

SUBJECT: PLANS AND PROPOSAL ADDENDUMS

PROJECT: C 72-8-143

CONTROL: 0072-08-143

COUNTY: BEXAR

LETTING: 01/06/2023

REFERENCE NO: 1221

**PROPOSAL ADDENDUMS**

- 
- PROPOSAL COVER
- BID INSERTS (SH. NO.: ALL )
- GENERAL NOTES (SH. NO.: ALL )
- SPEC LIST (SH. NO.: )
- SPECIAL PROVISIONS: )
- ADDED: )
- 
- DELETED:
- 
- SPECIAL SPECIFICATIONS:
- ADDED:
- 
- DELETED:
- 
- OTHER: PLAN SHEET AND OTHER CHANGES

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

\*\*\*\*\*BID INSERTS\*\*\*\*\*

REVISED QUANTITIES FOR THE FOLLOWING BID ITEMS: 351-6006, 354-6048

DELETED THE FOLLOWING ITEMS: 354-6045, 354-6057, 3077-6011, 3077-6075

ALL BID INSERTS REPLCED DUE TO LINE SHIFTS

\*\*\*\*\*GENERAL NOTES\*\*\*\*\*

REVISED BASIS OF ESTIMATE

\*\*\*\*\*PLAN SHEETS\*\*\*\*\*

SHEETS 6-7: REVISED NOTE AND PAVEMENT DETAILS TO REMOVE 2" AND 4" MILL AND INLAY

SHEETS 8-8F:REPLACED DUE TO LINE SHIFTS

SHEETS 9-9A: REVISED TOTAL QUANTITIES

DESCRIPTION OF ABOVE CHANGES  
(INCLUDING PLANS SHEET CHANGES)

(CONTINUED)

SHEET 11: REVISED TOTAL QUANTITIES

SHEETS 15-16: REVISED TRAFFIC CONTROL PLAN TO REMOVE 2" AND 4" MILL AND INLAY

SHEET 18: REVISED LANE CLOSURE ASSESMENT FEE TABLE TO ONLY ALLOW NIGHTLY LANE CLOSURES

SHEET 19: REVISED LIMITS OF FLEXIBLE PAVEMENT REPAIR

SHEETS 20-26: REVISED NOTE TO REMOVE 2" AND 4" MILL AND INLAY

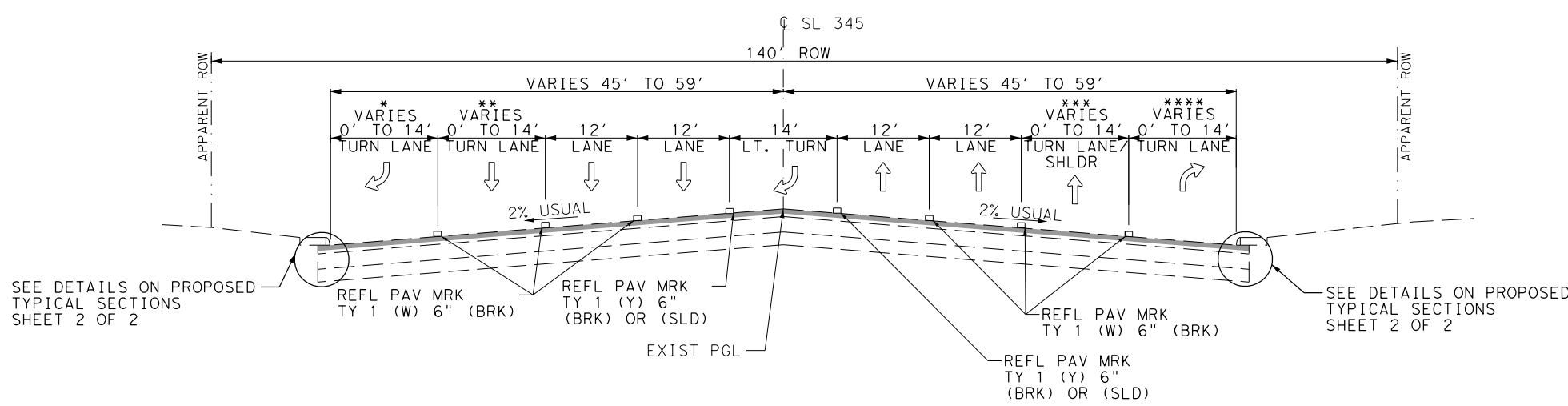
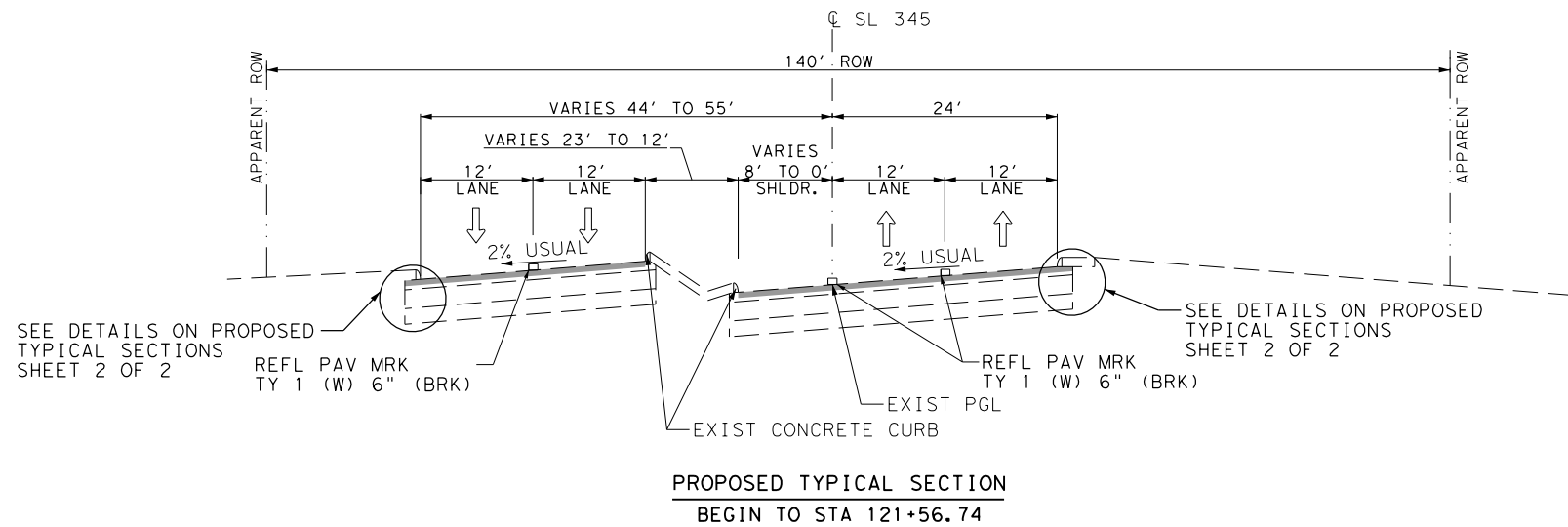
SHEET 28: REVISED DIMENSIONS TO REMOVE 2" AND 4" MILL AND INLAY TRANSITION

SHEETS 55-67: UPDATED QUANTITIES AND REVISED SHEETS TO REPLACE 2" AND 4" MILL AND INLAY WITH 3" MILL AND INLAY

SHEET 68: REVISED FLEXIBLE PAVEMENT REPAIR DETAIL TO REFLECT 3" MILL AND INLAY

SHEET 69: REVISED PLANNING END TREATMENTS DETAIL FOR 3" MILL AND INLAY





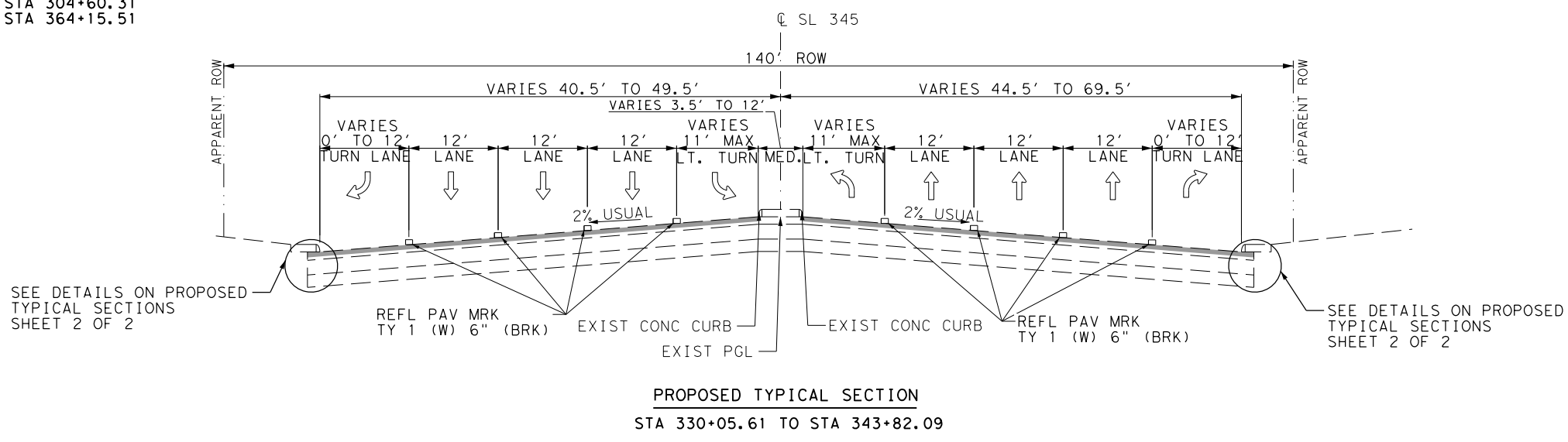
- TURN LANE**
- \* STA 124+22.17 TO STA 138+13.53
  - \* STA 139+70.63 TO STA 158+75.39
  - \* STA 159+77.59 TO STA 169+60.01
  - \* STA 191+55.41 TO STA 201+21.85
  - \* STA 225+25.24 TO STA 229+68.88
  - \* STA 255+49.56 TO STA 260+62.15
  - \* STA 300+38.18 TO STA 304+60.31
  - \* STA 360+05.31 TO STA 364+15.51

- TURN LANE**
- \*\* STA 139+58.26 TO STA 358+81.85

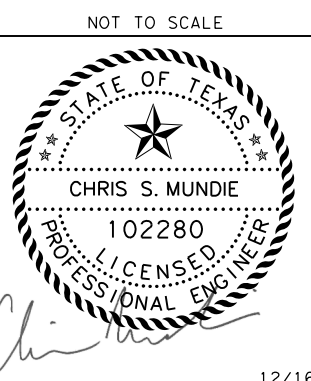
- PROPOSED TYPICAL SECTION**
- STA 121+56.74 TO STA 330+05.61
  - STA 343+82.09 TO STA 383+13.04

- TURN LANE**
- \*\*\* STA 121+56.74 TO STA 358+83.00
  - \*\*\* STA 348+14.02 TO STA 383+13.04

- TURN LANE**
- \*\*\*\* STA 249+15.60 TO STA 253+99.56
  - \*\*\*\* STA 259+45.87 TO STA 263+83.56
  - \*\*\*\* STA 295+11.44 TO STA 299+33.57
  - \*\*\*\* STA 319+95.68 TO STA 324+34.06
  - \*\*\*\* STA 340+54.15 TO STA 343+81.30



NOTE:  
1. REFER TO OVERLAY PLANS SHEETS FOR APPROXIMATE LOCATIONS OF 3" MILL & INLAY.



12/16/2022



SL 345

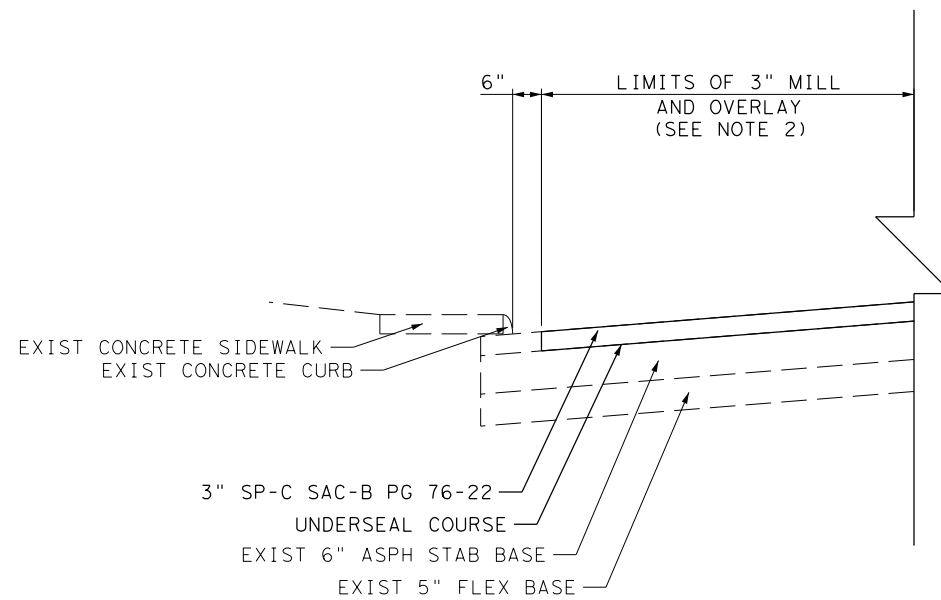
PROPOSED TYPICAL SECTIONS

SHEET 1 OF 2

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISED 12/19/2022

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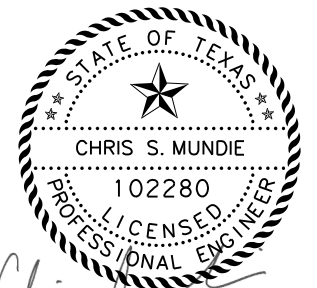


**MILL & INLAY DETAIL**  
**3" MILL**  
 NTS

NOTE:

1. REFER TO OVERLAY PLANS SHEETS FOR APPROXIMATE LOCATIONS OF 3" MILL & OVERLAY.
2. THE MINIMUM WIDTH OF A MILL & OVERLAY SHALL BE THE WIDTH OF ONE 12' LANE.

NOT TO SCALE



*Chris S. Mundie*  
 12/16/2022

**LJA Engineering, Inc.** **LJA**  
 FRN - F-1386

**Texas Department of Transportation**  
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SL 345

PROPOSED  
 TYPICAL  
 SECTIONS

SHEET 2 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	7
CONT.	SECT.	JOB	
0072	08	143	

REVISED 12/19/2022

Control: 0072-08-143

County: Bexar

Highway: SL 345

\*\*\*\*\*GENERAL NOTES\*\*\*\*\*  
2014 Specification Book (Revised August 4, 2022)

=====**Basis of Estimate**=====

Item	Description	Rate/Area	Quant-Unit
354 6048	Plane Asph Conc Pav (3")	278,804 SY	278,804 SY

=====**Asphalt Concrete Pavement**=====

Item	Type	Location	Depth	Area	Rate/Area	Quant-Tons
3077 6034	SP-C SAC-B PG76-22	SL 345	3"	278,804 SY	115lbs/sy-in	48,094 Tons

=====**Surface Treatment Data**=====

Item	Description	Depth	Area	Rate	Quantity
3085 6001	Underseal Course	N/A	278,804 SY	0.20 gal/sy	55,760 gal

=====**FLEXIBLE PAVEMENT STRUCTURE REPAIR**=====

(FOR CONTRACTORS INFORMATION ONLY)

Description	Depth	Area	Rate	Quantity
Tack Coat (2 applications)	N/A	5,325 SY	0.10 gal/sy	1,065 gal
HMA (TY B) PG64-22	10"	5,325 SY	115lbs/sy-in	3,062 Tons

**--General--**

Contact the Engineer or the City when construction operations are within 400 feet of a signalized intersection to determine/verify the location of loop detectors, conduit, ground-boxes, etc. Repair or replace any signal equipment damaged by construction operations. The method of repair or replacement shall be pre-approved and inspected. Depending on the type and extent of the damage, the Engineer reserves the right to perform the repair or replacement work and the Contractor will be billed for this work.

City of San Antonio: (210) 207-8642

Any materials removed and not reused and determined to be salvageable shall be stored within the project limits at an approved location or delivered undamaged to the storage yard as directed. Deface traffic signs so that they will not reappear in public as signs.

Any sign panels that are adjusted or removed and replaced, shall be done the same workday unless otherwise approved. This work shall be considered subsidiary to Item 502.

Control: 0072-08-143

Sheet 8

County: Bexar

Highway: SL 345

Notify the Engineer at least two weeks prior to a proposed traffic pattern change(s) that will require a revision to traffic signals.

Locate and reference all manholes and valves within the construction area with station and offset or GPS. Each manhole and valve shall be identified by its owner (SAWS, CPS, etc.). No roadwork will begin until this list has been submitted. All valves and manhole covers have to be accessible at all times, therefore; temp. CTB, material stockpiles, etc. cannot be placed over these valves or covers.

The Contractor has the option to adjust or construct all manholes and valves to final pavement elevations prior to the final mat of HMA or after final mat of HMA. If between the final elevation adjustment and the final mat of HMA, the manholes and valves are going to be exposed to traffic, place temporary asphalt around the manhole and valve to provide a +/- 50:1 taper. The cost of elevation adjustment and the concrete apron around the manhole and valve will be part of the manhole and valve work. The asphalt tapers are part of the HMA work.

Hurricane Evacuation

Hurricane Season is from June 1 thru November 30. As the closest metropolitan city inland from the Texas Coast, the City of San Antonio is a major shelter destination during mandatory hurricane evacuations. As such, planned work zone lane or road closures may be restricted and/or suspended during mandatory hurricane evacuation operations. The District will coordinate these restrictions at a minimum H-120 from any projected impact to the Texas Coast.

No time charges will be made if the Engineer determines that work on the project was impacted by the hurricane.

The Engineer may order changes in the Traffic Control Plan to accommodate evacuation traffic, and may suspend the work, all or in part, to ensure timely completion of this work. All work to implement changes in the Traffic Control Plan will be paid through existing bid prices or through Item 9.5, Force Account. However, the Department will not entertain any request for delay damages, loss of efficiency that may be attributed to the restriction or suspension of road or lane closures, or to changes in the Traffic Control Plan.

If a sanitary sewer overflow (SSO) occurs:

1. Attempt to eliminate the source of the SSO.
2. Contain sewage from the SSO to the extent possible to prevent contamination of waterways.
3. Call SAWS at (210) 233-2015.

Submit locate request for SAWS water and sewer to [TXDOTlocates@saws.org](mailto:TXDOTlocates@saws.org).

**Control:** 0072-08-143

**County:** Bexar

**Highway:** SL 345

In accordance with the Underground Facility Damage Prevention Act (One Call Bill) the phone number for a utility locator is 811. It is the Contractor's responsibility to plan for utility locators as needed.

Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way. Call or email the TxDOT offices listed below for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation. The Contractor is liable for all damages incurred to the above-mentioned utilities when working without having the utilities located prior to excavation.

For signal and ITS locates call TransGuide at 210-731-5136 or email [sat\\_its\\_locates@txdot.gov](mailto:sat_its_locates@txdot.gov) for ITS locates and [signal.request@txdot.gov](mailto:signal.request@txdot.gov) for signal locates.

Contractor questions on this project are to be addressed to the following individual(s):  
Carlos Arcila, P.E. (Area Engineer), [Carlos.Arcila@txdot.gov](mailto:Carlos.Arcila@txdot.gov) 210-536-9646  
Danny Gallegos, P.E. (Assistant Area Engineer), [Danny.Gallegos@txdot.gov](mailto:Danny.Gallegos@txdot.gov) 210-536-9646

Contractor questions will be accepted through email, phone, and in person by the above individuals.

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following Address:

[https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting Responses/](https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting%20Responses/)

All questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, CCSJ/Project Name.

The Contractor must measure the vertical clearance at each structure after the final surface of the roadway is completed and provide the vertical clearance measurement to the Engineer.

**--Item 5--**

Taper ACP placed at curb inlets, traffic inlets and slotted drains.

A horizontal boom or equivalent equipment is required for construction in the vicinity of the CPS Energy electric lines to provide vertical clearance of equipment during construction. Contact CPS Energy Utility Coordination Group sixteen (16) week in anticipation of pole bracing. The estimated duration for pole bracing is 6 to 10 weeks (or longer if temporary construction easements are required) after invoice is paid. For de-energizing or sleeving of the overhead electrical lines depicted on the plans, please contact CPS Energy Utility Coordination Group sixteen (16) week in anticipation of needed de-energization. The estimated duration for de-energizing is approximately 4 to 6 weeks (after invoice is paid) but could vary on system scenario and back feed requirements. De-energizing may not be possible in all instances or may

**Control:** 0072-08-143

**Sheet 8A**

**County:** Bexar

**Highway:** SL 345

be restricted during specific periods of time due to load demand. Contractor will be reimbursed for the invoice cost for pole bracing and/or de-energizing or sleeving through force account.

Prevention of Migratory Bird Nesting

It is anticipated that migratory birds, a protected group of species, may try to nest on bridges, culverts, vegetation, or gravel substrate, at any time of the year. The preferred nesting season for migratory birds is from February 15 through October 1. When practicable, schedule construction operations outside of the preferred nesting season. Otherwise, nests containing migratory birds must be avoided and no work will be performed in the nesting areas until the young birds have fledged.

Structures

Bridge and culvert construction operations cannot begin until swallow nesting prevention is implemented, until after October 1 if it's determined that swallow nesting is actively occurring, or until it's determined swallow nests have been abandoned. If the State installed nesting deterrent on the bridges and culverts, maintain the existing nesting deterrent to prevent swallow nesting until October 1 or completion of the bridge and culvert work, whichever occurs earlier. If new nests are built and occupied after the beginning of the work, do not perform work that can interfere with or discourage swallows from returning to their nests. Prevention of swallow nesting can be performed by one of the following methods:

1. By February 15 begin the removal of any existing mud nests and all other mud placed by swallows for the construction of nests on any portion of the bridge and culverts. The Engineer will inspect the bridges and culverts for nest building activity. If swallows begin nest building, scrape, or wash down all nest sites. Perform these activities daily unless the Engineer determines the need to do this work more frequently. Remove nests and mud through October 1 or until bridge and culvert construction operations are completed.
2. By February 15 place a nesting deterrent (which prevents access to the bridge and culvert by swallows) on the entire bridge (except deck and railing) and culverts. This work is subsidiary to the various bid items.

No extension of time or compensation payment will be granted for a delay or suspension of work caused by nesting swallows.

Provide a non-intrusive back-up alarm system on all heavy equipment used in close proximity to residential areas. This item is subsidiary to various bid items.

Excavation within 5 feet of an existing CPS Energy pole will require pole bracing. Contact CPS Energy utility coordination to request pole bracing (Customer Engineering 210-353-4050). The estimated duration for the pole bracing process is approximately 10 to 15 weeks.

**Control:** 0072-08-143

**County:** Bexar

**Highway:** SL 345

**--Item 6--**

Show the stockpile lot and/or sub lot numbers on all tickets for all materials.

Steel Wrapped or Asbestos Utility Lines:

Existing steel wrapped natural gas and/or asbestos cement (AC) water lines that will no longer be in service are usually abandoned in place (AIP). However, if any of these lines have to be removed for whatever reason (in the way of other construction, to make tie-ins, etc.), comply with Item 6.

If removal of AC water lines is included in the construction contract, then notify the Engineer of proposed dates of removal of the AC water lines in accordance to Item 6. Excavate to the top of the AC water line to allow a separate contractor hired by the State to remove the AC water line. The excavation for the AC water line removal is subsidiary to the work that created the need for the removal (excavation for structures, roadway, a new line, tie-ins, etc.).

To comply with the latest provisions of Build America, Buy America Act (BABA Act) of the Bipartisan Infrastructure Law, the contractor must submit a notarized original of the TxDOT Construction Material Buy America Certification Form for all items classified as construction materials. This form is not required for materials classified as a manufactured product.

Refer to the Buy America Material Classification Sheet for clarification on material categorization.

The Buy America Material Classification Sheet is located at the below link.  
<https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html> for clarification on material categorization.

**--Item 7--**

The total disturbed area within the project is anticipated at less than one (1) acre. Due to this type of construction, the project qualifies for exclusion under the Construction General Permit (CGP) issued by the Texas Commission on Environmental Quality (TCEQ). However, should the sum of the Engineer's anticipated disturbances and the Contractor's (On ROW and off ROW) PSL's equal or exceed the one (1) acre threshold; both TxDOT and the Contractor have project responsibilities under the CGP that reverts to non-exclusion status. Obtain approval for all non-depicted areas of disturbance that increases the initial soil and vegetation disturbed area estimates before work starts at these locations.

**Control:** 0072-08-143

**Sheet 8B**

**County:** Bexar

**Highway:** SL 345

Notify the Engineer of the disturbed acreage within one (1) mile of the project limits. Obtain authorization from the TCEQ for Contractor PSL's for construction support activities on or off ROW.

Roadway closures during the following key dates and/or special event are prohibited. See the general notes under Item 502 for these dates.

**--Item 8--**

Working days will be computed and charged in accordance with Article 8.3.1.4:Standard work week.

A Special Provision to Item 8 for a delayed authorized date to begin work has been included in the contract. The reason for including the Special Provision is for material processing or contractor mobilization.

Create and maintain a Bar Chart schedule.

A lane closure assessment fee will be assessed as per the "Lane Closure Assessment Fee Table" in the plans.

**--Item 9--**

When approved, provide uniformed, off-duty law enforcement officers with marked vehicles during work that requires a lane closure. The officer in marked vehicles shall be located as approved to monitor or direct traffic during the closure. The method used to direct traffic at signalized intersections shall be as approved. Additional officers and vehicles may be provided when approved or directed.

Complete the daily tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

Show proof of certification by the Texas Commission on Law Enforcement Standards.

All law enforcement personnel used in Work Zone Traffic Control shall be trained for performing duties in work zones and are required to take "Safe and Effective Use of Law Enforcement Personnel in Work Zones" (Course #133119) which can be found online at the following site: [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov) Certificates of completion should be available to all who finish the course. These should be kept by the officers to substantiate completion when reporting to the work site.

Minimums, scheduling fees, etc. will not be paid; TxDOT will consider paying cancellation fees on a case-by-case basis.

**Control:** 0072-08-143

**County:** Bexar

**Highway:** SL 345

**--Item 316--**

Asphalt season will be year-round but meet temperature limitations specified in the standard specifications for Item 316.

Ensure that the asphalt for precoating the aggregate and the asphalt used for the surface treatment will not result in a reaction that may adversely affect the bonding of the aggregate and asphalt during the surface treatment operation.

Do not add bag house fines in the production of precoated material.

Clean all concrete curbs, islands, medians, etc. that get coated with asphalt.

**--Item 320--**

Construct all longitudinal ACP joints adjacent to a travel lane with a joint maker device that will create a 3:1 to 6:1 taper. For placement of 2 inches or more, the device shall provide a maximum ½ inch vertical edge. Taper outside edges (next to the grass) or backfill (shoulder-up) the same day.

Provide a material transfer device capable of providing a continuous flow of material to the paver. The material transfer device will consist of a windrow elevator or better.

When placing Item 346 mixtures, use a self-propelled wheel mounted MTV capable of receiving mix from the haul trucks, separate from the paver. It shall have a minimum storage capacity of approximately 25 tons. It shall be equipped with a pivoting discharge conveyor and shall completely and thoroughly remix the material prior to placement. The effectiveness of the MTV's remixing ability is subject to the approval of the Engineer. In addition, the paver shall have a surge storage insert with a minimum capacity of 20 tons.

**--Item 354--**

Retain planed material.

Take precaution to avoid damage to existing bridge decks and armor joints. Repair any damage to the bridge decks and/or armor joints as approved. This work will not be paid directly but will be performed at the Contractor's expense.

**--Item 500--**

"Materials on Hand" payments will not be considered in determining percentages for mobilization payments.

**Control:** 0072-08-143

**Sheet 8C**

**County:** Bexar

**Highway:** SL 345

**--Item 502--**

General

In addition to providing a Contractor's Responsible Person and a phone number for emergency contact, have an employee available to respond on the project for emergencies and for taking corrective measures within 2 hours or within a reasonable time frame as specified by the Engineer.

Treat the pavement drop-offs as shown in the TCP.

Avoid placing stockpiles, equipment, and other construction materials within the roadway's horizontal clear zone or at any location that will constitute a hazard and will endanger traffic. If a stockpile is placed within the clear zone, address in accordance with the TMUTCD.

If Nighttime work is required and work is not behind positive barrier then full Class 3 reflective gear is required to be worn by all workers, hard hat halos are required to be worn by the flaggers at flagging stations, TY III barricades are required to be spaced at 500 ft, and a mandatory night work meeting is required.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Mounting and moving the mailbox as needed for the various construction phases is subsidiary to Item 502.

Access to adjoining property must be maintained at all times.

Barricades, Signs, and Traffic Control Devices

When advanced warning flashing arrow panels and/or changeable message sign is specified, have one standby unit in good condition at the job site. Standby time shall be considered subsidiary to the bid item.

After written notification, the time frame is provided on the Form 599 to provide properly maintained signs and barricades before considered in non-compliance with this item.

Temporary Rumble Strips are to be used according to WZ (RS)-16.



**Control:** 0072-08-143

**County:** Bexar

**Highway:** SL 345

Use 2 number of rumble strip arrays.

