course will not be placed; however, the intermediate course will be placed level with the existing pavement, enabling future milling operation to occur in Phase 4.
9. Remove or relocate the temporary concrete barrier service in accordance with the TMP.

Phase 2

Phase 2 consists of the widening of the interchange ramps and the creation of ramp spurs, which allow the outside lanes of Route 15 to be widened. The design concepts contained in Volume II depict the traveled way widening to be constructed entirely on one side of the existing ramp. The improvements required along the existing edge of the outside lanes will be the construction of the required paved shoulder. This sequence will allow the widening of the traveled portion of the ramp and inside shoulder to be completed in a single phase without construction occurring on both sides of the existing ramp as limited by Part 2, Section 2.10.1. The sequence of construction for all ramps and spurs will be the same as the first 6 steps of Phase 1, followed by:

7. Stage the dump trucks to deliver the stone to avoid vehicle back-ups on the existing I-64 ramps.
8. Complete the remaining pavement operations for the widening of the inside lanes of the ramps once the QAM has ensured that the stone base has been properly placed.
9. Move construction efforts to the outside of the ramps to install a new paved shoulder. The final surface course will not be placed at this time; however, the intermediate course will be placed level with the existing pavement. This will facilitate the future milling operation to occur in Phase 4.
10. Continue the advance construction of the proposed traffic signals at the DDI crossovers, while keeping the existing signals operational.

Phase 3

Phase 3 will consist of the milling, overlay, and build-up of pavement in all areas within the project limits, except for the DDI crossovers. It is anticipated that paving operations will be completed on a single ramp and spur followed by the Route 15 mainline lanes connecting to the spur. Upon completion of the Route 15 mainline lanes mentioned above, the adjacent Route 15 mainline lanes will be paved leading to the next ramp and spur. Milling, overlay, and build-up operations will continue in this sequence until all Route 15 mainline lanes, ramps, and spurs are complete.

Phase 3 Pavement will be concluded such that the existing pavement through the DDI is rideable.

Phase 4

Phase 4 involves the improvements in and between the two crossovers of the DDI. The improvements consist of milling, overlay, and build-up of pavement. The existing crossover at the terminus of each ramp will remain operational. The outside edge of the existing crowned road will be paved to create the super-elevation through the DDI. The paving will be accomplished by forming a wedge of pavement on all four outside corners of each DDI crossover. Upon completion of the pavement build-up on the outside, the overlay will be completed on the inside lanes of each DDI crossover. At the completion of Phase 4, the proposed DDI traffic signals will be complete and traffic will be switched into the ultimate DDI configuration using temporary striping and TTC devices.

Phase 5

Phase 5 involves the final improvements to implement the DDI under permanent conditions. The first construction activity will be the demolition of the existing pavement associated with the old ramp termini. Upon disposal of the existing pavement structure, curb will be poured where necessary to form the DDI splitter islands. This work also includes the MS-1 medians required on the outside spurs of the ramps. The existing traffic signals will now be demolished and removed.

Once the concrete cures for the DDI islands, the temporary pavement striping will be replaced with the permanent striping. This will be performed for the entire project limits. The DDI islands and the project limits will be fine-graded and seeded to achieve substantial completion. VDOT will perform the final inspection and create a punch list, and the GEI Team will complete the punch list for final completion.

4.5.2 Transportation Management Plan

The project requires significant construction along the mainline lanes of Route 15 without the addition of through lanes. Due to the narrow corridor allowed for construction of the project, maintaining traffic flow will be of extreme importance to the success of this project. Our Team is committed to developing a TMP that gets this project built safely with minimal disruption and delay to the traveling public. We will develop a TMP based on a planned sequence of construction and actual means and methods built on safety, proactive communication with stakeholders, diversion of traffic via alternate routes, efficiency, and minimal shifts of traffic.

The GEI Team's proposed TMP is built upon both Kimley-Horn's experience designing DDIs in Georgia and Minnesota and the *Missouri's Experience with a Diverging Diamond – Lessons Learned* document. Our team proposes a five-phase TMP that incorporates the minimum requirements contained in Part 2 – Technical Information and Requirements of the RFP (specifically Section 2.10 – Transportation Management Plan).

Preconstruction Activities

- Develop and obtain approval on a Type B, Category III TMP that details all phases of work, proposed road closures, and MOT.
- Conduct the required engineering study and submit paperwork to obtain a temporary speed limit reduction from the current posted speed limit of 45 mph to 30 mph for Route 15, from just north of the intersection with Route 250 to the intersection with Camp Creek Parkway.
- Provide required notification to VDOT, Northwest Regional Traffic Operations (NWRO), and 511 Virginia.
- Set-up portable changeable message signs (PCMS) at appropriate locations in advance of the project to warn motorists of pending construction activities.
- Install alternate and/or incident management detour signing for motorists who choose to take alternate routes. An option that we have explored is detouring Route 15 through traffic onto Route 250, to Zion Road, to Columbia Road, to Louisa Road, and back to Route 15. Based on our field study, the detour should add less than 15 minutes to the travel time. We will further study the efficiency and make adjustments during the development of the TMP.
- Hold the citizen information meeting and major stakeholder meetings as described in the Section 4.4.1 of this proposal. Major stakeholders near the project consist of local businesses (Exxon, McDonald's, etc.), county EMS, Walmart distribution facility, Walmart Supercenter, Lowes, residents and commercial businesses in the Spring Creek Development, and tenants and pad site owners at the Shoppes at Spring Creek Shopping Center. The businesses within the project corridor will likely raise concerns about the maintenance of access at all time for their customers, visibility during construction activity in front of their property, and the ability of large trucks to maintain deliveries (i.e. Walmart, Lowes, etc.). Conversely, the likely concern for the residents of Spring Creek will be their ability to access I-64 at the interchange and delays due to lane closures. The TMP will be crafted and structured to consider and mitigate these important issues to the best possible extent.

Assumptions For All Phases

- Route 15 will remain open to one lane of traffic in each direction at all times.
- One lane will be maintained on the I-64 ramps at all times.
- Minimum lane widths will be 11 feet for Route 15 and I-64 ramps.
- A 2-foot offset will be provided on Route 15 to the face of all Group II devices or temporary traffic barrier service concrete. A 1-foot offset will be provided on the I-64 ramps to the face of all Group II devices or temporary traffic barrier service concrete.
- Each I-64 off-ramp will provide access to northbound and southbound Route 15 at all times. Route 15 northbound and southbound will have access to the I-64 on-ramps at all times.
- The existing traffic signals at the ramp terminal intersections will remain operational for MOT purposes until the beginning of Phase 5 when the new traffic signals are complete and operational.

The following demonstrates our approach to communicating and mitigating impacts to the traveling public, by construction phase.

Phase 1

- Reduce traveled way widths along Route 15 to minimums.
- Adjust existing signal heads on the mast arms of the traffic signals at Camp Creek Parkway and Ramps C and D, if necessary, to align with the temporary striping and reduced lane widths.
- Facilitate construction of median improvements by installing temporary barrier concrete service along the inside shoulders of Route 15 southbound and northbound lanes from the ramp terminal intersections of Ramps C and D to the northern project limits and from the ramp terminal intersections of Ramps A and B to the southern project limits. Intermittent lane closures during

approved working hours may be necessary along Route 15 northbound and southbound lanes during this phase.

- Facilitate construction of median improvements behind temporary traffic barrier service along Route 15. Remove the temporary barrier service concrete along Route 15 upon completion of the intermediate pavement course and median improvements. The proposed unopened portions of the travel lanes will be delineated with Group 2 devices.

Phase 2

- Install Group 2 devices along the edges of Ramps A, B, C, and D.
- Install temporary barrier concrete along the outside edge of Route 15 southbound from the ramp terminal intersection of Ramp A to the southern limit of construction and from the ramp terminal intersection of Ramp C to the northern limit of construction. Intermittent lane closures during approved working hours may be necessary along Route 15 northbound and southbound during this phase.
- Construct widening of Ramp A and the widening of Route 15 southbound. Driveway access to the VDOT Zion Crossroads maintenance facility will be maintained at all times.
- Construct widening of Ramp C and the widening of Route 15 northbound.
- Construct widening of Ramps B and D (including the spurs) as required by the approved construction plans. All ramp movements will be maintained at the ramp terminal intersections with Route 15 at all times, although turn-lane closures on Ramps A and C will occasionally be required. The TMP will address required storage lengths and times when the turn lanes may be closed to prevent traffic from queuing onto I-64.
- Remove the temporary barrier concrete along Route 15 and Ramps A and C upon completion of the intermediate pavement course and median improvements. The proposed unopened portions of the travel lanes will be delineated with Group 2 devices.

Phase 3

- Mill, overlay, and build-up the pavement along Route 15 by using intermittent, alternating lane closures along Route 15 northbound and southbound. Staging and minor shifts of traffic within the ramp terminal intersections will be required to maintain all ramp movements.

Phase 4

- Mill, overlay, and build-up the pavement within the proposed DDI crossover area(s) by using intermittent lane closures along the inside lanes of Route 15 northbound and southbound. Staging and minor shifts of traffic within the ramp terminal intersections will be required to maintain all ramp movements.
- Prior to the commencement of Phase 5 activities, the GEI Team will engage the public and stakeholders regarding the implementation of the DDI configuration is about to be implemented. This will minimally include paid advertisements in local print and radio media three weeks in advance and again one-week in advance of implementing Phase 5 of the TMP

Phase 5

- Traffic will be shifted to the DDI configuration with the use of local law enforcement (slow roll) and TTC devices initially. At this point, the proposed DDI traffic signals will be activated.
- Lane closures in northbound and southbound Route 15 will alternate for the demolition of temporary pavement, raised median construction, guardrail, etc.
- Remove and demolish the old traffic signals at the ramp terminal intersections.
- Install final pavement surface course, pavement markings, and signage with temporary lane closures.
- Remove TTC devices.

4.6 PROPOSAL SCHEDULE

4.6.1 Detailed Work Plan

The GEI Team's detailed work plan depicting the overall sequence of the full scope of work on the project is located in the Appendix on page A-26.

4.6.2 Schedule Narrative

The GEI Team's narrative description of the proposal schedule is located in the Appendix on page A-33.

4.7 DISADVANTAGED BUSINESS ENTERPRISES (DBE)

DBE Participation Statement

The GEI Team is committed to achieving a 17 percent DBE participation goal for the entire value of the contract, utilizing the methods stated below in the DBE subcontracting narrative.

GENERAL EXCAVATION, INC

7/6/12

Scott C. Hunter, Date
Vice President

DBE Subcontracting Narrative

General Excavation, Inc. does extensive research when choosing DBE subcontractors to solicit for a project, generally utilizing tools such as the Virginia Department of Minority Business Enterprises website (**www.dmbe.virginia.gov**). Initial searches are performed online using zip codes to get a better understanding of how many DBE subcontractors are located close to the project. Once the DBE subcontractors have been identified, we then examine their classes of work and VDOT prequalification status to see if they will be able to perform work on the project. If the zip code search does not provide positive results, General Excavation, Inc. will perform a search of the website by work description or NIGP code (i.e. pipe, concrete, etc). General Excavation also solicits DBE participation on projects through the online subscriber service, Bidrunner.com (**www.bidrunner.com**).

Once the qualified and applicable DBE subcontractors are chosen, letters are written to each DBE subcontractor outlining the scope of work, bid date and time, location of plans for viewing, and phone and fax information for questions or quotes. Solicitations for quotes are sent out two weeks before the project bids to give the DBE subcontractors time to evaluate the quantities and scope of work and obtain plans and specifications. General Excavation, Inc. includes on each letter, a space for the DBE subcontractor to check whether or not they are interested in bidding the project, as well as a space to check if they would like us to contact them with more information. They are to fax back the letter with the appropriate item checked. We fax the letters and then mail them via US Mail. The letters are sent using postal form 3877, which is a confirmation of mailing, a form used to prove that these letters were, in fact, mailed out in a timely manner. It is GEI's policy to follow up with each DBE subcontractor to insure they received the letter and inquire about their intention to bid on the project.

Additionally, advertisements are placed in local newspapers requesting quotes specifically from minority subcontractors. These advertisements also list project scope, bid date and time, place plans may be viewed, and phone and fax information for questions and quotes.

A Design-Build Project
I-64/Route 15 (Zion Crossroads)
Interchange Improvement

Form C-78-RFP

ATTACHMENT 3.6

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFP NO. C00086453DB48

PROJECT NO.: 0064-054-703

ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.6, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of April 13, 2012 – RFP
   (Date)
2. Cover letter of June 25, 2012 – RFP Addendum #1
   (Date)
3. Cover letter of _____
   (Date)

SIGNATURE

July 6, 2012
DATE

Technical Proposal Checklist

ATTACHMENT 4.0.1.1

I-64/ Route 15 (Zion Crossroads) Interchange Improvement Project

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Technical Proposal Checklist, with the page references added, with the Technical Proposal.

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Technical Proposal Checklist and Contents	Attachment 4.0.1.1	Section 4.0.1.1	no	A-3
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	no	A-1
Letter of Submittal	NA	Sections 4.1		1
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	yes	1
Offeror's official representative information	NA	Section 4.1.1	yes	2
Authorized representative's original signature	NA	Section 4.1.1	yes	2
Declaration of intent	NA	Section 4.1.2	yes	2
120 day declaration	NA	Section 4.1.3	yes	2
Principal Officer information	NA	Section 4.1.4	yes	2
Substantial Completion and Final Completion date(s)	NA	Section 4.1.5	yes	2
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.6	no	2
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.7	no	2
Offeror's Qualifications	NA	Section 4.2		3
Confirmation that the information provided in the SOQ submittal remains true and accurate or indicates that any	NA	Section 4.2.1	yes	3

ATTACHMENT 4.0.1.1

I-64/ Route 15 (Zion Crossroads) Interchange Improvement Project

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
requested changes were previously approved by VDOT				
Organizational chart with any updates since the SOQ submittal clearly identified	NA	Section 4.2.2	yes	3
Revised narrative when organizational chart includes updates since the SOQ submittal	NA	Section 4.2.2	yes	3
Design Concept	NA	Section 4.3		4
Conceptual Roadway Plans and description	NA	Section 4.3.1.1	yes	4
Project Approach	NA	Section 4.4		5
Public Relations Management	NA	Section 4.4.1	yes	5
Utilities	NA	Section 4.4.2	yes	5
Geotechnical	NA	Section 4.4.3	yes	6
Quality Assurance/ Quality Control (QA/QC)	NA	Section 4.4.4	yes	6
Construction of Project	NA	Section 4.5		8
Sequence of Construction	NA	Section 4.5.1	yes	8
Transportation Management Plan	NA	Section 4.5.2	yes	9

ATTACHMENT 4.0.1.1

I-64/ Route 15 (Zion Crossroads) Interchange Improvement Project

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Proposal Schedule	NA	Section 4.6		12
Proposal Schedule	NA	Section 4.6	no	12
Proposal Schedule Narrative	NA	Section 4.6	no	12
Proposal Schedule in electronic format (CD-ROM)	NA	Section 4.6	no	CD
Disadvantaged Business Enterprises (DBE)	NA	Section 4.7		13
Written statement of percent DBE participation	NA	Section 4.7	yes	13
DBE subcontracting narrative	NA	Section 4.7	yes	13

Proposal Payment Agreement

ATTACHMENT 9.3.1
PROPOSAL PAYMENT AGREEMENT

THIS PROPOSAL PAYMENT AGREEMENT (this "Agreement") is made and entered into as of this 6 day of July, 2012, by and between the Virginia Department of Transportation ("VDOT"), and General Excavation, Inc. ("Offeror").

WITNESSETH:

WHEREAS, Offeror is one of the entities who submitted Statements of Qualifications ("SOQs") pursuant to VDOT's **December 6, 2011** Request for Qualifications ("RFQ") and was invited to submit proposals in response to a Request for Proposals ("RFP") for the **I-64/ Route 15 (Zion Crossroads) Interchange Improvement, Project No. 0064-054-703** ("Project"), under a design-build contract with VDOT ("Design-Build Contract"); and

WHEREAS, as part of the procurement process for the Project, Offeror has already provided and/or furnished to VDOT, and may continue to provide and/or furnish to VDOT, certain intellectual property, materials, information and ideas, including, but not limited to, such matters that are: (a) conveyed verbally and in writing during proprietary meetings or interviews; and (b) contained in, related to or associated with Offeror's proposal, including, but not limited to, written correspondence, designs, drawings, plans, exhibits, photographs, reports, printed material, tapes, electronic disks, or other graphic and visual aids (collectively "Offeror's Intellectual Property"); and

WHEREAS, VDOT is willing to provide a payment to Offeror, subject to the express conditions stated in this Agreement, to obtain certain rights in Offeror's Intellectual Property, provided that Offeror submits a proposal that VDOT determines to be responsive to the RFP ("Offeror's Proposal"), and either (a) Offeror is not awarded the Design-Build Contract; or (b) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror; and

WHEREAS, Offeror wishes to receive the payment offered by VDOT, in exchange for granting VDOT the rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt and adequacy of which are acknowledged by the parties, the parties agree as follows:

1. **VDOT's Rights in Offeror's Intellectual Property**. Offeror hereby conveys to VDOT all rights, title and interest, free and clear of all liens, claims and encumbrances, in Offeror's Intellectual Property, which includes, without restriction or limitation, the right of VDOT, and anyone contracting with VDOT, to incorporate any ideas or information from Offeror's Intellectual Property into: (a) the Design-Build Contract and the Project; (b) any other contract awarded in reference to the Project; or (c) any subsequent procurement by VDOT. In receiving all rights, title and interest in Offeror's Intellectual Property, VDOT is deemed to own all intellectual property rights, copyrights, patents, trade secrets, trademarks, and service marks in Offeror's Intellectual Property, and Offeror agrees that it shall, at the request of VDOT, execute all papers and perform all other acts that may be necessary to ensure that VDOT's rights, title and interest in Offeror's Intellectual Property are protected. The rights conferred herein to VDOT include, without limitation, VDOT's ability to use Offeror's Intellectual Property without the obligation to notify or seek permission from Offeror.

2. **Exclusions from Offeror's Intellectual Property**. Notwithstanding Section 1 above, it is understood and agreed that Offeror's Intellectual Property is not intended to include, and Offeror does not convey any rights to, the Escrow Proposal Documents submitted by Offeror in accordance with the RFP.

3. **Proposal Payment**. VDOT agrees to pay Offeror the lump sum amount of **thirty thousand and 00/100 Dollars ($30,000.00)** ("Proposal Payment"), which payment constitutes payment in full to Offeror for the conveyance of Offeror's Intellectual Property to VDOT in accordance with this Agreement. Payment of the Proposal Payment is conditioned upon: (a) Offeror's Proposal being, in the sole discretion of VDOT, responsive to the RFP; (b) Offeror complying with all other terms and conditions of this Agreement; and (c) either (i) Offeror is not awarded the Design-Build Contract, or (ii) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror.

4. **Payment Due Date**. Subject to the conditions set forth in this Agreement, VDOT will make payment of the Proposal Payment to the Offeror within forty-five (45) days after the later of: (a) notice from VDOT that it has awarded the Design-Build Contract to another Offeror; or (b) notice from VDOT that the procurement for the Project has been cancelled and that there will be no Contract Award.

5. **Effective Date of this Agreement**. The rights and obligations of VDOT and Offeror under this Agreement, including VDOT's ownership rights in Offeror's Intellectual Property, vests upon the date that Offeror's Proposal is submitted to VDOT. Notwithstanding the above, if Offeror's Proposal is determined by VDOT, in its sole discretion, to be nonresponsive to the RFP, then Offeror is deemed to have waived its right to obtain the Proposal Payment, and VDOT shall have no obligations under this Agreement.

