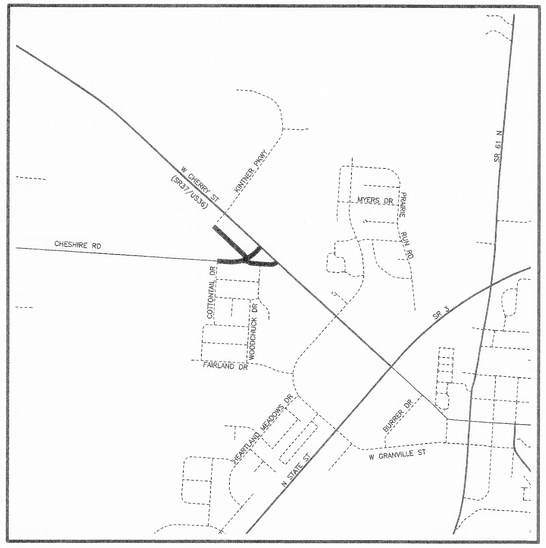
CITY OF SUNBURY, DELAWARE COUNTY, OHIO
STREET, STORM, WATER, SIGNAL, AND LIGHTING PLAN
FOR
CHESHIRE ROAD RELOCATION
2025



LOCATION MAP

LATITUDE: 40°15'06"N LONGITUDE: 82°52'35"W

SCALE: 1" = 1/4 MILE

0 1/4 1/2 3/4 1

N

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

DESIGN DESIGNATION

CHESHIRE ROAD

CURRENT ADT (2025)	7,200
DESIGN YEAR ADT (2045)	8,100
DESIGN HOURLY VOLUME (2045)	810
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	8.0%
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	MAJOR COLLECTOR

STONE CREEK WAY

CURRENT ADT (2025)	7,200
DESIGN YEAR ADT (2045)	1,600
DESIGN HOURLY VOLUME (2045)	160
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	2.0%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	LOCAL

STONE CREEK WAY

CURRENT ADT (2025)	2,070
DESIGN YEAR ADT (2045)	2,350
DESIGN HOURLY VOLUME (2045)	234
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	8.0%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	LOCAL

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PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF RELOCATING 600' OF CHESHIRE ROAD, RECONSTRUCTING 500' OF CHESHIRE ROAD, AND CONSTRUCTING A NEW ROAD (750') WEST OF THE RELOCATED CHESHIRE ROAD. THE PROJECT INCLUDES ASPHALT PAVEMENT, CONCRETE MEDIAN, CURB AND GUTTER, CURB RAMPS, WATER MAIN, STORM SEWER, SIGNAL, LIGHTING, AND TRAFFIC CONTROL.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	5.25 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	5.50 ACRES

SPECIFICATIONS

THE CITY OF SUNBURY DETAILED SPECIFICATIONS TOGETHER WITH THE DELAWARE COUNTY DESIGN, CONSTRUCTION AND SURVEYING STANDARDS, LATEST EDITION, OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT) 2023 EDITION, AND THE CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATIONS (CMSC), WHICH SHALL BE THE LATEST VERSION PUBLISHED AT THE TIME OF SIGNATURE, INCLUDING ALL REVISIONS, SUPPLEMENTS, AND STANDARD DRAWINGS, SHALL GOVERN ALL MATERIAL AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN IN THE PLANS UNLESS OTHERWISE NOTED.

WATER CONSTRUCTION PLAN APPROVAL:

10-27-2025

CHIEF OPERATING OFFICER, DEL–CO WATER COMPANY INC. — DATE

CONSTRUCTION PLAN APPROVAL:

THE SIGNATURES ON THIS PLAN SIGNIFY CONCURRENCE WITH THE GENERAL PURPOSE AND LOCATION OF THE PROPOSED IMPROVEMENTS WITH RESPECT TO SANITARY SEWERS AND LOT SERVICES. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL ENGINEER WHO PREPARED AND CERTIFIED THESE PLANS.

Carla Odibalski — 10/21/2025
CITY ENGINEER, CITY OF SUNBURY — DATE

10-21-25
ADMINISTRATOR, CITY OF SUNBURY — DATE

10/28/2025 8:05:47 AM
B.S.T&G FIRE DEPARTMENT, CITY OF SUNBURY — DATE

PLAN DESIGNER
EMH&T, INC.
5500 NEW ALBANY ROAD
COLUMBUS, OH 43054
TEL: (614)–775–4500
CONTACT: MATT SCHEER
EMAIL: MSCHEER@EMHT.COM

ENGINEERS SEAL:

STATE OF OHIO — MATTHEW J. SCHEER — E-63434 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Matt Scheer
DATE: 10-7-25

PREPARED BY:

EMH&T
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
5500 New Albany Road, Columbus, OH 43054
Phone: 614.775.4500 Toll Free: 888.775.3648
emht.com

Notify OHIO811.org Before You Dig
Notify online using Remote Ticket Entry
To call dial 8-1-1 or 800-362-2764
ildig

STANDARD CONSTRUCTION DRAWINGS

ODOT		COC	DELAWARE COUNTY	DEL-CO WATER
HL–30.11	TC–21.21	COC–4106	S102	D–1
HL–30.21	TC–41.20	MIS–54	S105	D–2
HL–30.22	TC–41.40	MIS–56	S125	D–4
	TC–41.41	MIS–57	S133	D–5
MT–95.61	TC–42.20	MIS–404	S167	D–8
MT–96.60	TC–52.10	MIS–501	S168	D–24
MT–97.10	TC–52.20	MIS–603		D–30
MT–99.20	TC–65.10	MIS–700		
MT–101.60	TC–65.11			
MT–101.90	TC–71.10			
MT–105.10	TC–74.10			
MT–110.10	TC–81.22			
MT–120.00	TC–83.20			
	TC–85.10			
	TC–85.20			

SUPPLEMENTAL SPECIFICATIONS

ODOT	
800	816
805	903
809	906
811	909
813	907
815	913

SPECIAL PROVISIONS

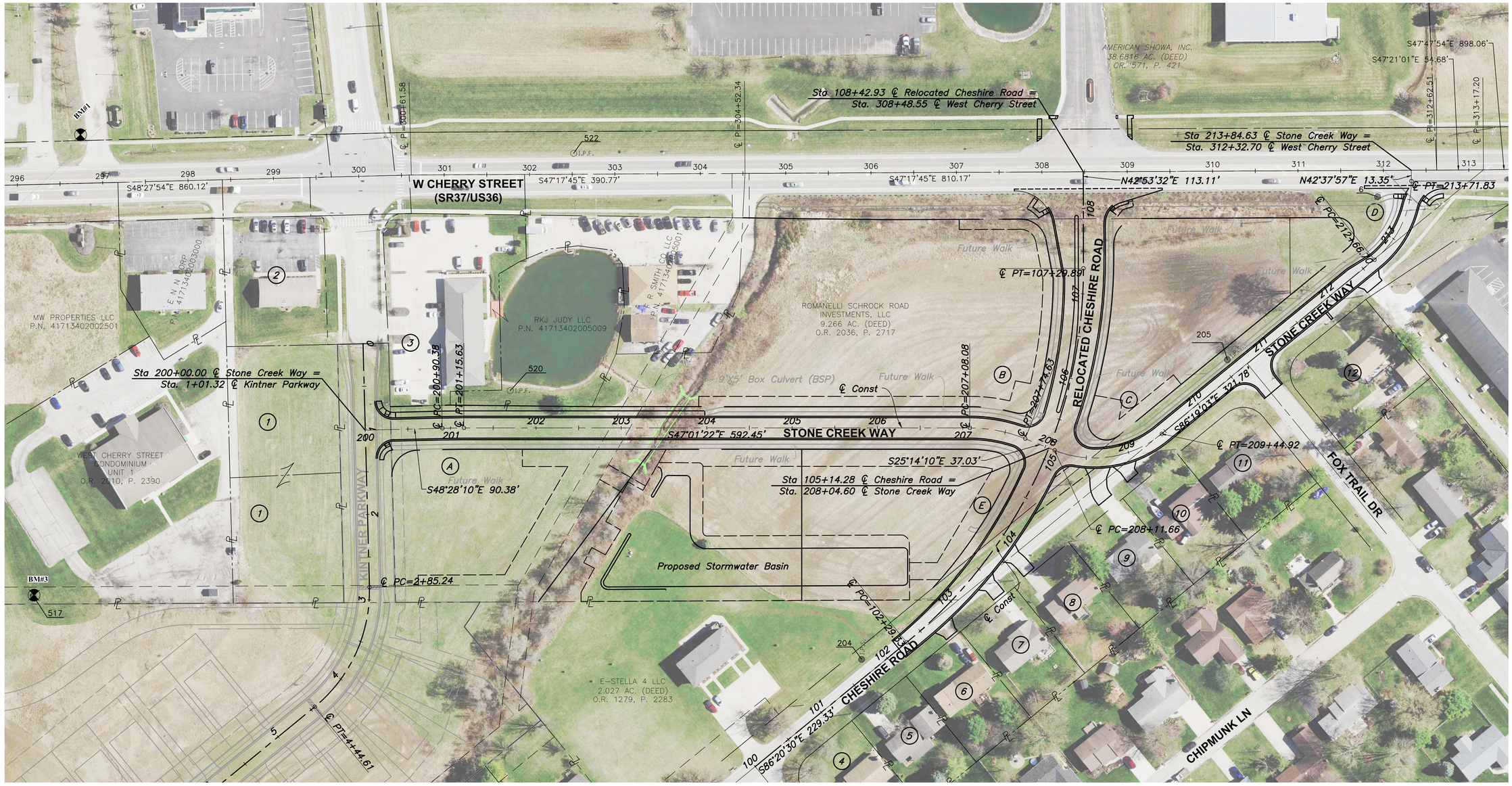
REV. NO.	REVISION DESCRIPTION	SHEET(S)	INITIAL	DATE
1	Added Alternate Pavement Section & Revised Watermain Location, Added sheet 39A Intersection Detail.	1, 3, 18, 20, 21, 23, 39A		

TITLE SHEET

CHESHIRE ROAD RELOCATION

1
65

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3 Xrefs: 2024048A-XS-REFR-E, 20240484-XS-REFR-ROAD-N, Deltawaterindex.



Horizontal Datum
The bearings shown on this map are based on the Ohio State Plane Coordinate System, North Zone, NAD 83 (2011). Said bearings are based upon positional solutions derived from RTK GPS observations using the Ohio Department of Transportation Virtual Reference System Equipment and software. The bearing of South 86°20'30" East, assigned to the centerline of existing Cheshire Road, is designated the bases of bearings for this map.

Bench Mark	Elevation	Description
BM#1	959.94	Chiseled "X" on southwest flange bolt of a fire hydrant, located on the northeasterly side of West Cherry Street (State Route 37) being the first fire hydrant (325 feet) northwest of the intersection with Kintner Parkway.
BM#3	953.78	Chiseled "X" on northeast rim of a sanitary sewer manhole, located 150 feet west of the southwest building corner of 700 West Cherry Street (State Route 37). Being on the southwest side of West Cherry Street.

Vertical Datum
The elevations shown on this map are based on the North American Vertical Datum of 1988. Said elevations are based upon positional solutions derived from RTK GNSS observations using the Ohio Department of Transportation's Ohio Real Time Network equipment and software and the National Geodetic Survey's GEOID18 model, elevations were then transferred by conventional leveling procedures to the permanent benchmarks listed hereon. (Fieldwork Completed 12/2023).

U.S. Survey Foot

Points	Northing (Ground)	Easting (Ground)	Elevation	Full Description
6	212922.0140	1864649.9070	962.20	1165 #6 MAGS
204	212937.7280	1863838.7650	954.13	1152 RTK IPSw/cap
205	212902.2920	1864391.2620	957.68	1152 RTK IPSw/cap
517	213653.4550	1863179.5940	952.99	1065 #17 CESO MAGF
520	213448.4670	1863752.1780	959.99	1057 #20 CESO IRFw/cap
522	213601.0310	1863995.8320	962.31	1057 #22 CESO IRFw/cap

1. LARRY M. ("MIKE") FORMAN
LUANN FORMAN
MARY JO FORMAN MILLER,
SUCCESSOR CO-TRUSTEES
0.451 AC. (DEED)
O.R. 1088, P. 2028
2. PURELIFE PROPERTIES LLC
P.N. 41713402004000
3. RKJ JUDY LLC
P.N. 41713402005006
4. WOLFE, CHARLES E
P.N. 41713404007000
5. FRANK ROBERT A &
JANET M CO TRUSTEES
P.N. 41713404006000
6. OBERLANDER STEVEN D &
BRENDA J
P.N. 41713404005000
7. ENDRES JOHN ARTHUR
P.N. 41713404004000
8. SON HONG DUC TRA MY
& NGUYEN HOAI SON
P.N. 41713404003000
9. LEFEVER TAMI LYNN
P.N. 41713404002000
10. PRIBONIC MICHAEL
P.N. 41713404001000
11. LIMING JASON L TRUSTEE
P.N. 41713404016000
12. REYNOLDS MARK HENRY
P.N. 41713406004000

A ℄ CURVE DATA
P.I.=Sta 201+03.01
Δ=1°26'48"
Dc=5°43'46"
R=1000.00'
T=12.63'
L=25.25'
E=0.08'
C=25.25'
CB=S47°44'46"E

B ℄ CURVE DATA
P.I.=Sta 207+41.76
Δ=21°47'12"
Dc=32°44'26"
R=175.00'
T=33.68'
L=66.54'
E=3.21'
C=66.14'
CB=S36°07'46"E

C ℄ CURVE DATA
P.I.=Sta 208+85.41
Δ=61°04'53"
Dc=45°50'12"
R=125.00'
T=73.75'
L=133.26'
E=20.13'
C=127.04'
CB=S55°46'37"E

D ℄ CURVE DATA
P.I.=Sta 213+23.04
Δ=51°03'00"
Dc=48°33'21"
R=118.00'
T=56.35'
L=105.14'
E=12.76'
C=101.69'
CB=N68°09'27"E

E ℄ CURVE DATA
P.I.=Sta 104+97.38
Δ=50°45'58"
Dc=10°08'31"
R=564.94'
T=268.05'
L=500.56'
E=60.37'
C=484.35'
CB=N68°16'31"E

GRAPHIC SCALE
1 inch = 60 feet
CALCULATED JJB
CHECKED MJS

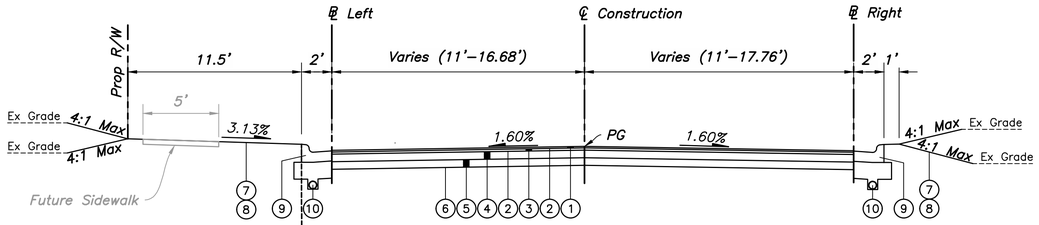
SCHEMATIC PLAN

CHESHIRE ROAD RELOCATION

2
65

SEPTEMBER, 2025

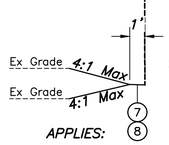
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Xrefs: 2024484-CS-HEPT-PHOTO, 2024484-CS-HEPT-BASE-N, 20230883-15-BASE, 20240881-HANTER-HDS2600NL-BSP



TYPICAL #1 - RELOCATED CHESHIRE ROAD

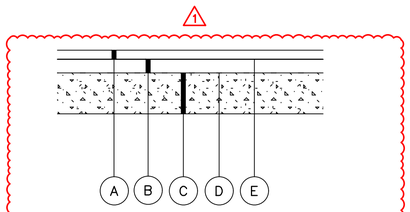
APPLIES:

STA 102+17.50 to STA 104+78.53
STA 104+78.53 to STA 105+50.56 – See Intersection Details Sheet 35



APPLIES:

STA 102+17.50 to STA 103+24.37

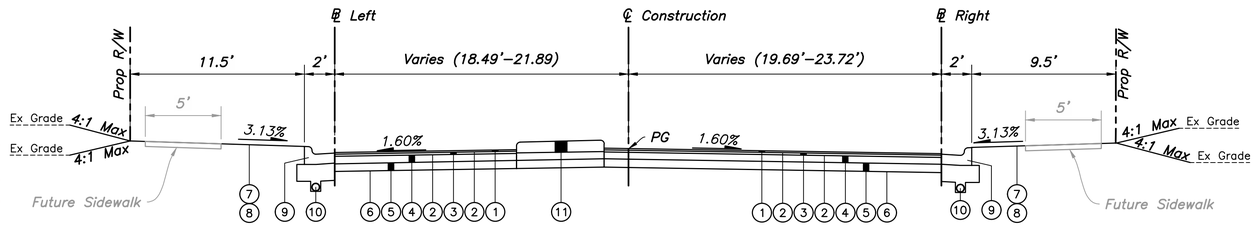


ALTERNATE STREET PAVEMENT DETAIL

Not to Scale

ALTERNATE PAVEMENT LEGEND

- (A) ITEM 441 – 1 1/4" Asphalt Concrete Surface Course Type 1, (448), PG-64-22
- (B) ITEM 441 – 1 3/4" Asphalt Concrete Intermediate Course Type 2, (448)
- (C) ITEM 307 – 7" Roller Compacted Concrete Base – Residential
- (D) ITEM 407 – Tack Coat, Type SBR Asphalt (@ 0.07 Gal/Sq Yd)
- (E) ITEM 407 – Non-Tracking Tack Coat (@ 0.055 Gal/Sq Yd)



TYPICAL #2 - RELOCATED CHESHIRE ROAD

APPLIES:

STA 105+50.56 to STA 107+18.32
STA 107+18.32 to STA 108+21.61 – See Intersection Details Sheet 37

LEGEND

1. *ITEM 441 – 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64–22*
2. *ITEM 407 – NON–TRACKING TACK COAT (@ 0.055 Gal/Sq Yd)*
3. *ITEM 441 – 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64–22*
4. *ITEM 301 – 6" ASPHALT CONCRETE BASE, PG64–22*
5. *ITEM 304 – 6" AGGREGATE BASE*
6. *ITEM 204 – SUBGRADE COMPACTION AND PROOF ROLLING*
7. *ITEM 659 – SEEDING AND MULCHING, CLASS 1*
8. *ITEM 653 – TOPSOIL T=3"*
9. *ITEM 609 – COMBINATION CURB AND GUTTER (DCED–R2020)*
10. *ITEM 605 – 4" PIPE UNDERDRAIN*
11. *ITEM 609 – 9" CONCRETE MEDIAN (COLS STND DWG 2331)*
12. *ITEM 452 – NON–REINFORCED CONCRETE T=8"*
13. *ITEM 608 – CONCRETE WALK (T=4")*
14. *ITEM 659 – NATIVE WILDFLOWER AND GRASS MIXTURE*

A = Cross slope shall be 1.60% except as as shown on Intersection Details Sheet 38

1 Added Alternate Pavement Section

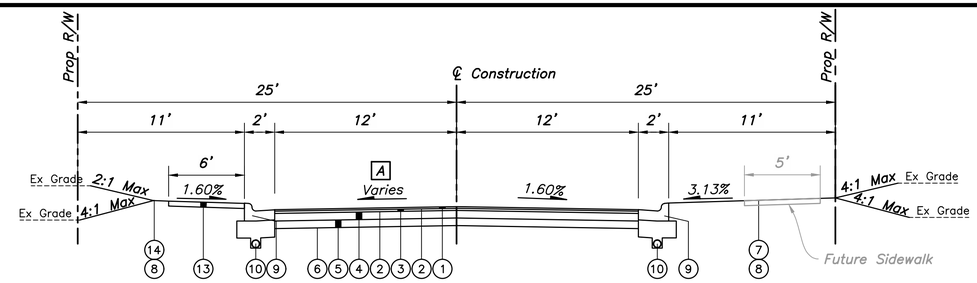
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CHECKED MJS

TYPICAL SECTION

CHESHIRE ROAD RELOCATION

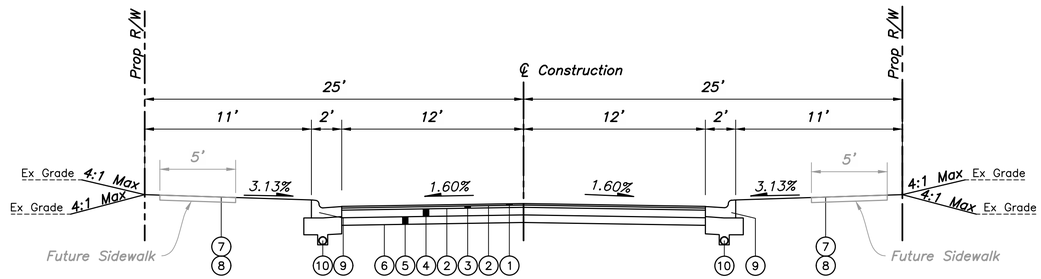
SEPTEMBER, 2025

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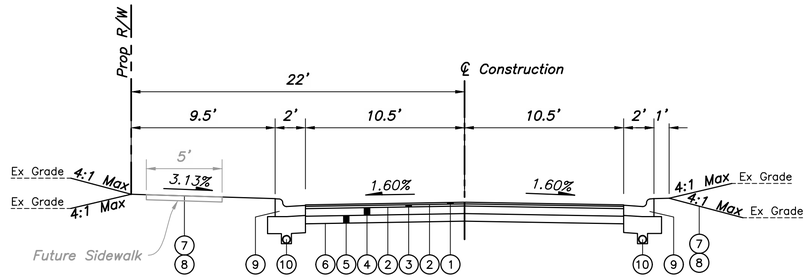
TYPICAL #3 - STONE CREEK WAY

APPLIES:
STA 200+12.00 to STA 200+33.50 – See Intersection Details Sheet 39
STA 200+33.50 to STA 203+97.00



TYPICAL #4 - STONE CREEK WAY

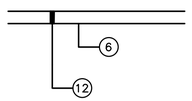
APPLIES:
STA 203+97.00 to STA 207+63.13
STA 207+63.13 to STA 208+56.55 – See Intersection Details Sheet 35



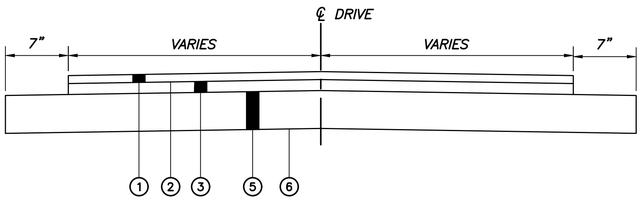
TYPICAL #5 - STONE CREEK WAY

APPLIES:

STA 208+56.55 to STA 210+44.25
STA 210+44.25 to STA 211+10.25 – See Drive Details Sheet 42
STA 211+10.25 to STA 212+35.11
STA 212+35.11 to STA 213+63.36 – See Intersection Details Sheet 40



Concrete Drive Apron Build-up



Asphalt Driveway Detail

LEGEND

1. *ITEM 441 – 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64–22*
2. *ITEM 407 – NON–TRACKING TACK COAT (@ 0.055 Gal/Sq Yd)*
3. *ITEM 441 – 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG64–22*
4. *ITEM 301 – 6" ASPHALT CONCRETE BASE, PG64–22*
5. *ITEM 304 – 6" AGGREGATE BASE*
6. *ITEM 204 – SUBGRADE COMPACTION AND PROOF ROLLING*

A = *Cross slope shall be 1.60% except as as shown on Intersection Details Sheet 38*

7. *ITEM 659 – SEEDING AND MULCHING, CLASS 1*
8. *ITEM 653 – TOPSOIL T=3"*
9. *ITEM 609 – COMBINATION CURB AND GUTTER (DCED–R2020)*
10. *ITEM 605 – 4" PIPE UNDERDRAIN*
11. *ITEM 609 – 9" CONCRETE MEDIAN (COLS STND DWG 2331)*
12. *ITEM 452 – NON–REINFORCED CONCRETE T=8"*
13. *ITEM 608 – CONCRETE WALK (T=4")*
14. *ITEM 659 – NATIVE WILDFLOWER AND GRASS MIXTURE*

CALCULATED JAF
CHECKED MJS

TYPICAL SECTION

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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CITY OF SUNBURY GENERAL NOTES

1. A PRE-CONSTRUCTION MEETING SHALL BE HELD AT THE CITY ADMINISTRATION BUILDING (9 E GRANVILLE ST) AT LEAST 15 CALENDAR DAYS BEFORE THE START OF CONSTRUCTION. REPRESENTATIVES OF THE OWNER, DESIGN ENGINEER, DELAWARE COUNTY ENGINEER'S OFFICE, AND THE CONTRACTOR SHALL BE IN ATTENDANCE. A SCHEDULE OF THE SEQUENCE OF EVENTS DURING CONSTRUCTION MUST BE SUBMITTED FOR REVIEW AT LEAST (7) SEVEN DAYS PRIOR TO THIS MEETING.

2. THE CITY OF SUNBURY DETAILED SPECIFICATIONS TOGETHER WITH THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), INCLUDING ALL SUPPLEMENTS THERETO, CURRENT EDITION, ALONG WITH THE DELAWARE COUNTY DESIGN, CONSTRUCTION AND SURVEYING STANDARDS, LATEST EDITION & ODOT 2023 EDITION SHALL GOVERN ALL MATERIAL AND WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN IN THE PLANS UNLESS OTHERWISE NOTED.

3. ALL WORK SHALL BE COMPLETELY ACCEPTABLE TO THE CITY OF SUNBURY OFFICIALS. NO WORK SHALL COMMENCE UNTIL ARRANGEMENTS HAVE BEEN MADE WITH THE CITY OF SUNBURY ENGINEER FOR INSPECTION. NECESSARY LINE AND GRADE STAKING TO BE PROVIDED BY THE CONTRACTOR.

4. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE CITY OF SUNBURY ENGINEER AT LEAST (7) SEVEN WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

5. APPROVED WORKING HOURS: 7A-7P MON-FRI EXCEPT ON NATIONAL HOLIDAYS. CONTRACTOR MAY REQUEST SATURDAY WORKING HOURS AT THE PRECON MEETING.

6. THE CONTRACTOR SHALL PROVIDE A VIDEO RECORD OF THE SITE TO THE CITY ENGINEER PRIOR TO THE START OF CONSTRUCTION. EMPHASIS OF THE VIDEO SHOULD BE ON EXISTING DEVELOPED AREAS CONTIGUOUS WITH THE PROJECT WORK AREAS.

7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AN UP-TO-DATE COPY OF THE APPROVED PLANS. FOR ACCEPTANCE OF WORK, THE CITY REQUIRES A SIGNED COMPLETE SET OF ALL APPROVED PLANS.

8. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND GOVERNMENT FEES, LICENSES, AND INSPECTIONS FOR THE PROPER EXECUTION OF THE IMPROVEMENTS SHOWN ON THE PLANS.

9. ALL PERTINENT STANDARD CONSTRUCTION DRAWINGS ARE AVAILABLE UPON REQUEST AT THE OFFICE OF THE CITY ENGINEER.

10. APPROVAL OF THESE PLANS SHALL BE IN ACCORDANCE WITH THE CITY OF SUNBURY.

11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND VERIFY THE EXTENT OF WORK TO BE PERFORMED PRIOR TO MAKING THEIR BID. THIS IS ESPECIALLY TRUE WITH REGARD TO ANY REMOVAL ITEMS.

12. THE CONTRACTOR AND SUBCONTRACTOR SHALL ALSO ABIDE BY ALL ORDINANCES OF THE CITY OF SUNBURY.

13. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

14. ALL FIELD TILE BROKEN DURING EXCAVATION SHALL BE REPLACED TO ORIGINAL CONDITION OR CONNECTED TO THE CURB SUBDRAIN OR TO THE STORM SEWER SYSTEM AS DIRECTED BY THE ENGINEER.

15. INGRESS AND EGRESS SHALL BE MAINTAINED TO PUBLIC AND PRIVATE PROPERTY.

16. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY AND ALL EXISTING WORK DAMAGED DURING OR DUE TO THE EXECUTION OF THIS CONTRACT AT THEIR OWN EXPENSE. SAID WORK TO BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S ENGINEER AND THE CITY OF SUNBURY.

17. ALL SIGNS, FENCES, SHRUBS, DRAINAGE STRUCTURES, OR OTHER PHYSICAL FEATURES THAT ARE TO REMAIN INTACT WHICH ARE DISTURBED OR DAMAGED DURING WORK UNDER THE CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR UNLESS OTHERWISE PROVIDED IN THE CONTRACT. THE COST OF ALL SUCH WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS SANITARY SEWER ITEMS.

18. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO ORIGINAL CONDITION AS NEAR AS PRACTICABLE UPON COMPLETION OF THIS WORK. ANY DAMAGE TO OTHER UTILITIES DURING THIS WORK BY THE SUBCONTRACTOR SHALL BE REPAIRED BY THE APPROPRIATE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE.

19. CARE SHALL BE EXERCISED WHEN WORKING THE AREA AROUND EXISTING TREES AND SHRUBS. TREES MAY BE REMOVED WITHIN THE PERMANENT AND TEMPORARY EASEMENTS ONLY. EFFORTS SHALL BE MADE TO PRESERVE TREES 24-INCHES CALIPER OR LARGER. NO TREES SHALL BE DAMAGED OR DISTURBED OUTSIDE OF THE EASEMENTS OR WHERE MARKED ON THE PLANS AS "DO NOT DISTURB".

20. THE COST OF DEWATERING OR ROCK EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR SANITARY PIPE. THE BIDDER SHALL DETERMINE IF ANY DEWATERING OR ROCK EXCAVATION WILL BE REQUIRED AND ADJUST THEIR BIDS ACCORDINGLY.

21. PAVEMENT CUTS FOR UTILITY LINE INSTALLATIONS SHALL BE SUBJECT TO THE BACKFILL REQUIREMENTS OF COC CMS ITEM 912. PAVEMENT SHALL BE PLACED TO MATCH EXISTING SECTION OR 10 INCHES OF 448 ASPHALT, WHICHEVER IS GREATER. DEEP TRENCHES MAY NOT BE PARTIALLY FILLED WITH LARGE SIZE AGGREGATE.

22. THE FLOW IN ALL SEWERS, DRAINS, AND SANITARY SEWER COURSES ENCOUNTERED SHALL BE MAINTAINED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND WHENEVER SUCH SANITARY SEWER COURSES AND DRAINS ARE DISTURBED OR DESTROYED DURING THE PROSECUTION OF EXPENSE TO THE CITY OF SUNBURY.

23. ALL EARTHWORK OPERATIONS, ESPECIALLY PAVEMENT SUBGRADE CONSTRUCTION, SHALL BE INSPECTED BY A REGISTERED SOILS ENGINEER EMPLOYED AND PAID FOR BY THE OWNER. ADDITIONALLY ALL FINAL GRADES SHALL BE FIELD CHECKED BY THE CONSTRUCTION MANAGER UPON COMPLETION OF THE CONTRACTOR'S OPERATIONS TO DETERMINE IF THE SITE HAS BEEN CONSTRUCTED TO THE GRADES INDICATED.

24. ALL ITEMS CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SAME AND SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS.

25. EROSION CONTROL MEASURES ARE TO BE INSTALLED PER PLAN OR AS SUCH DIRECTED BY THE CITY AND ARE TO BE MAINTAINED UNTIL SUCH TIME THAT THEY ARE NO LONGER REQUIRED.

26. ALL AREAS IN THE RIGHT-OF-WAY ARE TO BE GRADED AND SEEDED AS SOON AS WORK IN THAT AREA IS COMPLETE.

27. THE CONTRACTOR IS RESPONSIBLE FOR THE PROVISION AND MAINTENANCE OF A PORTABLE TOILET ON THE SITE DURING ALL PHASES OF CONSTRUCTION.

28. THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR ALL COMPACTION AS WELL AS ASPHALT AND CONCRETE TESTING. TESTING IS TO BE PERFORMED BY A REGISTERED CONTRACTOR AS SPECIFIED BY THE CITY ENGINEER.

29. THE CITY ENGINEER RESERVES THE RIGHT TO DIRECT PROJECT SPECIFIC CHANGES TO ANY CITY CONSTRUCTION NOTE AND SPECIFICATION.

30. NO CONSTRUCTION TRAFFIC IS PERMITTED ON STREETS ACCESSING NEIGHBORHOOD SUBDIVISIONS. NO TRACKED EQUIPMENT IS PERMITTED ON EXISTING STREET PAVEMENT.

31. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL OTHER FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. THE CONTRACTOR AND SUBCONTRACTORS SHALL INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS ASSOCIATED WITH THIS WORK.

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL PERMITS NECESSARY TO PERFORM ALL WORK WITHIN AND/OR ADJACENT TO THE RIGHT-OF-WAY OF ALL ROADS AND HIGHWAYS. ALL FEES, BONDS, INSURANCE, AND OTHER COSTS REQUIRED BY THE OWNER OF SAID ROADS AND HIGHWAYS SHALL BE PROVIDED BY THE CONTRACTOR AND INCLUDED IN THE PRICE BID FOR THE WORK.

33. THE CONTRACTOR SHALL PROVIDE THE CITY ENGINEER AND DELAWARE COUNTY ENGINEER WITH A 24 HOUR TELEPHONE NUMBER TO READILY CONTACT A RESPONSIBLE PARTY IN THE CASE OF AN EMERGENCY. THE COST AND/OR DAMAGES INCURRED RELATED TO WORK PERFORMED BY THE CONTRACTOR IN SUCH EMERGENCIES ARE THE CONTRACTORS RESPONSIBILITY AND NOT THE AFFECTED ENTITY.

34. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR BY REASON OF COMPLIANCE WITH ANY OF THE REQUIREMENTS INDICATED IN THE PLANS, BUT PAYMENT SHALL BE DEEMED TO BE INCLUDED AMONG THE SEVERAL ITEMS, AS BID UPON, UNLESS OTHERWISE SPECIFICALLY PROVIDED.

35. IN ADDITION TO THE DIRECT REQUIREMENTS OF THE CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL OBSERVE AND CONFORM TO THE SPECIFIC REQUIREMENTS OF ALL RIGHT -OF-WAYS INCLUDING EASEMENTS, COURT ENTRIES, RIGHTS OF ENTRY, OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF THE APPLICABLE GOVERNING AGENCY. THE COST OF OPERATIONS NECESSARY TO FULFILL SUCH REQUIREMENTS SHALL BE INCLUDED IN THE TOTAL CONTRACT PRICE BID.

36. THE DESIGN SHOWN ON THESE DRAWINGS IS BASED UPON A FIELD SURVEY AND EXISTING RECORDS.

37. PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL TAKE PHOTOGRAPHS AND VIDEO OF THE PROJECT SITE PER THE SPECIFICATIONS. A DIGITAL COPY OF ALL MEDIA SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR PRE-CONSTRUCTION VIDEOTAPING.

38. ALL CONSTRUCTION STAKING SHALL BE PROVIDED BY THE CONTRACTOR. THIS WILL CONSIST OF ALIGNMENT AND GRADE STAKES SET AND MARKED IN THE FIELD. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY REPLACEMENT STAKES NECESSARY, REMOVED OR DESTROYED BY THEIR PERSONNEL OR EQUIPMENT.

39. THE CONTRACTOR SHALL MAINTAIN AS-BUILT DRAWINGS THROUGHOUT THE PROJECT AND SHALL BRING THE CURRENT SET OF AS-BUILT DRAWINGS TO EACH PROGRESS MEETING FOR REVIEW.

40. THE WORK OF THIS CONTRACT SHALL NOT INTERFERE WITH MAINTAINING CONTINUOUS FLOW IN THE EXISTING SANITARY SEWER, STORM SEWER, WATERLINES, POWER, TELEPHONE, CABLE TV, GAS, OR ANY OTHER SYSTEM THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL UTILITY POLES AND RELOCATE ANY UTILITY THAT IMPEDES CONSTRUCTION. NOTHING SHALL BE DONE BY ANY OTHER CONTRACTOR FOR THIS PROJECT WHICH WILL IN ANY WAY REDUCE THE QUALITY OR QUANTITY LEVEL OF SUCH OPERATIONS. THE CONTRACTOR SHALL NOTIFY THE OWNER (1) ONE WEEK PRIOR TO MODIFYING ANY FACILITIES. NO PAYMENT WILL BE MADE FOR ANY UTILITY MAINTENANCE UNLESS SPECIFICALLY NOTED AS A BID ITEM IN THE PROPOSAL. FAILURE TO PROPERLY MAINTAIN UTILITIES WILL RESULT IN THE REDUCTION OF THE PROPOSAL ITEM FOR UTILITY MAINTENANCE.

41. AT ALL UTILITY CROSSINGS, THE BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL BETWEEN THE DEEPER AND SHALLOWER PIPE UNLESS CONTROLLED DENSITY FILL OR CONCRETE IS SPECIFIED OTHERWISE IN THE DRAWINGS.

42. MANHOLES SHALL BE INSTALLED WITH ADJUSTING RINGS SO THAT THE TOP OF THE CASTING IS AT EXISTING GRADE. THE CASTING SHALL NOT PROTRUDE SO AS TO INTERFERE WITH MOWING.

43. BACKFILL: EARTH WILL NOT BE MOUNDED OVER THE TRENCH IN ANTICIPATION OF SETTLEMENT. THE CONTRACTOR SHALL COMPACT THE TRENCH AND ESTABLISH THE ORIGINAL DITCH GRADE AS WORK PROGRESSES. DRAINAGE MUST BE RESTORED AS QUICKLY AS PRACTICAL. IF EROSION OF THE DITCH LINE CAUSES SILTING OF EXISTING DRAINAGE LINES, THE CONTRACTOR SHALL CLEAN AS NECESSARY. BACKFILL AND CLEANUP OPERATIONS SHALL BE KEPT WITHIN 300 FEET OF PIPE LAYING OPERATIONS DAILY. CARE SHALL BE TAKEN TO INSURE THAT NO DITCH LINE ELEVATIONS ARE RAISED DUE TO EXCESS BACKFILL. COMPACTION IS TO BE CARRIED OUT WITH THE NECESSARY EQUIPMENT TO ACHIEVE THE COMPACTION REQUIREMENT OF ODOT CMS ITEM 304.05. THE CONTRACTOR SHALL MAINTAIN DRIVEWAYS ACCESSIBLE AT ALL TIMES BY USING PLATES OR COMPACTED GRANULAR FILL.

44. ROAD MAINTENANCE AREA: UNLESS PREEXISTING BEFORE CONSTRUCTION OPERATIONS, THE SURFACE WITHIN A MINIMUM OF 5 FEET FROM THE EDGE OF PAVEMENT SHALL BE MAINTAINED OBSTACLE FREE, BY THE CONTRACTOR, FOR POSITIVE DRAINAGE AND/OR SNOW PLOW/MAINTENANCE OF ROAD PAVEMENT.

45. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

46. DISTURBANCE TO THIS SITE IS COVERED BY OEPA GENERAL PERMIT OHC000006 AND THE NPDES PERMIT.

47. MARKER POLES SHALL BE SET AT ALL PROPOSED MANHOLES AS SHOWN ON THE PLANS. THE MARKER POLE SHALL BE A 4 INCHX 4 INCH PRESSURE TREATED OR HARDWOOD POLE SET TO A POINT 3 FEET BELOW FINAL GRADE. BRACE THE POLE IN SUCH A MANOR TO HOLD IT FIRMLY IN POSITION DURING BACKFILL. THE POLE SHALL EXTEND 4 FEET ABOVE FINAL GRADE AND SHALL BE PAINTED BRIGHT RED. THE COST FOR THE MARKER POLES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 604-MANHOLES.

ROADWAY CONSTRUCTION SPECIFICATIONS:

1. CITY STREETS, AS WELL AS STATE ROUTES, ARE TO BE KEPT CLEAN AND FREE, AT ALL TIMES, FROM MUD, STONE, DIRT, ETC. A TEMPORARY CONSTRUCTION ENTRANCE COMPRISED OF 100'X20' MAT OF 2 INCH STONE, IS TO BE MAINTAINED AT ALL TIMES.

2. ASPHALT JOB MIX FORMULA WILL BE REQUIRED AS WELL AS OTHER TESTING AS DESCRIBED IN ITEM 401.

3. PLACEMENT OF THE SURFACE COURSE OF 448 ASPHALT MAY BE DELAYED UNTIL THE MAJORITY OF CONSTRUCTION TRAFFIC HAS DIMINISHED AT THE OPTION OF THE DEVELOPER.

4. CONCRETE CURBS ARE TO BE BRANDED DURING CONSTRUCTION AS FOLLOWS:

   "S" - ON TOP OF CURB FOR SANITARY LATERAL LOCATIONS
   "W" - ON FACE OF CURB FOR WATER SERVICE BOX LOCATIONS "WV" - ON FACE OF CURB FOR HYDRANT WATCH VALVE LOCATIONS "WM" - ON FACE OF CURB FOR MAIN LINE VALVE LOCATIONS

   BRANDS THAT ARE MISSED MUST BE NEATLY GROUND IN THE CURB AFTER IT HAS SET.

5. ALL ROADWAY SUBGRADE SHALL BE PROOF ROLLED PER ITEM 204 AND HAVE A REGISTERED SOILS ENGINEER ON SITE TO WITNESS AND REPORT ON THE PROOF ROLLING.

LIGHTING:
SEE SHEET 33 FOR LIGHTING NOTES.

MAINTENANCE OF TRAFFIC:
SEE SHEET 13 FOR MAINTENANCE OF TRAFFIC NOTES

TRAFFIC SIGNAL:
SEE SHEET 51-53 FOR TRAFFIC SIGNAL NOTES

CALCULATED JJB CHECKED MJS

GENERAL NOTES

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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DELCO WATER COMPANY
GENERAL NOTES FOR WATERLINE CONSTRUCTION
REVISED: JANUARY 16, 2025

1. General Notes as modified by Del–Co Water and shown on the approved Construction Drawings shall supersede the requirements of the Del–Co Water Company Construction Standards Manual wherever discrepancies occur.

2. Standard General Notes:
   a. Waterline design, materials, and installation methods shall conform to applicable sections of Recommended Standards for Water Works (Ten States Standards), American Water Works Association (AWWA) Standards, and the Del–Co Water Company Construction Standards Manual. Contractor shall obtain a copy of the standards and have in their possession at all times during construction. Coordinate work with Del–Co Water (740) 548–7746.

   b. Del–Co Water's signature on this plan signifies only concurrence with the general purpose and location of the proposed waterline improvements. All technical details remain the responsibility of the professional engineer who prepared and certified these plans. Del–Co Water Company takes no responsibility, financial or otherwise, regarding errors in this plan.

   c. Correction of errors shall be to the applicable Del–Co Water Company standard, and the sole responsibility of the developer. All corrections, or revisions that affect Del–Co.'s Waterline plans, directly or indirectly shall be submitted to, and approved by Del–Co Water Company prior to revisions being issued.

   d. The contractor is responsible for the submission of GPS coordinates to the Del–Co Water GIS Department at the completion of the waterline installation. Based on the circumstances of the project, points may be required to be uploaded daily. These coordinates shall include all horizontal and vertical (Northing, Easting, Elevation) survey coordinates. The survey coordinates shall be obtained at the completion of water main installation and shall include all valves, tees, fire hydrants, bends, plugs, reducers, tapped tees, curb boxes, air releases, 2" end of line fire hydrants, ends of casing pipe, and service saddles. GPS points and depths are also required on service line bores at each side of the road in addition to the saddle/water main and meter locations. GPS points should also be collected every 10 feet on services lines that are being deflected. Additional GPS coordinates are required on top of the exposed water main every 60' on straight runs, and at every bell (20') where the waterline is being deflected without fittings and where the trench can be safely entered. All GPS points shall be collected on the center or centerline of the feature. For hydrants, post indicator valves and 2" flush hydrants, the point correct location. To ensure accuracy, the GPS rod and level must be utilized for all points. All GPS points shall also have pertinent attributes collected, especially pipe material and pipe diameter where applicable. If the coordinates are unable to be collected on top of the water main or fitting, it shall be notated in the GPS attributes. If a coordinate is unable to be collected directly on top of the feature, an offset point must be collected by a capable survey grade unit.

   i. GPS coordinates shall be referenced to the applicable county engineer's monuments and shall be based on the North American Datum of 1983 (NAD with the NSRS2007 adjustment, with further reference made to the Ohio State Plane North Coordinate System, North Zone, with elevations based on NAVD 88 Datum. All coordinates (Northing, Easting, Elevation) shall be referenced to the nearest hundredth. All survey coordinates shall be accurate to within 0.6 foot or less horizontal and vertical.

   ii. The GPS coordinates shall be submitted to the Del–Co Water GIS Department in digital form, excluding Portable Document Format (PDF). Preferred file types include comma delimited text files and Microsoft Excel. The above–listed GPS coordinate information shall be submitted to the Del–Co Water GIS or Engineering Department as part of the as–built drawing submittal where applicable.

   iii. Contractors are required to supply (own or rent) and maintain their own GPS devices. Del–Co Water reserves the right to deny inadequate GPS devices that are unable to provide sufficient accuracy required for submission.

   e. As–Built drawings are required following the completion of construction. One set of drawings marked "As–Built" shall be submitted by the developer to Del–Co's Inspection Department for review and approval. Water mains cannot receive a Final Acceptance until as–built drawings have been approved. Please note: taps may not be purchased nor installed until water lines have received a Final Acceptance

   f. Water mains shall become the ownership of Del–Co Water upon final acceptance.

   g. Waterline construction plans are approved for a period of one year from the date of the approval letter or signed plans. If construction has not started within one year of the date of approval, plans shall be resubmitted to Del–Co Water Company for approval.

3. Waterline Construction:

   a. Waterlines shall be NSF 61 approved, and compliant with ASTM D2241 & Ohio EPA ENG–08–002 standards.

   b. Use the following type and class of pipe unless otherwise indicated on the drawings:

   i. 2–inch water line pipe: Class 200 SDR 21 Yelomine PVC (restrained joint).

   ii. 4–inch water line pipe: Class 200 SDR 21 PVC.

   iii. 6–inch water line pipe: Class 200 SDR 21 PVC.

   iv. 8–inch to 12–inch water line pipe: Class 160 SDR 26 PVC.

   v. 16–inch and larger water line pipe: AWWA C151 Class 52 DIP.

   vi. 4–inch pipe and larger used for fire service: AWWA C900 DR 18 (150 PSI) PVC.

   vii. All sizes of Del–Co–owned waterlines used on master meter projects: Class 200 SDR 21 PVC.

   c. All sizes of Ductile Iron pipe shall be installed with V–Bio Enhanced Polyethylene Encasement and in accordance with Del–Co Water Subdivision Construction Standards Section 02731 Ductile Iron.

   d. All fittings shall be mechanical joint conforming to AWWA C153.

   e. Mechanical Joint or Transition Accessory Pack T–bolts shall be corrosion resistant.

   f. Crosses shall not be used without approval of Del–Co Water Company.

   g. All valves shall be mechanical joint conforming to AWWA with AISI 304 stainless steel external hardware and shall be Resilient–Seated Gate valves per AWWA C509. Use of butterfly valves is prohibited.

   h. Provide heavy–duty valve boxes on all hot–taps and at valves located under gravel or pavement surfaces.

   i. Top of valve box shall be flush with finished grade in paved areas, and 4 inches above finished grade in non–paved areas.

   j. Maintain a minimum 10–foot horizontal and 1.5–foot vertical separation between waterlines and sanitary and storm sewers.

   k. All other buried utilities shall maintain a minimum 5–foot horizontal separation, and 2–foot vertical separation from the centerline of waterlines as finally laid and constructed.

   l. Provide concrete thrust blocking for all fittings, valves, anchor tees, and hydrants. m. Bury waterlines a minimum depth of 48–inches to the top of pipe.

   n. All engineered fill to be placed over or under Del–Co Water Lines shall be in place prior to the construction of the water lines.

   o. Place a 5–foot steel fence post or 4"x4" wood post at valves and the ends of lines. Paint blue.

   p. Tracer Wire:

   i. Install Copperhead® or equal 12–gauge high strength 452lb break strength 30 mil HDPE jacket, copper–clad, steel reinforced tracer wire on all water mains and service lines installed by trenching methods.

   ii. Install Copperhead® or equal 12–gauge extra high strength 1150lb break strength 45 mil HDPE jacket, copper–clad, steel reinforced tracer wire on all water mains and service lines installed by boring methods.

   iii. Fasten wire to pipe in two places per pipe section. Extend tracer wire to ground surface at all valves and hydrants as shown in the Del–Co standard detail. Splice wires using Burndy Copper Split Bolt KS–15. Thoroughly wrap the connector and bare wires with 3M Temflex 2155 Rubber Splicing Tape, cover entire connection with Scotch Super 88 Heavy Duty Grade Electrical Tape.

   iv. Connect all service line wires to main line wires using Burndy Copper Split Bolt KS–15. Thoroughly wrap the connector and bare wires with 3M Temflex 2155 Rubber Splicing Tape, cover entire connection with Scotch Super 88 Heavy Duty Grade Electrical Tape.

   v. Contractor Shall Test the continuity of all wire using a third–party tester.

1. Contractor shall contact Del–Co.'s Inspection Department a minimum of 24 hours prior to test.

2. Tester shall send a signed report to Del–Co Water Inspection Department affirming all wire has continuity.

3. Contractor shall repair all deficiencies.

4. Water Service Construction (between main line and meter pit):

   a. All water services shall be constructed and installed per AWWA C800.

   b. For meters 1–inch and smaller, use 1–inch Class 200 SDR 7 iron pipe size (IPS) polyethylene pipe.

   c. Connections to PVC pipe shall be made with approved tapping saddle and corporation stop per Del–Co Subdivision Construction Standards Manual.

   d. Connections to DIP shall be by direct tap or saddle and approved corporation stop per Del–Co Subdivision Construction Standards Manual.

   e. Provide a curb stop with 1–inch female iron pipe threads on the customer side at the end of service lines. Locate at ROW, but a minimum of five feet from edge of sidewalk unless otherwise approved or directed by Del–Co Water.

   f. All service line valves 1½–inch and larger shall be mechanical joint gate valves, restrained with Duct–Lugs and galvanized all thread rod, or anchor tees where applicable.

   g. Minimum depth of cover shall be 48 inches.

   h. Place a 5–foot steel fence post or 4"x4" wood post at the ends of all service lines, paint blue.

   i. Contractor shall be responsible for providing special backfill material for all lines, including those installed by Del–Co Water Company, where required by the County or City Engineer.

5. Fire Hydrants:

   a. Fire hydrants shall conform to AWWA C502 for dry barrel hydrants.

   b. Main valve: 5.25–inch compression.

   c. Nozzles:

   i. Threading: Conform to NFPA National Standard fire hose threads.

   ii. 4.5–inch steamer, except in the following locations provide an integral storz connection; Harrington HIHS50 or equal: Berkshire, Berlin, Concord, Genoa, Kingston, Liberty, Orange, Porter, Trenton, and Scioto Townships; City of Powell; and the Villages of Sunbury and Galena.

   iii. Two 2.5–inch hose connections.

   d. Inlet Connection: 6–inch mechanical joint.

   e. Operating Nut: 1.5–inch pentagon, turn counterclockwise to open.

   f. Placement of Hydrant: 2 feet from the back of curb or 8 feet from the edge of pavement on non–curbed streets

   g. Extensions and parts: Shall be manufactured by the original equipment manufacturer.

   h. Approved Manufacturers: Mueller Super Centurion 200, American Flow Control B–84–B, Clow Medallion, M&H Model 129M, AVK Nostalgic 2780, or Kennedy Guardian K81D.

   i. Painting: Repaint all hydrants after installation per Del–Co Subdivision Construction Standards Manual Section 02731, Part 2.06.

   i. Liberty Township, Powell, and Village of Sunbury: Safety Red.

   ii. Other Townships: Safety Yellow

   iii. Fire hydrants located on private water lines shall be painted Industrial Green.

6. Flushing Hydrants
   a. All dead ends line shall have either an automatic flushing device or a 2" end of line fire hydrant in accordance with Section 02731 Flushing Hydrants.

7. Disinfect all water lines in accordance with AWWA C651 and Del–Co Water specifications.

8. All pipe installation and pressure testing shall be in accordance with AWWA C600 for ductile iron pipe and C605 for plastic pipe, and Del–Co Specifications.

   a. Contractor shall provide all equipment necessary to perform pressure test.

   b. Schedule test between 8:00 AM and 2:00 PM weekdays. Notify Del–Co Water 24 hours prior to testing.

