

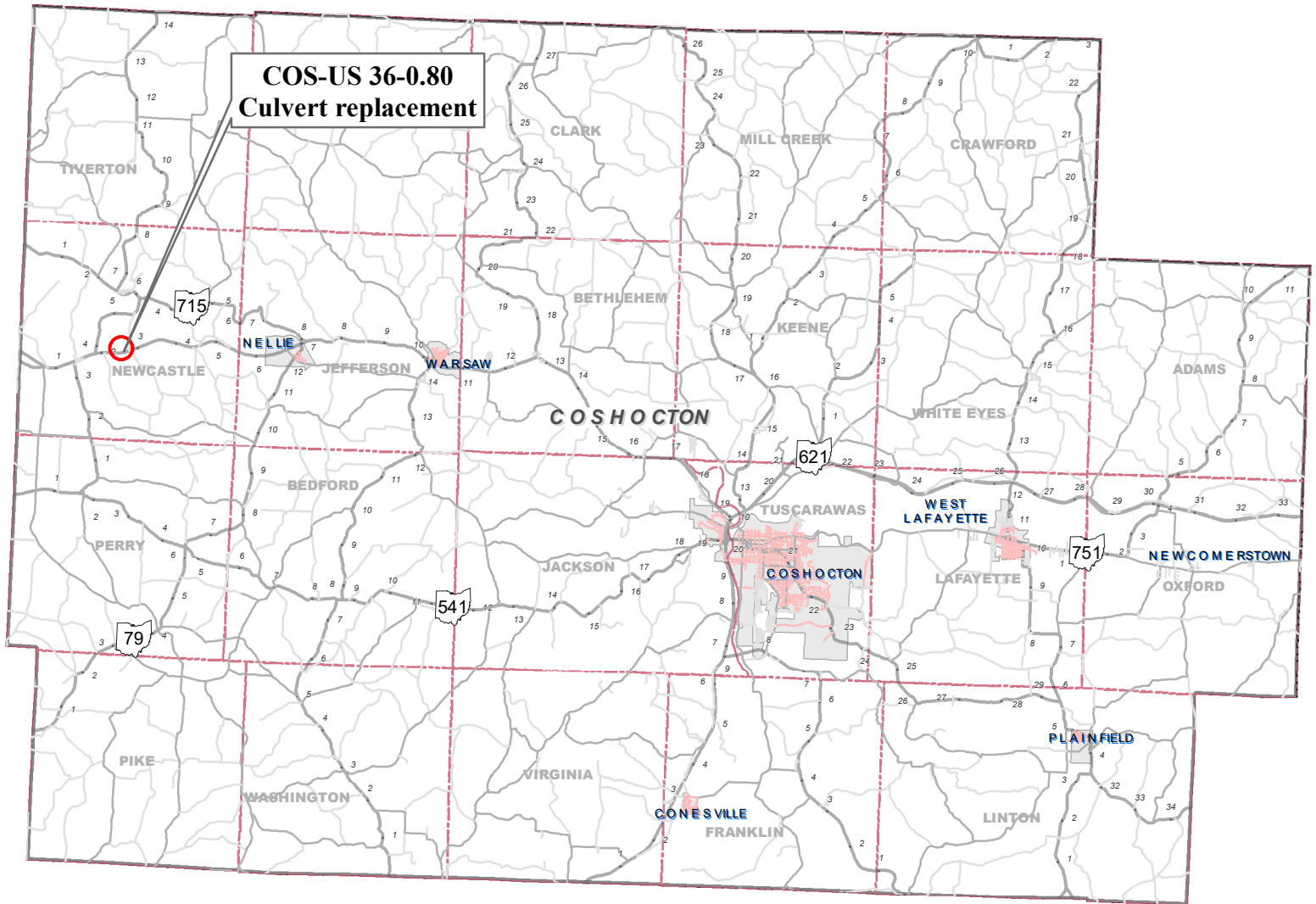
Project Description

DO5-CUL-FY2022 PID - 102497

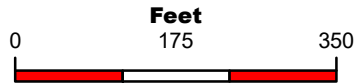
The propose project is for the replacement of six deficient culverts at various locations in Coshocton, Guernsey, and Licking Counties. Culvert locations and scope of work are as follows: Coshocton US 36 (SLM 0.80) culvert replacement, Guernsey SR 658 (SLM 10.13) culvert replacement, Licking SR 37 (SLM 7.60) culvert replacement, Licking SR 37 (SLM 8.53) culvert liner, Licking SR 37 (SLM 11.54) invert field paving, and Licking IR 70 (SLM 18.64) headwall repair and culvert liner. The location on Licking IR 70 (SLM 18.64) lies within the limited access of IR-70 (TR 303 at SLM 5.86). At this time, the roadway will remain open to traffic and no detours will be necessary. Construction for this project is planned for spring of 2022.

Questions concerning this project can be directed to Nicole Hafer-Lipstreu at (740) 323-5103 or Nicole.haferlipstreu@dot.ohio.gov, or Brian Tatman at (740)323-5191 or brian.tatman@dot.ohio.gov in the ODOT District 5 Planning Department.

**The Ohio Department of Transportation
COSHOCOTON COUNTY**

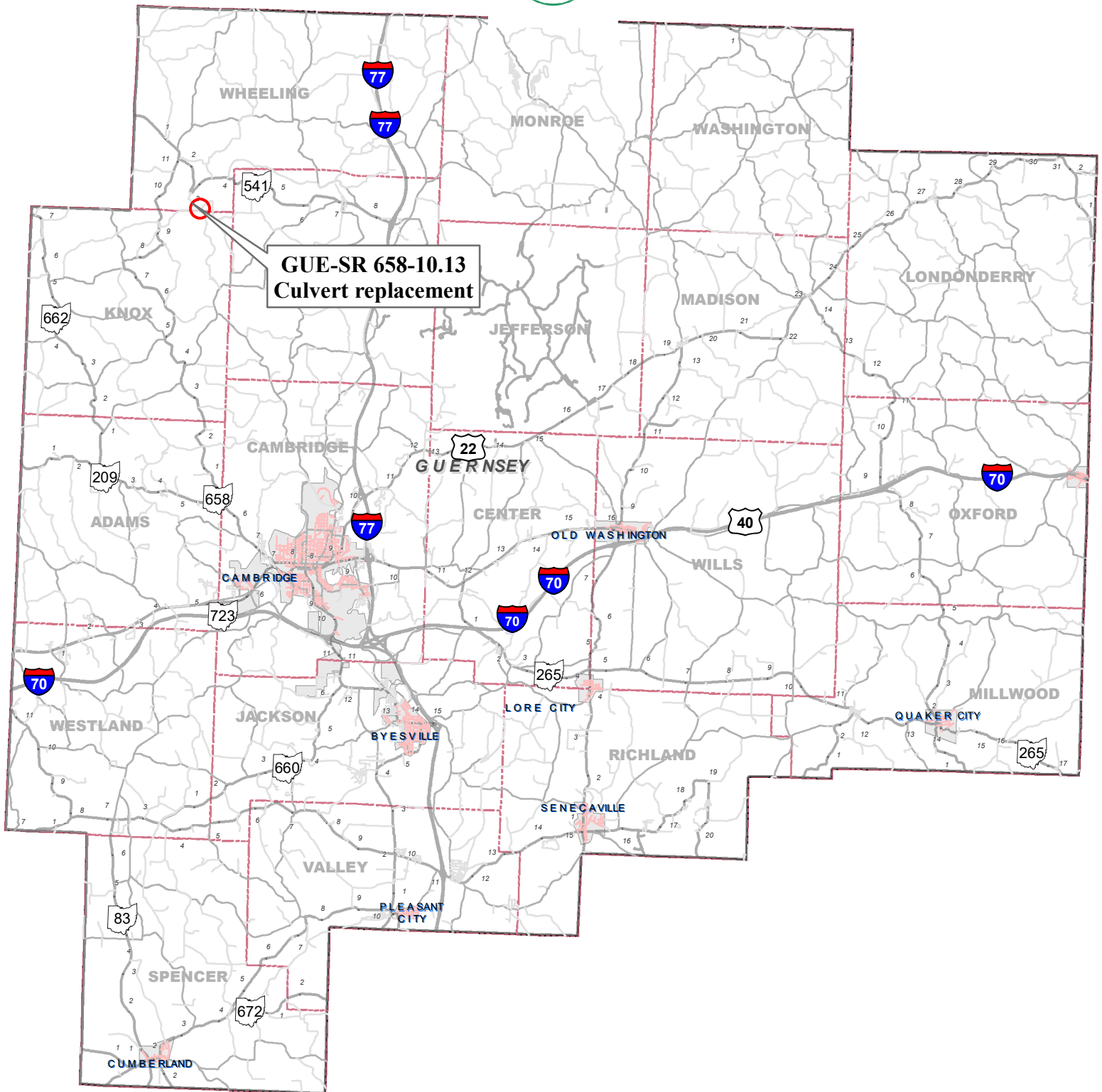


**DO5- CUL-FY 2022
PID - 102497**



**DO5 CUL FY 2022
102497**

**The Ohio Department of Transportation
GUERNSEY COUNTY**



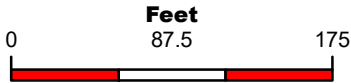
**GUE-SR 658-10.13
Culvert replacement**