6. Indemnity. Subject to the limitation contained below, Offeror shall, at its own expense, indemnify, protect and hold harmless VDOT and its agents, directors, officers, employees, representatives and contractors from all claims, costs, expenses, liabilities, demands, or suits at law or equity ("Claims") of, by or in favor of or awarded to any third party arising in whole or in part from: (a) the negligence or wilful misconduct of Offeror or any of its agents, officers, employees, representatives or subcontractors; or (b) breach of any of Offeror's obligations under this Agreement, including its representation and warranty under Section 8 hereof. This indemnity shall not apply with respect to any Claims caused by or resulting from the sole negligence or wilful misconduct of VDOT, or its agents, directors, officers, employees, representatives or contractors.

7. Assignment. Offeror shall not assign this Agreement, without VDOT's prior written consent, which consent may be given or withheld in VDOT's sole discretion. Any assignment of this Agreement without such consent shall be null and void.

8. Authority to Enter into this Agreement. By executing this Agreement, Offeror specifically represents and warrants that it has the authority to convey to VDOT all rights, title, and interest in Offeror's Intellectual Property, including, but not limited to, those any rights that might have been vested in team members, subcontractors, consultants or anyone else who may have contributed to the development of Offeror's Intellectual Property, free and clear of all liens, claims and encumbrances.

9. Miscellaneous.

a. Offeror and VDOT agree that Offeror, its team members, and their respective employees are not agents of VDOT as a result of this Agreement.

b. Any capitalized term used herein but not otherwise defined shall have the meanings set forth in the RFP.

c. This Agreement, together with the RFP, embodies the entire agreement of the parties with respect to the subject matter hereof. There are no promises, terms, conditions, or obligations other than those contained herein or in the RFP, and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto.

d. It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the Commonwealth of Virginia, validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provisions to be invalid.

e. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the day and year first above written.

VIRGINIA DEPARTMENT OF TRANSPORTATION

By: _____

Name: _____

Title: _____

General Excavation, Inc.

By: _____

Name: Scott C. Hunter

Title: Vice President

A-11

Certification Regarding Debarment

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-054-703

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	July 6, 2012	Vice President
Signature	Date	Title

General Excavation, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	July 6, 2012 Date	Project Manager/Senior Associate Title

Kimley-Horn and Associates, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	June 8, 2012	Vice President/Regional Program Manager
Signature	Date	Title

McDonough Bolyard Peck, Inc. (d/b/a MBP)
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	6-28-12	GENERAL MANAGER
Signature	Date	Title

THE BROTHERS SIGNAL COMPANY
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Earl S. Kelly 06/08/12 Managing Member
Signature Date Title

Traffic Signals Plus, PLLC
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature Date 6/11/12 Title Regional Vice President

Frochling & Robertson, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

June 11, 2012 Principal

Signature Date Title

Schnabel Engineering Consultants, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	6/8/12	PRESIDENT
Signature	Date	Title

KDR REAL ESTATE SERVICES
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Marie B. Travesky June 11, 2012 President

Signature Date Title

Travesky & Associates, Ltd.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature 6.11.12 Date Branch Manager Title

S&ME, Inc
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: **Project No.: 0064-054-703**

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	June 8, 2012 Date	Vice President Title

H&B Surveying and Mapping, LLC

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

[signature]	6-12-12	President
Signature	Date	Title

On-Time Utility Solutions, LLC
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-054-703

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	6/12/12	President
Signature	Date	Title

NXL Construction Services, Inc.
Name of Firm

Proposal Schedule

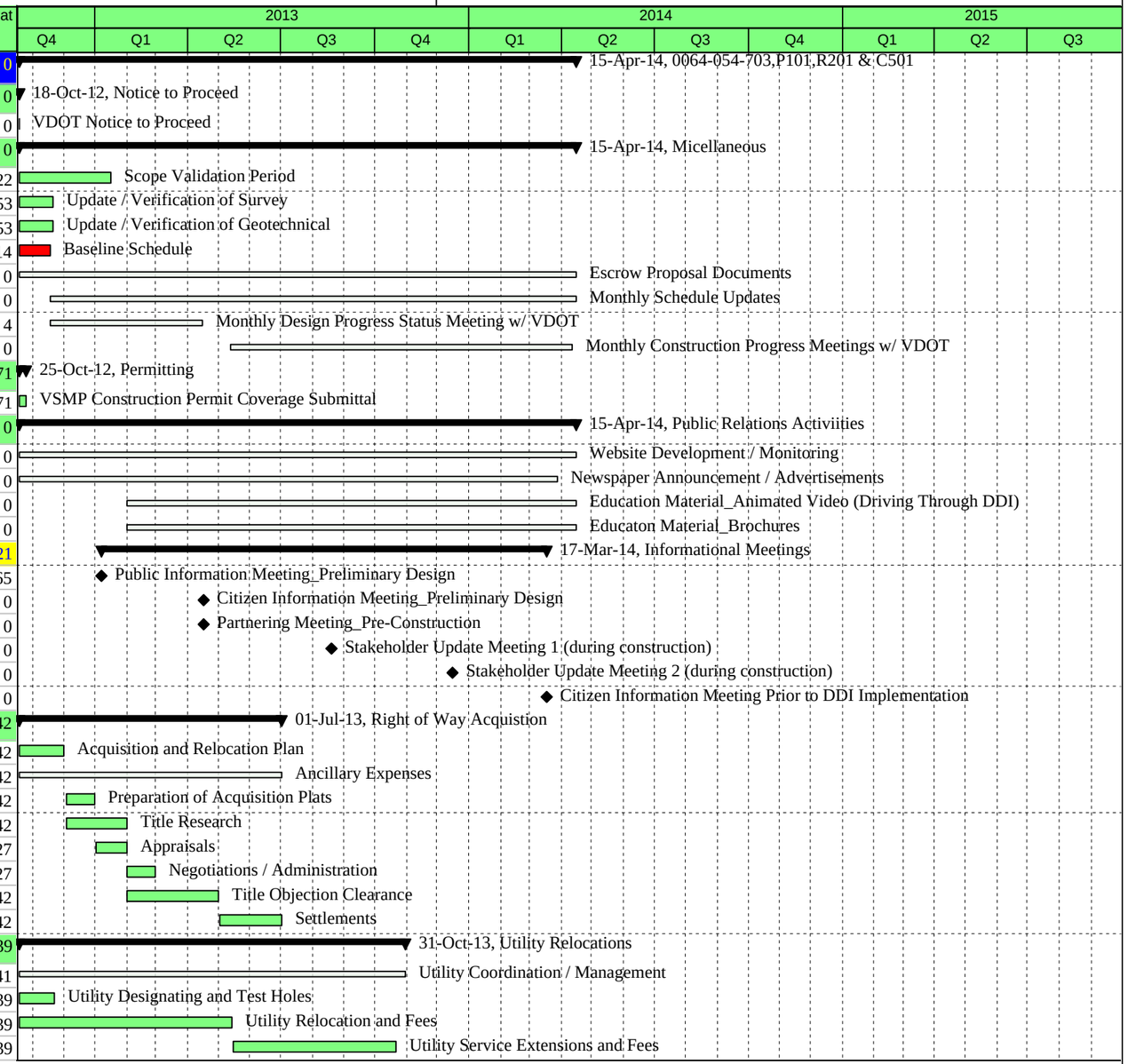
Virginia Deptartment of Transportation

Contract ID: C00086453DB48

0064-054-703,P101,R201 C501

05-Jul-12 17:14

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
0064-054-703,P101,R201 & C501		319	18-Oct-12	15-Apr-14	0
Notice to Proceed		1	18-Oct-12	18-Oct-12	0
A1000	VDOT Notice to Proceed	1	18-Oct-12*	18-Oct-12	0
Micellaneous		318	19-Oct-12	15-Apr-14	0
A1010	Scope Validation Period	90	19-Oct-12	16-Jan-13	22
A1020	Update / Verification of Survey	23	19-Oct-12	20-Nov-12	53
A1030	Update / Verification of Geotechnical	23	19-Oct-12	20-Nov-12	53
A1040	Baseline Schedule	30	19-Oct-12	17-Nov-12	514
A1080	Escrow Proposal Documents	544	19-Oct-12	15-Apr-14	0
A1050	Monthly Schedule Updates	514	18-Nov-12	15-Apr-14	0
A1060	Monthly Design Progress Status Meeting w/ VDOT	149	18-Nov-12	15-Apr-13	4
A1070	Monthly Construction Progress Meetings w/ VDOT	175	13-May-13	11-Apr-14	0
Permitting		5	19-Oct-12	25-Oct-12	71
A1200	VSMP Construction Permit Coverage Submittal	5	19-Oct-12	25-Oct-12	71
Public Relations Activiities		318	19-Oct-12	15-Apr-14	0
A1240	Website Development / Monitoring	544	19-Oct-12	15-Apr-14	0
A1250	Newspaper Announcement / Advertisements	526	19-Oct-12	28-Mar-14	0
A1210	Education Material_Animated Video (Driving Thr...	439	01-Feb-13	15-Apr-14	0
A1220	Educaton Material_Brochures	439	01-Feb-13	15-Apr-14	0
Informational Meetings		244	07-Jan-13	17-Mar-14	21
A1230	Public Information Meeting_Preliminary Design	0		07-Jan-13*	265
A1390	Citizen Information Meeting_Preliminary Design	0		16-Apr-13*	0
A1400	Partnering Meeting_Pre-Construction	0		16-Apr-13*	0
A1410	Stakeholder Update Meeting 1 (during construction)	0		19-Aug-13*	0
A1420	Stakeholder Update Meeting 2 (during construction)	0		16-Dec-13*	0
A1870	Citizen Information Meeting Prior to DDI Implem...	0		17-Mar-14*	0
Right of Way Acquistion		177	18-Oct-12	01-Jul-13	142
A1260	Acquisition and Relocation Plan	30	18-Oct-12	30-Nov-12	142
A1330	Ancillary Expenses	177	18-Oct-12	01-Jul-13	142
A1270	Preparation of Acquisition Plats	20	03-Dec-12	31-Dec-12	142
A1280	Title Research	42	03-Dec-12	31-Jan-13	142
A1290	Appraisals	22	02-Jan-13	31-Jan-13	227
A1300	Negotiations / Administration	20	01-Feb-13	28-Feb-13	227
A1310	Title Objection Clearance	63	01-Feb-13	01-May-13	142
A1320	Settlements	42	02-May-13	01-Jul-13	142
Utility Relocations		262	19-Oct-12	31-Oct-13	39
A1340	Utility Coordination / Management	378	19-Oct-12	31-Oct-13	141
A1350	Utility Designating and Test Holes	24	19-Oct-12	21-Nov-12	39
A1360	Utility Relocation and Fees	143	19-Oct-12	14-May-13	39
A1370	Utility Service Extensions and Fees	111	15-May-13	21-Oct-13	39



Remaining Level of Effort
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Milestone

General Excavation, Inc.

9757 Rider Rd

Warrenton, VA 20187

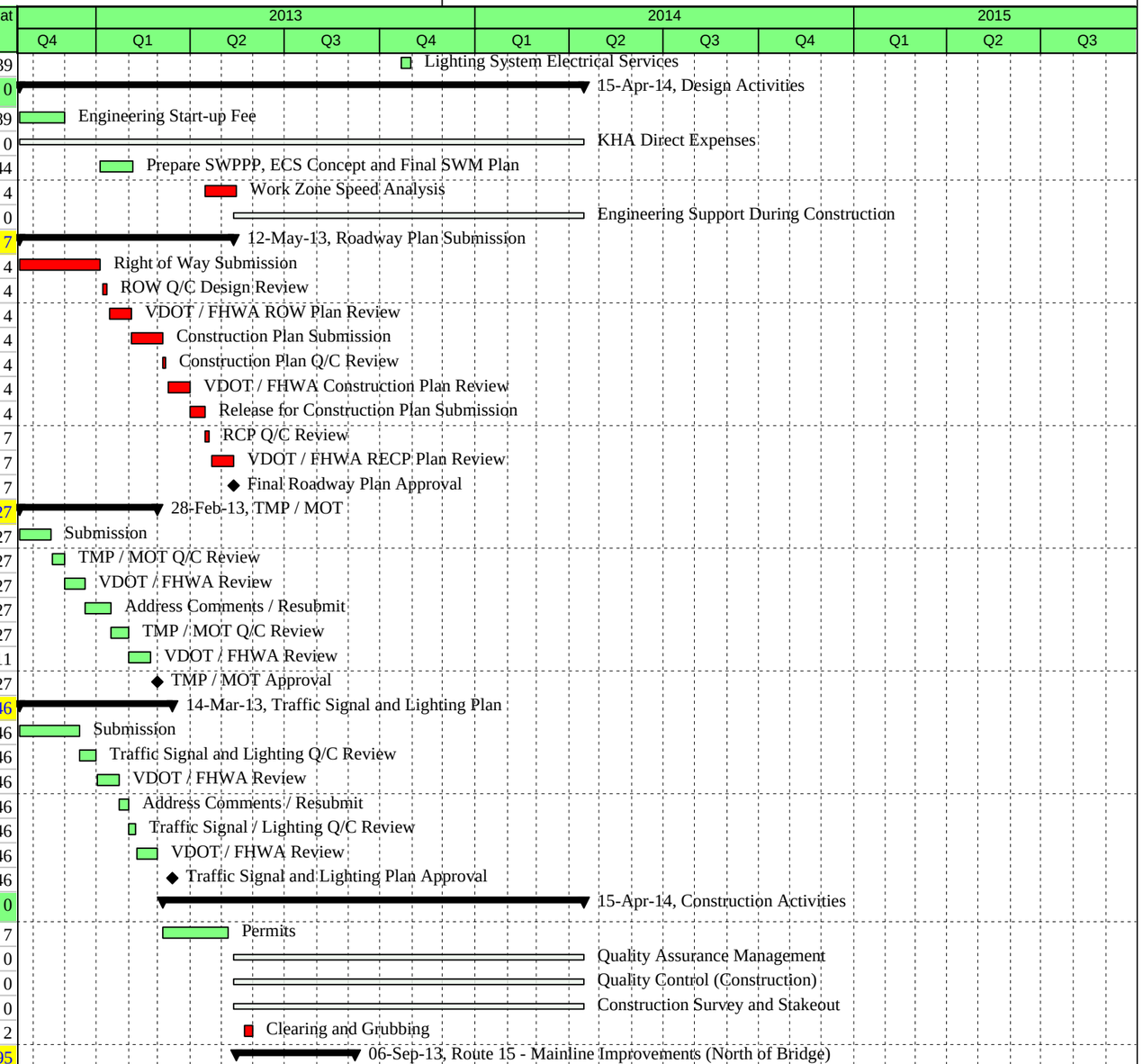
Virginia Deptartment of Transportation

Contract ID: C00086453DB48

0064-054-703,P101,R201 C501

05-Jul-12 17:14

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
A1380	Lighting System Electrical Services	8	22-Oct-13	31-Oct-13	39
Design Activities		319	18-Oct-12	15-Apr-14	0
A1430	Engineering Start-up Fee	29	19-Oct-12	30-Nov-12	289
A1720	KHA Direct Expenses	318	19-Oct-12	15-Apr-14	0
A1440	Prepare SWPPP, ECS Concept and Final SWM Plan	22	04-Jan-13	05-Feb-13	244
A1700	Work Zone Speed Analysis	30	16-Apr-13	15-May-13	4
A1710	Engineering Support During Construction	177	13-May-13	15-Apr-14	0
Roadway Plan Submission		206	19-Oct-12	12-May-13	7
A1450	Right of Way Submission	78	19-Oct-12	04-Jan-13	4
A1460	ROW Q/C Design Review	5	07-Jan-13	11-Jan-13	4
A1470	VDOT / FHWA ROW Plan Review	21	14-Jan-13	03-Feb-13	4
A1480	Construction Plan Submission	30	04-Feb-13	05-Mar-13	4
A1490	Construction Plan Q/C Review	3	06-Mar-13	08-Mar-13	4
A1500	VDOT / FHWA Construction Plan Review	21	11-Mar-13	31-Mar-13	4
A1510	Release for Construction Plan Submission	15	01-Apr-13	15-Apr-13	4
A1520	RCP Q/C Review	4	16-Apr-13	19-Apr-13	7
A1530	VDOT / FHWA RECP Plan Review	21	22-Apr-13	12-May-13	7
A1540	Final Roadway Plan Approval	0		12-May-13	7
TMP / MOT		92	18-Oct-12	28-Feb-13	227
A1550	Submission	32	18-Oct-12	18-Nov-12	327
A1560	TMP / MOT Q/C Review	12	19-Nov-12	30-Nov-12	327
A1570	VDOT / FHWA Review	21	01-Dec-12	21-Dec-12	327
A1580	Address Comments / Resubmit	14	21-Dec-12	14-Jan-13	227
A1590	TMP / MOT Q/C Review	13	14-Jan-13	31-Jan-13	227
A1600	VDOT / FHWA Review	21	01-Feb-13	21-Feb-13	411
A1610	TMP / MOT Approval	0		28-Feb-13	227
Traffic Signal and Lighting Plan		147	19-Oct-12	14-Mar-13	146
A1620	Submission	58	19-Oct-12	15-Dec-12	146
A1630	Traffic Signal and Lighting Q/C Review	16	16-Dec-12	31-Dec-12	146
A1640	VDOT / FHWA Review	21	02-Jan-13	22-Jan-13	146
A1650	Address Comments / Resubmit	9	23-Jan-13	31-Jan-13	146
A1660	Traffic Signal / Lighting Q/C Review	7	01-Feb-13	07-Feb-13	146
A1670	VDOT / FHWA Review	21	08-Feb-13	28-Feb-13	146
A1680	Traffic Signal and Lighting Plan Approval	0		14-Mar-13	146
Construction Activities		224	05-Mar-13	15-Apr-14	0
A1760	Permits	45	05-Mar-13	08-May-13	7
A1740	Quality Assurance Management	177	13-May-13	15-Apr-14	0
A1750	Quality Control (Construction)	177	13-May-13	15-Apr-14	0
A1770	Construction Survey and Stakeout	177	13-May-13	15-Apr-14	0
A1780	Clearing and Grubbing	5	23-May-13	31-May-13	2
Route 15 - Mainline Improvements (North of Bridge)		79	15-May-13	06-Sep-13	95



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General Excavation, Inc.