9. Obtain written approval of material and manufacturers list from Del–Co Water prior to beginning construction.

10. Provide casing pipe for all road crossings unless otherwise approved by Del–Co. Casing pipe shall be steel pipe with 0.375–inch wall thickness, or PVC C900 for waterlines 12–inch Dia. or less. Casings for waterlines larger than 12–inch Dia. may be AWWA C905.

11. Easements shall be provided to Del–Co Water before permission will be given to make new service line connections.

12. Connections to existing water lines will be made by Del–Co Water at the contractor's expense or performed by contractors who are approved for making connections. Notify all property owners, and Del–Co Water, in writing 48 hours before starting construction.

13. Contractor shall excavate to determine the location and depth of existing water lines wherever cover over the water lines is being reduced. If the final depth of the waterline will be below Del–Co Water standards, Contractor shall submit a relocation plan for approval by Del–Co Water, and relocate the water line at their expense.

14. Contractor shall be responsible for locating and protecting the water line prior to final acceptance by Del–Co Water, and repairing all damages from construction activity.

15. Do not fill new water lines until approved by Del–Co Water.

16. Booster pumps are not allowed on individual services.

17. All water mains, including those not designed to provide fire protection, shall be sized following an analysis based on flow demands, and pressure requirements. The system shall be designed to maintain a minimum pressure of 20 psi at ground level at all points in the distribution system under all designed flow conditions. Normal working pressure in the distribution system shall not be less than 35 psi.

18. Del–Co Water requires all waterlines intended for ownership and maintenance by Del–Co Water, regardless of pipe size, to secure EPA approval prior to the start of construction.

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GENERAL NOTES

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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GENERAL NOTES

ROUNDING

The rounding at slope breakpoints shown on the Typical Sections applies to all Cross Sections even though otherwise shown.

SUBGRADE COMPACTION AND PROOF ROLLING

Construct the subgrade as follows and in the following sequence.

1. After clearing and grubbing, strip topsoil within the limits of grading.
2. Following site stripping, excavate the subgrade to within 0.2 of a foot of the plan subgrade elevation.
3. Remove any remaining vegetation, topsoil, organic material, existing asphalt and granular base, and any other unsuitable materials (e.g., A–4B, A–2–5, A–5, A–7–5, coal, shale, rock) as determined by the Engineer from the proposed pavement areas. These materials are to be removed prior to proof rolling. Areas of over excavation for removed unsuitable materials shall be filled in a controlled manner as per plan.
4. Once the subgrade is exposed and prior to the placement of any pavement materials or new fill in embankment areas, the top 12 inches of the entire exposed subgrade is to be compacted and proof rolled per 204.03 and Item 204.06, in order to detect any soft, wet or weak zones.
5. If any soft, wet or weak zones are present, as determined by the Engineer, the materials in these zones shall be either scarified, dried, and thoroughly recompacted in place in accordance with Item 204, or chemically stabilized per Item 206, or be undercut and replaced per Item 204.04 using Item 204 Granular Material, Type B or C as directed by the Engineer. Geotextile fabric, type D shall be placed at the bottom of the overexcavation.
6. Proof roll the undercut areas according to 204.06 to verify stability.
7. Fine grade the subgrade to the specified grade

REMOVAL AND REPLACEMENT OR STABILIZATION OF SOFT OR UNSUITABLE MATERIAL

Areas requiring over excavation or undercut, as determined by the Engineer, shall be excavated in accordance with Item 204 Excavation of Subgrade. The over excavated or undercut areas are to be filled as directed by the Engineer in a controlled manner in accordance wit 204.07 and as follows.

Prior to placement of any new fill or pavement construction, areas of over excavation or undercut are to be replaced with fill comprised of Item 204 Granular Material, Type B or C; or with properly compacted new fill meeting the requirements of Item 204 Embankment; or with excavations scarified to permit drying and recompacted to the appropriate design unit weight and sufficient moisture content to meet Item 203 compaction requirements, at the discretion of the Engineer.

The Contractor may propose an alternate means of stabilizing the subgrade provided that the recommendation is made by a qualified geotechnical professional and that the material used in the over excavated area can be tested to verify compaction and moisture content.

The following estimated contingency quantities are carried to the General Summary for use as directed by the Engineer for removal and replacement of soft or unsuitable materials as described above:

Item 204 – Excavation of Subgrade	1,200	Cu. Yd.
Item 204 – Granular Material, Type B	1,200	Cu. Yd.
Item 204 – Geotextile Fabric, Type D	1,690	Sq. Yd.

DRAINAGE CONNECTIONS

All drains, which are encountered during construction, shall be provided with unobstructed outlets. Existing collectors which are located below the roadway ditch elevations, and which cross the roadway, shall be replaced within the construction limits by Item 611 Conduit, Type B, one commercial size larger than the existing conduit.

Existing collectors and isolated farm drains, which are encountered above the elevation of roadway ditches, shall be outletted into the roadway ditch by 611 Type F Conduit. The optimum outlet elevation shall be one foot above the flowline elevation of the ditch. Lateral field tiles which cross the roadway shall be intercepted by 611, Type E Conduit, and carried in a longitudinal direction to an adequate outlet or roadway crossing.

The location, type, size and grade of replacements shall be determined by the engineer and payment shall be made on final measurements.

Erosion control pads and animal guards shall be provided at the outlet end of all farm drains as per standard construction drawing DM–1.1, except when they outlet into a drainage structure. Payment for the erosion control pads and animal guards and any necessary bends or branches shall be included for payment in the pertinent conduit items.

The following estimated quantities have been included in the General Summary for the work noted above:

ODOT Item 611 – 4" Conduit, Type E for Drainage Connection 100 Ft.

ODOT Item 611 – 6" Conduit, Type E for Drainage Connection 100 Ft.

ODOT Item 611 – 8" Conduit, Type E for Drainage Connection 100 Ft.

ODOT Item 611 – 12" Conduit, Type E for Drainage Connection 100 Ft.

DUST CONTROL

The Contractor shall be responsible for providing dust control measures in accordance with Item 616. Dust Control operations shall be performed on a periodic basis as directed by the Engineer to alleviate or prevent the dust nuisance originating within the project work limits. The following estimated quantities have been included for dust control purposes:

Item 616 – Water 100 M. Gal.

ITEM 204 – PROOF ROLLING

The following quantity is provided in the General Summary to address locations requiring proof rolling:

Item 204 – Proof Rolling 4 Hours

ITEM SPECIAL – CLAY LINER

This items of work shall include construction of a clay liner as part of the stormwater management basin at the location indicated on the Plan.

The bottom and sides of the basin shall be overexcavated to an 18" minimum depth and replaced with a compacted clay liner. The liner shall extend to the limits shown on the Plans.

Material for the liner shall be approved by the Engineer prior to the placement of the material.

The Contractor shall be responsible for verifying the integrity of the liner upon completion and acceptance of all items (pipes, headwalls, endwalls, rock channel protection, etc.) that penetrate and/or abut the liner.

The Contractor shall be responsible for verifying the integrity of the liner upon completion and acceptance of all items of work (duct banks, conduits, wiring, etc.) performed by other contractors that penetrate and/or abut the liner.

Payment shall be per cubic yard and shall include all overexcavation, equipment, materials, labor, incidentals, and disposal of materials as necessary to construct the clay liner to the satisfaction of the Engineer.

ITEM SPECIAL – DETENTION OUTLET STRUCTURE

This item of work shall be performed according to CMSC Item 604 and the Plan details. Payment shall be per each and shall include all equipment, labor, materials, and incidentals, including but not limited to catch basin structure, grate, low strength mortar backfill, internal pipe riser, cap, and inlet pipe with associated endwall. Outlet pipe will be paid for under Item Special – Detention Outlet Structure.

ITEM SPECIAL – PERMANENT EROSION CONTROL MATTING

This work consists of furnishing and placing erosion control matting in accordance with CMSC Item 671, as modified herein. (North American Green SC250 or approved equal – https://nagreen.com/sites/default/files/2020–03/GEN_EC_BRO_3.20.pdf).

Preparation: Complete fine grading of the retention basin emergency spillway. Apply Topsoil as indicated on the Plans.

Construction: Install erosion control matting per the manufacturer's specifications and installation guidelines. After the erosion control matting has been installed, then apply the seeding and fertilize.

Method of Measurement: The Owner will measure Item Special – Permanent Erosion Control Matting by the number of square yards completed and accepted. The City will determine the area based on the surface area covered by the erosion control matting.

The Owner will pay for accepted quantities at the contract price as follows:

Item Special – Permanent Erosion Control Matting Square Yard

ITEM SPECIAL – MAILBOX REMOVED AND RESET

This work shall consist of removing existing mailbox and supports and furnishing and erecting mailbox supports and any associated mounting hardware (which may require temporary relocation during construction and replacement to original location upon completion of construction) in accordance with plan details, and attaching an owner–supplied mailbox at locations specified in the Plan or otherwise established by the Engineer. This work shall also include removal of the existing mailbox and mailbox support during construction.

MATERIALS

Wood posts shall be nominal 4" x 4" square or 4–1/2" diameter round, and conform to Section 710.14. Steel posts shall be nominal pipe size 2" I.D., and conform to AASHTO M 181.

HARDWARE

Plates, screws, bolts, etc. Shall be commercial–grade galvanized steel.

SETTING POSTS

Posts shall be set per the first paragraph of Section 606.03, and shall in no instance be encased in concrete.

MOUNTING BOXES

Supports hardware shall accommodate either a single or a double installation, and no more.

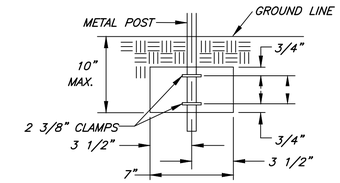
The mailbox shall be securely and neatly attached by the Contractor to the new support. The Contractor shall furnish all necessary attachment hardware (nuts, bolts, plates, spacers and washers) as necessary to accommodate the complete installation.

In the absence of a new box supplied by the Owner, the Contractor shall salvage the existing box and place it on the new support. Due care shall be exercised in such an operation, and the Contractor shall be responsible for repairing or replacing any box damaged by improper handling on his part, as judged and directed by the Engineer.

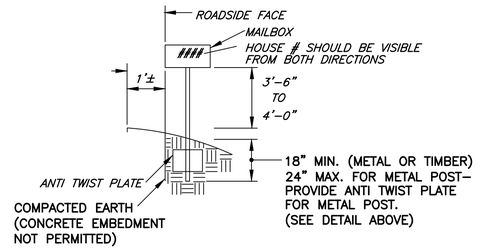
The Contractor shall be responsible for coordinating with the local post master regarding the timing of the movement of any mailbox to a new location.

Payment under this item shall be limited to final permanent installations. Temporary installations shall be in accordance with section 107.12. However, the same material and size limitations as for permanent installations shall apply.

All tools, labor materials, and incidentals necessary to install, remove, replace and temporarily relocate mailboxes, as stated above, in addition to coordination with landowners or the postal service, shall be included within Item Special – Mailbox Removed and Reset.



ANTI TWIST PLATE
(FOR METAL POST ONLY)



MAILBOX & ANTI TWIST PLATE DETAIL

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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CALCULATED JJB | CHECKED MJS

GENERAL NOTES

LEGEND

EXISTING ABBREVIATIONS

WM ..... WATER MAIN
WS ..... WATER SERVICE
WSV ..... WATER SERVICE VALVE
SAN ..... SANITARY SEWER
FM ..... SANITARY FORCE MAIN
SS ..... SANITARY SERVICE
GM ..... GAS MAIN
GS ..... GAS SERVICE
RD ..... ROOF DRAIN
OHE ..... OVERHEAD ELECTRIC
OHC ..... OVERHEAD COMMUNICATIONS
UGC ..... UNDERGROUND COMMUNICATIONS
UGD ..... UNDERGROUND DUCT BANK
CATV ..... CABLE TELEVISION
CO ..... CLEAN OUT
E/TW ..... EDGE OF TRAVELED WAY
E/P ..... EDGE OF PAVEMENT
E/S ..... EDGE OF SHOULDER
F/C ..... FACE OF CURB
C&G ..... CURB & GUTTER

EXISTING CONDITIONS

CENTERLINE SURVEY
CENTERLINE EXIST. DRIVE
EDGE OF PAVEMENT
CURB
SHOULDER
DRIVEWAY
PARKING LOT
CONC. WALK
RIGHT OF WAY
PROPERTY LINE
PROPERTY LINE EXTENDED
LOT LINE (SAME OWNER BOTH SIDES)
RAILROAD RIGHT OF WAY
STORM
SANITARY
SANITARY FORCE MAIN
WATER MAIN
GAS MAIN
ELECTRIC CONDUIT
TELEPHONE CONDUIT
FIBER OPTIC CONDUIT
ELECTRIC CONDUIT
ELECTRIC DUCT BANK
CATV CONDUIT
ELECTRIC / COMMUNICATION (OVERHEAD)
TEL/COMM CONDUIT

DITCH / STREAM
CORPORATION LINE
FENCE
WOOD FENCE
GUARDRAIL
CONC. WALL
ROCK
TREELINE
TREES
BUSHES
HEDGE/SHRUB
STUMP
CONC. PAD
WOOD POST
POST/BOLLARD
MAILBOX
FLAGPOLE
PARKING BLOCK
BUILDING

EXISTING UTILITY SYMBOLS

STM. MH
STM. MH (OPEN GRATE)
CURB & GUTTER INLET
CURB INLET
SAN. MH
CATCH BASIN
WATER VALVE
WATER SERVICE VALVE
FIRE HYDRANT
GAS METER
GAS VALVE
GAS MARKER

LIGHT POLE
TELEPHONE POLE
TELEPHONE LIGHT POLE
TELEPHONE ELECTRIC LIGHT POLE
TELEPHONE ELECTRIC POLE
ELECTRIC POLE
LIGHT POLE
GUY ANCHOR

PULLBOX
ELEC. PULLBOX
TEL. PEDESTAL
TEL/COMM MH
LIGHTING CONTROLLER
SIGNAL POLE MOUNT
SIGNAL CONTROLER
PEDESTRIAN PUSH BUTTON
SIGNS

EXISTING SURVEY SYMBOLS

I.P.F. IRON PIN FND./METAL BAR FND.
P.K.F. PK NAIL FND.
RIGHT-OF-WAY MON. FND.
I.P.F. IRON ROD FND./RR SPIKE FND.
BENCHMARK
I.P.S. IRON PIN SET/MAG NAIL SET/PK NAIL SET/RR SPIKE SET/TRAVERSE DRILL HOLE

PROPOSED ABBREVIATIONS

(DND).....DO NOT DISTURB
(TBA).....TO BE ABANDONED
(TBR).....TO BE REMOVED
(TBRL).....TO BE RELOCATED BY THIS PROJECT
(TBRLO).....TO BE RELOCATED (BY OTHERES)
(TBRO).....TO BE REMOVED (BY OTHERS)
(APP).....AS PER PLAN
(ATG).....ADJUST TO GRADE
(RTG).....RECONSTRUCT TO GRADE
(R&R).....REMOVE AND RESET
(BO).....BY OTHERS
(BSP).....BY SEPARATE PLAN
(SUP).....SHARED USE PATH
(PA).....PREVIOUSLY ABANDONED
E/TW.....EDGE OF TRAVELED WAY
E/P.....EDGE OF PAVEMENT
E/S.....EDGE OF SHOULDER
F/C.....FACE OF CURB
C&G.....CURB & GUTTER
℄.....BASELINE

PROPOSED LAYOUT

CENTERLINE CONSTRUCTION
CENTERLINE PROP. DRIVE
EDGE OF PAVEMENT
BACK OF CURB
FACE OF CURB
CONC. WALK/ASPH. BIKEPATH
RIGHT-OF-WAY
STORM EASEMENT
UTILITY EASEMENT
SLOPE EASEMENT
TEMPORARY EASEMENT
PROPERTY LINE
CONSTRUCTION LIMITS
CHAIN LINK / WIRE WOVEN FENCE

STORM
SANITARY
WATER MAIN
GAS MAIN
TRAFFIC INTERCONNECT
COMMUNICATION
UNDERGROUND LIGHTING (IN CONDUIT)
SIGNAL CONDUIT
CENTERLINE OF DITCH
DECORATIVE RAILING
GUARDRAIL

PROPOSED UTILITY SYMBOLS

STM. MH
CURB & GUTTER INLET
CURB INLET
SAN. MH
END WALL
END OF PIPE

CATCH BASIN
WATER VALVE
FIRE HYDRANT
LIGHT POLE

ELEC MANHOLE
COMM MANHOLE (2'X3' UTILITY BOX PER COMM-03)
COMM MANHOLE (3'X5' UTILITY BOX PER COMM-04)

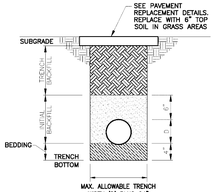
CROSS SECTIONS

Proposed Grade @ ℄ Const.
806.32
109+50.00 — ℄ Station
797.08
Ex. Grade @ ℄ Const.

CHESHIRE ROAD RELOCATION

8
65

SEPTEMBER, 2025



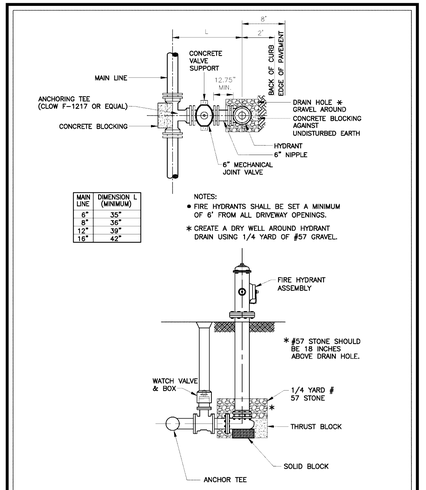
NOTES

1. SUITABLE BEDDING AND INITIAL BACKFILL MATERIAL SHALL CONSIST OF NATURALLY OCCURRING SAND OR CLAY FREE FROM TRASH, ROOTS, DEBRIS, EXCESSIVE MOISTURE AND OBJECTS LARGER THAN ¾".
2. PIPE TRENCH WALL SHALL BE VERTICAL TO THE TOP OF THE INITIAL BACKFILL.
3. PROVIDE SELECT FILL No. 8 OR No. 57 STONE FOR BEDDING MATERIAL TO THE DEPTH REQUIRED BY THE WATER UTILITY WHEN UNSTABLE TRENCH BOTTOMS ARE ENCOUNTERED, AS DETERMINED BY THE WATER UTILITY.
4. MANUALLY COMPACT EMBEDMENT MATERIAL FILLING ALL VOIDS AROUND PIPE.
5. TRENCH BACKFILL TYPE SHALL BE PER GENERAL NOTES AND SPECIFICATIONS.

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WATER LINE EMBEDMENT

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MAIN LINE	DIMENSION L (MINIMUM)
6"	35"
8"	36"
12"	39"
16"	42"

NOTES:

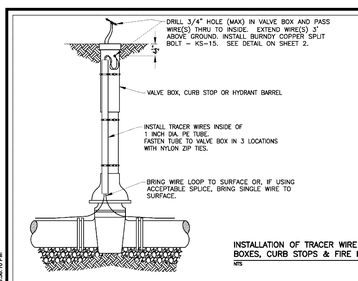
- FIRE HYDRANTS SHALL BE SET A MINIMUM OF 6' FROM ALL DRIVEWAY OPENINGS.
- * CREATE A DRY WELL AROUND HYDRANT DRAIN USING 1/4 YARD OF #57 GRAVEL.

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HYDRANT SETTING TYPE A

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INSTALLATION OF TRACER WIRE AT VALVE BOXES, CURB STOPS & FIRE HYDRANTS
NTS

NOTES:

1. TRACER WIRE SHALL BE 12-GAUGE HIGH STRENGTH 30 MIL HDPE JACKET, COPPER-CLAD, STEEL REINFORCED.
2. BRING WIRE TO THE SURFACE AT ALL VALVES AND CURB STOPS.
3. INSTALL TRACER WIRE ON FIRE HYDRANT LATERAL PIPE WHERE THE FIRE HYDRANT IS MORE THAN 50-FEET FROM THE MAIN LINE, OR WHEN THE LATERAL CHANGES DIRECTION.

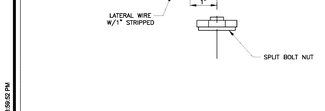
TRACER WIRE DETAIL
NTS

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TRACER WIRE DETAIL

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TRACER WIRE DETAIL

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END CAP BLOCKING						
SIZE	2"	4"	6"	8"	12"	16"
BLOCKING AREA	6"x6"	9"x9"	13"x13"	17"x17"	24"x24"	33"x33"

BLOCKING FOR TEES

RUN	BRANCH 4" L'	D'	Vc.f.	6" L'	D'	Vc.f.	8" L'	D'	Vc.f.	12" L'	D'	Vc.f.	16" L'	D'	Vc.f.
4"	11	8	0.8												
6"	11	8	0.8	18	12	1.9									
8"	10	9	0.7	18	12	1.9	23	16	3.5						
12"	8	12	0.8	18	12	1.9	23	16	3.5	38	22	8.7			
16"	6	16	0.8	14	16	2.0	20	18	3.5	38	23	8.7	49	30	13.6

SIZE OF CONCRETE BLOCKING FOR VERTICAL OVERBEND

PIPE SIZE	SIZE OF BLOCK	VOLUME Cu. Yd.
4"	1.5'x1.5'x1.5	0.13
6"	2.5'x2.5'x2.5'	0.5
8"	3'x3'x3'	1
12"	3.5'x3.5'x3.5'	1.5
16"	4.5'x4.5'x4.5'	3.5

BLOCKING FOR REDUCERS

	4" D'	L'	6" D'	L'	8" D'	L'	12" D'	L'	16" D'	L'
2"	12	6	12	12						
4"			12	12						
6"					12	12				
8"							24	18		
12"									24	24

BLOCKING FOR HORIZONTAL BENDS AND VERTICAL UNDERBENDS

PIPE SIZE	DEGREE OF BEND 11.25° L'	D'	Vc.f.	22.5° L'	D'	Vc.f.	45° L'	D'	Vc.f.	90° L'	D'	Vc.f.
4"	5	4	0.2	9	5	0.4	14	5	0.6	14	5	0.6
6"	8	6	0.5	12	7	0.7	20	8	1.4	9	1.7	
8"	9	8	0.7	16	9	1.4	24	12	2.7	25	11	4
12"	14	12	1.8	24	14	3.6	36	18	6.8	32	18	10.7
16"	18	16	3.4	32	18	6.7	36	32	13.4	41	26	25.6

VALVE SUPPORTS

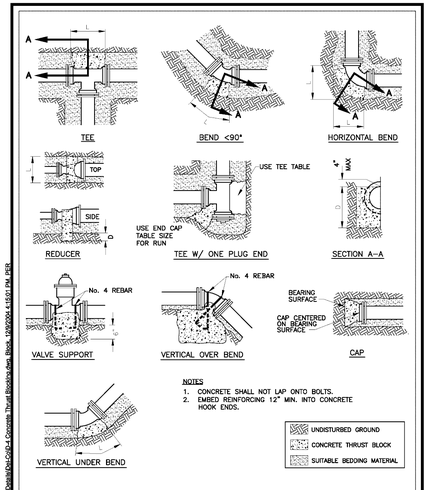
VALVE SIZE	WIDTH	Vc.f.
4"	16"	0.3
6"	17"	0.4
8"	20"	0.4
12"	24"	0.5
16"	30"	0.5

Del-Co Water Co., Inc. 6773 OLENTANGY RIVER RD. DELAWARE, OH 43015

CONCRETE THRUST BLOCKING

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NOTES

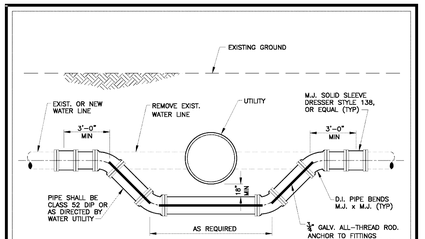
1. CONCRETE SHALL NOT LAP ONTO BOLTS.
2. EMBED REINFORCING 12" MIN. INTO CONCRETE HOOK ENDS.

Del-Co Water Co., Inc. 6773 OLENTANGY RIVER RD. DELAWARE, OH 43015

CONCRETE THRUST BLOCKING

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NOTES

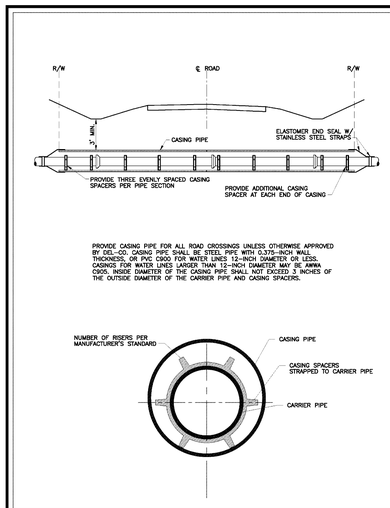
1. COORDINATE WITH DEL-CO WATER FOR SHUT DOWN OF WATER LINE.
2. PROVIDE CONCRETE THRUST BLOCKS AND DUCT-LUGS/ALL THREAD AT ALL FITTINGS,
3. FOR STORM PIPE 15" AND LARGER, CASING REQUIRED, ALSO SEE DETAIL D-30.

* 8" & SMALLER: ONE STICK OF ALL-THREAD ON EACH SIDE OF WATERLINE.
10" & 12": 3 STICKS OF ALL-THREAD REQUIRED.
WATERLINE GREATER THAN 12" USE 4 STICKS OF ALL-THREAD.

DEL-CO WATER CO., INC. 6658 OLENTANGY RIVER RD. DELAWARE, OH 43015 PHONE: (740) 548-7746 FAX: (740) 548-2089

WATER LINE LOWERING

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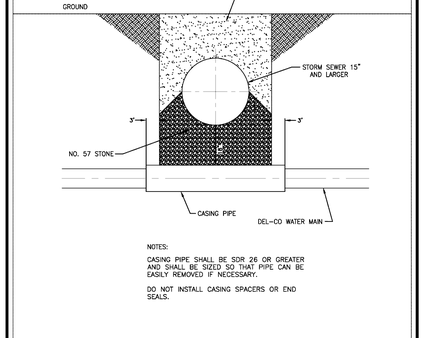


PROVIDE CASING PIPE FOR ALL ROAD CROSSINGS UNLESS OTHERWISE APPROVED BY DEL-CO. CASING PIPE SHALL BE STEEL PIPE WITH 0.375-INCH WALL THICKNESS, OR PVC C900 FOR WATER LINES 12-INCH DIAMETER OR LESS. CASINGS FOR WATER LINES LARGER THAN 12-INCH DIAMETER MAY BE AWWA C905. INSIDE DIAMETER OF THE CASING PIPE SHALL NOT EXCEED 3 INCHES OF THE OUTSIDE DIAMETER OF THE CARRIER PIPE AND CASING SPACERS.

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CASING DETAIL – ROAD CROSSING

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NOTES:

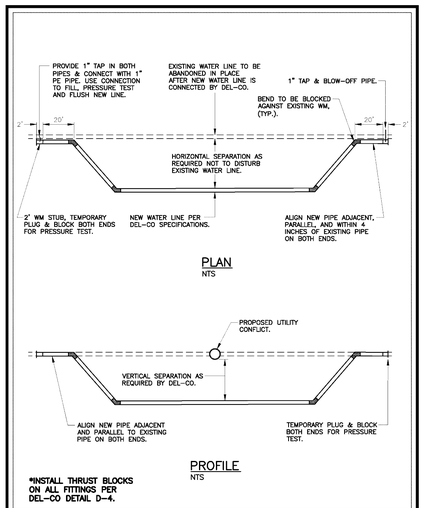
CASING PIPE SHALL BE SDR 26 OR GREATER AND SHALL BE SIZED SO THAT PIPE CAN BE EASILY REMOVED IF NECESSARY.

DO NOT INSTALL CASING SPACERS OR END SEALS.

DEL-CO WATER CO., INC. 6658 OLENTANGY RIVER RD. DELAWARE, OH 43015 PHONE: (740) 548-7746 FAX: (740) 548-2089

STORM CROSSING CASING PIPE DETAIL

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*INSTALL THRUST BLOCKS ON ALL FITTINGS PER DEL-CO DETAIL D-4.

DEL-CO WATER CO., INC. 6658 OLENTANGY RIVER RD. DELAWARE, OH 43015 PHONE: (740) 548-7746 FAX: (740) 548-2089

WATER LINE RELOCATION WITH FITTINGS

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CALCULATED JJB
CHECKED MJS

DEL-CO WATER NOTES & DETAILS

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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SITE DESCRIPTION
PROJECT NAME AND LOCATION:
CHESHIRE ROAD RELOCATION
CITY OF SUNBURY, DELAWARE COUNTY OHIO

OWNER NAME AND ADDRESS:

SITE CONTACT: JIM OHLIN
ROMANELLI AND HUGHES
148 W SCHROCK ROAD
WESTERVILLE, OH 43081
Tel: 614-891-2042
Email: JOHLIN@RH-HOMES.COM

DESCRIPTION: THIS PROJECT CONSISTS OF RELOCATING 600' OF CHESHIRE ROAD, RECONSTRUCTING 500' OF CHESHIRE ROAD, AND CONSTRUCTING A NEW ROAD (750') WEST OF THE RELOCATED CHESHIRE ROAD. THE PROJECT INCLUDES ASPHALT PAVEMENT, CONCRETE MEDIAN, CURB AND GUTTER, CURB RAMPS, WATER MAIN, STORM SEWER, SIGNAL, LIGHTING, AND TRAFFIC CONTROL.

THE MAJORITY OF THE EXISTING SITE CONSISTS OF EXISTING ROADWAY, DITCHES, AND OPEN SPACE. THE SITE IS BORDERED BY SUBDIVISIONS TO THE SOUTH, WEST, AND EAST AND COMMERCIAL DEVELOPMENT TO THE NORTH.

STORMWATER RUNOFF FROM THE SITE FLOWS INTO AN UNNAMED TRIBUTARY TO LITTLE WALNUT CREEK.

RUNOFF CURVE NUMBER:
PRE-DEVELOPMENT RUN-OFF CURVE NUMBER - 0.57
POST-DEVELOPMENT RUN-OFF CURVE NUMBER - 0.66

SITE AREA:
THE SITE IS APPROXIMATELY 9.50 ACRES. A TOTAL NOI DISTURBANCE OF 5.50 ACRES WILL BE DISTURBED BY CONSTRUCTION ACTIVITIES ASSOCIATED WITH ROADWAY IMPROVEMENTS.

SITE DESCRIPTION: (CHECK ONE)

SUBDIVISION	____
COMMERCIAL	____
INDUSTRIAL	____
P.U.D.	____
OTHER	__X__ (ROADWAY IMPROVEMENTS)

SOIL TYPES:

BeA Bennington silt loam, 0 to 2 percent slopes	3.9%
BeB Bennington silt loam, 2 to 6 percent slopes	17.0%
Crd1 B1 Cardinton silt loam, 2 to 6 percent slopes	21.1%
PwA Pewamo Silty Clay Loam, 0 to 1 percent slopes	8.1%
UdB Udorthents, clayey-Urban land complex, undulating	49.9%

SEQUENCE OF MAJOR ACTIVITIES:
1. ESTABLISH A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT AREA.
2. INSTALL INLET CONTROL ON EXISTING STRUCTURES, FILTER FABRIC DITCH CHECKS, AND FILTER FABRIC SOCKS.
3. CLEAR AND GRUB SITE. COMMENCE WITH GRADING OF THE SITE.
4. INSTALL INLET CONTROL ON PROPOSED STRUCTURES AS THEY ARE CONSTRUCTED.
5. COMMENCE WITH PAVING ACTIVITIES
6. STABILIZE DISTURBED AREAS ACCORDING TO THE TEMPORARY AND PERMANENT SEEDING REQUIREMENTS.
7. REMOVED TEMPORARY EROSION CONTROLS UPON ESTABLISHMENT OF PERMANENT VEGETATION.

NAME OF RECEIVING WATERS:
STORMWATER RUNOFF FROM THE SITE FLOWS INTO AN UNNAMED TRIBUTARY TO LITTLE WALNUT CREEK.

NPDES PERMIT:

GENERAL NOTES
ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST MEET THE STANDARDS AND SPECIFICATIONS OF THE OHIO RAINWATER AND LAND DEVELOPMENT HANDBOOK (2006).

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS, AT THE ENGINEER'S DISCRETION.

REGULAR INSPECTION AND MAINTENANCE WILL BE PROVIDED FOR ALL EROSION AND SEDIMENT CONTROL PRACTICES.

THE CONTRACTOR SHALL USE EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SEDIMENT MOVEMENT INTO AREAS DESIGNATED AS WETLANDS.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ADDITIONAL EROSION AND SEDIMENT CONTROL BMP'S MAY BE REQUIRED AS IDENTIFIED BY THE CITY.

STORMWATER LEGISLATION 935 WAS APPROVED IN 2025. REVIEW AND FOLLOW THE MOST UP-TO-DATE-VERSION FOR FEES, INSPECTIONS, ENFORCEMENT, AND PENALTIES.

THE CITY MAY ACCESS AND INSPECT MAINTENANCE DURING CONSTRUCTION AND POST-CONSTRUCTION AT ANY TIME, UNANNOUNCED, AND REQUIRE REMEDIATIONS AND/OR MAINTENANCE.

POST-CONSTRUCTION MAINTENANCE REPORTING MUST BE SUBMITTED TO THE CITY OF SUNBURY ANNUALLY BY JANUARY 1ST OF EVERY YEAR IN COMPLIANCE WITH THE DESIGN PLAN AND/OR MANUFACTURER'S SPECIFICATIONS. POST-CONSTRUCTION STORMWATER QUALITY DEVICES/LOCATIONS REQUIRE ANNUAL OEPA REPORTING.

MINIMIZE OFF SITE SEDIMENT TRACKING OF VEHICLES USING STONE MATERIAL IN ALL CONSTRUCTION ENTRANCES, INCLUDING INDIVIDUAL LOT ACCESS POINTS.STABILIZED CONSTRUCTION ENTRANCES TO BE PROPERLY MAINTAINED AND IN GOOD WORKING ORDER, AT ALL TIMES. THIS MAY REQUIRE PERIODIC TOP DRESSING OF STONE AS CONDITIONS AND USE DEMAND. IN ADDITION, MANUAL REMOVAL OF SEDIMENT AND DEBRIS FROM THE STREETS AND GUTTERS, AFTER EACH WORKDAY, MAY BE NECESSARY TO ACHIEVE SATISFACTORY RESULTS. IF WEATHER CONDITIONS AND USE OF STONE CONSTRUCTION ENTRANCE DOES NOT PRODUCE SATISFACTORY RESULTS. ENHANCED METHODS SUCH AS SHAKER RACKS AND/OR TIRE WASH CLEANING SYSTEMS MAY BE REQUIRED.

AT THE REQUIRED PRE-CONSTRUCTION MEETING WITH THE CITY, INCLUDE TRUCK ROUTES AND GENERAL DEVELOPMENT BUILDOUT IF POSSIBLE.

DESIGNER ENGINEER WILL PROVIDE THE CITY WITH CAD/GIS AS THEY ARE ABLE, FOR THE CITY'S THIRD PARTY INSPECTIONS OF SITE COMPLIANCE TRACKING.

REGULARLY SCHEDULED STREET SWEEPING USING A COMBINATION AND FREQUENCY OF SCRAPING, ROTARY BOX BROOM/PICKUP SWEEPER AND ROTARY BRUSH VACUUM EQUIPMENT MAY BE REQUIRED TO ACHIEVE SATISFACTORY RESULTS.

CONTROLS
EROSION AND SEDIMENT CONTROLS:
STABILIZATION PRACTICES

TEMPORARY STABILIZATION - TOP SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 14 DAYS WILL BE STABILIZED WITH TEMPORARY SEED AND MULCH NO LATER THAN FOURTEEN (14) DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED SHALL BE APPLIED AS PER THE TEMPORARY SEEDING SPECIFICATIONS. AREAS OF THE SITE WHICH ARE TO BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUB-BASE UNTIL ASPHALT PAVEMENT CAN BE APPLIED.

PERMANENT STABILIZATION - DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN SEVEN (7) DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OR WITHIN TWO (2) DAYS FOR AREAS WITHIN FIFTY FEET (50') OF A STREAM. REFER TO LANDSCAPE PLAN FOR DETAILS.

STABILIZATION TYPE	J	F	M	A	M	J	J	A	S	O	N	D
PERMANENT SEEDING			●	●	●	*	*	*	●	●		
DORMANT SEEDING	●	●	●							●	●	●
TEMPORARY SEEDING			●	●	●	*	*	*	●	●		
SODDING			**	**	**	**	**	**	**			
MULCHING	●	●	●	●	●	●	●	●	●	●	●	●

* - IRRIGATION NEEDED
** - IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

OTHER CONTROLS
WASTE DISPOSAL:
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER RENTED FROM A LICENSED SOLID WASTE MANAGEMENT COMPANY. THE DUMPSTER WILL MEET ALL LOCAL, CITY AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF TWICE PER WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED OFF-SITE. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER. THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED. ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE WILL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY ORC 3714

HAZARDOUS WASTE:
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES. THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE:
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, AS REQUIRED BY LOCAL REGULATION.

OFF-SITE VEHICLE TRACKING:
OFF-SITE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

DEWATERING ACTIVITIES:
THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

PROCESS WASTEWATER:
ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT WORKS.

TIMING OF CONTROLS/MEASURES
AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN FOURTEEN (14) DAYS AND/OR WITHIN SEVEN (7) DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN FOURTEEN (14) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN TWO (2) DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN FIFTY FEET (50') OF A STREAM, AND WITHIN SEVEN (7) DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN FIFTY FEET (50') AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

SPILL PREVENTION
MATERIAL MANAGEMENT PRACTICES:
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.

GOOD HOUSEKEEPING: THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.

1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
6. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS: THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS - ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE - FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

FERTILIZERS - FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS - ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS - CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

SPILL CONTROL PRACTICES
IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
3. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
4. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN THIRTY (30) MINUTES OF THE SPILL.
5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF).
6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

DUST CONTROL
DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

1. VEGETATIVE COVER AND/MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMIAN IDLE FOR OVER TWENTY ONE 21 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
2. WATERING - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
3. SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.
4. STONE - GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
5. BARRIERS - EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACED PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT FIFTEEN (15) TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
6. CALCIUM CHLORIDE - THIS CHEMICAL MAY BE APPLIED BY MECHANICAL SPREADER AS LOOSE, DRY GRANULES OR FLAKES AT A RATE THAT KEEPS THE SURFACE MOIST BUT NOT SO HIGH AS TO CAUSE WATER POLLUTION OR PLANT DAMAGE. APPLICATION RATES SHOULD BE STRICTLY IN ACCORDANCE WITH SUPPLIERS' SPECIFIED RATES.
7. OPERATION AND MAINTENANCE - WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.
8. STREET CLEANING - PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED, UTILIZING A STREET SWEEPER OR BUCKET-TYPE ENDLOADER OR SCRAPER.

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED JJB
CHECKED MJS

SEDIMENT & EROSION CONTROL NOTES

CHESHIRE ROAD RELOCATION

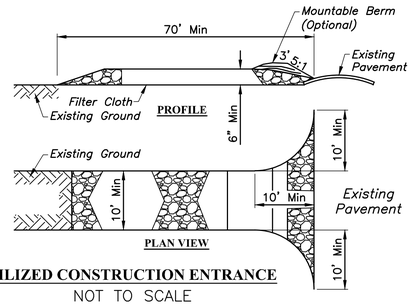
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SEPTEMBER, 2025

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CONSTRUCTON SPECIFICATION NOTES

1. Stone Size – Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length – Seventy (70) foot minimum.
3. Thickness – Not less than six (6) inches.
4. Width – Twenty (20) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Geotextile – Shall be placed over the entire area prior to placing of stone.
6. Surface Water – All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted. Cost of pipe shall be included in the price bid for the Stabilized Construction Entrance.
7. Maintenance – The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right–of–way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights–of–way shall be removed immediately.
8. Washing – Wheels shall be cleaned to remove sediment prior to entrance onto public right–of–ways. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device. The Contractor's bid shall include costs associated with staffing and operating the wheel wash station.
9. Periodic inspection and needed maintenance shall be provided after each rain.



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

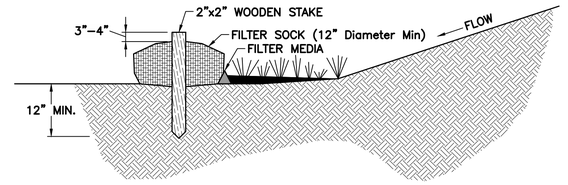
1. Materials – compost used for filter socks shall be weed, pathogen and insect free and free of any refuse, contaminants or other materials toxic to plant growth. They shall be derived from a well–decomposed source of organic matter and consist of a particles ranging from 3/8" to 2".
2. Filter socks shall be 3 or 5 mil continuous, tubular, hdpe 3/8" knitted mesh netting material, filled with compost passing the above specifications for compost products.

Installation:

3. Filter socks will be placed on a level line across slopes, generally parallel to the base of the slope or other affected area. On slopes approaching 2:1, additional socks shall be provided at the top and as needed midslope.
4. Upon installation of the filter sock, additional filter media (matching the media inside of the sock) shall be placed on the upland side of the filter sock. Filter media shall extend halfway up the sock and slope at a maximum of 45 degrees to existing ground elevation.
5. Filter socks intended to be left as a permanent filter or part of the natural landscape, shall be seeded at the time of installation for establishment of permanent vegetation.

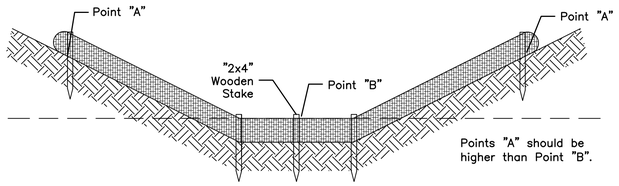
Maintenance:

7. Routinely inspect filter socks after each significant rain, maintaining filter socks in a functional condition at all times.
8. Remove sediments collected at the base of the filter socks when they reach 1/3 of the exposed height of the practice.
9. Where the filter sock deteriorates or fails, it will be repaired or replaced with a more effective alternative.
10. Removal – filter socks will be dispersed on site when no longer required in such as way as to facilitate and not obstruct seedings.



FILTER SOCK
Not to Scale

CONSTRUCTION:
Trench the filter fabric fence as detailed for PERIMETER COMPOST FILTER SOCK FENCE/SEDIMENT FENCE. Place a vertical "2x4" stake in the center of the ditch with the top level to the top of the fence and at least 6" below the bottom of the ditch.



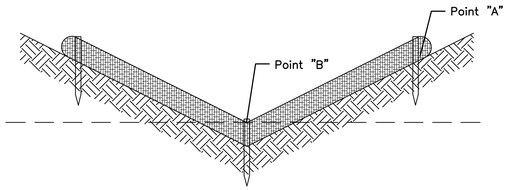
ELEVATION VIEW OF FLAT BOTTOM DITCH
SCALE: NONE

ITEM 207 - FILTER SOCK CHECK DAM
NOT TO SCALE

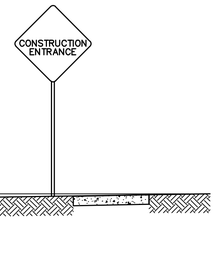
NOTES

MATERIALS: Furnish Compost filter sock ditch checks consisting of the following materials:

1. 30" wide Compost filter sock with sound wood supports with maximum on–center spacing of 10'. Use filter fabric conforming to ODOT Item 712.09 Type C.
2. A vertically driven "2x4" stake the center of the ditch.



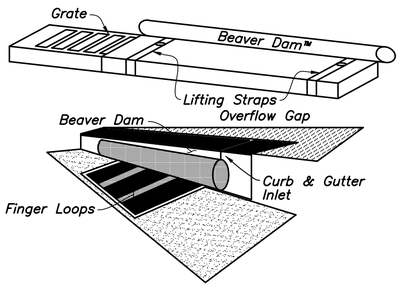
ELEVATION VIEW OF "V" DITCH
SCALE: NONE



Notes:

1. Signs shall be installed in advance of entrance.

CONSTRUCTION ENTRANCE SIGN
NOT TO SCALE

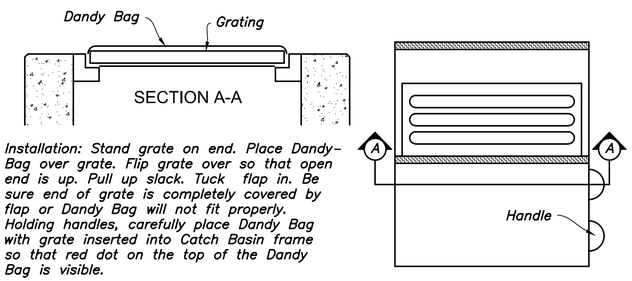


Installation: Stand grate on end. Slide the Beaver Dam Bag on with Dam on top of the grate. Pull all excess down. Lay unit on its side. Carefully tuck flap in. Press Velcro strips together. Install the unit making sure front edge of grate is inserted in frame first then lower back into place. Press Velcro dots together which are located under lifting straps. This insures straps remain flush with gutter.

Maintenance: With a stiff bristle broom sweep silt and other debris off surface after each event.

ITEM 207 - INLET PROTECTION - THE DANDY CURB BAG
Scale: NONE

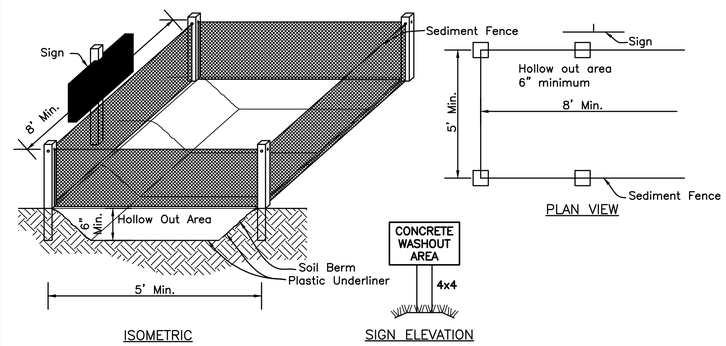
Applies to Structure #'s: XX, XX....



Installation: Stand grate on end. Place Dandy–Bag over grate. Flip grate over so that open end is up. Pull up slack. Tuck flap in. Be sure end of grate is completely covered by flap or Dandy Bag will not fit properly. Holding handles, carefully place Dandy Bag with grate inserted into Catch Basin frame so that red dot on the top of the Dandy Bag is visible.

Maintenance: After silt has dried, remove it from the surface of Dandy Bag with broom.

ITEM 207 - INLET PROTECTION (DANDY BAG)
SCALE: NONE



ISOMETRIC

SIGN ELEVATION

CONCRETE WASHOUT AREA
NOT TO SCALE

NOTES

1. Concrete trucks shall utilize designated areas to washout trucks.
2. Accumulated concrete shall be removed from the site and disposed of properly.
3. Geotextile – shall be placed over the entire Hollow Out Area prior to use.
4. Provide all items noted above including removal of concrete washout upon completion of the project in Item 207 Concrete Washout, As Per Plan.

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED JJB
CHECKED MJS

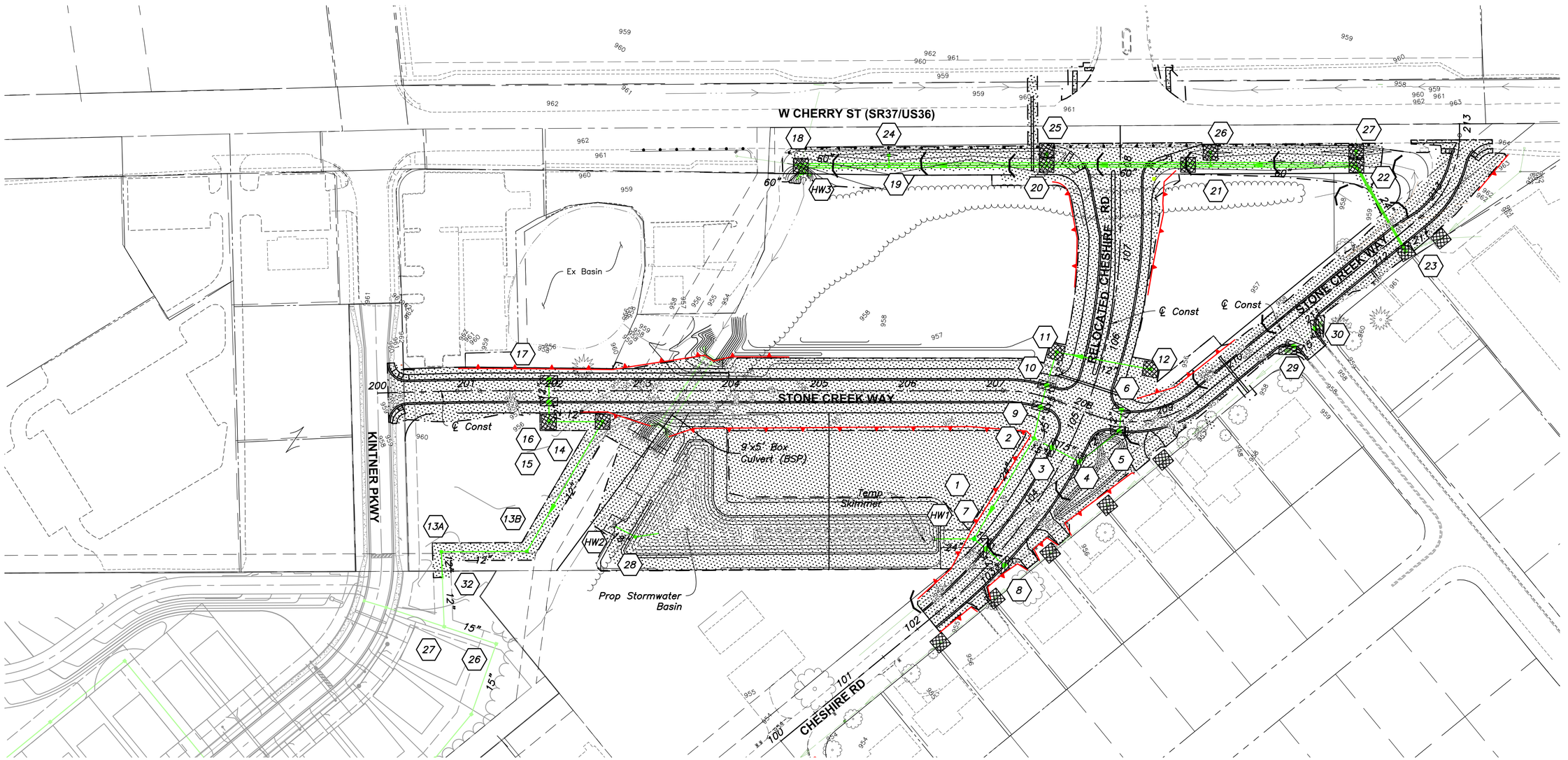
SEDIMENT & EROSION CONTROL DETAILS

CHESHIRE ROAD RELOCATION

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SEPTEMBER, 2025

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Legend

- Existing Ditch
- Perimeter Filter Sock
- Limits of Disturbance
- Inlet Protection (Beaver Dam) (For detail see sht. 11)
- Inlet Protection (Dandy Bag) (For detail see sht. 11)
- Proposed Compost Sock Check Dam
- Concrete Washout Area (Contractor to determine location and coordinate with City for Approval)
- Construction Entrance (Contractor to determine location and coordinate with City for Approval)
- Contractor to coordinate all areas designated for storage or disposal of solid, hazardous, or toxic wastes, including dumpster areas, areas designated for truck washout and vehicle tracking, with City for approval.

GRAPHIC SCALE
0 30 60 120
1 inch = 60 feet

CALCULATED DJD
CHECKED MJS

SEDIMENT & EROSION CONTROL PLAN

CHESHIRE ROAD RELOCATION

12
65

SEPTEMBER, 2025

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Xrefs: 20240484-CS-REFR-ROAD-N, 20230885-YS-BOND, 20240484-YS-REFR-E, 20240981-WATER-RESIDENTIAL-BSP

ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN

GENERAL

All traffic control devices shall be furnished, erected, maintained and removed by the Contractor in accordance with the "Ohio Manual of Uniform Traffic Control Devices" (Current Edition), copies of which are available from the Ohio Department of Transportation, Office of Traffic Engineering, 1980 West Broad Street, Columbus, Ohio 43223.

The roadway shall not be opened to traffic until permanent traffic controls are in place, or until temporary traffic controls, approved by the Engineer, are installed. The Contractor assumes all liability for the premature removal of temporary traffic controls.