**DO5- CUL-FY 2022
PID - 102497**

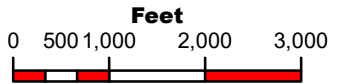
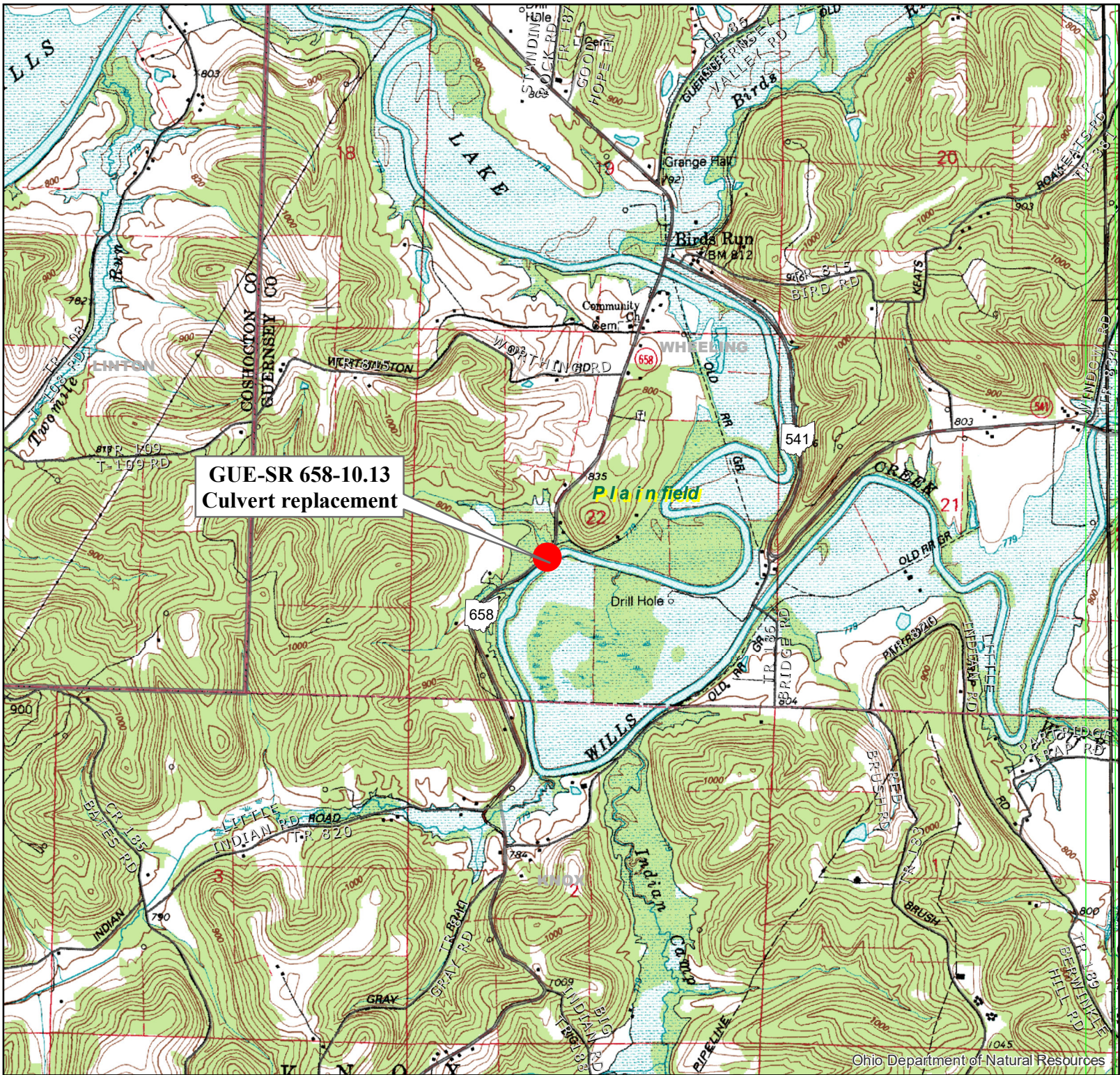


GUE-SR 658-10.13
Culvert replacement

658
658



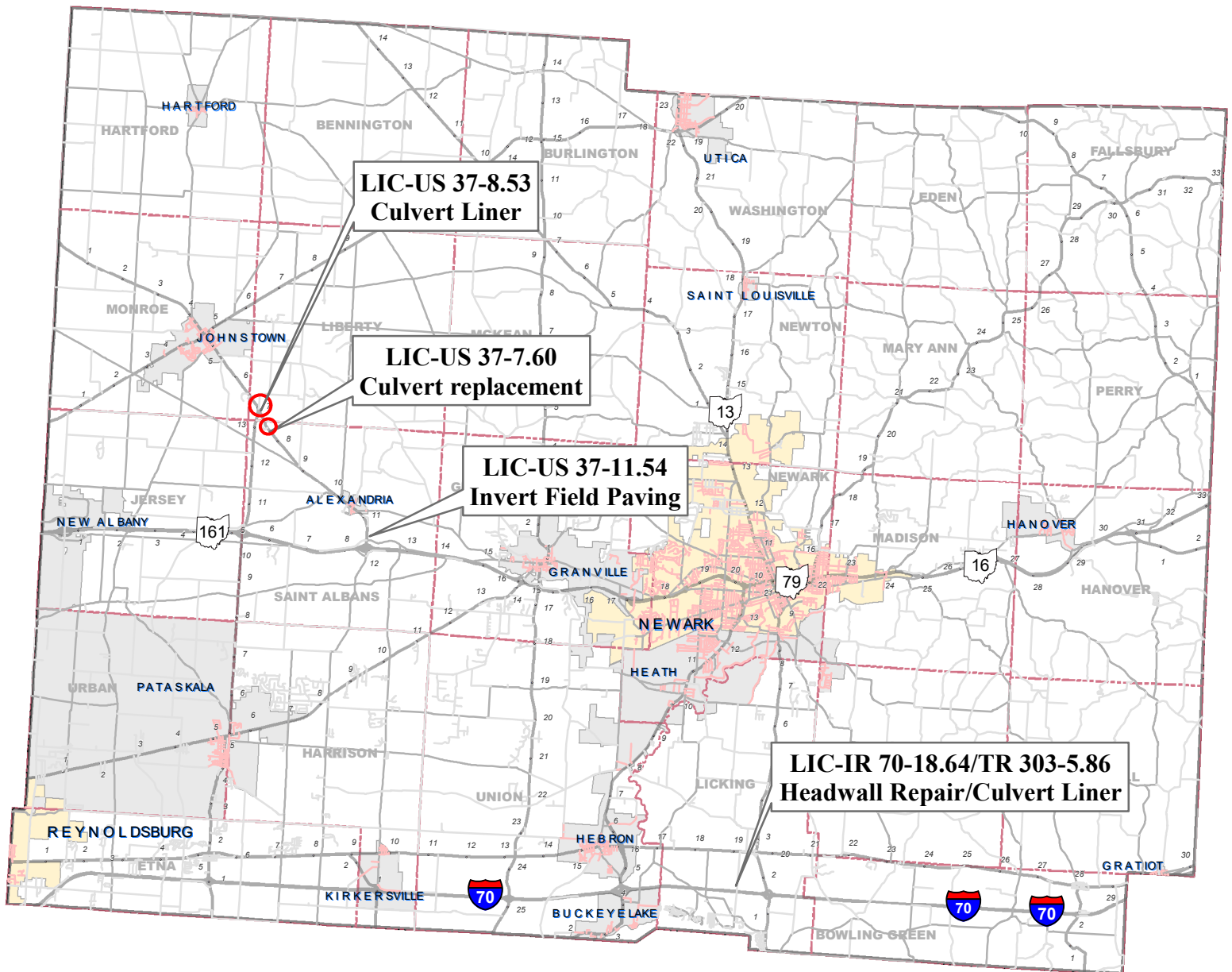
DO5 CUL FY 2022
102497



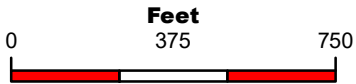
DO5 CUL FY 2022
102497

Kimbloton 7.5'
Quadrangle Map

**The Ohio Department of Transportation
LICKING COUNTY**

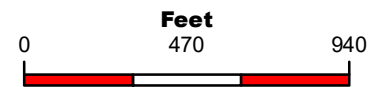


**DO5- CUL-FY 2022
PID - 102497**



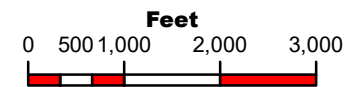
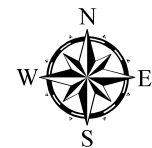
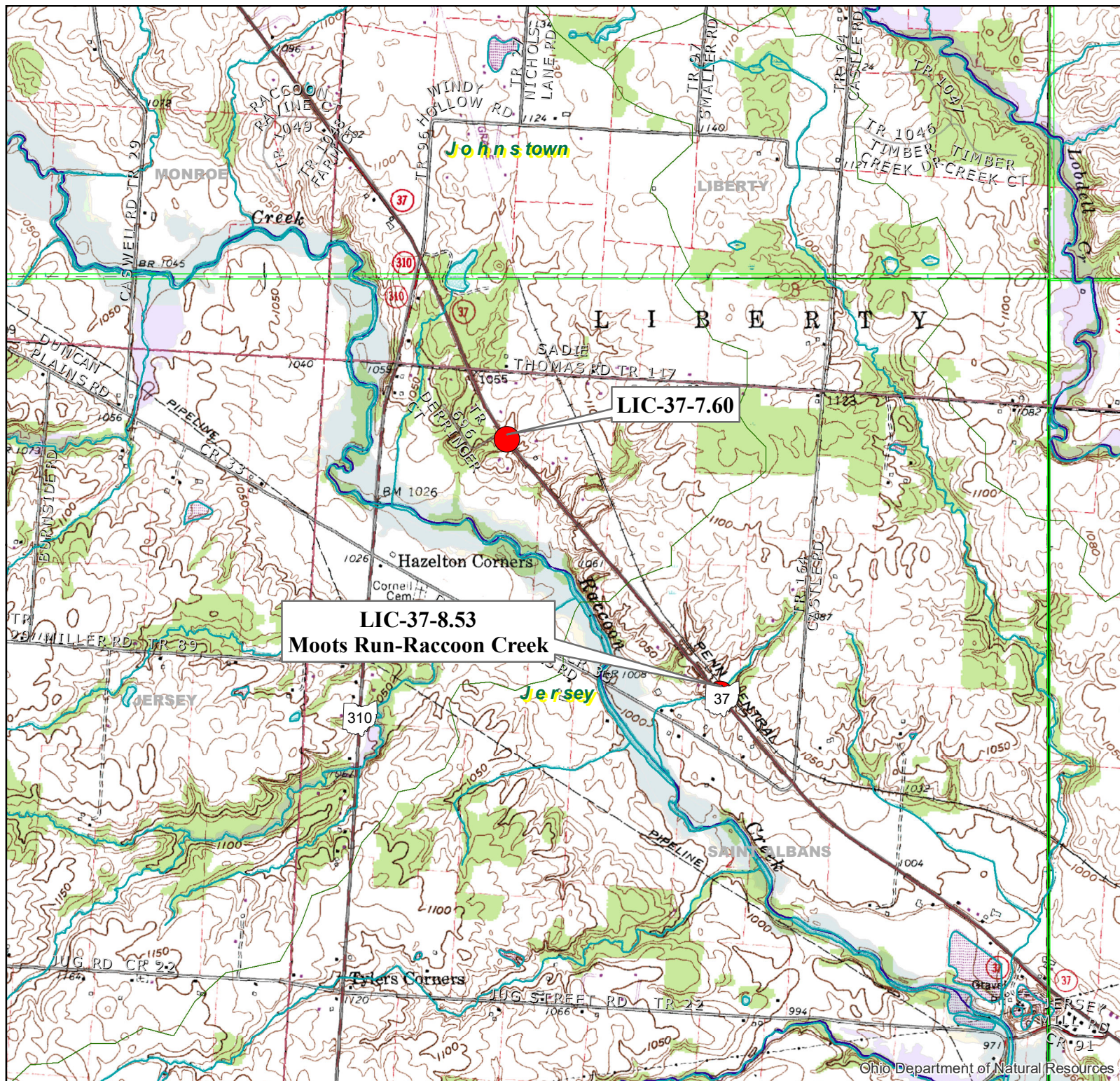
DO5 CUL FY 2022
102497