Moving an existing sign to a temporary location is subsidiary to Item 502. Installations with permanent supports at permanent locations will be paid for under the applicable bid item(s).

Cover permanent signs if not used. This is subsidiary to Item 502.

#### Lane and Ramp Closures and Detours

Notify the Engineer in writing 10 business days in advance of any temporary or permanent lane, ramp, connector, etc. closures/detours, restrictions to lane widths, alterations to vertical clearances, or modifications to radii. Any other modifications to the roadway that may adversely affect the mobility of oversized/overweight trucks also require 10 business days advance written notice to the Engineer. At least one lane must always remain open.

For closures not listed in the TCP; the lane closures are limited to between the hours of 9:00 PM to 5:00 AM, and at least one lane must remain open at all times.

At no time shall two consecutive intersecting roadways be closed at one time during construction.

At no time shall two consecutive ramps be closed at one time during construction or overlay operations.

Unless otherwise noted in the plans and/or as directed by the Engineer, daily lane closures shall be limited according to the following restrictions:

Nighttime: 9:00 PM to 5:00 AM  
(With uniformed off duty law enforcement officers)

Weekend closures when approved by the Engineer: Nighttime Only: 9:00 PM to 5:00 AM

No lane closures will be permitted for the following dates and/or special events:

Between December 15 and January 1

Fiesta Week and Sales Tax Holidays (Bexar County Only)

Wednesday before Thanksgiving thru the Sunday after Thanksgiving

Saturday and Sunday before Memorial Day and Labor Day

Saturday or Sunday when July 4 falls on a Friday or Monday

Election days (Bexar County Only)

During major events at the AT&T Center (Spurs home games, Rodeo, concerts, etc.)

Alamodome, and/or Convention Center (Bexar County Only)

**Control:** 0072-08-143

**Sheet 8D**

**County:** Bexar

**Highway:** SL 345

#### Traffic Signals

There are traffic signals at the intersection of SL345/Clarke; SL345/Prue; SL345/Huebner; SL345/Usaa; SL345/Cinnamon Creek; SL345/Bluemel; SL345/Hamilton Wolfe; SL345/Wurzbach; SL345/Datapoint; SL345/Medical; SL345/Louis Pasteur; SL345/Chambers; SL345/Callaghan; SL345/Magic; SL345/Lakeridge; SL345/E Woodlake; SL345/410 Frontage Roads; SL345/Hillcrest; SL345/Crossroads, and SL 345/Balcones. Always keep the signals in operation except when necessary for specific installation operations, including any modifications to existing signal heads to always maintain clear visibility. Adjustment of any signal head will be subsidiary to Item 502. When it is necessary for a signal to be turned off, or when left-turn lanes are closed, hire off duty police officers to control the traffic until the signals are back in satisfactory condition.

Moving or adjustment of traffic signal heads, VIVDS, and radar detection for the purpose of alignment with the shifting of lanes in conjunction with the traffic control plan will be subsidiary to various bid items.

Coordinate with the appropriate entity (City of San Antonio, City of New Braunfels, etc.) or TxDOT when left-turn lanes are closed and/or for signal timing revisions as necessary.

#### Hauling

The use of rubber-tired equipment will be required for moving dirt or other materials along or across pavement surfaces. Where the contractor desires to move any equipment not licensed for operation on public highways, on or across pavement, they shall protect the pavement from damage as directed/approved by the Engineer.

Throughout construction operations, the Contractor will be required to conduct their hauling operations in a manner such that vehicles will not haul over previously recompacted subgrade or compacted base material, except in short sections for dumping manipulations.

The Contractor shall keep the roadway clean and free of dirt or other materials during hauling operations. If the Contractor does not maintain a clean roadway, they shall cease all construction operations, when directed by the Engineer, to clean the roadway to the satisfaction of the Engineer.

#### --Item 504--

A Type D Structure (Asphalt Mix Control Laboratory) is required for all projects that do not have a previously approved laboratory structure for TxDOT's exclusive use. The structure will include high speed internet service with WIFI signal, one desk, two chairs, and one file cabinet.

#### --Item 506--

An Inspector will perform a regularly scheduled SWP3 inspection every 7 calendar days.

**Control:** 0072-08-143

**County:** Bexar

**Highway:** SL 345

Failure to address items noted on the SW3P inspection report within two report cycles may result in the Department stopping all construction operations, exclusive of time charges, or withholding that month's estimate until the SW3P deficiencies are corrected unless the Engineer determines that the area is too wet to correct SW3P deficiencies.

Failure to correctly maintain daily monitoring reports and submitting to TxDOT on a daily/weekly basis may result in the monthly estimate being withheld.

**--Item 529--**

Curb inlets and extensions are based on an exposed curb height of 7 inches. The roadway curb height and shape will be transitioned to the inlet's curb with a 40: 1 taper.

**--Item 531--**

The curb ramp locations shown in the plans have considered the geometric features of the intersection, traffic signals, and the pavement markings. If anything changes during construction, the location of curb ramps must be adjusted to ensure they meet TAS requirements.

**--Item 585--**

Use Surface Test Type B, pay adjustment schedule 2 to evaluate ride quality of travel lanes.

**--Item 666--**

Use TY II markings (vs. an acrylic or epoxy) on asphalt surfaces as the sealer for the TY I markings, unless otherwise approved by the Engineer.

**--Item 672--**

Place all adhesive material directly from the heated dispenser to the pavement. Do not use portable or non-heated containers. Use adhesive of sufficient thickness so that when the marker is pressed into the adhesive, 1/8" or more adhesive will remain under 100% of the marker. The adhesive should extend not less than 1/2" but not more than 1 1/2" beyond the perimeter of the marker.

**--Item 677--**

Obtain approval before using the mechanical method for the elimination of existing thermoplastic pavement markings.

**--Item 688--**

The sealant used for vehicle loop wire must be approved.

The button placement must be coordinated with the concrete pad to access the button according to ADA and TAS. If any mounting modifications are needed (extensions, brackets, etc.) to meet ADA and TAS requirements the adjustment will be subsidiary to Item 688. The concrete pad (if required) will be paid separately.

**Control:** 0072-08-143

**Sheet 8E**

**County:** Bexar

**Highway:** SL 345

The pedestrian push button must be wired with a 2/C#14 loop detector cable in lieu of a #12 A.W.G. XHHW wire.

Furnish and install new Polara Enterprises accessible pedestrian signals (APS) push buttons or approved equivalent.

**--Item 3076, 3077, 3079, 3080, 3081, & 3082 --**

Table 10 in Item 3076 and Table 11 in Item 3077, Hamburg Wheel Test Requirements tested in accordance with Tex-242-F are changed for PG 64-22 or lower and PG 70-22. Minimum number of passes at 12.55 mm Rut Depth, Tested at 50 degrees C will be 5,000 and 10,000 respectively.

Submit a copy of the Tex 233-F production charts on a weekly basis. At the end of the ACP work, provide all originals.

Crushing of aggregate for hot mix and immediate use for production of the mix is not allowed. Stockpile the aggregate until enough material is available for five days of production unless prior approval is provided

Hold a pre-paving meeting one month prior to the placement of the hot mix. The date and time of pre-paving meeting should be coordinated with the Engineer prior to scheduling.

Do not use diesel or solvents as asphalt release agents in production, transportation, or construction. A list of approved asphalt release agents is available from the District Laboratory.

No more than one hot mix lot will be open for any specific type of hot mix, unless authorized. After a lot is open and the Contractor gets approval to change plants, the previous lot will be closed, and a new lot will be opened. The numbering for the lots produced at the new plant will start with No. 1. If allowed to switch back to the original or previous plant, the next lot from that plant will resume numbering sequentially from the last lot produced by that plant.

The minimum application rates are listed in Table UC. The Engineer may adjust the application rates taking into consideration the existing pavement surface conditions.



**Control:** 0072-08-143

**Sheet 8F**

**County:** Bexar

**Highway:** SL 345

Table UC

Material	Minimum Application Rate (gal. per square yard)
TRAIL – Hot Asphalt	0.15
Spray Applied Underseal Membrane	0.20
Seal Coat – Emulsion (CHFRS-2P, CRS-2P)	0.25
Seal Coat – Asphalt (AC-15P, AC-20-5TR, AC-20XP, AC10-2TR)	0.23
Aggregate for Seal Coat Options TY PB GR 4(AC) or TY B GR 4(Emulsion)	1 CY:120 SY

**--Item 4171--**

Install bridge identification numbers shown below for each of the following listed bridges in accordance with the special specification and San Antonio District Standard. Install the bridge identification number on two locations as shown on the plans, or as directed. For bridges in a two-way condition, install the bridge identification number on each outside beam on the upstream side of traffic. For bridges in a one-way condition, install the bridge identification number on each side, opposite corners on each outside beam. For culverts less than 5 ft. in height, install the bridge identification number on the headwall on upstream and downstream location. For culverts greater than 5 ft. in height, install the bridge identification number inside the first barrel on the upstream side of traffic and inside the last barrel on the opposite corner in the direction of traffic.

**--Item 6185--**

4 shadow vehicles with TMA will be required for this project. The TMA's will be measured and paid for by the DAY for each TMA/TA set up and operational on the worksite. The contractor will be responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMA's needed for the project. See TMA and TA Summary sheet in the plans.



# Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0072-08-143

DISTRICT San Antonio

COUNTY Bexar

HIGHWAY SL 345

CONTROL SECTION JOB				0072-08-143		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00061219			
COUNTY				Bexar			
HIGHWAY				SL 345			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	104-6015	REMOVING CONC (SIDEWALKS)	SY	7.000		7.000	
	104-6021	REMOVING CONC (CURB)	LF	11.000		11.000	
	104-6032	REMOVING CONC (WHEELCHAIR RAMP)	SY	10.000		10.000	
	351-6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY	5,325.000		5,325.000	
	354-6048	PLANE ASPH CONC PAV (3")	SY	278,804.000		278,804.000	
	438-6001	CLEANING AND SEALING EXISTING JOINTS	LF	403.000		403.000	
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	12.000		12.000	
	506-6040	BIODEG EROSN CONT LOGS (INSTL) (8")	LF	1,386.000		1,386.000	
	506-6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	1,386.000		1,386.000	
	529-6001	CONC CURB (TY I)	LF	11.000		11.000	
	531-6003	CONC SIDEWALKS (6")	SY	7.000		7.000	
	531-6004	CURB RAMPS (TY 1)	EA	1.000		1.000	
	662-6050	WK ZN PAV MRK REMOV (REFL) TY II-A-A	EA	2,521.000		2,521.000	
	662-6060	WK ZN PAV MRK REMOV (W)4"(BRK)	LF	82,755.000		82,755.000	
	662-6063	WK ZN PAV MRK REMOV (W)4"(SLD)	LF	5,148.000		5,148.000	
	662-6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	12,851.000		12,851.000	
	662-6075	WK ZN PAV MRK REMOV (W)24"(SLD)	LF	8,921.000		8,921.000	
	662-6080	WK ZN PAV MRK REMOV (W)(ARROW)	EA	156.000		156.000	
	662-6090	WK ZN PAV MRK REMOV (W)(WORD)	EA	94.000		94.000	
	662-6093	WK ZN PAV MRK REMOV (Y)4"(BRK)	LF	5,825.000		5,825.000	
	662-6095	WK ZN PAV MRK REMOV (Y)4"(SLD)	LF	49,424.000		49,424.000	
	666-6018	REFL PAV MRK TY I (W)6"(DOT)(100MIL)	LF	515.000		515.000	
	666-6030	REFL PAV MRK TY I (W)8"(DOT)(100MIL)	LF	254.000		254.000	
	666-6036	REFL PAV MRK TY I (W)8"(SLD)(100MIL)	LF	15,842.000		15,842.000	
	666-6048	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	LF	13,670.000		13,670.000	
	666-6054	REFL PAV MRK TY I (W)(ARROW)(100MIL)	EA	182.000		182.000	
	666-6078	REFL PAV MRK TY I (W)(WORD)(100MIL)	EA	132.000		132.000	
	666-6147	REFL PAV MRK TY I (Y)24"(SLD)(100MIL)	LF	252.000		252.000	
	666-6156	REFL PAV MRK TY I(Y)(MED NOSE)(100MIL)	EA	18.000		18.000	
	666-6225	PAVEMENT SEALER 6"	LF	89,957.000		89,957.000	
	666-6226	PAVEMENT SEALER 8"	LF	16,096.000		16,096.000	
	666-6230	PAVEMENT SEALER 24"	LF	13,922.000		13,922.000	
	666-6231	PAVEMENT SEALER (ARROW)	EA	182.000		182.000	
	666-6232	PAVEMENT SEALER (WORD)	EA	132.000		132.000	
	666-6233	PAVEMENT SEALER (MED NOSE)	EA	18.000		18.000	
	666-6306	RE PM W/RET REQ TY I (W)6"(BRK)(100MIL)	LF	23,526.000		23,526.000	

1 Revised 12/22/2022



DISTRICT	COUNTY	CCSJ	SHEET
San Antonio	Bexar	0072-08-143	9



CONTROLLING PROJECT ID 0072-08-143

DISTRICT San Antonio  
HIGHWAY SL 345

COUNTY Bexar

# Estimate & Quantity Sheet

CONTROL SECTION JOB				0072-08-143		TOTAL EST.	TOTAL FINAL
PROJECT ID				A00061219			
COUNTY				Bexar			
HIGHWAY				SL 345			
ALT	BID CODE	DESCRIPTION	UNIT	EST.	FINAL		
	666-6309	RE PM W/RET REQ TY I (W)6"(SLD)(100MIL)	LF	7,120.000		7,120.000	
	666-6318	RE PM W/RET REQ TY I (Y)6"(BRK)(100MIL)	LF	6,023.000		6,023.000	
	666-6321	RE PM W/RET REQ TY I (Y)6"(SLD)(100MIL)	LF	52,773.000		52,773.000	
	672-6007	REFL PAV MRKR TY I-C	EA	1,694.000		1,694.000	
	672-6009	REFL PAV MRKR TY II-A-A	EA	2,104.000		2,104.000	
	672-6010	REFL PAV MRKR TY II-C-R	EA	305.000		305.000	
	677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	7,401.000		7,401.000	
	677-6003	ELIM EXT PAV MRK & MRKS (8")	LF	1,153.000		1,153.000	
	677-6007	ELIM EXT PAV MRK & MRKS (24")	LF	65.000		65.000	
	677-6008	ELIM EXT PAV MRK & MRKS (ARROW)	EA	8.000		8.000	
	677-6012	ELIM EXT PAV MRK & MRKS (WORD)	EA	8.000		8.000	
	688-6004	VEH LP DETECT (SAWCUT)	LF	1,000.000		1,000.000	
	690-6103	REMOVE VEHICLE LOOP DETECTOR	LF	5,500.000		5,500.000	
	3077-6034	SP MIXESSP-CSAC-B PG76-22	TON	48,094.000		48,094.000	
	3085-6001	UNDERSEAL COURSE	GAL	55,760.000		55,760.000	
	4171-6001	INSTALL BRIDGE IDENTIFICATION NUMBERS	EA	2.000		2.000	
	5003-6004	RETROFIT DET WARN SURF(SURF APPLIED)	EA	3.000		3.000	
	6001-6001	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	30.000		30.000	
	6185-6002	TMA (STATIONARY)	DAY	174.000		174.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	12.000		12.000	
	01	LITTER CONTROL: STATE FORCE ACCOUNT WORK (NON-PARTICIPATING)	LS	1.000		1.000	
	18	SAFETY CONTINGENCY: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	
		EROSION CONTROL MAINTENANCE: CONTRACTOR FORCE ACCOUNT WORK (PART)	LS	1.000		1.000	
		LAW ENFORCEMENT: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	

1 Revised 12/22/2022



DISTRICT	COUNTY	CCSJ	SHEET
San Antonio	Bexar	0072-08-143	9A

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SL 345 SUMMARY OF ROADWAY ITEMS														
PLAN SHEET NO.	LOCATION	104 6015	104 6021	104 6032	351 6006	354 6048	529 6001	531 6003	531 6004	688 6004	690 6103	3077 6034	3085 6001	5003 6004
		REMOVING CONC (SIDEWALKS)	REMOVING CONC (CURB)	REMOVING CONC (WHEELCHAIR RAMP)	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	PLANE ASPH CONC PAV (3")	CONC CURB (TY 1)	CONC SIDEWALKS (6")	CURB RAMPS (TY 1)	VEH LP DETECT (SAWCUT)	REMOVE VEHICLE LOOP DETECTOR	SP MIXES SP-C SAC-B PG76-22	UNDERSEAL COURSE	RETROFIT DET WARN SURF (SURF APPLIED)
		SY	LF	SY	SY	SY	LF	SY	EA	LF	LF	SY	SY	EA
55	BEGIN TO STA 120+00					4,787						4,787	4,787	
56	STA 120+00 TO STA 142+00	7	11		536	23,896	11	7		250	750	23,896	23,896	3
57	STA 142+00 TO STA 164+00			10	996	25,859			1	500	500	25,859	25,859	
58	STA 164+00 TO STA 185+00				3,099	21,686				250	250	21,686	21,686	
59	STA 185+00 TO STA 209+00					26,919					500	26,919	26,919	
60	STA 209+00 TO STA 232+00				74	23,659					500	23,659	23,659	
61	STA 232+00 TO STA 254+00					22,311					250	22,311	22,311	
62	STA 254+00 TO STA 277+00					23,834					500	23,834	23,834	
63	STA 277+00 TO STA 301+00				67	24,621					500	24,621	24,621	
64	STA 301+00 TO STA 324+00				27	23,310					250	23,310	23,310	
65	STA 324+00 TO STA 347+00					23,400					1,000	23,400	23,400	
66	STA 347+00 TO STA 370+00				179	21,478					250	21,478	21,478	
67	STA 370+00 TO END				347	13,044					250	13,044	13,044	
<b>PROJECT TOTALS</b>		<b>7</b>	<b>11</b>	<b>10</b>	<b>5,325</b>	<b>278,804</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>1,000</b>	<b>5,500</b>	<b>278,804</b>	<b>278,804</b>	<b>3</b>

**LJA Engineering, Inc.** FRN - F-1386

*Texas Department of Transportation*

SL 345

ROADWAY SUMMARY

SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISED 12/19/2022

PHASE 1

THE INTENT OF THIS PHASE IS TO PERFORM BASE REPAIRS FOR THE DURATION OF THE PROJECT. BASE REPAIRS SHALL PROCEED IN THE DIRECTION OF TRAFFIC.

DAILY WORK HOURS: OFF-PEAK 9:00 PM - 5:00 AM

1. INSTALL ADVANCED WARNING SIGNS AND ALL APPLICABLE TRAFFIC CONTROL DEVICES PER TMUTCD AND TCP STANDARDS BC(1)-21 THRU BC(12)-21 FOR THE SL 345 PROJECT LIMITS.
2. INSTALL SW3P FOR THE SL 345 PROJECT LIMITS & MAINTAIN THROUGHOUT CONSTRUCTION.
3. INSTALL APPLICABLE TRAFFIC CONTROL DEVICES FOR THE FULL DEPTH BASE REPAIR AT THE LOCATIONS SHOWN IN THE SL 345 OVERLAY PLANS.
4. CONSTRUCTION:
  - i. PERFORM ALL BASE REPAIRS, CURB REPAIRS, AND ADA IMPROVEMENTS USING TCP(1-4)-18. THE LENGTH OF THE BASE REPAIR AND ADA IMPROVEMENT WORK AREAS SHALL BE BASED ON THE CONTRACTOR'S ABILITY, OR AS DETERMINED BY THE ENGINEER, TO COMPLETE THE BASE REPAIRS AND RETURN TRAFFIC TO NORMAL OPERATIONS AT THE END OF EACH WORK DAY. THE CONTRACTOR SHALL COMPLETE EACH BASE REPAIR LOCATION BEFORE PROCEEDING TO THE NEXT LOCATION.
  - ii. INSTALL WORK ZONE PAVEMENT MARKINGS FOR EXISTING TRAFFIC OPERATIONS.
  - iii. CONTRACTOR SHALL COMPLETE ALL PHASE 1 WORK BEFORE PROCEEDING TO PHASE 2. ALL TRAFFIC LANES SHALL BE OPENED BY THE TIME SPECIFIED. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES.

PHASE 2 (SEE NOTE 1)

THE INTENT OF THIS PHASE IS TO PERFORM THE MILL AND OVERLAY CONSTRUCTION OPERATIONS. PLANING, SURFACE TREATING, AND OVERLAY OPERATIONS SHALL PROCEED IN THE DIRECTION OF TRAFFIC.

DAILY WORK HOURS: AS DETERMINED BY THE ENGINEER BASED ON SURROUNDING LAND USE AND PUBLIC USE BUILDINGS.

1. INSTALL ALL APPLICABLE TRAFFIC CONTROL DEVICES PER TMUTCD AND TCP (2-1)-18 FOR MILL & OVERLAY OPERATIONS.

2. CONSTRUCTION:

STEP 1 SOUTHBOUND OUTSIDE LANE:

- i. PLANE EXISTING SURFACE 3" FOR SOUTHBOUND OUTSIDE LANE AND RIGHT TURN LANES IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

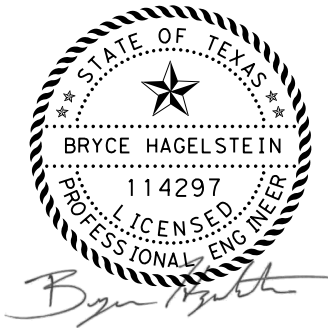
STEP 2 SOUTHBOUND MIDDLE LANE:

- i. PLANE EXISTING SURFACE 3" FOR SOUTHBOUND MIDDLE LANE IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

TRAFFIC CONTROL PLAN SEQUENCE OF WORK

1. THIS PROJECT WILL BE CONSTRUCTED IN (3) PHASES. BEFORE THE COMMENCEMENT OF EACH PHASE, INSTALL ADVANCE WARNING SIGNS, TEMPORARY SIGNS AND BARRICADES AS SHOWN ON THE PLANS AND/OR AS DIRECTED/APPROVED BY THE ENGINEER. DAILY LANE CLOSURES WILL BE USED IN ACCORDANCE WITH STATE TCP STANDARDS. DROP OFF CONDITIONS OF GREATER THAN 2" MUST HAVE A 3:1 SLOPE AT THE END OF EACH DAY, AS WELL AS THROUGHOUT THE PROJECT WHERE ACCESS TO ADJACENT PROPERTIES IS ALLOWED TO DRIVEWAYS AND SIDE STREETS.
2. PREPARING ROW / REMOVAL OF EXISTING ITEMS TO BE DONE ONLY IN AREAS WHERE WORK IS OCCURING, AS PER THE PHASES NOTED BELOW.
3. PLANING, SURFACE TREATMENTS AND OVERLAYS SHALL BE PERFORMED IN THE DIRECTION OF TRAFFIC. BEGIN SURFACE CONSTRUCTION AS SHOWN IN THE PLANS.
4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENT OF ITEM 7, "LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC" AND ITEM 502, "BARRICADES, SIGNS, AND TRAFFIC HANDLING", OF THE STANDARD SPECIFICATIONS, AND TO THE GENERAL NOTES.
5. A BRIEF DESCRIPTION OF THESE PHASES ARE AS FOLLOWS:

- NOTES: 1. THE LENGTH OF THE WORK AREA SHALL BE BASED ON THE CONTRACTOR'S ABILITY, OR AS DIRECTED BY THE ENGINEER, TO COMPLETE EACH STEP, INSTALL SP-C TO FINISHED GRADE, AND RETURN TRAFFIC TO EXISTING OPERATIONS AT THE END OF EACH WORK DAY. THE LANES SHALL BE OPENED BY THE TIME SPECIFIED. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES.
2. COORDINATE OUTSIDE LANE CLOSURES WITH VIA BUS SERVICES
  3. DAILY LIMITS OF 3" MILL AREAS SHALL BE DETERMINED BASED ON THE CONTRACTOR'S ABILITY TO COMPLETE MILLING OPERATIONS AND INSTALL THE 3" SP-C LAYER IN ONE DAY.



SL 345

TRAFFIC CONTROL PLAN NARRATIVE

SHEET 1 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	15
CONT.	SECT.	JOB	
0072	08	143	

REVISED 12/19/2022

PHASE 2 CONT.

STEP 3 SOUTHBOUND INSIDE LANE:

- i. PLANE EXISTING SURFACE 3" FOR SOUTHBOUND INSIDE LANE IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

STEP 4 NORTHBOUND OUTSIDE LANE:

- i. PLANE EXISTING SURFACE 3" FOR NORTHBOUND OUTSIDE LANE AND RIGHT TURN LANES IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

STEP 5 NORTHBOUND MIDDLE LANE:

- i. PLANE EXISTING SURFACE 3" FOR NORTHBOUND MIDDLE LANE IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

STEP 6 NORTHBOUND INSIDE LANE:

- i. PLANE EXISTING SURFACE 3" FOR NORTHBOUND INSIDE LANE IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

STEP 7 CENTER LEFT TURN LANE:

- i. PLANE EXISTING SURFACE 3" FOR CENTER LEFT TURN LANE IN 3" MILL AREAS. (SEE NOTE 3)
- ii. INSTALL UNDERSEAL COURSE IN 3" MILL AREAS.
- iii. INSTALL 3" SP-C SAC B PG 76-22 TO FINISHED GRADE IN 3" MILL AREAS.
- iv. PLACE REMOVABLE WORK ZONE PAVEMENT MARKINGS TO ACCOMODATE EXISTING TRAFFIC PATTERNS AT END OF EACH DAY.
- v. PLANING MAY BE DONE IN CONJUNCTION WITH THE OVERLAY OPERATIONS TO THE EXTENT APPROVED BY THE ENGINEER.

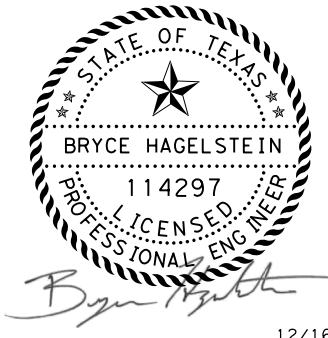
PHASE 3

THE INTENT OF THIS PHASE IS TO INSTALL FINAL PAVEMENT MARKINGS, AND PROJECT CLEANUP.

DAILY WORK HOURS: AS DETERMINED BY THE ENGINEER BASED ON SURROUNDING LAND USE AND PUBLIC USE BUILDINGS.

1. INSTALL ALL APPLICABLE TRAFFIC CONTROL DEVICES PER TMUTCD AND TCP STANDARDS FOR PAVEMENT MARKINGS AND CLEANUP.
2. INSTALL FINAL PAVEMENT MARKINGS UTILIZING TCP(3-1)-13.
3. PERFORM FINAL CLEANUP.
4. REMOVE SW3P DEVICES, ADVANCED WARNING SIGNS, AND TRAFFIC CONTROL DEVICES

- NOTES: 1. THE LENGTH OF THE WORK AREA SHALL BE BASED ON THE CONTRACTOR'S ABILITY, OR AS DIRECTED BY THE ENGINEER, TO COMPLETE EACH STEP, INSTALL SP-C TO FINISHED GRADE, AND RETURN TRAFFIC TO EXISTING OPERATIONS AT THE END OF EACH WORK DAY. THE LANES SHALL BE OPENED BY THE TIME SPECIFIED. CONTRACTOR SHALL MAINTAIN ACCESS AT ALL TIMES.
2. COORDINATE OUTSIDE LANE CLOSURES WITH VIA BUS SERVICES
  3. DAILY LIMITS OF 3" MILL AREAS SHALL BE DETERMINED BASED ON THE CONTRACTOR'S ABILITY TO COMPLETE MILLING OPERATIONS AND INSTALL THE 3" SP-C LAYER IN ONE DAY.