9757 Rider Rd

Warrenton, VA 20187

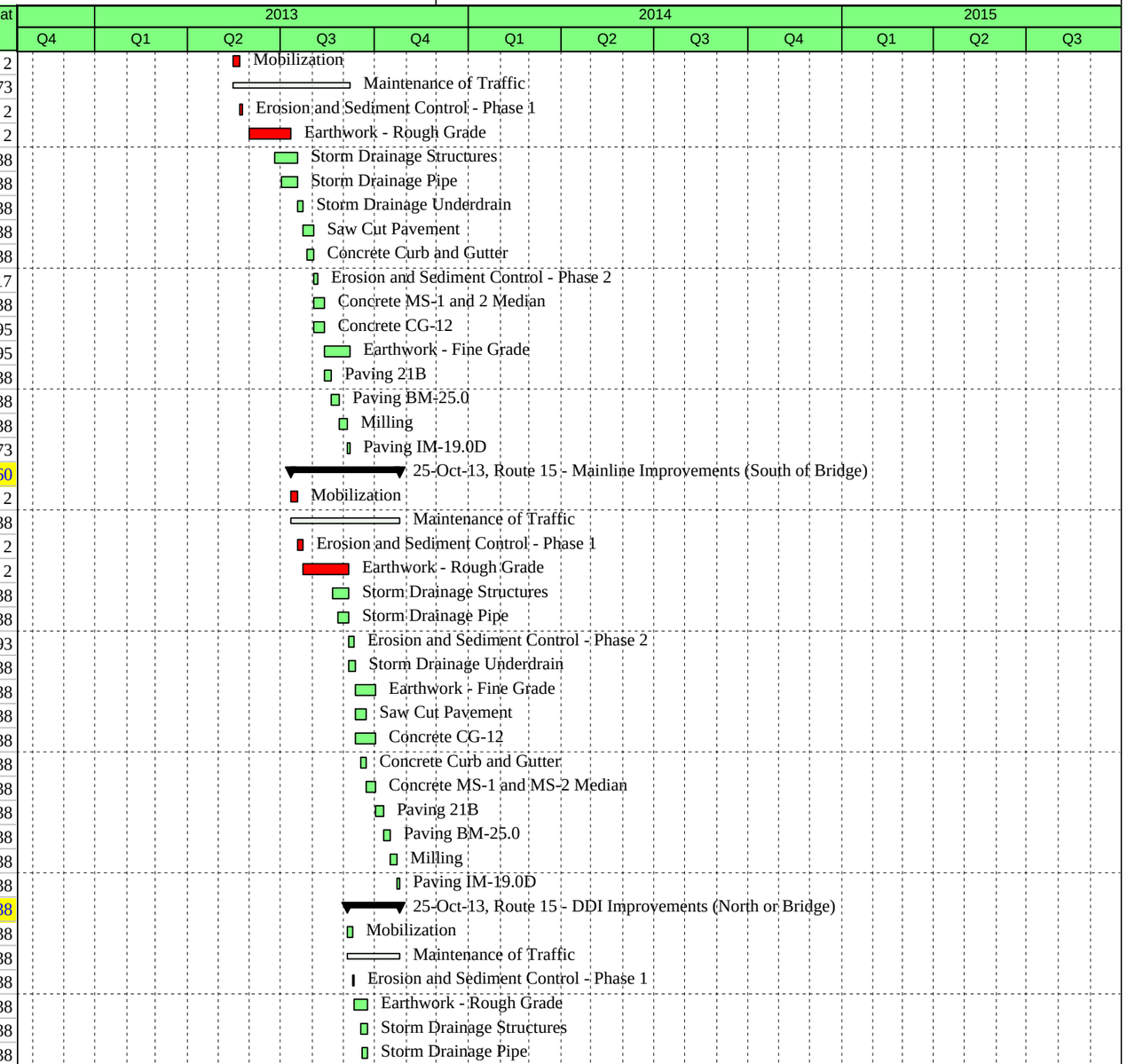
Virginia Deptartment of Transportation

Contract ID: C00086453DB48

0064-054-703,P101,R201 C501

05-Jul-12 17:14

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
A1790	Mobilization	5	15-May-13	22-May-13	2
A1820	Maintenance of Traffic	79	15-May-13	06-Sep-13	73
A1800	Erosion and Sediment Control - Phase 1	2	22-May-13	24-May-13	2
A1830	Earthwork - Rough Grade	28	31-May-13	11-Jul-13	2
A1850	Storm Drainage Structures	15	25-Jun-13	17-Jul-13	38
A1860	Storm Drainage Pipe	11	01-Jul-13	17-Jul-13	38
A1880	Storm Drainage Underdrain	4	17-Jul-13	23-Jul-13	38
A1890	Saw Cut Pavement	8	23-Jul-13	02-Aug-13	38
A1910	Concrete Curb and Gutter	5	26-Jul-13	02-Aug-13	38
A1810	Erosion and Sediment Control - Phase 2	2	02-Aug-13	06-Aug-13	117
A1920	Concrete MS-1 and 2 Median	7	02-Aug-13	13-Aug-13	38
A1940	Concrete CG-12	7	02-Aug-13	13-Aug-13	95
A1840	Earthwork - Fine Grade	17	13-Aug-13	06-Sep-13	95
A1950	Paving 21B	4	13-Aug-13	19-Aug-13	38
A1960	Paving BM-25.0	6	19-Aug-13	27-Aug-13	38
A1980	Milling	5	27-Aug-13	04-Sep-13	38
A1970	Paving IM-19.0D	2	04-Sep-13	06-Sep-13	73
Route 15 - Mainline Improvements (South of Bridge)		75	11-Jul-13	25-Oct-13	60
A1990	Mobilization	4	11-Jul-13	17-Jul-13	2
A2020	Maintenance of Traffic	75	11-Jul-13	25-Oct-13	38
A2000	Erosion and Sediment Control - Phase 1	3	17-Jul-13	22-Jul-13	2
A2030	Earthwork - Rough Grade	32	22-Jul-13	05-Sep-13	2
A2050	Storm Drainage Structures	11	20-Aug-13	05-Sep-13	38
A2060	Storm Drainage Pipe	7	26-Aug-13	05-Sep-13	38
A2010	Erosion and Sediment Control - Phase 2	3	05-Sep-13	10-Sep-13	93
A2070	Storm Drainage Underdrain	5	05-Sep-13	12-Sep-13	38
A2040	Earthwork - Fine Grade	14	12-Sep-13	02-Oct-13	38
A2090	Saw Cut Pavement	7	12-Sep-13	23-Sep-13	38
A2140	Concrete CG-12	14	12-Sep-13	02-Oct-13	38
A2100	Concrete Curb and Gutter	4	17-Sep-13	23-Sep-13	38
A2120	Concrete MS-1 and MS-2 Median	7	23-Sep-13	02-Oct-13	38
A2150	Paving 21B	5	02-Oct-13	09-Oct-13	38
A2160	Paving BM-25.0	5	09-Oct-13	16-Oct-13	38
A2180	Milling	5	16-Oct-13	23-Oct-13	38
A2170	Paving IM-19.0D	2	23-Oct-13	25-Oct-13	38
Route 15 - DDI Improvements (North or Bridge)		37	04-Sep-13	25-Oct-13	38
A2190	Mobilization	3	04-Sep-13	09-Sep-13	38
A2220	Maintenance of Traffic	37	04-Sep-13	25-Oct-13	38
A2200	Erosion and Sediment Control - Phase 1	2	09-Sep-13	11-Sep-13	38
A2230	Earthwork - Rough Grade	9	11-Sep-13	24-Sep-13	38
A2250	Storm Drainage Structures	5	17-Sep-13	24-Sep-13	38
A2260	Storm Drainage Pipe	3	19-Sep-13	24-Sep-13	38



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General Excavation, Inc.

9757 Rider Rd

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Virginia Deptartment of Transportation

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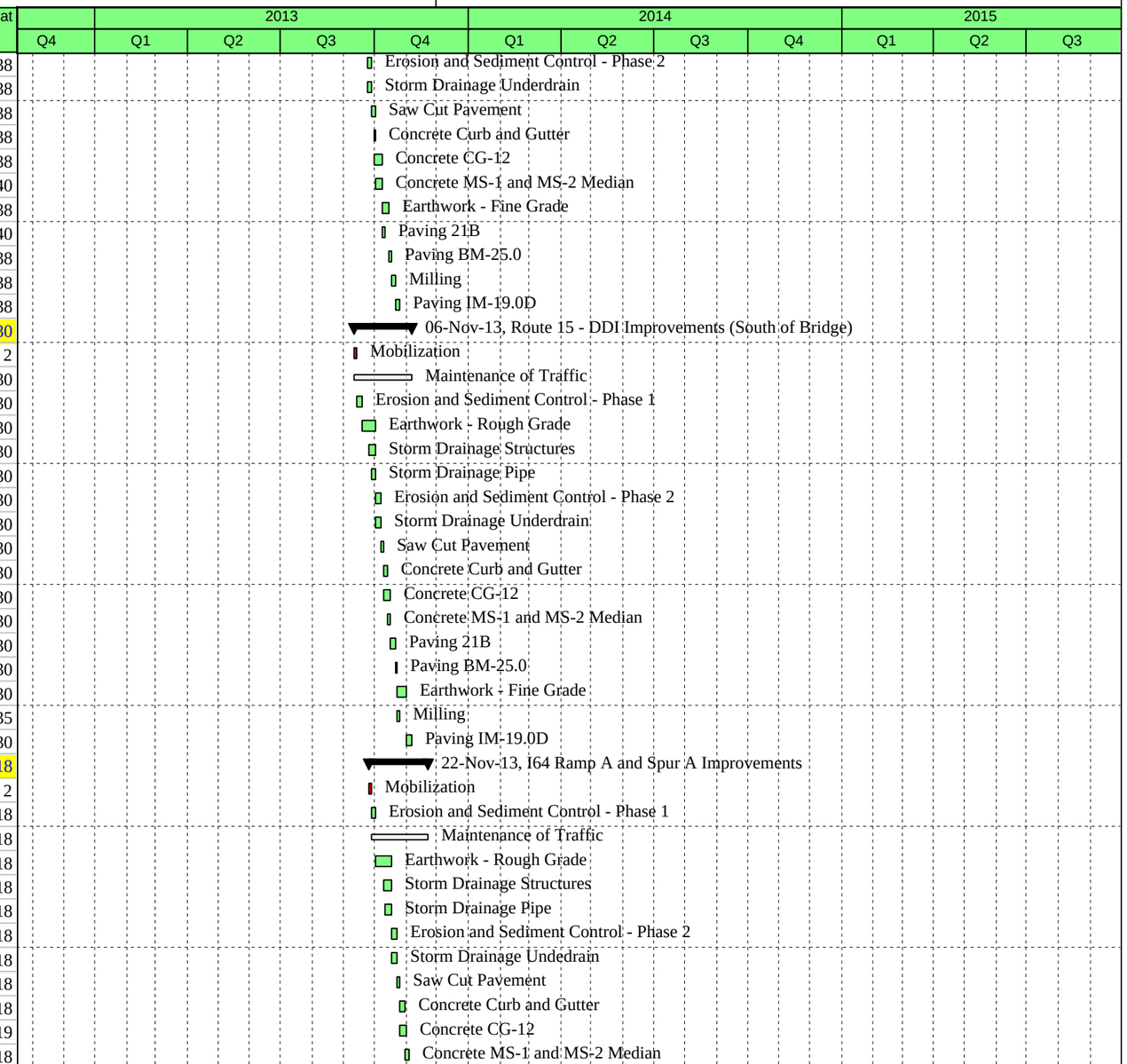
0064-054-703,P101,R201 C501

05-Jul-12 17:14

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
A2210	Erosion and Sediment Control - Phase 2	3	24-Sep-13	27-Sep-13	38
A2270	Storm Drainage Underdrain	3	24-Sep-13	27-Sep-13	38
A2290	Saw Cut Pavement	3	27-Sep-13	02-Oct-13	38
A2300	Concrete Curb and Gutter	2	30-Sep-13	02-Oct-13	38
A2340	Concrete CG-12	6	30-Sep-13	08-Oct-13	38
A2320	Concrete MS-1 and MS-2 Median	4	02-Oct-13	08-Oct-13	40
A2240	Earthwork - Fine Grade	5	08-Oct-13	15-Oct-13	38
A2350	Paving 21B	3	08-Oct-13	11-Oct-13	40
A2360	Paving BM-25.0	2	15-Oct-13	17-Oct-13	38
A2380	Milling	2	17-Oct-13	21-Oct-13	38
A2370	Paving IM-19.0D	4	21-Oct-13	25-Oct-13	38
Route 15 - DDI Improvements (South of Bridge)		40	11-Sep-13	06-Nov-13	30
A2390	Mobilization	2	11-Sep-13	13-Sep-13	2
A2420	Maintenance of Traffic	40	11-Sep-13	06-Nov-13	30
A2400	Erosion and Sediment Control - Phase 1	3	13-Sep-13	18-Sep-13	30
A2430	Earthwork - Rough Grade	10	18-Sep-13	02-Oct-13	30
A2450	Storm Drainage Structures	5	25-Sep-13	02-Oct-13	30
A2460	Storm Drainage Pipe	3	27-Sep-13	02-Oct-13	30
A2410	Erosion and Sediment Control - Phase 2	3	02-Oct-13	07-Oct-13	30
A2470	Storm Drainage Underdrain	3	02-Oct-13	07-Oct-13	30
A2490	Saw Cut Pavement	2	07-Oct-13	09-Oct-13	30
A2500	Concrete Curb and Gutter	3	09-Oct-13	14-Oct-13	30
A2540	Concrete CG-12	5	09-Oct-13	16-Oct-13	30
A2520	Concrete MS-1 and MS-2 Median	2	14-Oct-13	16-Oct-13	30
A2550	Paving 21B	3	16-Oct-13	21-Oct-13	30
A2560	Paving BM-25.0	2	21-Oct-13	23-Oct-13	30
A2440	Earthwork - Fine Grade	7	23-Oct-13	01-Nov-13	30
A2580	Milling	2	23-Oct-13	25-Oct-13	35
A2570	Paving IM-19.0D	3	01-Nov-13	06-Nov-13	30
I64 Ramp A and Spur A Improvements		42	25-Sep-13	22-Nov-13	18
A2590	Mobilization	2	25-Sep-13	27-Sep-13	2
A2600	Erosion and Sediment Control - Phase 1	3	27-Sep-13	02-Oct-13	18
A2620	Maintenance of Traffic	40	27-Sep-13	22-Nov-13	18
A2630	Earthwork - Rough Grade	11	02-Oct-13	17-Oct-13	18
A2650	Storm Drainage Structures	6	09-Oct-13	17-Oct-13	18
A2660	Storm Drainage Pipe	4	11-Oct-13	17-Oct-13	18
A2610	Erosion and Sediment Control - Phase 2	3	17-Oct-13	22-Oct-13	18
A2670	Storm Drainage Undedrain	3	17-Oct-13	22-Oct-13	18
A2690	Saw Cut Pavement	3	22-Oct-13	25-Oct-13	18
A2700	Concrete Curb and Gutter	3	25-Oct-13	30-Oct-13	18
A2740	Concrete CG-12	5	25-Oct-13	01-Nov-13	19
A2720	Concrete MS-1 and MS-2 Median	3	30-Oct-13	04-Nov-13	18



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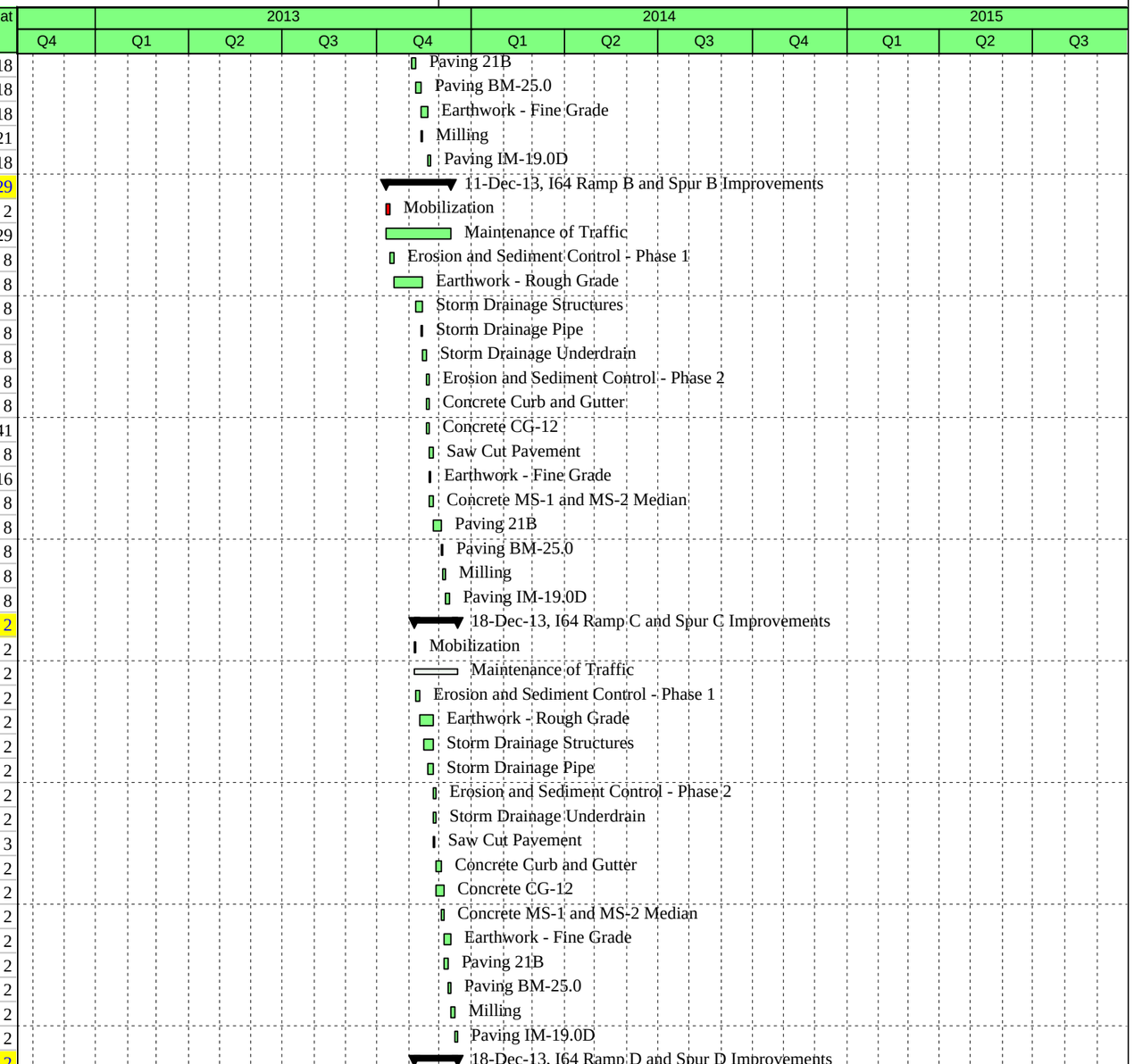
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
A2750	Paving 21B	3	04-Nov-13	07-Nov-13	18
A2760	Paving BM-25.0	3	07-Nov-13	12-Nov-13	18
A2640	Earthwork - Fine Grade	5	12-Nov-13	19-Nov-13	18
A2780	Milling	2	12-Nov-13	14-Nov-13	21
A2770	Paving IM-19.0D	3	19-Nov-13	22-Nov-13	18
I64 Ramp B and Spur B Improvements		43	09-Oct-13	11-Dec-13	29
A2790	Mobilization	3	09-Oct-13	14-Oct-13	2
A2820	Maintenance of Traffic	43	09-Oct-13	11-Dec-13	29
A2800	Erosion and Sediment Control - Phase 1	3	14-Oct-13	17-Oct-13	8
A2830	Earthwork - Rough Grade	20	17-Oct-13	14-Nov-13	8
A2850	Storm Drainage Structures	4	08-Nov-13	14-Nov-13	8
A2860	Storm Drainage Pipe	2	12-Nov-13	14-Nov-13	8
A2870	Storm Drainage Underdrain	2	14-Nov-13	18-Nov-13	8
A2810	Erosion and Sediment Control - Phase 2	2	18-Nov-13	20-Nov-13	8
A2900	Concrete Curb and Gutter	3	18-Nov-13	21-Nov-13	8
A2940	Concrete CG-12	3	18-Nov-13	21-Nov-13	41
A2890	Saw Cut Pavement	3	20-Nov-13	25-Nov-13	8
A2840	Earthwork - Fine Grade	1	21-Nov-13	22-Nov-13	16
A2920	Concrete MS-1 and MS-2 Median	2	21-Nov-13	25-Nov-13	8
A2950	Paving 21B	3	25-Nov-13	02-Dec-13	8
A2960	Paving BM-25.0	2	02-Dec-13	04-Dec-13	8
A2980	Milling	2	04-Dec-13	06-Dec-13	8
A2970	Paving IM-19.0D	2	06-Dec-13	10-Dec-13	8
I64 Ramp C and Spur C Improvements		28	06-Nov-13	18-Dec-13	2
A2990	Mobilization	2	06-Nov-13	08-Nov-13	2
A3020	Maintenance of Traffic	28	06-Nov-13	18-Dec-13	2
A3000	Erosion and Sediment Control - Phase 1	1	08-Nov-13	11-Nov-13	2
A3030	Earthwork - Rough Grade	10	11-Nov-13	25-Nov-13	2
A3050	Storm Drainage Structures	6	15-Nov-13	25-Nov-13	2
A3060	Storm Drainage Pipe	4	19-Nov-13	25-Nov-13	2
A3010	Erosion and Sediment Control - Phase 2	2	25-Nov-13	27-Nov-13	2
A3070	Storm Drainage Underdrain	2	25-Nov-13	27-Nov-13	2
A3090	Saw Cut Pavement	1	25-Nov-13	26-Nov-13	3
A3100	Concrete Curb and Gutter	2	27-Nov-13	03-Dec-13	2
A3140	Concrete CG-12	4	27-Nov-13	05-Dec-13	2
A3120	Concrete MS-1 and MS-2 Median	2	03-Dec-13	05-Dec-13	2
A3040	Earthwork - Fine Grade	5	05-Dec-13	12-Dec-13	2
A3150	Paving 21B	2	05-Dec-13	09-Dec-13	2
A3160	Paving BM-25.0	3	09-Dec-13	12-Dec-13	2
A3180	Milling	2	12-Dec-13	16-Dec-13	2
A3170	Paving IM-19.0D	2	16-Dec-13	18-Dec-13	2
I64 Ramp D and Spur D Improvements		28	06-Nov-13	18-Dec-13	2