OSIP 2013
Aerial Imagery



**DO5 CUL FY 2022
102497**

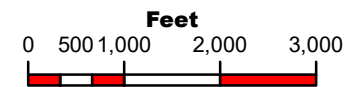
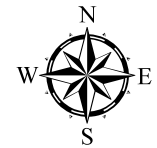
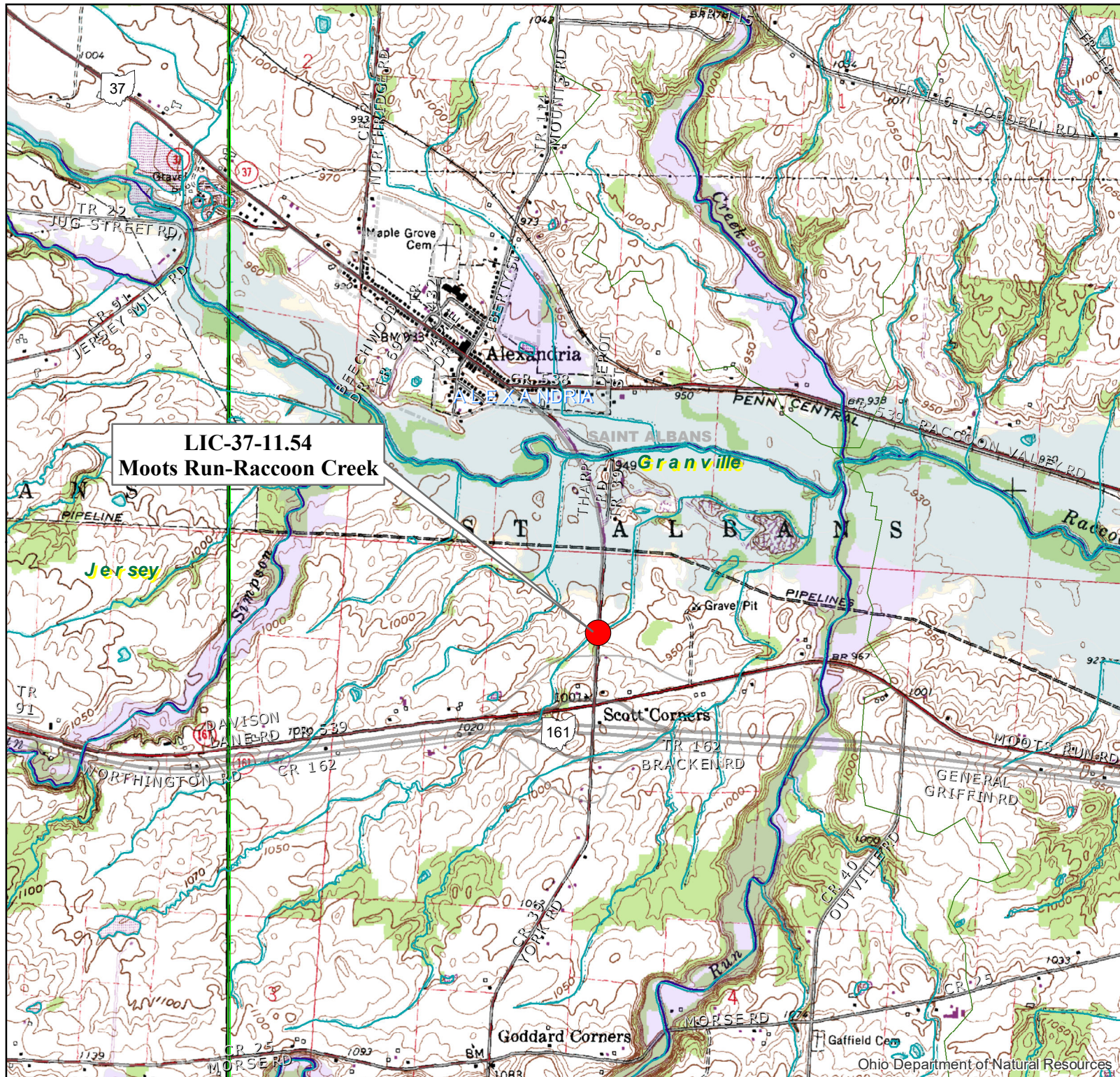
OSIP 2013
Aerial Imagery



DO5 CUL FY 2022
102497

Jersey 7.5'
Quadrangle Map

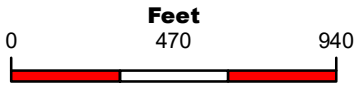
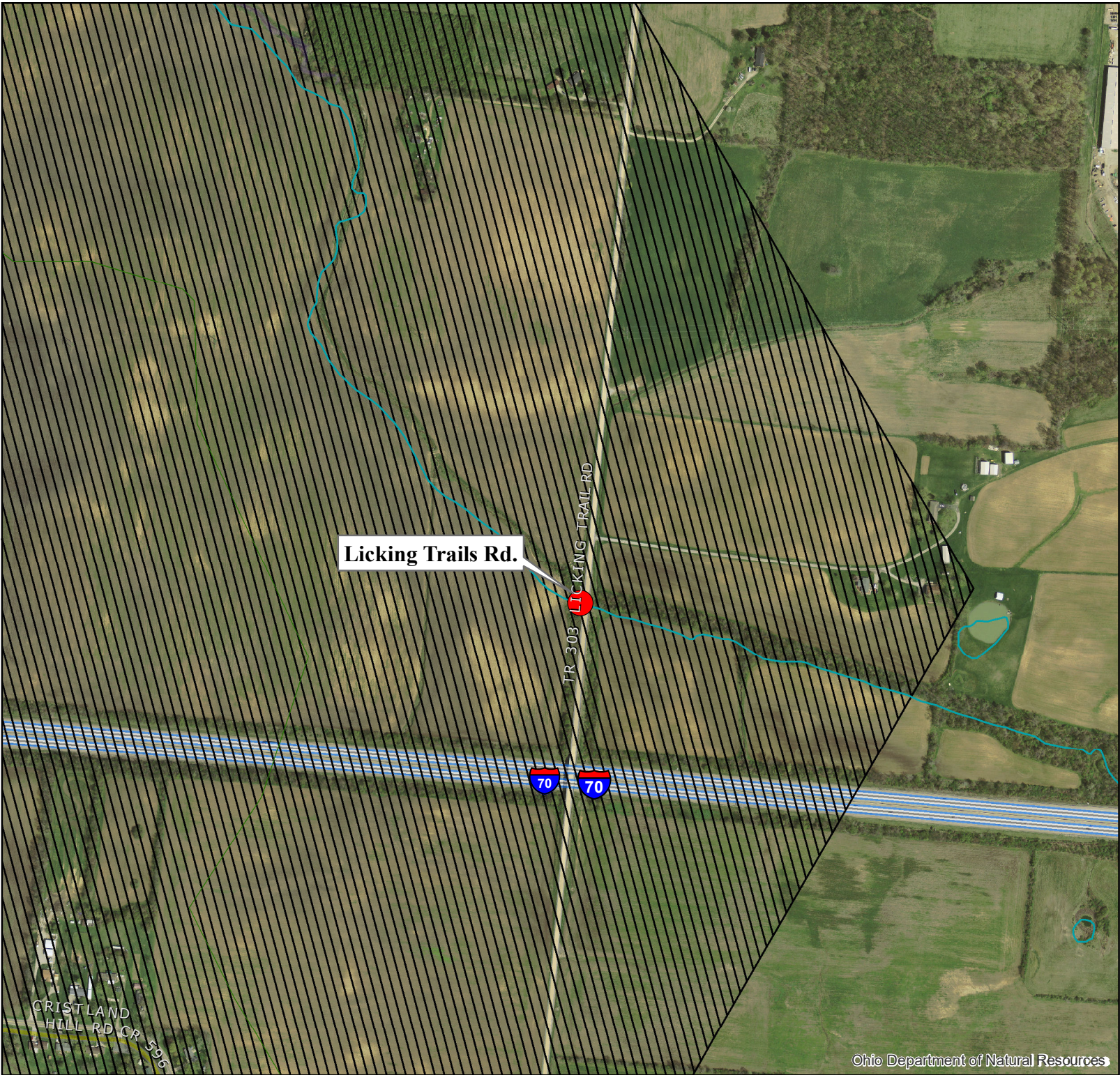
Ohio Department of Natural Resources