The Contractor shall be responsible for the reinstallation and/or replacement of all permanent traffic control devices damaged or removed during the construction. Permanent traffic control that is no longer in conflict with temporary traffic control shall be replaced immediately. The Contractor shall assume all liability for missing, damaged and improperly placed traffic control devices.

The Contractor shall provide a 24 hour contact who will be responsible for maintenance of traffic for the duration of the project.

Construction operations shall not begin until all temporary traffic control devices are in place and approved by the Engineer and the City.

Access to all adjoining properties shall be maintained at all times. Access for mail delivery, emergency and service vehicles shall not be disrupted. The Contractor shall coordinate construction activities with the Engineer and the owners of the abutting properties in advance (10 Days) of any operations which affect access.

Maintenance of all traffic control devices including drums, signs, barricades, sign boards, detour signage, etc., shall be the Contractor's responsibility.

Drums shall be placed as follows: 35' c/c on tangents, 20' c/c on tapers, and 8' c/c in radii.

A flashing arrow panel (48"x96" – Type "C") shall be used in lane closures in accordance with the Ohio Manual.

All trenches shall be backfilled or securely plated during all nighttime and non–working hours.

Flashing yellow type "B" lights shall be required on all barricades in use at night. All advance signing shall be equipped with type "A" flashing lights. Cones are not approved for use at night. Lights are not required on signs in place during daylight hours.

The Contractor shall be responsible for the protection and safe movement of pedestrians through, around, or detoured away from the construction site. Traffic control for pedestrian movements shall be as per figures TA–28 and TA–29 of Part VI of the Ohio Manual of Uniform Traffic Control Devices.

The safety of pedestrian traffic shall be considered at all times in the provision of traffic control devices required by these plans and notes. It shall be the Contractor's responsibility to provide lights, signs, barricades, and other warnings to physically separate the pedestrian from hazards incidental to the construction operations such as anchor bolts, open excavations, etc.

The Contractor shall submit in writing (a minimum of 14 days prior to construction) a plan to maintain pedestrian traffic for the duration of the project to the City and the Engineer for approval.

For areas adjacent to vehicular traffic, open trench shall be adequately maintained and protected with the proper traffic control devices at all times. Placement of subbase and base material shall follow closely as possible behind excavation operations. The length of trench which is open at any one time shall be held to a length that can be backfilled for nighttime and non–working hours. Drop offs within the work zone shall conform to the requirements set forth on ODOT Standard Construction Drawing MT–101.90.

MAINTENANCE OF DRAINAGE

It shall be the Contractor's responsibility to ensure that existing drainage is maintained throughout all phases of construction. Temporary drainage, if required, shall be provided by the Contractor and included with Item 614, Maintaining Traffic, As Per Plan. Special consideration shall be given to maintaining existing drainage during construction of the proposed box culvert.

SEQUENCE OF CONSTRUCTION

The pre–phase shall construct the improvements to the south of W Cherry Street, outside the limits of existing pavement. Traffic shall not be impacted during this phase.

Phase 1 shall construct the new roadway improvements that are proposed outside of the limits of the existing roads. Traffic shall not be impacted during this phase.

Phase 2A shall install a portion of the proposed water main crossing of W Cherry Street via one lane, two way flagging operations per ODOT SCD 97.10. Work shall only be performed Monday through Friday from 9 AM – 3 PM.

Phase 2B shall install the remainder of the proposed water main crossing of W Cherry Street via one lane, two way flagging operations per ODOT SCD 97.10. Work shall only be performed Monday through Friday from 9 AM – 3 PM.

Phase 3 shall construct the new roadway connection of Cheshire Road (relocated) at existing W Cherry Street. The new roadway connection shall be installed by shifting eastbound traffic into the existing center lane per ODOT SCD MT–95.61. Two lane, two way traffic shall be maintained on W Cherry Street at all times, and work shall only be performed Monday through Friday from 9 AM – 3 PM.

Phase 4 shall construct the new roadway connection of Cheshire Road (relocated) at Old Cheshire Road. The new roadway connection shall be installed by closing Old Cheshire Road per ODOT SCD MT–101.60 and the details provided herein. Traffic shall be detoured according to the plan details. The closure shall be limited to 7 days and the Contractor shall phase construction to maintain access to all private properties along Old Cheshire Road at all times.

Phase 5 shall reconstruct Old Cheshire Road. The reconstructed roadway connection at Old Cheshire Road and W Cherry Street shall be installed by shifting eastbound traffic into the existing center lane per ODOT SCD MT–95.61. Two lane, two way traffic shall be maintained on W Cherry Street at all times, and work shall only be performed Monday through Friday from 9 AM – 3 PM. The Contractor shall phase construction to maintain access to all private properties along Old Cheshire Road at all times.

Phase 6 shall construct the new sidewalk improvements that are proposed on the northeast and northwest corners of W Cherry Street and Cheshire Road (relocated). Traffic shall not be impacted during this phase.

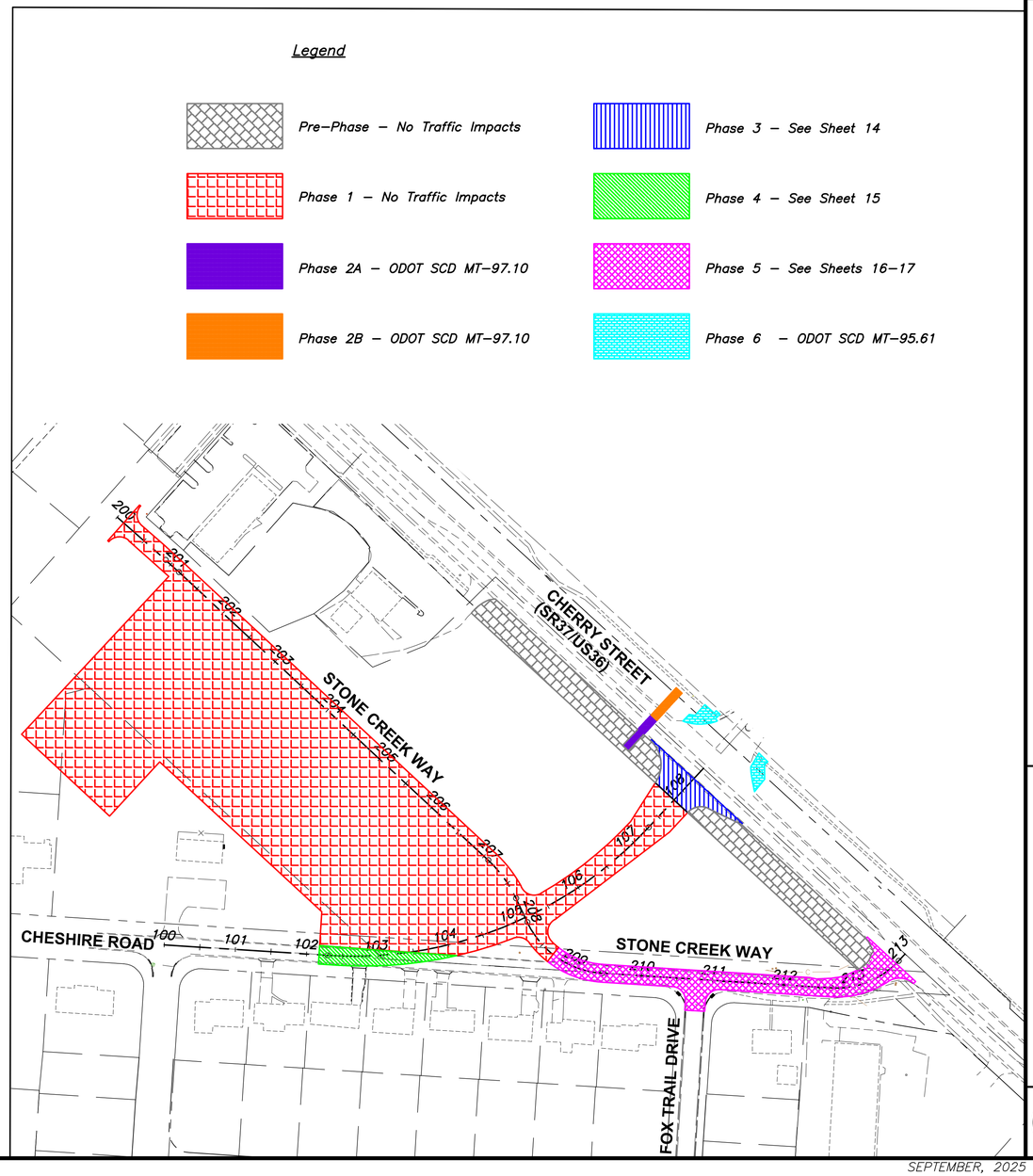
MAINTENANCE OF TRAFFIC ESTIMATE OF QUANTITIES

Item No.	Estimated Quantity	Unit	Item Description
614	1	Lump Sum	Maintaining Traffic, As Per Plan

Maintenance of Traffic Phase Compatibility Matrix

	1	2A	2B	3	4	5	6	Pre–Phase
1	X	X	X	X	X	X	X	X
2A	Yes	X	X	X	X	X	X	X
2B	Yes	No	X	X	X	X	X	X
3	Yes	No	No	X	X	X	X	X
4	Yes	Yes	Yes	Yes	X	X	X	X
5	Yes	No	No	No	No	X	X	X
6	Yes	No	No	No	Yes	Yes	X	X
Pre–Phase	Yes	Yes	Yes	Yes	Yes	Yes	Yes	X

Yes = Maintenance of Traffic Phases may be constructed concurrently
No = Maintenance of Traffic Phases shall not be constructed concurrently



GRAPHIC SCALE
0 50 100 200
1 inch = 100 feet

CALCULATED BDM
CHECKED JDS

MAINTENANCE OF TRAFFIC NOTES

CHESHIRE ROAD RELOCATION

13
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Xrefs: 2024048-XS-REFR-ROAD-N, 2024048-XS-REFR-E, 2024048-CI-REFR-BDY-N

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED BDM
CHECKED JDS

MAINTENANCE OF TRAFFIC PLAN PHASE 3

CHESHIRE ROAD RELOCATION

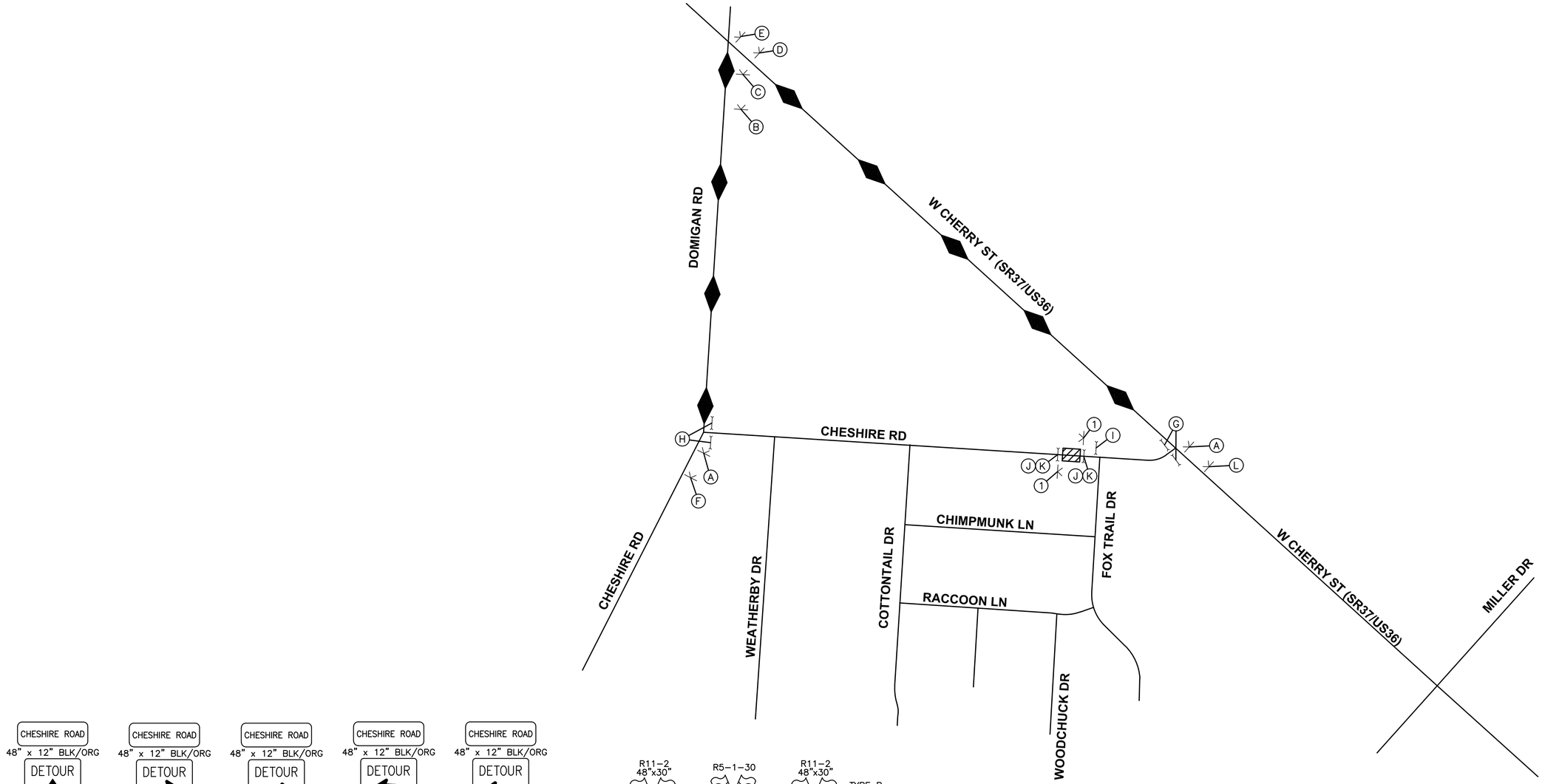
14
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LEGEND

- = *Work Zone*
- = *Direction of Travel*
- = *Orange Drum*
- = *Temporary Sign Support*
- = *Type A (Advanced Signage) or Type B (Barricade) Lights*

SEPTEMBER, 2025

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S Xref: 2024484-CS-HDTR-ROAD-N, 2024484-XS-HDTR-E, 2024484-CT-HDTR-MOT-N



CHESHIRE ROAD
48" x 12" BLK/ORG
DETOUR
M4-9-30
(A)

CHESHIRE ROAD
48" x 12" BLK/ORG
DETOUR
M4-9R-30(MOD)
(B)

CHESHIRE ROAD
48" x 12" BLK/ORG
DETOUR
M4-9R-30
(C)

CHESHIRE ROAD
48" x 12" BLK/ORG
DETOUR
M4-9L-30(MOD)
(D)

CHESHIRE ROAD
48" x 12" BLK/ORG
DETOUR
M4-9L-30
(E)

TYPE A TYPICAL
CHESHIRE RD CLOSED
EAST OF COTTONTAIL DR
FOLLOW DETOUR
72"x48" BLK/ORG
(F)

TYPE B TYPICAL
ROAD CLOSED AHEAD
R11-3
60"x30"
DETOUR
M4-10R
48"x12"
6' Type III (Portable)
(G)

TYPE B TYPICAL
ROAD CLOSED AHEAD
R11-3
60"x30"
DETOUR
M4-10L
48"x12"
6' Type III (Portable)
(H)

W14-2-36
NO OUTLET
TYPE B TYPICAL
ROAD CLOSED
LOCAL TRAFFIC ONLY
R11-3
60"x30"
6' Type III (Portable)
(I)

TYPE A TYPICAL
CHESHIRE RD CLOSED
WEST OF FOX TRAIL DR
FOLLOW DETOUR
72"x48" BLK/ORG
(L)

R11-2
48"x30"
ROAD CLOSED
R5-1-30
DO NOT ENTER
R11-2
48"x30"
ROAD CLOSED
TYPE B TYPICAL
10' Type III Barricades
SEE ODOT SCD MT-101.60
(J)

TYPE III BARRICADES
TYPE A
W20-3-48
ROAD CLOSED AHEAD
350 FEET
W16-2P-24
TYPE A
ROAD WORK AHEAD
W20-1-48
(J)
350'
350'
ADVANCE WARNING SIGNS FOR CLOSURE
PER ODOT SCD MT-101.60
(K)

2 WEEKS PRIOR TO CLOSURE (REMOVE UPON ROAD CLOSURE)
CHESHIRE ROAD
CLOSES DATE
FOR XXX DAYS
PORTABLE CHANGEABLE MESSAGE SIGN
(1)

Legend

- Work Zone
- Detour Route
- Temporary Sign Support
- Type III Barricade

NOT TO SCALE

CALCULATED BDM
CHECKED JDS

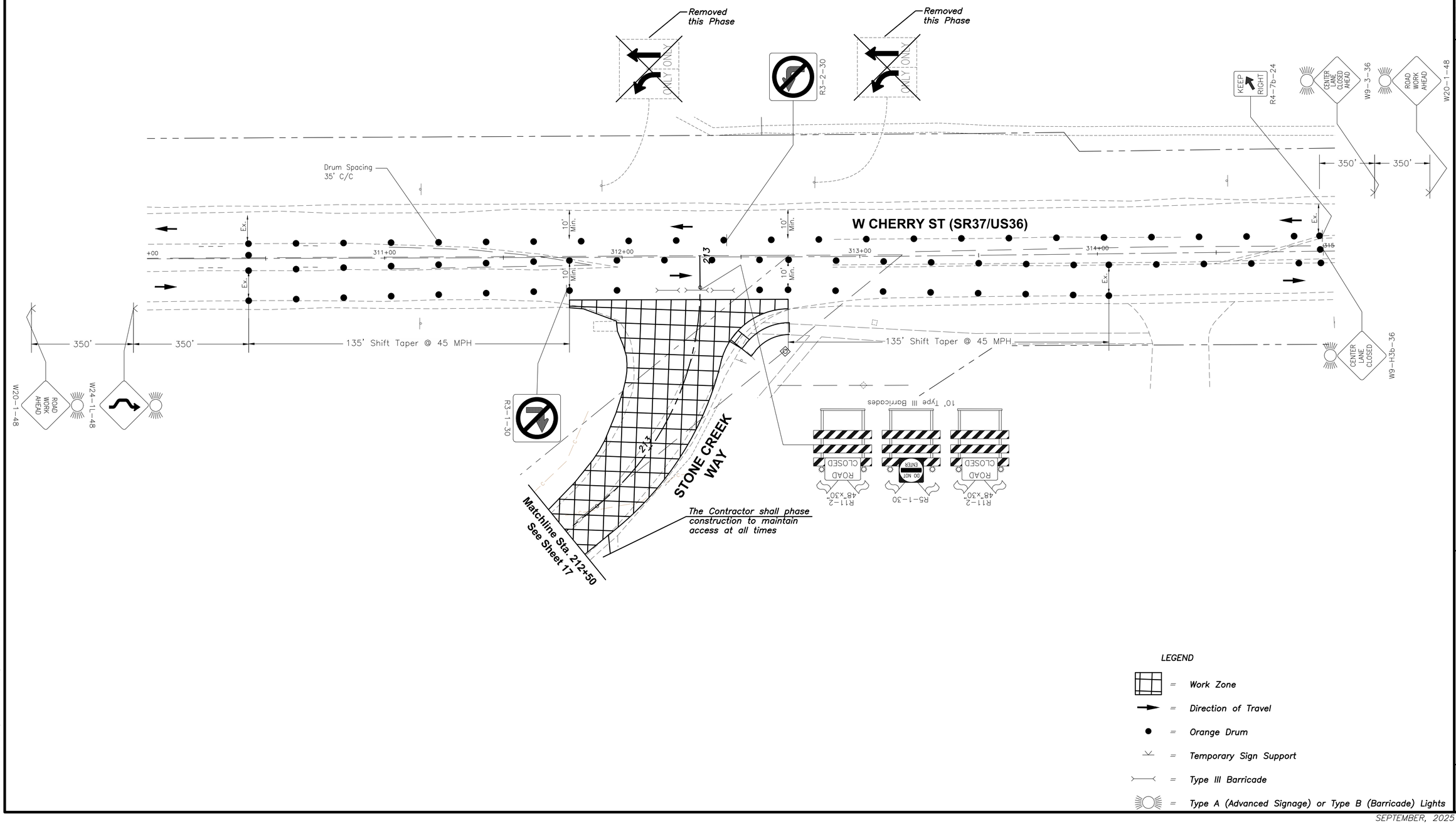
MAINTENANCE OF TRAFFIC PLAN
PHASE 4 DETOUR

CHESHIRE ROAD RELOCATION

15
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SEPTEMBER, 2025

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Xrefs: 2024048-GS-REFR-ROAD-N, 2024048-GS-REFR-L, 2024048-01-REFR-MOT-N



GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED BDM
CHECKED JDS

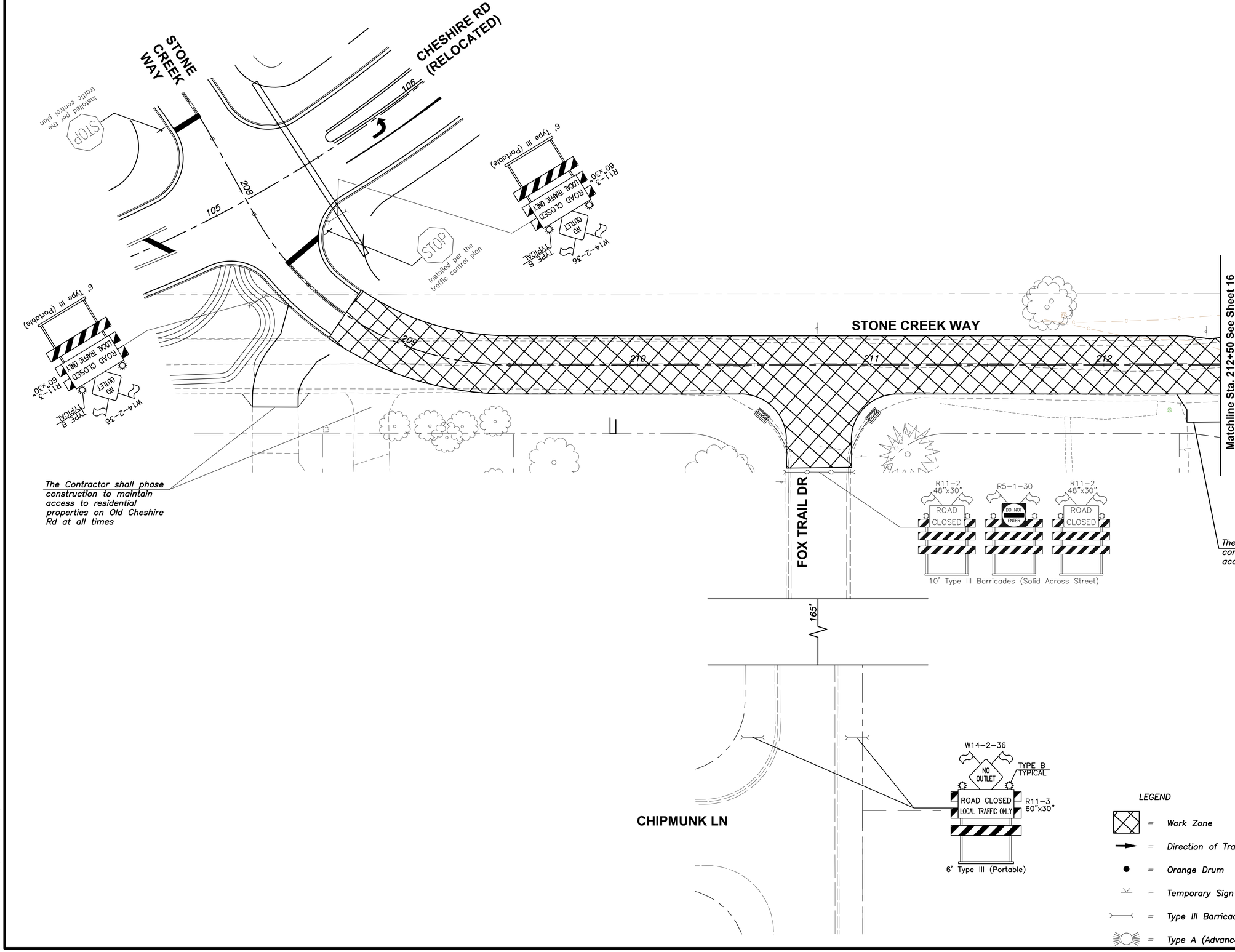
MAINTENANCE OF TRAFFIC PLAN PHASE 5

CHESHIRE ROAD RELOCATION

16
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SEPTEMBER, 2025

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3 Xrefs: 2024048A-CS-REFR-ROAD-N, 2024048A-PS-REFR-E, 2024048A-CL-REFR-MDT-N



GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED BDM
CHECKED JDS

MAINTENANCE OF TRAFFIC PLAN PHASE 5

CHESHIRE ROAD RELOCATION

17
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SEPTEMBER, 2025

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Xrefs: 20240484-CS-HEPR-ROAD-N, 20240484-ES-HEPR-E, 20240484-ST-HEPR-MOT-N

ITEM NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION	SEE SHEET
			Roadway	
201	1	L. Sum	Clearing and Grubbing	
202	1	Each	Manhole Removed	
202	113	Ft	Pipe Removed, 24" and Under	
202	489	Sq Ft	Concrete Walk Removed	
202	2	Each	C&G Inlet Removed	
202	27	Sq Yd	Pavement Removed (Concrete Drive)	
202	59	Ft	Curb and Gutter Removed	
202	24	Ft	Removal Misc.: Timber Driveway Edge Removed and Reset	
202	682	Ft	Guardrail Removed	
203	7,904	Cu Yd	Excavation	
203	4,075	Cu Yd	Embankment	
204	6,735	Sq Yd	Subgrade Compaction	
204	4	Hour	Proof Rolling	7
204*	1,200	Cu Yd	Excavation of Subgrade	7
204*	1,200	Cu Yd	Granular Material, Type B	7
204*	1,690	Sq Yd	Geotextile Fabric, Type D	7
608	2,214	Sq Ft	Concrete Walk (T=4")	
608	1,084	Sq Ft	Concrete Walk (T=8")	
608	6	Each	Curb Ramps	
608	120	Sq Ft	Detectable Warning	
Special	5	Each	Mailbox Removed and Reset	7
			Sediment & Erosion Control	
207*	7,700	Sq Yd	Construction Seeding and Mulching	
207	1,848	Ft	Filter Sock	11
207	216	Ft	Compost Sock Check Dam	11
207	30	Each	Inlet Protection	11
207	1	Each	Designated Concrete Washout Area	11
207	1	L. Sum	Stabilized Construction Entrance	11
659	1,283	Cu Yd	Topsoil (T=3")	
659	2.1	Ton	Commercial Fertilizer	
659	15,392	Sq Yd	Seeding and Mulching, Class 1	
659	328	Sq Yd	Native Wildflower and Grass Mixture	
659	84	M Gal	Water	
Special	1	Each	Temporary Sediment Basin Dewatering Skimmer	44
Special	1,187	Sq Yd	Permanent Erosion Control Matting	7
			Drainage	
601	15	Cu Yd	Rock Channel Protection, Type C with Fabric Filter	
603	300	Ft	4" Conduit, Type F	
604	8	Each	Catch Basin 2x2 (DCED-S133A)	
604	1	Each	Catch Basin 3x3 (DCED-S133C)	
604	2	Each	Catch Basin 4x4 (DCED-S133D)	
604	12	Each	Curb and Gutter Inlet Single (DCED-S125)	
604	2	Each	Manhole, Type C (DCED-S102)	
604	5	Each	Manhole, Manhole No.3 (ODOT MH-3, 90° Base, One W/ Flat Top Transition See Plan)	
604	1	Each	Headwall for 18" Pipe	
604	1	Each	Headwall for 24" Pipe	
604	1	Each	Headwall for 60" Pipe	
605	3,742	Ft	4" Underdrain	
ODOT 611*	100	Ft	4" Conduit, Type E	7
ODOT 611*	100	Ft	6" Conduit, Type E	7
ODOT 611*	100	Ft	8" Conduit, Type E	7
ODOT 611*	100	Ft	12" Conduit, Type E	7
901	652	Lin Ft	12" Pipe w/ Type 1 Bedding	
901	81	Lin Ft	12" Pipe w/ Type 1 Bedding (w/ Watertight Joints and Concrete Encasement per DCED-S149 & CMS 910)	
901	49	Lin Ft	15" Pipe w/ Type 1 Bedding (w/ Watertight Joints)	
901	71	Lin Ft	15" Pipe w/ Type 1 Bedding (w/ Watertight Joints and Concrete Encasement per DCED-S149 & CMS 910)	
901	26	Lin Ft	18" Pipe w/ Type 1 Bedding	
901	290	Lin Ft	24" Pipe w/ Type 1 Bedding (w/ Watertight Joints)	
901	639	Lin Ft	60" Pipe w/ Type 1 Bedding	
Special	2	Lin Ft	54" Elliptical Pipe	
Special	596	Cu Yd	Clay Liner	7
Special	1	Each	Detention Outlet Structure	7
			Pavement	
252	12	Sq Yd	Pavement Repair	
301	1,008	Cu Yd	Asphalt Concrete Base, PG64-22 (T=6")	
304	12	Cu Yd	Aggregate base (T=6") (Drives)	
304	1,008	Cu Yd	Aggregate Base (T=6")	
407	4	Gal	Non-Tracking Tack Coat (0.055 Gal/SY) (Drives)	
407	666	Gal	Non-Tracking Tack Coat (0.055 Gal/SY)	
423	178	Pound	Crack Sealing	
441	3	Cu Yd	Asphalt Concrete, Surface Course, Type 1, (448), PG64-22 (T=1.25") (Drives)	
441	4	Cu Yd	Asphalt Concrete, Intermediate Course, Type 2, (448), PG64-22 (T=1.75") (Drives)	
441	297	Cu Yd	Asphalt Concrete, Intermediate Course, Type 2, (448), PG64-22 (T=1.75")	
441	212	Cu Yd	Asphalt Concrete, Surface Course, Type 1, (448), PG64-22 (T=1.25")	
452	231	Sq Yd	Non-Reinforced Concrete Pavement (T=8")	
609	3,742	Ft	Combination Curb and Gutter (DCED-R2020)	
609	126	Sq Yd	9" Concrete Median (Cols Std Dwg 2331)	
			Lighting	
1001	7	Each	Pull Box, Medium Duty	
1001	1	Each	Riser, Street Light Circuit	
1001	1,819	CKT Ft	Street Lighting Circuit Cable, As Per Plan	61
1001	14	Each	Pole to be Wired, As Per Plan	61
1001	1	Each	120/240V Pad Mounted Lighting Controller, As Per Plan	61
1001	1,799	Lin Ft	2" Conduit, Concrete Encased	
1001	7	Each	Luminaire, 59W, 240V, With House Side Shield, As Per Plan	61
1001	1	Each	Luminaire, 59W, 240V, With House Side Shield, As Per Plan, Furnish Only	61
1001	7	Each	Luminaire, 77W, 240V, With House Side Shield, As Per Plan	61
1001	1	Each	Luminaire, 77W, 240V, With House Side Shield, As Per Plan, Furnish Only	61
1001	14	Each	Light Pole, As Per Plan	61
1001	1	Each	Light Pole, As Per Plan, Furnish Only	61
1001	14	Each	Foundation, As Per Plan	61

ITEM NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION	SEE SHEET
			Traffic Control	
621	16	Each	RPM	47
621	4	Each	Raised Pavement Marker Removed	47
621	8	Each	RPM, Misc.: RPM Reflector Removed and Replaced	47
627	25	Each	Reboundable Traffic Post – Yellow Installed	
630	378	Ft	Ground Mounted Support, No. 3 Post	
630	184	Sq Ft	Sign, Flat Sheet	
630	1	Each	Removal of Gound Mounted Sign and Reerection	
630	9	Each	Removal of Ground Mounted Sign and Storage	
630	7	Each	Removal of Ground Mounted Post Support and Disposal	
630	6	Each	Sign, Double-Faced, Street Name	
644	6	Each	Removal of Pavement Marking	
644	2300	Ft	Removal of Pavement Marking	
644	0.05	Mile	Center Line, Solid and Dashed, 4"	
644	0.51	Mile	Center Line, Double Yellow, 4"	
644	0.10	Mile	Edge Line, Yellow 6"	
644	851	Ft	Channelizing Line, 8"	
644	102	Ft	Crosswalk Line, 12"	
644	201	Ft	Stop Line, 24"	
644	193	Ft	Transverse/Diagonal Line, Yellow, 24"	
644	44	Ft	Chevon Marking, 24"	
644	13	Each	Lane Arrow, 96"	
647	480	Ft	Crosswalk Line, Type II, 24", Type B90	
			Traffic Signals	
ODOT 625	120	Lin Ft	Conduit Encased, 2", 725.051	
ODOT 625	290	Lin Ft	Conduit Encased, 3", 725.051	
ODOT 625	206	Lin Ft	Conduit, 2", 725.051	
ODOT 625	324	Lin Ft	Conduit, 3", 725.051	
ODOT 625	418	Lin Ft	Conduit, 3", 725.052 (SCH 80), Jacked or Drilled, As Per Plan	51
ODOT 625	2	Each	Pull Box, 725.06, 18", As Per Plan	51
ODOT 625	4	Each	Pull Box, 725.08, 24", As Per Plan	51
ODOT 625	418	Lin Ft	Trench	
ODOT 625	418	Lin Ft	Plastic Caution Tape	
ODOT 625	10	Each	Ground Rod	
ODOT 625	4	Each	Luminaire, Post Top, LED, 120 Volt, As Per Plan	51
ODOT 625	4	Each	Connection, Fused Pull-Apart, Type II	
ODOT 625	4	Each	Connection, Unfused Pull-Apart, Type III	
ODOT 625	1,316	Lin Ft	No. 8 AWG, 600 Volt Distribution Cable (Combination Lighting)	
ODOT 625	707	Lin Ft	No. 4 AWG, 600 Volt Distribution Cable, As Per Plan (Grounding and Bonding)	51
ODOT 625	300	Lin Ft	Pole and Bracket Cable, No. 10 AWG, 600 Volt	
ODOT 630	4	Each	Sign, Single Faced, Street Name, As Per Plan	51
ODOT 630	1	Each	Signing, Misc.: Traffic Signal Signs	51
ODOT 632	9	Each	Vehicular Signal Head, (LED), 3-Section, 12" Lens, 1-Way, With Backplate (Black), As Per Plan	52
ODOT 632	2	Each	Vehicular Signal Head, (LED), 4-Section, 12" Lens, 1-Way, With Backplate (Black), As Per Plan	52
ODOT 632	8	Each	Pedestrian Signal Head, As Per Plan	52
ODOT 632	11	Each	Covering of Vehicular Signal Head, As Per Plan	52
ODOT 632	8	Each	Covering of Pedestrian Signal Head	
ODOT 632	8	Each	Accessible Pedestrian Pushbutton, As Per Plan	52
ODOT 632	1	Each	Combination Signal Support, Type TC-81.22, Design No. 12, As Per Plan	52
ODOT 632	1	Each	Combination Signal Support, Type TC-81.22, Design No. 13, As Per Plan	52
ODOT 632	2	Each	Combination Signal Support, Type TC-81.22, Design No. 14, As Per Plan	52
ODOT 632	4	Each	Signal Support Foundation, As Per Plan	52
ODOT 632	4	Each	Pedestal Foundation, As Per Plan	52
ODOT 632	4	Each	Pedestrian Pedestal, 11', As Per Plan	52
ODOT 632	2,654	Lin Ft	Signal Cable, 7 Conductor, No. 14 AWG	
ODOT 632	1,834	Lin Ft	Signal Cable, 3 Conductor, No. 14 AWG	
ODOT 632	1,618	Lin Ft	Loop Detector Lead-In Cable	
ODOT 632	1	Each	Conduit Riser, 2" Diameter, SCH 80	
ODOT 632	158	Lin Ft	Power Cable, 3-Conductor, Cu, No. 6 AWG, As Per Plan	52
ODOT 632	1	Each	Power Service, As Per Plan	52
ODOT 633	1	Each	Cabinet, Type TS-2, As Per Plan	52
ODOT 633	1	Each	Cabinet Foundation, As Per Plam	53
ODOT 633	1	Each	Controller Work Pad, As Per Plan	53
ODOT 633	1	Each	Uninterruptible Power Supply (UPS), 1000 Watt, As Per Plan	53
ODOT 633	1	Each	Communication System, As Per Plan	53
ODOT 633	1	Each	Controller Item, Misc.: GPS Time Synchronization	53
ODOT 809	1	Each	ATC Controller, As Per Plan	52
ODOT 809	1	Each	CCTV IP-Camera System, Dome-Type	53
ODOT 816	1	Each	Video Detection System, As Per Plan	53
Special	4	Each	Pole Mounted Receptacle, 120V, Duplex GFI	53
			Maintenance of Traffic	
614	1	L. Sum	Maintaining Traffic, As Per Plan	13
616	100	M Gal.	Water	7
			Water	
801	39	Lin Ft	6" Water Pipe and Fittings	
1 801	1,065 70	Lin Ft	8" Water Pipe and Fittings	
802	3	Each	6" Valve & Appurtenances	
802	8	Each	8" Valve & Appurtenances	
806	225	Lin Ft	8" Casing Pipe	
809	3	Each	Fire Hydrant, Type "B"	
			Sanitary	
604	5	Each	Manhole, Type C (Sa.S-3)	
604	1	Each	Doghouse Manhole per DCRSD Std Dwg Sa.S-4	
901	648	Lin Ft	8" Sanitary Sewer w/ Type I Bedding	
914	4	Each	8"x6" Diameter Wye Fitting	
			Miscellaneous	
623	1	L Sum	Construction Layout Stakes	
624	1	L Sum	Mobilization	

1

			Alternate Pavement
407	6,047	Sq Yd	7" Roller Compacted Concrete Base
407	333	Gal	Non-Tracking Tack Coat (0.055 Gal/SY)
407	423	Gal	Tack Coat, Type SBR Asphalt (0.07 Gal/SY)
441	297	Cu Yd	Asphalt Concrete, Intermediate Course, Type 2, (448), PG64-22 (T=1.75")
441	212	Cu Yd	Asphalt Concrete, Surface Course, Type 1, (448), PG64-22 (T=1.25")

1 Added Alternate Pavement Section & Revised Watermain Location

Notes:
Item numbers reference current Columbus CMSC unless otherwise noted.
ODOT = Ohio Department of Transportation Construction & Material Specifications, 2023 Edition
* = To be used at the direction of the Engineer

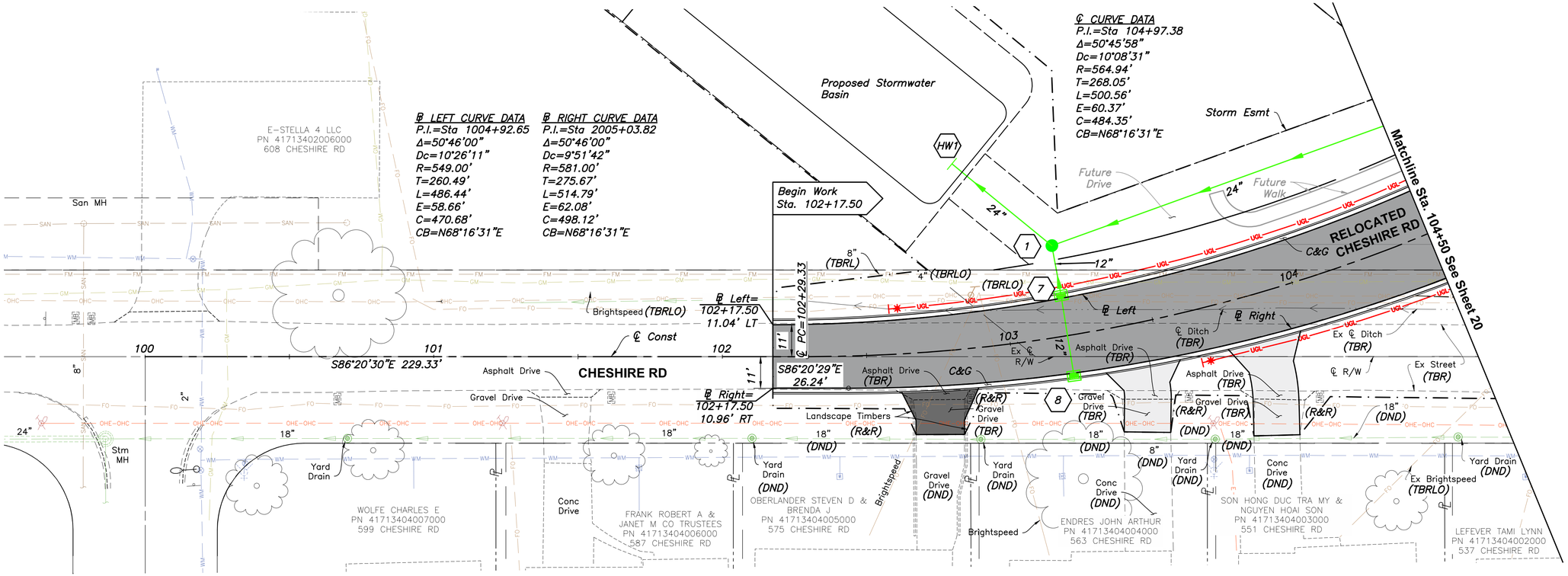
CALCULATED JJB
CHECKED MJS

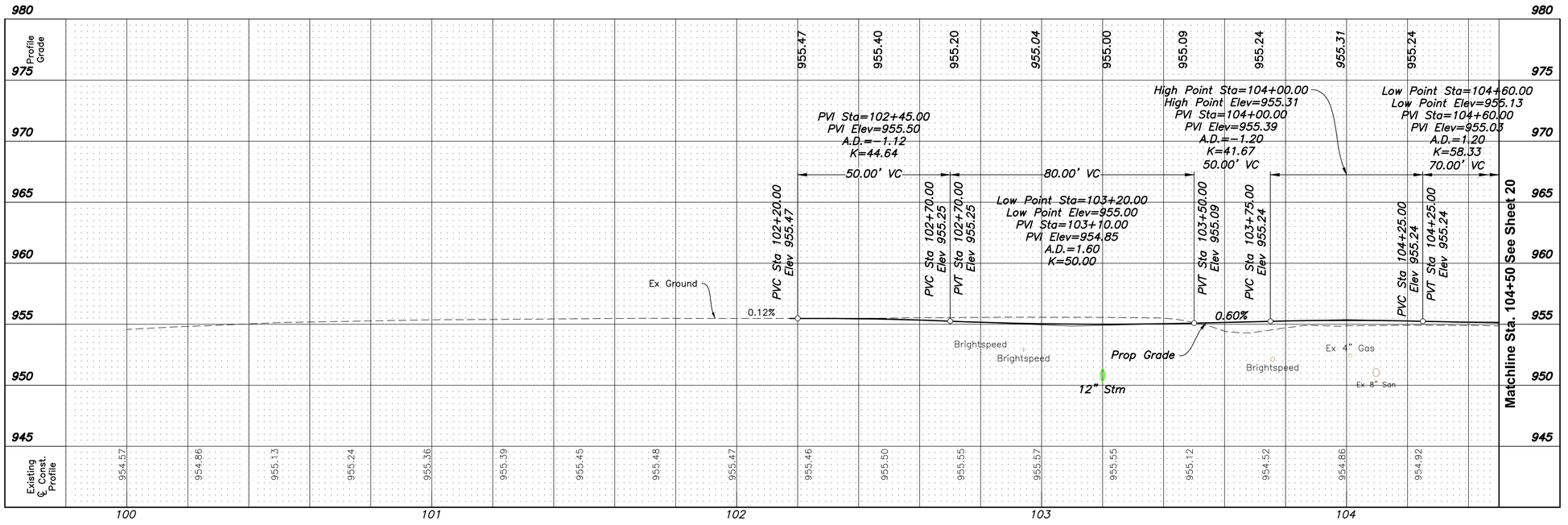
GENERAL SUMMARY

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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Legend

- Full Depth Pavement
- Concrete Drive
- Asphalt Drive
- Const Limits

HORIZ 1 Inch = 20 Feet
VERT 1 Inch = 5 Feet

CALCULATED JJB
CHECKED MJS

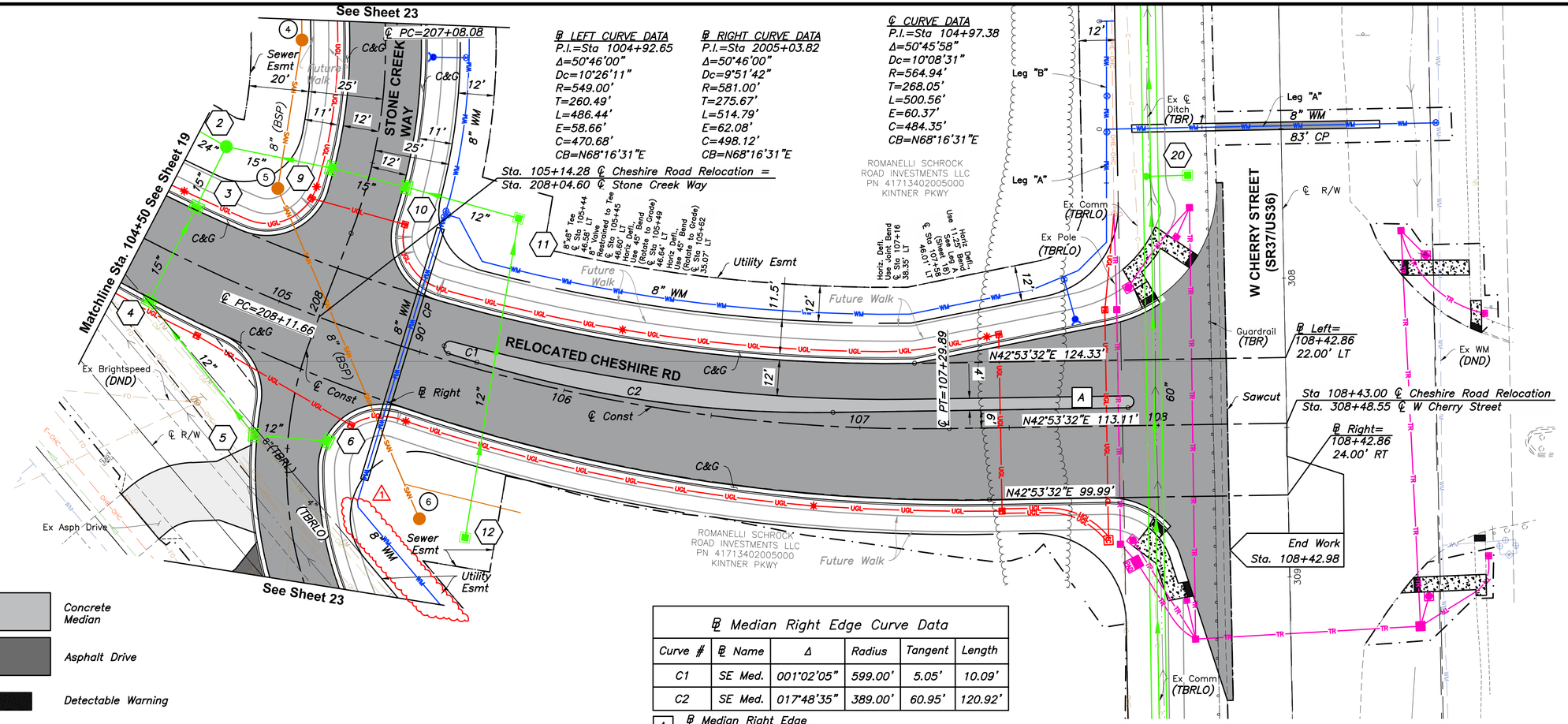
PLAN & PROFILE

CHESHIRE ROAD RELOCATION

19
65

SEPTEMBER, 2025

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Xrefs: 2024484-CS-HEPR-ROAD-N, 2024484-CS-HEPR-ROAD-MTCH-N, 2024484-CS-HEPR-E, 2024484-CS-HEPR-ROAD-N, 20230605-YS-BOXD, 2024484-CS-CNTR-ROAD-N, 2024484-CU-WATR-N



Legend

- Full Depth Pavement
- Concrete Drive
- 8" Concrete Walk
- Const Limits
- Concrete Median
- Asphalt Drive
- Detectable Warning

℄ Median Right Edge Curve Data

Curve #	℄ Name	Δ	Radius	Tangent	Length
C1	SE Med.	001°02'05"	599.00'	5.05'	10.09'
C2	SE Med.	017°48'35"	389.00'	60.95'	120.92'

A ℄ Median Right Edge N42°53'32"E 98.78'

1 Revised Watermain Location

CALCULATED JJB
CHECKED MJS

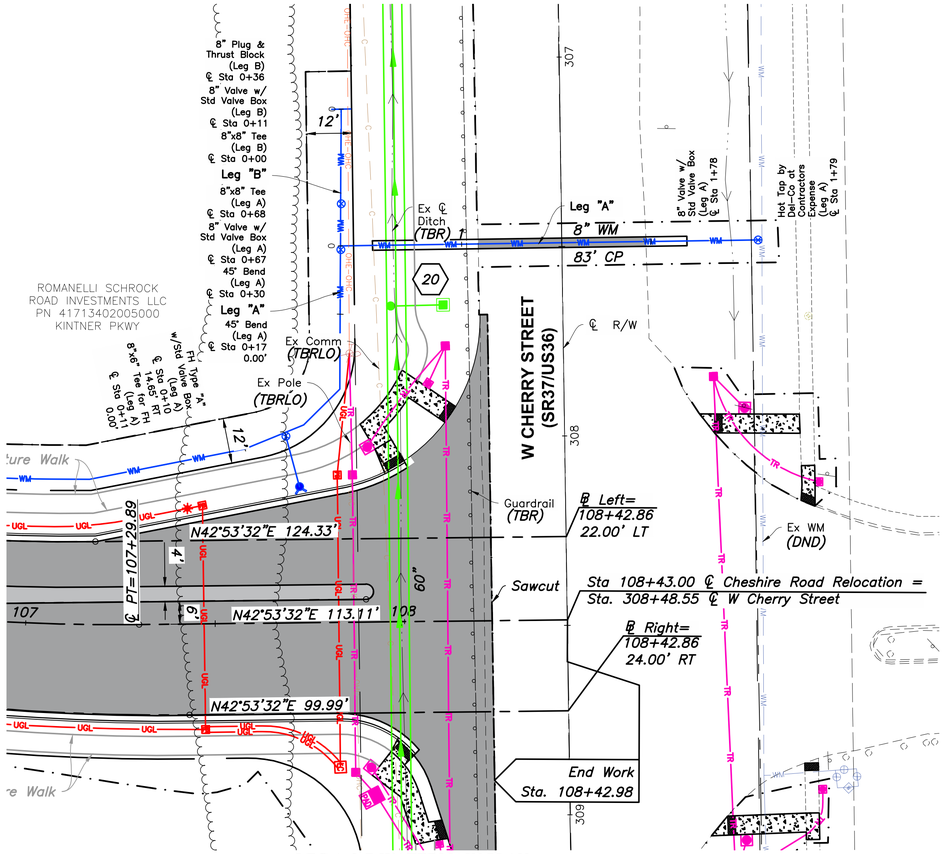
PLAN & PROFILE

CHESHIRE ROAD RELOCATION

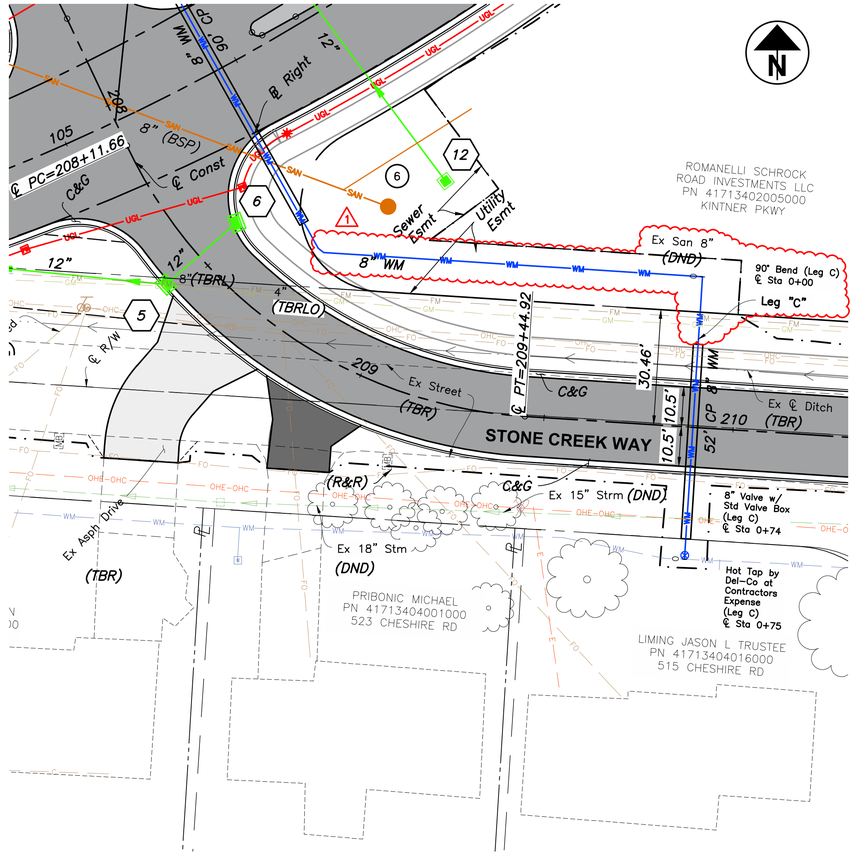
20
65

SEPTEMBER, 2025

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Xrefs: 20240484-CS-REFR-ROAD-N, 20240484-CS-REFR-E, 20240484-CS-REFR-ROAD-HIGH-N, 20240484-CS-REFR-ROAD-N, 20230685-CS-REFR-N, 20240484-CS-CNTR-ROAD-N, 20240484-CS-CNTR-BASE, 20240484-CS-CNTR-ROAD-N, 20240484-CU-WATR-N



LEG A & B WATERMAIN PLAN

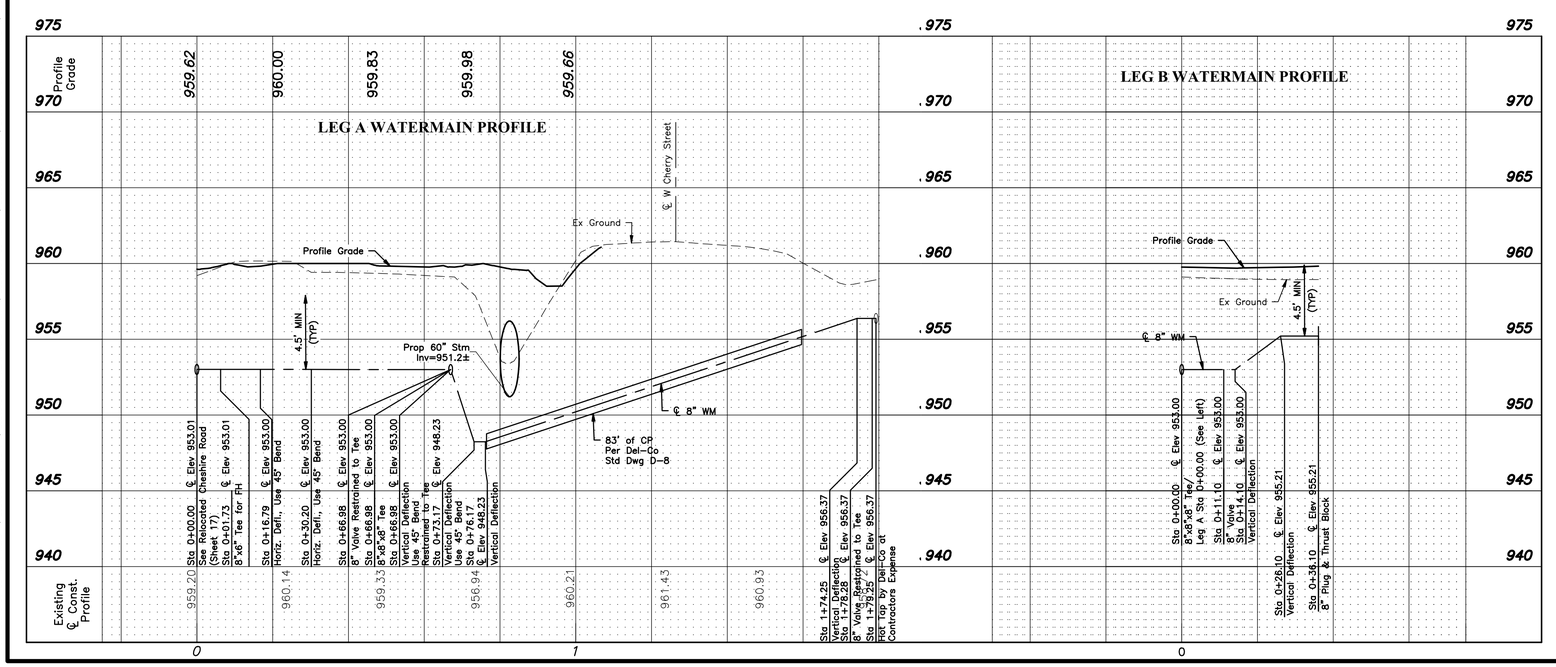


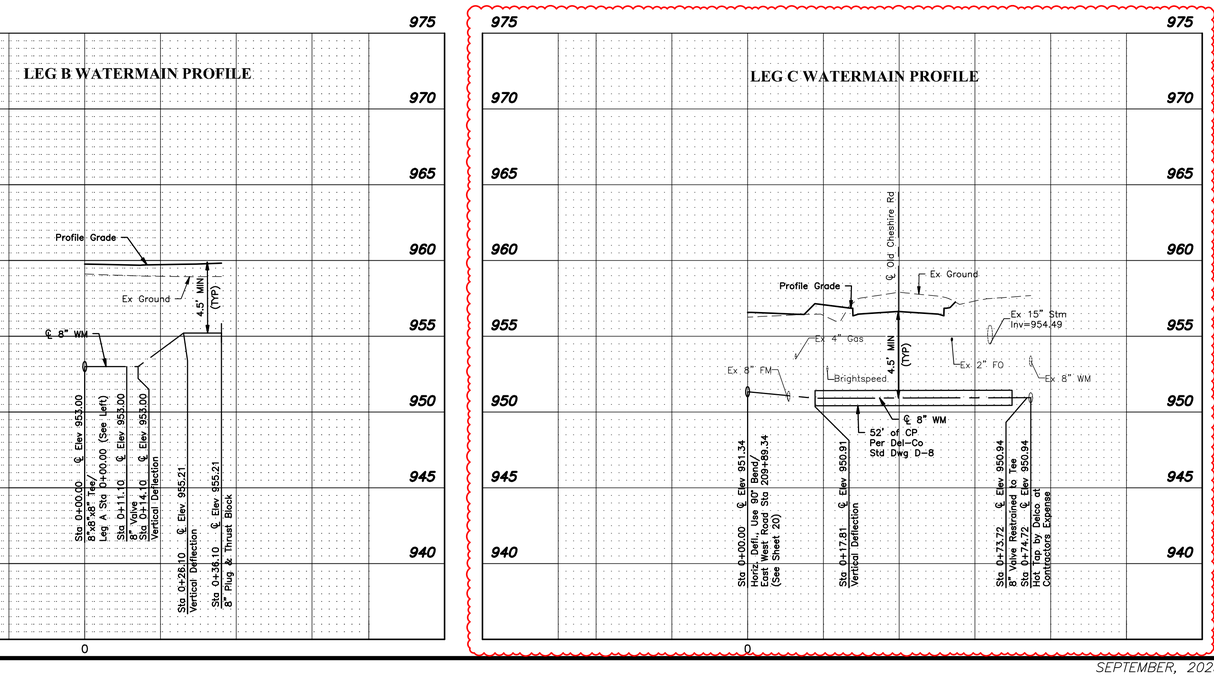
LEG C WATERMAIN PLAN

Legend

- Full Depth Pavement
- Concrete Drive
- 8" Concrete Walk
- Const Limits
- Concrete Median
- Asphalt Drive
- Detectable Warning

NOTE: Contractor to inform and coordinate proposed work & restoration with affected property owner. Correspondence must be presented to Del–Co prior to disturbance of adjacent properties.





