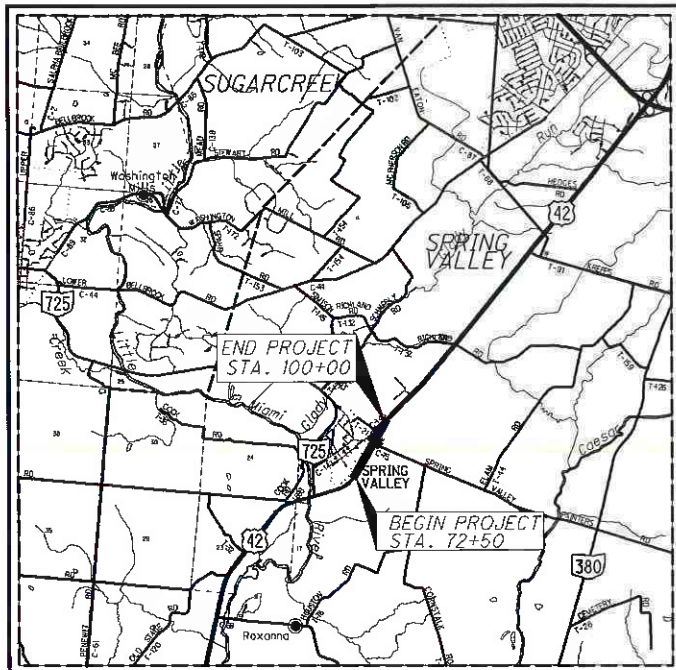


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GRE-42-3.15

**SPRING VALLEY TOWNSHIP
GREENE COUNTY**



LOCATION MAP

LATITUDE: 39°36'38.43" LONGITUDE: -84°0'3.91"



PORTION TO BE IMPROVED	-----
INTERSTATE HIGHWAY	-----
FEDERAL ROUTES	-----
STATE ROUTES	-----
COUNTY & TOWNSHIP ROADS	-----
OTHER ROADS	-----

DESIGN DESIGNATION

SLM 2.484-3.623 SLM 3.623-6.137

CURRENT ADT (2020)	7,600	9,600
DESIGN YEAR ADT (2040)	9,900	12,500
DESIGN HOURLY VOLUME (2040)	1,000	1,200
DIRECTIONAL DISTRIBUTION	55%	51%
TRUCKS (24 HOUR B&C)	6%	4%
DESIGN SPEED	60 MPH	60 MPH
LEGAL SPEED	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	04 MINOR ARTERIAL (RURAL)	

NHS PROJECT ----- NO

DESIGN EXCEPTIONS

NONE REQUIRED

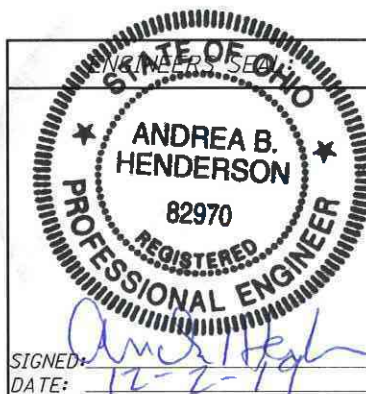
UNDERGROUND UTILITIES

Contact Two Working Days
Before You Dig



OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8 ENGINEERING
505 S. SR 741
LEBANON, OH 45036



INDEX OF SHEETS:

TITLE SHEET	1
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DRAINAGE DETAILS	61
TRAFFIC CONTROL	62-73
SOIL PROFILES	

PROJECT DESCRIPTION

INSTALL A RESTRICTED CROSSING U-TURN (RCUT) AT THE INTERSECTION OF US ROUTE 42 AND SPRING VALLEY PAINTERSVILLE ROAD.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	5.1 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	5.1 ACRES

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7/18/14	RM-1.1	7/18/14	TC-41.30	10/18/13			800-2019 10/18/19	WATERWAY PERMIT CONDITIONS-TBD
BP-8.1	1/18/19	RM-3.1	7/19/13	TC-42.20	10/18/13	I-1.2	1/15/16	830	10/19/18
BP-9.1	1/18/19	CB-91	1/18/13	TC-52.10	10/18/13	I-2.1	1/15/16	836	1/19/18
				TC-52.20	7/20/18	EB-2.1	7/20/18	821	4/20/18
		MT-95.40	1/20/17	TC-61.10	1/17/13	CB-2.2	7/20/18	878	1/18/19
		MT-97.10	7/19/13	TC-61.30	7/19/19	CB-3.1	1/15/16	921	4/20/12
HW-2.1	7/20/18	MT-97.12	1/20/17	TC-64.10	7/19/19				
HW-2.2	7/20/18	MT-95.50	7/21/17	TC-65.10	1/17/14				
		MT-99.20	4/19/19	TC-65.11	7/21/17				
MGS-1.1	1/19/18	MT-101.90	7/21/17	TC-71.10	1/19/18				
MGS-2.1	1/19/18			CB-4.2	1/18/13				
MGS-4.2	7/19/13	MT-105.10	7/19/13	DM-1.1	7/21/17				
MGS-4.3	1/18/13			DM-1.2	1/18/13				
				DM-1.3	7/18/14				
				DM-4.3	1/15/16				
				DM-4.4	1/15/16				

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED: Tony K Cepbell
DATE: 12/3/19 DISTRICT DEPUTY DIRECTOR

APPROVED: _____
DATE: _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E180(689)

PID NO. 108640

CONSTRUCTION PROJECT NO. NONE

RAILROAD INVOLVEMENT NONE

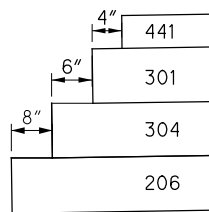
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LEGEND:

- ① ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
- ② ITEM 407 - NON-TRACKING TACK COAT
- ③ ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)
- ④ ITEM 407 - NON-TRACKING TACK COAT
- ⑤ ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22
- ⑥ ITEM 304 - 6" AGGREGATE BASE
- ⑦ ITEM 204 - SUBGRADE COMPACTION
- ⑧ ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS -STA. 72+61.00 TO STA. 84+00.00
- ⑨ ITEM 609 - 4" CONCRETE MEDIAN -STA. 83+32.61 TO STA. 85+33.01*
- ⑩ ITEM 659 - SEEDING AND MULCHING
- ⑪ ITEM 254 - 1.25" PAVEMENT PLANING, ASPHALT CONCRETE
- ⑫ ITEM 659 - TOPSOIL
- ⑬ ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP
- ⑭ ITEM 605 - 6" BASE PIPE UNDERDRAINS
- ⑮ ITEM 611 - 4" CURB, TYPE 4B
- ⑯ ITEM 441 - 0" MIN, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448) (SEE NOTE C)
- (A) EXISTING ASPHALT PAVEMENT
- (B) EXISTING GUARDRAIL
- (C) EXISTING CONCRETE CHANNEL
- (A) LOON WIDENING -STA. 77+86.52 TO STA. 80+09.66
STA. 92+26.81 TO STA. 95+25.00
- (B) VARIES: 3.4' - 4' STA. 72+97.00 TO STA. 73+46.86 R
4' - 2.4' STA. 99+61.64 TO STA. 99+96.60 R
3.4' - 4' STA. 92+23.96 TO STA. 93+29.10 L
4' - 2.8' STA. 94+97.22 TO STA. 95+22.04 L

- (C) VEGETATED BIO-FILTER - STA. 90+30 TO STA. 96+65
- (D) TURF REINFORCE MAT TYPE 1 - STA. 80+25 TO STA. 83+25



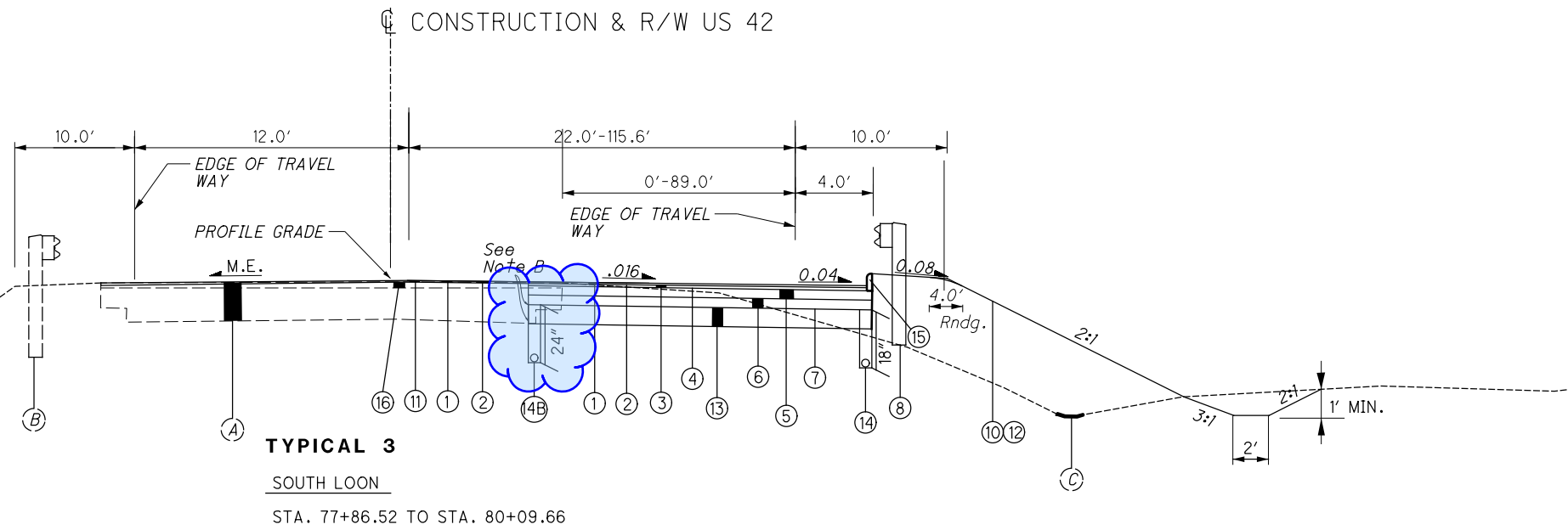
BASE STEP DETAIL
(NTS)

NOTES:

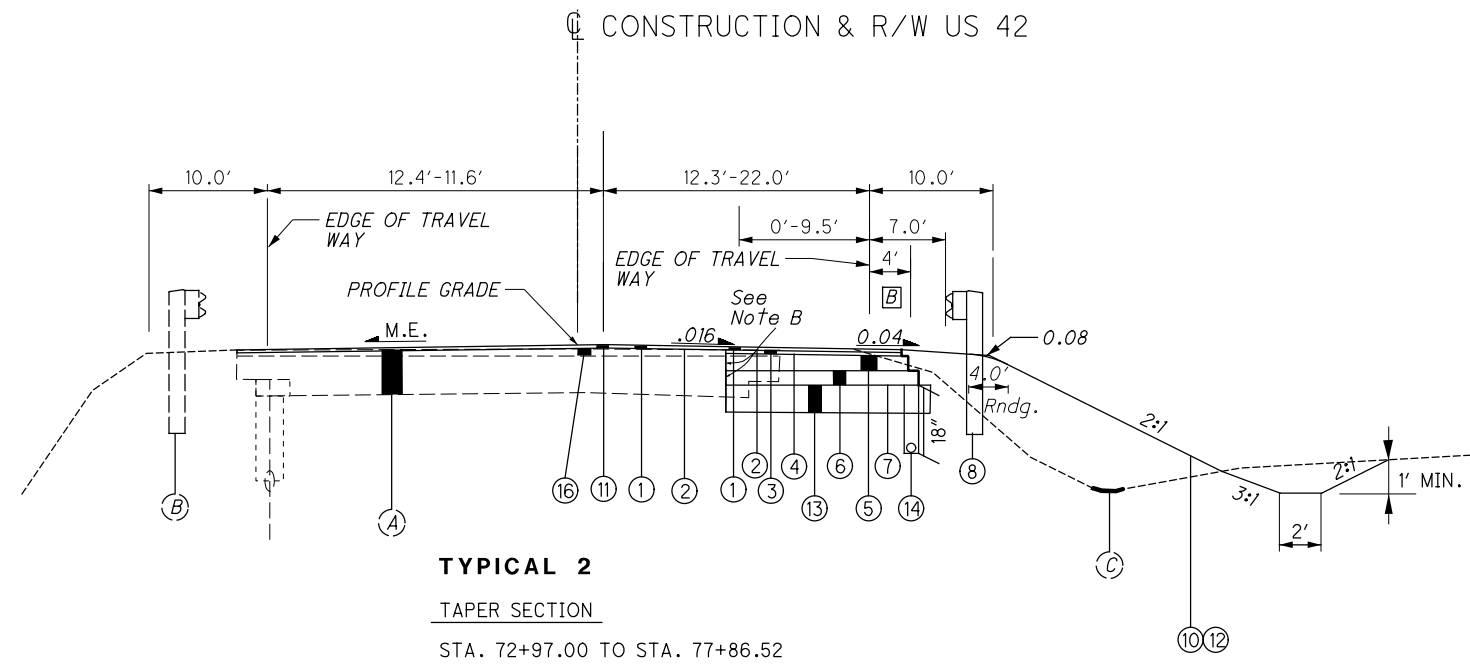
"M.E." MEANS "MATCH EXISTING"

NOTE "B"
THE EXISTING PAVEMENT EDGES SHALL BE SAW CUT TO LOCATE A SOUND EDGE PER SEC. 203.04(e) OF THE CMS. FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLAN INDICATE AN AVERAGE WIDTH OF 1 FT OF EXISTING PAVEMENT BEING REPLACED.

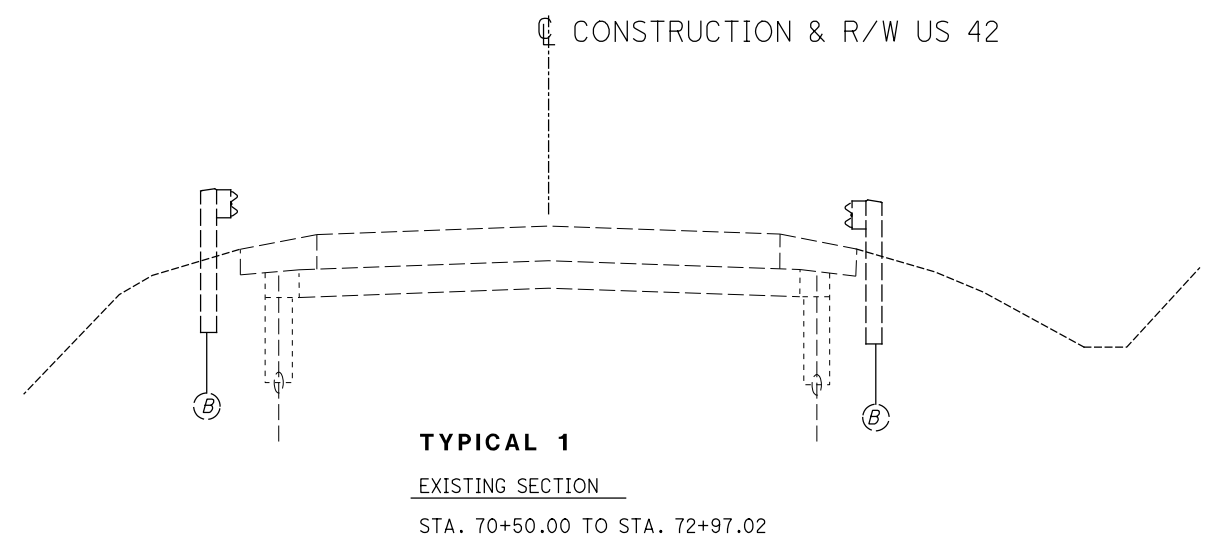
NOTE C
ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) IS TO BE USED AS A LEVELING COURSE TO ESTABLISH A 0.016 CROSS SLOPE. ESTIMATED QUANTITIES HAVE BEEN ADDED TO THE GENERAL SUMMARY.



TYPICAL 3
SOUTH LOON
STA. 77+86.52 TO STA. 80+09.66



TYPICAL 2
TAPER SECTION
STA. 72+97.00 TO STA. 77+86.52

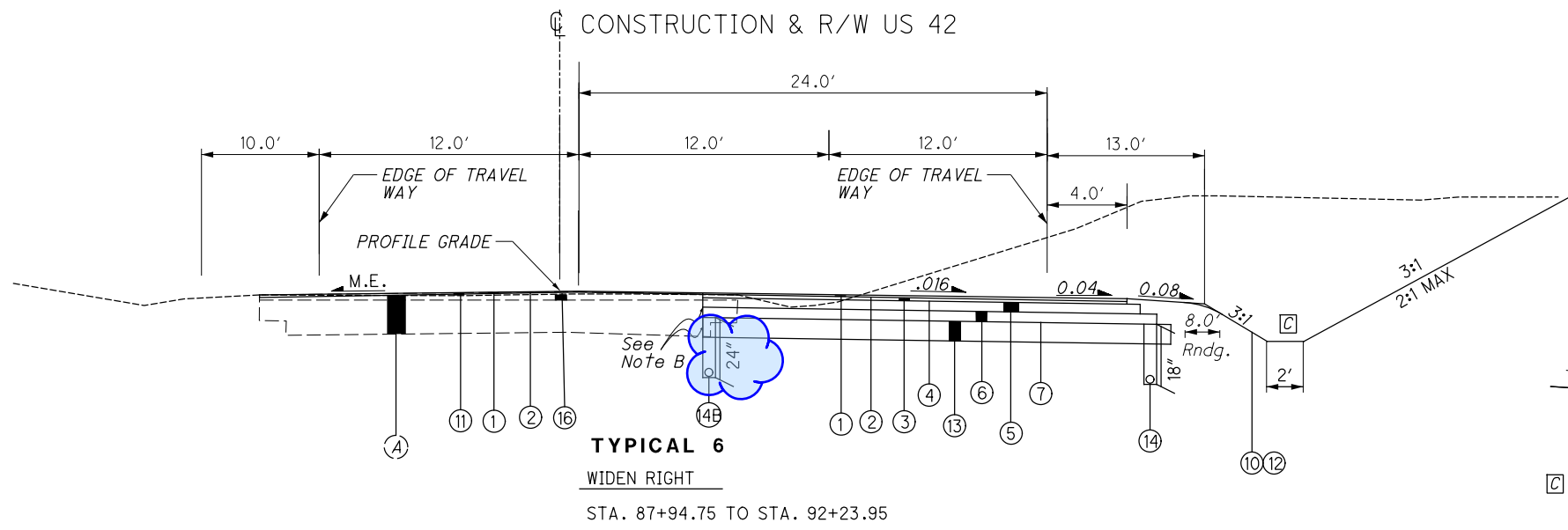


TYPICAL 1
EXISTING SECTION
STA. 70+50.00 TO STA. 72+97.02

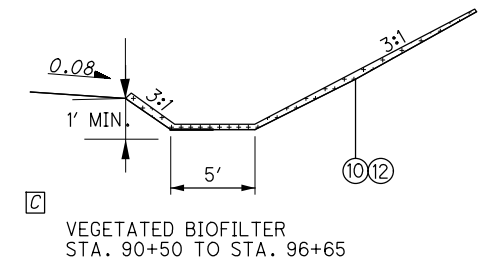
TYPICAL SECTIONS

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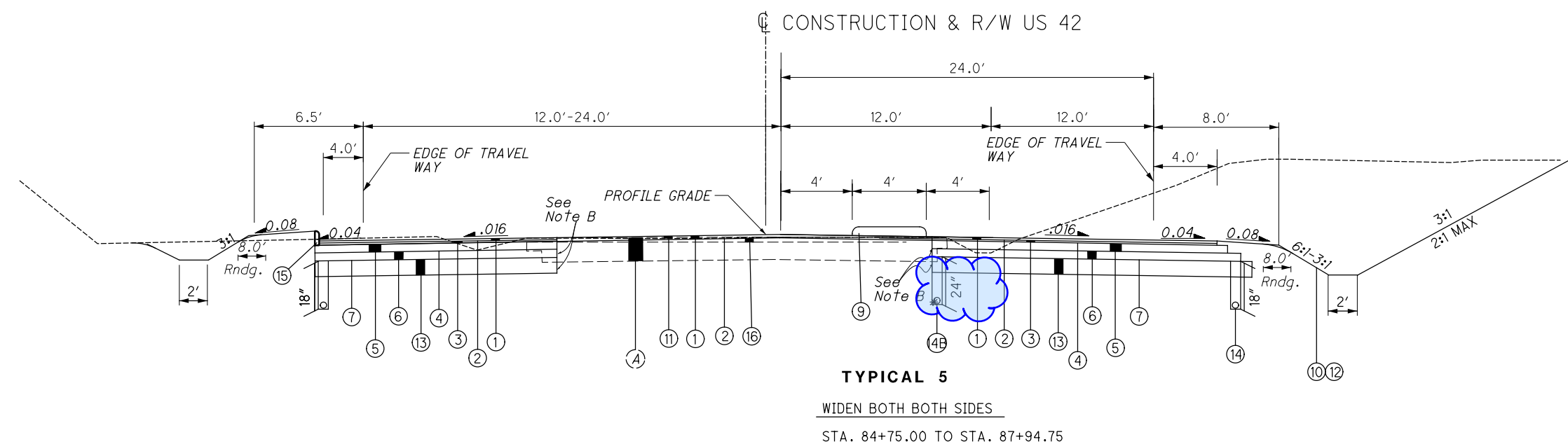
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TYPICAL 6
 WIDEN RIGHT
 STA. 87+94.75 TO STA. 92+23.95