DO5 CUL FY 2022
102497

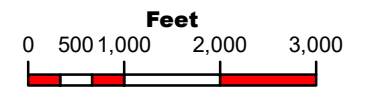
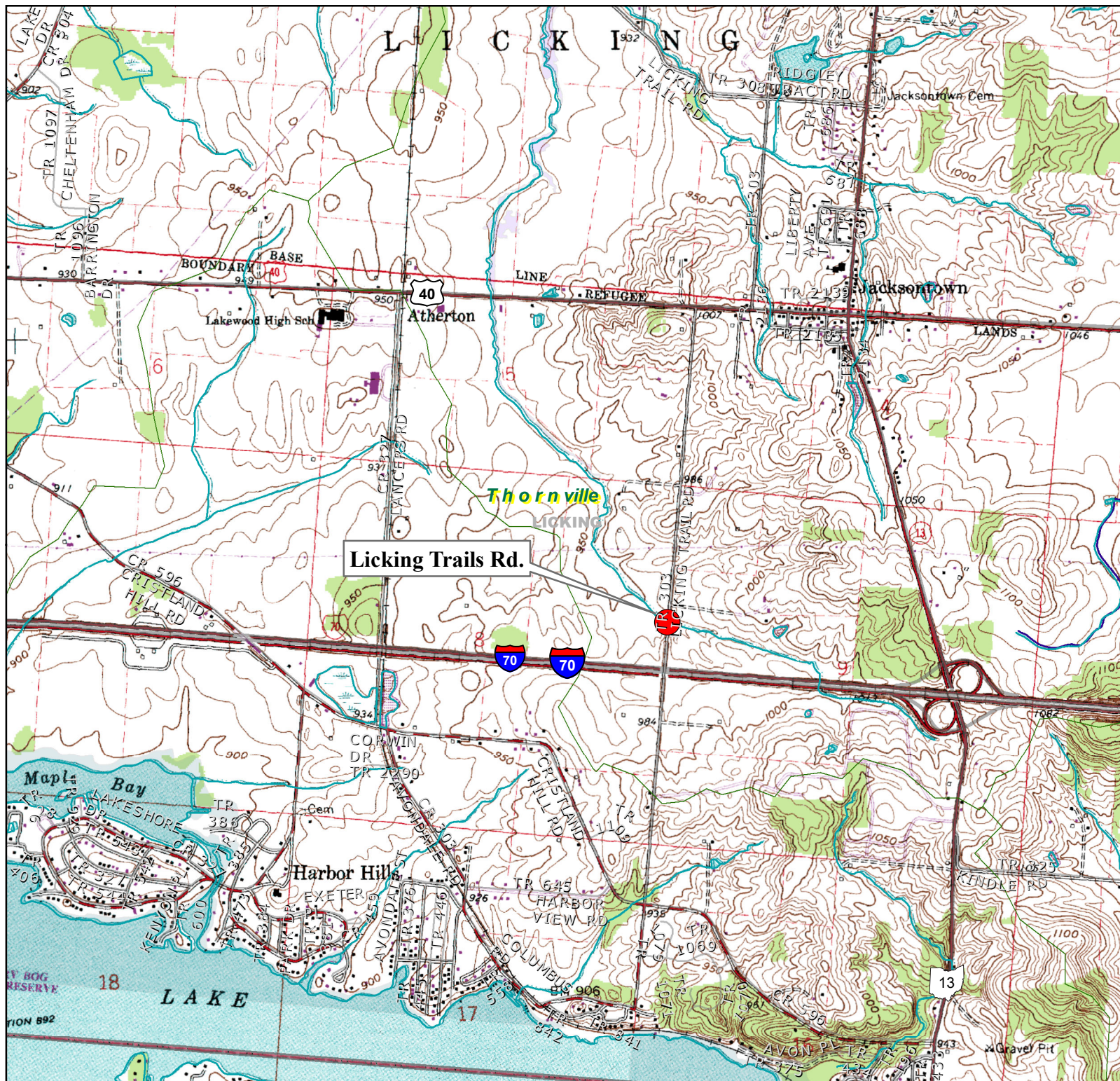
Granville 7.5'
Quadrangle Map

Ohio Department of Natural Resources



DO5 CUL FY 2022
102497

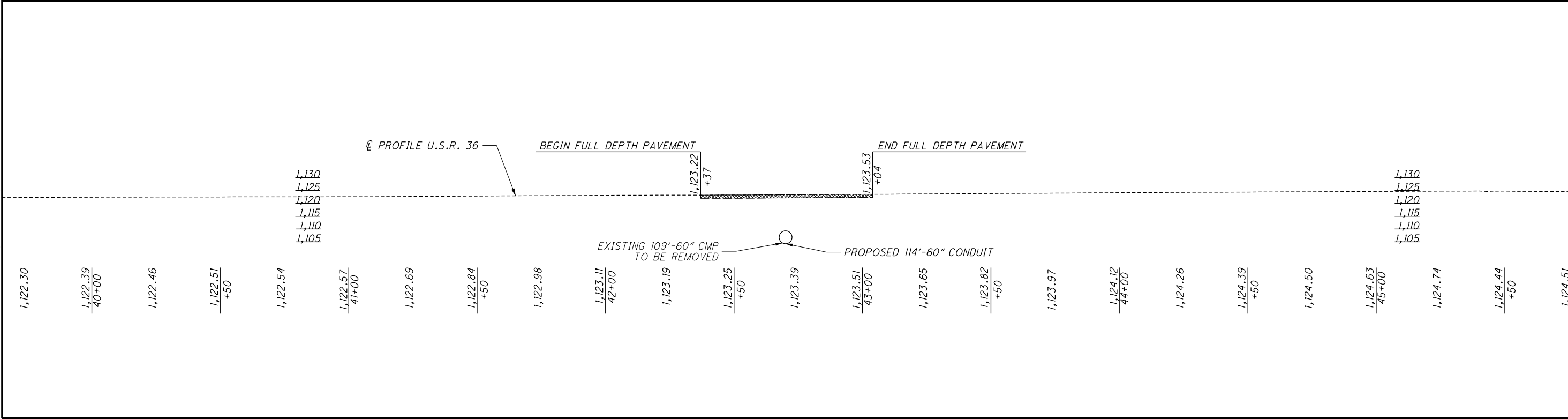
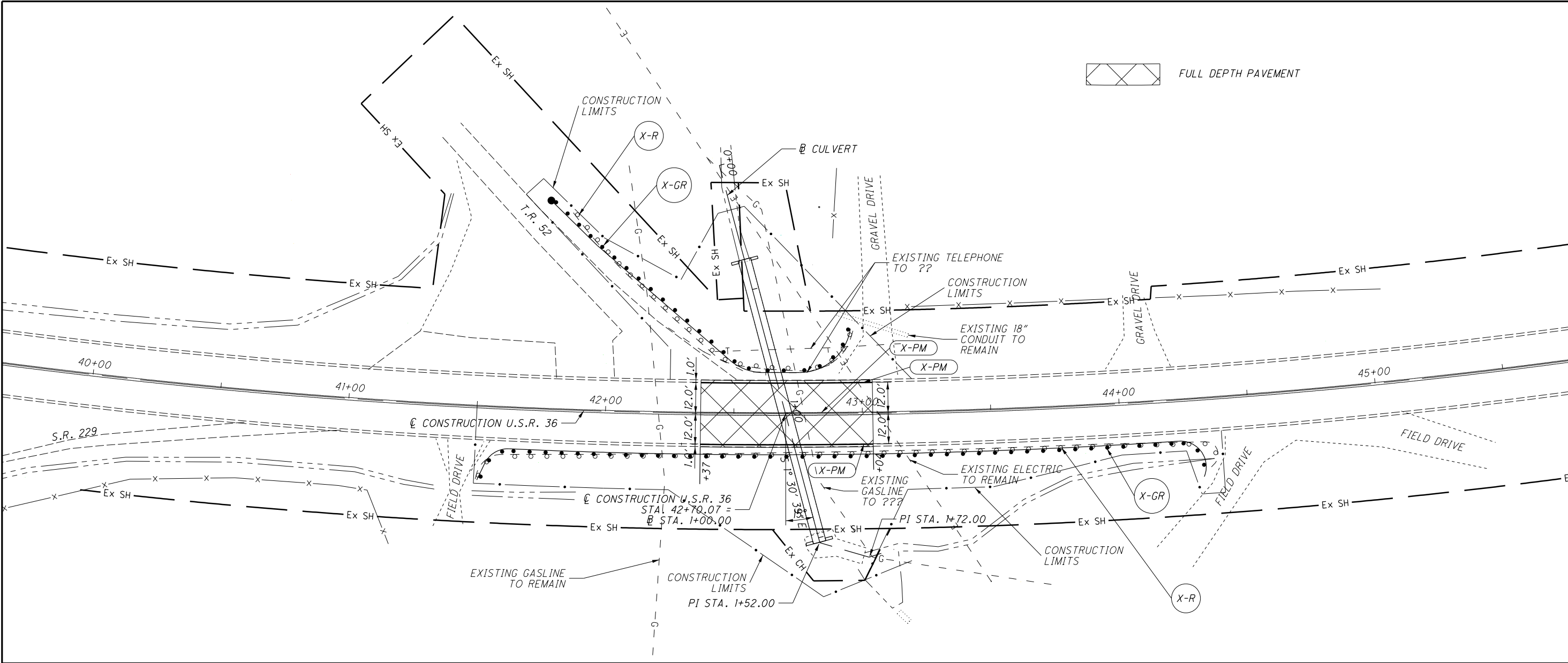
OSIP 2013
Aerial Imagery



