



Andy Beshear
GOVERNOR

TRANSPORTATION CABINET

200 Mero Street
Frankfort, Kentucky 40601

Jim Gray
SECRETARY

March 19, 2024

CALL NO. 105
CONTRACT ID NO. 241007
ADDENDUM # 3

Subject: Washington County, STP 0551(053)
Letting March 21,2024

Added - Special Note P. 21A-21K & 38A-38D of 213
Revised - Proposal Bid Items P.208-213A of 213
Revised - Plan Sheets R002, R002J, R002L, R002P, R002R, R002S, R002T, R002U,
R002V, R002W, R002X, R004, R010, R242, R249, R250, R251, R252, R253

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills,

A handwritten signature in black ink that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ce
Enclosures

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SPECIAL NOTE FOR EXCAVATION AND EMBANKMENT

This Special Note replaces Sections 204 and 206 of the Department's 2008 Standard Specifications for Road and Bridge Construction and will apply where indicated on the plans or in the proposal. Section references herein are to the Department's 2008 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Remove and dispose of all materials taken from within limits of the work contracted, meaning the calculated material lying between the original groundline and the excavation limits established or approved by the Engineer as shown on the final cross sections, and form embankments with materials from sources specified in the Plans or from other approved sources.

2.0 MATERIALS AND EQUIPMENT. Use water conforming to Section 803.

3.0 CONSTRUCTION.

3.1 Excavation. Excavate for cuts and roadbeds, embankment foundation benches, embankment subgrades, under-cutting subgrades in cut sections, shoulders, slopes, ditches, waterways, intersections, approaches, balance excavation, inlet and outlet ditches, and channel changes, all as specified in the Contract.

Remove and dispose of miscellaneous structures from within the limits of the typical section according to Section 203.

Protect and preserve all existing culverts, pipelines, conduits, subdrains, or parts thereof that may continue to be used without any change. Repair or replace any culvert, pipeline, conduit, or subdrain damaged from operations or negligence during the life of the Contract.

During construction, ensure that the roadway is well drained at all times.

3.1.1 Classification. Without regard to the materials encountered, all roadway and drainage excavation is unclassified and the Department will consider it Roadway Excavation. Any reference to rock, earth, or any other material on the Plans or cross sections, whether in numbers, words, letters, or lines, is solely for the Department's information and is not an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusions as to the conditions to be encountered, including any shrinkage and swell of materials. The Department does not give any guarantee as to the accuracy of the data and will not consider any claim for additional compensation when the materials encountered are not in accord with the classification shown.

3.1.2 Slopes. Do not remove or loosen any material outside of the required slopes. Leave all rock cut slopes with a uniform surface, and remove all loose or overhanging rock. Do not gouge or dig holes in back slopes or in embankment slopes.

The Engineer may vary the slopes in cuts during construction, depending upon the material encountered in excavation to secure sufficient material for the formation of embankment and shoulders, to prevent landslides, to improve sight distance, or for any other reasons widening or variations are deemed to be to the best advantage of the work. When making a cut on any section of the roadway in any material that may slide, excavate to the slope lines as specified in the Plans or as the Engineer directs. Do not form vertical slopes during the

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process of excavation of such cut, except in staged construction when leaving material in cuts for future shoulder construction.

3.1.3 Serrated Slopes. When the Plans designate locations to construct serrated slopes and when soft rock or shale are encountered at the designated locations, excavate these materials by bulldozing or ripping, without drilling and blasting, in a manner that serrates the cut faces to a stepped pattern.

Round all soil overburden and talus material above the serrated slopes to blend with the original ground. Construct the top half step tread of a serrated slope just below the surface where the soil overburden contacts the soft rock or shale and continue the steps to the bottom of the cut slope, unless hard rock or hard shale formations are encountered which indicate that the lower limits of the rock disintegration zone have been reached. When hard rock or hard shale formations which must be blasted are encountered within the cuts being serrated, end the steps of the serrated slope by blending them into the hard rock or shale. Construct the step risers in the serrated slopes to the height specified in the Plans with the approximate width of the step treads being the height of the risers multiplied by the designated cut slope ratio. Make the midpoints of treads of the steps coincide approximately with the staked slope lines. Blend the first and last steps of a serrated slope into the staked slope line. Construct the first and last steps of a serrated slope to a width of approximately one-half the normal step tread width. Construct the step treads approximately level rather than parallel to the ditch line grades. When the steps extend throughout the length of a cut, round the ends of the steps and blend them into the adjacent ground.

The Engineer will not require thorough final dressing of the serrated slopes. However, remove large pieces of rock or other dangerous material which might fall from the steps and create safety hazards or maintenance problems. Seed and protect the serrated slopes according to the Plans and Section 212.

3.1.4 Presplitting. Presplit all rock and shale formations within the roadway excavation limits that are conducive to excavation by drilling and blasting at the designated slope lines. Perform the presplitting before blasting and excavating the interior portion of the specified cross section at any location.

Perform presplitting to obtain smooth faces in the rock and shale formations. Develop presplit faces that are free of all loose or crushed pieces and do not deviate more than 6 inches inwardly from the designated slope lines or offset drill holes, nor more than one foot outwardly, except where seams, broken formations, or earth pockets may cause unavoidable irregularities. The Engineer may stop the presplitting when he determines that materials have become unsuitable for presplitting. The Department will measure for payment material lying outside the typical section that must be removed due to seams, broken formations, or earth pockets, including any earth overburden removed with this material.

3.1.5 Ditches. Ditches include channel changes, inlet and outlet ditches, side ditches, surface ditches, wing ditches, and such other required ditches.

Construct side ditches draining from cuts toward embankments to avoid erosion damage to embankments by directing water coming from cuts away from fills.

Do not place material removed in cleaning or opening of ditches on cut

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slopes

Excavate special ditches and channel changes before constructing adjacent embankment areas.

Remove all debris from ditches before requesting formal acceptance.

3.1.6 Use of Excavated Materials. Use all suitable excavated material in the formation of embankments, subgrade, or shoulders; as backfill for structures; or for other purposes specified in the Contract.

Remove and dispose of all sod and soft or spongy material. Do not use such materials in the construction of the grade, except as provided in Part 3.2 of this note.

Take ownership and dispose of any coal excavated from the project within the typical section, or as directed. Do not use coal in embankments except in small quantities and then only when thoroughly mixed with other materials.

Do not waste excavated material without permission. When approved, waste excess material adjacent to the embankment or incorporate it in the normal embankment construction within the right-of-way limits. Do not perform irregular or partial widening of embankments. Do not waste excess material between cut slopes and the right-of-way limits, except for the purpose of filling depressions, gullies, and other cavities; and, when so wasted, shape the material to conform with the adjacent ground.

A) Channel Lining, Class IV. Prepare broken stone from formations consisting primarily of limestone, or if specified in the Plans, durable sandstone or durable shale (SDI equal to or greater than 95 according to KM 64-513) that are encountered in roadway excavation or obtained from borrow excavation.

Provide stone so that at least 80 percent, by volume, of individual stones range in size from 1/4 to 1 1/2 cubic foot. Use smaller sized stones for filling voids in the upper surface and dressing to the proper slope. The Engineer will accept the size and gradation of the material based on visual inspection. The Engineer may allow material not conforming to the specified size and gradation when it is acceptable for the intended use.

Shape ditches and channels as specified to receive the channel lining. Unless solid rock is encountered, begin the channel lining in a trench 2 feet below the natural ground or 2 feet below the channel flowline when the flowline is not lined. Where encountering solid rock, end the slope protection at the solid rock line.

Construct Channel Lining, Class IV to the minimum thickness specified in the Plans. Place the stone in a manner to produce a surface not varying more than 6 inches from a true plane.

B) Spreading Stockpiled Topsoil. If the Contract includes Spreading Stockpiled Topsoil as a bid item, or when otherwise specified in the Contract, salvage topsoil from within the limits of the slope lines and store it in stockpiles. Before removing the topsoil, clear the areas of all weeds, brush, stumps, stones, and other debris. Remove the topsoil only from areas and to depths specified in the Plans or as the Engineer directs. Avoid mixing subsoil or other unsuitable material with the topsoil. Place sod removed from embankment areas according to Subsection 206.03 in the topsoil stockpiles. Place the stockpiles along the project at approved locations. Neatly dress each stockpile, when completed. Perform

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temporarily or permanent seeding of the stockpiles.

When Spreading Stockpiled Topsoil is a bid item, the Department will allow the topsoil to be spread directly on the areas designated to receive the topsoil, without stockpiling, provided that seeding and protection operations are ready to begin.

3.1.7 Roadbed. In addition to the limits of the roadbed as defined in Subsection 101.03, extend the roadway excavation to the ditch lines in cuts. Conduct roadway excavation operations to make available a sufficient quantity of selected materials to complete the roadbed.

Remove all rock between ditch lines to a depth below the required grade as specified in the Plans or as staked. Leave the final surface of the rock to provide complete drainage. Construct the refill over this surface with select material having no stone or spalls larger than 4 inches. Place all refill in lifts not exceeding one foot in depth, loose measurement, and compact according to Part 3.2 of this note. The Engineer will make no allowance for excavation and refill material to a greater depth below the required grade than as specified in the Plans or as staked.

When encountering unsuitable material at subgrade elevation, remove the material to the depths specified in the Plans or as directed. Dry and use material that is unstable due to excessive moisture but otherwise suitable. Waste the material or use the material as refill or in embankments as the Engineer directs. Refill with suitable material.

A) Rock Roadbed. Conduct roadway blasting and excavation operations to make available a sufficient quantity of rock to complete the roadbed.

Prepare rock from formations consisting primarily of limestone, durable sandstone, or durable shale (SDI equal to or greater than 95 according to KM 64-513) that are encountered in the roadway excavation or that are obtained from borrow excavation. Do not use rock fragments exceeding one foot.

Excavate all cuts to a minimum of 2 feet below the final subgrade elevation and refill with the broken stone in 2 lifts, each approximately one foot thick. Leave the excavated surface to provide complete drainage. If excavation is deeper than 2 feet below subgrade, construct the top 2 feet in 2 lifts, each approximately one foot thick and the remaining in lifts not exceeding one foot using rock conforming to this section.

Construct rock roadbed from ditch line to ditch line in cuts, from shoulder to shoulder in fills, and throughout the entire project including mainline, ramps, and approach roads.

Perform all handling, stockpiling, or hauling manipulations, including overhauling, necessary to provide for the proper distribution of the broken stone.

In all instances, dump, spread, and smooth each one-foot lift, and compact each lift by vibratory rollers weighing at least 5 tons to minimize voids and bridging.

B) Chemically Stabilized Roadbed. Construct according to Section 208.

3.2 Embankment.

3.2.1 Embankment Foundations. Remove sod from all embankment areas to a

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depth of approximately 3 inches. The Engineer will not require the removal of sod when constructing embankments over marshy areas.

Remove unsuitable material, including frozen material, encountered in embankment areas before placing any embankment material thereon.

When the height of the embankment, at subgrade elevation, is to be greater than 3 feet above existing concrete pavement, either break the pavement until no fragments have a dimension greater than 3 feet or remove the pavement. When the height of the embankment, at subgrade elevation, is to be 3 feet or less above existing concrete pavement, remove the pavement.

When placing embankment above existing asphalt pavement, break up to destroy all cleavage planes or remove as the Engineer directs.

Cut benches with horizontal and vertical faces into the original ground of embankment foundations as required. When practical, benches should be into rock. Compact the horizontal face. Provide subsurface drainage as specified in the Plans or as the Engineer directs.

When the Contract designates original material as unsuitable for the embankment foundation, the Department will designate areas of Special Excavation and/or treatment and will give instructions about the removal and disposal of unsuitable foundation material in the Plans.

When a bid item of special excavation has not been included in the Contract and the original ground is specified in the Plans as suitable to serve as the embankment foundation but the Engineer subsequently determines the material is unsuitable to remain in its original position, excavate and dispose of the unsuitable foundation material as directed. Incorporate the excavated material into embankments when manipulations such as spreading thin layers or drying the material make it acceptable for use as embankment-in-place. When excavated material cannot be used in embankments, waste the material.

3.2.2 Placing and Compacting. Use only acceptable materials from sources permitted in the Contract. Do not place frozen material, stumps, logs, roots, sod, or other perishable materials in any embankment. Do not place any stone or masonry fragment greater than 4 inches in any dimension within one foot of the finished subgrade elevation, unless rock roadbed is specified.

The Department may allow concrete rubble, without protruding reinforcement, to be placed in embankment provided that no fragment is larger than one foot in any dimension or is placed within 2 feet of the subgrade.

When crossing marshy or otherwise unstable areas, the Department may allow the first lift to exceed one-foot loose depth. Use rock or granular material in the first lift, when available, and construct by placing material behind the leading edge of the layer and blading into place to avoid unnecessary disturbance to the original ground.

Drain, clean out, and fill ponds lying within the staked construction limits.

Construct the upper one foot of the embankment with selected material placed in lifts not exceeding one foot loose thickness.

When rock roadbed is specified, construct the upper 2 feet of the embankment according to Part 3.1.7 of this note.

A) Embankments of Earth, Friable Sandstone, Weathered Rock, Waste Crushed Aggregate, Bank Gravel, Creek Gravel, or Similar Materials. Construct in lifts not exceeding one foot in thickness, loose depth, to the full width of the cross section, and compact the material.

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Shape the upper surface of the embankment to provide complete drainage of surface water at all times. Do not form ruts.

- B) Embankments Principally of Unweathered Limestone, Durable Shale (SDI equal to or greater than 95 according to KM 64-513), or Durable Sandstone.** Construct in lifts not exceeding 3 feet. Ensure that the maximum dimensions of boulders or large rocks placed in the embankment do not exceed 3 feet vertically and 4.5 feet horizontally. Place rocks having any dimension greater than 2 feet at least 2 feet below subgrade elevation. Do not dump rock into final position. Distribute the rock to minimize voids, pockets, and bridging. The Engineer will not require rolling in the construction of rock embankment. Do not construct the rock embankment to an elevation higher than one foot below subgrade elevation.
- C) Embankment of Rock/Shale/Soil Combination.** Construct in lifts not exceeding one foot in thickness; however, when the thickness of the rock exceeds one foot, the Department may allow the thickness of the embankment lifts to increase, as necessary, due to the nature of the material, up to 2 feet. Apply a sufficient amount of water to induce slaking when mixtures contain 50 percent or more non-durable shale. Do not dump the mixture into final position. Distribute the mixture in a manner that minimizes voids, pockets, and bridging.
- D) Embankments Principally of Non-Durable Shale (SDI less than 95 according to KM 64-513).** Remove or break down rock fragments or limestone slabs having thickness greater than 4 inches or having any dimension greater than 1 1/2 feet before incorporating them into the lift. Construct in loose lifts not exceeding 8 inches in thickness. Apply water to accelerate slaking. Uniformly incorporate the water throughout the lift using a multiple gang disk with a minimum disk diameter of 2 feet or other suitable equipment the Engineer approves. Compact with 30-ton static tamping foot rollers in conjunction with vibratory tamping foot rollers that produce a minimum compactive effort of 27 tons and direct hauling equipment over the full width of the lift to aid in compaction. When questions arise regarding the durability of shale, use KM 64-514 to estimate the durability of the material in the field.

Compact the embankment foundations and embankment to a density of at least 95 percent of maximum density as determined according to KM 64-511. The Engineer will check density according to KM 64-412.

During compaction, maintain the moisture content of embankment or subgrade material within ± 2 percent of the optimum moisture content as determined according to KM 64-511.

Compact each lift as required before depositing material for the next lift. Provide equipment that will satisfy the density requirements at all times. Run the hauling equipment, as much as possible, along the full width of the cross section.

3.2.3 Embankment Adjacent to Structures. Construct according to Subsection 603.03.04 for backfill.

3.3 Construction Tolerances. Make every reasonable effort to construct the project uniformly within the following allowable tolerances and in a manner that will minimize the field measurements and computations required to determine if the work is satisfactory.

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The Department will allow the following tolerances before making payment for any decreases in the quantity or before requiring the rework of the constructed item:

- 1) Do not deviate the distance from centerline to the ditch lines in cuts and the shoulder lines in fills more than one foot from the dimension specified in the Plans. Ensure that the total width of the roadbed is not deficient by more than one foot at any location.
- 2) Ensure that the sloped surfaces between the ditch lines or shoulder lines and the original ground are not inside the specified slope limits more than 6 inches or outside the specified slope limits more than one foot, both measured horizontally.
- 3) Excavate cut benches to within one foot above or below the bench elevation specified in the Plans or established by the Engineer.
- 4) The Department will not make payment for any earthwork performed outside the limits specified by the neat lines of the cross sections on the Plans or by the Engineer. Do not remove or place any extra material more than one foot outside of these limits without permission, except as provided in Parts 3.1.4 and 3.2 of this note.
- 5) On grade and drain projects where surfacing is not included, complete the subgrade to within ± 0.1 foot of the designated grade at the time of final acceptance, except that when rock roadbed is specified, complete it to within ± 0.2 foot.
- 6) Ensure that all subgrades being prepared for base or surface courses, except traffic bound courses, are within $\pm 1/2$ inch of the specified crown section, except that when rock roadbed is specified, complete it to within ± 0.2 foot. Uniformly construct these subgrades so the subsequent base and surface courses can be constructed within their specified tolerances.

3.4 Landslides. When directed, remove and dispose of all landslides. The Department will measure landslides in place, by the cross section method, before removal of material. Obtain the Engineer's approval for use of slide material.

3.5 Disposal of Wasted Material. Obtain approved sites for wasting material off the right-of-way. Place material to avoid an unsightly appearance. Place all waste to avoid the obstruction of drainage. Seed and protect the wasted material and all temporary haul roads.

Submit for approval drawings of proposed waste areas, showing the configuration of the original ground and the anticipated configuration of the area upon completion of the waste operation; any preparatory work such as benching; provisions for surface and subsurface drainage of the area after wasting is completed; and any other necessary information. The Department will pay for the geotechnical investigation and analysis of the proposed waste area when one is requested by the Engineer. Ensure all work is performed by a pre-qualified geotechnical consultant and according to the Department's Geotechnical Manual.

Furnish cross sections and hydraulic computations for waste area sites situated in the flood plain of any stream. For these computations, define this flood plain as that area required to pass the 100 year flood. Indicate with the computations the effect that the waste site will have on both the design flood and the 100 year flood.

Furnish copies of a written agreement with the property owner, approval of the owner(s) of utilities of any nature existing within the proposed waste area, and approvals from all applicable regulatory agencies including the Natural Resources and Environmental Protection Cabinet, US Forest Service, US Army Corp of Engineers, US

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Fish and Wildlife, Kentucky Division of Water, and Planning and Zoning Commissions.

When encountering unanticipated waste material resulting from landslides or approved slope changes, waste it within the right-of-way at sites designated by the Engineer, or dispose of it off the right-of-way at sites acquired or approved by the Department.

4.0 MEASUREMENT.

4.1 Payment for Design Quantities. Unless the Contract provides for payment based on field measurements of material excavated, the Department will not measure Excavation or Embankment quantities but will make final payment at the Contract unit price for the design quantity specified within the neat lines of the cross sections on the Plans, increased or decreased by authorized adjustments.

The Department will not consider any quantity specified in the Plans for contingencies to be part of the design quantity. The Department will include only the portion of the contingency quantity actually used, as determined by the Engineer's measurements.

4.2 Authorized Adjustments. The Department will only make adjustments to the design quantities of Excavation or Embankment authorized by the Engineer for the following reasons:

- 1) Changes in the quantity of work due to benching, undercutting, changing slopes or grades, removing slides, and any other required procedures.
- 2) Decreases in the quantity because of acceptable work not conforming to established tolerances.
- 3) Corrections of major errors on the Plans. Major errors are defined as individual mistakes of 5 percent or more in the quantity of earthwork between 2 consecutive cross sections, for omissions, duplications, or other errors in the survey or on the Plans, but not for minor discrepancies in the plotting of cross sections, in the planimetry of cross sections, and in the resulting computation of the volume of earthwork. When errors in the lines or grades specified in the Plans cause major errors in earthwork quantities, the Department will correct the earthwork quantities throughout the entire span of the errors. The Department will not adjust earthwork quantities when errors in the lines or grades do not cause major errors in the earthwork quantities.
- 4) Arithmetical mistakes.

4.3 Serrated Slopes. The Department will not measure this work for payment and will consider it incidental to either Excavation or Embankment, as applicable.

The Department will not measure for payment any breakage of the soft rock or other material outside the staked slope line.

4.4 Presplitting. The Department will not measure this work for payment and will consider it incidental to Excavation. However, if the Engineer directs in writing slope changes, then the Department will pay for the second presplitting operation as Extra Work.

The Department will not measure for payment any extra material excavated because of the drill holes being offset outside the designated slope lines.

The Department will not measure for payment any material including any earth overburden necessary to be removed due to the Contractor's faulty blasting practices.

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4.5 Rock Bed. The Department will measure the quantity in cubic yards as Embankment. The Department will not measure any special work necessary to perform rock roadbed construction for payment and will consider it incidental to the Embankment bid item.

The Department will measure the removal of unsuitable material as Excavation. The Department will measure any additional material necessary for refill as Embankment, at its origin. The Department will not measure for payment rock refill exceeding 2 feet. When the material is removed from the roadbed and wasted without the Engineer's permission, the Department will not measure for payment any required refill material.

4.6 Landslides. The Department will measure the removal quantity in cubic yards as Excavation and will make equal measurement as Embankment when placed outside the plan's neat lines or wasted. When placed within the neat lines, the Department will consider the equal measurement of Embankment incidental to the Embankment design quantity. When the material is placed outside the plan's neat lines or wasted without the Engineer's permission, the Department will not consider the equal measurement of Embankment for payment.

The Department will not measure for payment the removal and disposal of landslides resulting from faulty operations.

Whenever a landslide extends beyond the right-of-way in wooded areas, and the Engineer directs trees and stumps be removed, the Department will measure for payment clearing of the additional area under Clearing and Grubbing or Removing Trees and Stumps, as provided in the original Contract.

4.7 Ditches. When Ditching or Ditching and Shouldering are listed as a bid item, the Department will measure this according to Subsection 209.04. When Ditching or Ditching and Shouldering are not listed as a bid item, the Department will not measure this work for payment and will consider it incidental to either Excavation or Embankment, as applicable.

4.8 Excavation. The Department will measure the quantity in cubic yards based on design quantities with authorized adjustments. The Department will base the measurement of the Excavation quantities at locations where serrated slopes are constructed on the areas and volumes defined by the staked slope lines. The Department will not measure for payment any excavated material used for any purpose other than that the Plans specify or the Engineer approves.

When the Contract provides for payment based on field measurements of the material excavated, the Department will measure the excavation in its original position by taking cross sections before the work starts and after it is entirely completed. The Department will compute the volume by the average end-area method. The Department will include in its measurement all unavoidable slides and authorized excavation of any material below the subgrade.

Where material has been excavated beyond the slope line and wasted, without being authorized, the Department will measure the wasted material and deduct it from the excavated quantities.

In determining the amount of waste material to be deducted as the result of excavation beyond the slope lines set by the Engineer, and wasted, the Department will consider only that portion outside of one foot additional width of embankment on each side, widened uniformly. The Department will measure the volume and deduct it from the excavation quantities without regard to swell or shrinkage factors.

4.9 Benches. The Department will measure excavation of benches as Excavation

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and will make equal payment as Embankment.

4.10 Embankment. The Department will measure the quantity in cubic yards as the design quantity shown within the neat lines of the cross sections on the Plans, increased or decreased by authorized adjustments according to Part 4.2 of this note.

The Department will consider removing sod 3 inches or less in depth; removing and/or scarifying of existing pavements in embankment areas; and the addition of water to aid compaction incidental to Embankment.

When undercutting embankment foundations, regardless of whether the excavated material is used as embankment or is wasted, the Department will measure the removal of unsuitable materials as Excavation or Special Excavation.

When the Engineer directs that the excavated material be wasted, then the Department will measure the material used to replace the wasted material as the same quantity as the excavated volume, and will pay for the material as Embankment. When the excavated material is used in embankment, the Department will make no separate payment for the material necessary to replace the excavated material.

The Department will not measure borrow excavation used to construct the embankment for payment and will consider it incidental to the construction of Embankment.

4.11 Special Excavation. The Department will measure the quantity in cubic yards as the design quantity shown within the neat lines of the cross sections on the Plans, increased or decreased by authorized adjustments as specified in Parts 4.1 and 4.2 of this note.

The Department will not measure overhaul of material and will consider it incidental to Special Excavation.

4.12 Waste. The Department will consider acquiring a waste site, disposing of waste, and providing erosion control for the site and haul roads incidental to Excavation and Embankment.

If the waste material is due to authorized adjustments, the Department will measure the quantity of unanticipated waste resulting from the authorized adjustments in place before excavation; make provisions for a waste site; and measure erosion control work for payment according to Subsection 212.04. The Department will include the quantity of approved unanticipated waste under Embankment.

4.13 Overhaul. The Department will measure the quantity only for excavation and embankment added due to authorized adjustments. For all other excavation quantities, the Department will not measure this work for payment and will consider it incidental to either Excavation or Embankment, as applicable.

The Department will measure the quantity by the Cubic Yard Station. A Cubic Yard Station is the product of the volume of material hauled in cubic yards and the distance that the material is hauled, in excess of the 2,000 feet of free haul, in stations of 100 feet, as determined by the Mass Diagram Method or by analytical methods.

4.14 Channel Lining, Class IV. The Department will measure the quantity in cubic yards.

4.15 Water. The Department will not measure for payment water used to provide sufficient moisture for compaction.

5.0 PAYMENT. The Department will make payment for the completed and accepted

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quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
21554EN10Z	Excavation	Cubic Yard
----	Overhaul	Cubic Yard Station
02488	Channel Lining, Class IV	Cubic Yard
05998	Spreading Stockpiled Topsoil	Cubic Yard
21553EN10Z	Embankment	Cubic Yard
02204	Special Excavation	Cubic Yard

The Department will pay for Overhaul at 2 percent of the Contract unit price for both Excavation and Embankment for each Cubic Yard Station.

The Department will consider payment as full compensation for all work required under this section.

January 1, 2008

Special Note for Tree, Stump, and Brush Removal

I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Site Preparation; (2) Maintaining and controlling traffic; (3) Temporary erosion control and temporary pollution control; (4) Cutting, trimming, and/or removing trees, stumps, and/or brush as specified or directed by the Project Engineer; (5) Treating all cut stumps required by Project Engineer to prevent re-sprouting; (5) Clean up and disposal of waste; (6) Final dressing and seeding and protection; and (7) all other work specified in the Contract.

Note: This note applies to all trees and brush from the roadway to within 5' of the right of way fence

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Seeding and Protection.** Use applicable Seed Mixture as specified per Section 212.03.03.
- C. Erosion Control.** See the Special Note for Erosion Control.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic.** The Contractor shall maintain and control traffic in accordance with the Traffic Control Plan.
- B. Cutting, Trimming, and/or Removing Trees, Stumps, and/or Brush.** The Contractor shall cut, trim, and/or remove trees within the clearing dimensions as shown on the Tree Trimming Detail. On this detail, the horizontal width is taken from the edge of pavement measured perpendicular to the roadway, but not to extend beyond the obvious Right-of-Way limits, or as directed by the Engineer. To achieve the tree trimming/clearing dimensions shown on the Tree Trimming Detail, the complete removal of some trees may be necessary. The Department's expectation is that if the trunk or any portion of the trunk of any tree is within the tree trimming/clearing dimensions shown on the Tree Trimming Detail, any such tree shall be cut and removed as part of this bid item. Additionally, if there are trees whose main trunk is not within the tree trimming/clearing dimensions, but more than approximately 50% of the tree's canopy will be removed due to trimming, any such tree shall be cut and removed as part of this bid item. Cut trees and/or bushes as close to the ground as possible; three inches (3") or less from ground line. All tree stumps within the mowing zone shall be removed

Tree, Stump, & Brush Removal
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via mechanical grinding, or other methods approved by the Engineer, to a minimum depth of four inches (4") below the surrounding grade line. For trees that are cut but will not be required to have their stump removed, treat the stump, within one hour of cutting, with the herbicide solution specified below. The Contractor and Engineer should work together to identify the trees and/or stumps requiring removal. The Engineer will make the final determination on the decision to remove or leave any trees and/or stumps in question.

Replace and level any and all soil disturbed during the tree, stump, and/or brush removal and/or tree trimming operations. Leave the soil in a condition suitable for seeding that is level with the surrounding soil grade, with no holes or indentions to catch water or present unsafe mowing conditions. This work will be incidental to the bid item "clearing and grubbing".

NOTE: Tree cutting restrictions apply. See the Special Note for Tree Removal for details on the restrictions.

- C. Removal of Tree, Stump, and Brush Debris.** The Contractor will remove all debris and biomass from the trimming and/or removal of trees, stumps, and/or brush from the work site and dispose of such off the right-of-way in accordance with local, state, and federal solid waste laws and regulations. Cleanup and remove all existing down trees and brush located within the designated areas. At the discretion of the Engineer, the contractor may be permitted to chip and blow biomass onto non-mowing zones. Chips shall not be blown onto areas that would potentially restrict the flow of water in drainage ditches. All un-chipped biomass must be removed from roadway right-of-ways.

The Contractor shall keep the work zone free of accumulated waste material and debris at all times. Remove and dispose of all tree, stump, and brush chips off the right-of-way. Remove and dispose of all debris and waste material off the right-of-way as work is completed and at the end of each workday. Remove desirable wood pieces from the right-of-way at the end of each workday. Stockpile trees and brush off the right-of-way. At the discretion of the Project Engineer, the Contractor may be permitted to stockpile trees and brush at approved locations along the right-of-way.

The Contractor shall immediately correct any disturbance to all drainage features and structures caused by the Contractor's work.

- D. Stump Treatment.** Within one hour of cutting, the Contractor shall apply a stump treatment mix consisting of fifty percent (50%) Glyphosate (EPA Reg. No. 524-579) with water and add twelve (12) ounces of Imazapyr (EPA Reg. No. 241-431), as specified, per gallon of solution. The addition of a non-ionic surfactant 5% (v/v) shall be added to the solution to increase uptake of the herbicide solution into the root system. Generic formulations are not acceptable. Mix the herbicide solution in the presence of the Inspector. Include a color indicator in the herbicide solution to mark the treated stumps. Spray or paint the herbicide solution onto all cut stumps within one hour after cutting. Apply the herbicide solution in a manner to avoid drift onto surrounding vegetative ground cover. Stumps in the mowing zone, designated for mechanical grinding treatment, need not receive the herbicide treatment.

Provide herbicide material for the treatment of cut stumps meeting the following criteria:

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a. Glyphosate

Active ingredient: **(Glyphosate)**

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its potassium salt.....	48.7%
Inert ingredients	51.3%
Total	100.0%

* Contains 660 grams per liter or 5.5 pounds per U.S. gallon of the active ingredient glyphosate, in the form of its potassium salt. Equivalent to 540 grams per liter or 4.5 pounds per U.S. gallon of the acid, glyphosate.

EPA Reg. No. 524-579

b. Imazapyr

Active ingredient: **(Imazapyr)**

*Isopropylamine salt of Imazapyr 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid	26.7%
Inert ingredients	73.3%
Total	100%

* Equivalent to 21.8 percent 2-[4,5-dihydro-4-methyl-4-(1methylethyl)-5oxo-1H-imidazolyl]-3-pyridinecarboxylic acid or 2 pounds acid per gallon.