1 Revised Watermain Location

CALCULATED JJB
CHECKED MJS
HORIZ 1 Inch = 20 Feet
VERT 1 Inch = 5 Feet

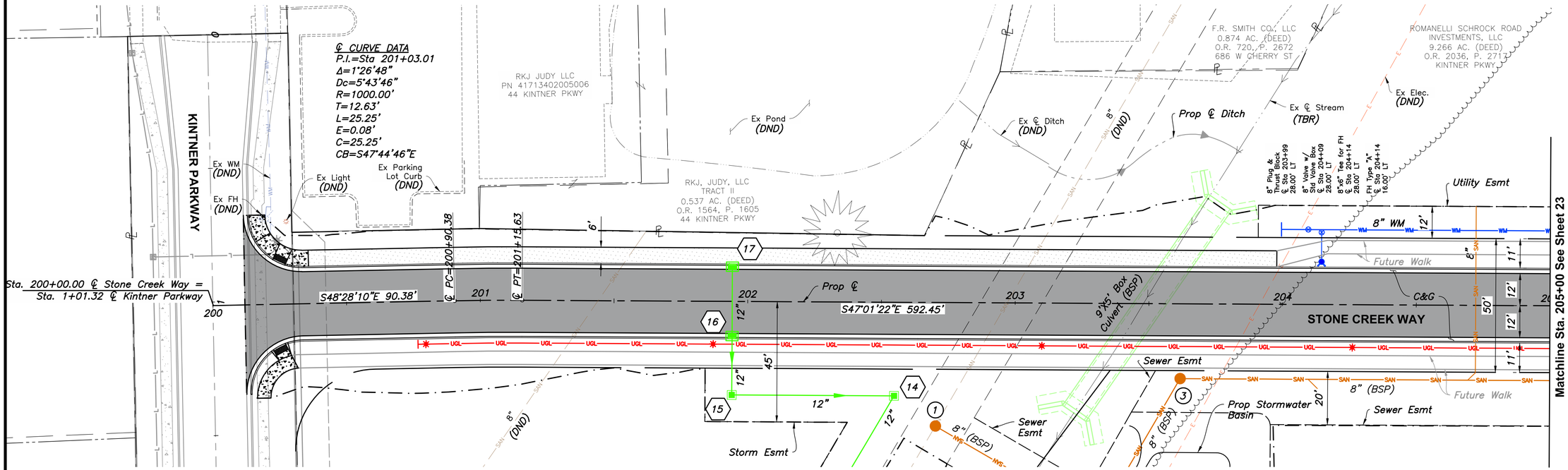
PLAN & PROFILE

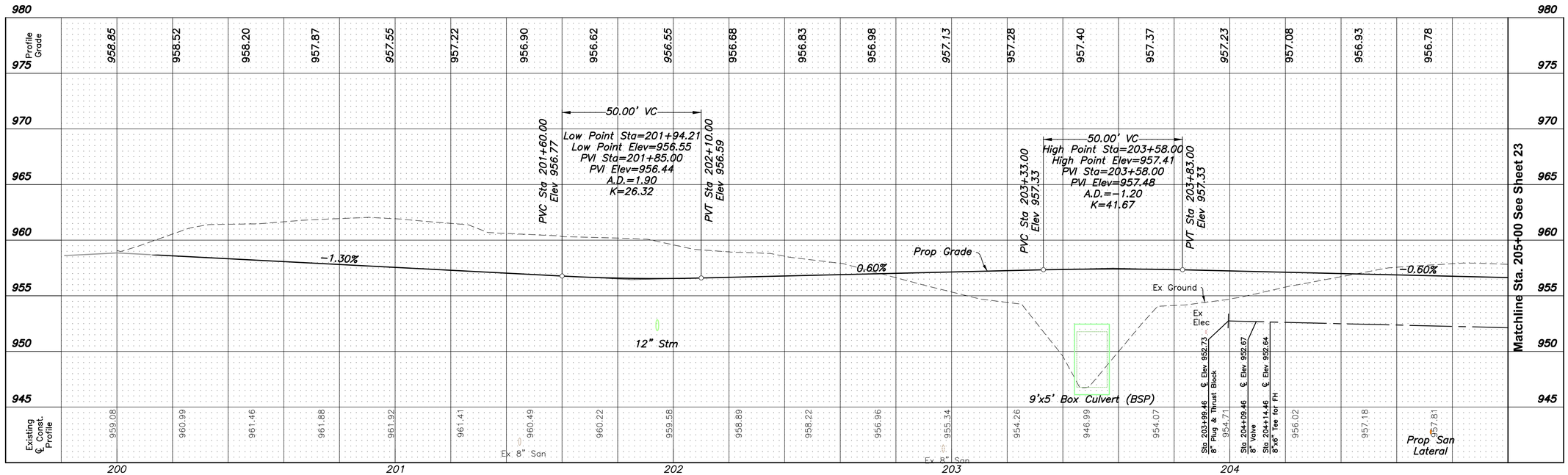
CHESHIRE ROAD RELOCATION

21
65

SEPTEMBER, 2025

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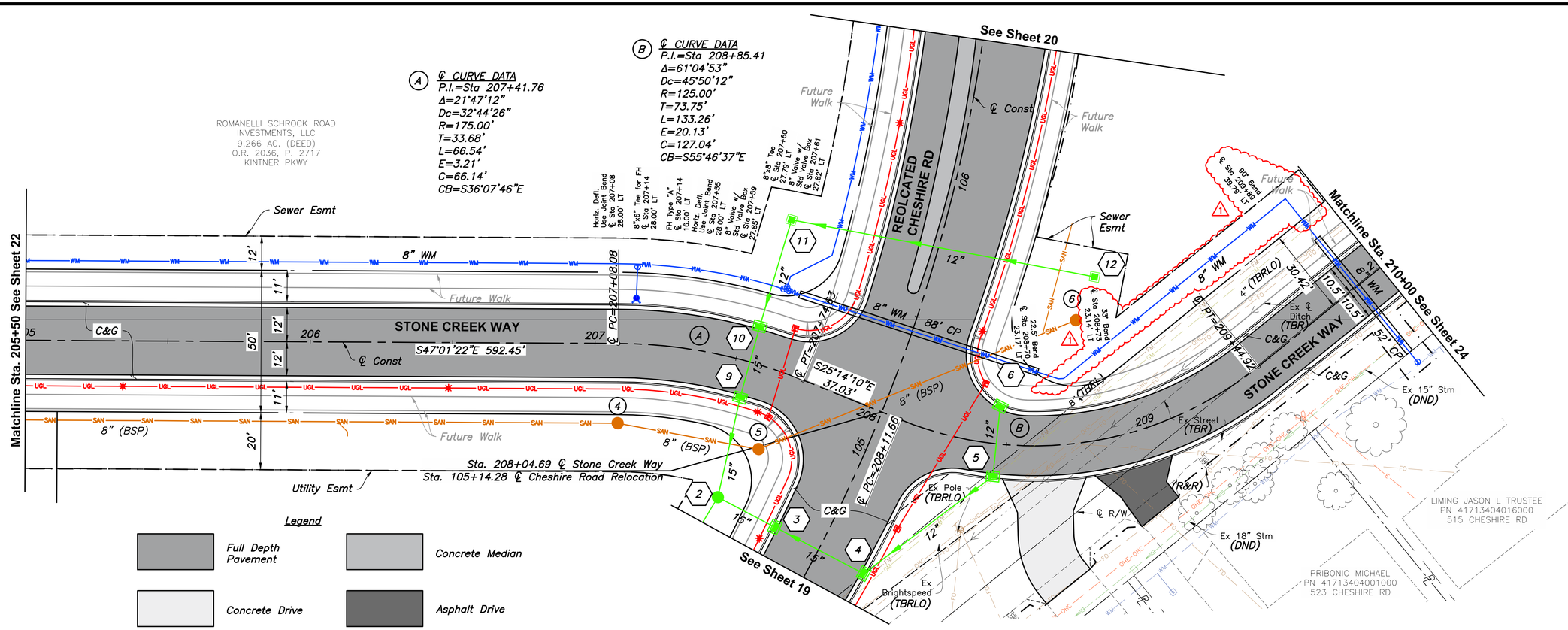


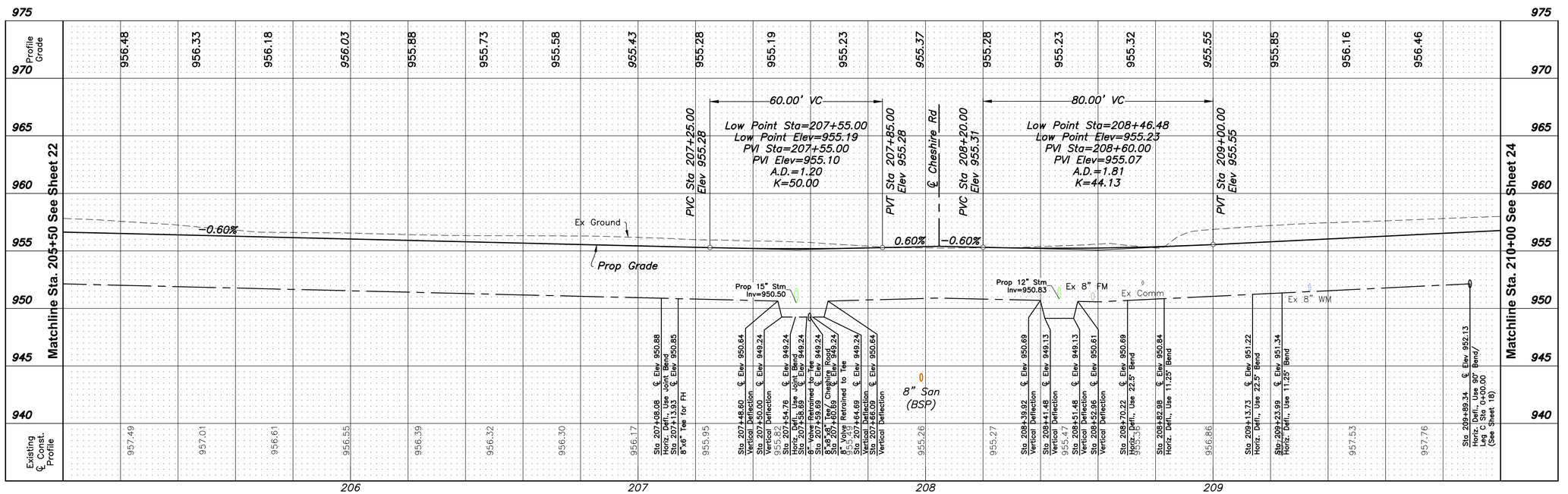
PLAN & PROFILE

CHESHIRE ROAD RELOCATION

22
65

SEPTEMBER, 2025





Revised Watermain Location

CALCULATED JJB
CHECKED MJS
HORIZ 1 Inch = 20 Feet
VERT 1 Inch = 5 Feet

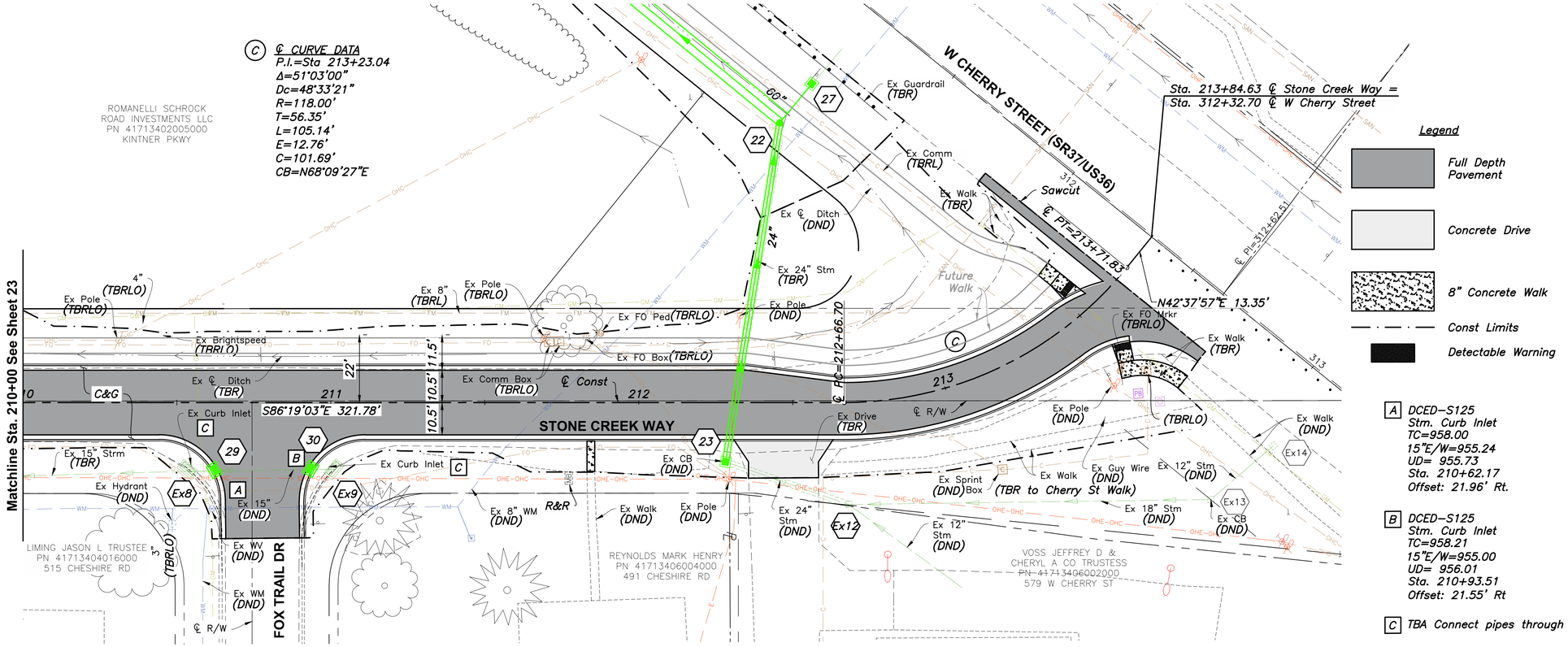
PLAN & PROFILE

CHESHIRE ROAD RELOCATION

23
65

SEPTEMBER, 2025

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CALCULATED JJB
CHECKED MJS
HORIZ 1 Inch = 20 Feet
VERT 1 Inch = 5 Feet

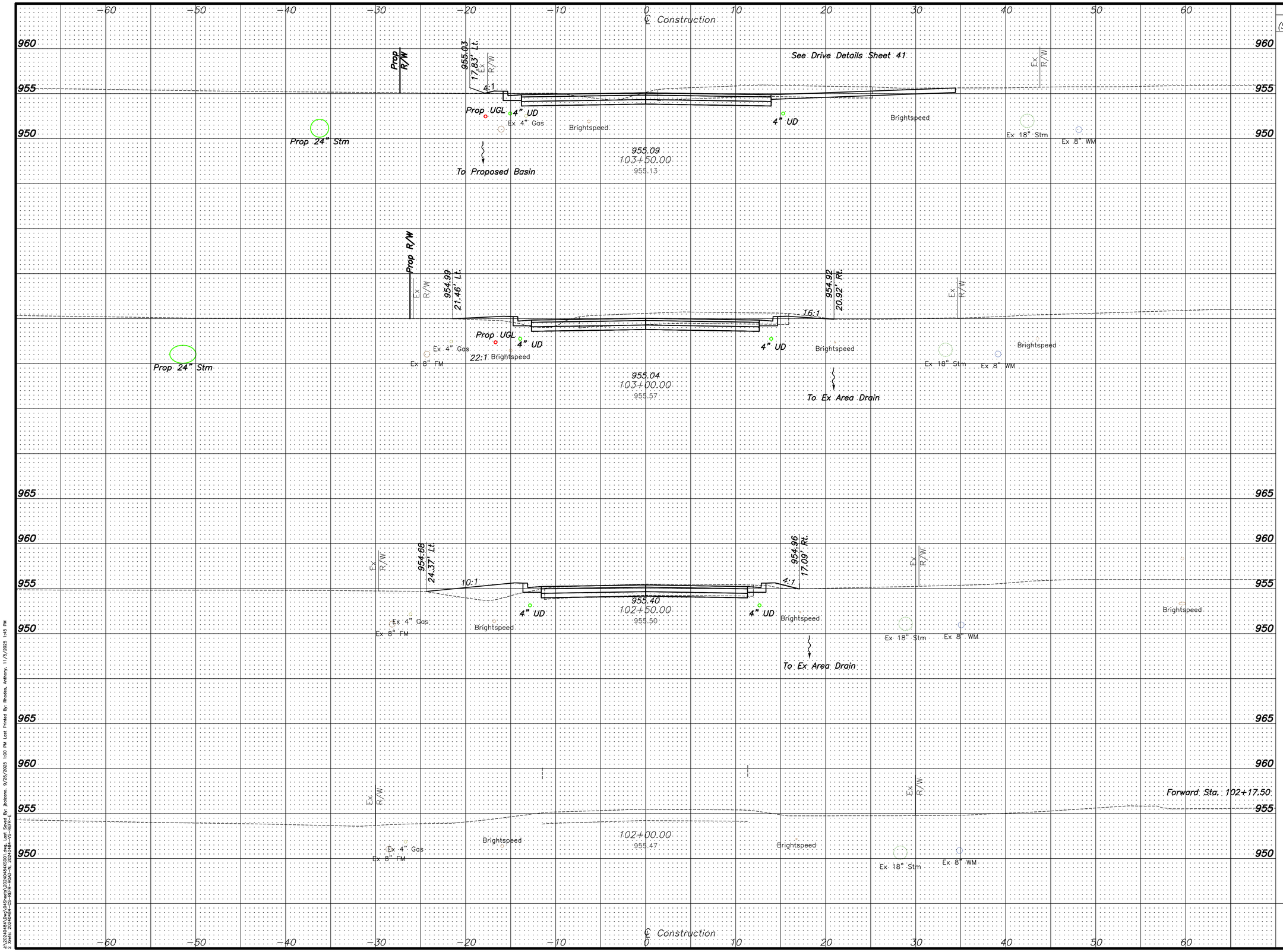
PLAN & PROFILE

CHESHIRE ROAD RELOCATION

24
65

SEPTEMBER, 2025

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s:\Kent 2024048A-CS-REFR-ROAD-HI, 2024048A-PS-REFR-E, 2024048A-CS-REFR-ROAD-HIGH-HL, 20230859-PS-ROAD, 2024048A-HWTER-RESIDENTIAL-.dgn



Station	End Area Cut (Sq.Ft.)	End Area Fill (Sq.Ft.)	Volume Cut (Cu.Yd.)	Volume Fill (Cu.Yd.)
			94	14
	65	2		
			105	6
	48	4		
			75	17
	33	14		
			40	9
	33	0		
Sheet Total			314	46

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

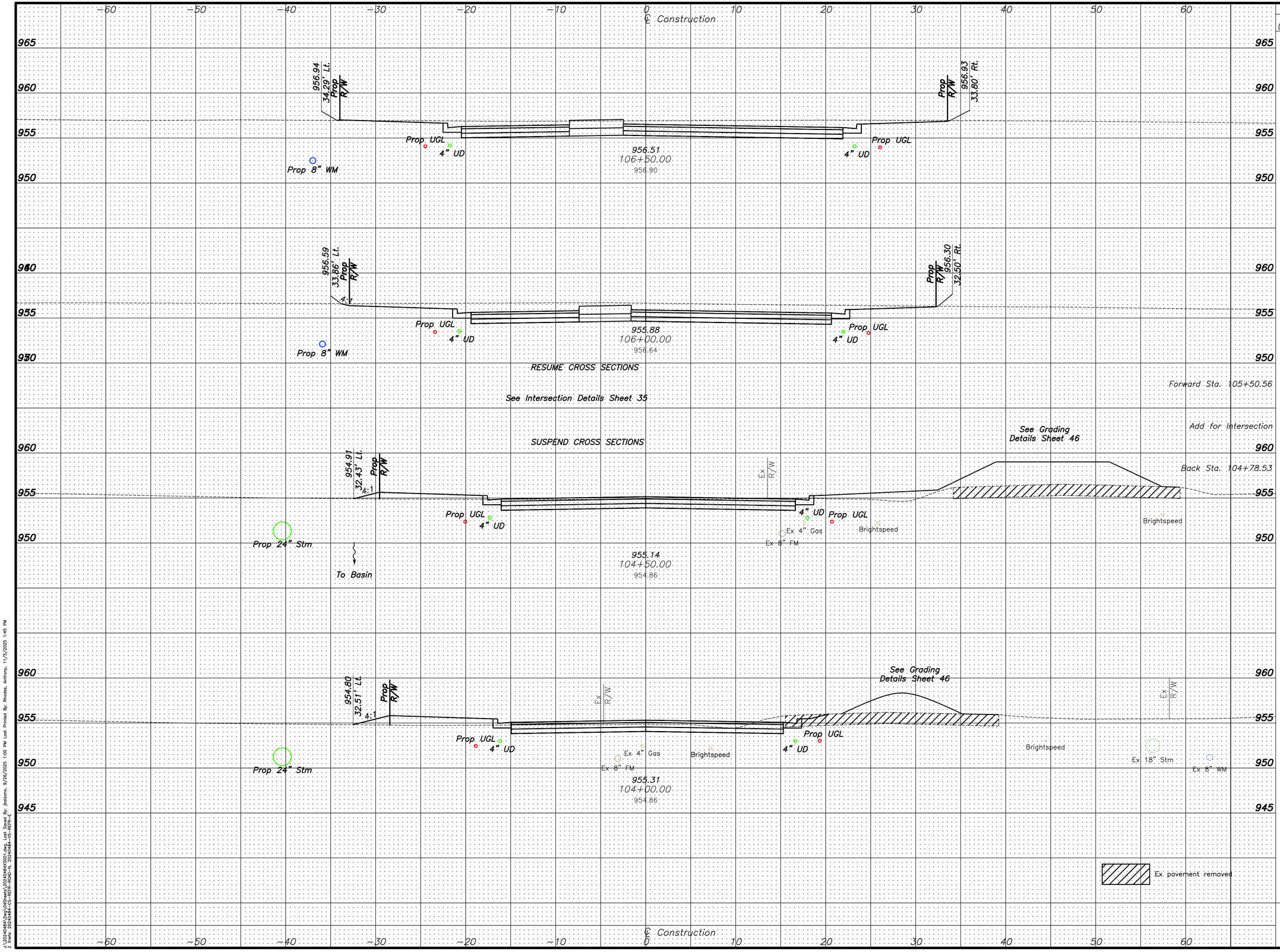
CROSS SECTIONS
STA 102+00 TO STA 103+50

CHESHIRE ROAD RELOCATION

25
65

SEPTEMBER, 2025

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Xrefs: 2024484-C3-REFR-ROAD-N; 2024484-C5-REFR-E



	End Area		Volume	
	Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
			126	13
	85	1		
			171	1
	99	0		
			190	0
Forward Sta. 105+50.56	108	0		
Add for Intersection			184	46
Back Sta. 104+78.53	43	13		
			61	59
	71	97		
			124	143
	62	57		
Sheet Total			856	262

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

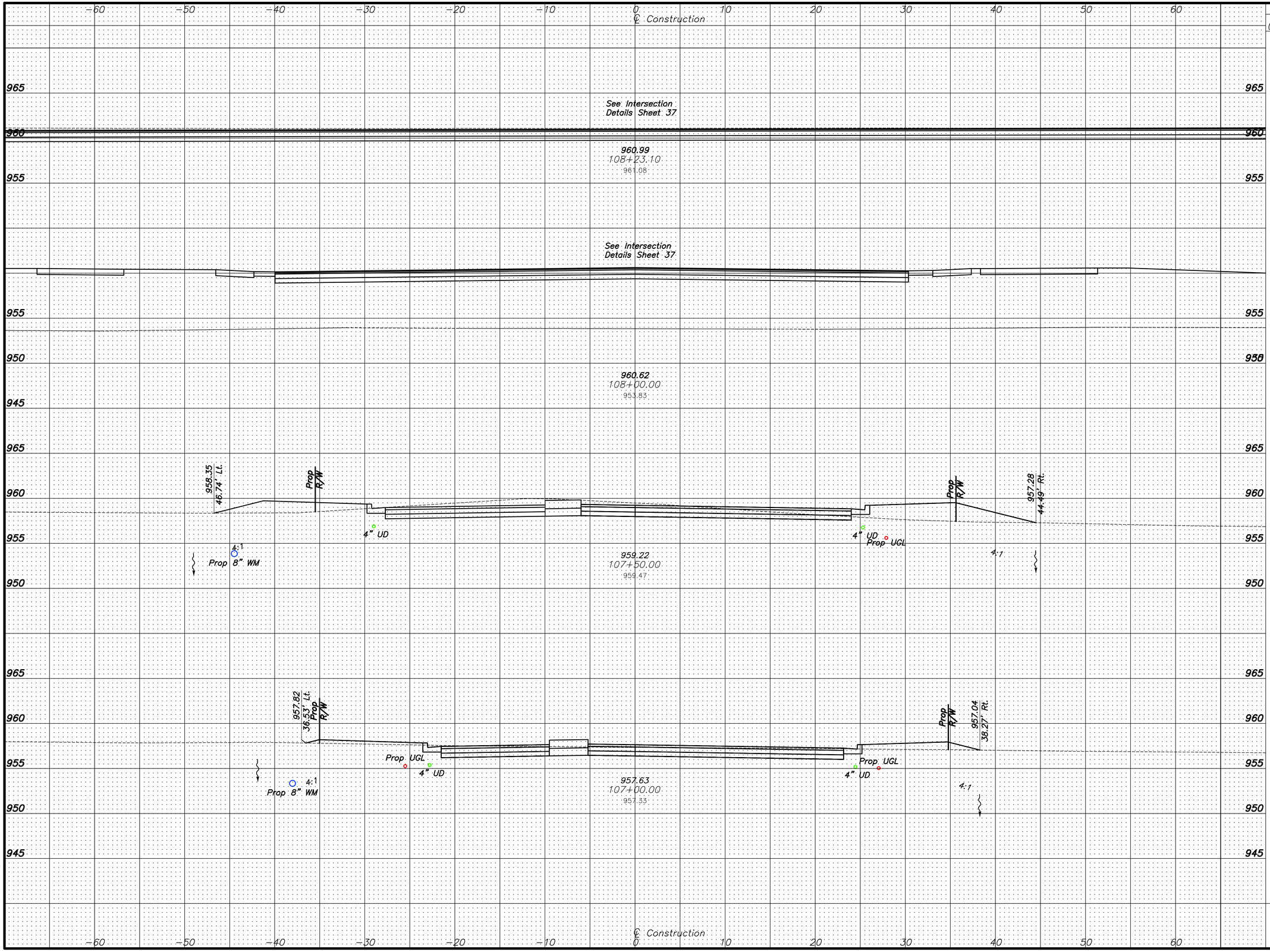
CROSS SECTIONS
STA 104+00 TO STA 106+00

CHESHIRE ROAD RELOCATION

26
65

SEPTEMBER, 2025

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2 Xrefs: 2024084-CS-REFR-ROAD-N, 2024084-HS-REFR-E



	End Area		Volume	
	Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
	218	0		
			94	128
	0	299		
			65	317
	70	43		
			113	51
	51	12		
Sheet Total			272	496

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

CROSS SECTIONS
STA 106+50 TO STA 108+23.10

CHESHIRE ROAD RELOCATION

27
65

SEPTEMBER, 2025

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Xrefs: 2024084-CS-REFR-ROAD-N, 2024084-CS-REFR-E

End Area		Volume	
Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
		293	0
170	0		
		371	0
230	0		
		379	0
179	0		
		193	0
95	0		
Sheet Total		1236	0

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

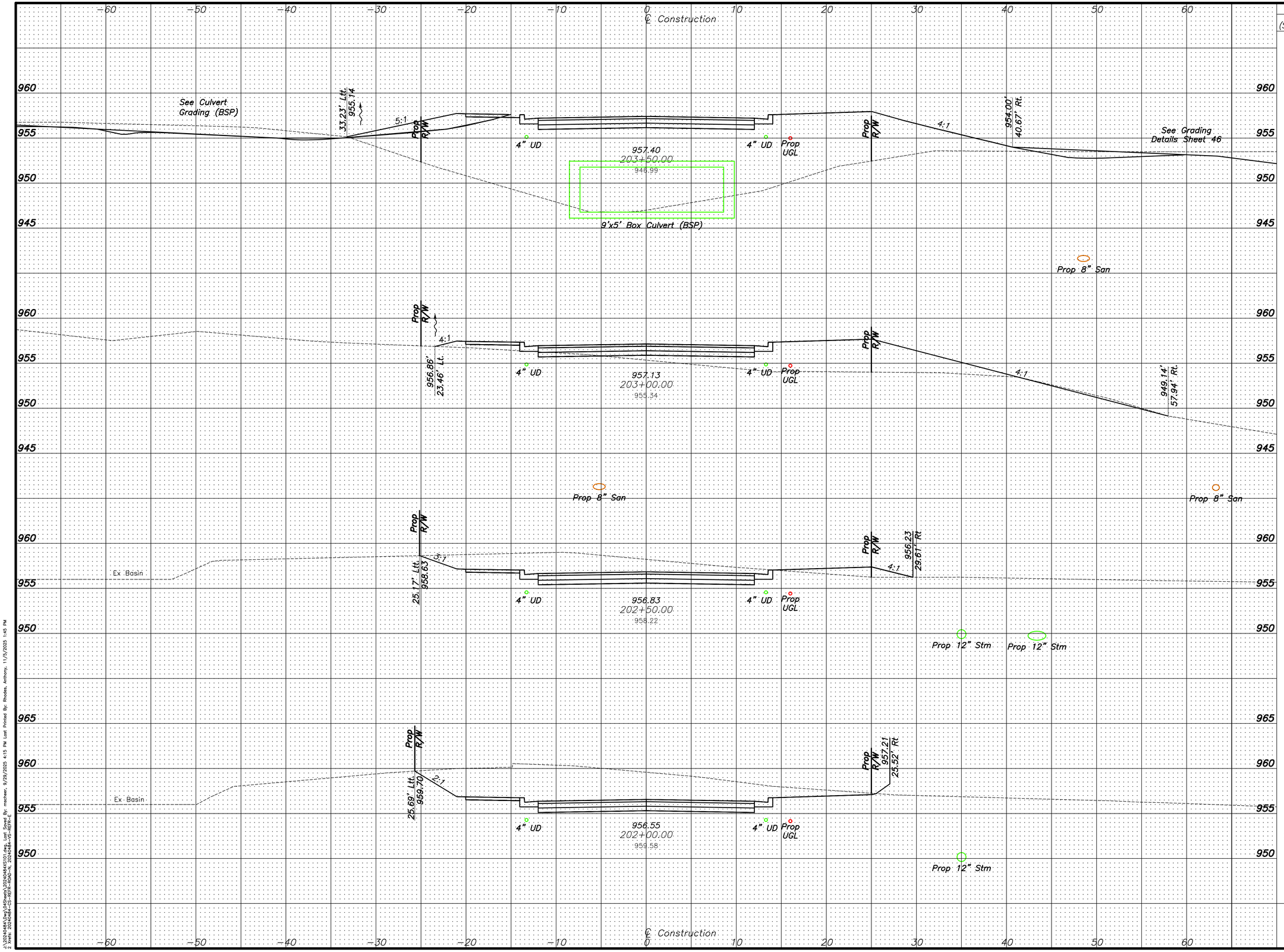
CROSS SECTIONS
STA 200+00 TO STA 201+50

CHESHIRE ROAD RELOCATION

28
65

SEPTEMBER, 2025

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Xrefs: 2024048-IS-REPR-ROAD-N; 2024048-VS-REPR-E



	End Area		Volume	
	Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
			54	343
	58	336		
			57	401
	3	97		
			77	99
	80	9		
			210	9
	146	0		
Sheet Total			398	852

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

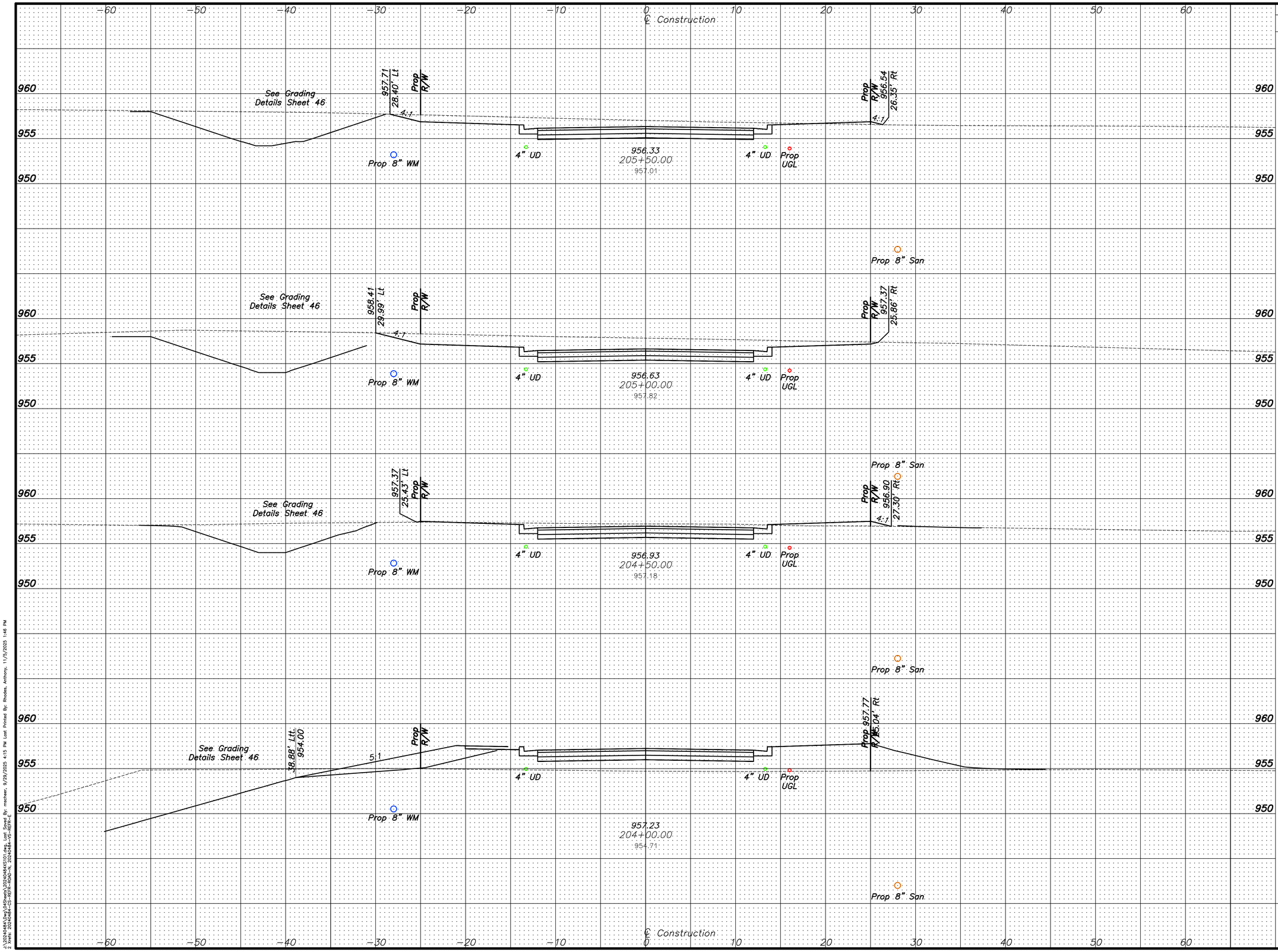
CROSS SECTIONS STA 202+00 TO STA 203+50

CHESHIRE ROAD RELOCATION

29
65

SEPTEMBER, 2025

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Xrefs: 2024484-C3-REFR-ROAD-N, 2024484-V5-REFR-E



End Area		Volume	
Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
		101	3
58	2		
		127	2
79	0		
		114	5
44	5		
		41	37
0	34		
Sheet Total		383	47

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

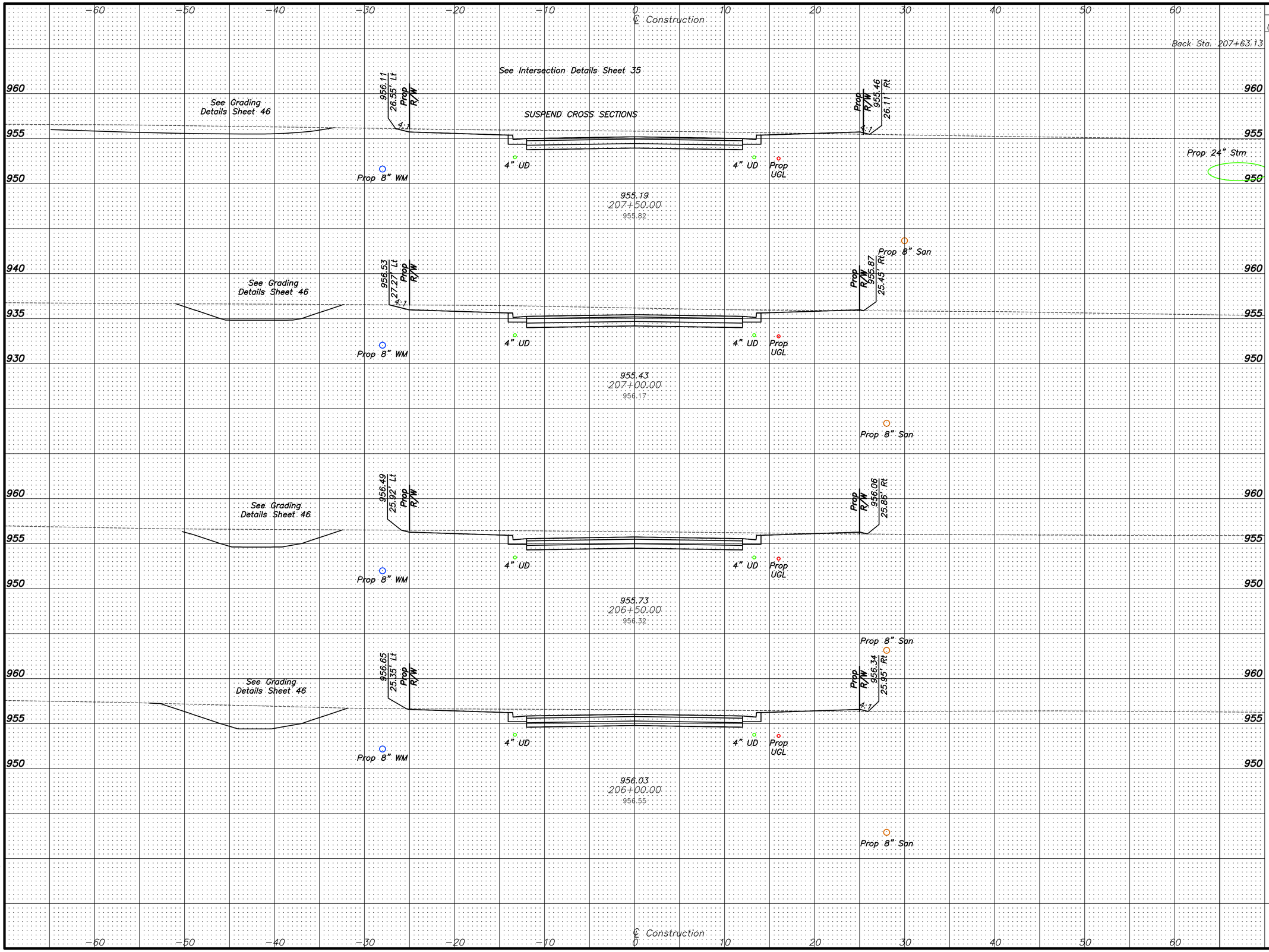
CROSS SECTIONS
STA 204+00 TO STA 205+50

CHESHIRE ROAD RELOCATION

30
65

SEPTEMBER, 2025

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2 Xref: 2024048A-GS-REFR-ROAD-N, 2024048A-GS-REFR-E



Station	End Area Cut (Sq.Ft.)	End Area Fill (Sq.Ft.)	Volume Cut (Cu.Yd.)	Volume Fill (Cu.Yd.)
Back Sta. 207+63.13	54	3		
			28	1
	56	1		
			108	2
	60	1		
			106	2
	54	1		
			98	2
	51	1		
Sheet Total			340	7

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

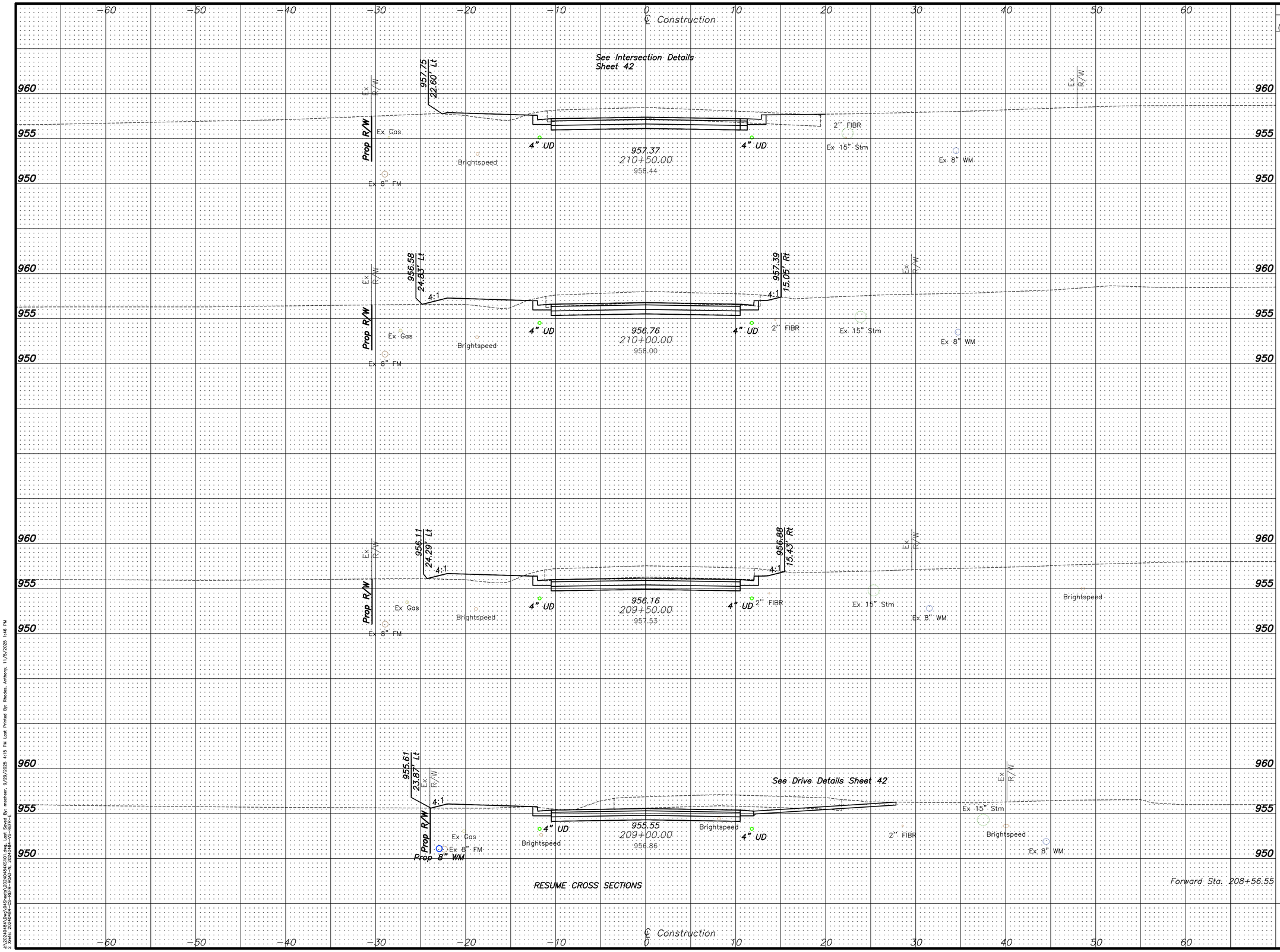
CROSS SECTIONS
STA 206+00 TO STA 207+50

CHESHIRE ROAD RELOCATION

31
65

SEPTEMBER, 2025

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Z Xref: 2024048A-GS-REFR-ROAD-N, 2024048A-VS-REFR-E



Station	End Area Cut (Sq.Ft.)	End Area Fill (Sq.Ft.)	Volume Cut (Cu.Yd.)	Volume Fill (Cu.Yd.)
			122	13
	63	11		
			113	18
	58	8		
			113	14
	63	7		
			128	11
	75	4		
			124	4
Forward Sta. 208+56.55	79	0		
Sheet Total			600	60