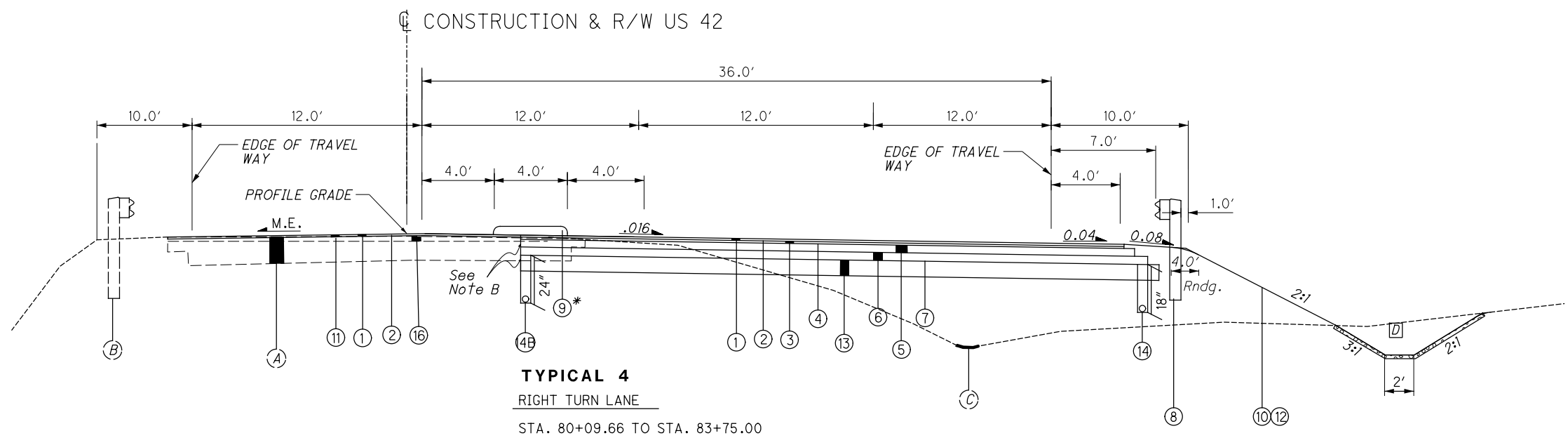


VEGETATED BIOFILTER
 STA. 90+50 TO STA. 96+65



TYPICAL 5
 WIDEN BOTH BOTH SIDES
 STA. 84+75.00 TO STA. 87+94.75

FOR PAVEMENT LEGEND SEE SHEET 3
 FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 3

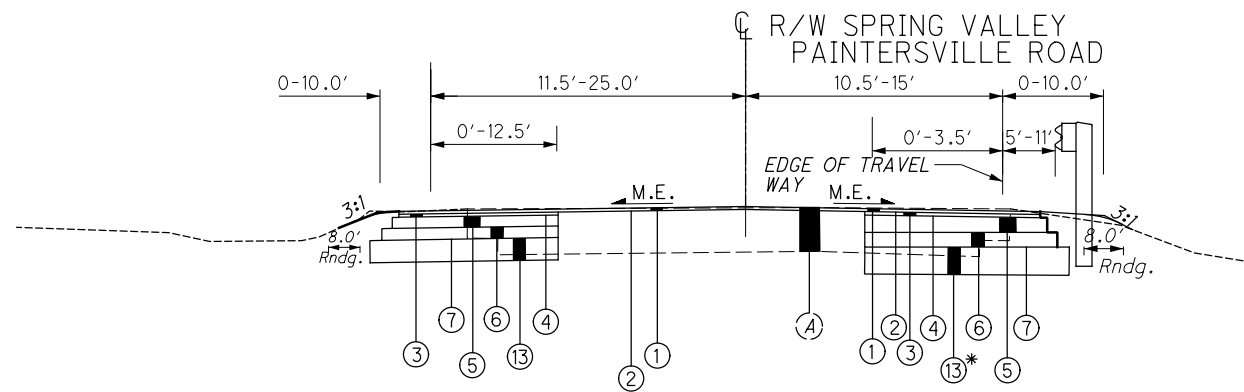


TYPICAL 4
 RIGHT TURN LANE
 STA. 80+09.66 TO STA. 83+75.00

TYPICAL SECTIONS

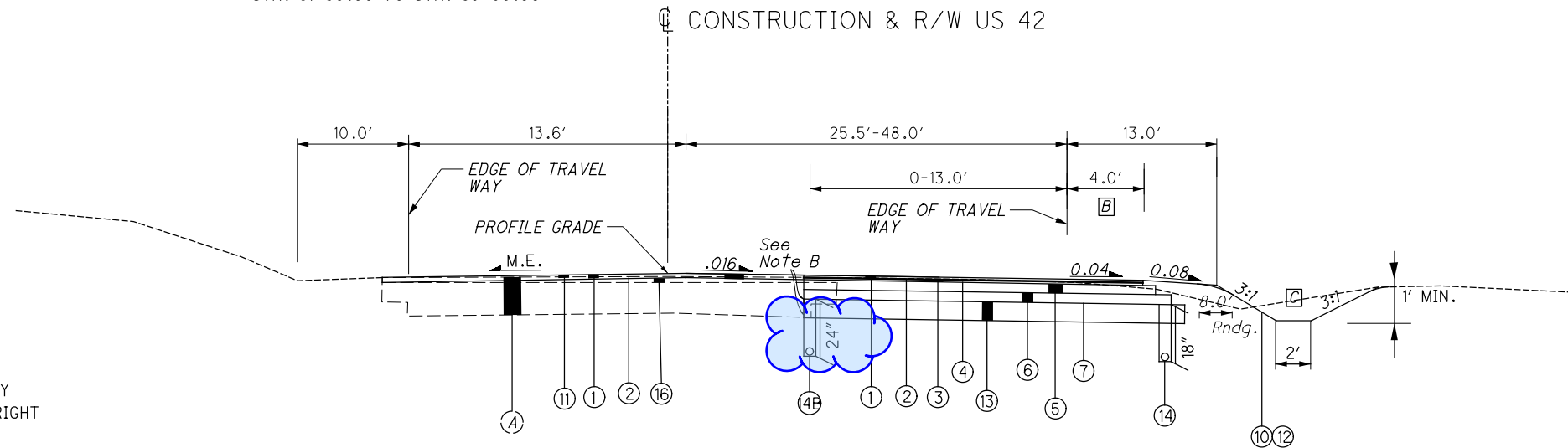
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TYPICAL 9

SPRING VALLEY PAINTERSVILLE ROAD
STA. 61+90.00 TO STA. 65+50.00



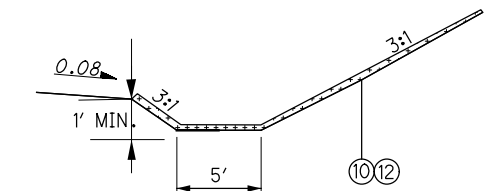
TYPICAL 8

CURVE SECTION
STA. 95+34.61 TO STA. 99+96.60

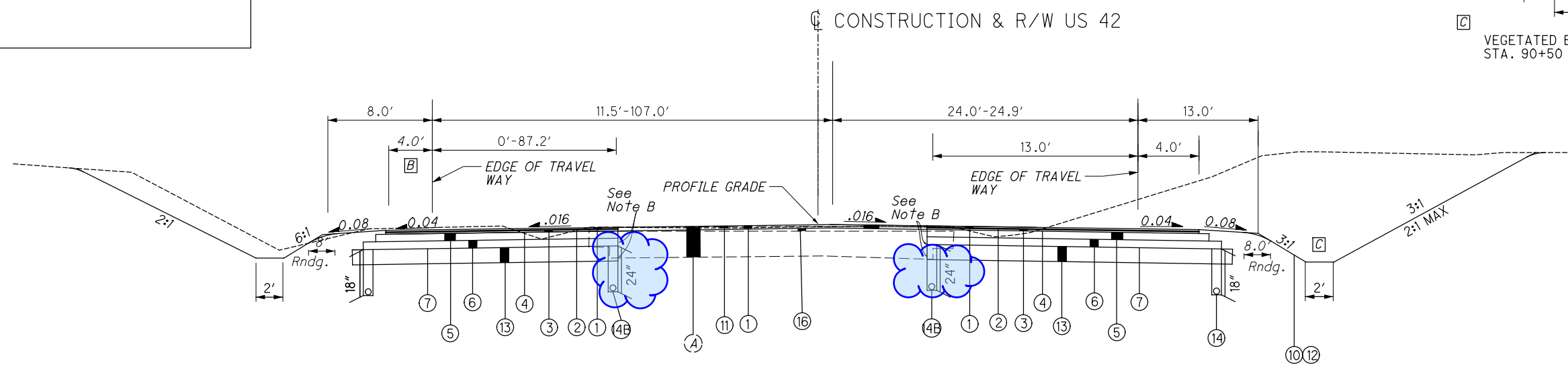
NOTES

* CEMENT STABILIZATION WILL NOT BE NECESSARY ON SPRING VALLEY ROAD STA. 61+90 TO 63+00 RIGHT (SOUTH WEST RADIUS)

FOR PAVEMENT LEGEND SEE SHEET 3
FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 3



VEGETATED BIOFILTER
STA. 90+50 TO STA. 96+65



TYPICAL 7

NORTH LOON PAVEMENT
STA. 92+23.95 TO STA. 95+34.61

TYPICAL SECTIONS

GRE-42-3.15

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

DAYTON POWER & LIGHT COMPANY
1900 DRYDEN ROAD
DAYTON, OHIO 45439
937-331-4521 (WILLIAM GOURLEY)
WILLIAM.GOURLEY@AES.COM

VECTREN ENERGY
6500 CLYO ROAD
CENTERVILLE, OHIO 45459
937-312-2539 (JEFF PIKE)
JEFFREY.T.PIKE@CENTERPOINTENERGY.COM
(SEND PLANS TO SHARED EMAIL BOX:
PUBLICPROJECT@CENTERPOINTENERGY.COM

AT&T OHIO
7201 FAR HILLS AVENUE
DAYTON, OHIO 45459
937-296-3588 (HOWARD LAUDERMILK)
HL1596@ATT.COM

CHARTER COMMUNICATIONS/SPECTRUM
3691 TURNER ROAD
DAYTON, OHIO 45415
937-425-8854 (CHRIS BOOKSH)
CHRISTOPHER.BOOKSH@CHARTER.COM

GREENE COUNTY WATER & SEWER
667 DAYTON-XENIA ROAD
XENIA, OHIO 45385
937-562-7462 (MARISSA RAGLIN)
MRAGLIN@CO.GREENE.OH.US

GREENE COUNTY WATER & SEWER
667 DAYTON-XENIA ROAD
XENIA, OHIO 45385
937-562-7462 (KEVIN MOYER)
KMOYER@CO.GREENE.OH.US

GREENE COUNTY ENGINEER'S OFFICE
615 DAYTON-XENIA ROAD
XENIA, OHIO 45385
937-562-7500 (STEPHANIE ANN GOFF)
SGOFF@CO.GREENE.OH.US

VILLAGE OF SPRING VALLEY/SPRING VALLEY VILLAGE COUNCIL
7 W. MAIN STREET
SPRING VALLEY, OHIO 45370
937-367-4368 (BRETT BONECUTTER, ADMINSTRATOR)
BBONESV@GMAIL.COM

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET __2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:
VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12A

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD 83
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO SOUTH ZONE (SPC 3402)
THE COMBINED SCALE FACTOR IS 1.0

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENTS IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWING RM-1.1 AND AT THE LOCATIONS SHOWN BELOW.

STA. 83+00 26' L
STA. 83+00 44' R
STA. 89+00 24' L
STA 89+00 33' R

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING ----3 HOUR.

ITEM 878 -INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS

THIS ITEM SHALL INCLUDE GRE-US42 LOCATIONS. A LUMP SUM QUANTITIY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ALL WORK AS DESCRIBED IN SUPPLEMENTAL SPECIFICATION 878.

ITEM 878 INSPECTION AND TESTING OF UNBOUND MATERIALS LUMP

ITEM 621 - RAISED PAVEMENT MARKERS (RPM)

INSTALL RAISED PAVEMENT MARKERS ACCORDING TO SCD TC-65.10 AND TC-65.11.

SIGN, MISC: REMOVAL OF SOLAR POWERED LED SIGNS FOR SALVAGE, EACH

632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN
REQUIRED UNDER THE PROVISIONS OF 203.05. TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC., SHALL BE REMOVED IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. REMOVED ITEMS SHALL BE REUSED AS PART OF A NEW INSTALLATION ON THE PROJECT OR STORED ON THE PROJECT FOR SALVAGE BY (DO8 TRAFFIC DEPARTMENT) IN ACCORDANCE WITH THE LISTING GIVEN HEREIN.

REMOVE SUPOORT FOUNDATIONS TO AT LEAST 2 FEET BELOW SUBGRADE OR FINISHED GROUNDLINE.

NO ITEMS WILL BE REUSED

ITEMS TO BE STORED INCLUDE SIGNAL HEADS AND FLASHER CABINET

ITEMS TO BE STORED SHALL BE DELIVERED TO THE NEAREST ODOT FACILITY WHOSE ADDRESS IS LISTED BELOW:

ODOT DISTRICT 08, ATTN: JIM JUDD
513-933-6692

505 SOUTH STATE ROUTE 741
LEBANON, OHIO 45036

IN THE EVENT THE ITEMS STORED ON THE PROJECT FOR SALVAGE BY THE LOCAL AGENCY ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

BAT HABITAT REMOVAL PLAN

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. THE CONTRACTOR SHALL NOT REMOVE TREES UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THE CONTRACTOR SHALL DEMARCATATE CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, TOPSOIL	170 CU. YD.
659, SEEDING AND MULCHING	1533 SQ. YD.
659, COMMERCIAL FERTILIZER	.21 TON
659, LIME	.32 ACRES
659, WATER	8.3 M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05. QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS SHOWN ON THE PLANS.

203, EMBANKMENT.....	1936 CY
203, EXCAVATION.....	1760 CY

EMBANKMENT OVER EXISTING DITCHES

WHERE NEW EMBANKMENT IS TO BE PLACED OVER EXISTING DITCHES, ALL SOFT AND WET SOILS SHALL BE REMOVED AS SHOWN ON THE PLAN DETAIL AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS SHOWN ON THE PLANS.

203, EMBANKMENT.....	428 CY
203, EXCAVATION.....	389 CY

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CALCULATED
ABH
CHECKED
JDO

GENERAL NOTES

GRE - 42 - 3.15

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTER(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. EACH VBF WILL INCLUDE ITEM 670, DITCH EROSION PROTECTION. THE DITCH FOR EACH VEGETATED BIOFILTER SHALL BE TRAPEZOIDAL, AS SHOWN IN THE PLANS.

VEGETATED BIOFILTER
STA. 92+50 TO STA. 96+65

ITEM 659 TOPSOIL = 33.6 CY
ITEM 670 DITCH EROSION PROTECTION = 404 SY

FRICKE AIRPORT
OWNER: DONALD E. FRICKE
2408 US RT 42
SPRING VALLEY, OH 45370
PHONE 937-862-4560
MANAGER: DONALD E. FRICKE
2408 US RT 42
SPRING VALLEY, OH 45370
PHONE 937-862-4560

POTENTIALLY IMPACTED AIRPORTS	AIRPORT ELEVATION "A"	PROJECT ELEVATION "B" + 25 FEET (CONTRLLING CRITERIA)	DISTANCE BETWEEN AIRPORT & PROJECT "C"	NOTIFICATION SLOPE X:1	USE TYPE	AMOUNT OF CLEARANCE ABOVE NOTIFICATION SLOPE "Z"
FRICKE AIRPORT	905 FT	906 + 40 = 910 FT	1,854 FT	50:1	PRIVATE	-1.92 FT

ASBESTOS NOTIFICATION

UTILITY REVIEWS FOR THIS LOCATION INDICATE THE PRESENCE OF 48" WATER LINE BURIED AT AN ASSUMED DEPTH OF 3' BELOW THE DITCH LINE. THE CONTRACTOR SHALL COMPLETE THE 10 DAY OEPA NOTIFICATION OR DEMOLOTION FORM AND SUBMIT IT ELECTRONICALLY TO <https://epa.ohio.gov/dapc/atw/asbestos> AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE: 1) THE CONTRACTORS NAME AND ADDRESS, 2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED.

DUE CARE WILL BE TAKEN TO NOT IMPACT THIS WATERLINE. SHOULD THE WATERLINE BECOME EXPOSED OR IMPACTED THE CONTRACTOR SHALL STOP WORK AND CONTACT SUZANNE ENDERS AT SUZANNE.ENDERS@DOT.OHIO.GOV (513-933-6286), AS WELL AS THE APPROPRIATE OEPA CONTACT LISTED AT THE ABOVE WEB ADDRESS.

SHOULD CONSTRUCTION REQUIRE THE REMOVAL AND DISPOSAL OF THIS MATERIAL, THE CONTRACTOR SHALL ENSURE THAT ASBESTOS CONTAINING MATERIALS DO NOT BECOME FRIABLE (BROKEN-UP OR DISPERSED) AND THAT NO VISIBLE FIBER EMISSIONS WILL OCCUR. ADDITIONALLY, THE REMOVAL AND DISPOSAL OF THE ASBESTOS CONTAINING MATERIAL SHALL COMPLY WITH CHAPTER 3745-20 OF THE OHIO ADMINISTRATIVE CODE, THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AND APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS (29 CFR 1926.1101).

BASIS FOR PAYMENT THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

INSTREAM WORK RESTRICTION

THE CONTRACTOR SHALL NOT PERFORM ANY WORK WITHIN THE JURISDICTIONAL BOUNDARIES OF ANY WATERWAY, INCLUDING WETLANDS, UNTIL ODOT OBTAINS THE NECESSARY WATERWAY PERMIT. THIS INCLUDES THE PLACEMENT OF ANY TEMPORARY OR PERMANENT FILLS.

