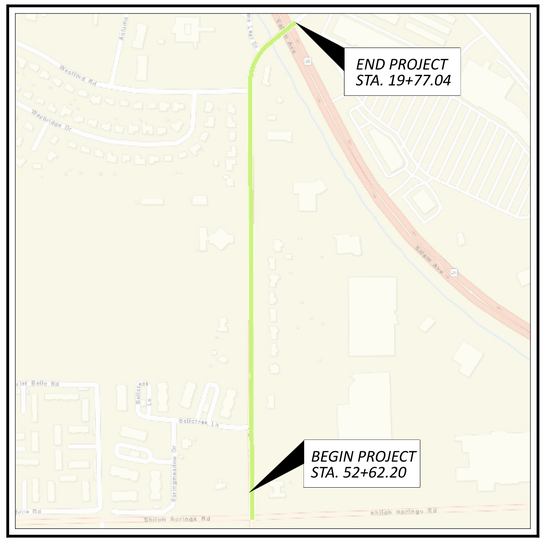
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MOT TROTWOOD OLIVE RD WALKS SA22

CITY OF TROTWOOD

MONTGOMERY COUNTY



LOCATION MAP

LATITUDE: 39°49'21" LONGITUDE: -84°17'34"

N

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

DESIGN DESIGNATION

	SR-49	OLIVE RD
CURRENT ADT (2023)	15,500	4,500
DESIGN YEAR ADT (2046)	17,500	4,500
DESIGN HOURLY VOLUME (2046)	1,900	600
DIRECTIONAL DISTRIBUTION	60%	59%
TRUCKS (24 HOUR B&C)	4%	0%
DESIGN SPEED	55 MPH	35 MPH
LEGAL SPEED	50 MPH	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN MAJOR COLLECTOR	URBAN PRINCIPAL ARTERIAL
NHS PROJECT	YES	NO

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
CMT
CRAWFORD, MURPHY & TILLY, INC.

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2 - 3
TYPICAL SECTIONS	4
GENERAL NOTES	5
MAINTENANCE OF TRAFFIC	6
GENERAL SUMMARY	7 - 8
SUBSUMMARIES	9 - 12
PROJECT SITE BMP PLAN	13
PLAN AND PROFILES	14 - 18
CROSS SECTIONS	19 - 42
INTERSECTION DETAILS	43 - 44
DRIVEWAY DETAILS	45 - 46
ROADWAY DETAILS	47
TRAFFIC CONTROL	48 - 51
SIGNAL PLANS	52 - 59
RIGHT OF WAY PLANS	

FEDERAL PROJECT NUMBER

E220596

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

ADD 1,500 FEET OF NEW SIDEWALK (3 SEGMENTS) ALONG OLIVE ROAD & RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE SR49/OLIVE ROAD INTERSECTION IN TROTWOOD, MONTGOMERY COUNTY OHIO

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	1.3 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	1.425 ACRES

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 5, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John W. O'Brien
District 07 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-4.1	7/19/13	TC-41.40	10/18/13					800	7/18/25	
BP-5.1	7/18/25	TC-41.41	7/19/19					832	7/18/25	
BP-7.1	7/18/25	TC-42.20	10/18/13					809	7/18/25	
		TC-52.10	10/18/13					813	7/21/23	
MT-95.31	7/19/19	TC-52.20	1/15/21					860	1/21/22	
MT-97.10	4/19/19	TC-71.10	7/18/25					909	7/18/25	
MT-101.90	7/17/20	TC-74.10	7/21/23					913	4/16/21	
MT-110.10	7/19/13	TC-81.11	1/19/24					916	7/19/24	
		TC-83.20	7/18/25							
MGS-2.1	7/18/25	TC-84.20	1/19/24							
MGS-4.2	7/18/25	TC-84.21	10/18/13							
MGS-4.3	7/18/25	TC-85.10	1/19/24							
		TC-85.21	7/18/25							
TC-21.21	7/18/25									
TC-41.20	10/18/13	HW-2.2	7/20/18							
TC-41.30	4/21/23									

ENGINEER'S SEAL
ROADWAY
STATE OF OHIO
SHELBY R. INGLE
E-68116
REGISTERED
PROFESSIONAL ENGINEER
Shelby R. Ingle, PE
2026.01.14
15:54:35-05'00'

TITLE SHEET

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE ROAD
SUITE 270
TROTWOOD, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.1 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

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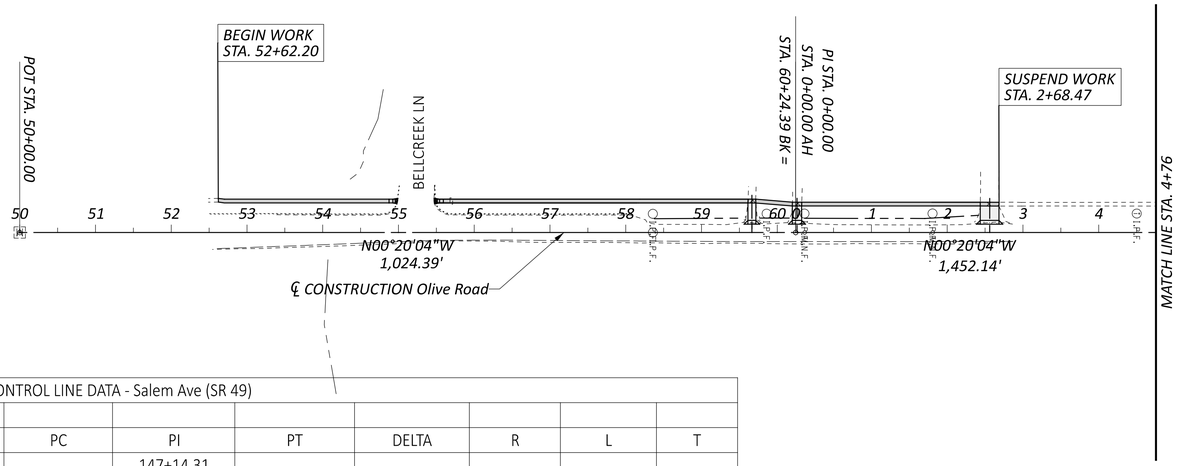

CONTROL LINE DATA - Salem Ave (SR 49)											
POINT	BEARING	DISTANCE	NORTHING	EASTING							
ID		(FEET)	(Y)	(X)	PC	PI	PT	DELTA	R	L	T
POT	N27°02'04"W	2185.56 '	555467.43	180501.08		147+14.31					
POT			557414.18	179507.69		168+99.87					
CONTROL LINE DATA - Olive Road											
POT	N00°20'04"W	1024.39 '	553101.77	180060.19		50+00.00					
HPI	N00°20'04"W	1452.14 '	554126.14	180054.21		CLP 0+00.00					
HPI	N52°57'58"E	365.39 '	555804.54	180083.41	CLP 16+02.14	CLP 16+83.20	CLP 17+58.88	36°03'02"	249.11 '	156.74 '	81.06 '
HPI	N18°40'28"E	208.40 '	556133.73	180477.61	CLP 21+34.81	CLP 21+93.21	CLP 22+50.32	20°47'30"	-318.31 '	115.51 '	58.40 '
POT			556360.55	180523.62		CLP 24+24.41					

CONTROL POINTS						
POINT No.	NORTHING	EASTING	ELEVATION	MON TYPE	STA.	OFFSET
SALEM AVE. (SR 49)						
102	556256.17	180098.6	881.45	MON BOX	155+99.80	0
OLIVE ROAD						
106	553101.77	180060.19	858.62	MON BOX	50+00.00	0

HORIZONTAL SCALE IN FEET
0 50 100 200

SCHEMATIC PLAN

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCRESTON VILLAGE DR
SUITE 270
DUBLIN, OHIO 43016-4459
PH (937)767-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.2 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

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MOT TROTWOOD OLIVE RD WALKS SA22

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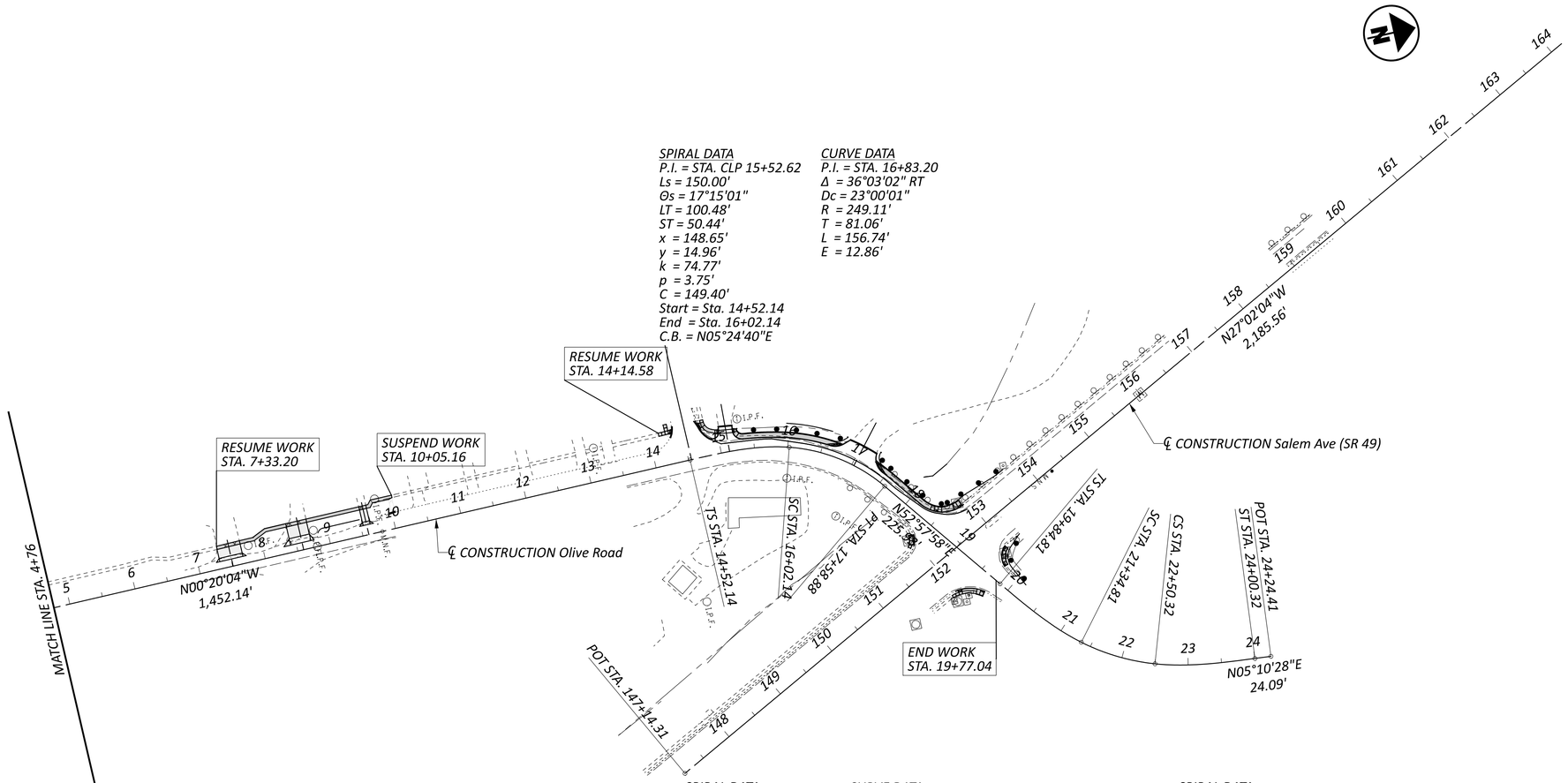


SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

CURVE DATA
P.I. = STA. 16+83.20
Δ = 36°03'02" RT
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'

SPIRAL DATA
P.I. = STA. CLP 20+85.10
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 149.17'
y = 11.73'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 19+84.81
End = Sta. 21+34.81
C.B. = N48°28'06"E

CURVE DATA
P.I. = STA. 21+93.21
Δ = 20°47'30" LT
Dc = 18°00'00"
R = 318.31'
T = 58.40'
L = 115.51'
E = 5.31'

CURVE DATA
P.I. = STA. 22+02.00
Δ = 47°47'30" LT
Dc = 18°00'00"
R = 318.31'
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
Lc = 115.51'
Ts = 217.19'
Es = 33.06'
Emax =
T.S. =
S.C. = 21+34.81
C.S. = 22+50.32
S.T. =

SPIRAL DATA
P.I. = STA. CLP 23+00.59
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 147.79'
y = 23.41'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 22+50.32
End = Sta. 24+00.32
C.B. = N09°40'20"E

HORIZONTAL SCALE IN FEET
0 50 100 200

SCHEMATIC PLAN

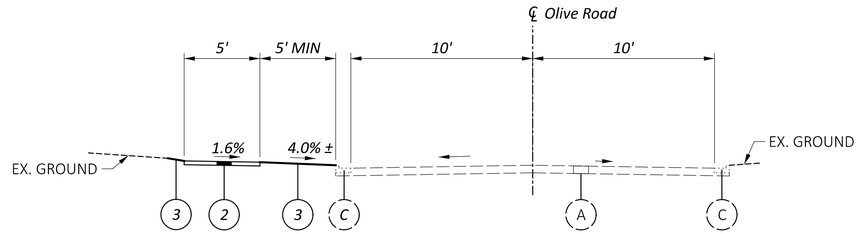
DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 WARREN ROAD
SUITE 270
DUBLIN, OHIO 43016
PH (937)767-2193
www.cmtengr.com

DESIGNER
LDW

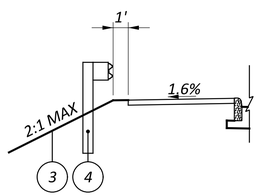
REVIEWER
JWB 07/01/25

PROJECT ID
117202

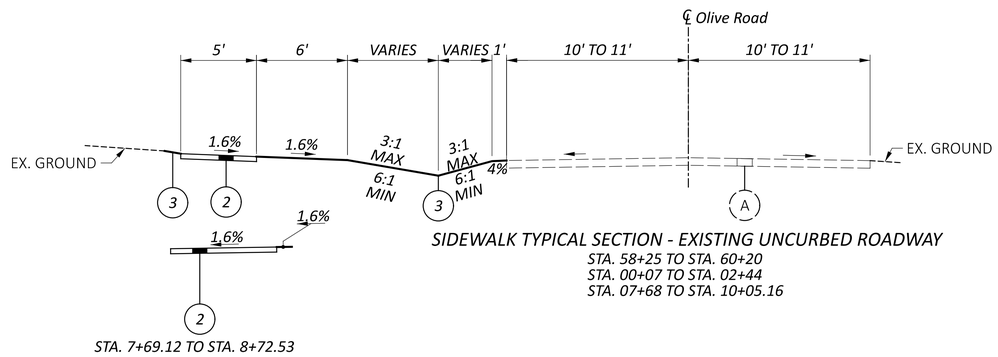
SHEET P.3 TOTAL 59



SIDEWALK TYPICAL SECTION - EXISTING CURBED ROADWAY
STA. 52+62 TO STA. 58+25

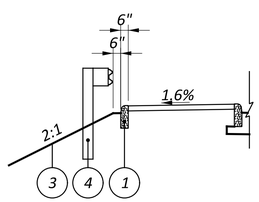


ALTERNATE GRADING W/O DITCH
STA. 17+25 TO STA. 17+80
STA. 18+10 TO STA. 18+75

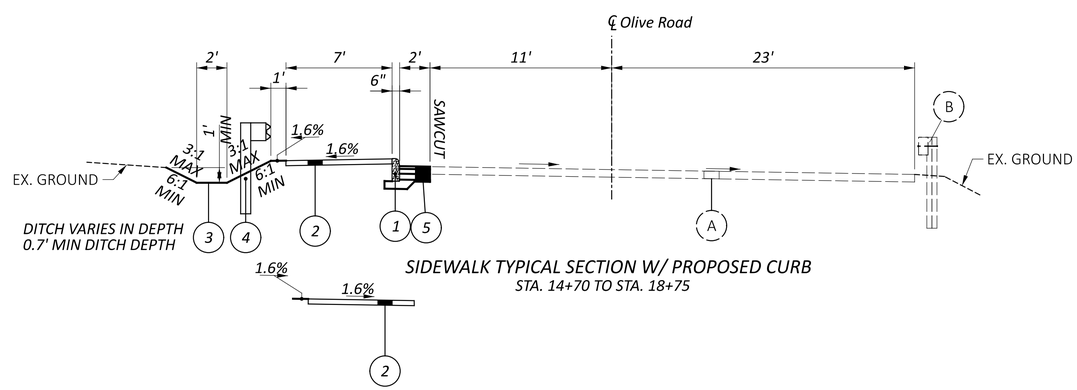


STA. 7+69.12 TO STA. 8+72.53

SIDEWALK TYPICAL SECTION - EXISTING UNCURBED ROADWAY
STA. 58+25 TO STA. 60+20
STA. 00+07 TO STA. 02+44
STA. 07+68 TO STA. 10+05.16



ALTERNATE GRADING WITH CURB
STA. 17+80 TO STA. 18+10

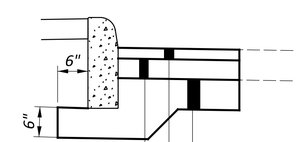


STA. 14+70 TO STA. 15+02

SIDEWALK TYPICAL SECTION W/ PROPOSED CURB
STA. 14+70 TO STA. 18+75

1. ITEM 609 - CURB, TYPE 6
2. ITEM 608 - 4" CONCRETE WALK
3. ITEM 659 - SEEDING AND MULCHING
4. ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POST
5. ITEM 441 - 3" AC SURFACE, TYPE 1, (449), PG64-22 (TWO EQUAL LIFTS)
   ITEM 407 - NON-TRACKING TACK COAT 0.075 GAL./S.Y.
   ITEM 301 - 6" ASPHALT CONCRETE BASE, (449), PG64-22
   ITEM 304 - 6" AGGREGATE BASE

A. Ex. Asphalt Pavement
   10" Asphalt
   2.5" Aggregate Base
B. Ex. Guardrail
C. Ex. Curb



ITEM 304 - 6" AGGREGATE BASE
ITEM 441 - 3" AC SURFACE, TYPE 1, (449), PG64-22 (TWO EQUAL LIFTS)
ITEM 301 - 6" ASPHALT CONCRETE BASE, (449), PG64-22

PAVEMENT DETAIL
NOT TO SCALE

TYPICAL SECTIONS

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:43 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
TROTWOOD, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
AEE

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.4 TOTAL 59

UTILITIES

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

WATER/SEWER

CITY OF TROTWOOD
2400 OLIVE ROAD
TROTWOOD, OHIO 45426
TEL. (937)837-1702
JMCCLUSKEY@TROTWOOD.ORG
JOHNNY MCCLUSKEY

MONTGOMERY COUNTY ENVIRONMENTAL SERVICES
1850 SPAULDING ROAD
KETTERING, OHIO 45432

TEL. (937)781-2634
HINCHJ@MCOHIO.ORG
JENNIFER HINCH

STEWARTK@MCOHIO.ORG
KEN STEWART

CABLE

CHARTER COMMUNICATIONS
3691 TURNER ROAD
DAYTON, OHIO 45415
TEL. (937)396-8591
EIN.WHATLEY@CHARTER.COM
EIN WHATLEY

ELECTRIC

AES OHIO
1900 DRYDEN ROAD
DAYTON, OHIO 45439
TEL. (937)554-9063
WILLIAM.WARD@AES.COM
BILL WARD

TELECOMMUNICATIONS

FRONTIER COMMUNICATIONS
10 MULBERRY STREET
BROOKVILLE, OHIO 45309
ROBIN.LATHAM@FTR.COM
ROBIN LATHAM

GAS

CENTERPOINT ENERGY/GRIDHAWK
6500 CLYO ROAD
CENTERVILLE, OHIO 45459
TEL. (937)291-7116
PUBLICPROJECT@CENTERPOINTENERGY.COM
KELLY.SPURLOCK@CENTERPOINTENERGY.COM
KELLY SPURLOCK

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

WORK LIMITS

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

ITEM 201, CLEARING AND GRUBBING

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	2	0	2
30"	4	0	4
48"	5	0	5
60"	0	0	0

PROTECTION OF BATS - CUTTING RESTRICTIONS

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

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

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

SEEDING AND MULCHING

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

659, TOPSOIL – 360 CU YD
659, SEEDING AND MULCHING – 3,235 SQ YD
659, COMMERICAL FERTILIZER – 0.45 TON
659, WATER – 18 MGAL
670, SLOPE EROSION PROTECTION – 2,680 EACH
832, EROSION CONTROL – 30,000 EACH

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

CONCRETE DRIVEWAY

THIS ITEM SHALL BE PLACED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. ASSESSMENT OF EXISTING CONDITION SHALL TAKE PLACE IN ALL AREAS WHERE DRIVE CONDUITS AND HEADWALLS EXIST. ADDITIONAL ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN PROVIDED FOR THE FOLLOWING ITEMS:

ITEM 611, 12" CONDUIT, TYPE B - 85 LF
ITEM 611, 18" CONDUIT, TYPE B - 110 LF
ITEM 602, CONCRETE MASONRY – 3.06 CU.YD

ITEM 638, FIRE HYDRANT REMOVED AND RESET, AS PER PLAN

THIS ITEM HAS BEEN PLACED AS A CONTINGENCY QUANTITY. THE CONTRACTOR SHALL COORDINATE WITH THE CITY IF EXISTING HYDRANT IS IN CONFLICT WITH PROPOSED WALK. MONTGOMERY COUNTY ENVIRONMENTAL SERVICES STANDARDS AND SPECIFICATIONS HAVE BEEN PROVIDED IN THE CASE FIRE HYDRANT RELOCATION IS NECESSARY.

THIS ITEM SHALL BE PLACED IN ACCORDANCE WITH MONTGOMERY COUNTY ENVIRONMENTAL SERVICES (MCES) 2019 REQUIREMENTS, SPECIFICATIONS AND STANDARDS, JANUARY 2019 REVISION.

INSPECTION

A. ALL HYDRANTS AND VALVES WILL BE INSPECTED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE PRIOR TO REINSTALLATION.

B. DAMAGED OR DEFECTIVE MATERIALS RESULTING FROM THE CONTRACTOR WILL BE REJECTED WHETHER PREVIOUSLY INCORPORATEDINTO THE WORK OR NOT, AND ALL EXPENSES OF REPAIRING OR REMOVING AND REPLACING SUCH DEFECTIVE MATERIALS SHALL BE PAID BY THE CONTRACTOR.

INSTALLATION

A. INSTALL ALL HYDRANTS, VALVES AND APPURTENANCES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

B. UNLESS OTHERWISE APPROVED INSTALL ALL VALVES PLUMB AND LEVEL AND IN A CLOSED POSITION. VALVES SHALL BE INSTALLED FREE FROM DISTORTION AND STRAIN CAUSED BY MISALIGNED PIPING, EQUIPMENT OR OTHER CAUSES.

C. VALVE BOXES SHALL BE SET PLUMB, AND CENTERED WITH THE BODIES DIRECTLY OVER THE OPERATING NUTS. THE VALVE BOX SHALL BE SET SO TRAFFIC LOADS ARE NOT TRANSMITTED TO THE VALVE. ANY VALVE BOX SET TOO HIGH OR TOO LOW SHALL BE ADJUSTED AT THE CONTRACTOR'S EXPENSE.

D. FIRE HYDRANTS:

1. HYDRANTS SHALL BE SET ON A SOLID CONCRETE BLOCK UNIT 1'-6" X 8" X 1'-4" AND BACKFILLED WITH NO. 57 GRAVEL.

2. THE HYDRANT SHALL BE SET WITH THE CENTER OF THE LOWEST NOZZLE AT LEAST 15-INCHES, BUT NOT MORE THAN 18-INCHES ABOVE THE FINISHED GRADE AND/OR AS APPROVED BY THE ENGINEER. THE STORZ NOZZLE SHALL BE ORIENTED NORMAL TO THE EDGE OF PAVEMENT.

3. THE HYDRANT SHALL BE HARNESSED TO THE GATE VALVE AND THE GATE VALVE SHALL BE HARNESSED TO THE MAIN LINE BY USING SUITABLE TIE ANCHOR PIPE AND FITTINGS TO SUIT THE INSTALLATION SHOWN ON THE DRAWINGS AND STANDARD DETAILS IN SECTION 15051. THE GATE VALVES REQUIRED FOR HYDRANTS SHALL BE IN ACCORDANCE WITH PARAGRAPH 2.1.C.

FIELD TESTS AND ADJUSTMENTS

A. ADJUST ALL PARTS AND COMPONENTS AS REQUIRED TO PROVIDE CORRECT OPERATION.

B. CONDUCT FUNCTIONAL FIELD TEST OF EACH VALVE IN PRESENCE OF ENGINEER TO DEMONSTRATE THAT EACH PART AND ALL COMPONENTS TOGETHER FUNCTION CORRECTLY. ALL TESTING EQUIPMENT REQUIRED SHALL BE PROVIDED.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, OPERATION OF POWER-OPERATED CONSTRUCTION-TYPE DEVICES.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

THE FOLLOWING QUANTITES ARE PROVIDED AND HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

	BEGIN STATION	END STATION	ITEM 659, TOPSOIL VOLUME (CY)	ITEM 670, SLOPE EROSION PROTECTION (SY)
VFS 1	52+61	54+92	14	128
VFS 2	55+54	58+38	18	158
VFS 3	58+38	59+56	28	249
VFS 4	00+12	02+36	41	370
VFS 5	07+69	08+28	15	135

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL
POSITIONING METHOD: ODOT CORS
MONUMENT TYPE: B

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83
ELLIPSOID: GRS80
MAP PROJECTION: TRANSVERSE MERCATOR
COORDINATE SYSTEM: OCCS, MONTGOMERY COUNTY
COMBINED SCALE FACTOR: 1.000038

ORIGIN OF COORDINATE
SYSTEM: (164,041.67 , 0)

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

UNITS ARE IN U.S. SURVEY FEET.

SPECIAL BENCHING 804

BENCHING OF FOUNDATION SLOPES ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05.

CENTERPOINT ENERGY

HIGH PRESSURE GAS MAINS ARE NOTED THROUGHOUT THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING AND LOCATING THE EXACT DEPTH OF THE EXISTING GAS MAINS PRIOR TO THE START OF ANY CONSTRUCTION IF EXISTING GAS MAINS ARE LOCATED WITHIN 3' HORIZONTALLY OF PROPOSED WORK AND/OR EXCAVATING MORE THAN 1' BELOW EXISTING GRADE. PRICE OF THIS ITEM SHALL BE INCLUDED IN LINE ITEM 608, 4" CONCRETE WALK, AS PER PLAN.

MONTGOMERY COUNTY ENVIRONMENTAL SERVICES

MONGOMERY COUNTY ENVIRONMENTAL SERVICES (MCES) WATER AND SANITARY FACILITIES ARE WITHIN PROJECT LIMITS. WATER MAINS AND SERVICES ARE NOTED THROUGHOUT THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH MCES ON THE POSSIBLE RELOCATION OF CURB BOXES/METER PITS, IF IN CONFLICT WITH THE PROPOSED WALK. PRICE OF THIS ITEM SHALL BE INCLUDED IN LINE ITEM 608, 4" CONCRETE WALK, AS PER PLAN.

GENERAL NOTES

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUFF ROAD
SUITE 270
WESTERVILLE, OHIO 43081
PH (937)701-2193
www.cmtengr.com

DESIGNER
BMR
REVIEWER
JWB 07/01/25
PROJECT ID
117202
SHEET P.5 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:43 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_GN101.dgn

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF EXISTING PAVEMENT. THE INTERSECTION AT OLIVE ROAD AND SR 49 SHALL MAINTAIN A MINIMUM OF 1 LANE IN EACH DIRECTION WITH NO LEFT TURN LANE. LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A RESONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMERSURATE WITH THE WORK IN PROGRESS. AT THE APPROVAL OF THE ENGINEER, CLOSE ONE LANE OF TRAFFIC WITH DRUMS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MT-95.31 OR WITH FLAGGERS IN ACCORDANCE WITH MT-97.10 AS NECESSARY TO COMPLETE THE WORK. REMOVE LANE RESTRICTIONS AT COMPLETION OF EACH DAY. BACKFILL TRENCHES FLUSH WITH PAVEMENT SURFACE AT THE END OF EACH DAY. CONTRACTOR MAY ALTERNATIVELY USE STEEL PLATE FOR SHORT SEGMENTS AT THE APPROVAL OF THE ENGINEER. MAINTAIN PEDESTRIAN ACCESS IN ACCORDANCE WITH MT-110.10.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THERE SHALL BE AN INTERIM COMPLETION DATE OF 9/30/26 FOR ALL SIDEWALK WORK, WITH THE EXCEPTION OF WALK BETWEEN AUTUMN LEAF DRIVE TO THE NORTH TO SR 49 AND THE WALK AND CURB RAMPS IMMEDIATELY ADJACENT TO THE TRAFFIC SIGNAL POLES AT THE INTERSECTION OF SR 49 & OLIVE ROAD.

WALK BETWEEN AUTUMN LEAF DRIVE TO SR 49 MUST REMAIN CLOSED UNTIL THE FULL INTERSECTION AND RAMPS ARE COMPLETE.

THE CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE TEMPORARY DOWN GUY ANCHORED TO THE EXISTING GROUND OR COUNTER LOAD, TO SUPPORT THE EXISTING SOUTHEAST SIGNAL SUPPORT (SP-4) AND ACCOMMODATE THE ADDED STRAIN WIRES AND LOAD DURING CONSTRUCTION.

ITEM 614, MAINTENANCE TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE 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 MAINTAINING AGENCY AND 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. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

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 VEHICLE CRASH 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 BILLINGS TO THE STATE OR THE CITY OF TROTWOOD FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6 AM TO 7 PM. 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 PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION LAW ENFORCEMENT OFFICERS (LEOS) AT THE CONTRACTOR'S EXPENSE.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION,

2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION,

3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED,

4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE,

5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES THAT MEET ALL OF THE CRITERIA LISTED BELOW: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

CRITERIA

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY, AND,
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF: THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER, OR THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE, OR OTHER LOCATION AS APPROVED BY THE ENGINEER. THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE SHIFT DURATION SHALL NOT BE LESS THAN THE LEO'S MINIMUM SHOW-UP TIME REQUIRED BY THEIR LAW ENFORCEMENT AGENCY. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 25 HOURS.

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICALCLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HRS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER BMR
REVIEWER JWB 07/01/25
PROJECT ID 117202
SHEET P.6 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:45 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\180621\01-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-EngineeringMOT\Sheets\117202_MN101.dgn

SHEET NUM. 5	6	9		10		11		12		42		44	PART. 01/SAF	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
																		ROADWAY	
LS													LS	201	11000	LS		CLEARING AND GRUBBING	5
		330											330	202	38000	330	FT	GUARDRAIL REMOVED	
		925											925	202	30000	925	SF	WALK REMOVED	
		70											70	202	75000	70	FT	FENCE REMOVED	
				613									613	202	23000	613	SY	PAVEMENT REMOVED	
				210									210	202	32000	210	FT	CURB REMOVED	
										431			431	203	10000	431	CY	EXCAVATION	42
										335		10	345	203	20000	345	CY	EMBANKMENT	42
				417									417	204	10000	417	SY	SUBGRADE COMPACTION	
		682.5											682.5	606	15100	682.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
		3											3	606	26550	3	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
		1,195											1,195	608	52000	1,195	SF	CURB RAMP	
		80											80	608	53020	80	SF	DETECTABLE WARNING	
		7,940											7,940	608	10001	7,940	SF	4" CONCRETE WALK, AS PER PLAN	5
		180											180	608	13000	180	SF	6" CONCRETE WALK	
		460											460	608	15000	460	SF	8" CONCRETE WALK	
																		EROSION CONTROL	
360													360	659	00300	360	CY	TOPSOIL	5
3,235													3,235	659	00510	3,235	SY	SEEDING AND MULCHING, CLASS 2	5
0.45													0.45	659	20000	0.45	TON	COMMERCIAL FERTILIZER	5
18													18	659	35000	18	MGAL	WATER	5
2,680													2,680	670	00500	2,680	SY	SLOPE EROSION PROTECTION	5
30,000													30,000	832	30000	30,000	EACH	EROSION CONTROL	5
																		DRAINAGE	
3.06		0.4											3.46	602	20000	3.46	CY	CONCRETE MASONRY	
85		115											200	611	04400	200	FT	12" CONDUIT, TYPE B	
		25											25	611	04600	25	FT	12" CONDUIT, TYPE C	
110													110	611	07400	110	FT	18" CONDUIT, TYPE B	
		1											1	611	99574	1	EACH	MANHOLE, NO. 3	
		1											1	611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE	
																		PAVEMENT	
				249									249	254	01000	249	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
				71									71	301	56000	71	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
				71									71	304	20000	71	CY	AGGREGATE BASE	
				87									87	407	20000	87	GAL	NON-TRACKING TACK COAT	
				36									36	441	70000	36	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	
				14									14	442	22120	14	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449) (DRIVEWAYS)	
				28									28	452	10010	28	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
				85									85	452	12010	85	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
				200									200	609	12000	200	FT	COMBINATION CURB AND GUTTER, TYPE 2	
				590									590	609	26000	590	FT	CURB, TYPE 6	
																		WATER WORK	
		1											1	638	10501	1	EACH	FIRE HYDRANT REMOVED AND RESET, AS PER PLAN	5
																		TRAFFIC CONTROL	
						145.5							145.5	630	03100	145.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
						8							8	630	08600	8	EACH	SIGN POST REFLECTOR	
								13					13	630	79000	13	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE	
								14					14	630	79501	14	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	52
						67.75		92.5					160.25	630	80100	160.25	SF	SIGN, FLAT SHEET	
								4					4	630	80500	4	EACH	SIGN, DOUBLE FACED, STREET NAME	
						4							4	630	85000	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	
						4							4	630	85100	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
						5							5	630	86006	5	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND STORAGE	
						2							2	630	86010	2	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION	
						0.07							0.07	644	00104	0.07	MILE	EDGE LINE, 6"	
						0.4							0.4	644	00300	0.4	MILE	CENTER LINE	
						350							350	644	00404	350	FT	CHANNELIZING LINE, 12"	
						49							49	644	00500	49	FT	STOP LINE	
						290							290	644	00630	290	FT	CROSSWALK LINE, 24"	
						155							155	644	00700	155	FT	TRANSVERSE/DIAGONAL LINE, YELLOW	

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:46 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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GENERAL SUMMARY

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE ROAD
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DESIGNER
BMR

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.7 TOTAL 59

SHEET NUM. 5	6	9		10		11		12		42		44	PART. 01/SAF	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
						115							115	644	00720	115	FT	CHEVRON MARKING, WHITE	
						5							5	644	01300	5	EACH	LANE ARROW	
						460							460	644	30000	460	FT	REMOVAL OF PAVEMENT MARKING	
						2							2	644	30020	2	EACH	REMOVAL OF PAVEMENT MARKING	
																		TRAFFIC SIGNALS	
								2					2	625	00450	2	EACH	CONNECTION, FUSED PULL APART	
								2					2	625	00460	2	EACH	CONNECTION, UNFUSED PULL APART	
								2					2	625	18400	2	EACH	BRACKET ARM, 20'	
								1,320					1,320	625	23306	1,320	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE	
								360					360	625	23400	360	FT	NO. 10 AWG POLE AND BRACKET CABLE	
								780					780	625	25408	780	FT	CONDUIT, 2", 725.051	
								49					49	625	25902	49	FT	CONDUIT, JACKED OR DRILLED, 725.04, 4"	
								2					2	625	26252	2	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED)	
								780					780	625	29000	780	FT	TRENCH	
								2					2	625	30700	2	EACH	PULL BOX, 725.08, 18"	
								7					7	625	31510	7	EACH	PULL BOX REMOVED	
								11					11	625	32000	11	EACH	GROUND ROD	
								780					780	625	36010	780	FT	UNDERGROUND WARNING/MARKING TAPE	
								2					2	631	97700	2	EACH	SIGN LIGHTING MISC.: WARNING SIGN FLASHER ASSEMBLY, AS PER PLAN	52
								10					10	632	05006	10	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	
								4					4	632	05064	4	EACH	VEHICULAR SIGNAL HEAD, (LED), 4-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	
								1					1	632	05086	1	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE	
								8					8	632	20731	8	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	52
								8					8	632	20751	8	EACH	ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN	52
								14					14	632	25000	14	EACH	COVERING OF VEHICULAR SIGNAL HEAD	
								8					8	632	25010	8	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD	
								410					410	632	30200	410	FT	MESSENGER WIRE, 7 STRAND, ⅜" DIAMETER WITH ACCESSORIES	
								200					200	632	40300	200	FT	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG	
								3,200					3,200	632	40500	3,200	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
								2,120					2,120	632	40700	2,120	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
								3					3	632	64000	3	EACH	STRAIN POLE FOUNDATION	
								8					8	632	64020	8	EACH	PEDESTAL FOUNDATION	
								60					60	632	67300	60	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG	
								1					1	632	86130	1	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 10	
								1					1	632	87130	1	EACH	COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 10	
								1					1	632	87140	1	EACH	COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 12	
								1					1	632	89802	1	EACH	PEDESTAL, 5', TRANSFORMER BASE	
								5					5	632	89904	5	EACH	PEDESTAL, 10', TRANSFORMER BASE	
								2					2	632	90008	2	EACH	PEDESTAL, 15', TRANSFORMER BASE	
								1					1	632	90100	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION	52
								1					1	632	90104	1	EACH	REUSE OF TRAFFIC CONTROL ITEM: PULL BOX	
								1					1	632	90208	1	EACH	REUSE OF STRAIN POLE	
								1					1	633	65511	1	EACH	CABINET, TYPE TS-2, AS PER PLAN	52
								2					2	809	69001	2	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	52
								4					4	809	69101	4	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	53
								1					1	809	69123	1	EACH	ATC CONTROLLER, AS PER PLAN	53
								1					1	809	69200	1	EACH	EMERGENCY VEHICLE PREEMPTION	53
								1					1	809	69210	1	EACH	PREEMPT RECEIVING UNIT	53
								700					700	809	69220	700	FT	PREEMPT DETECTOR CABLE	53
								1					1	809	69230	1	EACH	PREEMPT PHASE SELECTOR	53
								1					1	809	69240	1	EACH	PREEMPT CONFIRMATION LIGHT	53
																		MAINTENANCE OF TRAFFIC	
	25												25	614	11110	25	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	6
																		INCIDENTALS	
													LS	614	11000	LS		MAINTAINING TRAFFIC	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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DESIGNER
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REVIEWER
JWB 07/01/25

PROJECT ID
117202

MOT TROTWOOD OLIVE RD WALKS SA22

ROADWAY SUBSUMMARY

REF NO.	SHEET		STATION TO STATION		SIDE	CAD MEASURED AREA	202 GUARDRAIL REMOVED	202 WALK REMOVED	202 FENCE REMOVED	606 GUARDRAIL, TYPE MGS, WITH LONG POST	606 ANCHOR ASSEMBLY, MGS TYPE T	608 CURB RAMP	608 DETECTIABLE WARNING	608 4" CONCRETE WALK	608 6" CONCRETE WALK	608 8" CONCRETE WALK	602 CONCRETE MASONARY	611 12" CONDUIT, TYPE B	611 12" CONDUIT, TYPE C	611 MANHOLE, NO. 3	611 MANHOLE ADJUSTED TO GRADE	638 FIRE HYDRANT REMOVED AND RESET			
	BEGIN	END	BEGIN	END		SF	EACH	SF	LF	FT	EACH	SF	SF	SF	SF	SF	CY	FT	FT	EACH	EACH	EACH			
SW-1	14		52+62.20	54+98.49	LT	1195						65		1130											
SW-2	14	15	55+48.70	59+71.53	LT	2145						75		2015	55										
FH-1	14		55+51.37		LT																	1			
F-1	15		58+37.73		LT				21																
SW-3	15		59+71.53	+7.98	LT	310								245	65										
F-2	15		60+04.36		LT				21																
SW-4	15	16	+7.98	2+68.47	LT	1305								1180		125									
SW-5	17		7+32.86	8+72.67	LT	715								380		335									
SW-6	17		8+72.67	9+64.48	LT	470								410	60										
F-3	17		8+79.81		LT				28																
SW-7	17		9+64.48	10+05.16	LT	220		200						220											
SW-8	18		14+14.58	14+35.21	LT	165		235				65		100											
SW-9	18		14+83.35	15+03.19	LT	225		125				105		120											
A-1	18		14+93.49		LT																1				
P-1	18		14+93.49	15+35.44	LT													115							
SW-10	18		15+22.04	16+76.40	LT	1160						80	40	1080											
GR-1	18		15+31.68	16+79.38	LT					237.5	2														
HW-1	18		15+35.44		LT												0.20								
HW-2	18		16+60.00		LT												0.20								
P-2	18		16+60.00	16+81.03	LT														25						
MH-1	18		16+60.00		LT															1					
SW-11	18		17+27.00	152+89.48	LT	1175						250	40	885											
GR-2	18		17+26.46	153+69.26	LT		250			357.5	1														
SALEM AVENUE (SR 49) / OLIVE ROAD INTERSECTION																									
SW-12	18		18+27.47	151+87.07	LT/RT	180		180				155		25											
SW-13	18		19+73.15	152+99.27	LT/RT	240						200		40											
SW-14	18		19+74.87	151+91.53	LT/RT	310		185				200		110											
GR-3	18		20+15.57	153+25.45	LT/RT		80			87.5															
TOTALS CARRIED TO GENERAL SUMMARY							330	925	70	682.5	3	1195	80	7940	180	460	0.40	115	25	1	1	1			

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REVIEWER
JWB 07/01/25

PROJECT ID
117202

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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MOT TROTWOOD OLIVE RD WALKS SA22