DO5 CUL FY 2022
102497

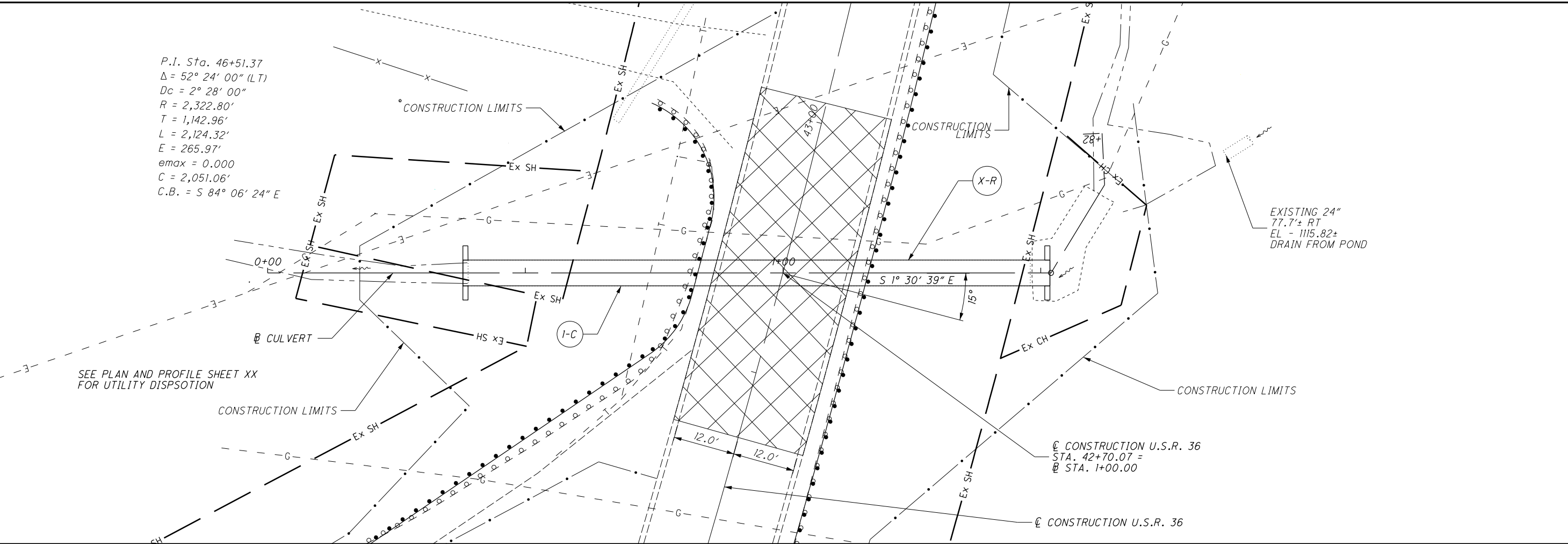
Thornville 7.5'
Quadrangle Map

I:\ProjectData\05\02497\Design\Roadway\Sheets\02497_GP000.dgn Sheet 2/19/2020 11:32:12 AM RGOSSETT



I:\Project\B05\102497\Design\Drainage\Sheet\102497_DC001.dgn Sheet 2/19/2020 11:32:13 AM RG03SETT

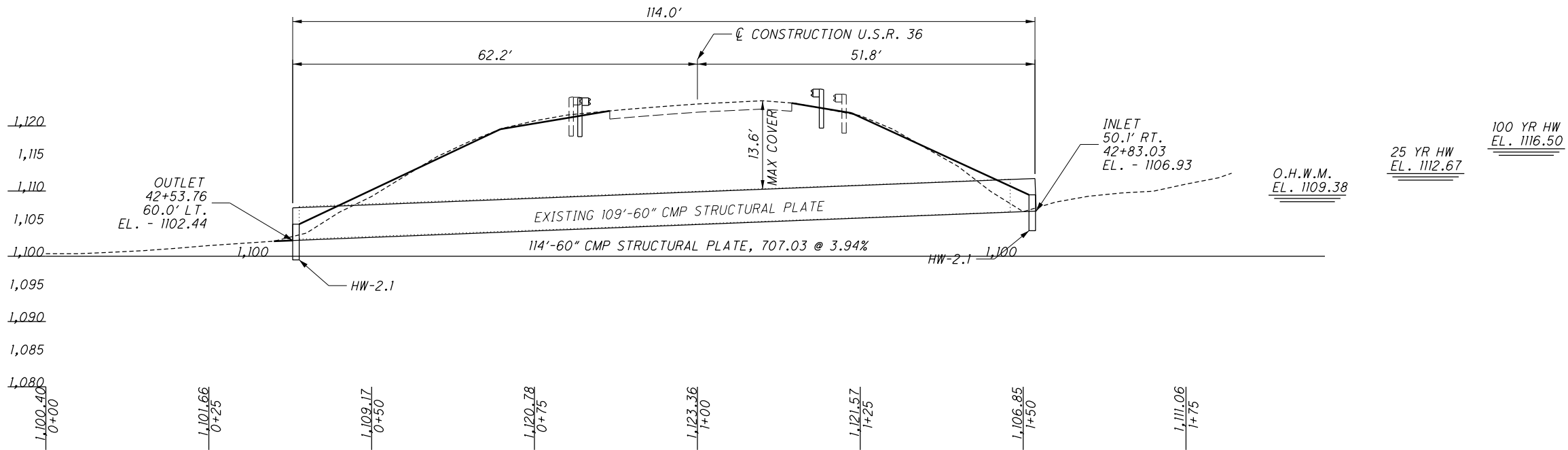
P.I. Sta. 46+51.37
 $\Delta = 52^\circ 24' 00''$ (LT)
 $D_c = 2^\circ 28' 00''$
 $R = 2,322.80'$
 $T = 1,142.96'$
 $L = 2,124.32'$
 $E = 265.97'$
 $e_{max} = 0.000$
 $C = 2,051.06'$
C.B. = S $84^\circ 06' 24''$ E

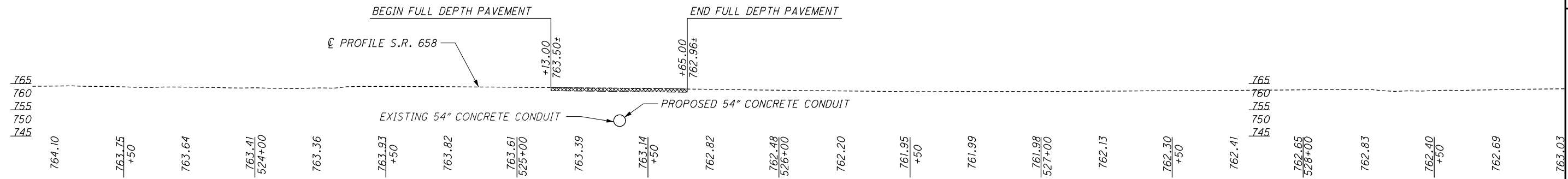
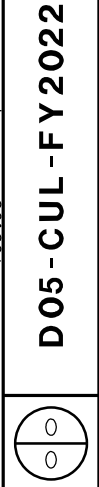


EXISTING STRUCTURE
TYPE: 60" CMP STRUCTURAL PLATE
SKEW: 15°
ALIGNMENT: CURVE TO THE LEFT
CFN: 160360081

PROPOSED STRUCTURE
TYPE: 60" CMP STRUCTURAL PLATE
SKEW: 15°
ALIGNMENT: CURVE TO THE LEFT
CFN: 1866824

HYDRAULIC DATA
DRAINAGE AREA = 154 AC.
DESIGN SERVICE LIFE = 75 YEARS
ABRASION LEVEL =
pH =
 $Q_{25} = 146$ cfs $V_{25} = 14.7$ fps
 $Q_{100} = 224$ cfs $V_{100} = 16.4$ fps

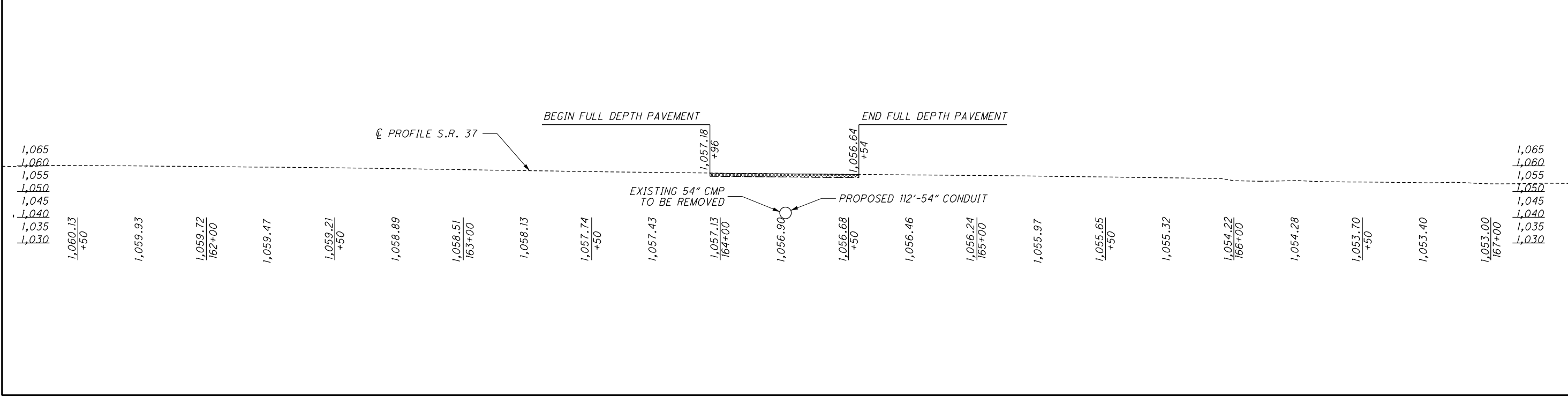
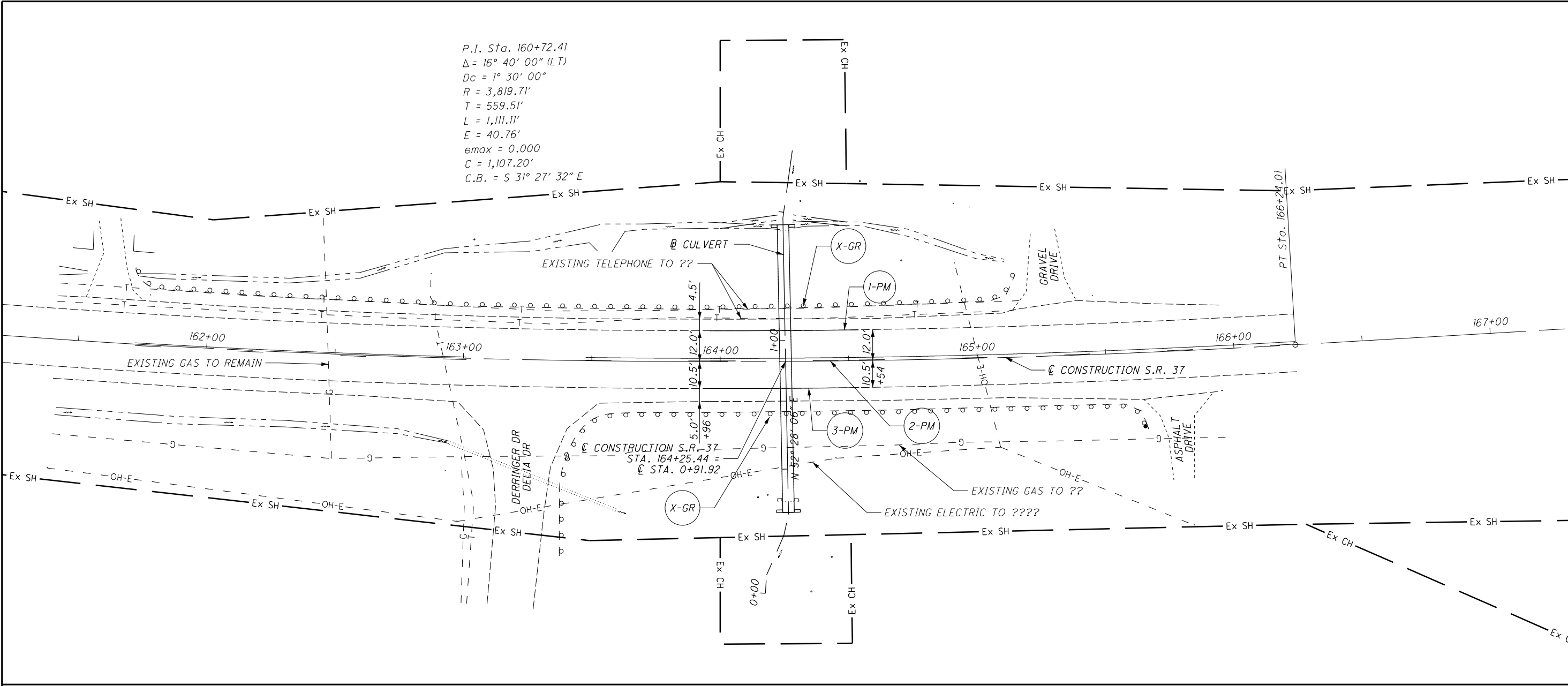