CONCRETE SLOPE PROTECTION REMOVED, AS PER PLAN

EXISTING PAVED GUTTER SHALL BE REMOVED ACCORDING TO THE PLANS. AND EXCAVATED THEN BACKFILLED AS SHOWN ON THE CROSS SECTIONS.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

EXISTING SUBSURFACE DRAINAGE

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS OR AGGREGATE DRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

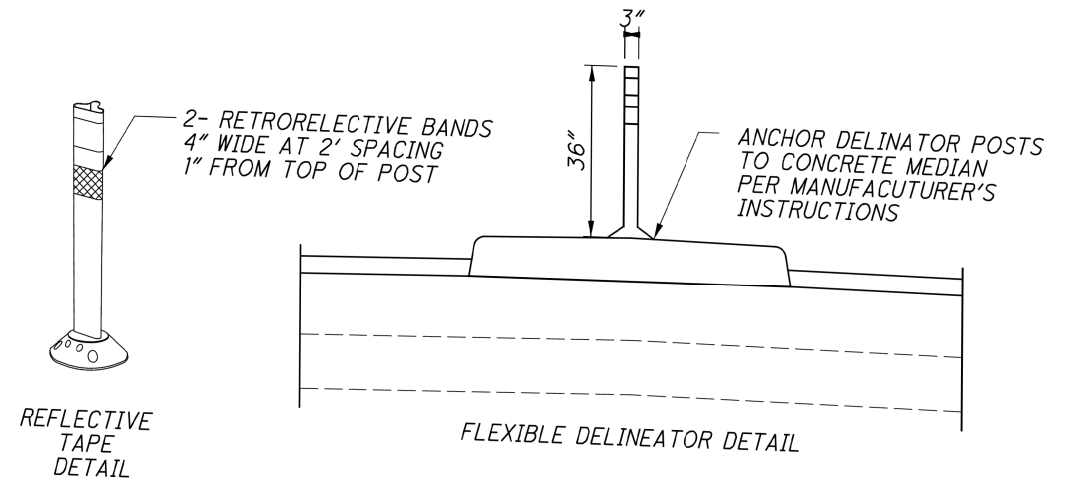
UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

- 601, TIED CONCRETE BLOCK MAT, TYPE 1 7.1 SQ. YD.
- 611 6" CONDUIT, TYPE F 197 FT.
- 605 6" SHALLOW PIPE UNDERDRAINS 3086 FT.
- 605 6" BASE PIPE UNDERDRAINS 2757 FT.

THE FOLLOWING ESTIMATED QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

- TEE-----15 EA
- 45° WYE-----6 EA
- 45° BEND-----6 EA



ITEM 620 DELINEATOR, MISC. SURFACE MOUNTED-YELLOW

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GENERAL NOTES

GRE - 42 - 3.15

7
73

PERMITTED LANE CLOSURE TIMES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PERMITTED LANE CLOSURE NOTE. THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 8 WORK ZONE TRAFFIC CONTROL MANAGER. SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED IN THE LANE. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED. PERMITTED LANE CLOSURES SHALL ONLY BE ALLOWED DURING THE TIMES SPECIFIED IN THE UNAUTHORIZED LANE USE TABLE INCLUDED IN THESE PLANS. NO LANE OR SHOULDER CLOSURE SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

UNAUTHORIZED LANE USE TABLE			
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	PERMITTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
US 42: MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION	4 PM to 6 PM	1 MINUTE	\$65
US 42: MAINTAIN ONE LANE OF TWO-WAY TRAFFIC USING A FLAGGER.	6 PM to 4 PM	1 MINUTE PERIOD	\$65
SPRING VALLEY PAINTERSVILLE ROAD: MAINTAIN ONE LANE OF TWO-WAY TRAFFIC USING A FLAGGER.	ALL TIMES	1 MINUTE PERIOD	\$65

QUANTITIES

PORTABLE BARRIER SHALL BE PLACED TO PROTECT THE WIDENING SECTIONS OF THE WORK ZONE IN PHASE 1 AND PHASE 2.

THE EXISTING PAVED SHOULDER ON THE WEST SIDE OF US 42 SHALL BE REMOVED AND REPLACED WITH PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B FROM STA. 71+85 TO STA. 98+00. EXISTING RUMBLE STRIPES SHALL BE REMOVED IN ITS ENTIRETY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

- ITEM 614 - WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) 8 EA
- ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B 1165 SY
- ITEM 622 - PORTABLE BARRIER, 32" 4150 LF

SEQUENCE OF CONSTRUCTION

PHASE 1

CONSTRUCT TEMPORARY PAVEMENT ALONG EAST SIDE OF US 42 BY MAINTAINING ONE LANE OF TWO-WAY TRAFFIC VIA FLAGGING OPERATIONS PER MT-97.10. MAINTAIN TRAFFIC FOR THE NORTH-SOUTH MOVEMENT ON US 42 USING TWO-WAY TRAFFIC ON THE EXISTING AND TEMPORARY PAVEMENT. PLACE TEMPORARY CONCRETE BARRIER TO SEPARATE THE CONSTRUCTION ZONE FROM THE TRAFFIC BEING MAINTAINED. CONTRACTOR SHALL MAINTAIN ALL ACCESS AT ALL TIMES. LANES SHALL BE A MINIMUM OF 10 FEET WIDTH WITH A 2 FOOT PAVED SHOULDER ON EACH SIDE.

PHASE 2

CONSTRUCT ALL WORK ON WEST SIDE OF US 42. MAINTAIN TRAFFIC FOR THE NORTH-SOUTH MOVEMENT ON US 42 USING TWO-WAY TRAFFIC ON THE EXISTING, PROPOSED AND TEMPORARY PAVEMENT. PLACE TEMPORARY CONCRETE BARRIER TO SEPARATE THE CONSTRUCTION ZONE FROM THE TRAFFIC BEING MAINTAINED. CONTRACTOR SHALL MAINTAIN ALL ACCESS AT ALL TIMES. LANES SHALL BE A MINIMUM OF 10 FEET WIDTH WITH A 2 FOOT PAVED SHOULDER ON EACH SIDE. PHASE 2 CAN BE COMPLETED BEFORE PHASE 1. TEMPORARY PAVEMENT TO BE PLACED AS NEEDED ON THE EAST SIDE OF US 42 IF PHASE 2 TO BE COMPLETED BEFORE PHASE 1.

PHASE 3

CONTRACTOR SHALL MILL/PLANE THE ENTIRE LENGTH OF THE PROJECT.

CONTRACTOR SHALL COMPLETE ALL MEDIAN WORK AND PAVING OF SURFACE COURSE.

CONTRACTOR SHALL COMPLETE ALL SIGNING AND MARKING WORK.

TRAFFIC SHALL BE MAINTAINED ACCORDING TO SCD MT-97.10 AND MT-97.12.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

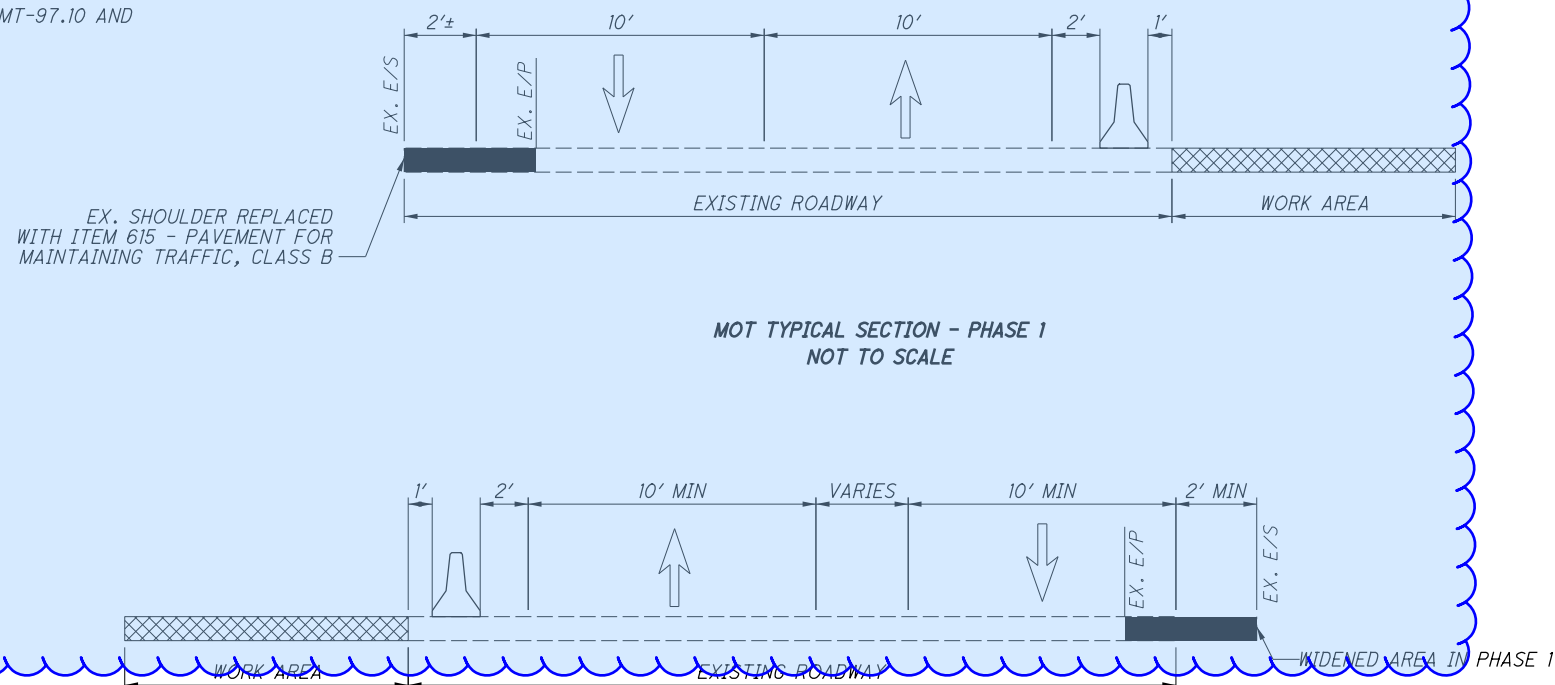
BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY) 90 EACH

ITEM 614, OBJECT MARKER, ONE-WAY 90 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.



**MOT TYPICAL SECTION - PHASE 2
NOT TO SCALE**

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MAINTENANCE OF TRAFFIC GENERAL NOTES

GRE-42-03.16

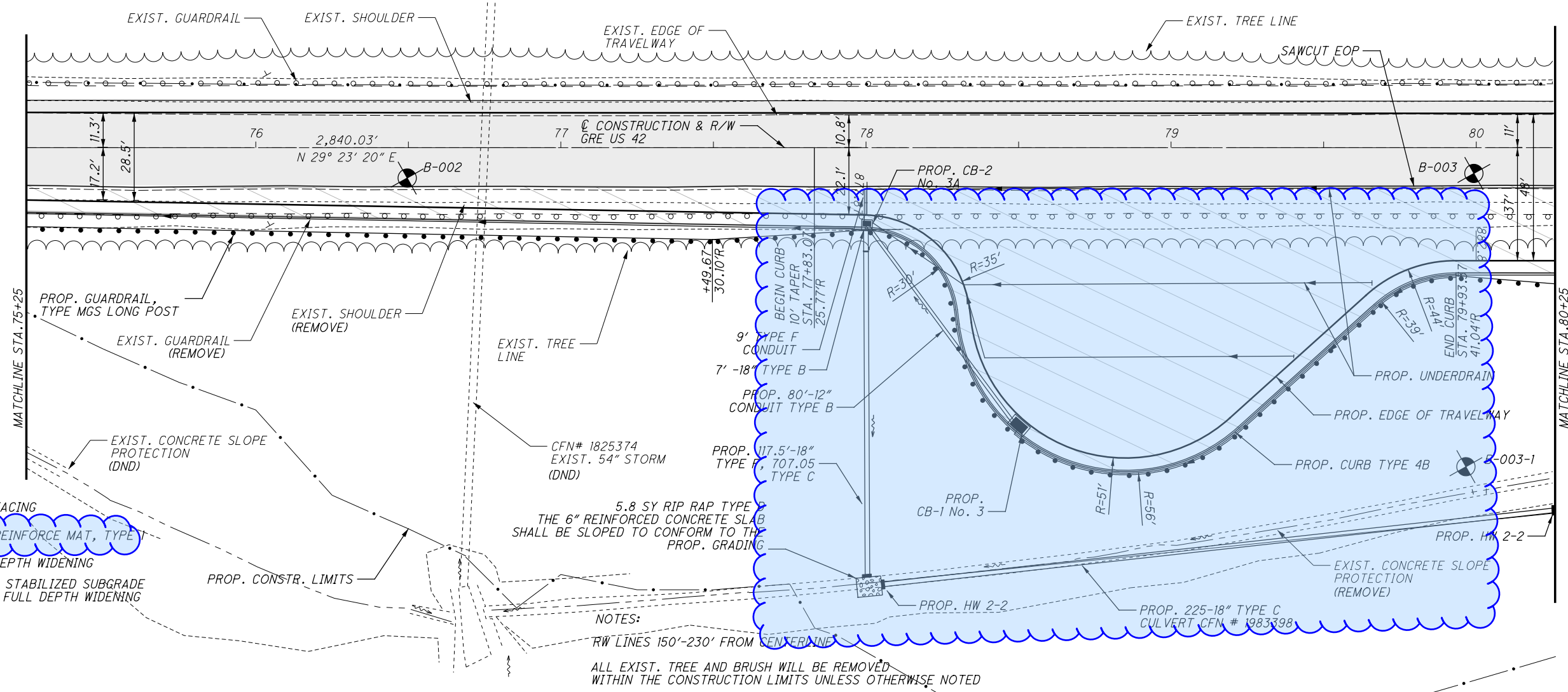
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SHEET NUM.										PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
2	4	6	8	14	15	59	63	65	01/SAF/O T	EXT	TOTAL					
		LS							LS	201	11000	LS			ROADWAY	
									1,942	202	23000	1,942	SY	CLEARING AND GRUBBING		
									1,325	202	38000	1,325	FT	PAVEMENT REMOVED		
									1	202	20010	1	EACH	GUARDRAIL REMOVED		
									222	202	32801	222	SY	ROADWAY REMOVED		
						20,453			20,453	203	10000	20,453	CY	CONCRETE SLOPE PROTECTION REMOVED, AS PER PLAN	7	
														EXCAVATION		
						25,131			25,131	203	20000	25,131	CY	EMBANKMENT		
									1,300	204	13000	1,300	CY	EXCAVATION OF SUBGRADE		
	3								3	204	45000	3	HOUR	PROOF ROLLING		
									207	206	10500	207	TON	CEMENT		
									8,000	206	11000	8,000	SY	CURING COAT		
									8,000	206	15010	8,000	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP		
									LS	206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		
				2					2	606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T		
									1,425	606	15100	1,425	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS		
									89	609	70000	89	SY	4" CONCRETE MEDIAN		
	4								4	623	40500	4	EACH	REFERENCE MONUMENT, TYPE A	6	
									LS	878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS		
									1	202	98600	1	EACH	ABANDON MISC.; REMOVE ABANDONED GAS LINE		
														EROSION CONTROL		
		216							216	659	00300	216	CY	TOPSOIL		
		1,533							1,533	659	10000	1,533	SY	SEEDING AND MULCHING		
		0.21							0.21	659	20000	0.21	TON	COMMERCIAL FERTILIZER		
		0.32							0.32	659	31000	0.32	ACRE	LIME		
		8							8	659	35000	8	MGAL	WATER		
					10.8				10.8	601	11000	10.8	SY	RIPRAP, TYPE D		
		555							555	670	00700	555	SY	DITCH EROSION PROTECTION		
									48,300	832	30000	48,300	EACH	EROSION CONTROL		
									LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN		
									LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS		
									LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
					240				240	836	10000	240	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1		
														DRAINAGE		
									LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING		
				0.62	0.91				1.53	602	20000	1.53	CY	CONCRETE MASONRY		
		2,757							2,757	605	98000	2,757	FT	UNDERDRAINS, MISC.; BASE PIPE	7	
		3,086							3,086	605	11100	3,086	FT	6" SHALLOW PIPE UNDERDRAINS	7	
		197							197	611	00510	197	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	7	
					11				11	611	13200	11	FT	30" CONDUIT, TYPE A, 707.01 (AL COATED), 707.04		
									7.1	601	21050	7.1	SY	TIED CONCRETE BLOCK MAT, TYPE 1	7	
					1				1	611	98840	1	EACH	INLET, NO. 2-A-6		
									3	611	98180	3	EACH	CATCH BASIN, NO. 3A		
									1	611	98230	1	EACH	CATCH BASIN, NO. 4		
									1	611	98150	1	EACH	CATCH BASIN, NO. 3		
									358	611	04400	358	FT	12" CONDUIT, TYPE B		
									7	611	07400	7	FT	18" CONDUIT, TYPE B		
									298	611	07600	298	FT	18" CONDUIT, TYPE C		
									118	611	08200	118	FT	18" CONDUIT, TYPE F, 707.05 TYPE C		
														PAVEMENT		
									9,419	254	01000	9,419	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25"		
									3,462	255	20000	3,462	FT	FULL DEPTH PAVEMENT SAWING		
									1,444	301	46000	1,444	CY	ASPHALT CONCRETE BASE, PG64-22		
									1,444	304	20000	1,444	CY	AGGREGATE BASE		
									1,222	407	20000	1,222	GAL	NON-TRACKING TACK COAT		
									628	441	50000	628	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22		
									421	441	50300	421	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)		
									50	441	50200	50	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)		

GENERAL SUMMARY

GRE - 42 - 3.15

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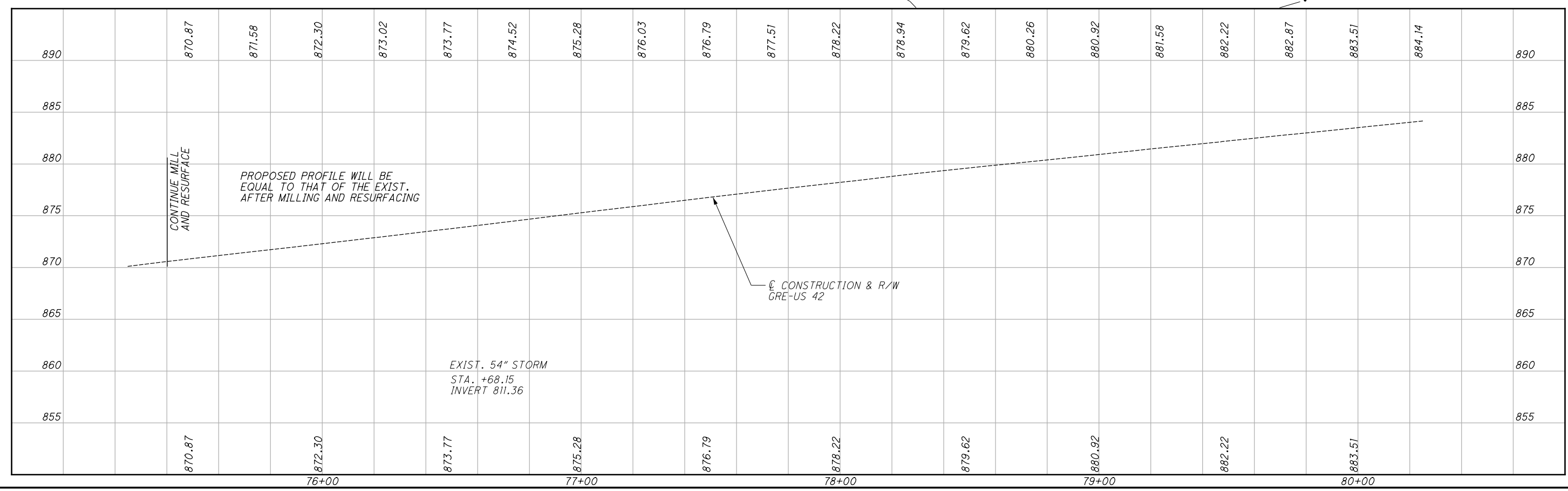