PAVEMENT SUBSUMMARY

REF NO.	SHEET BEGIN	SHEET END	STATION TO STATION BEGIN	STATION TO STATION END	SIDE	CAD MEASURED AREA (SF)	202 PAVEMENT REMOVED (SY)	202 CURB REMOVED (LF)	204 SUBGRADE COMPACTION (SY)	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.5" (SY)	301 ASPHALT CONCRETE BASE, PG64-22 (449) (CY)	304 AGGREGATE BASE (CY)	407 NON-TRACKING TACK COAT 0.085 GAL./S.Y. (GAL)	407 NON-TRACKING TACK COAT 0.075 GAL./S.Y. (GAL)	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22 (CY)	442 ASPHALT CONCRETE SURFACE COURSE, TYPE A, (449) (CY)	452 6" NON-REINFORCED CONCRETE PAVEMENT (SY)	452 8" NON-REINFORCED CONCRETE PAVEMENT (SY)	609 COMBINATION CURB AND GUTTER, TYPE 2 (FT)	609 CURB, TYPE 6 (FT)
C-1	14		54+98.49		LT			30											20	
C-2	14		55+48.70		LT			30											20	
DW-1	15		56+66.58		LT	380	16			28			3			2	9			
DW-2	15		+1.82		LT	385	17			27			3			2	10			
DW-3	16		2+56.04		LT	745	38			53			5			3		18		
DW-4	17		7+50.77		LT	870	34			55			5			3		23		
DW-5	17		8+50.05		LT	1090	77			63			6			3		44		
DW-6	17		9+59.07		LT	340	14			23			2			1	9			
C-3	17		9+95.61	10+05.30	LT			10											10	
C-4	18		14+35.21		LT			20											20	
PV-1	18		14+70.05	18+75.02	LT	2020	225		225		38	38		34	19					
C-5	18		14+07.05	15+03.19	LT			25												65
DW-7	18		15+12.56		LT	460	52		52		9	9		8	5					
C-6	18		15+21.87	16+84.09	LT															200
DW-8	18		17+03.39		LT	1260	140		140		24	24		21	12					
C-7	18		17+22.68	18+66.25	LT															245
SALEM AVENUE (SR 49) / OLIVE ROAD INTERSECTION																				
C-8	18		18+38.84	151+96.12	LT/RT			20											20	25
C-9	18		19+73.15	152+99.27	LT/RT			15											50	35
C-10	18		19+74.87	151+91.53	LT/RT			60											60	20
TOTALS CARRIED TO GENERAL SUMMARY							613	210	417	249	71	71	24	63	36	14	28	85	200	590

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DESIGNER: BMR
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.10 TOTAL: 59

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:48 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:48 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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TRAFFIC SUBSUMMARY

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 3 POST (FT)	630 SIGN POST REFLECTOR, RED (SF)	630 SIGN POST REFLECTOR, YELLOW (EACH)	630 SIGN, FLAT SHEET (SF)	630 REMOVAL OF GROUND MOUNTED SIGN AND STORAGE (EACH)	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION (EACH)	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND STORAGE (EACH)	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND REERECTION (EACH)
48	RS-1	OLIVE RD	55+00	LT	-	-						1		1
49	RS-2	OLIVE RD	14+80	LT	-	-			2			2		1
49	S-1	OLIVE RD	17+38	RT	W23-H2A-36	36X36	16.5			9				
50	S-2	OLIVE RD	20+82	RT	W23-H2A-36	36X36	16.5			9				
50	S-3	SR-49	150+22	RT	W23-H2A-48	48X48	14.5 / 14.5			16				
50	R-1	SR-49	152+81	LT	-	-					1		2	
50	R-2	SR-49	152+85	LT	-	-					1		1	
50	R-3	SR-49	153+01	LT	-	-					1		1	
50	S-4	SR-49	153+50	LT	R5-1-36	36X36	13.5	2		9				
51	S-5	SR-49	154+75	LT	W23-H2A-48	48X48	14.5 / 14.5			16				
51	S-6	SR-49	155+74	LT	R5-1A-42	42X30	13 / 13	4		8.75				
51	RS-3	SR-49	160+25	LT	-	-	15					1		
51	R-4	SR-49	165+03	LT	-	-					1		1	
								6	2					
TOTALS CARRIED TO GENERAL SUMMARY							145.5	8		67.75	4	4	5	2

SHEET NO.	REFERENCE NO.	LOCATION	STATION FROM	STATION TO	SIDE	644 EDGE LINE, 6" (MILE)	644 CENTER LINE (MILE)	644 CHANNELIZING LINE, 12" (FT)	644 STOP LINE (FT)	644 CROSSWALK LINE, 24" (FT)	644 TRANSVERSE/DIAGONAL LINE, YELLOW (FT)	644 CHEVRON MARKING, WHITE (FT)	644 LANE ARROW (EACH)	644 REMOVAL OF PAVEMENT MARKING (FT)	644 REMOVAL OF PAVEMENT MARKING (EACH)
49	E-1	OLIVE RD	14+77	15+33	LT	0.01									
49	E-2	OLIVE RD	15+76	18+69	LT	0.06									
50	A-1	SR-49	149+88		RT								1		
50	RM-1	SR-49	150+00		RT										1
50	T-1	SR-49	149+45	151+00	LT						155				
50	A-2	SR-49	150+54		RT								1		
50	Y-1	SR-49	149+45	151+20	LT		0.04								
50	C-1	SR-49	149+66	151+97	RT			350							
50	V-1	SR-49	150+82	151+97	RT							115			
50	RM-2	SR-49	151+04	151+97	RT									95	
50	RM-3	SR-49	151+50		LT										1
50	A-3	SR-49	151+20		MID								1		
50	A-4	SR-49	151+86		LT								1		
50	A-5	SR-49	151+86		RT								1		
50	RM-4	SR-49	EXISTING SOUTH CROSSWALK MARKINGS											220	
50	RM-5	OLIVE RD	18+34	18+40	RT									50	
50	RM-6	OLIVE RD	19+48	19+80	LT									95	
50	ST-1	OLIVE RD	18+34		RT				26						
50	ST-2	OLIVE RD	19+80		LT				23						
50	X-1	OLIVE RD	WEST CROSSWALK MARKINGS							50					
50	X-2	OLIVE RD	EAST CROSSWALK MARKINGS							50					
50	X-3	SR-49	SOUTH CROSSWALK MARKINGS							100					
50	X-4	SR-49	NORTH CROSSWALK MARKINGS							90					
TOTALS CARRIED TO GENERAL SUMMARY						0.07	0.04	350	49	290	155	115	5	460	2

DESIGN AGENCY
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DESIGNER: GSH
REVIEWER: JWB 07/01/25
PROJECT ID: 117202

SIGNAL SUBSUMMARY

ITEM	QUAN.	UNIT	DESCRIPTION
625	2	EACH	CONNECTION, FUSED PULL APART
625	2	EACH	CONNECTION, UNFUSED PULL APART
625	2	EACH	BRACKET ARM, 20'
625	1320	FT	NO. 10 AWG 600 VOLT DISTRIBUTION CABLE
625	360	FT	NO. 10 AWG POLE AND BRACKET CABLE
625	780	FT	CONDUIT, 2", 725.051
625	49	FT	CONDUIT, JACKED OR DRILLED, 725.04, 4"
625	2	EACH	LUMINAIRE, CONVENTIONAL, SOLID STATE (LED)
625	780	FT	TRENCH
625	2	EACH	PULL BOX, 725.08, 18"
625	7	EACH	PULL BOX REMOVED
625	11	EACH	GROUND ROD
625	780	FT	UNDERGROUND WARNING/MARKING TAPE
630	13	EACH	SIGN HANGER ASSEMBLY, SPAN WIRE
630	4	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN
630	92.5	SF	SIGN, FLAT SHEET
630	4	EACH	SIGN, DOUBLE FACED, STREET NAME
631	2	EACH	SIGN LIGHTING MISC.: WARNING SIGN FLASHER ASSEMBLY, AS PER PLAN
632	10	EACH	VEHICULAR SIGNAL HEAD, (LED), 3-SECTION, 12" LENS, 1-WAY, POLYCARBONATE
632	4	EACH	VEHICULAR SIGNAL HEAD, (LED), 4-SECTION, 12" LENS, 1-WAY, POLYCARBONATE
632	1	EACH	VEHICULAR SIGNAL HEAD, (LED), 5-SECTION, 12" LENS, 1-WAY, POLYCARBONATE
632	8	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN
632	8	EACH	ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	14	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	8	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD
632	410	FT	MESSENGER WIRE, 7 STRAND, 3/8" DIAMETER WITH ACCESSORIES
632	200	FT	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	3200	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	2120	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	3	EACH	STRAIN POLE FOUNDATION
632	8	EACH	PEDESTAL FOUNDATION
632	60	FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632	1	EACH	STRAIN POLE, TYPE TC-81.11, DESIGN 10
632	1	EACH	COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 10
632	1	EACH	COMBINATION STRAIN POLE, TYPE TC-81.11, DESIGN 12
632	1	EACH	PEDESTAL, 5', TRANSFORMER BASE
632	5	EACH	PEDESTAL, 10', TRANSFORMER BASE
632	2	EACH	PEDESTAL, 15', TRANSFORMER BASE
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
632	1	EACH	REUSE OF TRAFFIC CONTROL ITEM: PULL BOX
632	1	EACH	REUSE OF STRAIN POLE
633	1	EACH	CABINET, TYPE TS-2, AS PER PLAN
809	2	EACH	ADVANCE RADAR DETECTION, AS PER PLAN
809	4	EACH	STOP LINE RADAR DETECTION, AS PER PLAN
809	1	EACH	ATC CONTROLLER, AS PER PLAN
809	1	EACH	EMERGENCY VEHICLE PREEMPTION
809	1	EACH	PREEMPT RECEIVING UNIT
809	700	FT	PREEMPT DETECTOR CABLE
809	1	EACH	PREEMPT PHASE SELECTOR
809	1	EACH	PREEMPT CONFIRMATION LIGHT

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:49 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_GS104.dgn

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCOMB VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
GSH

REVIEWER
JWB 07/01/25

PROJECT ID
117202

PROJECT DESCRIPTION

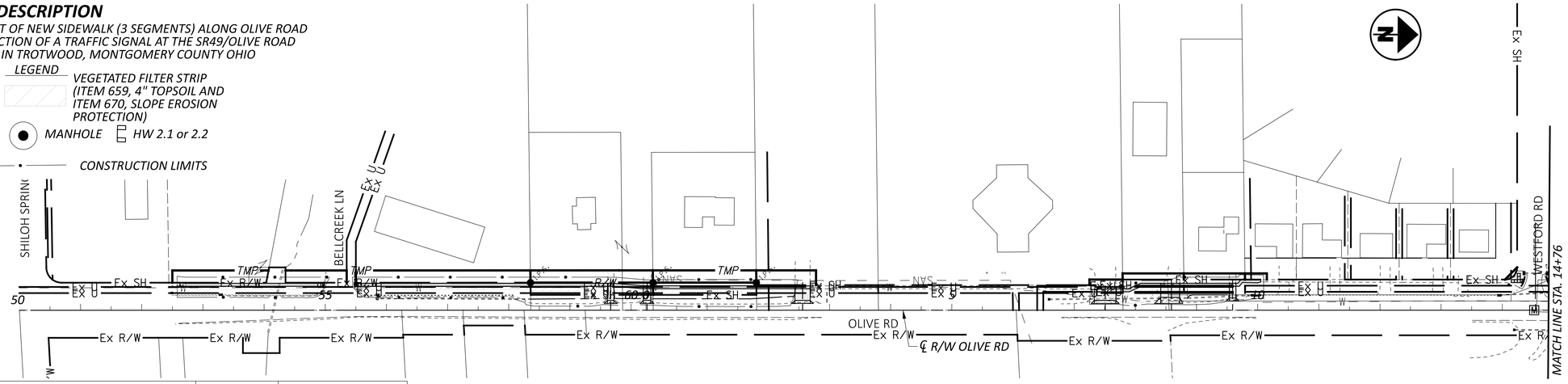
ADD 1,500 FEET OF NEW SIDEWALK (3 SEGMENTS) ALONG OLIVE ROAD & RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE SR49/OLIVE ROAD INTERSECTION IN TROTWOOD, MONTGOMERY COUNTY OHIO

LEGEND

VEGETATED FILTER STRIP (ITEM 659, 4" TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION)

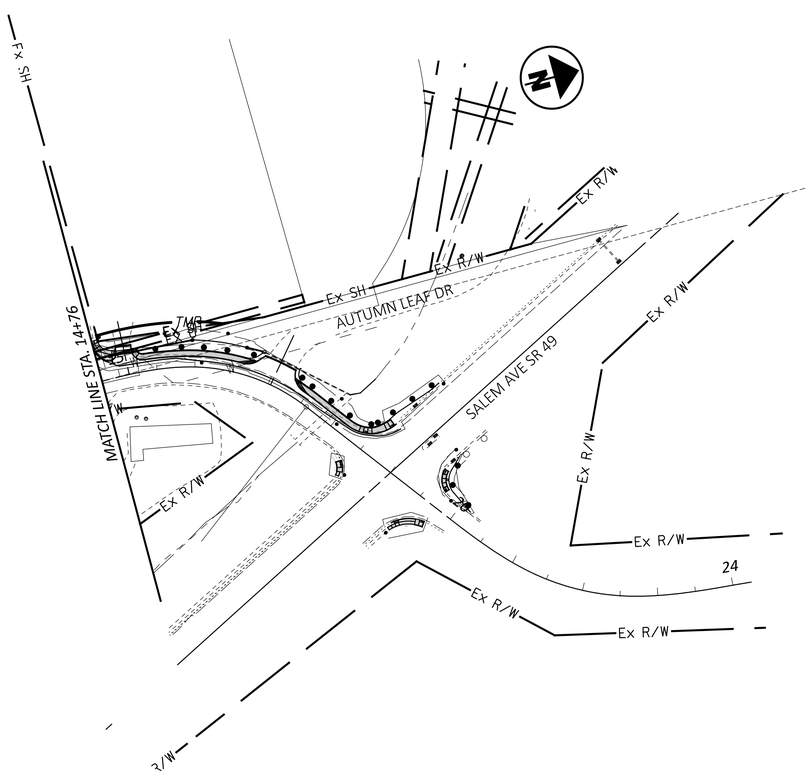
MANHOLE *HW 2.1 or 2.2*

CONSTRUCTION LIMITS



BMP TYPE	STATION		BMP WIDTH	EDA TREATMENT
	BEGIN	END	(FEET)	CREDIT (ACRES)
VFS 1	52+61	54+92	5	0.0530
VFS 2	55+54	58+38	5	0.0652
VFS 3	58+38	59+56	19	0.0650
VFS 4	00+12	02+36	14.9	0.1023
VFS 5	07+69	08+28	20.6	0.0467
	TOTAL AREA WITH ODOT R/W TREATED (ACRES)			0.3322
	TREATMENT REQUIREMENTS (ACRES)			0.3300

TOTAL AREA (RIGHT OF WAY)			
PROJECT EARTH DISTURBED AREA	1.3 ACRES	RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.4 - 0.6
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	0.125 ACRES	RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE	0.4 - 0.6
NOTICE OF INTENT EARTH DISTURBED AREA	1.425 ACRES	POST CONSTRUCTION BMP: VEGETATED FILTER STRIPS (VFS) WERE PROVIDED TO MEET NPDES POST-CONSTRUCTION REQUIREMENTS. SEE PLAN AND PROFILE SHEETS FOR LOCATION.	
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE	0.36 ACRES		
IMPERVIOUS (PAVED) AREA FOR POST-CONSTRUCTION SITE	0.42 ACRES	IMMEDIATE RECEIVING WATERS	UNNAMED TRIBUTARY TO COON CREEK
TOTAL AREA (RIGHT OF WAY)	0.93 ACRES	SUBSEQUENT RECEIVING WATERS	



FACILITY CONTACT PERSON: JOHNNY MCCLUSKEY

PROJECT SITE BMP PLAN

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WINTON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)767-1233
www.cmtengr.com

DESIGNER: LDW
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.13 TOTAL: 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_DE101 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:50 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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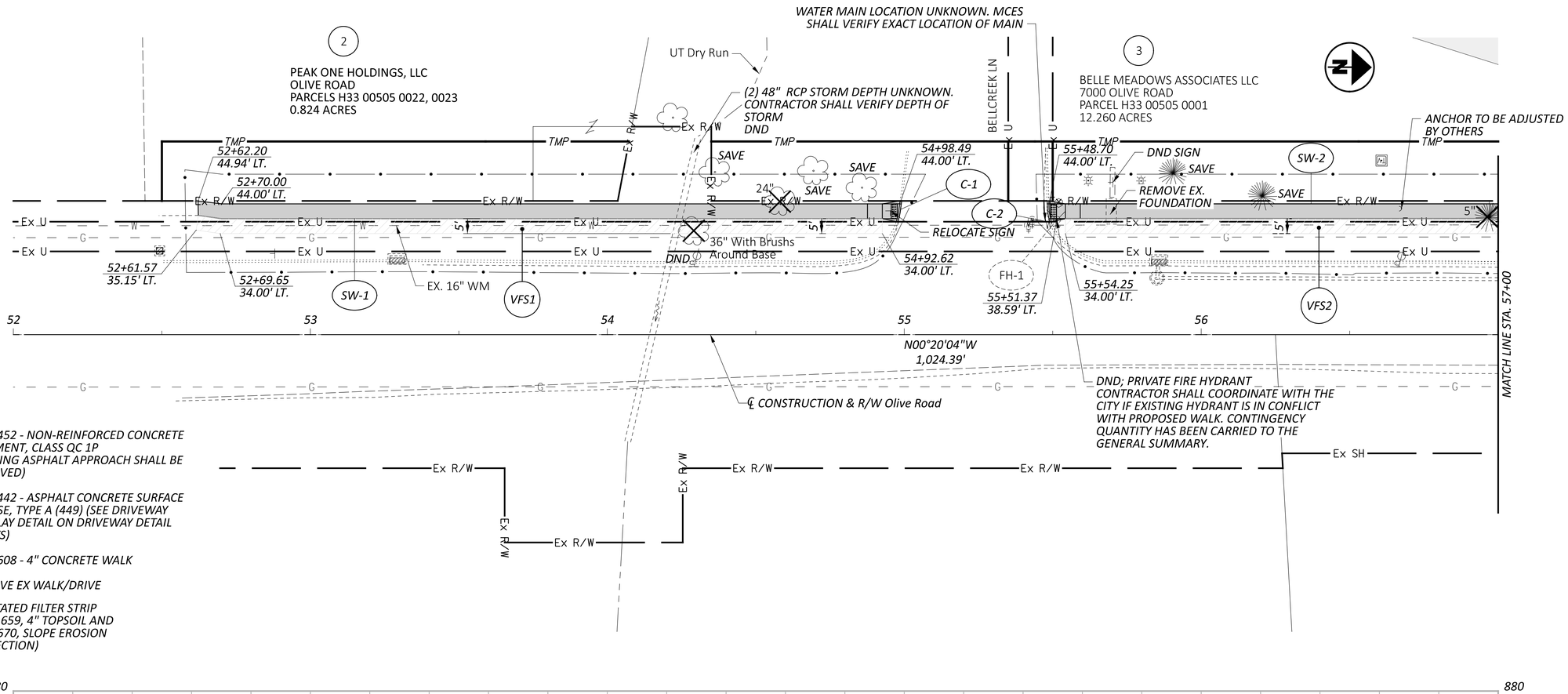


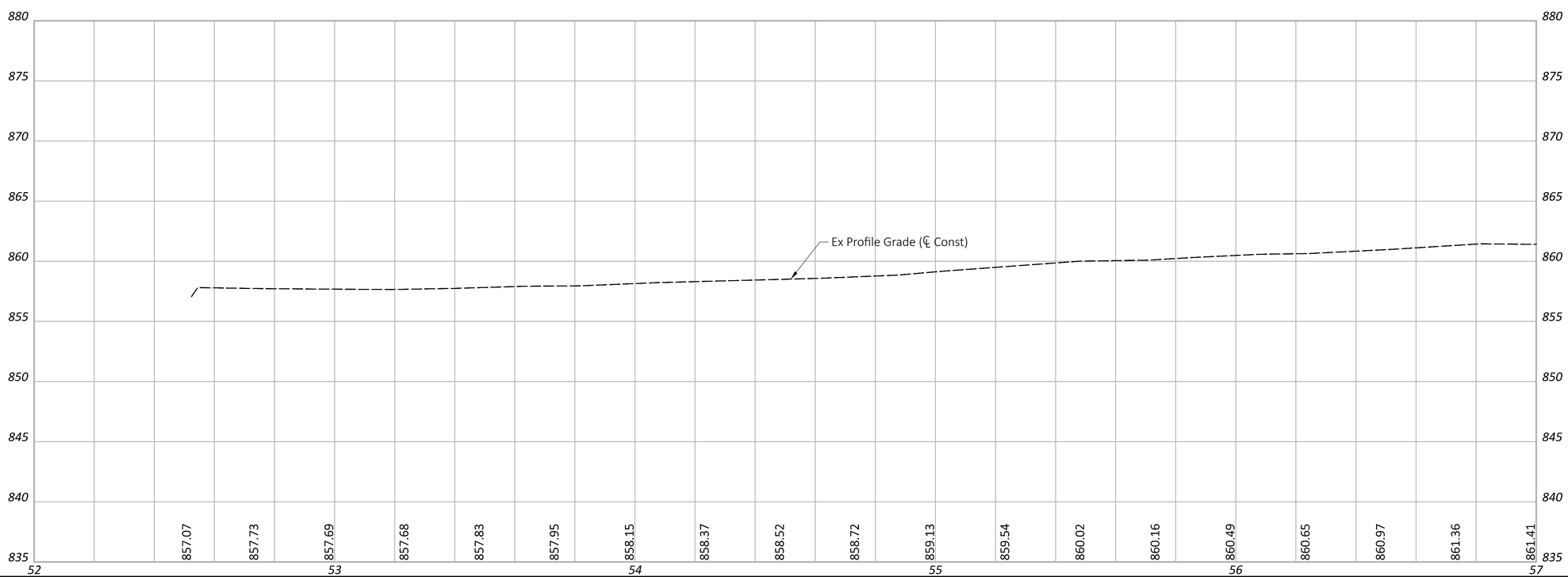
ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P (EXISTING ASPHALT APPROACH SHALL BE REMOVED)

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, TYPE A (449) (SEE DRIVEWAY OVERLAY DETAIL ON DRIVEWAY DETAIL SHEETS)

ITEM 608 - 4" CONCRETE WALK

REMOVE EX WALK/DRIVE

VEGETATED FILTER STRIP (ITEM 659, 4" TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION)



MOT TROTWOOD OLIVE RD WALKS SA22

PLAN AND PROFILE
STA. 52+00 TO STA. 57+00

MODEL: 117202_GP101 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:33:58 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_GP101.dgn

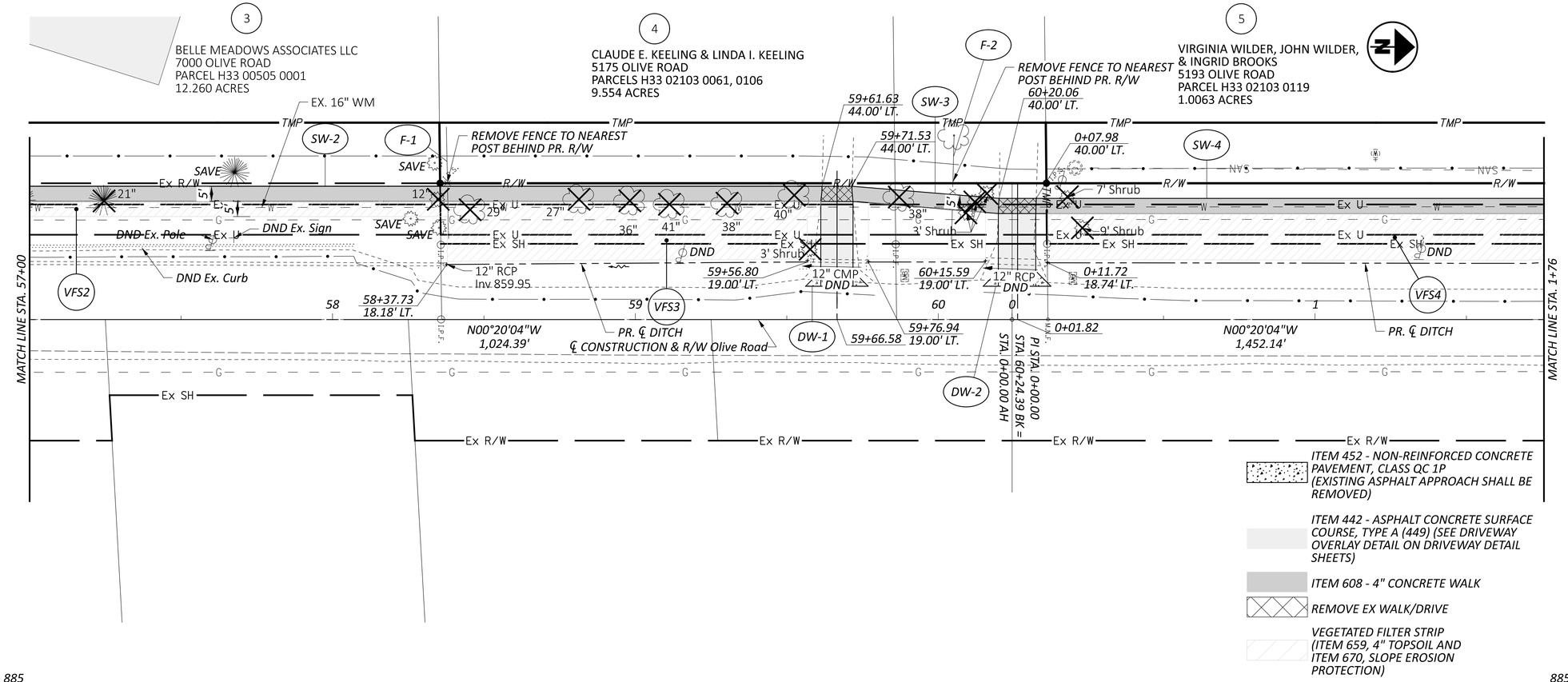
DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAKS DR.
SUITE 270
DUBLIN, OHIO 43016
PH (937)767-2193
www.cmtengr.com

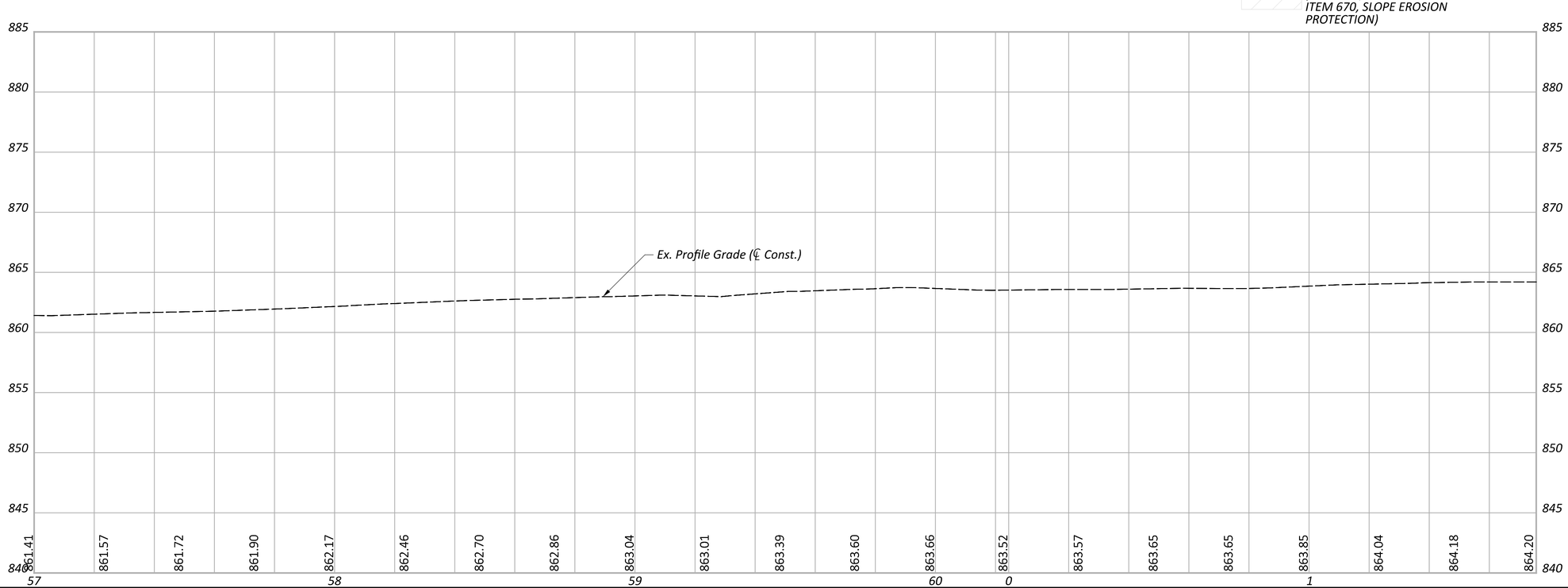
DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.14 TOTAL 59





HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE
STA. 57+00 TO STA. 1+76.00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUFFMAN WHITTON VILLAGE DR
SUITE 270
DUBLIN, OHIO 43459
PH (937)701-2193
www.cmtengr.com

DESIGNER: LDW
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.15 TOTAL: 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_GP102 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:00 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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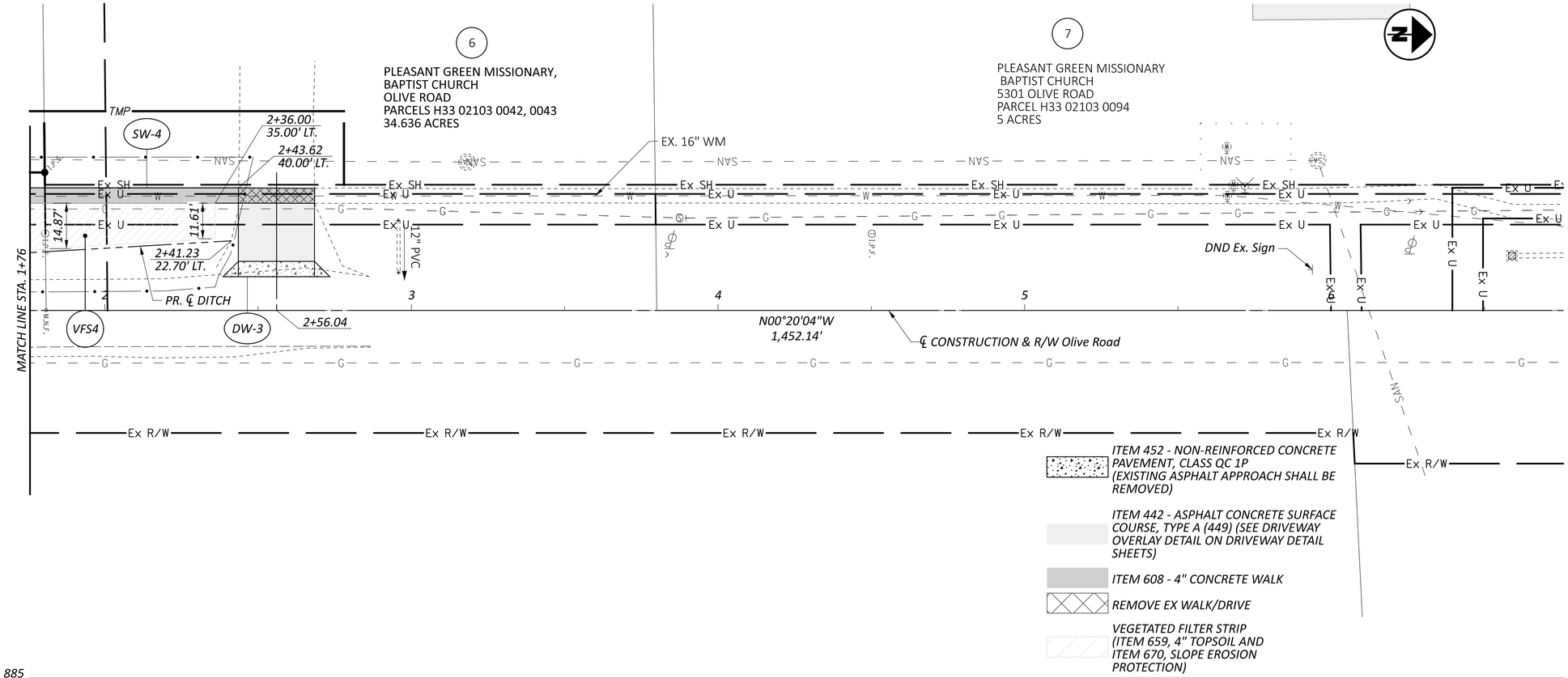

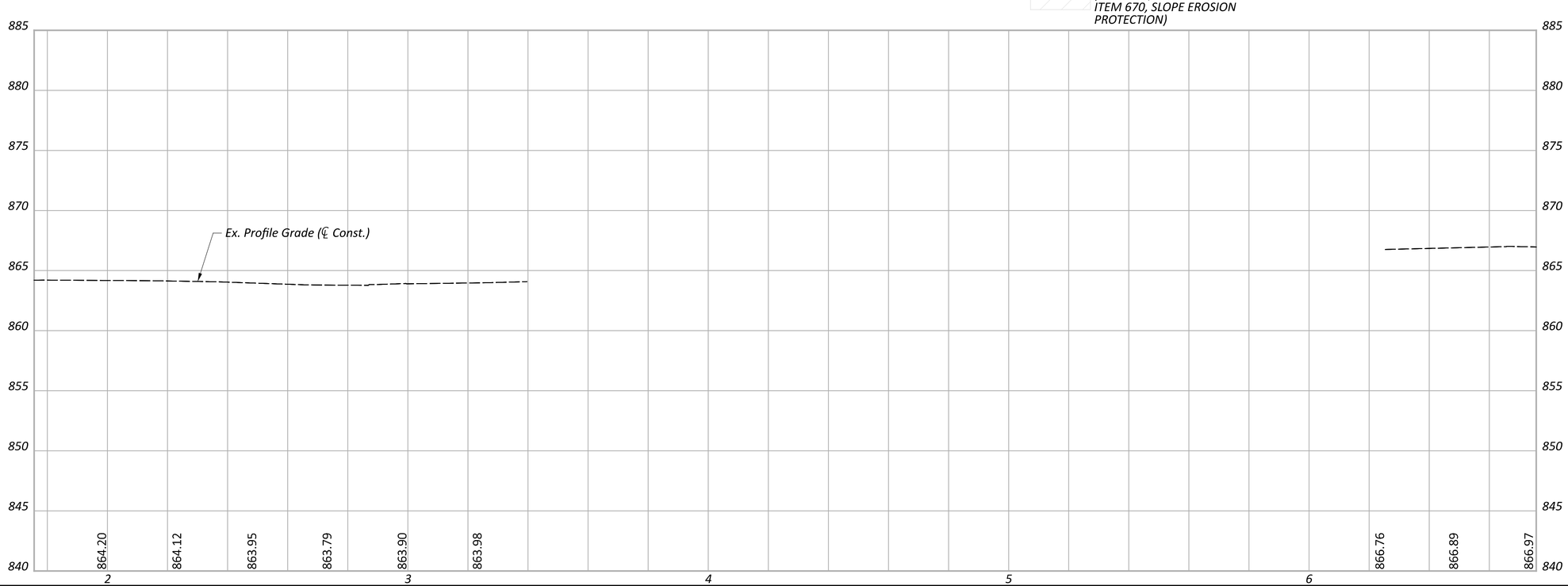

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE
STA. 1+76.00 TO STA. 6+76.00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR.
SUITE 270
LIVONIA, OHIO 45459
PH (937)767-2193
www.cmtengi.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.16 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_GP103 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:01 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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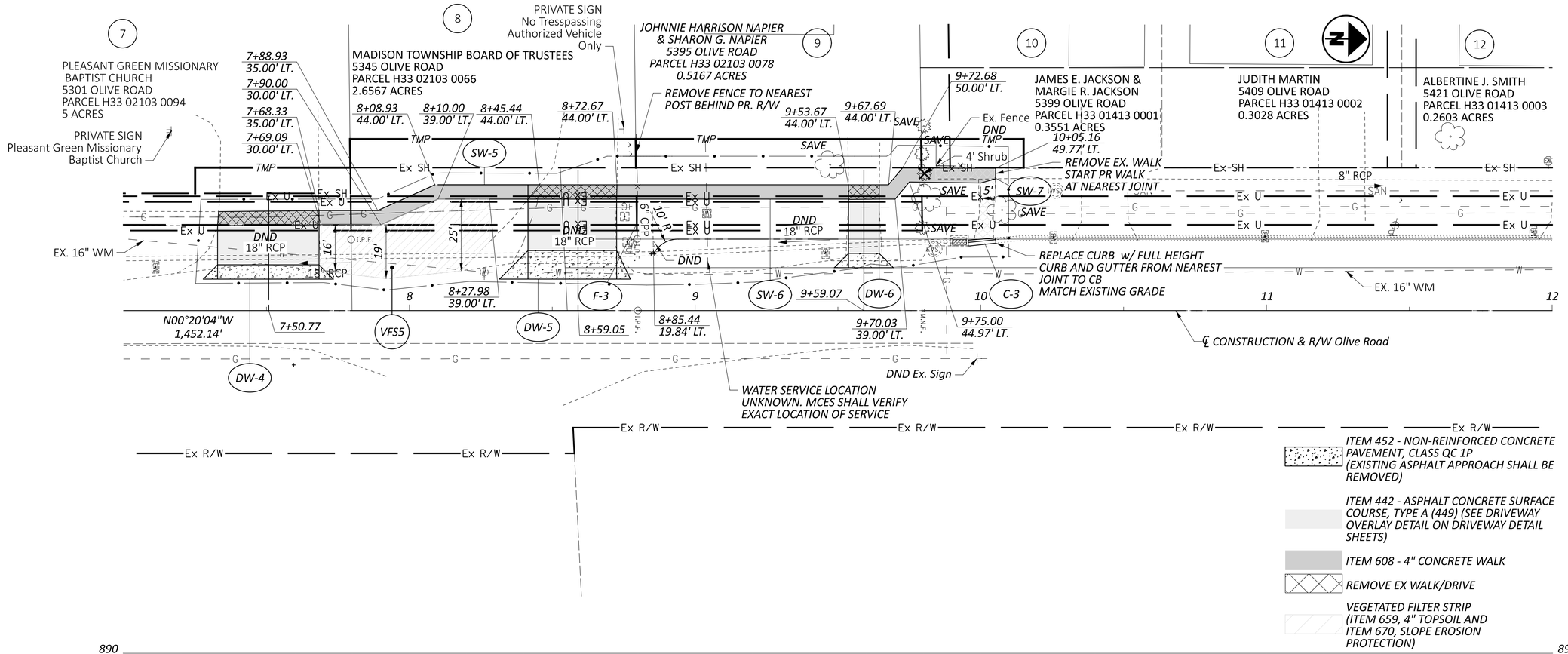

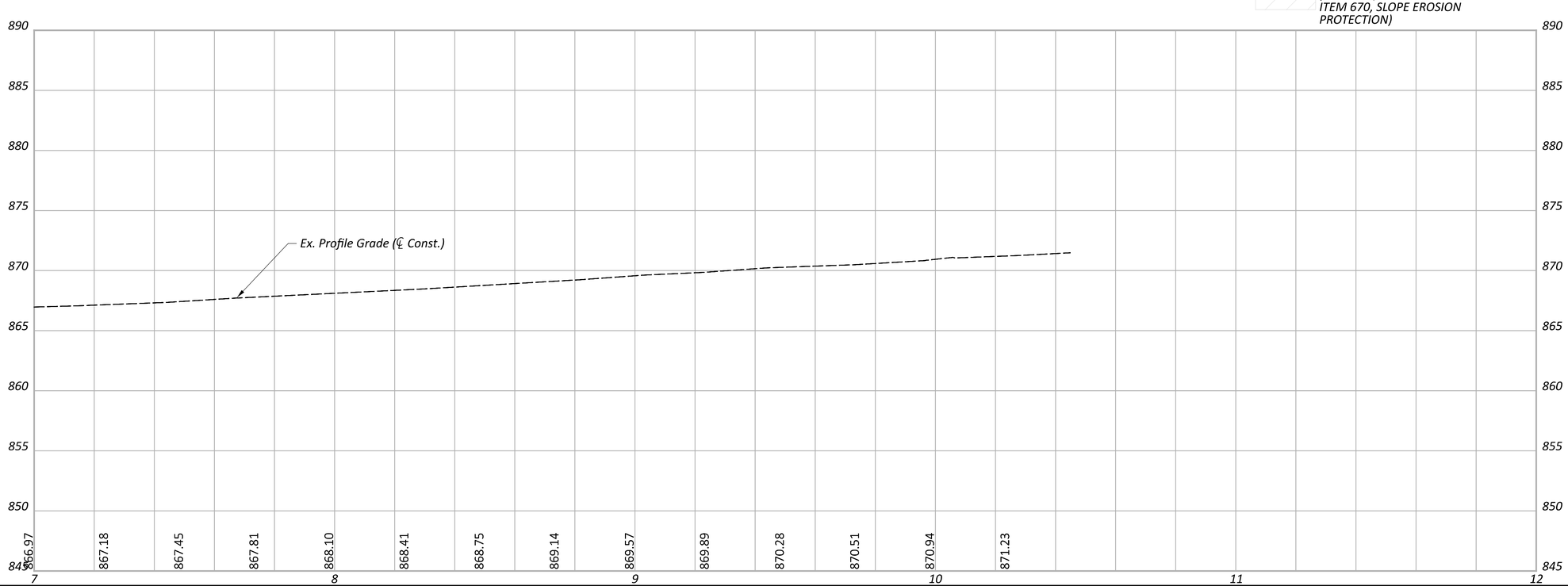

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE
STA. 7+00 TO STA. 12+00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER BELOIT ROAD
SUITE 270
DUBLIN, OHIO 43459
PH (937)767-2193
www.cmtengr.com