SL 345

TRAFFIC CONTROL PLAN NARRATIVE

SHEET 2 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	16
CONT.	SECT.	JOB	
0072	08	143	

REVISED 12/19/2022

LANE CLOSURE ASSESSMENT FEE TABLE  
SL 345 MAINLANE CLOSURES

ONE LANE CLOSURE

ROADWAY	DIRECTION	DAY	TIME OF DAY																								LANE CLOSURE ASSESSMENT FEE
			AM												PM												
SL 345	NB	SUNDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	\$2,000
		MONDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		TUESDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		WEDNESDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		THURSDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		FRIDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		SATURDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
	SB	SUNDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	\$2,000
		MONDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
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		SATURDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	

TWO LANES CLOSED

ROADWAY	DIRECTION	DAY	TIME OF DAY																								LANE CLOSURE ASSESSMENT FEE
			AM												PM												
SL 345	NB	SUNDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	\$9,500
		MONDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		TUESDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		WEDNESDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		THURSDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		FRIDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
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	SB	SUNDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	\$9,500
		MONDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		TUESDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
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		FRIDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
		SATURDAY	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	

LEGEND	ALLOWABLE LANE CLOSURE	
	NO LANE CLOSURE	



SL 345

LANE CLOSURE ASSESSMENT FEE TABLE




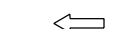

SHEET 1 OF 1

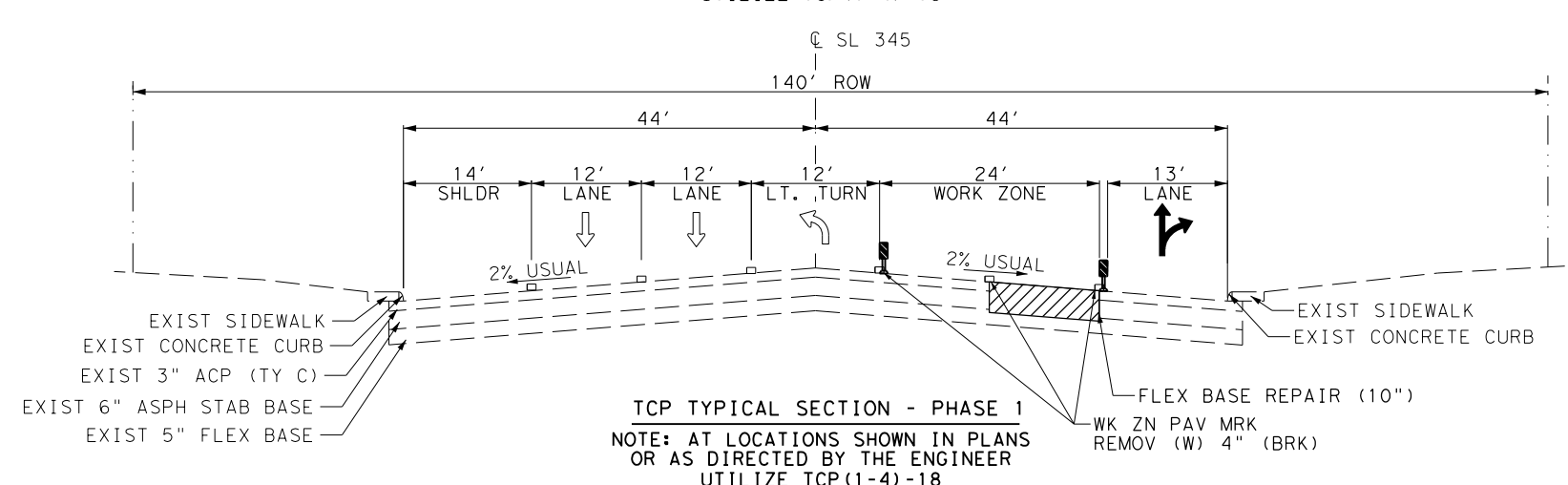
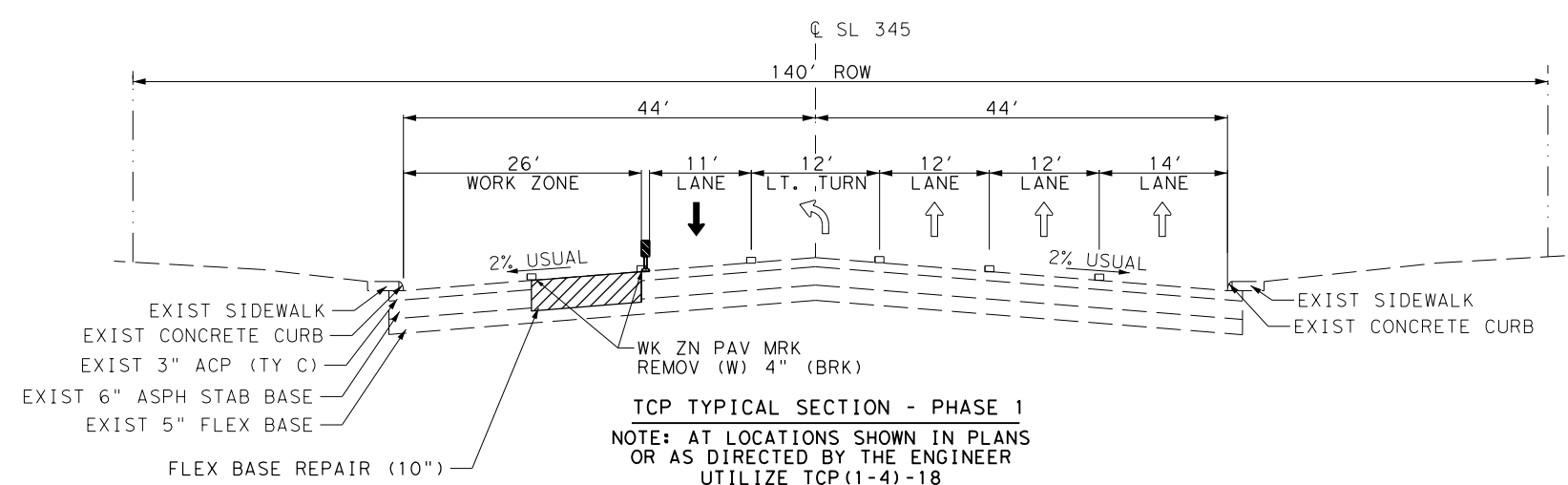
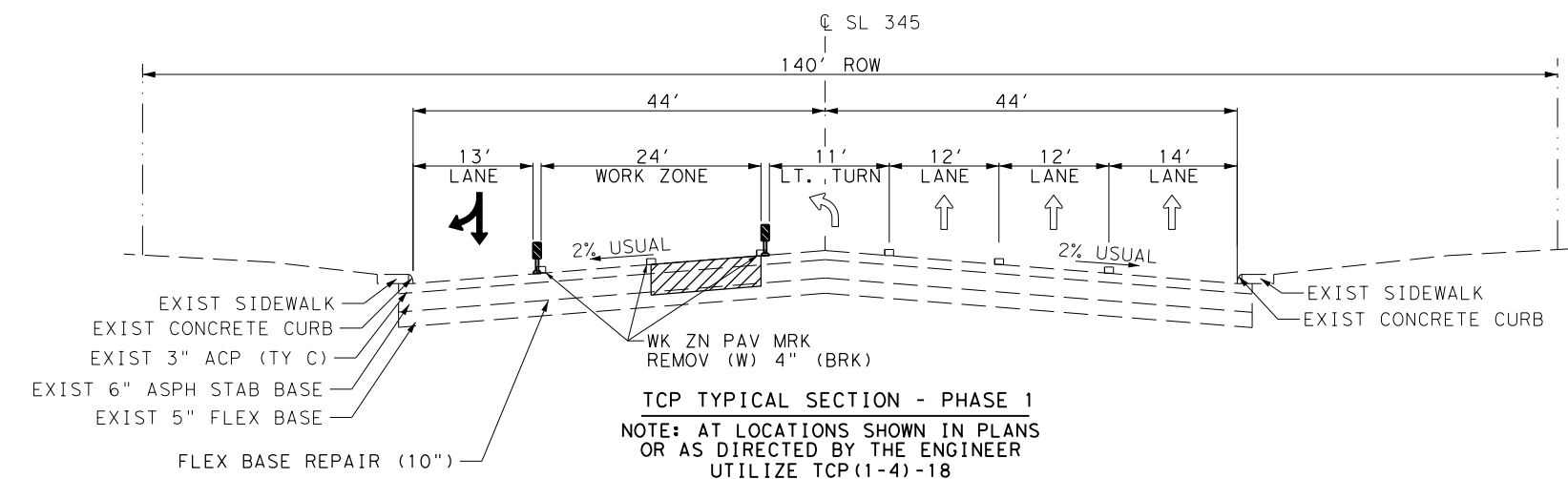
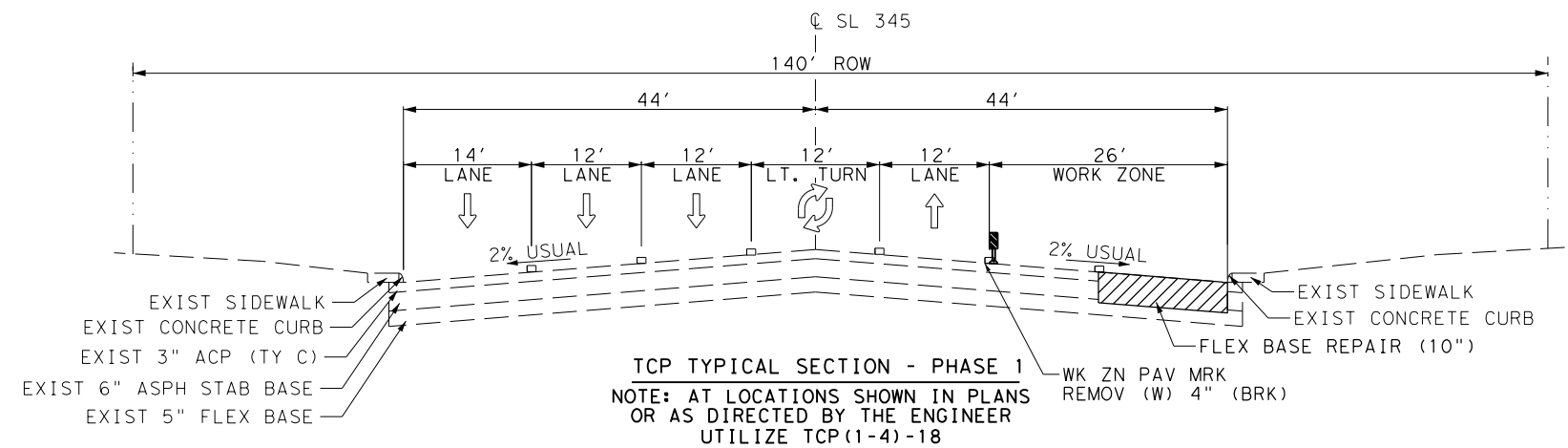
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6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	18
CONT.	SECT.	JOB	
0072	08	143	

REVISED 12/19/2022

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LEGEND

-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



- NOTES
- CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
  - CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
  - CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
  - CONTRACTOR SHALL CONSTRUCT BASE REPAIR ONE LANE AT A TIME UTILIZING TCP (1-4)-18.

NOT TO SCALE



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SL 345

TCP TYPICAL SECTIONS PHASE 1

SHEET 1 OF 1

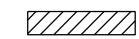


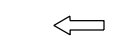

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

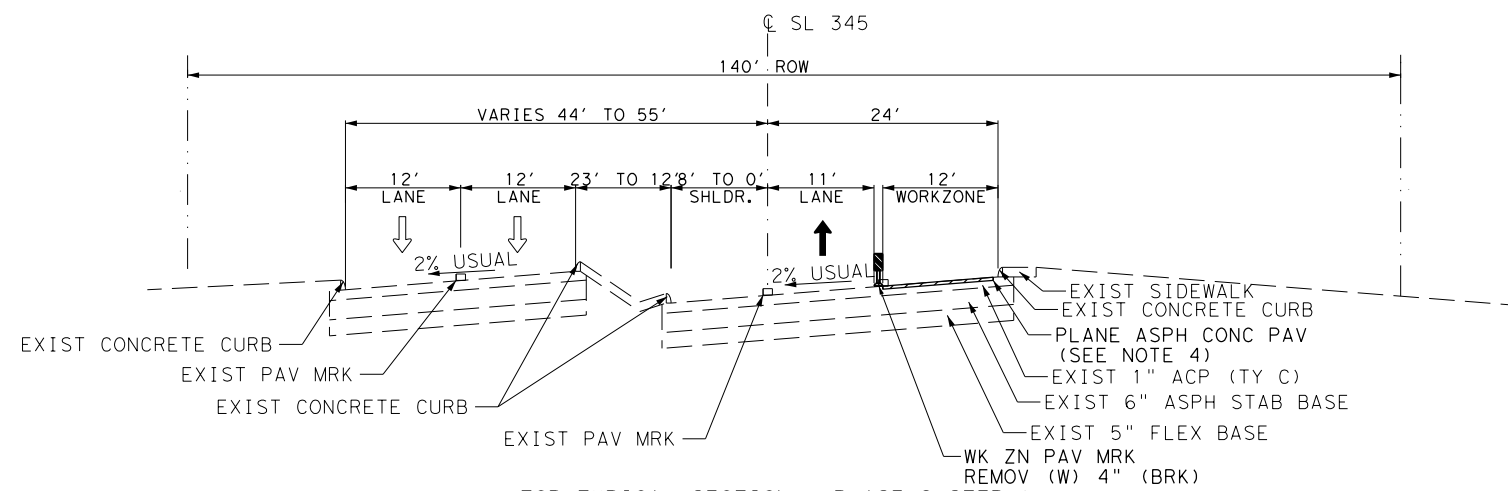
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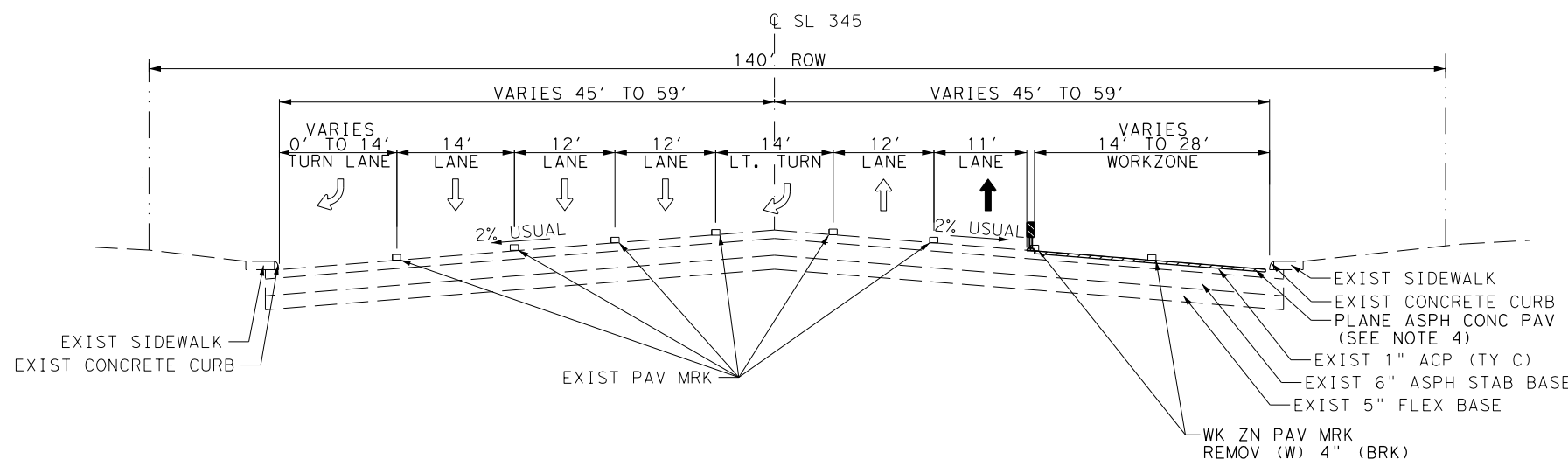
LEGEND

-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



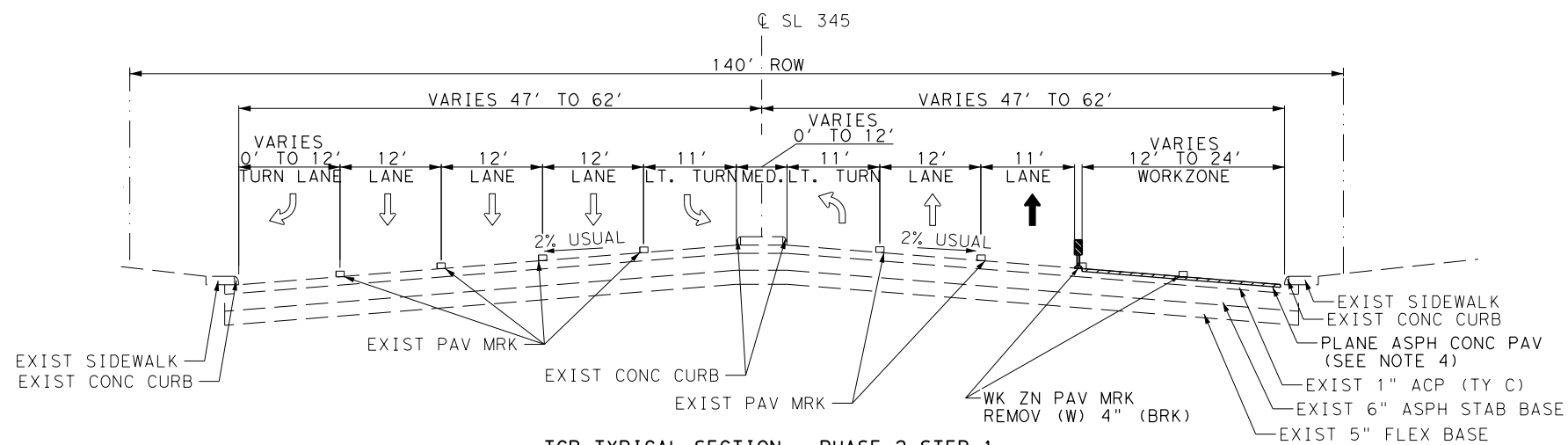
TCP TYPICAL SECTION - PHASE 2 STEP 1

BEGIN TO STA 121+56.74



TCP TYPICAL SECTION - PHASE 2 STEP 1

STA 121+56.74 TO STA 330+05.61  
STA 343+82.09 TO STA 383+01.12



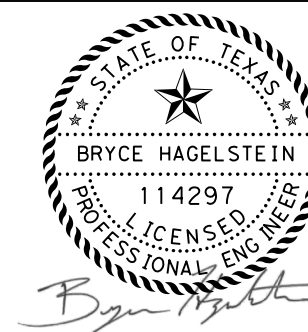
TCP TYPICAL SECTION - PHASE 2 STEP 1

STA 330+05.61 TO STA 343+82.09

NOTES

1. CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.

NOT TO SCALE



12/16/2022



SL 345

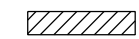


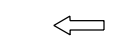

TCP  
TYPICAL  
SECTIONS  
PHASE 2 STEP 1

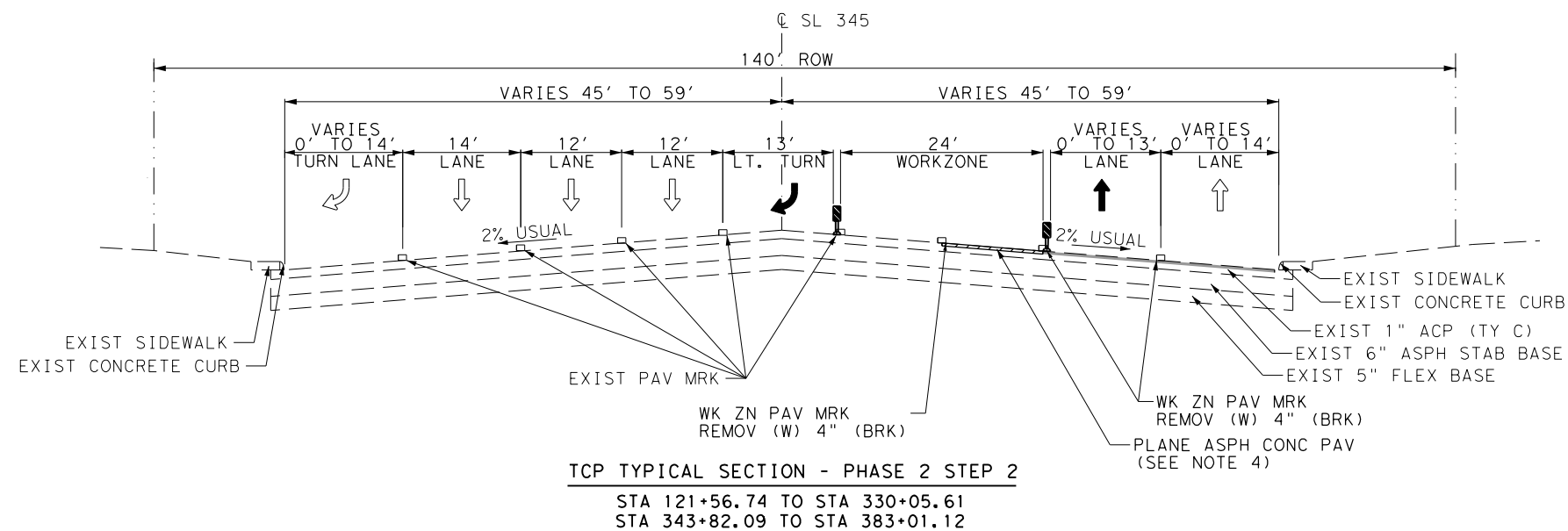
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	
CONT.	SECT.	JOB	
0072	08	143	20

REVISD 12/19/2022

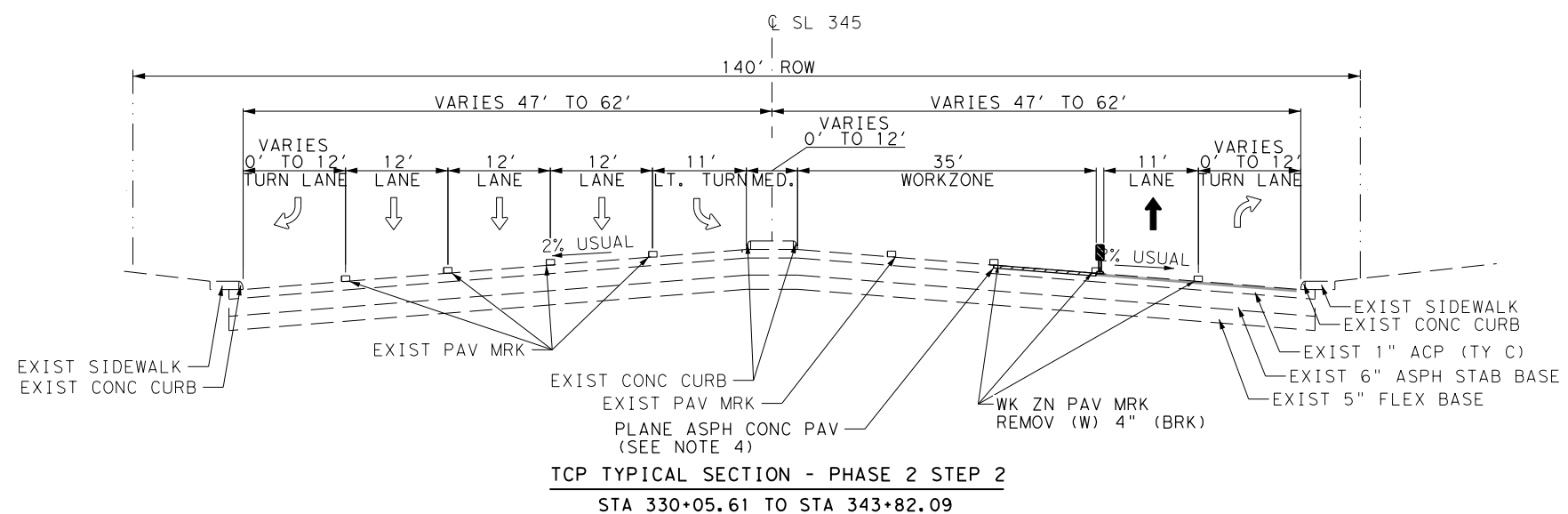
LEGEND

-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES

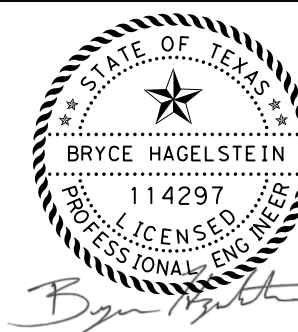


NOTES

1. CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP(3-1)-13 AND TCP(3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.



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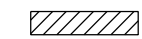

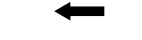


TCP  
 TYPICAL  
 SECTIONS  
 PHASE 2 STEP 2

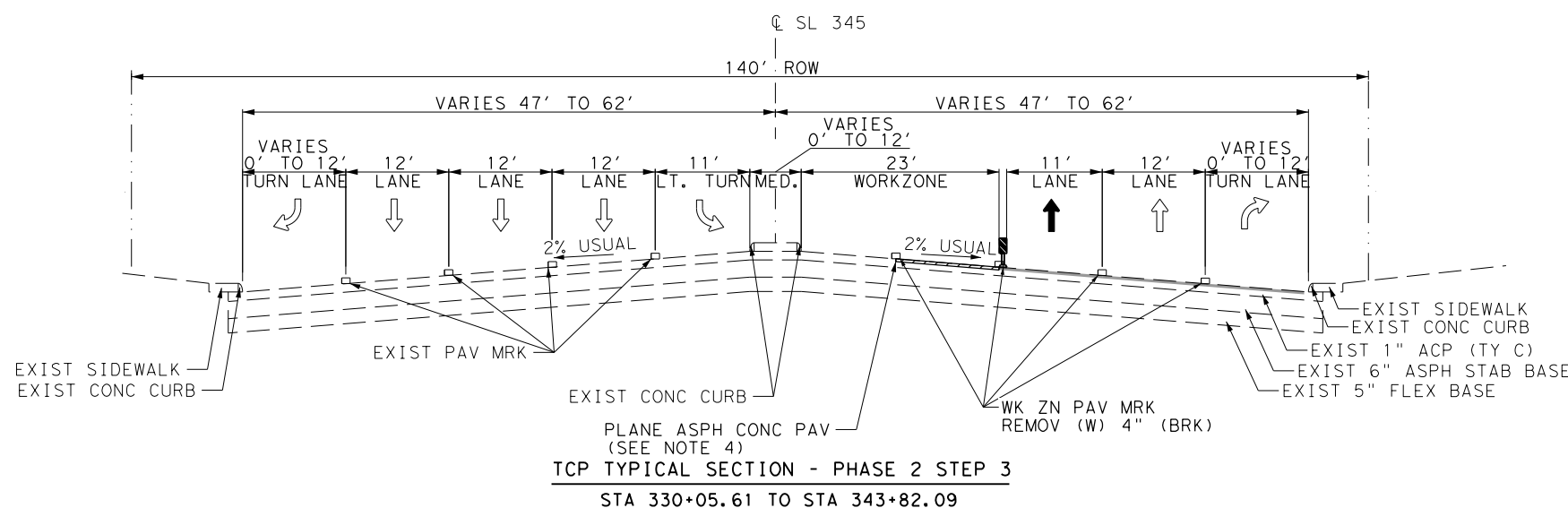
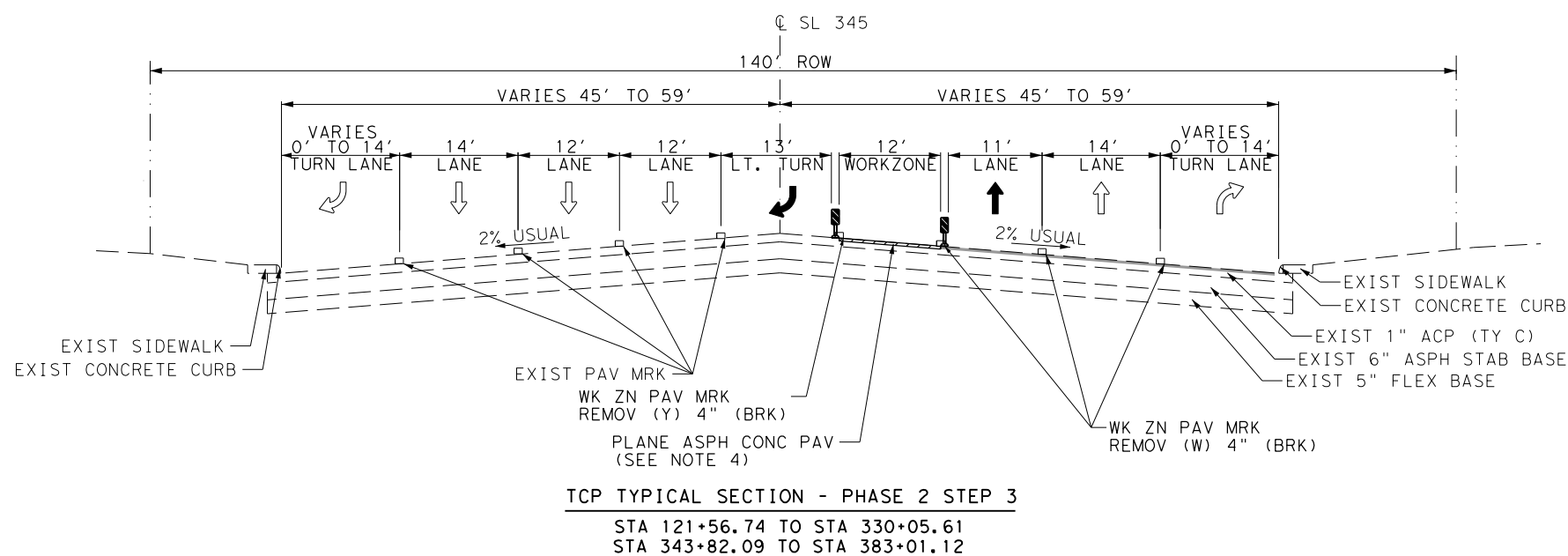
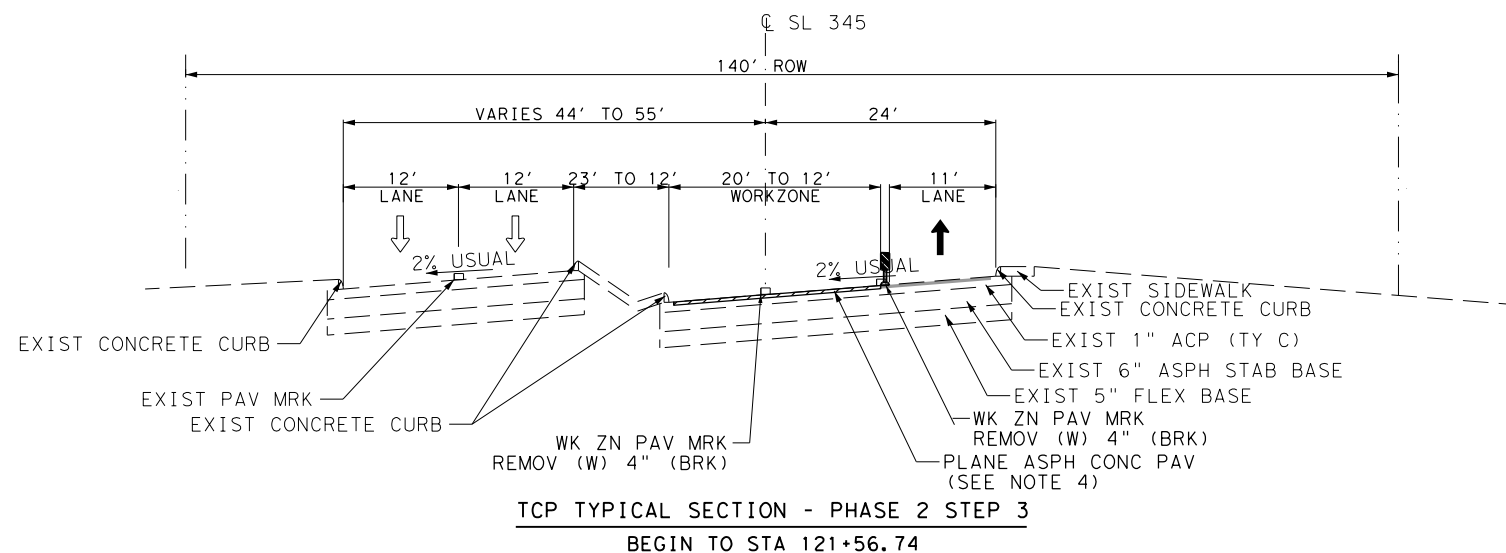
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	
CONT.	SECT.	JOB	21
0072	08	143	

 REVISED 12/19/2022

LEGEND

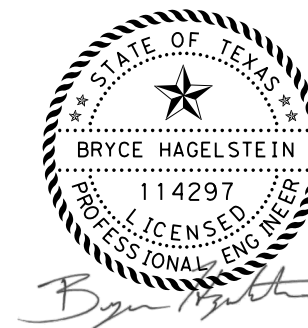
-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



NOTES

1. CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
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4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.