HYDRAULIC DATA	
DRAINAGE AREA = 333 AC.	
DESIGN SERVICE LIFE = 75 YEARS	
ABRASION LEVEL =	
pH =	
$Q_{25} = 228 \text{ cfs}$	$V_{25} = 14.3 \text{ fps}$
$Q_{100} = 506 \text{ cfs}$	$V_{100} = 31.8 \text{ fps}$

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0

5

10

15

20

HORIZONTAL SCALE IN FEET

CALCULATED

RJG

CHECKED

HAG

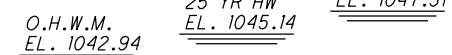
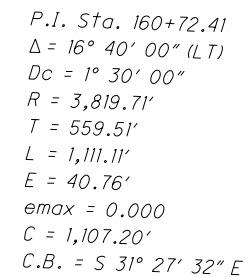
PLAN AND PROFILE

LIC-37-7.60

D05-CUL-FY 2022

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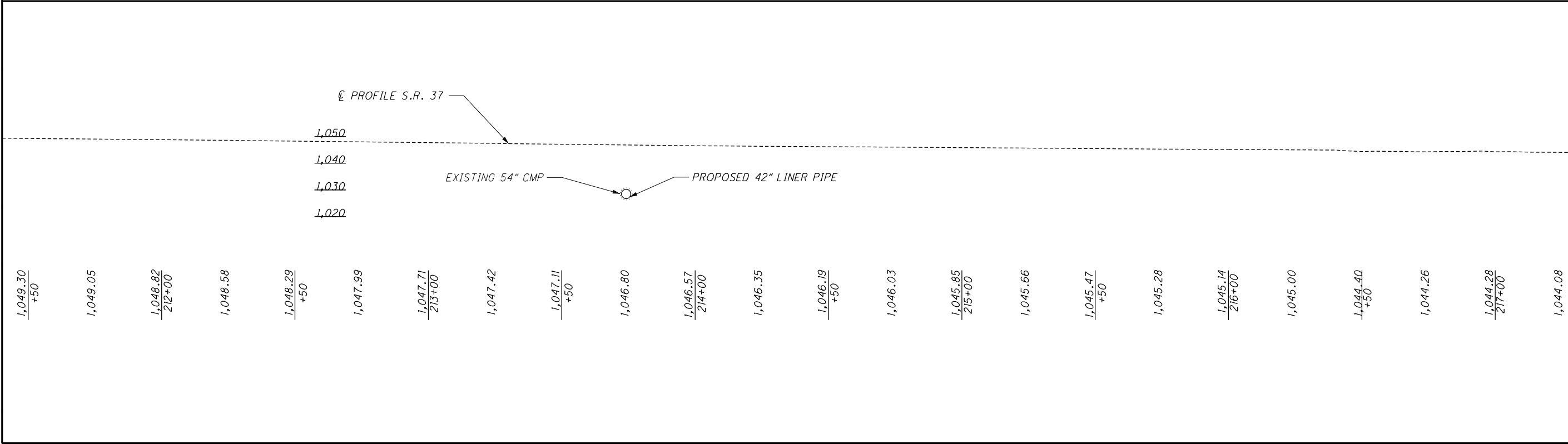
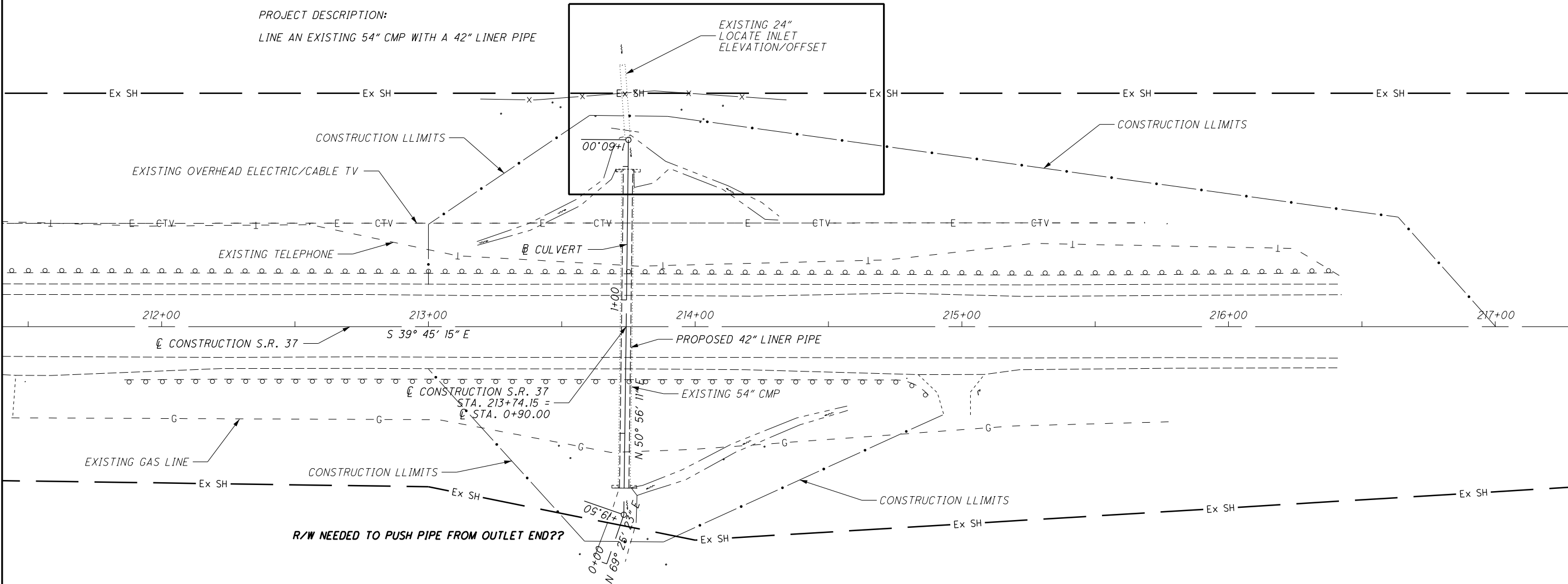
0



HYDRAULIC DATA
 DRAINAGE AREA = 84 AC.
 DESIGN SERVICE LIFE = 75 YEARS
 ABRASION LEVEL =
 pH =
 $O_{25} = 94 \text{ cfs}$ $V_{25} = 10.9 \text{ fps}$
 $O_{100} = 143 \text{ cfs}$ $V_{100} = 11.9 \text{ fps}$

I:\ProjectData\05\02497\Design\Roadway\Sheets\02497_GP004.dgn Sheet 2/9/2020 11:32:24 AM RGOSSETT