DESIGNER: LDW
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.17 TOTAL: 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_GP104 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:03 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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MODEL: 117202_GP105 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:05 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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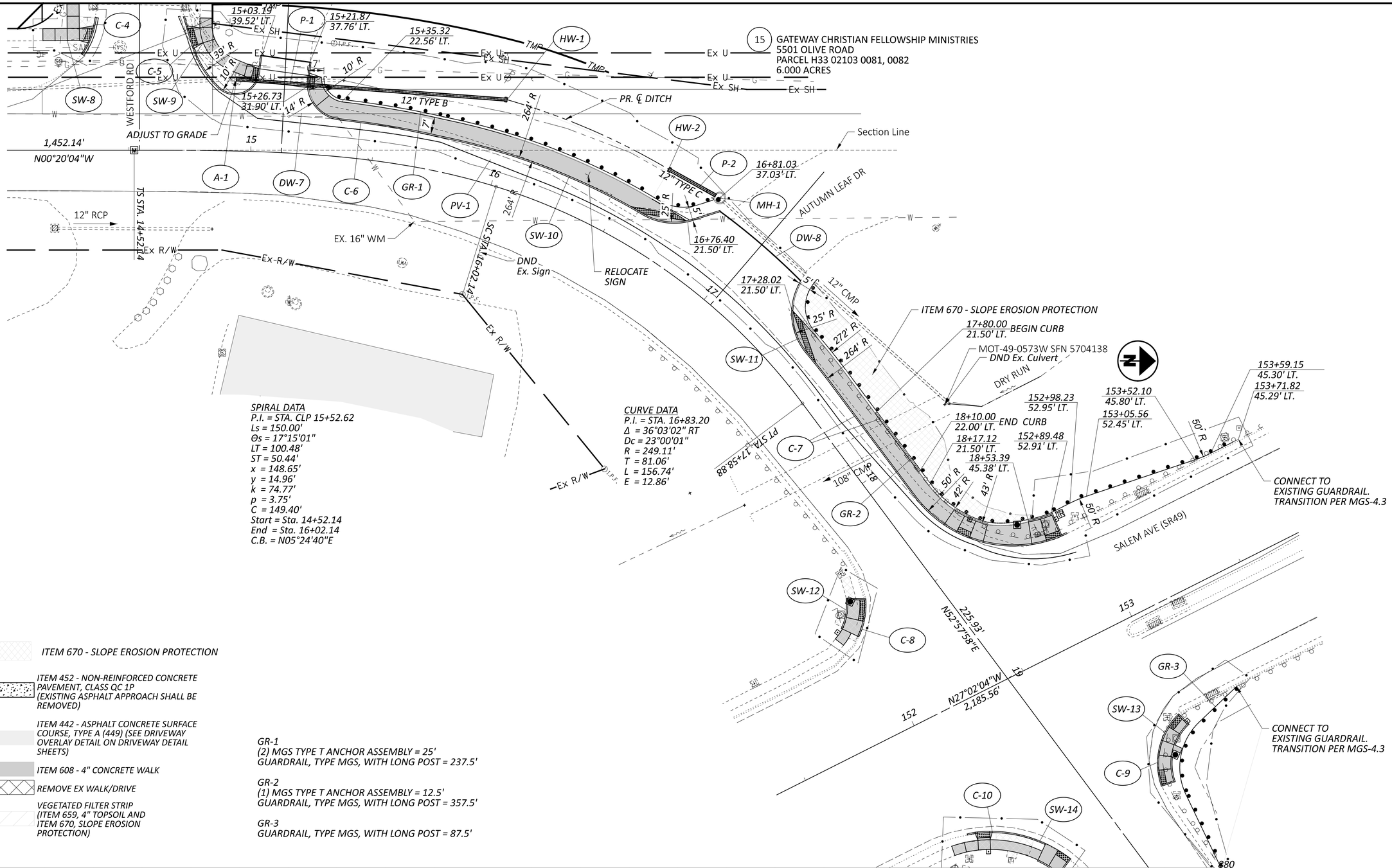

PLAN AND PROFILE
STA. 14+00 TO STA. 18+75

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR
SUITE 270
DUBLIN, OHIO 43016
PH (937)791-2139
www.cmtengr.com

DESIGNER	LDW
REVIEWER	JWB 07/01/25
PROJECT ID	117202
SHEET	P.18
TOTAL	59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 52+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:13 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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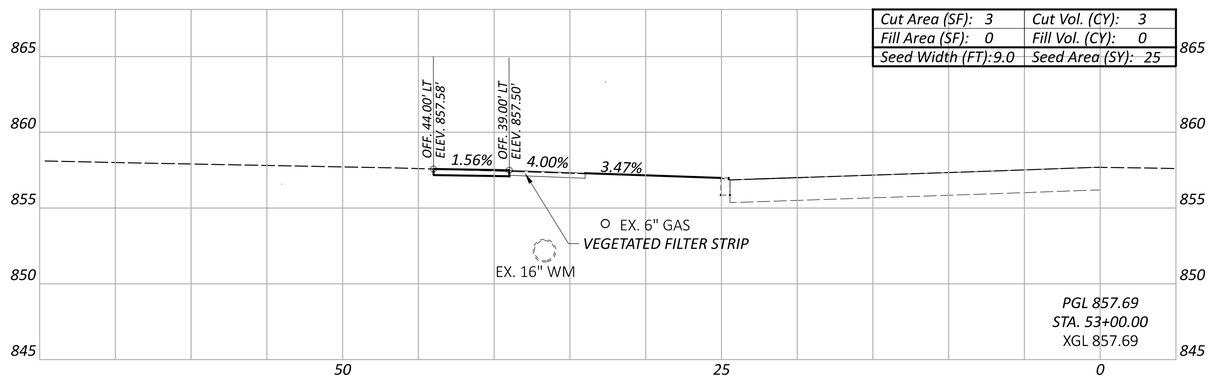

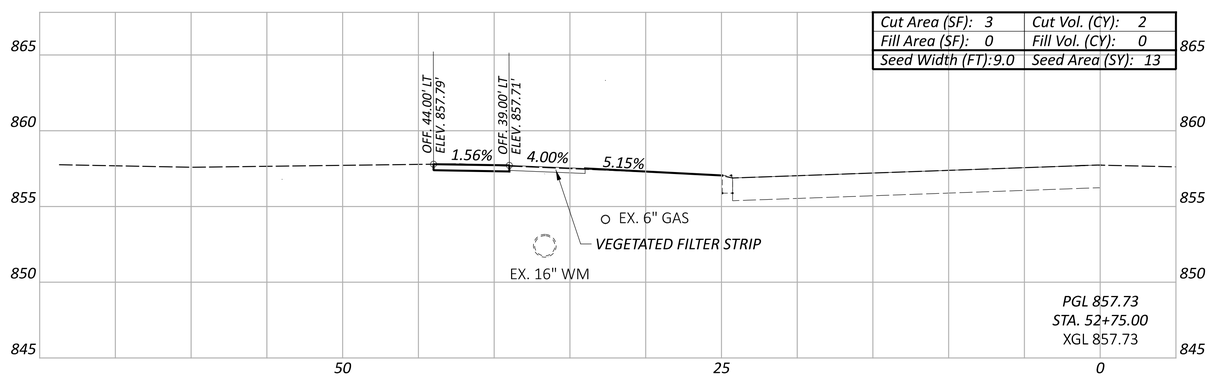

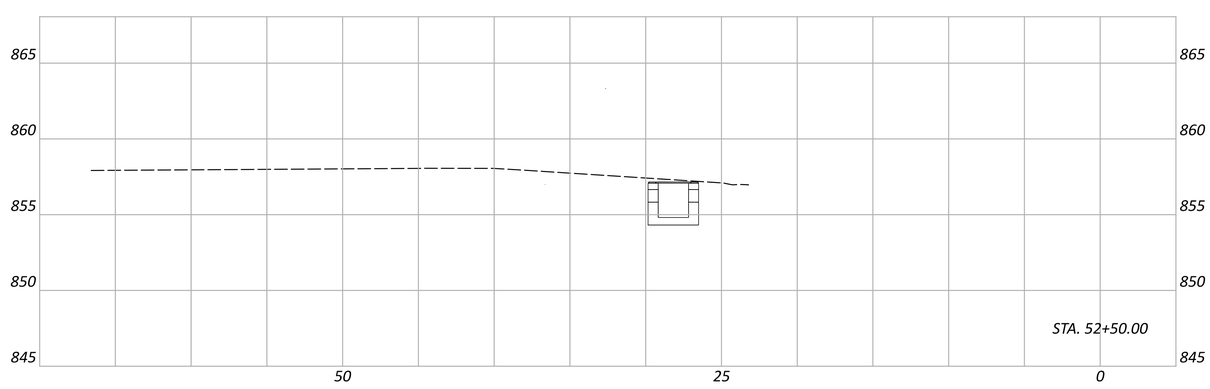

Sheet Totals		
Seeding	Cut	Fill
37.5	5	0

CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 WARREN ROAD
SUITE 270
LAKEWOOD, OHIO 44107
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.19 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 53+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:19 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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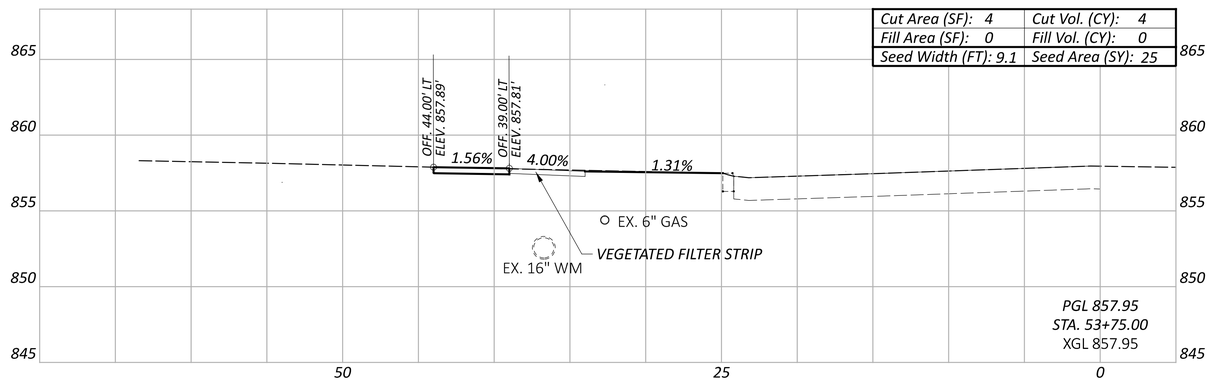

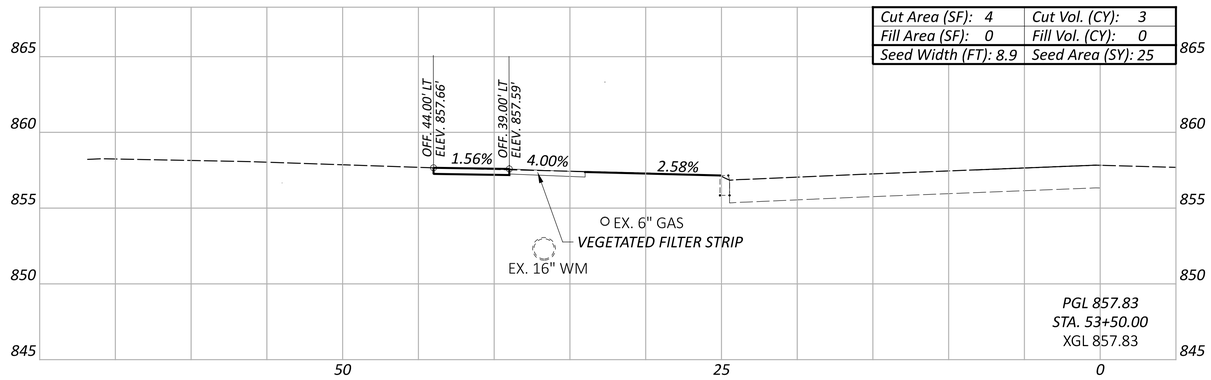

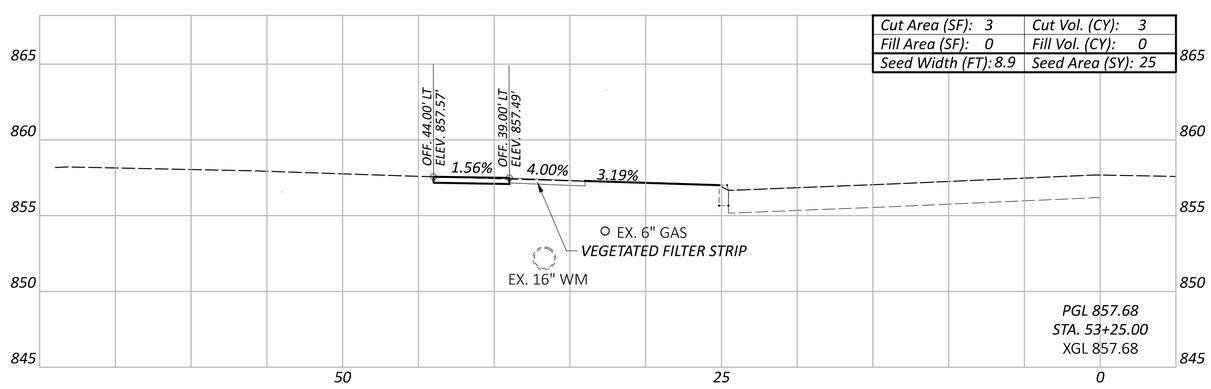

Sheet Totals		
Seeding	Cut	Fill
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CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WORTHINGTON VILLAGE DR
SUITE 270
DUBLIN, OHIO 43017
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.20 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 54+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:21 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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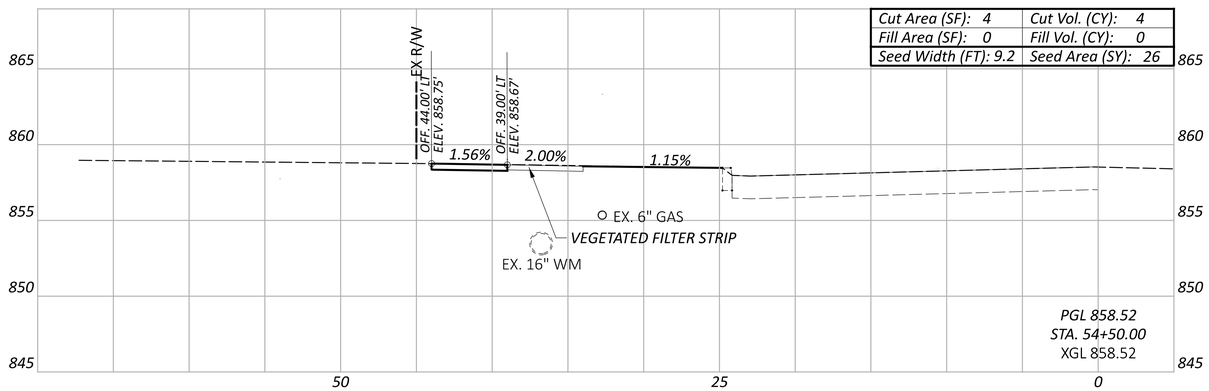

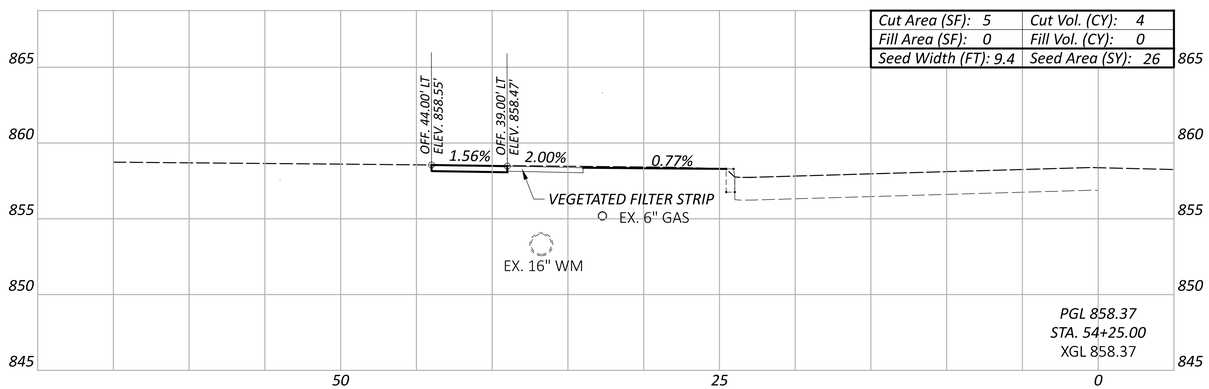

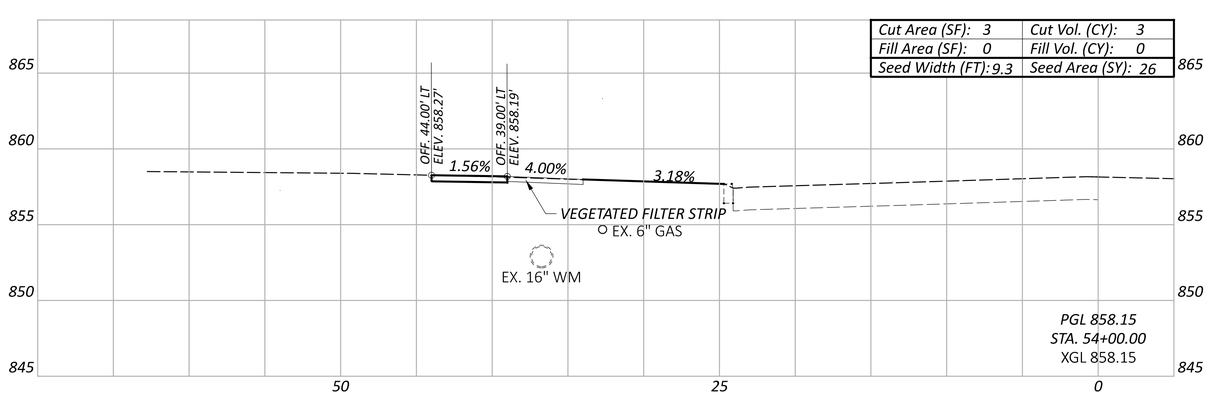

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
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DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUTCHINSON VILLAGE DR.
SUITE 270
DUBLIN, OHIO 43459
PH (937)701-2393
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.21 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 54+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:24 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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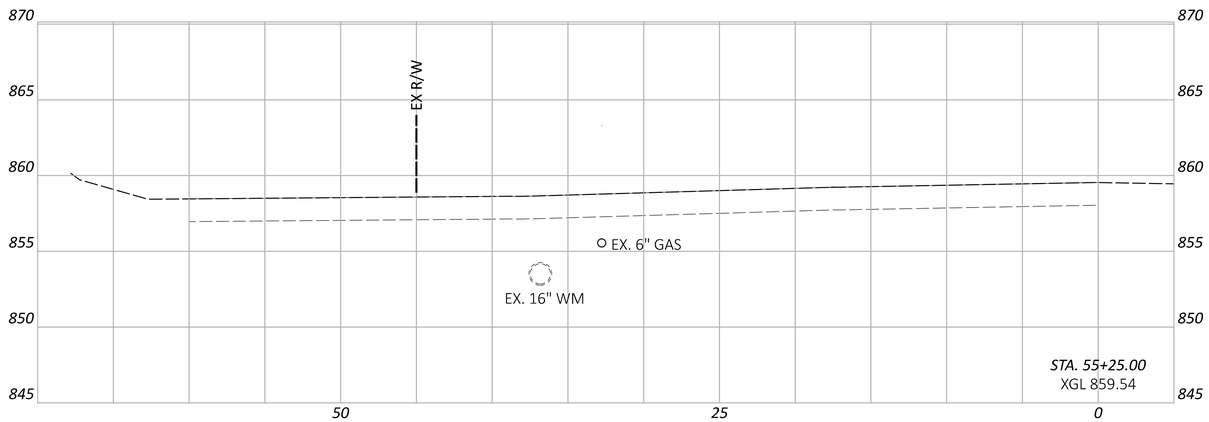
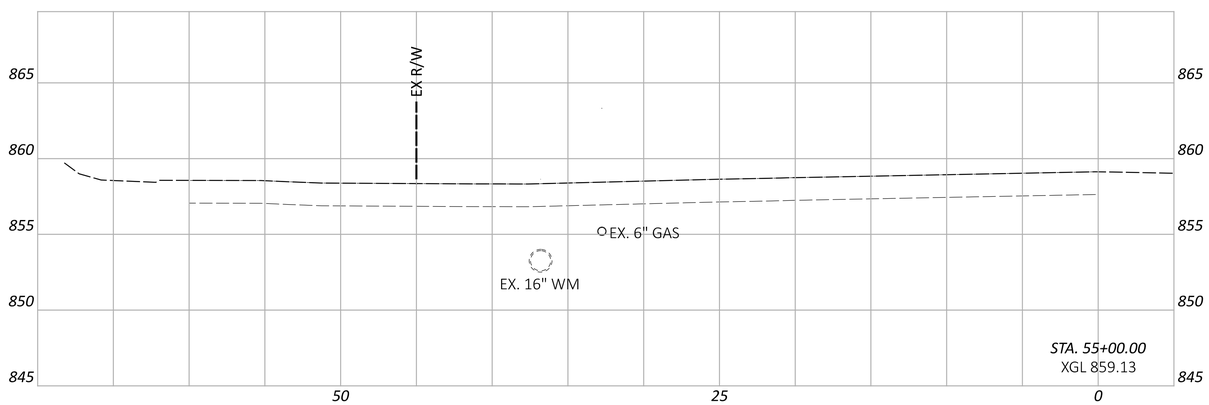
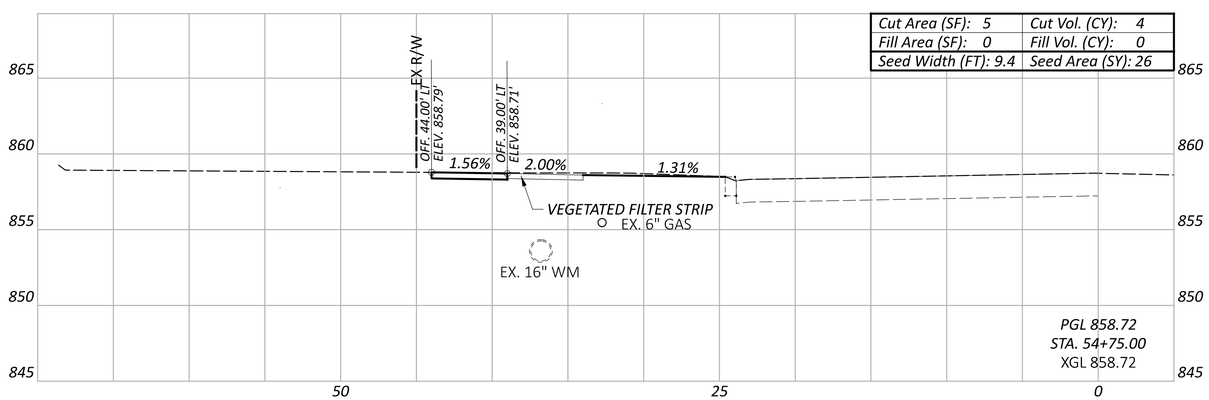




Cut Area (SF): 5	Cut Vol. (CY): 4
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 9.4	Seed Area (SY): 26



Sheet Totals		
Seeding	Cut	Fill
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CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
10200 ALLEN CENTER VILLAGE DR
SUITE 270
DAYTON, OHIO 45458
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

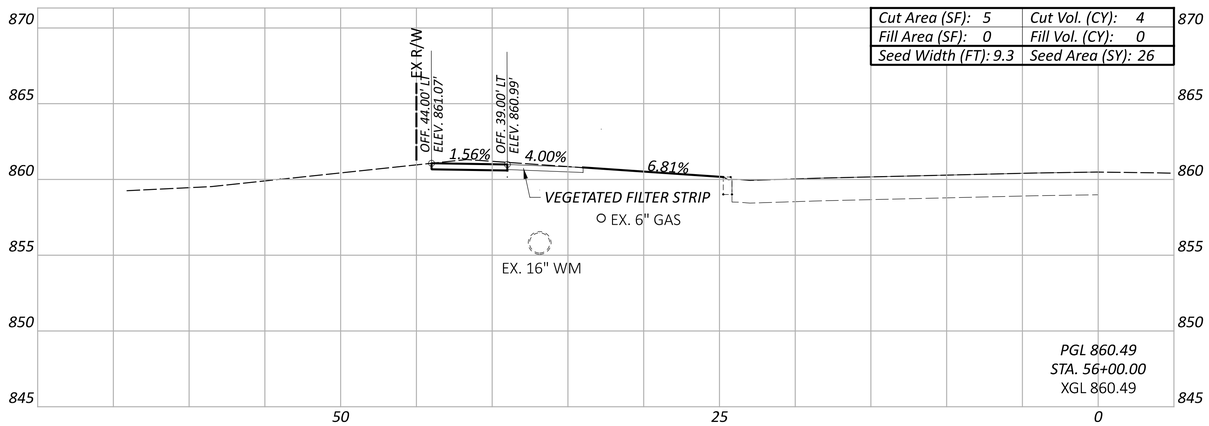
REVIEWER
JWB 07/01/25

PROJECT ID
117202

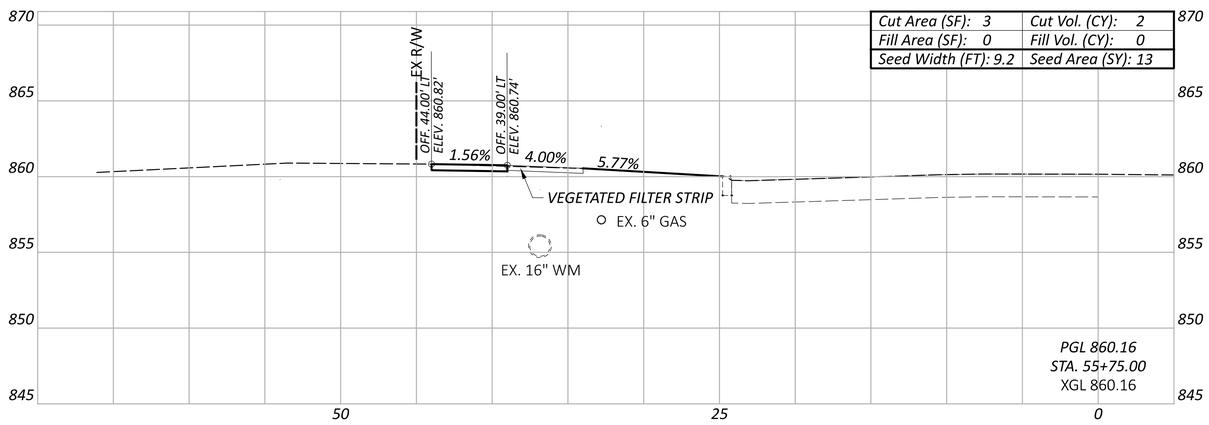
SHEET P.22 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

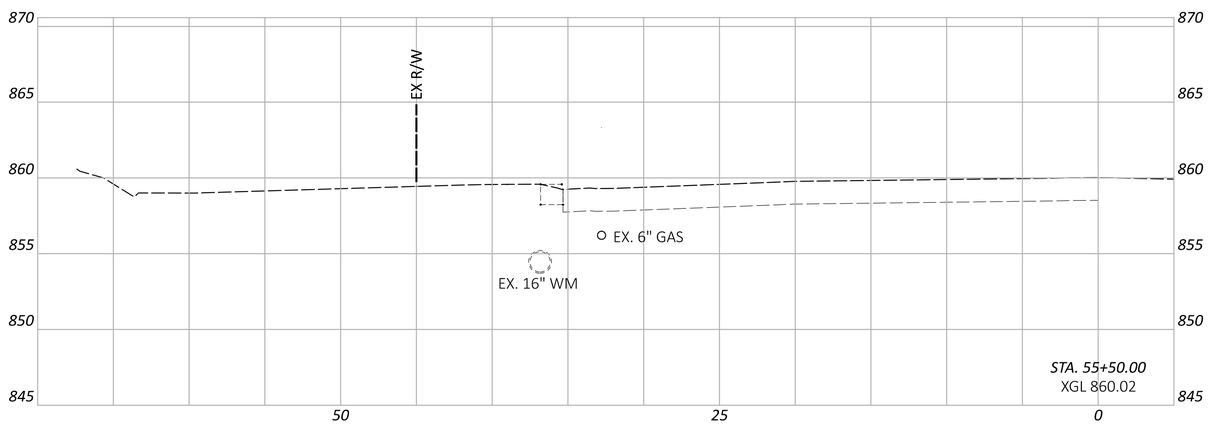
MODEL: Alignment - OliveRoad - 55+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:27 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn



Cut Area (SF): 5	Cut Vol. (CY): 4
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 9.3	Seed Area (SY): 26



Cut Area (SF): 3	Cut Vol. (CY): 2
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 9.2	Seed Area (SY): 13



CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
39	6	0

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCOMB VILLAGE DR
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DUBLIN, OHIO 43016
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DESIGNER
LDW

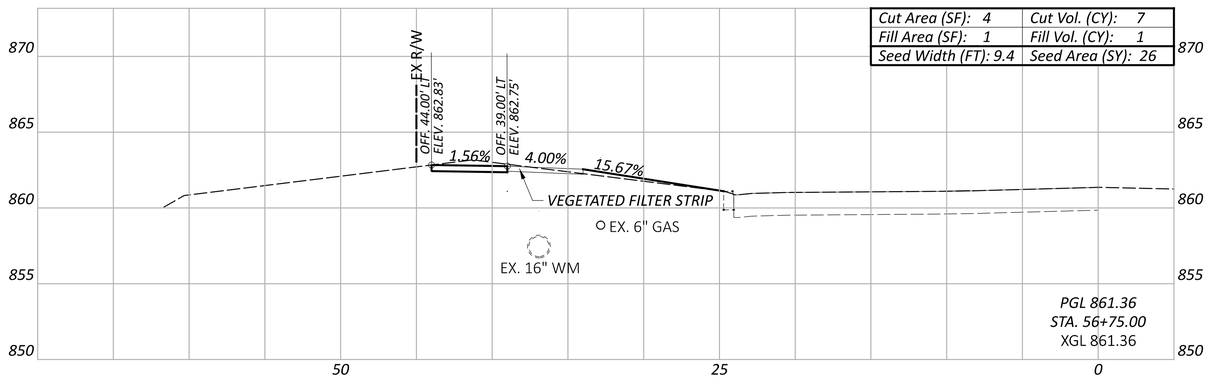
REVIEWER
JWB 07/01/25

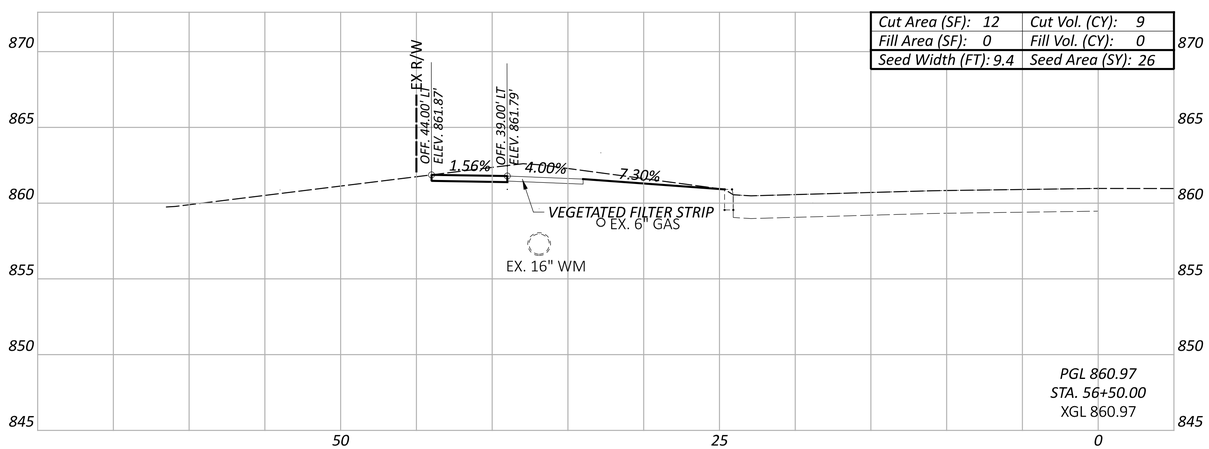
PROJECT ID
117202

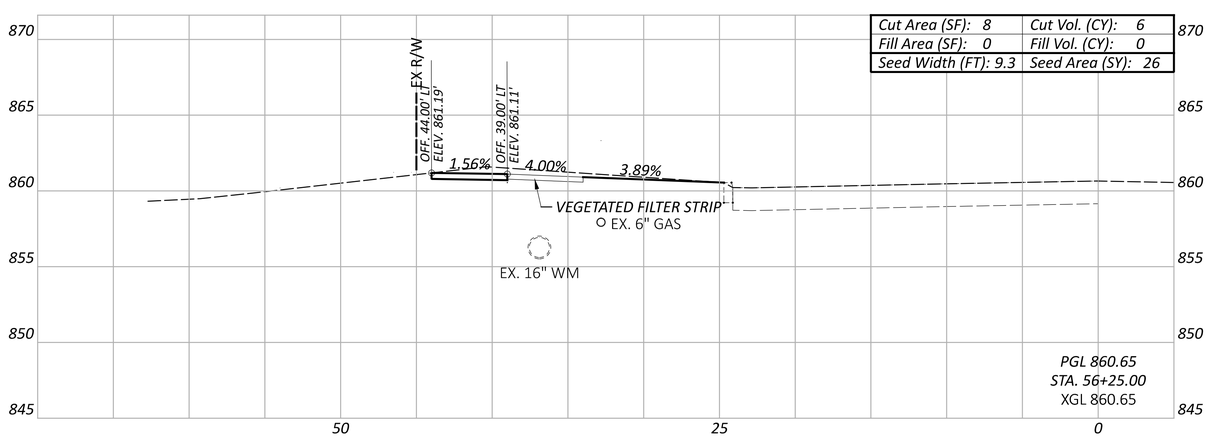
SHEET P.23 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 56+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:30 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
78	22	1

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCRETON VILLAGE DR
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DESIGNER
LDW

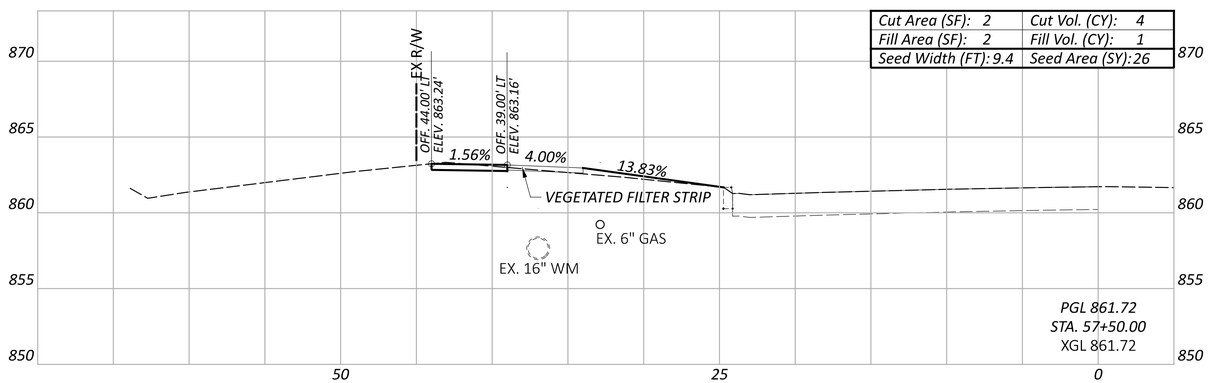
REVIEWER
JWB 07/01/25

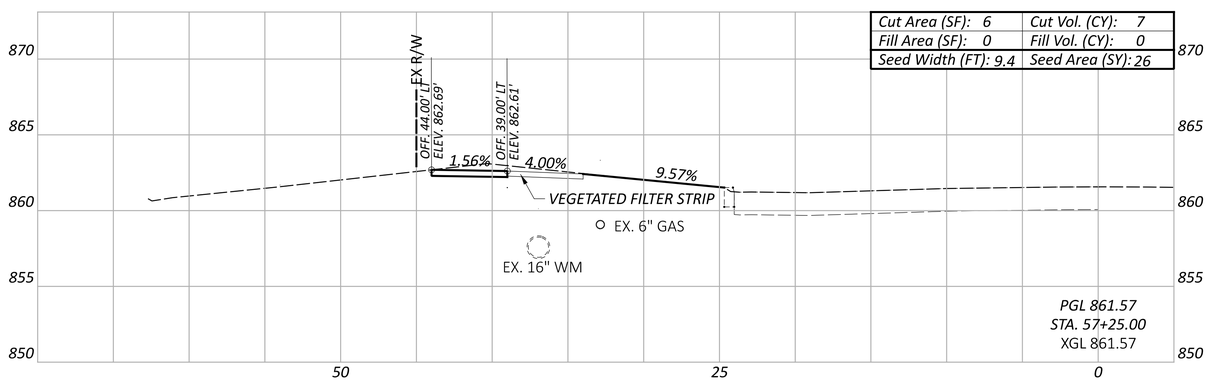
PROJECT ID
117202

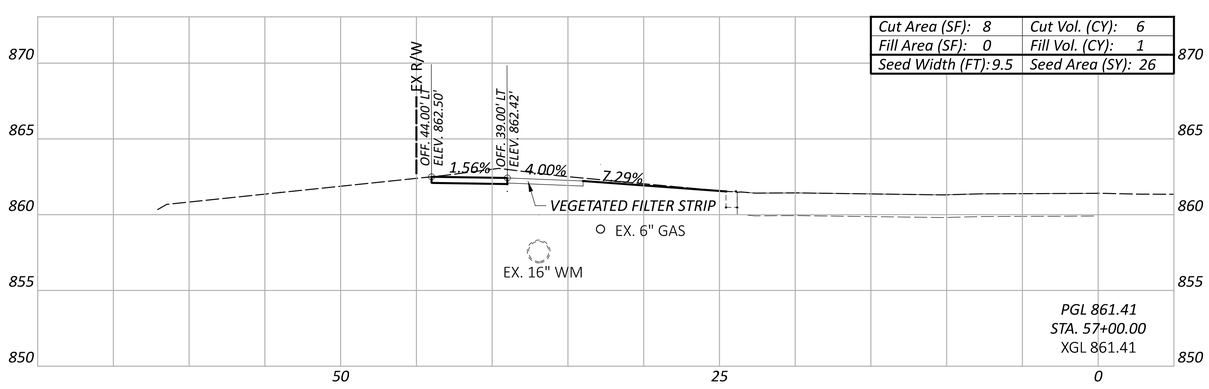
SHEET P.24 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 57+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:33 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
78	17	2

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 WARREN ROAD
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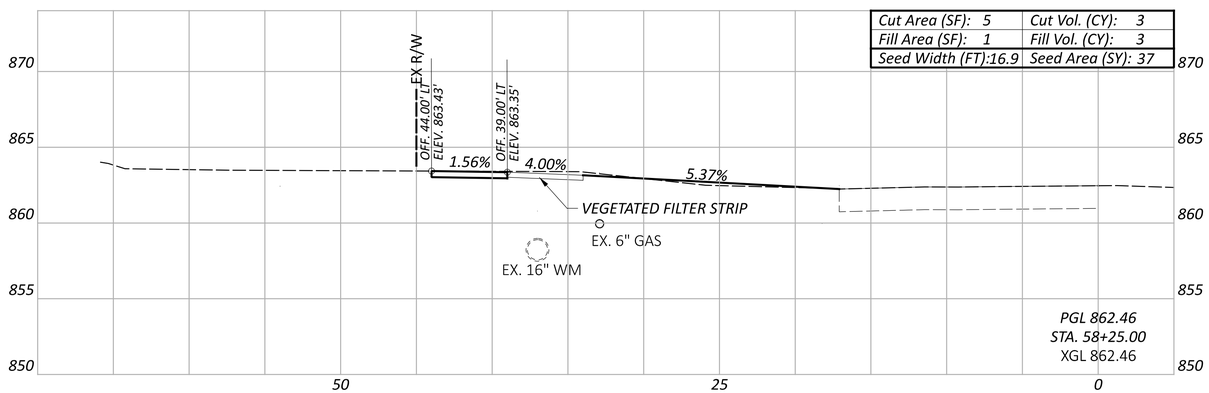
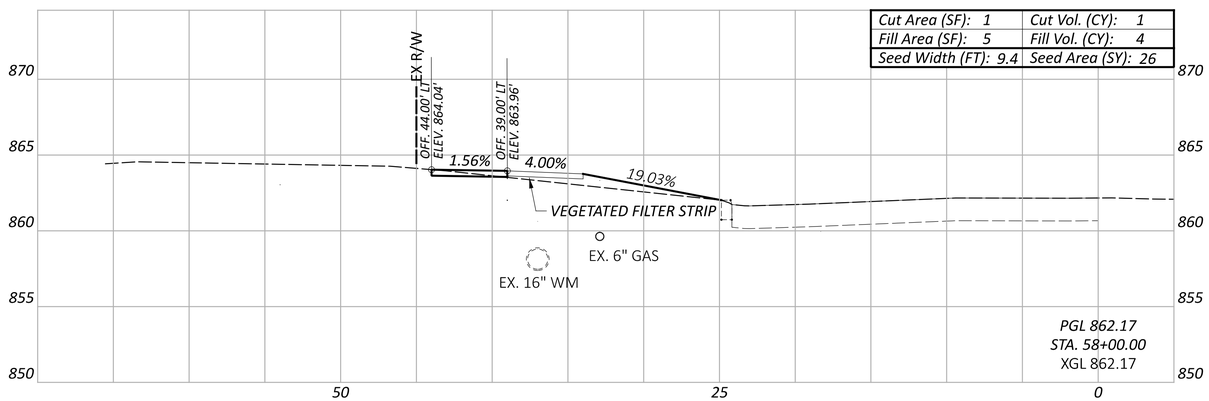
117202