RESURFACING

- TURF REINFORCE MAT, TYPE 1
- FULL DEPTH WIDENING
- CEMENT STABILIZED SUBGRADE AT ALL FULL DEPTH WIDENING

5.8 SY RIP RAP TYPE 2
 THE 6" REINFORCED CONCRETE SLAB
 SHALL BE SLOPED TO CONFORM TO THE
 PROP. GRADING

NOTES:
 RW LINES 150'-230' FROM CENTERLINE
 ALL EXIST. TREE AND BRUSH WILL BE REMOVED
 WITHIN THE CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED

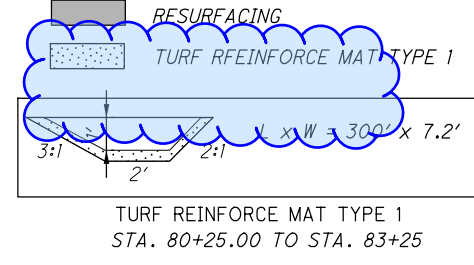
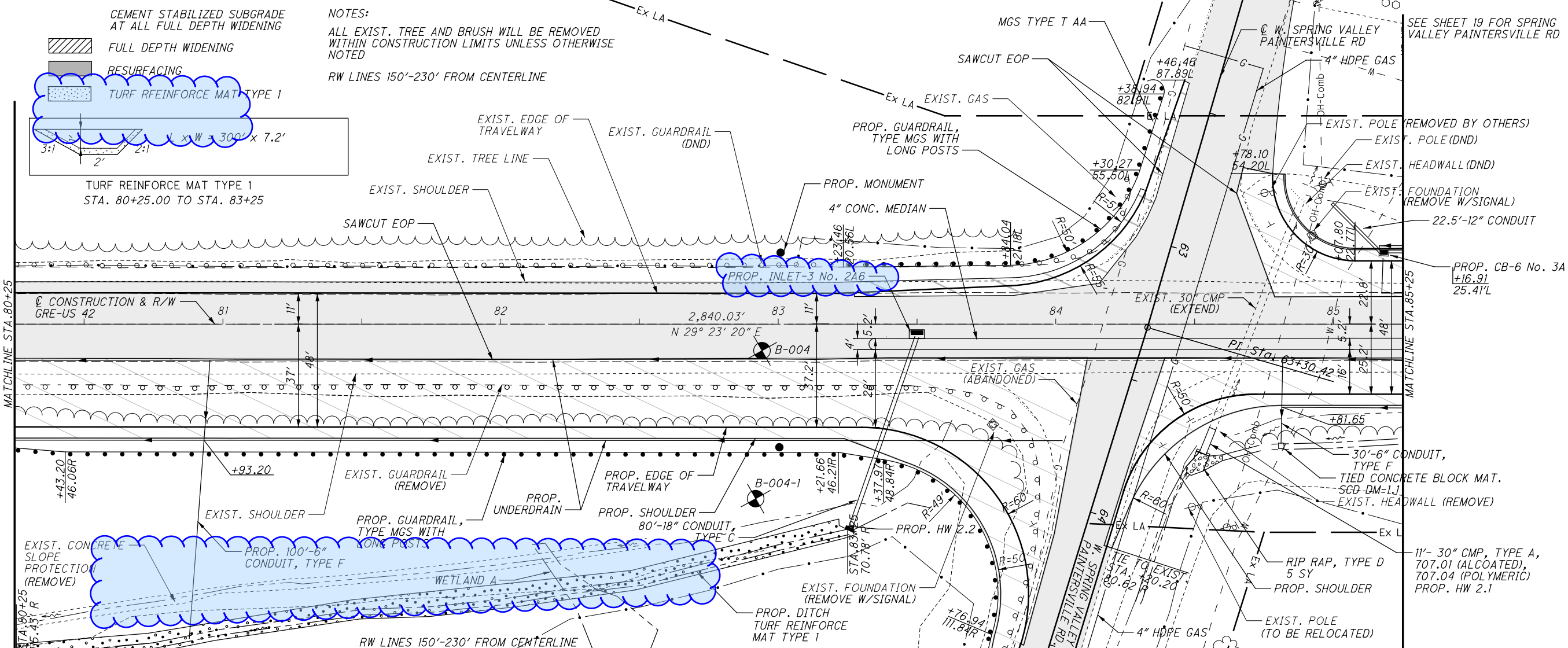


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PLAN AND PROFILE
STA. 75+25 TO STA. 80+25

GRE-42-3.15

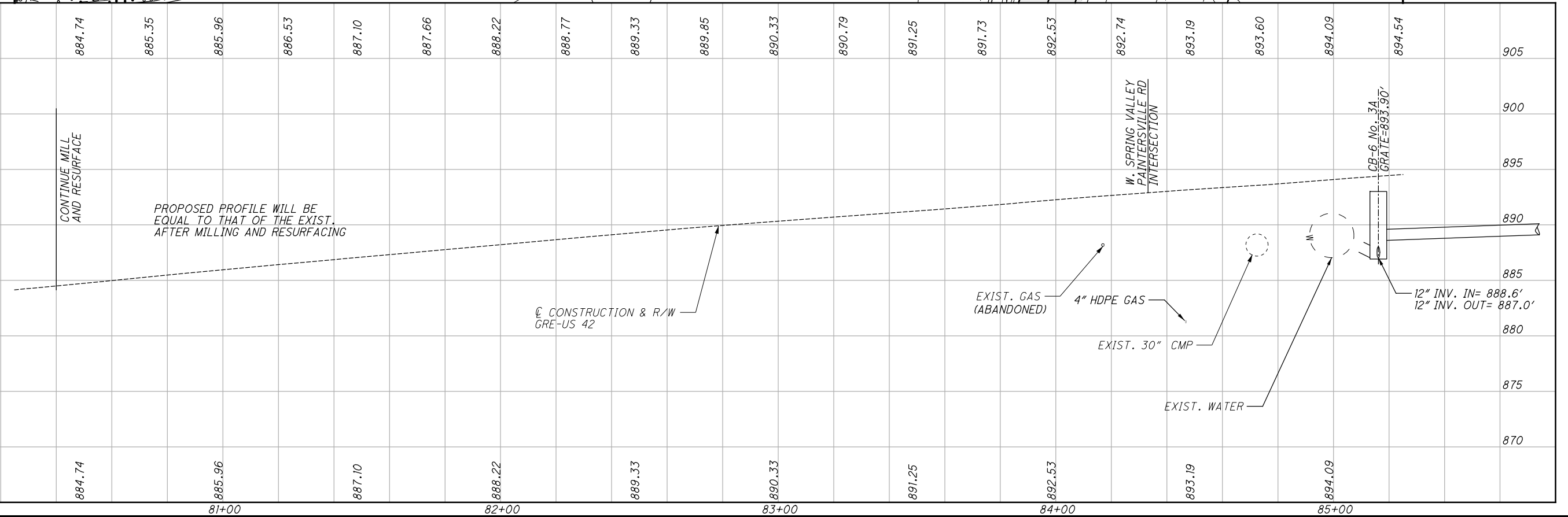
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NOTES:
 ALL EXIST. TREE AND BRUSH WILL BE REMOVED WITHIN CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED
 RW LINES 150'-230' FROM CENTERLINE

MATCHLINE STA. 80+25

SEE SHEET 19 FOR SPRING VALLEY PAINTERSVILLE RD
 EXIST. POLE (REMOVED BY OTHERS)
 EXIST. POLE (DND)
 EXIST. HEADWALL (DND)
 EXIST. FOUNDATION (REMOVE W/SIGNAL)
 22.5'-12" CONDUIT
 PROP. CB-6 No. 3A
 +16.91
 25.41'L



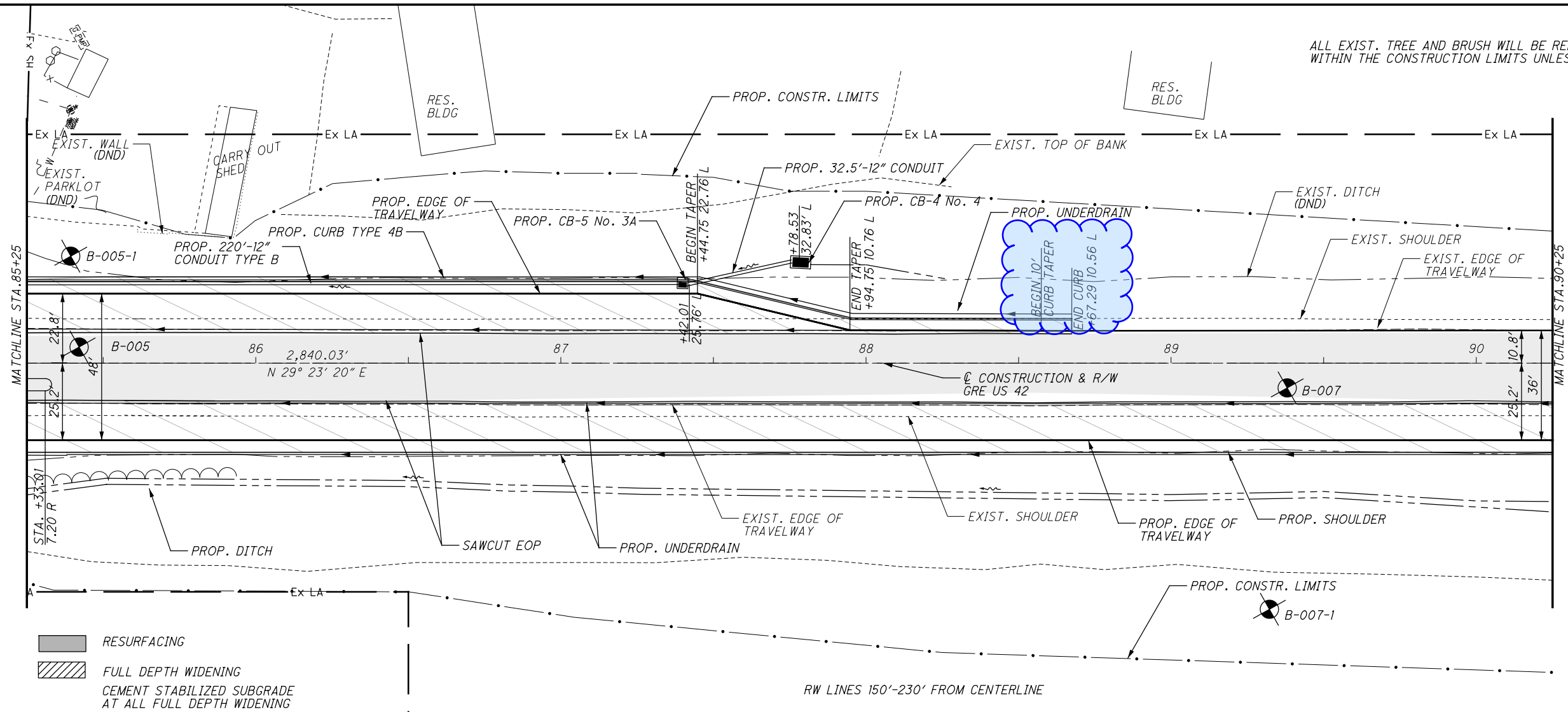
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PLAN AND PROFILE
 STA. 80+25 TO STA. 85+25

GRE-42-3.15

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 73

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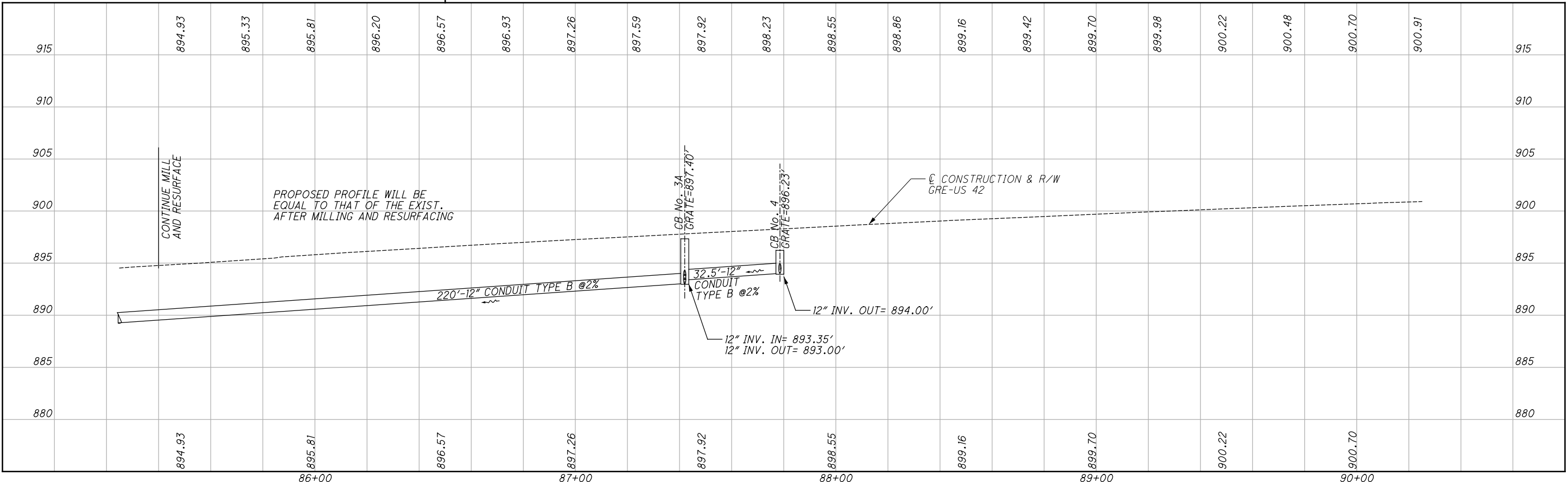


- RESURFACING
- FULL DEPTH WIDENING
- CEMENT STABILIZED SUBGRADE AT ALL FULL DEPTH WIDENING

ALL EXIST. TREE AND BRUSH WILL BE REMOVED WITHIN THE CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED

CALCULATED ABH
CHECKED JDO

0 20 40
10
HORIZONTAL SCALE IN FEET



PLAN AND PROFILE
STA. 85+25 TO STA. 90+25

GRE-42-3.15

END WORK:
STA. 61+90.00

SEE SHEET 15 FOR GRE US 42

END WORK:
STA. 65+50.00

CALCULATED
ABH
CHECKED
JDO

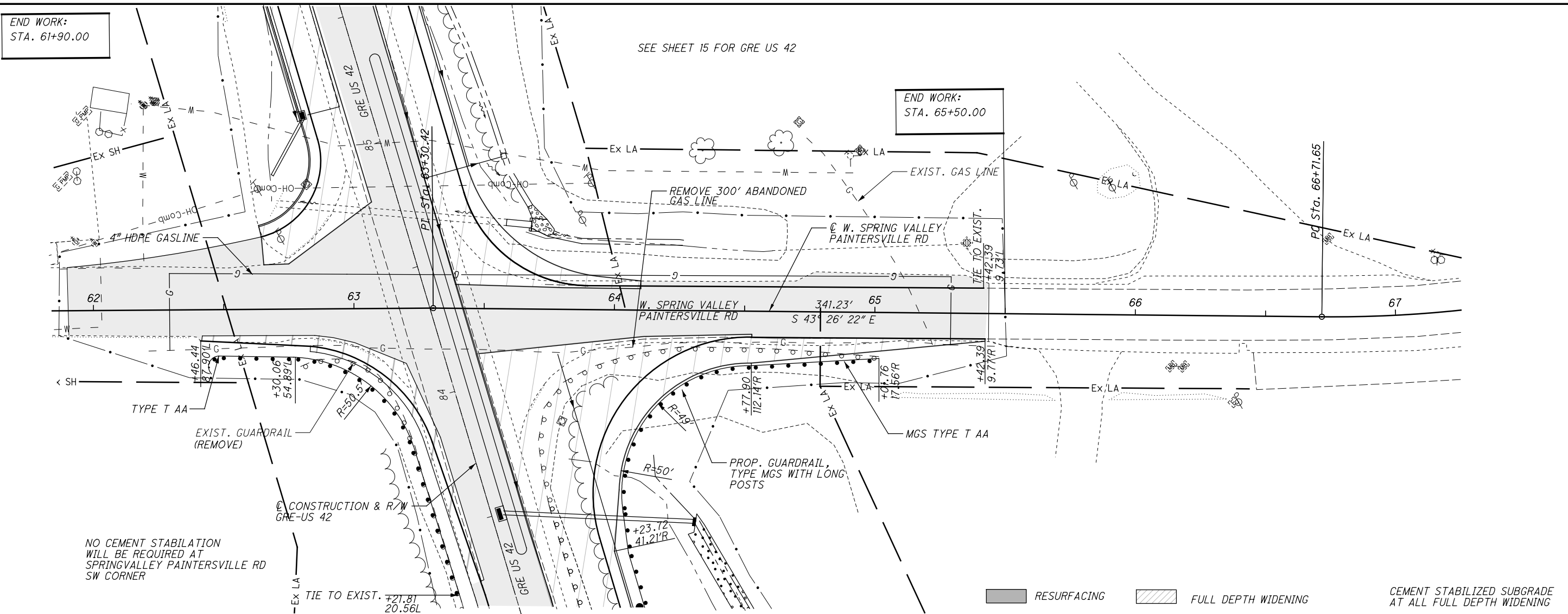
0 20 40
HORIZONTAL
SCALE IN FEET

**SPRING VALLEY RD
PAINTERSVILLE RD
PLAN AND PROFILE
STA. 62+25.00 TO STA 65+50.00**

GRE-42-3.15

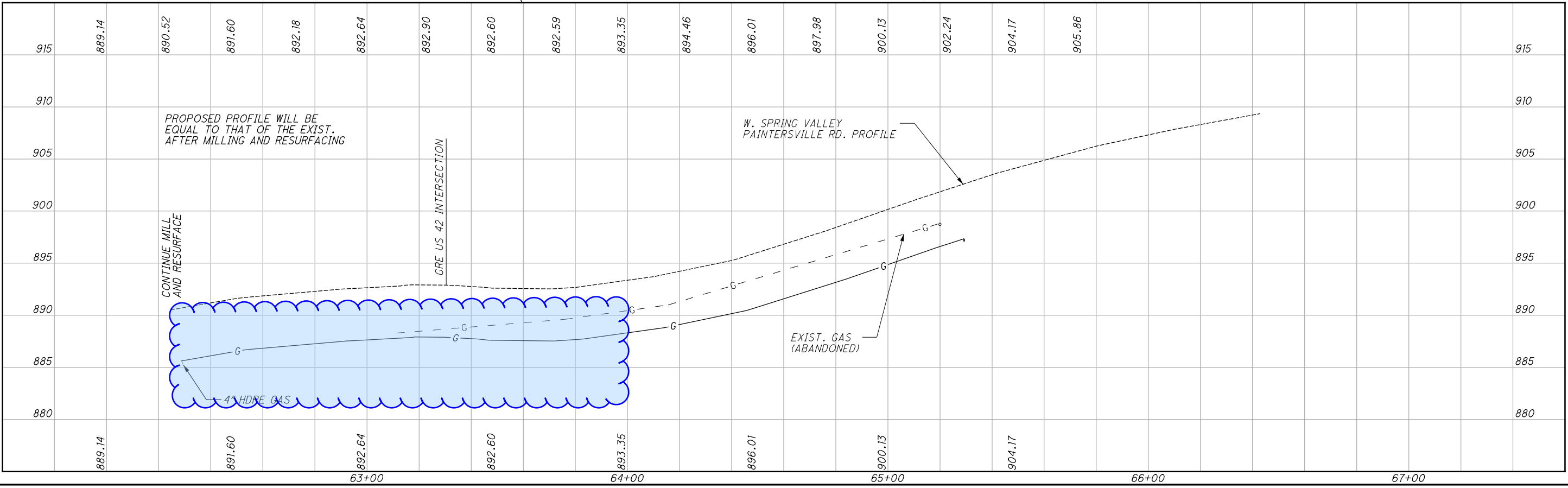
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NO CEMENT STABILIZATION
WILL BE REQUIRED AT
SPRINGVALLEY PAINTERSVILLE RD
SW CORNER