CALCULATED DJD
CHECKED MJS

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CROSS SECTIONS STA 209+00 TO STA 210+50

CHESHIRE ROAD RELOCATION

32
65

SEPTEMBER, 2025

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Z Xrefs: 2024484-C3-REFR-ROAD-N; 2024484-V5-REFR-E

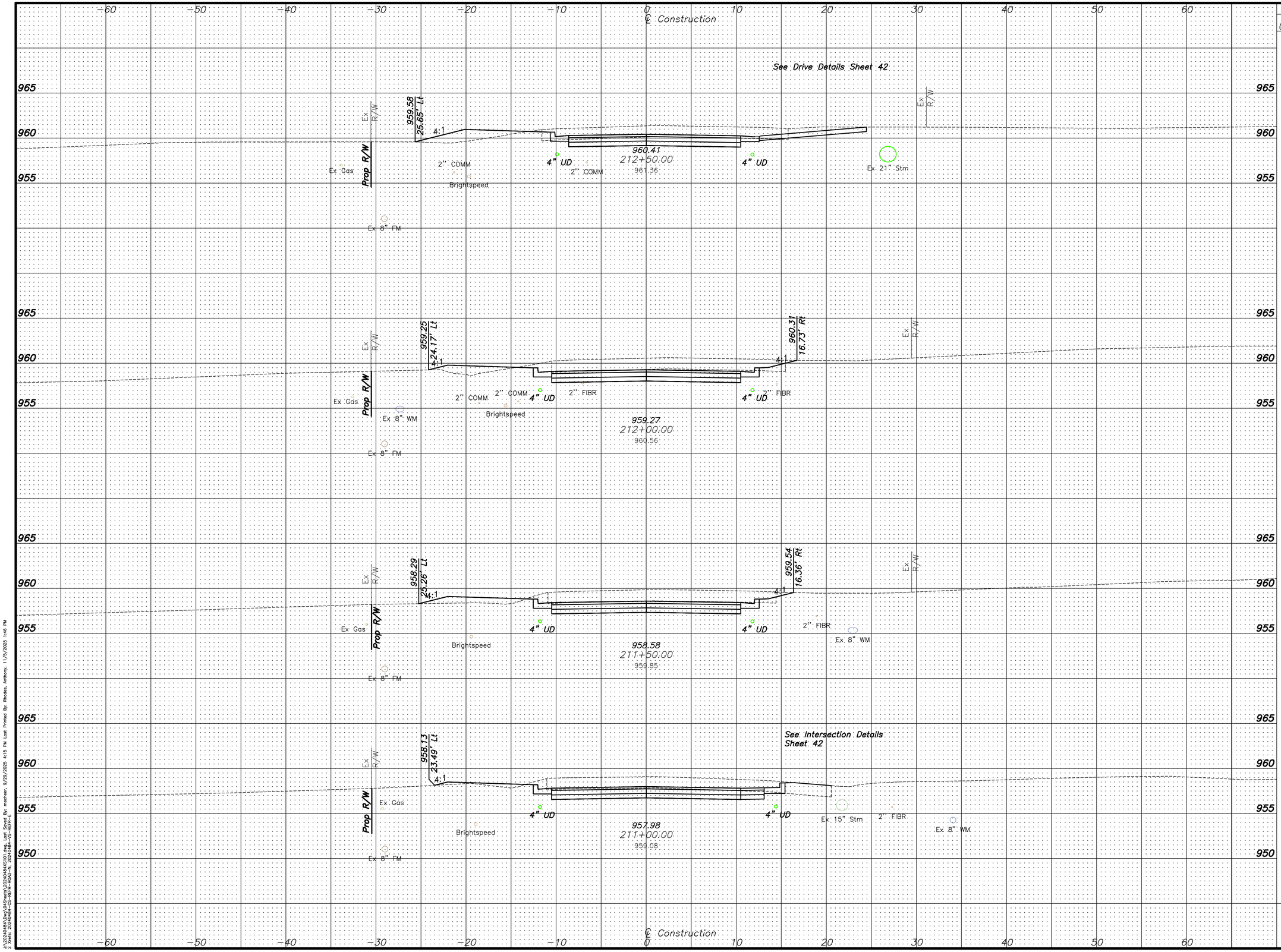
CROSS SECTIONS
STA 211+00 TO STA 212+50

CHESHIRE ROAD RELOCATION

CALCULATED DJD | CHECKED MJS

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

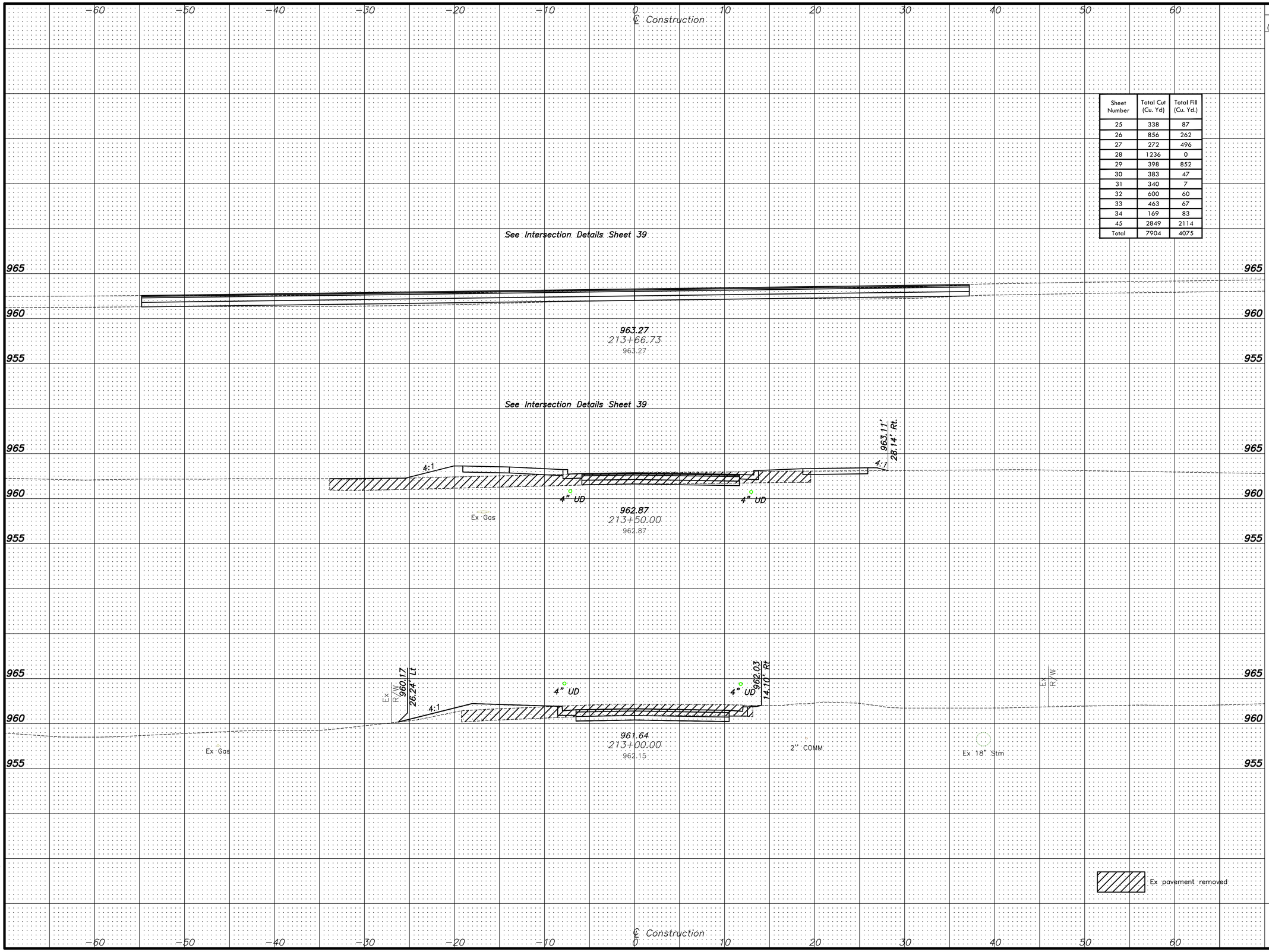
	End Area		Volume	
	Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
			103	29
	61	10		
			118	15
	66	6		
			120	13
	63	7		
			122	10
	68	3		
Sheet Total			463	67



J:\2024\484\Dwg\04Sheets\2024484X3101.dwg, Last Saved By: mscheer, 9/29/2025 4:15 PM Last Printed By: Rhodes, Anthony, 11/5/2025 1:46 PM
Xrefs: 2024484-ICS-REPT-ROAD-N, 2024484-HS-REPT-E

SEPTEMBER, 2025

33
65



Sheet Number	Total Cut (Cu. Yd)	Total Fill (Cu. Yd.)
25	338	87
26	856	262
27	272	496
28	1236	0
29	398	852
30	383	47
31	340	7
32	600	60
33	463	67
34	169	83
45	2849	2114
Total	7904	4075

End Area		Volume	
Cut (Sq.Ft.)	Fill (Sq.Ft.)	Cut (Cu.Yd.)	Fill (Cu.Yd.)
115	0		
		58	16
69	51		
		111	67
50	21		
Sheet Total		169	83

HORIZ 1 Inch = 5 Feet
VERT 1 Inch = 5 Feet

CALCULATED DJD
CHECKED MJS

CROSS SECTIONS
STA 213+00 TO STA 213+85.18

CHESHIRE ROAD RELOCATION

34
65

SEPTEMBER, 2025

J:\2024\484\Dwg\S45Sheets\2024484XS101.dwg, Last Saved By: mscheer, 9/29/2025 4:15 PM, Last Printed By: Rhodes, Anthony, 11/5/2025 1:46 PM
Xrefs: 2024484-CS-HDR-ROAD-N, 2024484-XS-HDR-E

NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Relocated Cheshire Road unless otherwise noted.

SC=Stone Creek Way
CS = Cherry Street

Sta. 105+50.05 39.82 LT ℄ Relocated Cheshire Road =
Sta. 207+65.49 33.50 LT ℄ Stone Creek Way

EG Curve Data
Δ=92°00'42"
R=21.50'
T=22.27'
L=34.53

105+50.58
18.32' LT

955.28
955.20
955.12
955.05
955.01
10' (Typ)
0.78%
PB
SC 207+65.49
12.00' LT
4.53'

955.57
105+50.18

105+50.19
19.42' RT

EG Curve Data
Δ=108°24'51"
R=21.50'
T=29.82'
L=40.68

Sta. 105+49.68 40.92 RT ℄ Relocated Cheshire Road =
Sta. 208+56.55 32.00 LT ℄ Stone Creek Way

955.27
10.68'
955.18
955.10
955.01
LP
955.07
0.85%
0.60%
SC 208+56.55
10.50' LT
10' (Typ)

STONE CREEK WAY

955.20
SC 207+65.49
955.19
SC 207+63.13
℄ PT=207+74.63

℄ PC=208+11.66
955.24
SC 208+36.91
955.23
SC 208+46.48
955.24
SC 208+56.55
℄ Const

208
955.35

SC 207+63.13
12.00' RT
6.04'
0.50%
PB
955.00
HP 955.04
954.99
954.94
954.89
0.50%
10' (Typ.)
104+78.55
16.71' LT

EG Curve Data
Δ=96°02'53"
R=21.50'
T=23.90'
L=36.04

Sta. 104+78.01 38.20 LT ℄ Relocated Cheshire Road =
Sta. 207+63.13 33.50 RT ℄ Stone Creek Way

℄ Const
105

955.16
104+87.87
0.03' LT
955.16
104+78.59
RELOCATED
CHESHIRE ROAD

955.07
SC 208+56.55
10.50' RT
LP 955.06
SC 208+46.48
10.50' RT
SC 208+36.91
10.50' RT
7.86'
0.54%
10' (Typ)
955.03
955.07
957.97
954.92
104+87.87
17.74' RT
954.89
104+78.53
17.51' RT
PB

EG Curve Data
Δ=74°14'07"
R=21.50'
T=16.27'
L=27.86

Sta. 104+87.34 39.23 RT ℄ Relocated Cheshire Road =
Sta. 208+36.91 32.00 RT ℄ Stone Creek Way

GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

CALCULATED JJB
CHECKED MJS

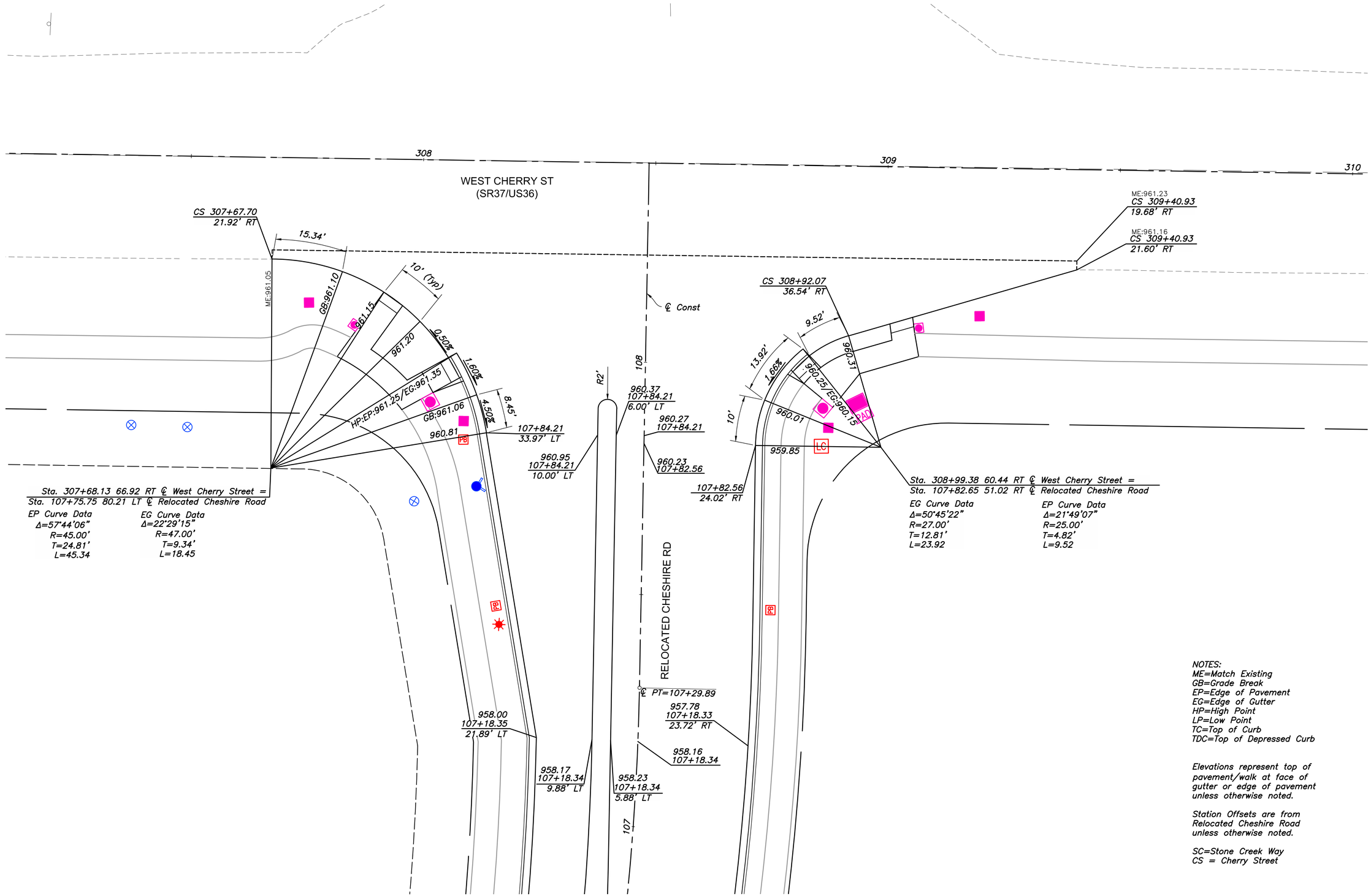
INTERSECTION DETAILS

CHESHIRE ROAD RELOCATION

35
65

SEPTEMBER, 2025

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Sheet: 2024048A-CS-INTR-ROAD-N, 2024048A-PS-INTR-E, 2024048A-PS-INTR-RESIDENTIAL - ESP



NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Relocated Cheshire Road unless otherwise noted.

SC=Stone Creek Way
CS = Cherry Street

GRAPHIC SCALE
0 5 10 20
1 inch = 10 feet

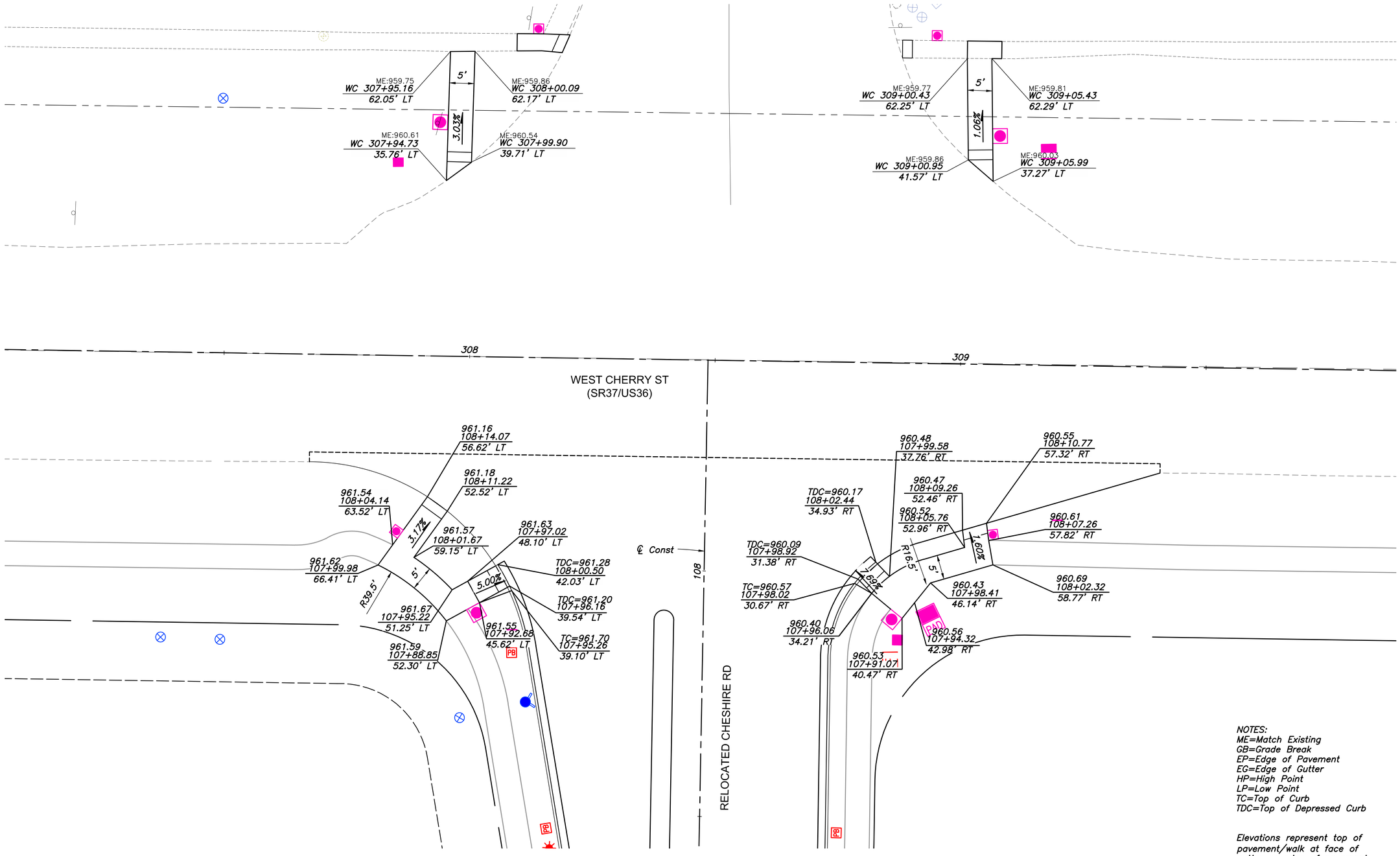
CALCULATED JJB
CHECKED MJS

INTERSECTION DETAILS

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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Sheet: 2024048A-CS-REFR-ROAD-04, 2024048A-PS-REFR-E, 2024048A-INTER-RESIDENTIAL-SSP



NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Relocated Cheshire Road unless otherwise noted.

SC = Stone Creek Way
CS = Cherry Street

GRAPHIC SCALE
0 5 10 20
1 inch = 10 feet

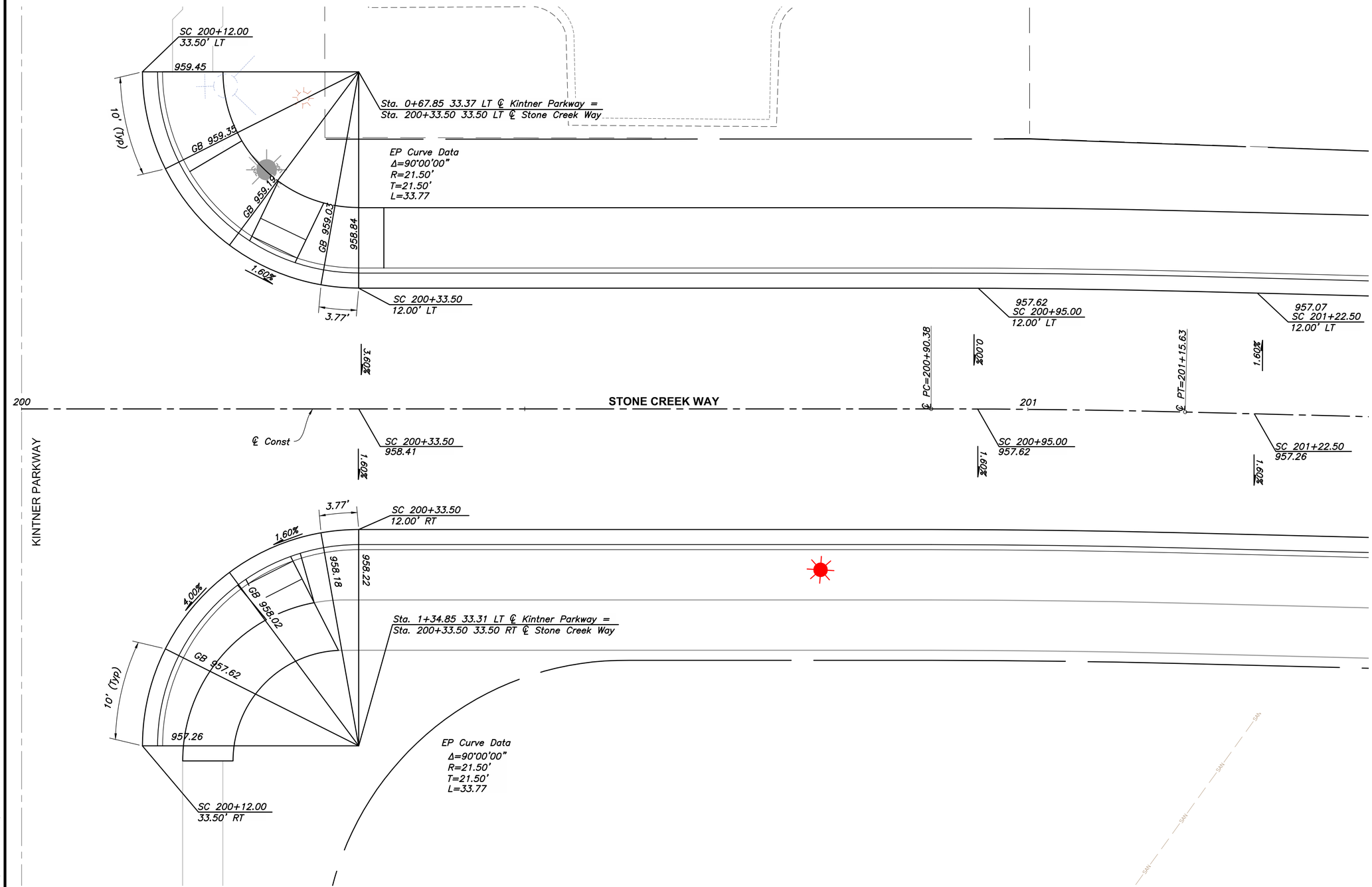
CALCULATED JJB
CHECKED MJS

CURB RAMP DETAILS

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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3 Xrefs: 2024048-CS-REPR-ROAD-N, 2024048-XS-REPR-E, 2024068-I-HUNTER-RESIDENTIAL-.dgn



GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

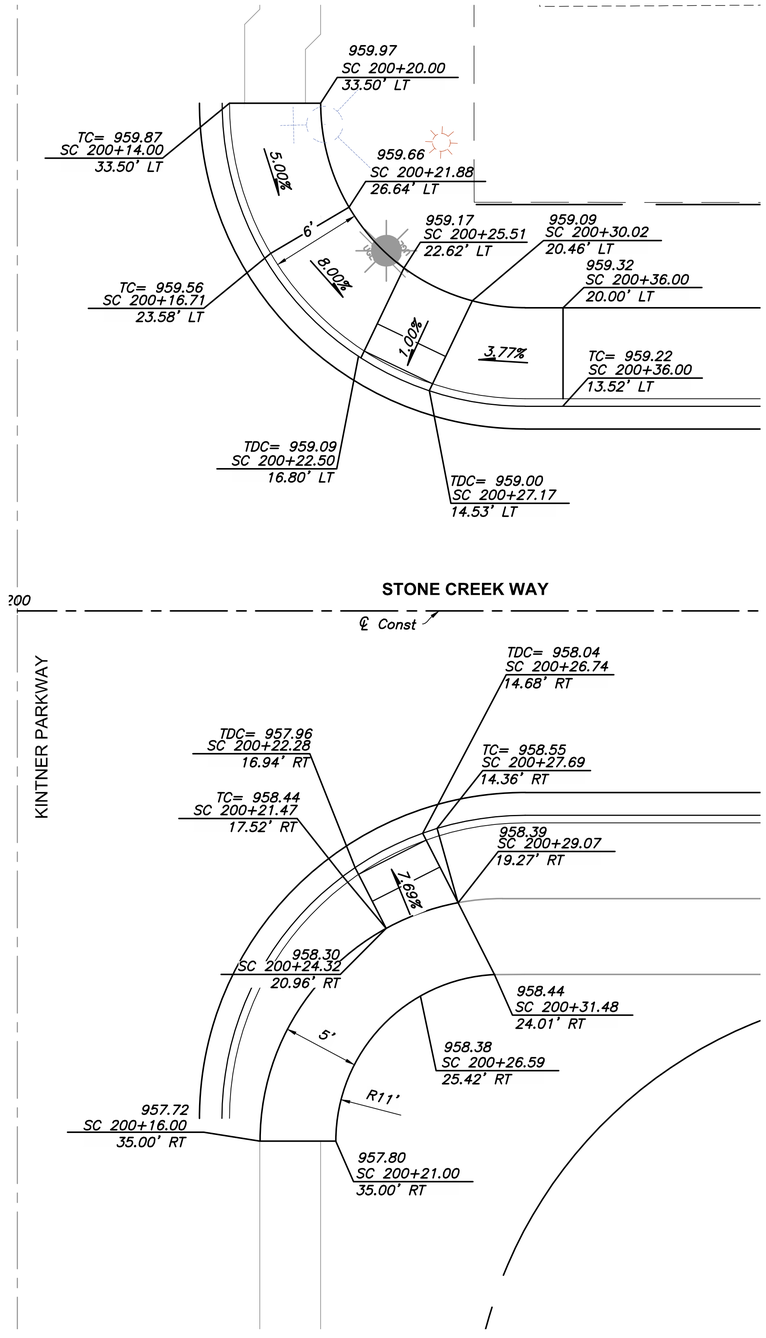
CALCULATED JJB
CHECKED MJS

INTERSECTION DETAILS

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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$ Xrefs: 20240484-CS-HEPE-ROAD-H, 20240484-HS-HEPE-Z, 20240481-HANTER-RESIDENTIAL-BSP



NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Relocated Cheshire Road unless otherwise noted.

SC= Stone Creek Way
CS = Cherry Street

GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

CALCULATED JJB
CHECKED MJS

CURB RAMP DETAILS

CHESHIRE ROAD RELOCATION

39
65

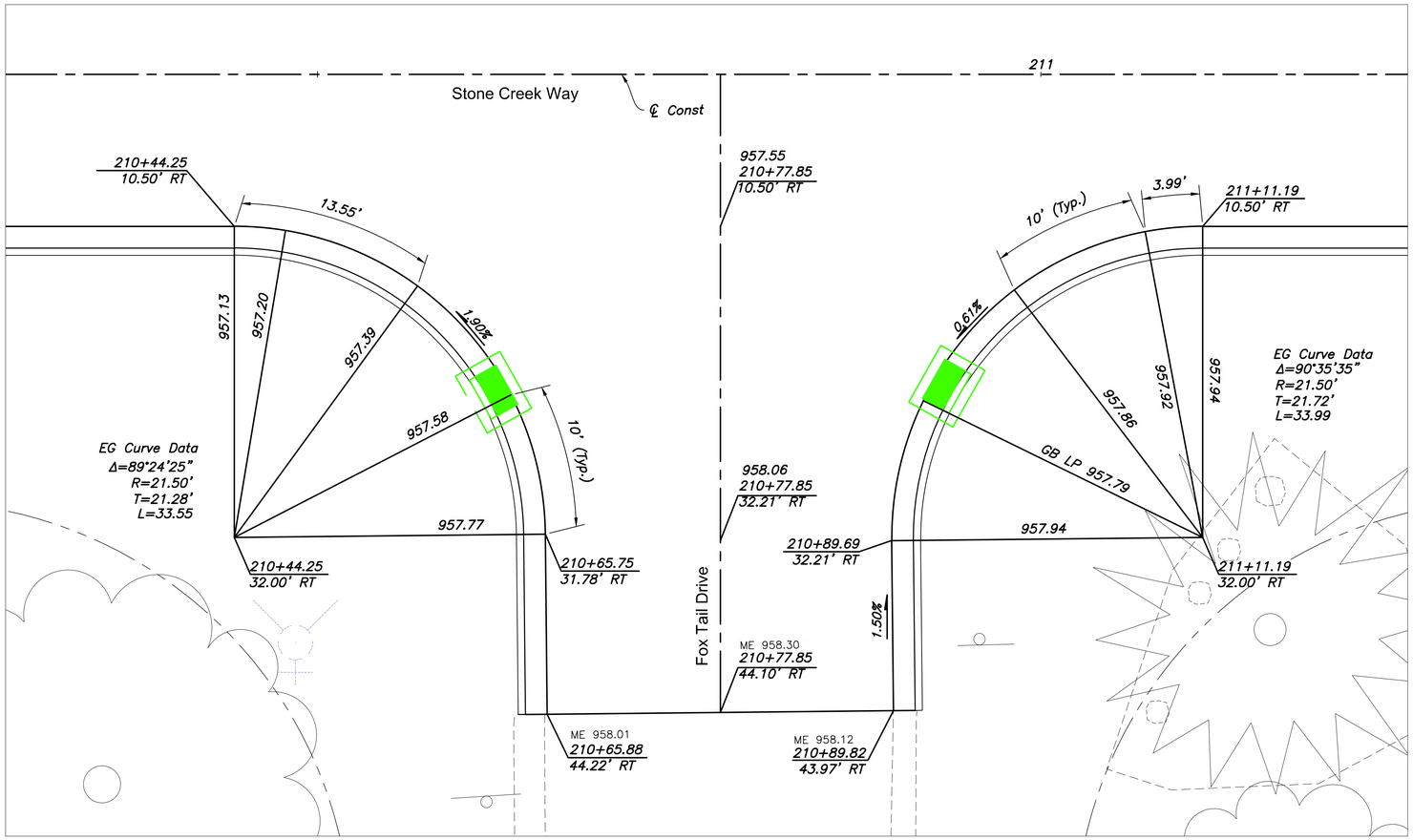
SEPTEMBER, 2025

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3 Views 2024484-CS-HDTR-ROAD-N, 2024484-VS-HDTR-E, 2024081-WATER-RESIDENTIAL-BSP

NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Relocated Cheshire Road unless otherwise noted.



GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

CALCULATED JJB
CHECKED MJS

INTERSECTION DETAIL

CHESHIRE ROAD RELOCATION

39A
65

Added sheet 39A Intersection Detail.

SEPTEMBER, 2025

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S Xrefs: 2024048A-CS-HDR-ROAD-N, 2024048A-VS-HDR-E, 2024088T-WATER-RESIDENTIAL-ESP

WEST CHERRY STREET
(SR37/US36)

311 312 313

℄ Const

℄ PI=312+62.51

℄ PI=313+17.20

ME 962.49
213+62.43
54.75' LT

963.21
213+63.32
2.81' LT

ME 962.34
213+56.49
54.42' LT

EG 963.23

EP 963.13

7.94'

℄ PT=213+71.83

3.54'

ME 963.81
213+67.92
37.11' RT

ME 963.71
213+64.88
37.33' RT

963.11
213+56.95
15.62' RT

3.03%

6.43'

963.29

963.59

EG 963.09

963.01

EP 962.99

963.05

12.86'

10' (Typ)

1.51%

962.85

213+43.05
10.50' RT

Sta. 312+69.98 51.40 RT ℄ West Cherry Street =
Sta. 213+43.05 42.00 RT ℄ Stone Creek Way

EG Curve Data	EP Curve Data
Δ=29°53'31"	Δ=45°43'15"
R=31.50'	R=29.50'
T=8.41'	T=12.44'
L=16.43	L=23.54

NOTES:
ME=Match Existing
GB=Grade Break
EP=Edge of Pavement
EG=Edge of Gutter
HP=High Point
LP=Low Point
TC=Top of Curb
TDC=Top of Depressed Curb

Elevations represent top of pavement/walk at face of gutter or edge of pavement unless otherwise noted.

Station Offsets are from Stone Creek Way unless otherwise noted.

℄ Const

213

17'

℄ PC=212+66.70

960.90
212+66.61
6.50' LT

1.00%

960.84
212+66.61

960.73
212+66.61
10.50' RT

959.88
212+35.11
10.50' LT

1.60%

959.88
212+35.11

959.88
212+35.77
10.50' RT

1.60%

STONE CREEK WAY

212

℄ PT=213+71.83

West Cherry St

GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

963.36
213+53.71
19.70' LT

963.44
213+54.65
14.58' LT

TDC=963.17
213+55.59
8.64' LT

TDC=963.12
213+56.00
5.79' LT

5'

4.50%

TDC=963.09
213+50.38
7.31' LT

TC=963.59
213+49.34
7.50' LT

963.44
213+47.87
18.67' LT

963.36
213+49.05
13.73' LT

℄ Const

STONE CREEK WAY

TDC=963.03
213+56.13
16.80' RT

M.E. 963.37
213+60.48
38.23' RT

963.23
213+53.24
22.48' RT

M.E. 963.33
213+56.74
38.79' RT

TDC=962.94
213+52.32
14.26' RT

5'

R18.5'

3.69%

TC=963.40
213+51.66
13.93' RT

963.26
213+51.10
26.79' RT

963.18
213+49.58
19.96' RT

963.23
213+47.62
24.38' RT

GRAPHIC SCALE
0 5 10 20
1 inch = 10 feet

CALCULATED JJB
CHECKED MJS

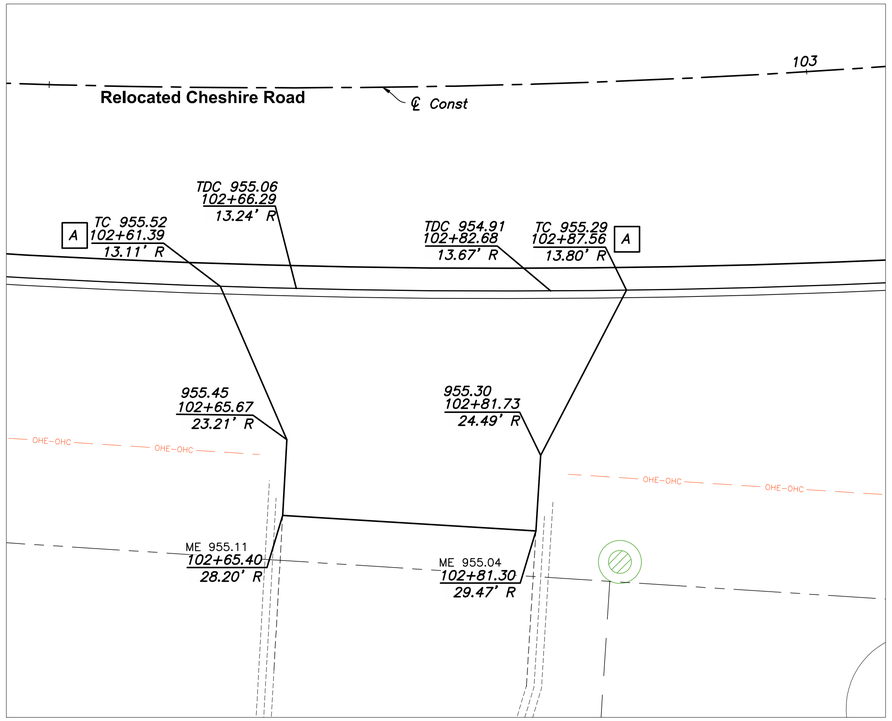
INTERSECTION DETAILS

CHESHIRE ROAD RELOCATION

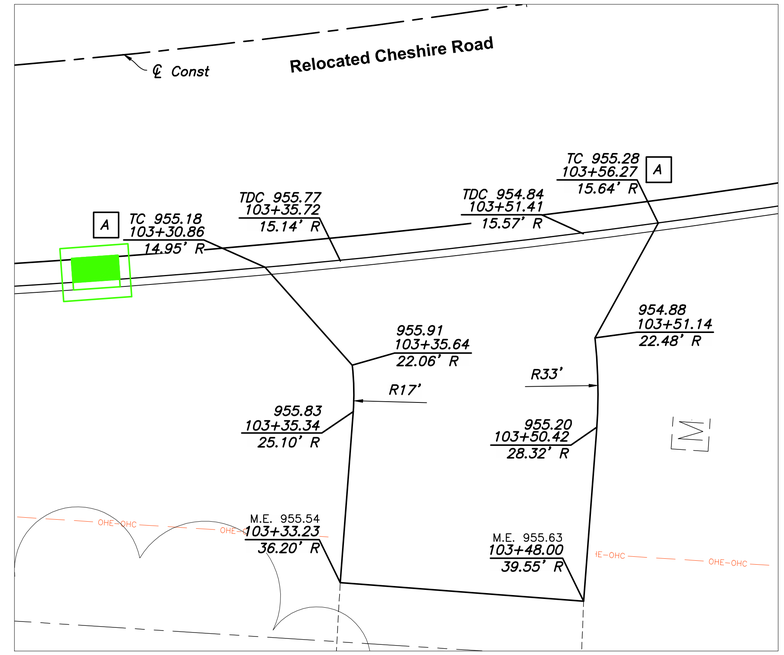
40
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SEPTEMBER, 2025

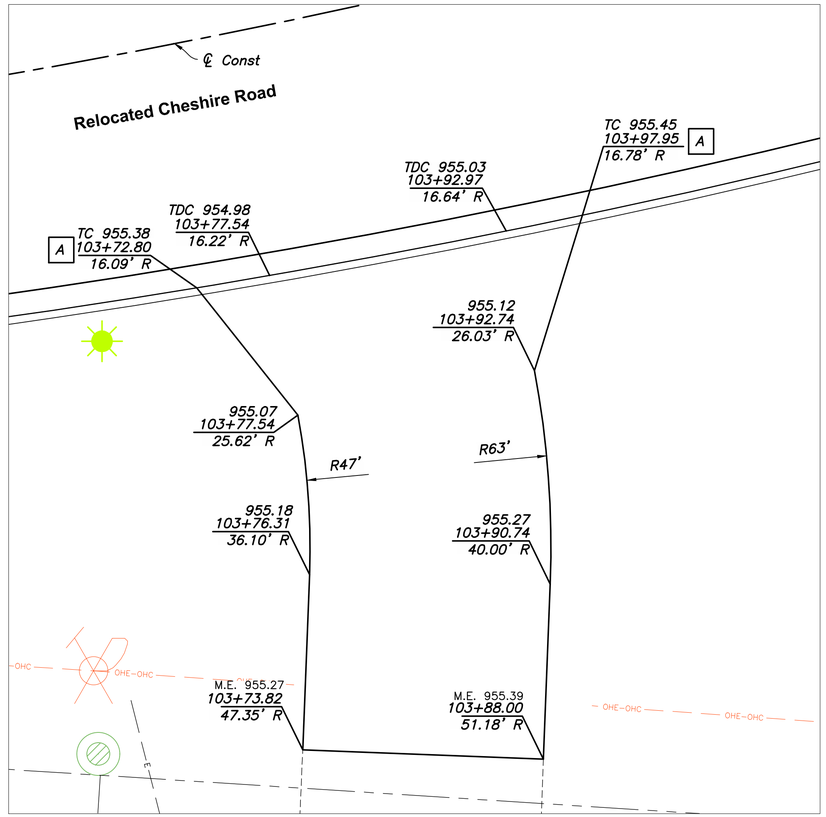
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X Refs: 20240484-CS-REFF-ROAD-H, 20240484-TS-REFF-E, 20240484-HWTER-RESIDENTIAL-BSP



575 Cheshire Road, Sunbury, Ohio 43074



563 Cheshire Road, Sunbury, Ohio 43074



551 Cheshire Road, Sunbury, Ohio 43074

NOTES:
TDC = Top of Depressed Curb
ME = Match Existing
TC= Top of Casting

Elevations represent top of pavement unless otherwise noted.

A *Curb shall transition from 6" to 1" over 6".*

GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

CALCULATED JAF
CHECKED MJS

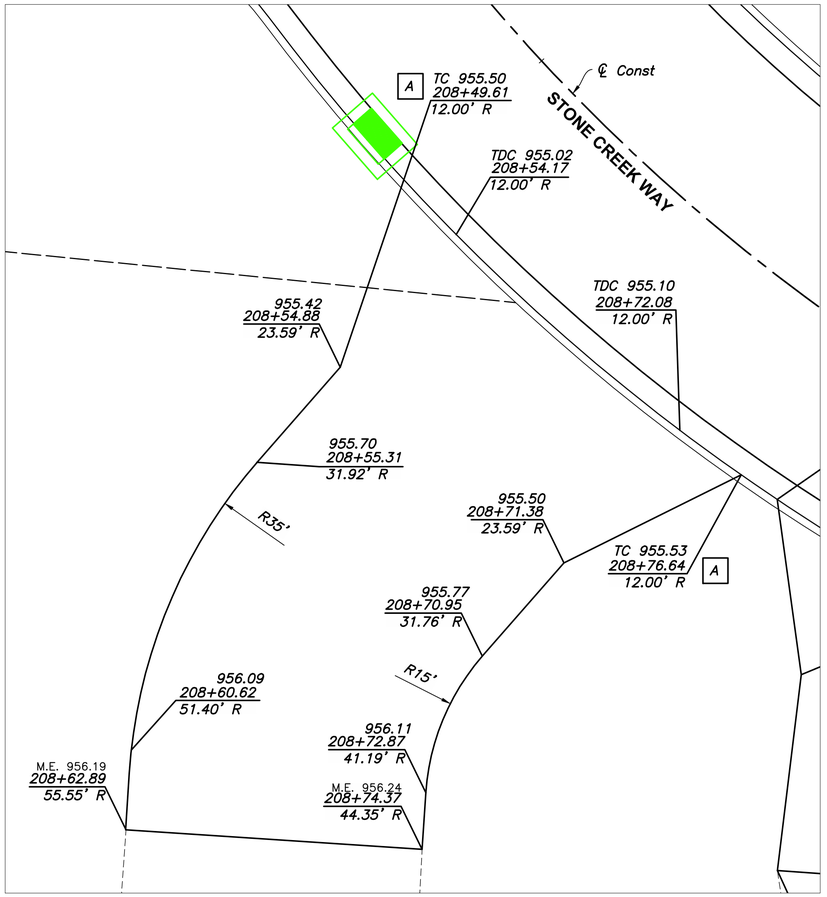
DRIVE DETAILS

CHESHIRE ROAD RELOCATION

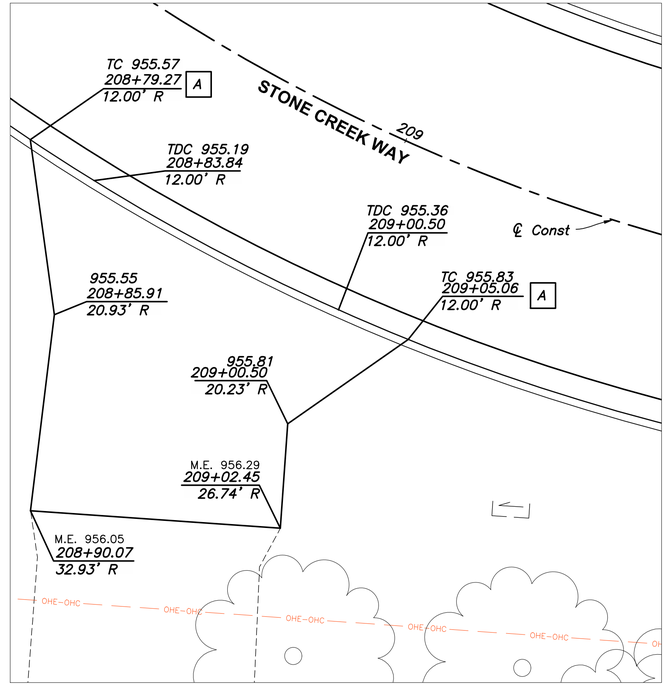
41
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SEPTEMBER, 2025

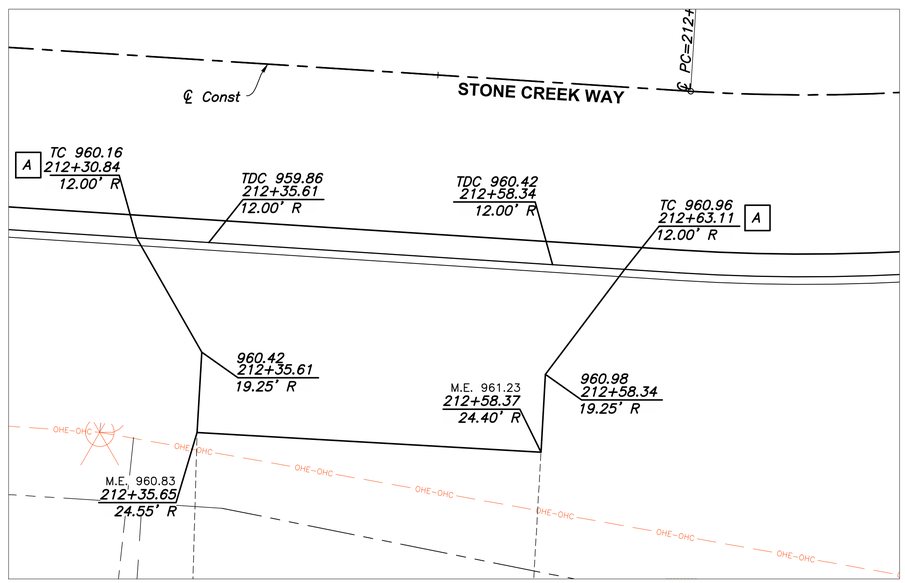
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3 Xrefs: 2024048-CS-REFR-E, 2024048-CS-REFR-PHOTO, 2024048-CS-REFR-ROAD-N



537 Cheshire Road, Sunbury, Ohio 43074



523 Cheshire Road, Sunbury, Ohio 43074



579 West Cherry Street, Sunbury, Ohio 43074

NOTES:
TDC = Top of Depressed Curb
ME = Match Existing
TC= Top of Casting

Elevations represent top of pavement unless otherwise noted.

A *Curb shall transition from 6" to 1" over 6".*

GRAPHIC SCALE
0 2.5 5 10
1 inch = 5 feet

CALCULATED JAF
CHECKED MJS

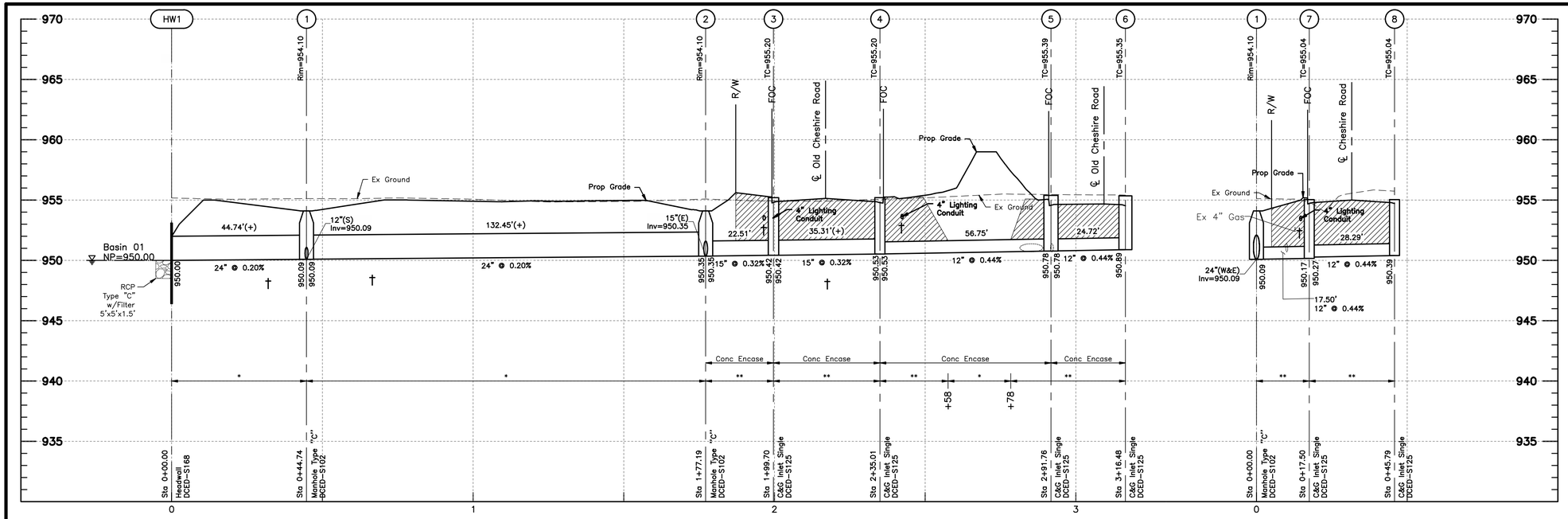
DRIVE DETAILS

CHESHIRE ROAD RELOCATION

42
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SEPTEMBER, 2025

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Sheet: 2024048A-CS-REFR-E, 2024048A-CS-REFR-PHOTO, 2024048A-CS-REFR-ROAD-N



NOTES:

All elevations on this plan are based on NAVD 1988 datum, unless otherwise noted.

All street crossings shown in profiles are public streets.

All fills are to be placed a minimum of 2.5' above the proposed storm sewer prior to the start of sewer construction per Item 203 of CMSC.

Denoted thus:

† Contractor shall maintain a 1.5' minimum clearance from outside of pipe to outside of pipe for all utility crossings unless otherwise noted.