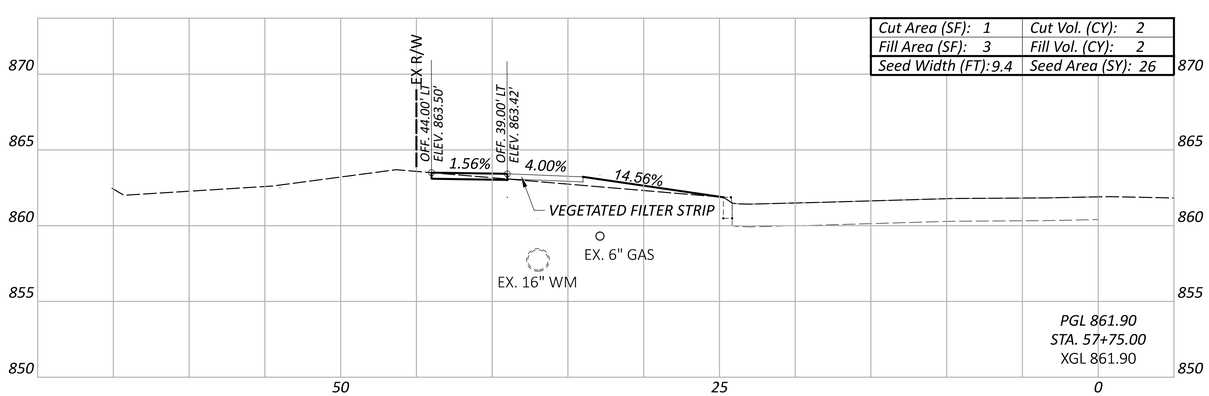
SHEET P.25 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 57+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:35 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
89	6	9

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7775 WALTON PARKWAY
SUITE 270
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REVIEWER
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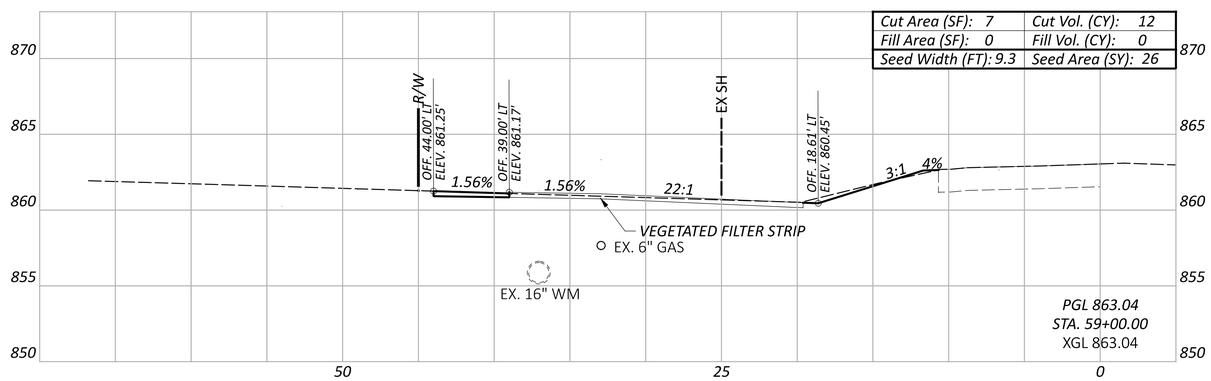
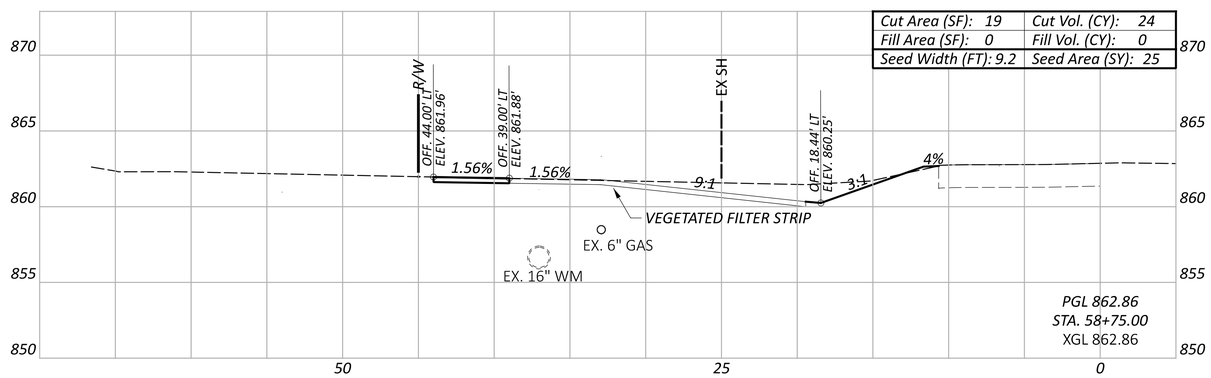
PROJECT ID
117202

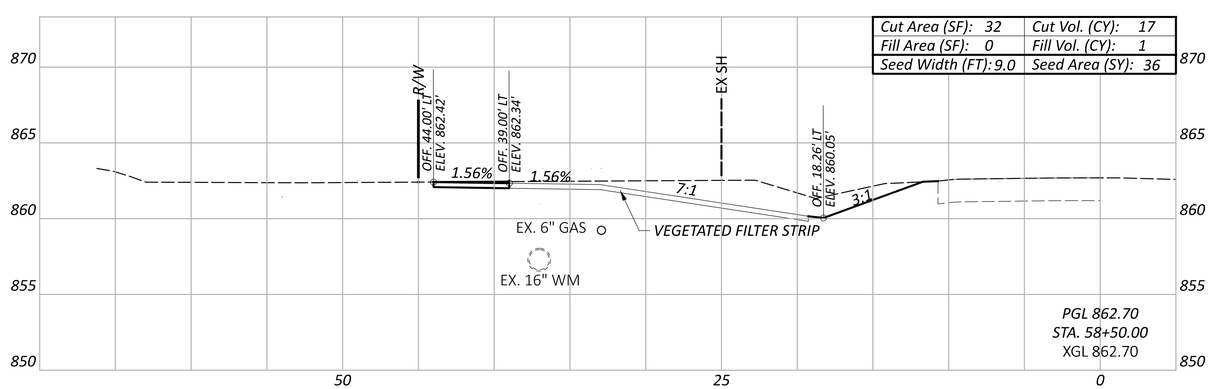
SHEET P.26 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 58+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:38 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







Sheet Totals		
Seeding	Cut	Fill
37	53	1

CROSS SECTIONS

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CRAWFORD, MURPHY & TILLY, INC.
7777 HUFF ROAD
SUITE 270
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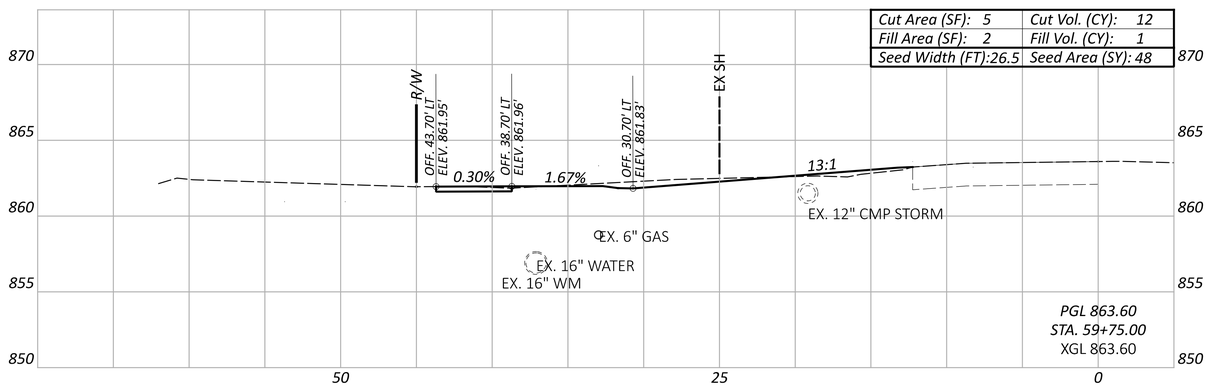
117202

SHEET P.27 TOTAL 59

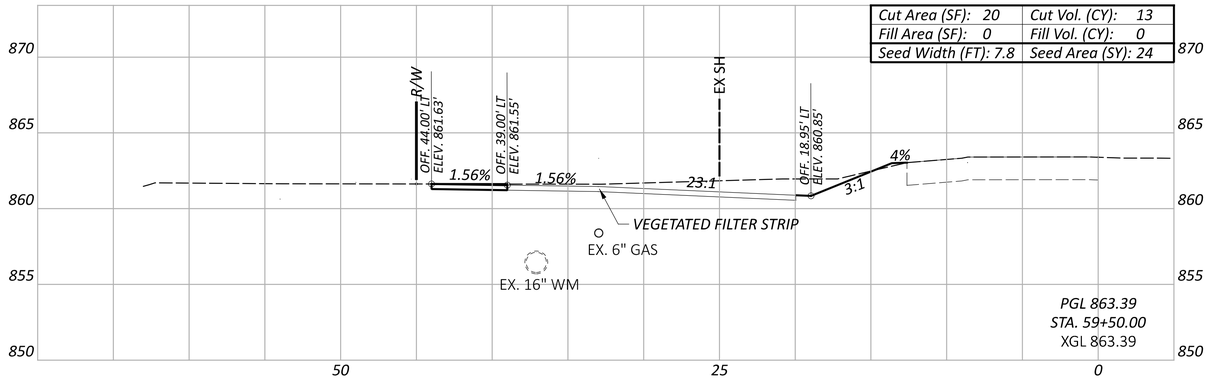
MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - 59+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:41 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn

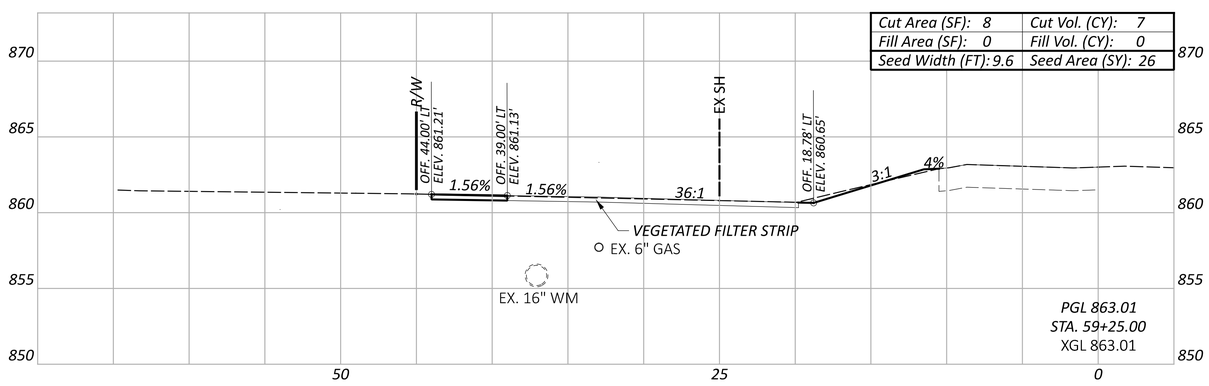
Cut Area (SF): 5	Cut Vol. (CY): 12
Fill Area (SF): 2	Fill Vol. (CY): 1
Seed Width (FT):26.5	Seed Area (SY): 48



Cut Area (SF): 20	Cut Vol. (CY): 13
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 7.8	Seed Area (SY): 24



Cut Area (SF): 8	Cut Vol. (CY): 7
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 9.6	Seed Area (SY): 26



CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
98	20	0

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 MERCHANTS VILLAGE DR
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DUBLIN, OHIO 43017
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DESIGNER
LDW

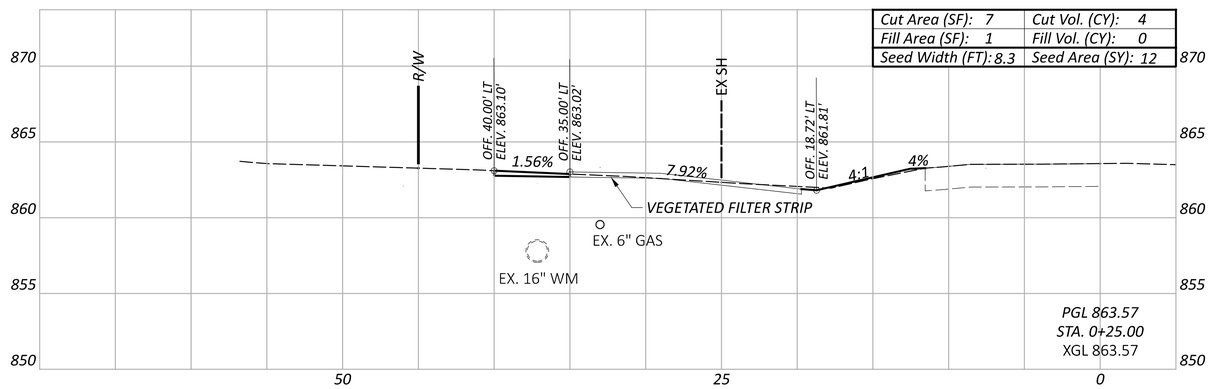
REVIEWER
JWB 07/01/25

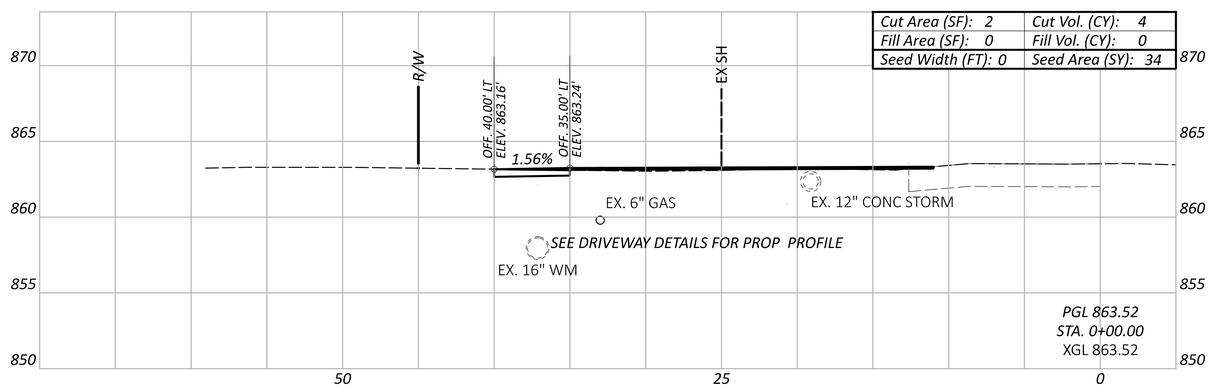
PROJECT ID
117202

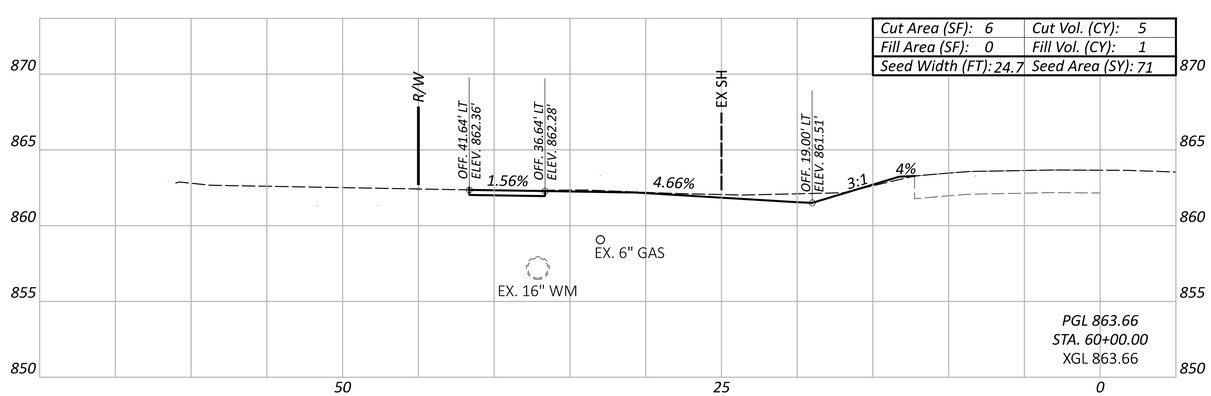
SHEET P.28 TOTAL 59

MODEL: Alignment - OliveRoad - 60+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:44 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEng$vs\80_MOT-OliveSR495safetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn

MOT TROTWOOD OLIVE RD WALKS SA22







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
117	13	1

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

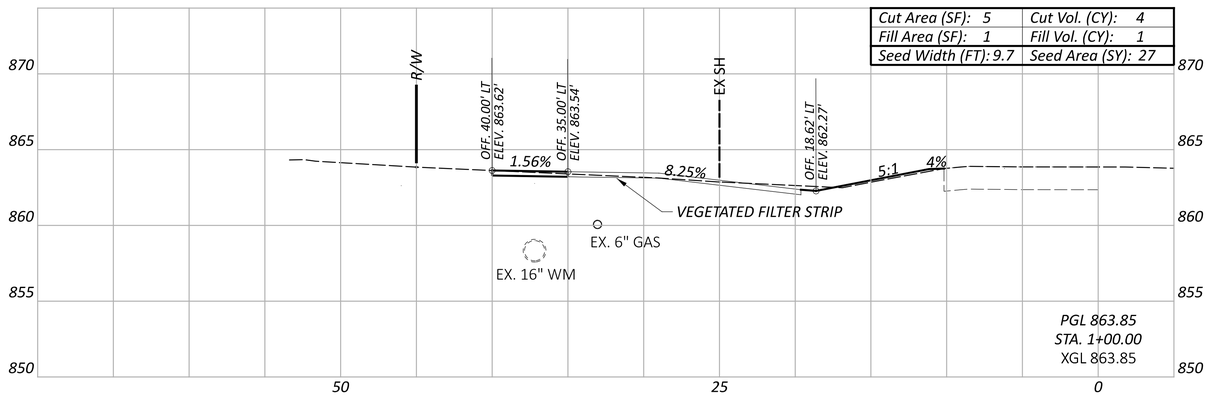
PROJECT ID
117202

SHEET P.29 TOTAL 59

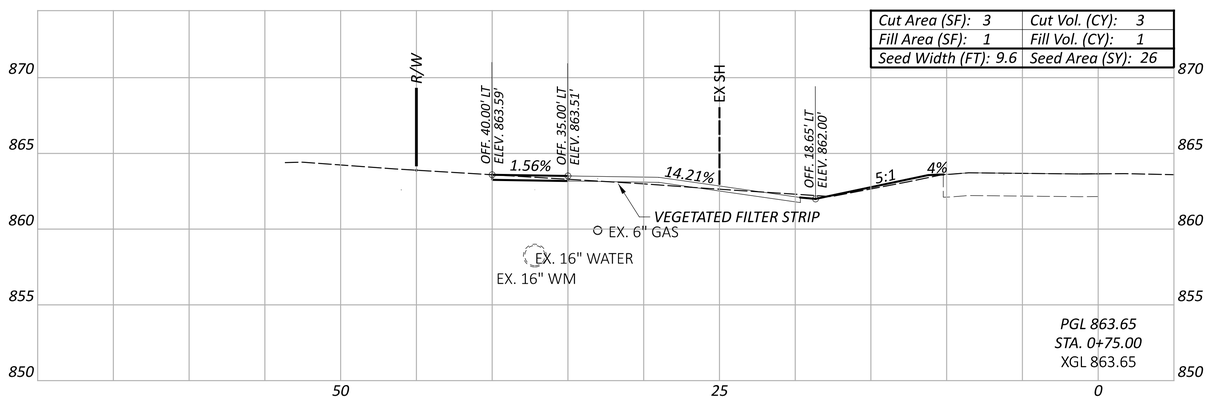
MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 0+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:47 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-Olive5R495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-Olive5R495safetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn

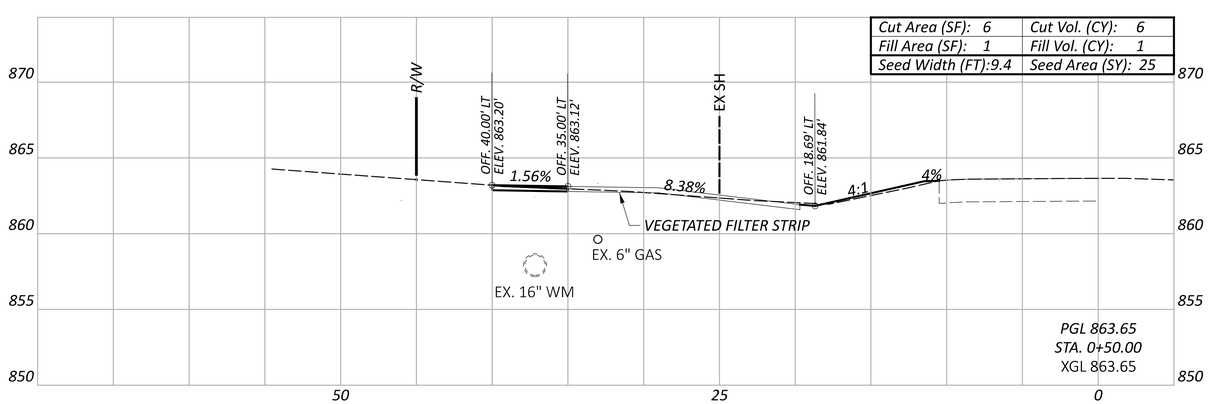
Cut Area (SF): 5	Cut Vol. (CY): 4
Fill Area (SF): 1	Fill Vol. (CY): 1
Seed Width (FT): 9.7	Seed Area (SY): 27



Cut Area (SF): 3	Cut Vol. (CY): 3
Fill Area (SF): 1	Fill Vol. (CY): 1
Seed Width (FT): 9.6	Seed Area (SY): 26



Cut Area (SF): 6	Cut Vol. (CY): 6
Fill Area (SF): 1	Fill Vol. (CY): 1
Seed Width (FT):9.4	Seed Area (SY): 25



CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
78	13	3

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
5500 NEW ALBANY ROAD, WESTERVILLE, OHIO 43082
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PH (937) 701-2193
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DESIGNER
LDW

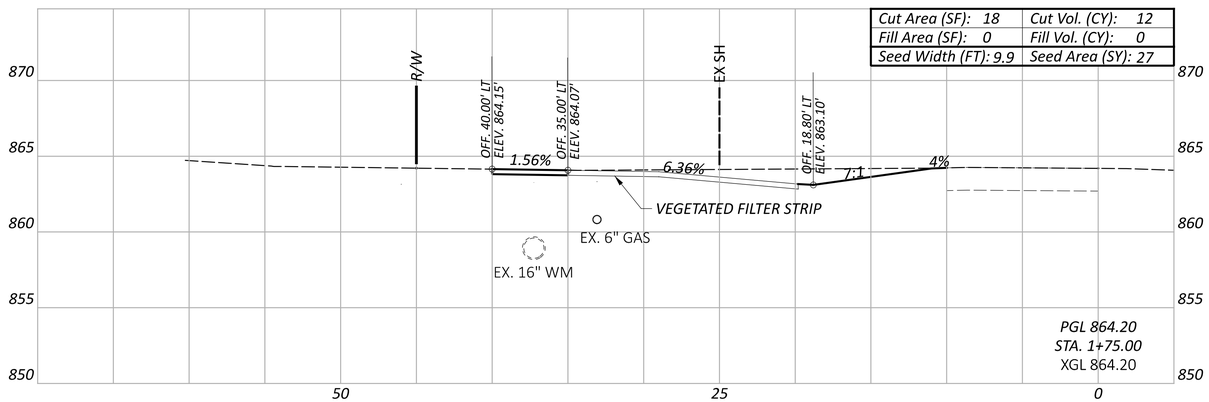
REVIEWER
JWB 07/01/25

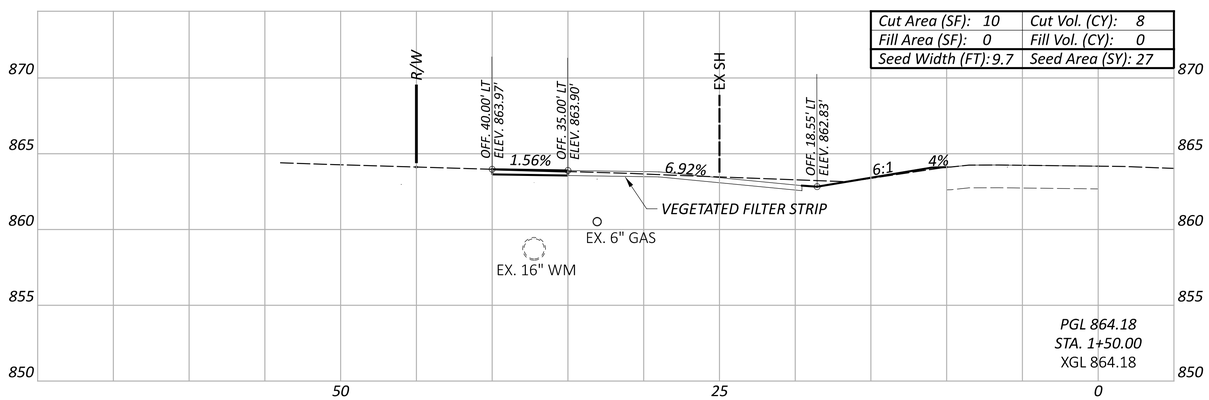
PROJECT ID
117202

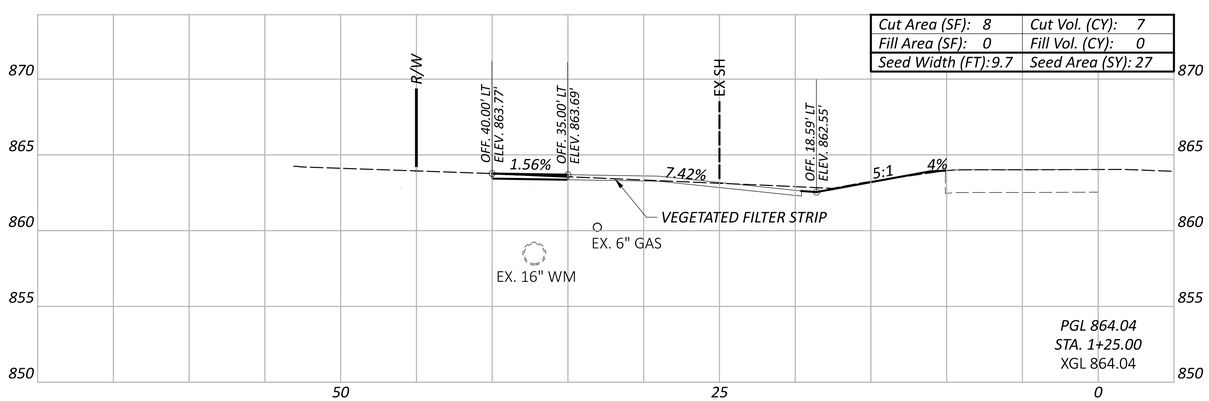
SHEET P.30 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 1+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:50 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR
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REVIEWER
JWB 07/01/25

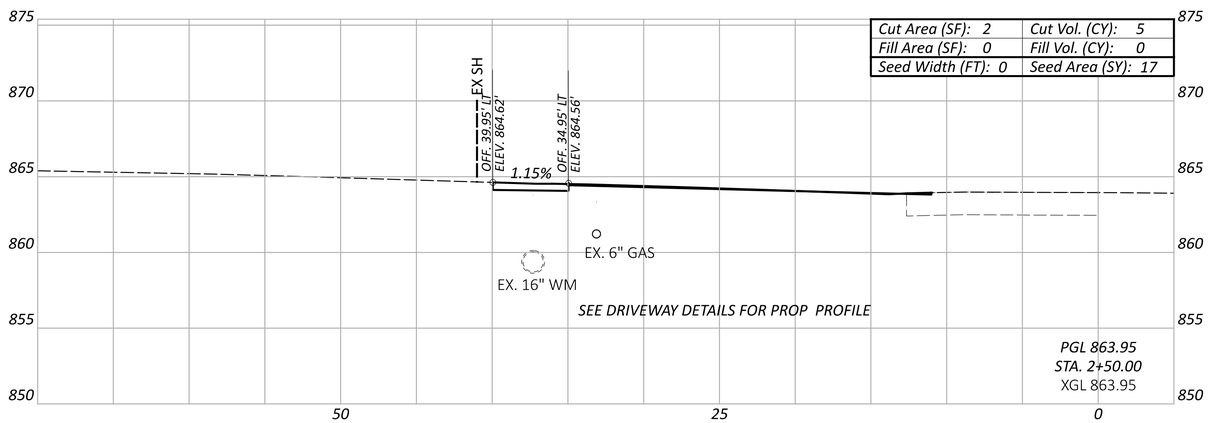
PROJECT ID
117202

Sheet Totals		
Seeding	Cut	Fill
81	29	0

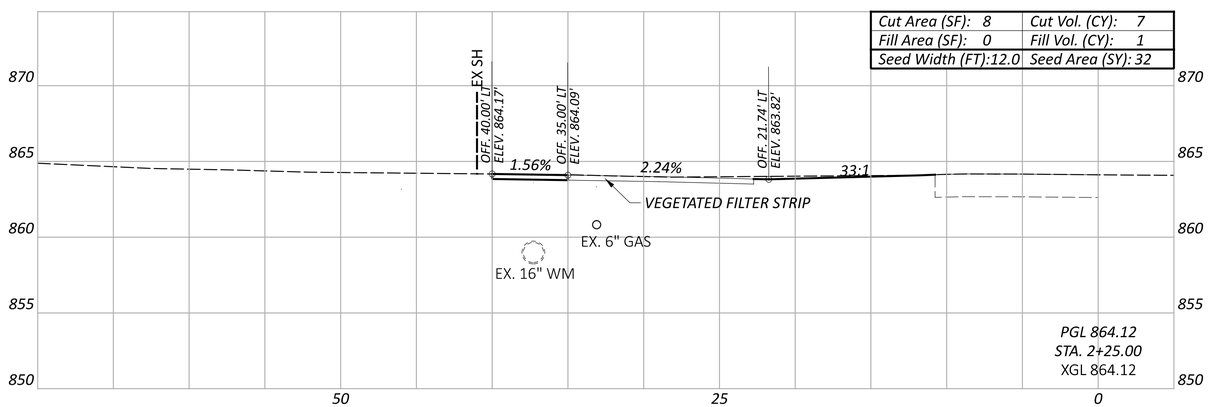
SHEET P.31 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

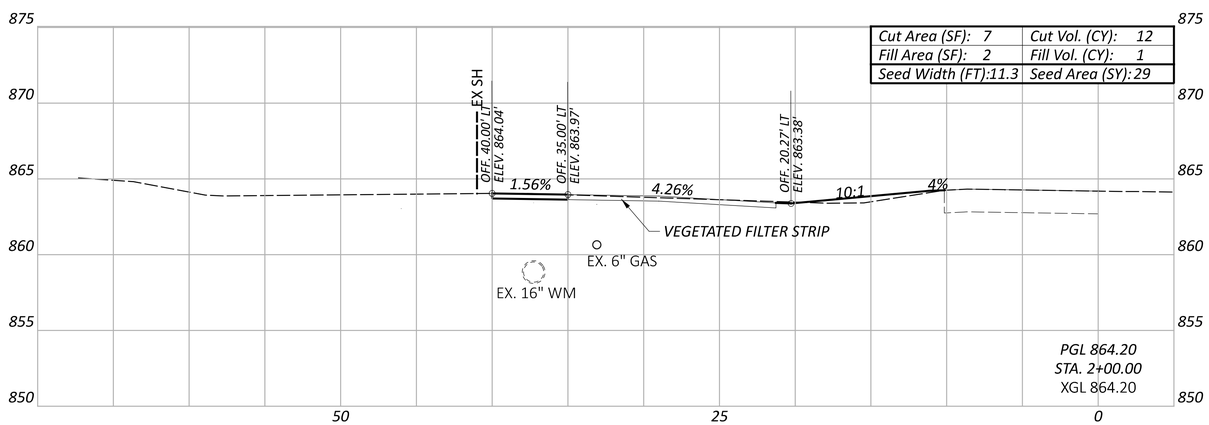
MODEL: Alignment - OliveRoad - CLP 2+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:53 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEng$vs\80_MOT-OliveSR495safetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn



Cut Area (SF): 2	Cut Vol. (CY): 5
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 0	Seed Area (SY): 17



Cut Area (SF): 8	Cut Vol. (CY): 7
Fill Area (SF): 0	Fill Vol. (CY): 1
Seed Width (FT):12.0	Seed Area (SY): 32



Cut Area (SF): 7	Cut Vol. (CY): 12
Fill Area (SF): 2	Fill Vol. (CY): 1
Seed Width (FT):11.3	Seed Area (SY): 29

CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7965 PRESTON VILLAGE DR
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DAYTON, OHIO 45459
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DESIGNER
LDW

REVIEWER
JWB 07/01/25

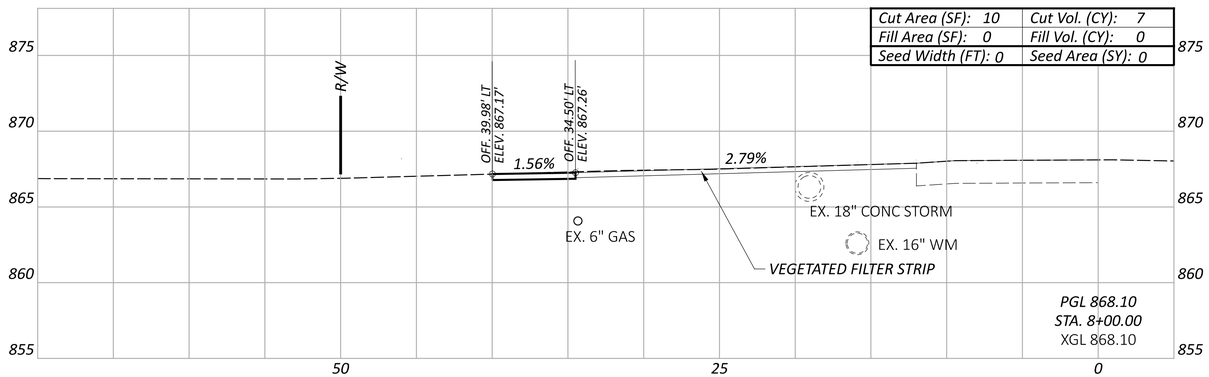
PROJECT ID
117202

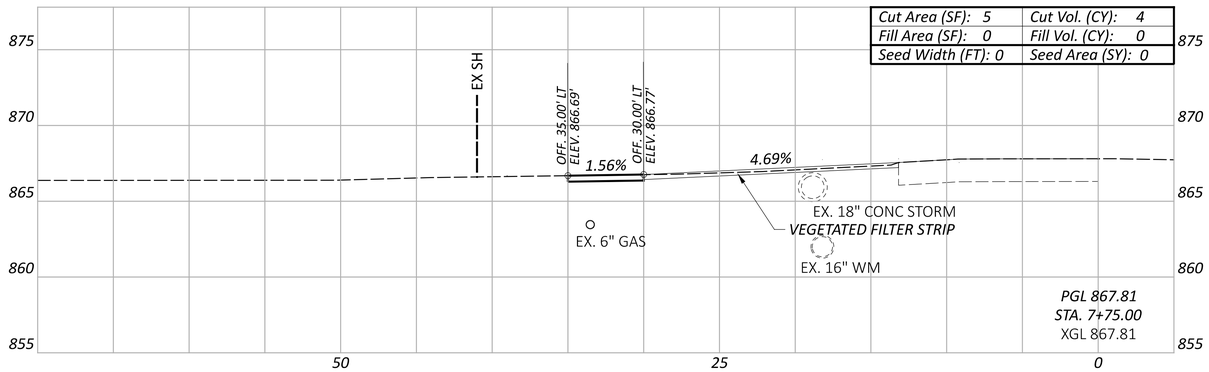
Sheet Totals		
Seeding	Cut	Fill
78	24	2

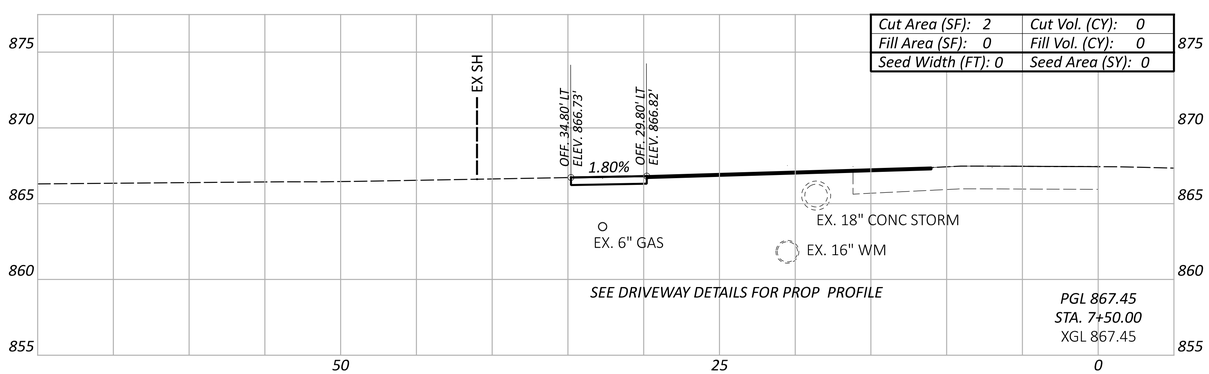
SHEET	TOTAL
P.32	59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 7+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:56 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEng$vs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Roadway\Sheets\117202_XS101.dgn







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
0	11	0

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17777 WARREN RD.
SUITE 270
LAKEWOOD, OHIO 44459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.33 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 8+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:34:59 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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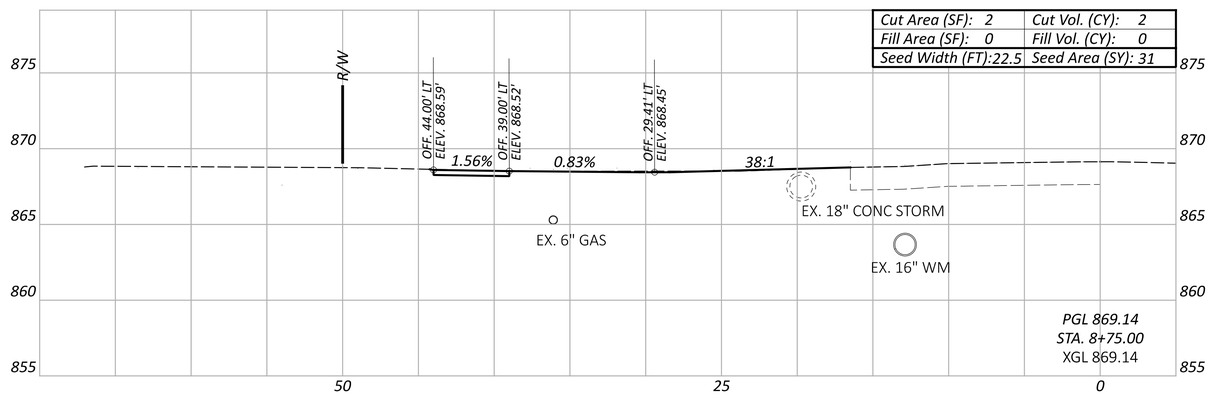