EPA Reg. No. 241-431

KRS 217B requires that any individual who applies pesticides to Kentucky Highway Right-of-Way areas must be certified as a Pesticide Applicator under Category 6 guidelines. Comply with all current laws and regulations established by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and by KRS 217B that regulate the handling, use, and application of pesticides.

- E. Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his/her work.
- F. Coordination with Utility Companies.** NOTICE: Utility locations shown in the plans are approximate and have not been specifically located by the Department. Locate all underground, above ground and overhead utilities prior to beginning construction. The Contractor shall have the responsibility for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Utility Owner while they relocate their facilities. The Contractor shall be responsible for repairing all utility damage that occurs as a result of his/her operations.
- G. Right-of-Way Limits.** The exact limits of the Right-of-Way have not been established by the Department. The Contractor shall limit his/her activities to the obvious Right-of-Way, permanent or temporary easements, and any work areas secured by consent and release of the adjacent property owners. The Contractor shall be responsible for all encroachments onto private lands.
- H. Clean Up, Disposal of Waste.** Clean up and dispose of all removed debris by the end of each workday,

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and other waste as per Section 204.03.08. The Department will incur no cost to obtain the disposal sites. The Department will NOT make direct payment for clean up or disposal of waste and debris from the project. See the Special Provision for Waste and Borrow Sites.

- I. **Final Dressing, Seeding and Protection.** Apply final dressing, class A to all disturbed areas, both on and off the Right-of-Way. Sow all disturbed earthen areas with the appropriate Seed Mixture as specified in Section 212.03.03.
- J. **Erosion Control.** See the Special Note for Erosion Control.

IV. METHOD OF MEASUREMENT

- A. **Maintain and Control Traffic.** See the Traffic Control Plan.
- B. **Site preparation.** Other than the bid items listed, site preparation will NOT be measured for payment, but shall be incidental to the project bid items.
- C. **Clearing and Grubbing.** The Department will measure clearing and grubbing as 1 lump sum as per the current specification.
- D. **Stump Treatment.** The Department will NOT measure for payment the operation of Stump Treatment. This activity shall be incidental to the bid item Clearing and Grubbing.
- E. **Clean Up, Disposal of Waste.** The Department will NOT measure for payment the operations of Clean Up and Disposal of Waste. These activities shall be incidental to the project bid items.
- F. **Final Dressing, Seeding and Protection.** The Department will NOT measure for payment the operations of Final Dressing. Seeding and Protection will be measured according to Section 212.
- G. **Erosion Control.** See the Special Note for Erosion Control.

V. BASIS OF PAYMENT

- A. **Maintain and Control Traffic.** See the Traffic Control Plan.
- B. **Clearing and Grubbing.** The Department will make payment for the completed and accepted work on the basis of 1 lump sum. The Department will consider payment at the contract unit price as full compensation for furnishing all materials, equipment, labor, other expenses, and all incidentals necessary to complete the work of trimming and removing the trees and brush as specified in this note.
- C. **Erosion Control.** See the Special Note for Erosion Control.

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Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	82,843.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	804.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	96.00	TON		\$	
0040	00190		LEVELING & WEDGING PG64-22	10,388.00	TON		\$	
0050	00212		CL2 ASPH BASE 1.00D PG64-22	10,871.00	TON		\$	
0060	00214		CL3 ASPH BASE 1.00D PG64-22	27,339.00	TON		\$	
0070	00301		CL2 ASPH SURF 0.38D PG64-22	4,260.00	TON		\$	
0080	00387		CL3 ASPH SURF 0.38B PG76-22 (REVISED 3-19-24)	2,091.00	TON		\$	
0090	00388		CL3 ASPH SURF 0.38B PG64-22	17,625.00	TON		\$	
0100	02069		JPC PAVEMENT-10 IN	2,790.00	SQYD		\$	
0110	02101		CEM CONC ENT PAVEMENT-8 IN	6,712.00	SQYD		\$	
0120	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0130	02677		ASPHALT PAVE MILLING & TEXTURING	3,884.00	TON		\$	
0135	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT (ADDED 3-19-24)	2,222,073.00	SF		\$	
0140	24970EC		ASPHALT MATERIAL FOR TACK NON- TRACKING	133.00	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0150	00078		CRUSHED AGGREGATE SIZE NO 2 (REVISED 3-19-24)	1,000.00	TON		\$	
0160	01000		PERFORATED PIPE-4 IN	36.00	LF		\$	
0170	01010		NON-PERFORATED PIPE-4 IN	16.00	LF		\$	
0180	01028		PERF PIPE HEADWALL TY 3-4 IN	2.00	EACH		\$	
0190	01810		STANDARD CURB AND GUTTER	1,554.00	LF		\$	
0200	01825		ISLAND CURB AND GUTTER	5,471.00	LF		\$	
0210	01875		STANDARD HEADER CURB	632.00	LF		\$	
0220	01984		DELINEATOR FOR BARRIER - WHITE	16.00	EACH		\$	
0230	01987		DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	330.00	EACH		\$	
0240	02003		RELOCATE TEMP CONC BARRIER	820.00	LF		\$	
0250	02014		BARRICADE-TYPE III	16.00	EACH		\$	
0270	02058		REMOVE PCC PAVEMENT	1,750.00	SQYD		\$	
0280	02091		REMOVE PAVEMENT	691.00	SQYD		\$	
0290	02159		TEMP DITCH	24,097.00	LF		\$	
0300	02160		CLEAN TEMP DITCH	12,048.00	LF		\$	
0310	02165		REMOVE PAVED DITCH	7,100.00	SQYD		\$	
0320	02200		ROADWAY EXCAVATION	123,775.00	CUYD		\$	
0330	02223		GRANULAR EMBANKMENT (REVISED 3-19-24)	4,637.00	CUYD		\$	
0335	02230		EMBANKMENT IN PLACE (ADDED 3-8-24)	100,234.00	CUYD		\$	
0340	02265		REMOVE FENCE	1,634.00	LF		\$	
0350	02360		GUARDRAIL TERMINAL SECTION NO 1	23.00	EACH		\$	
0360	02367		GUARDRAIL END TREATMENT TYPE 1	35.00	EACH		\$	

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0370	02369		GUARDRAIL END TREATMENT TYPE 2A	1.00	EACH		\$	
0380	02371		GUARDRAIL END TREATMENT TYPE 7	2.00	EACH		\$	
0390	02381		REMOVE GUARDRAIL	25,713.00	LF		\$	
0400	02403		REMOVE CONCRETE MASONRY	124.00	CUYD		\$	
0410	02429		RIGHT-OF-WAY MONUMENT TYPE 1 (REVISED 3-8-24)	11.00	EACH		\$	
0420	02432		WITNESS POST	3.00	EACH		\$	
0430	02483		CHANNEL LINING CLASS II	7,383.00	TON		\$	
0440	02484		CHANNEL LINING CLASS III	3,259.00	TON		\$	
0450	02545		CLEARING AND GRUBBING 192 ACRES	1.00	LS		\$	
0460	02555		CONCRETE-CLASS B	8.00	CUYD		\$	
0470	02562		TEMPORARY SIGNS	5,400.00	SQFT		\$	
0480	02565		OBJECT MARKER TYPE 2	2.00	EACH		\$	
0490	02585		EDGE KEY	869.00	LF		\$	
0500	02602		FABRIC-GEOTEXTILE CLASS 1 (REVISED 3-19-24)	71,193.00	SQYD		\$	
0510	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0520	02671		PORTABLE CHANGEABLE MESSAGE SIGN (REVISED 3-8-24)	6.00	EACH		\$	
0530	02697		EDGELINE RUMBLE STRIPS 16 IN	90,850.00	LF		\$	
0540	02701		TEMP SILT FENCE	24,574.00	LF		\$	
0550	02703		SILT TRAP TYPE A	251.00	EACH		\$	
0560	02704		SILT TRAP TYPE B	251.00	EACH		\$	
0570	02705		SILT TRAP TYPE C	251.00	EACH		\$	
0580	02706		CLEAN SILT TRAP TYPE A	251.00	EACH		\$	
0590	02707		CLEAN SILT TRAP TYPE B	251.00	EACH		\$	
0600	02708		CLEAN SILT TRAP TYPE C	251.00	EACH		\$	
0610	02726		STAKING	1.00	LS		\$	
0620	02775		ARROW PANEL	4.00	EACH		\$	
0630	02898		RELOCATE CRASH CUSHION	4.00	EACH		\$	
0640	03171		CONCRETE BARRIER WALL TYPE 9T	820.00	LF		\$	
0650	04933		TEMP SIGNAL 2 PHASE	2.00	EACH		\$	
0660	04935		TEMP SIGNAL KY-528	1.00	LS		\$	
0670	04935		TEMP SIGNAL US-150	1.00	LS		\$	
0680	04935		TEMP SIGNAL US-150X	1.00	LS		\$	
0690	05950		EROSION CONTROL BLANKET	20,265.00	SQYD		\$	
0700	05952		TEMP MULCH	809,749.00	SQYD		\$	
0710	05953		TEMP SEEDING AND PROTECTION	607,009.00	SQYD		\$	
0720	05963		INITIAL FERTILIZER	48.00	TON		\$	
0730	05964		MAINTENANCE FERTILIZER	29.00	TON		\$	
0740	05985		SEEDING AND PROTECTION	928,748.00	SQYD		\$	
0750	05989		SPECIAL SEEDING CROWN VETCH	165,454.00	SQYD		\$	
0760	05992		AGRICULTURAL LIMESTONE	576.00	TON		\$	
0770	06510		PAVE STRIPING-TEMP PAINT-4 IN	518,058.00	LF		\$	
0780	06542		PAVE STRIPING-THERMO-6 IN W	126,692.00	LF		\$	
0790	06543		PAVE STRIPING-THERMO-6 IN Y	125,368.00	LF		\$	
0800	06544		PAVE STRIPING-THERMO-8 IN W	675.00	LF		\$	

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0810	06545		PAVE STRIPING-THERMO-8 IN Y	5,119.00	LF		\$	
0820	06546		PAVE STRIPING-THERMO-12 IN W	468.00	LF		\$	
0830	06547		PAVE STRIPING-THERMO-12 IN Y 60 IN	2,530.00	LF		\$	
0840	06556		PAVE STRIPING-DUR TY 1-6 IN W	1,595.00	LF		\$	
0850	06557		PAVE STRIPING-DUR TY 1-6 IN Y	1,485.00	LF		\$	
0860	06569		PAVE MARKING-THERMO CROSS-HATCH 12 IN	43,480.00	SQFT		\$	
0870	06574		PAVE MARKING-THERMO CURV ARROW	66.00	EACH		\$	
0880	06578		PAVE MARKING-THERMO MERGE ARROW	26.00	EACH		\$	
0890	06610		INLAID PAVEMENT MARKER-MW	368.00	EACH		\$	
0900	06612		INLAID PAVEMENT MARKER-BY	1,257.00	EACH		\$	
0910	08901		CRASH CUSHION TY VI CLASS BT TL2	4.00	EACH		\$	
0920	10020NS		FUEL ADJUSTMENT (REVISED 3-19-24)	179,143.00	DOLL	\$1.00	\$	\$179,143.00
0930	10030NS		ASPHALT ADJUSTMENT (REVISED 3-19-24)	274,094.00	DOLL	\$1.00	\$	\$274,094.00
0940	20191ED		OBJECT MARKER TY 3	40.00	EACH		\$	
0950	20458ES403		CENTERLINE RUMBLE STRIPS	27,652.00	LF		\$	
0960	21289ED		LONGITUDINAL EDGE KEY	45,789.00	LF		\$	
0970	21370ED		LONGITUDINAL SAW CUT- 6 IN	1,705.00	LF		\$	
0980	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	26,925.00	LF		\$	
0990	22520EN		PAVE MARKING-THERMO YIELD BAR-36 IN	168.00	LF		\$	
1000	22664EN		WATER BLASTING EXISTING STRIPE	396,845.00	LF		\$	
1010	23821EC		CENTERLINE RUMBLE STRIPS-12 IN	52,445.00	LF		\$	
1020	23875NC		REMOVE THERMOPLASTIC ARROWS	43.00	EACH		\$	
1030	24114EC		PAVE MARK-THERMO-YIELD	12.00	EACH		\$	
1040	24115EC		ROUNABOUT ARROW	24.00	EACH		\$	
1050	24955ED		REMOVE SIGNAL EQUIPMENT	3.00	EACH		\$	
1060	25078ED		THRIE BEAM GUARDRAIL TRANSITION TL-3	8.00	EACH		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1065	00460		CULVERT PIPE-12 IN (ADDED 3-19-24)	12.00	LF		\$	
1070	00462		CULVERT PIPE-18 IN	499.00	LF		\$	
1080	00464		CULVERT PIPE-24 IN	21.00	LF		\$	
1090	00468		CULVERT PIPE-36 IN	60.00	LF		\$	
1100	00469		CULVERT PIPE-42 IN	12.00	LF		\$	
1105	00520		STORM SEWER PIPE-12 IN (ADDED 3-19-24)	16.00	LF		\$	
1110	00521		STORM SEWER PIPE-15 IN	292.00	LF		\$	
1120	00522		STORM SEWER PIPE-18 IN	93.00	LF		\$	
1125	00980		SLOTTED DRAIN PIPE-12 IN (ADDED 3-19-24)	50.00	LF		\$	
1130	01204		PIPE CULVERT HEADWALL-18 IN	14.00	EACH		\$	
1140	01212		PIPE CULVERT HEADWALL-36 IN	2.00	EACH		\$	
1150	01214		PIPE CULVERT HEADWALL-42 IN	1.00	EACH		\$	

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LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1160	01310		REMOVE PIPE (REVISED 3-19-24)	187.00	LF		\$	
1170	01371		METAL END SECTION TY 1-18 IN	14.00	EACH		\$	
1180	01381		METAL END SECTION TY 2-18 IN	2.00	EACH		\$	
1190	01450		S & F BOX INLET-OUTLET-18 IN	2.00	EACH		\$	
1200	01451		S & F BOX INLET-OUTLET-24 IN	1.00	EACH		\$	
1210	01453		S & F BOX INLET-OUTLET-36 IN	1.00	EACH		\$	
1220	01480		CURB BOX INLET TYPE B (REVISED 3-19-24)	15.00	EACH		\$	
1230	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	
1240	01535		DROP BOX INLET TYPE 6F	1.00	EACH		\$	
1245	01581		DROP BOX INLET TYPE 16G (ADDED 3-19-24)	5.00	EACH		\$	
1250	01585		REMOVE DROP BOX INLET	1.00	EACH		\$	
1255	01587		DROP BOX INLET TYPE 16S (ADDED 3-19-24)	1.00	EACH		\$	
1260	01691		FLUME INLET TYPE 2	2.00	EACH		\$	
1270	01705		REMOVE CURB & GUTTER BOX INLET (REVISED 3-19-24)	4.00	EACH		\$	
1280	02607		FABRIC-GEOTEXTILE CLASS 2 FOR PIPE (REVISED 3-19-24)	1,554.00	SQYD	\$2.00	\$	\$3,108.00
1290	02625		REMOVE HEADWALL	9.00	EACH		\$	
1300	02690		SAFELOADING (REVISED 3-19-24)	2.39	CUYD		\$	
1310	03260		CLEAN ROADWAY DRAINS	2.00	EACH		\$	
1320	03262		CLEAN PIPE STRUCTURE	14.00	EACH		\$	
1330	08100		CONCRETE-CLASS A	22.48	CUYD		\$	
1340	21541NN		CORED HOLE DRAINAGE BOX CON- 18 IN	1.00	EACH		\$	
1350	23628EC		CORED HOLE DRAINAGE CONN TO HEADWALL	2.00	EACH		\$	
1360	23952EC		DRAINAGE JUNCTION BOX TY B	1.00	EACH		\$	
1370	24814EC		PIPELINE INSPECTION	7,546.00	LF		\$	

Section: 0004 - BRIDGE- CULVERT

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1380	00003		CRUSHED STONE BASE	15.00	TON		\$	
1390	00078		CRUSHED AGGREGATE SIZE NO 2	56.00	TON		\$	
1400	08003		FOUNDATION PREPARATION	1.00	LS		\$	
1410	08100		CONCRETE-CLASS A	11.00	CUYD		\$	
1420	08150		STEEL REINFORCEMENT	650.00	LB		\$	
1430	20465EC		CLEAN CULVERT	1.00	LS		\$	
1440	22146EN		CONCRETE PATCHING REPAIR	26.00	SQFT		\$	

Section: 0005 - BRIDGE - LONG LICK BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1450	02231		STRUCTURE GRANULAR BACKFILL	202.00	CUYD		\$	
1460	02403		REMOVE CONCRETE MASONRY	66.00	CUYD		\$	

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1470	03299		ARMORED EDGE FOR CONCRETE	102.00	LF		\$	
1480	03300		ELIMINATE TRANSVERSE JOINT RETROFIT - JOINT ELIMINATION BY SLAB EXTENSION	69.50	LF		\$	
1490	08001		STRUCTURE EXCAVATION-COMMON	192.00	CUYD		\$	
1500	08019		CYCLOPEAN STONE RIP RAP	784.00	TON		\$	
1510	08020		CRUSHED AGGREGATE SLOPE PROT	458.00	TON		\$	
1520	08033		TEST PILES	110.00	LF		\$	
1530	08046		PILES-STEEL HP12X53	299.00	LF		\$	
1540	08100		CONCRETE-CLASS A	130.60	CUYD		\$	
1550	08104		CONCRETE-CLASS AA	172.40	CUYD		\$	
1560	08140		MECHANICAL REINF COUPLER #5 EPOXY COATED	50.00	EACH		\$	
1570	08150		STEEL REINFORCEMENT	28,995.00	LB		\$	
1580	08151		STEEL REINFORCEMENT-EPOXY COATED	48,690.00	LB		\$	
1590	08160		STRUCTURAL STEEL 124125 LBS	1.00	LS		\$	
1600	08170		SHEAR CONNECTORS 1482 LBS	1.00	LS		\$	
1610	08504		EPOXY SAND SLURRY	74.00	SQYD		\$	
1620	08510		REM EPOXY BIT FOREIGN OVERLAY	879.00	SQYD		\$	
1630	08534		CONCRETE OVERLAY-LATEX	58.30	CUYD		\$	
1640	08549		BLAST CLEANING	594.00	SQYD		\$	
1650	08550		HYDRODEMOLITION	879.00	SQYD		\$	
1660	20745ED		ROCK SOUNDINGS	24.70	LF		\$	
1670	20746ED		ROCK CORINGS	55.00	LF		\$	
1680	21322NC		CSL TESTING (6 TUBES)	2.00	EACH		\$	
1690	22146EN		CONCRETE PATCHING REPAIR	18.00	SQFT		\$	
1700	23000EX		DRILLED SHAFT-66 IN (ROCK)	22.00	LF		\$	
1710	23032EN		BRIDGE BARRIER RETROFIT RETROFIT TO - RAIL SYSTEM SINGLE SLOPE 40 INCH	316.00	LF		\$	
1720	23249EC		DRILLED SHAFT-72 IN COMMON	24.70	LF		\$	
1730	23378EC		CONCRETE SEALING	10,300.00	SQFT		\$	
1740	23744EC		EPOXY INJECTION CRACK REPAIR	73.00	LF		\$	
1750	24094EC		PARTIAL DEPTH PATCHING	4.00	CUYD		\$	
1760	24981EC		BRIDGE CLEANING LONG LICK CREEK	1.00	LS		\$	
1770	24983EC		BEARING LUBRICATION	8.00	EACH		\$	
1780	25028ED		RAIL SYSTEM SINGLE SLOPE - 40 IN	286.00	LF		\$	

Section: 0006 - BRIDGE - KY 555 OVER BEECH FORK

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1790	03299		ARMORED EDGE FOR CONCRETE	88.00	LF		\$	
1800	03300		ELIMINATE TRANSVERSE JOINT RETROFIT - JOINT ELIMINATION BY SLAB EXTENSION	95.50	LF		\$	
1810	08019		CYCLOPEAN STONE RIP RAP	1,134.00	TON		\$	
1820	08020		CRUSHED AGGREGATE SLOPE PROT	175.00	TON		\$	
1830	08151		STEEL REINFORCEMENT-EPOXY COATED	2,297.00	LB		\$	

PROPOSAL BID ITEMS

241007

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Report Date 3/19/24

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1840	08504		EPOXY SAND SLURRY	74.00	SQYD		\$	
1850	08510		REM EPOXY BIT FOREIGN OVERLAY	1,363.00	SQYD		\$	
1860	08534		CONCRETE OVERLAY-LATEX	58.00	CUYD		\$	
1870	08549		BLAST CLEANING	74.00	SQYD		\$	
1880	08550		HYDRODEMOLITION	1,363.00	SQYD		\$	
1890	22146EN		CONCRETE PATCHING REPAIR	33.00	SQFT		\$	
1900	23378EC		CONCRETE SEALING	591.00	SQFT		\$	
1910	24094EC		PARTIAL DEPTH PATCHING	6.00	CUYD		\$	
1920	24981EC		BRIDGE CLEANING BEECH FORK	1.00	LS		\$	

Section: 0007 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1930	06406		SBM ALUM SHEET SIGNS .080 IN	2,800.00	SQFT		\$	
1940	06407		SBM ALUM SHEET SIGNS .125 IN	257.00	SQFT		\$	
1950	06410		STEEL POST TYPE 1	4,975.00	LF		\$	
1960	06412		STEEL POST MILE MARKERS	7.00	EACH		\$	
1970	21596ND		GMSS TYPE D	12.00	EACH		\$	
1980	24631EC		BARCODE SIGN INVENTORY	292.00	EACH		\$	

Section: 0008 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1990	04701		POLE 40 FT MTG HT LIGHTING PER ROUNDABOUT	42.00	EACH		\$	
2000	04720		BRACKET 4 FT	9.00	EACH		\$	
2010	04721		BRACKET 6 FT	1.00	EACH		\$	
2020	04722		BRACKET 8 FT	6.00	EACH		\$	
2030	04723		BRACKET 10 FT	4.00	EACH		\$	
2040	04724		BRACKET 12 FT	5.00	EACH		\$	
2050	04725		BRACKET 15 FT	17.00	EACH		\$	
2060	04740		POLE BASE	42.00	EACH		\$	
2070	04750		TRANSFORMER BASE	42.00	EACH		\$	
2080	04761		LIGHTING CONTROL EQUIPMENT	3.00	EACH		\$	
2090	04780		FUSED CONNECTOR KIT	84.00	EACH		\$	
2100	04820		TRENCHING AND BACKFILLING	4,400.00	LF		\$	
2110	04832		WIRE-NO. 12	5,600.00	LF		\$	
2120	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	14.00	EACH		\$	
2130	21543EN		BORE AND JACK CONDUIT	3,100.00	LF		\$	
2140	23778EC		WIRE-NO. 10	23,100.00	LF		\$	
2150	24589ED		LED LUMINAIRE	42.00	EACH		\$	
2160	24900EC		PVC CONDUIT-1 1/4 IN-SCHEDULE 80	4,650.00	LF		\$	
2170	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	3,500.00	LF		\$	

Section: 0009 - DEMOBILIZATION AND/OR MOBILIZATION

241007

PROPOSAL BID ITEMS

Page 7 of 7

Report Date 3/19/24

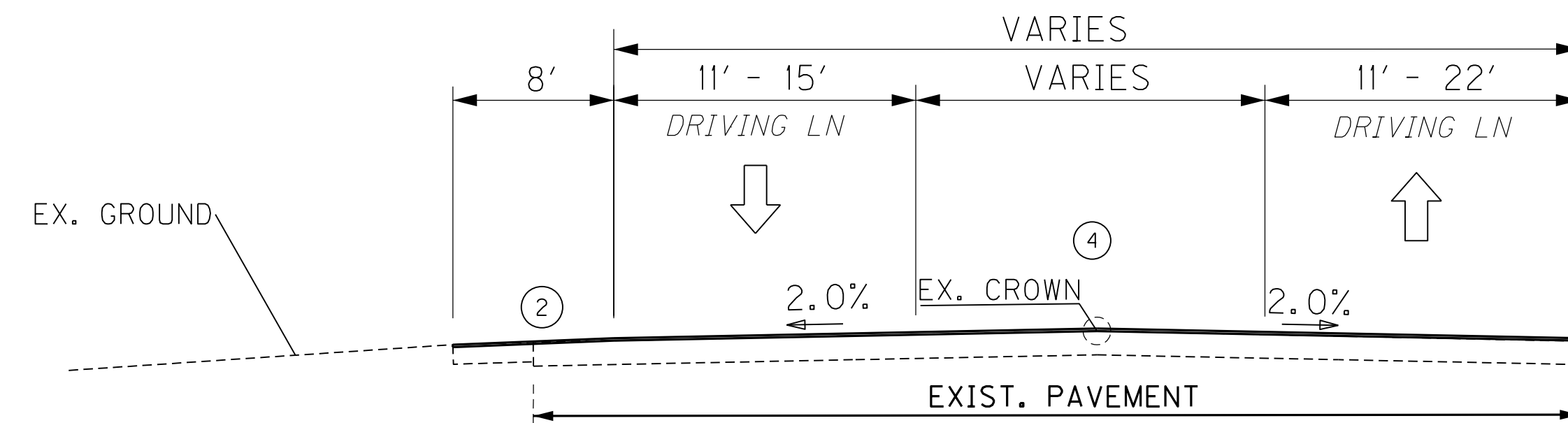
LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2180	02568		MOBILIZATION	1.00	LS		\$	
2190	02569		DEMOBILIZATION	1.00	LS		\$	

TYPICAL SECTIONS

PAVEMENT DESIGN

EXISTING TRAFFIC LANES (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG64-22
 LEVELING & WEDGING PG64-22

EXISTING SHOULDER (RESURFACE)
 1.50" CL2 ASPHALT SURFACE 0.38D PG64-22



NORMAL SECTION KY 555 - 2 LANE OVERLAY

STA. 5+05.51 TO 7+64.79
 STA. 12+15.33 TO 15+88.64

① DAYLIGHTED SHOULDERS

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2 FEET DOWN THE DITCH OF FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:

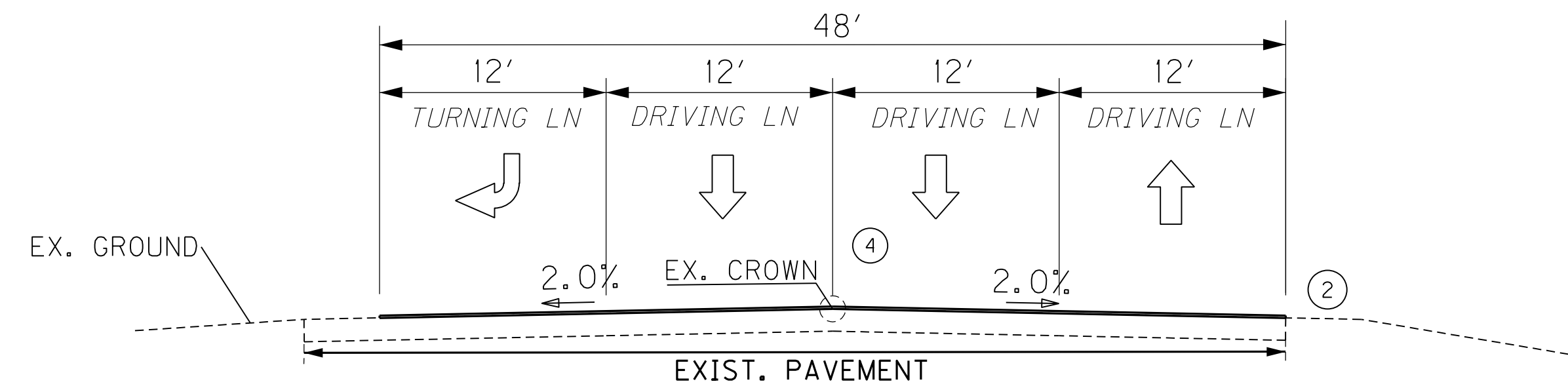
ASPHALT SEAL COAT 2.40 LB/SQ YD
 ASPHALT SEAL AGGREGATE 20 LB/SQ YD

NOTE: PER THE DIRECTION OF THE ENGINEER, WHERE SHOULDER PAVEMENT EXISTS THEN THE CONTRACTOR SHALL APPLY ASPHALT SEAL AS DESCRIBED.

② SEE CROSS SECTIONS FOR SLOPES OUTSIDE LIMIT OF THE SHOULDER

④ MATCH EXISTING ROADWAY DIMENSIONS

NOTE:
 SURFACE FROM STA. 3+65.47 TO STA. 12+72.31 SHALL BE 1.50" CL3 0.38B PG 76-22 ALONG KY 555



NORMAL SECTION KY 555 - 4 LANE OVERLAY

STA. 3+65.47 TO 3+79.95



COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS



DRAWING TITLE: KY 555 TYPICAL SECTIONS

ITEM NO. 04-164.10 COUNTY OF WASHINGTON

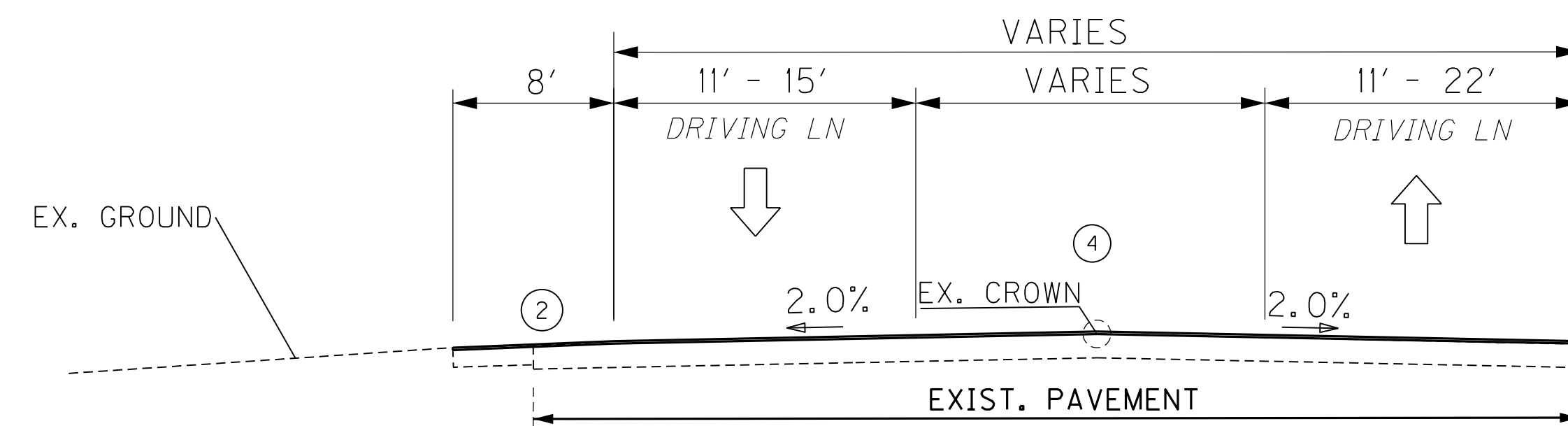
SHEET NO. R002

TYPICAL SECTIONS

PAVEMENT DESIGN

EXISTING TRAFFIC LANES (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG64-22
 LEVELING & WEDGING PG64-22

EXISTING SHOULDER (RESURFACE)
 1.50" CL2 ASPHALT SURFACE 0.38D PG64-22



① DAYLIGHTED SHOULDERS

ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2 FEET DOWN THE DITCH OF FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:

ASPHALT SEAL COAT 2.40 LB/SQ YD
 ASPHALT SEAL AGGREGATE 20 LB/SQ YD

NOTE: PER THE DIRECTION OF THE ENGINEER, WHERE SHOULDER PAVEMENT EXISTS THEN THE CONTRACTOR SHALL APPLY ASPHALT SEAL AS DESCRIBED.