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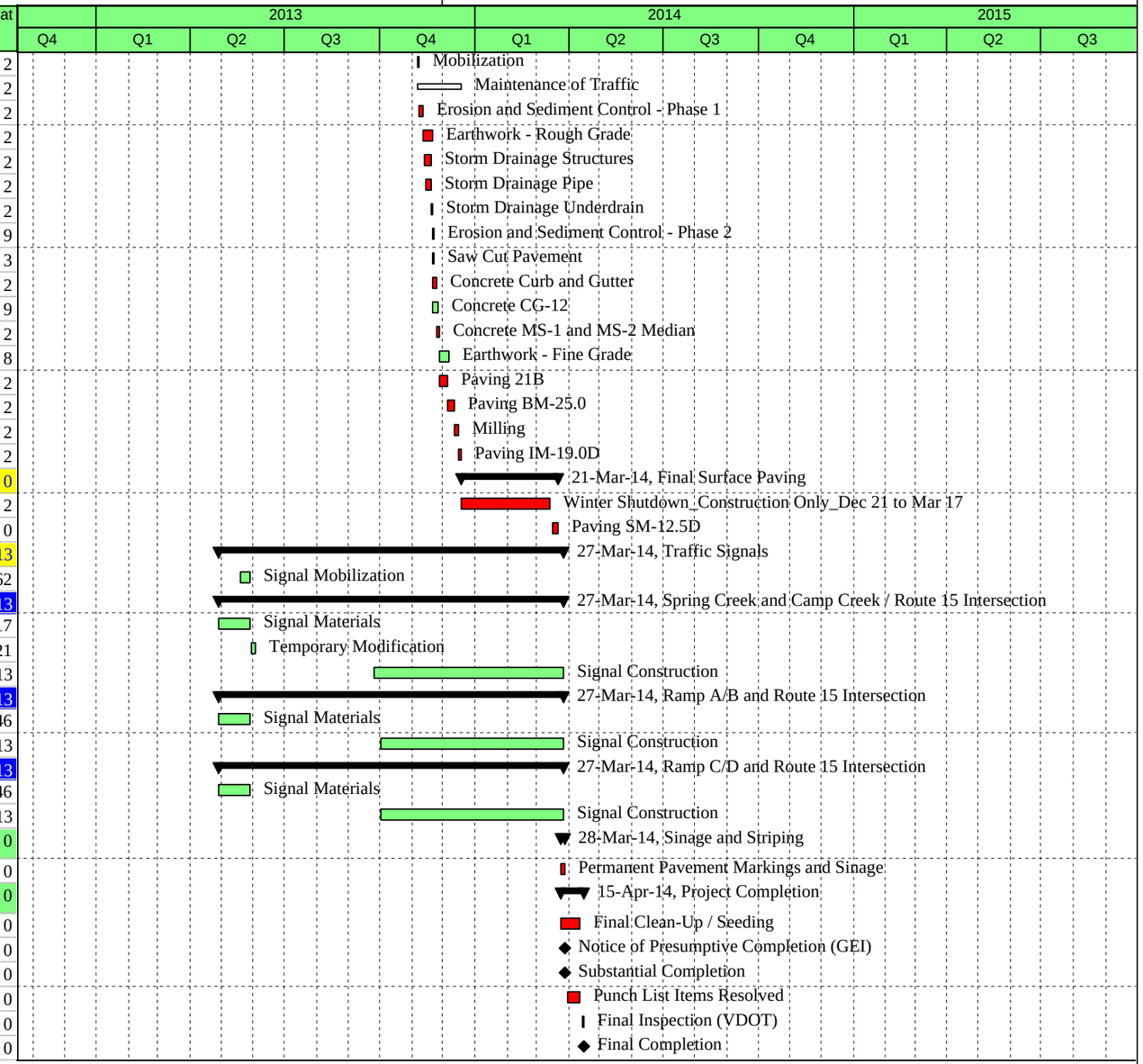
05-Jul-12 17:14

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
A3190	Mobilization	1	06-Nov-13	07-Nov-13	2
A3220	Maintenance of Traffic	28	06-Nov-13	18-Dec-13	2
A3200	Erosion and Sediment Control - Phase 1	2	07-Nov-13	11-Nov-13	2
A3230	Earthwork - Rough Grade	8	11-Nov-13	21-Nov-13	2
A3250	Storm Drainage Structures	5	12-Nov-13	19-Nov-13	2
A3260	Storm Drainage Pipe	3	14-Nov-13	19-Nov-13	2
A3270	Storm Drainage Underdrain	1	19-Nov-13	20-Nov-13	2
A3210	Erosion and Sediment Control - Phase 2	2	20-Nov-13	22-Nov-13	9
A3290	Saw Cut Pavement	2	20-Nov-13	22-Nov-13	3
A3300	Concrete Curb and Gutter	3	20-Nov-13	25-Nov-13	2
A3340	Concrete CG-12	4	20-Nov-13	26-Nov-13	9
A3320	Concrete MS-1 and MS-2 Median	2	25-Nov-13	27-Nov-13	2
A3240	Earthwork - Fine Grade	5	27-Nov-13	06-Dec-13	8
A3350	Paving 21B	4	27-Nov-13	05-Dec-13	2
A3360	Paving BM-25.0	4	05-Dec-13	11-Dec-13	2
A3380	Milling	3	11-Dec-13	16-Dec-13	2
A3370	Paving IM-19.0D	2	16-Dec-13	18-Dec-13	2
Final Surface Paving		7	19-Dec-13	21-Mar-14	0
A1100	Winter Shutdown_Construction Only_Dec 21 to ...	86	19-Dec-13	14-Mar-14	2
A3390	Paving SM-12.5D	5	17-Mar-14	21-Mar-14	0
Traffic Signals		174	29-Apr-13	27-Mar-14	13
A3400	Signal Mobilization	7	20-May-13	29-May-13	162
Spring Creek and Camp Creek / Route 15 Intersection		174	29-Apr-13	27-Mar-14	13
A3410	Signal Materials	30	29-Apr-13	28-May-13	317
A3550	Temporary Modification	3	30-May-13	03-Jun-13	221
A3420	Signal Construction	128	25-Sep-13	27-Mar-14	13
Ramp A/B and Route 15 Intersection		174	29-Apr-13	27-Mar-14	13
A3430	Signal Materials	30	29-Apr-13	28-May-13	146
A3440	Signal Construction	123	02-Oct-13	27-Mar-14	13
Ramp C/D and Route 15 Intersection		174	29-Apr-13	27-Mar-14	13
A3450	Signal Materials	30	29-Apr-13	28-May-13	146
A3460	Signal Construction	123	02-Oct-13	27-Mar-14	13
Sinage and Striping		5	24-Mar-14	28-Mar-14	0
A3470	Permanent Pavement Markings and Sinage	5	24-Mar-14	28-Mar-14	0
Project Completion		17	24-Mar-14	15-Apr-14	0
A3490	Final Clean-Up / Seeding	15	24-Mar-14	11-Apr-14	0
A3500	Notice of Presumptive Completion (GEI)	0		28-Mar-14	0
A3510	Substantial Completion	0		28-Mar-14	0
A3520	Punch List Items Resolved	10	31-Mar-14	11-Apr-14	0
A3530	Final Inspection (VDOT)	2	14-Apr-14	15-Apr-14	0
A3540	Final Completion	0		15-Apr-14*	0



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General Excavation, Inc.

9757 Rider Rd

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Section 4.6.2 Schedule Narrative

The GEI Team has developed the proposal schedule based on the requirements of Part 1, Section 4.6. The schedule was developed using software by Primavera Systems, Inc. The schedule is depicted in Gantt format and is organized by an outline layout. The schedule is organized into eight categories. The categories are: Miscellaneous, Hold and Witness Points, Permitting, Public Relation Activities, Right of Way Acquisition, Utility Relocations, Design Activities, and Construction Activities.

The schedule has been prepared in a manner that leads to four primary milestones. The milestones for successful completion of the project include; final construction plan approval, the switch from the existing traffic pattern into the diverging diamond interchange (DDI) configuration, substantial completion and final completion. In order to achieve these four milestones, the GEI Team will be required to mobilize our forces immediately upon notice to proceed. Our initial efforts will include the verification of survey and geotechnical data, and the conversion of our conceptual plans contained in Volume II into our right-of-way submission plans. It is at this point where our public relations campaign will begin in earnest to ensure the message of the pending DDI interchange is fully received and understood by the stakeholders.

The GEI Team will diligently pursue the approval of the construction plans and will consider opportunities along the way to “break” out portions of the plan to advance certain phases of the construction. The anticipated start date for the project does not achieve plan approval until May 14, 2012. Although the GEI Team will attempt to “break” out certain portions of the construction work, careful consideration of certain activities will need to be given to this option. Careful consideration is necessary in regards to the type of construction activity undertaken due to the potential of unsuitable and high moisture content dirt materials. It is desirable and has been assumed that earthwork on the project will not begin until June 2013.

The construction and transportation management plan (TMP)/maintenance of traffic (MOT) narrative located in Section 4.5 of the proposal describes, in more detail, the phasing of the project. The critical path items on the schedule, with regards to construction, will include the proper phasing of the TMP/MOT operation and implementation in the field combined with a sound public relations campaign that will keep all stakeholders aware of the progress and future work that may impact them. The order of the critical construction components to be completed are; pavement widening in the median and outside lanes of Route 15, ramp and spur improvements, DDI improvements, and conversion into a fully operational DDI.

WEST
64
Charlottesville

Proposal

A Design-Build Project

I-64/Route 15 (Zion Crossroads) Interchange Improvement

State Project Number: 0064-054-703, P101, R201, and C501
Federal Project Number: IM-064-2 (155)
Contract ID Number: C00086453DB48

Prepared for: VDOT

Prepared by: General Excavation Inc. 540-439-2202

In association with: Kimley-Horn and Associates, Inc.

Volume II
July 2012

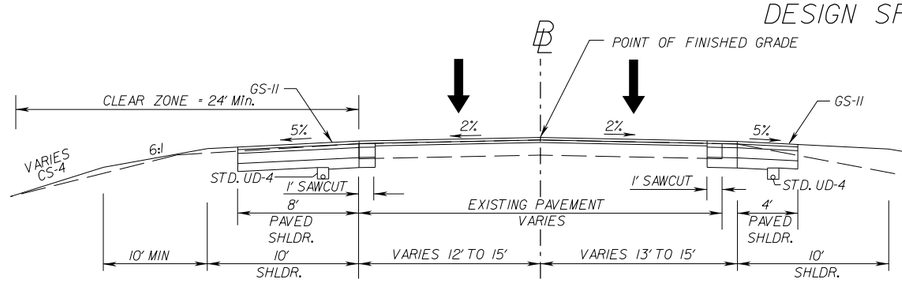
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	14

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.

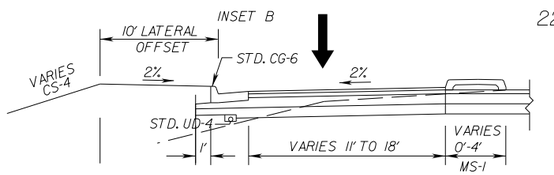
TYPICAL SECTIONS

ROUTE 15
GS-2
DESIGN SPEED 50 MPH

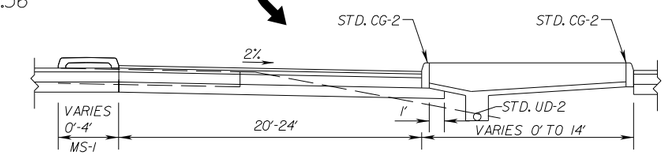


SB STATION 205+88.17 TO SB STATION 217+80.62

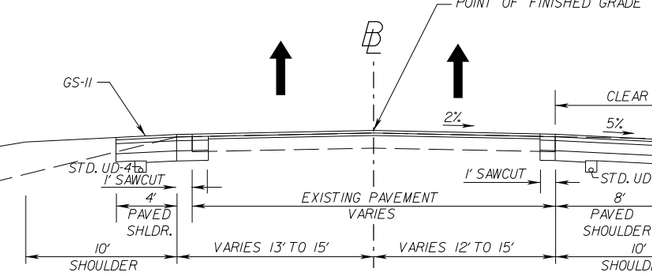
SB STATION 228+09.22 TO SB STATION 239+39.36



SB STATION 205+88.17 TO SB STATION 216+32.02

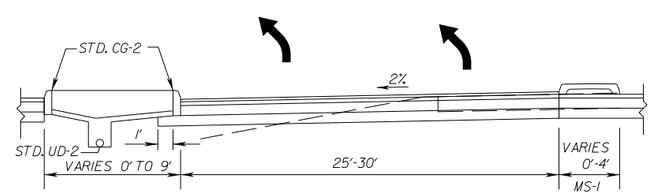


SB STATION 207+65.22 TO SB STATION 213+75.00

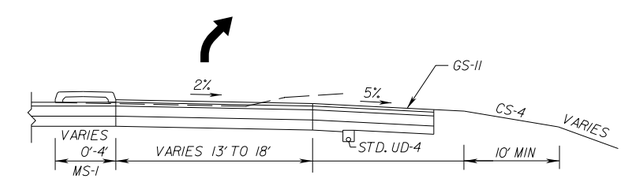


NB STATION 107+65.22 TO NB STATION 177+80.67

NB STATION 128+09.17 TO NB STATION 139+37.24



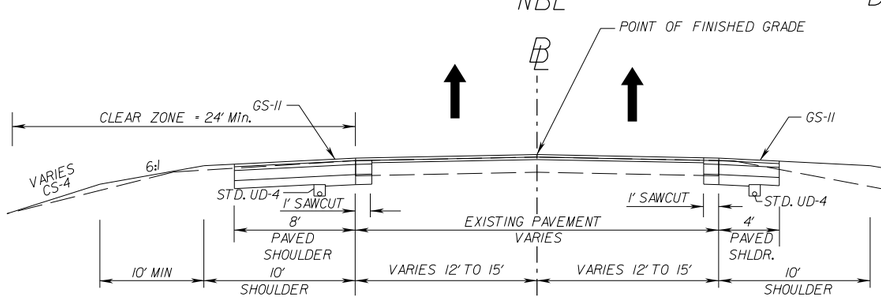
NB STATION 131+70.00 TO NB STATION 139+37.24



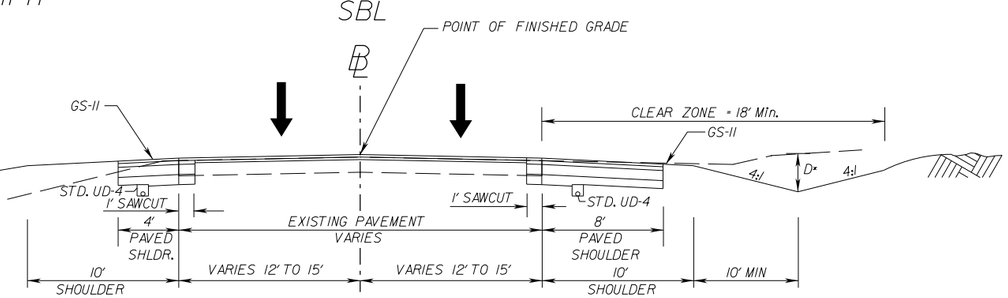
NB STATION 129+42.21 TO NB STATION 139+37.24

D* - SEE CROSS SECTIONS (DEPTH VARIES)

ROUTE 15
GS-6
DESIGN SPEED 30 MPH



NB STATION 217+80.62 TO NB STATION 228+09.22



SB STATION 117+80.67 TO SB STATION 128+09.17

PROJECT	SHEET NO.
0064-054-703	14

5:52:25 PM
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PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

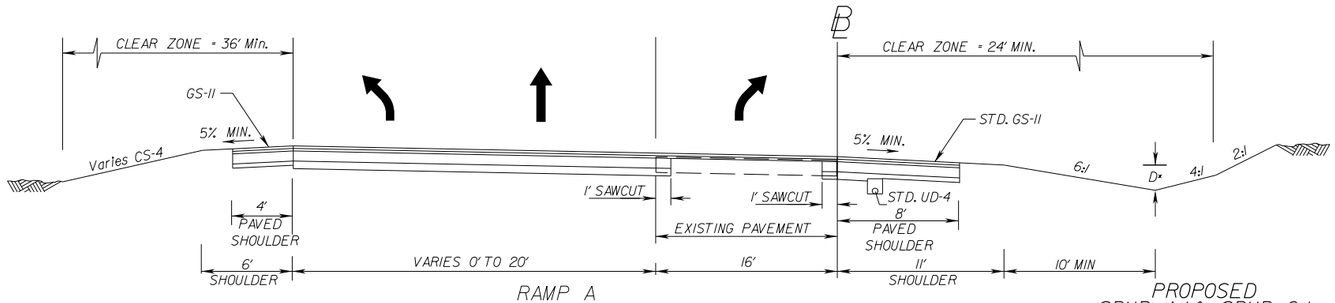
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	15

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.
540-439-2202

TYPICAL SECTIONS

RAMPS
GS-R

PROPOSED RAMP A & RAMP C
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 60 MPH



RAMP A

STATION	TO	STATION
310+10.41		314+92.18

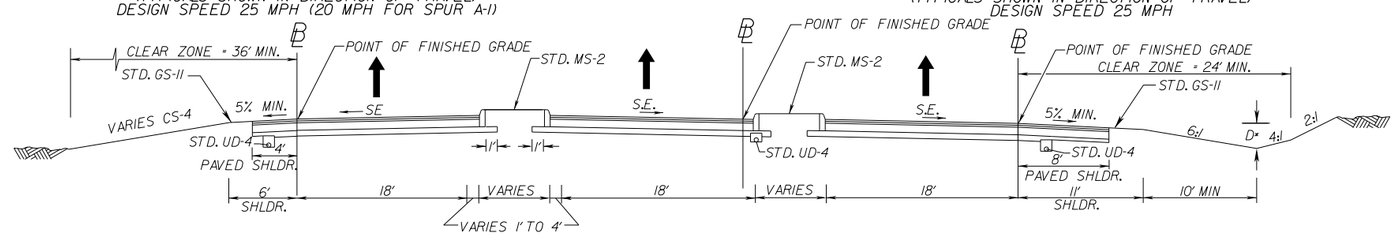
RAMP C

STATION	TO	STATION
507+80.00		502+10.69

PROPOSED SPUR A-1 & SPUR C-1
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 25 MPH (20 MPH FOR SPUR A-1)

PROPOSED SPUR A-2 & SPUR C-2
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 25 MPH

PROPOSED RAMP A & RAMP C
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 25 MPH