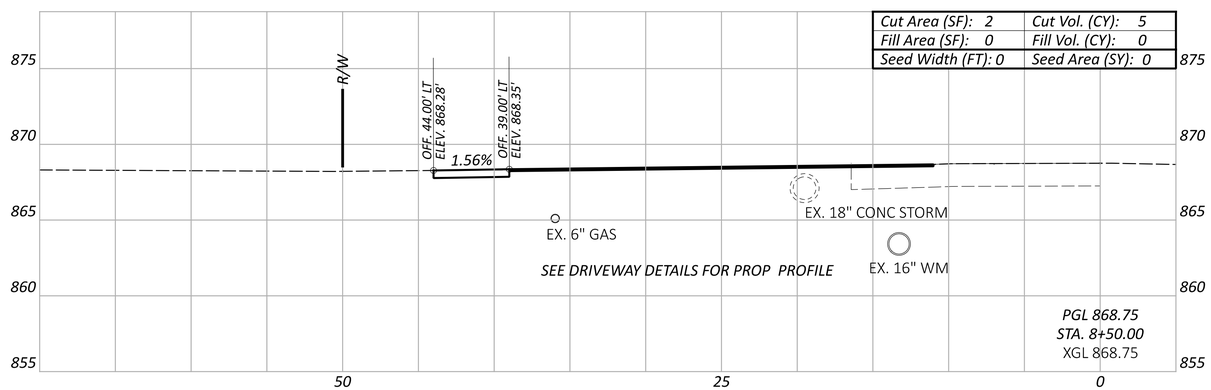

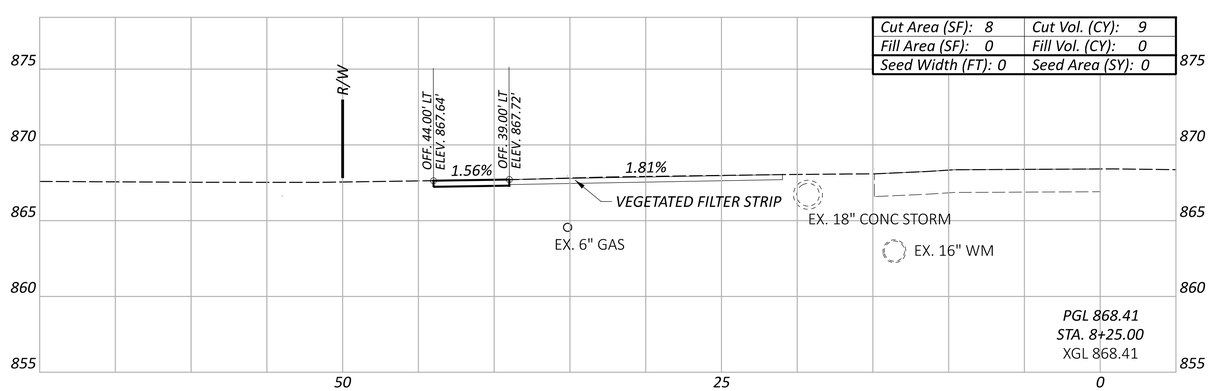

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
31	16	0

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 WARREN ROAD
SUITE 270
LAKEWOOD, OHIO 44459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.34 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 9+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:02 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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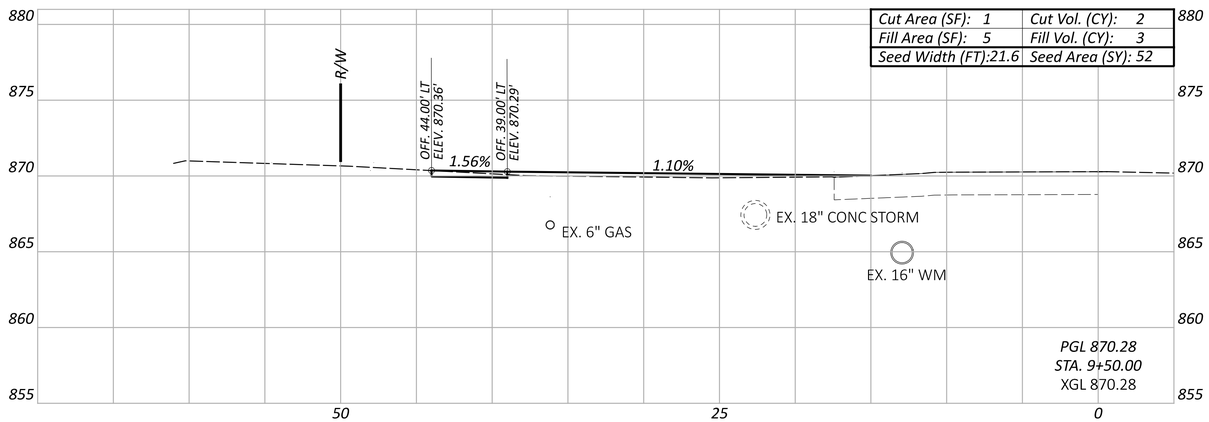

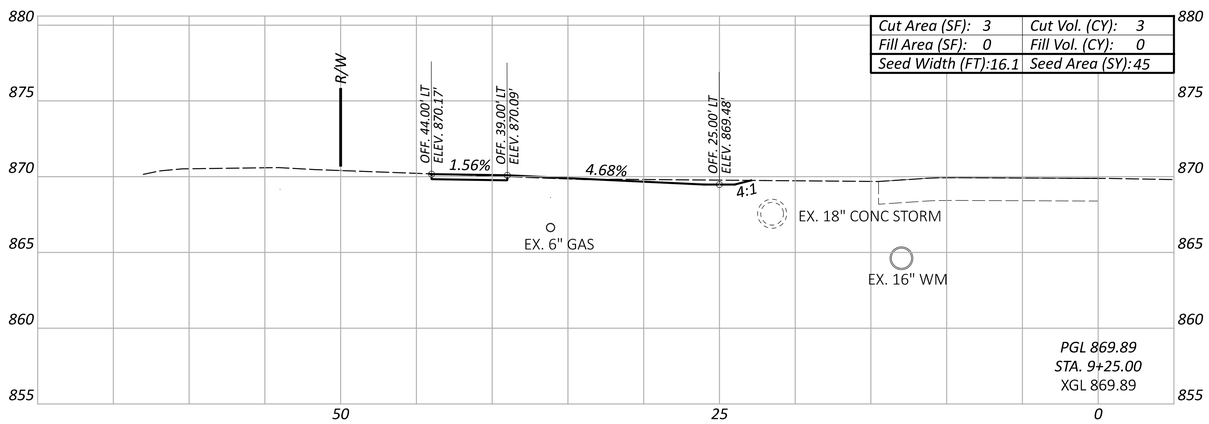

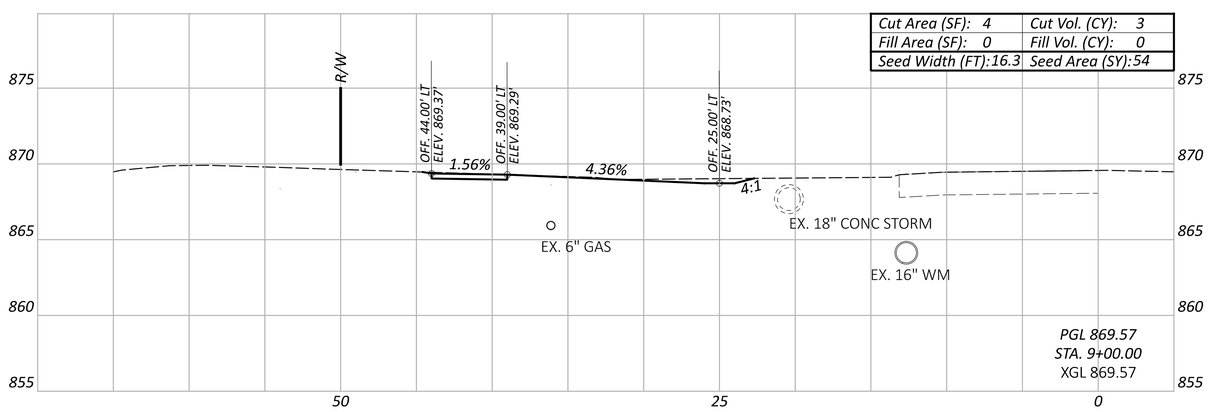

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
151	8	3

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR
SUITE 270
DUBLIN, OHIO 43016
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.35 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 9+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:04 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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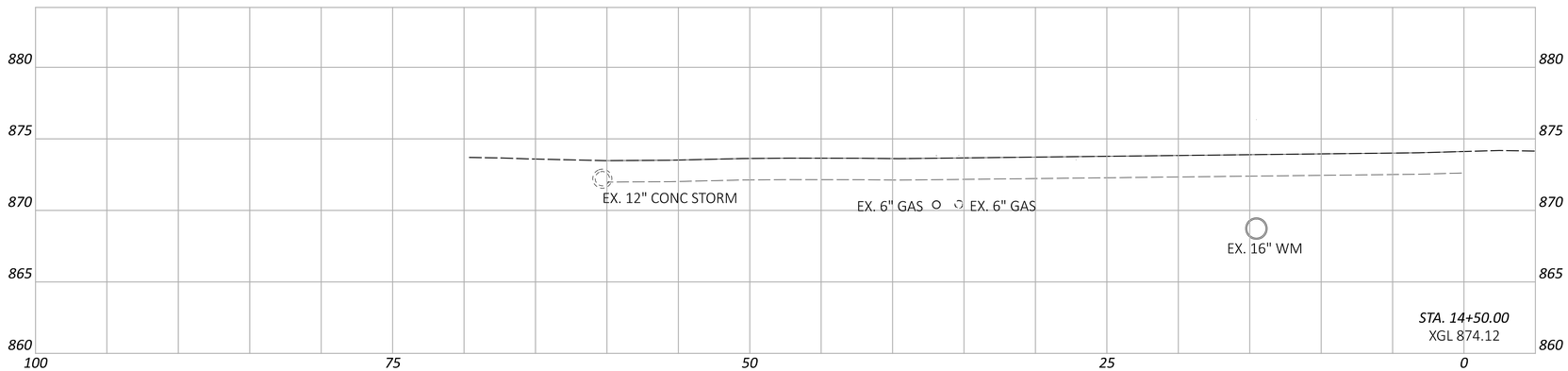

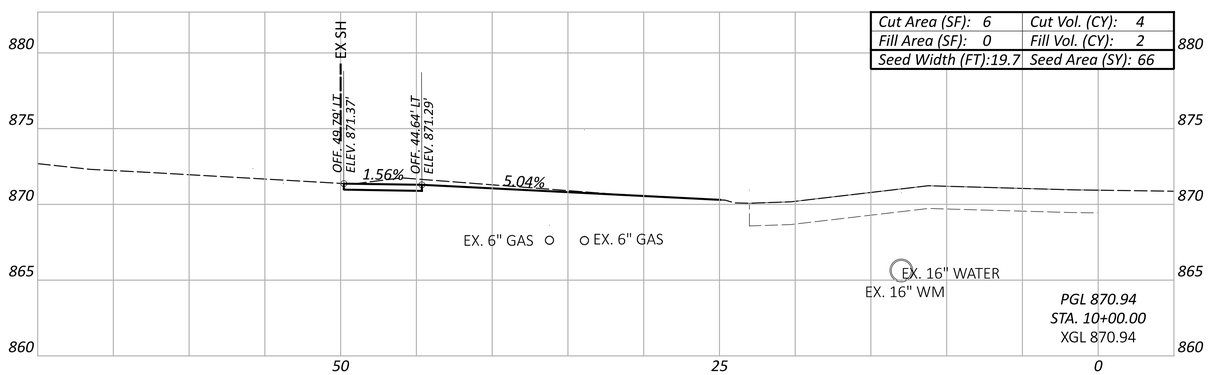

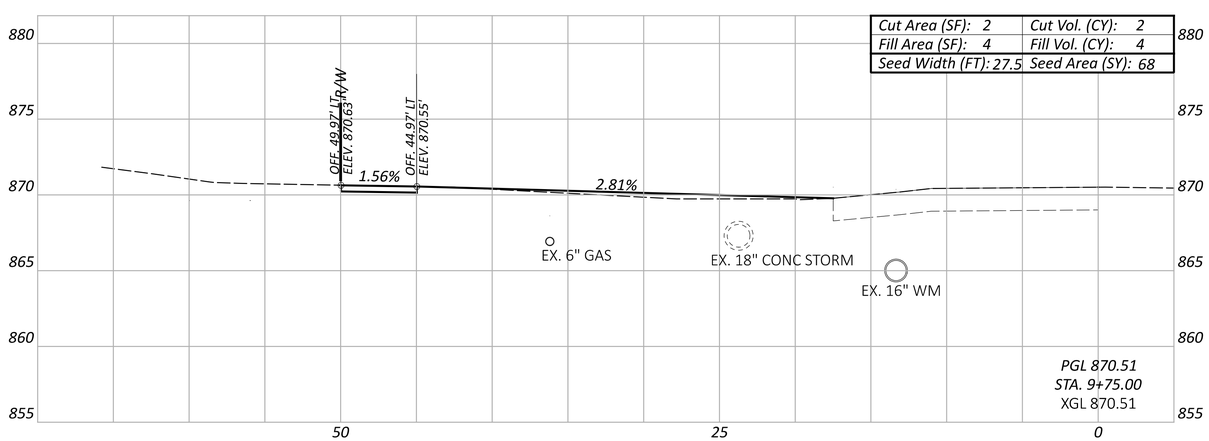

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
174	6	6

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
77 EAST WILSON BRIDGE DR
SUITE 270
DUBLIN, OHIO 43017
PH (937)701-2939
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.36 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 14+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:07 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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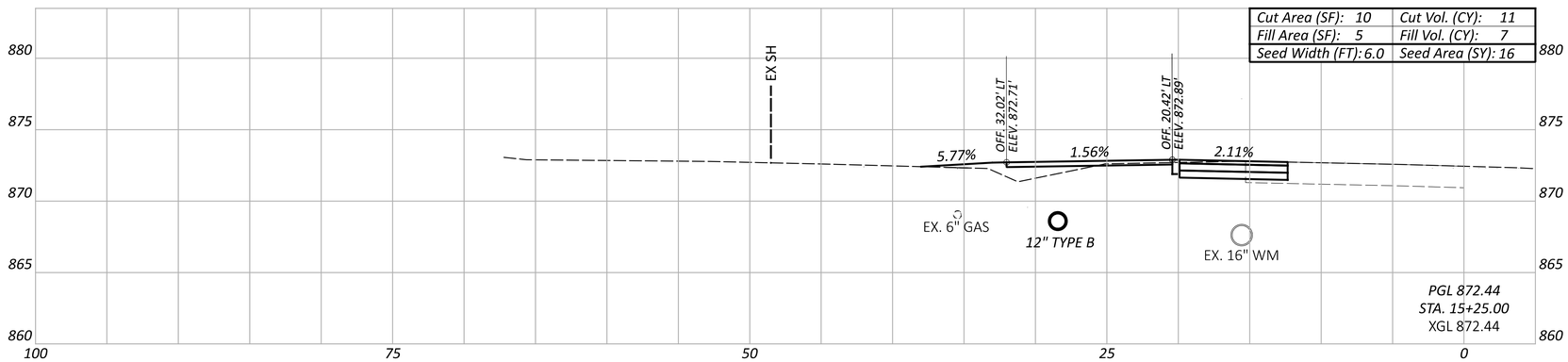

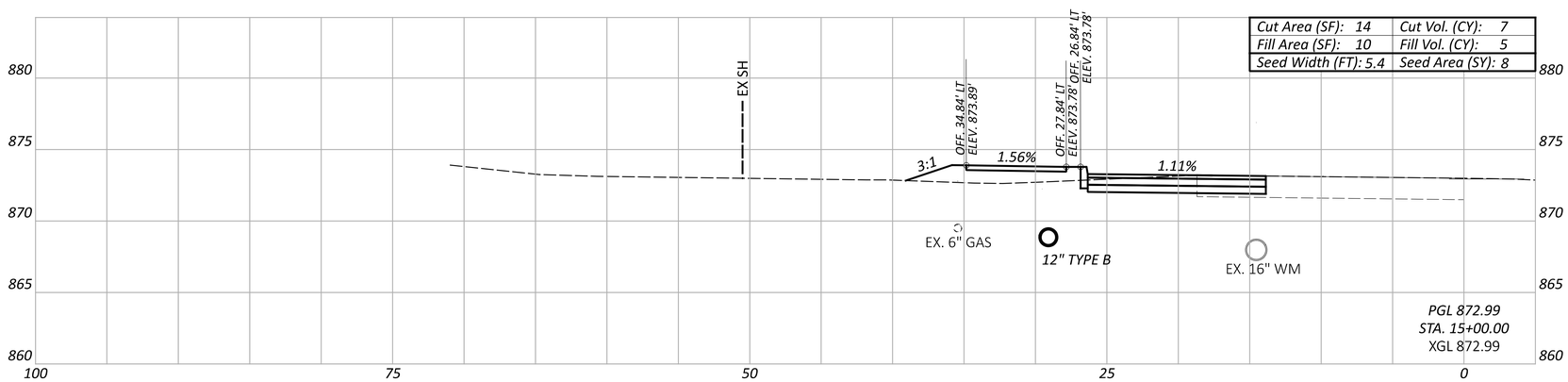

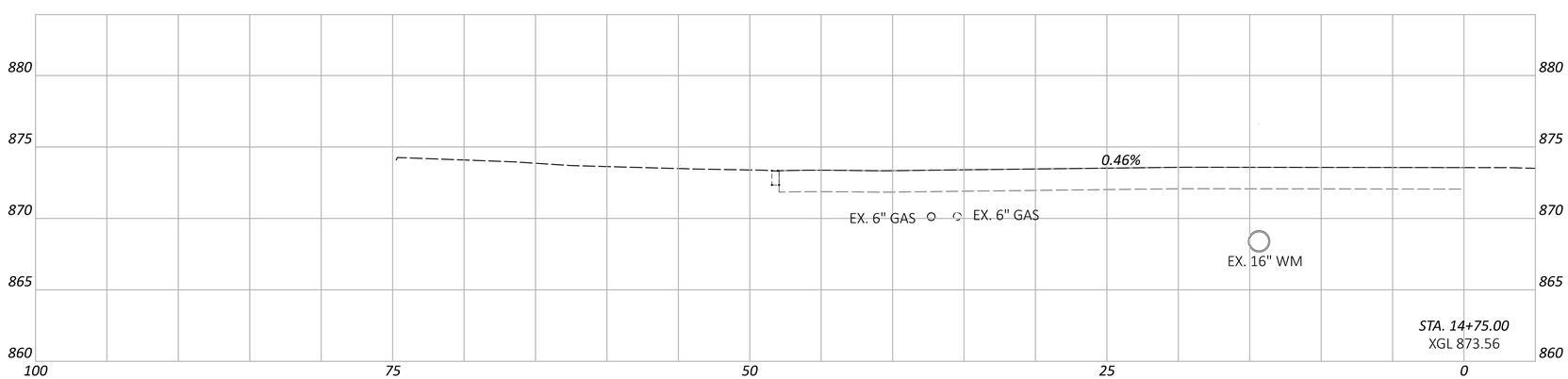

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
24	18	12

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR
SUITE 270
LIVONIA, OHIO 44149
PH (937)701-2139
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DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.37 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 15+50.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:12 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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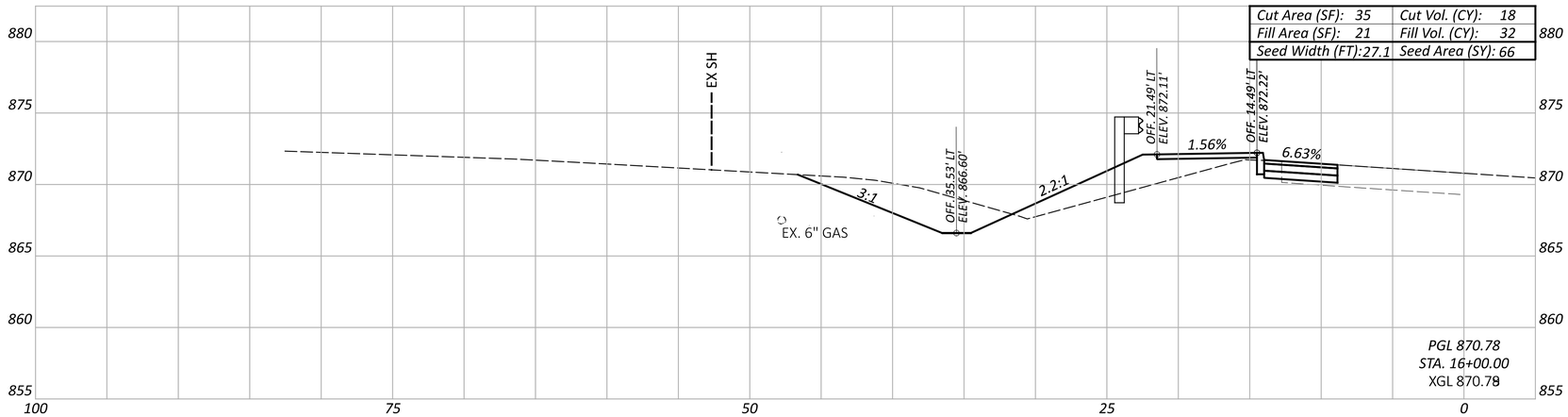

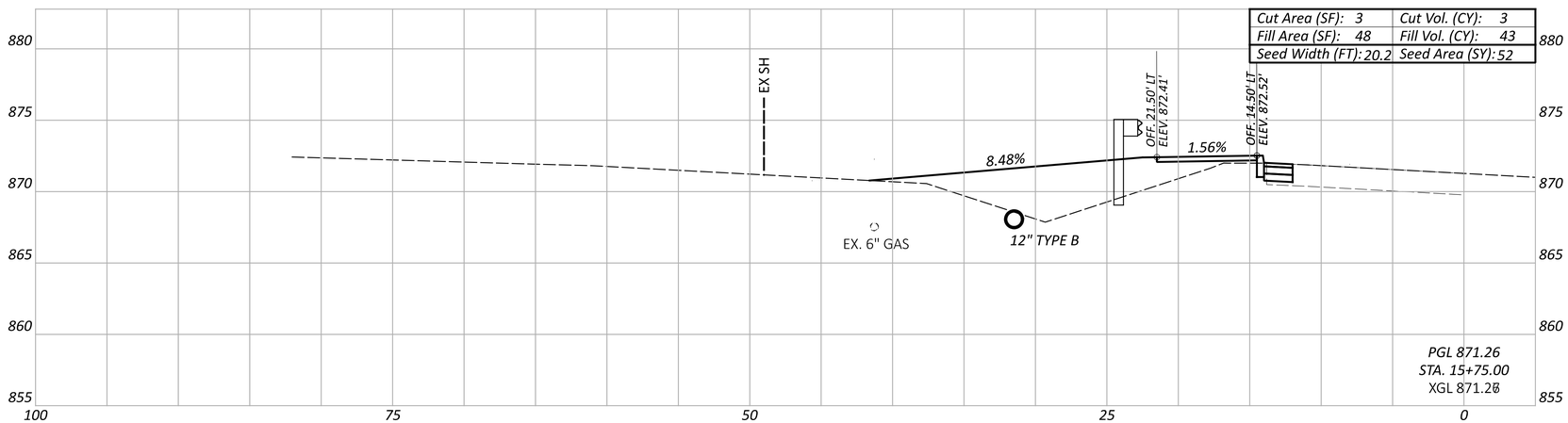

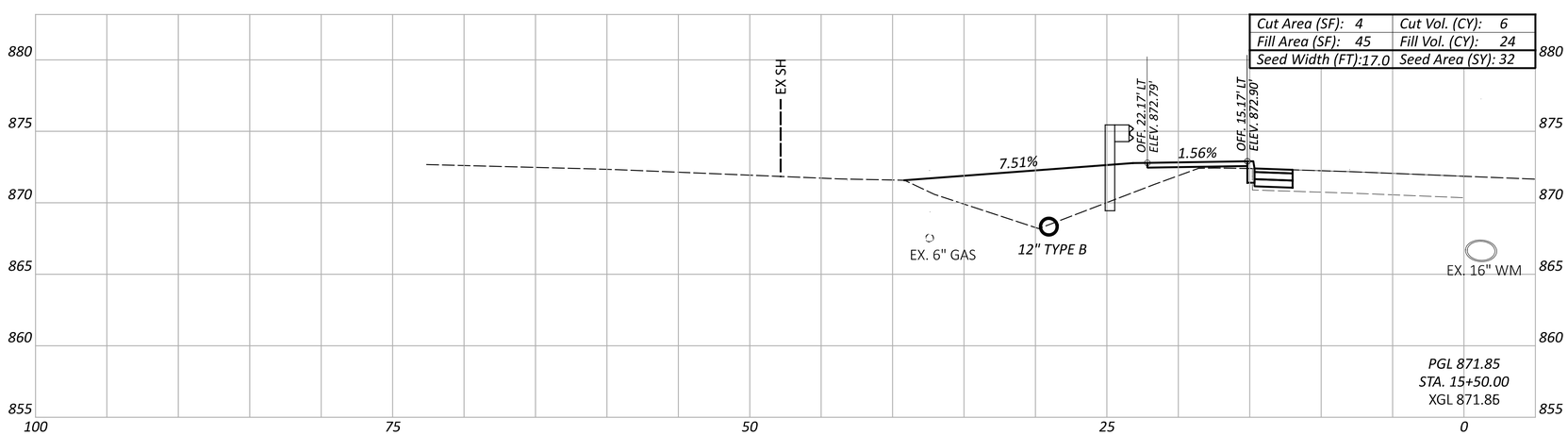

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
150	27	99

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7775 WALTON VILLAGE DR
SUITE 270
DUBLIN, OHIO 43016
PH (937) 701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.38 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 16+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:15 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-Olive5R49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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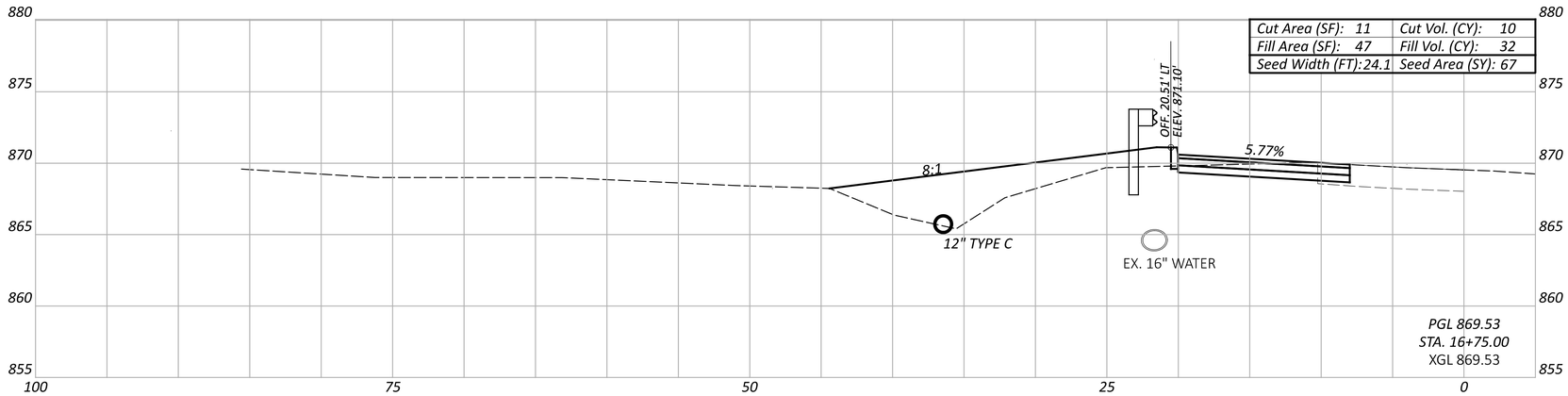
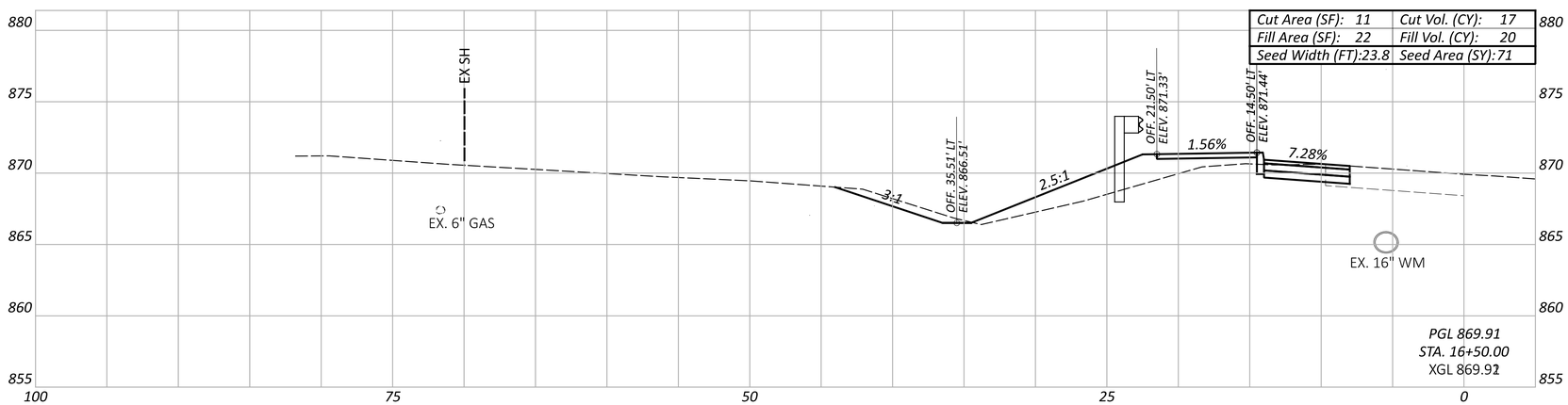
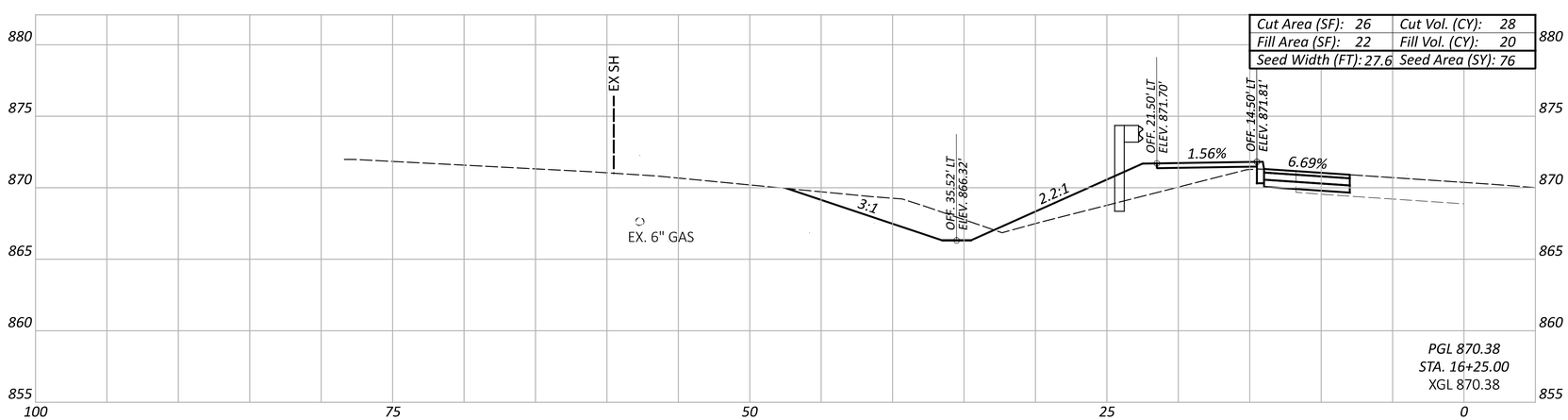


Cut Area (SF): 11	Cut Vol. (CY): 10
Fill Area (SF): 47	Fill Vol. (CY): 32
Seed Width (FT):24.1	Seed Area (SY): 67



Cut Area (SF): 11	Cut Vol. (CY): 17
Fill Area (SF): 22	Fill Vol. (CY): 20
Seed Width (FT):23.8	Seed Area (SY):71



Cut Area (SF): 26	Cut Vol. (CY): 28
Fill Area (SF): 22	Fill Vol. (CY): 20
Seed Width (FT): 27.6	Seed Area (SY): 76

CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
214	55	72

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALTON VILLAGE DR
SUITE 270
TROTWOOD, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET	TOTAL
P.39	59

MODEL: Alignment - OliveRoad - CLP 17+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:18 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-Olive5R49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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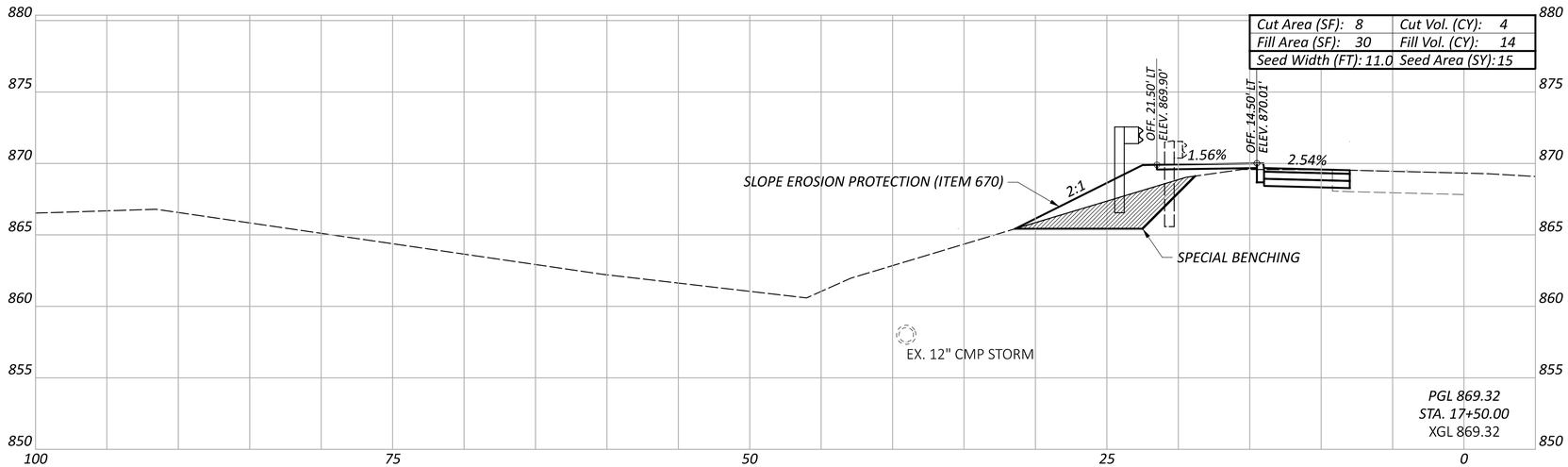
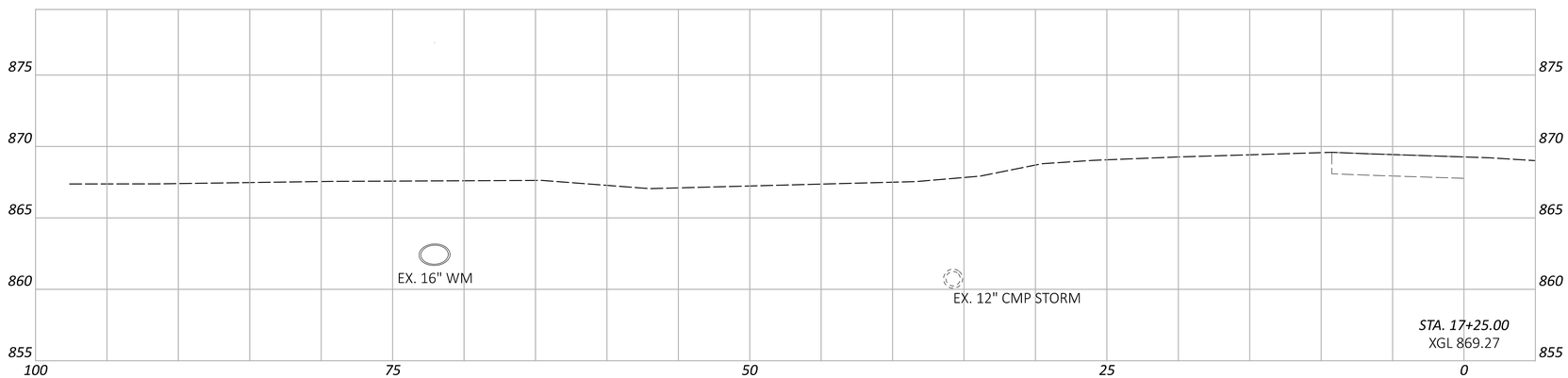
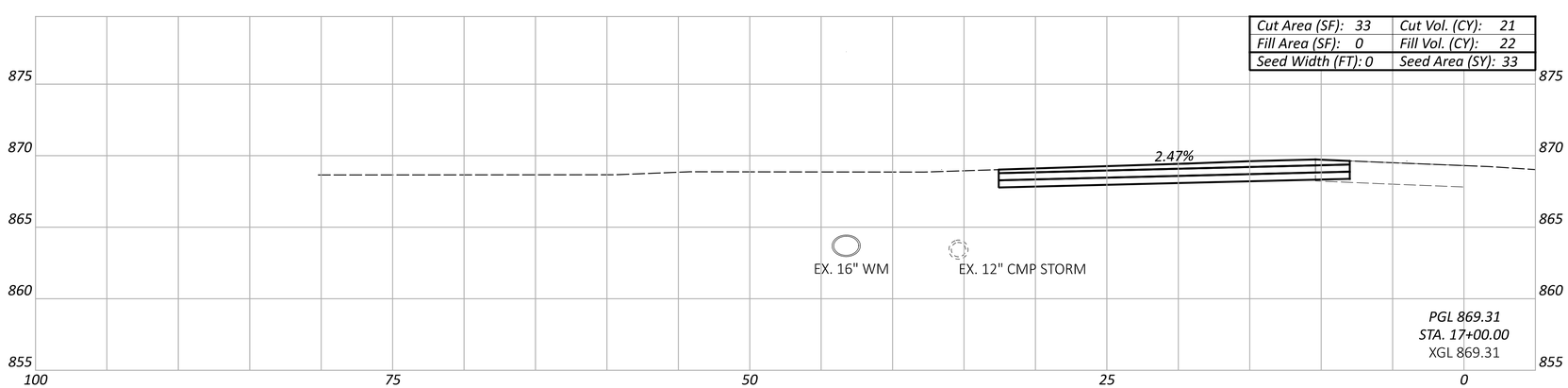
MOT TROTWOOD OLIVE RD WALKS SA22







CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
48	25	48

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALTON VILLAGE DR
SUITE 270
Dayton, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.40 TOTAL 59

MODEL: Alignment - OliveRoad - CLP 17+75.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:21 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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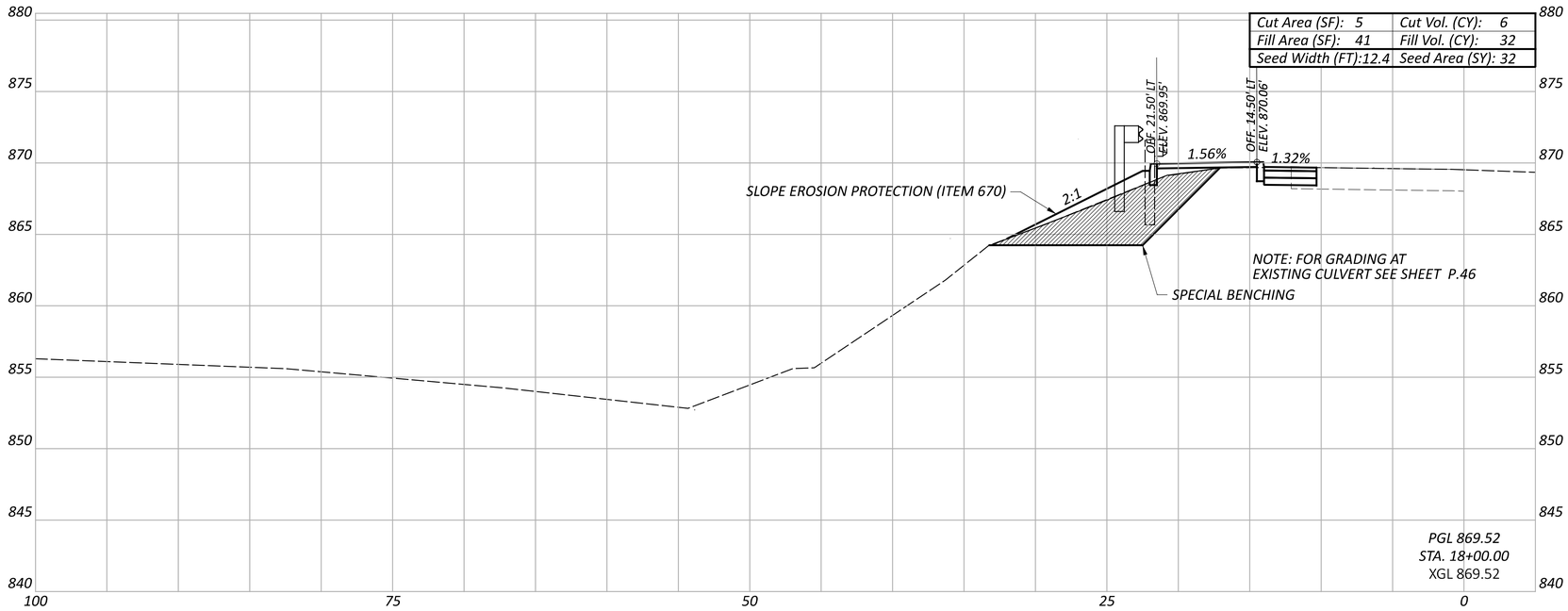
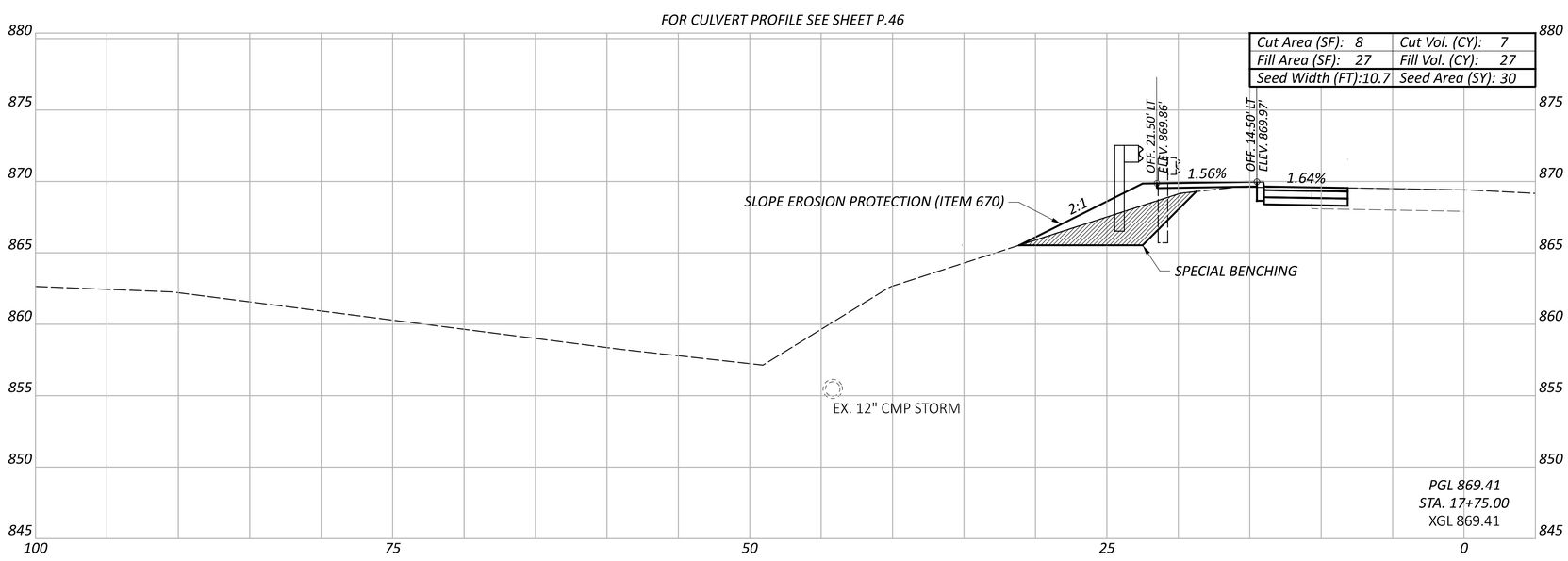
MOT TROTWOOD OLIVE RD WALKS SA22