NOT TO SCALE



SL 345

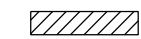

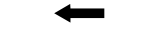


TCP TYPICAL SECTIONS PHASE 2 STEP 3

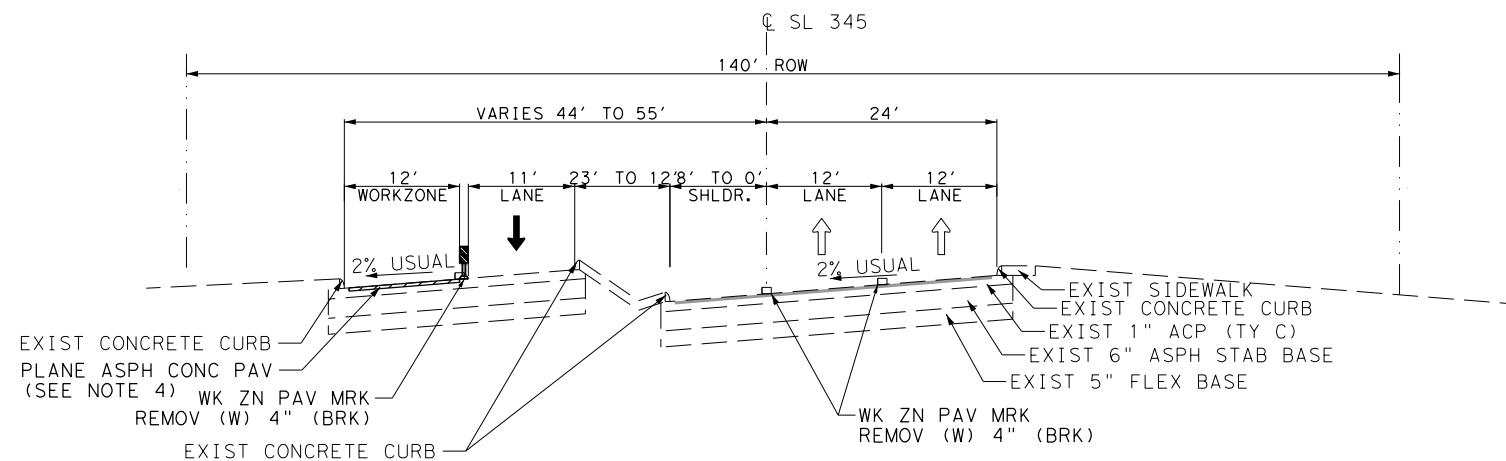
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	22
CONT.	SECT.	JOB	
0072	08	143	

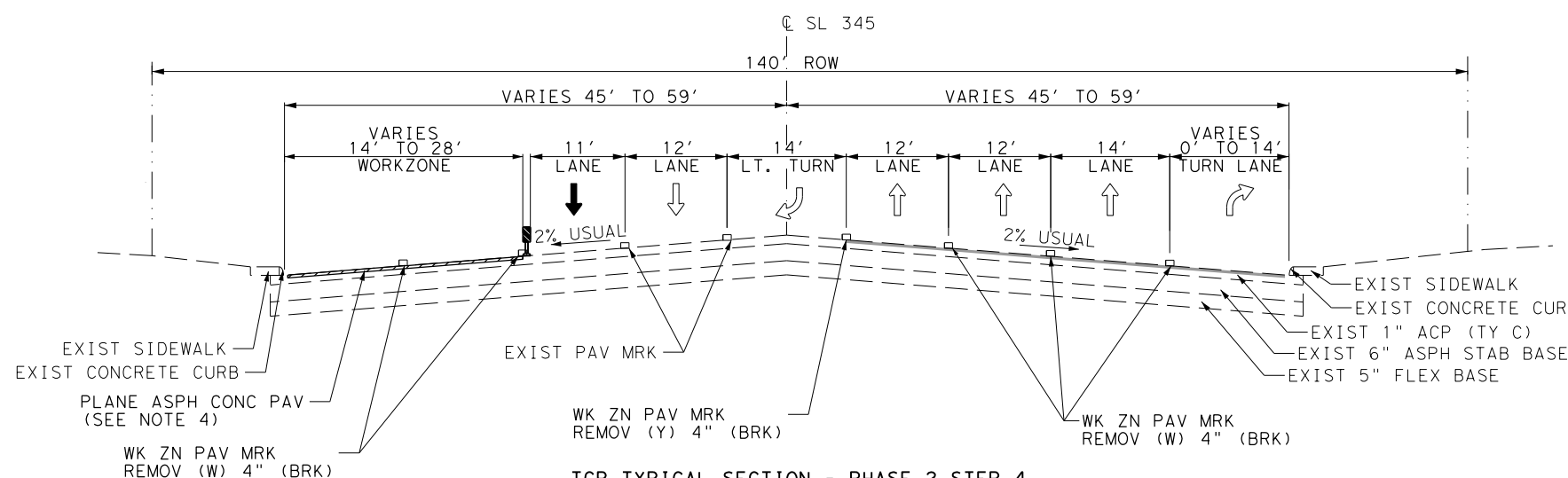
REVISD 12/19/2022

LEGEND

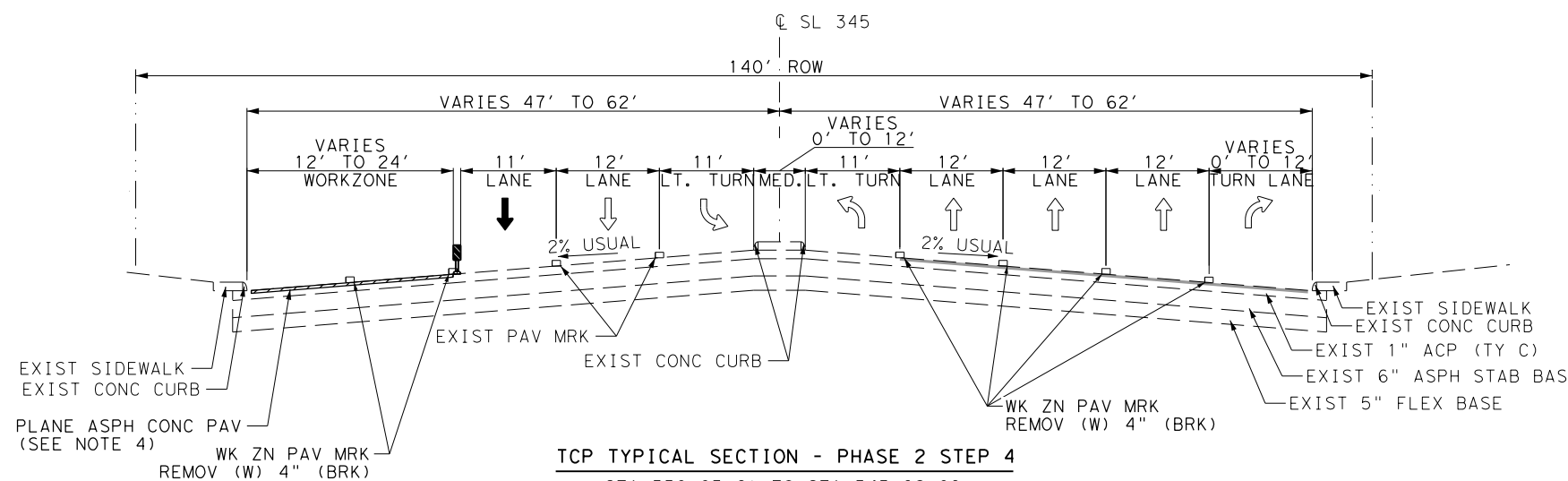
-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



TCP TYPICAL SECTION - PHASE 2 STEP 4  
BEGIN TO STA 121+56.74



TCP TYPICAL SECTION - PHASE 2 STEP 4  
STA 121+56.74 TO STA 330+05.61  
STA 343+82.09 TO STA 383+01.12

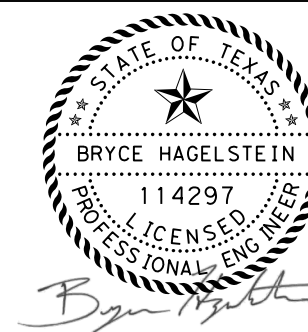


TCP TYPICAL SECTION - PHASE 2 STEP 4  
STA 330+05.61 TO STA 343+82.09

NOTES


1. CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.

NOT TO SCALE



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of Transportation

SL 345

TCP  
TYPICAL  
SECTIONS  
PHASE 2 STEP 4

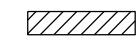


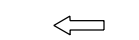

SHEET 1 OF 1

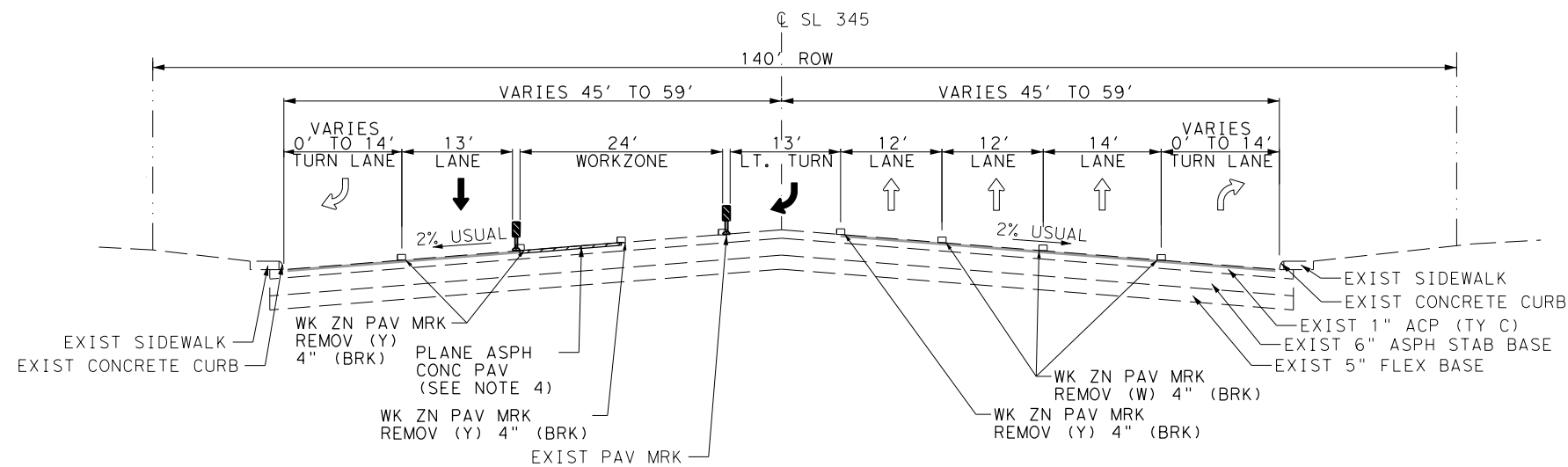
FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

23

 REVISED 12/19/2022

LEGEND

-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES

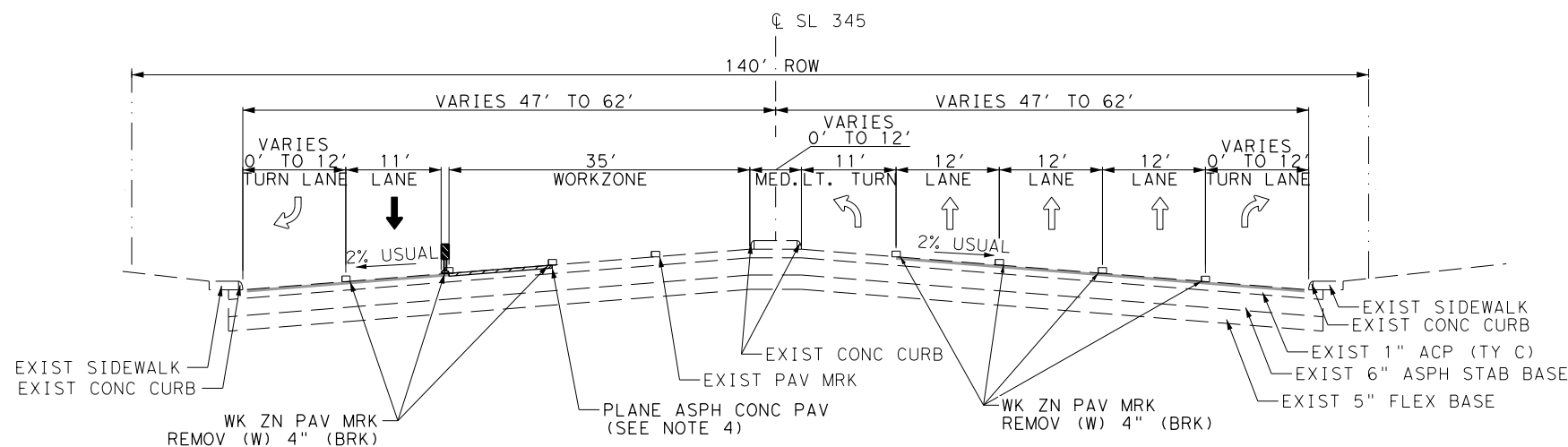


TCP TYPICAL SECTION - PHASE 2 STEP 5

STA 121+56.74 TO STA 330+05.61  
STA 343+82.09 TO STA 383+01.12

NOTES

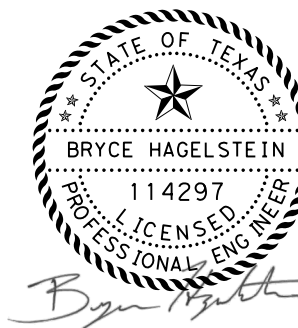
1. CONTRACTOR SHALL RETURN TRAFFIC TO MULTILANE TWO-WAY OPERATIONS AT THE END OF EACH WORK DAY.
2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.



TCP TYPICAL SECTION - PHASE 2 STEP 5

STA 330+05.61 TO STA 343+82.09

NOT TO SCALE



12/16/2022

**LJA Engineering, Inc.**  
FRN - F-1386

Texas Department  
of Transportation

SL 345

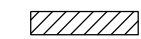

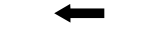


TCP  
TYPICAL  
SECTIONS  
PHASE 2 STEP 5

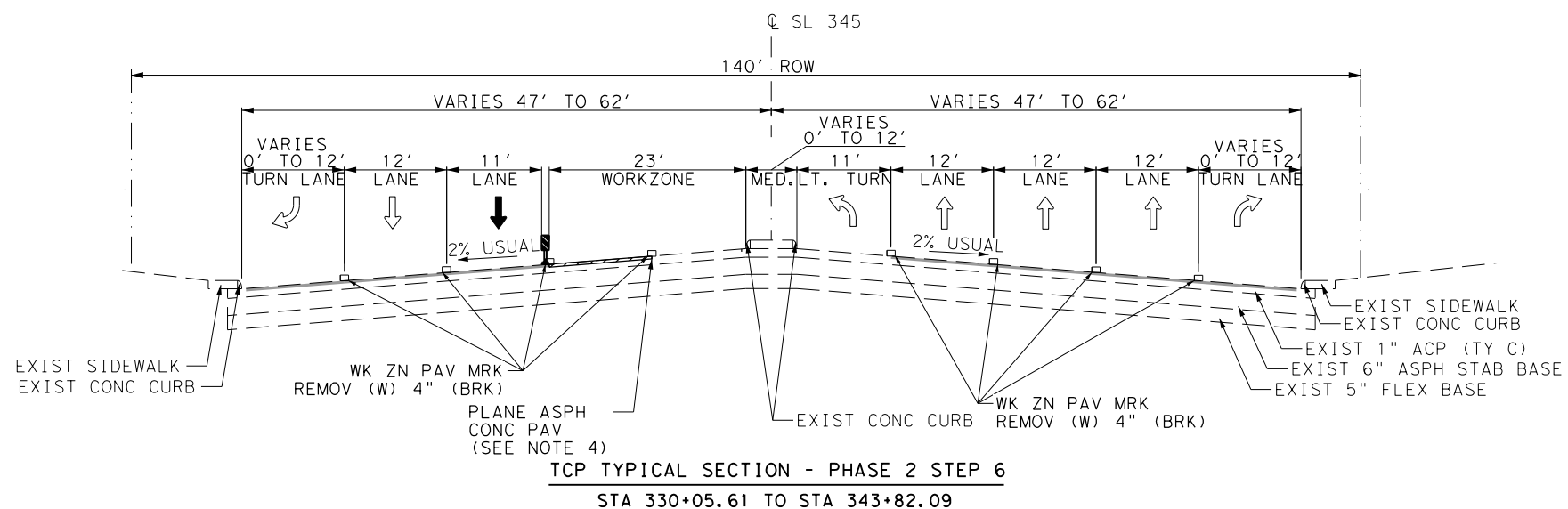
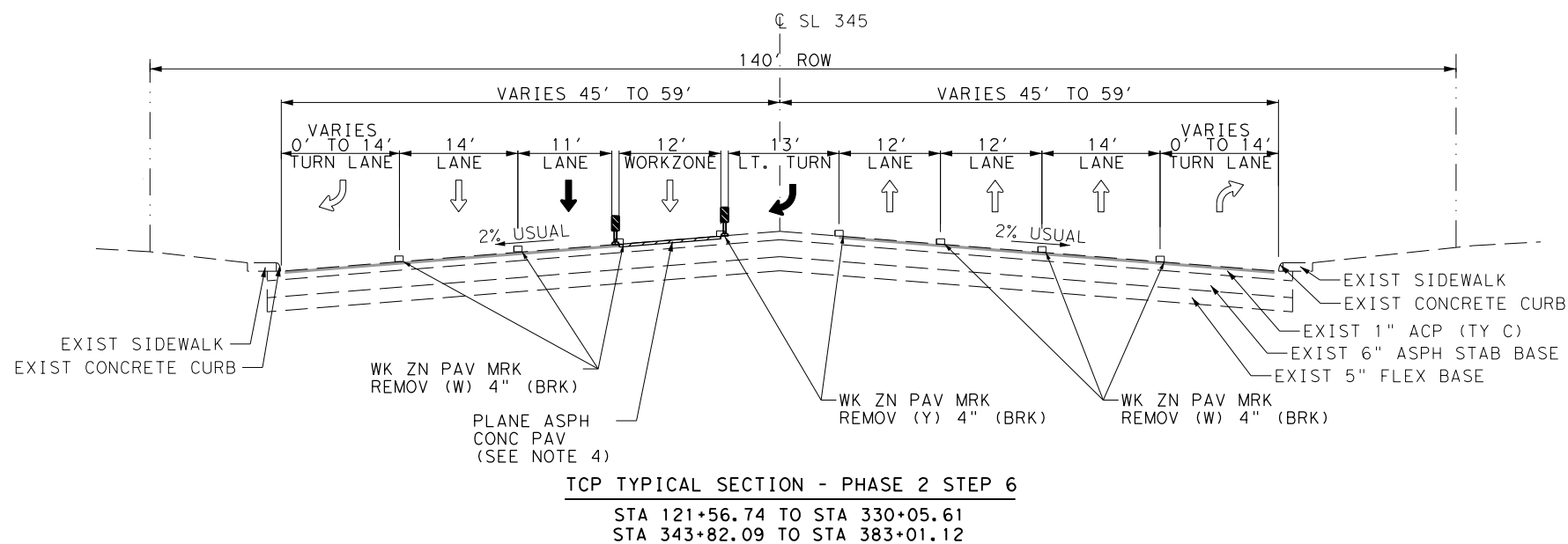
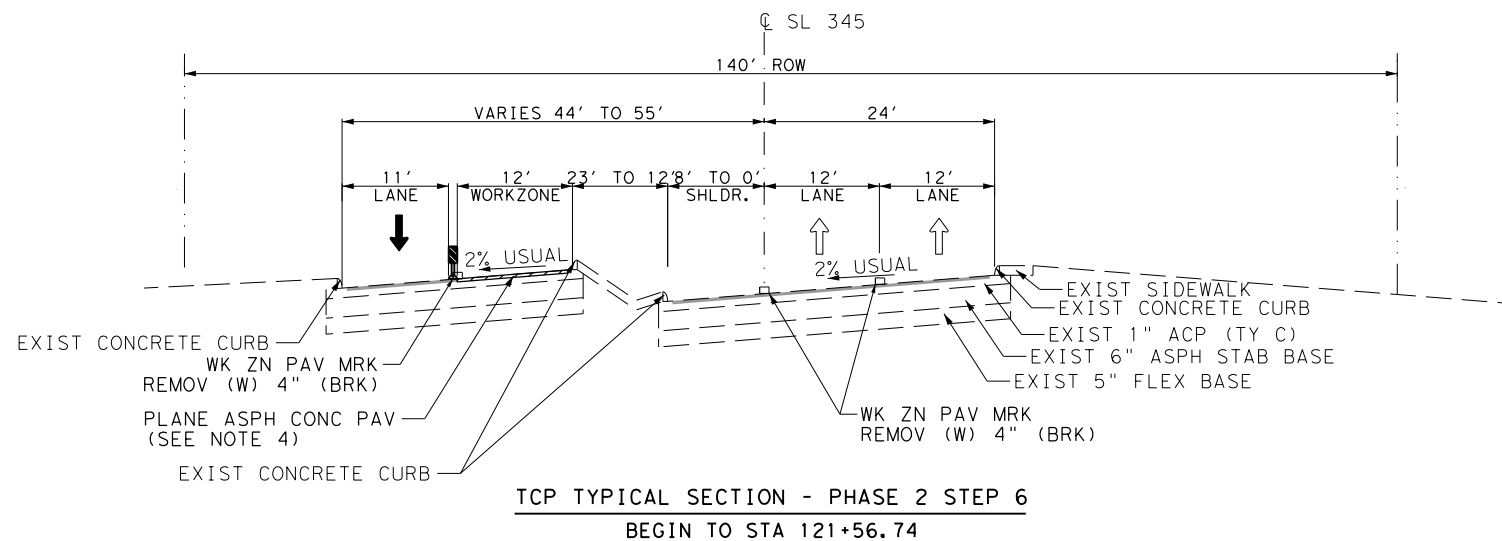
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	24
CONT.	SECT.	JOB	
0072	08	143	

REVISD 12/19/2022

LEGEND

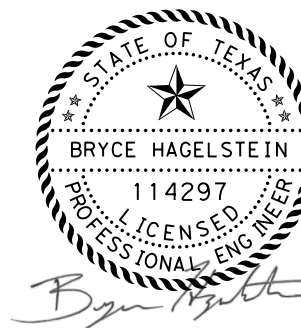
-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



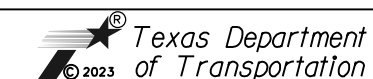
NOTES

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2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.

NOT TO SCALE



12/16/2022



SL 345

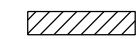


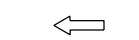

**TCP  
TYPICAL  
SECTIONS  
PHASE 2 STEP 6**

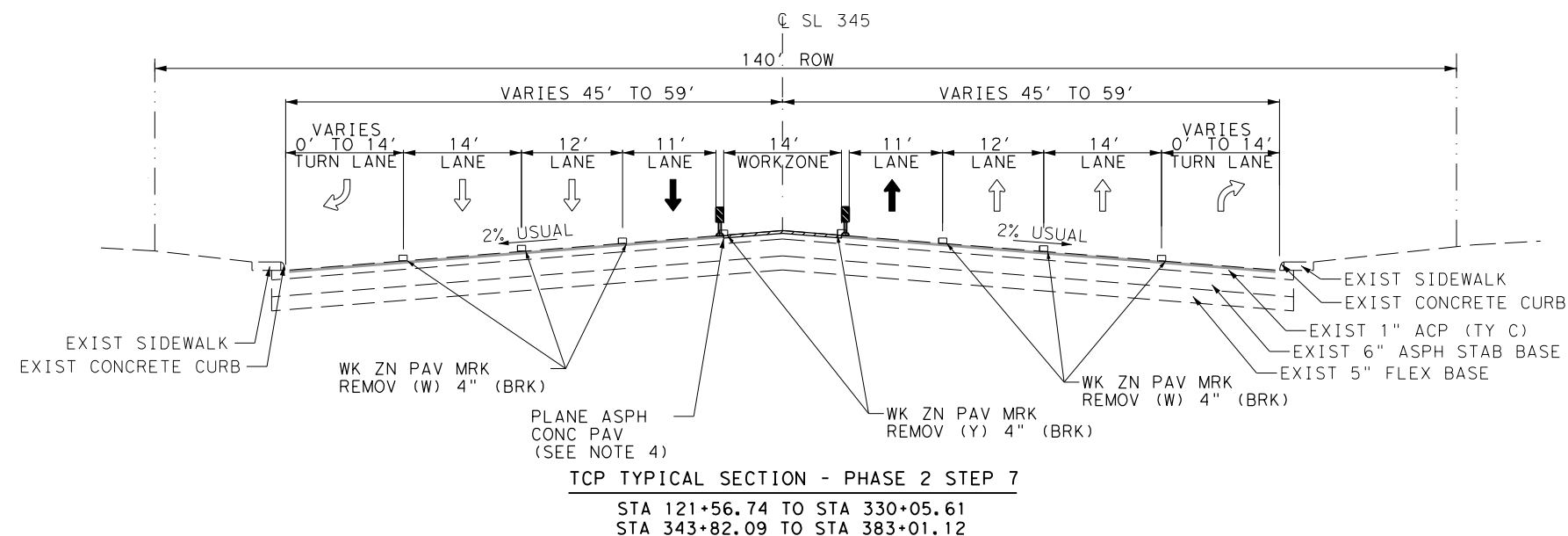
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	25
CONT.	SECT.	JOB	
0072	08	143	

 REVISED 12/19/2022

LEGEND

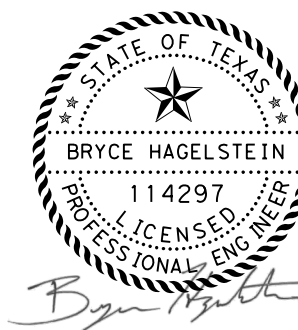
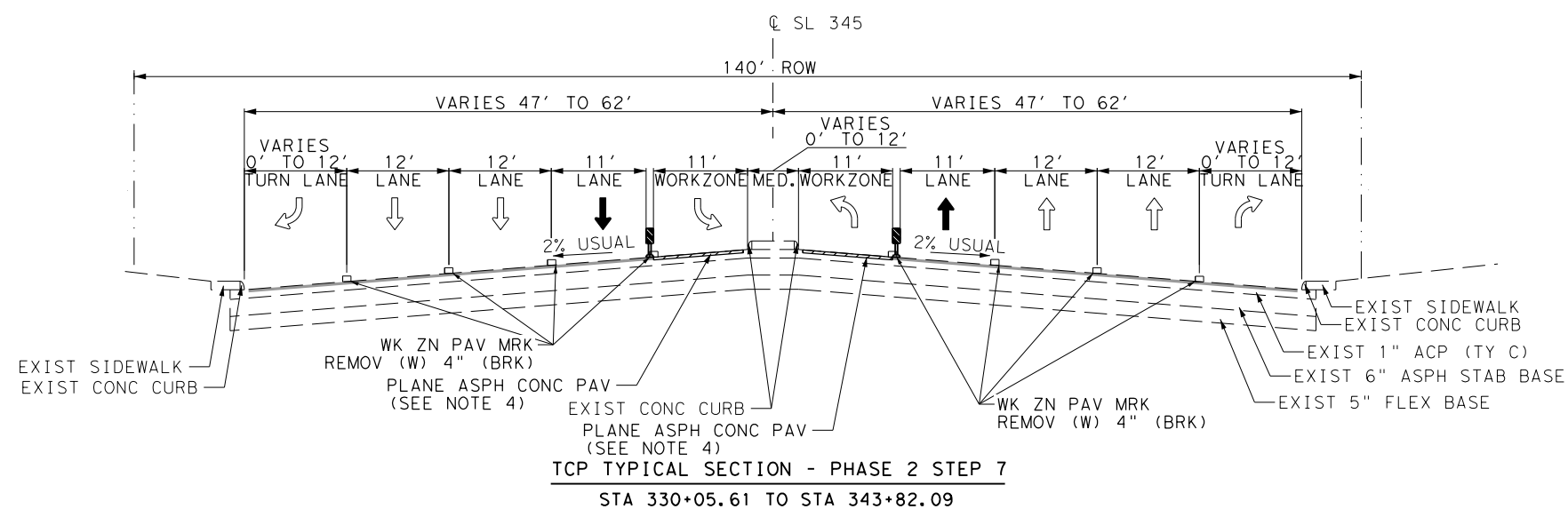
-  WORK ZONE
-  WORK COMPLETED PREVIOUS STEP
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  CHANNELIZING DEVICES



NOTES

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2. CONTRACTOR SHALL UTILIZE MOBILE OPERATIONS FOR PLACEMENT OF WORK ZONE PAVEMENT MARKINGS. SEE STANDARD TCP (3-1)-13 AND TCP (3-3)-14.
3. CONTRACTOR SHALL PLACE WORK ZONE PAVEMENT MARKINGS TO MATCH THE PROPOSED PAVEMENT MARKING PATTERNS. SEE "SIGNING & PAVEMENT MARKING" LAYOUTS FOR INFORMATION.
4. SEE OVERLAY PLANS FOR 3" MILL LOCATIONS.