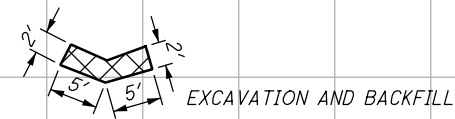
RESURFACING FULL DEPTH WIDENING CEMENT STABILIZED SUBGRADE AT ALL FULL DEPTH WIDENING



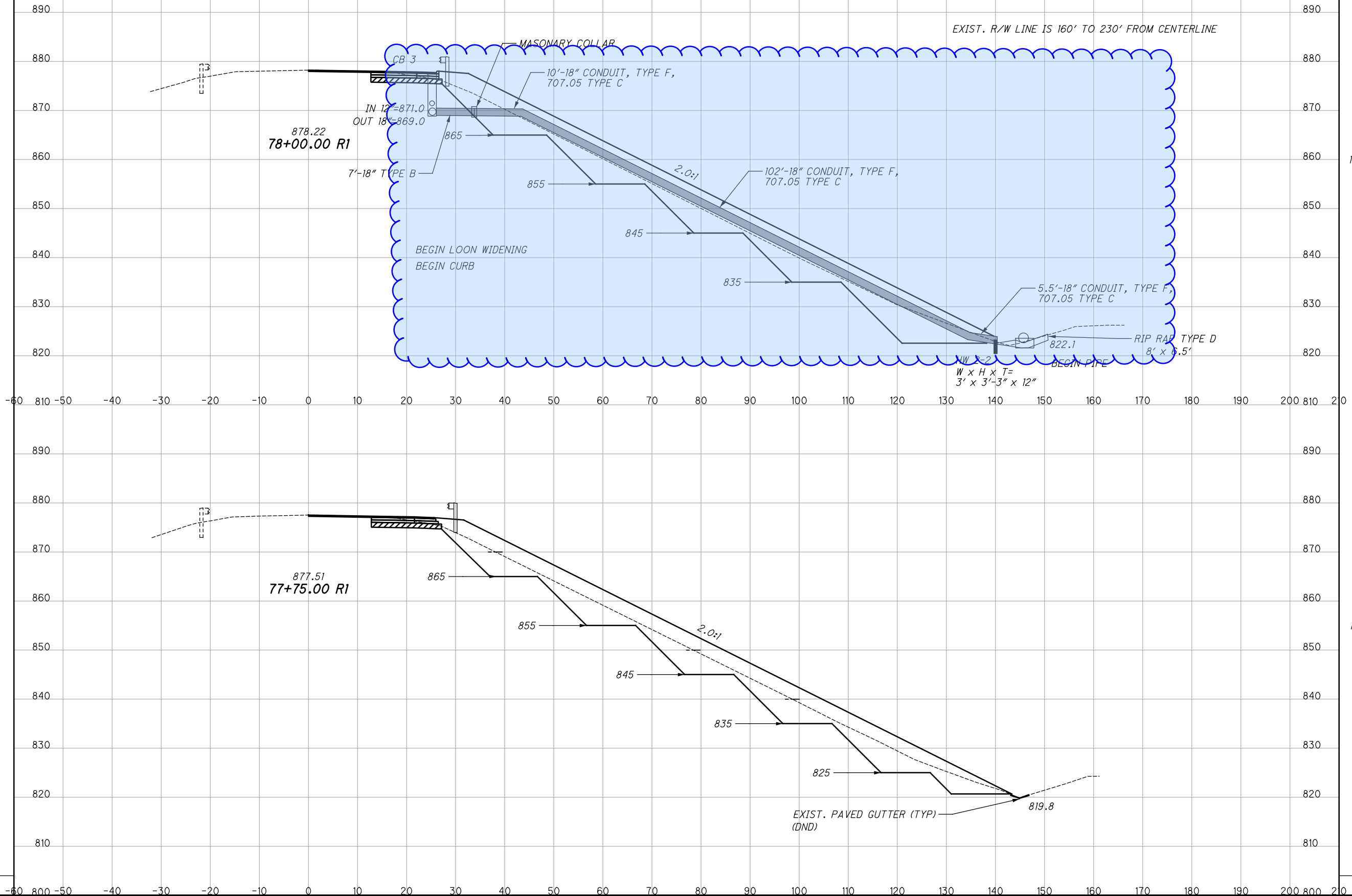
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SEEDING
END SO.
WIDTH YDS.

END AREA
CUT FILL
VOLUME
CUT FILL
CALCULATED
ABH
CHECKED
JDO



ITEM 206 - CEMENT STABILIZED
SUBGRADE, 12" DEEP



EXIST. R/W LINE IS 160' TO 230' FROM CENTERLINE

878.22
78+00.00 R1

877.51
77+75.00 R1

12 434

11 354

11 331

11 295

CROSS SECTIONS - U.S. 42
STA. 77+75.00 R1 TO STA. 78+00.00 R1

GRE-42-3.15

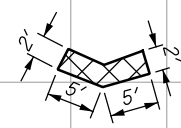
30
73

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SEEDING

END WIDTH	SO. YDS.

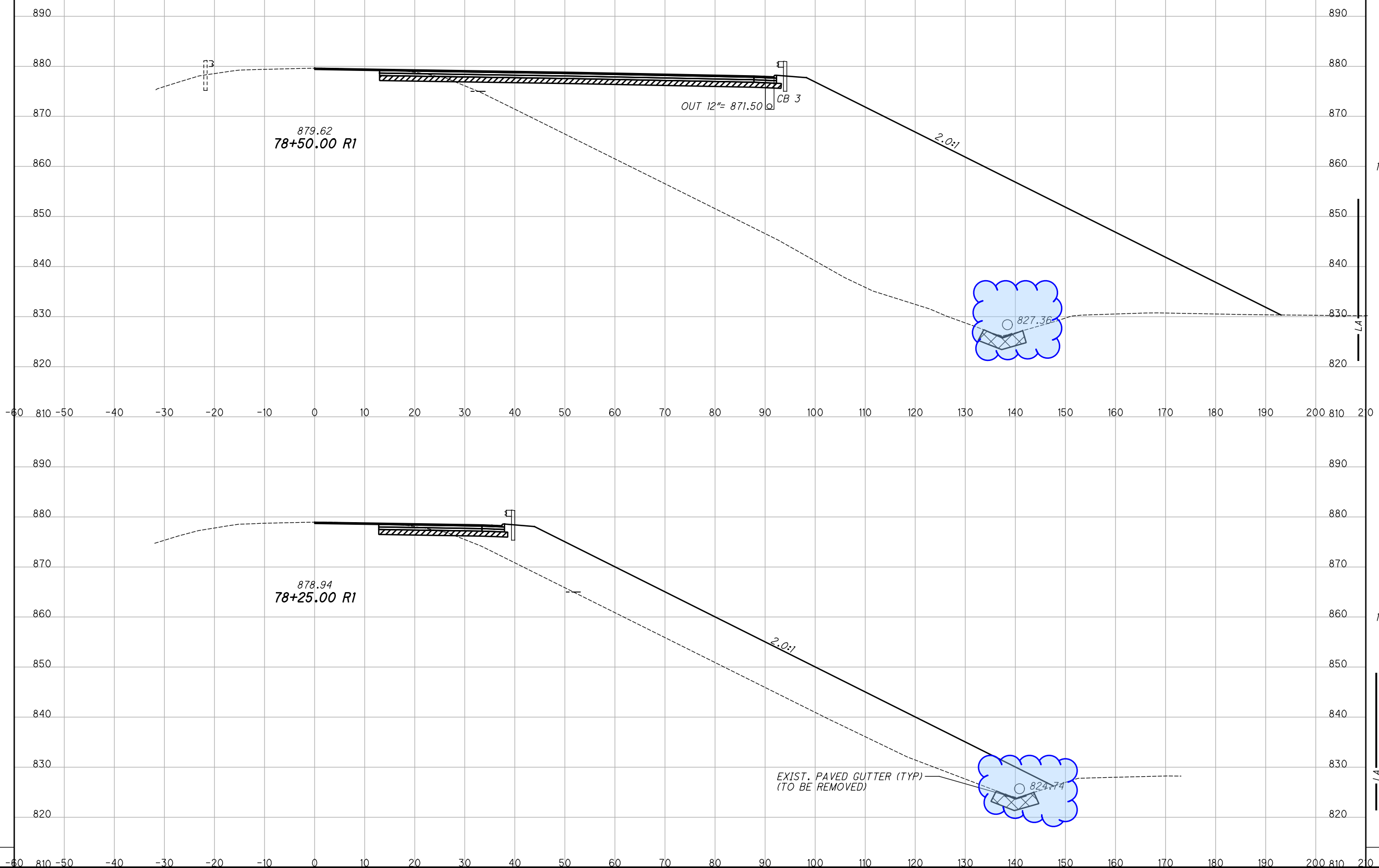
END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL	ABH	JDO
12	3459				
11	2046				
12	960				
11	645				



EXCAVATION AND BACKFILL

ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP

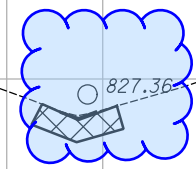
EXIST. R/W LINE IS 160' TO 230' FROM CENTERLINE



879.62
78+50.00 R1

OUT 12" = 871.50 CB 3

2.0:1

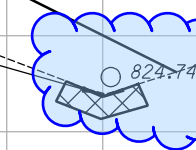


827.36

878.94
78+25.00 R1

2.0:1

EXIST. PAVED GUTTER (TYP)
(TO BE REMOVED)



824.74

CROSS SECTIONS - U.S. 42
STA. 78+25.00 R1 TO STA. 78+50.00 R1

GRE-42-3.15

31
73

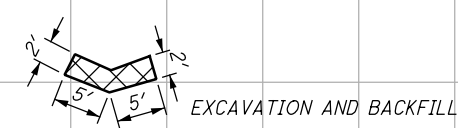
I:\ProjectData\GRE-US42-3.16\Design\Roadway\Sheets\08640_XS010.dgn CLX_42_4 1/17/2020 5:50:00 AM danders

SEEDING

END WIDTH	SO. YDS.

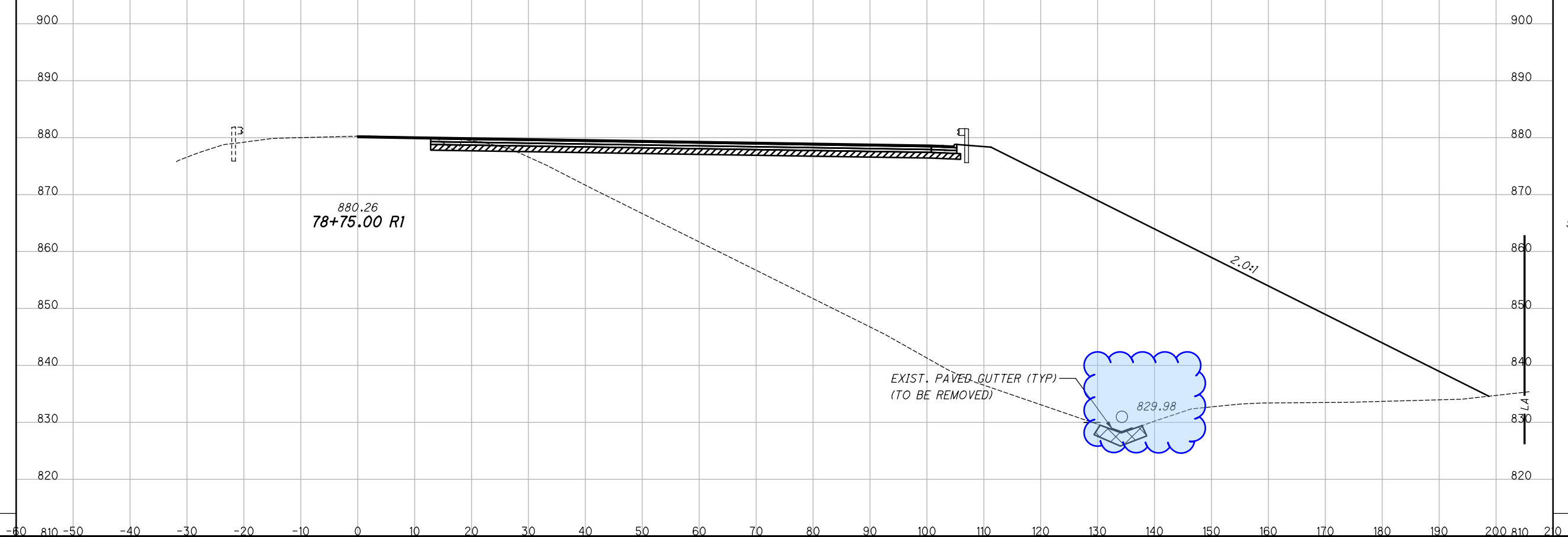
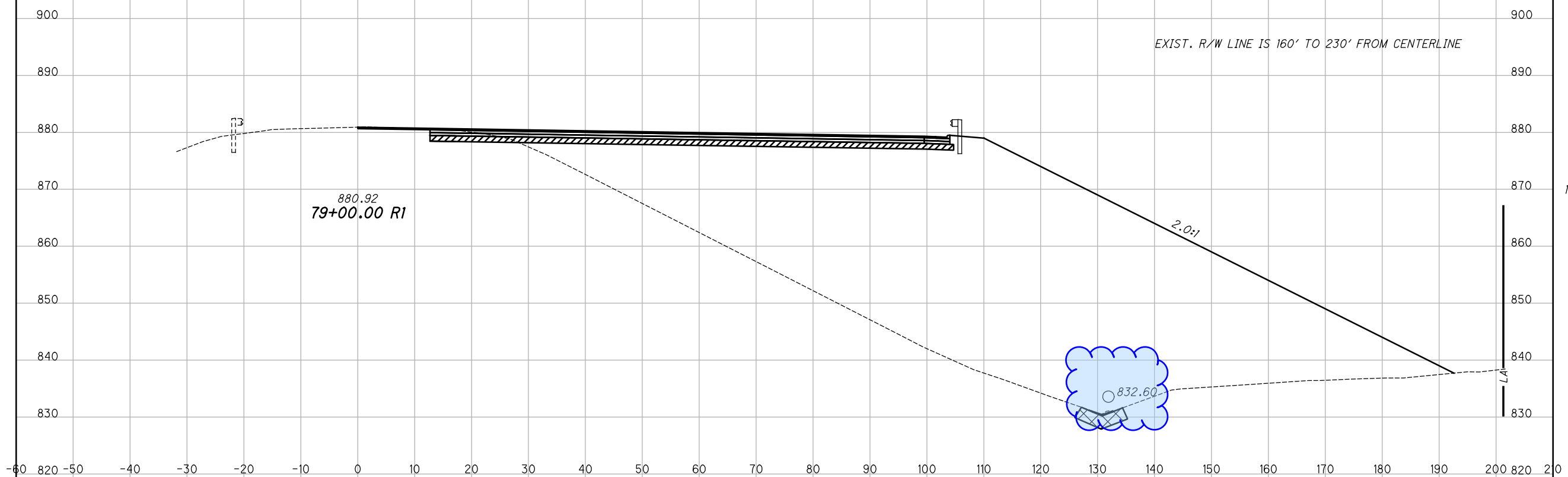
END AREA

END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL	ABH	JDO
12	3646				
		10	3475		
9	3860				
		10	3388		



ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP

EXIST. R/W LINE IS 160' TO 230' FROM CENTERLINE



CROSS SECTIONS - U.S. 42
STA. 78+75.00 R1 TO STA. 79+00.00 R1

GRE-42-3.15

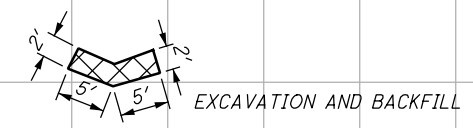
32 / 73

I:\ProjectData\GRE\US42-3.16\Design\Roadway\Sheets\08640_XS010.dgn CLX_42_4 1/17/2020 5:50:00 AM dhenders

SEEDING

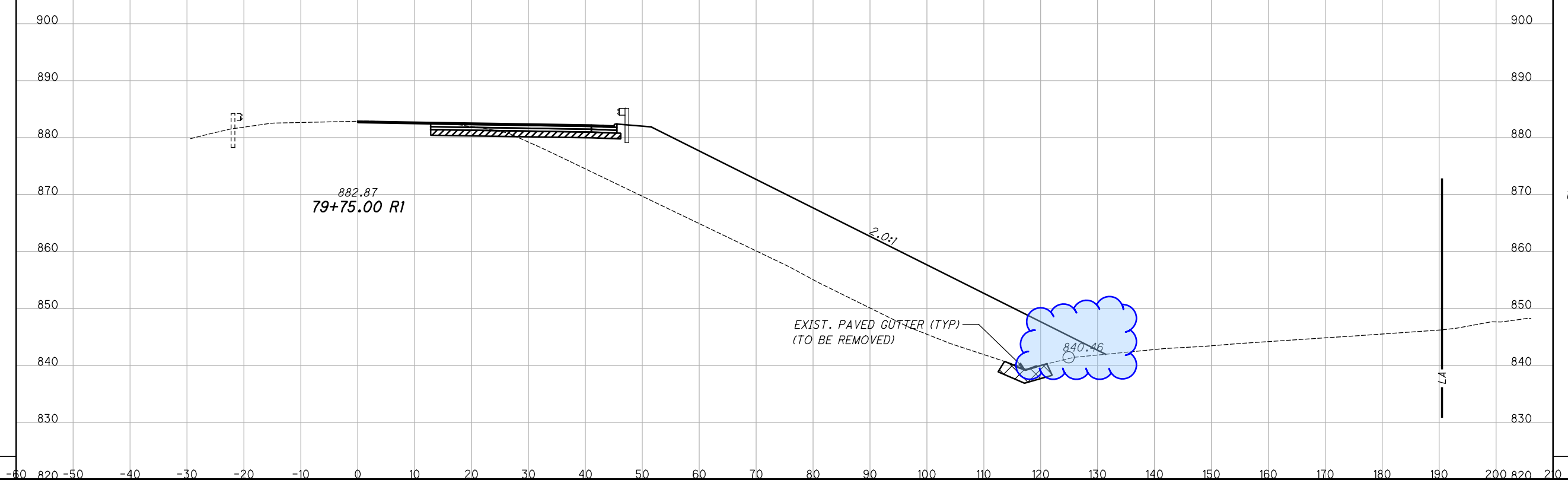
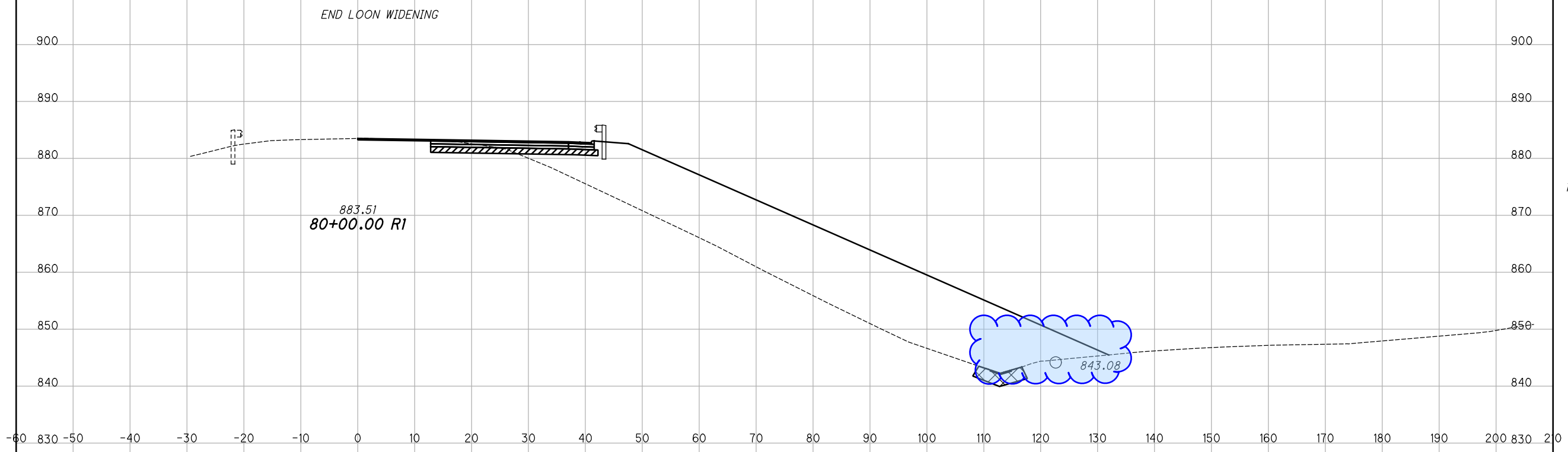
END WIDTH	SO. YDS.