CROSS SECTIONS

Sheet Totals		
Seeding	Cut	Fill
62	13	59

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7775 WALTON PARKWAY
SUITE 270
DUBLIN, OHIO 43459
PH (937)707-2193
www.cmtengr.com

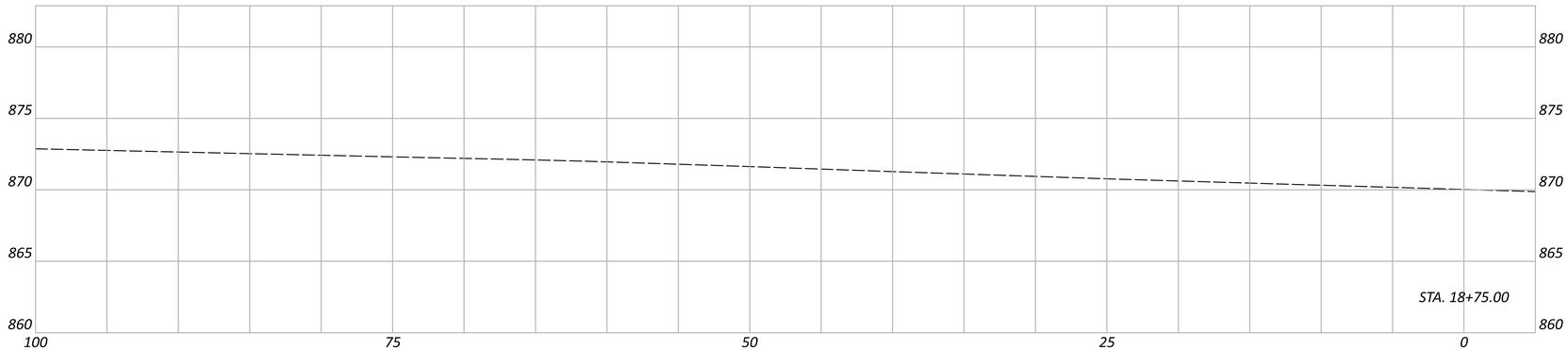
DESIGNER
LDW

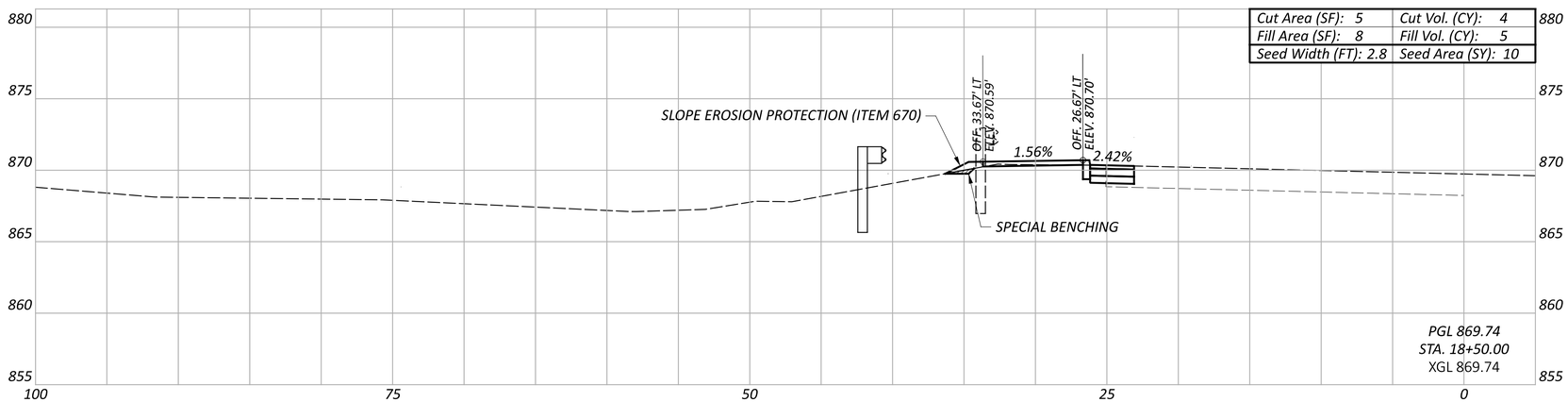
REVIEWER
JWB 07/01/25

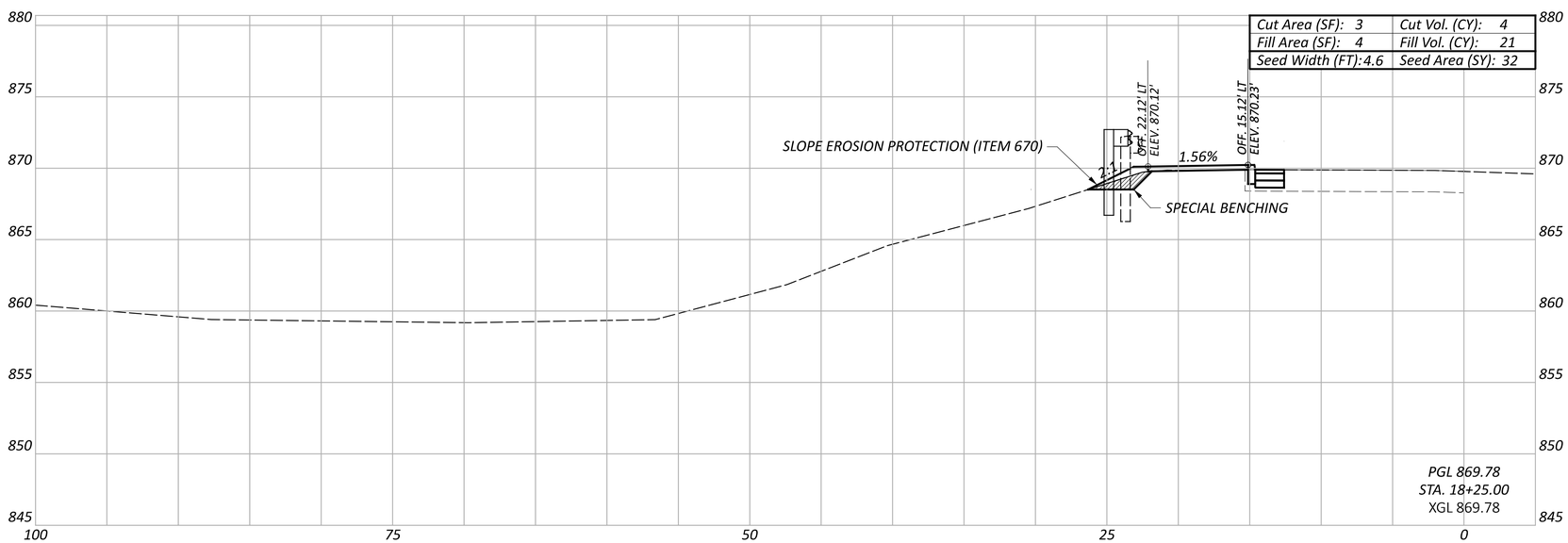
PROJECT ID
117202

SHEET P.41 TOTAL 59

EARTHWORK SUMMARY	
(TOTALS CARRIED TO GENERAL SUMMARY)	
	ITEM 203
EXCAVATION	431 CY
EMBANKMENT	335 CY
SPECIAL BENCHING	1340 CY







MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Alignment - OliveRoad - CLP 18+25.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:23 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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CROSS SECTIONS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2193
www.cmtengr.com

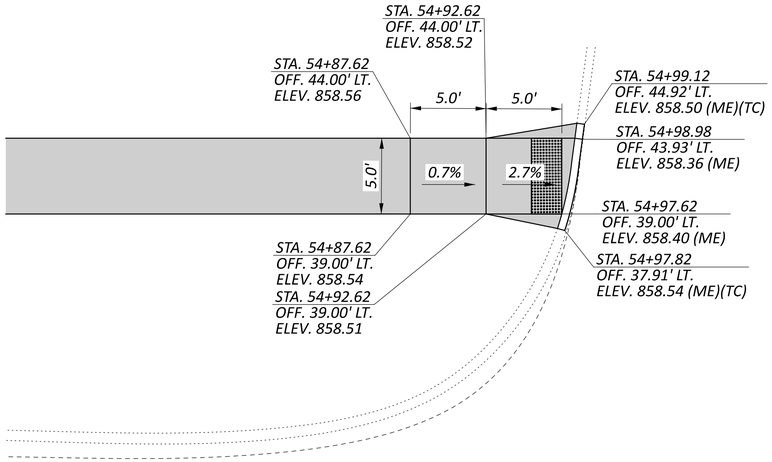
DESIGNER
LDW

REVIEWER
JWB 07/01/25

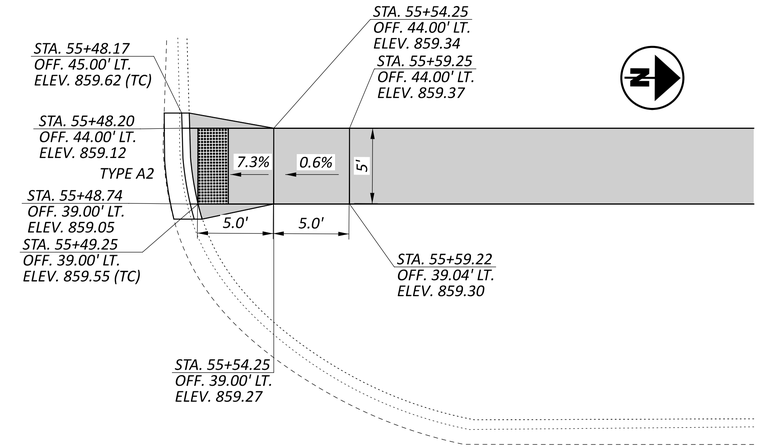
PROJECT ID
117202

Sheet Totals		
Seeding	Cut	Fill
42	8	26

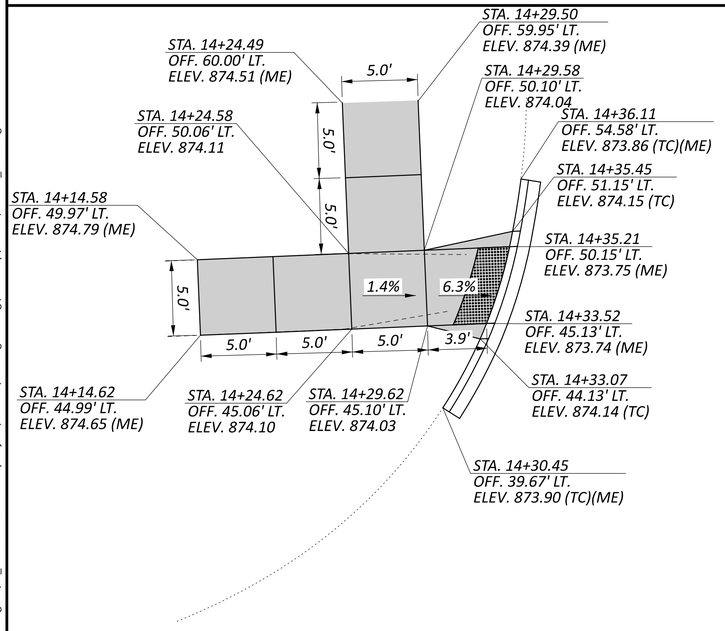
SHEET	TOTAL
P.42	59



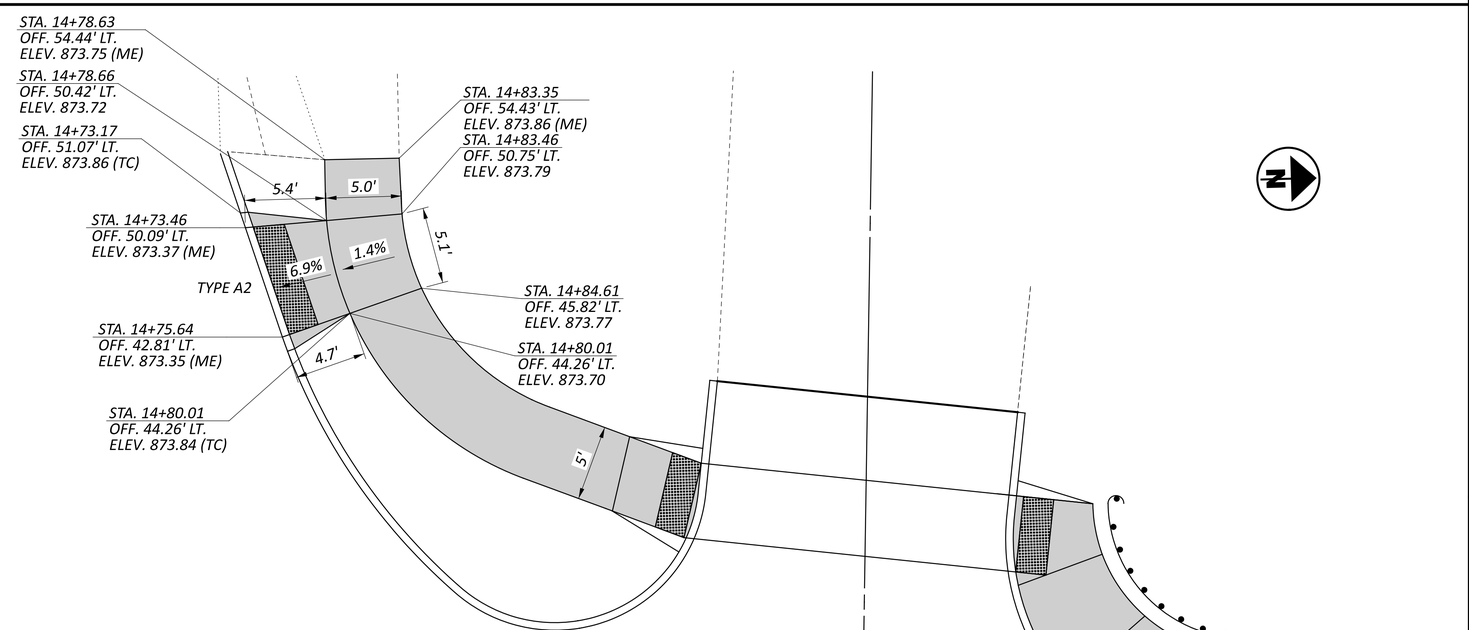
BELLCREEK LN



(ME) MEET EXISTING
(TC) TOP OF CURB



WESTFORD RD



HORIZONTAL SCALE IN FEET
0 2.5 5 10

INTERSECTION DETAILS
BELLCREEK LN/OLIVE RD & WESTFORD RD/OLIVE RD

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE ROAD
SUITE 270
DUBLIN, OHIO 43016
PH (937)767-1809
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.43 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_GI101 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:28 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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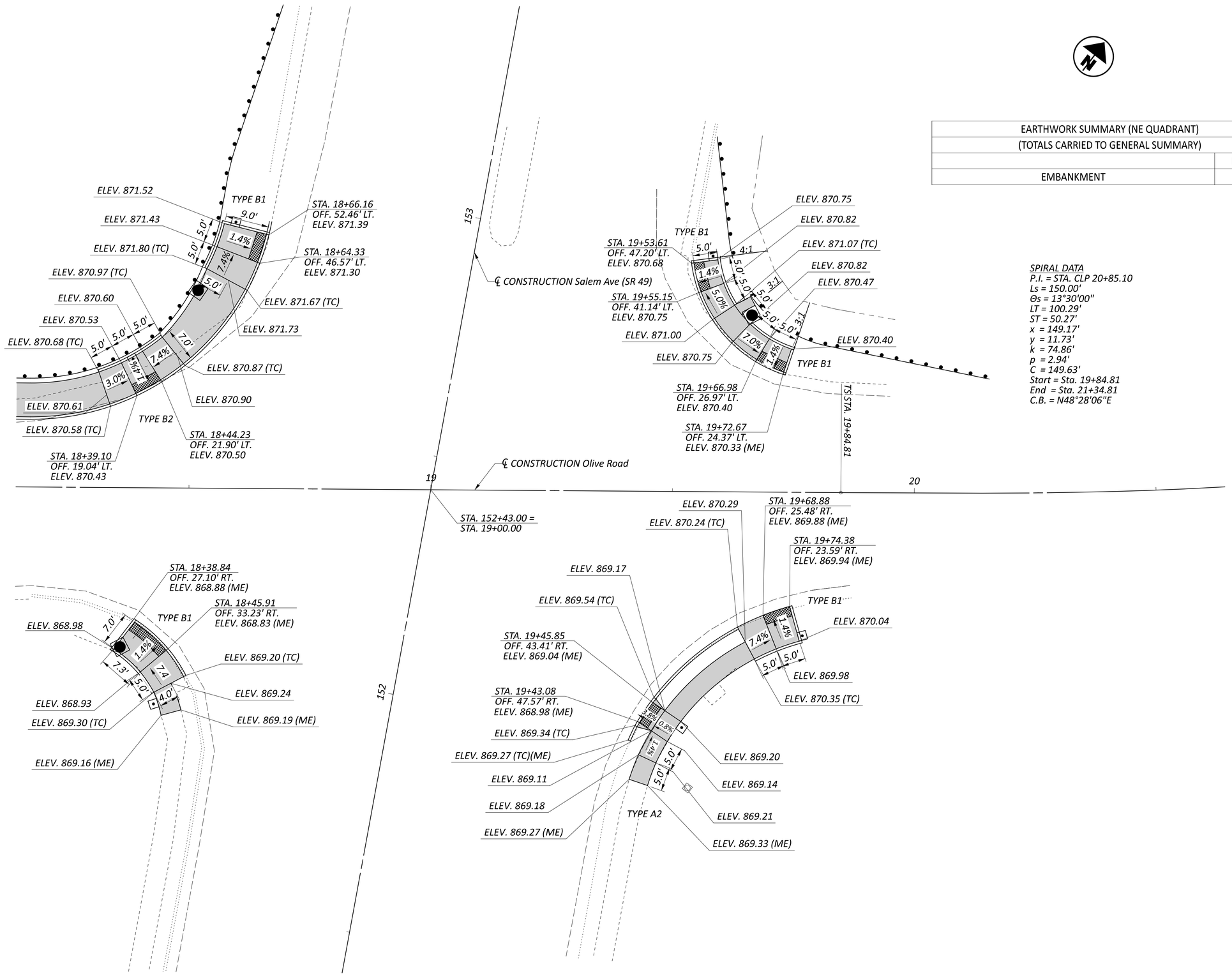

EARTHWORK SUMMARY (NE QUADRANT)	
(TOTALS CARRIED TO GENERAL SUMMARY)	
	ITEM 203
EMBANKMENT	10 CY

SPIRAL DATA
P.I. = STA. CLP 20+85.10
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 149.17'
y = 11.73'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 19+84.81
End = Sta. 21+34.81
C.B. = N48°28'06"E

HORIZONTAL SCALE IN FEET
0 5 10 20

INTERSECTION DETAILS
SALEM AVE (SR 49) AND OLIVE RD

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUNTERSTON VILLAGE DR.
SUITE 270
DUBLIN, OHIO 43459
PH (937)707-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.44 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_GI102 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:31 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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MOT TROTWOOD OLIVE RD WALKS SA22
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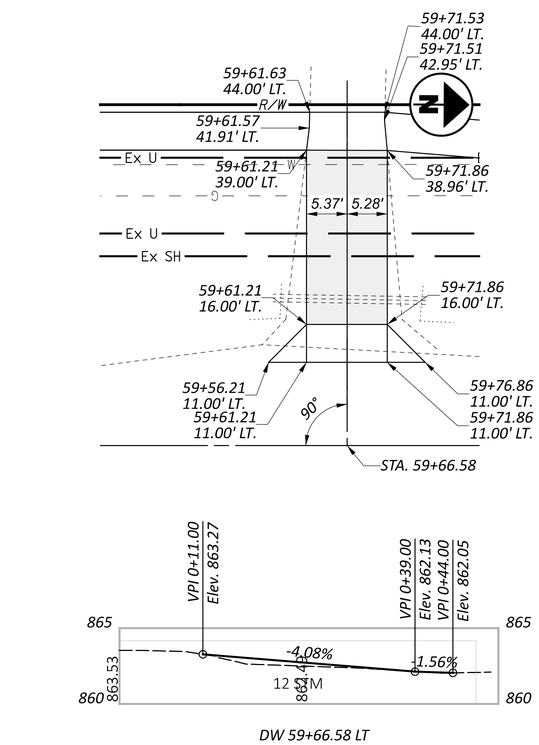
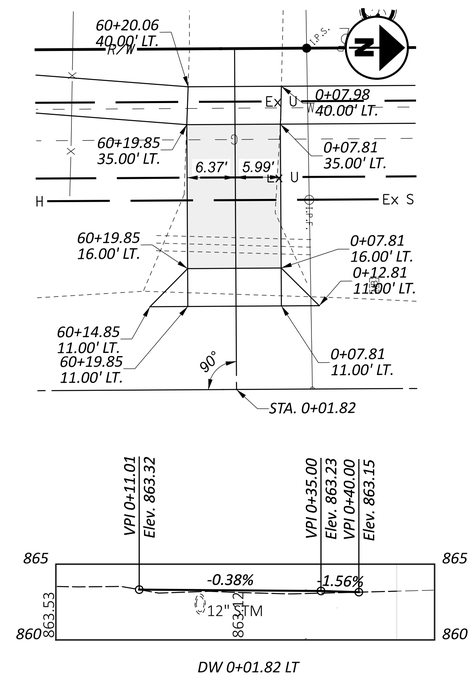
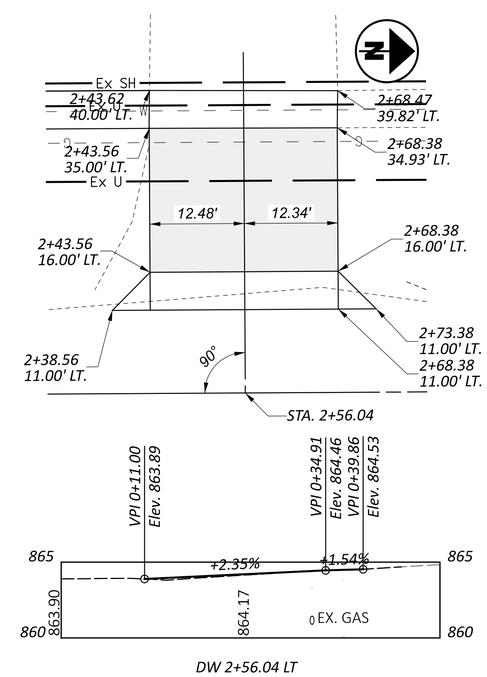


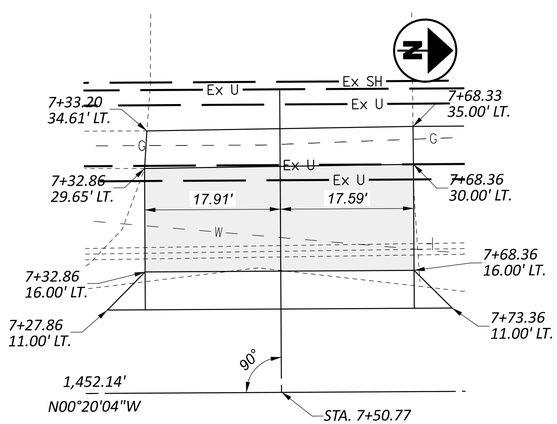
DW 59+66.58 LT



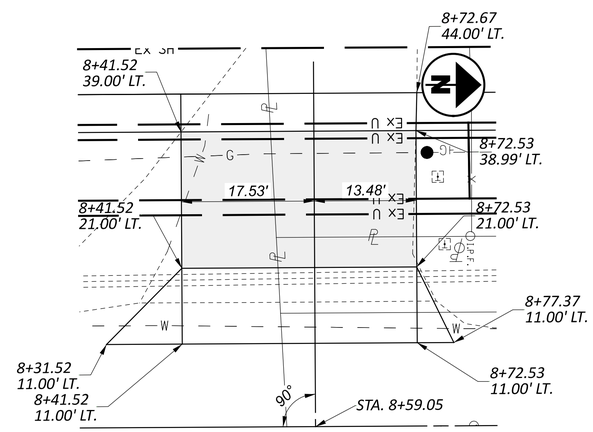
DW 0+01.82 LT



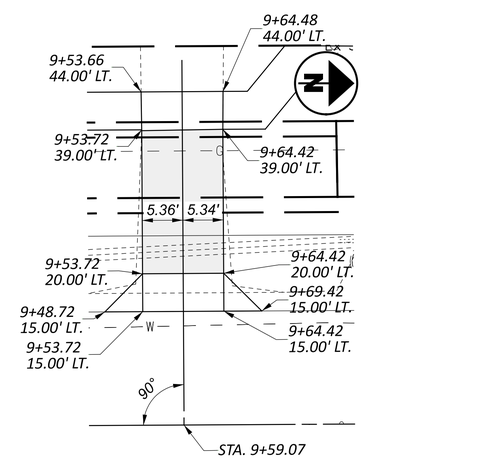
DW 2+56.04 LT



DW 7+50.77 LT



DW 8+50.05 LT



DW 9+59.07 LT

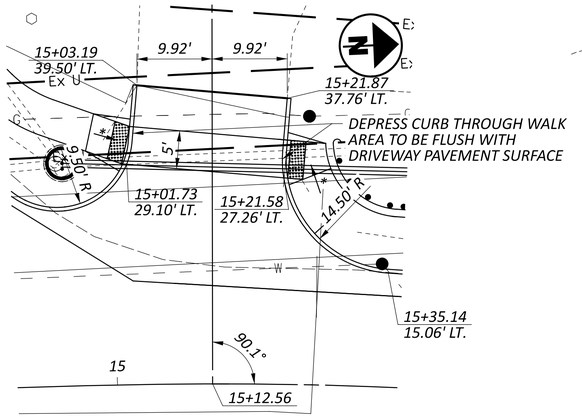
TYPICAL SECTION DETAILS SEE SHEET P.45

HORIZONTAL SCALE IN FEET
0 5 10 20

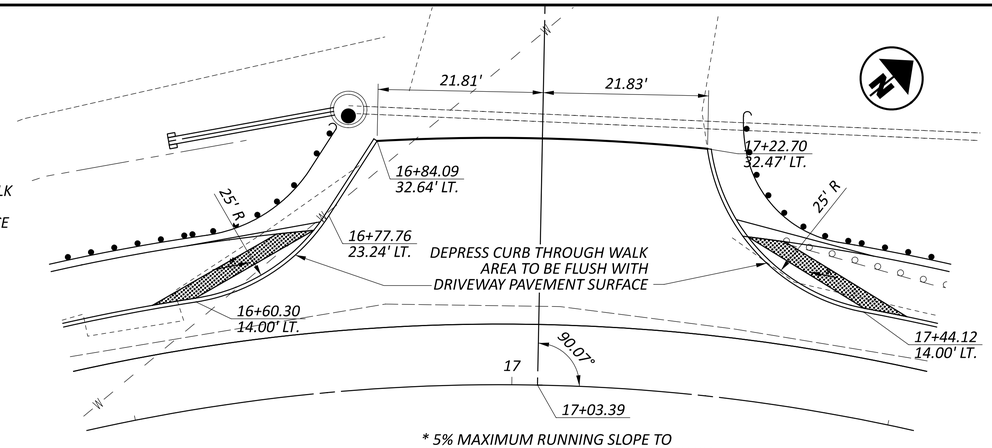
DRIVEWAY DETAILS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUNTERSBROOK VILLAGE DR
SUITE 270
TROTWOOD, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
LDW
REVIEWER
JWB 07/01/25
PROJECT ID
117202



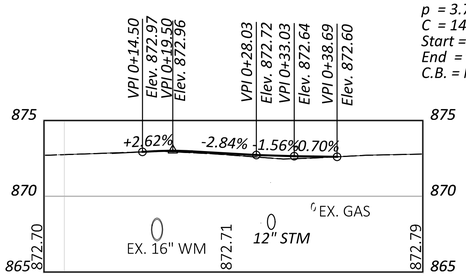
* 5% MAXIMUM RUNNING SLOPE TO ACHIEVE FLUSH TRANSITION TO DRIVEWAY



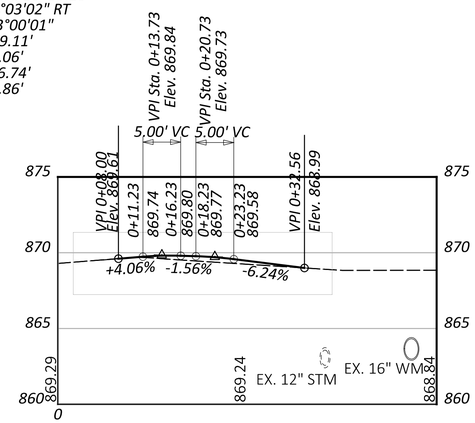
* 5% MAXIMUM RUNNING SLOPE TO ACHIEVE FLUSH TRANSITION TO DRIVEWAY

SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

CURVE DATA
P.I. = STA. 16+83.20
Δ = 36°03'02" RT
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'



DW 15+12.56 LT



DW 17+03.39 LT

1. RESIDENTIAL SHALL BE 6" CONCRETE WITH 4" AGGREGATE BASE

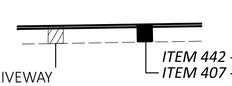
2. COMMERCIAL DRIVES SHALL BE 8" CONCRETE, UNLESS NOTED, WITH 4" AGGREGATE BASE

3. TYPICALLY 12' WIDE DRIVES ARE USED FOR RESIDENTIAL AND 24' WIDE DRIVES ARE FOR COMMERCIAL.

4. HIGH TRAFFIC VOLUME DRIVE APPROACHES SHALL BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

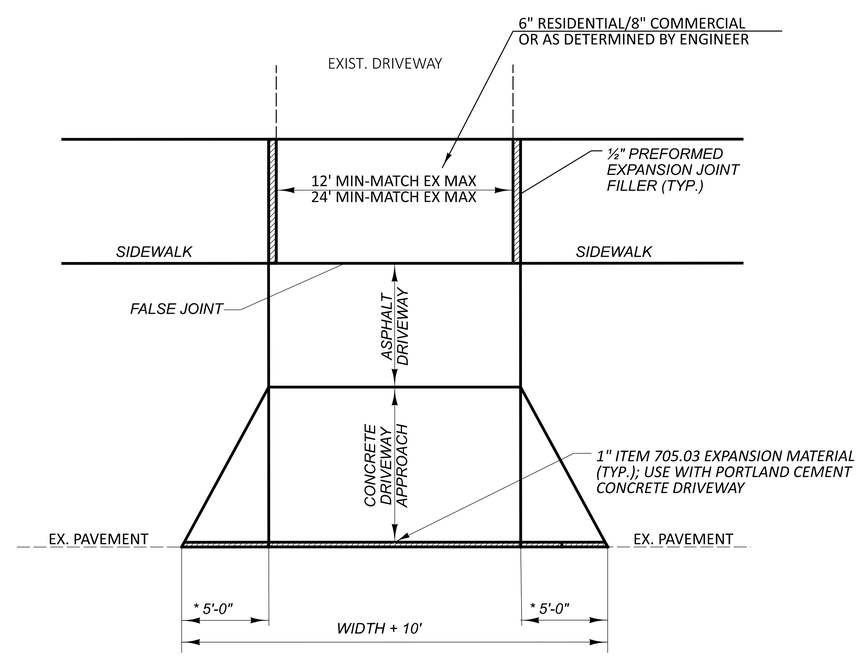
5. THE DRIVE APPROACH FLARES SHOWN ABOVE SHALL BE USED ONLY WITH THE TYPE OF CURB INDICATED.

6. DRIVE APPROACHES SHALL MEET THE REQUIREMENTS OF ODOT ITEM 452.



ITEM 442 - VARIES ASPHALT CONCRETE SURFACE COURSE, TYPE A (449)
ITEM 407 - NON-TRACKING TACK COAT (0.085 GAL/SY)

TYPICAL DRIVEWAY MILL/OVERLAY



HORIZONTAL SCALE IN FEET
0 10 20 40

DRIVEWAY DETAILS

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Olive Road-1 - Plan 2 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:40 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE ROAD
SUITE 270
CINCINNATI, OHIO 45459
PH (937) 701-2193
www.cmtengr.com

DESIGNER
LDW

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.46 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: CLP_1 - Profile 1 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:35:57 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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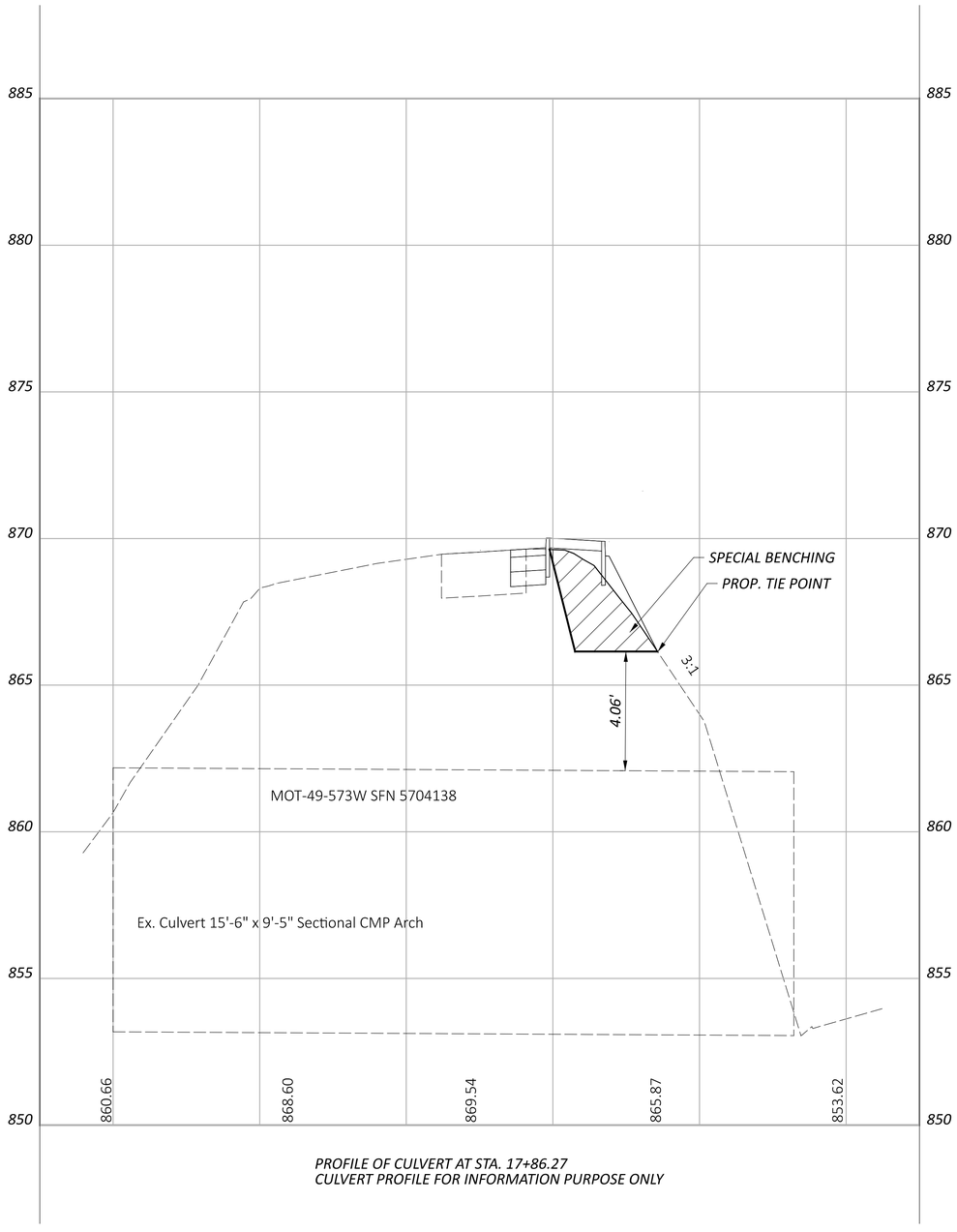
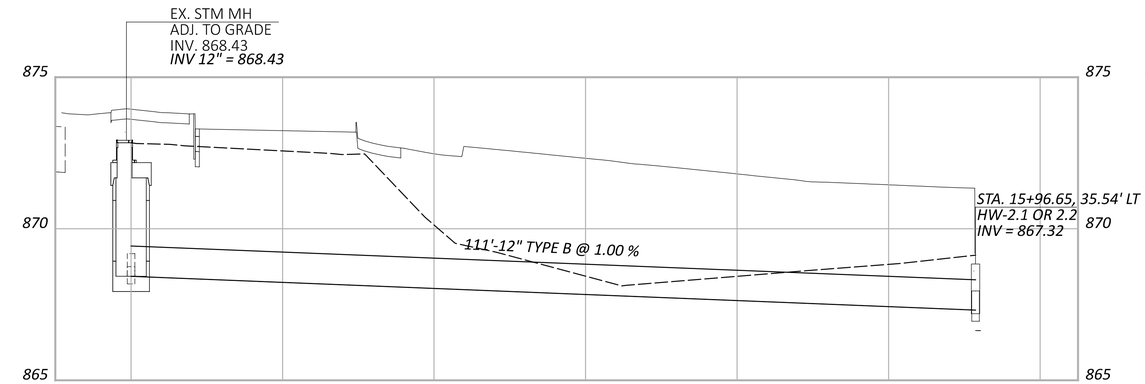
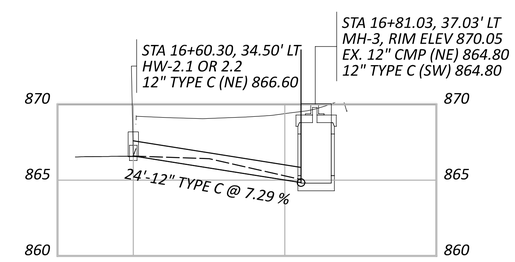


PROFILE OF CULVERT AT STA. 17+86.27
CULVERT PROFILE FOR INFORMATION PURPOSE ONLY





HORIZONTAL SCALE IN FEET
0 ---NA--- ---NA--- ---NA---

CULVERT PROFILE
EX CULVERT PROFILE STA. 17+86.31

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUFF ROAD
WESTERVILLE, OHIO 43230
SUITE 270
DUBLIN, OHIO 43459
PH (937)767-2733
www.cmtengr.com

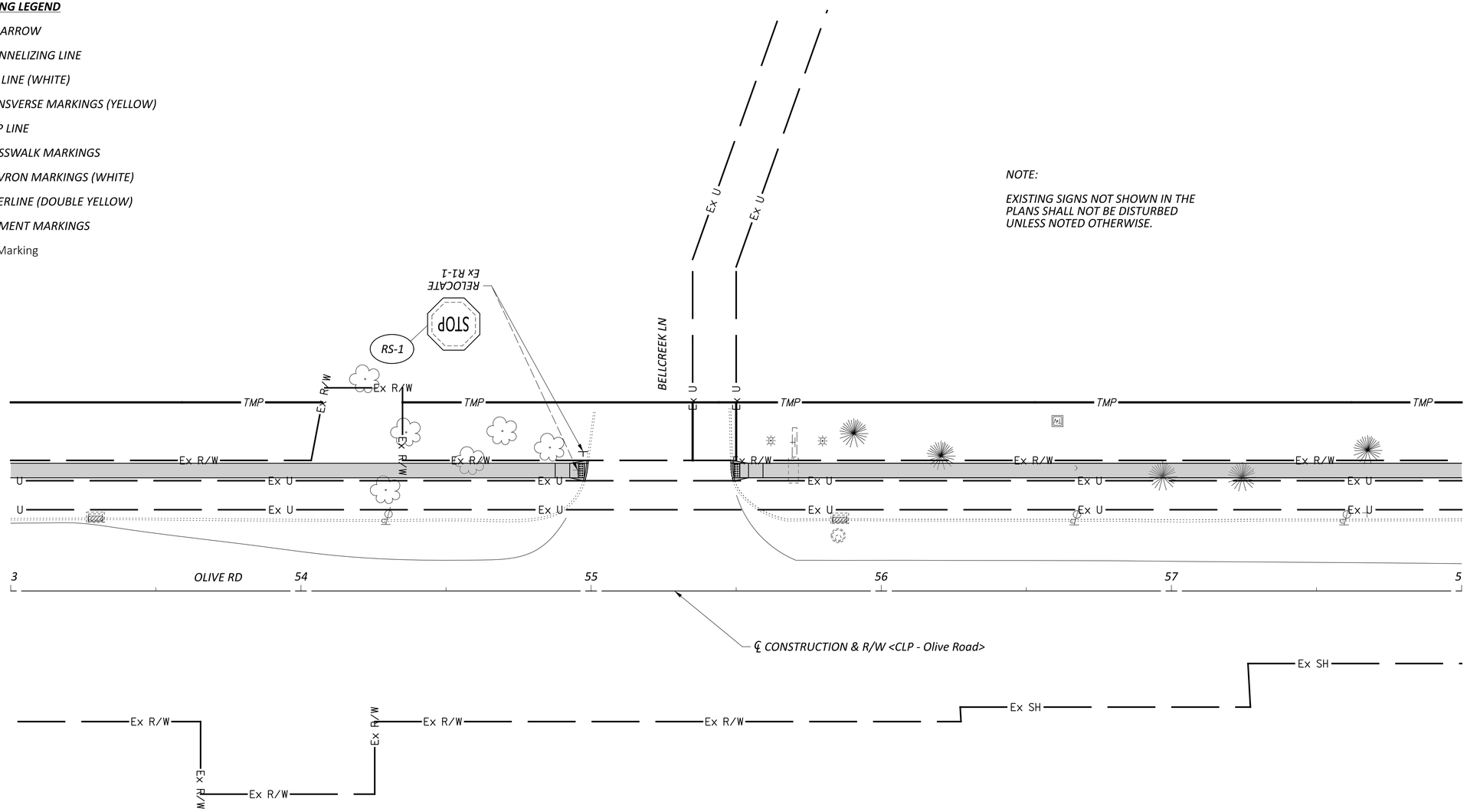
DESIGNER	LDW
REVIEWER	JWB 07/01/25
PROJECT ID	117202
SHEET	P.47
TOTAL	59

PAVEMENT MARKING LEGEND

- (A) ITEM 644, 6' TURN ARROW
- (C) ITEM 644, 12" CHANNELIZING LINE
- (E) ITEM 644, 6" EDGE LINE (WHITE)
- (T) ITEM 644, 24" TRANSVERSE MARKINGS (YELLOW)
- (ST) ITEM 644, 24" STOP LINE
- (X) ITEM 644, 24" CROSSWALK MARKINGS
- (V) ITEM 644, 24" CHEVRON MARKINGS (WHITE)
- (Y) ITEM 644, 4" CENTERLINE (DOUBLE YELLOW)
- (RM) REMOVAL OF PAVEMENT MARKINGS
- Existing Pavement Marking

NOTE:

EXISTING SIGNS NOT SHOWN IN THE PLANS SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.