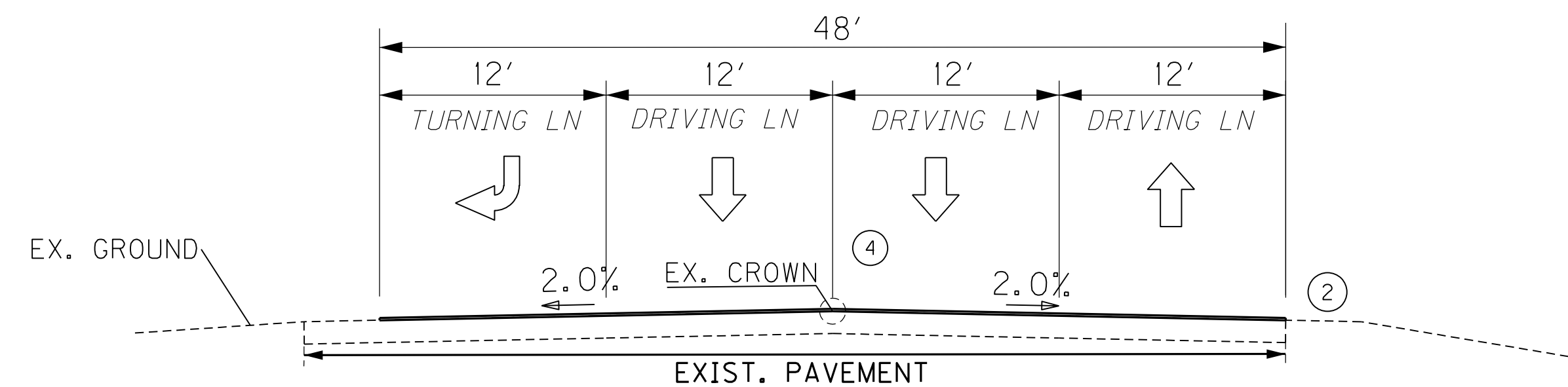
② SEE CROSS SECTIONS FOR SLOPES OUTSIDE LIMIT OF THE SHOULDER

④ MATCH EXISTING ROADWAY DIMENSIONS

NORMAL SECTION KY 555 - 2 LANE OVERLAY

STA. 5+05.51 TO 7+64.79
 STA. 12+15.33 TO 15+88.64

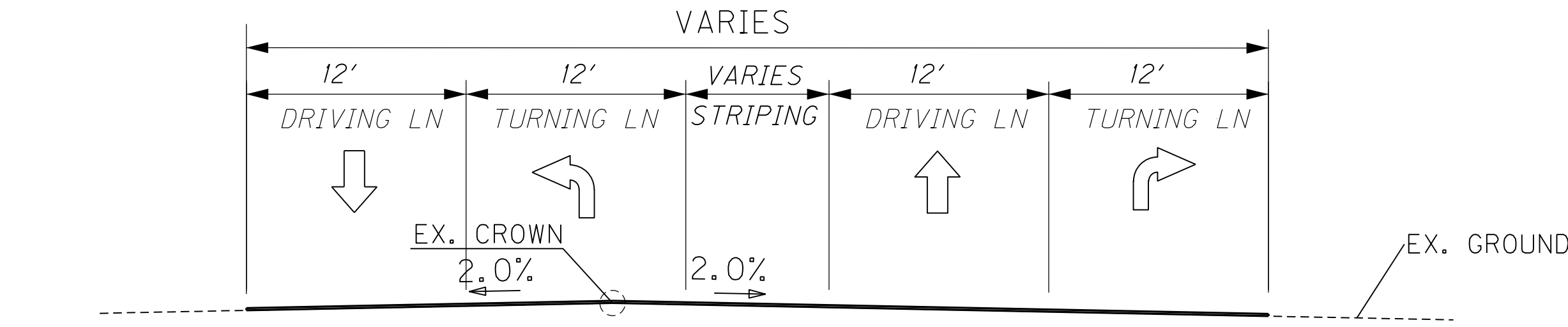
NOTE:
 SURFACE FROM STA. 3+65.47 TO STA. 12+72.31
 SHALL BE 1.50" CL3 0.38B PG 76-22 ALONG KY 555



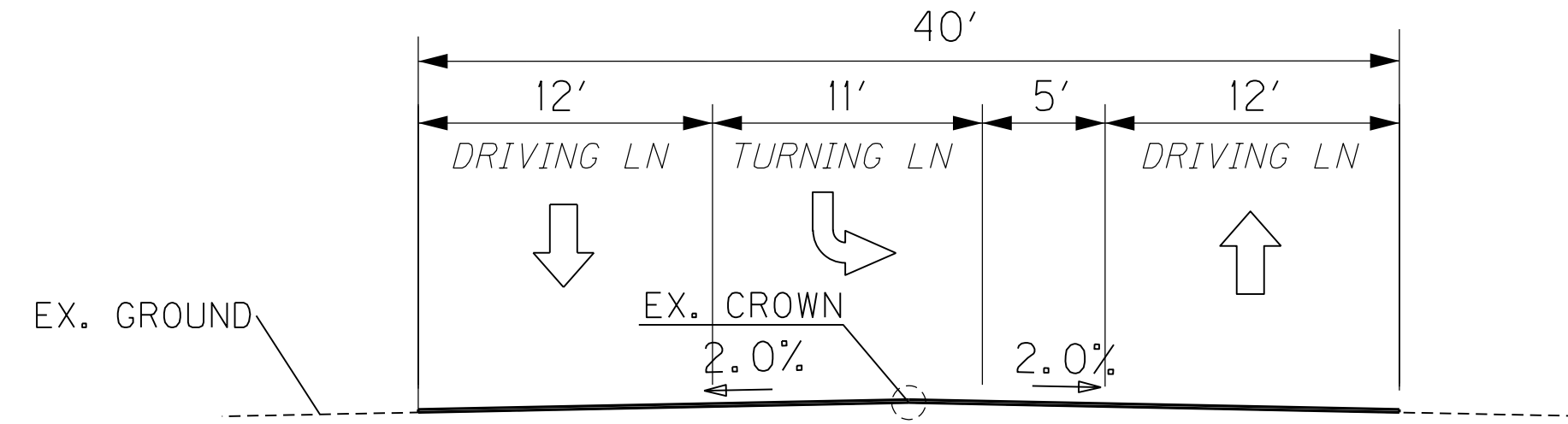
NORMAL SECTION KY 555 - 4 LANE OVERLAY

STA. 3+65.47 TO 3+79.95

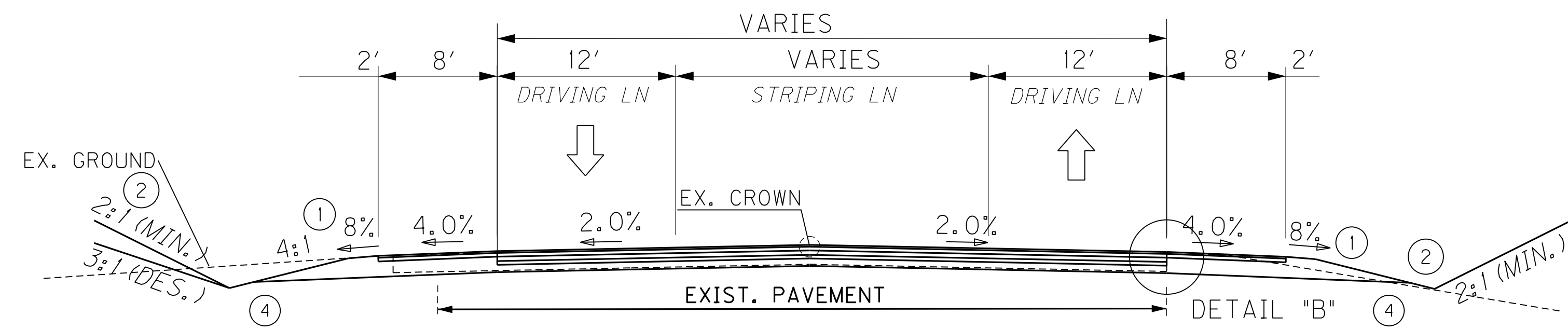
TYPICAL SECTIONS



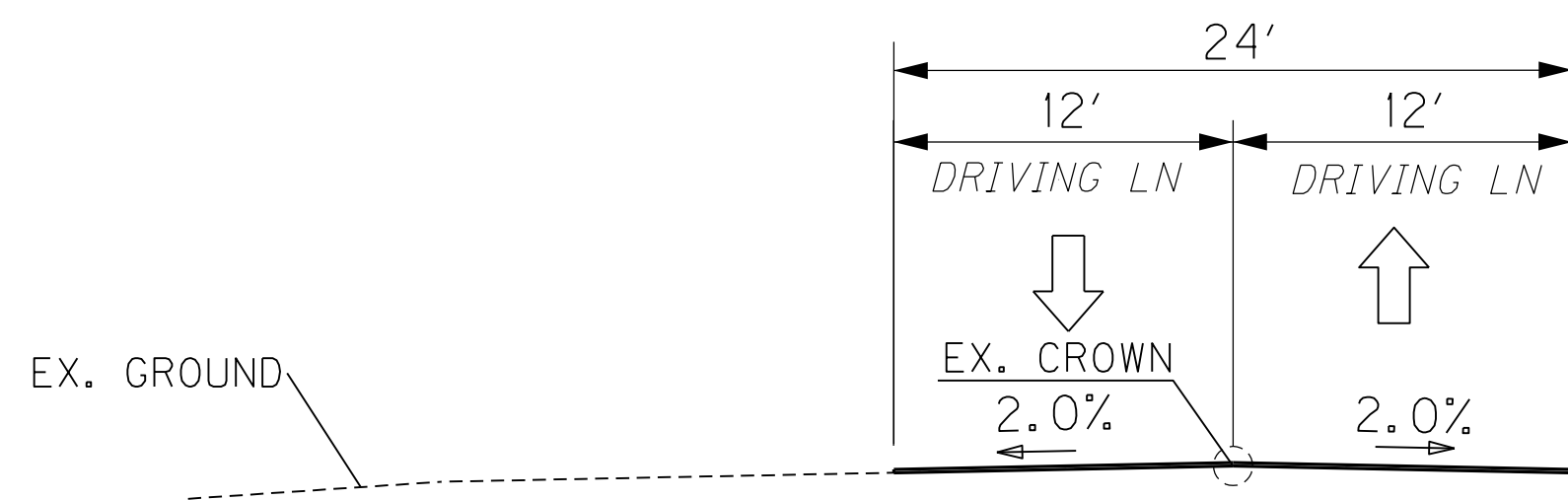
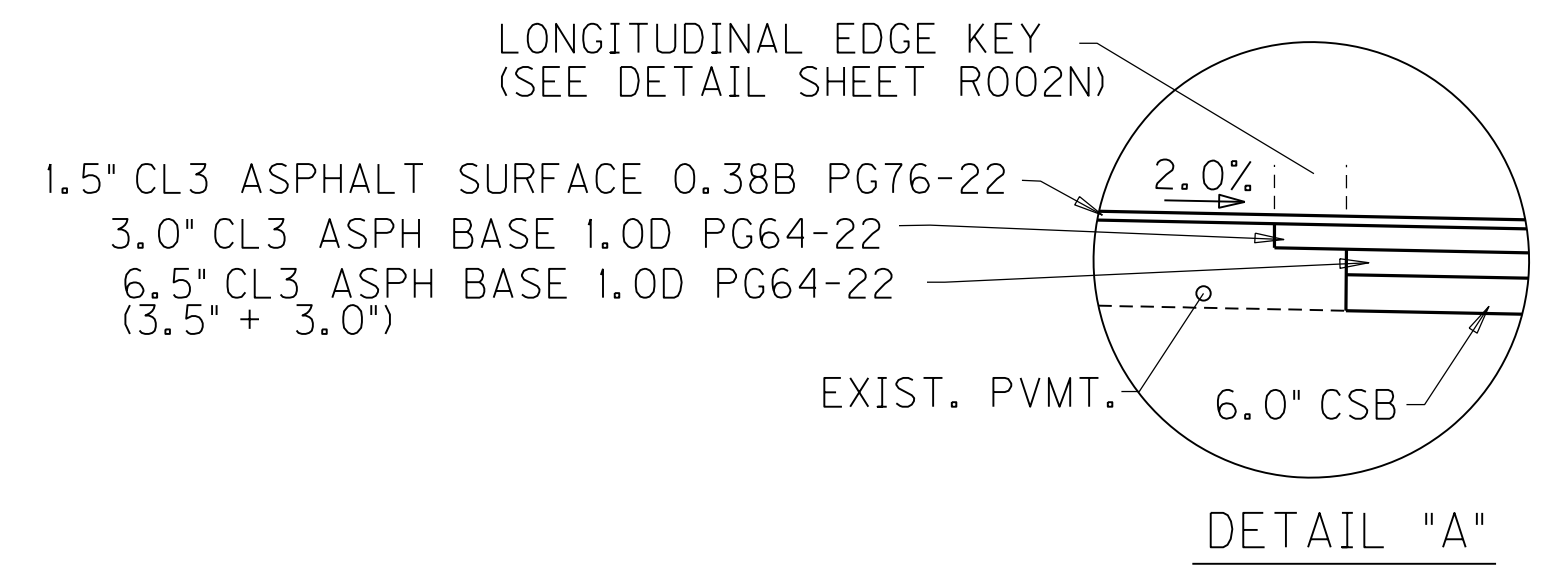
NORMAL SECTION
US150X - 2 LANE (WEST SIDE OF KY 555) RESURFACE



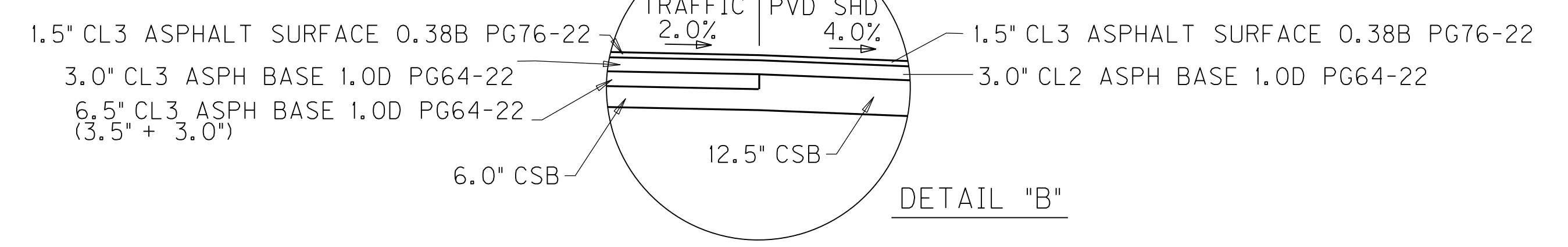
NORMAL SECTION
US150X - 2 LANE (WEST SIDE OF KY 555) RESURFACE



NORMAL SECTION
US150X - 2 LANE (EAST SIDE OF KY 555)



NORMAL SECTION
US 150X - 2 LANE OVERLAY



PAVEMENT DESIGN

EXISTING TRAFFIC LANES (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 LEVELING & WEDGING PG64-22

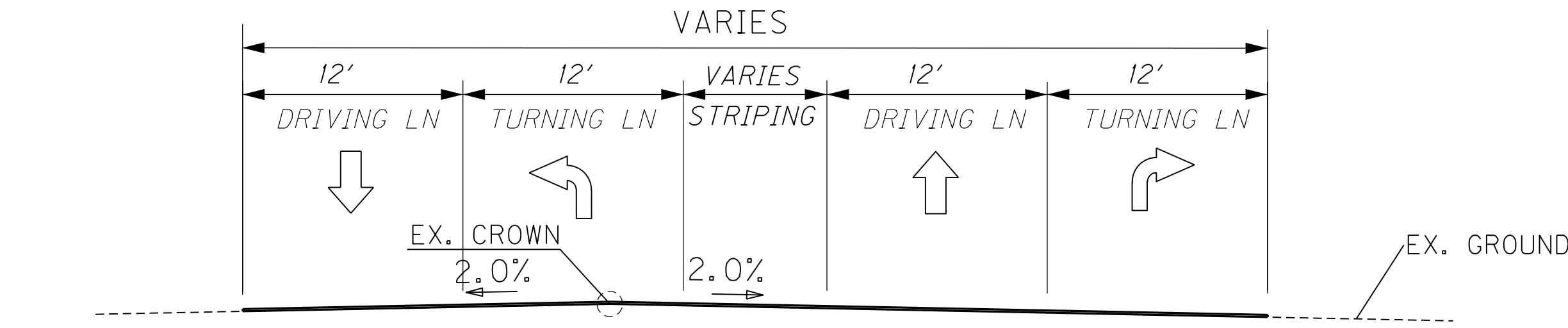
TRAFFIC LANES (OVERLAY AND WIDENING)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 3.5" CL3 ASPHALT BASE 1.0D PG64-22
 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 6.0" CRUSHED STONE BASE

SHOULDERS (WIDENING)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 3.0" CL2 ASPHALT BASE 1.0D PG64-22
 12.5" CRUSHED STONE BASE

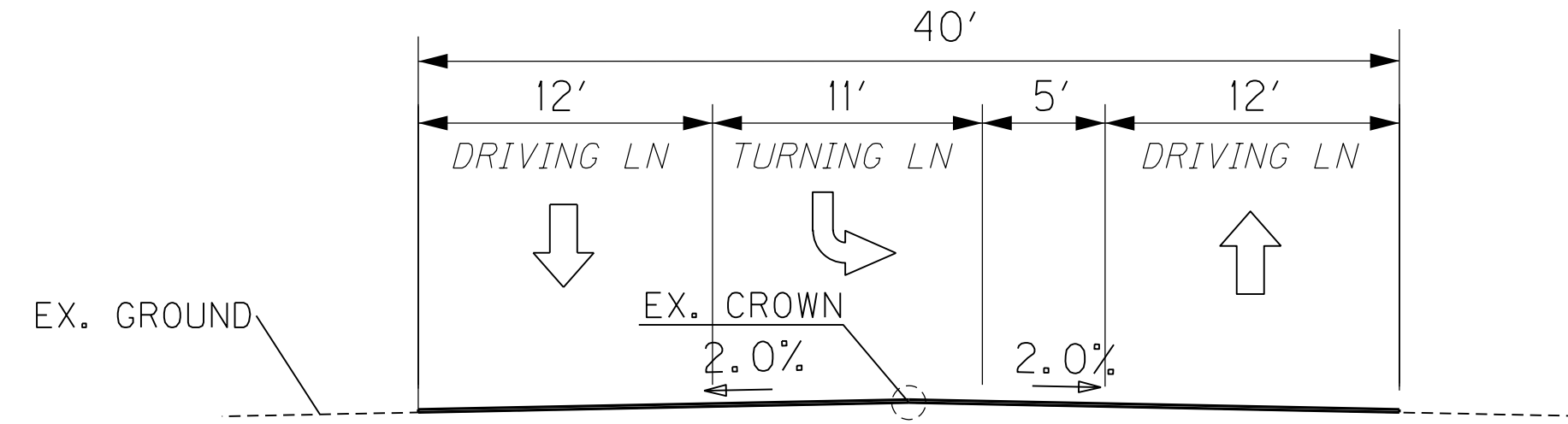
① DAYLIGHTED SHOULDERS
 ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2 FEET DOWN THE DITCH OF FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:
 ASPHALT SEAL COAT 2.40 LB/SQ YD
 ASPHALT SEAL AGGREGATE 20 LB/SQ YD

- ② SEE CROSS SECTIONS FOR SLOPES OUTSIDE LIMIT OF THE SHOULDER
- ③ ALL GUARDRAIL REQUIRES 7' POSTS
- ④ SLOPE SUBGRADE AWAY FROM EXISTING PAVEMENT AT 0.5% MINIMAL CROSS SLOPE

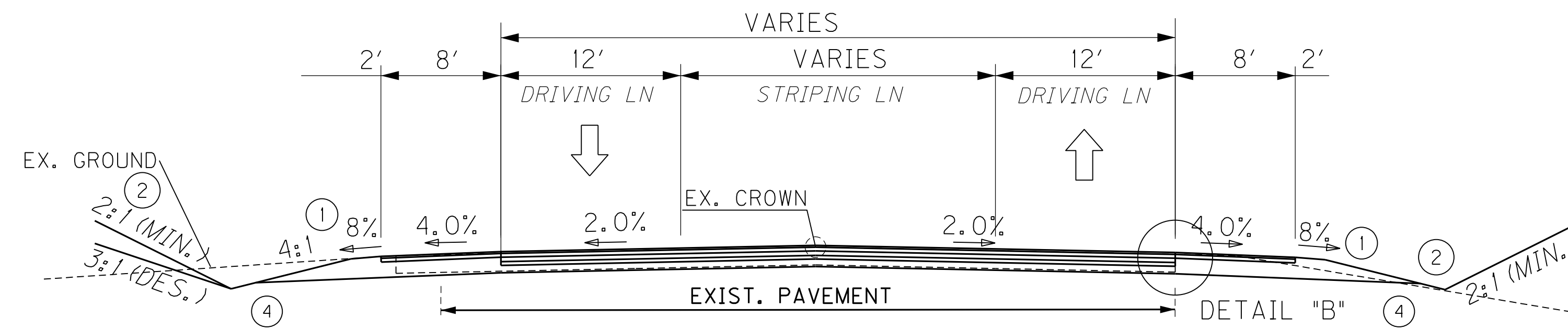
TYPICAL SECTIONS



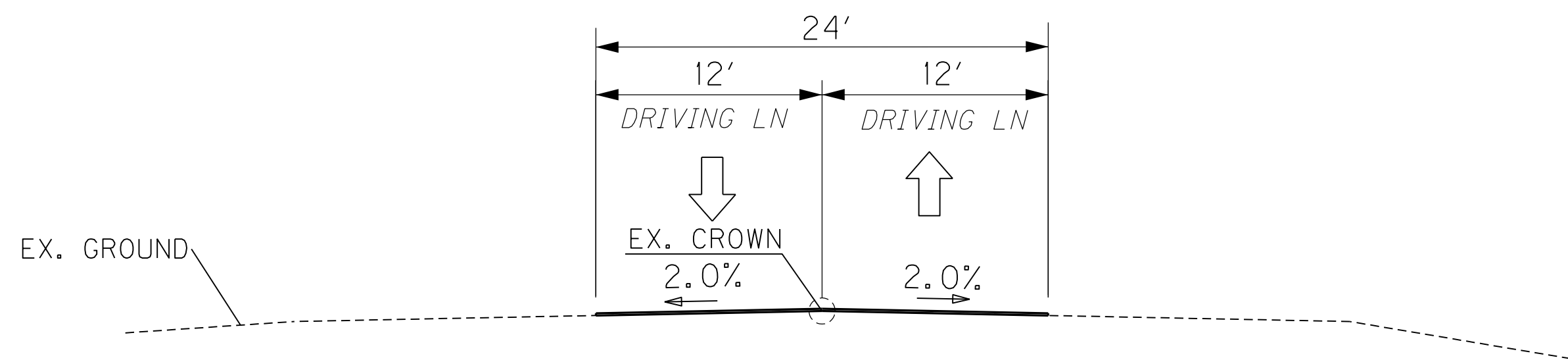
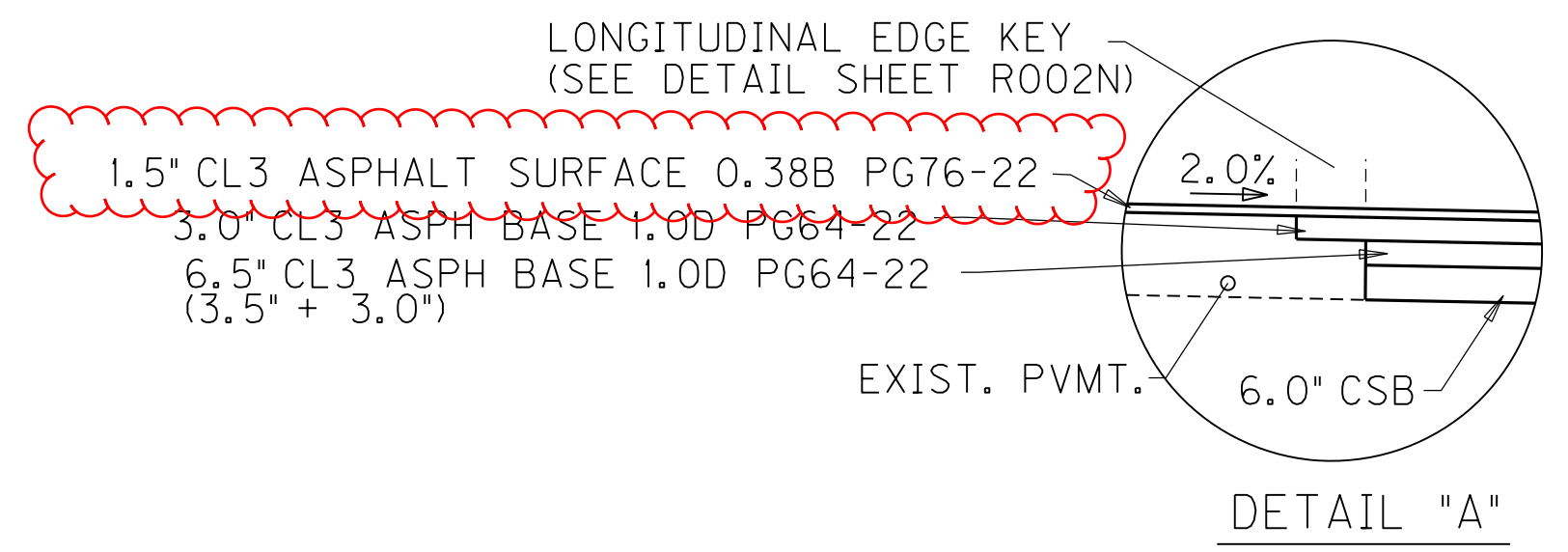
NORMAL SECTION
US150X - 2 LANE (WEST SIDE OF KY 555) RESURFACE



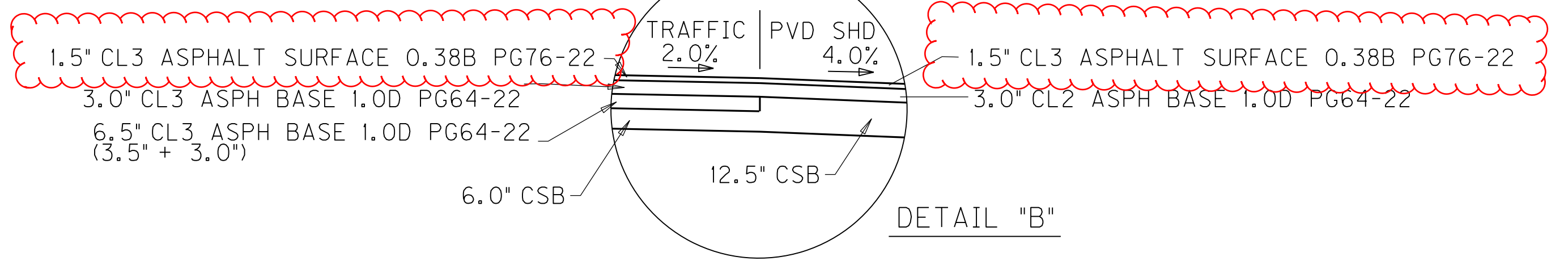
NORMAL SECTION
US150X - 2 LANE (WEST SIDE OF KY 555) RESURFACE



NORMAL SECTION
US150X - 2 LANE (EAST SIDE OF KY 555)



NORMAL SECTION
US 150X - 2 LANE OVERLAY



PAVEMENT DESIGN

EXISTING TRAFFIC LANES (RESURFACE)

1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 LEVELING & WEDGING PG64-22

TRAFFIC LANES (OVERLAY AND WIDENING)

1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 3.5" CL3 ASPHALT BASE 1.0D PG64-22
 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 6.0" CRUSHED STONE BASE

SHOULDER (WIDENING)

1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 3.0" CL2 ASPHALT BASE 1.0D PG64-22
 12.5" CRUSHED STONE BASE

① DAYLIGHTED SHOULDERS
 ASPHALT SEAL REQUIRED FROM EDGE OF PAVEMENT TO A POINT 2 FEET DOWN THE DITCH OF FILL SLOPE. TWO APPLICATIONS OF THE FOLLOWING:
 ASPHALT SEAL COAT 2.40 LB/SQ YD
 ASPHALT SEAL AGGREGATE 20 LB/SQ YD

② SEE CROSS SECTIONS FOR SLOPES OUTSIDE LIMIT OF THE SHOULDER

③ ALL GUARDRAIL REQUIRES 7' POSTS

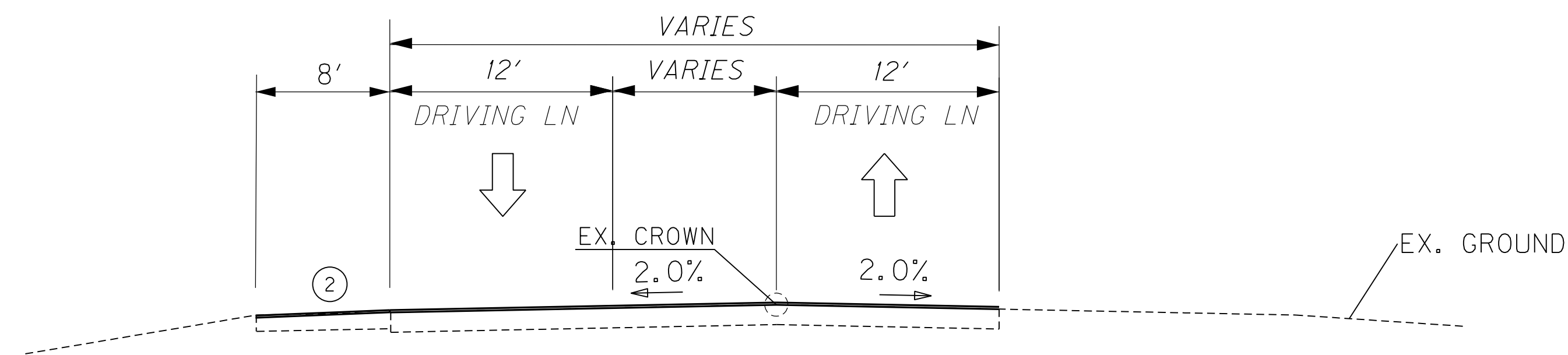
④ SLOPE SUBGRADE AWAY FROM EXISTING PAVEMENT AT 0.5% MINIMAL CROSS SLOPE

TYPICAL SECTIONS

PAVEMENT DESIGN

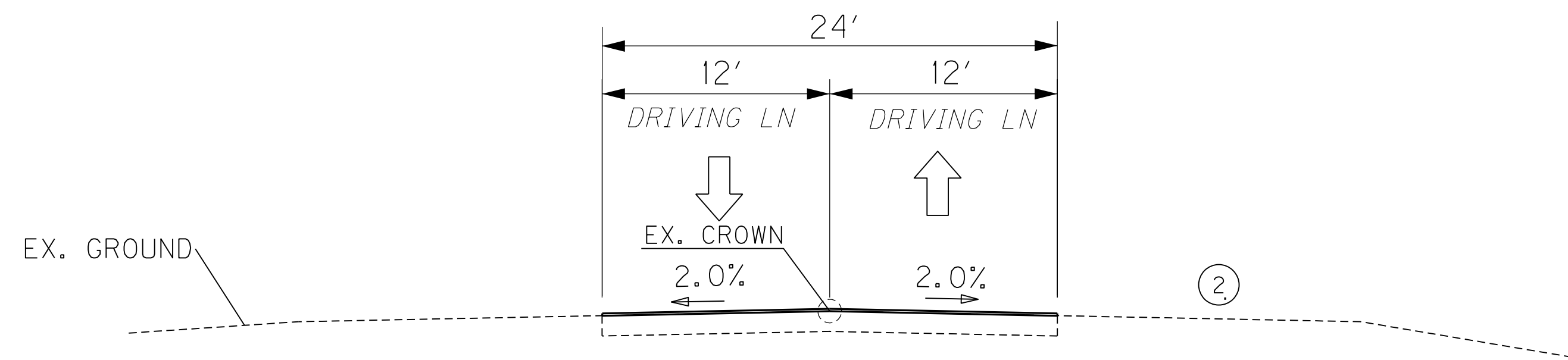
EXISTING TRAFFIC LANES (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 LEVELING & WEDGING PG64-22