NOT TO SCALE



12/16/2022

**LJA Engineering, Inc.**   
 FRN - F-1386



SL 345

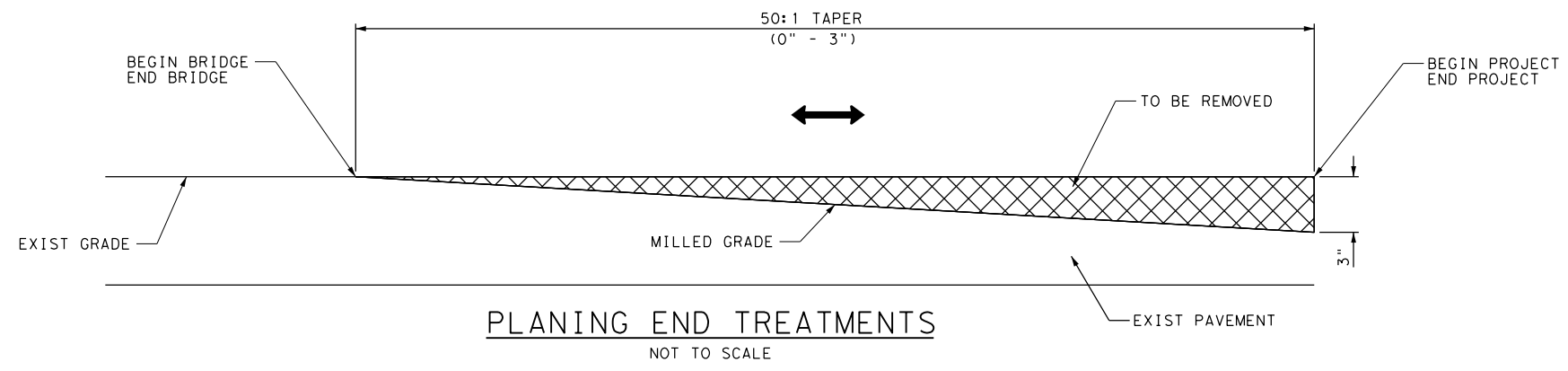
TCP  
 TYPICAL  
 SECTIONS  
 PHASE 2 STEP 7

SHEET 1 OF 1

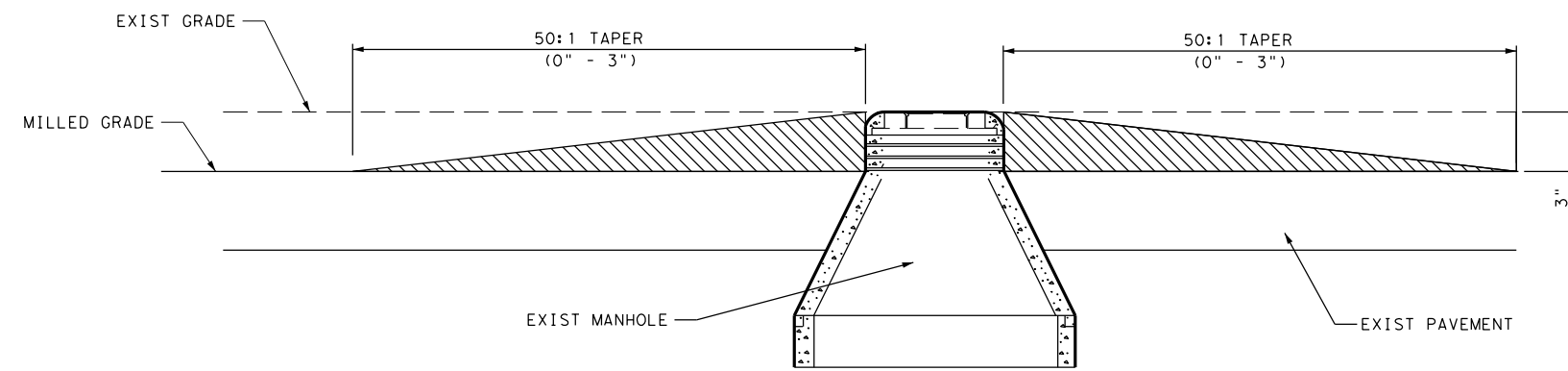
FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	26
CONT.	SECT.	JOB	
0072	08	143	

 REVISED 12/19/2022

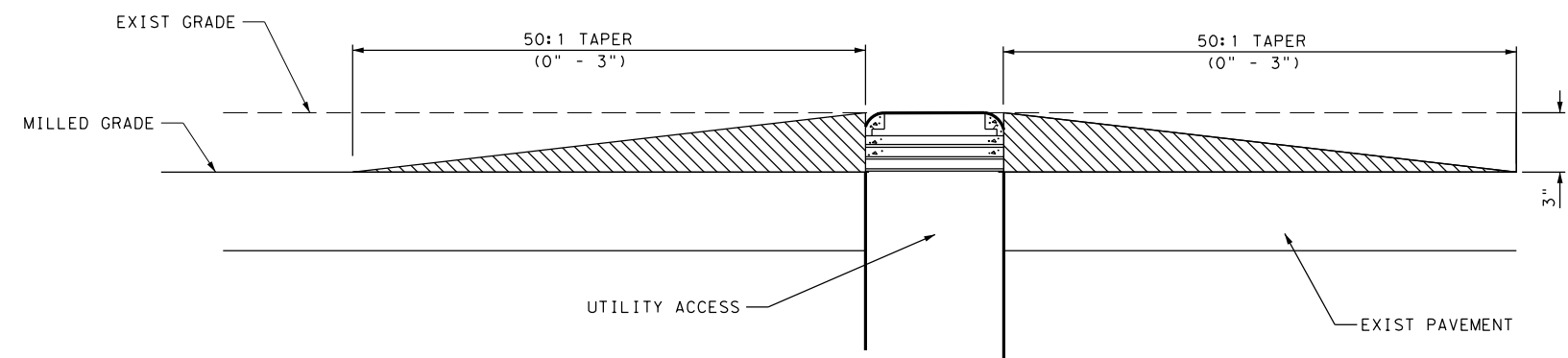
LEGEND



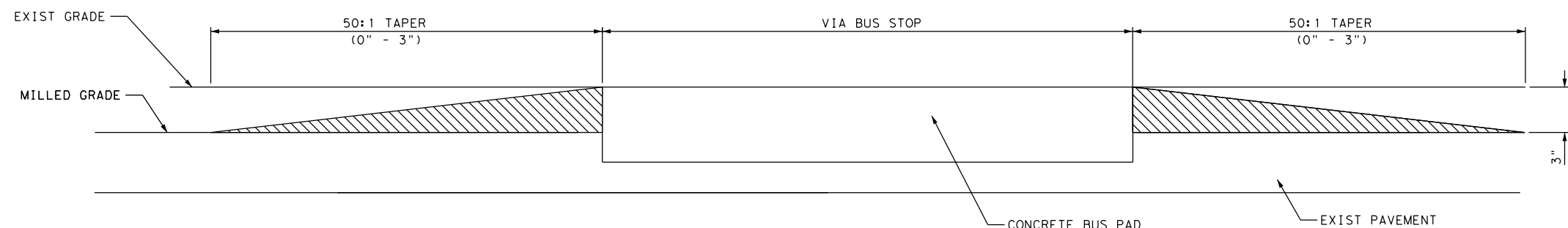
**PLANING END TREATMENTS**  
NOT TO SCALE



**MANHOLE ACCESS TAPER**  
NOT TO SCALE



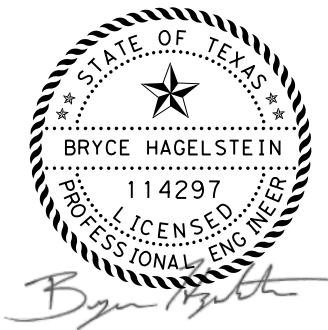
**UTILITY ACCESS TAPER**  
NOT TO SCALE



**VIA BUS STOP TAPER**  
NOT TO SCALE

NOTE:  
LOCATIONS OF MANHOLES, VALVES, AND OTHER UTILITY ACCESS POINTS IN THE PAVEMENT ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR  
LOCATIONS OF VIA BUS STOP CONCRETE PADS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR  
EDGE TREATMENT TAPERS ARE INCIDENTAL TO ITEM 354

NOT TO SCALE



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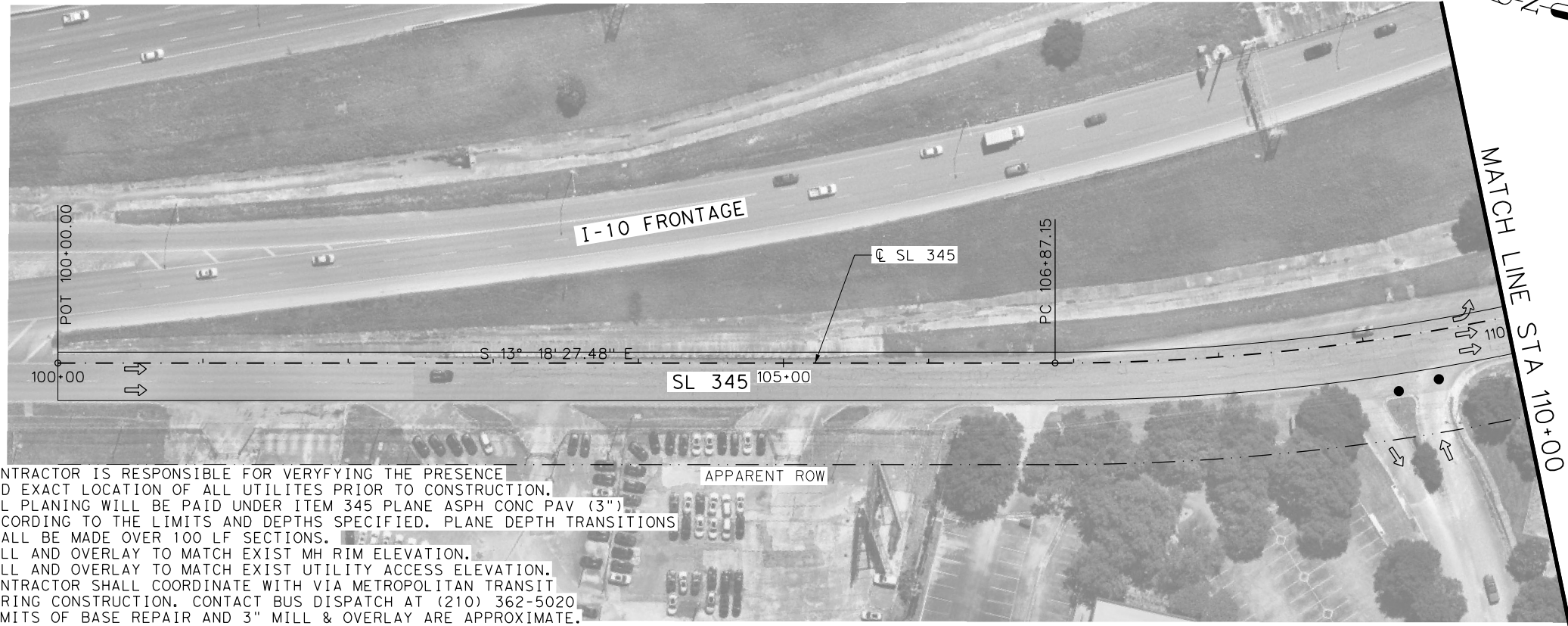
TCP PLAN DETAILS

SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	28
CONT.	SECT.	JOB	
0072	08	143	

REVISD 12/19/2022





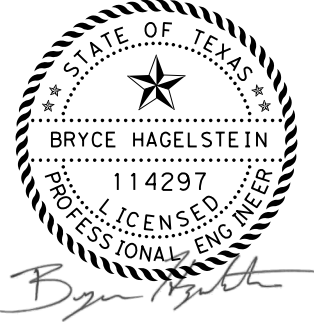
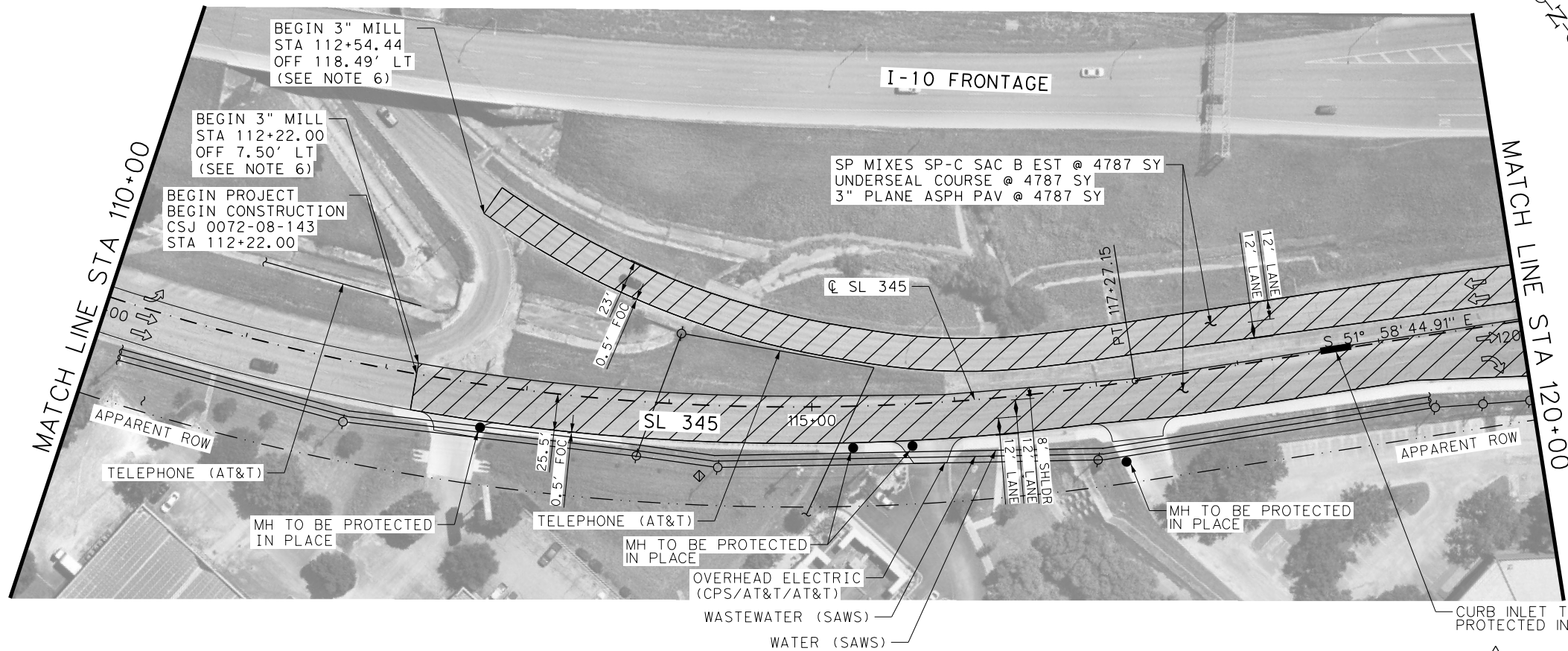
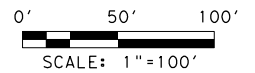
QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY
354	6048	PLANE ASPH CONC PAV (3")	4,787
688	6004	VEH LP DETECT (SAWCUT)	LF
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF
3077	6034	SP MIXES SP-C SAC-B PG76-22	4,787
3085	6001	UNDERSEAL COURSE	4,787

LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET

NOTES:

- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
- MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
- MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
- CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020.
- LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
- HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.



12/19/2022

**LJA Engineering, Inc.**  
FRN - F-1386



SL 345

SL 345 OVERLAY PLANS

BEGIN TO STA 120+00

SHEET 1 OF 13

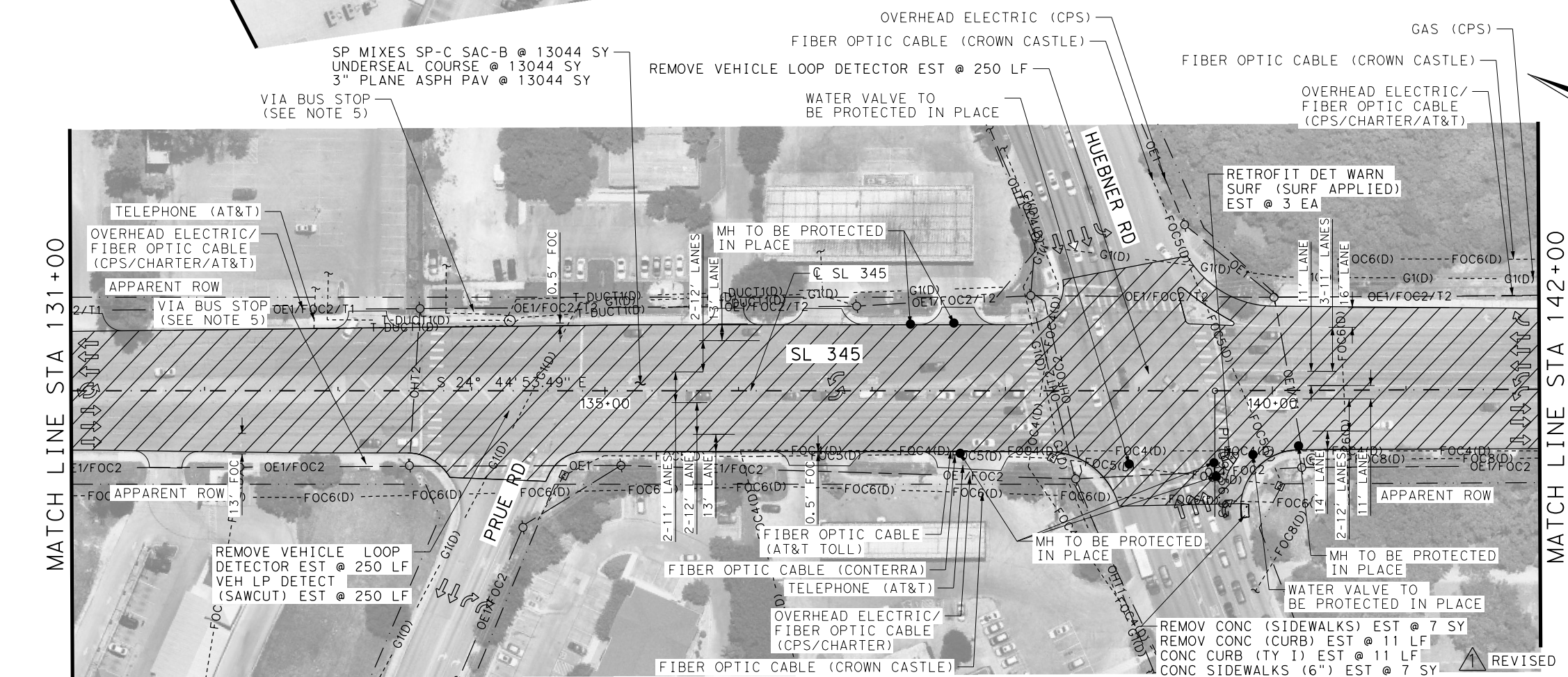
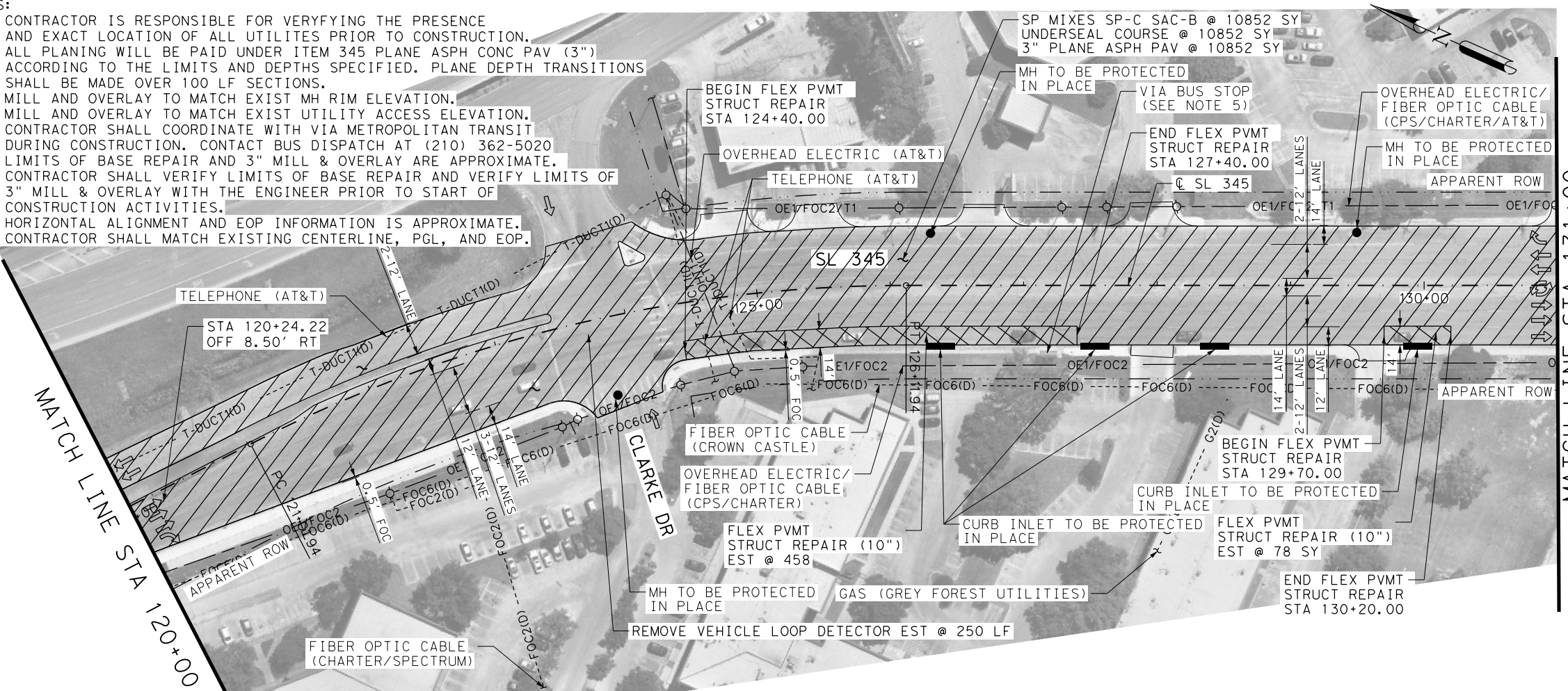
FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISION: REVISED 12/19/2022

NOTES:

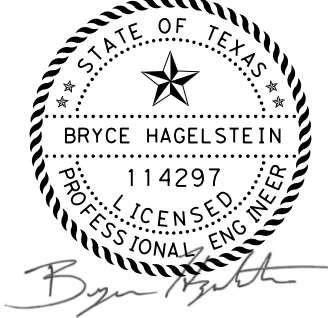
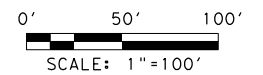
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3. MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
4. MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
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6. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
7. HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

QUANTITY SUMMARY CSJ 0072-08-143				
ITEM NUMBER		ITEM	UNIT	QTY
104	6015	REMOVING CONC (SIDEWALKS)	SY	7
104	6021	REMOVING CONC (CURB)	LF	11
104	6032	REMOVING CONC (WHEELCHAIR RAMPS)	SY	
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY	536
354	6048	PLANE ASPH CONC PAV (3")	SY	23,896
529	6001	CONC CURB (TY 1)	LF	11
531	6003	CONC SIDEWALKS (6")	SY	7
688	6004	VEH LP DETECT (SAWCUT)	LF	250
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF	750
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY	23,896
3085	6001	UNDERSEAL COURSE	SY	23,896
5003	6004	RETROFIT DET WARN SURF (SURF APPLIED)	EA	3



LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



**LJA Engineering, Inc.**  
FRN - F-1386



SL 345

SL 345 OVERLAY PLANS

STA 120+00 TO STA 142+00  
SHEET 2 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
COMT.	SECT.	JOB
0072	08	143

12/19/2022  
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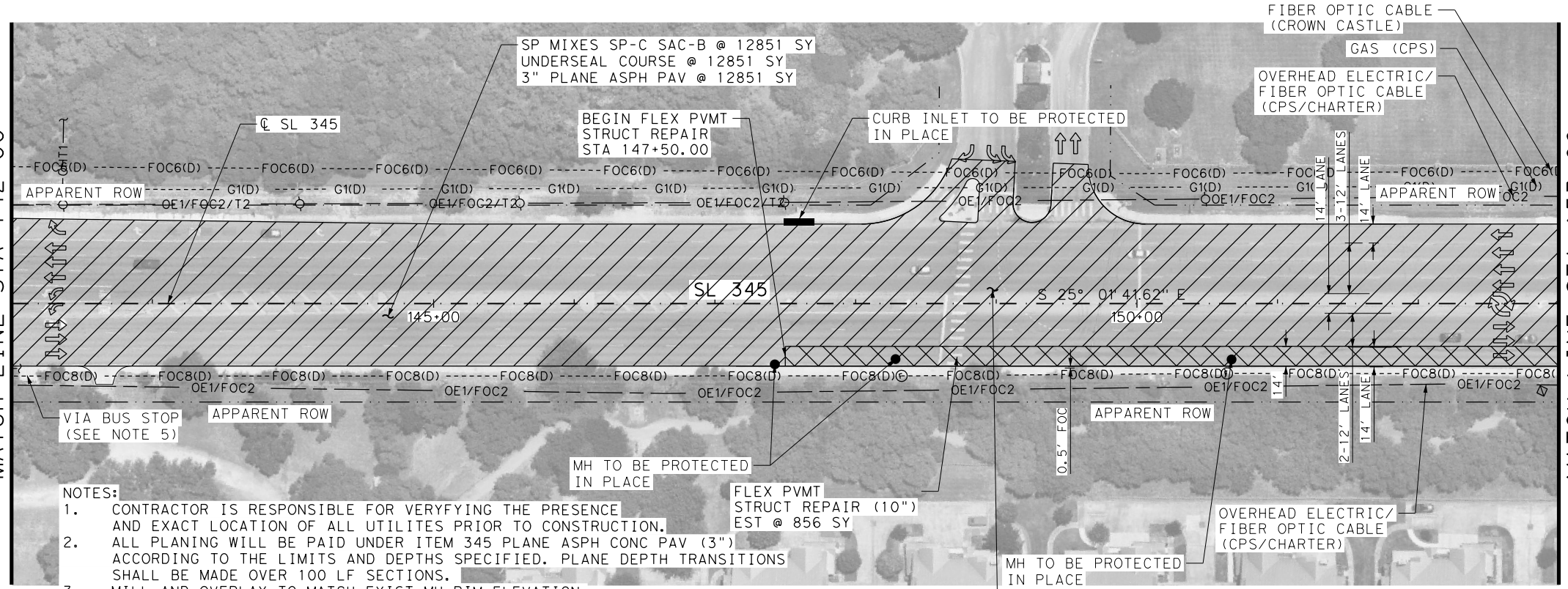
REVISED 12/19/2022



QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER		ITEM	QTY
104	6032	REMOVING CONC (WHEELCHAIR RAMP)	SY 10
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY 996
354	6048	PLANE ASPH CONC PAV (3")	SY 25,859
531	6004	CURB RAMPS (TY 1)	EA 1
688	6004	VEH LP DETECT (SAWCUT)	LF 500
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF 500
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY 25,859
3085	6001	UNDERSEAL COURSE	SY 25,859

MATCH LINE STA 142+00

MATCH LINE STA 153+00

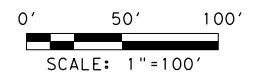


NOTES:

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- ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
- MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
- MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
- CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
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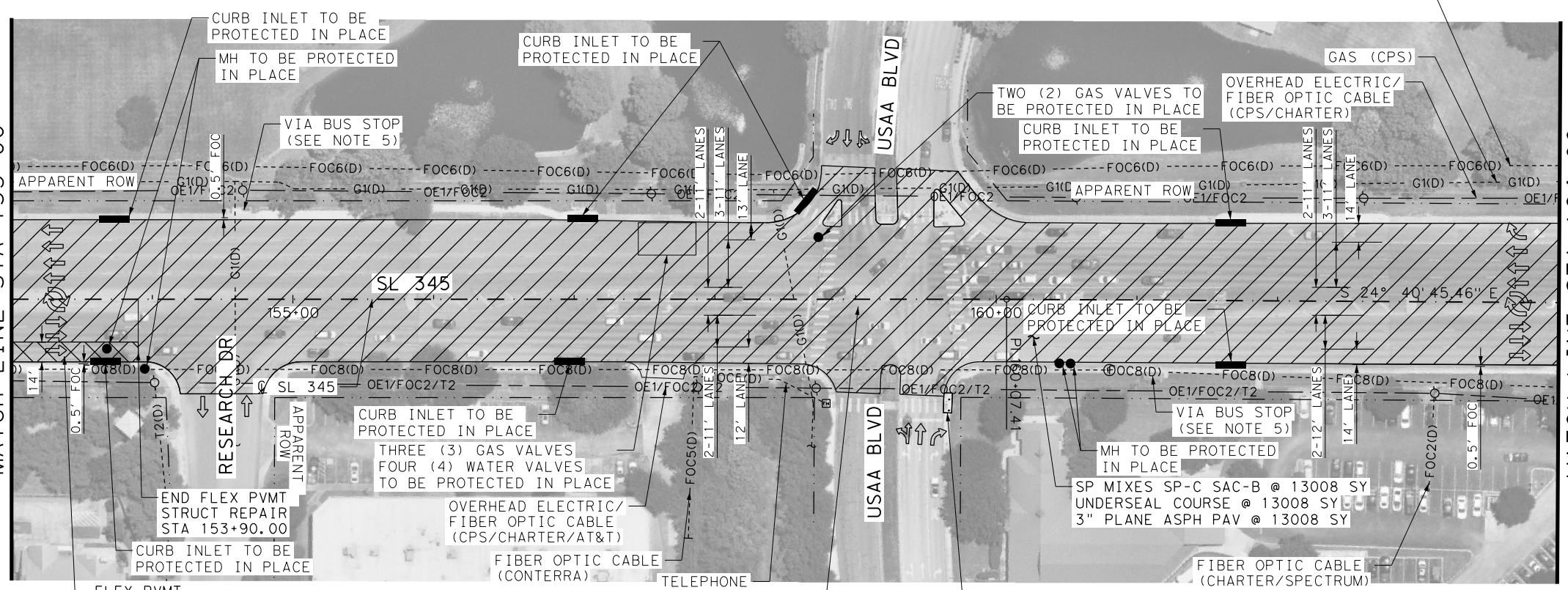
LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



MATCH LINE STA 153+00

MATCH LINE STA 164+00



**LJA Engineering, Inc.**  
FRN - F-1386



SL 345

SL 345 OVERLAY PLANS

STA 142+00 TO STA 164+00

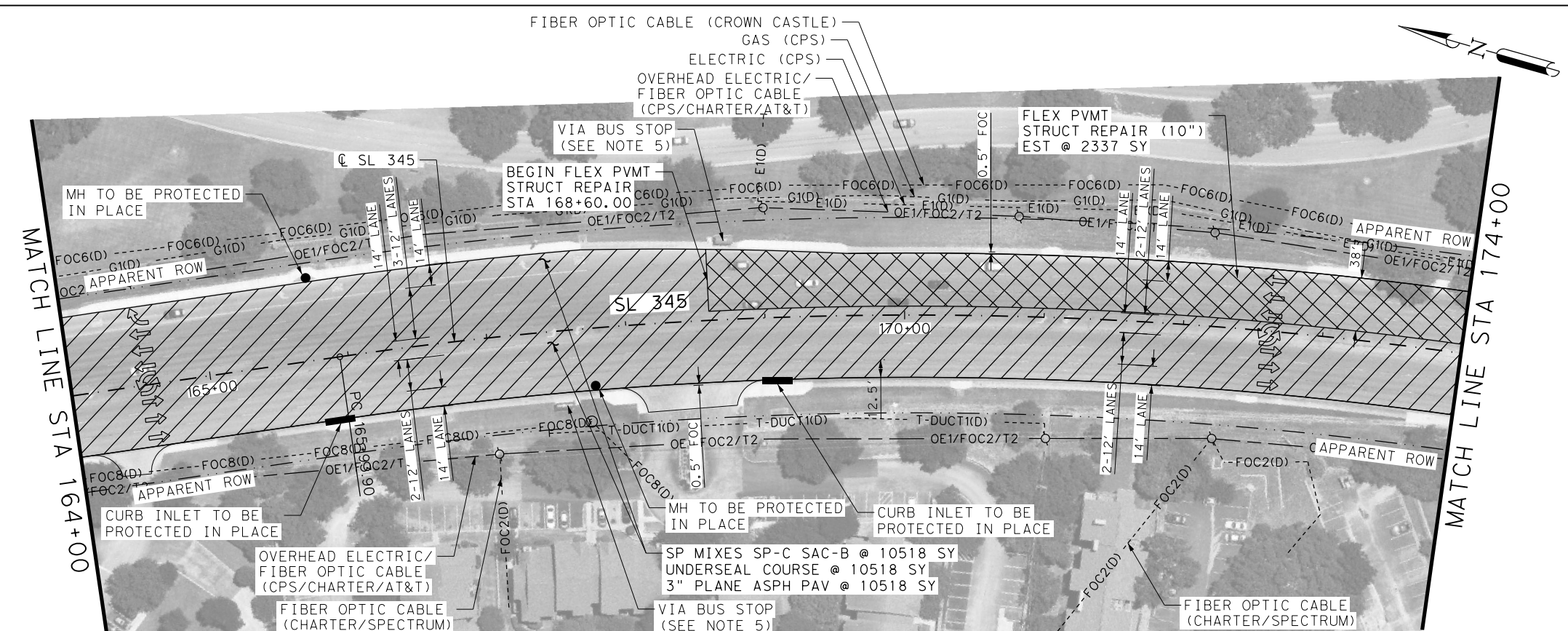
SHEET 3 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

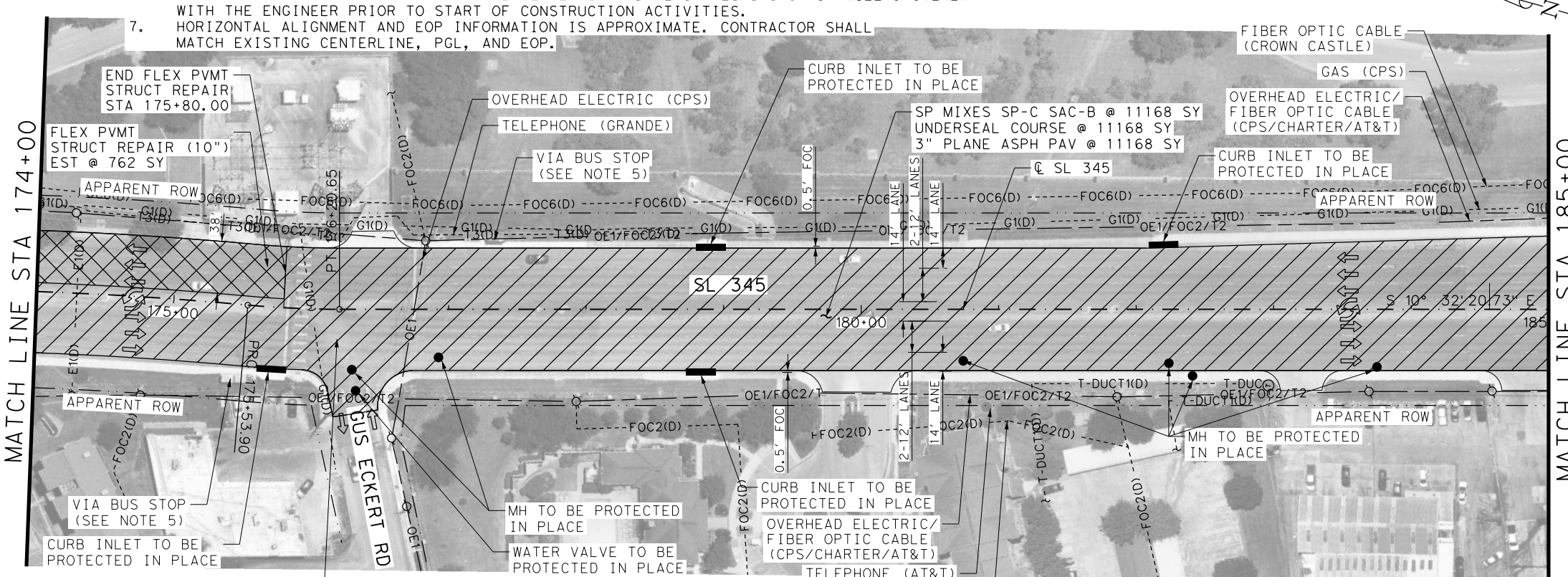
REVISD 12/19/2022

12/19/2022  
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QUANTITY SUMMARY CSJ 0072-08-143				
ITEM NUMBER		ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY	3,099
354	6048	PLANE ASPH CONC PAV (3")	SY	21,686
688	6004	VEH LP DETECT (SAWCUT)	LF	250
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF	250
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY	21,686
3085	6001	UNDERSEAL COURSE	SY	21,686

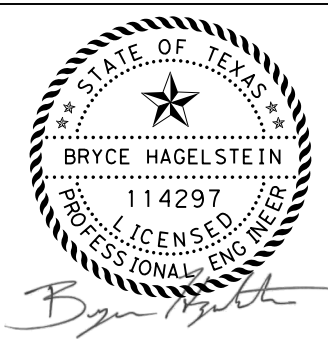
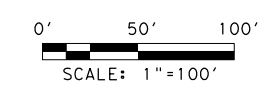


- NOTES:
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  3. MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  4. MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  5. CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
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  7. HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.



LEGEND

	LIMITS OF 3" MILL & OVERLAY
	LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
	VIA BUS STOP (TO REMAIN)
	PROPOSED TRAFFIC DIRECTION ARROW
	EXISTING TRAFFIC DIRECTION ARROW
	MANHOLE/UTILITY ACCESS
	CURB INLET



12/19/2022

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FRN - F-1386

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SL 345

**SL 345 OVERLAY PLANS**

STA 164+00 TO STA 185+00  
SHEET 4 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

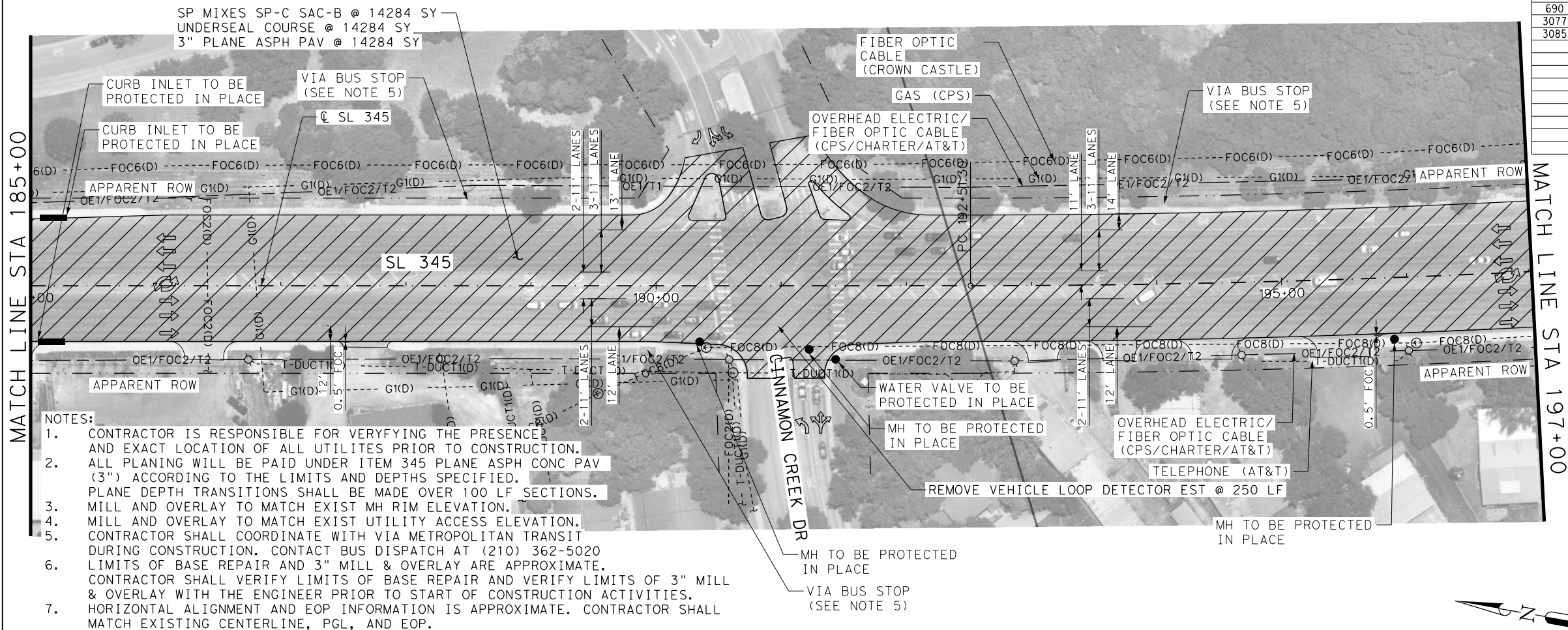
REVISD 12/19/2022

12/19/2022  
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REMOVE VEHICLE LOOP DETECTOR EST @ 250 LF  
VEH LP DETECT (SAWCUT) EST @ 250 LF



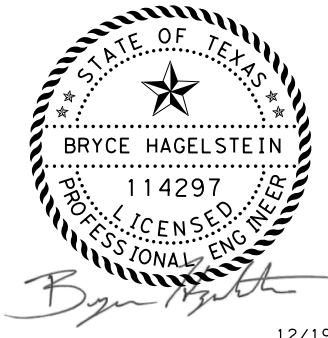
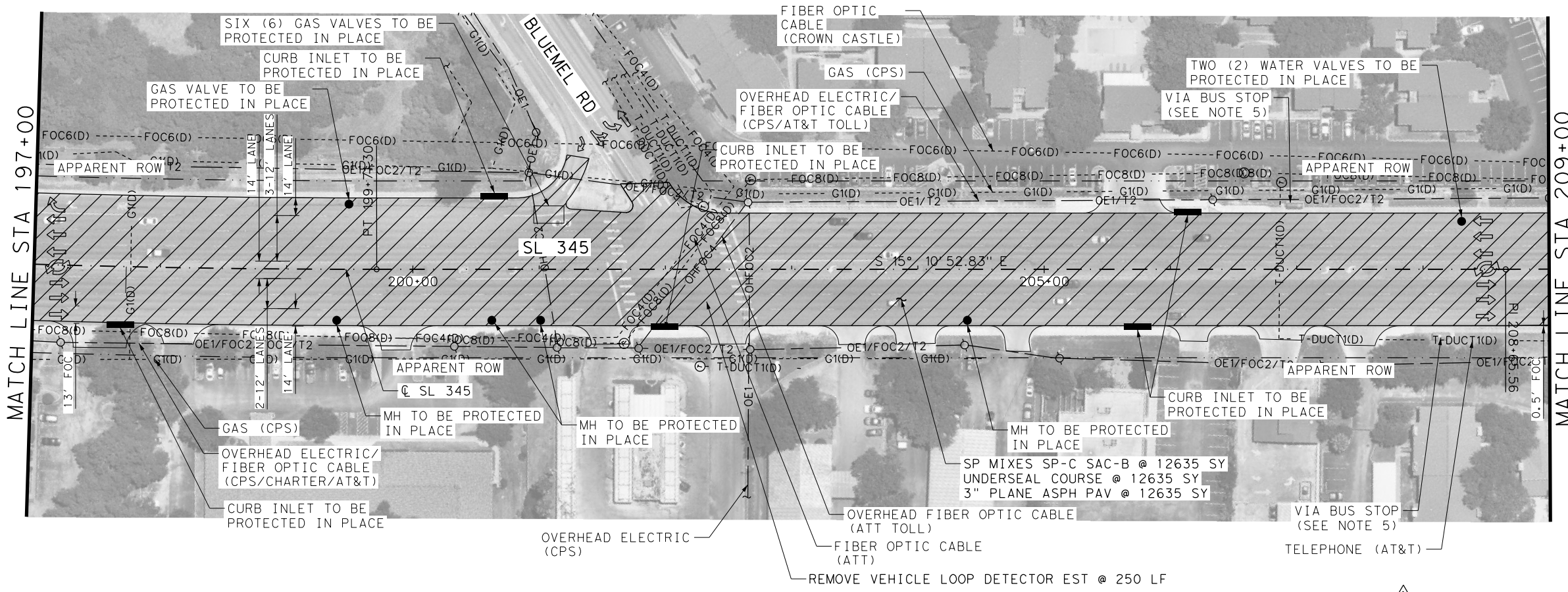
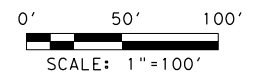
QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY
354	6048	PLANE ASPH CONC PAV (3")	26,919
688	6004	VEH LP DETECT (SAWCUT)	LF
690	6103	REMOVE VEHICLE LOOP DETECTOR	500
3077	6034	SP MIXES SP-C SAC-B PG76-22	26,919
3085	6001	UNDERSEAL COURSE	26,919



- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
  - LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



12/19/2022



SL 345

SL 345 OVERLAY PLANS

STA 185+00 TO STA 209+00

SHEET 5 OF 13

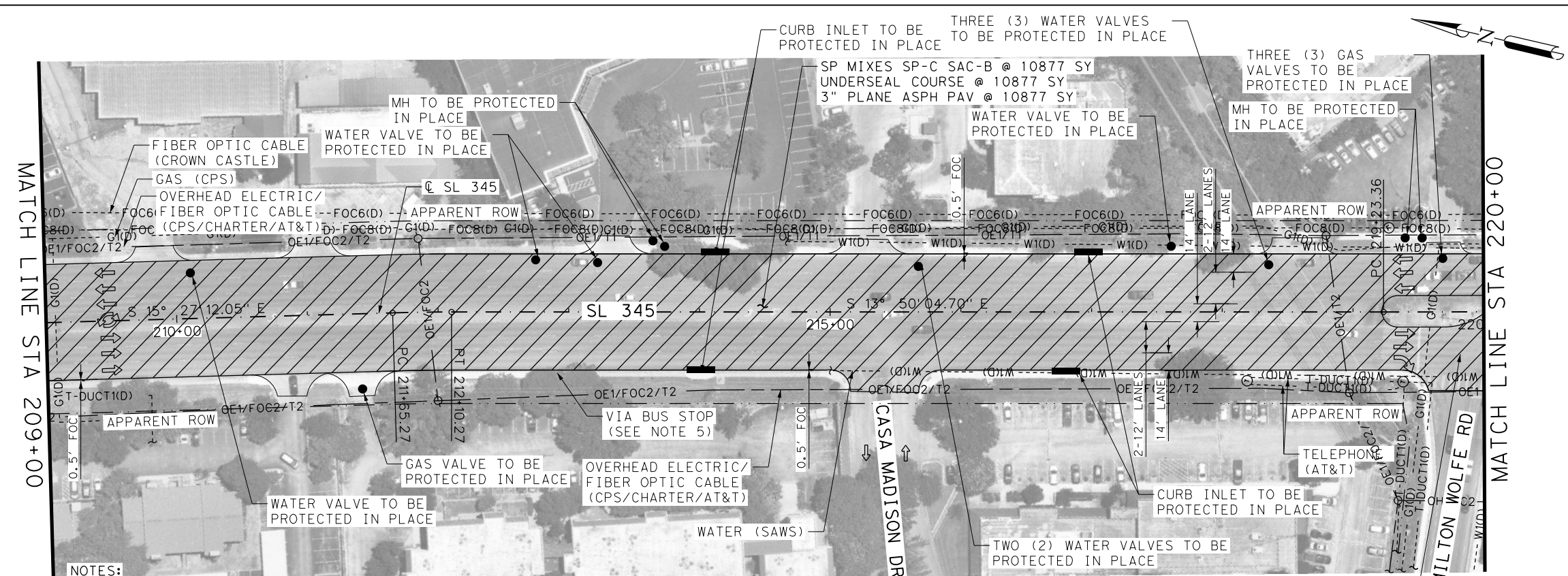
FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

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QUANTITY SUMMARY CSJ 0072-08-143				
ITEM NUMBER	ITEM	UNIT	QTY	
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY	74
354	6048	PLANE ASPH CONC PAV (3")	SY	23,659
688	6004	VEH LP DETECT (SAWCUT)	LF	
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF	500
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY	23,659
3085	6001	UNDERSEAL COURSE	SY	23,659

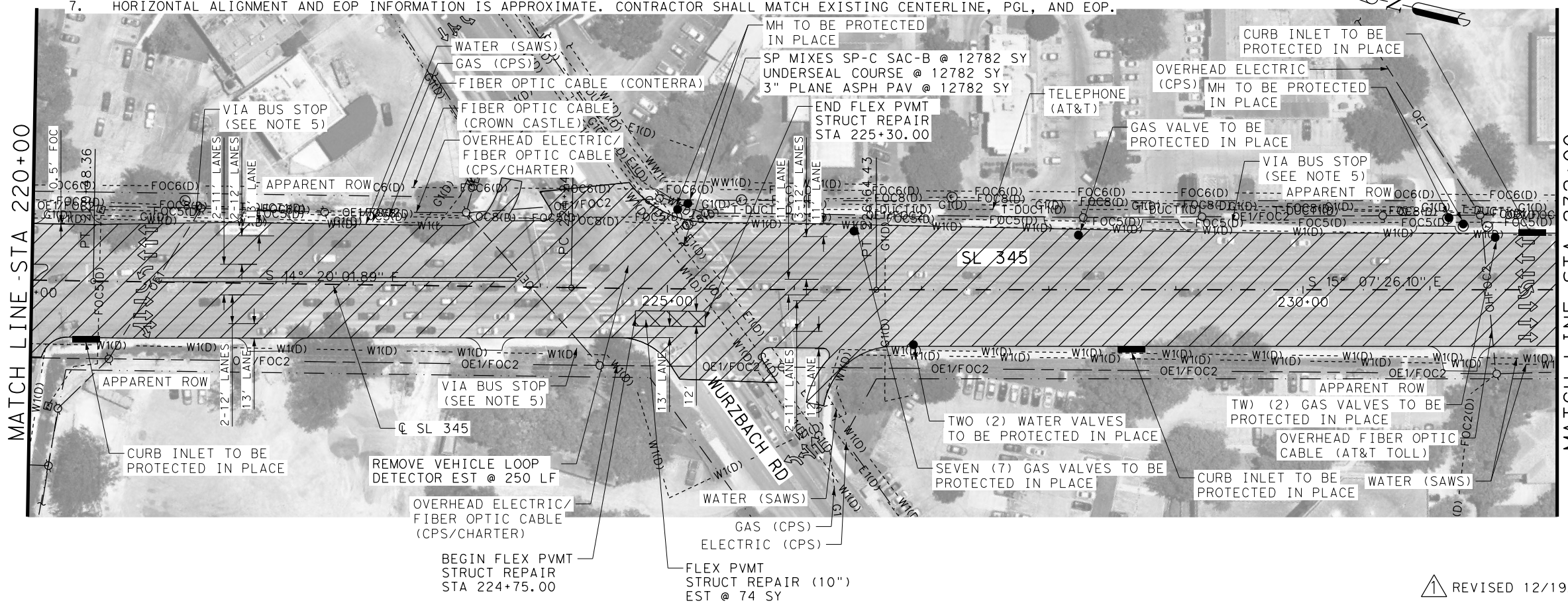
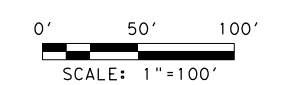


LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET

NOTES:

- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
- MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
- MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
- CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
- LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
- HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.



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SL 345

SL 345 OVERLAY PLANS

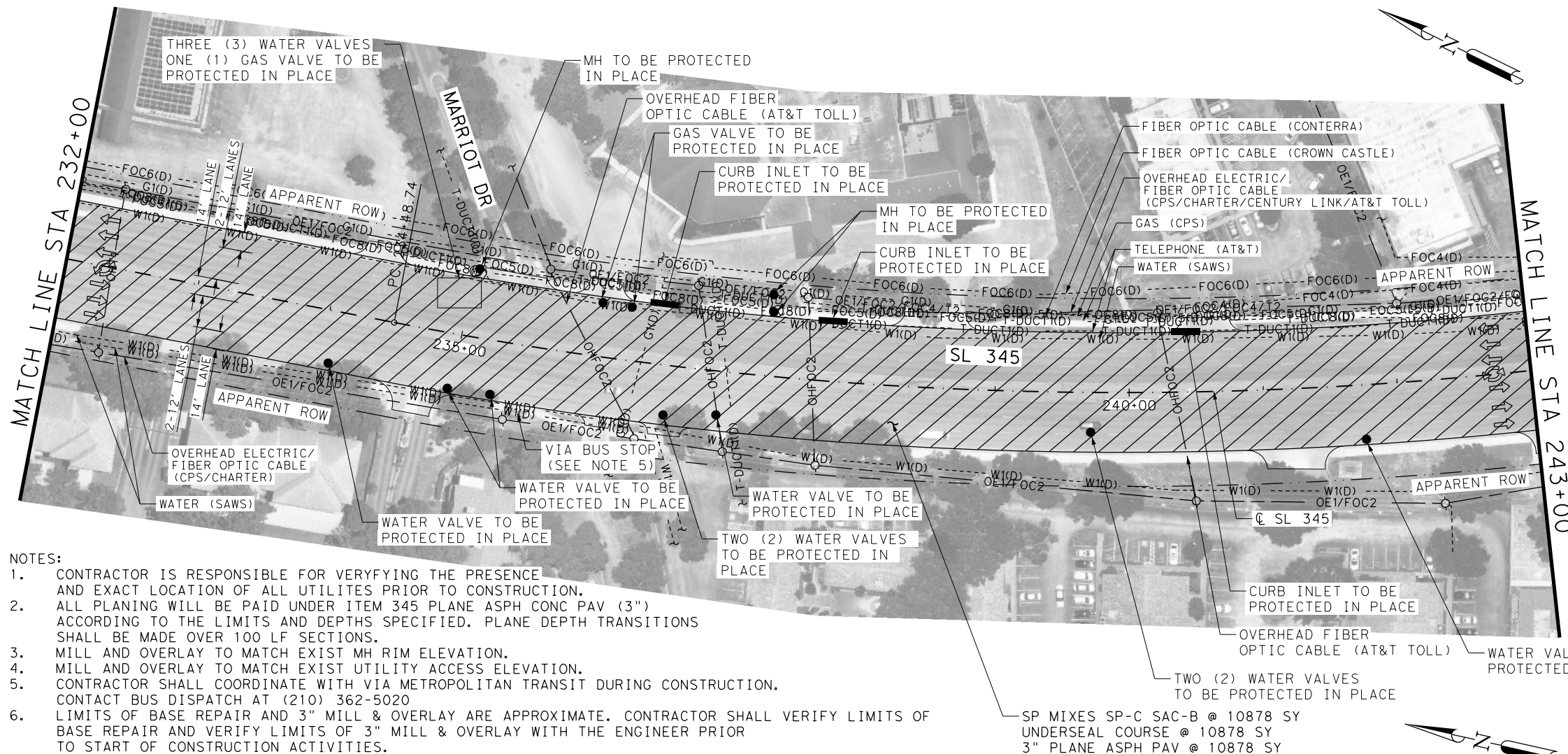
STA 209+00 TO STA 232+00  
SHEET 6 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISD 12/19/2022

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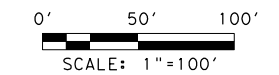
QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY
354	6048	PLANE ASPH CONC PAV (3")	22,311
688	6004	VEH LP DETECT (SAWCUT)	LF
690	6103	REMOVE VEHICLE LOOP DETECTOR	250
3077	6011	SP MIXES SP-C PG64-22	SY
3077	6034	SP MIXES SP-C SAC-B PG76-22	22,311
3085	6001	UNDERSEAL COURSE	22,311



LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET

- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
  - LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.