SIGN LEGEND

- (S) PR SIGN
- (RS) EX SIGN TO BE RELOCATED
- EX SIGN TO REMAIN
- (R) EX SIGN TO BE REMOVED

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL
STA. 53+00 TO STA. 58+00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HUTCHINSON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)767-2193
www.cmtengr.com

DESIGNER: GSH
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.48 TOTAL: 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_TP101 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:00 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT
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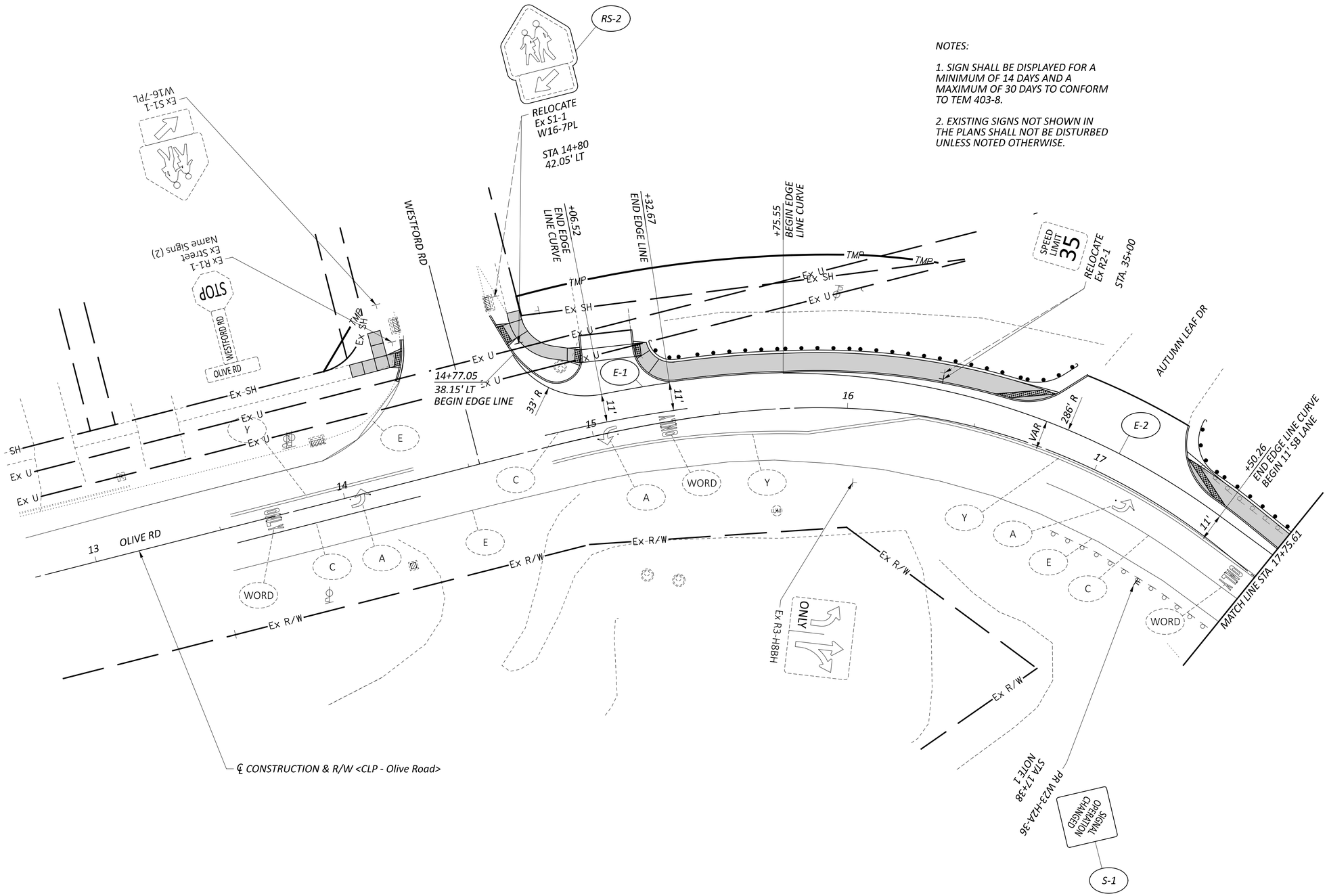

NOTES:

1. SIGN SHALL BE DISPLAYED FOR A MINIMUM OF 14 DAYS AND A MAXIMUM OF 30 DAYS TO CONFORM TO TEM 403-8.

2. EXISTING SIGNS NOT SHOWN IN THE PLANS SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL
STA. 13+00 TO STA. 17+75.61

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.48

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 WARREN ROAD
STRONGSVILLE, OHIO 44149
PH (937)701-2193
www.cmtengr.com

DESIGNER: GSH
REVIEWER: JWB 07/01/25
PROJECT ID: 117202
SHEET: P.49 TOTAL: 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_TP105 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:02 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR495safetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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NOTES:

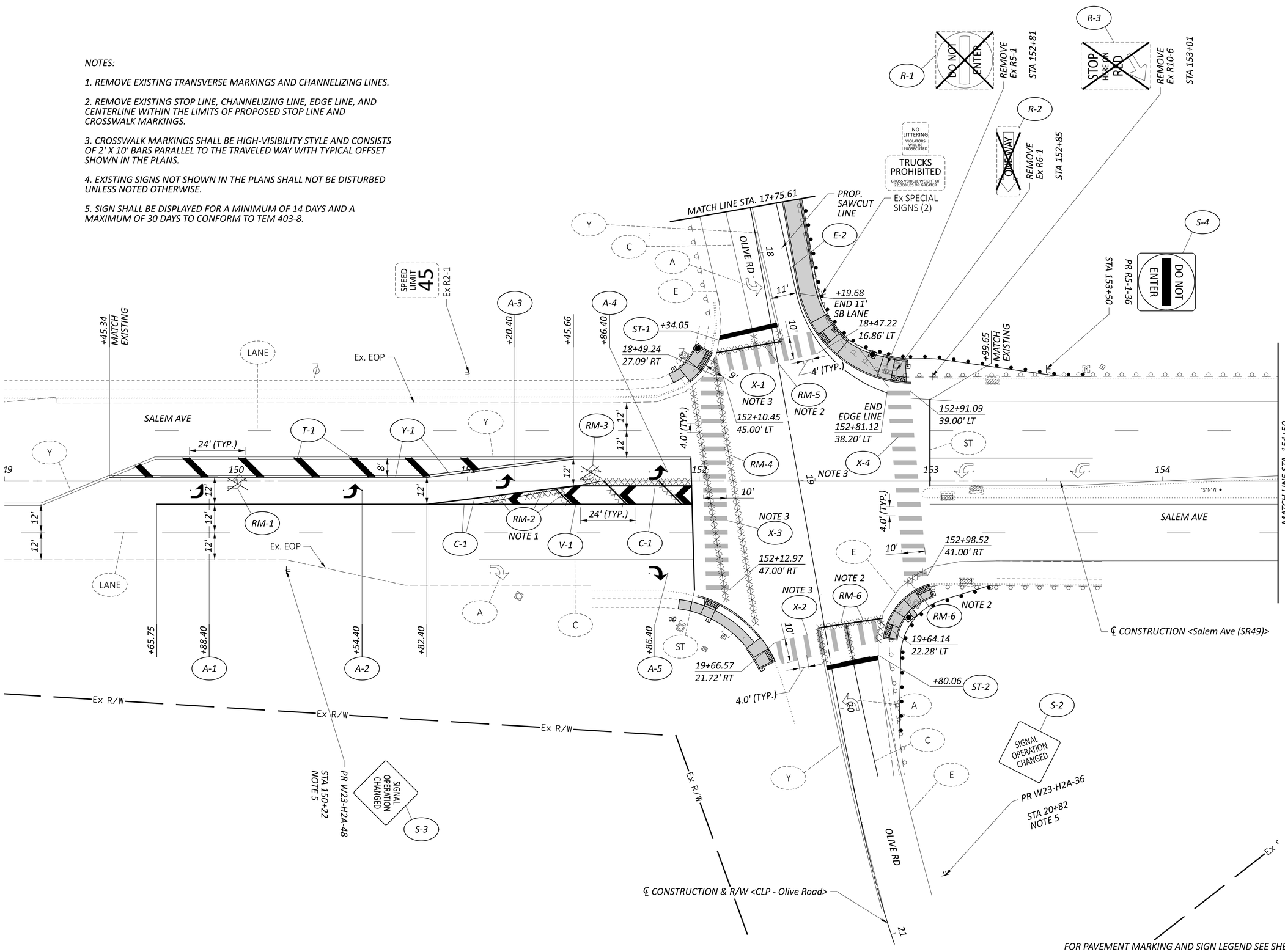
1. REMOVE EXISTING TRANSVERSE MARKINGS AND CHANNELIZING LINES.

2. REMOVE EXISTING STOP LINE, CHANNELIZING LINE, EDGE LINE, AND CENTERLINE WITHIN THE LIMITS OF PROPOSED STOP LINE AND CROSSWALK MARKINGS.

3. CROSSWALK MARKINGS SHALL BE HIGH-VISIBILITY STYLE AND CONSISTS OF 2' X 10' BARS PARALLEL TO THE TRAVELED WAY WITH TYPICAL OFFSET SHOWN IN THE PLANS.

4. EXISTING SIGNS NOT SHOWN IN THE PLANS SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.

5. SIGN SHALL BE DISPLAYED FOR A MINIMUM OF 14 DAYS AND A MAXIMUM OF 30 DAYS TO CONFORM TO TEM 403-8.



FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.48

HORIZONTAL SCALE IN FEET 0 10 20 40

TRAFFIC CONTROL
STA. 149+00 TO STA. 154+50

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_TP201 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:05 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
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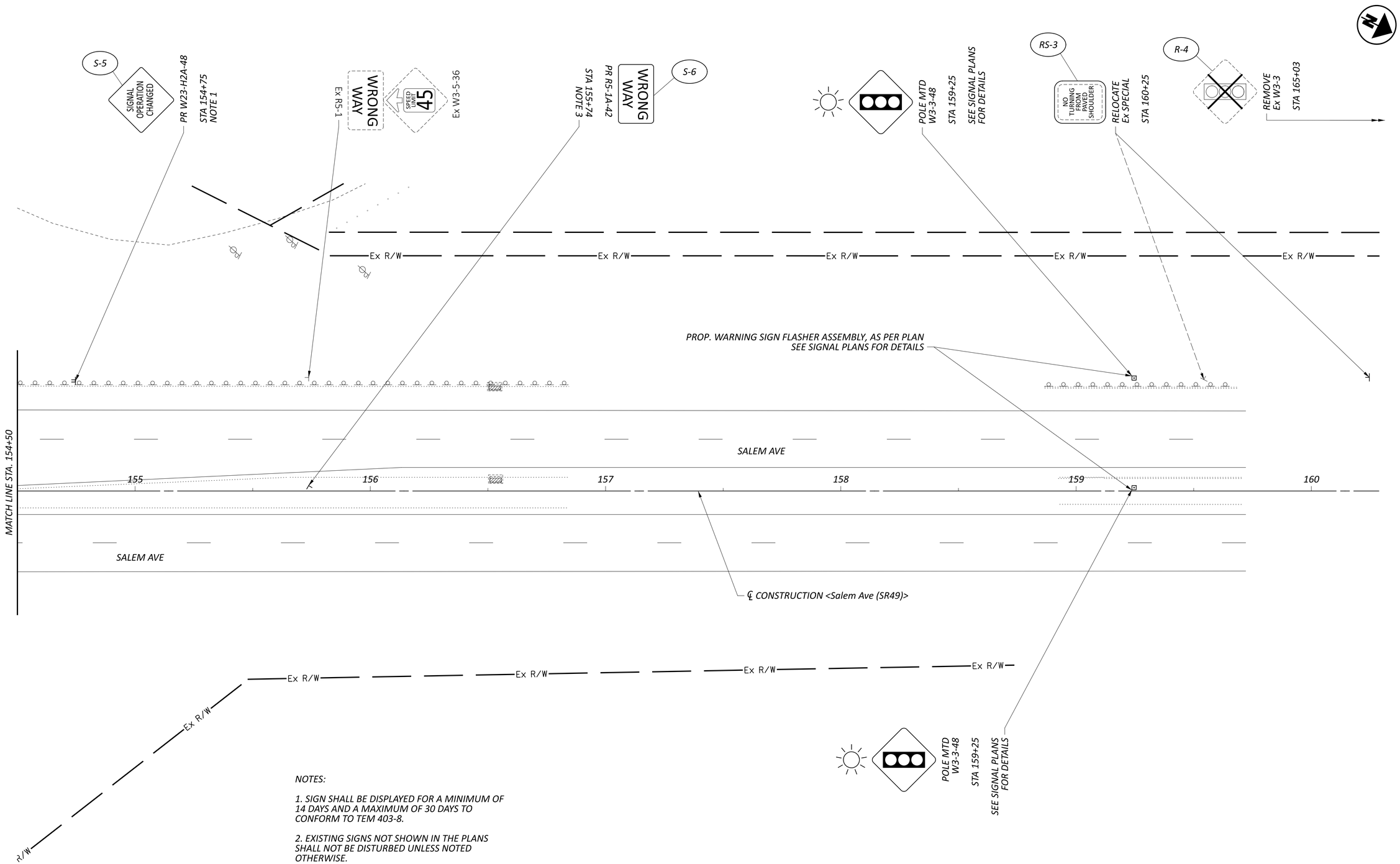
DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER OAK DR
SUITE 270
LONGVIEW, OHIO 45459
PH (937)767-2193
www.cmtengr.com

DESIGNER GSH
REVIEWER JWB 07/01/25
PROJECT ID 117202
SHEET P.50 TOTAL 59



NOTES:

1. SIGN SHALL BE DISPLAYED FOR A MINIMUM OF 14 DAYS AND A MAXIMUM OF 30 DAYS TO CONFORM TO TEM 403-8.

2. EXISTING SIGNS NOT SHOWN IN THE PLANS SHALL NOT BE DISTURBED UNLESS NOTED OTHERWISE.

3. SIGN SHALL BE ROTATED BY 30 DEGREES TO PROHIBIT VISIBILITY BY NORTHBOUND TRAFFIC.

FOR PAVEMENT MARKING AND SIGN LEGEND SEE SHEET P.48

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL
STA. 154+50 TO STA. 160+00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCOMB VILLAGE DR
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www.cmtengr.com

DESIGNER
GSH

REVIEWER
JWB 07/01/25

PROJECT ID
117202

SHEET P.51 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_TP202 PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:07 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Traffic\Sheets\117202_TP202.dgn

GENERAL REQUIREMENTS

THE PURPOSE OF THIS SPECIFICATION AND THE ASSOCIATED PLANS IS TO REPLACE THREE OUT OF THE FOUR EXISTING STRAIN POLES AND PROVIDE ADA COMPLIANT SIGNAL EQUIPMENT AT THE STATE ROUTE 49 AND OLIVE ROAD INTERSECTION IN THE CITY OF TROTWOOD, OHIO. THESE PLANS AND SPECIFICATIONS ARE TO RESULT IN THE COMPLETE INSTALLATION OF FULLY FUNCTIONAL TRAFFIC SIGNALS UTILIZING STRAIN POLE SUPPORTS AND SHALL OPERATE ACCORDING TO THE REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

THE 2023 OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATION, LATEST REVISION, SHALL GOVERN THIS PROJECT EXCEPT WHEN OTHERWISE NOTED. ITEMS LISTED SHALL CONFORM TO THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATION MANUAL, TO THE ODOT OFFICE OF ROADWAY ENGINEERING STANDARD CONSTRUCTION DRAWINGS, AND TO ANY SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIFIC REQUIREMENTS NOTED.

BIDDERS SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE OHIO REVISED CODE AND ADMINISTRATIVE CODE.

SIGNAL ACTIVATION

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNAL TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, 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 CITY ENGINEER AND DISTRICT TRAFFIC ENGINEER. THE DISTRICT TRAFFIC ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND DISTRICT TRAFFIC ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED DISTRICT TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE 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 REINSPECTED BY DISTRICT TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. CITY FORCES SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

DETECTION MAINTENANCE

IF VEHICLE DETECTION BECOMES UNEXPECTEDLY DISABLED, REQUIRES MODIFICATION, OR IS SCHEDULED TO BE TEMPORARILY REMOVED DURING THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY ENGINEER AND DISTRICT TRAFFIC ENGINEER.

IF THE LOSS OF VEHICLE DETECTION IS KNOWN PRIOR TO THE START OF CONSTRUCTION, IT SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING. AT SUCH TIME, THE DISTRICT TRAFFIC ENGINEER SHALL ADVISE THE CITY ENGINEER AND CONTRACTOR ON THE APPROPRIATE ACTION TO RECTIFY ANY LOSS OF VEHICLE DETECTION. THIS MAY INCLUDE PLACING THE TRAFFIC SIGNAL ON MINIMUM OR MAXIMUM RECALL, MODIFYING THE MINIMUM GREEN TIMES, AND REMOVING THE MALFUNCTIONING DETECTION FROM SERVICE. WHERE NON-INTRUSIVE DETECTION (I.E. VIDEO, RADAR) ALREADY EXISTS, THE CONTRACTOR SHALL INSURE THAT DETECTION IS OPERATING AND MAINTAINED BY RECONFIGURING THE DETECTION UNITS ACCORDINGLY DURING ALL CONSTRUCTION PHASES. THIS IS TO AVOID THE SIGNAL FROM MAXING OUT THE EFFECTED SIGNAL PHASE AND CREATING UNNECESSARY DELAYS.

LOCATIONS WHERE NON-INTRUSIVE DETECTION IS PROPOSED AND THE EXISTING VEHICLE DETECTION IS TO BE ABANDON, THE NON-INTRUSIVE VEHICLE DETECTION SHALL BE INSTALLED, CONFIGURED AND MADE FULLY FUNCTIONAL PRIOR TO THE EXISTING DETECTION BEING DISABLED. THE CONTRACTOR SHALL CONTINUE TO MAINTAIN AND MODIFY THE DETECTION UNTIL FINAL ACCEPTANCE OF THE TRAFFIC SIGNAL. THIS IS TO ENSURE VEHICLE DETECTION REMAINS FULLY FUNCTIONAL THROUGHOUT CONSTRUCTION.

WORK INSPECTION

THE CONTRACTOR SHALL PROVIDE THE CITY ENGINEER AND DISTRICT TRAFFIC ENGINEER WITH 72 HOUR NOTICE OF ANY SIGNAL WORK TO BE PERFORMED AT THE INTERSECTION SITE(S) SO THAT INSPECTION SERVICES CAN BE SUPPLIED.

ITEM 630 SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN

THE CONTRACTOR SHALL ATTACH A STAINLESS STEEL SIGN SUPPORT TO THE VERTICAL SIGNAL SUPPORT. THE SIGN SUPPORT SHALL BE ATTACHED TO THE TOP AND BOTTOM OF A SIGN BLANK AND BANDED TO A STRAIN POLE HAVING A DIAMETER BETWEEN 2 AND 14 INCHES THEREBY SECURING THE SIGN IN A CANTILEVERED POSITION. THIS ITEM SHALL INCLUDE ALL NECESSARY HARDWARE, FASTENERS, AND ACCESSORIES. THE SIGN SUPPORT SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 14 FEET. THE ENGINEER SHALL INSPECT AND APPROVE THE FINAL LOCATION OF THE STREET NAME SIGN SUPPORT PRIOR TO INSTALLATION.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID, PER EACH OF CMS ITEM 630 SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN.

ITEM 631 SIGN LIGHTING MISC.: WARNING SIGN FLASHER ASSEMBLY, AS PER PLAN

THIS SPECIFICATION APPLIES TO WARNING SIGN FLASHERS POWERED BY SIGNAL CONTROLLER AT THE SR49 AND OLIVE RD INTERSECTION. THE WARNING SIGN FLASHERS AND SIGNAL CONTROLLER SHALL BE CONNECTED USING THE SPECIFIED SIGNAL CABLE.

THE WARNING SIGN FLASHERS SHALL BE COMPATIBLE WITH ITEM 809 ADVANCE RADAR DETECTION, AS PER PLAN. SIGN FLASHERS SHALL TURN ON DURING THE EVENT WHEN VEHICLES TRAVELLING AT 25 MPH OR LOWER SPEEDS ARE DETECTED WITHIN THE ADVANCE WARNING SIGN ZONE AS SHOWN IN THE PLANS.

THE ENTIRE WARNING SIGN FLASHER AND SIGN ASSEMBLY SHALL CONFORM TO THE CONTRACT DOCUMENTS AND MEET THE REQUIREMENTS SET FORTH IN THE OMUTCD. THE SIGN SIZE SHALL BE 48” X 48” AND SIGN CODE W3-3-48.

WARNING SIGN FLASHER ASSEMBLIES SHALL BE MOUNTED ON THE SPECIFIED SUPPORT SHOWN IN THE PLANS. THE FLASHER CONTROL WILL BE HOUSED IN THE SIGNAL CONTROLLER CABINET AT THE SR49 AND OLIVE RD INTERSECTION.

A PAIR OF LED SIGNAL BEACONS, ONE ABOVE AND ONE BELOW THE SIGN, MEETING THE CURRENT ITE VEHICLE TRAFFIC CONTROL SIGNAL HEADS (VTCSH) STANDARD WILL BE USED UNLESS OTHERWISE SPECIFIED. THE MANUFACTURER OF THE SIGNAL BEACON SHALL BE LISTED ON THE DEPARTMENT'S QUALIFIED PRODUCTS LIST FOR LED SIGNAL LAMPS.

IF VOLTAGES OVER 50V AC OR DC ARE PRESENT, GROUNDING AND BONDING REQUIREMENTS SPECIFIED IN THE ODOT CMS WILL BE FOLLOWED.

ANY TIMER INCLUDED IN THE ASSEMBLY MUST SATISFY THE REQUIREMENTS OF 731.10 AND BE LISTED ON THE DEPARTMENT’S QUALIFIED PRODUCTS LIST.

PAYMENT FOR ITEM 631 SIGN LIGHTING MISC.: WARNING SIGN FLASHER ASSEMBLY, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TESTING, CERTIFICATIONS AND OTHER INCIDENTALS NECESSARY TO FURNISH THE WARNING SIGN FLASHER ASSEMBLY COMPLETE IN PLACE, INCLUDING THE SIGN, SIGNAL HEADS, ALL CONNECTIONS AND MOUNTING MADE, WIRING COMPLETE, TESTED AND ACCEPTED. THE SIGN FLASHER SUPPORTS, ADVANCE RADAR, AND SIGNAL CABLES ARE PAID SEPARATELY.

ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CONTROLLER AND CABINET, ETC., SHALL BE REMOVED FROM THE SR49 AND OLIVE RD INTERSECTION IN ACCORDANCE WITH C&MS 632.26 AND AS INDICATED ON THE PLANS. THE EXISTING STRAIN POLE, AND POWER SERVICE AT THE SOUTHEAST QUADRANT OF SR49 AT OLIVE RD INTERSECTION SHALL NOT BE REMOVED. REMOVED ITEMS SHALL BE SALVAGED BY THE CITY IN ACCORDANCE WITH THE LISTING GIVEN HEREIN.

ITEMS TO BE STORED:

STRAIN POLES	(3)
BRACKET ARMS	(2)
SIGNS	(7)
VEHICULAR SIGNAL HEADS	(8)
PEDESTRIAN SIGNAL HEADS	(2)
PEDESTRIAN PUSHBUTTONS	(4)
CCTV CAMERA POLES	(2)
CONTROLLER	(1)
CABINET	(1)

REMOVED ITEMS IDENTIFIED FOR STORAGE SHALL BE DELIVERED TO THE CITY OF TROTWOOD FOR SALVAGE. CONTACT THE CITY ENGINEER TO ARRANGE A MUTUALLY AGREEABLE TIME AND LOCATION FOR ITEMS TO BE DELIVERED.

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ITEMS NOT STORED AT NO ADDITIONAL COST TO THE PROJECT. THE CONTRACTOR SHALL ALSO REMOVE ALL EXISTING FOUNDATIONS OF STRAIN POLES AND PEDESTALS TO A MINIMUM OF 1 FOOT BELOW GRADE UNLESS OTHERWISE DIRECTED ON THE PLANS AND REGRADE/RESOD THE AREA.

THE EXISTING CABINET FOUNDATION SHALL BE RETAINED AND BE IN ACCEPTABLE CONDITION PRIOR TO BEING REUSED BY THE PROPOSED CABINET.

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

ITEM 632 PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, 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 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. THE CONTRACTOR SHALL PROVIDE ODOT, IN WRITING, WITH 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.

PAYMENT FOR ITEM 632 PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN SHALL BE MADE FOR THE NUMBER OF COMPLETE SIGNAL HEAD FURNISHED AND INSTALLED, INCLUDING ALL LABOR, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE.

ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN

IN ADDITON TO THE REQUIREMENTS OF C&MS 632 AND 732 THE ACCESSIBLE PEDESTRIAN PUSHBUTTON SHALL MEET THE CURRENT REQUIREMENTS OF THE MUTCD AND THE ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT OF WAY (PROWAG) REQUIREMENTS.

THIS LINE ITEM SHALL INCLUDE AN APS AUDIBLE BEACON WIRED TO THE ACCESSIBLE PEDESTRIAN PUSHBUTTON. THE AUDIBLE BEACON SHALL BE MOUNTED ON TOP OF THE PEDESTRIAN HEAD FOR THE CORRESPONDING PEDESTRIAN CROSSING.

PAYMENT FOR ITEM 632 ACCESSIBLE PEDESTRIAN PUSHBUTTON, AS PER PLAN SHALL BE MADE FOR THE NUMBER OF COMPLETE ACCESSIBLE PEDESTRIAN PUSHBUTTON FURNISHED AND INSTALLED, INCLUDING ALL LABOR, AUDIBLE BEACON, EQUIPMENT, MATERIALS AND NEW ATTACHMENT HARDWARE.

STRAIN POLE AND PEDESTAL FOUNDATION ELEVATIONS

ELEVATIONS SHOWN IN THE PLANS FOR STRAIN POLE AND PEDESTAL FOUNDATIONS ARE FOR COMPUTATIONAL PURPOSES ONLY. THE ACTUAL ELEVATION OF THE FOUNDATION SHALL BE IN ACCORDANCE WITH TRAFFIC SCD TC-21.21 PROVIDED THE EXISTING SLOPE IS LESS THAN 6:1.

AT LOCATIONS WHERE THE EXISTING SLOPE IS 6:1 OR GREATER, THE BURIED DEPTH OF FOUNDATION, AS SHOWN IN SCD TC-21.21 SHALL APPLY TO THE LOW SIDE OF THE SLOPE. THE TOP OF THE FOUNDATION SHALL BE SET 2 INCHES ABOVE THE EXISTING SURFACE ON THE HIGH SIDE OF THE SLOPE. THE ADDITIONAL DEPTH OF FOUNDATION NECESSARY TO MEET THESE REQUIREMENTS SHALL BE ADDED TO THE FORMED TOP.

SIGNAL AND PEDESTAL SUPPORT FOUNDATION

PRIOR TO ORDERING THE SIGNAL AND PEDESTAL SUPPORTS, THE CONTRACTOR SHALL CONTACT OUPS TO HAVE ALL THE UTILITIES LOCATED IN THE FIELD. THEN, THE CONTRACTOR SHALL MEET THE PROJECT ENGINEER TO LOCATE THE PROPOSED SUPPORT LOCATIONS TO INSURE THERE ARE NO CONFLICTS WITH UTILITIES. IF THERE ARE ISSUES, THE PROJECT ENGINEER SHALL PROVIDE GUIDANCE AS TO THE RELOCATION OF THE SUPPORTS.

DUE TO THE FURTHER POSSIBILITY OF CONFLICT WITH EXISTING OR PROPOSED UNDERGROUND OBSTRUCTIONS (INCLUDING THE POSSIBILITY OF UNRECORDED OBSTRUCTIONS) WHICH COULD AFFECT THE LOCATION OF THE FOUNDATION FOR THIS ITEM, AND CONSEQUENTLY, THE DESIGN OF THE SUPPORT AND/OR ARMS, THE CONTRACTOR SHALL NOT PLACE FINAL ORDERS FOR THE ITEM UNTIL THE FOUNDATIONS HAVE BEEN INSTALLED, AT FINAL GRADE, AND THE CONTRACTOR HAS RECEIVED, FROM ENGINEER, WRITTEN NOTICE TO PROCEED WITH THE ORDERS FOR THE ITEM.

IF ANY FOUNDATION LOCATIONS MUST BE ADJUSTED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND MAINTAINING AGENCY, WHO WILL DETERMINE THE REVISED LOCATION AND IF NEEDED, THE SUPPORT DESIGN. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DETERMINING THE REVISED DESIGN. THE ENGINEER WILL INFORM THE CONTRACTOR OF ANY CHANGES NECESSARY AND AUTHORIZE THE CONTRACTOR TO ORDER THE SUPPORT.

THE CONTRACTOR SHALL, WHEN DEVELOPING THE PROGRESS SCHEDULE, AND THOSE OF SUBCONTRACTORS, ENSURE THAT THE FOUNDATIONS ARE INSTALLED AT THE EARLIEST TIME AS IS FEASIBLE AND PRACTICAL, AND SHALL INCLUDE SUFFICIENT TIME IN THE PROGRESS SCHEDULE FOR ORDERING, MANUFACTURING, DELIVERY, AND INSTALLATION OF THE SUPPORT ITEMS AFTER THE FOUNDATIONS ARE IN PLACE.

NO PAYMENTS FOR DELIVERED MATERIALS FOR THE FOUNDATION OR SUPPORT ITEMS SHALL BE MADE UNTIL THE FOUNDATIONS ARE IN PLACE, AND IF CHANGES IN THE DESIGN OF THIS ITEM ARE REQUIRED, NO PAYMENT SHALL BE MADE FOR THE ITEMS MANUFACTURED TO THE ORIGINAL DESIGN.

PAYMENT 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 FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 633 CABINET, TYPE TS-2, AS PER PLAN

THE CABINET SHALL BE FURNISHED AND INSTALLED ACCORDING TO CMS 633 AND 733 AND BE LISTED ON THE TRAFFIC AUTHORIZED PRODUCTS LIST (TAP).

THE GROUND-MOUNTED CABINET SHALL BE A NEMA TS-2, TYPE 1, CABINET SIZE 7 WITH 16 LOAD SWITCH BAYS, LED UNDER-SHELF LIGHTING, POWER HARNESSES FOR BOTH TS2 TYPE 1 AND TYPE 2 CONTROLLERS AND SHALL HAVE A MINIMUM OF THREE SHELVES.

EACH CABINET SHALL COME EQUIPPED WITH TWO 16-CHANNEL CABINET DETECTOR RACKS (CDR) INCLUDING BUS INTERFACE UNITS (BIU). THE LOOP DETECTOR TERMINATION PANEL FOR THE SECOND DETECTOR RACK SHALL BE OMITTED.

THE CABINET SHALL BE FURNISHED WITH AN EDI MMU AS ALLOWED ON THE TAP/APPROVED PRODUCTS LIST.

PAYMENT FOR ITEM 633 CABINET, TYPE TS-2, AS PER PLAN WILL BE AT THE CONTRACT BID PRICE PER EACH COMPLETE AND IN PLACE INCLUDING ALL CONNECTIONS TESTED AND ACCEPTED.

ITEM 809 ADVANCE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING AN ADVANCE RADAR DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.

2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.

ITEM 809 ADVANCE RADAR DETECTION, AS PER PLAN (CONTINUED)

3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.

4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.

5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.

6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).

7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

8. THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING EXISTING LOOPS.

9. THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.

PAYMENT FOR ITEM 809 ADVANCE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

ITEM 809 STOP LINE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A STOP LINE RADAR DETECTION UNIT. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.

2. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.

3. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.

4. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.

5. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.

6. A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MINIMUM 7 FEET).

7. THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.

8. THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING EXISTING LOOPS.

9. THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.

PAYMENT FOR ITEM 809 STOP-LINE RADAR DETECTION, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

ITEM 809 ATC CONTROLLER, AS PER PLAN

THE CONTROLLER UNIT SHALL BE FURNISHED AND INSTALLED PER SS 809 AND BE LISTED ON THE TRAFFIC AUTHORIZED PRODUCTS (TAP) LIST.
THE CONTROLLER SHALL BE A SIEMENS M60, LATEST MODEL, AND COMPATIBLE WITH THE CABINET TYPE BEING INSTALLED.

ITEM 809 EMERGENCY VEHICLE PREEMPTION

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING PREEMPTION EQUIPMENT IN THE LOCATIONS AND LOCAL CONTROLLERS AS SHOWN IN THE PLANS. THE PREEMPTION SHALL CONFORM TO ODOT SUPPLEMENTAL SPECIFICATION 809 AND SHALL UTILIZE COMMUNICATIONS TO IDENTIFY THE PRESENCE OF AN EMERGENCY PRIORITY VEHICLE. IT SHALL CAUSE THE TRAFFIC SIGNAL CONTROLLER TO SELECT A PRE PROGRAMMED PREEMPTION PLAN THAT WILL DISPLAY AND HOLD THE DESIRED SIGNAL PHASE FOR THE DIRECTION OF THE EMERGENCY VEHICLE.

THE COMMUNICATIONS MEDIUM SHALL EMPLOY LIGHT DETECTION TECHNIQUES TO DETERMINE AND LOG THE PRESENCE OF THE EMERGENCY VEHICLE. THE SYSTEM SHALL DETECT THE PRESENCE OF THE VEHICLE THROUGH AN EMITTING DEVICE LOCATED ON THE EMERGENCY VEHICLE. THE SYSTEM SHALL ACTIVATE THE PREEMPTION SEQUENCE BY APPLYING A SIGNAL TO ONE OF THE CONTROLLER'S PREEMPT DISCRETE INPUTS. THE SYSTEM SHALL BE COMPLETELY COMPATIBLE WITH THE CONTROLLER.

THE EQUIPMENT SHALL BE SHELF OR RACK MOUNTED AND EASILY REMOVABLE AND REPLACEABLE WITHIN THE CABINET. SUPPLY EQUIPMENT COMPLETELY WIRED IN THE CONTROLLER CABINET AND TESTED. THE SYSTEM SHALL BE CAPABLE OF PREEMPTING AND RECEIVING PRIORITY FOR EACH APPROACH TO THE INTERSECTION. IT SHALL BE POSSIBLE TO DETECT THE EMERGENCY VEHICLE AT LEAST 2000 FEET FROM THE INTERSECTION IN AN 80DB-A NOISE ENVIRONMENT.

ALL PREEMPTION PLANS SHOULD BE PROGRAMMED TO PREVENT THE YELLOW TRAP, UNLESS AS DIRECTED BY THE DISTRICT TRAFFIC ENGINEER. YELLOW TRAP PREVENT WILL FORCE THE TRANSITION THROUGH YELLOW CHANGE AND RED CLEARANCE FOR RESOLUTION OF YELLOW TRAP IF ANY PHASE OPPOSING THE PREEMPTION CLEARANCE PHASE(S) IS ACTIVE AND DISPLAYING A GREEN OR FLASHING YELLOW ARROW INDICATION WHEN THE PREEMPTION PLAN IS ACTIVATED AND THE PREEMPTION CLEARANCE PHASE(S) ARE GREEN.

SUPPLY EACH INTERSECTION SHOWN IN THE PLANS WITH THE FOLLOWING COMPONENTS, EACH BID SEPARATELY:

PREEMPT RECEIVING UNIT
PREEMPT DETECTOR CABLE.
PREEMPT PHASE SELECTOR ASSEMBLY AND INTERFACE WIRING PANEL
CONFIRMATION LIGHT

THE CONTRACTOR SHALL INVENTORY THE CITY'S EXISTING EMITTERS TO DETERMINE COMPATIBILITY WITH THE PROPOSED SYSTEM. IF EXISTING EMITTERS ARE FOUND TO BE NOT COMPATIBLE, THEN THE CITY SHALL BE SUPPLIED (AT COSTS INCIDENTAL TO THE SYSTEM) WITH THE EMITTERS, TRANSMITTERS, SWITCHES, WIRING AND ALL REQUIRED VEHICLE EQUIPMENT FOR THE FOLLOWING EMERGENCY VEHICLES. THE CITY SHALL BE RESPONSIBLE FOR INSTALLING VEHICLE EQUIPMENT.

THE CITY SHALL BE SUPPLIED WITH SOFTWARE REQUIRED TO CALIBRATE, LOG, AND OPERATE THE SYSTEM. TWO (2) OPERATING AND INSTRUCTION MANUALS SHALL BE SUPPLIED WITH THE SOFTWARE.

THE CONTRACTOR SHALL THOROUGHLY TEST THE INSTALLED SYSTEM. AS A MINIMUM, THE CONTRACTOR SHALL VERIFY THAT ALL CONNECTIONS ARE PROPERLY MADE TO THE CONTROLLER CABINETS. THE CONTRACTOR SHALL CHECK THAT THE RANGE SETTING IS PROPER FOR EACH INTERSECTION. THE CONTRACTOR SHALL DETERMINE THAT ALL PHASE SELECTORS ARE SELECTING THE PROPER PHASE AND TIMING ACCURATELY. THE CONTRACTOR SHALL VERIFY THAT ALL VEHICLE EMITTERS ARE BEING PROPERLY DETECTED.

IF THE PROPOSED PREEMPT SYSTEM IS NOT COMPATIBLE WITH THE EXISTING SYSTEM, THE CONTRACTOR SHALL PROVIDE TRAINING FOR UP TO FIFTEEN (15) PERSONS IN THE OPERATION OF THE SYSTEM. IT SHALL BE PROVIDED WITHIN 48 HOURS OF THE INSTALLATION OF THE SYSTEM. IT SHALL CONSIST OF HANDS ON INSTRUCTION FOR A MINIMUM OF SIXTEEN (16) HOURS. THE CONTRACTOR SHALL PROVIDE TRAINING FOR UP TO FOUR (4) PERSONS IN THE INSTALLATION AND MAINTENANCE OF THE SYSTEM. IT SHALL CONSIST OF A MINIMUM OF EIGHT (8) HOURS OF INSTRUCTION. TRAINING SHALL BE SUPPLIED WITHIN SEVEN (7) DAYS OF THE INSTALLATION OF THE SYSTEM. ALL TRAINING SHALL BE HELD IN A CITY SUPPLIED LOCATION. TRAINING SHALL BE CONDUCTED BY SOMEONE WHO HAS PERFORMED THIS WITHIN THE LAST YEAR AND DOES IT ON A REGULAR BASIS. THE COST OF TRAINING, INCLUDING COURSE MATERIAL, TRAVEL SUBSISTENCE AND RELATED COSTS, SHALL BE ENTIRELY BORNE BY THE CONTRACTOR AND SHALL BE INCIDENTAL TO THE PREEMPTION EQUIPMENT.
PAYMENT FOR ITEM 809 PREEMPTION SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH PREEMPTION IN PLACE AND FULLY OPERATIONAL AS SHOWN IN THE PLANS, EXCEPT FOR THOSE ITEMS BID SEPARATELY.