END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL	ABH	JDO
11	796				
		10	848		
11	1036				
		11	1349		



ITEM 206 - CEMENT STABILIZED SUBGRADE, 12" DEEP

EXIST. R/W LINE IS 160' TO 230' FROM CENTERLINE



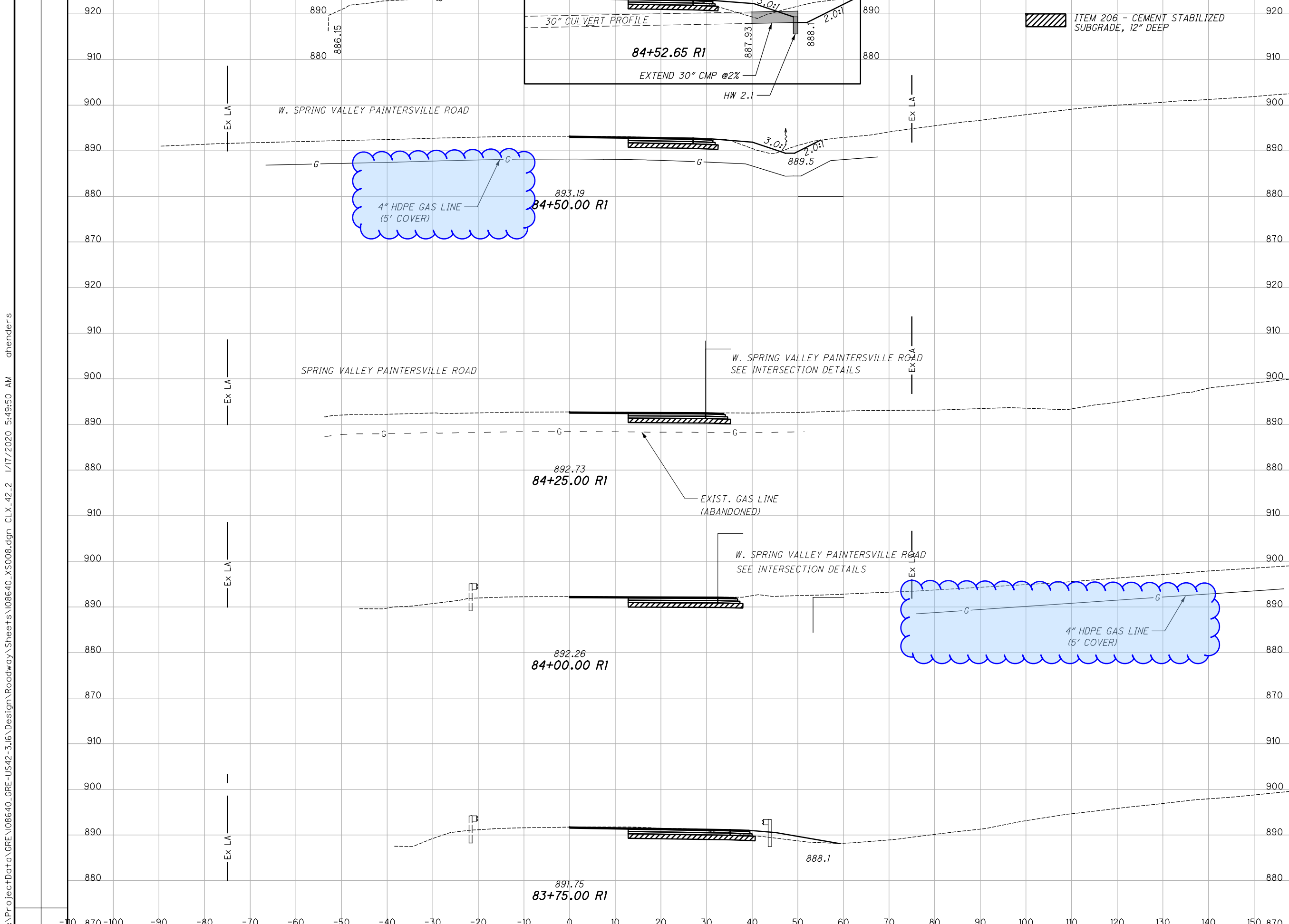
CROSS SECTIONS - U.S. 42
STA. 79+75.00 R1 TO STA. 80+00.00 R1

GRE-42-3.15

34
73

SEEDING	
END WIDTH	SO. YDS.

END AREA		VOLUME		CALCULATED	
CUT	FILL	CUT	FILL	ABH	CHECKED



920					
910					
900	27	5			
890					
880			13	2	
870					
920					
910	0	0			
900					
890			0	0	
880					
910					
900	0	0			
890					
880			15	0	
870					
910					
900	32	17			
890					
880			23	59	

CROSS SECTIONS - U.S. 42
STA. 83+75.00 R1 TO STA. 84+50.00 R1

GRE-42-3.15


40
73

I:\ProjectData\GRE\US42-3.15\Design\Roadway\Sheets\08640_XS008.dgn CLX_42_2 1/17/2020 5:49:50 AM anenders

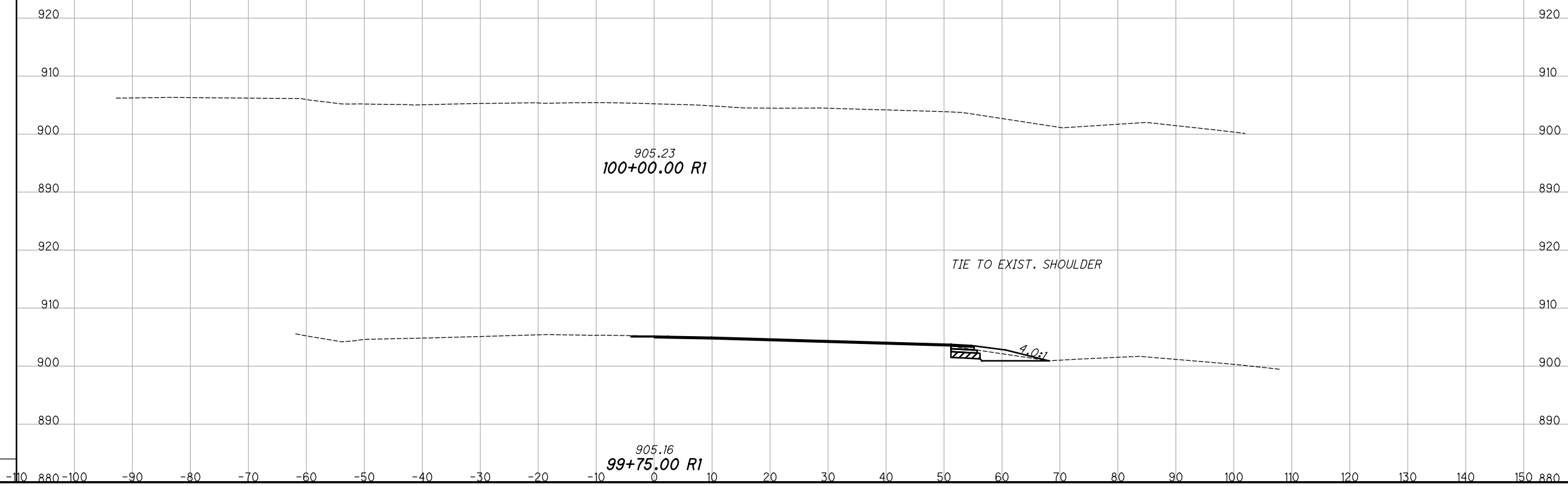
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SEEDING
END SO.
WIDTH YDS.

END AREA VOLUME
CUT FILL CUT FILL
CALCULATED
ABH
CHECKED
JDO

 ITEM 206 - CEMENT STABILIZED
SUBGRADE, 12" DEEP

EMBANKMENT = 22,767 CY
EXCAVATION = 18,304 CY

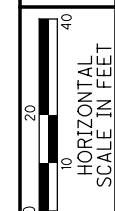


CROSS SECTIONS
STA. 99+75.00 R1 TO STA. 100+00.00 R1

GRE-42-03.15

59
73

END AREA	VOLUME
CUT	FILL
0	6
0	6
4	4



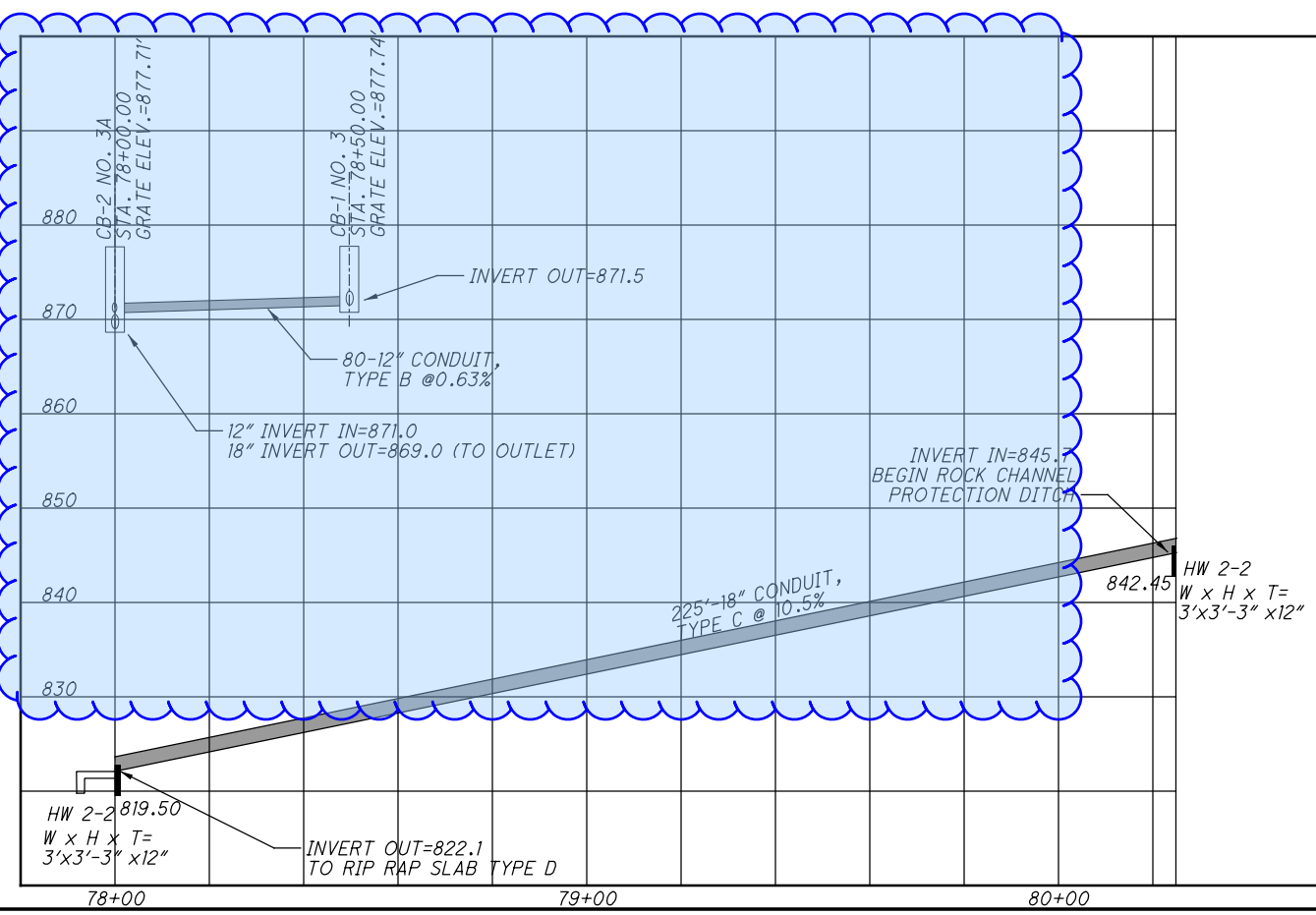
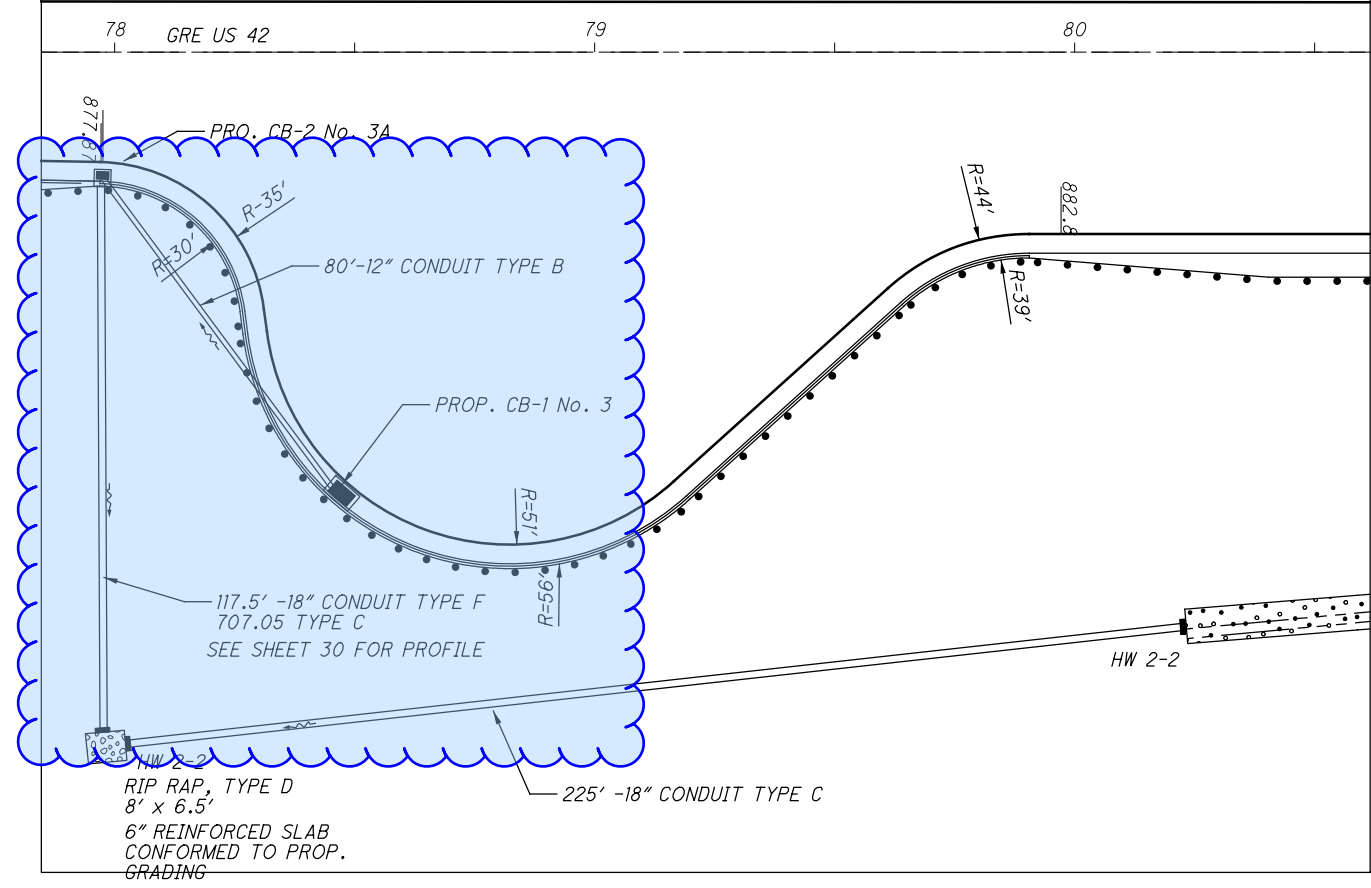
CALCULATED
ABH
CHECKED
JDO