PROJECT DESCRIPTION:
LINE AN EXISTING 54" CMP WITH A 42" LINER PIPE



01020

05

20

HORIZONTAL
SCALE IN FEET

CALCULATED
RJG

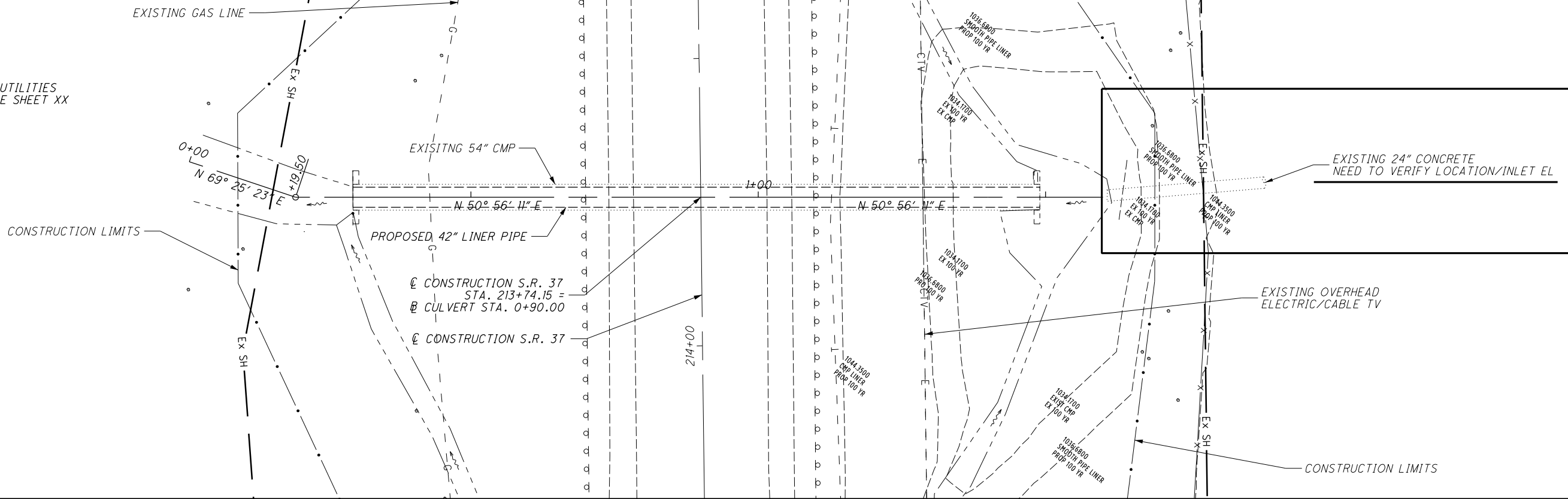
CHECKED
HAG

PLAN AND PROFILE
LIC-37-8.54

D05 - CUL - FY 2022

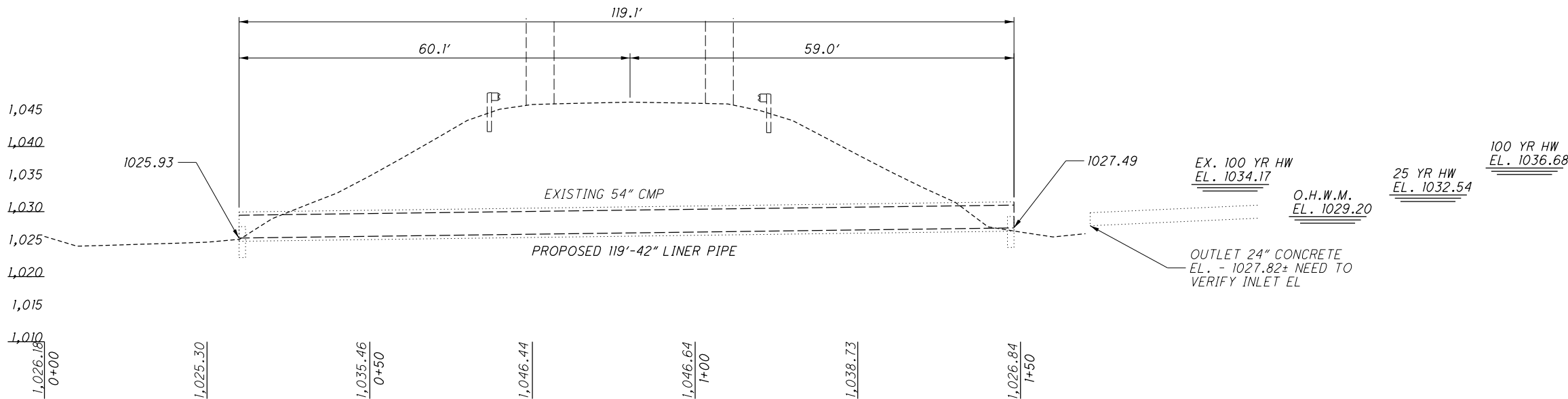
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FOR DISPOSITION OF UTILITIES
SEE PLAN AND PROFILE SHEET XX



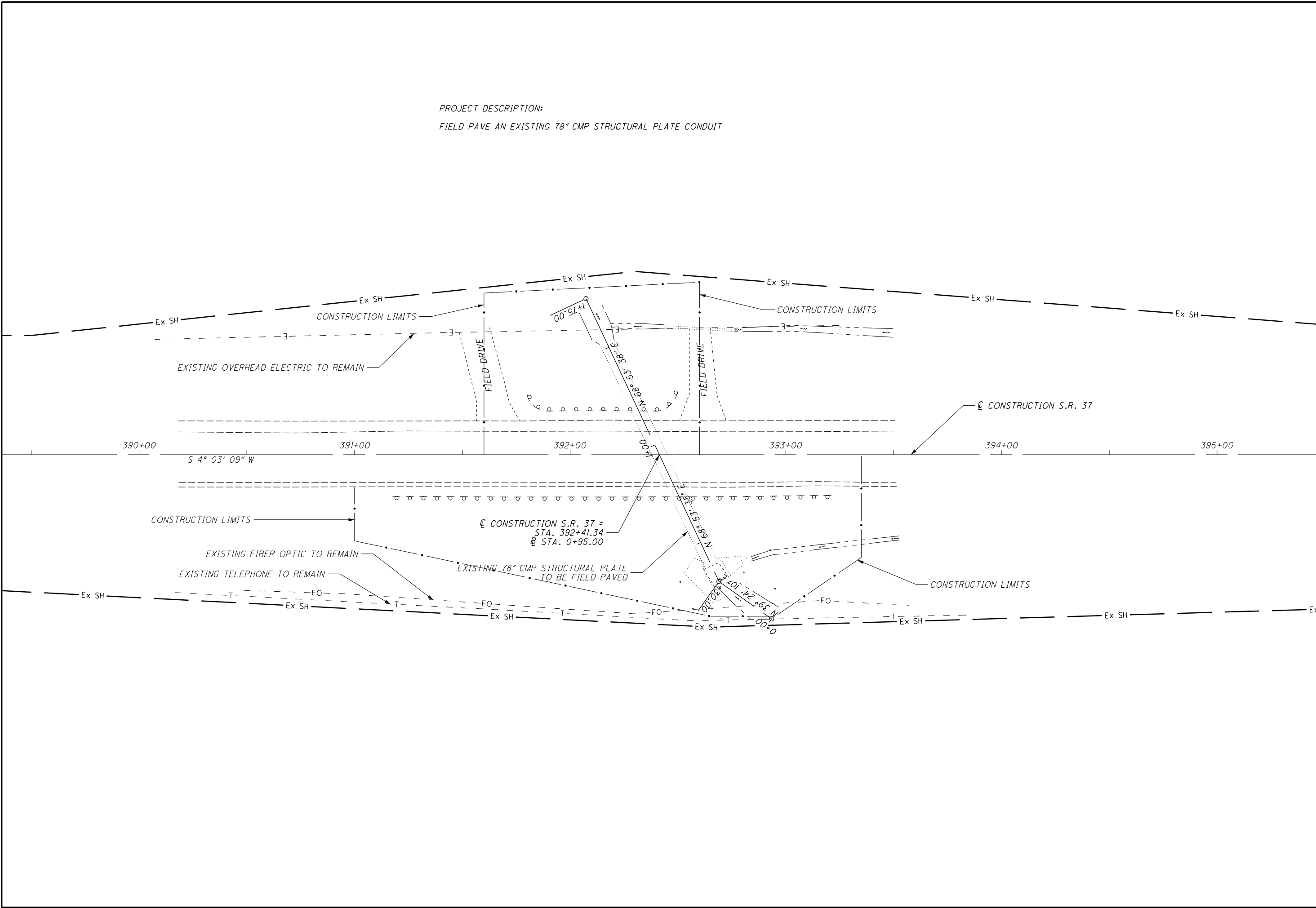
EXISTING STRUCTURE
TYPE: 54" CMP
SKEW: 0°
ALIGNMENT: TANGENT
CFN: 450370852

PROPOSED STRUCTURE
TYPE: 42" LINER PIPE
SKEW: 0°
ALIGNMENT: TANGENT
CFN: 1874184




HYDRAULIC DATA
DRAINAGE AREA = 90 AC.
DESING SERVICE LIFE = 75 YEARS
ABRASION LEVEL =
pH =
Q ₂₅ = 98 cfs V ₂₅ = 14.3 fps
Q ₁₀₀ = 148 cfs V ₁₀₀ = 15.4 fps

I:\ProjectData\05\02497\Design\Roadway\Sheets\02497_GP005.dgn Sheet 2/19/2020 11:32:28 AM RGOSSETT




PROJECT DESCRIPTION:
FIELD PAVE AN EXISTING 78" CMP STRUCTURAL PLATE CONDUIT



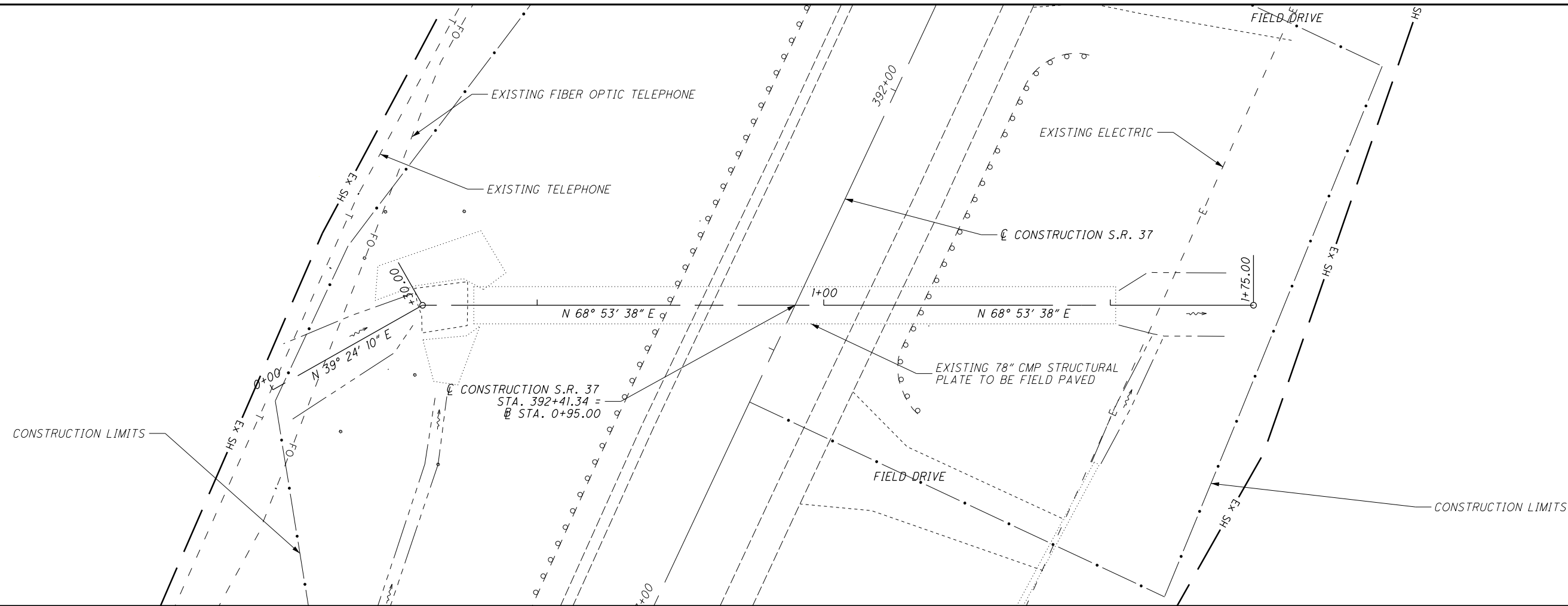
0	5	10	20
HORIZONTAL SCALE IN FEET			

CALCULATED	RJG	CHECKED	HAG
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PLAN VIEW
LIC-37-11.55