EXISTING SHOULDER (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22



NORMAL SECTION
KY 528 - 2 LANE OVERLAY
US 150 - 2 LANE OVERLAY

② SEE CROSS SECTIONS FOR SLOPES
 OUTSIDE LIMIT OF THE SHOULDER



NORMAL SECTION
KY 528 - 2 LANE OVERLAY
US 150 - 2 LANE OVERLAY



COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS



DRAWING TITLE: KY 555 TYPICAL SECTIONS

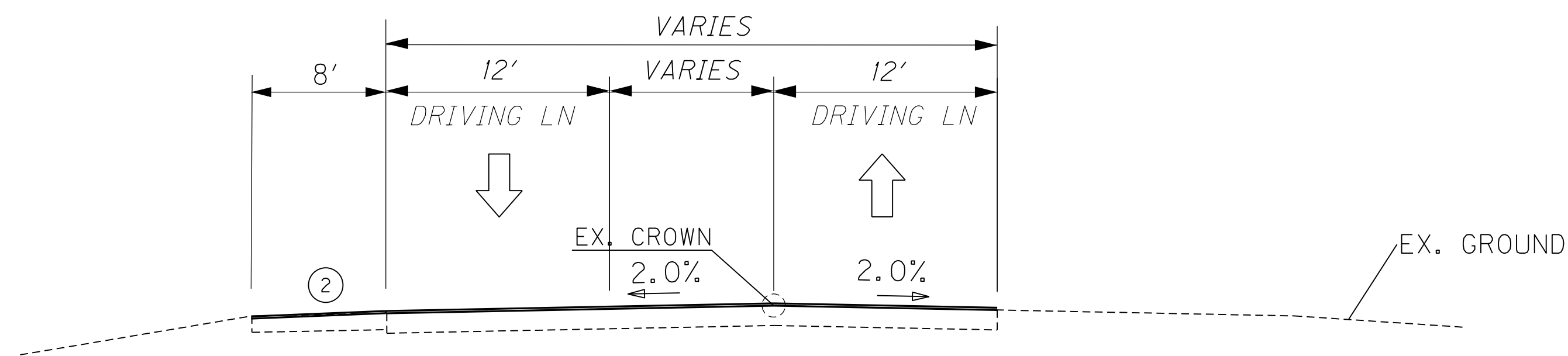
ITEM NO. 04-164.10 COUNTY OF WASHINGTON
 SHEET NO. R002K

TYPICAL SECTIONS

PAVEMENT DESIGN

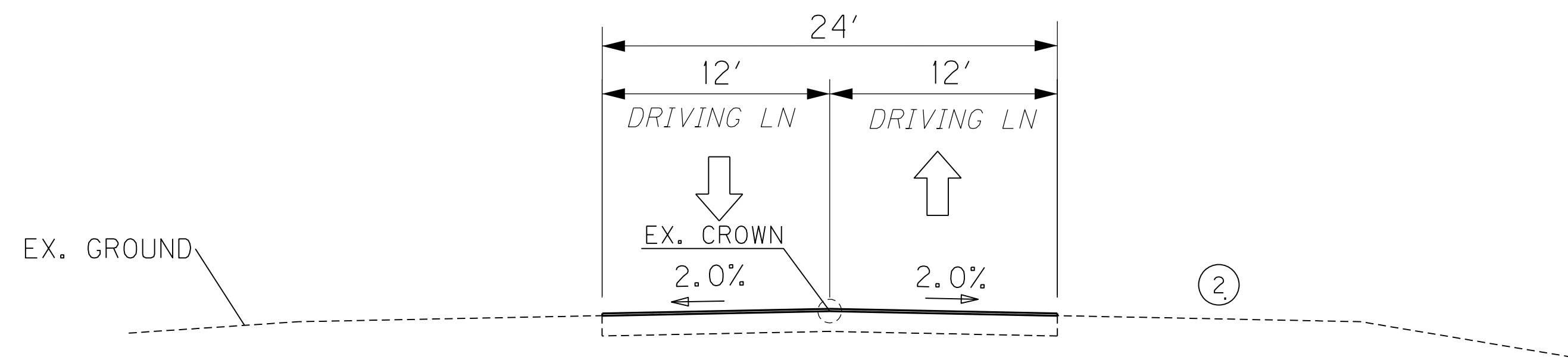
EXISTING TRAFFIC LANES (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 LEVELING & WEDGING PG64-22

EXISTING SHOULDER (RESURFACE)
 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22



NORMAL SECTION
KY 528 - 2 LANE OVERLAY
US 150 - 2 LANE OVERLAY

(2) SEE CROSS SECTIONS FOR SLOPES
 OUTSIDE LIMIT OF THE SHOULDER



NORMAL SECTION
KY 528 - 2 LANE OVERLAY
US 150 - 2 LANE OVERLAY



COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS



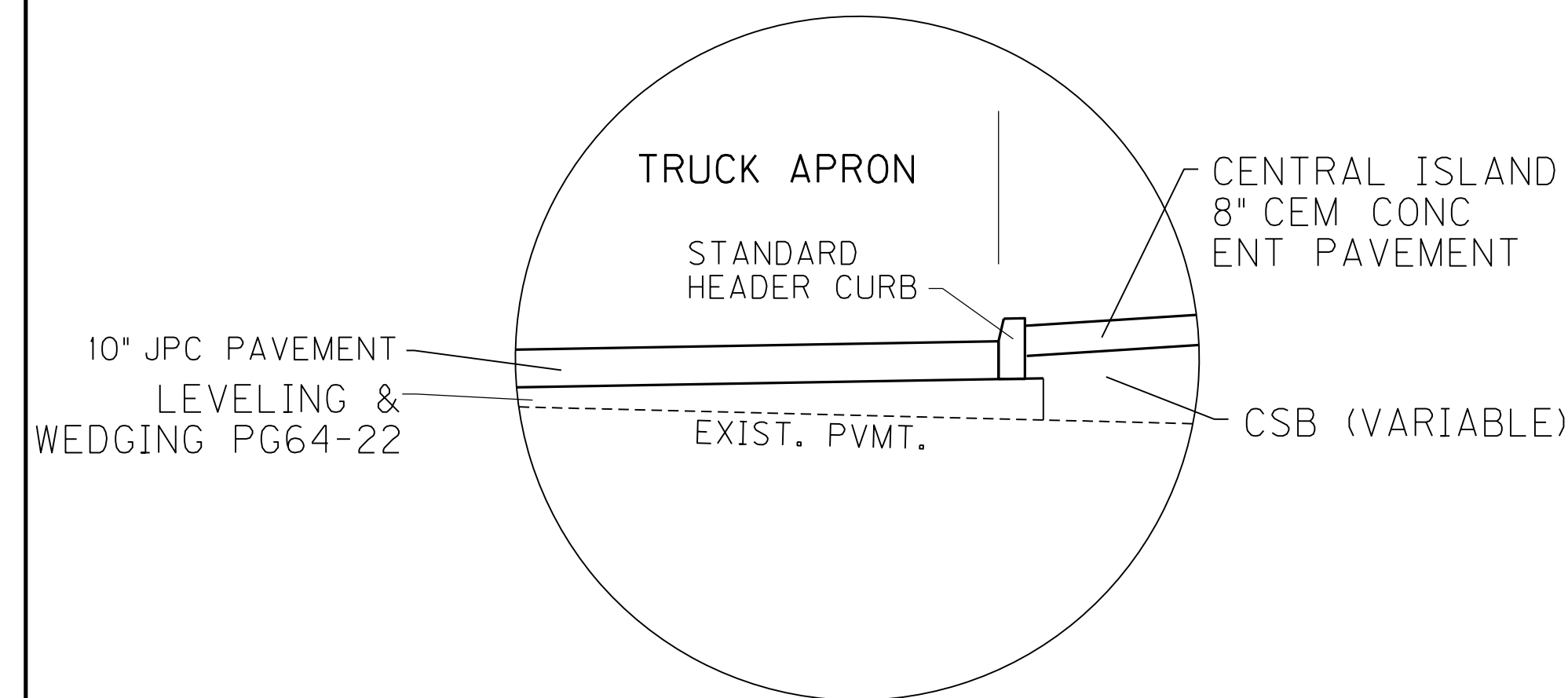
DRAWING TITLE: KY 555 TYPICAL SECTIONS

ITEM NO. 04-164.10 COUNTY OF WASHINGTON

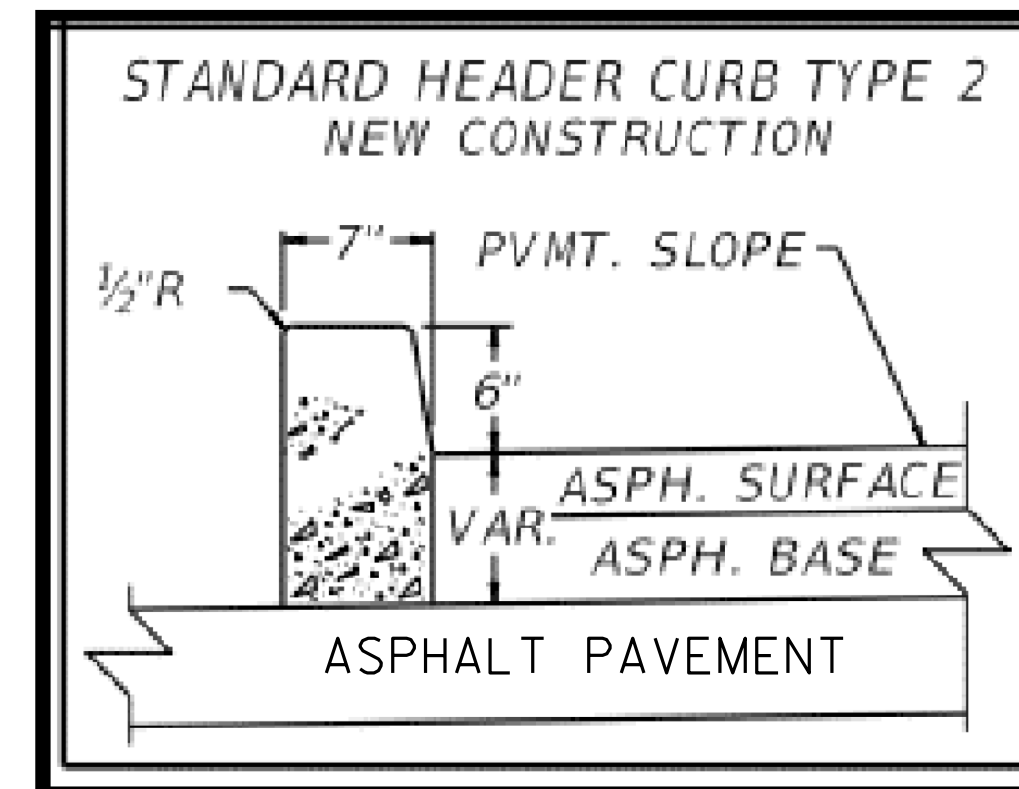
SHEET NO. R002K

PAVEMENT DESIGN

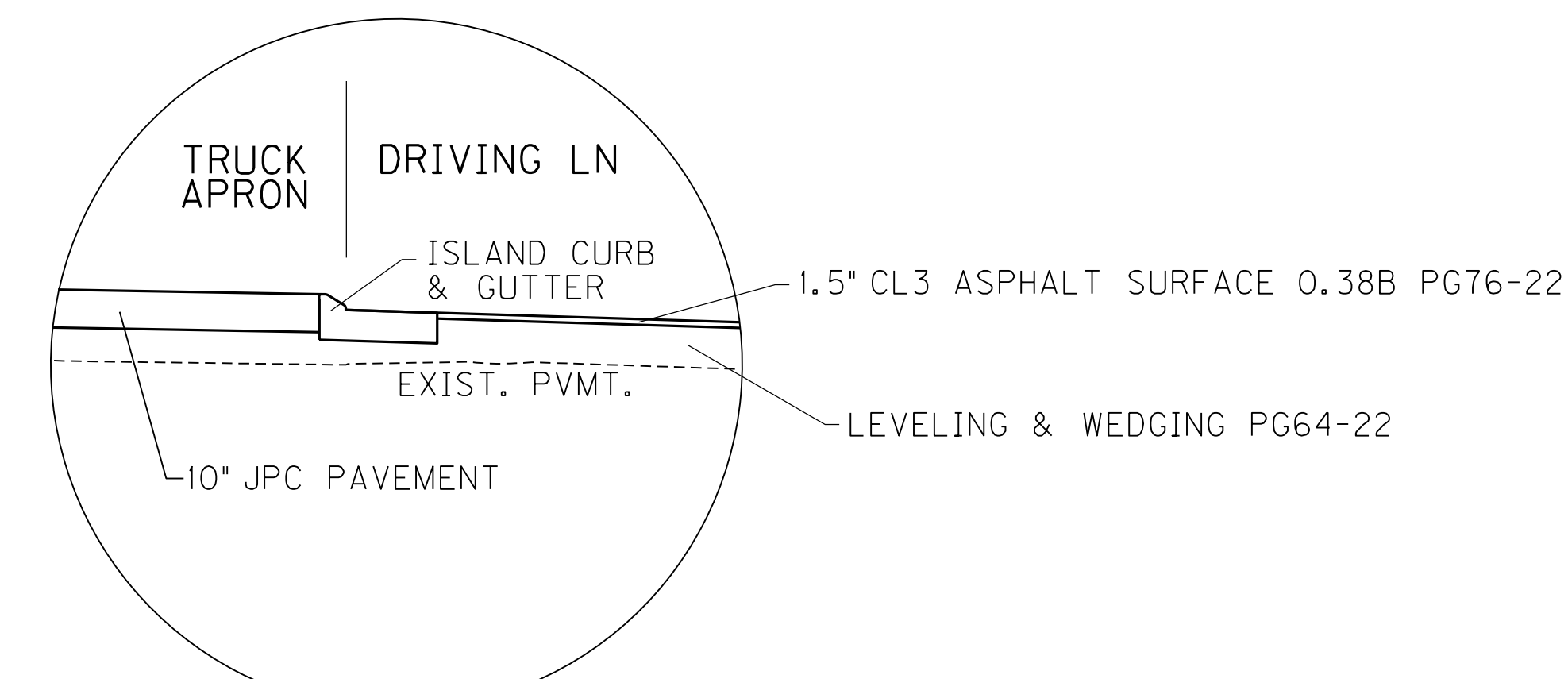
- EXISTING TRAFFIC LANES (RESURFACE)
 - 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 - LEVELING & WEDGING PG64-22
- TRAFFIC LANES (WIDENING)
 - 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - 3.5" CL3 ASPHALT BASE 1.0D PG64-22
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - LEVELING & WEDGING PG64-22
 - 6.0" CRUSHED STONE BASE
- SHOULDERS (WIDENING)
 - ISLAND CURB & GUTTER (RMP 100-11)
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - 6.0" CRUSHED STONE BASE
- TRUCK APRON & OUTSIDE MEDIAN
 - 10.0" JPC PAVEMENT-10 INCH
 - 6.0" CRUSHED STONE BASE



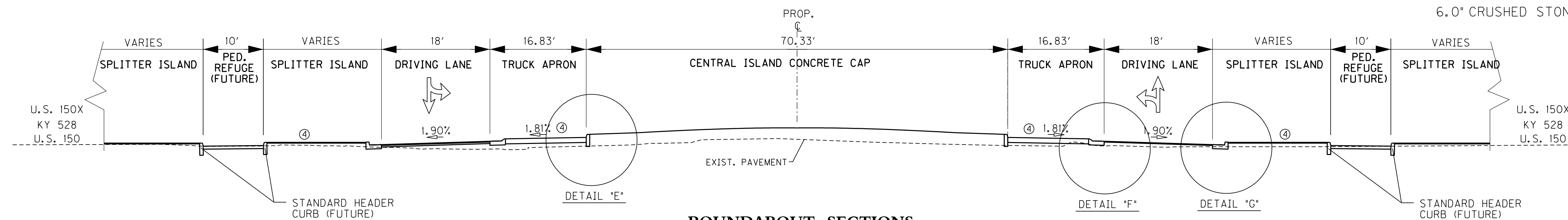
DETAIL "E"



RPM-100-11

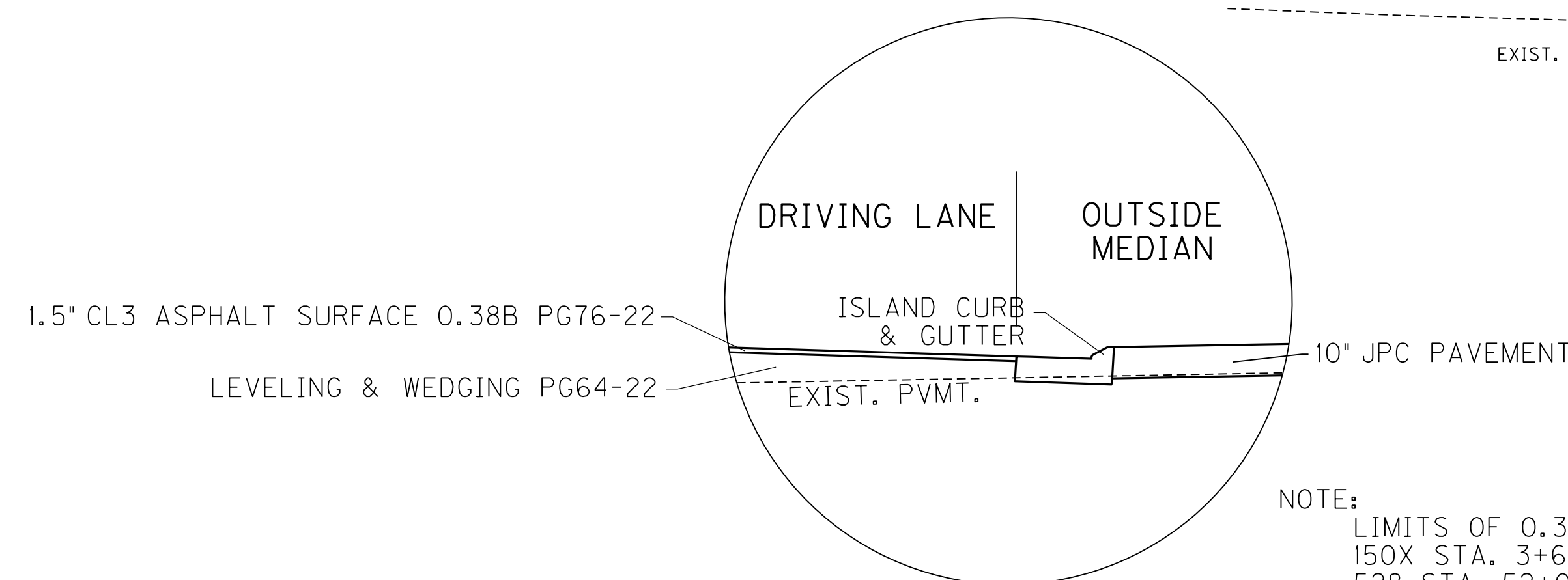
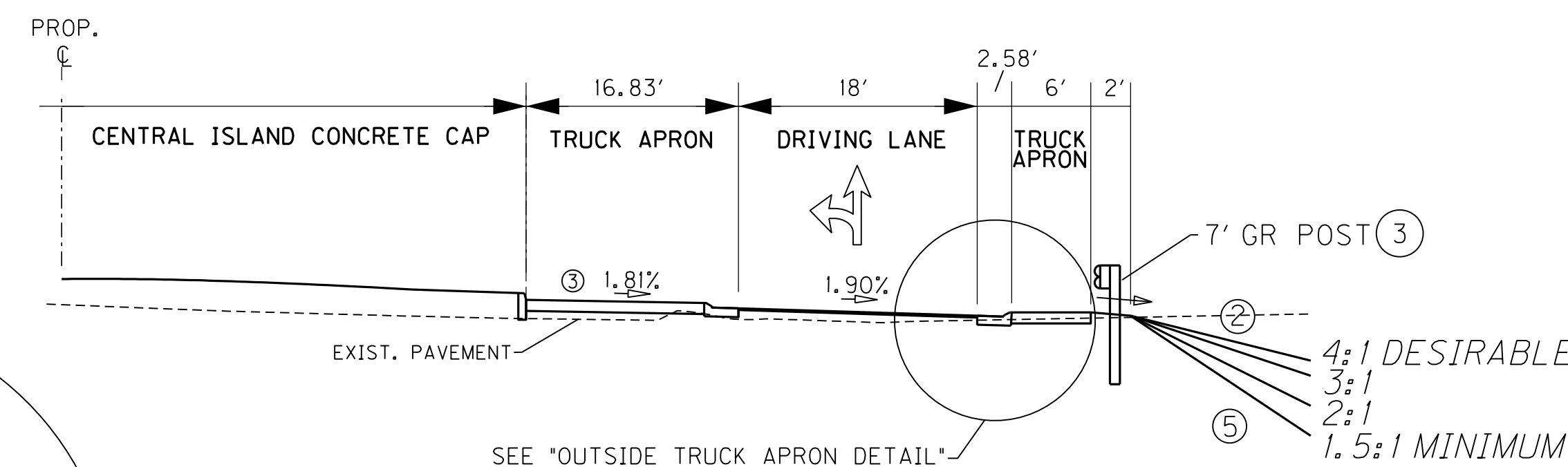


DETAIL "F"

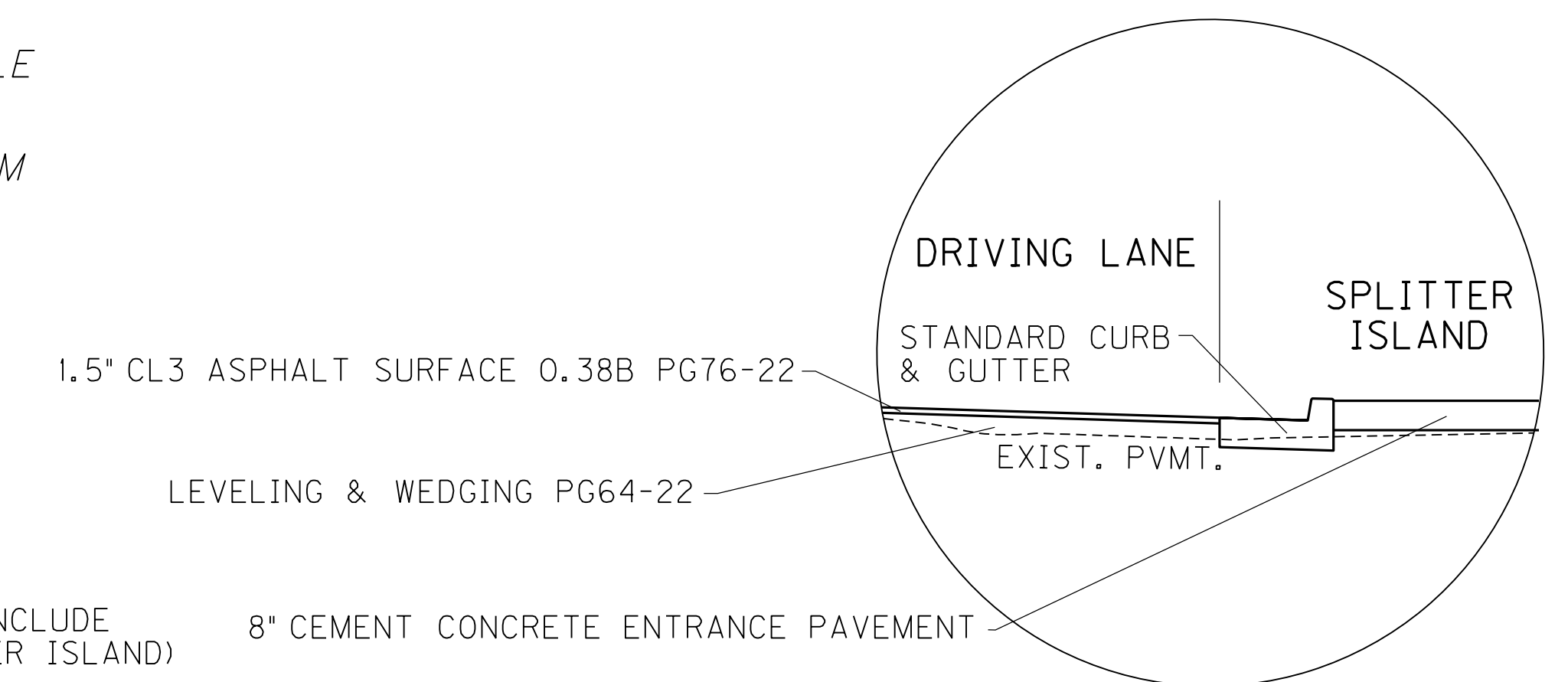


ROUNDABOUT SECTIONS
INTERSECTION KY 555 /US 150X
STA. 10+00
INTERSECTION KY 555 /KY 528
STA. 54+81.43
INTERSECTION KY 555 /US 150
STA. 85+36.58

- ② SEE CROSS SECTIONS FOR SIDESLOPES
- ③ ALL GUARDRAIL REQUIRES 7' POSTS
- ④ TEXTURED CONCRETE SHALL BE DYED BAJA RED, 2-BAG (RG-28272R INTERSTAR) AND STAMPED IN A BRICK PATTERN - CONTRACTOR SHALL SUBMIT SAMPLE FOR APPROVAL. FINISHING, TEXTURING, AND COLORING SHALL BE INCIDENTAL TO JPC PAVEMENT OR CLASS A CONCRETE.
- ⑤ SLOPES STEEPER THAN 2:1 SHALL BE CONSTRUCTED WITH AGGREGATE IN ACCORDANCE WITH THE GEOTECHNICAL NOTES