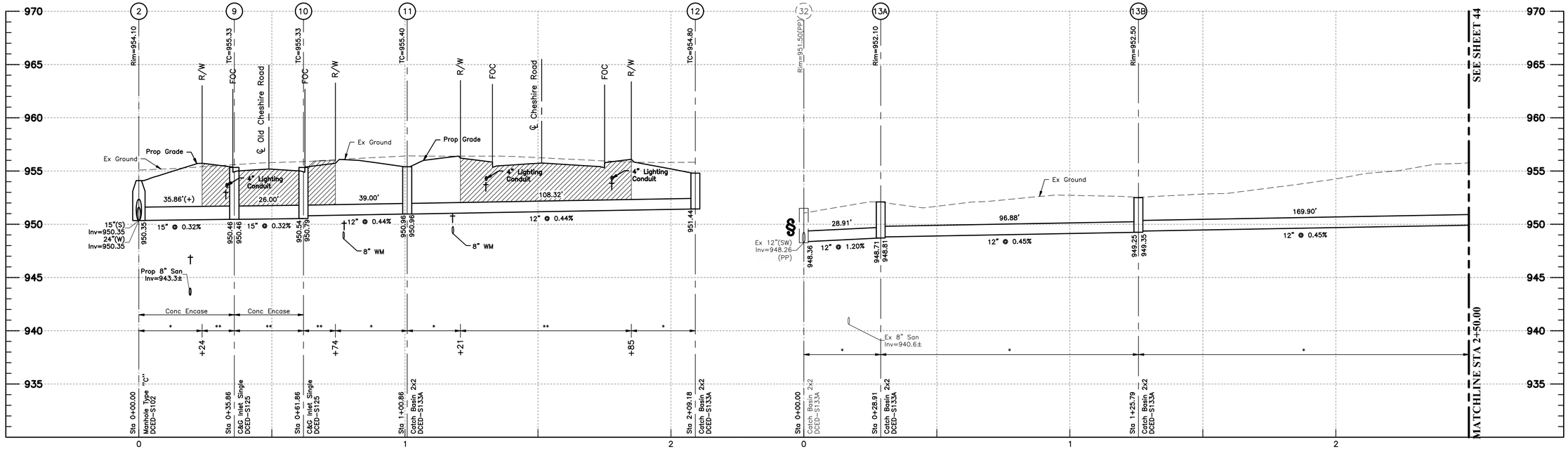
§ Where plans provide for a proposed conduit to be connected to or cross over or under an existing sewer or underground utility, the contractor shall locate the existing pipes or utilities both as to line and grade before starting to lay the proposed conduit. Contractor to verify invert/top of pipe and location of existing utility before construction. If there is a discrepancy between the contractor's information and the plan information shown, the contractor is to contact the engineer of record prior to the start of construction.

* Compacted Backfill, Per CMS Item 911

** Compacted Granular Backfill, Per CMS Item 912

Denoted thus:

(+) Pipe runs are to be sanitary grade (watertight) and have watertight joints per CMSC 901.15, and Trench Dams per CMSC 901.11. This applies to full pipe length, from structure to structure.



CALCULATED JJB
CHECKED MJS
HORIZ 1 inch = 20 feet
VERT 1 inch = 5 Feet

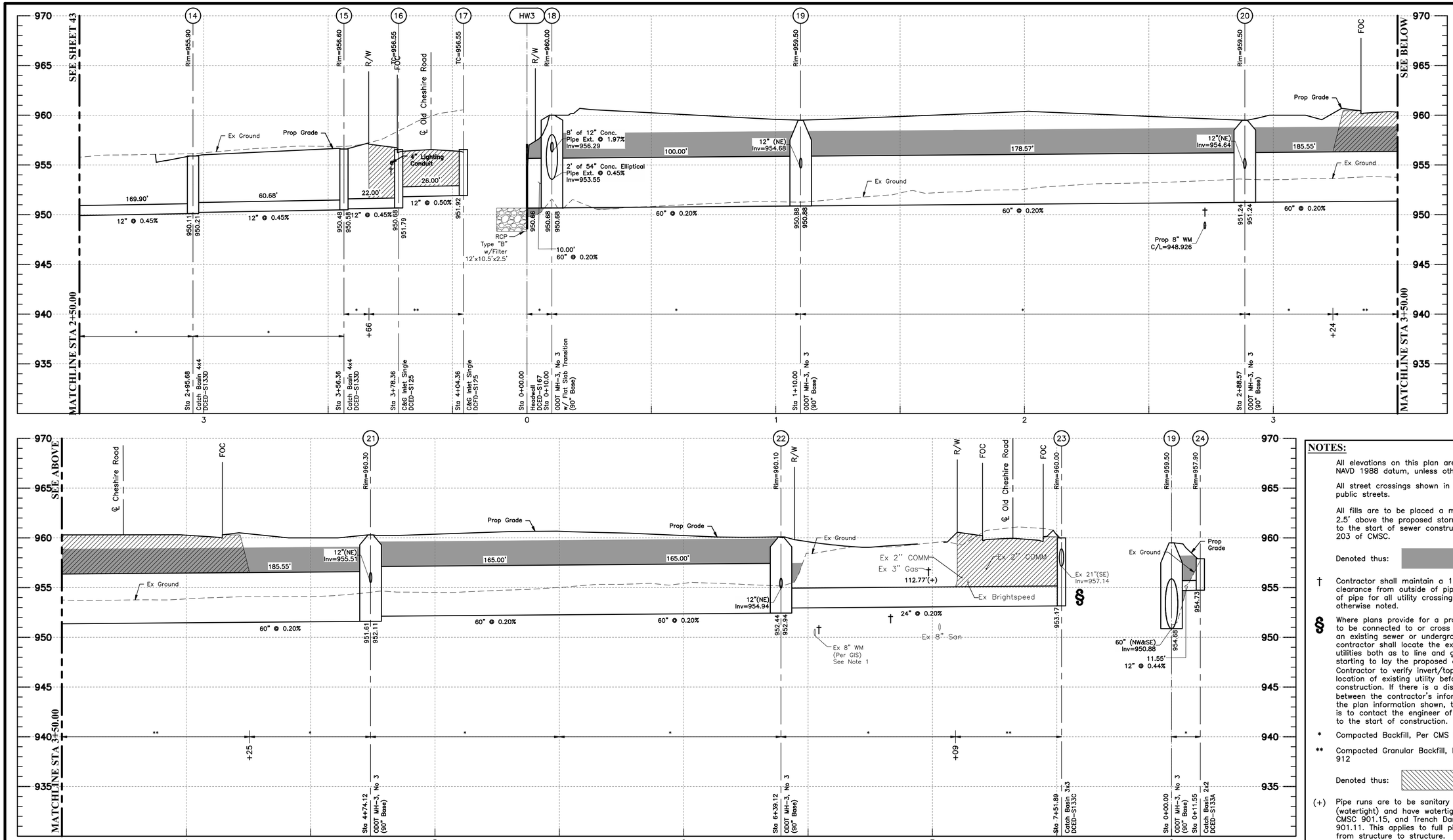
STORM PROFILES

CHESHIRE ROAD RELOCATION

43
65

SEPTEMBER, 2025

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Xref: 2024048A-CU-STRM-N



NOTES:

All elevations on this plan are based on NAVD 1988 datum, unless otherwise noted.

All street crossings shown in profiles are public streets.

All fills are to be placed a minimum of 2.5' above the proposed storm sewer prior to the start of sewer construction per Item 203 of CMSC.

Denoted thus:

† Contractor shall maintain a 1.5' minimum clearance from outside of pipe to outside of pipe for all utility crossings unless otherwise noted.

§ 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. Contractor to verify invert/top of pipe and location of existing utility before construction. If there is a discrepancy between the contractor's information and the plan information shown, the contractor is to contact the engineer of record prior to the start of construction.

* Compacted Backfill, Per CMS Item 911

** Compacted Granular Backfill, Per CMS Item 912

Denoted thus:

(+) Pipe runs are to be sanitary grade (watertight) and have watertight joints per CMSC 901.15, and Trench Dams per CMSC 901.11. This applies to full pipe length, from structure to structure.

Note 1 Existing Water Main shown per provided GIS linework. Contractor to coordinate with Del-Co on locating and lowering Water Main.

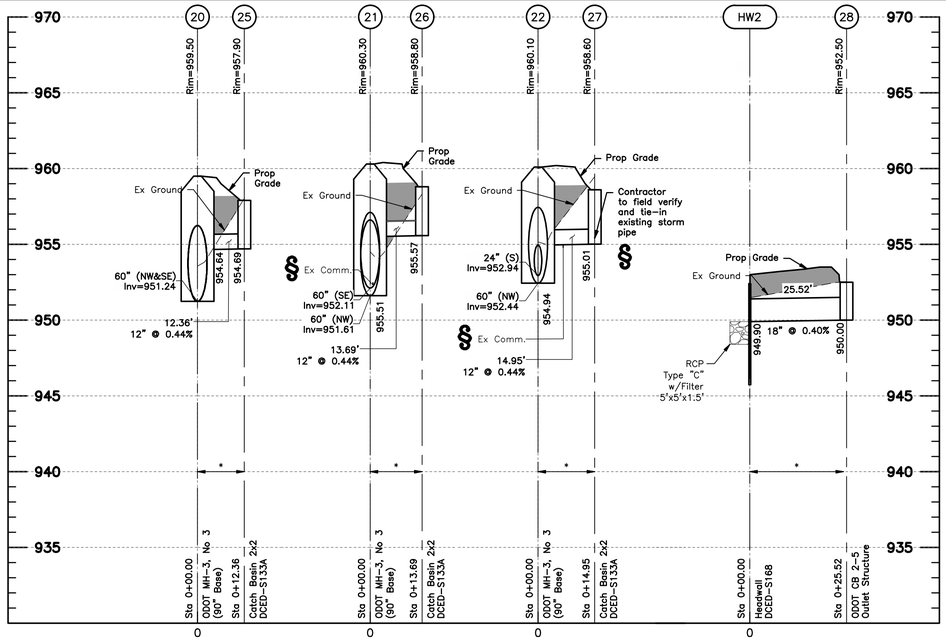
CALCULATED JJB
CHECKED MJS
HORIZ 1 inch = 20 Feet
VERT 1 inch = 5 Feet

STORM PROFILES

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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Xref: 20240484-CU-STRM-N



STRUCTURE COORDINATES

STRUCTURE #	NORTHING - PLAN	EASTING - PLAN	NORTHING - AS BUILT	EASTING - AS BUILT
1	212949.1788	1863977.9978		
2	212986.1033	1864105.1941		
3	212964.9190	1864112.7973		
4	212931.6831	1864124.7258		
5	212926.0508	1864181.1973		
6	212942.3544	1864199.7816		
7	212931.8034	1863980.0824		
8	212903.6390	1863982.7955		
9	213006.5416	1864134.6649		
10	213020.2954	1864156.7295		
11	213040.1938	1864190.2713		
12	212953.3008	1864254.9466		
13A	213349.6039	1863526.6945		
13B	213283.9490	1863597.9322		
14	213332.9324	1863760.6131		
15	213374.2971	1863716.2190		
16	213390.3929	1863731.2165		
17	213409.4152	1863748.9408		
18	213391.8769	1864122.1445		
19	213323.9584	1864195.5412		
20	213202.6766	1864326.6052		
21	213076.3383	1864462.4993		
22	212963.5971	1864582.9751		
23	212853.7857	1864557.3077		
24	213332.5139	1864203.3063		
25	213211.8267	1864334.9100		
26	213086.3851	1864471.8025		
27	212974.5671	1864593.1332		
28	213212.1707	1863698.9748		
29	212861.7798	1864391.4701		
30	212860.1793	1864422.7721		
C1	213282.4670	1863805.7119		
C2	213303.5331	1863899.3720		
Ex 26			213231.0708	1863501.1849
Ex 27			213285.5446	1863471.3182
Ex 32			213327.7340	1863507.7890
Ex C1			213282.4670	1863805.7119
Ex C2			213303.5331	1863899.3720
Ex HW6			212924.3472	1864159.3945
Ex HW7			212921.6311	1864201.1278
HW1	212979.6812	1863945.2615		
HW2	213236.2799	1863690.6013		
HW3	213383.0268	1864117.4889		
HW6	212924.3472	1864159.3945		
HW7	212921.6311	1864201.1278		

STORM SEWER TABLE

LINE	BEARING	LENGTH	SIZE
HW1–1	S47°01'23"E	44.74'	24"
1–2	N73°48'44"E	132.45'	24"
2–3	S19°44'36"E	22.51'	15"
3–4	S19°44'36"E	35.31'	15"
4–5	S84°18'16"E	56.75'	12"
5–6	N48°44'25"E	24.72'	12"
1–7	S06°50'28"E	17.50'	12"
7–8	S05°30'09"E	28.29'	12"
2–9	N55°15'30"E	35.86'	15"
9–10	N58°03'46"E	26.00'	15"
10–11	N59°19'19"E	39.00'	12"
11–12	S36°39'38"E	108.32'	12"
Ex 32–13A	N40°50'31"E	28.91'	12"
13A–13B	S47°20'07"E	96.88'	12"
13B–14	N73°14'34"E	169.90'	12"
14–15	N47°01'23"W	60.68'	12"
15–16	N42°58'37"E	22.00'	12"
16–17	N42°58'37"E	26.00'	12"
HW3–18	N27°44'48"E	10.00'	60"
18–19	S47°13'12"E	100.00'	60"
19–20	S47°13'12"E	178.57'	60"
20–21	S47°05'13"E	185.55'	60"
21–22	S46°53'58"E	165.00'	60"
22–23	S13°09'22"W	112.77'	24"
19–24	N42°13'38"E	11.55'	12"
20–25	N42°13'38"E	12.36'	12"
21–26	N42°47'58"E	13.69'	12"
22–27	N42°47'58"E	14.95'	12"
Ex 8 –29	S19°09'10"E	25.52'	18"
–29	S88°39'17"E	9.22'	15"
29–30	S87°04'23"E	31.34'	15"

NOTES:

All elevations on this plan are based on NAVD 1988 datum, unless otherwise noted.

All street crossings shown in profiles are public streets.

All fills are to be placed a minimum of 2.5' above the proposed storm sewer prior to the start of sewer construction per Item 203 of CMSC.

Denoted thus:

† Contractor shall maintain a 1.5' minimum clearance from outside of pipe to outside of pipe for all utility crossings unless otherwise noted.

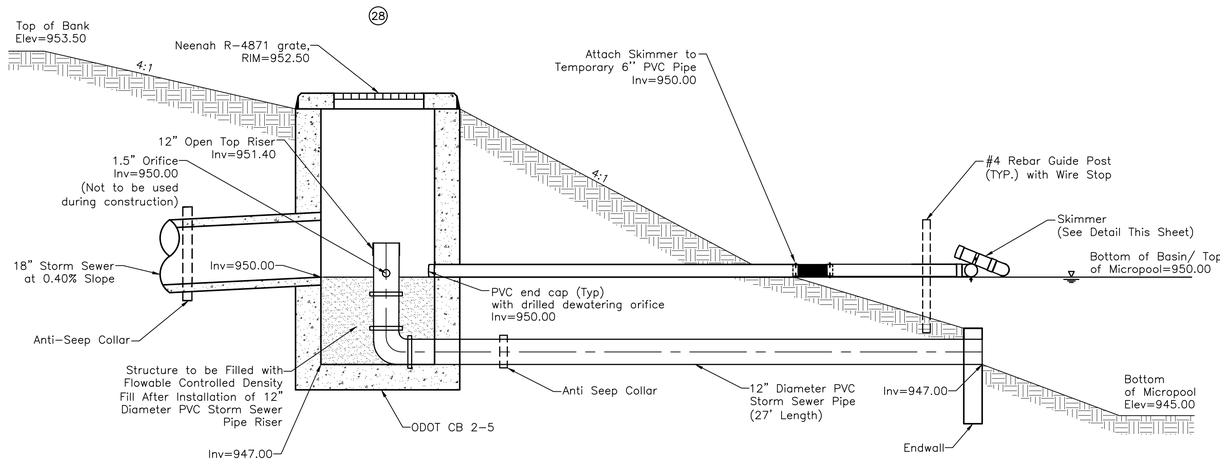
§ Where plans provide for a proposed conduit to be connected to or cross over or under an existing sewer or underground utility, the contractor shall locate the existing pipes or utilities both as to line and grade before starting to lay the proposed conduit. Contractor to verify invert/top of pipe and location of existing utility before construction. If there is a discrepancy between the contractor's information and the plan information shown, the contractor is to contact the engineer of record prior to the start of construction.

* Compacted Backfill, Per CMS Item 911

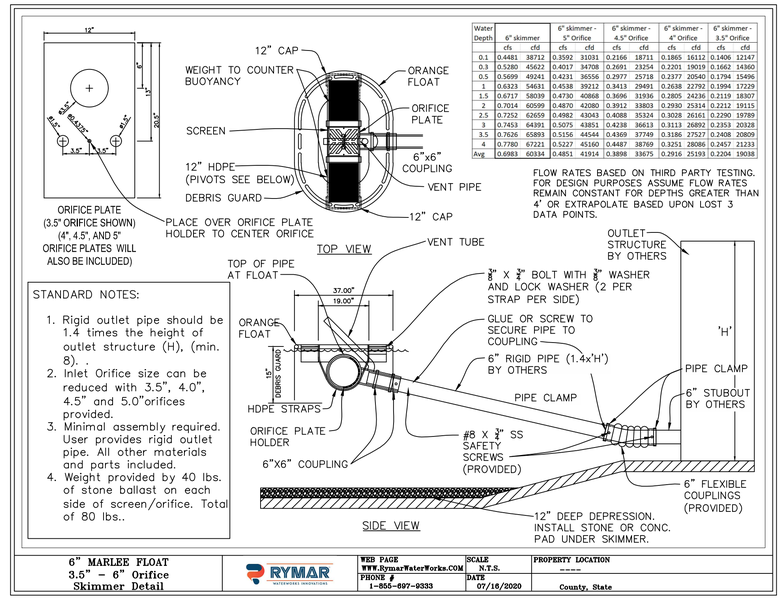
** Compacted Granular Backfill, Per CMS Item 912

Denoted thus:

(+) Pipe runs are to be sanitary grade (watertight) and have watertight joints per CMSC 901.15, and Trench Dams per CMSC 901.11. This applies to full pipe length, from structure to structure.



PERMAMENT OUTLET STRUCTURE/TEMPORARY SEDIMENT CONTROL BASIN OUTLET STRUCTURE DETAIL
Scale: Not to Scale



Water Depth	6" skimmer		6" skimmer - 5" Orifice		6" skimmer - 4.5" Orifice		6" skimmer - 4" Orifice		6" skimmer - 3.5" Orifice	
	cfs	cfd	cfs	cfd	cfs	cfd	cfs	cfd	cfs	cfd
0.1	0.4481	38712	0.3592	31031	0.2166	18711	0.1865	16112	0.1406	12147
0.3	0.5280	45622	0.4017	34708	0.2691	23254	0.2201	19019	0.1662	14360
0.5	0.5699	49241	0.4231	36556	0.2977	25718	0.2377	20540	0.1794	15496
1	0.6323	54631	0.4538	39212	0.3413	29491	0.2638	22792	0.1994	17229
1.5	0.6717	58039	0.4730	40868	0.3696	31936	0.2805	24236	0.2119	18307
2	0.7014	60599	0.4870	42080	0.3912	33803	0.2930	25314	0.2212	19115
2.5	0.7252	62659	0.4982	43043	0.4088	35324	0.3028	26161	0.2290	19789
3	0.7453	64391	0.5075	43851	0.4238	36613	0.3113	26892	0.2353	20328
3.5	0.7626	65893	0.5156	44544	0.4369	37749	0.3186	27527	0.2408	20809
4	0.7780	67221	0.5227	45160	0.4487	38769	0.3251	28086	0.2457	21233
Avg.	0.6983	60334	0.4851	41914	0.3898	33675	0.2916	25193	0.2204	19038

FLOW RATES BASED ON THIRD PARTY TESTING. FOR DESIGN PURPOSES ASSUME FLOW RATES REMAIN CONSTANT FOR DEPTHS GREATER THAN 4' OR EXTRAPOLATE BASED UPON LOST 3 DATA POINTS.

STANDARD NOTES:

1. Rigid outlet pipe should be 1.4 times the height of outlet structure (H), (min. 8).
2. Inlet Orifice size can be reduced with 3.5", 4.0", 4.5" and 5.0"orifices provided.
3. Minimal assembly required. User provides rigid outlet pipe. All other materials and parts included.
4. Weight provided by 40 lbs. of stone ballast on each side of screen/orifice. Total of 80 lbs..

6" MARLEE FLOAT 3.5" – 6" Orifice Skimmer Detail	RYMAR HYDRAULIC INNOVATION	WEB PAGE WWW.RymarWaterWorks.COM PHONE # 1-855-697-9333	SCALE N.T.S. DATE 07/16/2020	PROPERTY LOCATION ~~~~ County, State

CALCULATED JJB | CHECKED MJS

HORIZ 1 inch = 20 Feet | VERT 1 inch = 5 Feet

STORM PROFILES

CHESHIRE ROAD RELOCATION

45
65

SEPTEMBER, 2025

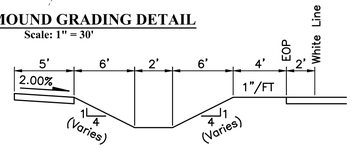
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DITCH GRADING DETAIL
Scale: 1" = 30'

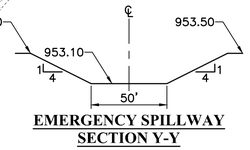
NOTES:

Note 1 Existing Water Main shown per provided GIS linework. Contractor to coordinate with Del-Co on locating and lowering Water Main.

BASIN & MOUND GRADING DETAIL
Scale: 1" = 30'

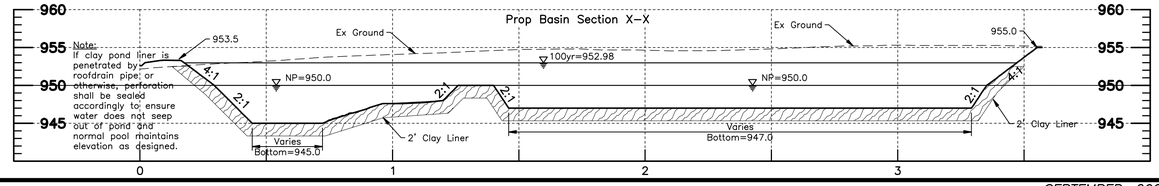


DITCH TYPICAL SECTION A-A
Not To Scale



EMERGENCY SPILLWAY SECTION Y-Y
Not To Scale

NOTE:
Existing Culvert is built per the Kintner Crossing Single Family Plan.



HORIZ 1 Inch = 30 Feet
VERT 1 Inch = 10 Feet
CALCULATED JJB
CHECKED MJS

GRADING DETAILS

CHESHIRE ROAD RELOCATION

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SEPTEMBER, 2025

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Xrefs: 20240484-CS-REFR-ROAD-N, 20240484-VS-REFR-E, 20240484-CU-UTIL-REFR

GENERAL

These specifications, together with the accompanying plans, are intended to describe the type, size, and location of the products and materials to be provided and installed under various bid items related to the traffic control. The Contractor shall furnish and install traffic control devices and related materials in the compliance with these plans and specifications, as well as the 2023 Ohio Department of Transportation Constuction and Material Specifications, The Ohio Manual of Uniform Traffic Control Devices for Streets and Highway, and The Standard Construction Drawings issued by the Ohio Department of Transportation. These specifications set forth the minimum performance and operating requirements of the traffic control items referred to herein.

ITEM 621 RPM
ITEM 621 RAISED PAVEMENT MARKER REMOVED
ITEM 621 RPM, MISC.: RPM REFLECTOR REMOVED AND REPLACED

Under the items of work listed, Raised Pavement Markers (RPMs) within the Cherry Street Corridor between Sta. 306+08 and 315+69 shall be modified to conform with the spacing and color requirements specified in ODOT Standard Construction Drawing TC–65.10 and TC–65.11, as much as practical while minimizing removal of existing RPMs.

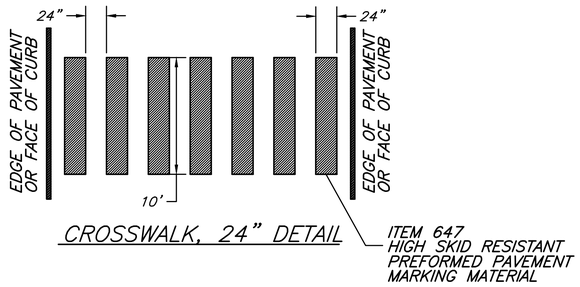
Existing RPMs within the Cherry Street corridor shall be modified as outlined below:

- *–Only existing RPMs located in the center of the signalized intersection, between the eastbound and westbound stop bars (Sta. 307+83 to 309+14), shall be removed. Voids resulting from the removal shall be filled with epoxy.*
- *–Reflectors shall be changed for RPMs located in locations where pavement markings are changed (For example, changing from DY to CH).*

New RPMs shall be installed to supplement the existing RPMs on the eastbound and westbound approaches to the new signalized intersection to conform with the spacing requirements outlined in ODOT standard construction drawings.

RPMs are only required on Cherry Street. RPMs shall not be installed on any other roadway.

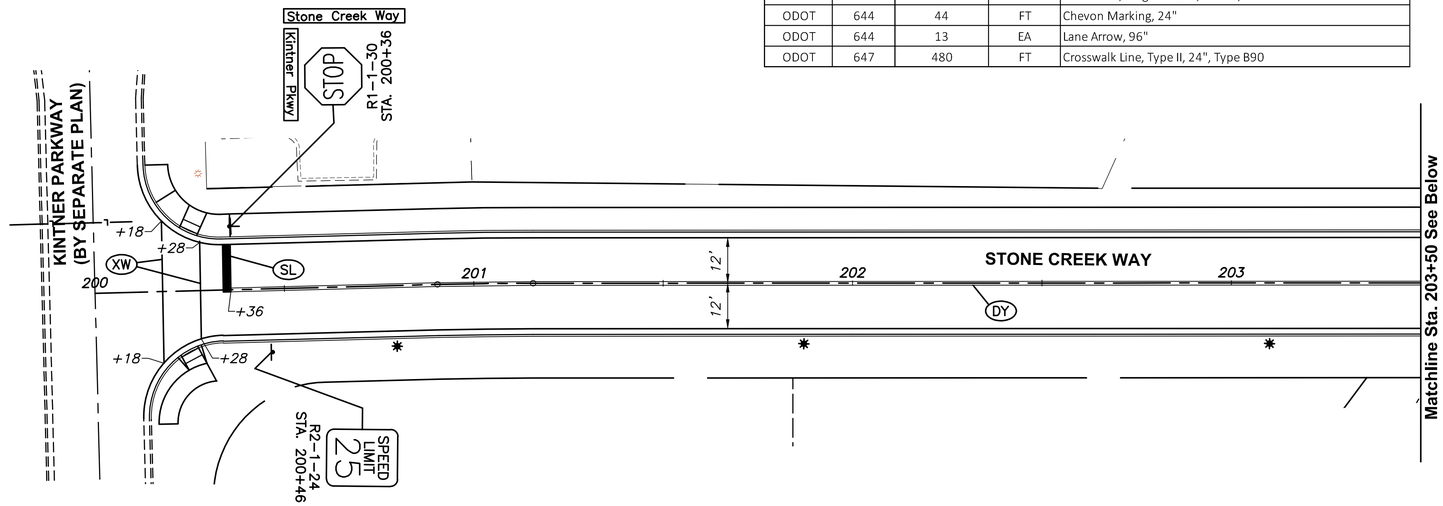
TRAFFIC CONTROL ESTIMATE OF QUANTITIES				
Spec	**Item No.**	**Estimated Quantity**	**Unit**	**Item Description**
ODOT	621	16	EA	RPM
ODOT	621	4	EA	Raised Pavement Marker Removed
ODOT	621	8	EA	RPM, Misc.: RPM Reflector Removed and Replaced
COC	627	25	EA	Reboundable Traffic Post - Yellow Installed
ODOT	630	378	FT	Ground Mounted Support, No. 3 Post
ODOT	630	184	SF	Sign, Flat Sheet
ODOT	630	1	EA	Removal of Gound Mounted Sign and Reerection
ODOT	630	9	EA	Removal of Ground Mounted Sign and Storage
ODOT	630	7	EA	Removal of Ground Mounted Post Support and Disposal
ODOT	630	6	EA	Sign, Double-Faced, Street Name
ODOT	644	6	EA	Removal of Pavement Marking
ODOT	644	2300	FT	Removal of Pavement Marking
ODOT	644	0.05	MILE	Center Line, Solid and Dashed, 4"
ODOT	644	0.51	MILE	Center Line, Double Yellow, 4"
ODOT	644	0.10	MILE	Edge Line, Yellow 6"
ODOT	644	851	FT	Channelizing Line, 8"
ODOT	644	102	FT	Crosswalk Line, 12"
ODOT	644	201	FT	Stop Line, 24"
ODOT	644	193	FT	Transverse/Diagonal Line, Yellow, 24"
ODOT	644	44	FT	Chevon Marking, 24"
ODOT	644	13	EA	Lane Arrow, 96"
ODOT	647	480	FT	Crosswalk Line, Type II, 24", Type B90

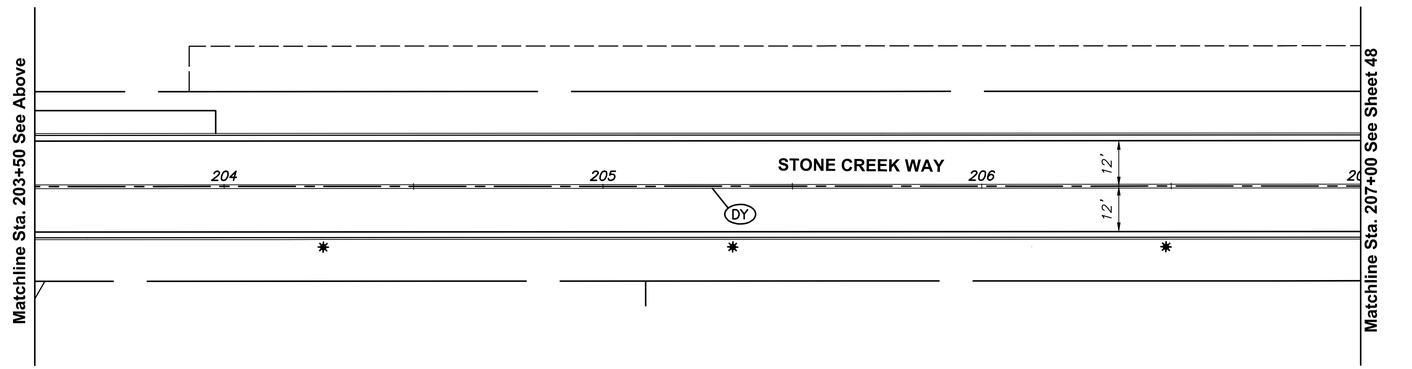


LINE SPECIFICATIONS	
YE	Edge Line, 4" Yellow
WE	Edge Line, 4" White
CM	Chevron Marking, 24" White
YT	Transverse Line, 24" Yellow (ODOT SCD TC–71.10)
DY	Center Line, 4" Solid Double Yellow
CSD	Center Line, 4" Solid & Dashed Yellow
CH	Channelizing Line, 8" White
SL	Stop Line, 24" White
XW	Crosswalk Line, 12" White
XW2	Crosswalk Line, 24" White, See Detail (ODOT SCD TC–74.10)

PAVEMENT MARKING LEGEND

- (DY) EXISTING PAVEMENT MARKING
- DY PROPOSED PAVEMENT MARKING, ITEM 644
- DY PROPOSED PAVEMENT MARKING, ITEM 647
- R REMOVAL OF PAVEMENT MARKING





GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED RLS
CHECKED DRM

TRAFFIC CONTROL PLAN

CHESHIRE ROAD RELOCATION

47
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SEPTEMBER, 2025

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Xrefs: 2024048A-CS-HEPR-ROAD-N, 2024048A-CS-HEPR-L, 2024088-CS-HEPR-N, 2023088S-TS-BASE

NOTES:

1. FOR CLARITY, NOT ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET ARE SHOWN ON THIS SHEET. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET BETWEEN STATION 306+08 AND 315+69, WITH THE EXCEPTION OF THE EXISTING WHITE EDGE LINES (EXCEPT WHERE SHOWN).

GRAPHIC SCALE
1 inch = 20 feet

CALCULATED RLS
CHECKED DRM

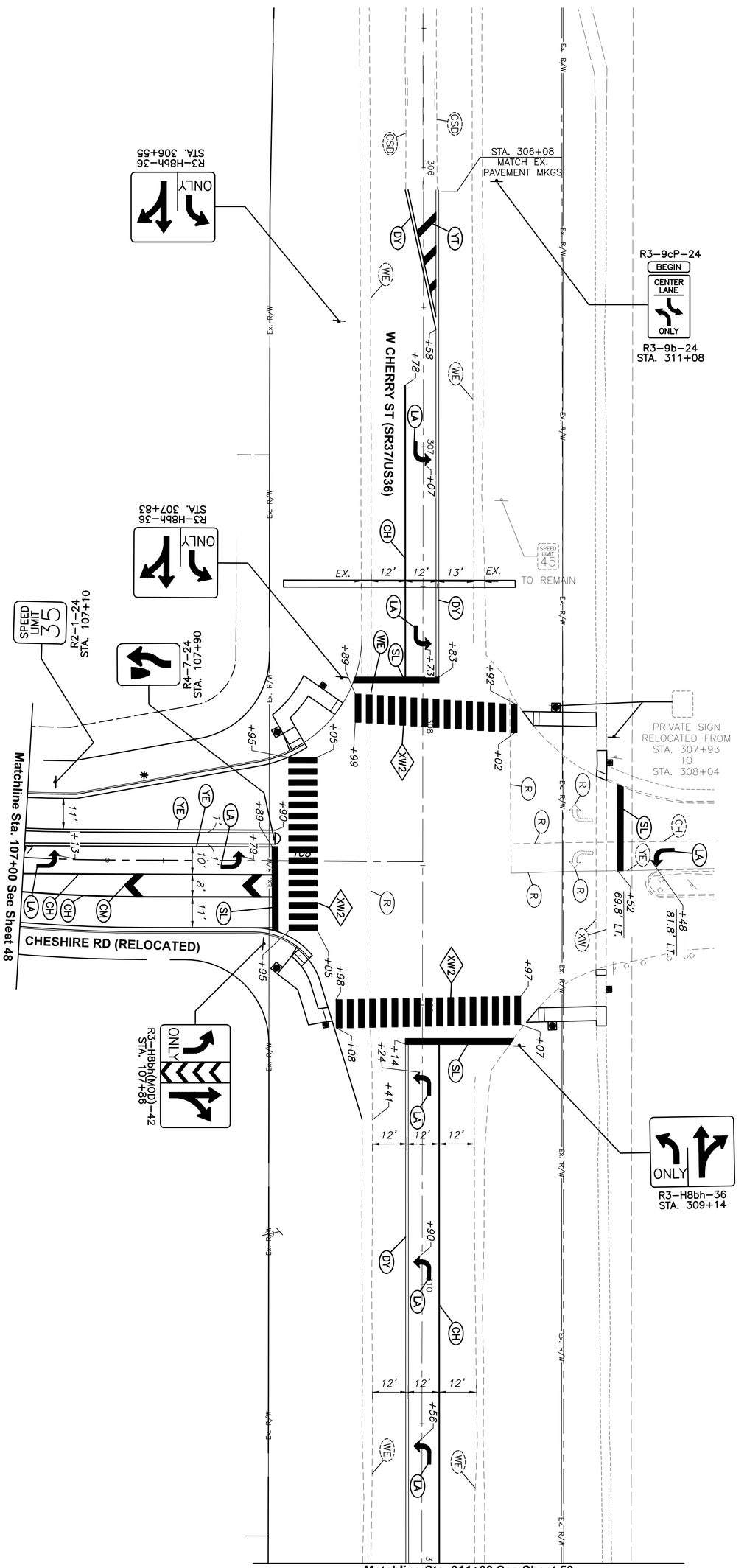
TRAFFIC CONTROL PLAN

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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4 Xrefs: 20240484-CS-REFR-ROAD-N, 20240484-VS-REFR-E, 20240681-CS-REFR-N, 20230685-VS-BORD



NOTES:

1. FOR CLARITY, NOT ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET ARE SHOWN ON THIS SHEET. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET BETWEEN STATION 306+08 AND 315+69, WITH THE EXCEPTION OF THE EXISTING WHITE EDGE LINES (EXCEPT WHERE SHOWN).

NOTES:

1. FOR CLARITY, NOT ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET ARE SHOWN ON THIS SHEET. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS ON W CHERRY STREET BETWEEN STATION 306+08 AND 315+69, WITH THE EXCEPTION OF THE EXISTING WHITE EDGE LINES (EXCEPT WHERE SHOWN).

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED RLS
CHECKED DRM

TRAFFIC CONTROL PLAN

CHESHIRE ROAD RELOCATION

50
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SEPTEMBER, 2025

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4 Xrefs: 20240484-CS-HEPR-ROAD-N, 20240484-PS-HEPR-E, 20240681-PS-HEPR-N, 20230885-PS-BRDG

GENERAL
These specifications, together with the accompanying plans, are intended to describe the type, size, and location of the products and materials to be provided and installed under various bid items related to traffic control and highway lighting. The Contractor shall furnish and install traffic control and highway lighting devices and related materials in compliance with these plans and specifications, as well as the 2023 Ohio Department of Transportation Construction and Material Specifications, the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, and the Standard Construction Drawings issued by the Ohio Department of Transportation. These specifications set forth the minimum performance and operating requirements of the traffic control and highway lighting items referred to herein.

PLAN AND SPECIFICATION COMPLIANCE
The Contractor shall furnish and install traffic signal devices in compliance with these plans and specifications, the 2023 ODOT Construction and Material Specifications including all supplemental specifications, the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, and the "TC" and "HL" standard construction drawings issued by ODOT. These specifications set forth the minimum design and operating requirements for traffic signal and highway lighting equipment.

Traffic signal control and highway lighting equipment shall meet or exceed the standards specified in the following documents:
a) Specifications listed in this plan.
b) NEMA Standards Publication no. TS1–1989 and/or TS2–2003 (or current NEMA issue)
c) 2023 ODOT Construction and Material Specifications.

In case of a conflicting specification statement, the specification document hierarchy shall be in the order listed from (A), highest, to (C), lowest.

UNDERGROUND UTILITIES
The location of the underground utilities shown on these plans are as obtained from the owners of the utility as required by Ohio Revised Code section 153.64 The Ohio Department of Transportation, City of Sunbury and the Engineer assume no responsibility for the accuracy of the location or the depths of the underground facilities shown on these plans. Support, protection, and restoration of all existing utilities and appurtenances shall be the Contractor's responsibility. The cost of this work shall be included in the bid price for the various items of work. It shall be the Contractor's responsibility to notify the Ohio Utilities Protection Service (OUPS) so existing facilities can be marked prior to construction.

TRANSITION TO SIGNAL CONTROL
Responsibility for determining whether signal control is appropriate and justified by current conditions, and for setting the date when any newly signalized intersection is placed into cycling operation, rests with the maintaining agency (City of Sunbury), not the Engineer. When the City of Sunbury agency authorizes cycling operation of a traffic signal at an intersection not currently under signal control, new signals shall flash for 7 days prior to the 10 day performance test and before being placed on regular cycling operation. Ohio Department of Transportation Standard Construction Drawing MT–120.00 shall be implemented for transition to signal control.

Additionally, prior to activating the new traffic signal to stop–and–go mode, all items in the proposed signal plan shall be fully completed, (i.e., vehicle detection, pedestrian signal heads, etc.). If there are constructability issues (i.e., roadway widening, etc.) that prevent the signal from being completed prior to activation, it shall be brought to the attention of the Project Engineer. The Engineer will then review, approve or reject proposals to activate the traffic signal prior to completion. The Contractor shall notify the Project Engineer at least 10 working days prior to scheduling the final inspection of the signal installation. Final inspection is not considered complete until the Engineer inspects the traffic signal and issues written approval. If issues are found during the final inspection that effect the safety of the traveling public and/or the efficiency of the intersection, the signal shall not be activated on the proposed date. Any punch list items that are found shall be corrected and re–inspected by the Engineer prior to final acceptance. City forces shall only assume day to day maintenance of the traffic signal after final written acceptance has been issued.

MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS
The Contractor shall be responsible for maintaining traffic signal installations within the project under the following conditions:

1. The Contractor shall be responsible for existing signal installations which the plan requires the Contractor to adjust, modify, add on to, or remove, or which the Contractor actually adjusts, modifies, or otherwise disturbs, from the time his operations first disturb the installation until the time the installation has subsequently been removed or modified and the work has been accepted.

2. The Contractor shall be responsible for maintenance of new signal installations or devices, installed by the Contractor, from the time of installation until the work is accepted.

The Contractor shall correct as quickly as possible all outages or malfunctions. He shall provide the Engineer such addresses and phone numbers where his maintenance forces can be contacted. The Contractor shall provide one or more persons to receive all calls and dispatch the necessary maintenance forces to correct outages. Such a person or persons may be used to perform other duties as long as prompt attention is given to these calls and a person is readily available continuously 24 hours a day, 7 days a week. All lamp outages, cable outages, electrical failures, equipment malfunctions and misaligned signal heads shall be corrected to the satisfaction of the Engineer with the signal back to service within four hours after the Contractor has been notified of the outage.

In the event new signals are damaged prior to acceptance all damaged equipment except poles and control equipment shall be replaced by the Contractor to the satisfaction of the Engineer with the signal back in service within 8 hours after the Contractor's notification of the outage.

If poles and/or control equipment are damaged and must be replaced, the Contractor shall make temporary repairs as necessary to bring the signal back into full operation within the allowed 8–hour period, and shall make permanent repairs or replacement as soon thereafter as possible.

None of the above shall be construed as collective or consecutive outage time periods at any one location. That is, where more than one outage occurs at any one location, then the allotted time limit shall be for the worst single outage.

Where outages are the direct result of a vehicular accident, the response of the Contractor shall be as outlined above. The Contractor shall be responsible for collection of any compensation for this work from those parties responsible for the damage.

Where the Contractor has failed to or cannot respond to an outage or signal equipment malfunction, at these locations within his responsibility, within periods as specified above, the Engineer may invoke the provisions of Section 105.15 and any subsequent costs to the City for Police Services and Maintenance Services shall be deducted from monies due or to become due the Contractor in accordance with provisions of Section 105.15.

Any signalized intersection, where the signal is out of service due to construction procedures, or due to an outage or malfunction of equipment as described above, shall be placed under officer control.

Any vehicular traffic signal head which will be out of operation shall be covered in the manner described in 632.25.

All costs resulting from the above requirements shall be included in the lump sum price bid for Item 614 Maintaining Traffic, As Per Plan.

PAINT CHIP SUBMITTAL
Prior to any painting, the Contractor shall submit paint samples to both the Engineer and Sunbury officials. Paint samples shall be representative of the color, type and manufacture that will be used for finishing the various items. The Engineer and Sunbury officials shall review the paint samples prior to the commencement of the finishing process.

Paint samples shall be submitted for all proposed traffic signal items called for in this plan set, including, signal supports, signal heads, pedestrian heads, pushbuttons, signs, bracket arms, luminaires and controller cabinets. Any cost associated with providing paint samples shall be incidental to the individual items to be painted.

GROUNDING AND BONDING
The requirements of the Construction and Material Specifications (C&MS) and the TC series of Standard Construction Drawings are modified as follows:

1. All metallic parts containing electrical conductors shall be permanently joined to form an Effective Ground Fault Current Path back to the grounded conductor in the power service disconnect switch.
   a) Provide an equipment grounding conductor in metallic conduits (725.04) in addition to the conductors specified and bond the conduit to this grounding conductor.
   b) When an equipment grounding conductor is required in plastic conduit (725.05), the installation shall include a separate equipment grounding conductor in addition to the conductors specified.
   c) Metallic conduit carrying the loop wires from in the pavement to the pull box splice location will only be bonded at the pull box end, and will not contain an equipment grounding conductor.
   d) If multiple conduit runs begin and end at the same points, only one equipment grounding conductor is required.
   e) If an equipment grounding conductor is needed in conduit between signalized intersections for underground interconnect cable, the grounding system for each signalized intersection will be separated about midway between the intersections.
   f) The messenger wire at signalized intersections will be used as the conductive path from corner to corner if conduit is not provided under the roadway. When conduit connects the corners of an intersection, an equipment grounding conductor shall be used in the conduit.
   g) Metal pull box lids shall be bonded by attachment of the equipment grounding conductor to the frame diagonal as provided on HL–30.11.
2. Conduits.
   The 725.04 conduit shall have grounding bushings installed at all termination points. The bushing material shall be compatible with galvanized steel conduit and the grounding lug material shall be compatible for use with copper wire. Threaded or compression type bushings may be used.
   The 725.05 conduit shall have the inside and outside diameters of the conduit deburred at all termination points.
   Both ends of metallic conduit shall be bonded to the equipment grounding conductor. Metallic conduit may be bonded to metallic boxes through the use of conduit fittings UL approved for this type of connection, with the box bonded to the equipment grounding conductor.
3. Wire for grounding and bonding.
   a) Use insulated, copper wire for the equipment grounding conductor. Bonding jumpers in boxes and enclosures may be bare or insulated copper wire. Wire size shall be as follows:
      i. Use 4 AWG between the power service and supports, poles, pedestals, controller or flasher cabinets.
      ii. Use a minimum 8 AWG between loop detector pull boxes and the first conduit that requires a larger size as specified in 3.a.i above.
      iii. The insulation shall be green or green with yellow stripe(s). For 4 AWG or larger, insulation may also be black with green tape/labels installed at all access points.
   b) In a highway lighting system, the equipment grounding conductor shall be the same wire size as the duct cable or distribution cable circuit conductors, with the minimum conductor size of 4 AWG. Bonding jumpers will be minimum size 4 AWG.
4. Ground rod.
   a) A 3/4 inch Schedule 40 PVC conduit will be used in foundations and concrete walls for the grounding conductor (ground wire) raceway to the ground rod. Should metallic conduit be used, both ends of the conduit shall be bonded to the grounding conductor.
   b) The typical grounding conductor (ground wire) shall be 4 AWG insulated, copper.
5. The green conductor in signal cables (conductor #4) shall not be used to supply power to a signal indication. It will be connected to the signal body as an equipment ground in aluminum heads and it will be unused in plastic heads. Unused conductors shall be grounded in the cabinet. Typical use of conductors is as follows:

COND. NO.	COLOR	VEHICLE SIGNAL	PEDESTRIAN SIGNAL
1	Black	green ball	#1 Walk
2	White	AC neutral	AC neutral
3	Red	red ball	#1 DW/FDW
4	Green	equipment ground	equipment ground
5	Orange	yellow ball	#2 DW/FDW
6	Blue	green arrow	#2 Walk
7	White/black stripe	yellow arrow	not used

6. Power Service and Disconnect Switch.
   a) At the power service location, the grounding conductor (ground wire) from the disconnect switch neutral (AC–) bar to the ground rod shall be a continuous, unspliced conductor. If spliced, it shall be an exothermic weld butt splice.
   b) The service neutral (AC–) shall only be connected to ground at the main power service disconnect switch and at the controller cabinet with UPS and generator.
      i. Equipment grounding conductors shall be brought to the main switch, but shall be grounded at both secondary and main switches.
7. Payment for the above work shall be incidental to "Item 625 No. 4 AWG 600 Volt Distribution Cable, As Per Plan"

ITEM 625 NO. 4 AWG 600 VOLT DISTRIBUTION CABLE, AS PER PLAN
A green colored, insulated, cable shall be used for the ground wire (GND) where indicated. This GND cable shall be separate from the ground rod wire, but shall be connected to the same grounding bolt used for the ground rod wire attachment at the pole. The GND cable shall be tagged as "GND SYS" at all pole locations & control cabinets.

Payment shall be as per Item 625.

ITEM 625 PULL BOX, (BY TYPE), (BY SIZE), AS PER PLAN
Pull boxes shall have the word "TRAFFIC" on the lid. All pull boxes within or adjacent to sidewalk shall be flush with the walk.

Payment shall be as per Item 625.

ITEM 625 CONDUIT, (BY SIZE), 725.052 (SCH 80), JACKED OR DRILLED, AS PER PLAN
Conduit placed under proposed roadways shall have a minimum overall depth of 24 inches and or a minimum depth of 12 inches under the final pavement subgrade whichever is deeper. This item of work shall include exposing all water line and gas line crossings and restoration of disturbed areas to original condition.

Payment shall be as Item 625.

ITEM 625 LUMINAIRE, POST TOP, LED, 120 VOLT, AS PER PLAN
The Contractor shall furnish and install Granville Series – Leaf Style Casting Luminaires GVD3–P50–30K–MVOLT–CLF–GL3–BK–CL as manufactured by Holophane, 214 Oakwood Avenue, Newark, Ohio 43055. Luminaires shall be IES Type III, 99 watt LED and operate on 120volt/60 hertz circuits. Luminaires shall be as per item 625 except that the luminaires at each intersection shall run off a single photoelectric cell. The luminaire and all mounting hardware shall be painted to match the signal support.

Measurement and payment shall be as per item 625.

ITEM 630 SIGN, SINGLE FACED, STREET NAME, AS PER PLAN
Under this item of work the Contractor shall furnish and install LED internally illuminated street name signs, as manufactured by National Sign and Signal, South Armstrong Road, Battle Creek, Michigan 49015 (616) 963–2817 or approved equal. Internally illuminated signs shall be supplied with all the hardware for mounting below the specified mast arm.

The sign shall be constructed of cast and extruded aluminum components welded to provide a weatherproof housing suitable for outdoor use. Drip rails shall overhang the sign face to prevent water from entering the electrical housing. Drain holes shall be provided in the bottom of the housing. Each door shall be secured to the housing by a full length, open, stainless steel hinge on the door and three–quarter turn air lock fasteners. Neoprene gasketing shall form a watertight seal between the door and the housing. The exterior of the sign housing shall be primed and coated to match the signal supports. Surface preparation shall be as per the paint manufacturer's recommendations. Prior to painting the Contractor shall submit paint samples to the Engineer and Sunbury officials for review and comment.

All sign components shall be accessible when one door is open and shall not require removal of the sign for access or maintenance operations. LED's shall be mounted to a white aluminum panel and have a conformal coating applied for protection. LED drivers shall be housed inside the sign enclosure and shall not be visible from the exterior.

Signs shall operate on 120 volt/60 hertz power and shall be capable of continuous operation over a range in temperatures from –35 degrees to 140 degrees Fahrenheit. A wire entrance junction box shall be supplied with the sign and shall mount inside the sign enclosure. Signs shall not have individual photocells.

The sign face shall be constructed of shatterproof, translucent polycarbonate material. The sign face and legend shall conform to the requirements of the Ohio Manual of Uniform Traffic Control Devices. The background color shall be translucent green with twelve inch white upper case and nine inch lower case letters. A clear coat shall be applied to all sign faces to prevent fading and protect the surface.

Mounting hardware shall be provided to rigid mount the sign to the mast arm. Mounting brackets shall be adjustable to allow the sign to be plumb. All mounting hardware shall be manufactured of heat treated aluminum bar stock, stainless steel, or galvanized steel of adequate design and strength for its intended use. All hardware, including stainless steel cables if used, shall be painted as per this specification to match the mast arm and support.

Payment shall be made at the contract unit price bid per each sign including all labor, materials, connections, and appurtenances complete, in place, tested and accepted.

ITEM 630 SIGNING, MISC.: TRAFFIC SIGNAL SIGNS
When used, the contractor shall install W3–3–36 "SIGNAL AHEAD" signs with W16–15P–24 "NEW" supplemental placards and posts if required just prior to the signal being placed on flash. The "NEW SIGNAL" and "SIGNAL AHEAD" signs shall be covered until the signal is placed on regular operation at which time the contractor shall uncover them.

The Contractor shall remove these items 3 weeks after they are uncovered. At the same time, the Contractor shall return any permanent sign, which has been temporarily shifted in order to accommodate the "signal operation changed" sign, to the location specified in the plans. Failure to remove these items and relocate permanent signs shall result in the city removing them, along with relocating permanent signs, and billing the contractor for all costs involved. All removed material shall be considered forfeited to the city.

Mounting hardware and posts shall be incidental to this bid item.

Payment shall be per the unit price bid to install and remove all necessary signs at each intersection.

STATE OF OHIO
JORDAN C. STEELE
E-76138
REGISTERED PROFESSIONAL ENGINEER

Jordan C. Steele, Date 9/26/25

For Power Distribution and Grounding Only on Sheets 51 through 64.

CALCULATED MSJ
CHECKED DRM/JDS

TRAFFIC SIGNAL NOTES

CHESHIRE ROAD RELOCATION

51
65

SEPTEMBER, 2025

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ITEM 632 VEHICULAR SIGNAL HEAD, (LED), 3–SECTION, 12" LENS, 1–WAY, WITH BACKPLATE (BLACK), AS PER PLAN
ITEM 632 VEHICULAR SIGNAL HEAD, (LED), 4–SECTION, 12" LENS, 1–WAY, WITH BACKPLATE (BLACK), AS PER PLAN
In addition to the requirements of C&MS 632 and 732, the following requirements shall apply:

1. Signal heads and visors shall be constructed of black polycarbonate plastic with visors as specified and meet ITE specifications.
2. Proper exterior colors shall be obtained by use of colored plastic material rather than painting.
3. All upper signal support hardware and piping up to and including the wire inlet fitting shall be ferrous metal.
4. The entrance fitting shall be of the tri–stud design with serrated rings in order to achieve positive locking.
5. All signal heads shall be rigidly mounted to the mast arm with the (color) module located in front of the mast arm.
6. Aluminum backplates shall be in accordance with the C&MS and include a fluorescent yellow reflective border.
7. 4–Section vehicular signal heads shall provide for Flashing Yellow Arrow operation for permitted left turns as detailed in the plans.