SPUR A-1

STATION	TO	STATION
10+00.00		11+70.47

SPUR C-1

STATION	TO	STATION
10+00.00		11+66.35

SPUR A-2

STATION	TO	STATION
20+00.00		21+91.25

SPUR C-2

STATION	TO	STATION
20+00.00		22+00.09

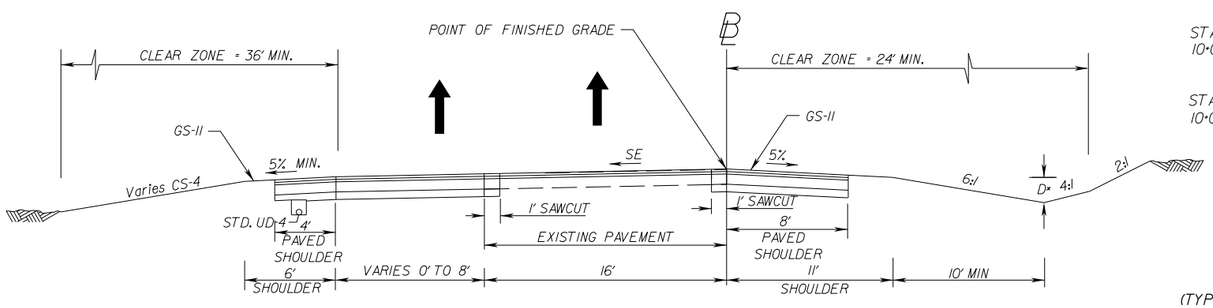
RAMP A

STATION	TO	STATION
314+92.18		317+03.58

RAMP C

STATION	TO	STATION
500+00.00		502+10.69

PROPOSED RAMP B & RAMP D
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 50 MPH



RAMP B

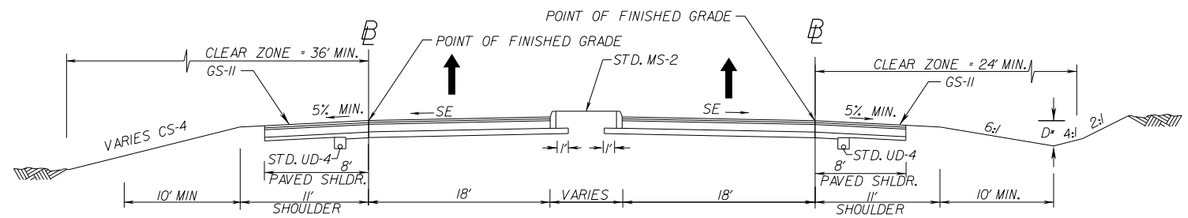
STATION	TO	STATION
403+28.13		415+40.00

RAMP D

STATION	TO	STATION
616+14.31		603+75.00

PROPOSED RAMP B & RAMP D
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 25 MPH

PROPOSED SPUR B-1 & SPUR D-1
(TYPICALS SHOWN IN DIRECTION OF TRAVEL)
DESIGN SPEED 30 MPH (25 MPH FOR SPUR B-1)



RAMP B

STATION	TO	STATION
400+00.00		403+28.13

RAMP D

STATION	TO	STATION
616+14.31		619+35.39

SPUR B-1

STATION	TO	STATION
30+00.00		33+21.34

SPUR D-1

STATION	TO	STATION
60+00.00		63+17.60

NOTE:
1) DITCH DEPTH VARIES.

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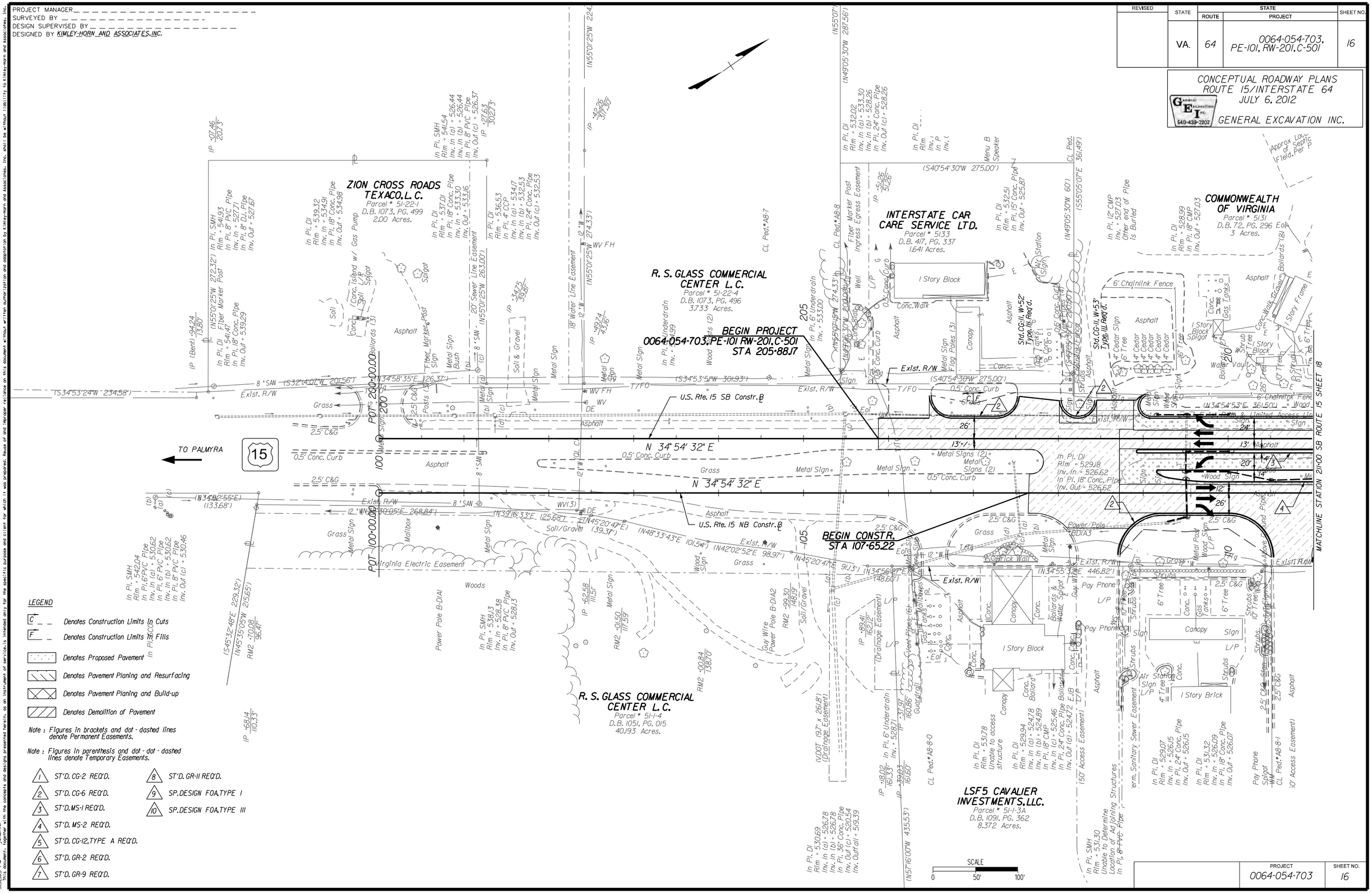
5:29:25 PM jnoriker

	PROJECT	SHEET NO.
	0064-054-703	15

PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, PE-101, RW-201, C-501	16

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.



LEGEND

- C — Denotes Construction Limits In Cuts
- F — Denotes Construction Limits In Fills
- Denotes Proposed Pavement
- Denotes Pavement Planing and Resurfacing
- Denotes Pavement Planing and Build-up
- Denotes Demolition of Pavement

Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures in parenthesis and dot - dot - dashed lines denote Temporary Easements.

1. ST'D. CG-2 REQ'D.
2. ST'D. CG-6 REQ'D.
3. ST'D. MS-1 REQ'D.
4. ST'D. MS-2 REQ'D.
5. ST'D. CG-12, TYPE A REQ'D.
6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN FOA, TYPE I
10. SP. DESIGN FOA, TYPE III

PROJECT	SHEET NO.
0064-054-703	16

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5:52:05 PM jpulliam

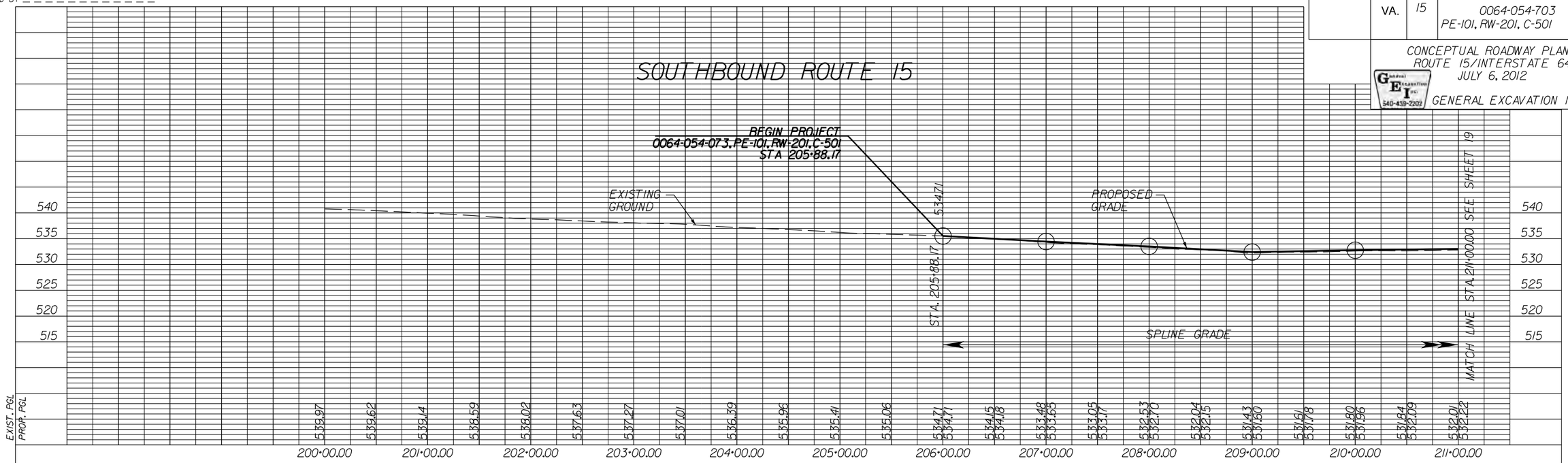
7/3/2012 K:\RIC_RDMY\13162000_ZionXRoads\CADD\REF\Sheets\d86453003.dgn

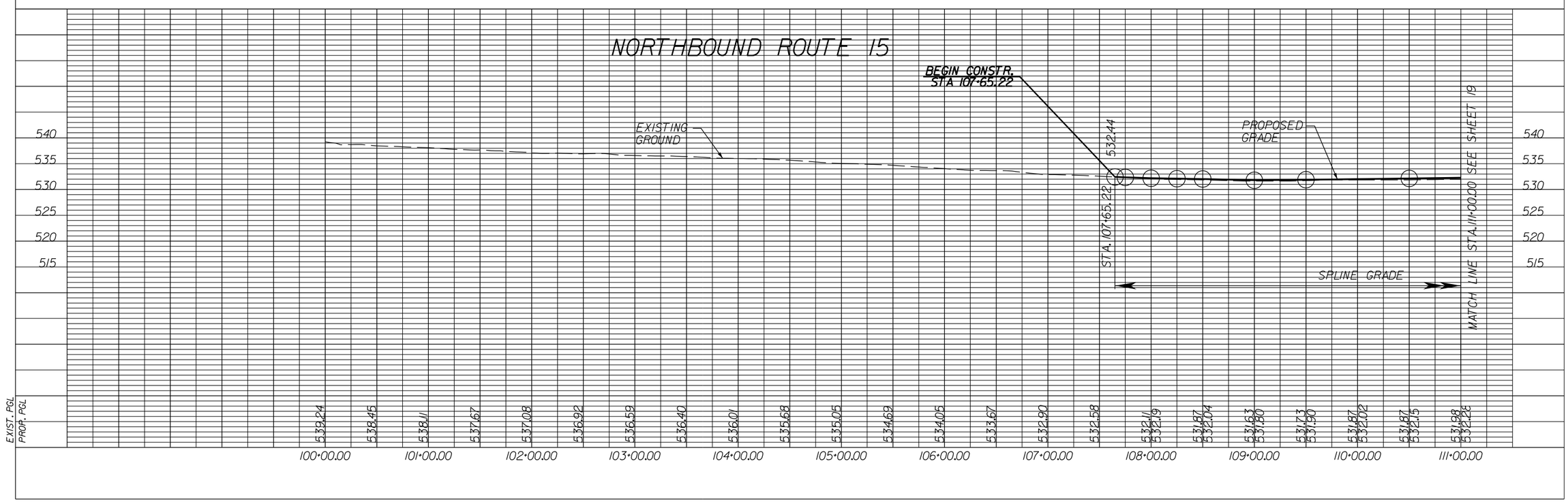
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	15	0064-054-703 PE-101, RW-201, C-501	17

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. GEI 540-439-2202
GENERAL EXCAVATION INC.





VERT. 1" = 10'
HORIZ. 1" = 50'

	PROJECT	SHEET NO.
	0064-054-703	17

5:59:26 PM jpaulker

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7/3/2012

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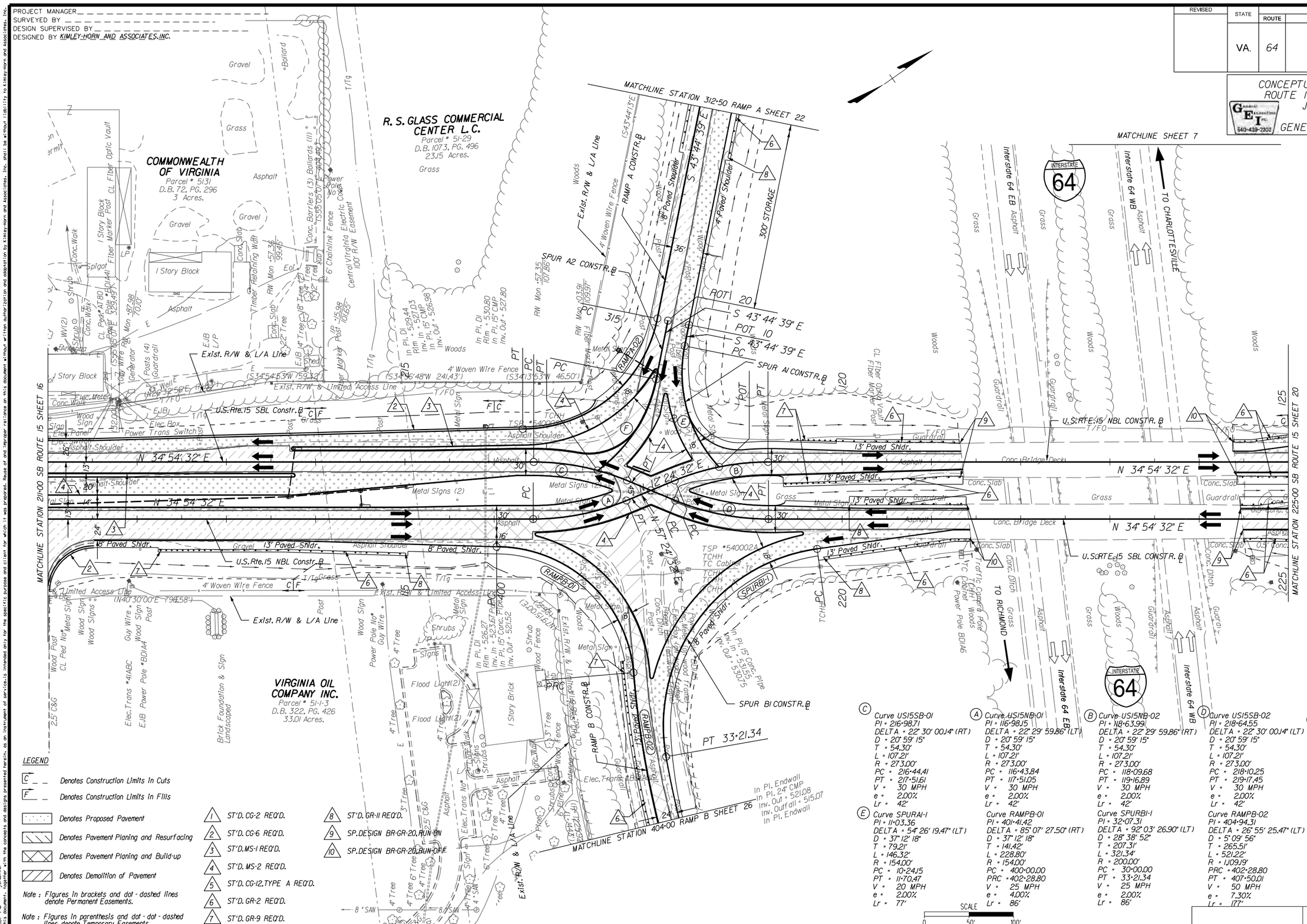
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	18

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.
540-439-2202



LEGEND

C _ _ Denotes Construction Limits In Cuts

F _ _ Denotes Construction Limits In Fills

Denotes Proposed Pavement

Denotes Pavement Planing and Resurfacing

Denotes Pavement Planing and Build-up

Denotes Demolition of Pavement

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1 ST'D. CG-2 REQ'D.
2 ST'D. CG-6 REQ'D.
3 ST'D. MS-1 REQ'D.
4 ST'D. MS-2 REQ'D.
5 ST'D. CG-12, TYPE A REQ'D.
6 ST'D. GR-2 REQ'D.
7 ST'D. GR-9 REQ'D.
8 ST'D. GR-11 REQ'D.
9 SP. DESIGN BR-GR-20, RUN ON
10 SP. DESIGN BR-GR-20, RUN OFF

(C) Curve US15SB-01
PI = 216+98.71
DELTA = 22° 30' 00.4" (RT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 216+44.41
PT = 217+51.61
V = 30 MPH
e = 2.00%
Lr = 42'

(A) Curve US15NB-01
PI = 116+98.15
DELTA = 22° 29' 59.86" (LT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 116+43.84
PT = 117+51.05
V = 30 MPH
e = 2.00%
Lr = 42'

(B) Curve US15NB-02
PI = 118+63.99
DELTA = 22° 29' 59.86" (RT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 118+09.68
PT = 119+16.89
V = 30 MPH
e = 2.00%
Lr = 42'

(D) Curve US15SB-02
PI = 218+64.55
DELTA = 22° 30' 00.4" (LT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 218+10.25
PT = 219+17.45
V = 30 MPH
e = 2.00%
Lr = 42'

(F) Curve SPURA2-1
PI = 21+32.19
DELTA = 42° 36' 12.06" (RT)
D = 34° 18' 32"
T = 65.12'
L = 124.18'
R = 167.00'
PC = 20+67.08
PT = 21+91.25
V = 25 MPH
e = 2.00%
Lr = 0'

(E) Curve SPUR A1-1
PI = 11+03.36
DELTA = 54° 26' 19.47" (LT)
D = 37° 12' 18"
T = 79.21'
L = 146.32'
R = 154.00'
PC = 10+24.15
PT = 11+70.47
V = 20 MPH
e = 2.00%
Lr = 77'

Curve RAMPB-01
PI = 401+41.42
DELTA = 85° 07' 27.50" (RT)
D = 37° 12' 18"
T = 141.42'
L = 228.80'
R = 154.00'
PC = 400+00.00
PRC = 402+28.80
V = 25 MPH
e = 4.00%
Lr = 86'

Curve SPUR B1-1
PI = 32+07.31
DELTA = 92° 03' 26.90" (LT)
D = 28° 38' 52"
T = 207.31'
L = 321.34'
R = 200.00'
PC = 30+00.00
PT = 33+21.34
V = 25 MPH
e = 2.00%
Lr = 86'