OUTSIDE TRUCK APRON



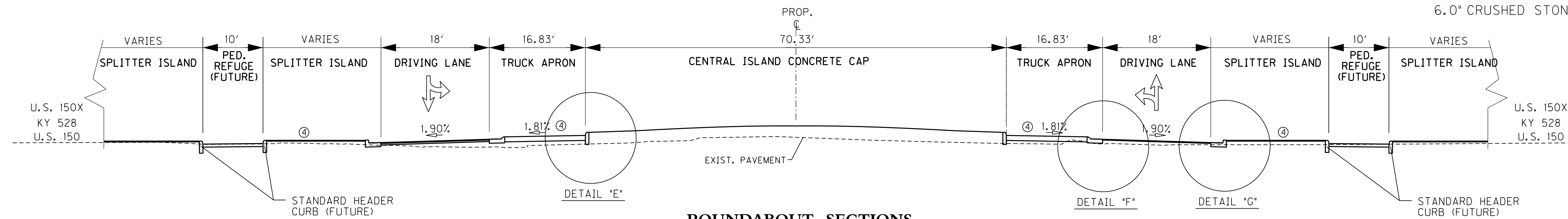
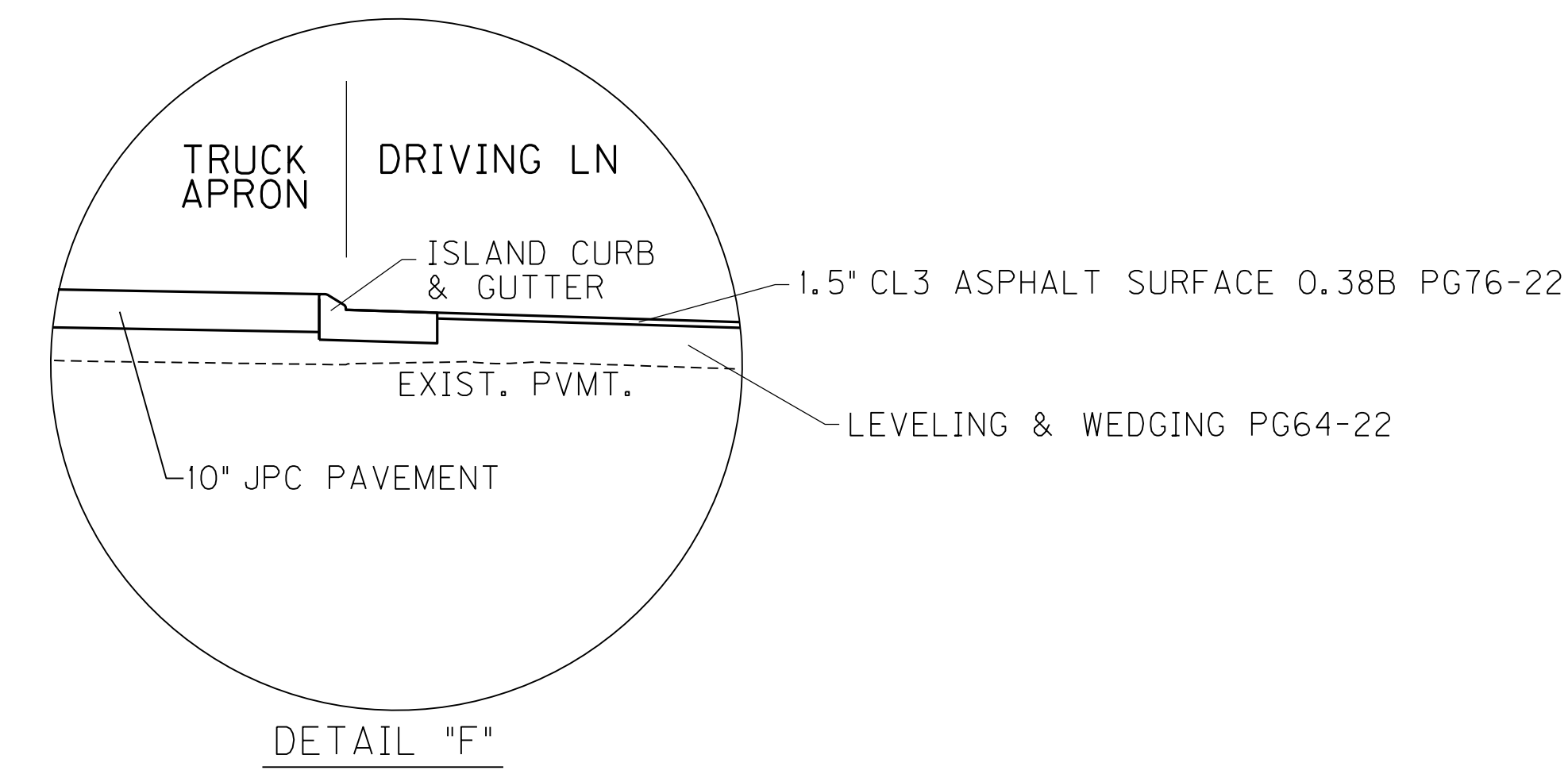
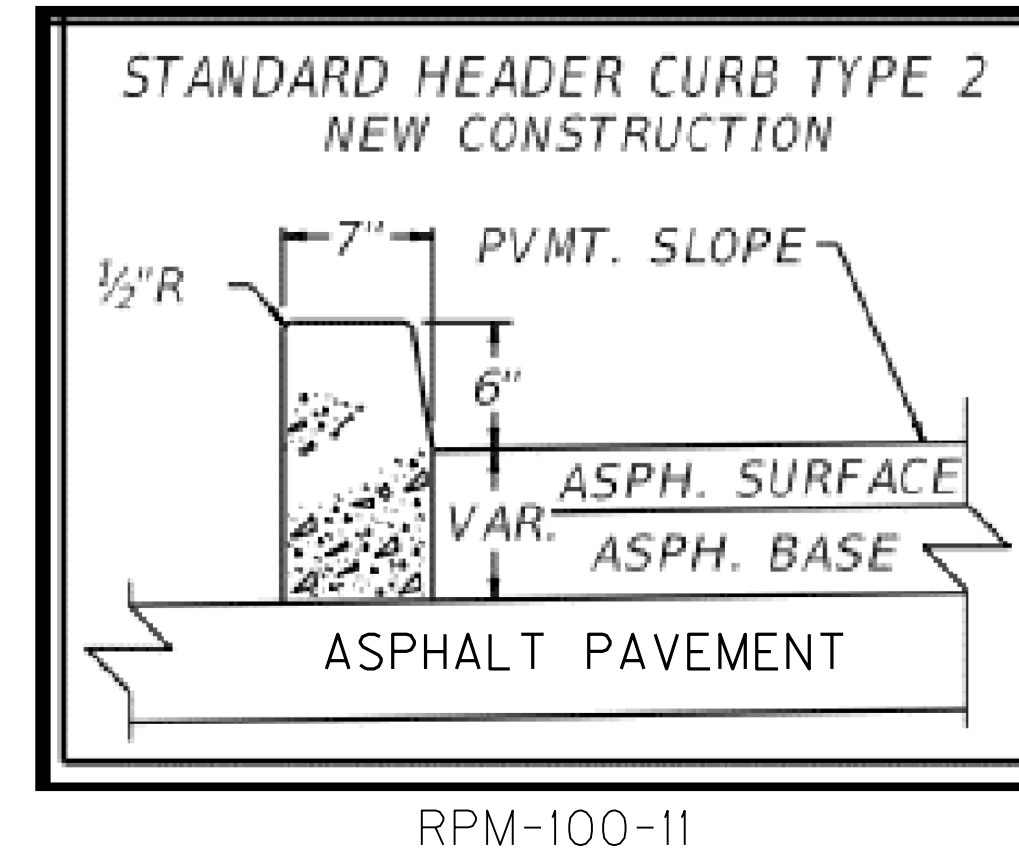
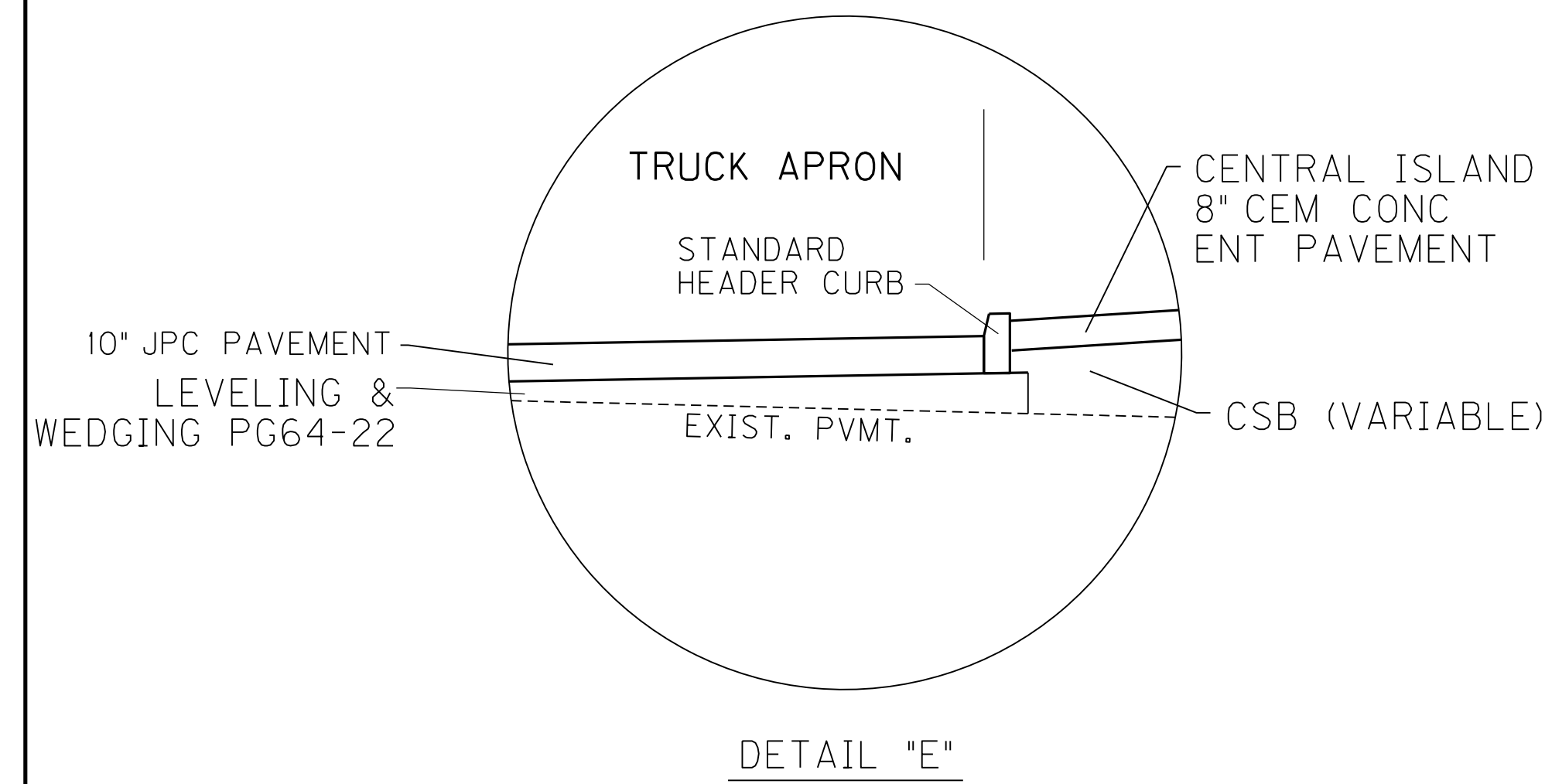
DETAIL "G"

NOTE:
 LIMITS OF 0.38B PG 76-22 ALONG KY 555 AT THE FOLLOWING ROUNDABOUTS SHALL INCLUDE
 150X STA. 3+65.44 TO STA. 12+72.31 (BEGINNING OF PROJECT THROUGH NORTH SPLITTER ISLAND)
 528 STA. 52+06.94 TO STA. 57+65.85 (SPLITTER ISLAND THROUGH SPLITTER ISLAND)
 150 STA. 82+52.53 TO STA. 88+12.13 (SPLITTER ISLAND THROUGH SPLITTER ISLAND)
 APPROACHES TO ROUNDABOUTS OTHER THAN KY 555 SHALL USE 0.38B PG 76-22 AS SPECIFIED FOR THE SURFACE MIX

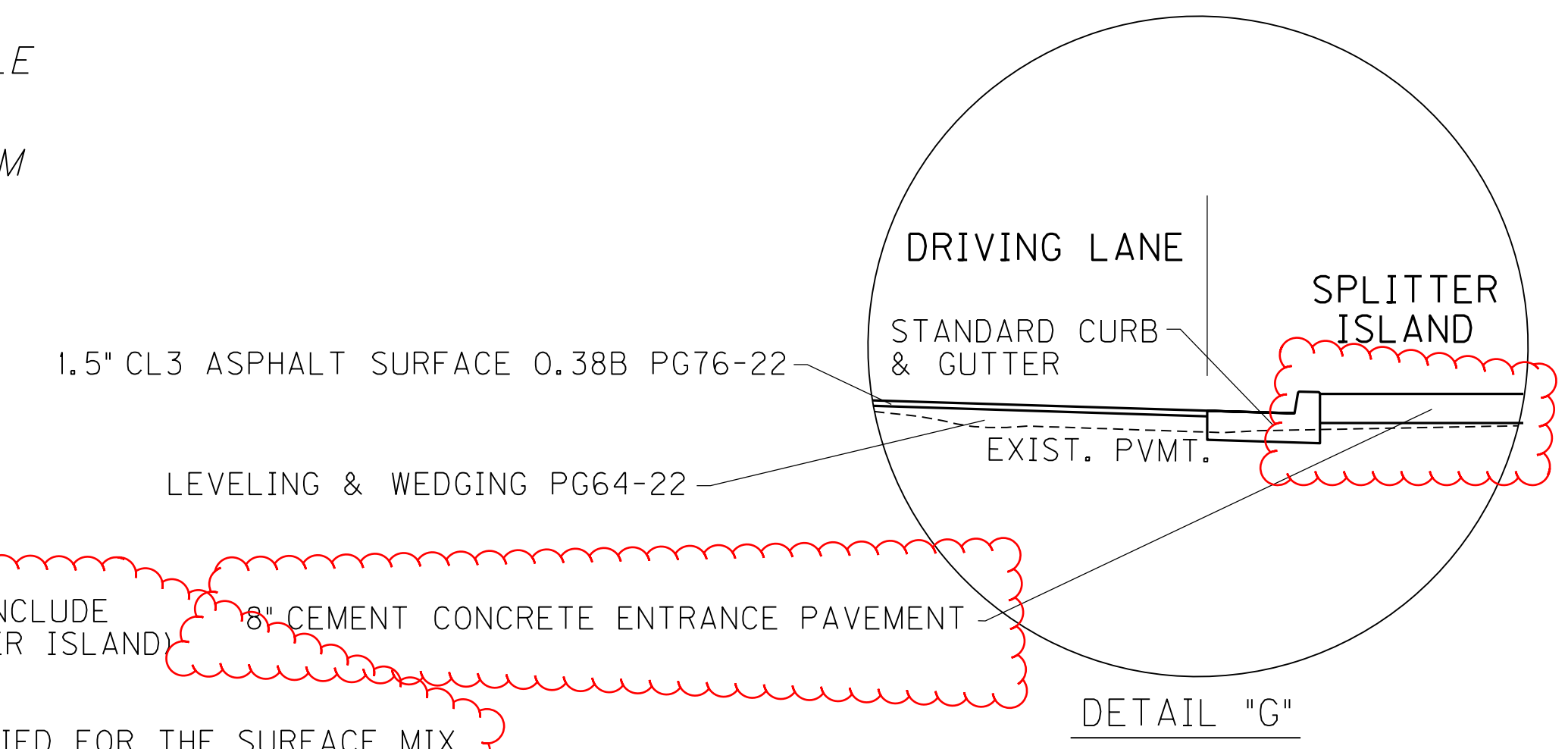
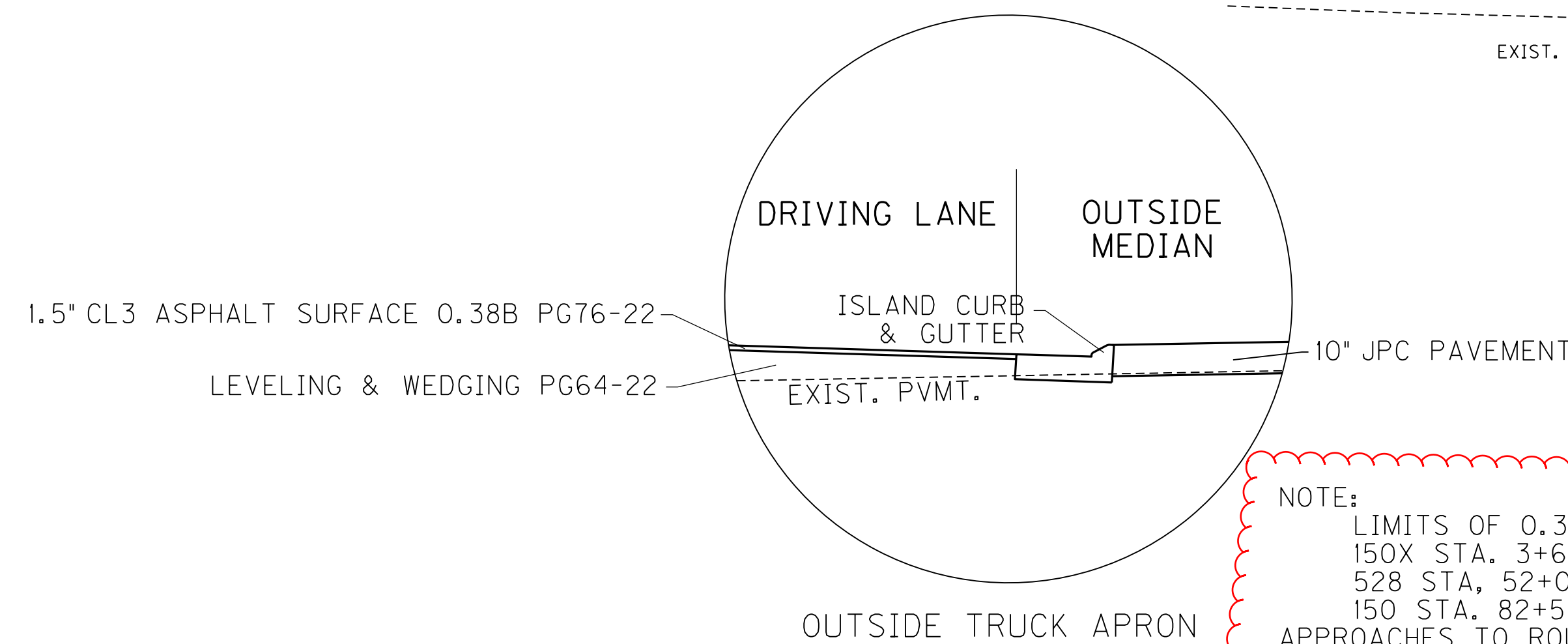
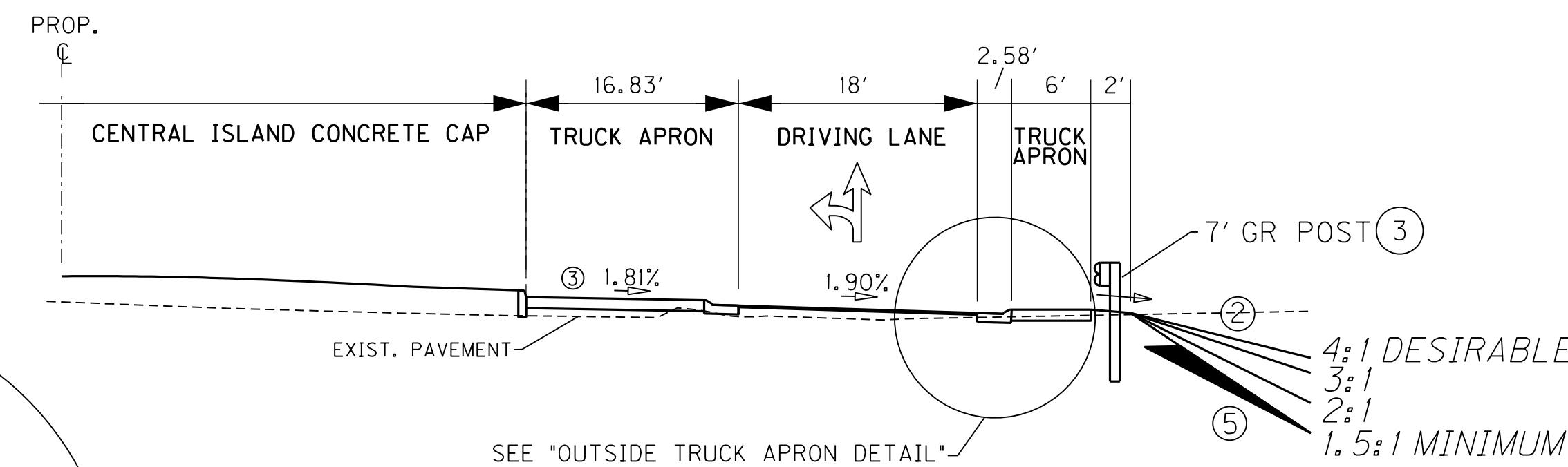


PAVEMENT DESIGN

- EXISTING TRAFFIC LANES (RESURFACE)
 - 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 - LEVELING & WEDGING PG64-22
- TRAFFIC LANES (WIDENING)
 - 1.50" CL3 ASPHALT SURFACE 0.38B PG76-22
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - 3.5" CL3 ASPHALT BASE 1.0D PG64-22
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - LEVELING & WEDGING PG64-22
 - 6.0" CRUSHED STONE BASE
- SHOULDERS (WIDENING)
 - ISLAND CURB & GUTTER (RMP 100-11)
 - 3.0" CL3 ASPHALT BASE 1.0D PG64-22
 - 6.0" CRUSHED STONE BASE
- TRUCK APRON & OUTSIDE MEDIAN
 - 10.0" JPC PAVEMENT-10 INCH
 - 6.0" CRUSHED STONE BASE



- ② SEE CROSS SECTIONS FOR SIDESLOPES
- ③ ALL GUARDRAIL REQUIRES 7' POSTS
- ④ TEXTURED CONCRETE SHALL BE DYED BAJA RED, 2-BAG (RG-28272R INTERSTAR) AND STAMPED IN A BRICK PATTERN - CONTRACTOR SHALL SUBMIT SAMPLE FOR APPROVAL. FINISHING, TEXTURING, AND COLORING SHALL BE INCIDENTAL TO JPC PAVEMENT OR CLASS A CONCRETE.
- ⑤ SLOPES STEEPER THAN 2:1 SHALL BE CONSTRUCTED WITH AGGREGATE IN ACCORDANCE WITH THE GEOTECHNICAL NOTES



NOTE:
 LIMITS OF 0.38B PG 76-22 ALONG KY 555 AT THE FOLLOWING ROUNDABOUTS SHALL INCLUDE
 150X STA. 3+65.44 TO STA. 12+72.31 (BEGINNING OF PROJECT THROUGH NORTH SPLITTER ISLAND)
 528 STA. 52+06.94 TO STA. 57+65.85 (SPLITTER ISLAND THROUGH SPLITTER ISLAND)
 150 STA. 82+52.53 TO STA. 88+12.13 (SPLITTER ISLAND THROUGH SPLITTER ISLAND)
 APPROACHES TO ROUNDABOUTS OTHER THAN KY 555 SHALL USE 0.38B PG 76-22 AS SPECIFIED FOR THE SURFACE MIX



GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	KY 555	US 150X	KY 528	US 150															PROJECT TOTALS
78	CRUSHED AGGREGATE SIZE NO 2	(10) TON	1,000																		1,000
1000	PERFORATED PIPE-4 IN	LF	36																		36
1010	NON-PERFORATED PIPE-4 IN	LF	16																		16
1028	PERF PIPE HEADWALL TY3-4 IN	EACH	2																		2
1810	STANDARD CURB AND GUTTER	LF	1,554																		1,554
1875	STANDARD HEADER CURB		632																		632
1825	ISLAND CURB & GUTTER	LF	5,471																		5,471
1984	DELINEATOR FOR BARRIER-WHITE	EACH	16																		16
1987	DELINEATOR FOR GUARDRAIL B/W	EACH	330																		330
2003	RELOCATE TEMP CONC. BARRIER	LF	820																		820
2014	TYPE III BARRICADE	EACH	16																		16
2058	REMOVE PCC PAVEMENT	SOYD	1,750																		1,750
2091	REMOVE PAVEMENT	SOYD	691																		691
2159	TEMP DITCH	LF	24,097																		24,097
2160	CLEAN TEMP DITCH	LF	12,048																		12,048
2165	REMOVE PAVED DITCH	(6) SOYD	7,100																		7,100
2200	ROADWAY EXCAVATION	(9) CUYD	123,775																		123,775
2223	GRANULAR EMBANKMENT	CUYD	4,637																		4,637
2230	EMBANKMENT IN-PLACE	(9) CUYD	100,234																		100,234
2265	REMOVE FENCE	LF	1,634																		1,634
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	23																		23
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	35																		35
2369	GUARDRAIL END TREATMENT TYPE 2A	EACH	1																		1
2371	GUARDRAIL END TREATMENT TYPE 7	EACH	2																		2
2381	REMOVE GUARDRAIL	LF	25,713																		25,713
2403	REMOVE CONCRETE MASONRY	(8) CUYD	124																		124
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	11																		11
2432	WITNESS POST	EACH	3																		3
2483	CHANNEL LINING CLASS II	TONS	7,383																		7,383
2484	CHANNEL LINING CLASS III	(5) TONS	3,259																		3,259
2545	CLEARING AND GRUBBING	(4) LS	1																		1
2555	CONCRETE-CLASS B	(2) CUYD	8																		8
2562	TEMPORARY SIGNS	SF	5,400																		5,400
2565	OBJECT MARKER TYPE 2	EACH	2																		2
2568	MOBILIZATION	LS	1																		1
2569	DEMOBILIZATION	LS	1																		1
2585	EDGE KEY	LF	869																		869
2602	FABRIC-GEOTEXTILE CLASS 1	(3) SQYD	71,193																		71,193
2650	MAINTAIN & CONTROL TRAFFIC	LS	1																		1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	6																		6
2697	EDGE LINE RUMBLE STRIPS	LF	90,850																		90,850
2701	TEMP SILT FENCE	LF	24,574																		24,574
2703	SILT TRAP TYPE A	EACH	251																		251
2704	SILT TRAP TYPE B	EACH	251																		251
2705	SILT TRAP TYPE C	EACH	251																		251
2706	CLEAN SILT TRAP TYPE A	EACH	251																		251
2707	CLEAN SILT TRAP TYPE B	EACH	251																		251
2708	CLEAN SILT TRAP TYPE C	EACH	251																		251
2726	STAKING	LS	1																		1
2775	ARROW PANEL	EACH	4																		4
2898	RELOCATE CRASH CUSHION	EACH	4																		4
3171	CONCRETE BARRIER WALL TYPE 9T	LF	820																		820
4933	TEMP SIGNAL 2 PHASE	EACH	2																		2
4935	TEMP SIGNAL (US 150X)	LS	1																		1
4935	TEMP SIGNAL (KY 528)	LS	1																		1
4935	TEMP SIGNAL (US 150)	LS	1																		1
5950	EROSION CONTROL BLANKET	SOYD	20,265																		20,265
5952	TEMP MULCH	SOYD	809,749																		809,749
5953	TEMP SEEDING AND PROTECTION	SOYD	607,009																		607,009
5963	INITIAL FERTILIZER	TONS	48																		48
5964	MAINTENANCE FERTILIZER	TONS	29																		29
5985	SEEDING AND PROTECTION	SOYD	928,748																		928,748
5989	SPECIAL SEEDING CROWN VETCH	SOYD	165,454																		165,454
5992	AGRICULTURAL LIMESTONE	TONS	576																		576
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LF	518,058																		518,058
6542	PAVE STRIPING - THERMO 6 IN WHITE	LF	126,692																		126,692
6543	PAVE STRIPING - THERMO 6 IN YELLOW	LF	125,368																		125,368
6544	PAVE STRIPING - THERMO 8 IN WHITE	LF	675																		675
6545	PAVE STRIPING - THERMO 8 IN YELLOW	LF	5,119																		5,119
6546	PAVE STRIPING - THERMO 12 IN WHITE	LF	468																		468
6547	PAVE MARKING - THERMO - 60 IN YELLOW (5) - 12"	LF	2,530																		2,530
6556	PAVE STRIPING-DUR TY 1-6 IN W	LF	1,595																		1,595

NOTES:

- EARTHWORK CALCULATIONS
 - EXCAVATION
79.959 CY COM KY 555
43.816 CY COM MISC. FND. BENCH ETC.
123.775 CY TOTAL EXCAVATION
 - EMBANKMENT
56.418 CY EMB KY 555
43.816 CY EMB FND. EMB. BENCH
100.234 CY TOTAL EMBANKMENT
 - 1 50 LF APPROACH TO BEECH FORK BRIDGE & 450 LF AT US 150 NE SECTION.
 - 2 GROUTED CHANNEL LINING WITH HIGH 3000 PSI GROUT.
 - 3 INCLUDES 4702 SY FOR PAVED DITCH REMOVAL. & 1500 S.Y FOR UNDERCUT
 - 4 APPROXIMATE 192 ACRES. (CLEARING TO WITHIN 5' OF R/W).
 - 5 INCLUDES 1,422 TONS FOR PAVED DITCH REMOVAL.
 - 6 RUBBLEIZE EXISTING PAVED DITCH INPLACE. FINISH TO GRADE W/ FABRIC GEOTEXTILE CLASS 1 & CLASS III CHANNEL LINING.
 - 8 REMOVE EXISTING CONCRETE ISLAND SEE SHEET R014. (US 150)
 - 9 CONTRARY TO SECTIONS 204 & 206. THE CONTRACTOR WILL BE COMPENSATED FOR ROADWAY EXCAVATION & EMBANKMENT IN-PLACE. FUEL ADJUSTMENTS WILL BE APPLICABLE TO BOTH BID ITEMS.
 - 10 FOR PERFORATED PIPE HEADWALLS & SUBGRADE UNDERCUT AREAS AS DIRECTED BY THE ENGINEER.
- "SPECIAL NOTE FOR ROADWAY EXCAVATION" - CONTRARY TO THE CURRENT KENTUCKY STANDARD THIS CONTRACT HAS QUANTITIES FOR BOTH EXCAVATION & EMBANKMENT IN-PLACE.
- SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SECTION 204. OVERHAUL SHALL NOT BE CONSIDERED FOR ANY UNDERCUT. SPECIAL EXCAVATIONS OR AUTHORIZED ROADWAY EXCAVATION ADJUSTMENTS FOR THIS PROJECT.

FOR DRAINAGE QUANTITIES - SEE DRAINAGE SUMMARY SHEET

FOR STRUCTURE QUANTITIES - SEE STRUCTURE SUMMARY SHEET

FOR LIGHTING QUANTITIES - SEE LIGHTING SUMMARY SHEET

FOR SIGNING QUANTITIES - SEE SIGNING SUMMARY SHEET

GENERAL SUMMARY

ITEM	DESCRIPTION	UNIT	KY 555	US 150X	KY 528	US 150											PROJECT TOTALS
78	CRUSHED AGGREGATE SIZE NO 2	(10) TON	1,000														1,000
1000	PERFORATED PIPE 4 IN	LF	36														36
1010	NON-PERFORATED PIPE 4 IN	LF	16														16
1028	PERF PIPE HEADWALL TY3-4 IN	EACH	2														2
1810	STANDARD CURB AND GUTTER	LF	1,554														1,554
1875	STANDARD HEADER CURB		632														632
1825	ISLAND CURB & GUTTER	LF	5,471														5,471
1984	DELINEATOR FOR BARRIER-WHITE	EACH	16														16
1987	DELINEATOR FOR GUARDRAIL B/W	EACH	330														330
2003	RELOCATE TEMP CONC. BARRIER	LF	820														820
2014	TYPE III BARRICADE	EACH	16														16
2058	REMOVE PCC PAVEMENT	SQYD	1,750														1,750
2091	REMOVE PAVEMENT	SQYD	691														691
2159	TEMP DITCH	LF	24,097														24,097
2160	CLEAN TEMP DITCH	LF	12,048														12,048
2165	REMOVE PAVED DITCH	(6) SQYD	7,100														7,100
2200	ROADWAY EXCAVATION	(9) CUYD	123,775														123,775
2223	GRANULAR EMBANKMENT	CUYD	4,637														4,637
2230	EMBANKMENT IN-PLACE	(9) CUYD	100,234														100,234
2265	REMOVE FENCE	LF	1,634														1,634
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	23														23
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	35														35
2369	GUARDRAIL END TREATMENT TYPE 2A	EACH	1														1
2371	GUARDRAIL END TREATMENT TYPE 7	EACH	2														2
2381	REMOVE GUARDRAIL	LF	25,713														25,713
2403	REMOVE CONCRETE MASONRY	(8) CUYD	124														124
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	11														11
2432	WITNESS POST	EACH	3														3
2483	CHANNEL LINING CLASS II	TONS	7,383														7,383
2484	CHANNEL LINING CLASS III	(5) TONS	3,259														3,259
2545	CLEARING AND GRUBBING	(4) LS	1														1
2555	CONCRETE-CLASS B	(2) CUYD	8														8
2562	TEMPORARY SIGNS	SF	5,400														5,400
2565	OBJECT MARKER TYPE 2	EACH	2														2
2568	MOBILIZATION	LS	1														1
2569	DEMOBILIZATION	LS	1														1
2585	EDGE KEY	LF	869														869
2602	FABRIC-GEOTEXTILE CLASS 1	(3) SQYD	71,193														71,193
2650	MAINTAIN & CONTROL TRAFFIC	LS	1														1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	6														6
2697	EDGE LINE RUMBLE STRIPS	LF	90,850														90,850
2701	TEMP SILT FENCE	LF	24,574														24,574
2703	SILT TRAP TYPE A	EACH	251														251
2704	SILT TRAP TYPE B	EACH	251														251
2705	SILT TRAP TYPE C	EACH	251														251
2706	CLEAN SILT TRAP TYPE A	EACH	251														251
2707	CLEAN SILT TRAP TYPE B	EACH	251														251
2708	CLEAN SILT TRAP TYPE C	EACH	251														251
2726	STAKING	LS	1														1
2775	ARROW PANEL	EACH	4														4
2898	RELOCATE CRASH CUSHION	EACH	4														4
3171	CONCRETE BARRIER WALL TYPE 9T	LF	820														820
4933	TEMP SIGNAL 2 PHASE	EACH	2														2
4935	TEMP SIGNAL (US 150X)	LS	1														1
4935	TEMP SIGNAL (KY 528)	LS	1														1
4935	TEMP SIGNAL (US 150)	LS	1														1
5950	EROSION CONTROL BLANKET	SQYD	20,265														20,265
5952	TEMP MULCH	SQYD	809,749														809,749
5953	TEMP SEEDING AND PROTECTION	SQYD	607,009														607,009
5963	INITIAL FERTILIZER	TONS	48														48
5964	MAINTENANCE FERTILIZER	TONS	29														29
5985	SEEDING AND PROTECTION	SQYD	928,748														928,748
5989	SPECIAL SEEDING CROWN VETCH	SQYD	165,454														165,454
5992	AGRICULTURAL LIMESTONE	TONS	576														576
6510	PAVE STRIPING - TEMP PAINT - 4 IN	LF	518,058														518,058
6542	PAVE STRIPING - THERMO 6 IN WHITE	LF	126,692														126,692
6543	PAVE STRIPING - THERMO 6 IN YELLOW	LF	125,368														125,368
6544	PAVE STRIPING - THERMO 8 IN WHITE	LF	675														675
6545	PAVE STRIPING - THERMO 8 IN YELLOW	LF	5,119														5,119
6546	PAVE STRIPING - THERMO 12 IN WHITE	LF	468														468
6547	PAVE MARKING - THERMO - 60 IN YELLOW (5) - 12"	LF	2,530														2,530
6556	PAVE STRIPING-DUR TY 1-6 IN W	LF	1,595														1,595

NOTES:

EARTHWORK CALCULATIONS

EXCAVATION

79,959 CY COM KY 555

43,816 CY COM MISC. FND. BENCH ETC.