D05 - CUL - FY 2022

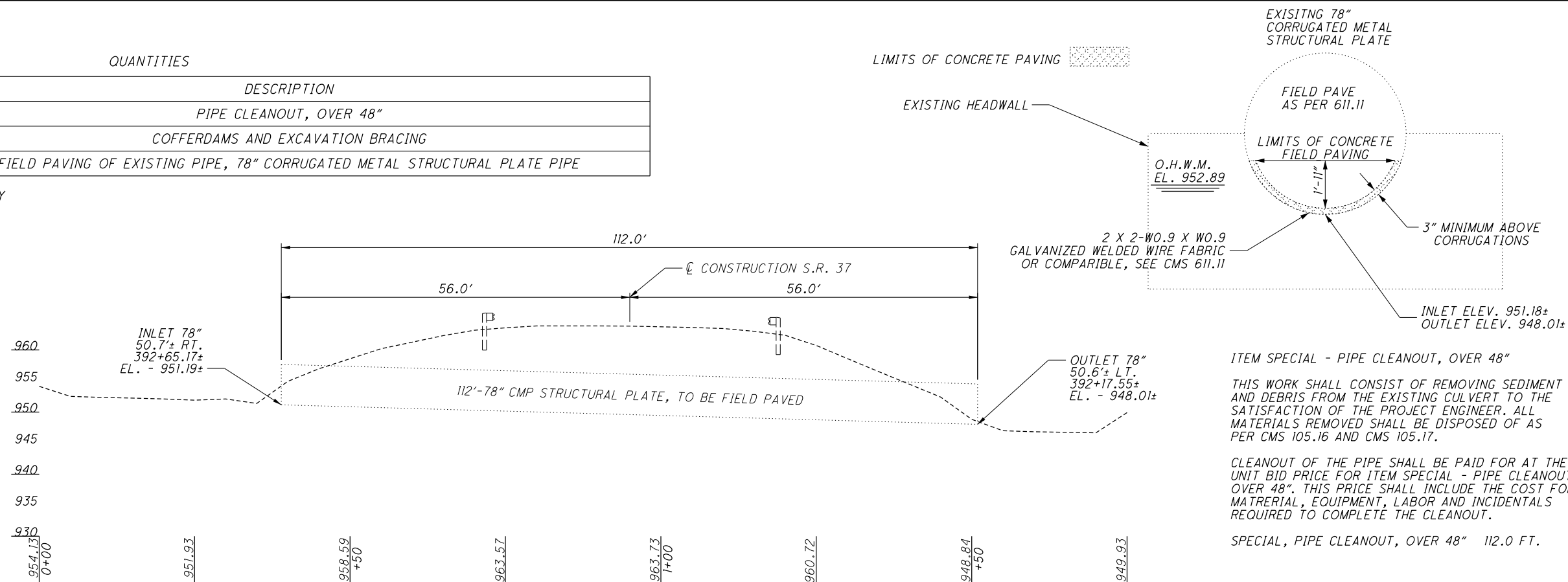
I:\ProjectData\05\02497\Design\Drainage\Sheet\02497_DC005.dgn Sheet 2/19/2020 11:32:28 AM RGOSSETT



QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION
SPECIAL 20270130	112	FT	PIPE CLEANOUT, OVER 48"
503	LUMP		COFFERDAMS AND EXCAVATION BRACING
611	112	FT	FIELD PAVING OF EXISTING PIPE, 78" CORRUGATED METAL STRUCTURAL PLATE PIPE

TOTALS CARRIED TO GENERAL SUMMARY



ITEM SPECIAL - PIPE CLEANOUT, OVER 48"

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING CULVERT TO THE SATISFACTION OF THE PROJECT ENGINEER. ALL MATERIALS REMOVED SHALL BE DISPOSED OF AS PER CMS 105.16 AND CMS 105.17.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT BID PRICE FOR ITEM SPECIAL - PIPE CLEANOUT, OVER 48". THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

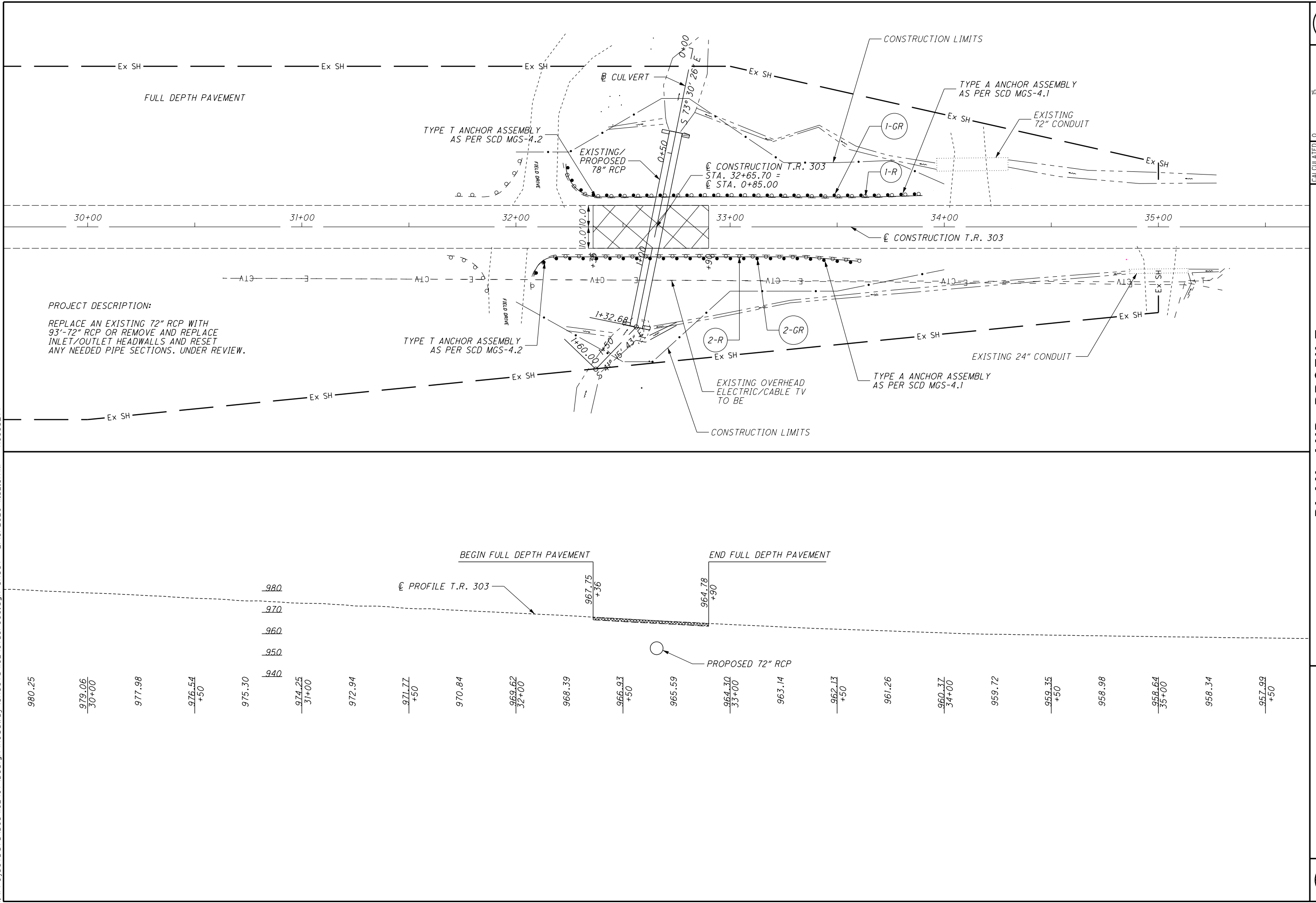
SPECIAL, PIPE CLEANOUT, OVER 48" 112.0 FT.

CALCULATED
RJG
CHECKED
HAG

HORIZONTAL
SCALE IN FEET

CULVERT DETAIL - LIC-37-11.55
STA. 392+41.34

D05-CUL-FY2022



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FOR DISPOSITION OF UTILITIES
SEE PLAN AND PROFILE SHEET XX

CONSTRUCTION LIMITS

⊕ CULVERT

⊕ CONSTRUCTION T.R. 303

⊕ CONSTRUCTION T.R. 303
STA. 32+65.70 =
⊕ STA. 0+85.00

72" RCP

11.5° SKEW

FIELD DRIVE

S 73° 30' 26" E

EXISTING OVERHEAD
ELECTRIC/CABLE TV

FIELD DRIVE

CONSTRUCTION LIMITS

FULL DEPTH PAVEMENT



0 5 10 20
HORIZONTAL
SCALE IN FEET

CALCULATED
RJG
CHECKED
HAG

CULVERT DETAIL - LIC-70-18.64
STA. 32+65.7 (T.R. 303)

D05-CUL-FY2022



EXISTING STRUCTURE

TYPE: 72" REINFORCED CONCRETE PIPE
SKEW: 11.5°
ALIGNMENT: TANGENT
CFN: 450701863

PROPOSED STRUCTURE

TYPE: 72" REINFORCED CONCRETE PIPE
SKEW: 11.5°
ALIGNMENT: TANGENT
CFN: 1804464

HYDRAULIC DATA

DRAINAGE AREA = 365 AC.
DESING SERVICE LIFE = 75 YEARS
ABRASION LEVEL =
pH =
 $Q_{10} = 229$ cfs $V_{10} = 17.5$ fps
 $Q_{100} = 503$ cfs $V_{100} = 20.5$ fps