Curve RAMPB-02
PI = 404+94.31
DELTA = 26° 55' 25.47" (LT)
D = 5° 09' 56"
T = 265.51'
L = 521.22'
R = 1109.19'
PRC = 402+28.80
PT = 407+50.01
V = 50 MPH
e = 7.30%
Lr = 177'

Curve RAMPA-02
PI = 316+18.34
DELTA = 78° 39' 10.87" (RT)
D = 37° 12' 18"
T = 126.17'
L = 211.40'
R = 154.00'
PC = 314+92.18
PT = 317+03.58
V = 25 MPH
e = 4.00%
Lr = 86'

PROJECT	SHEET NO.
0064-054-703	18

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5:52:07 PM jnoalver

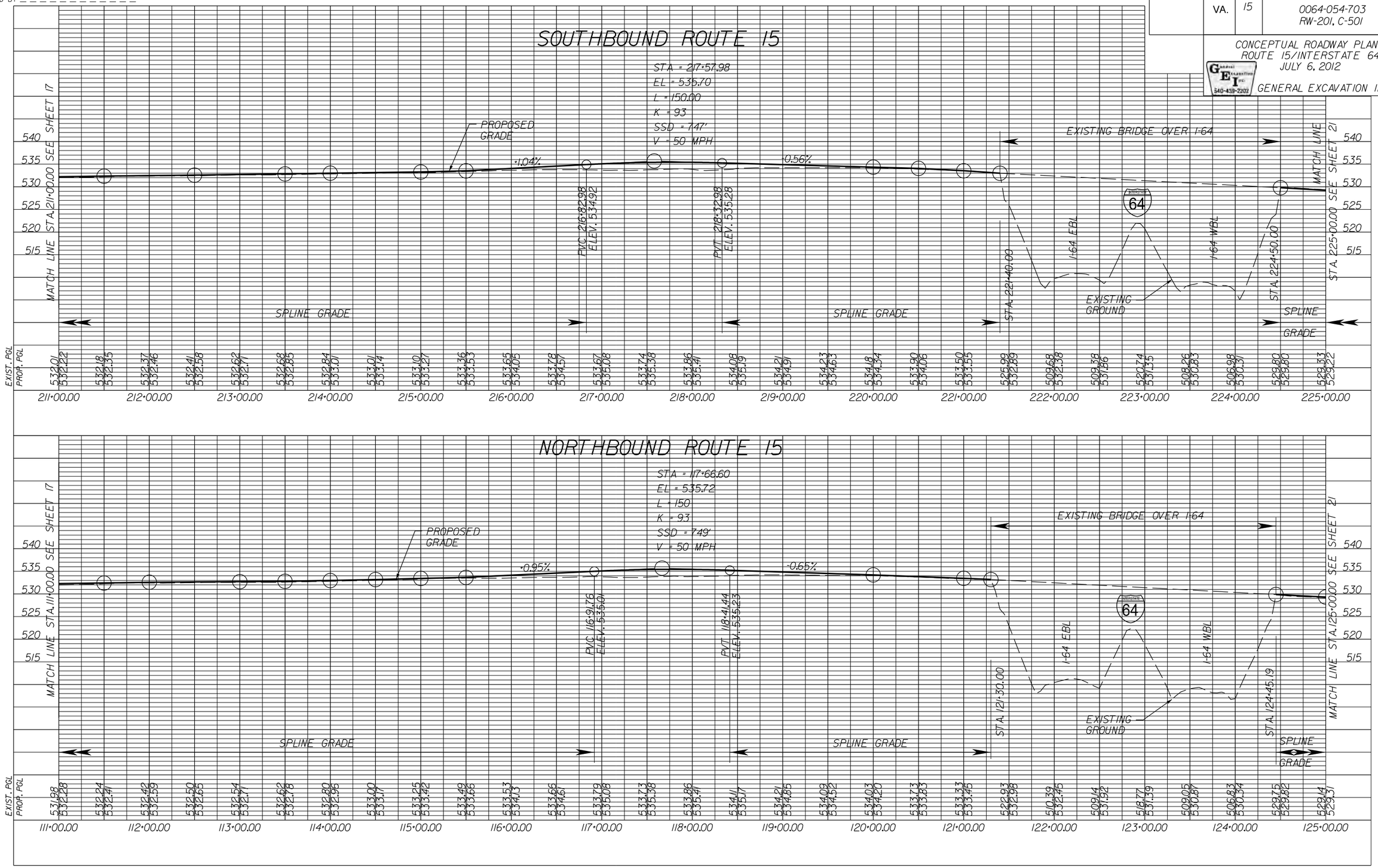
7/3/2012 K:\RIC_RDWY\13162000_ZionXRoads\CADD\REF\Sheets\d86453004.dgn

PROJECT MANAGER _ _ _ _ _ _ _ _ _ _ _ _
SURVEYED BY _ _ _ _ _ _ _ _ _ _
DESIGN SUPERVISED BY _ _ _ _ _ _ _ _ _ _ _ _
DESIGNED BY _ _ _ _ _ _ _ _ _ _ _ _ _ _

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	15	0064-054-703 RW-201, C-501	19

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

GENERAL EXCAVATION INC.
540-439-2202



VERT. 1" = 10'
HORIZ. 1" = 50'

PROJECT	SHEET NO.
0064-054-703	19

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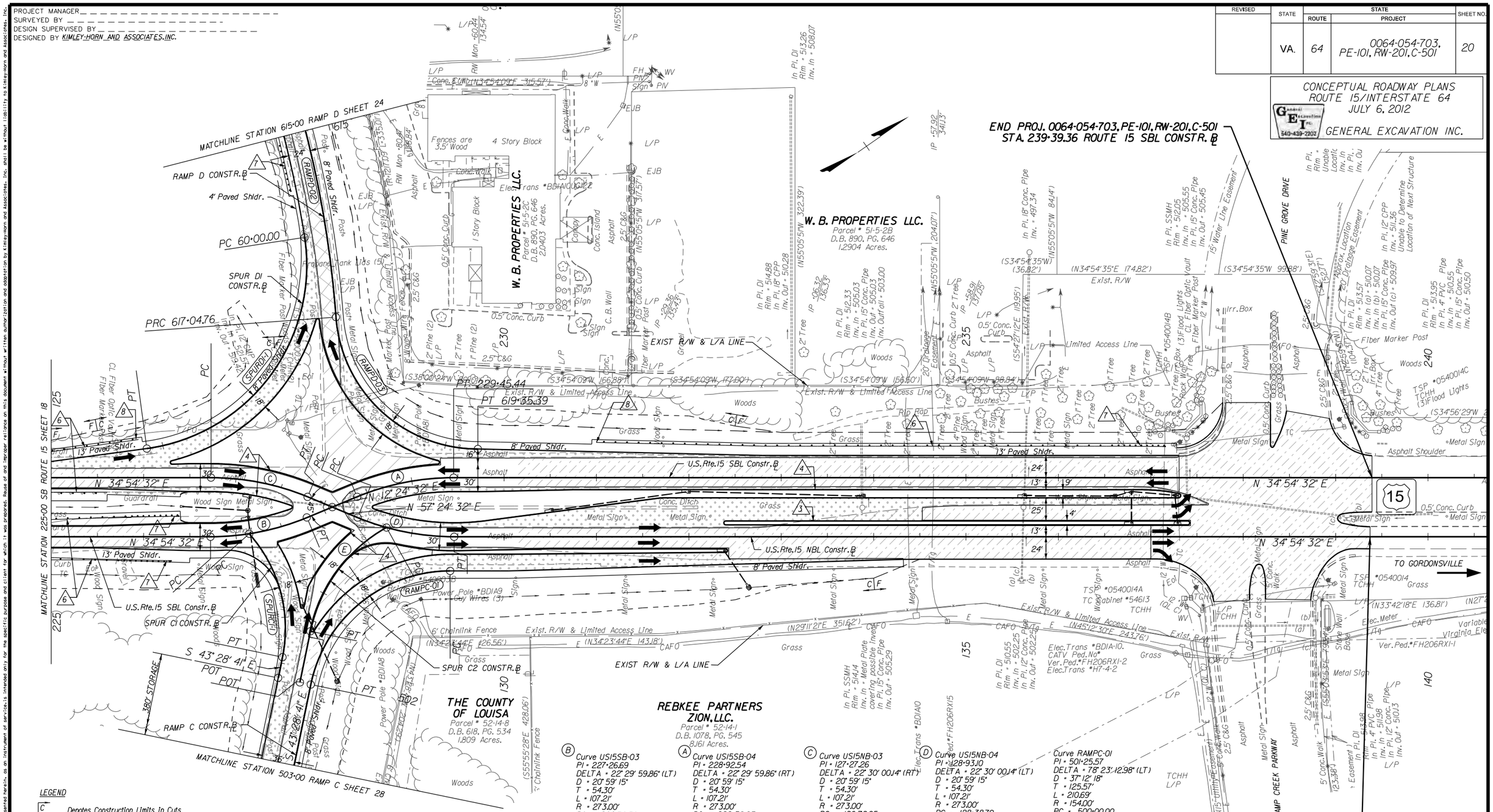
5:50:07 PM jmpilker
7/3/2012
K:\RIC_RDWY\113162000_ZionXRoads\CADD\REF\Sheets\d86453004a.dgn

PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	64	0064-054-703, PE-101, RW-201, C-501	20

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. 540-439-2202
GENERAL EXCAVATION INC.



LEGEND

C _ _ Denotes Construction Limits In Cuts

F _ _ Denotes Construction Limits In Fills

Denotes Proposed Pavement

Denotes Pavement Planing and Resurfacing

Denotes Pavement Planing and Build-up

Denotes Demolition of Pavement

Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures In parenthesis and dot - dot - dashed lines denote Temporary Easements.

1. ST'D. CG-2 REQ'D.
2. ST'D. CG-6 REQ'D.
3. ST'D. MS-1 REQ'D.
4. ST'D. MS-2 REQ'D.
5. ST'D. CG-12, TYPE A REQ'D.
6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN BR-GR-20, RUN-ON
10. SP. DESIGN BR-GR-20, RUN-OFF

(B) Curve USI5SB-03
PI = 227+26.69
DELTA = 22° 29' 59.86" (LT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 226+72.39
PT = 227+79.60
V = 30 MPH
e = 2.00%
Lr = 42'

Curve SPURCI-1
PI = 40+77.41
DELTA = 53° 22' 22.54" (RT)
D = 37° 12' 18"
T = 77.41'
L = 143.46'
R = 154.00'
PC = 40+00.00
PT = 41+43.46
V = 25 MPH
e = 4.00%
Lr = NONE

(A) Curve USI5SB-04
PI = 228+92.54
DELTA = 22° 29' 59.86" (RT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 228+38.23
PT = 229+45.44
V = 30 MPH
e = 2.00%
Lr = 42'

(E) Curve SPURC2-1
PI = 50+76.62
DELTA = 49° 17' 25.52" (LT)
D = 34° 18' 32"
T = 76.62'
L = 143.67'
R = 167.00'
PC = 50+00.00
PT = 51+43.67
V = 25 MPH
e = 2.00%
Lr = NONE

(C) Curve USI5NB-03
PI = 127+27.26
DELTA = 22° 30' 00.14" (RT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 126+72.95
PT = 127+80.16
V = 30 MPH
e = 2.00%
Lr = 42'

Curve SPURDI-1
PI = 62+03.47
DELTA = 90° 59' 04.45" (RT)
D = 28° 38' 52"
T = 203.47'
L = 317.60'
R = 200.00'
PC = 60+00.00
PT = 63+17.60
V = 30 MPH
e = 2.00%
Lr = 86'

(D) Curve USI5NB-04
PI = 128+93.10
DELTA = 22° 30' 00.14" (LT)
D = 20° 59' 15"
T = 54.30'
L = 107.21'
R = 273.00'
PC = 128+38.79
PT = 129+46.00
V = 30 MPH
e = 2.00%
Lr = 42'

Curve RAMPD-02
PI = 614+48.61
DELTA = 26° 02' 55.10" (RT)
D = 4° 59' 43"
T = 265.32'
L = 521.47'
R = 1,147.00'
PC = 611+83.29
PRC = 617+04.76
V = 50 MPH
e = 7.10%
Lr = 108'

Curve RAMPC-01
PI = 501+25.57
DELTA = 78° 23' 12.98" (LT)
D = 37° 12' 18"
T = 125.57'
L = 210.69'
R = 154.00'
PC = 500+00.00
PT = 502+10.69
V = 25 MPH
e = 4.00%
Lr = 86'

Curve RAMPD-03
PI = 618+47.88
DELTA = 85° 48' 18.10" (LT)
D = 37° 12' 18"
T = 143.12'
L = 230.63'
R = 154.00'
PRC = 617+04.76
PT = 619+35.39
V = 25 MPH
e = 4.00%
Lr = 86'

SCALE
0 50' 100'

PROJECT	SHEET NO.
0064-054-703	20

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5:52:08 PM jpadilar

7/3/2012 K:\RIC_RDWY\13\62000_ZIonXRoads\CADD\REF\Sheets\d86453005.dgn

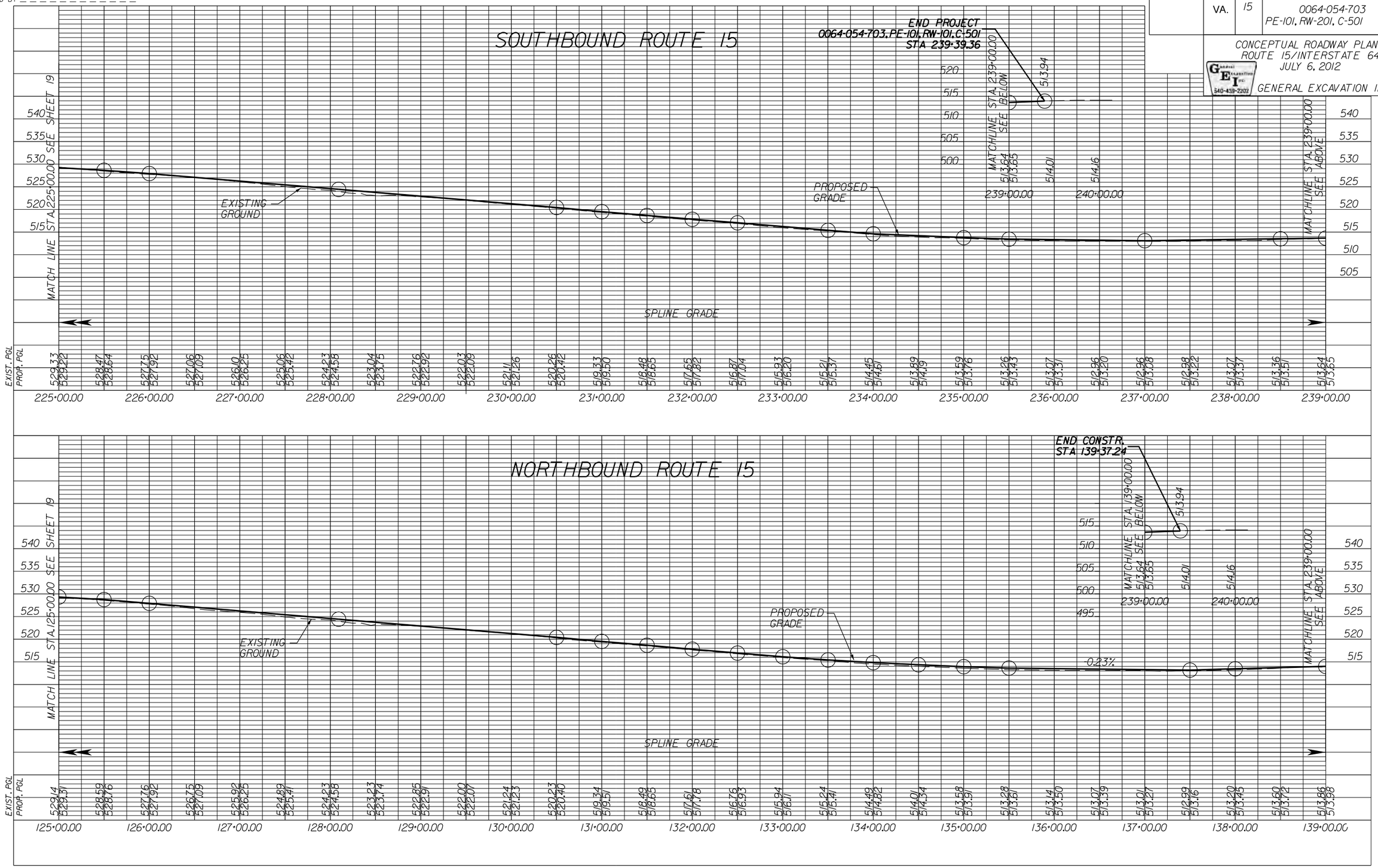
PROJECT MANAGER _ _ _ _ _ _ _ _ _ _ _ _
SURVEYED BY _ _ _ _ _ _ _ _ _ _
DESIGN SUPERVISED BY _ _ _ _ _ _ _ _ _ _ _ _
DESIGNED BY _ _ _ _ _ _ _ _ _ _ _ _ _ _

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	15	0064-054-703 PE-101, RW-201, C-501	21

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. GEI 540-439-2202

GENERAL EXCAVATION INC.



VERT. 1" = 10'
HORIZ. 1" = 50'

PROJECT	SHEET NO.
0064-054-703	21

5:59:09 PM jpoulier

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PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	22

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.
540-439-2202

LEGEND

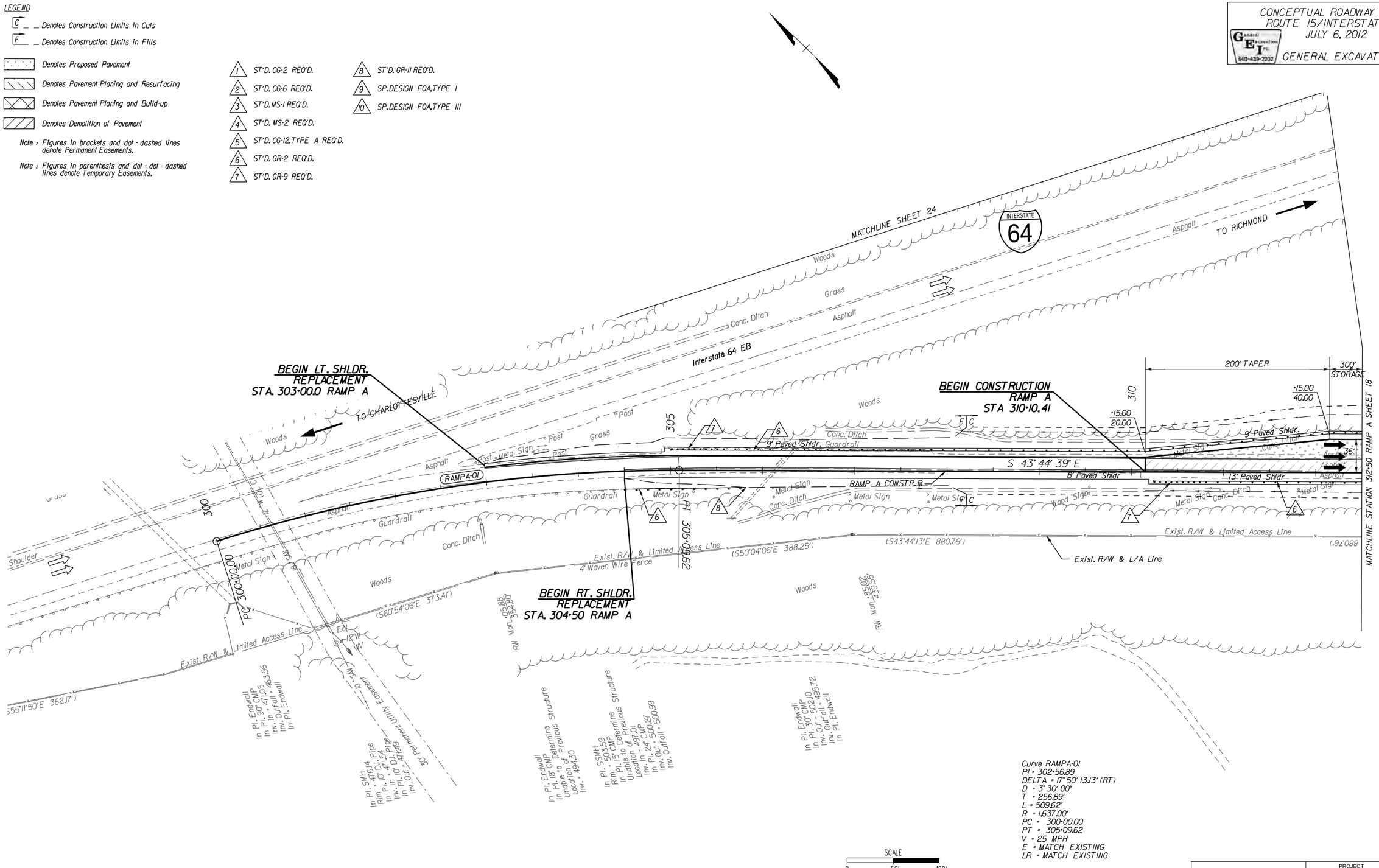
C _ _ Denotes Construction Limits In Cuts
F _ _ Denotes Construction Limits In Fills

Denotes Proposed Pavement
Denotes Pavement Planing and Resurfacing
Denotes Pavement Planing and Build-up
Denotes Demolition of Pavement

Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures in parenthesis and dot - dot - dashed lines denote Temporary Easements.