ITEM 632 COVERING OF VEHICULAR SIGNAL HEAD, AS PER PLAN
Cover vehicular signal heads if erected at intersections where traffic is maintained before energizing the signals. Use a sturdy opaque covering material specifically made for use with traffic signals, and ensure that the color of the cover is different than the signal head, tan or beige, so that it is clear to drivers the heads are covered, not dark. Use a method of covering to cover attachment and materials, including backplates, as approved by the Engineer. Covers are to be free of text, pictures, or any type of advertising. Maintain covers and remove them when directed by the Engineer.

Payment shall be per Item 632.

ITEM 632 PEDESTRIAN SIGNAL HEAD, AS PER PLAN
In addition to the requirements of C&MS 632 and 732 the following shall apply:

1. Signal heads and visors shall be constructed of black polycarbonate plastic to match the signal supports and meet ITE specifications.
2. Proper exterior colors shall be obtained by use of colored plastic material rather than painting.
3. Pipe, spacers and fittings constructed of polycarbonate plastic may be used in lieu of galvanized steel or aluminum.
4. The pedestrian signal head shall be of the LED countdown type.
5. New attachment hardware and fittings shall be used
6. The light emitting diode (LED) modules shall meet the requirements of C&MS 732.04–C. The Contractor shall provide, in writing, the LED manufacturer name, serial number, part number, description of lamp, and date of manufacture for all led units that are to be used in the signal head prior to installation, for acceptance and warranty purposes.
7. Pedestrian signal heads shall display international symbols in lieu of the words "WALK" and "DON'T WALK".
8. A clear, shatterproof, lens shall cover the face of the signal head and be of sufficient strength to protect the components from roadside hazards and vandalism.

Payment shall be per Item 632 and including all labor, equipment, materials and new attachment hardware.

ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN
The exterior pushbutton housing shall be black to match the signal supports. The pushbutton shall be a Polara INS2 accessible pushbutton system. The pushbuttons shall be programmed by the manufacturer to provide verbal commands regarding the state of the pedestrian signal. Upon pressing the pushbutton and when the pedestrian signal head displays "Don't Walk", a verbal command shall be provided, "Wait, Wait to Cross (Street Name)". When the pedestrian phase is active and the pedestrian signal head displays "Walk", a verbal command shall be provided, "Walk sign on to cross (Street Name)". The pushbutton shall be rated for medium or heavy duty usage and have a barrier type of lug terminal for attachment of the field cable. A clear bead of silicone sealant shall be applied to the top of the pushbutton housing (1 inch each side of top center) against the pole to prevent water from entering the back of the pushbutton housing. One aluminum sign shall be supplied with each pushbutton. The bottom of the sign shall be mounted just above the top of the pushbutton. Mount the center of the pushbutton 42" above the pedestrian pathway surface. The signs shall be as detailed in these plans.

The back of all signs, mounting hardware, and support assemblies mounted on either signal supports or pedestal supports shall be coated to match its respective support. Finish requirements shall be in accordance with that listed for the support, pedestal, or light pole used for attachment.

Payment shall be as per Item 632.

ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC–81.22, (BY SIZE), AS PER PLAN
The signal support foundations shall be excavated or vacuum excavated to test for conflicts prior to shop drawings approval. Foundation voids shall be temporary backfilled, securely covered, or the foundations installed while signal supports are manufactured. If utility conflicts are encountered during excavation, the Engineer shall be notified. Modifications to the foundation location may be required. Vacuum excavation, and foundation location adjustments shall be incidental to Item 632 Signal Support Foundation, As Per Plan.

The vertical pole upright shall be tapered and 16 sharp fluted galvanized steel montube. The fluting of the upright shall not start until the point which is above the height of the decorative clam shell base to ensure a smooth fit between the pole and the top of the decorative base. The mast arms shall be a tapered, round and smooth with an upsweep as illustrated on the pole details. Arms 40 feet or less shall be of one piece construction. Arms greater than 40 feet can be of two piece construction. Mast arms greater than 59' in length (or as directed by the project engineer) shall be fitted with a vibration damping device to reduce fatigue and increase structure longevity. Arms shall be clamp on style.

A decorative two–piece clam shell base shall be provided as specified herein with each signal support. The decorative clam shell base shall have a maximum height of 40 inches. A decorative base of 42 inches will not be accepted. Decorative bases shall be elastomeric urethane or cast aluminum and similar to:
– Valmont: Enduro, Huntington series.
– Union Metal: Columbian Family
– Millerbernd: Augusta Series
– Or approved equal.

Combination signal supports shall include a 120 V outlet with duplex GFI receptacle, orientated and attached as shown in the details included within.

1–1/2 inch bind half couplings shall be provided at the orientation and height specified on the signal support, orientation and fabrication data sheet for pedestrian signal head mounting.

All signal cables shall be run inside the poles. Standard Drawing TC–83.10 is hereby modified to prohibit the use of external conduit risers for signal cabling, or any other use.

The Contractor shall provide all necessary attachments or connections to the poles. Additional wiring holes in the pole shall be drilled, reamed, or hole sawed. Flame cutting (oxyacetylene or electrical arc) will not be accepted. All cut edges or other defects in the zinc coating shall be cleaned and covered with two coats of zinc rich repair paint matching the factory finish. Brackets and appurtenances shall be securely attached with stainless steel screws of sufficient size for the intended loading. Stainless steel banding shall not be used unless specifically authorized by these plans and specifications or directed by the Engineer. All banding, where used, shall be factory painted to match the signal supports.

Design Criteria
In addition to the requirements of item 632, signal support structures shall be designed and constructed by the supplier to support the loads caused by the signs, signals, and other equipment that the plan requires the Contractor to install. The use of standard ODOT design designations such as those described on ODOT standard drawings, and any details provided in this plan, are intended to promote uniformity of design and are not warranted to be structurally adequate. To the maximum extent practicable, the Contractor and supplier shall provide a structurally adequate support that utilizes standard ODOT anchor bolt sizing and spacing.

In addition to provisions of the ODOT C&MS, furnish and install signal poles as specified in the plans. The signal support designer shall provide drawings of each signal support with structural aspects of the design and materials in compliance with the AASHTO, LRFDLTS–1. Design Criteria as listed on ODOT standard construction drawing TC–81.22, note No. 33 shall apply.

Submit, to the Engineer prior to incorporation: signal support drawings and shop drawings, which identify and describe the manufactured signal support and signal support item which is being incorporated into the construction. The signal support drawings and shop drawings shall each be reviewed, sealed, stamped, and dated by an Ohio registered Professional Engineer.

The mast arm support pole assembly, and the mast arm assembly shall be made by the same manufacturer and designed and sold as a unit.

All pre–drilled holes for all items shall be deburred and free of all sharp edges. All outside welds shall be rolled or ground smooth. All inside welds shall be void of sharp edges. Any structural fastener (3/4" or greater) shall be galvanized per ASTM 153 and shall be made of high strength carbon steel. Any other fastener (less than 3/4") shall be stainless steel. All visible fasteners shall match the coating of the structure.

Finish
Poles and arms, including base and arm clamp, bolt covers, handholes, and wire entrances, shall be hot dipped galvanized when applicable after fabrication in accordance with 711.02. All visible elements of the signal support, and any other parts required to be coated or painted, shall be galvanized and then powder–coated or painted. All painting shall be performed under controlled environmental conditions, and in accordance with the paint manufacturer's recommendations pertaining to surface preparation, material handling, and application.

All structural steel products shall be galvanized on the interior and exterior surfaces as per ASTM A123. The exterior surface of all structural steel and aluminum products shall be properly prepared for the application of an exterior coating. The coating color on both steel and aluminum products shall match each other. It is the responsibility of the contractor to ensure that both product manufacturers match coating colors.

The inside of each pole assembly and pole accessories shall be galvanized. The inside area formed by the gussets, pole and pole flange plate shall also be galvanized to protect the area from corrosion. It is to be noted that some type of opening shall be required to galvanize the gusset area. This opening shall not hamper the structural integrity of the flange assembly. External surfaces of the mast arm structure shall be galvanized.

Pole structure surfaces shall be prepared for galvanizing by using a solvent cleaning method to remove dirt, oil, dust, grease and any other contaminant that will reduce the adhesion of the galvanizing. Mill scale, rust or any other foreign material not removed by solvents shall be removed using mechanical methods. (Per steel structures painting council: SSPC–VIS–1–67) manufacturer recommended abrasive techniques shall be used to provide the proper profile for adherence to ASTM A123 galvanic coating. The galvanizing shall be properly prepared so the powder coating or paint will adhere to the galvanized support. The structure shall then be coated or painted as per plan. Each coating layer shall be properly cured before the application of the next coat. Dry thickness measurements for steel shall conform to section SSPC–PA2–82, steel structures painting council.

All exterior surfaces of the mast arm pole shaft assembly, mast arm assembly, two–piece base, all clamps, all wire entrances, all clevis hangars, all handhole covers, brackets, luminaire arms, finials, pole and arm caps and traffic pedestal structures shall have a coating applied to them.

Exterior surfaces of all bolt and screw fasteners, washers, nuts, and other attachment hardware shall have a coating applied to them. Fastener threads shall not be clogged with coating material.

The following shall apply for all the items above:
1. The top finish coat of paint shall be Black, per the Aerospace Material Specifications Standard 595 (ASM) color number 17038. Paint samples shall be submitted with the signal support shop drawings for review.
2. Be applied over properly prepared galvanizing material on steel products and over properly prepared aluminum for aluminum products and have a minimum 5–year repair warranty of coating delamination, blistering, or corrosion. All coating systems shall meet the minimum requirements of ODOT Supplemental Specification 916 – standard performance based paint processes for light poles, sign supports and traffic supports for wet–coat systems.
3. All coated or painted items shall be shipped in a manner to minimize damage in transit. Surfaces should be protected by foam padding, by wrapping in cardboard, by spiral wrapping with wax paper, by crating, by a combination of methods or by any other method selected by the manufacturer which will ensure delivery of undamaged materials. Materials damaged in transit shall be repaired or replaced. All costs associated with correcting damaged material shall be borne by the contractor.

Anchor bolts shall be oriented as required by the plans however the formed top of the support foundation shall be oriented square to the adjacent sidewalk where applicable.

Payment
This item of work shall be measured as each complete signal support, in place in essentially a vertical position under full plan loading. All labor, equipment, and materials necessary to pickup, transport, store, erect, adjust, and repair the signal support and anchor bolts shall be included for payment in the bid item. Payment shall be as per Item 632.

ITEM 632 PEDESTRIAN PEDESTAL, 11', AS PER PLAN
Pedestals shall be as per City of Columbus Standard Construction Drawing 4106, except that it shall be 11' in height. The decorative base shall be of similar appearance to the base requirements of Item 632 Combination Signal Support, Type TC–81.22, (By Size), As Per Plan.

All exterior surfaces shall be coated in accordance with the finish section requirements of Item 632 Combination Signal Support, Type TC–81.21 (BY SIZE), As Per Plan. All signal cables shall be run inside the poles. Standard Drawing TC–83.10 is hereby modified to prohibit the use of external conduit risers for signal cabling, or any other use.

Payment shall be as per Item 632.

ITEM 632 SIGNAL SUPPORT FOUNDATION, AS PER PLAN
The formed top of the anchor base pole foundation shall be oriented parallel to the sidewalk or back–of–curb or edge–of–pavement as shown on the signal plans. The top of the foundation shall be flush with any adjacent sidewalk or concrete area. A minimum of two conduit ells, used or unused, shall be installed in each pole foundation.

Contractor shall vacuum excavate proposed mast arm foundation locations prior to installation. The signal support mast arm foundations shall be excavated or vacuum excavated to test for conflicts prior to shop drawings approval. Foundation voids shall be temporary backfilled, securely covered, or the foundations installed while signal supports are manufactured. If utility conflicts are encountered during excavation, the Engineer shall be notified. Modifications to the foundation location may be required. Vacuum excavation, and foundation location adjustments shall be incidental to this item of work.

Payment shall be as per Item 632.

ITEM 632 PEDESTAL FOUNDATION, AS PER PLAN
The formed top of the pole foundation shall be oriented parallel to the sidewalk or back–of–curb or edge–of–pavement as shown on the signal plans. The top of the foundation shall be flush with any adjacent sidewalk or concrete area. A minimum of two conduit ells, used or unused, shall be installed in each pedestal foundation.

Prior to ordering the pedestals, the Contractor shall contact OUPS to have all the utilities located in the field to insure there are no conflicts with utilities. If there are issues, the Project Engineer shall provide guidance as to the relocation of the support poles.

Breakaway anchor bolts shall be used for pedestal foundations.

Payment shall be as per Item 632 and will be at the contract unit price and will be full compensation for all labor, materials, tools, equipment and other incidentals necessary for each support foundation furnished, in place, complete and accepted.

ITEM 632 POWER SERVICE, AS PER PLAN
ITEM 632 POWER CABLE, 3–CONDUCTOR, CU, NO. 6 AWG, AS PER PLAN
Power cable shall be provided as per 632.23 between the control cabinet and the tap–in location noted in the plan. When the power cable is in place and two weeks prior to the time that electrical power will be required, the Contractor shall contact Consolidated Electric Cooperative which will make the electrical service connection. Under no circumstances shall the Contractor connect power cable into the power company's circuits. A common photo electric relay and contactor with HAND/OFF/AUTO switch shall control all street lighting mounted on signal supports. The photo electric relay shall be located on the signal pole closest to the controller. The voltage supplied shall be 120/240 volts, 120 volts per circuit with one circuit for traffic signals and one circuit for street lighting on the signal supports. Power cable conductors shall be copper. The neutral of the power cable shall only be grounded in the main power service disconnect switch and at controller cabinet with UPS and generator.

Provide an Arc Flash Hazard Warning sign on the outside front door of the enclosure in accordance with the current National Electrical Code paragraph 110.16.

Provide an available fault current sign on the outside of the front door of the power service disconnect switch at the controller cabinet in accordance with the National Electrical Code paragraph 110.24.

Measurement and payment shall be as per Item 632.

ITEM 809 ATC CONTROLLER, AS PER PLAN
ITEM 633 CABINET, TYPE TS–2, AS PER PLAN
The controller shall be an Econolite Cobalt with EOS software in an integrated controller/UPS cabinet. The following shall be provided under this item of work.
1. The controller shall include a minimum of two Ethernet ports and data keys.
2. Back–up protection shall be enabled
3. A minimum of two 120 volt GFI receptacles shall be installed in the cabinet
4. An outlet receptacle and box shall be installed in the cabinet to protect network equipment from an imbalance flow of current from the hot to the neutral. The outlet shall be a NEMA duplex 5–15 receptacle, rated at 15 amps (minimum) at 120 VAC. The outlet shall meet or exceed federal specifications and UL 498 standards and shall be rated as weather–resistant. The receptacle shall be installed within a metallic, single gang electrical box with a cover plate. The electrical box shall be standard depth (nominally 2 – 1/8 in.) And shall be UL–listed. The outlet shall be installed inside the cabinet along one of the side walls and shall be wired from the same circuit breaker as the other outlets, unless otherwise directed by the Engineer.
5. A surge suppression device shall be installed in the cabinet to provide protected power outlets to network equipment. The surge suppression device shall be securely mounted in the cabinet in a method approved by the Engineer. The surge suppression device installed shall have 6 NEMA 5–15 outlets and shall be capable of being plugged into a standard 5–15 outlet. The output current of the surge suppression device shall be 15 amps. The surge suppression device shall have an energy handling rating of 1280 joules, UL 1499 let through rating of 330 volts, and surge current rating of 50,000 amps.
6. The controller cabinet shall have two ground rods installed six feet apart. The rods shall be connected by a ground wire jumper that is welded to each rod.
7. Signal head field wiring shall be labeled with phase number, direction, movement type, and color (red, yellow, green, yellow arrow, green arrow) or pedestrian movement.

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8. The Contractor shall provide the cabinet wiring diagram/plans in PDF format to the City of Sunbury. Include a set of back panel prints in the cabinet for the City's maintenance crews.
9. The cabinet shall provide for an integral battery back–up compartment with a separate door.
10. The terminal facilities shall be TS2 configuration.
11. A slide out laptop shelf.
12. Interior, undershelf LED cabinet lighting, including a minimum of 2 panels of 6 high–intensity LEDs each and a door activated switch. The LED panels shall be mounted in locations to maximize light on the cabinet equipment.
13. Cabinet shall be furnished with a cabinet riser.
14. A gooseneck/adjustable light fixture with an LED lamp. The adjustable light fixture shall be mounted on the upper right side of the controller cabinet. Provide an Arc Flash Warning sign on the outside front door of the cabinet in accordance with the National Electrical Code paragraph 110.16.
15. Provide an Arc Flash Warning sign on the outside front door of the cabinet in accordance with the National Electrical Code paragraph 110.16.
16. Cabinet shall include wiring from uninterruptible power supply to signal cabinet to provide alarms for on battery, two hour timer, low battery and off battery in signal cabinet.
17. Auxiliary power shall charge batteries.
18. Provide a 20 amp circuit breaker ahead of the street lighting circuit contactor pole.
19. Provide a 15 amp circuit breaker ahead of the receptacle circuit contactor pole.
20. Provide a multi–pole contactor (for the luminaires and receptacles) and two HOA switches (one for the luminaires and the other for the receptacles).
21. The exterior of the cabinet shall be unpainted bare aluminum.

Payment shall be made at the unit price bid for each CMS Item 633, Controller Unit, Type TS2/A2 with Cabinet, Type TS2, As Per Plan complete and in place, all connections tested and accepted.

ITEM 633 UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT, AS PER PLAN
This item of work shall consist of furnishing and installing a Battery Backup UPS system capable of maintaining power at an intersection during a utility power failure. The intersection shall remain fully operational for a period of a minimum of four (4) hours under a full–load. The system shall be self–contained including the UPS hardware, the required number of batteries and its own ventilated enclosure. The controller and battery back–up cabinet shall appear as one cabinet from the outside with two internal compartments accessed by separate doors.

The Battery Back–up System shall meet the requirements of ODOT CMS 633 and 733 and be listed in the ODOT TAP approved products list. The Battery Back–up System shall be Multilink EP1100 with Safety Automatic Transfer Switch (SATS), Battery Balancer and include NEMA L1430–FI Inlet for Generator hook–up.

The UPS shall have the following features and capabilities:
1. The unit shall be rated for a maximum output power of 1000VA (or 700Watts)
2. Output Voltage regulation of +/– 5%
3. Allow for Hot Swappable Batteries and temperature–compensated charging to maximize battery life.
4. Intelligent Boost Operation for Brownout Protection – providing a stable output during low voltage conditions
5. Include safety approvals to UL–1778, CSA–107.1 and EN60950
6. The UPS shall be configurable and monitored by a front panel Ethernet Port.
7. Include a means to switch the intersection from full–operation to flashing operation after 2–hours of run–time. This is to conserve battery operation during an extended utility power outage.
8. Include standard form C relay contacts to trigger an alarm within the controller assembly, informing a technician the system is operating on battery back up. Alarms to the traffic controller shall include On Battery, Low Battery, 2 Hour Run Time and Flash.
9. Include a Safety Automatic Transfer Switch (SATS), separate from the UPS to connect UPS power when the utility line is unqualified. The ATS will also allow for Generator Hook–up and hot swapping of the UPS
10. The Batteries used in the UPS shall use Absorbent Glass Mat (AGM) technology and shall be of the Valve Regulated Lead Acid (VLRA) construction.
11. Four (4) batteries shall be supplied with the UPS system. Each battery shall be 12VDC and be rated for 105Ahr, minimum.
12. All batteries shall be placed on battery heater mats in the enclosure.
13. Include optional battery balancer device that regulates the batteries and optimizes performance.
14. The UPS System shall be installed in the UPS Compartment of the traffic cabinet and shall include a vent, fan and thermostat.
15. Be equipped with remote communication capabilities to monitor battery status.

All connections, wiring, attachment hardware and miscellaneous materials for full operation of the UPS system shall be included in the unit price bid for this item. Payment shall be per CMS Item 633, Uninterruptible Power Supply (UPS), 1000 Watt, As Per Plan and shall be made at the unit price bid per each, complete, in place, tested and accepted.

ITEM 633 CABINET FOUNDATION, AS PER PLAN
The cabinet foundation shall be sized to accommodate the UPS cabinet on the same foundation. Provide a spare 3" conduit ell per TC–83.20.

Payment will be made at the unit bid price for each CMS Item 633, Cabinet Foundation, As Per Plan.

ITEM 633 CONTROLLER WORK PAD, AS PER PLAN
The controller work pad shall be sized to accommodate the UPS cabinet on the same work pad.

Payment will be made at the unit bid price for each CMS Item 633, Controller Work Pad, As Per Plan.

ITEM 633 COMMUNICATION SYSTEM, AS PER PLAN
Under this item of work the Contractor shall furnish and install communication equipment at the proposed traffic signal installation. The Communications equipment shall conform to ODOT CMS Specification 633.15. The model supplied shall be Applied Information Field Monitoring Unit FMU/2 with Glance Integration.

Antennas for both the cellular and 900MHZ radios shall be mounted to the top of the traffic signal cabinet enclosure and sealed to prevent water intrusion into the cabinet.

This item shall include a 10–year connectivity and service plan with each Field Monitoring Unit. Each device shall also include a 10–year full replacement warranty. The warranty shall be extendable to match the duration of the connectivity plan.

Wiring, couplers, modifications of the cabinet facilities, and all other devices, whether or not specifically itemized on the plan or these notes shall be provided and installed as required to render the system completely operational.

Payment for Item 633 Communication System, As Per Plan shall be made at the contract unit price for each, complete and in place including all required cabinet hardware, mounting brackets, cables, connections tested and accepted.

ITEM 633 CONTROLLER ITEM, MISC.: GPS TIME SYNCHRONIZATION
Unter this item of work the Contractor shall furnish and install GPS time synchronization equipment in the traffic signal cabinet. The time–based GPS unit shall be connected to the proposed traffic signal controller.

This item of work shall consist of providing and installing all parts and equipment, complete with all wiring, connections and miscellaneous items and accessories needed to render the GPS time synchronization fully operational, in place, tested and accepted.

Payment for Item 633 Controller Item, Mics.: GPS Time Synchronization shall be per each unit.

ITEM 816 VIDEO DETECTION SYSTEM, AS PER PLAN
Under this item of work the Contractor shall furnish and install a complete video vehicle detection system consisting of the following:
- Currux Vision Smart City ITS Platform video detection system.
- Two (2) AXIS M4318–PLVE Panoramic Cameras.

The video vehicle detection system shall monitor vehicles on a roadway via processing of video images and provide detector outputs to the traffic signal controller. Each system shall outfit one entire intersection and shall include two image sensors (cameras) and all necessary cables.

Wiring, couplers, modification of the cabinet facilities, and all other devices, whether or not specifically itemized wherein, shall be provided and installed as required to render the video system completely operational in compliance with the Ohio Department of Transportation Standards, Supplemental Specifications 816 and 907 and the Manufacturer's recommendations. All major components of the video vehicle detection system shall be supplied by the same manufacturer or manufactures as listed above as a complete system, ready to operate.

All devices except the image sensors shall be housed in the controller cabinet. All devices shall be mounted so all cable connections are accessible and all device doors can be fully opened for servicing. The video vehicle detection system shall be capable of being controlled via a remote supervisor computer. The user shall be able to create edit, store and delete detection zones from either the supervisor computer or at the remote intersection location.

The detection sensors shall be housed in an environmental enclosure that is waterproof and dust tight to NEMA–4 specifications.

All exposed exterior surfaces of the video sensors, mounting hardware, and related items shall be painted to match the signal supports. Detection units shall be mounted on candy cane style bracket, which shall be coated to match the signal support and be considered incidental to this item of work.

All video detection wiring shall exit the mast arm within one foot of the riser pipe location and provide for a drip loop. The camera wiring shall also be located inside the riser pipe. Video detection wiring shall not be run out of the end of the mast arm.
In addition to the requirements outlined above payment for the Video Detection System, As Per Plan shall include the following:

All devices, wiring, and cabinet modifications required to make the video vehicle detection system fully operational shall be provided, installed and paid for under this item of work. Payment for all of the above will be made at the contract unit price bid, including all labor, materials, and appurtenances for each complete video vehicle detection system at one intersection, installed, tested, and accepted.

ITEM 809 CCTV IP–CAMERA SYSTEM, DOME–TYPE
In addition to the requirements of Item 809 the following shall apply:

- The Contractor shall furnish and install a Hanwha PNM–C34404RQPZ quad view camera with PTZ.
- Pole mount adapter – coated to match the color of the signal support.

Wiring, couplers, modifications of the cabinet facilities, and all other devices, whether or not specifically itemized on the plan or these notes shall be provided and installed as required to render the system completely operational. All mounting hardware, connections, and cables shall be considered incidental to this item of work. All visible elements of the system except the bubble lens shall be coated to match the color of the traffic signal supports. Power shall be obtained from the adjacent signal cabinet and all power cable shall be furnished and installed under this item of work.

Payment shall be per each, per Item 809.

ITEM SPECIAL – POLE MOUNTED RECEPTACLE, 120V, DUPLEX GFI
A receptacle shall be included on each pole where detailed herein. Ground fault interrupting (GFI) receptacles shall be 20 ampere specification grade, weather resistant type with weatherproof in–use housing and cover per NEC 406.9(B). Receptacles shall run off of the same photocell as the luminaires.

CALCULATED MSJ
CHECKED DRM/JDS

TRAFFIC SIGNAL NOTES

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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Traffic Signal Estimate of Quantities

Item	Quantity	Unit	Item Description
625	120	LF	Conduit Encased, 2", 725.051
625	290	LF	Conduit Encased, 3", 725.051
625	206	LF	Conduit, 2", 725.051
625	324	LF	Conduit, 3", 725.051
625	418	LF	Conduit, 3", 725.052 (SCH 80), Jacked or Drilled, As Per Plan
625	2	EA	Pull Box, 725.06, 18", As Per Plan
625	4	EA	Pull Box, 725.08, 24", As Per Plan
625	418	LF	Trench
625	418	LF	Plastic Caution Tape
625	10	EA	Ground Rod
625	4	EA	Luminaire, LED, 120 Volt, As Per Plan
625	4	EA	Connection, Fused Pull-Apart, Type II
625	4	EA	Connection, Unfused Pull-Apart, Type III
625	1316	LF	No. 8 AWG, 600 Volt Distribution Cable (Combination Lighting)
625	707	LF	No. 4 AWG, 600 Volt Distribution Cable, As Per Plan (Grounding and Bonding)
625	300	LF	Pole and Bracket Cable, No. 10 AWG, 600 Volt
630	4	EA	Sign, Single Faced, Street Name, As Per Plan
630	1	EA	Signing, Misc.: Traffic Signal Signs
632	9	EA	Vehicular Signal Head, (LED), 3-Section, 12" Lens, 1-Way, With Backplate (Black), As Per Plan
632	2	EA	Vehicular Signal Head, (LED), 4-Section, 12" Lens, 1-Way, With Backplate (Black), As Per Plan
632	8	EA	Pedestrian Signal Head, As Per Plan
632	11	EA	Covering of Vehicular Signal Head, As Per Plan
632	8	EA	Covering of Pedestrian Signal Head
632	8	EA	Accessible Pedestrian Pushbutton, As Per Plan
632	1	EA	Combination Signal Support, Type TC-81.22, Design No. 12, As Per Plan
632	1	EA	Combination Signal Support, Type TC-81.22, Design No. 13, As Per Plan
632	2	EA	Combination Signal Support, Type TC-81.22, Design No. 14, As Per Plan
632	4	EA	Signal Support Foundation, As Per Plan
632	4	EA	Pedestal Foundation, As Per Plan
632	4	EA	Pedestrian Pedestal, 11', As Per Plan
632	2654	LF	Signal Cable, 7 Conductor, No. 14 AWG
632	1834	LF	Signal Cable, 3 Conductor, No. 14 AWG
632	1618	LF	Loop Detector Lead-In Cable
632	1	EA	Conduit Riser, 2" Diameter, SCH 80
632	158	LF	Power Cable, 3-Conductor, Cu, No. 6 AWG, As Per Plan
632	1	EA	Power Service, As Per Plan
633	1	EA	Cabinet, Type TS-2, As Per Plan
633	1	EA	Cabinet Foundation, As Per Plam
633	1	EA	Controller Work Pad, As Per Plan
633	1	EA	Uninterruptible Power Supply (UPS), 1000 Watt, As Per Plan
633	1	EA	Communication System, As Per Plan
633	1	EA	Controller Item, Misc.: GPS Time Synchronization
809	1	EA	ATC Controller, As Per Plan
809	1	EA	CCTV IP-Camera System, Dome-Type
816	1	EA	Video Detection System, As Per Plan
Special	4	EA	Pole Mounted Receptacle, 120V, Duplex GFI

CALCULATED MSJ
CHECKED DRM/JDS

TRAFFIC SIGNAL QUANTITIES

CHESHIRE ROAD RELOCATION

SEPTEMBER, 2025

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MATERIAL SPECIFICATIONS FOR BBS GENERATOR POWER PANEL EQUIPMENT

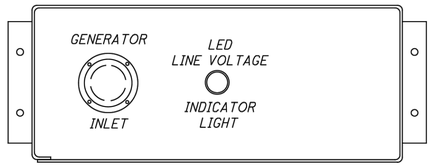
GENERATOR INLET - The inlet shall be 30 amp, 125/250V, locking, four (4) wire grounding and meet the NEMA configuration number L14-30-P 30A 125/250V specification. The inlet shall be a Hubbell catalog #2715.

LINE VOLTAGE GENERATOR SWITCH - The switch shall be 30 amp, 125/250V AC, two (2) pole, three (3) position (On, Off, On). The switch shall be a Hubbell catalog #1388.

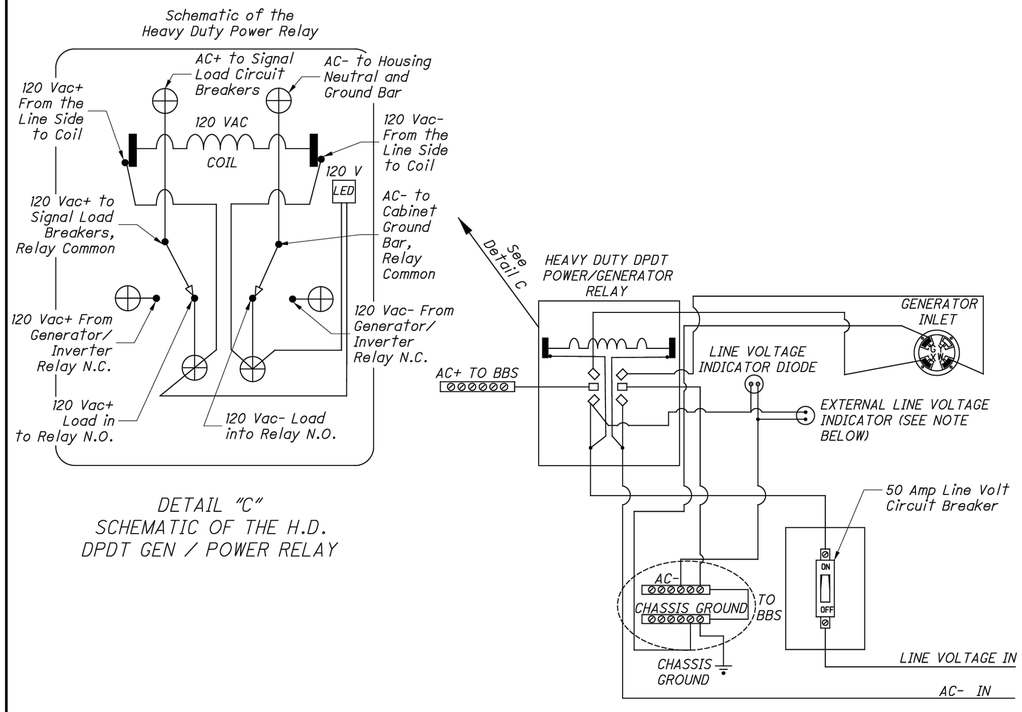
LINE VOLTAGE INDICATOR LIGHT - The indicator light shall be 125V AC light emitting diode with a red lens.

LINE VOLTAGE CIRCUIT BREAKER - The circuit breaker shall be single pole single throw and a minimum of 30 amps. The amperage shall be increased to accomodate greater loads, if necessary. The gauge of the power cable shall be of proper size per N.E.C.

EXTERNAL LINE VOLTAGE INDICATOR LIGHT - The indicator light shall be a 1" waterproof NEMA 4X or IP66 LED lamp with a green lens.



FRONT VIEW OF GENERATOR POWER PANEL

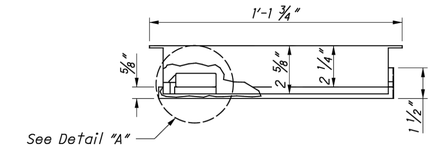


DETAIL "C"
SCHEMATIC OF THE H.D.
DPDT GEN / POWER RELAY

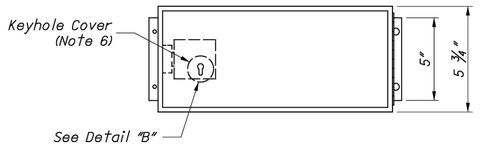
ELECTRICAL HOOKUP DETAIL FOR THE BBS GENERATOR POWER PANEL

NOTE: EXTERNAL LINE VOLTAGE INDICATOR LIGHT required when called for in the plans. EXTERNAL LINE VOLTAGE INDICATOR LIGHT shall be located on the enclosure exterior for visibility from the adjacent roadway when all cabinet, and generator panel doors are closed.

GENERATOR POWER PANEL ENCLOSURE



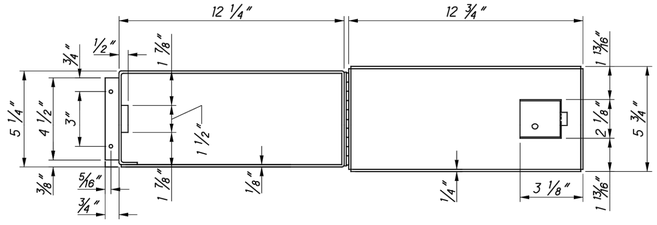
TOP VIEW



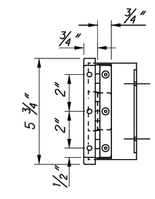
FRONT VIEW CLOSED DOOR

NOTES:

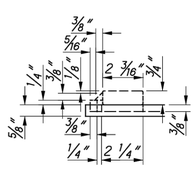
1. The enclosure shall be constructed of 1/8" thick alumimum.
2. The lock shall be the standard police door type, keyed with the standard flasher door skeleton key.
3. The door shall be sealed with a foam rubber gasket to prevent moisture from entering the enclosure.
4. The enclosure shall be mounted onto the outside of the controller cabinet with non-accessible bolts and sealed with a high quality silicon caulk at all surfaces touching the cabinet.
5. The hinge shall be of stainless steel or equivalent corrosive-resistant material.
6. Keyhole shall be covered with a movable circular aluminum or brass cover with top pivot pin.



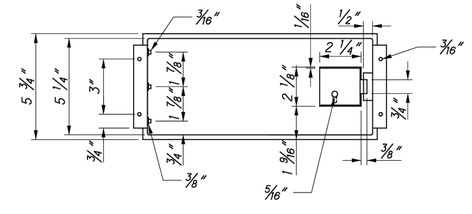
FRONT VIEW OPEN DOOR



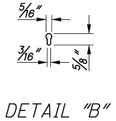
RIGHT SIDE VIEW
CLOSED DOOR



DETAIL "A"



BACK VIEW CLOSED DOOR



DETAIL "B"

THIS DRAWING REPLACES PIS 203012 DATED 04-20-2012.

PLAN INSERT SHEET
BATTERY BACKUP SYSTEM (BBS)
GENERATOR POWER PANEL

PIS 203012

1 / 1

0 / 0

REVISION DATE	DESIGNED	OFFICE OF ROADWAY ENGINEERING
07-18-2014	XXX	
CHECKED	REVIEWED	
CHECKED	XXX	

CALCULATED MSJ
CHECKED DRM/JDS

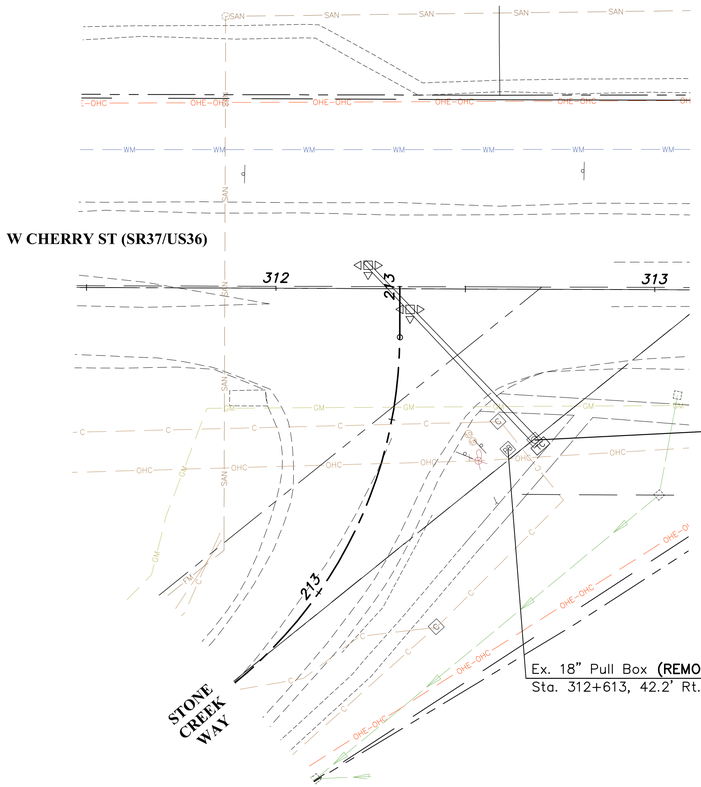
TRAFFIC SIGNAL DETAILS

CHESHIRE ROAD RELOCATION

55 / 65

SEPTEMBER, 2025

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Ex. Signal Support & Foundation **(REMOVE)**
w/(2)–Ex. Vehicle Yellow/Red Flashing Signal Heads **(REMOVE)**
w/(1)–Overhead Power Service **(REMOVE)**
w/(1)–Pole Mounted Flashing Controller **(REMOVE)**
w/(1)–1" Conduit Riser **(REMOVE)**
w/(1)–Pole Mt'd Main Power Disconnect Switch **(REMOVE)**
Sta. 312+68.4, 39.8' Rt.

Ex. 18" Pull Box **(REMOVE)**
Sta. 312+613, 42.2' Rt.

LEGEND

SIGNAL HEADS:	EX. VEHICULAR
SIGNAL POLES:	EX. ANCHOR/STRAIN POLE
	EX. PEDESTAL PUSHBUTTON
	EX. MASTARM
CONTROLLERS & CABINETS:	EX. CABINET TC
PULL BOXES:	EX. PULL BOX

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED MSJ
CHECKED DRM/JDS

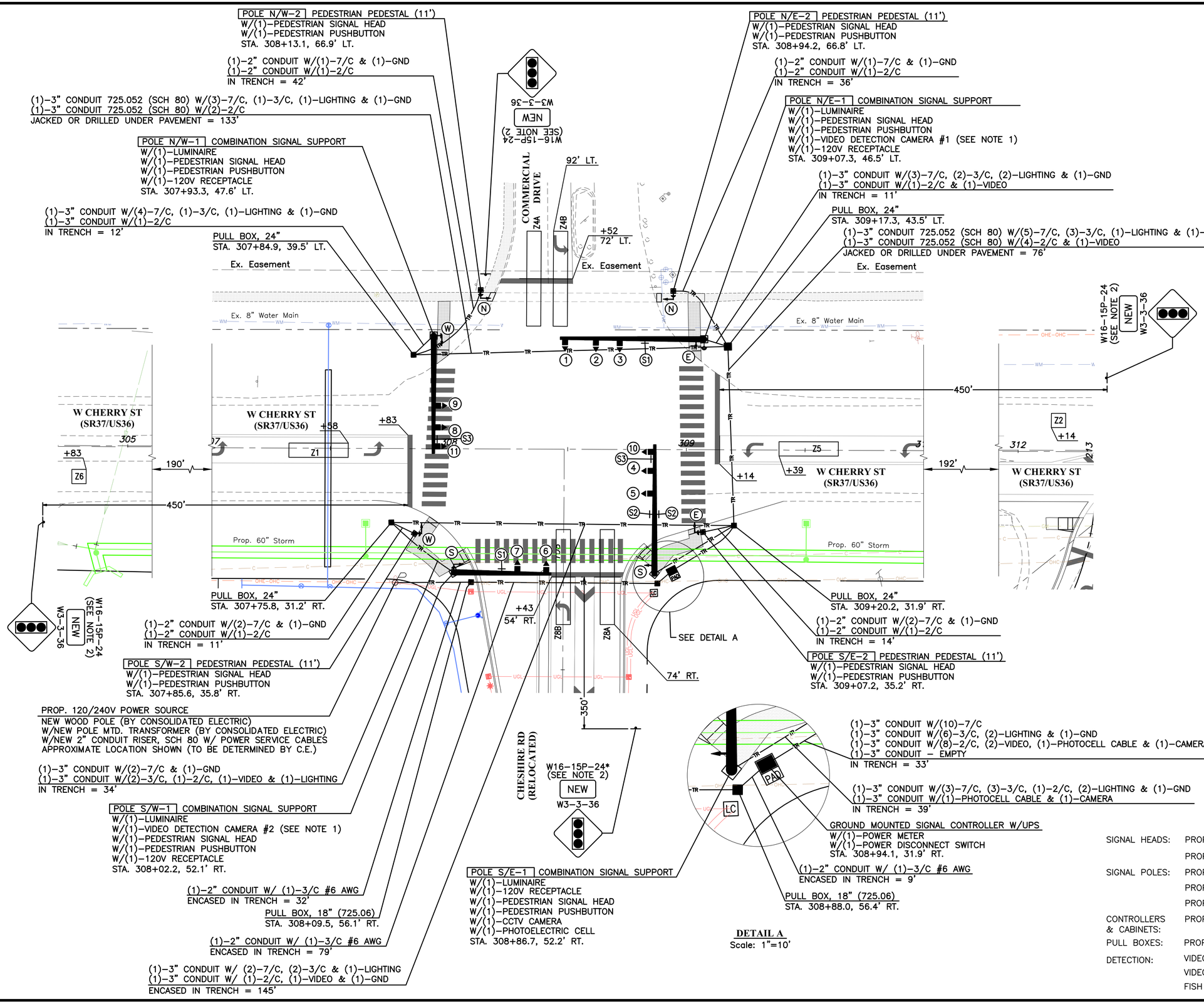
TRAFFIC SIGNAL REMOVAL PLAN

CHESHIRE ROAD RELOCATION

56
65

SEPTEMBER, 2025

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Xrefs: 2024044-CS-REFF-ROAD-N, 2024044-CS-REFF-E, 20230085-XS-BASE



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3 Xrefs: 2024048A-CS-REFR-ROAD-N, 2024048A-SS-REFR-ROAD-N, 2024048A-SS-REFR-E, 20230825-TC-DRAD

SIGNAL TIMING CHART

INTERSECTION: CHESHIRE RD/ W CHERRY ST (SR 37/US RT 36)
MAINTAINING AGENCY: VILLAGE OF SUNBURY

START UP
START IN: RED FLASH
TIME FOR FLASH OR ALL RED: 10
FIRST PHASE(S): 2 + 6
COLOR DISPLAYED: GREEN

DUAL ENTRY: YES | PHASES: 2 + 6 | 4 + 8
REST IN RED: INACTIVE | RING 1 – | RING 2 –

OVERLAP			E	G	–	–
PHASES			ø1+ø2	ø5+ø6	–	–

INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8
DIRECTION	EBLT	WB	–	SB	WBLT	EB	–	NB
MINIMUM GREEN (INITIAL) (SEC.)	10	15	–	10	10	15	–	10
ADDED INITIAL *(SEC./ACTUATION)	–	–	–	–	–	–	–	–
MAXIMUM INITIAL (SEC.)	–	–	–	–	–	–	–	–
PASSAGE TIME (PRESET GAP) (SEC.)	3.6	2.0	–	3.6	3.6	2.0	–	3.6
TIME BEFORE REDUCTION *(SEC.)	–	–	–	–	–	–	–	–
MINIMUM GAP *(SEC.)	–	–	–	–	–	–	–	–
TIME TO REDUCE *(SEC.)	–	–	–	–	–	–	–	–
MAXIMUM GREEN I (SEC.)	15	60	–	30	15	60	–	30
MAXIMUM GREEN II (SEC.)	–	–	–	–	–	–	–	–
YELLOW CHANGE (SEC.)	3.9	4.8	–	4.1	3.9	4.8	–	4.1
FYA DELAY (SEC.)	–	2	–	–	–	2	–	–
ALL RED CLEARANCE (SEC.)	1.8	1.0	–	2.0	1.8	1.0	–	2.0
WALK (SEC.)	–	7	–	7	–	7	–	7
PEDESTRIAN CLEARANCE (SEC.)	–	17	–	16	–	15	–	17
RECALL MAXIMUM (ON/OFF)	OFF	OFF	–	OFF	OFF	OFF	–	OFF
RECALL MINIMUM (ON/OFF)	OFF	ON	–	OFF	OFF	ON	–	OFF
RECALL PEDESTRIAN (ON/OFF)	OFF	ON	–	OFF	OFF	ON	–	OFF
MEMORY (ON/OFF)	OFF	ON	–	OFF	OFF	ON	–	OFF

*VOLUME DENSITY CONTROLS

Traffic Signal Coordination Data will be furnished by the City to the Contractor at the time of construction. It shall be the Contractors responsibility to implement the proposed timing plans at the intersections listed below in the table and implement timing adjustments as the intersections of Cherry Street/SR 3 and Cherry Street/Miller Drive as directed. All timing data modifications/implementation shall be considered incidental to Item 809 ATC Controller, As Per Plan.

Cherry Street at Kintner Parkway

PATTERN	CYCLE	OFFSET	FULL DEMAND PHASE SPLIT (SEC.)								
AM PEAK	60	–	–	–	–	–	–	–	–	–	–
PM PEAK	60	–	–	–	–	–	–	–	–	–	–
OFF PEAK	60	–	–	–	–	–	–	–	–	–	–

Cherry Street at Cheshire Road

PATTERN	CYCLE	OFFSET	FULL DEMAND PHASE SPLIT (SEC.)								
AM PEAK	60	–	–	–	–	–	–	–	–	–	–
PM PEAK	60	–	–	–	–	–	–	–	–	–	–
OFF PEAK	60	–	–	–	–	–	–	–	–	–	–

— AM PEAK = 6–9AM
— PM PEAK = 3–7PM
— OFF PEAK = 9AM–3PM
— FREE OPERATION SHOULD BE IMPLEMENTED BETWEEN 7PM–10PM
— FLASH OPERATION SHOULD BE IMPLEMENTED BETWEEN 10PM–6AM
— COORDINATED PHASE REFERENCED TO BEGINNING OF YELLOW ON THRU PHASE FOR S. MILLER DRIVE.

FIELD WIRING HOOK-UP CHART

SIGNAL HEAD #	INDICATION	FIELD TERMINAL	FLASH	SIGNAL HEAD #	INDICATION	FIELD TERMINAL	FLASH
1 (NB)	R	ø8 R	R	10 (EBLT)	R	ø6 R	R
	Y	ø8 Y			◄Y–	ø6 Y	
	G	ø8 G			◄Y– FYA	OLE Y	
2 (NB)	R	ø8 R	R		G	ø6 G	
	Y	ø8 Y		11 (WBLT)	R	ø2 R	R
	G	ø8 G			◄Y–	ø2 Y	
3 (NB)	R	ø8 R	R		◄Y– FYA	OLG Y	
	Y	ø8 Y			G	ø2 G	
	G	ø8 G		PEDESTRIAN MOVEMENTS			
4 (EB)	R	ø6 R	R	S	WALK	G ø6–W	OFF
	Y	ø6 Y			DON'T WALK	R ø6–DW	
	G	ø6 G		E	WALK	G ø8–W	OFF
5 (EB)	R	ø6 R	R		DON'T WALK	R ø8–DW	
	Y	ø6 Y		N	WALK	G ø2–W	OFF
	G	ø6 G			DON'T WALK	R ø2–DW	
6 (SB)	R	ø4 R	R	W	WALK	G ø4–W	OFF
	Y	ø4 Y			DON'T WALK	R ø4–DW	
	G	ø4 G					
7 (SB)	R	ø4 R	R				
	Y	ø4 Y					
	G	ø4 G					
8 (WB)	R	ø2 R	R				
	Y	ø2 Y					
	G	ø2 G					
9 (WB)	R	ø2 R	R				
	Y	ø2 Y					
	G	ø2 G					

OLE = PPLT/FYA (PROTECTED TURN = PHASE 1, PERMISSIVE THROUGH = PHASE 2)
OLG = PPLT/FYA (PROTECTED TURN = PHASE 5, PERMISSIVE THROUGH = PHASE 6)

OLE FYA OUTPUT MODE = LS 13 YEL PED
OLE FYA OUTPUT MODE = LS 15 YEL PED

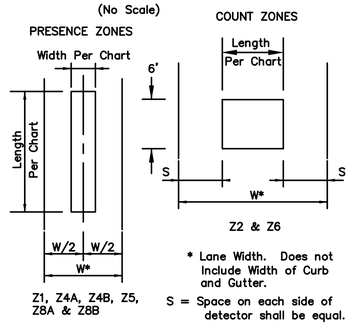
Controller Notes:
1. Configure MMU for mode H FYA operation.
2. When applicable, simulated loads shall be applied on all unused ped load switch walk outputs for all FYA signals. The simulated load shall be easily removed if/when walk signals are installed.
3. FYA DELAY programmed to FYA overlap that corresponds to permissive through movement in timing chart.

VIDEO DETECTION ASSIGNMENTS

DETECTOR	CAMERA/ UNIT	PHASE	DETECTION ZONE SIZE	PRESENCE	DELAY DATA	
					DELAY (sec.)	INHIBIT DELAY DURING GREEN ø
Z1	2	1	6'x25'	X	3	1
Z2	1	2	6'x6'	–	–	–
Z4A	2	4	6'x40'	X	12	4
Z4B	2	4	6'x40'	X	3	4
Z5	1	5	6'x25'	X	3	5
Z6	2	6	6'x6'	–	–	–
Z8A	1	8	6'x40'	X	12	8
Z8B	1	8	6'x40'	X	3	8

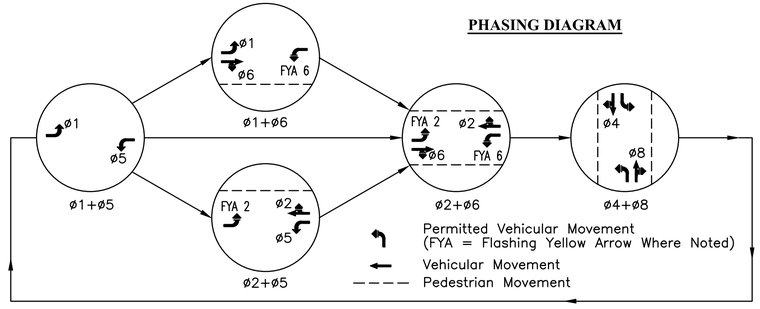
VEHICLE DETECTOR DETAILS

(No Scale)



* Lane Width. Does not Include Width of Curb and Gutter.
S = Space on each side of detector shall be equal.