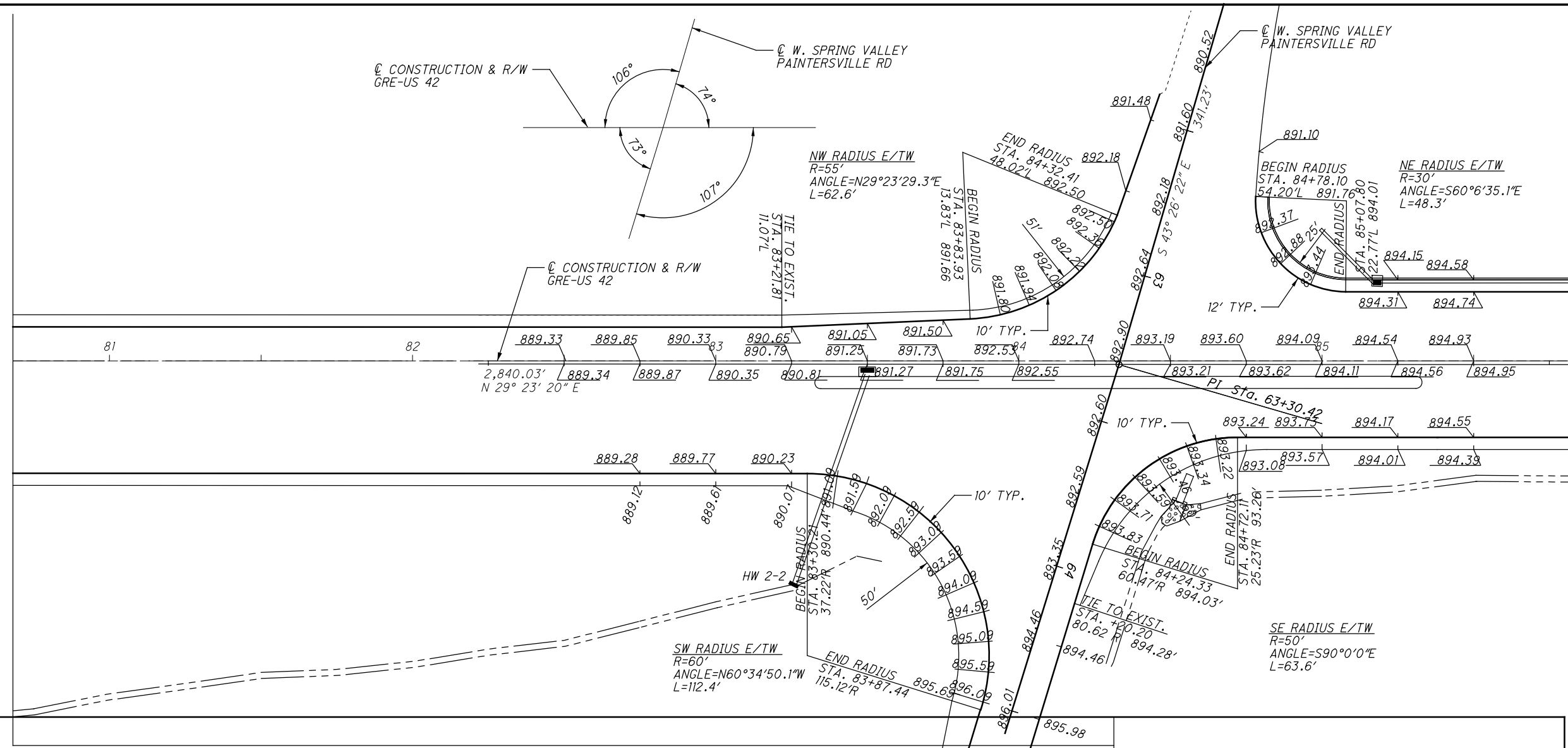
**DRAINAGE DETAIL
INTERSECTION DETAIL**

GRE - 42 - 3.15

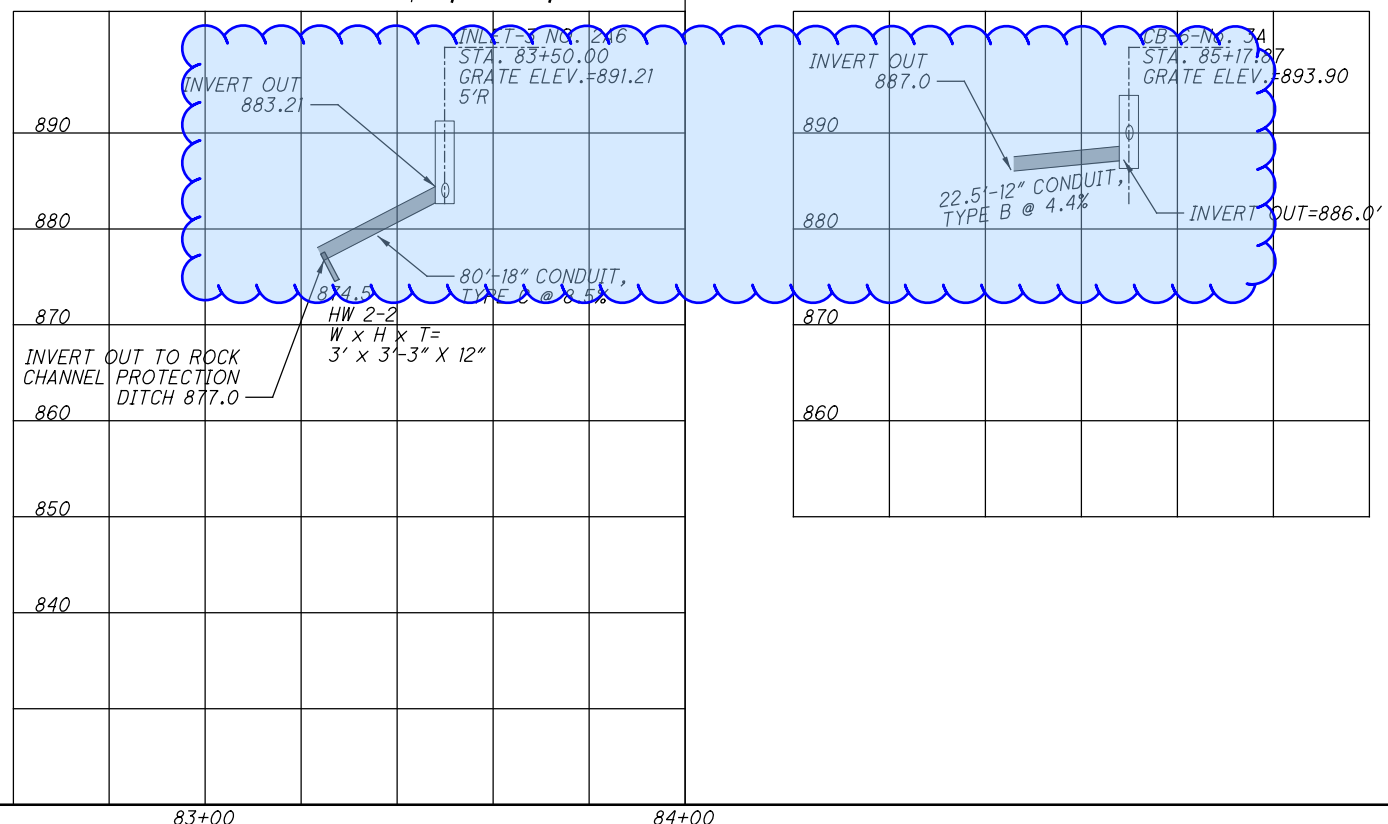
60
73

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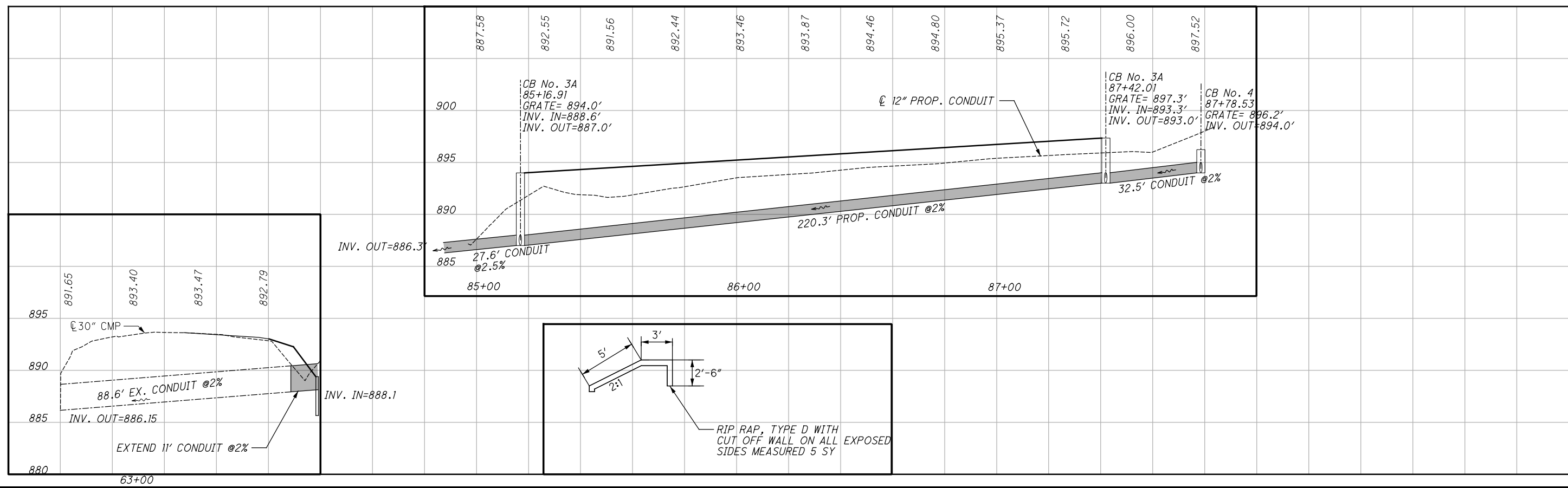
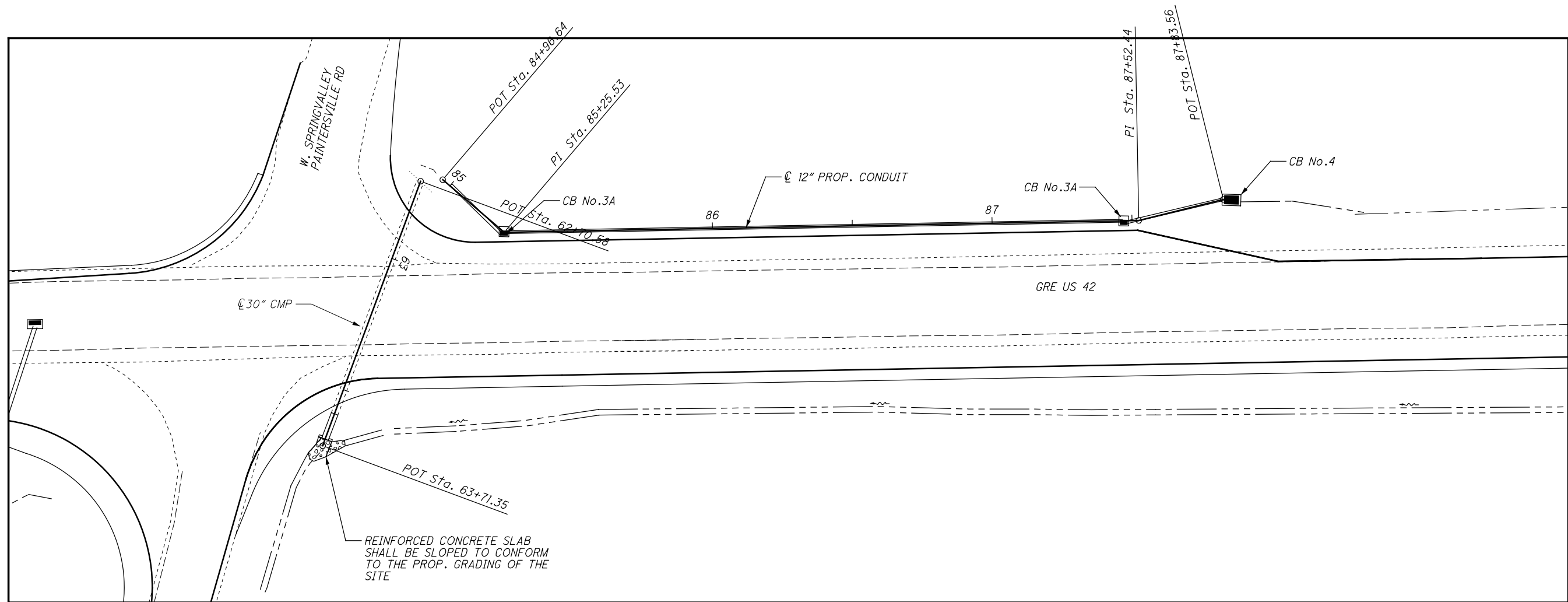


**DRAINAGE DETAIL
 INTERSECTION DETAIL**



GRE - 42 - 3.15

I:\ProjectData\GRE-US42-3.16\Design\Drainage\Sheets\08640_DP001.dgn Sheet 1/17/2020 5:50:04 AM chenders



CALCULATED
ABH
CHECKED
TRB

0 20 40
HORIZONTAL SCALE IN FEET

DRAINAGE DETAIL

GRE - 42 - 3.15

I:\ProjectData\GRE\108640_GRE-US42-3.16\Design\Roadway\Traffic\Sheets\108640_Ts00.dgn Sheet 1/17/2020 5:50:04 AM onenders

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644	644	644	644	644	644	644	644	644	621	621	644	620	620	621	202																
			CENTERLINE	EDGE LINE 6" (yellow)		EDGE LINE 6" (white)	RUMBLE STRIPE	CHANNELIZING LINE, 12"	STOP LINE, 24"	LANE ARROW	WORDS ONLY	LANE LINE	RPM (YELLOW-YELLOW)	RPM (WHITE)	TRANSVERSE LINE	DELINEATOR, MISC. TYPE C WHITE	DELINEATOR, MISC. SURFACE MOUNTED, YELLOW	RAISED PAVEMENT MARKER REMOVED	REMOVE PAVEMENT MARKING	MILE	MILE	MILE	MILE	FT	FT	EACH	EACH	MILE	EA	EA	FT	EA	EA	EA	FT		
			FROM	TO																																	
66	ELW-1	GRE US 42	72+50.00	84+05.58	L			0.22																													
66	ELW-2	GRE US 42	72+50.00	83+95.60	R			0.22																													
68	ELW-3	GRE US 42	84+69.95	95+62.70	L			0.21																													
68	ELW-4	GRE US 42	84+77.10	99+66.63	R			0.28																													
71	ELW-5	GRE US 42	96+05.44	99+66.63	L			0.07																													
66	CL-1	GRE US 42	72+50.00	78+52.00	R	0.11									16																						
66	CL-2	GRE US 42	72+97.25	78+30.61	R	0.10									14																						
67	CL-3	GRE US 42	79+00.00	83+29.14	R	0.08									11																						
68	CL-4	GRE US 42	85+38.00	94+44.44	R	0.17									24																						
68	CL-5	GRE US 42	85+38.00	91+10.76	R	0.11									15																						
71	CL-6	GRE US 42	96+32.77	113+47.34	R	0.32									45																						
71	CL-7	GRE US 42	96+32.77	100+00.00		0.07									10																						
71	CL-8	GRE US 42	94+95.73	95+50.44		0.01									1																						
66	RS-1	GRE US 42	72+96.86	83+83.83	L			0.21																													
67	RS-2	GRE US 42	72+96.86	77+99.81	R			0.10																													
68	RS-3	GRE US 42	79+93.33	83+30.16	R			0.06																													
69	RS-4	GRE US 42	84+72.11	99+61.64	R			0.28																													
70	RS-5	GRE US 42	88+67.29	92+26.82	L			0.07																													
71	RS-6	GRE US 42	96+55.47	99+60.66	L			0.06																													
68	ELY-1	GRE US 42	83+34.59	85+38.01	R		0.04																														
68	ELY-2	GRE US 42	83+34.59	85+38.01	R		0.04																														
67	CH-1	GRE US 42	80+74.15	83+34.47	R					260.32						7																					
68	CH-2	GRE US 42	84+94.75	87+44.75	L					250.00						7																					
70	CH-3	GRE US 42	91+60.86	95+50.44	R					389.58																											
67	CH-4	GRE US 42	78+50.00	82+00.00	R					350.00																											
67	CT-1	GRE US 42															93																				
69	CT-2	GRE US 42															311																				
71	CT-3	GRE US 42															413																				
SUBTOTAL						0.98	0.08	0.99	0.77	1250	32.00	16	2	0.07	136	14	817.00	30.00	10	35	1300																

CALCULATED
ABH
CHECKED
TCS

PAVEMENT MARKINGS SUBSUMMARY

GRE-42-3.15

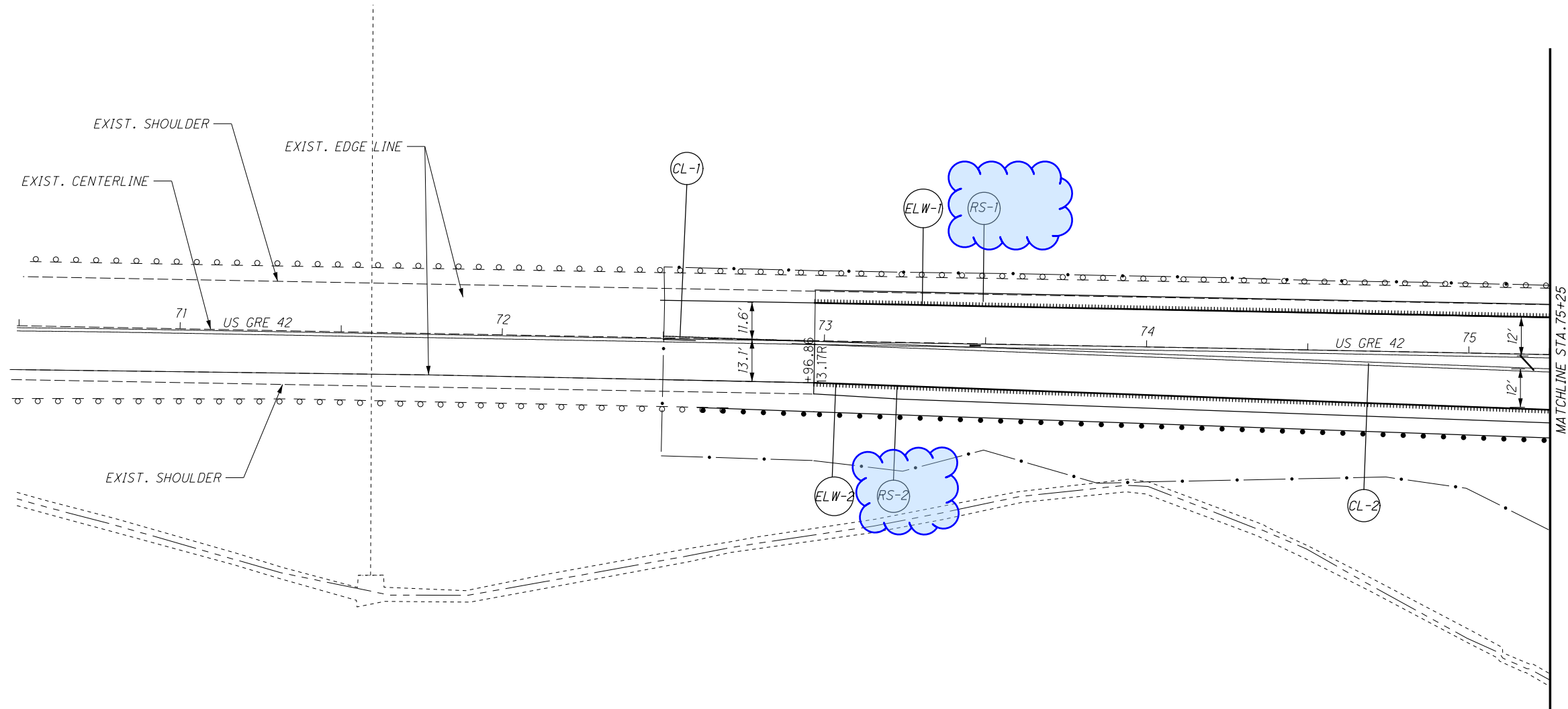
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SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644	644	644	644	644	644	644	644	644	621	621	644	620	620	621	202	
			CENTERLINE	EDGE LINE 6" (yellow)		EDGE LINE, 6" (white)	RUMBLE STRIPE	CHANNELIZING LINE, 12"	STOP LINE, 24"	LANE ARROW	WORDS ONLY	LANE LINE	RPM (YELLOW-YELLOW)	RPM (WHITE)	TRANSVERSE LINE	DELINEATOR, MISC. TYPE C WHITE	DELINEATOR, MISC. SURFACE MOUNTED, YELLOW	RAISED PAVEMENT MARKER REMOVED	REMOVE PAVEMENT MARKING			
			MILE	MILE		MILE	MILE	FT	FT	EACH	EACH	MILE	EA	EA	FT	EA	EA	EA	EA	EA	EA	EA
FROM	TO																					
66	ELW-1	GRE US 42	72+50.00	84+05.58	L			0.22														
66	ELW-2	GRE US 42	72+50.00	83+95.60	R			0.22														
68	ELW-3	GRE US 42	84+69.95	95+62.70	L			0.21														
68	ELW-4	GRE US 42	84+77.10	99+66.63	R			0.28														
71	ELW-5	GRE US 42	96+05.44	99+66.63	L			0.07														
66	CL-1	GRE US 42	72+50.00	78+52.00	R	0.11								16								
66	CL-2	GRE US 42	72+97.25	78+30.61	R	0.10								14								
67	CL-3	GRE US 42	79+00.00	83+29.14	R	0.08								11								
68	CL-4	GRE US 42	85+38.00	94+44.44	R	0.17								24								
68	CL-5	GRE US 42	85+38.00	91+10.76	R	0.11								15								
71	CL-6	GRE US 42	96+32.77	113+47.34	R	0.32								45								
71	CL-7	GRE US 42	96+32.77	100+00.00		0.07								10								
71	CL-8	GRE US 42	94+95.73	95+50.44		0.01								1								
66	RS-1	GRE US 42	72+96.86	83+83.83	L			0.21														
67	RS-2	GRE US 42	72+96.86	77+99.81	R			0.10														
68	RS-3	GRE US 42	79+93.33	83+30.16	R			0.06														
69	RS-4	GRE US 42	84+72.11	99+61.64	R			0.28														
70	RS-5	GRE US 42	88+67.29	92+26.82	L			0.07														
71	RS-6	GRE US 42	96+55.47	99+60.66	L			0.06														
68	ELY-1	GRE US 42	83+34.59	85+38.01	R		0.04															
68	ELY-2	GRE US 42	83+34.59	85+38.01	R		0.04															
67	CH-1	GRE US 42	80+74.15	83+34.47	R					260.32					7							
68	CH-2	GRE US 42	84+94.75	87+44.75	L					250.00					7							
70	CH-3	GRE US 42	91+60.86	95+50.44	R					385.58												
67	CH-4	GRE US 42	78+50.00	82+00.00	R					350.00												
67	CT-1	GRE US 42														93						
69	CT-2	GRE US 42														311						
71	CT-3	GRE US 42														413						
SUBTOTAL						0.98	0.08	0.99	0.77	1250	32.00	16	2	0.07	136	14	817.00	30.00	10	35	1300	
TOTAL CARRIED TO THE GENERAL SUMMARY						0.98	0.08	0.99	0.77	1250	32.00	16	2	0.07	136	14	817.00	30.00	10	35	1300	