12/19/2022

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FRN - F-1386

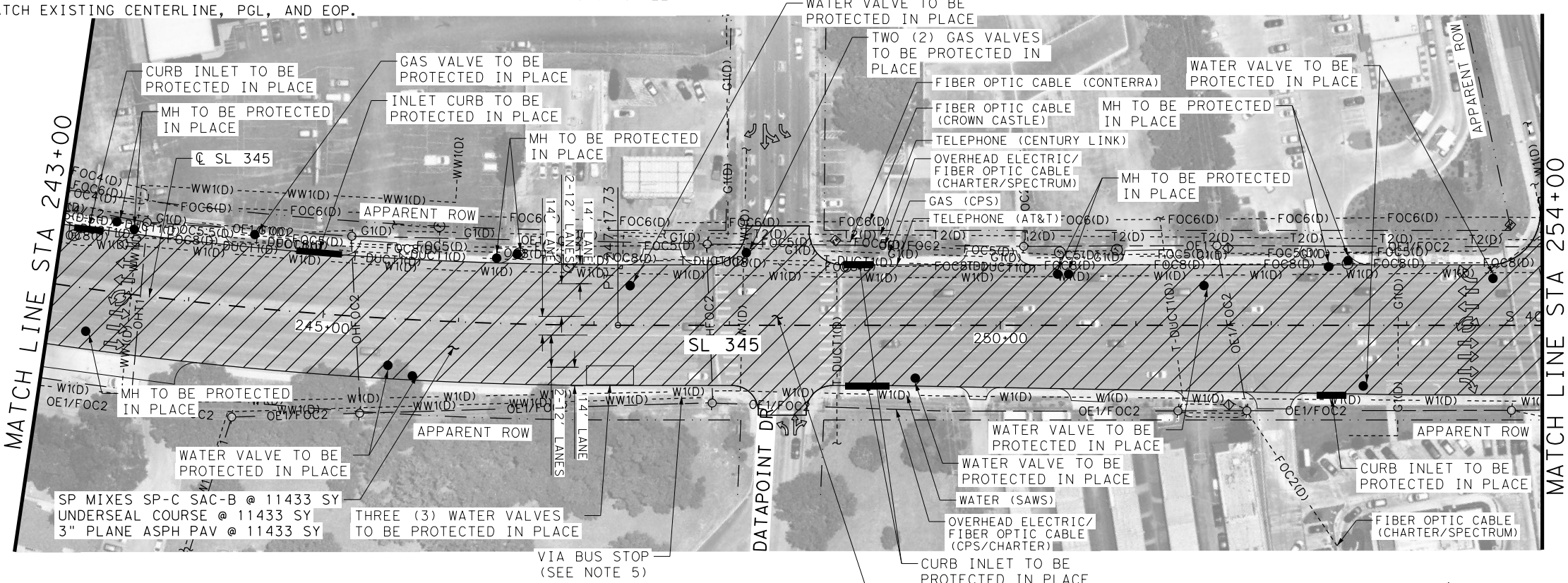
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SL 345

SL 345 OVERLAY PLANS

STA 232+00 TO STA 254+00  
SHEET 7 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

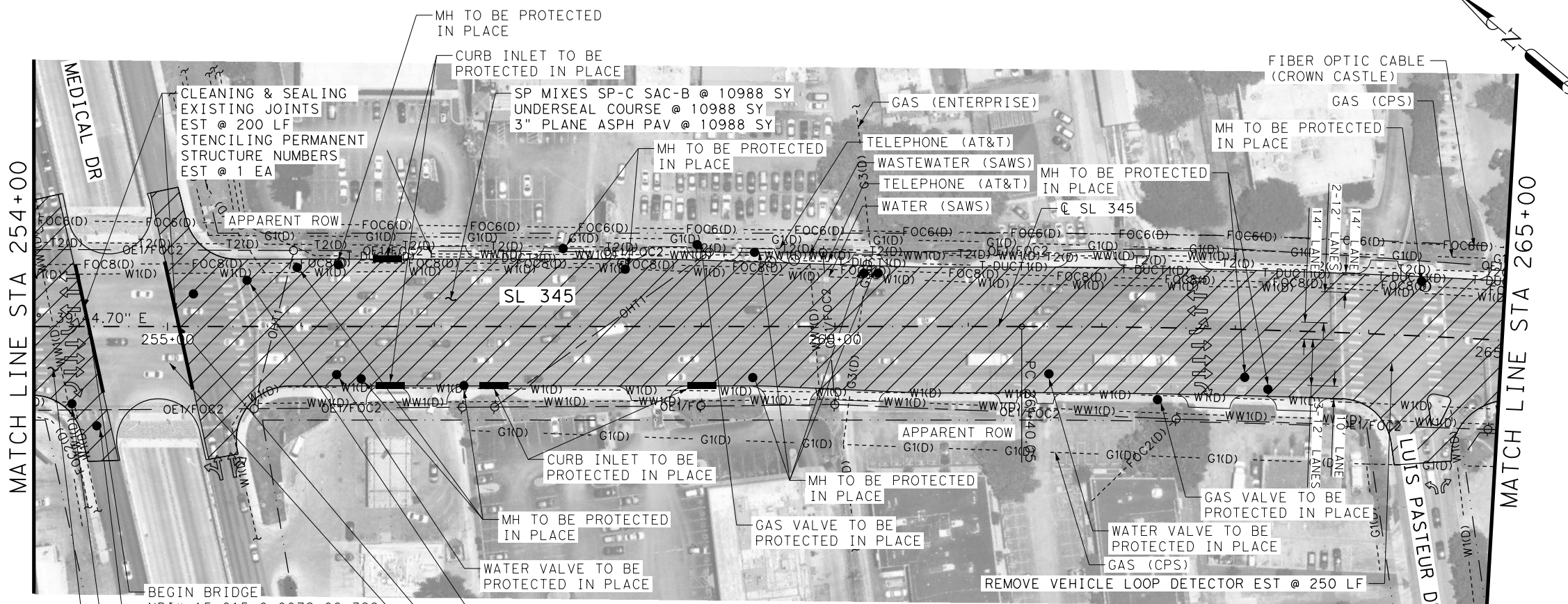


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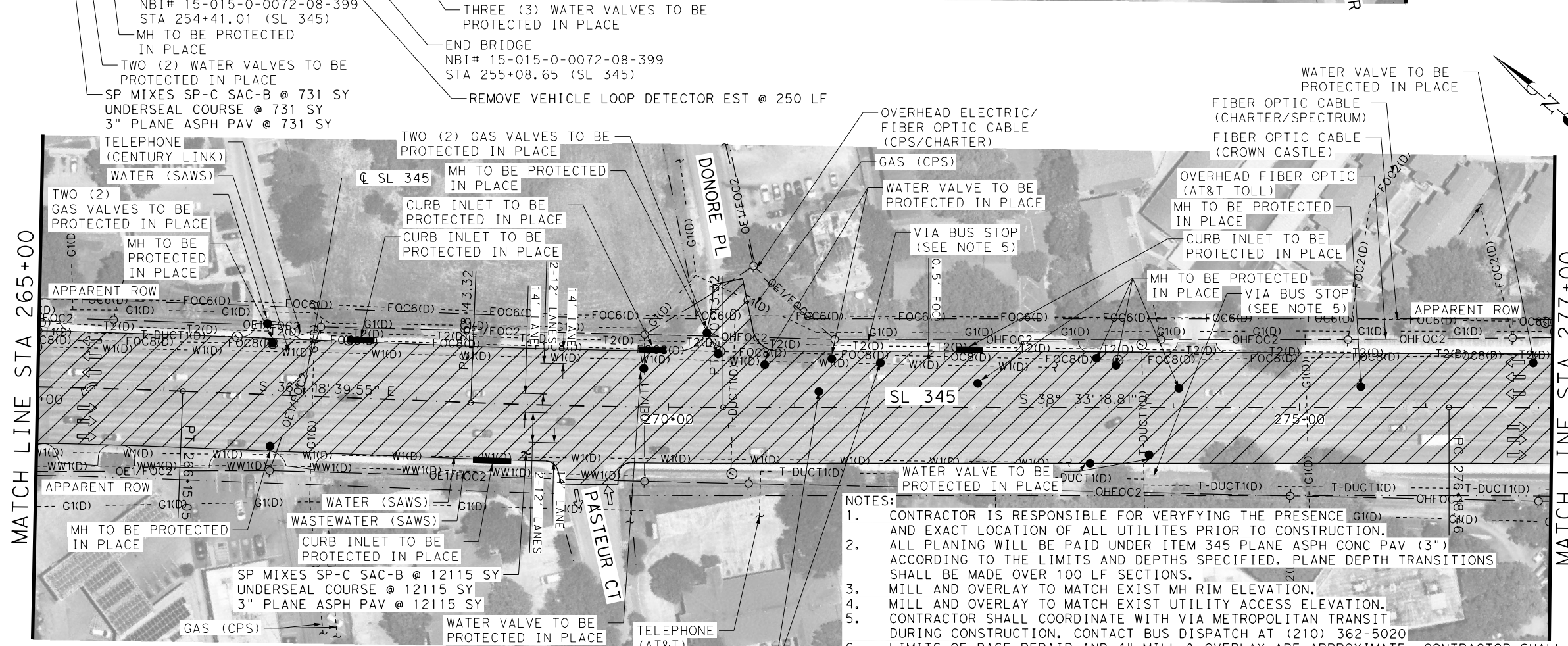
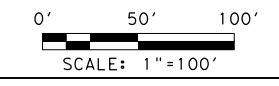


QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY
354	6048	PLANE ASPH CONC PAV (3")	SY 23,834
438	6001	CLEANING AND SEALING EXISTING JOINTS	LF 200
688	6004	VEH LP DETECT (SAWCUT)	LF 0
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF 500
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY 23,834
3085	6001	UNDERSEAL COURSE	SY 23,834
4171	6001	INSTALL BRIDGE IDENTIFICATION NUMBERS	EA 1

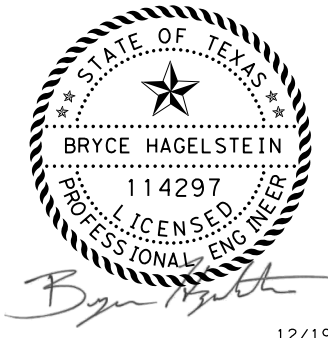


LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
  - LIMITS OF BASE REPAIR AND 4" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 4" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.



12/19/2022



SL 345

SL 345 OVERLAY PLANS

STA 254+00 TO STA 277+00

SHEET 8 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
COMT.	SECT.	JOB
0072	08	143

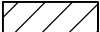



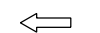


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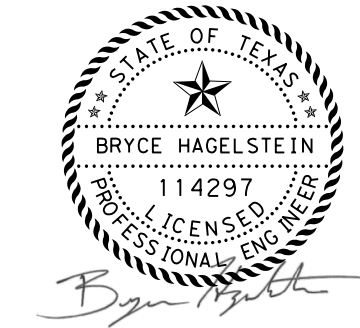
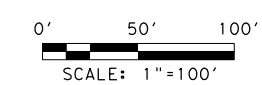
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ITEM NUMBER	ITEM	UNIT	QTY
104	6032	REMOVING CONC (WHEELCHAIR RAMP)	SY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY 67
354	6048	PLANE ASPH CONC PAV (3")	SY 24,621
531	6005	CURB RAMPS (TY 2)	EA
688	6004	VEH LP DETECT (SAWCUT)	LF 0
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF 500
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY 24,621
3085	6001	UNDERSEAL COURSE	SY 24,621

LEGEND

-  LIMITS OF 3" MILL & OVERLAY
-  LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
-  VIA BUS STOP (TO REMAIN)
-  PROPOSED TRAFFIC DIRECTION ARROW
-  EXISTING TRAFFIC DIRECTION ARROW
-  MANHOLE/UTILITY ACCESS
-  CURB INLET



**LJA Engineering, Inc.**  
FRN - F-1386

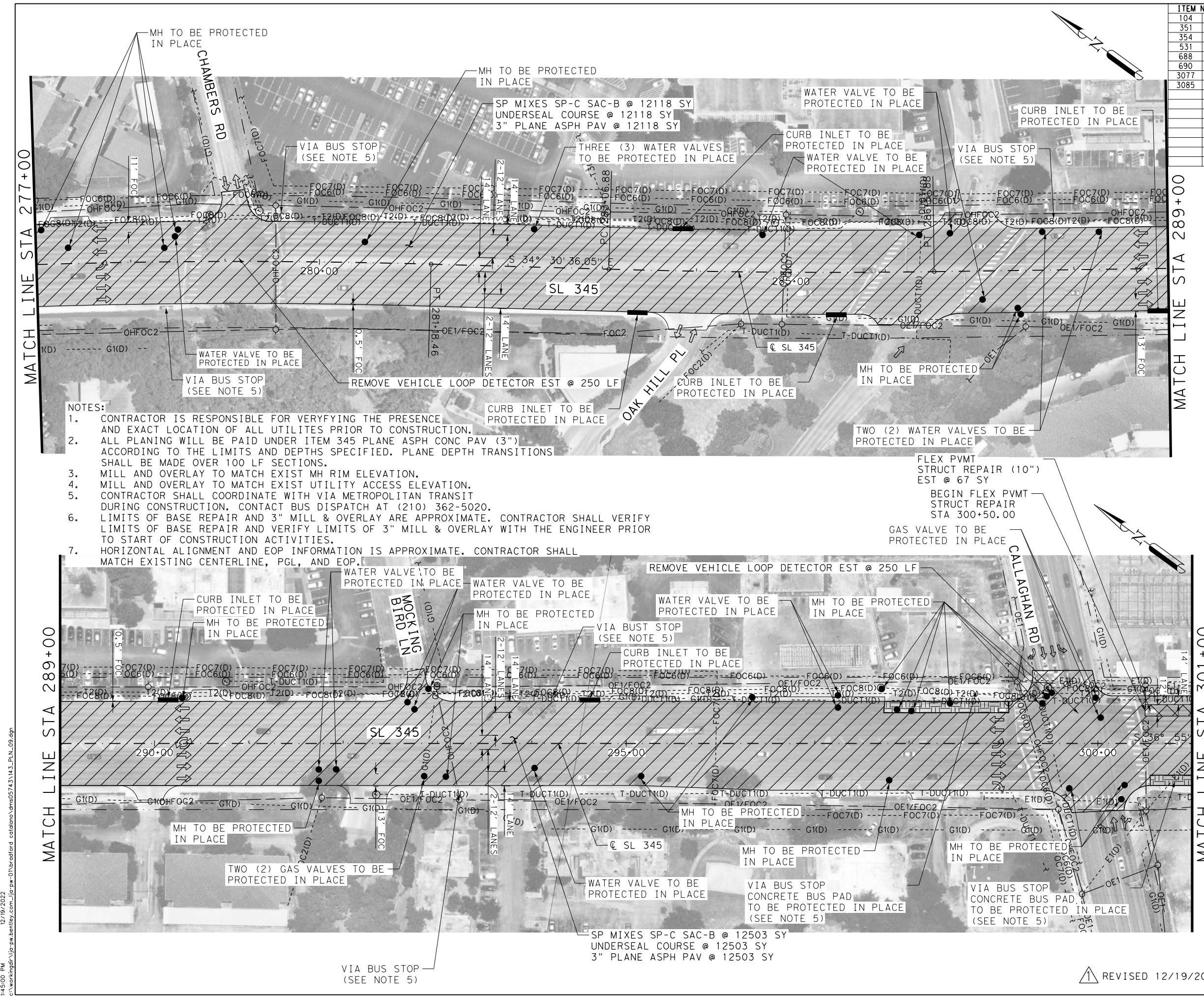


SL 345

SL 345 OVERLAY PLANS

STA 277+00 TO STA 301+00  
SHEET 9 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

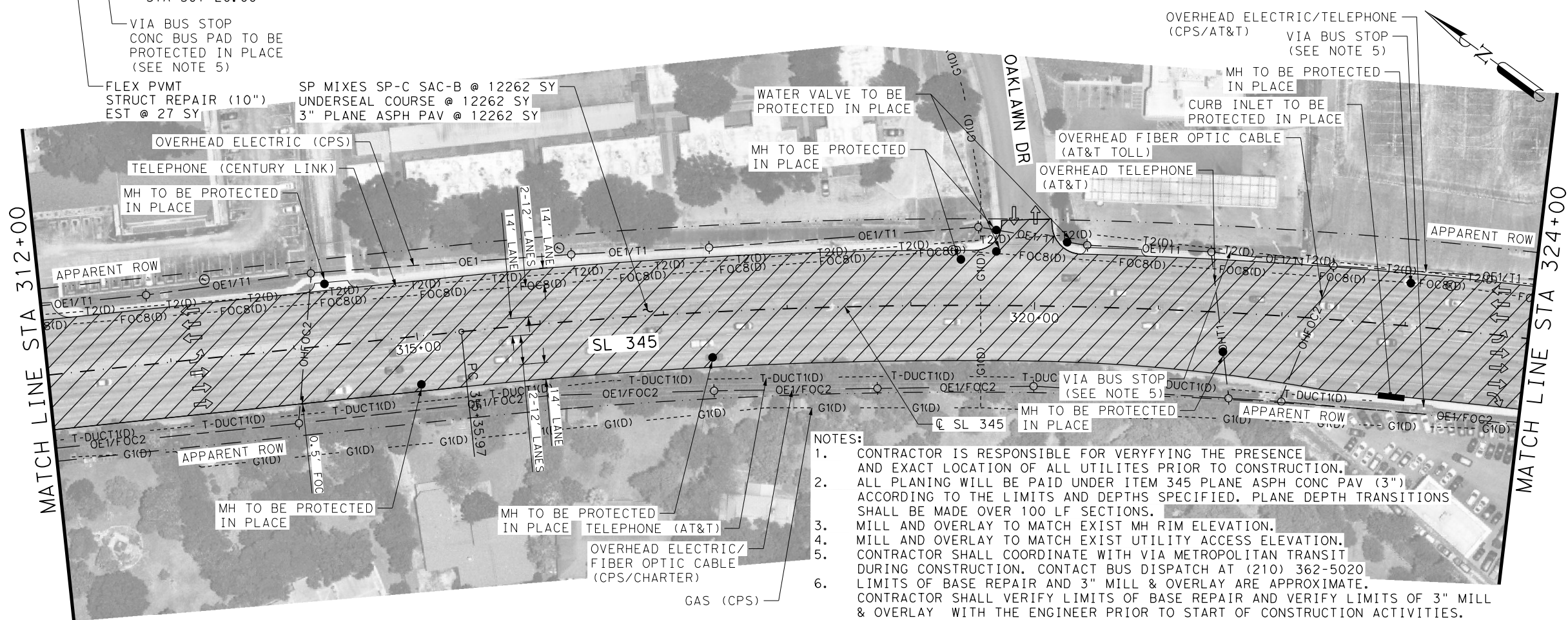
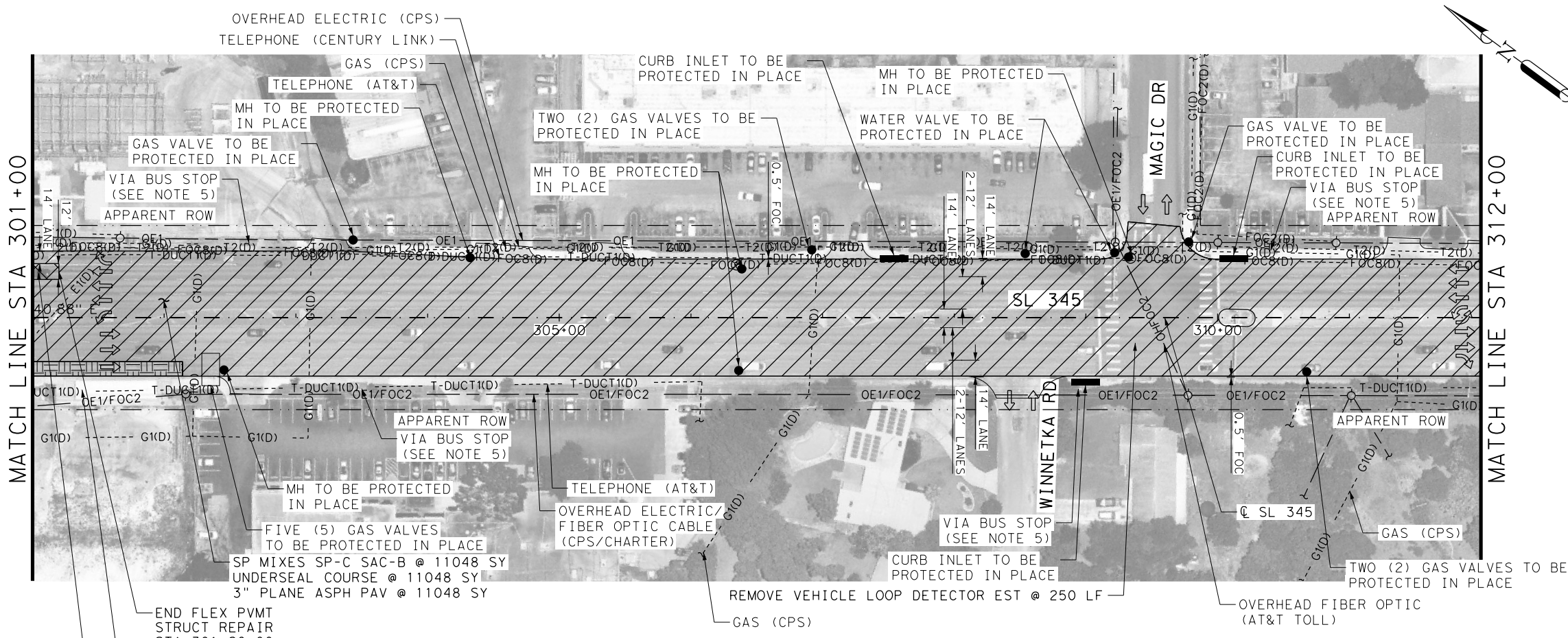


- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANNING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020.
  - LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

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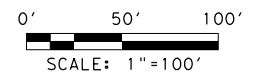
QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY 27
354	6048	PLANE ASPH CONC PAV (3")	SY 23,310
688	6004	VEH LP DETECT (SAWCUT)	LF
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF 250
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY 23,310
3085	6001	UNDERSEAL COURSE	SY 23,310



- NOTES:**
1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  2. ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  3. MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  4. MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  5. CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
  6. LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  7. HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

**LEGEND**

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



12/19/2022



SL 345

**SL 345 OVERLAY PLANS**

STA 301+00 TO STA 324+00

SHEET 10 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISD 12/19/2022

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REMOVE VEHICLE LOOP DETECTOR EST @ 250 LF

REMOVE VEHICLE LOOP DETECTOR EST @ 250 LF

FOUR (4) WATER VALVES TO BE PROTECTED IN PLACE

OVERHEAD ELECTRIC (CPS)

TELEPHONE (CENTURY LINK)

TELEPHONE (ATT)

TELEPHONE (AT&T)

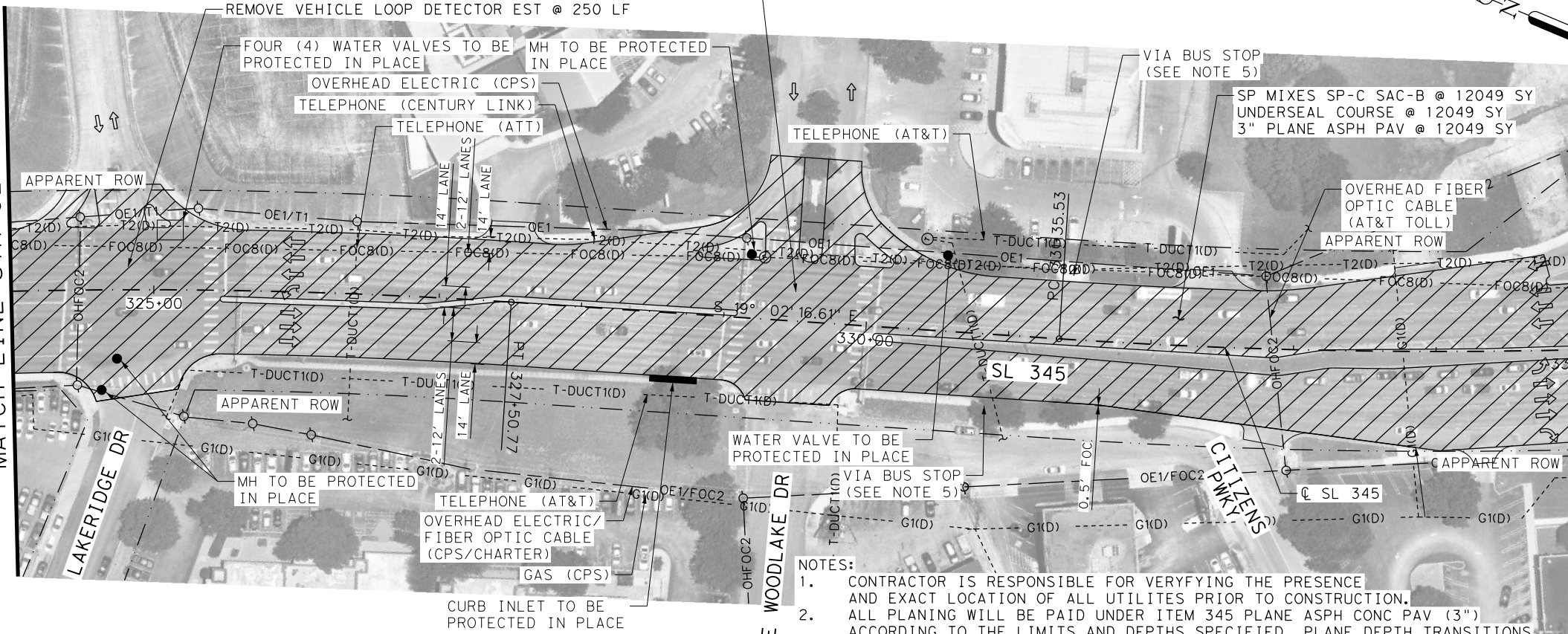
VIA BUS STOP (SEE NOTE 5)

SP MIXES SP-C SAC-B @ 12049 SY  
UNDERSEAL COURSE @ 12049 SY  
3" PLANE ASPH PAV @ 12049 SY

OVERHEAD FIBER OPTIC CABLE (AT&T TOLL)

MATCH LINE STA 324+00

MATCH LINE STA 335+00



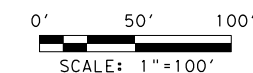
NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
2. ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
3. MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
4. MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
5. CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
6. LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
7. HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

QUANTITY SUMMARY CSJ 0072-08-143				
ITEM NUMBER		ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY	
354	6048	PLANE ASPH CONC PAV (3")	SY	23,400
438	6001	CLEANING AND SEALING EXISTING JOINTS	LF	203
688	6004	VEH LP DETECT (SAWCUT)	LF	
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF	1,000
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY	23,400
3085	6001	UNDERSEAL COURSE	SY	23,400
4171	6001	INSTALL BRIDGE IDENTIFICATION NUMBERS	EA	1

LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



REMOVE VEHICLE LOOP DETECTOR EST @ 250 LF

MH TO BE PROTECTED IN PLACE

SP MIXES SP-C SAC-B @ 2000 SY  
UNDERSEAL COURSE @ 2000 SY  
3" PLANE ASPH PAV @ 2000 SY

CURB INLET TO BE PROTECTED IN PLACE

OVERHEAD ELECTRIC/  
FIBER OPTIC CABLE  
(CPS/CHARTER)

END BRIDGE  
NBI# 15-015-0-0521-04-311  
STA 338+70.29 (SL 345)

BEGIN BRIDGE  
NBI# 15-015-0-0521-04-311  
STA 336+60.05 (SL 345)

SP MIXES SP-C SAC-B @ 9351 SY  
UNDERSEAL COURSE @ 9351 SY  
3" PLANE ASPH PAV @ 9351 SY

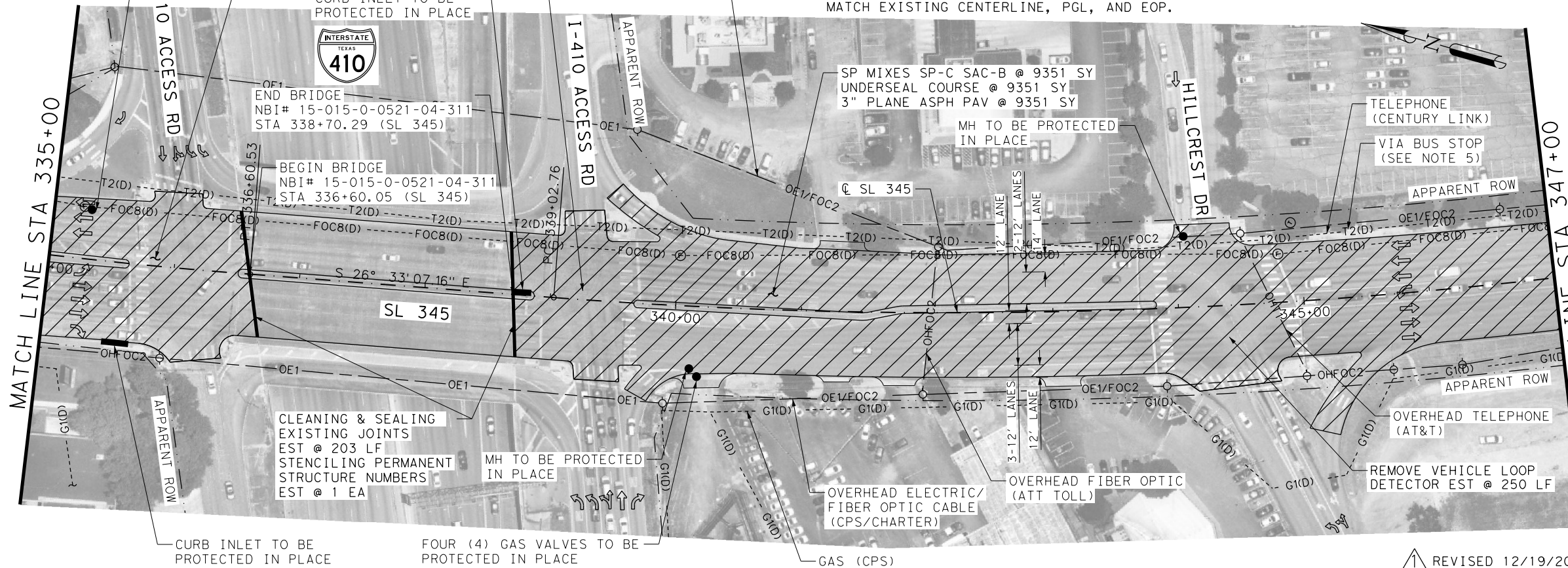
MH TO BE PROTECTED IN PLACE

TELEPHONE (CENTURY LINK)