123,775 CY TOTAL EXCAVATION

EMBANKMENT

56,418 CY EMB KY 555

43,816 CY EMB FND. EMB. BENCH

100,234 CY TOTAL EMBANKMENT

- 1 50 LF APPROACH TO BEECH FORK BRIDGE & 450 LF AT US 150 NE SECTION.
- 2 GROUTED CHANNEL LINING WITH HIGH 3000 PSI GROUT.
- 3 INCLUDES 4702 SY FOR PAVED DITCH REMOVAL. & 1500 S.Y FOR UNDERCUT
- 4 APPROXIMATE 192 ACRES. (CLEARING TO WITHIN 5' OF R/W).
- 5 INCLUDES 1,422 TONS FOR PAVED DITCH REMOVAL.

6 RUBBLEIZE EXISTING PAVED DITCH INPLACE. FINISH TO GRADE W/ FABRIC GEOTEXTILE CLASS 1 & CLASS III CHANNEL LINING.

- 8 REMOVE EXISTING CONCRETE ISLAND SEE SHEET R014. (US 150)
- 9 CONTRARY TO SECTIONS 204 & 206. THE CONTRACTOR WILL BE COMPENSATED FOR ROADWAY EXCAVATION & EMBANKMENT IN-PLACE. FUEL ADJUSTMENTS WILL BE APPLICABLE TO BOTH BID ITEMS.
- 10 FOR PERFORATED PIPE HEADWALLS & SUBGRADE UNDERCUT AREAS AS DIRECTED BY THE ENGINEER.

"SPECIAL NOTE FOR ROADWAY EXCAVATION" - CONTRARY TO THE CURRENT KENTUCKY STANDARD THIS CONTRACT HAS QUANTITIES FOR BOTH EXCAVATION & EMBANKMENT IN-PLACE.

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

SECTION 204. OVERHAUL SHALL NOT BE CONSIDERED FOR ANY UNDERCUT. SPECIAL EXCAVATIONS OR AUTHORIZED ROADWAY EXCAVATION ADJUSTMENTS FOR THIS PROJECT.

FOR DRAINAGE QUANTITIES - SEE DRAINAGE SUMMARY SHEET

FOR STRUCTURE QUANTITIES - SEE STRUCTURE SUMMARY SHEET

FOR LIGHTING QUANTITIES - SEE LIGHTING SUMMARY SHEET

FOR SIGNING QUANTITIES - SEE SIGNING SUMMARY SHEET

ITEM NUMBER	DESCRIPTION	Depth	US 150X TO KY 528	KY 528 TO US 150	KY 555	US 150X	KY 528	US 150	TOTALS
		INCHES	SQ YDS						
	US 150X TO US 150 MAINLINE 555								
00388	CL3 ASPH SURF 0.388 PG 64-22	1.5	22107	8277					30384
00214	CL3 ASPH BASE 1.00D PG 64-22	3	1567	2042					3609
00214	CL3 ASPH BASE 1.00D PG 64-22	3.5	2194	2132					4326
00214	CL3 ASPH BASE 1.00D PG 64-22	3	2324	2229					4553
00003	CRUSHED STONE BASE	6	2505	2531					5036
	US 150X TO US 150 SHOULDER 555								
00301	CL2 ASPH SURF 0.38D PG64-22	1.5	5013	2904					7917
00212	CL2 ASPH BASE 1.0D PG64-22	3	5013	2904					7917
00003	CRUSHED STONE BASE	6.5	5013	2904					7917
00003	CRUSHED STONE BASE	6	5013	2904					7917
	US 150 TO KY 53 MAINLINE 555								
00388	CL3 ASPH SURF 0388 PG64-22	1.5			183252				183252
00214	CL3 ASPH BASE 1.0D PG64-22	4			49042				49042
00214	CL3 ASPH BASE 1.0D PG64-22	4.25			56974				56974
00003	CRUSHED STONE BASE	6			62790				62790
	US 150 TO KY 53 SHOULDER 555								
00301	CL2 ASPH SURF 0.38D PG64-22	1.5			42702				42702
00212	CL2 ASPH BASE 1.0D PG64-22	4			42702				42702
00003	CRUSHED STONE BASE	10.25			42702				42702
00003	CRUSHED STONE BASE (FOR WEDGE)	8			42702				42702
	ROUNDAABOUTS								
00387	CL3 ASPH SURF 0.388 PG76-22	1.5				8737	7669	8938	25344
00190	LEVELING & WEDGING PG 64-22	3				23682	12610	17120	53412
00214	CL3 ASPH BASE 1.0D PG64-22	3				1514	2329	1163	5006
00214	CL3 ASPH BASE 1.0D PG64-22	3.5				1514	1310	1163	3987
00214	CL3 ASPH BASE 1.0D PG64-22	3				1514	1310	1163	3987
00003	CRUSHED STONE BASE	6				1514	2329	773	4616
00301	CL2 ASPH SURF 0.38D PG64-22	1.5					1019		1019
00212	CL2 ASPH BASE 1.0D PG64-22	3					1032		1032
00003	CRUSHED STONE BASE	6.25					1058		1058
02069	JPC PAVEMENT - 10 IN	10				923	906	961	2790
00003	CRUSHED STONE BASE	6				341	320	341	1002
	ROUNDAABOUTS								
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT								2222073
00190	LEVELING & WEDGING PG 64-22	1.5	1920	1572	15600				19092
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING		30881	15355	274996.4	35447	12327	11264	380270
00103	ASPHALT SEAL COAT		7822	5568	66965				80355
00100	ASPHALT SEAL AGGREGATE		7822	5568	66965				80355
02101	CEM CONC ENTR PAVEMENT	8				3982	869	628	1233
02676	MOBILIZATION FOR MILL & TEXT								1

ITEM CODE	ITEM	UNIT	US 150X TO KY 528	KY 528 TO US 150	KY 555	US 150X	KY 528	US 150	TOTAL PROJECT
	DESCRIPTION	UNIT							
00003	CRUSHED STONE BASE (2) (6)	TONS	4467	2960	65619	118	1294	384	82843
00100	ASPHALT SEAL AGGREGATE (5)	TONS	78	56	670				804
00103	ASPHALT SEAL COAT (4)	TONS	9	7	80				96
00190	LEVELING & WEDGING PG 64-22 (1) (8)	TONS	158	130	1287	3908	2081	2825	10388
00212	CL2 ASPH BASE 1.0D PG64-22 (1)	TONS	827	479	9394		170		10871
00214	CL3 ASPH BASE 1.00D PG 64-22 (1)	TONS	1064	1115	24107		636	416	27339
00301	CL2 ASPH SURF 0.38D PG64-22 (1)	TONS	414	240	3523		84		4260
00387	CL3 ASPH SURF 0.388 PG76-22 (1)	TONS				721	633	737	2091
00388	CL3 ASPH SURF 0.388 PG 64-22 (1)	TONS	1824	683	15118				17625
02677	ASPHALT PAVE MILL & TEXT (9)	TONS				621	480	783	3884
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT	2222073						2222073
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING (3)	TONS	11	5	96	12	4	4	133
02676	MOBILIZATION FOR MILL & TEXT	LS							1
02069	JPC PAVEMENT - 10 IN (7) (10)	SY				923	906	961	2790
02101	CEM CONC ENT PAVEMENT-8 IN (10) (11)	SY			3982	869	628	1233	6712

NOTES

- (1) - ESTIMATED AT 110 LBS. / SY PER IN OF DEPTH
- (2) - ESTIMATED AT 115 LBS. / SY PER IN OF DEPTH
- (3) - ESTIMATED AT 0.70 LBS. / SY
- (4) - ESTIMATED AT 2.4 LBS. / SY (TWO APPLICATIONS)
- (5) - ESTIMATED AT 20 LBS. / SY (SIZE 8 OR 9M)(TWO APPLICATIONS)
- (6) - ADDITIONAL 8000 TONS OF CSB ADDED FOR VARIABLE DEPTH AT TOP SIDE OF SUPERELEVATED CURVES
- (7) - INSIDE TRUCK APRON AND OUTSIDE MOUNTABLE MEDIAN
- (8) - THIS QUANTITY INCLUDES TONNAGES FOR SUPERELEVATION CORRECTIONS AND CROSS SLOPE LEVELING AS DIRECTED BY ENGINEER.
- (9) - INCLUDES MILLING AND TEXTURING AT ROUNDAABOUTS AS WELL AS 2000 TONS TO BE USED AT THE DISCRETION OF THE ENGINEER FOR CROSS SLOPE CORRECTIONS
- (10) - DEPTHS GREATER THAN THE SPECIFIED DEPTHS WILL BE CONSIDERED FOR ADDITIONAL PAYMENT
- (11) - ENTRANCE PAVEMENT AND CONCRETE CAP ON NON-MOUNTABLE MEDIAN/SPLITTER ISLAND



ITEM NUMBER	DESCRIPTION	Depth	US 150X TO KY 528	KY 528 TO US 150	KY 555	US 150X	KY 528	US 150	TOTALS
		INCHES	SQ YDS						
US 150X TO US 150 MAINLINE 555									
00388	CL3 ASPH SURF 0.388 PG 64-22	1.5	22107	8277					30384
00214	CL3 ASPH BASE 1.00D PG 64-22	3	1567	2042					3609
00214	CL3 ASPH BASE 1.00D PG 64-22	3.5	2194	2132					4326
00214	CL3 ASPH BASE 1.00D PG 64-22	3	2324	2229					4553
00003	CRUSHED STONE BASE	6	2505	2531					5036
US 150X TO US 150 SHOULDER 555									
00301	CL2 ASPH SURF 0.38D PG64-22	1.5	5013	2904					7917
00212	CL2 ASPH BASE 1.0D PG64-22	3	5013	2904					7917
00003	CRUSHED STONE BASE	6.5	5013	2904					7917
00003	CRUSHED STONE BASE	6	5013	2904					7917
US 150 TO KY 53 MAINLINE 555									
00388	CL3 ASPH SURF 0388 PG64-22	1.5			183252				183252
00214	CL3 ASPH BASE 1.0D PG64-22	4			49042				49042
00214	CL3 ASPH BASE 1.0D PG64-22	4.25			56974				56974
00003	CRUSHED STONE BASE	6			62790				62790
US 150 TO KY 53 SHOULDER 555									
00301	CL2 ASPH SURF 0.38D PG64-22	1.5			42702				42702
00212	CL2 ASPH BASE 1.0D PG64-22	4			42702				42702
00003	CRUSHED STONE BASE	10.25			42702				42702
00003	CRUSHED STONE BASE (FOR WEDGE)	8			42702				42702
ROUNDABOUTS									
00387	CL3 ASPH SURF 0.388 PG76-22	1.5				8737	7669	8938	25344
00190	LEVELING & WEDGING PG 64-22	3				23682	12610	17120	53412
00214	CL3 ASPH BASE 1.0D PG64-22	3				1514	2329	1163	5006
00214	CL3 ASPH BASE 1.0D PG64-22	3.5				1514	1310	1163	3987
00214	CL3 ASPH BASE 1.0D PG64-22	3				1514	1310	1163	3987
00003	CRUSHED STONE BASE	6				1514	2329	773	4616
00301	CL2 ASPH SURF 0.38D PG64-22	1.5					1019		1019
00212	CL2 ASPH BASE 1.0D PG64-22	3					1032		1032
00003	CRUSHED STONE BASE	6.25					1058		1058
02069	JPC PAVEMENT - 10 IN	10				923	906	961	2790
00003	CRUSHED STONE BASE	6				341	320	341	1002
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT								2222073
00190	LEVELING & WEDGING PG 64-22	1.5	1920	1572	16000				19092
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING		30881	15355	274996.4	35447	12327	11264	380270
00103	ASPHALT SEAL COAT		7822	5568	66965				80355
00100	ASPHALT SEAL AGGREGATE		7822	5568	66965				80355
02101	CEM CONC ENTR PAVEMENT	8			3982	869	628	1233	6712
02676	MOBILIZATION FOR MILL & TEXT								1

ITEM CODE	ITEM	UNIT	US 150X TO KY 528	KY 528 TO US 150	KY 555	US 150X	KY 528	US 150	TOTAL PROJECT
			DESCRIPTION						
00003	CRUSHED STONE BASE (2) (6)	TONS	4467	2960	65619	118	1294	384	82843
00100	ASPHALT SEAL AGGREGATE (5)	TONS	78	56	670				804
00103	ASPHALT SEAL COAT (4)	TONS	9	7	80				96
00190	LEVELING & WEDGING PG 64-22 (1) (8)	TONS	158	130	1287	3908	2081	2825	10388
00212	CL2 ASPH BASE 1.0D PG64-22 (1)	TONS	827	479	9394		170		10871
00214	CL3 ASPH BASE 1.00D PG 64-22 (1)	TONS	1064	1115	24107		636	416	27339
00301	CL2 ASPH SURF 0.38D PG64-22 (1)	TONS	414	240	3523		84		4260
00387	CL3 ASPH SURF 0.388 PG76-22 (1)	TONS				721	633	737	2091
00388	CL3 ASPH SURF 0.388 PG 64-22 (1)	TONS	1824	683	15118				17625
02677	ASPHALT PAVE MILL & TEXT (9)	TONS				621	480	783	3884
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQFT	2222073						2222073
24970EC	ASPHALT MATERIAL FOR TACK NON-TRACKING (3)	TONS	11	5	96	12	4	4	133
02676	MOBILIZATION FOR MILL & TEXT	LS							1
02069	JPC PAVEMENT - 10 IN (7) (10)	SY				923	906	961	2790
02101	CEM CONC ENT PAVEMENT-8 IN (10) (11)	SY			3982	869	628	1233	6712

NOTES

- (1) - ESTIMATED AT 110 LBS. / SY PER IN OF DEPTH
- (2) - ESTIMATED AT 115 LBS. / SY PER IN OF DEPTH
- (3) - ESTIMATED AT 0.70 LBS. / SY
- (4) - ESTIMATED AT 2.4 LBS. / SY (TWO APPLICATIONS)
- (5) - ESTIMATED AT 20 LBS. / SY (SIZE 8 OR 9M)(TWO APPLICATIONS)
- (6) - ADDITIONAL 8000 TONS OF CSB ADDED FOR VARIABLE DEPTH AT TOP SIDE OF SUPERELEVATED CURVES
- (7) - INSIDE TRUCK APRON AND OUTSIDE MOUNTABLE MEDIAN
- (8) - THIS QUANTITY INCLUDES TONNAGES FOR SUPERELEVATION CORRECTIONS AND CROSS SLOPE LEVELING AS DIRECTED BY ENGINEER.
- (9) - INCLUDES MILLING AND TEXTURING AT ROUNDABOUTS AS WELL AS 2000 TONS TO BE USED AT THE DISCRETION OF THE ENGINEER FOR CROSS SLOPE CORRECTIONS
- (10) - DEPTHS GREATER THAN THE SPECIFIED DEPTHS WILL BE CONSIDERED FOR ADDITIONAL PAYMENT
- (11) - ENTRANCE PAVEMENT AND CONCRETE CAP ON NON-MOUNTABLE MEDIAN/SPLITTER ISLAND



DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CULVERT PIPE					STORM SEWER			SLOTTED DRAIN PIPE - 12 IN	PIPE CULVERT HEADWALL -18 IN	PIPE CULVERT HEADWALL -36 IN **	PIPE CULVERT HEADWALL -42 IN	REMOVE PIPE	METAL END SECTION TY 1-18 IN	METAL END SECTION TY 2-18 IN	S & F BOX INLET-OUTLET-18 IN	S & F BOX INLET-OUTLET-24 IN	S & F BOX INLET-OUTLET-36 IN
						12 INCH	18 INCH	24 INCH	36 INCH	42 INCH	12 INCH	15 INCH	18 INCH										
Item Code						00460	00462	00464	00468	00469	00520	00521	00522	00980	01204	01212	01214	01310	01371	01381	01450	01451	01453
Unit to Bid						LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH
R198	11+34.85	15°20'27" RT.	M	1.4	N																		
R199	19+51.76	29°59'32" LT.	M	7.3	N																		
R200	38+60.81	44°17'02" LT.	M	9.7	N			8										4				1	
R201	59+69.54	14°38'11" LT.	M	31.8	N																		
R202	76+72.11	15°10'31" RT.	M	4.6	N																		
R203-R205	86+89.98	38°58'03" LT.	M		N																		
R206	98+79.29	15°46'13.2" RT.	M	8.3	N																		
R207	113+26.59	0°	M	10.9	N				16									4					1
R208	134+47.37	20°09'57" LT.	M	12.2	N																		
R209	137+89.09	15°04'21" LT.	M	21	N																		
R210	143+94.09	14°16'32" RT.	M	22.7	N																		
R211	149+77.44	6°22'30" RT.	M	29.5	N																		
R212	161+02.61	6°54'26" LT.	M	15	N																		
R213	179+91.30	45°08'38" RT.	M	9	N																		
R214	184+08.01	01°50'14" LT.	M	5	N																		
R215	232+61.96	05°04'35" RT.	M	17.5	N																		
R216	238+45.02	16°27'30" RT.	M	54.7	N																		
R217	248+67.65	0°	M	4.2	N																		
R218	273+14.99	0°	M	24.7	N																		
R219	277+13.78	0°	M	24.2	N																		
R220	282+83.35	29°34'16 LT.	M	17.9	N																		
R221	300+57.36	0°	M	36.7	N																		
R222	320+56.61	26°07'12" LT.	M	29.6	N																		
R223	347+08.91	30°03'28 RT.	M	35	N				12						1			4					
R224	354+29.76	0°	M	28.5	N																		
R225	362+50.81	0°	M	4.1	N																		
R226	371+06.32	0°	M	9.5	N																		
R227	382+04.91	0°	M	33.3	N																		
R228	390+97.05	0°	M	14.9	N				13									4					
R229	395+26.34	15°23'10" LT.	M	39.5	N																		
R230	407+16.80	21°11'36" LT.	M	28.3	N																		
R231	415+59.49	44°34'22" LT.	M	13.1	N																		
R232	427+99.26	29°56'56" LT.	M	9.4	N																		
R233	433+23.79	29°15'09" LT.	M	10.5	N																		
R234	439+75.04	0°	M	2.6	Y										1			4					
R235	457+32.92	21°59'09" LT.	M	1.9	Y												4				1		
R236	463+89.13	16°43'18" RT.	M	9.8	Y												4						
R237	465+53.03	28°03'15 LT.	M	25.8	N				32						1		4						
R238	8+52.50	0°	M	1.7	Y																1		
R239	9+40.67	30° LT.	M	2	N																		
R240	10+12.06	30° LT.	M	3.6	N								83										
R241	11+70.00	0°	M	2.7	N							40											
R242	56+35.00	0°	M	2	N	4	18						5	1									
R243	83+90.00	0°	M	2	N		23								1								
R244	84+89.19	25° RT.	M	2.1	N		23								1								
R245	86+80.00	0°	M	2.1	N		26								1								
	438+55, 42.9' RT. TO	0°	M	2	N		105															1	
	439+60, 43.1' RT.	0°	M		N																	1	
	196+32 LT/RT #		M		N																		
	451+24RT/451+43LT		M		N												90						
	451+06 RT.	0°	M		N																		
	451+45 LT.	0°	M		N																		
SHEET NO. 1 TOTALS						4	366	21	60	0	0	123	0	5	5	2	0	122	0	2	2	1	1
NOTES						* - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER																	

DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CULVERT PIPE					STORM SEWER				SLOTTED DRAIN PIPE - 12 IN	PIPE CULVERT HEADWALL -18 IN	PIPE CULVERT HEADWALL -36 IN **	PIPE CULVERT HEADWALL -42 IN	REMOVE PIPE	METAL END SECTION TY 1-18 IN	METAL END SECTION TY 2-18 IN	S & F BOX INLET-OUTLET-18 IN	S & F BOX INLET-OUTLET-24 IN	S & F BOX INLET-OUTLET-36 IN	
						12 INCH	18 INCH	24 INCH	36 INCH	42 INCH	12 INCH	15 INCH	18 INCH												
Item Code						00460	00462	00464	00468	00469	00520	00521	00522		00980	01204	01212	01214	01310	01371	01381		01450	01451	01453
Unit to Bid						LF	LF	LF	LF	LF	LF	LF	LF		LF	EACH	EACH	EACH	LF	EACH	EACH		EACH	EACH	EACH
R198	11+34.85	15°20'27" RT.	M	1.4	N																				
R199	19+51.76	29°59'32" LT.	M	7.3	N																				
R200	38+60.81	44°17'02" LT.	M	9.7	N			8										4					1		
R201	59+69.54	14°38'11" LT.	M	31.8	N																				
R202	76+72.11	15°10'31" RT.	M	4.6	N																				
R203-R205	86+89.98	38°58'03" LT.	M		N																				
R206	98+79.29	15°46'13.2" RT.	M	8.3	N																				
R207	113+26.59	0°	M	10.9	N				16									4						1	
R208	134+47.37	20°09'57" LT.	M	12.2	N																				
R209	137+89.09	15°04'21" LT.	M	21	N																				
R210	143+94.09	14°16'32" RT.	M	22.7	N																				
R211	149+77.44	6°22'30" RT.	M	29.5	N																				
R212	161+02.61	6°54'26" LT.	M	15	N																				
R213	179+91.30	45°08'38" RT.	M	9	N																				
R214	184+08.01	01°50'14" LT.	M	5	N																				
R215	232+61.96	05°04'35" RT.	M	17.5	N																				
R216	238+45.02	16°27'30" RT.	M	54.7	N																				
R217	248+67.65	0°	M	4.2	N																				
R218	273+14.99	0°	M	24.7	N																				
R219	277+13.78	0°	M	24.2	N																				
R220	282+83.35	29°34'16 LT.	M	17.9	N																				
R221	300+57.36	0°	M	36.7	N																				
R222	320+56.61	26°07'12" LT.	M	29.6	N																				
R223	347+08.91	30°03'28 RT.	M	35	N				12							1		4							
R224	354+29.76	0°	M	28.5	N																				
R225	362+50.81	0°	M	4.1	N																				
R226	371+06.32	0°	M	9.5	N																				
R227	382+04.91	0°	M	33.3	N																				
R228	390+97.05	0°	M	14.9	N			13										4							
R229	395+26.34	15°23'10" LT.	M	39.5	N																				
R230	407+16.80	21°11'36" LT.	M	28.3	N																				
R231	415+59.49	44°34'22" LT.	M	13.1	N																				
R232	427+99.26	29°56'56" LT.	M	9.4	N																				
R233	433+23.79	29°15'09" LT.	M	10.5	N																				
R234	439+75.04	0°	M	2.6	Y			17								1		4							
R235	457+32.92	21°59'09" LT.	M	1.9	Y			20										4					1		
R236	463+89.13	16°43'18" RT.	M	9.8	Y			33										4							
R237	465+53.03	28°03'15 LT.	M	25.8	N				32							1		4							
R238	8+52.50	0°	M	1.7	Y			70															1		
R239	9+40.67	30° LT.	M	2	N			31																	
R240	10+12.06	30° LT.	M	3.6	N								83												
R241	11+70.00	0°	M	2.7	N								40												
R242	56+35.00	0°	M	2	N	4		18						5		1									
R243	83+90.00	0°	M	2	N			23								1									
R244	84+89.19	25° RT.	M	2.1	N			23								1									
R245	86+80.00	0°	M	2.1	N			26								1									
	438+55, 42.9' RT. TO	0°	M	2	N			105																1	
	439+60, 43.1' RT.	0°	M		N																			1	
	196+32 LT/RT #		M		N																				
	451+24RT/451+43LT		M		N													90							
	451+06 RT.	0°	M		N																				
	451+45 LT.	0°	M		N																				
SHEET NO. 1 TOTALS						4	366	21	60	0	0	123	0		5	5	2	0	122	0	2		2	1	1
NOTES						* - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER																			



DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN PH LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CURB BOX INLET TYPE "B"	DROP BOX INLET TYPE 1	DROP BOX INLET TYPE 6F	DROP BOX INLET TYPE 16G	REMOVE DROP BOX INLET	DROP BOX INLET TYPE 16S	FLUME INLET TYPE 2	REMOVE CURB & GUTTER BOX INLET	CORED HOLE DRAINAGE CONN TO HEADWALL	CORED HOLE DRAINAGE BOX CON-18 IN	DRAINAGE JUNCTION BOX TY B	PIPELINE INSPECTION	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	REMOVE HEADWALL	SAFELOADING	CLEAN ROADWAY DRAINS	CLEAN PIPE STRUCTURE	CONCRETE-CLASS A *	REMARKS
Item Code						01480	01490	01535	01581	01585	01587	01691	01705	23628EC	21541NN	23952EC	24814EC	02607	02625	02690	03260	03262	08100	
Unit to Bid				FT	Y OR N	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	EACH	EACH	CY	
R198	11+34.85	15°20'27" RT.	M	1.4	N												213							EX. RCBC, DO NOT DISTURB
R199	19+51.76	29°59'32" LT.	M	7.3	N												132							EX. 42" RCP, DO NOT DISTURB
R200	38+60.81	44°17'02" LT.	M	9.7	N												177	14	1				1.68	EX. 24" RCP, EXTEND IN KIND
R201	59+69.54	14°38'11" LT.	M	31.8	N												184							EX. RCBC, DO NOT DISTURB
R202	76+72.11	15°10'31" RT.	M	4.6	N												105							EX. 18" RCP, DO NOT DISTURB
R203-R205	86+89.98	38°58'03" LT.	M		N												579							EX. RCBC, DO NOT DISTURB
R206	98+79.29	15°46'13.2" RT.	M	8.3	N												124							EX. 18" RCP, DO NOT DISTURB
R207	113+26.59	0°	M	10.9	N												161	35	1				3.24	EX. 36" RCP, EXTEND IN KIND
R208	134+47.37	20°09'57" LT.	M	12.2	N												149							EX. 18" RCP, DO NOT DISTURB
R209	137+89.09	15°04'21" LT.	M	21	N												234							EX. 30" RCP, DO NOT DISTURB
R210	143+94.09	14°16'32" RT.	M	22.7	N												241							EX. 24" RCP, DO NOT DISTURB
R211	149+77.44	6°22'30" RT.	M	29.5	N												178							EX. 30" RCP, DO NOT DISTURB
R212	161+02.61	6°54'26" LT.	M	15	N												180							EX. 18" RCP, DO NOT DISTURB
R213	179+91.30	45°08'38" RT.	M	9	N												197							EX. 36" RCP, DO NOT DISTURB
R214	184+08.01	01°50'14" LT.	M	5	N												105							EX. 24" RCP, DO NOT DISTURB
R215	232+61.96	05°04'35" RT.	M	17.5	N												194							EX. 24" RCP, DO NOT DISTURB
R216	238+45.02	16°27'30" RT.	M	54.7	N												317							EX. 36" HDPE, DO NOT DISTURB
R217	248+67.65	0°	M	4.2	N												84							EX. 30" RCP, DO NOT DISTURB
R218	273+14.99	0°	M	24.7	N												170							EX. 24" RCP, DO NOT DISTURB
R219	277+13.78	0°	M	24.2	N												167							EX. 24" RCP, DO NOT DISTURB
R220	282+83.35	29°34'16 LT.	M	17.9	N												216							EX. 42" RCP. DO NOT DISTURB
R221	300+57.36	0°	M	36.7	N												198							EX. 66" CMP, DO NOT DISTURB
R222	320+56.61	26°07'12" LT.	M	29.6	N												185							EX. 48" RCP, DO NOT DISTURB
R223	347+08.91	30°03'28 RT.	M	35	N												238	26	1				3.24	EX. 36" RCP, EXTEND IN KIND
R224	354+29.76	0°	M	28.5	N												180							EX. 24" RCP, DO NOT DISTURB
R225	362+50.81	0°	M	4.1	N												88							EX. 24" RCP, DO NOT DISTURB
R226	371+06.32	0°	M	9.5	N												109							EX. 36" RCP, DO NOT DISTURB
R227	382+04.91	0°	M	33.3	N												223							EX. RC ARCH CULVERT, DND
R228	390+97.05	0°	M	14.9	N		1			1							113	21					1.78	EX. 24" RCP, EXTEND IN KIND
R229	395+26.34	15°23'10" LT.	M	39.5	N												228							EX. 36" RCP, DO NOT DISTURB
R230	407+16.80	21°11'36" LT.	M	28.3	N												188							EX. 42" RCP, DO NOT DISTURB
R231	415+59.49	44°34'22" LT.	M	13.1	N												162							EX. 30" RCP, DO NOT DISTURB
R232	427+99.26	29°56'56" LT.	M	9.4	N												113							EX. 18" RCP, DO NOT DISTURB
R233	433+23.79	29°15'09" LT.	M	10.5	N												126							EX. 18" RCP, DO NOT DISTURB
R234	439+75.04	0°	M	2.6	Y												69	25	1				1.13	EX. 18" RCP, EXTEND IN KIND
R235	457+32.92	21°59'09" LT.	M	1.9	Y												72	29	1				1.07	EX. 18" RCP, EXTEND IN KIND
R236	463+89.13	16°43'18" RT.	M	9.8	Y			1									165	48	1				1.19	EX. 18" RCP, EXTEND IN KIND
R237	465+53.03	28°03'15 LT.	M	25.8	N												218	67	1				3.24	EX. 36" RCP, EXTEND IN KIND
R238	8+52.50	0°	M	1.7	Y	1											70	101						
R239	9+40.67	30° LT.	M	2	N	1								1			31	45						18" PIPE CORE
R240	10+12.06	30° RT.	M	3.6	N	1											83	111						
R241	11+70.00	0°	M	2.7	N	1								1		1	40	54						15" PIPE CORE
R242	56+35.00	0°	M	2	N				1								18	38						
R243	83+90.00	0°	M	2	N	1											23	34						
R244	84+89.19	25° RT.	M	2.1	N	1											23	34						
R245	86+80.00	0°	M	2.1	N	1											26	38						
	438+55, 42.9' RT. TO	0°	M	2	N													152						GUARDRAIL END TREATMENT
	438+60, 43.1' RT.	0°	M		N																			
	196+32 LT/RT #		M		N																2			EX. BRIDGE END DRAINS #
	451+24RT/451+43LT		M		N								2						1	1.78				EX. BRIDGE END DRAINS
	451+06 RT.	0°	M		N							1												RT. BRIDGE END DRAIN
	451+45 LT.	0°	M		N							1												LT. BRIDGE END DRAIN
SHEET NO. 1A TOTALS						7	1	1	1	1	0	2	2	2	0	1	7096	872	8	1.78	2	0	16.57	
NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER																								

DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN PH LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CURB BOX INLET TYPE "B"	DROP BOX INLET TYPE 1	DROP BOX INLET TYPE 6F	DROP BOX INLET TYPE 16G	REMOVE DROP BOX INLET	DROP BOX INLET TYPE 16S	FLUME INLET TYPE 2	REMOVE CURB & GUTTER BOX INLET	CORED HOLE DRAINAGE CONN TO HEADWALL	CORED HOLE DRAINAGE BOX CON-18 IN	DRAINAGE JUNCTION BOX TY B	PIPELINE INSPECTION	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	REMOVE HEADWALL	SAFELOADING	CLEAN ROADWAY DRAINS	CLEAN PIPE STRUCTURE	CONCRETE-CLASS A *	REMARKS
Item Code						01480	01490	01535	01581	01585	01587	01691	01705	23628EC	21541NN	23952EC	24814EC	02607	02625	02690	03260	03262	08100	
Unit to Bid				FT	Y OR N	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	EACH	EACH	CY	
R198	11+34.85	15°20'27" RT.	M	1.4	N												213							EX. RCBC, DO NOT DISTURB
R199	19+51.76	29°59'32" LT.	M	7.3	N												132							EX. 42" RCP, DO NOT DISTURB
R200	38+60.81	44°17'02" LT.	M	9.7	N												177	14	1				1.68	EX. 24" RCP, EXTEND IN KIND
R201	59+69.54	14°38'11" LT.	M	31.8	N												184							EX. RCBC, DO NOT DISTURB
R202	76+72.11	15°10'31" RT.	M	4.6	N												105							EX. 18" RCP, DO NOT DISTURB
R203-R205	86+89.98	38°58'03" LT.	M		N												579							EX. RCBC, DO NOT DISTURB
R206	98+79.29	15°46'13.2" RT.	M	8.3	N												124							EX. 18" RCP, DO NOT DISTURB
R207	113+26.59	0°	M	10.9	N												161	35	1				3.24	EX. 36i RCP, EXTEND IN KIND
R208	134+47.37	20°09'57" LT.	M	12.2	N												149							EX. 18" RCP, DO NOT DISTURB
R209	137+89.09	15°04'21" LT.	M	21	N												234							EX. 30" RCP, DO NOT DISTURB
R210	143+94.09	14°16'32" RT.	M	22.7	N												241							EX. 24" RCP, DO NOT DISTURB
R211	149+77.44	6°22'30" RT.	M	29.5	N												178							EX. 30" RCP, DO NOT DISTURB
R212	161+02.61	6°54'26" LT.	M	15	N												180							EX. 18" RCP, DO NOT DISTURB
R213	179+91.30	45°08'38" RT.	M	9	N												197							EX. 36" RCP, DO NOT DISTURB
R214	184+08.01	01°50'14" LT.	M	5	N												105							EX. 24" RCP, DO NOT DISTURB
R215	232+61.96	05°04'35" RT.	M	17.5	N												194							EX. 24" RCP, DO NOT DISTURB
R216	238+45.02	16°27'30" RT.	M	54.7	N												317							EX. 36" HDPE, DO NOT DISTURB
R217	248+67.65	0°	M	4.2	N												84							EX. 30" RCP, DO NOT DISTURB
R218	273+14.99	0°	M	24.7	N												170							EX. 24" RCP, DO NOT DISTURB
R219	277+13.78	0°	M	24.2	N												167							EX. 24" RCP, DO NOT DISTURB
R220	282+83.35	29°34'16 LT.	M	17.9	N												216							EX. 42" RCP. DO NOT DISTURB
R221	300+57.36	0°	M	36.7	N												198							EX. 66" CMP, DO NOT DISTURB
R222	320+56.61	26°07'12" LT.	M	29.6	N												185							EX. 48" RCP, DO NOT DISTURB
R223	347+08.91	30°03'28 RT.	M	35	N												238	26	1				3.24	EX. 36" RCP, EXTEND IN KIND
R224	354+29.76	0°	M	28.5	N												180							EX. 24" RCP, DO NOT DISTURB
R225	362+50.81	0°	M	4.1	N												88							EX. 24" RCP, DO NOT DISTURB
R226	371+06.32	0°	M	9.5	N												109							EX. 36" RCP, DO NOT DISTURB
R227	382+04.91	0°	M	33.3	N												223							EX. RC ARCH CULVERT, DND
R228	390+97.05	0°	M	14.9	N					1							113	21					1.78	EX. 24" RCP, EXTEND IN KIND
R229	395+26.34	15°23'10" LT.	M	39.5	N												228							EX. 36" RCP, DO NOT DISTURB
R230	407+16.80	21°11'36" LT.	M	28.3	N												188							EX. 42" RCP, DO NOT DISTURB
R231	415+59.49	44°34'22" LT.	M	13.1	N												162							EX. 30" RCP, DO NOT DISTURB
R232	427+99.26	29°56'56" LT.	M	9.4	N												113							EX. 18" RCP, DO NOT DISTURB
R233	433+23.79	29°15'09" LT.	M	10.5	N												126							EX. 18" RCP, DO NOT DISTURB
R234	439+75.04	0°	M	2.6	Y												69	25	1				1.13	EX. 18" RCP, EXTEND IN KIND
R235	457+32.92	21°59'09" LT.	M	1.9	Y												72	29	1				1.07	EX. 18" RCP, EXTEND IN KIND
R236	463+89.13	16°43'18" RT.	M	9.8	Y					1							165	48	1				1.19	EX. 18" RCP, EXTEND IN KIND
R237	465+53.03	28°03'15 LT.	M	25.8	N												218	67	1				3.24	EX. 36" RCP, EXTEND IN KIND
R238	8+52.50	0°	M	1.7	Y												70	101						
R239	9+40.67	30° LT.	M	2	N										1		31	45						18" PIPE CORE
R240	10+12.06	30° RT.	M	3.6	N												83	111						
R241	11+70.00	0°	M	2.7	N										1		40	54						15" PIPE CORE
R242	56+35.00	0°	M	2	N												18	38						
R243	83+90.00	0°	M	2	N												23	34						
R244	84+89.19	25° RT.	M	2.1	N												23	34						
R245	86+80.00	0°	M	2.1	N												26	38						
	438+55, 42.9' RT. TO	0°	M	2	N													152						GUARDRAIL END TREATMENT
	438+60, 43.1' RT.	0°	M		N																			
	196+32 LT/RT #		M		N																2			EX. BRIDGE END DRAINS #
	451+24RT/451+43LT		M		N															1	1.78			EX. BRIDGE END DRAINS
	451+06 RT.	0°	M		N																			RT. BRIDGE END DRAIN
	451+45 LT.	0°	M		N																			LT. BRIDGE END DRAIN
SHEET NO. 1A TOTALS						7	1	1	1	1	0	2	2	2	0	1	7096	872	8	1.78	2	0	16.57	

NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER

DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CULVERT PIPE					STORM SEWER			SLOTTED DRAIN PIPE - 12 IN	PIPE CULVERT HEADWALL -18 IN	PIPE CULVERT HEADWALL -36 IN**	PIPE CULVERT HEADWALL -42 IN	REMOVE PIPE	METAL END SECTION TY 1-18 IN	METAL END SECTION TY 2-18 IN	S & F BOX INLET-OUTLET-18 IN	S & F BOX INLET-OUTLET-24 IN	S & F BOX INLET-OUTLET-36 IN
						12 INCH	18 INCH	24 INCH	36 INCH	42 INCH	12 INCH	15 INCH	18 INCH										
Item Code	Unit to Bid	FT	Y OR N	00460	00462	00464	00468	00469	00520	00521	00522	00980	01204	01212	01214	01310	01371	01381	01450	01451	01453		
LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH		
KY 555 (ENTRANCE PIPE)																							
	119+99.40 LT.	SIDE ROAD	M		N																		
	127+77.71 RT.	ENTRANCE	M		N																		
	127+77.71 LT.	ENTRANCE	M		N																		
	185+37.39 LT.	SIDE ROAD	M		N																		
	209+23.50 LT.	ENTRANCE	M		N																		
	327+60.62 LT.	ENTRANCE	M		N																		
	422+44 LT.	ENTRANCE	M		N																		
	ENTRANCE PIPES #																						
KY 555 (ENTRANCE PIPES) TOTALS						0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0		
US 150X																							
R246	15+05.73	5° LT.	M	4.9	N		16																
R247	16+14.92	30° LT.	M	3.6	Y					74													
R248	16+82.00	0°	M	3.3	N																		
	14+75																						
	16+80																						
US 150X TOTALS						0	16	0	0	0	74	50	0	1	0	0	61	0	0	0	0	0	
KY 528																							
R249	6+80.00	0°	M	3.5	Y					4	48												
R250	6+95.00	0°	M	4.2	N					4		23											
R251	8+70.48	35° RT.	M	2.8	N	8	20																
R252	9+40.00	0°	M	2.9	Y					4	47												
R253	9+53.00	0°	M	2.8	N					4		20											
KY 528 TOTALS						8	20	0	0	16	95	43	45	3	0	0	0	0	0	0	0	0	
US 150																							
R254	11+22.00	0°	M	2.1	N		20																
R255	11+58.00	0°	M	2.1	N		20																
R256	12+56.27	38°26'53.2" LT.	M	27.5	N							12											
R257	12+58.46	40° RT.	M	2.1	N		19																
R258	13+14.13	40° RT.	M	2.1	N		19																
R259	14+58.00	0°	M	2.1	N		19																
US 150 TOTALS						0	97	0	0	12	0	0	0	0	5	0	1	4	0	0	0	0	
PROJECT TOTALS						12	499	21	60	12	16	292	93	50	14	2	1	187	14	2	2	1	1
NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER																							



DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CULVERT PIPE					STORM SEWER			SLOTTED DRAIN PIPE - 12 IN	PIPE CULVERT HEADWALL -18 IN	PIPE CULVERT HEADWALL -36 IN**	PIPE CULVERT HEADWALL -42 IN	REMOVE PIPE	METAL END SECTION TY 1-18 IN	METAL END SECTION TY 2-18 IN	S & F BOX INLET-OUTLET-18 IN	S & F BOX INLET-OUTLET-24 IN	S & F BOX INLET-OUTLET-36 IN
						12 INCH	18 INCH	24 INCH	36 INCH	42 INCH	12 INCH	15 INCH	18 INCH										
Item Code	Unit to Bid	FT	Y OR N	00460	00462	00464	00468	00469	00520	00521	00522	00980	01204	01212	01214	01310	01371	01381	01450	01451	01453		
LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH		
KY 555 (ENTRANCE PIPE)																							
	119+99.40 LT.	SIDE ROAD	M		N																		
	127+77.71 RT.	ENTRANCE	M		N																		
	127+77.71 LT.	ENTRANCE	M		N																		
	185+37.39 LT.	SIDE ROAD	M		N																		
	209+23.50 LT.	ENTRANCE	M		N																		
	327+60.62 LT.	ENTRANCE	M		N																		
	422+44 LT.	ENTRANCE	M		N																		
	ENTRANCE PIPES #																						
KY 555 (ENTRANCE PIPES) TOTALS						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
US 150X																							
R246	15+05.73	5° LT.	M	4.9	N		16																
R247	16+14.92	30° LT.	M	3.6	Y					74													
R248	16+82.00	0°	M	3.3	N						50		1										
	14+75																				61		
	16+80																						
US 150X TOTALS						0	16	0	0	0	0	74	50	0	1	0	0	61	0	0	0	0	
KY 528																							
R249	6+80.00	0°	M	3.5	Y					4	48		10										
R250	6+95.00	0°	M	4.2	N					4		23	10	1									
R251	8+70.48	35° RT.	M	2.8	N	8	20						10	1									
R252	9+40.00	0°	M	2.9	Y					4	47		10										
R253	9+53.00	0°	M	2.8	N					4	20		5	1									
KY 528 TOTALS						8	20	0	0	0	16	95	43	45	3	0	0	0	0	0	0	0	
US 150																							
R254	11+22.00	0°	M	2.1	N		20							1									
R255	11+58.00	0°	M	2.1	N		20							1									
R256	12+56.27	38°26'53.2" LT.	M	27.5	N				12							1	4						
R257	12+58.46	40° RT.	M	2.1	N		19							1									
R258	13+14.13	40° RT.	M	2.1	N		19							1									
R259	14+58.00	0°	M	2.1	N		19							1									
US 150 TOTALS						0	97	0	0	12	0	0	0	0	5	0	1	4	0	0	0	0	
PROJECT TOTALS						12	499	21	60	12	16	292	93	50	14	2	1	187	14	2	2	1	1

NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER

DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CURB BOX INLET TYPE "B"	DROP BOX INLET TYPE 1	DROP BOX INLET TYPE 6F	DROP BOX INLET TYPE - 16G	REMOVE DROP BOX INLET	DROP BOX INLET TYPE - 16S	FLUME INLET TYPE 2	REMOVE CURB & GUTTER BOX INLET	CORED HOLE DRAINAGE CONN TO HEADWALL	CORED HOLE DRAINAGE BOX CON-18 IN	DRAINAGE JUNCTION BOX TY B	PIPELINE INSPECTION	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	REMOVE HEADWALL	SAFELOADING	CLEAN ROADWAY DRAINS	CLEAN PIPE STRUCTURE	CONCRETE-CLASS A **	REMARKS	
Item Code				FT	Y OR N	01480 EACH	01490 EACH	01535 EACH	01581 EACH	01585 EACH	01587 EACH	01691 EACH	01705 EACH	23628EC EACH	21541NN EACH	23952EC EACH	24814EC EACH	02607 EACH	02625 EACH	02690 CY	03260 EACH	03262 EACH	08100 CY		
KY 555 (ENTRANCE PIPE)																									
	119+99.40 LT.	SIDE ROAD	M		N																	1		ENTRANCE PIPE #	
	127+77.71 RT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	127+77.71 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	185+37.39 LT.	SIDE ROAD	M		N																	1		ENTRANCE PIPE #	
	209+23.50 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	327+60.62 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	422+44 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	ENTRANCE PIPES #																					7		ENTRANCE PIPE #	
KY 555 (ENTRANCE PIPES) TOTALS						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0		
US 150X																									
R246	15+05.73	5° LT.	M	4.9	N	1									1		16	23							
R247	16+14.92	30° LT.	M	3.6	Y	1											74	99							
R248	16+82.00	0°	M	3.3	N	1											50	72							
	14+75												1												
	16+80												1							0.61					
US 150X TOTALS						3	0	0	0	0	0	0	2	0	1	0	140	194	0	0.61	0	0	0		
KY 528																									
R249	6+80.00	0°	M	3.5	Y				1								48	83							
R250	6+95.00	0°	M	4.2	N				1								23	53							
R251	8+70.48	35° RT.	M	2.8	N					1							20	53							
R252	9+40.00	0°	M	2.9	Y				1								47	82							
R253	9+53.00	0°	M	2.8	N				1								20	41							
KY 528 TOTALS						0	0	0	4	0	1	0	0	0	0	0	158	312	0	0	0	0	0		
US 150																									
R254	11+22.00	0°	M	2.1	N	1											20	29							
R255	11+58.00	0°	M	2.1	N	1											20	29							
R256	12+56.27	38°26'53.2" LT.	M	27.5	N												55	34	1				5.91	EX. 42" PIPE, EXTEND IN KIND	
R257	12+58.46	40° RT.	M	2.1	N	1											19	28							
R258	13+14.13	40° RT.	M	2.1	N	1											19	28							
R259	14+58.00	0°	M	2.1	N	1											19	28							
US 150 TOTALS						5	0	0	0	0	0	0	0	0	0	0	152	176	1	0	0	0	5.91		
PROJECT TOTALS						15	1	1	5	1	1	2	4	2	1	1	7546	1554	9	2.39	2	14	22.48		

NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER

DRAINAGE SUMMARY

Pipe Sheet No.	STATION	SKEW	DESIGN Ph LEVEL	COVER HEIGHT	FLOWABLE FILL REQUIRED	CURB BOX INLET TYPE "B"	DROP BOX INLET TYPE 1	DROP BOX INLET TYPE 6F	DROP BOX INLET TYPE - 16G	REMOVE DROP BOX INLET	DROP BOX INLET TYPE - 16S	FLUME INLET TYPE 2	REMOVE CURB & GUTTER BOX INLET	CORED HOLE DRAINAGE CONN TO HEADWALL	CORED HOLE DRAINAGE BOX CON-18 IN	DRAINAGE JUNCTION BOX TY B	PIPELINE INSPECTION	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	REMOVE HEADWALL	SAFELOADING	CLEAN ROADWAY DRAINS	CLEAN PIPE STRUCTURE	CONCRETE-CLASS A **	REMARKS	
Item Code				FT	Y OR N	01480 EACH	01490 EACH	01535 EACH	01581 EACH	01585 EACH	01587 EACH	01691 EACH	01705 EACH	23628EC EACH	21541NN EACH	23952EC EACH	24814EC EACH	02607 EACH	02625 EACH	02690 CY	03260 EACH	03262 EACH	08100 CY		
KY 555 (ENTRANCE PIPE)																									
	119+99.40 LT.	SIDE ROAD	M		N																	1		ENTRANCE PIPE #	
	127+77.71 RT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	127+77.71 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	185+37.39 LT.	SIDE ROAD	M		N																	1		ENTRANCE PIPE #	
	209+23.50 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	327+60.62 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	422+44 LT.	ENTRANCE	M		N																	1		ENTRANCE PIPE #	
	ENTRANCE PIPES #																					7		ENTRANCE PIPE #	
KY 555 (ENTRANCE PIPES) TOTALS						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0		
US 150X																									
R246	15+05.73	5° LT.	M	4.9	N	1									1		16	23							
R247	16+14.92	30° LT.	M	3.6	Y	1											74	99							
R248	16+82.00	0°	M	3.3	N	1											50	72							
	14+75												1												
	16+80												1							0.61					
US 150X TOTALS						3	0	0	0	0	0	0	2	0	1	0	140	194	0	0.61	0	0	0		
KY 528																									
R249	6+80.00	0°	M	3.5	Y				1								48	83							
R250	6+95.00	0°	M	4.2	N				1								23	53							
R251	8+70.48	35° RT.	M	2.8	N						1						20	53							
R252	9+40.00	0°	M	2.9	Y				1								47	82							
R253	9+53.00	0°	M	2.8	N				1								20	41							
KY 528 TOTALS						0	0	0	4	0	1	0	0	0	0	0	158	312	0	0	0	0	0		
US 150																									
R254	11+22.00	0°	M	2.1	N	1											20	29							
R255	11+58.00	0°	M	2.1	N	1											20	29							
R256	12+56.27	38°26'53.2" LT.	M	27.5	N												55	34	1				5.91	EX. 42" PIPE, EXTEND IN KIND	
R257	12+58.46	40° RT.	M	2.1	N	1											19	28							
R258	13+14.13	40° RT.	M	2.1	N	1											19	28							
R259	14+58.00	0°	M	2.1	N	1											19	28							
US 150 TOTALS						5	0	0	0	0	0	0	0	0	0	0	152	176	1	0	0	0	5.91		
PROJECT TOTALS						15	1	1	5	1	1	2	4	2	1	1	7546	1554	9	2.39	2	14	22.48		

NOTES * - INTERMEDIATE CONCRETE ANCHOR, ** - 30° SKEW HEADWALL, # - AT THE DISCRETION OF THE ENGINEER



BENCHING SUMMARY

STATION	SLOPE	EXCAVATION AREA (SQFT)	SPECIAL GRANULAR AREA (SQFT)	EXCAVATION VOL. (CUYD)	SPECIAL GRANULAR VOL. (CUYD)	SLOPE	EXCAVATION AREA (SQFT)	SPECIAL GRANULAR AREA (SQFT)	EXCAVATION VOL. (CUYD)	SPECIAL GRANULAR VOL. (CUYD)						SHEET TOTALS	
57+00	1.5:1	37.1218	52.4190	68.7441	97.0722											EXCAVATION	17,750
58+00	1.5:1	49.7576	55.3056	160.8878	199.4900											SPECIAL GRANULAR EMB.	2,285
61+00	1.5:1	40.6003	67.2614	75.1857	124.5581	1.5:1	13.2440	27.2561	24.5259	50.4743							
62+00	1.5:1	27.0674	50.2199	125.3106	217.5580	1.5:1	13.5931	22.8876	49.6983	92.8587							
63+00	1.5:1	14.3919	24.1265	76.7765	137.6785	1.5:1	9.5856	9.6281	42.9235	60.2143							
98+00	4:1	34.6248		64.1200		4:1	25.4334										
113+00						4:1	87.1726		161.4307								
114+00						4:1	64.7726		281.3800								
115+00						4:1	154.6586		406.3541								
116+00						4:1	80.9015		436.2224								
117+00						4:1	100.8532		336.5828								
118+00	4:1	90.0456		166.7511		4:1	143.1685		451.8920								
119+00						4:1	140.8854		526.0257								
135+00						4:1	215.2114		398.5396								
136+00						4:1	174.9365		722.4961								
137+00				404.0165		4:1	223.0316		736.9780								
138+00	4:1	218.1689		404.0165		4:1	292.6564		954.9778								
139+00	4:1	165.6494		710.7746		4:1	305.1918		1,107.1263								
140+00	4:1	113.7198		517.3504		4:1	216.2443		965.6224								
141+00	4:1	36.8876		278.9026													
142+00	4:1	31.1155		125.9317													
143+00	4:1	121.4762		282.5772		4:1	310.0530		574.1722								
144+00	4:1	236.0197		662.0294		4:1	331.5606		1,188.1733								
145+00	4:1	161.6611		736.4459													
211+00	4:1	54.5797		101.0735													
212+00	4:1	76.5660		242.8624													
215+00						4:1	106.5995		197.4065								
216+00						4:1	108.4060		398.1583								
217+00						4:1	95.7259		378.0220								
218+00						4:1	82.1148		329.3346								
219+00						4:1	34.8338		216.5715								
220+00						4:1	37.5655		134.0728								
232+00						4:1	244.5098		452.7959								
238+00	1.5:1	45.5599	58.7867	84.3702	108.8643												
239+00	1.5:1	26.0287	35.3813	132.5715	174.3852												
240+00	1.5:1	42.6381	56.3457	127.1607	169.8648												
271+00	1.5:1	23.0267	24.1121	42.6420	44.6520												
272+00	1.5:1	53.6003	63.3442	141.9019	161.9561												
273+00	1.5:1	32.4985	40.6381	159.4422	192.5598												
274+00	1.5:1	24.6249	32.0964	105.7841	134.6935												
275+00	1.5:1	19.8521	22.0247	82.3648	100.2243												
276+00	1.5:1	17.6514	22.5233	69.4509	82.4963												
277+00	1.5:1	18.6891	20.5894	67.2972	79.8383												
278+00	1.5:1	14.4289	9.4355	61.3296	55.6017												

Note: Volumes calculated using 100 foot stations before and after the first and last bench for each section



BENCHING SUMMARY

STATION	SLOPE	EXCAVATION AREA (SQFT)	SPECIAL GRANULAR AREA (SQFT)	EXCAVATION VOL. (CUYD)	SPECIAL GRANULAR VOL. (CUYD)	SLOPE	EXCAVATION AREA (SQFT)	SPECIAL GRANULAR AREA (SQFT)	EXCAVATION VOL. (CUYD)	SPECIAL GRANULAR VOL. (CUYD)								SHEET TOTALS	
57+00	1.5:1	37.1218	52.4190	68.7441	97.0722													EXCAVATION	17.750
58+00	1.5:1	49.7576	55.3056	160.8878	199.4900													SPECIAL GRANULAR EMB.	2.285
61+00	1.5:1	40.6003	67.2614	75.1857	124.5581	1.5:1	13.2440	27.2561	24.5259	50.4743									
62+00	1.5:1	27.0674	50.2199	125.3106	217.5580	1.5:1	13.5931	22.8876	49.6983	92.8587									
63+00	1.5:1	14.3919	24.1265	76.7765	137.6785	1.5:1	9.5856	9.6281	42.9235	60.2143									
98+00	4:1	34.6248		64.1200		4:1	25.4334												
113+00						4:1	87.1726		161.4307										
114+00						4:1	64.7726		281.3800										
115+00						4:1	154.6586		406.3541										
116+00						4:1	80.9015		436.2224										
117+00						4:1	100.8532		336.5828										
118+00	4:1	90.0456		166.7511		4:1	143.1685		451.8920										
119+00						4:1	140.8854		526.0257										
135+00						4:1	215.2114		398.5396										
136+00						4:1	174.9365		722.4961										
137+00				404.0165		4:1	223.0316		736.9780										
138+00	4:1	218.1689		404.0165		4:1	292.6564		954.9778										
139+00	4:1	165.6494		710.7746		4:1	305.1918		1,107.1263										
140+00	4:1	113.7198		517.3504		4:1	216.2443		965.6224										
141+00	4:1	36.8876		278.9026															
142+00	4:1	31.1155		125.9317															
143+00	4:1	121.4762		282.5772		4:1	310.0530		574.1722										
144+00	4:1	236.0197		662.0294		4:1	331.5606		1,188.1733										
145+00	4:1	161.6611		736.4459															
211+00	4:1	54.5797		101.0735															
212+00	4:1	76.5660		242.8624															
215+00						4:1	106.5995		197.4065										
216+00						4:1	108.4060		398.1583										
217+00						4:1	95.7259		378.0220										
218+00						4:1	82.1148		329.3346										
219+00						4:1	34.8338		216.5715										
220+00						4:1	37.5655		134.0728										
232+00						4:1	244.5098		452.7959										
238+00	1.5:1	45.5599	58.7867	84.3702	108.8643														
239+00	1.5:1	26.0287	35.3813	132.5715	174.3852														
240+00	1.5:1	42.6381	56.3457	127.1607	169.8648														
271+00	1.5:1	23.0267	24.1121	42.6420	44.6520														
272+00	1.5:1	53.6003	63.3442	141.9019	161.9561														
273+00	1.5:1	32.4985	40.6381	159.4422	192.5598														
274+00	1.5:1	24.6249	32.0964	105.7841	134.6935														
275+00	1.5:1	19.8521	22.0247	82.3648	100.2243														
276+00	1.5:1	17.6514	22.5233	69.4509	82.4963														
277+00	1.5:1	18.6891	20.5894	67.2972	79.8383														
278+00	1.5:1	14.4289	9.4355	61.3296	55.6017														

Note: Volumes calculated using 100 foot stations before and after the first and last bench for each section



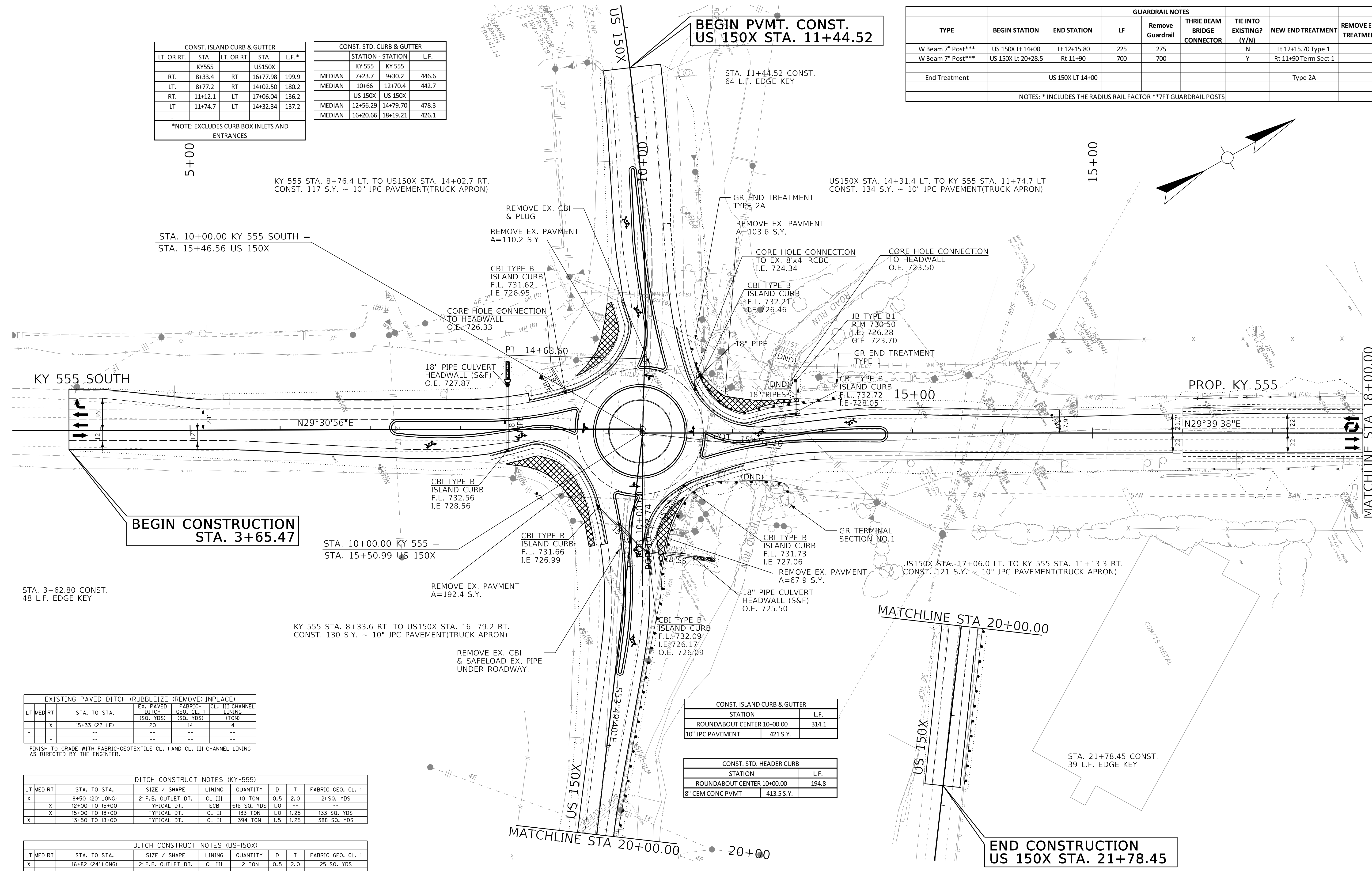
CONST. ISLAND CURB & GUTTER				
LT. OR RT.	STA.	LT. OR RT.	STA.	L.F.*
	KY555		US150X	
RT.	8+33.4	RT	16+77.98	199.9
LT.	8+77.2	RT	14+02.50	180.2
RT.	11+12.1	LT	17+06.04	136.2
LT	11+74.7	LT	14+32.34	137.2

*NOTE: EXCLUDES CURB BOX INLETS AND ENTRANCES

CONST. STD. CURB & GUTTER			
STATION	STATION	L.F.	
	KY555	KY555	
MEDIAN	7+23.7	9+30.2	446.6
MEDIAN	10+66	12+70.4	442.7
	US 150X	US 150X	
MEDIAN	12+56.29	14+79.70	478.3
MEDIAN	16+20.66	18+19.21	426.1

TYPE	BEGIN STATION	END STATION	LF	GUARDRAIL NOTES				
				Remove Guardrail	THRIE BEAM BRIDGE CONNECTOR	TIE INTO EXISTING? (Y/N)	NEW END TREATMENT	REMOVE END TREATMENT
W Beam 7" Post***	US 150X Lt 14+00	Lt 12+15.80	225	275		N	Lt 12+15.70 Type 1	
W Beam 7" Post***	US 150X Lt 20+28.5	Rt 11+90	700	700		Y	Rt 11+90 Term Sect 1	
End Treatment		US 150X LT 14+00					Type 2A	

NOTES: * INCLUDES THE RADIUS RAIL FACTOR **7FT GUARDRAIL POSTS



EXISTING PAVED DITCH (RUBBLEIZE (REMOVE) INPLACE)						
LT	MED	RT	STA. TO STA.	EX. PAVED DITCH (SQ. YDS)	FABRIC GEO. CL. I (TON)	CL. III CHANNEL LINING (TON)
	X		15+33 (27 LF)	20	14	4
			--	--	--	--

FINISH TO GRADE WITH FABRIC-GEOTEXTILE CL. I AND CL. III CHANNEL LINING AS DIRECTED BY THE ENGINEER.