PHASING DIAGRAM



CALCULATED MSJ
CHECKED DRM/JDS

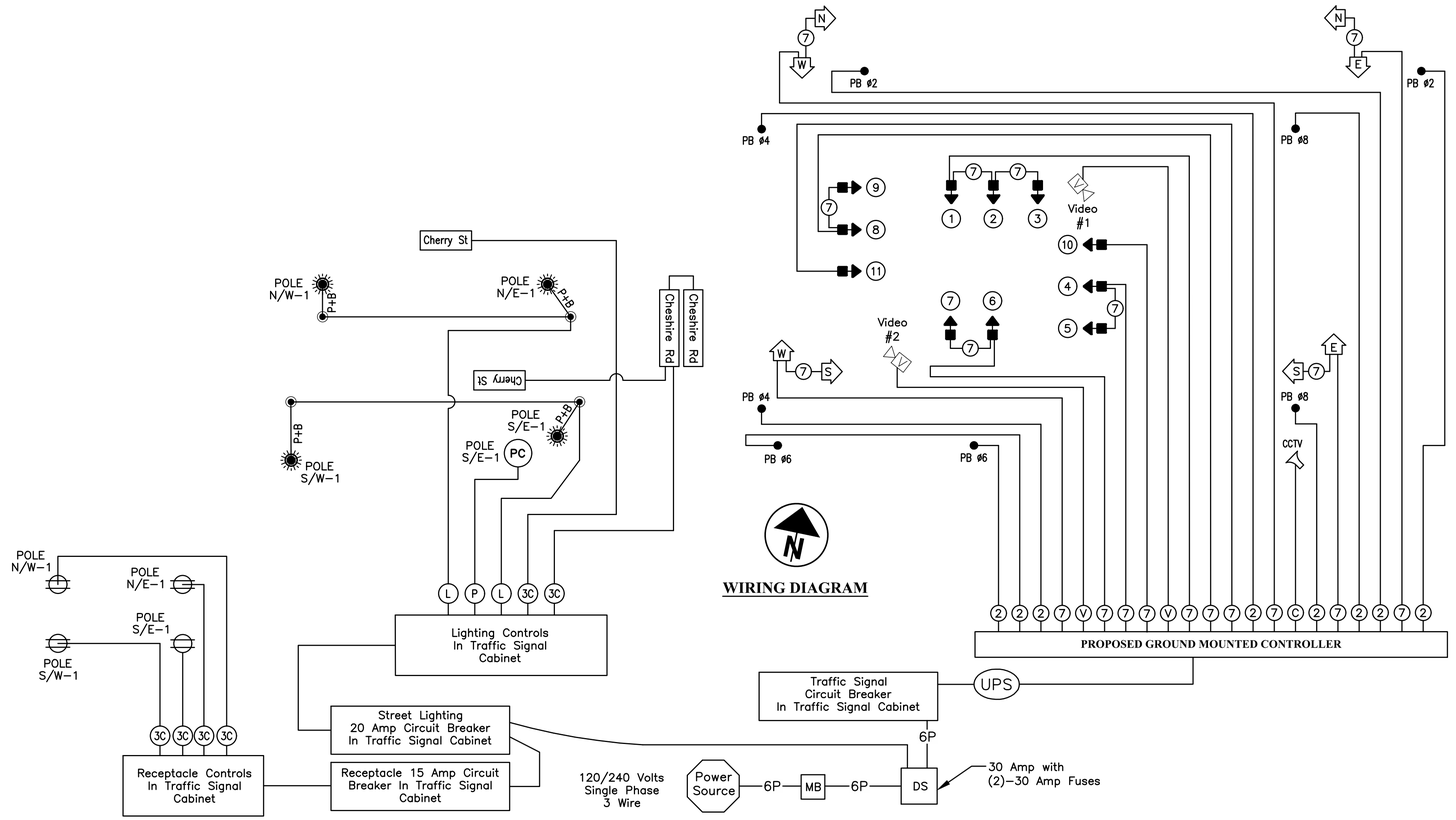
TRAFFIC SIGNAL DETAILS

CHESHIRE ROAD RELOCATION

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SEPTEMBER, 2025

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X Refs: 2024048A-CS-REFR-ROAD-N, 2024048A-VS-REFR-L, 20230885-VS-BOND



WIRING DIAGRAM

WIRING DIAGRAM LEGEND

- Vehicular Signal Head
- 6P — 3/C #6 AWG (Power)
- X — Pedestrian Signal Head
- PB — Pedestrian Pushbutton
- Power Source — Power Source 120/240 Volt Single Phase Power
- MB — Power Meter
- L — Distribution Cable #6 AWG (2 Wire)
- DS — Main Power Disconnect Switch
- 3C — 3 Conductor, #14 AWG
- Cherry St — Illuminated Street Name Sign
- 7 — Signal Cable, 7 Conductor, #14 AWG
- P — Photocell Cable
- Connection of Distribution Cable to Pole and Bracket Cable Connector Kit Fused and Unfused.
- Post Top Luminaire
- PC — Photocell
- GND — Ground Wire
- P+B — #10 AWG Pole and Bracket Cable
- 120V Ple Mtd. Receptacle
- V — Video Detection Unit
- CCTV Camera
- C — Camera Cable
- V — Video Detection Cable
- 2 — Signal Cable, 2 Conductor, #14 AWG (Lead–In Cable)

CALCULATED MSJ
CHECKED DRM/JDS

TRAFFIC SIGNAL DETAILS

CHESHIRE ROAD RELOCATION

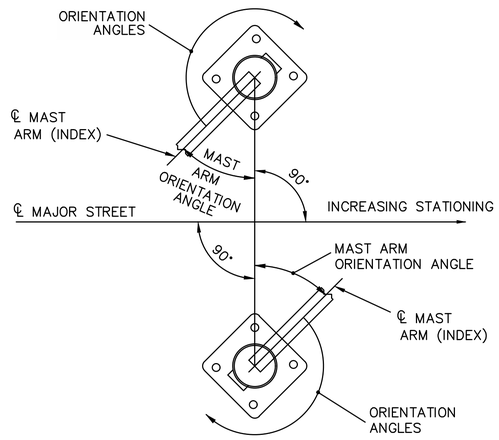
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SEPTEMBER, 2025

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3 Xrefs: 20240484-CS-REFF-ROAD-N, 20240484-CS-REFF-E, 20230085-YS-BASD

SIGNAL SUPPORT AND MAST ARM TABLE

SUPPORT NO.	SIGNAL SUPPORT DETAILS											ORIENTATION ANGLES FROM MAST ARM							FIELD ORIENTATION DATA		
	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM ATTACHEMENT HEIGHT	MAST ARM LENGTH	MAST ARM RISE	L1	L2 **	L3 **	S2	ILLUMINATED STREET NAME SIGN (SNS) S1	PEDESTRIAN SIGNAL	120V OUTLET WITH RECEPTACLE	PEDESTRIAN BUTTON	LUMINAIRE AIM ANGLE	CCTV CAMERA	VIDEO DETECTION CAMERA	HANDHOLE	INDEX LINE ANGLE MAST ARM	ANCHOR BOLT REF. LINE	POLE FOUNDATION ELEVATION
			FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG
N/W-1	TC-81.22	DESIGN 13	23.5	17	49.5	5	29.5	38.5	46.5	43.5	–	270°	180°	270°	0°	–	–	180°	0°	90°	***
N/W-2	COC-4106	N/A	11	–	–	–	–	–	–	–	–	90°	–	90°	–	–	–	180°	270° *	180°	***
N/E-1	TC-81.22	DESIGN 14	22	15.5	61.5	5	35.5	45.5	58.5	–	25	0°	180°	0°	270°	–	270°	180°	90°	180°	***
N/E-2	COC-4106	N/A	11	–	–	–	–	–	–	–	–	270°	–	270°	–	–	–	180°	90° *	180°	***
S/E-1	TC-81.22	DESIGN 14	23	16.5	54.5	5	34	43.5	51.5	48.5	25 / 25	0°	180°	0°	0°	0°	–	180°	0°	90°	***
S/E-2	COC-4106	N/A	11	–	–	–	–	–	–	–	–	7°	–	0°	–	–	–	180°	262° *	352°	***
S/W-1	TC-81.22	DESIGN 12	22.5	16	42	5	27	39	–	–	20	270°	180°	270°	270°	–	270°	180°	90°	180°	***
S/W-2	COC-4106	N/A	11	–	–	–	–	–	–	–	–	327°	–	327°	–	–	–	180°	127° *	217°	***

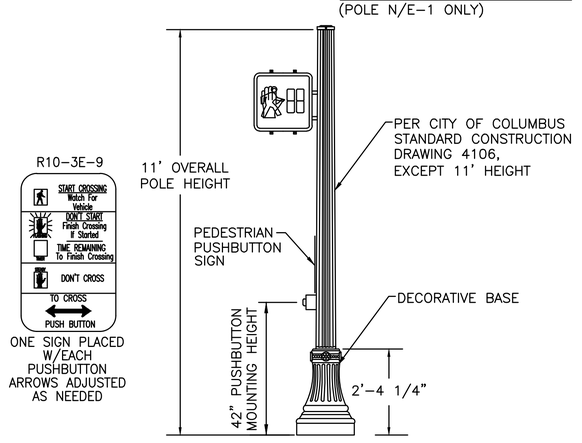


POLE ORIENTATION
NOT TO SCALE

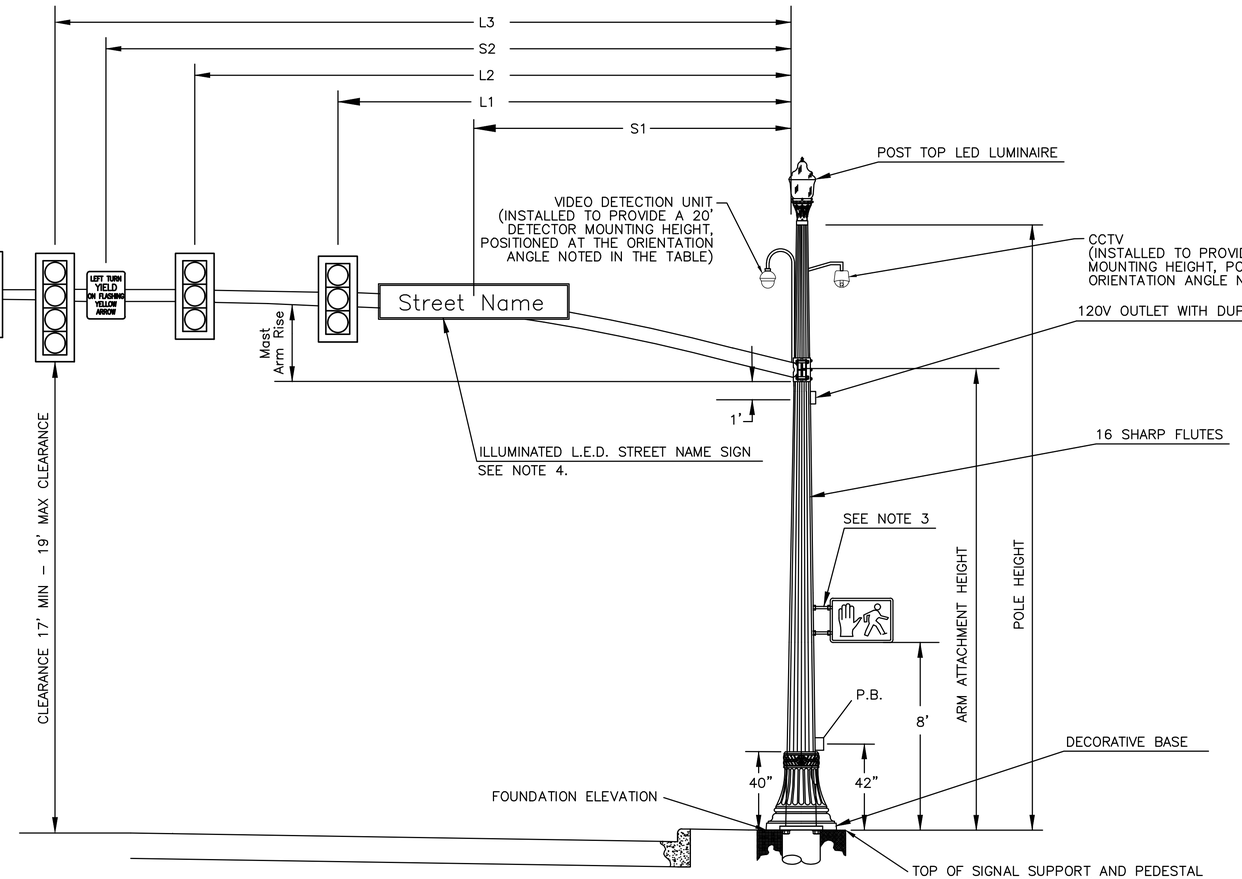
NOTES:
* PEDESTAL HAS NO MAST ARM. ORIENTATION ANGLE IS FOR REFERENCE ONLY.

** MAST ARMS SHALL BE DESIGNED TO ACCOMMODATE A 5-SECTION SIGNAL HEAD AT THE HEAD LOCATION PROPOSED FURTHEST FROM THE VERTICAL SUPPORT (L2 OR L3).

*** TOP OF FOUNDATION SHALL BE INSTALLED FLUSH WITH ADJACENT SIDEWALK. SEE INTERSECTION DETAIL SHEETS.



ITEM 632 PEDESTAL, 11', AS PER PLAN
NOT TO SCALE



SIGNAL ELEVATION DETAIL
NOT TO SCALE

NOTES:
1. ALL SIGNAL HEADS SHALL BE RIGID MOUNTED.
2. 1" I.D. GROMMETS SHALL BE SUPPLIED FOR 1.38" DIA. WIRE ENTRANCE HOLES AT EACH SIGNAL LOCATION. HOLES TO BE FIELD DRILLED.
3. TWO 1-1/2" BLIND HALF COUPLINGS SHALL BE USED TO MOUNT PEDESTRIAN SIGNAL HEADS. THE BHC'S SHALL BE FACTORY INSTALLED AT 8'-0" AND 9'-9" ABOVE THE POLE BASE AT THE ORIENTATION NOTED IN THE ABOVE CHART.
4. SINGLE FACED ILLUMINATED STREET NAME SIGNS SHALL BE RIGID MOUNTED AS ILLUSTRATED.
5. SHOP DRAWING SUBMITTALS FOR THE MAST ARM STRUCTURES SHALL INCLUDE A DETAILED, SCALED DRAWING FOR EACH MAST ARM. THE DRAWING FOR EACH ARM SHALL ACCURATELY REPRESENT THE INITIAL ARM ATTACHMENT ANGLE, ARM CURVATURE RADIUS AND THE RISE AFTER LOADING.

CALCULATED MSJ
CHECKED DRM/JDS

POLE ORIENTATION

CHESHIRE ROAD RELOCATION

60
65

SEPTEMBER, 2025

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3 Xrefs: 2024484-IS-REFR-ROAD-N, 2024484-IS-REFR-E, 2023585-IS-ROAD

LIGHTING NOTES

1. THE CITY OF COLUMBUS, OHIO, DIVISION OF POWER, CONSTRUCTION AND MATERIAL SPECIFICATIONS ARE HEREBY INCORPORATED INTO THIS SET OF PLANS. THE DIVISION OF POWER STANDARD SPECIFICATIONS CAN BE OBTAINED AT HTTPS://WWW.COLUMBUS.GOV/TEMPLATES/DETAIL.ASPX?ID=2147503308. THE MIS NUMBERS LISTED IN THE STREET LIGHTING QUANTITIES ARE REFERENCES TO SPECIFICATIONS PUBLISHED BY THE DIVISION OF POWER WHICH SHALL GOVERN ALL WORK RELATING TO THE INSTALLATION OF ROADWAY LIGHTING EQUIPMENT & APPARATUS FOR THIS PROJECT.

2. RESIDENTIAL OR COMMERCIAL ZONING DISTRICTS: ALL PUBLIC STREET LIGHTING WITHIN A PUBLIC STREET RIGHT-OF-WAY IN A RESIDENTIAL OR COMMERCIAL ZONING DISTRICT SHALL BE MAIN STREET LIGHTING, AA114BK FOR THE LIGHT POLES / LAMP POSTS, AND THE GENERAL ELECTRIC, EVOLVE EPAM FOR THE LUMINAIRES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER AND/OR CITY COUNCIL. THE LIGHT POLE/LAMP POST MUST BE FOURTEEN (14) FEET IN LENGTH TO PROVIDE A LIGHT CENTER MOUNTING HEIGHT OF APPROXIMATELY FIFTEEN (15) FEET SIX (6) INCHES. THE POLE SHALL HAVE A THREE (3) INCH TOP TO MOUNT THE POST TOP LUMINAIRES. THE POLE SHALL FEATURE CAST ALUMINUM BASES, A TAPERED SPUN ALUMINUM SHAFT, WHICH IS STRONG AND LIGHT WEIGHT FOR EASE OF INSTALLATION. THEY MUST REQUIRE LITTLE MAINTENANCE AND BE DAMAGE RESISTANT IN AREAS WHERE LAWN AND SNOW EQUIPMENT COMES IN DIRECT CONTACT WITH THE BASE. FOR MULTIPLE LUMINAIRE ORNAMENTATION A THREE (3) INCH DIAMETER LANTERN TOP SHALL BE STANDARD. THE FINISH OF THE BASE/SHAFT SHALL BE WITH SHERWIN WILLIAMS POLANE POLYURETHANE FINISH OVER SHERWIN WILLIAMS INDUSTRIAL PRIMER OR APPROVED EQUIVALENT. THE BASE AND SHAFT SHALL BE FADE AND CHEMICAL RESISTANT AND COLOR IS TO BE BLACK. THE POLES SHALL BE FURNISHED WITH A HAND HOLE AND REMOVABLE COVER. THE REMOVABLE COVER SHALL HAVE VANDAL RESISTANT FASTENERS TO PREVENT ACCESS. THE SEAL AND COVER SHALL HAVE THE SAME COLOR AND TEXTURE AS THE POLE AND BE EQUIPPED WITH A VANDAL RESISTANT FASTENER. THE POLE SHALL HAVE A NINE (9) AND ONE-EIGHTH (1/8) INCH DIAMETER BOLT CIRCLE WITH A FOUR (4) BOLT PATTERN.

3. FOUNDATIONS FOR ROADWAY LIGHT STANDARDS SHALL BE LOCATED 2'-0" BEHIND CURBS AT LOCATIONS INDICATED IN THE PLANS. WHERE UTILITIES INTERFERE WITH LIGHT POLE LOCATIONS, THE FOUNDATION MAY BE MOVED A MAXIMUM OF 3'-0" FROM LONGITUDINAL LOCATION SHOWN.

4. PROVIDE A VACANT ELL OUT OF LIGHT POLE FOUNDATIONS IN WHICH CIRCUIT TERMINATES FOR FUTURE EXTENSION OF THE LIGHTING SYSTEM.

5. PULL BOXES SHALL BE LOCATED APPROXIMATELY WHERE SHOWN ON PLANS WITH EXACT LOCATION OF EACH PULL BOX TO BE DETERMINED AFTER CAREFUL CONSIDERATION HAS BEEN GIVEN TO THE LOCATION OF UTILITIES. THE QUANTITY OF PULL BOXES MAY VARY DEPENDING UPON THE ACTUAL SITE CONDITIONS AND LOCATION OF UTILITIES.

6. ALL LIGHTING WIRING TO BE #4 AWG XHHW W/ #8 AWG XHHW GND. CONDUIT TO BE MINIMUM OF 2" SCH 40 PVC.

7. ALL SPLICES TO BE MADE WITH WATERPROOF CONNECTORS PER MIS-404 AND 1001.14.

8. PROVIDE 5' OF COILED SPARE WIRE IN EACH PULL BOX FOR EACH RUN.

9. EACH POLE TO HAVE IN-LINE WATERPROOF 5 AMP FUSE LOCATED AT POLE BASE, ACCESSIBLE AT HANDHOLE.

10. PULL BOXES SHALL COMPLY WITH NEC 314.30. PULL BOXES SHALL BE SET ON MINIMUM OF 6" CRUSHED STONE, SHALL BE RATED FOR TIER 15, SHALL BE PRECAST MONOLITHIC POLYMER CONCRETE AND SHALL CONFORM TO ANSI/SCTE 77 "SPECIFICATIONS FOR UNDERGROUND ENCLOSURE INTEGRITY". COVERS TO BE IN ACCORDANCE WITH ASTM C1028.

11. STREET TREES SHALL NOT BE INSTALLED WITHIN TEN FEET OF A PROPOSED STREET LIGHT POLE (MEASURED FROM TREE TRUNK TO CENTER OF LIGHT POLE).

ITEM 1001, LUMINAIRE, 59W, 240V, WITH HOUSE SIDE SHIELD, AS PER PLAN
ITEM 1001, LUMINAIRE, 59W, 240V, WITH HOUSE SIDE SHIELD, AS PER PLAN, FURNISH ONLY

LUMINAIRE SHALL BE MANUFACTURED BY GENERAL ELECTRIC, EVOLVE EPAM-01, 59W LED ACORN.

BASE BID SHALL INCLUDE THE INDICATED NUMBER OF 59 WATT LED POST TOP LUMINAIRES, ACORN TYPE.

LUMINAIRE SHALL BE COATED BLACK TO MATCH THE COLOR OF THE LIGHT POLE

AN EXTRA LUMINAIRE IS TO BE PROVIDED FOR EVERY 25, OR FRACTION THEREOF, SUPPLIED; MINIMUM ONE (1) EXTRA TO BE SUPPLIED ON ALL PROJECTS.

FEATURES: CAST ALUMINUM CONSTRUCTION – POST TOP FITTERS (PAINTED TO MATCH LIGHT POLE) WILL ACCEPT EXTERIOR HARDWARE – GLOBES ARE ARCYLIC – MUST BE EQUAL TO GE EVOLVE, EPAM-01-0-08-B-30-1-1H-A-X-X-BLCK-R.

THE LED LUMINAIRE SHALL BE 59 WATT, 3000K CCT, AND HAVE A TYPE 3 DISTRIBUTION WITH HOUSE SIDE SHIELDS INSTALLED. HOUSE SIDE SHIELD, SHALL BE PART #1LSHS-EPAM01 (93150929).

SHOP DRAWINGS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO ORDERING. CITY ENGINEER RESERVES THE RIGHT TO MODIFY THE REQUIREMENTS AT ANY TIME PRIOR TO SHOP DRAWING APPROVAL.

THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR DELIVERY AND DROP OFF OF THE SPARE PARTS (FURNISH ONLY).

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH LUMINAIRE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 1001, LUMINAIRE, 77W, 240V, WITH HOUSE SIDE SHIELD, AS PER PLAN
ITEM 1001, LUMINAIRE, 77W, 240V, WITH HOUSE SIDE SHIELD, AS PER PLAN, FURNISH ONLY

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AN EXTRA LUMINAIRE IS TO BE PROVIDED FOR EVERY 25, OR FRACTION THEREOF, SUPPLIED; MINIMUM ONE (1) EXTRA TO BE SUPPLIED ON ALL PROJECTS.

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THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR DELIVERY AND DROP OFF OF THE SPARE PARTS (FURNISH ONLY)

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH LUMINAIRE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 1001, LIGHT POLE, AS PER PLAN
ITEM 1001, LIGHT POLE, AS PER PLAN, FURNISH ONLY

LIGHT POLE SHALL BE MANUFACTURED BY MAIN STREET LIGHTING, LANCASTER II SERIES #AA114, 14' HEIGHT. POLE SHALL BE FURNISHED WITH FLAG POLE BRACKET.

BASE BID SHALL INCLUDE THE INDICATED NUMBER OF ALUMINUM POLES AS HEREINAFTER DESCRIBED.

AN EXTRA POLE IS TO BE PROVIDED FOR EVERY 25, OR FRACTION THEREOF, SUPPLIED; MINIMUM ONE (1) EXTRA TO BE SUPPLIED ON ALL PROJECTS.

MATERIAL: THE POLE SHALL BE 14' IN LENGTH TO PROVIDE A LIGHT CENTER MOUNTING HEIGHT OF APPROXIMATELY 15'6". THE POLE SHALL HAVE A 3" TENON TO MOUNT THE POST TOP LUMINAIRE.

FEATURES: CAST ALUMINUM BASE, TAPERED SPUN ALUMINUM SHAFT – STRONG – LIGHTWEIGHT FOR EASE OF INSTALLATION – REQUIRES LITTLE MAINTENANCE – DAMAGE RESISTANT IN AREAS WHERE LAWN/SNOW EQUIPMENT COMES IN DIRECT CONTACT WITH BASE – MULTIPLE LUMINAIRE ORNAMENTATION – 3" DIAMETER LANTERN TENON STANDARD.

FINISH: BASE/SHAFT FINISHED WITH SUPERIOR QUALITY ACRYLIC URETHANE FINISH OVER PRIMED ALUMINUM SURFACE THAT IS ULTRA VIOLET RESISTANT & IMPERVIOUS TO CANINE URINE. BASE AND SHAFT ARE FADE AND CHEMICAL RESISTANT AND COLOR SHALL BE BLACK, PER THE AEROSPACE MATERIAL SPECIFICATIONS STANDARD 595 (ASM) COLOR NUMBER 17038.

OTHER FEATURES: THE POLE SHALL BE FURNISHED WITH A HAND HOLE AND REMOVABLE COVER AND SEAL & COVER SHALL HAVE THE SAME COLOR AND TEXTURE AS THE POLE AND BE EQUIPPED WITH A VANDAL RESISTANT FASTENER. POLE SHALL HAVE A 9" DIAMETER BOLT CIRCLE WITH A 4 BOLT PATTERN. PROVIDE A GROUNDING LUG.

THE ALUMINUM POLE SHALL BE EQUAL IN QUALITY, DESIGN & PERFORMANCE TO MAIN STREET LIGHTING (#AA114-BK).

INSTALLATION: THE POLES SHALL BE PLACED ON THE AUGER TYPE FOUNDATION SIMILAR IN QUALITY, DESIGN & PERFORMANCE TO THE A. B. CHANCE CO. (#T112-0679).

THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR DELIVERY AND DROP OFF OF THE SPARE PARTS (FURNISH ONLY).

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH LIGHT POLE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 1001, STREET LIGHTING CIRCUIT CABLE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF MIS-404, STREET LIGHTING CIRCUIT CABLE FURNISHED FOR THIS PROJECT SHALL CONTAIN TWO (2) #4 AWG, 600 VOLT XHHW CABLES AND ONE (1) #8 AWG, 600 VOLT XHHW GROUND CABLE.

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH CIRCUIT FOOT OF CABLE.

ITEM 1001, POLE TO BE WIRED, AS PER PLAN

STREET LIGHT POLES SHALL BE WIRED AS PER MIS-501, EXCEPT THAT IT SHALL BE DESIGNED FOR A THREE WIRE, 240V SINGLE PHASE POWER, WITH GROUND, LIGHTING SYSTEM. THE CONTRACTOR SHALL WIRE EACH POLE AS SHOWN ON THE DETAIL GIVEN ON THIS SHEET.

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH POLE TO BE WIRED BY THE CONTRACTOR.

ITEM 1001, FOUNDATION, AS PER PLAN

LIGHT POLE FOUNDATIONS SHALL BE OF AUGER TYPE EQUAL IN QUALITY, DESIGN AND PERFORMANCE TO A.B. CHANCE CO. FOUNDATION (T112-0679). (AN ADAPTER PLATE MAY BE NEEDED FOR PROPER INSTALLATION PROCEDURE, DEPENDING ON THE TYPE OF DRILL MACHINERY.) PROVIDE A GROUNDING LUG.

THE TOP 8" OF THE SCREW-IN FOUNDATION SHALL BE COATED TO MATCH THE LIGHT POLE.

THE SPECIFICATIONS ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE CITY OF SUNBURY, OHIO.

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH FOUNDATION FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM 1001, 120/240V PAD MOUNTED LIGHTING CONTROLLER, AS PER PLAN

THE PROPOSED PAD MOUNT CONTROL SITE SHALL BE AS PER MIS-603, MIS-57 FOR METER, AND THE WIRING DETAIL PROVIDED FOR THREE WIRE, 120/240V SINGLE PHASE POWER, GROUNDED NEUTRAL. THE LIGHTING CONTROLLER SHALL BE DESIGNED WITH HEIGHT AS REQUIRED FOR A MAIN LUG ONLY 8 CIRCUIT LOAD CENTER WITH CIRCUIT BREAKERS AS SHOWN, AN INSULATED NEUTRAL BUS, A SEPARATE EQUIPMENT GROUND BUS, AND A TYPE 1 UL 1449 SURGE ARRESTOR WITH LED ACTIVE STATUS INDICATOR. THE MAIN FUSES SHALL BE 30 AMPERE BUSSMAN LPN-RK OR APPROVED EQUAL. COORDINATE ALL METERING AND SERVICE REQUIREMENTS WITH CONSOLIDATED ELECTRIC. ALSO, THE CONTRACTOR SHALL INSTALL THREE #4 AWG, 600V RHW CABLES FROM THE LINE TERMINALS OF THE CONTROL PANEL TO THE POWER COMPANY'S SERVICE TRANSFORMER OR PEDESTAL, LEAVING 10' OF COILED CABLE FOR CONNECTION BY THE POWER COMPANY.

PROVIDE AN ARC FLASH HAZARD WARNING SIGN ON THE OUTSIDE FRONT DOOR OF THE ENCLOSURE IN ACCORDANCE WITH THE CURRENT NATIONAL ELECTRICAL CODE PARAGRAPH 110.16.

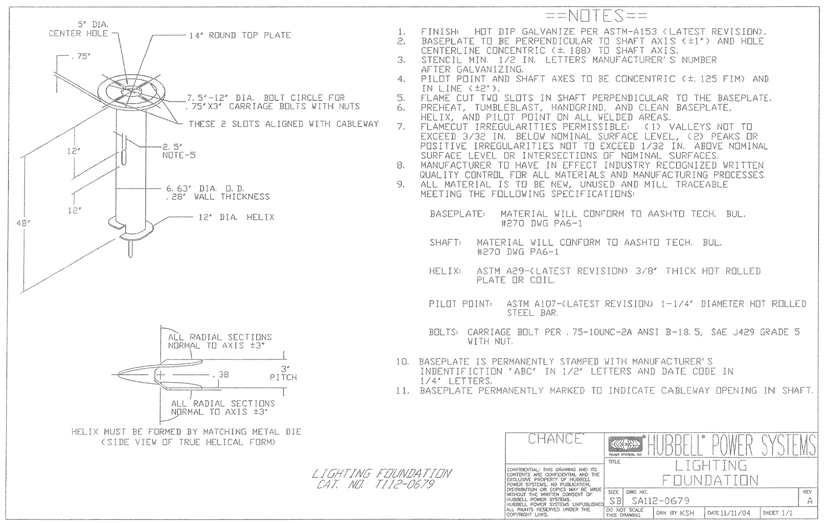
PROVIDE AN AVAILABLE FAULT CURRENT SIGN ON THE OUTSIDE OF THE FRONT DOOR OF THE SERVICE DISCONNECT ENCLOSURE IN ACCORDANCE WITH THE CURRENT NATIONAL ELECTRICAL CODE PARAGRAPH 110.24.

PAYMENT SHALL BE AS PER ITEM 1001 FOR EACH CONTROL SITE FURNISHED AND INSTALLED.

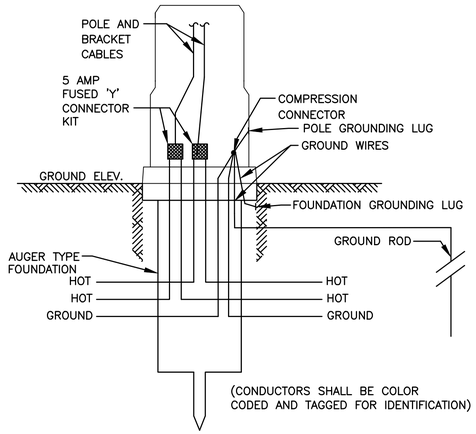
GROUNDING AND BONDING

THE REQUIREMENTS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE HL SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

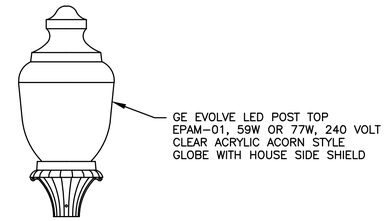
1. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.
   a. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
   b. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
   c. METAL PULL BOX LIDS SHALL BE BONDED BY ATTACHMENT OF THE EQUIPMENT GROUNDING CONDUCTOR TO THE FRAME DIAGONAL AS PROVIDED ON HL-30.11.
2. CONDUITS
   a. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
   b. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.
   c. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
   d. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
3. WIRE FOR GROUNDING AND BONDING
   a. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS: THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
4. GROUND ROD
   a. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
   b. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.
5. POWER SERVICE AND DISCONNECT SWITCH
   a. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
   b. THE SERVICE NEUTRAL SHALL ONLY BE CONNECTED TO GROUND AT THE MAIN POWER SERVICE DISCONNECT SWITCH.
6. PAYMENT TO PROVIDE THE COMPLETE GROUND FAULT CURRENT PATH SHALL BE CONSIDERED INCIDENTAL TO THE CONDUCTORS SUPPLIED BY THE PROJECT.



LIGHTING FOUNDATION CAT. NO. T112-0679



POLE TO BE WIRED, AS PER PLAN
(240 VOLT, THREE-WIRE, WITH GROUND)
No Scale



LUMINAIRE, (WATTAGE), 240V, AS PER PLAN
No Scale

STREET LIGHTING ESTIMATE OF QUANTITIES

ITEM	COLUMBUS MIS	QUANTITIES	UNIT	DESCRIPTION
1001	54	7	EA	Pull Box, Medium Duty
1001	56	1	EA	Riser, Street Light Circuit
1001	404	1,819	CKT FT	Street Lighting Circuit Cable, As Per Plan
1001	501	14	EA	Pole to be Wired, As Per Plan
1001	57 & 603	1	EA	120/240V Pad Mounted Lighting Controller, As Per Plan
1001	700	1,799	LF	2" Conduit, Concrete Encased
1001	-	7	EA	Luminaire, 59W, 240V, With House Side Shield, As Per Plan
1001	-	1	EA	Luminaire, 59W, 240V, With House Side Shield, As Per Plan, Furnish Only
1001		7	EA	Luminaire, 77W, 240V, With House Side Shield, As Per Plan
1001	-	1	EA	Luminaire, 77W, 240V, With House Side Shield, As Per Plan, Furnish Only
1001	-	14	EA	Light Pole, As Per Plan
1001	-	1	EA	Light Pole, As Per Plan, Furnish Only
1001	-	14	EA	Foundation, As Per Plan

CALCULATED DRM CHECKED JDS

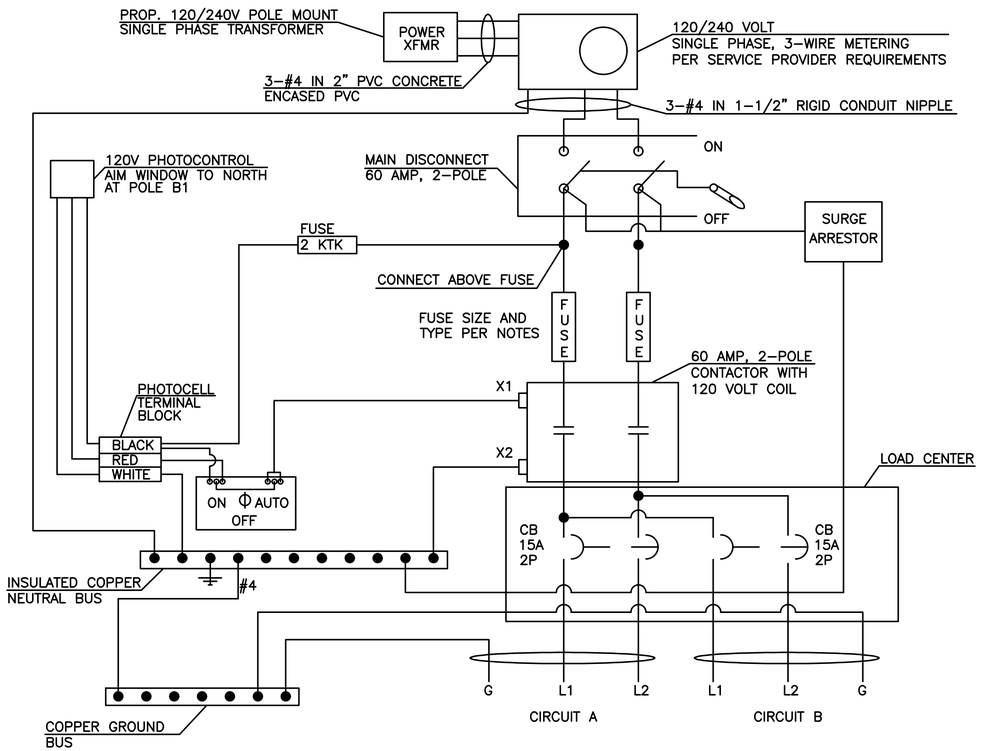
STREET LIGHTING NOTES AND DETAILS

CHESHIRE ROAD RELOCATION

61
65

SEPTEMBER, 2025

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120/240V LIGHTING CONTROL CENTER WIRING

PROPOSED LIGHTING CONTROL CENTER SCHEDULE

CONTROL CENTER	LEG	PROPOSED LUMINAIRES	LOAD		CIRCUIT BEAKER	CIRCUIT CABLE SIZE (AWG)	MAINTAINING AGENCY
			WATTS	AMPS			
3 WIRE, 120/240V PAD MOUNTED LIGHTING CONTROL	A	(7)-59W ACORN LUMINAIRES (4)-77W ACORN LUMINAIRES	721	3.3	15 A 2 POLE	4	CITY OF SUNBURY
	B	(3)-77W ACORN LUMINAIRES	231	1.1	15 A 2 POLE	4	
TOTAL		(7)-59W ACORN LUMINAIRES (7)-77W ACORN LUMINAIRES	952	4.4			

PHOTOMETRIC SUMMARY

DESCRIPTION	CLASSIFICATION	TARGET AVERAGE (FC)	DESIGN AVERAGE (FC)	DESIGN MAXIMUM (FC)	DESIGN MINIMUM (FC)	DESIGN MAX/MIN	TARGET AVG/MIN	DESIGN AVG/MIN
CHESHIRE ROAD	ARTERIAL, LOW PEDESTRIANS	0.9	0.9	2.4	0.3	8.0:1	3.0:1	3.0:1
STONE CREEK WAY	COLLECTOR, LOW PEDESTRIANS	0.6	0.6	1.8	0.2	9.0:1	4.0:1	3.0:1

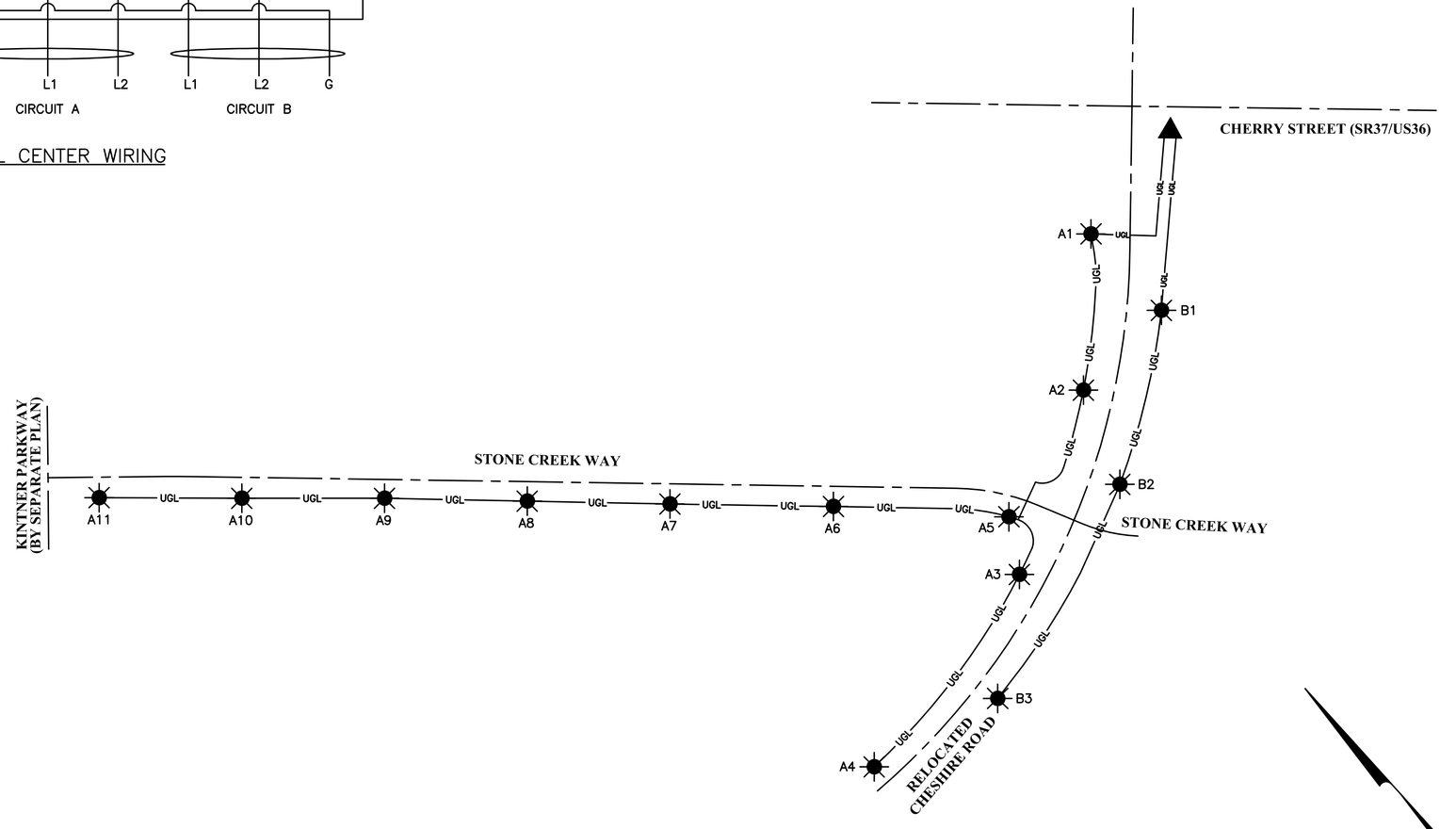
CIRCUIT SCHEMATIC LEGEND

UGL — PROPOSED 2" PVC CONDUIT W/ (2)-#4 AWG & (1) #8 AWG GND CABLES

ROADWAY CENTERLINE

PROPOSED POST TOP LIGHT POLE AND 240V, LED LUMINAIRE

PROPOSED PAD MOUNTED 120/240V LIGHTING CONTROL CABINET



STREET LIGHTING CIRCUIT SCHEMATIC
(NO SCALE)

CALCULATED DRM CHECKED JDS

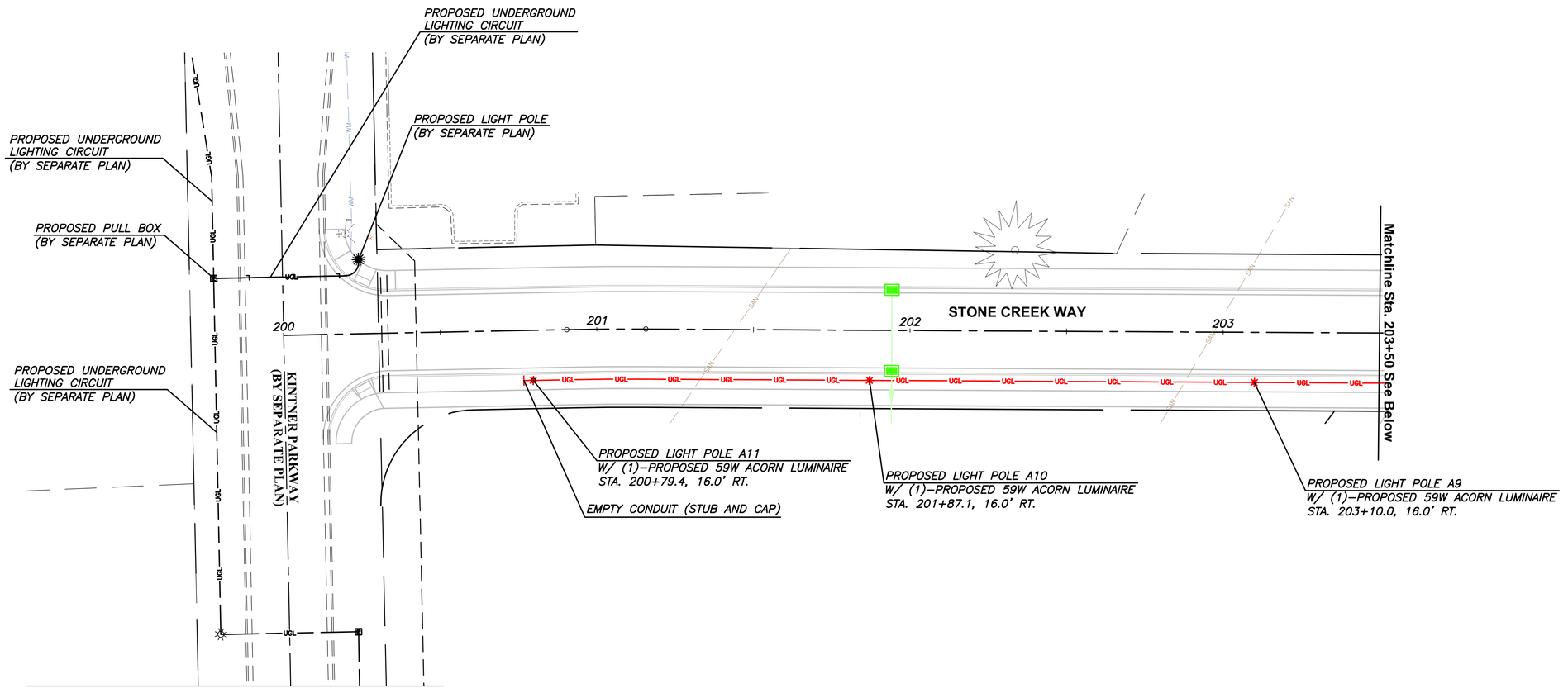
STREET LIGHTING NOTES AND DETAILS

CHESHIRE ROAD RELOCATION

62
65

SEPTEMBER, 2025

A:\2024\048\Dwg\04Sheets\20240484LN001.dwg, Last Saved By: dmcomm, 9/29/2025 6:41 AM Last Printed By: Rhodes, Anthony, 11/5/2025 1:48 PM (No Xrefs)



STREET LIGHTING PLAN LEGEND

UGL	PROPOSED 2" PVC CONDUIT, CONCRETE ENCASED W/ (2)–#4 AWG & (1) #8 AWG GND CABLES
✱	PROPOSED POST TOP LIGHT POLE, 14' AND 240V, LED LUMINAIRE (WATTAGE AS NOTED)
▪	PROPOSED LIGHTING PULL BOX W/ SPLICES WHERE NOTED
LC	PROPOSED PAD MOUNTED 120/240V LIGHTING CONTROL CABINET

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED DRM
CHECKED JDS

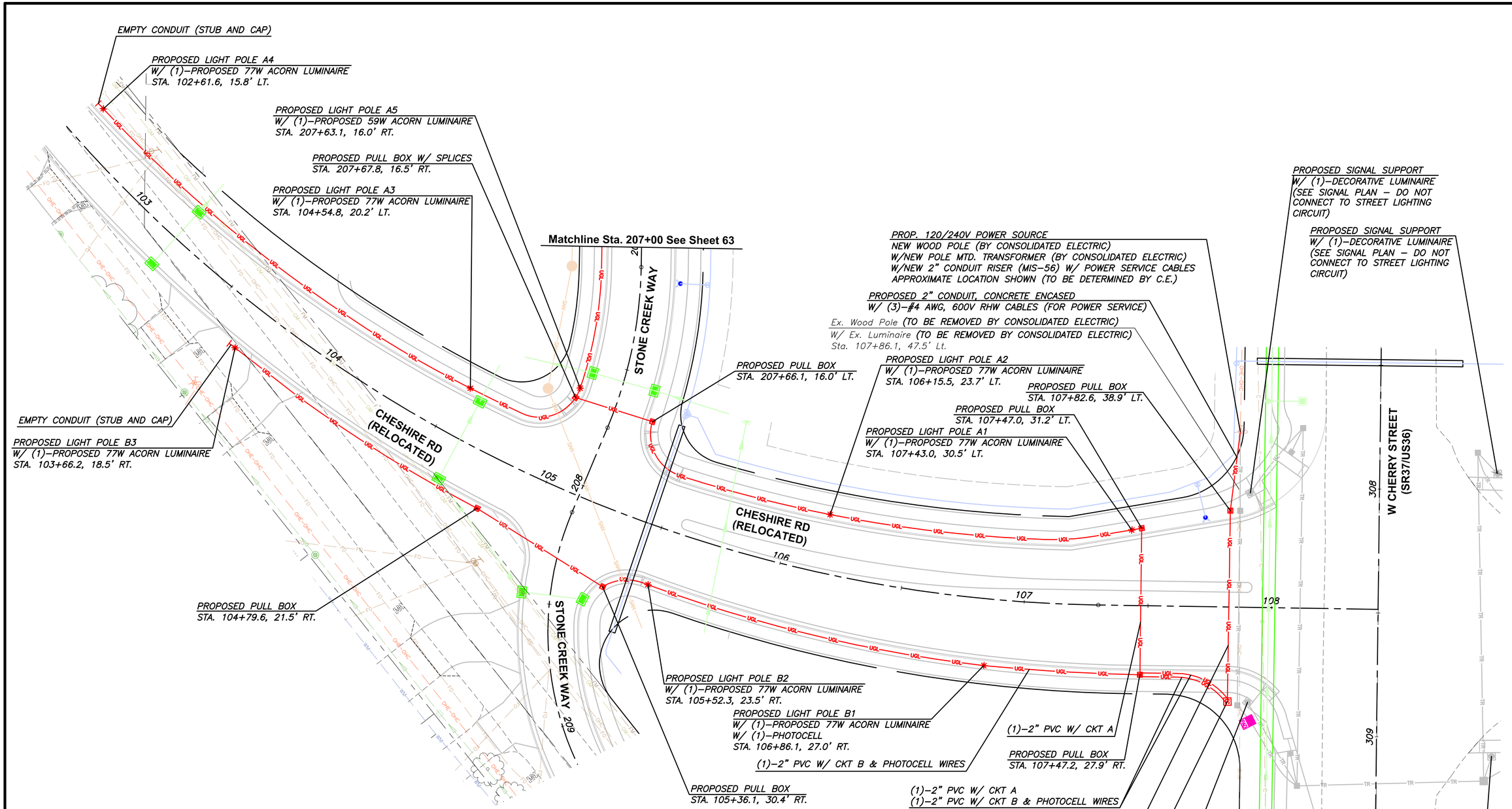
STREET LIGHTING PLAN

CHESHIRE ROAD RELOCATION

63
65

SEPTEMBER, 2025

J:\2024\484\Dwg\04Sheets\2024484L9001.dwg, Last Saved By: mjolly, 9/29/2025, 8:41 AM Last Printed By: Rhodes, Anthony, 11/5/2025, 1:48 PM
Xrefs: 2024484-CS-HEPT-ROAD-N, 2024484-CS-HEPT-E, 2024484-CS-HEPT-N



STREET LIGHTING PLAN LEGEND

- UGL — PROPOSED 2" PVC CONDUIT, CONCRETE ENCASED W/ (2)–#4 AWG & (1) #8 AWG GND CABLES
- ✱ — PROPOSED POST TOP LIGHT POLE, 14' AND 240V, LED LUMINAIRE (WATTAGE AS NOTED)
- ▪ — PROPOSED LIGHTING PULL BOX W/ SPLICES WHERE NOTED
- LC — PROPOSED PAD MOUNTED 120/240V LIGHTING CONTROL CABINET

GRAPHIC SCALE
0 10 20 40
1 inch = 20 feet

CALCULATED DRM
CHECKED JDS

STREET LIGHTING PLAN

CHESHIRE ROAD RELOCATION

64
65

SEPTEMBER, 2025

J:\2024048A\Shts\045Sheets\2024048AL01.dwg, Last Saved By: mjolly, 9/29/2025 8:41 AM Last Printed By: Rhodes, Anthony, 11/5/2025 1:48 PM
Xrefs: 2024048A-CS-REFR-ROAD-N, 2024048A-VS-REFR-C, 2024081-CS-REFR-N

0.20 Ac.
To 16

0.76 Ac.
To Ex 32

0.22 Ac.
To 17

0.25 Ac.
To 24

0.17 Ac.
To 25

0.14 Ac.
To 26

0.21 Ac.
To 27

1.13 Ac.
To 12

0.52 Ac.
To 10

0.25 Ac.
To 9

0.07 Ac.
To 3

0.06 Ac.
To 4

0.11 Ac.
To 7

0.08 Ac.
To 8

0.53 Ac.
To 6

0.11 Ac.
To 5

HW1

HW2

HW3

GRAPHIC SCALE
0 20 40 80
1 inch = 40 feet

CALCULATED JJB
CHECKED MJS

TRIBUTARY AREA MAP

CHESHIRE ROAD RELOCATION

65
65

SEPTEMBER, 2025

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Xrefs: 2024484-CS-REFF-ROAD-N, 2024484-CS-REFF-E, 2024484-CS-UTIL-REFF