1 ST'D. CG-2 REQ'D.
2 ST'D. CG-6 REQ'D.
3 ST'D. MS-1 REQ'D.
4 ST'D. MS-2 REQ'D.
5 ST'D. CG-12, TYPE A REQ'D.
6 ST'D. GR-2 REQ'D.
7 ST'D. GR-9 REQ'D.
8 ST'D. GR-11 REQ'D.
9 SP. DESIGN FOA, TYPE I
10 SP. DESIGN FOA, TYPE III



PROJECT	SHEET NO.
0064-054-703	22

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5:52:09 PM jmalier
7/3/2012 K:\RIC_RDWY\13162000_ZionXRoads\CADD\REF\Sheets\d86453006.dgn

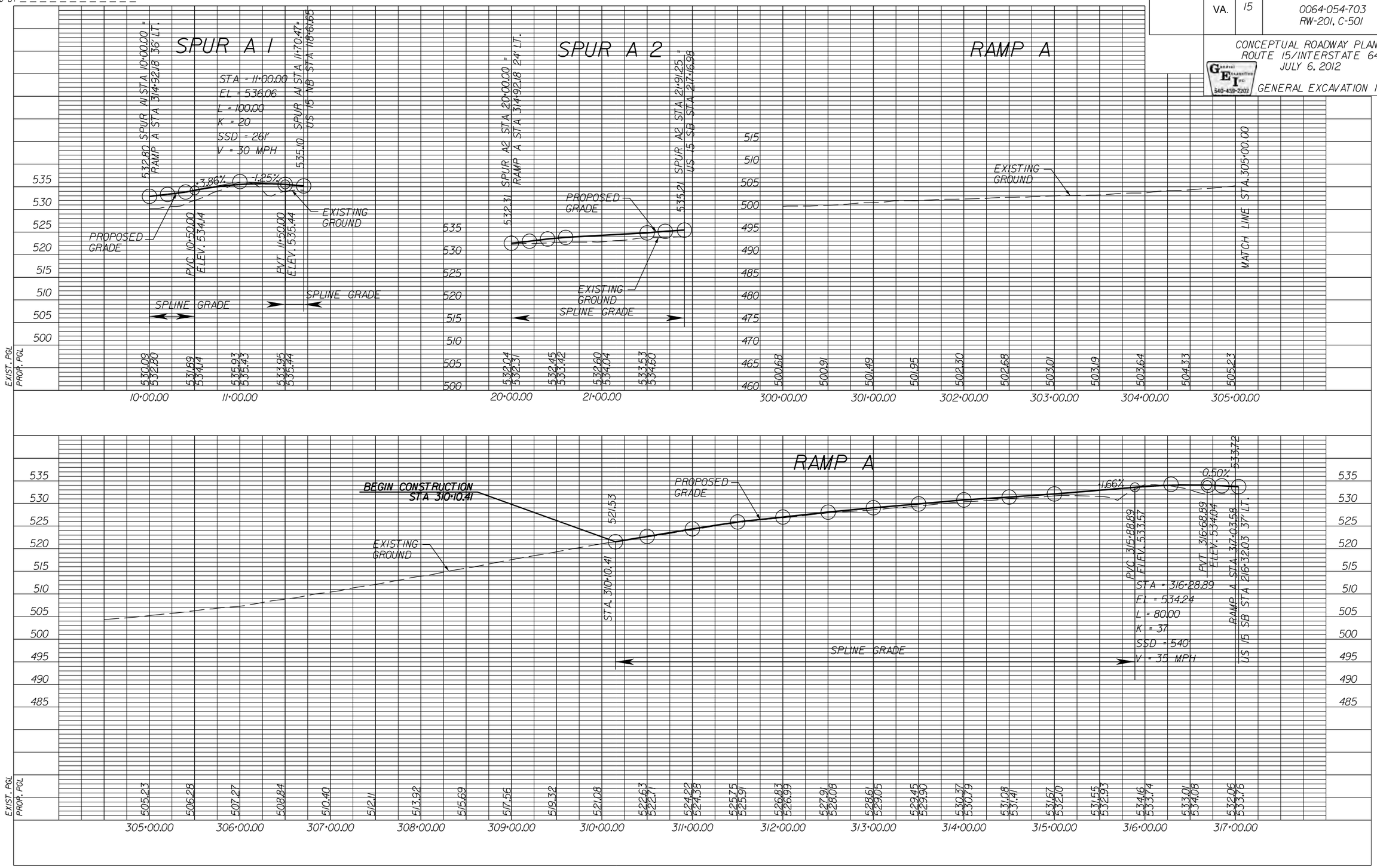
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	15	0064-054-703 RW-201, C-501	23

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. 540-439-2202

GENERAL EXCAVATION INC.



VERT. 1" = 10'
HORIZ. 1" = 50'

PROJECT	SHEET NO.
0064-054-703	23

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5:52:10 PM jpoulliar
7/3/2012
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PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	24

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.

LEGEND

- C _ _ Denotes Construction Limits in Cuts
- F _ _ Denotes Construction Limits in Fills
- Denotes Proposed Pavement
- Denotes Pavement Planing and Resurfacing
- Denotes Pavement Planing and Build-up
- Denotes Demolition of Pavement

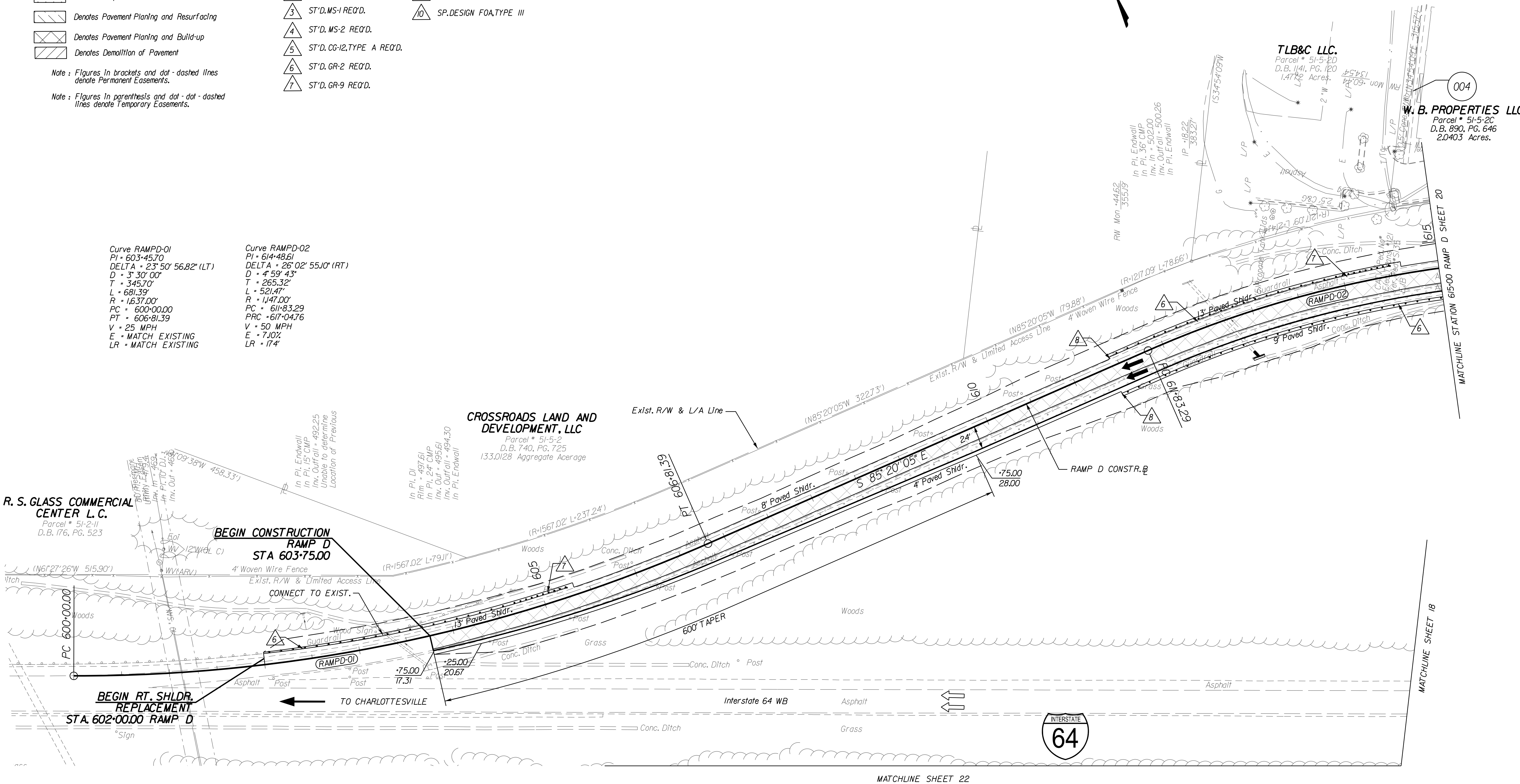
Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures in parenthesis and dot - dot - dashed lines denote Temporary Easements.

1. ST'D. CG-2 REQ'D.
2. ST'D. CG-6 REQ'D.
3. ST'D. MS-1 REQ'D.
4. ST'D. MS-2 REQ'D.
5. ST'D. CG-12, TYPE A REQ'D.
6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN FOA, TYPE I
10. SP. DESIGN FOA, TYPE III

Curve RAMPD-01
PI = 603+45.70
DELTA = 23° 50' 56.82" (LT)
D = 3° 30' 00"
T = 345.70'
L = 681.39'
R = 1,637.00'
PC = 600+00.00
PT = 606+81.39
V = 25 MPH
E = MATCH EXISTING
LR = MATCH EXISTING

Curve RAMPD-02
PI = 614+48.61
DELTA = 26° 02' 55.10" (RT)
D = 4° 59' 43"
T = 265.32'
L = 521.47'
R = 1,147.00'
PC = 611+83.29
PRC = 617+04.76
V = 50 MPH
E = 7.10%
LR = 174'



SCALE 0 50' 100'

PROJECT	SHEET NO.
0064-054-703	24

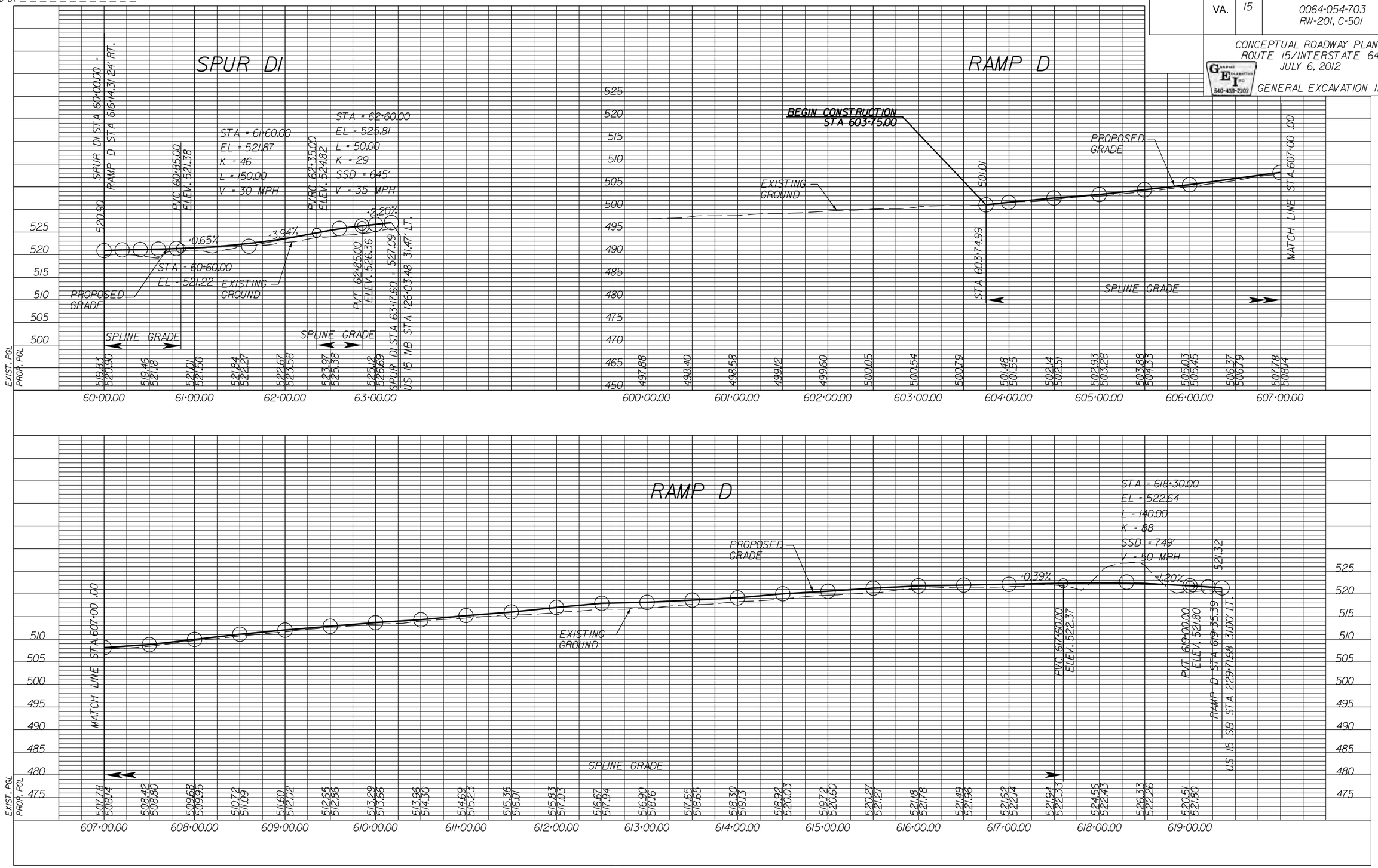
7/3/2012 K:\RIC_RDWY\113162000_ZionXRoads\CADD\REF\Sheets\d86453007.dgn

PROJECT MANAGER _ _ _ _ _ _ _ _ _ _ _ _
SURVEYED BY _ _ _ _ _ _ _ _ _ _
DESIGN SUPERVISED BY _ _ _ _ _ _ _ _ _ _ _ _
DESIGNED BY _ _ _ _ _ _ _ _ _ _ _ _ _ _

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	15	0064-054-703 RW-201, C-501	25

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

GENERAL EXCAVATION INC.



PROJECT	SHEET NO.
0064-054-703	25

VERT. 1" = 10'
HORIZ. 1" = 50'

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7/3/2012
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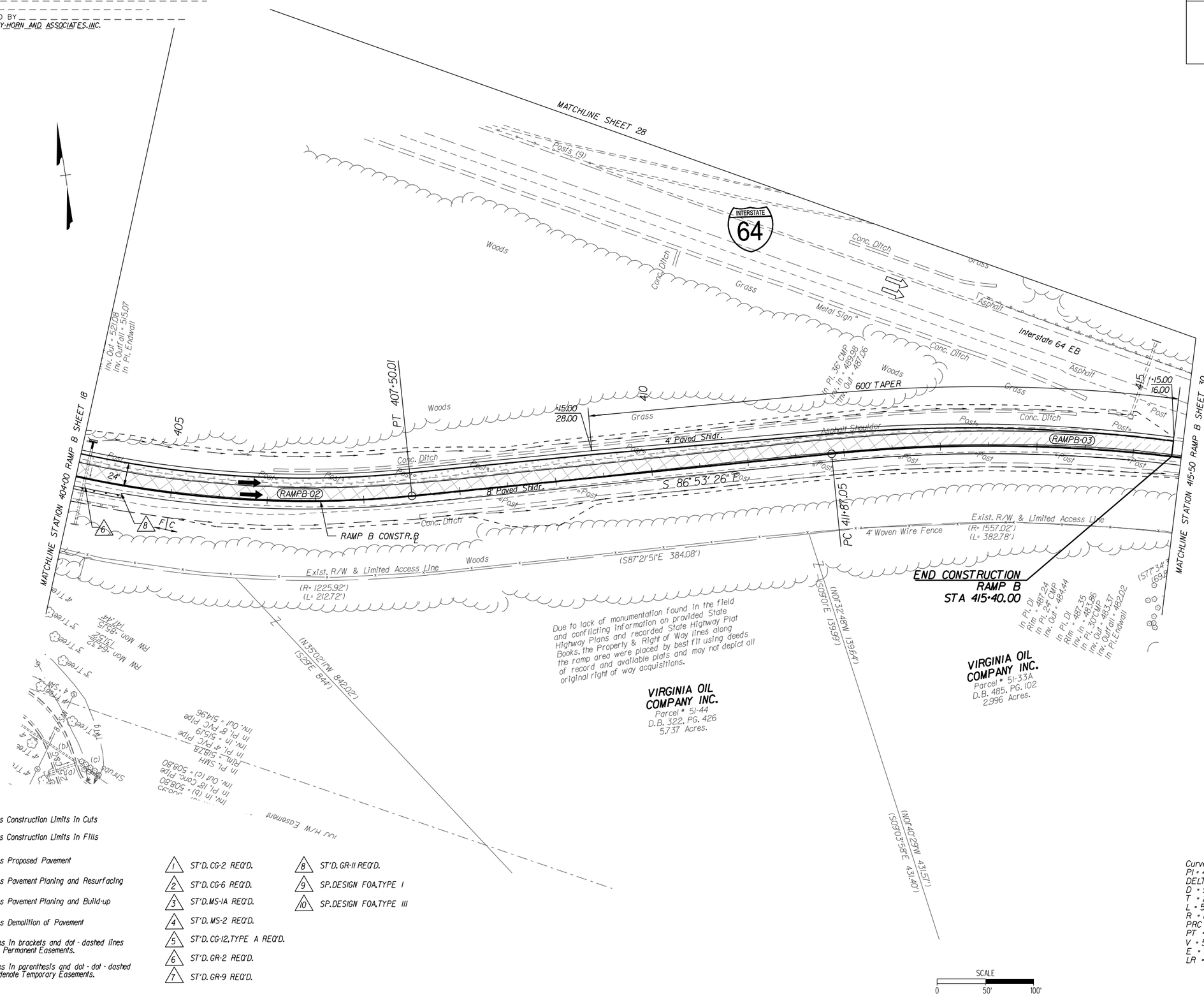
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	26

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.