CALCULATED
ABH
CHECKED
TCS

PAVEMENT MARKINGS SUBSUMMARY

GRE - 42 - 3.15



SIGNING & PAVEMENT MARKING
STA. 70+00.00 TO STA. 75+25.00

GRE-42-3.15

Traffic Sheets 108640_IP002.dgn Sheet 1/17/2020 5:50:07 AM ahanders

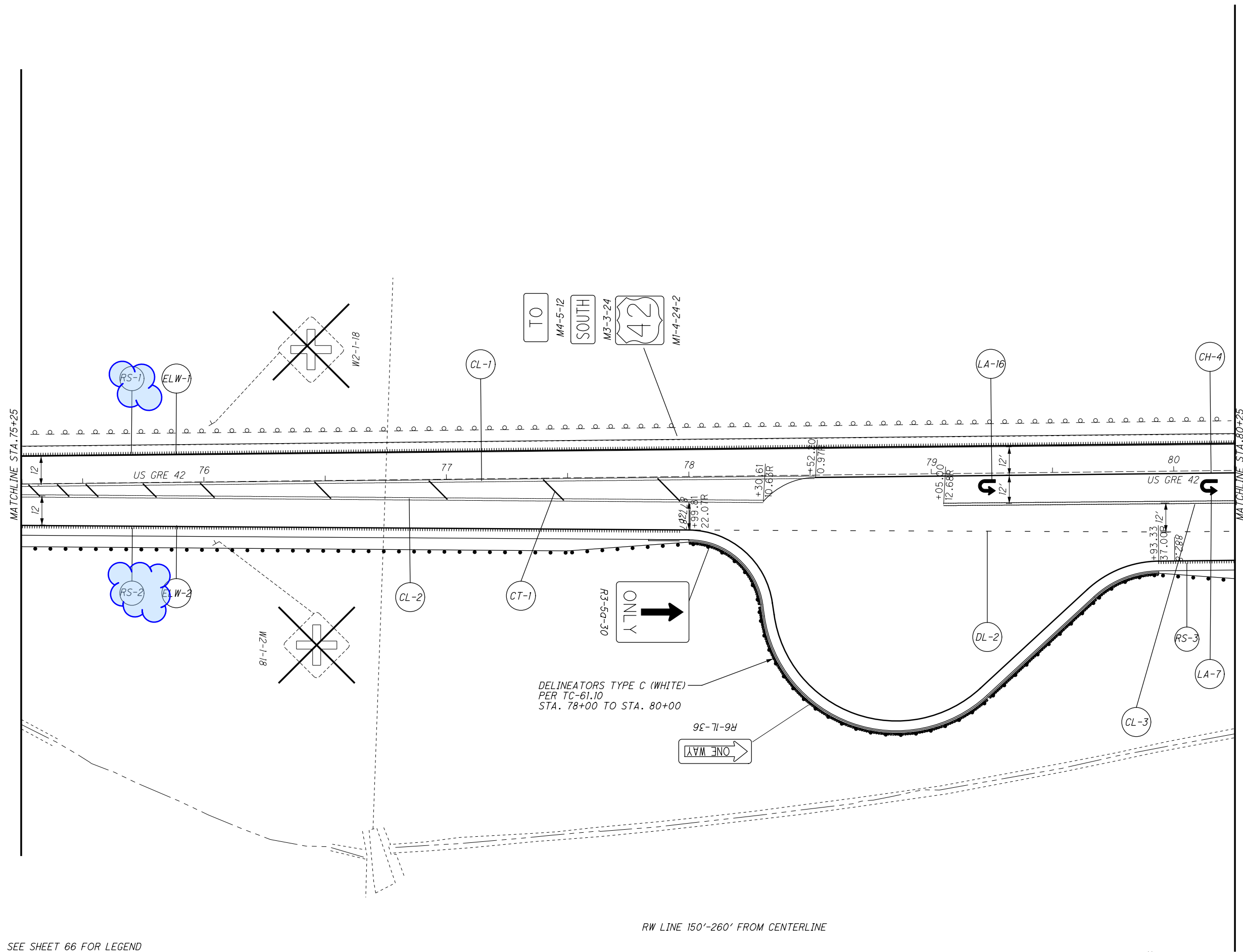
PAVEMENT MARKING LEGEND

- | | | |
|-----------------------------------|----------------------------|----------------------|
| (DL) DOTTED LINE, 6" WHITE | (LL) LANE LINE, 6" WHITE | (CT) TRANSVERSE LINE |
| (CH) CHANNELIZING LINE, 12" WHITE | (ELY) EDGE LINE, 6" YELLOW | (SL) STOP LINE |
| (CL) CENTERLINE, 4" | (ELW) EDGE LINE, 6" WHITE | (LA) LANE ARROW |

- (ON) ONLY MARKING
- (RS) RUMBLE STRIPE, EDGE LINE

SIGN LEGEND

- | | | | |
|----------|------------|---------|---|
| EXISTING | PROPOSED | REMOVED | RELOCATED |
| | | | |
| | STA. XX+XX | | RELOCATED FROM STA. XX+XX TO STA. XX+XX |



SEE SHEET 66 FOR LEGEND

RW LINE 150'-260' FROM CENTERLINE



0 20 40
HORIZONTAL
SCALE IN FEET

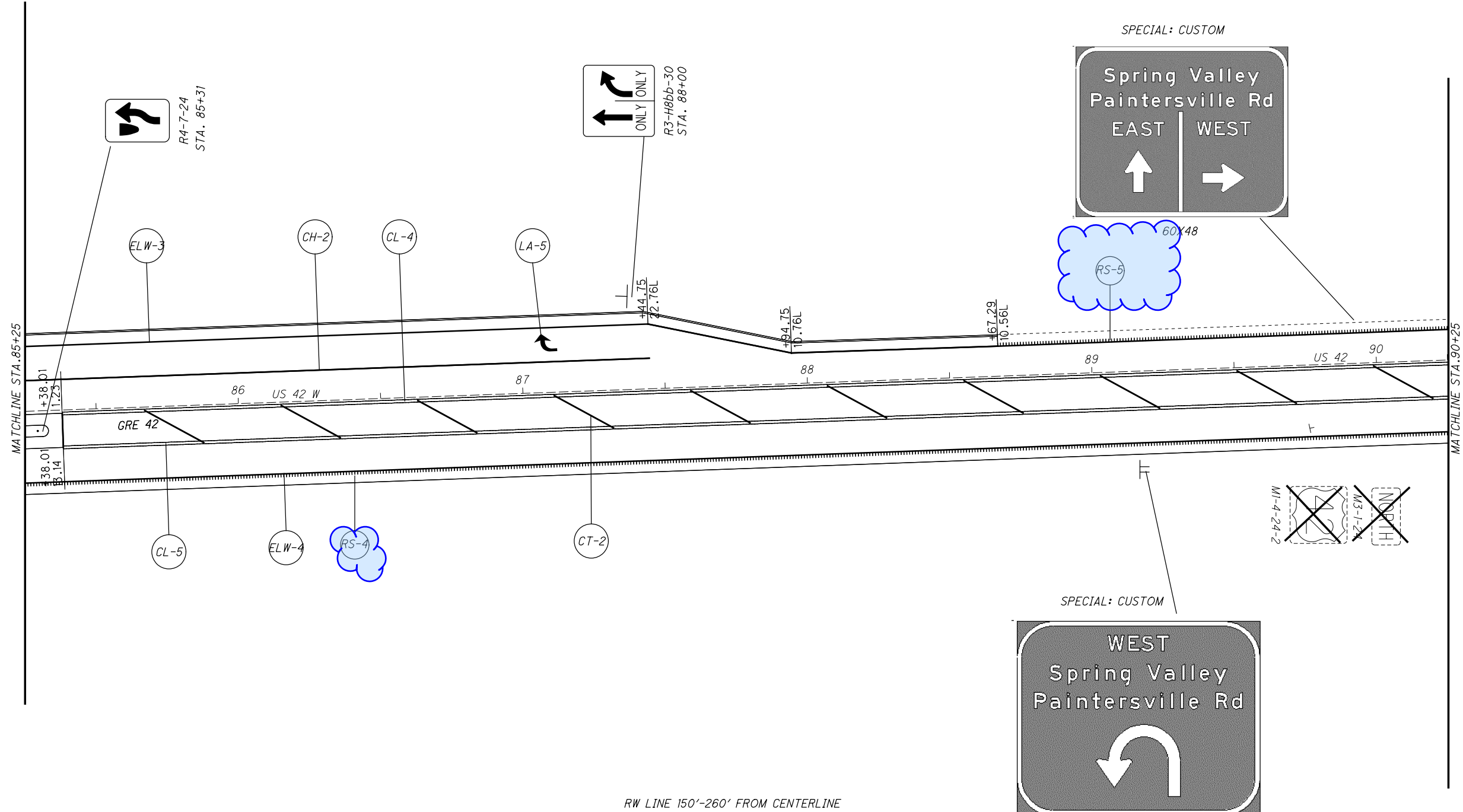
CALCULATED
ABH
CHECKED
TCS

SIGNING & PAVEMENT MARKING
STA. 75+25.00 TO STA. 80+25.00

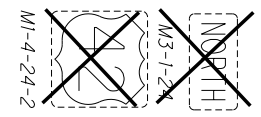
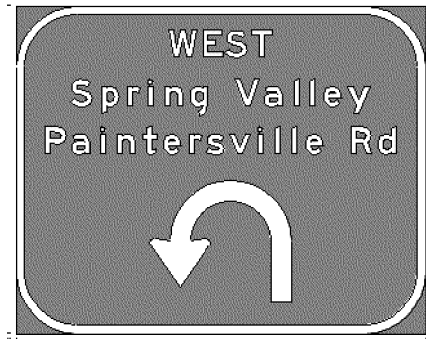
GRE - 42 - 3.15

67
73

SEE SHEET 66 FOR LEGEND



RW LINE 150'-260' FROM CENTERLINE



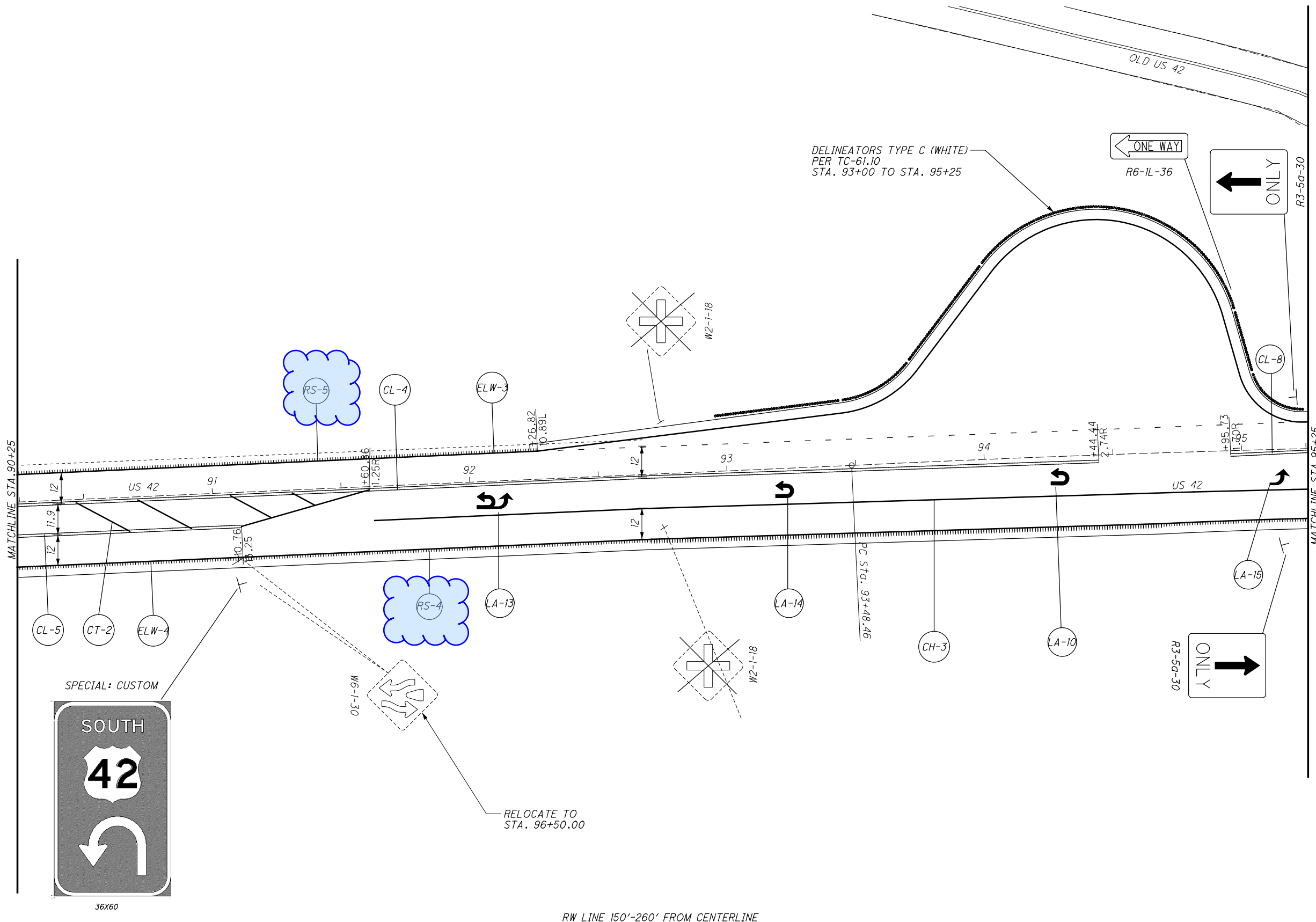
CALCULATED ABH CHECKED TCS

HORIZONTAL SCALE IN FEET

SIGNING & PAVEMENT MARKING
STA. 85+25.00 TO STA. 90+25.00

GRE - 42 - 3.15

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CALCULATED
ABH

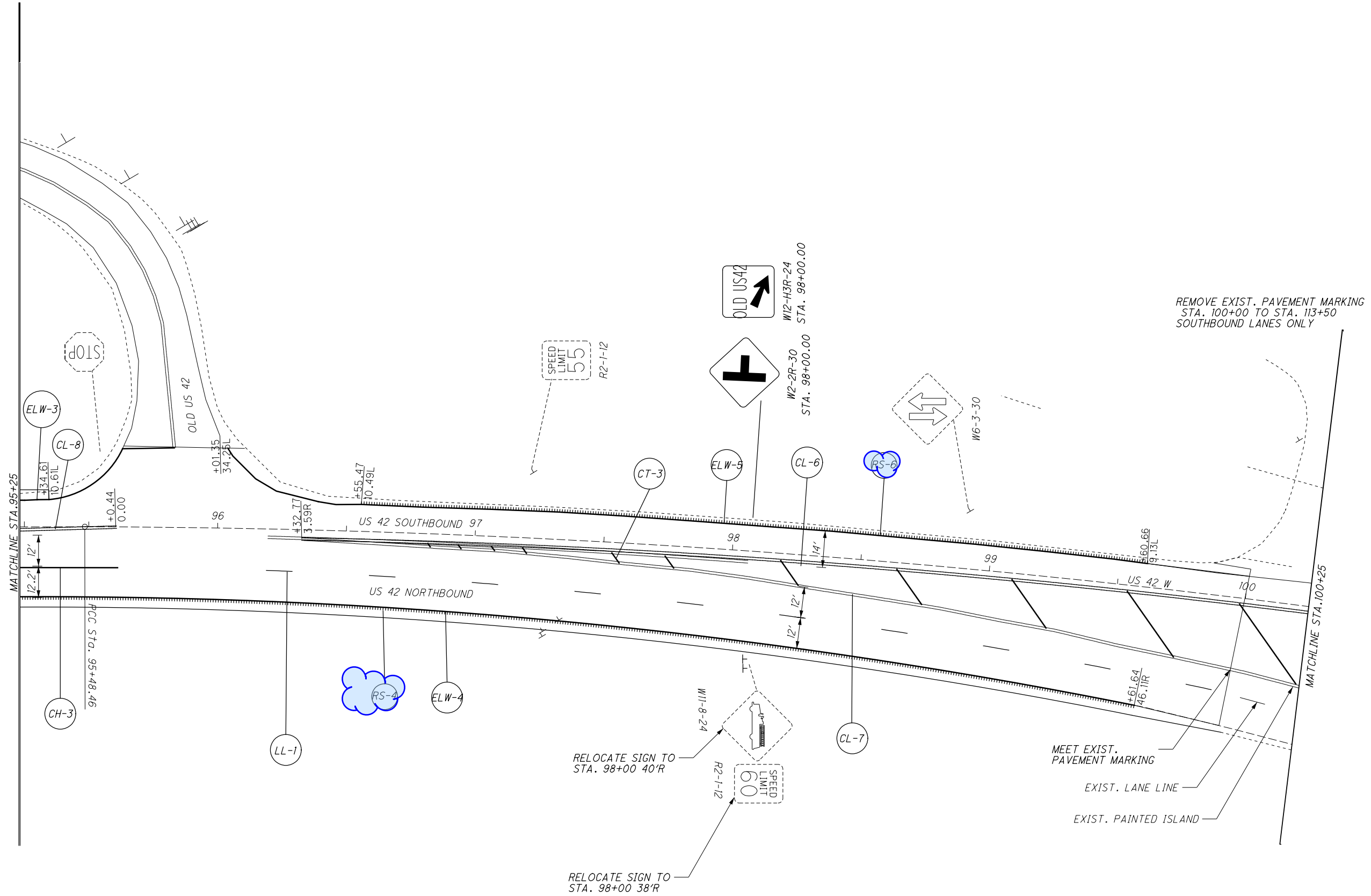
CHECKED
TCS

0 10 20 40
HORIZONTAL
SCALE IN FEET

SIGNING & PAVEMENT MARKING
STA. 90+25.00 TO STA. 95+25.00

GRE - 42 - 3.15

SEE SHEET 66 FOR LEGEND



REMOVE EXIST. PAVEMENT MARKING
STA. 100+00 TO STA. 113+50
SOUTHBOUND LANES ONLY

MEET EXIST.
PAVEMENT MARKING
EXIST. LANE LINE
EXIST. PAINTED ISLAND

RELOCATE SIGN TO
STA. 98+00 40'R

RELOCATE SIGN TO
STA. 98+00 38'R

CALCULATED	ABH	CHECKED	TCS

0 10 20 40
HORIZONTAL
SCALE IN FEET

SIGNING & PAVEMENT MARKING
STA. 95+25.00 TO STA. 100+25.00

GRE-42-3.15