VIA BUS STOP (SEE NOTE 5)

MATCH LINE STA 335+00

MATCH LINE STA 347+00



CLEANING & SEALING EXISTING JOINTS EST @ 203 LF  
STENCILING PERMANENT STRUCTURE NUMBERS EST @ 1 EA

CURB INLET TO BE PROTECTED IN PLACE

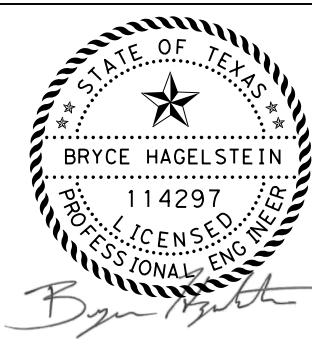
FOUR (4) GAS VALVES TO BE PROTECTED IN PLACE

OVERHEAD ELECTRIC/  
FIBER OPTIC CABLE  
(CPS/CHARTER)

GAS (CPS)

OVERHEAD FIBER OPTIC (ATT TOLL)

REMOVE VEHICLE LOOP DETECTOR EST @ 250 LF



12/19/2022

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SL 345

SL 345 OVERLAY PLANS

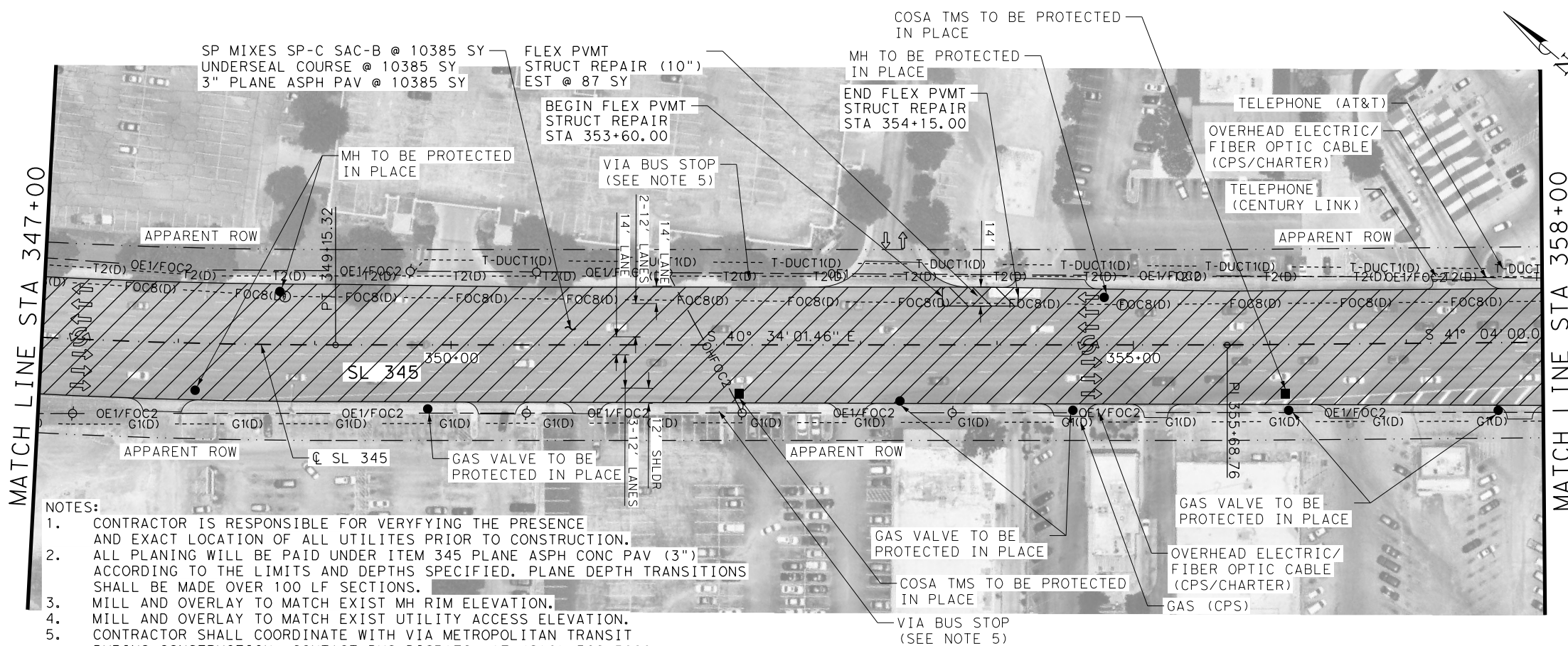
STA 324+00 TO STA 347+00

SHEET 11 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISD 12/19/2022

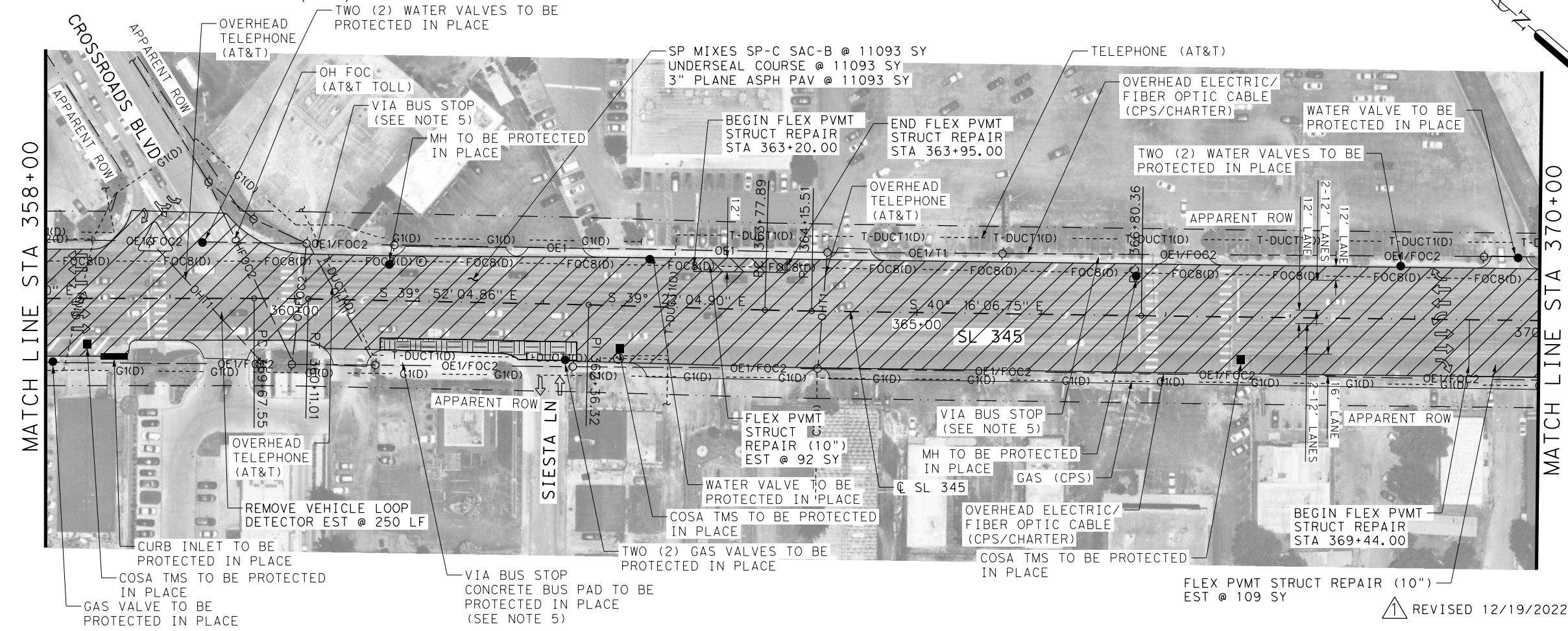
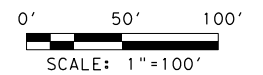
QUANTITY SUMMARY CSJ 0072-08-143			
ITEM NUMBER	ITEM	UNIT	QTY
351	6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR (10")	SY 179
354	6048	PLANE ASPH CONC PAV (3")	SY 21,478
688	6004	VEH LP DETECT (SAWCUT)	LF 250
690	6103	REMOVE VEHICLE LOOP DETECTOR	LF 250
3077	6034	SP MIXES SP-C SAC-B PG76-22	SY 21,478
3085	6001	UNDERSEAL COURSE	SY 21,478



- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020
  - LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



**LJA Engineering, Inc.**  
FRN - F-1386

SL 345

**SL 345 OVERLAY PLANS**

STA 347+00 TO STA 370+00

SHEET 12 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

REVISION: REVISED 12/19/2022

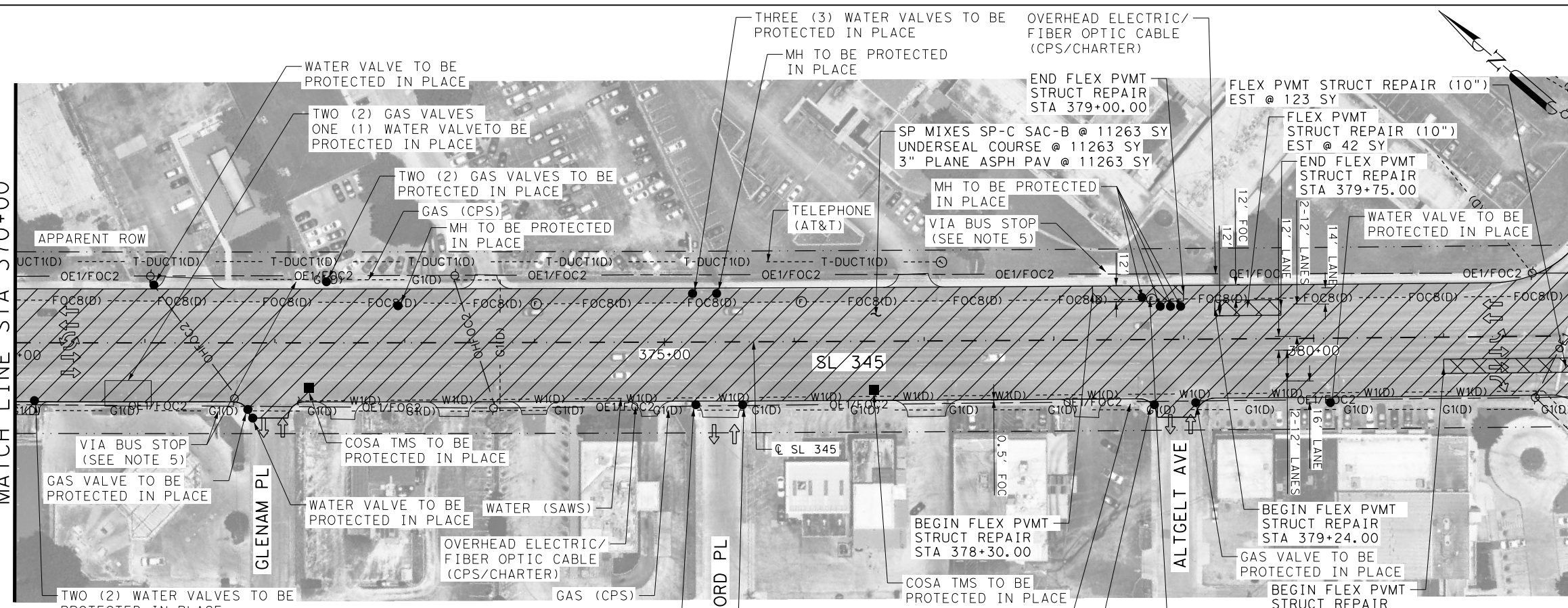
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ITEM NUMBER	ITEM	UNIT	QTY
351	6006 FLEXIBLE PAVEMENT STRUCTURE REPAIR(10")	SY	347
354	6048 PLANE ASPH CONC PAV (3")	SY	13,044
688	6004 VEH LP DETECT (SAWCUT)	LF	
690	6103 REMOVE VEHICLE LOOP DETECTOR	LF	250
3077	6034 SP MIXES SP-C SAC-B PG76-22	SY	13,044
3085	6001 UNDERSEAL COURSE	SY	13,044

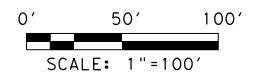
MATCH LINE STA 370+00

MATCH LINE STA 382+00



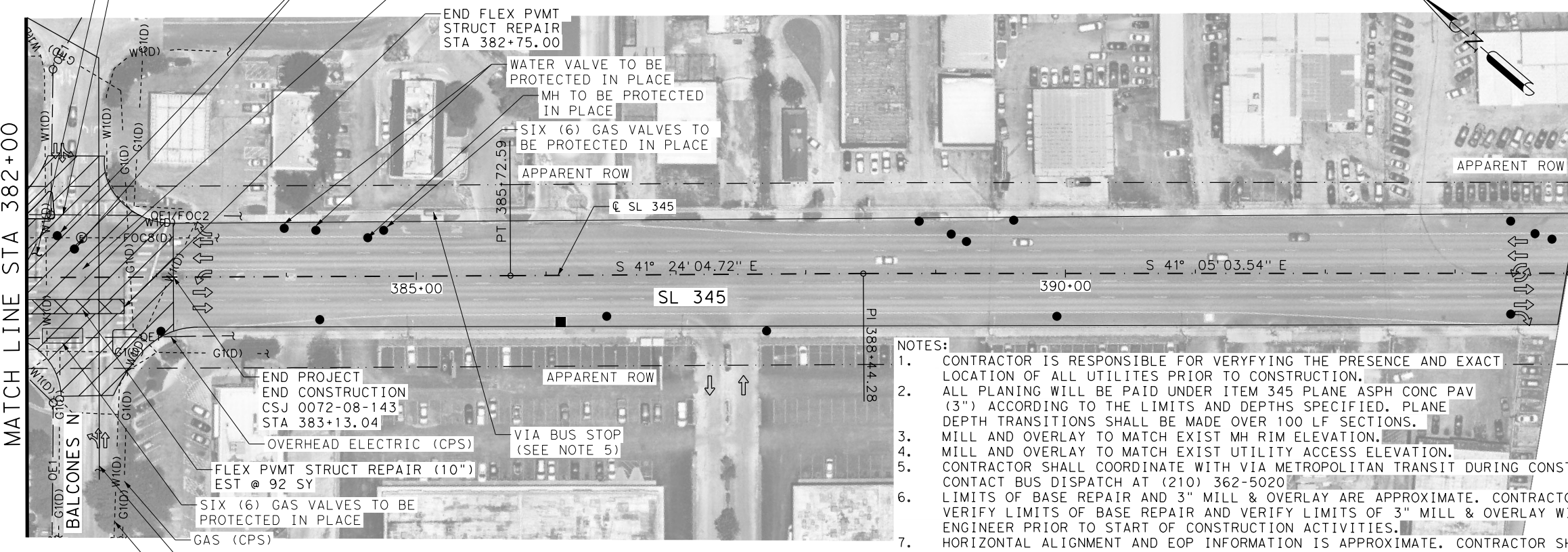
LEGEND

- LIMITS OF 3" MILL & OVERLAY
- LIMITS OF FLEXIBLE PAVEMENT STRUCTURE REPAIR
- VIA BUS STOP (TO REMAIN)
- PROPOSED TRAFFIC DIRECTION ARROW
- EXISTING TRAFFIC DIRECTION ARROW
- MANHOLE/UTILITY ACCESS
- CURB INLET



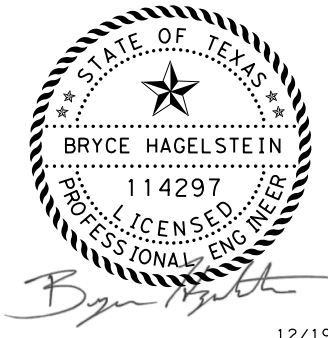
MATCH LINE STA 382+00

POT 393+88.27



- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - ALL PLANING WILL BE PAID UNDER ITEM 345 PLANE ASPH CONC PAV (3") ACCORDING TO THE LIMITS AND DEPTHS SPECIFIED. PLANE DEPTH TRANSITIONS SHALL BE MADE OVER 100 LF SECTIONS.
  - MILL AND OVERLAY TO MATCH EXIST MH RIM ELEVATION.
  - MILL AND OVERLAY TO MATCH EXIST UTILITY ACCESS ELEVATION.
  - CONTRACTOR SHALL COORDINATE WITH VIA METROPOLITAN TRANSIT DURING CONSTRUCTION. CONTACT BUS DISPATCH AT (210) 362-5020.
  - LIMITS OF BASE REPAIR AND 3" MILL & OVERLAY ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LIMITS OF BASE REPAIR AND VERIFY LIMITS OF 3" MILL & OVERLAY WITH THE ENGINEER PRIOR TO START OF CONSTRUCTION ACTIVITIES.
  - HORIZONTAL ALIGNMENT AND EOP INFORMATION IS APPROXIMATE. CONTRACTOR SHALL MATCH EXISTING CENTERLINE, PGL, AND EOP.

REVISD 12/19/2022



12/19/2022

**LJA Engineering, Inc.**  
FRN - F-1386



SL 345

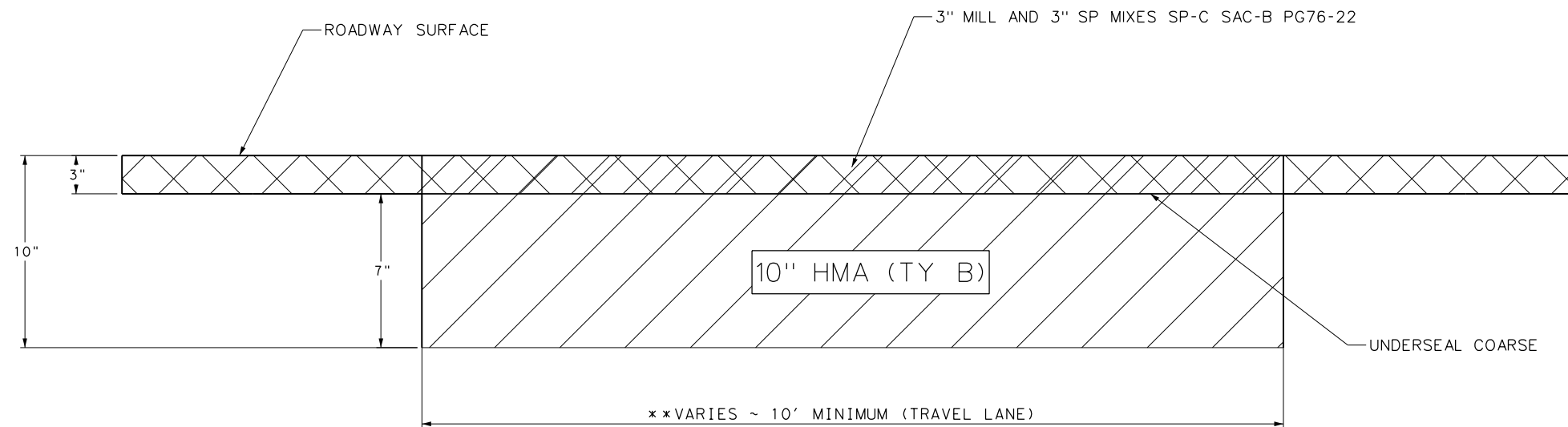
SL 345 OVERLAY PLANS

STA 370+00 TO END

SHEET 13 OF 13

FED. RD. DIV. NO.	PROJECT NO.	HIGHWAY NO.
6	SEE TITLE SHEET	SL345
STATE	STATE DIST. NO.	COUNTY
TEXAS	15	BEXAR
CONT.	SECT.	JOB
0072	08	143

67



**FLEXIBLE PAVEMENT STRUCTURE REPAIR 10"  
TYPICAL SECTION**

TO BE PLACED IN TWO EQUAL LIFTS  
N. T. S

**NOTES:**

\*\* THE TYPICAL REPAIR DIMENSION SHALL BE A MINIMUM WIDTH OF 10 FT AND A MINIMUM LENGTH AS SHOWN ON PLANS. THESE DIMENSIONS MAY DIFFER BASED UPON THE AREA THAT IS IN NEED OF REPAIR. FOR PAVEMENT REPAIR LOCATIONS AND DESCRIPTION, SEE "SL 345 OVERLAY PLANS" SHEETS.

THE USE OF ROTOMILL WILL BE USED FOR THE REMOVAL OF THE EXISTING PAVEMENT STRUCTURE, AND SHALL BE SUBSIDIARY TO ITEM 351, "FLEXIBLE PAVEMENT STRUCTURE REPAIR."

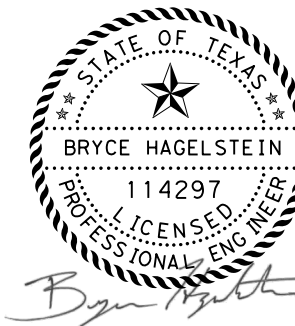
HMA (TY B) SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE SUBSIDIARY TO ITEM 351.

UNDERSEAL COARSE AND 3" SP MIXES SHALL BE PAID FOR DIRECTLY UNDER THE PERTINENT BID ITEM.

THE REPAIR LOCATIONS AND THE SIZE OF EACH LOCATION IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.

TACK COAT TO BE PLACED BETWEEN LIFTS AND SHALL BE SUBSIDIARY TO ITEM 351

NOT TO SCALE



12/19/2022



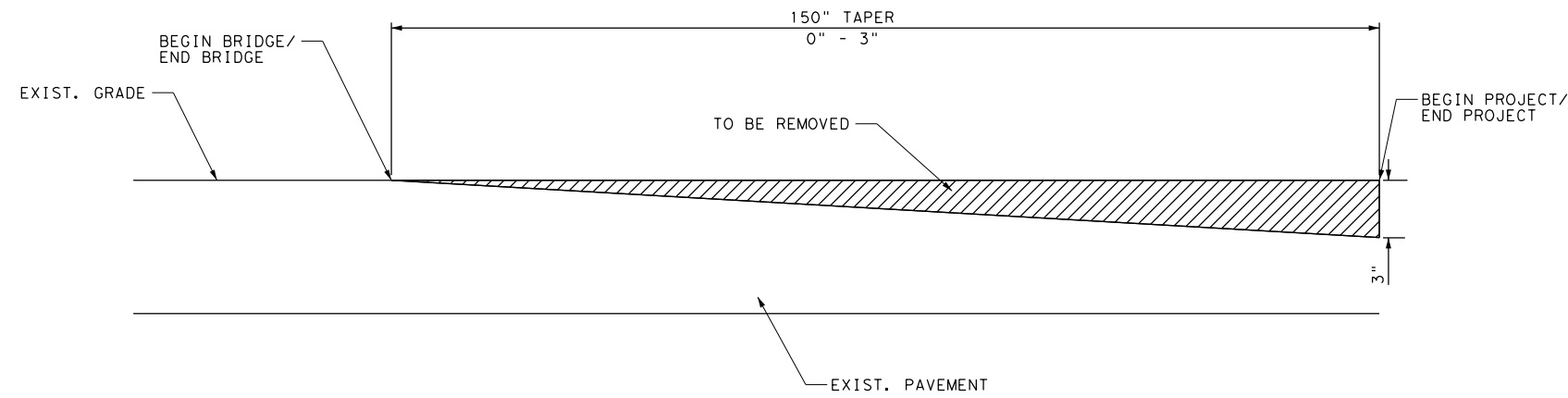
SL 345

**FLEXIBLE PAVEMENT  
REPAIR DETAIL**

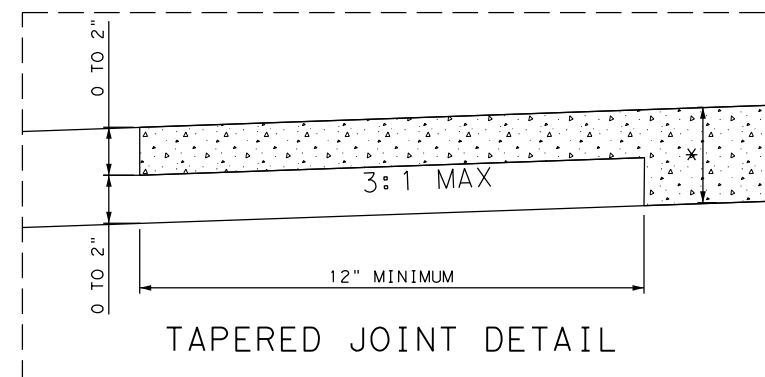
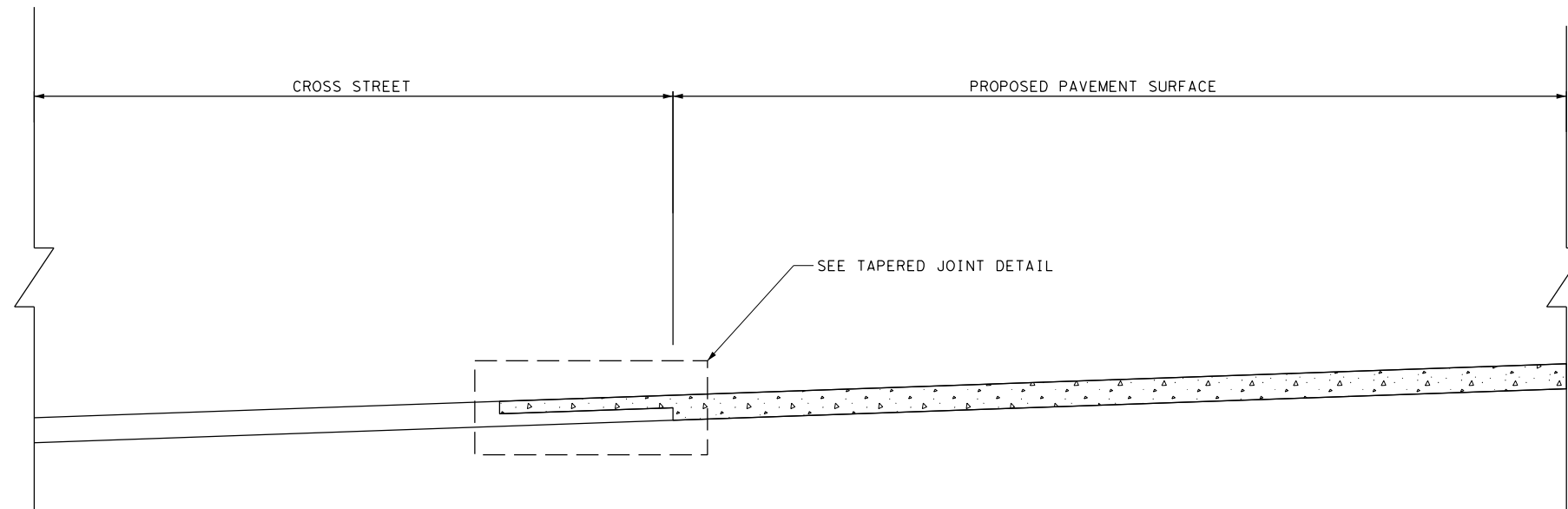
SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	68
CONT.	SECT.	JOB	
0072	08	143	

REVISED 12/19/2022

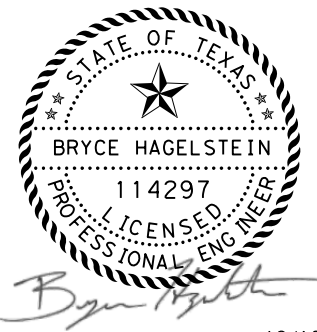


**PLANING END TREATMENTS**  
NOT TO SCALE



\* SEE TYPICAL SECTION FOR DEPTH AND TYPE OF HMA.

NOT TO SCALE



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 **Texas Department of Transportation**  
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SL 345

**MISCELLANEOUS ROADWAY DETAILS**

SHEET 1 OF 1

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6	SEE TITLE SHEET		SL345
STATE	STATE DIST. NO.	COUNTY	SHEET NO.
TEXAS	15	BEXAR	69
CONT.	SECT.	JOB	
0072	08	143	

 REVISED 12/19/2022