LEGEND

C — Denotes Construction Limits In Cuts

F — Denotes Construction Limits In Fills

Denotes Proposed Pavement

Denotes Pavement Planing and Resurfacing

Denotes Pavement Planing and Build-up

Denotes Demolition of Pavement

Note : Figures in brackets and dot - dashed lines denote Permanent Easements.

Note : Figures in parenthesis and dot - dot - dashed lines denote Temporary Easements.

1. ST'D. CG-2 REQ'D.
2. ST'D. CG-6 REQ'D.
3. ST'D. MS-1A REQ'D.
4. ST'D. MS-2 REQ'D.
5. ST'D. CG-12, TYPE A REQ'D.
6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN FOA, TYPE I
10. SP. DESIGN FOA, TYPE III

Curve RAMPB-02
PI = 404+94.31
DELTA = 26° 55' 25.47" (LT)
D = 5° 09' 56"
T = 265.51'
L = 521.22'
R = 1,109.19'
PRC = 402+28.80
PT = 407+50.01
V = 50 MPH
E = 7.30%
LR = 177'

Curve RAMPB-03
PI = 415+48.83
DELTA = 24° 55' 27.97" (RT)
D = 3° 30' 00"
T = 361.78'
L = 712.12'
R = 1,637.00'
PC = 411+87.05
PT = 418+99.16
V = 25 MPH
E = MATCH EXISTING
LR = MATCH EXISTING

PROJECT	SHEET NO.
0064-054-703	26

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5:52:11 PM jmalliver

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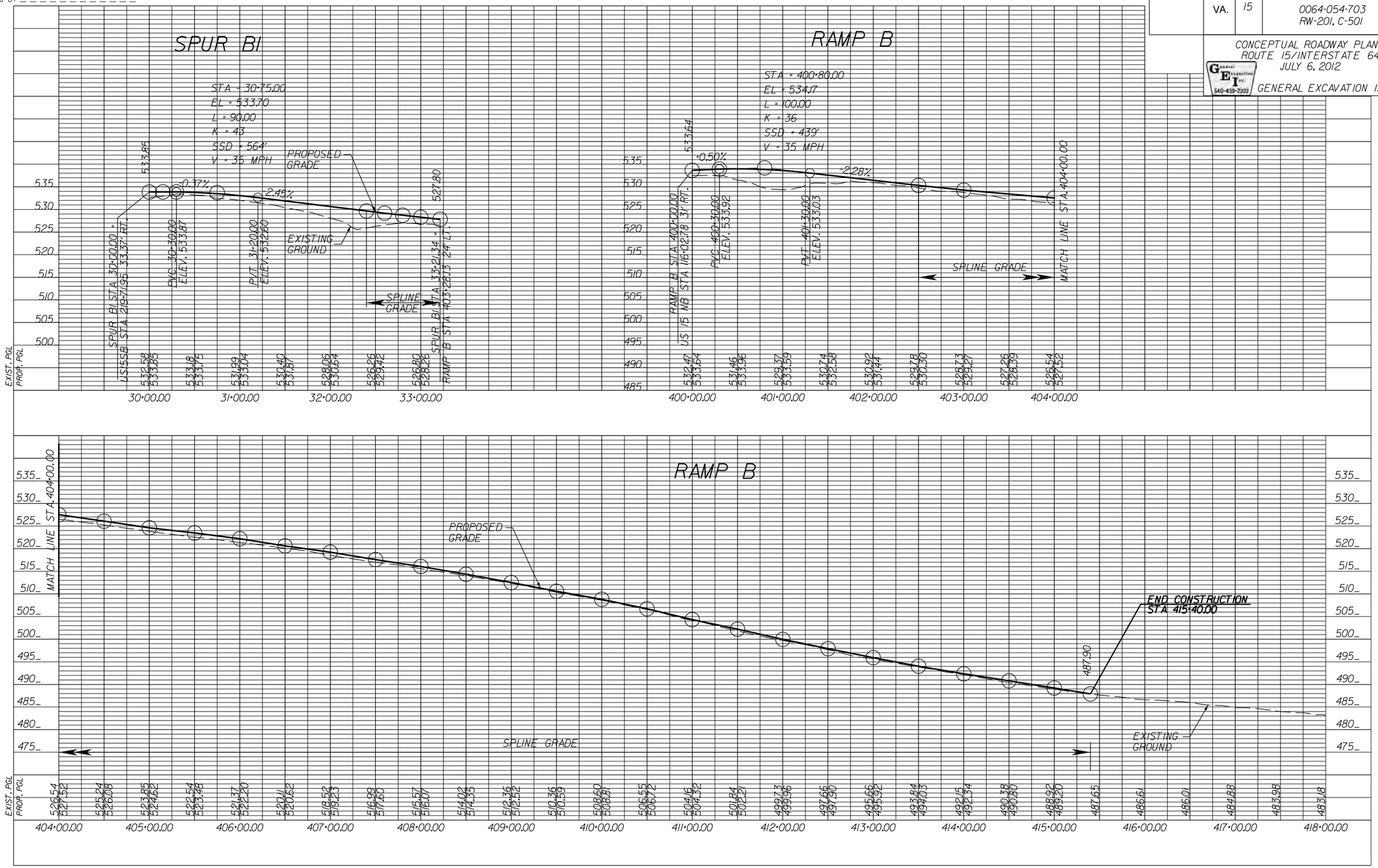
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	15	0064-054-703 RW-201, C-501	27

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. 540-439-2202
GENERAL EXCAVATION INC.



VERT. 1" = 10'
HORIZ. 1" = 50'

PROJECT	SHEET NO.
0064-054-703	27

5/2/12 PM
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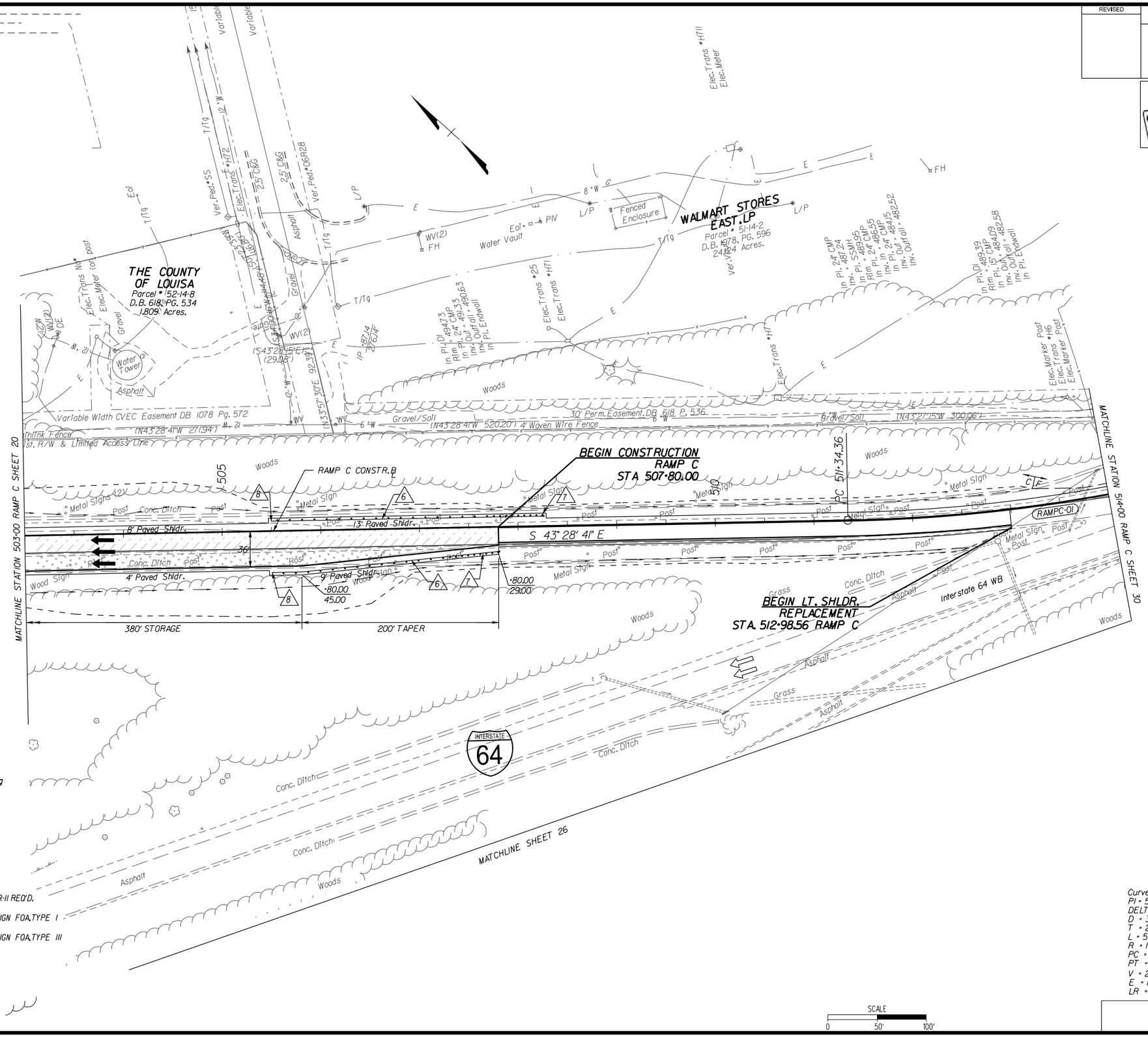
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	28

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
General Excavation Inc. 540-439-2202
GENERAL EXCAVATION INC.



LEGEND

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2. ST'D. CG-6 REQ'D.
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4. ST'D. MS-2 REQ'D.
5. ST'D. CG-12, TYPE A REQ'D.
6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN FOA, TYPE I
10. SP. DESIGN FOA, TYPE III

Curve RAMPC-02
PI = 513+91.82
DELTA = 17° 52' 35.02" (LT)
D = 3° 30' 00"
T = 257.47'
L = 510.75'
R = 1,637.00'
PC = 511+34.36
PT = 516+45.10
V = 25 MPH
E = MATCH EXISTING
LR = MATCH EXISTING

SCALE 0 50' 100'

PROJECT	SHEET NO.
0064-054-703	28

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5:52:12 PM jonaliver

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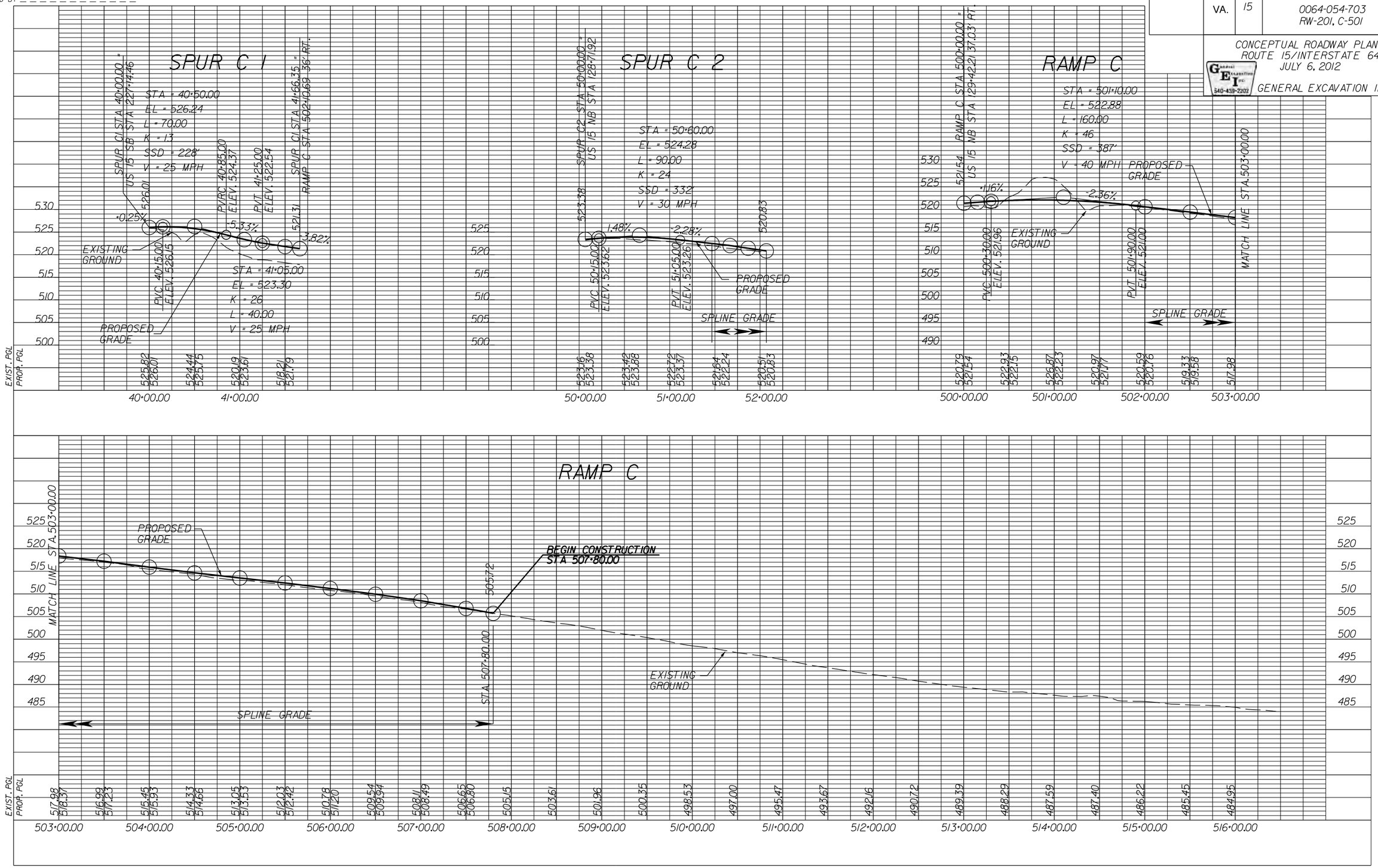
PROJECT MANAGER _ _ _ _ _ _ _ _ _ _ _ _
SURVEYED BY _ _ _ _ _ _ _ _ _ _
DESIGN SUPERVISED BY _ _ _ _ _ _ _ _ _ _ _ _
DESIGNED BY _ _ _ _ _ _ _ _ _ _ _ _ _ _

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	15	0064-054-703 RW-201, C-501	29

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012

General Excavation Inc. GEI 540-459-2202
GENERAL EXCAVATION INC.



VERT. 1" = 10'
HORIZ. 1" = 50'

PROJECT	SHEET NO.
0064-054-703	29

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5:52:43 PM jnoalker

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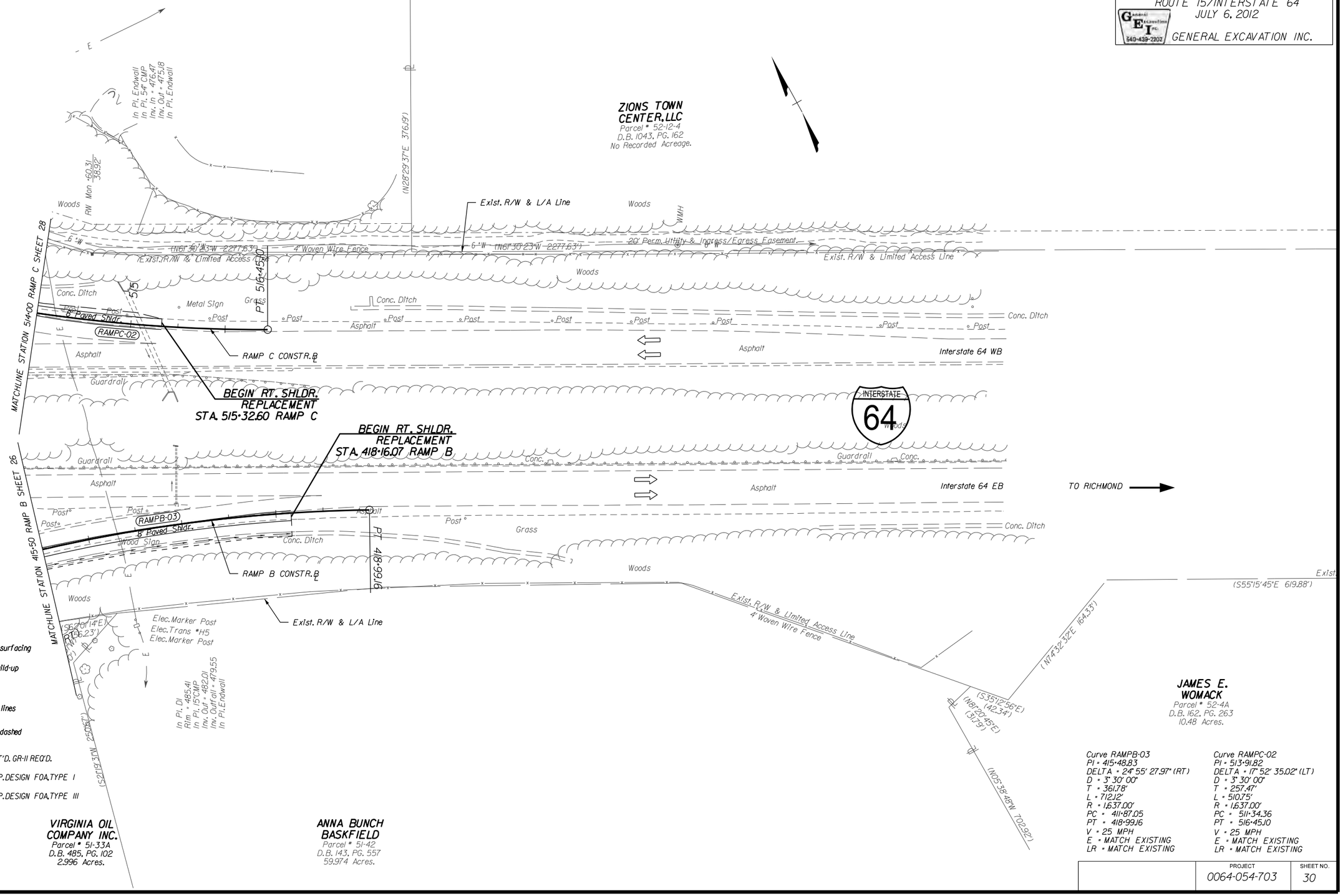
PROJECT MANAGER
SURVEYED BY
DESIGN SUPERVISED BY
DESIGNED BY KIMLEY-HORN AND ASSOCIATES, INC.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-054-703, RW-201, C-501	30

CONCEPTUAL ROADWAY PLANS
ROUTE 15/INTERSTATE 64
JULY 6, 2012
GENERAL EXCAVATION INC.



LEGEND

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2. ST'D. CG-6 REQ'D.
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4. ST'D. MS-2 REQ'D.
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6. ST'D. GR-2 REQ'D.
7. ST'D. GR-9 REQ'D.
8. ST'D. GR-11 REQ'D.
9. SP. DESIGN FOA, TYPE I
10. SP. DESIGN FOA, TYPE III

Curve RAMPB-03
PI = 415+48.83
DELTA = 24° 55' 27.97" (RT)
D = 3° 30' 00"
T = 361.78'
L = 712.12'
R = 1,637.00'
PC = 411+87.05
PT = 418+99.16
V = 25 MPH
E = MATCH EXISTING
LR = MATCH EXISTING

Curve RAMPC-02
PI = 513+91.82
DELTA = 17° 52' 35.02" (LT)
D = 3° 30' 00"
T = 257.47'
L = 510.75'
R = 1,637.00'
PC = 511+34.36
PT = 516+45.10
V = 25 MPH
E = MATCH EXISTING
LR = MATCH EXISTING

PROJECT	SHEET NO.
0064-054-703	30

5:52:13 PM jmoliver
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West
64
Charlottesville