DITCH CONSTRUCT NOTES (KY-555)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T FABRIC GEO. CL. I
	X		8+50 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SQ. YDS
	X		12+00 TO 15+00	TYPICAL DT.	ECB	616 SQ. YDS	1.0 -- --
	X		15+00 TO 18+00	TYPICAL DT.	CL II	133 TON	1.0 1.25 133 SQ. YDS
	X		13+50 TO 18+00	TYPICAL DT.	CL II	394 TON	1.5 1.25 388 SQ. YDS

DITCH CONSTRUCT NOTES (US-150X)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T FABRIC GEO. CL. I
	X		16+82 (24' LONG)	2' F.B. OUTLET DT.	CL III	12 TON	0.5 2.0 25 SQ. YDS
			--	--	--	--	-- -- --

CONST. ISLAND CURB & GUTTER	
STATION	L.F.
ROUNDABOUT CENTER 10+00.00	314.1
10" JPC PAVEMENT	421 S.Y.

CONST. STD. HEADER CURB	
STATION	L.F.
ROUNDABOUT CENTER 10+00.00	194.8
8" CEM CONC PVMT	413.5 S.Y.

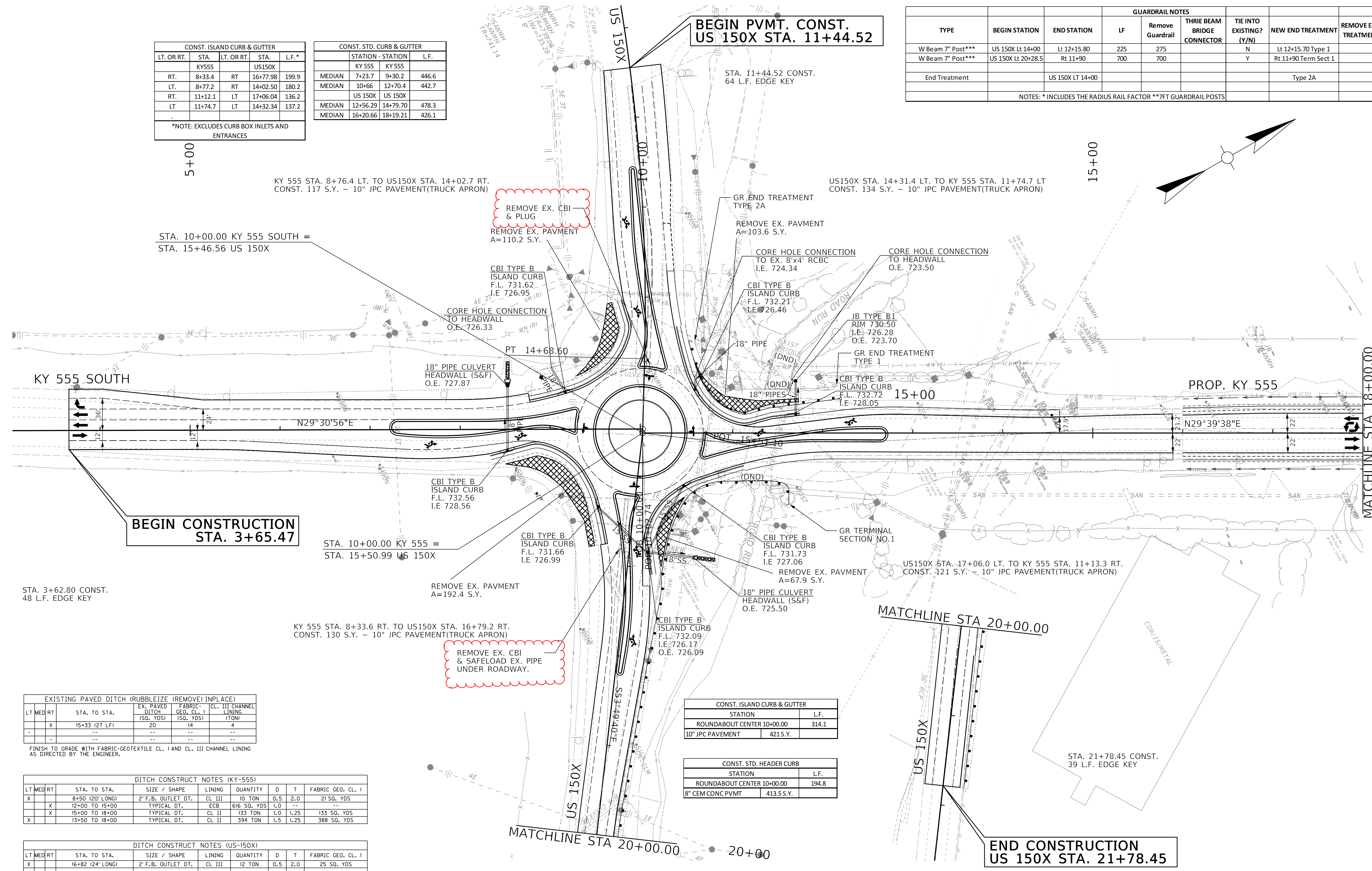
CONST. ISLAND CURB & GUTTER					
LT. OR RT.	STA.	LT. OR RT.	STA.	STA.	L.F.*
	KY555		US150X		
RT.	8+33.4	RT	16+77.98	199.9	
LT.	8+77.2	RT	14+02.50	180.2	
RT.	11+12.1	LT	17+06.04	136.2	
LT	11+74.7	LT	14+32.34	137.2	

*NOTE: EXCLUDES CURB BOX INLETS AND ENTRANCES

CONST. STD. CURB & GUTTER			
STATION	STATION	STATION	L.F.
	KY555	KY555	
MEDIAN	7+23.7	9+30.2	446.6
MEDIAN	10+66	12+70.4	442.7
	US 150X	US 150X	
MEDIAN	12+56.29	14+79.70	478.3
MEDIAN	16+20.66	18+19.21	426.1

TYPE	BEGIN STATION	END STATION	LF	GUARDRAIL NOTES				
				Remove Guardrail	THRIE BEAM BRIDGE CONNECTOR	TIE INTO EXISTING? (Y/N)	NEW END TREATMENT	REMOVE END TREATMENT
W Beam 7" Post***	US 150X Lt 14+00	Lt 12+15.80	225	275		N	Lt 12+15.70 Type 1	
W Beam 7" Post***	US 150X Lt 20+28.5	Rt 11+90	700	700		Y	Rt 11+90 Term Sect 1	
End Treatment		US 150X LT 14+00					Type 2A	

NOTES: * INCLUDES THE RADIUS RAIL FACTOR **7FT GUARDRAIL POSTS



EXISTING PAVED DITCH (RUBBLELIZE (REMOVE) INPLACE)					
LT	MED	RT	STA. TO STA.	EX. PAVED DITCH (SQ. YDS)	FABRIC CL. I CHANNEL LINING (TON)
	X		15+33 (27 LF)	20	4
			--	--	--

FINISH TO GRADE WITH FABRIC-GEOTEXTILE CL. I AND CL. III CHANNEL LINING AS DIRECTED BY THE ENGINEER.

DITCH CONSTRUCT NOTES (KY-555)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T FABRIC GEO. CL. I
	X		8+50 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2,0 21 SQ. YDS
	X		12+00 TO 15+00	TYPICAL DT.	ECB	616 SQ. YDS	1,0 -- --
	X		15+00 TO 18+00	TYPICAL DT.	CL II	133 TON	1,0 1.25 133 SQ. YDS
	X		13+50 TO 18+00	TYPICAL DT.	CL II	394 TON	1,5 1,25 388 SQ. YDS

DITCH CONSTRUCT NOTES (US-150X)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T FABRIC GEO. CL. I
	X		16+82 (24' LONG)	2' F.B. OUTLET DT.	CL III	12 TON	0.5 2,0 25 SQ. YDS
			--	--	--	--	-- -- --

CONST. ISLAND CURB & GUTTER	
STATION	L.F.
ROUNDABOUT CENTER 10+00.00	314.1
10" JPC PAVEMENT	421 S.Y.

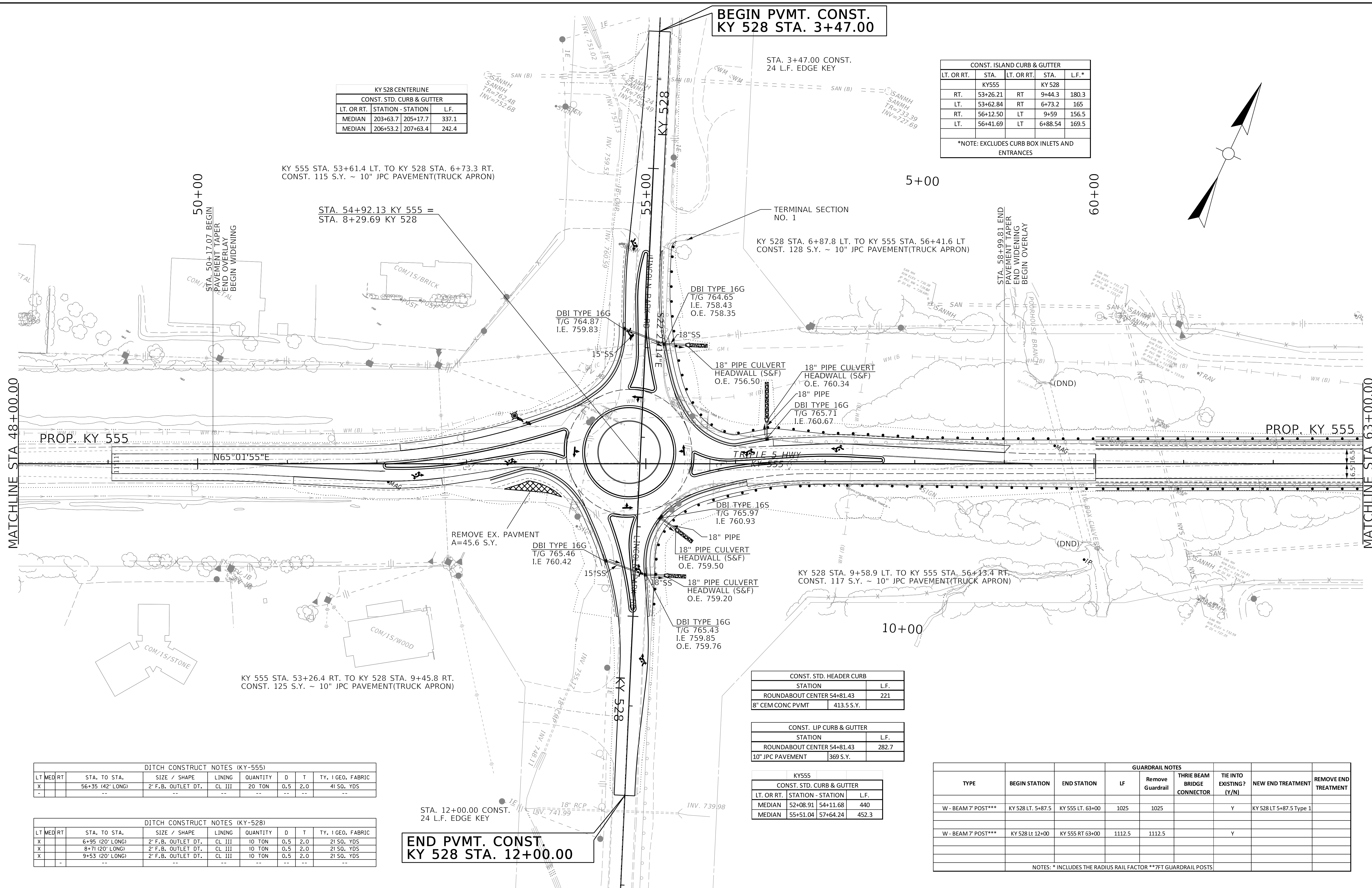
CONST. STD. HEADER CURB	
STATION	L.F.
ROUNDABOUT CENTER 10+00.00	194.8
8" CEM CONC PVMT	413.5 S.Y.

**BEGIN PVMT. CONST.
KY 528 STA. 3+47.00**

KY 528 CENTERLINE			
CONST. STD. CURB & GUTTER			
LT. OR RT.	STATION - STATION	L.F.	
MEDIAN	203+63.7 205+17.7	337.1	
MEDIAN	206+53.2 207+63.4	242.4	

CONST. ISLAND CURB & GUTTER				
LT. OR RT.	STA.	LT. OR RT.	STA.	L.F.*
RT.	53+26.21	RT	9+44.3	180.3
LT.	53+62.84	RT	6+73.2	165
RT.	56+12.50	LT	9+59	156.5
LT.	56+41.69	LT	6+88.54	169.5

*NOTE: EXCLUDES CURB BOX INLETS AND ENTRANCES



KY 555 STA. 53+61.4 LT. TO KY 528 STA. 6+73.3 RT.
CONST. 115 S.Y. ~ 10" JPC PAVEMENT (TRUCK APRON)

STA. 54+92.13 KY 555 =
STA. 8+29.69 KY 528

STA. 3+47.00 CONST.
24 L.F. EDGE KEY

TERMINAL SECTION
NO. 1

KY 528 STA. 6+87.8 LT. TO KY 555 STA. 56+41.6 LT
CONST. 128 S.Y. ~ 10" JPC PAVEMENT (TRUCK APRON)

STA. 58+99.81 END
PAVEMENT TAPER
END WIDENING
BEGIN OVERLAY

MATCHLINE STA 48+00.00

MATCHLINE STA 63+00.00

DITCH CONSTRUCT NOTES (KY-555)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T TY, 1 GEO. FABRIC
X			56+35 (42' LONG)	2' F.B. OUTLET DT.	CL III	20 TON	0.5 2.0 41 SO. YDS

DITCH CONSTRUCT NOTES (KY-528)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T TY, 1 GEO. FABRIC
X			6+95 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS
X			8+71 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS
X			9+53 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS

**END PVMT. CONST.
KY 528 STA. 12+00.00**

CONST. STD. HEADER CURB		
STATION	L.F.	
ROUNDAABOUT CENTER 54+81.43	221	
8" CEM CONC PVMT	413.5 S.Y.	

CONST. LIP CURB & GUTTER		
STATION	L.F.	
ROUNDAABOUT CENTER 54+81.43	282.7	
10" JPC PAVEMENT	369 S.Y.	

KY555			
CONST. STD. CURB & GUTTER			
LT. OR RT.	STATION - STATION	L.F.	
MEDIAN	52+08.91 54+11.68	440	
MEDIAN	55+51.04 57+64.24	452.3	

TYPE	BEGIN STATION	END STATION	LF	GUARDRAIL NOTES				REMOVE END TREATMENT
				Remove Guardrail	THREE BEAM BRIDGE CONNECTOR	TIE INTO EXISTING? (Y/N)	NEW END TREATMENT	
W - BEAM 7' POST***	KY 528 LT. 5+87.5	KY 555 LT. 63+00	1025	1025		Y	KY 528 LT 5+87.5 Type 1	
W - BEAM 7' POST***	KY 528 LT 12+00	KY 555 RT 63+00	1112.5	1112.5		Y		

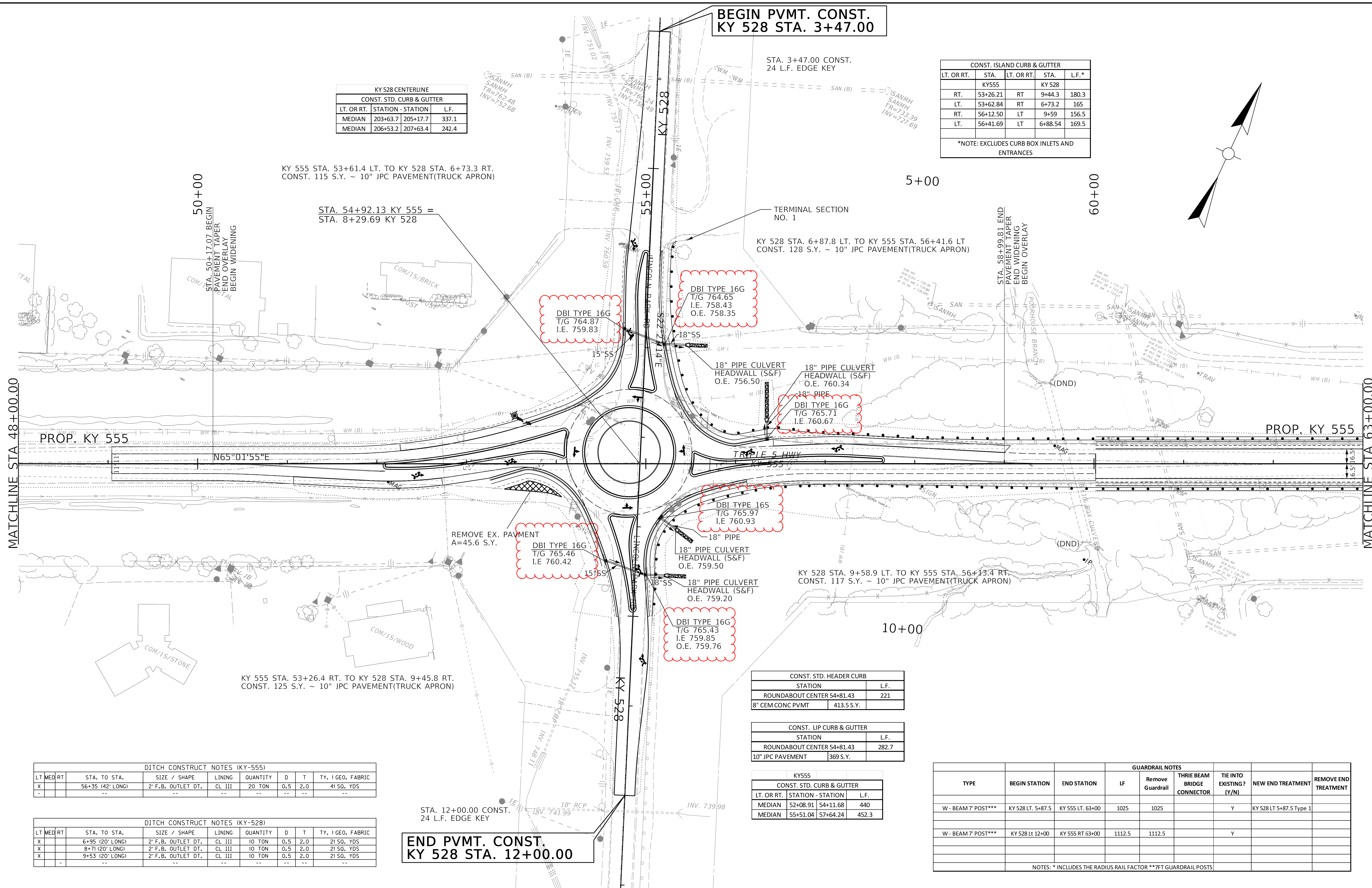
NOTES: * INCLUDES THE RADIUS RAIL FACTOR ** 7 FT GUARDRAIL POSTS

**BEGIN PVMT. CONST.
KY 528 STA. 3+47.00**

KY 528 CENTERLINE			
CONST. STD. CURB & GUTTER			
LT. OR RT.	STATION - STATION	L.F.	
MEDIAN	203+63.7 205+17.7	337.1	
MEDIAN	206+53.2 207+63.4	242.4	

CONST. ISLAND CURB & GUTTER				
LT. OR RT.	STA.	LT. OR RT.	STA.	L.F.*
RT.	53+26.21	RT	9+44.3	180.3
LT.	53+62.84	RT	6+73.2	165
RT.	56+12.50	LT	9+59	156.5
LT.	56+41.69	LT	6+88.54	169.5

*NOTE: EXCLUDES CURB BOX INLETS AND ENTRANCES



MATCHLINE STA 48+00.00

MATCHLINE STA 63+00.00

DITCH CONSTRUCT NOTES (KY-555)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T TY. 1 GEO. FABRIC
X			56+35 (42' LONG)	2' F.B. OUTLET DT.	CL III	20 TON	0.5 2.0 41 SO. YDS

DITCH CONSTRUCT NOTES (KY-528)							
LT	MED	RT	STA. TO STA.	SIZE / SHAPE	LINING	QUANTITY	D T TY. 1 GEO. FABRIC
X			6+95 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS
X			8+71 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS
X			9+53 (20' LONG)	2' F.B. OUTLET DT.	CL III	10 TON	0.5 2.0 21 SO. YDS

CONST. STD. HEADER CURB	
STATION	L.F.
ROUNDBOUT CENTER 54+81.43	221
8" CEM CONC PVMT	413.5 S.Y.

CONST. LIP CURB & GUTTER	
STATION	L.F.
ROUNDBOUT CENTER 54+81.43	282.7
10" JPC PAVEMENT	369 S.Y.

KY555			
CONST. STD. CURB & GUTTER			
LT. OR RT.	STATION - STATION	L.F.	
MEDIAN	52+08.91 54+11.68	440	
MEDIAN	55+51.04 57+64.24	452.3	

TYPE	BEGIN STATION	END STATION	LF	GUARDRAIL NOTES				REMOVE END TREATMENT
				Remove Guardrail	THREE BEAM BRIDGE CONNECTOR	TIE INTO EXISTING? (Y/N)	NEW END TREATMENT	
W - BEAM 7' POST***	KY 528 LT. 5+87.5	KY 555 LT. 63+00	1025	1025		Y	KY 528 LT 5+87.5 Type 1	
W - BEAM 7' POST***	KY 528 LT 12+00	KY 555 RT 63+00	1112.5	1112.5		Y		

NOTES: * INCLUDES THE RADIUS RAIL FACTOR ** 7FT GUARDRAIL POSTS

**END PVMT. CONST.
KY 528 STA. 12+00.00**



PIPE DRAINAGE SHEET 52 of 62

STORM SEWER PIPE

12"		15"		SLOTTED PIPE		DESIGN pH LEVEL		MAX. COVER HEIGHT		DROP BOX INLET TYPE 16G		REMOVE HDWL.		REMOVE PIPE		FABRIC GEO-TEXTILE CLASS 2 FOR PIPE		CONCRETE CLASS A	
L	I	N	E	A	R	F	E	E	T	12"	15"	FT	FT	EACH	EACH	LF	SY	CY	

4

48

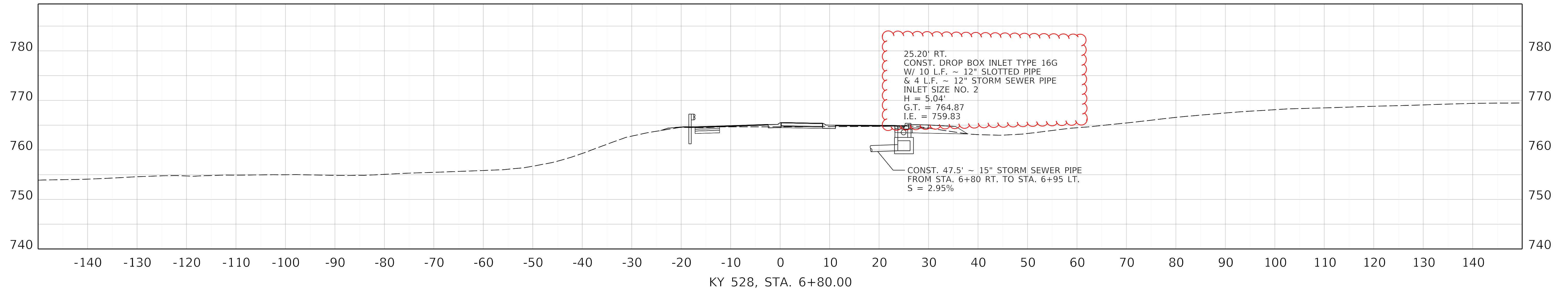
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M

3.5

1

83



PIPE DRAINAGE SHEET 53 of 62

STORM SEWER PIPE

STORM SEWER PIPE								SLOTTED PIPE	DESIGN pH LEVEL	MAX. COVER HEIGHT	DROP BOX INLET TYPE 16G	PIPE CULVERT HEADWALL - 18 IN	REMOVE HDWL.	REMOVE PIPE	FABRIC GEO-TEXTILE CLASS 2 FOR PIPE	CONCRETE CLASS A
12"	18"						12"				EACH	EACH	EACH	LF	SY	CY
L	I	N	E	A	R	F	E	E	T	FT						

4

23

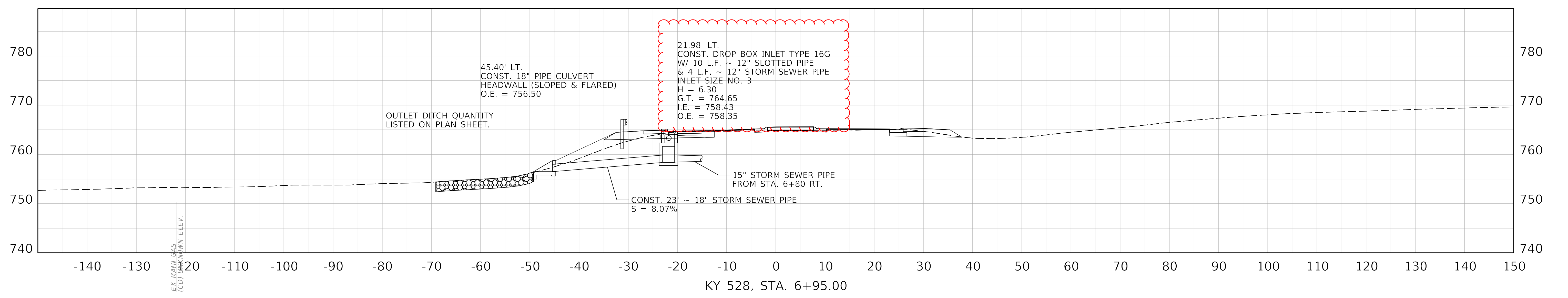
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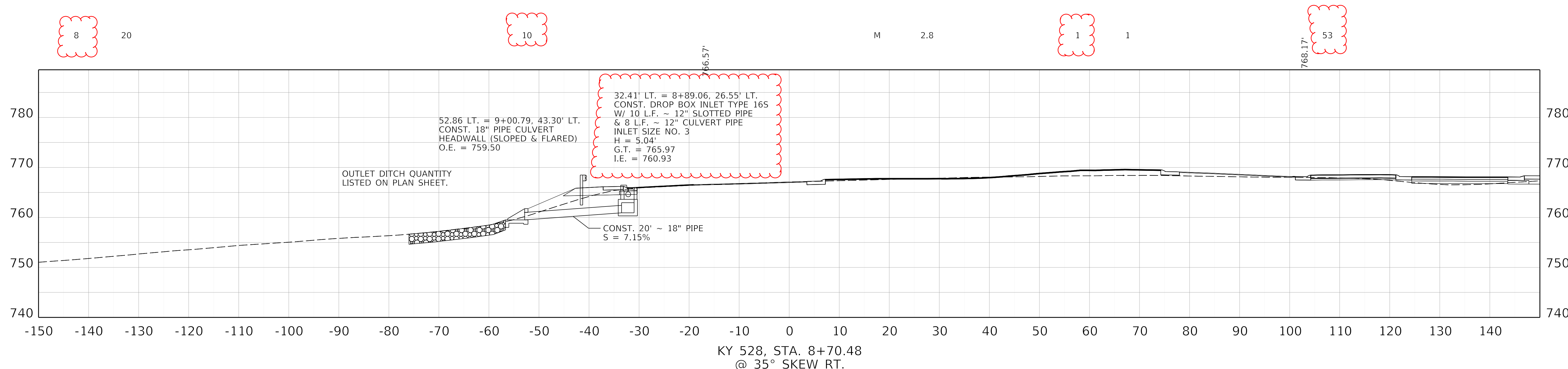
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53



PIPE DRAINAGE SHEET 54 of 62

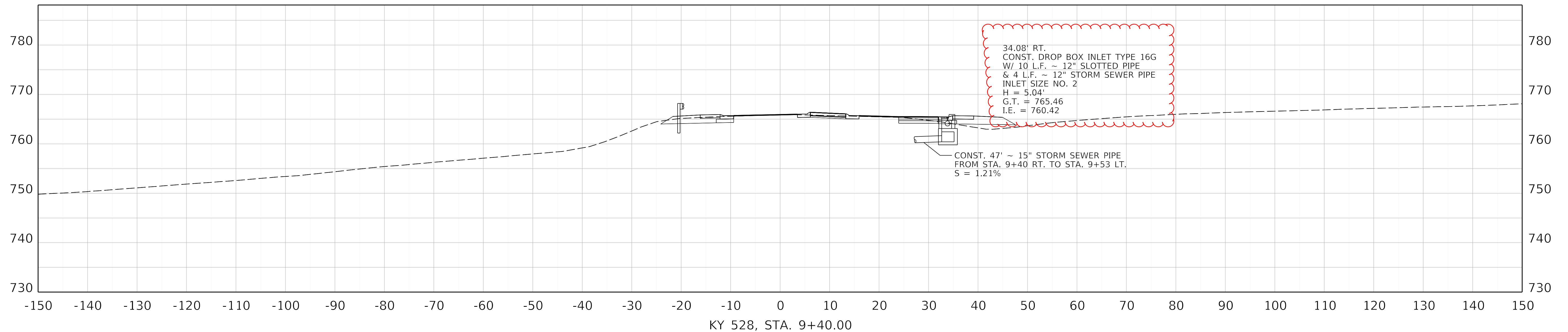
CULVERT PIPE								SLOTTED PIPE	DESIGN pH LEVEL	MAX. COVER HEIGHT	DROP BOX INLET TYPE 16S	PIPE CULVERT HEADWALL - 18 IN	REMOVE HDWL.	REMOVE PIPE	FABRIC GEO-TEXTILE CLASS 2 FOR PIPE	CONCRETE CLASS A
12"	18"						12"				EACH	EACH	EACH	LF	SY	CY
L	I	N	E	A	R	F	E	E	T	FT						



PIPE DRAINAGE SHEET 55 of 62

STORM SEWER PIPE										SLOTTED PIPE	DESIGN pH LEVEL	MAX. COVER HEIGHT	DROP BOX INLET TYPE 16G	REMOVE HDWL.	REMOVE PIPE	FABRIC GEO-TEXTILE CLASS 2 FOR PIPE	CONCRETE CLASS A	
12"	15"									12"								
L	I	N	E	A	R	F	E	E	T	FT		FT	EACH	EACH	LF	SY	CY	

4 47 10 M 2.9 1 82



PIPE DRAINAGE SHEET 56 of 62

STORM SEWER PIPE										SLOTTED PIPE	DESIGN pH LEVEL	MAX. COVER HEIGHT	DROP BOX INLET TYPE 16G	PIPE CULVERT HEADWALL - 18 IN	REMOVE HDWL.	REMOVE PIPE	FABRIC GEO-TEXTILE CLASS 2 FOR PIPE	CONCRETE CLASS A	
12"		18"								12"									
L	I	N	E	A	R	F	E	E	T	FT		FT		EACH	EACH	EACH	LF	SY	CY