ITEM 809 PREEMPT RECEIVING UNIT

RECEIVING UNITS SHALL CONSIST OF A LIGHTWEIGHT, WEATHERPROOF AND DIRECTIONAL ASSEMBLY. EACH RECEIVING UNIT SHALL BE 360 DEGREE ADJUSTABLE. THE RECEIVING UNIT SHALL BE CAPABLE OF SENDING THE PROPER ELECTRICAL SIGNAL TO THE TRAFFIC SIGNAL CONTROLLER VIA THE PREEMPTION DETECTOR CABLE. RECEIVING UNITS SHALL BE SUPPLIED WITH MAST ARM MOUNTING HARDWARE AS SHOWN IN THE PLANS. FURNISH PREEMPTION RECEIVING UNITS WITH 60-MONTH WARRANTIES OR FOR THE MANUFACTURER’S STANDARD WARRANTY WHICHEVER IS GREATER. ENSURE THAT THE WARRANTY PERIOD BEGINS ON THE DATE OF SHIPMENT TO THE PROJECT. ENSURE THAT EACH UNIT HAS A PERMANENT LABEL OR STAMP INDICATING THE DATE OF SHIPMENT.

PAYMENT FOR ITEM 809 PREEMPTION RECEIVING UNIT SHALL BE AT THE CONTRACT UNIT FOR EACH RECEIVING UNIT IN PLACE, COMPLETELY INSTALLED AT THE LOCATION SHOWN IN THE PLANS, WIRED, TESTED AND ACCEPTED.

ITEM 809 PREEMPT DETECTOR CABLE

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING PREEMPTION DETECTOR HOME RUN CABLE IN THE LOCATIONS SHOWN IN THE PLANS. IT SHALL CONNECT THE PREEMPT RECEIVING UNITS TO THE PHASE SELECTORS IN THE LOCAL CONTROLLER CABINET.

PREEMPTION DETECTOR CABLE SHALL CONFORM TO ODOT SPECIFICATION 632. ONLY ONE EXTERNAL SPLICE SHALL BE PERMITTED BETWEEN PREEMPTION RECEIVER UNIT AND CONTROLLER CABINET. THIS SPLICE SHALL MEET THE REQUIREMENTS OF C&MS 632.23 USING A WATERPROOF EPOXY SPLICE KIT. THE CABLE SHALL BE APPROVED FOR BOTH OVERHEAD AND UNDERGROUND USE. THE JACKET SHALL WITHSTAND EXPOSURE TO SUNLIGHT AND ATMOSPHERIC TEMPERATURES AND STRESSES REASONABLY EXPECTED IN NORMAL INSTALLATIONS.

PAYMENT FOR ITEM 809 PREEMPTION DETECTOR CABLE SHALL BE MADE AT THE CONTRACT UNIT PRICE PER FOOT FOR THE CABLE FURNISHED, IN PLACE, ALL CONNECTIONS MADE AND WIRING COMPLETED, TESTED AND ACCEPTED.

ITEM 809 PREEMPT PHASE SELECTOR

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING PREEMPT PHASE SELECTORS INCLUDING WIRING INTERFACE PANELS IN THE LOCAL CONTROLLER CABINET AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE PREEMPT PHASE SELECTORS COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS. THIS ITEM SHALL INCLUDE THE EXTRA CABINET SPACE NECESSARY TO BE LOCATED IN THE LOCAL CONTROLLER CABINETS WHERE INDICATED IN THE PLANS.

THE PHASE SELECTORS SHALL CONSIST OF A MODULE OR MODULES THAT WILL PROVIDE THE NECESSARY INPUTS TO THE CONTROLLER. PHASE SELECTORS SHALL BE SUPPLIED WITH SUFFICIENT QUANTITIES OF CHANNELS TO PROVIDE PREEMPTION FOR ALL APPROACHES TO THE INTERSECTION SEPARATELY. POWER SHALL BE OBTAINED FROM THE PHASE SELECTOR OR PHASE SELECTOR POWER SUPPLY AND NOT FROM THE LOCAL CONTROLLER TIMER.

THE PHASE SELECTORS SHALL HAVE FRONT PANEL INDICATORS FOR ACTIVE PREEMPT CHANNEL STATUS. IT SHALL HAVE TEST SWITCHES TO ACTIVATE ALL PREEMPT CHANNELS.

FURNISH PREEMPT PHASE SELECTORS WITH 60-MONTH WARRANTIES OR FOR THE MANUFACTURER’S STANDARD WARRANTY WHICHEVER IS GREATER. ENSURE THAT THE WARRANTY PERIOD BEGINS ON THE DATE OF SHIPMENT TO THE PROJECT. ENSURE THAT EACH UNIT HAS A PERMANENT LABEL OR STAMP INDICATING THE DATE OF SHIPMENT.

PAYMENT FOR ITEM 809 PREEMPT PHASE SELECTOR SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH PHASE SELECTOR IN PLACE, COMPLETELY INSTALLED IN THE LOCAL CONTROLLER SHOWN IN THE PLANS, WIRED, TESTED AND ACCEPTED.

ITEM 809 PREEMPT CONFIRMATION LIGHT

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING PREEMPT CONFIRMATION LIGHTS INCLUDING HARDWARE AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE PREEMPT CONFIRMATION LIGHT COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS.

A CONFIRMATION LIGHT SHALL BE SUPPLIED FOR EACH INTERSECTION TO INDICATE THAT THE EMERGENCY VEHICLE HAS ACHIEVED CONTROL OF THE TRAFFIC SIGNAL.

THE CONFIRMATION LIGHT SHALL BE A WEATHER TIGHT LIGHTING FIXTURE. IT SHALL BE SUPPLIED WITH A GLOBE, LED LAMP AND MOUNTING HARDWARE TO ATTACH TO THE TRAFFIC SIGNAL SPAN WIRE. THE CONFIRMATION LIGHT SHALL BE POWERED BY A LOAD SWITCH IN THE TRAFFIC SIGNAL CONTROLLER. SIGNAL CABLE CONFORMING TO 732.19 SHALL BE USED FOR CONFIRMATION LIGHTS. A MINIMUM OF 4-CONDUCTOR CABLE SHALL BE USED WITH THE GREEN WIRE SERVING AS THE SAFETY GROUND CONDUCTOR.

PAYMENT FOR ITEM 809 PREEMPT CONFIRMATION LIGHT, LED SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH LIGHT IN PLACE, COMPLETELY INSTALLED IN THE LOCATION SHOWN IN THE PLANS, WIRED, TESTED AND ACCEPTED.

GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 120 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION, THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY. EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLER, CABINET, UNINTERRUPTIBLE POWER SUPPLY, VEHICLE DETECTION EQUIPMENT, LED LAMP UNITS, NETWORK AND COMMUNICATION/ INTERCONNECT EQUIPMENT. CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT. THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

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.

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GROUNDING AND BONDING (CONTINUED)

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:
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. USE A MINIMUM 8 AWG BETWEEN THE “PREPARE TO STOP WHEN FLASHING” INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
IV. 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 No.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/	PED SIGNAL
1/	BLACK/	GREEN BALL/	NO.1 WALK
2/	WHITE/	AC NEUTRAL/	AC NEUTRAL
3/	RED/	RED BALL/	NO.1 DW/FDW
4/	GREEN/	EQUIPMENT GROUND/	EQUIPMENT GROUND
5/	ORANGE/	YELLOW BALL/	NO.2 DW FDW
6/	BLUE/GRN	ARROW/	NO.2 WALK
7/	WHITE W/ BLK STRIPE	YELLOW ARROW/	NOT USED

6. POWER 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 PRIMARY POWER SERVICE DISCONNECT SWITCH.
I. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
II. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

7. PAYMENT – ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

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TRAFFIC SIGNAL NOTES

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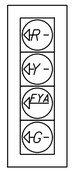
DESIGNER
GSH

REVIEWER
SAK 07/01/25

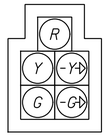
PROJECT ID
117202

SIGNAL HEADS



PROPOSED POLYCARBONATE

1A, 3A, 5A, 7A



PROPOSED POLYCARBONATE

2C

PROPOSED POLYCARBONATE

2A, 2B, 4A, 4B, 4C, 6A, 6B, 6C, 8A, 8B

PROPOSED PEDESTRIAN SIGNAL HEADS

P1, P2, P3, P4, P5, P6, P7, P8

SIGNS

PROPOSED R3-5R-30

Sn19

PROPOSED R3-5L-30

Sn14, Sn16, Sn18, Sn21

PROPOSED R10-3E-9

Sn2, Sn4, Sn6, Sn8

PROPOSED R10-3E-9

Sn1, Sn3, Sn5, Sn7

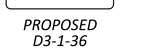
PROPOSED W23-H2B-30

Sn22, Sn23, Sn24, Sn25

SEE NOTE 1

PROPOSED R10-H12C-30

Sn13, Sn15, Sn17, Sn20

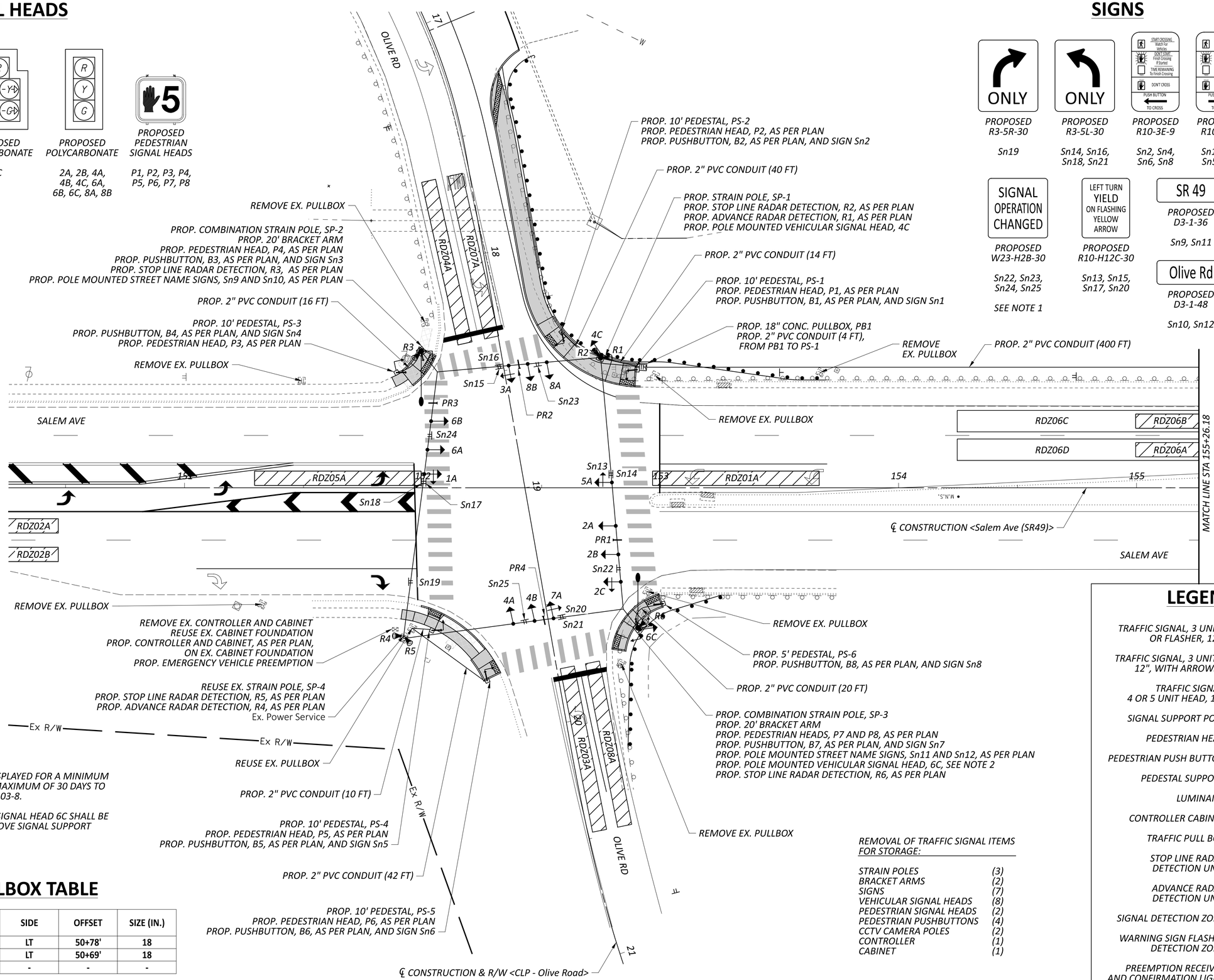


PROPOSED D3-1-36

Sn9, Sn11

PROPOSED D3-1-48

Sn10, Sn12



NOTES:

1. SIGN SHALL BE DISPLAYED FOR A MINIMUM OF 14 DAYS AND A MAXIMUM OF 30 DAYS TO CONFORM TO TEM 403-8.

2. THE BOTTOM OF SIGNAL HEAD 6C SHALL BE MOUNTED 25 FT ABOVE SIGNAL SUPPORT FOUNDATION.

PULLBOX TABLE

PULL BOX #	STATION	SIDE	OFFSET	SIZE (IN.)
PB1	152+92.65	LT	50+78'	18
PB2	156+92.84	LT	50+69'	18
-	-	-	-	-

REMOVAL OF TRAFFIC SIGNAL ITEMS FOR STORAGE:

STRAIN POLES	(3)
BRACKET ARMS	(2)
SIGNS	(7)
VEHICULAR SIGNAL HEADS	(8)
PEDESTRIAN SIGNAL HEADS	(2)
PEDESTRIAN PUSHBUTTONS	(4)
CCTV CAMERA POLES	(2)
CONTROLLER	(1)
CABINET	(1)

LEGEND

	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT, OR FLASHER, 12"		
TRAFFIC SIGNAL, 3 UNIT, 12", WITH ARROWS		
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN HEAD		
PEDESTRIAN PUSH BUTTON		
PEDESTAL SUPPORT		
LUMINAIRE		
CONTROLLER CABINET		
TRAFFIC PULL BOX		
STOP LINE RADAR DETECTION UNIT		
ADVANCE RADAR DETECTION UNIT		
SIGNAL DETECTION ZONE		
WARNING SIGN FLASHER DETECTION ZONE		
PREEMPTION RECEIVER AND CONFIRMATION LIGHT		

HORIZONTAL SCALE IN FEET 0 10 20 40

TRAFFIC SIGNAL PLAN
SALEM AVE (SR 49) AND OLIVE RD

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DESIGNER GSH
REVIEWER SAK 07/01/25
PROJECT ID 117202
SHEET P.55 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

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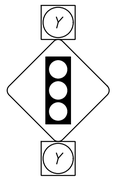
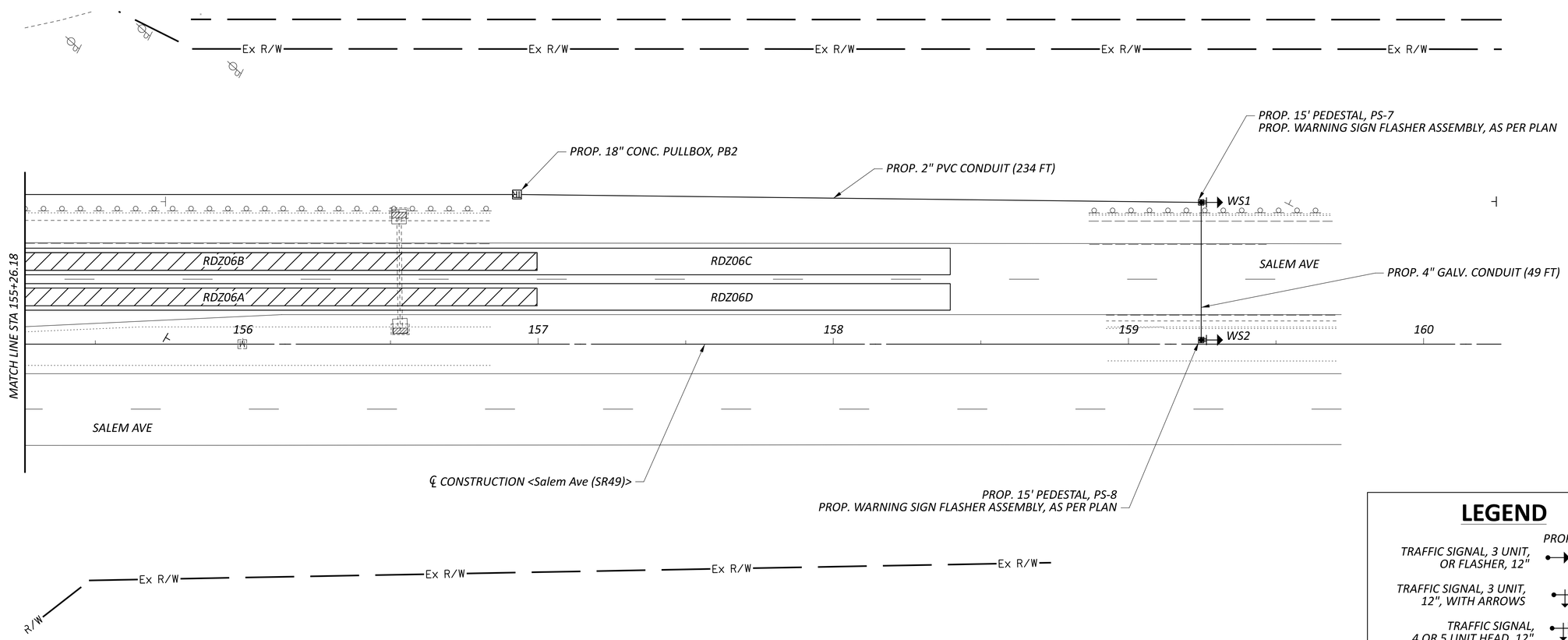
SIGN FLASHER



PROPOSED WARNING SIGN FLASHER ASSEMBLY

WS1, WS2



LEGEND

	PROP	EXIST
TRAFFIC SIGNAL, 3 UNIT, OR FLASHER, 12"		
TRAFFIC SIGNAL, 3 UNIT, 12", WITH ARROWS		
TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"		
SIGNAL SUPPORT POLE		
PEDESTRIAN HEAD		
PEDESTRIAN PUSH BUTTON		
PEDESTAL SUPPORT		
LUMINAIRE		
CONTROLLER CABINET		
TRAFFIC PULL BOX	TR	TR
STOP LINE RADAR DETECTION UNIT	S	S
ADVANCE RADAR DETECTION UNIT	D	D
SIGNAL DETECTION ZONE		
WARNING SIGN FLASHER DETECTION ZONE		

HORIZONTAL SCALE IN FEET
0 10 20 40

ADVANCE WARNING SIGN FLASHER ASSEMBLY
STATE ROUTE 49

DESIGN AGENCY
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REVIEWER
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PROJECT ID
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SHEET P.56 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

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SIGNAL TIMING CHART (TEM FORM 496-3)

INTERSECTION: STATE ROUTE 49 AND OLIVE RD								
MAINTAINING AGENCY: CITY OF TROTWOOD								
START UP	DUAL ENTRY: ON		PHASES:			2&6, 4&8		
	REST IN RED:		RING 1	-		RING 2	-	
START IN: ALL-RED FLASH	OVERLAP			A	B	C	D	
TIME FOR: FLASH , ALL RED (SEC.): 9, 6 FIRST PHASE(S): 2, 6 COLOR DISPLAYED: GREEN	PHASES			-	-	-	3	
INTERVAL OR FEATURE	CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)	1	2	3	4	5	6	7	8
DIRECTION	SBLT	NB	WBLT	EB	NBLT	SB	EBLT	WB
MINIMUM GREEN (INITIAL) (SEC.)	7	20	7	10	7	20	7	10
ADDED INITIAL *(SEC./ACTUATION)	-	-	-	-	-	-	-	-
MAXIMUM INITIAL *(SEC.)	-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)	3	1	3	3	3	1	3	3
TIME BEFORE REDUCTION *(SEC.)	-	-	-	-	-	-	-	-
MINIMUM GAP *(SEC.)	-	-	-	-	-	-	-	-
TIME TO REDUCE *(SEC.)	-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)	20	30	20	30	20	30	20	30
MAXIMUM GREEN II (SEC.)	20	30	20	30	20	30	20	30
YELLOW CHANGE (SEC.)	3.0	5.6	3.0	4.4	3.0	5.6	3.0	4.4
ALL RED CLEARANCE (SEC.)	2.5	1.0	2.5	1.4	2.5	1.0	2.5	1.4
DELAYED GREEN (LPI) ˙ (SEC.)	-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY^ (SEC.)	3	-	3	-	3	-	3	-
WALK (SEC.)	-	7	-	9	-	7	-	9
PEDESTRIAN CLEARANCE (SEC.)	-	9	-	25	-	9	-	25
RECALL MAXIMUM (ON/OFF)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
RECALL MINIMUM (ON/OFF)	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
RECALL PEDESTRIAN (ON/OFF)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
MEMORY (ON/OFF)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

*VOLUME DENSITY CONTROLS

FOR CROSSINGS WITH PEDESTRIAN PUSHBUTTONS, LPI'S (LEADING PEDESTRIAN INTERVALS) MAY BE IMPLEMENTED (3-6 SEC.) IN ACCORDANCE WITH LPI DURATION TIME PER THE ODOT SIGNAL CALCULATIONS - CLEARANCE INTERVALS SPREADSHEET

^ WHEN IMPLEMENTING FYA, A MINIMUM 3 SEC. DELAY SHALL BE PROGRAMMED PER FYA PHASE.

NOTES:

- ALL MOVEMENTS SHALL BE ACTUATED. THE PRIMARY THROUGH MOVEMENT SHALL HAVE MIN RECALL ACTIVE TO REST IN GREEN.

- ENABLE Φ1, 3 AND Φ5, 7 DETECTOR SWITCHING TO ALLOW Φ1 AND Φ5 TO EXTEND Φ2 AND Φ6, OR Φ3 AND Φ7 TO EXTEND Φ4 AND Φ8, RESPECTIVELY, WHEN ALLOCATED GREEN TIME FOR LEFT TURN PHASES ARE EXHAUSTED.

- COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL GO TO ZERO ON YELLOW PER OMUTCD FIGURE 4E-2.

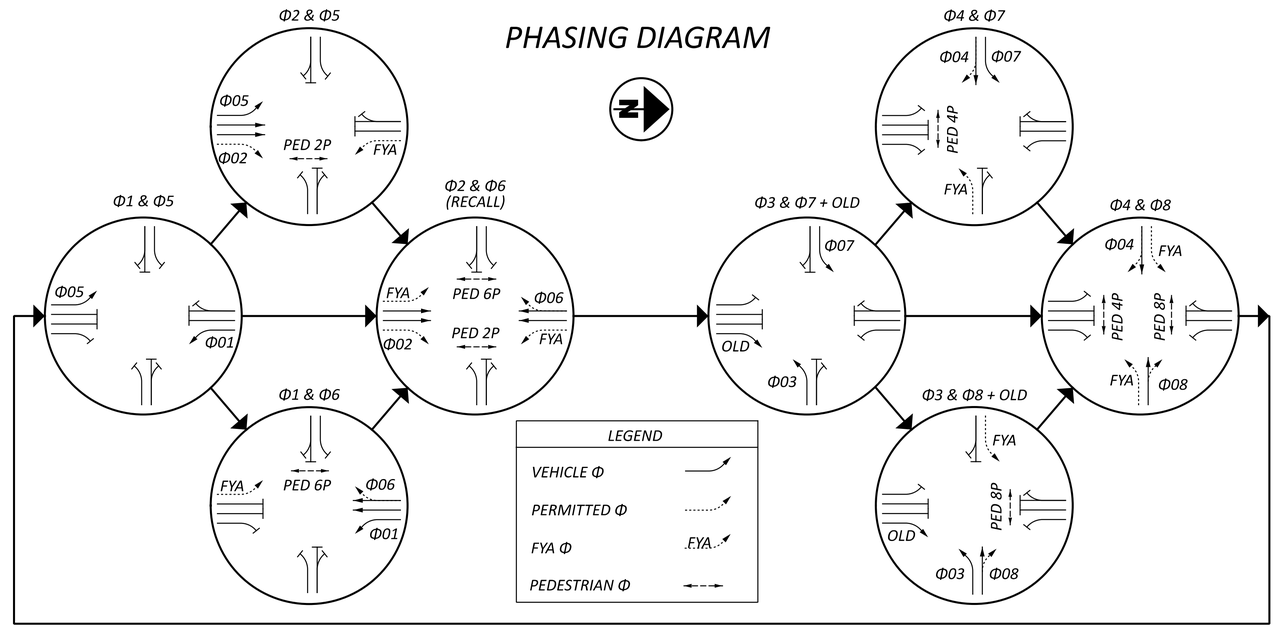
- RADAR DETECTION UNITS FOR DILEMMA ZONE DETECTION SHALL PLACE A CONSTANT CALL TO THE CONTROLLER WHEN VEHICLE TRAVEL TIMES TO THE STOP BAR ARE BETWEEN 2.5 AND 6.0 SECONDS. SPEED TRIGGER SHALL BE SET FOR VEHICLES TRAVELING 35 MPH AND GREATER.

- RADAR SHALL HAVE QUEUE DETECTION CONFIGURED AND A ZONE PLACED AT 100-200 FEET FROM THE STOP BAR FOR SLOW MOVING VEHICLE EXTENSIONS. SPEED TRIGGER SHALL BE SET AT 1 - 35 MPH.

- ALL DETECTOR DELAYS SHALL BE PLACED ON THE CONTROLLER.

- FOR ANY ENTRY TO FLASHING OPERATION PROGRAMMING SHALL RUN MINOR STREET GREEN (TYP. Φ4 & Φ8), ALL-RED CLEARANCE AND THEN FLASHING OPERATION.

PHASING DIAGRAM



RADAR DETECTION CHART (TEM FORM 496-4)

DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC.)	EXTENSION PROGRAMMED IN CONTROLLER (SEC.)	DETECTOR NO.	PURPOSE	DETECTION ZONE LENGTH (FT)
RDZ01A	SB-LT	PRESENCE	1	3	-	R6	SL	70
RDZ02A	NB	PRESENCE	2	-	-	R4	ADV	200
RDZ02B	NB	PRESENCE	2	-	-	R4	ADV	200
RDZ03A	WB-LT	PRESENCE	3	3	-	R5	SL	70
RDZ04A	EB	PRESENCE	4	-	-	R2	SL	70
RDZ05A	NB-LT	PRESENCE	5	3	-	R3	SL	70
RDZ06A	SB	PRESENCE	6	-	-	R1	ADV	200
RDZ06B	SB	PRESENCE	6	-	-	R1	ADV	200
RDZ06C	SB	PRESENCE	6	-	-	R1	WRN	415
RDZ06D	SB	PRESENCE	6	-	-	R1	WRN	415
RDZ07A	EBLT	PRESENCE	7	3	-	R2	SL	70
RDZ08A	WB	PRESENCE	8	-	-	R5	SL	70

PURPOSE: STOP-LINE (SL) DETECTION, ADVANCE (ADV) DETECTION, OR FOR WARNING SIGN FLASHER ASSEMBLY (WRN)

TRAFFIC SIGNAL DETAILS

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DESIGNER GSH

REVIEWER SAK 07/01/25

PROJECT ID 117202

SHEET P.57 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

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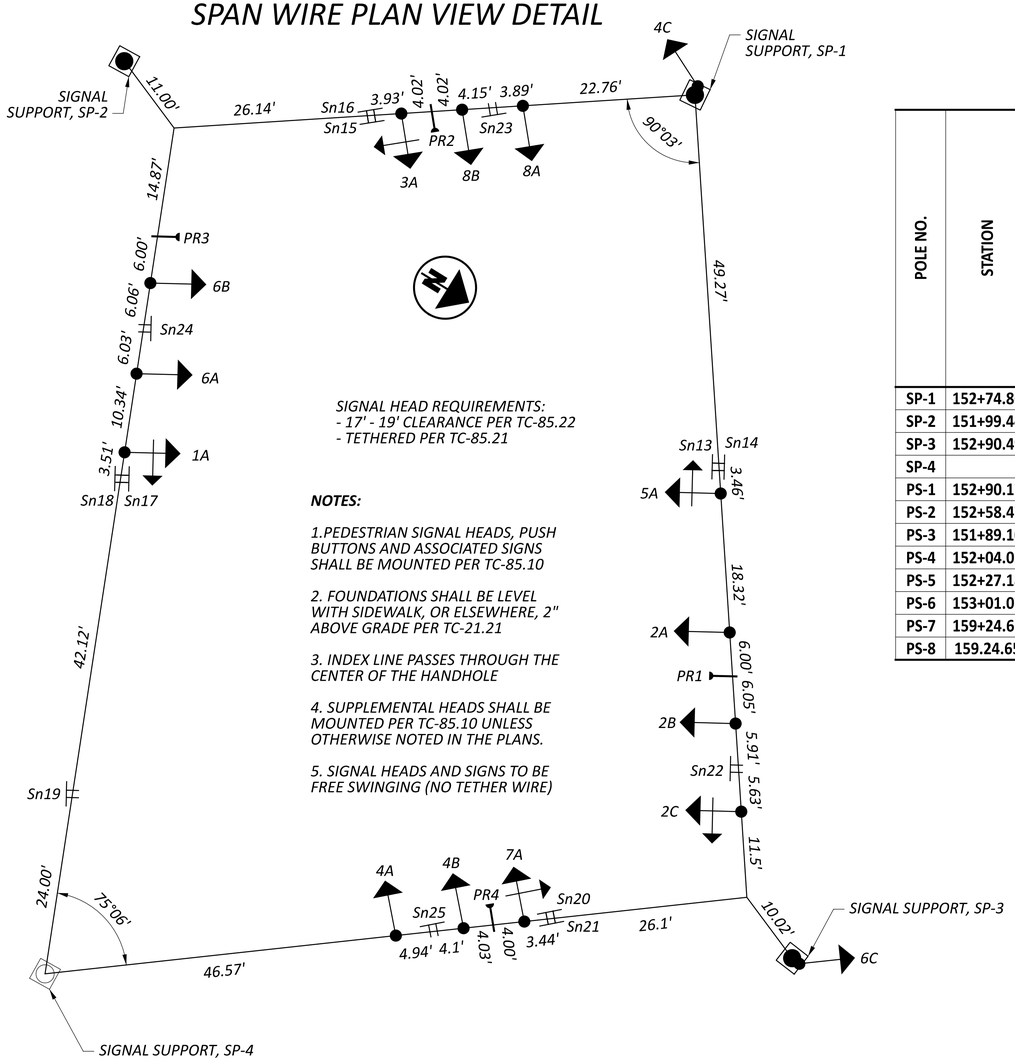
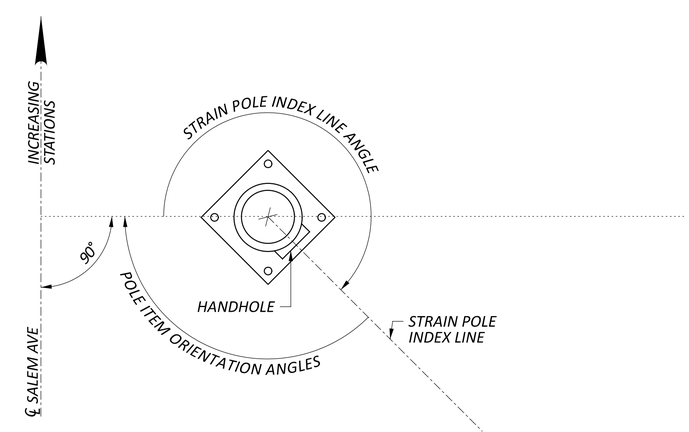
SPAN WIRE PLAN VIEW DETAIL



STRAIN POLE TABLE (TEM FIGURE 498-36)

POLE NO.	STATION	OFFSET	TYPE	DESIGN NO.	POLE HEIGHT (FT.)	FOUNDATION ELEVATION	ATTACHMENT ELEV. (EAST-WEST CROSSING SR-49)	ATTACHMENT ELEV. (NORTH-SOUTH CROSSING OLIVE RD)	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE								
										PEDESTRIAN SIGNAL	PEDESTRIAN PUSHBUTTON	POLE MOUNTED VEHICULAR SIGNAL	STOP LINE RADAR DETECTION	ADVANCE RADAR DETECTION	POLE MOUNTED STREET NAME SIGN (SR-49)	POLE MOUNTED STREET NAME SIGN (OLIVE RD)	BRACKET ARM	WARNING SIGN FLASHER ASSEMBLY
SP-1	152+74.86	54.77' LT	SIGNAL	10	30	871.39	897.10	897.10	355	-	-	210	145	270	-	-	-	-
SP-2	151+99.44	57.36' LT	SIGNAL	10	30	868.98	897.10		320	310	25	-	90	-	310	40	40	-
SP-3	152+90.49	58.84' RT	SIGNAL	12	30	870.82	897.10		320	120 / 210	25	170	90	-	310	40	40	-
SP-4	EXISTING STRAIN POLE						897.10	897.10	7	-	-	-	130	260	-	-	-	-
PS-1	152+90.17	49.61' LT	PEDESTAL	N/A	10	N/A			0	80	80	-	-	-	-	-	-	-
PS-2	152+58.47	65.42' LT	PEDESTAL		10				50	300	300	-	-	-	-	-	-	-
PS-3	151+89.10	48.40' LT	PEDESTAL		10				330	200	300	-	-	-	-	-	-	-
PS-4	152+04.02	59.92' RT	PEDESTAL		10				25	60	60	-	-	-	-	-	-	-
PS-5	152+27.18	81.02' RT	PEDESTAL		10				335	15	15	-	-	-	-	-	-	-
PS-6	153+01.07	48.70' RT	PEDESTAL		5				340	-	280	-	-	-	-	-	-	-
PS-7	159+24.65	48.00' LT	PEDESTAL		15				0	-	-	-	-	-	-	-	-	270
PS-8	159.24.65	1.41' LT	PEDESTAL		15				0	-	-	-	-	-	-	-	-	270



STRAIN POLE AND PEDESTAL ORIENTATION

TRAFFIC SIGNAL DETAILS

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:24 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Signals\Sheets\117202_CD102.dgn

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 HONEYCRETON VILLAGE DR
SUITE 270
DUBLIN, OHIO 43016
PH (937)767-2193
www.cmtengr.com

DESIGNER
GSH

REVIEWER
SAK 07/01/25

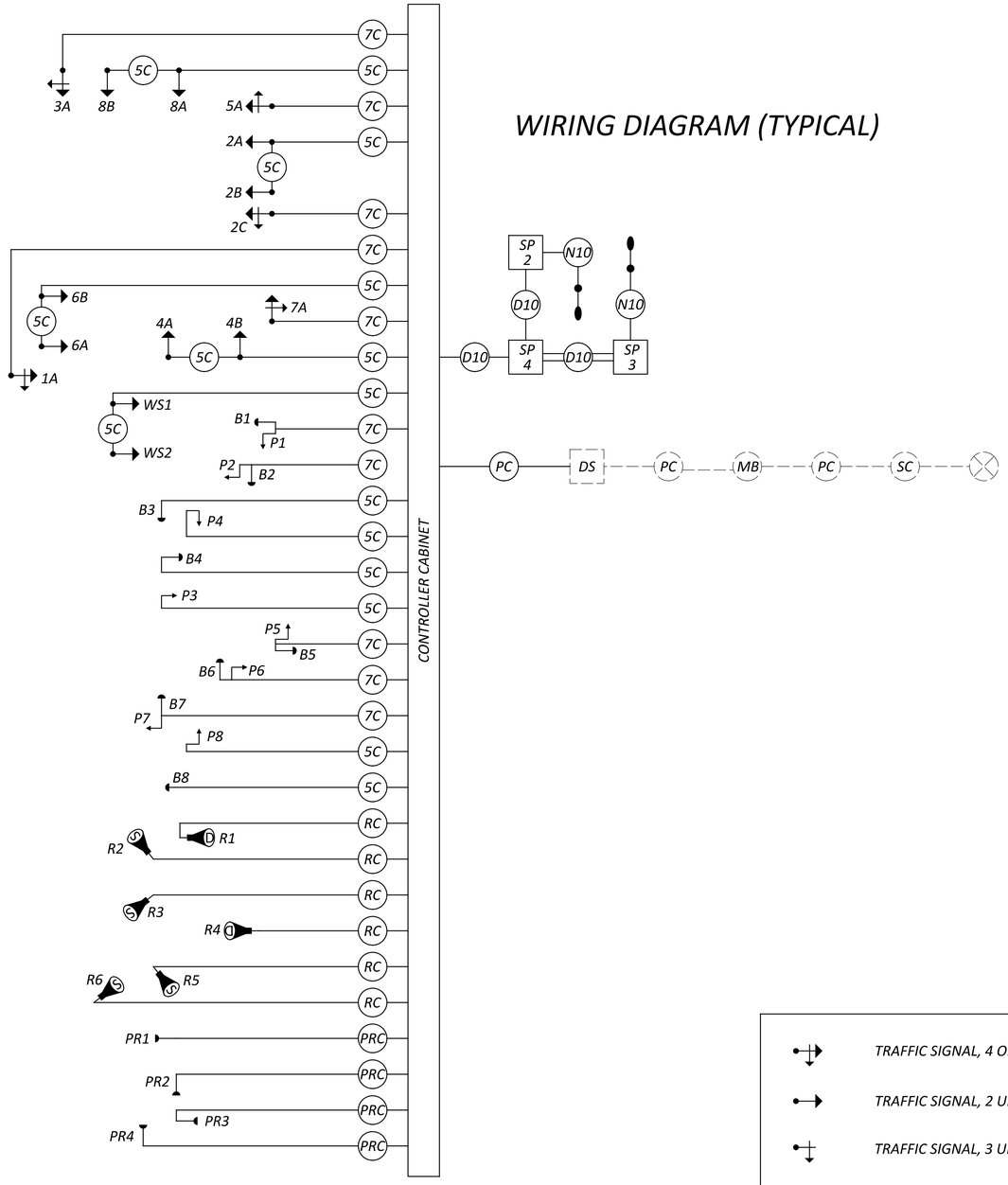
PROJECT ID
117202

SHEET P.58 TOTAL 59

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 1/14/2026 TIME: 3:36:25 PM PLTDRV: OHDOT_PDF.pltcfg PENTBL: OHDOT_Pen.tbl USER: WORKSPACE: OHDOT WORKSET: 117202_80_MOT-OliveSR49SafetyProject PRODUCT: OpenRoadsDesigner 10.12.03.2
L:\TrotwoodOH\18062101-00_GenEngSve\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\Signals\Sheets\117202_CD103.dgn

WIRING DIAGRAM (TYPICAL)



NOTE:

- OVERLAPS SHALL BE WIRED TO THE APPROPRIATE LOAD SWITCHES AS PER THE FIELD HOOKUP CHART AND CONFIGURED IN THE CONTROLLER SOFTWARE PER THE SIGNAL TIMING CHART.

FIELD WIRING HOOKUP CHART (TEM FORM 496-16)

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
1A (SB LT)	R	Φ1 R	R
	Y	Φ1 Y	
	<--FYA--	Φ2 G	
	<--G---	Φ1 G	
	-	-	
2A, 2B (NB)	R	Φ2 R	R
	Y	Φ2 Y	
	G	Φ2 G	
2C (NB RT)	R	Φ2 R	R
	Y	Φ2 Y	
	G	Φ2 G	
	---Y-->	Φ3 Y	
	---G-->	Φ3 G	
3A (WB LT)	R	Φ3 R	R
	Y	Φ3 Y	
	<--FYA--	Φ4 G	
	<--G---	Φ3 G	
	-	-	
4A, 4B (EB)	R	Φ4 R	R
	Y	Φ4 Y	
	G	Φ4 G	
5A (NB LT)	R	Φ5 R	R
	Y	Φ5 Y	
	<--FYA--	Φ6 G	
	<--G---	Φ5 G	
	-	-	
LS = LOAD SWITCH			

SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
6A, 6B (SB)	R	Φ6 R	R
	Y	Φ6 Y	
	G	Φ6 G	
7A (EB LT)	R	Φ7 R	R
	Y	Φ7 Y	
	<--FYA--	Φ8 G	
	<--G---	Φ7 G	
	-	-	
8A, 8B (WB)	R	Φ8 R	R
	Y	Φ8 Y	
	G	Φ8 G	
PEDESTRIAN MOVEMENTS			
PED EAST	W	Φ2 PED/ LS 10 G	OUT
	DW	Φ2 PED/ LS 10 R	
PED SOUTH	W	Φ4 PED/ LS 11 G	OUT
	DW	Φ4 PED/ LS 11 R	
PED WEST	W	Φ6 PED/ LS 12 G	OUT
	DW	Φ6 PED/ LS 12 R	
PED NORTH	W	Φ8 PED/ LS 13 G	OUT
	DW	Φ8 PED/ LS 13 R	
OVERLAPS			
OLD	---Y-->	Φ3 Y / LS 14 Y	OUT
	---G-->	Φ3 Y / LS 14 G	

LEGEND

- TRAFFIC SIGNAL, 4 OR 5 UNIT HEAD, 12"
- TRAFFIC SIGNAL, 2 UNIT, 3 UNIT, OR PHB HEAD 12"
- TRAFFIC SIGNAL, 3 UNIT HEAD, 12" WITH ARROWS
- PEDESTRIAN SIGNAL
- PEDESTRIAN PUSH BUTTON
- DILEMMA ZONE RADAR DETECTION UNIT
- STOP LINE RADAR DETECTION UNIT
- 5C — SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
- 7C — SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
- RC — RADAR DETECTION CABLE
- PRC — PREEMPTION CABLE
- SC — EXISTING SERVICE CABLE
- PREMPTION RECEIVER AND CONFIRMATION LIGHT
- LUMINAIRE, CONVENTIONAL
- NX — NO. 10 AWG DISTRIBUTION CABLE
- NXX — NO. 10 AWG POLE AND BRACKET CABLE
- DS — EXISTING DISCONNECT SWITCH
- EXISTING POWER SOURCE
- PC — EXISTING POWER CABLE
- PC — NEW POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
- SP 1 — SIGNAL SUPPORT POLE NO. __
- MB — EXISTING METER BASE

TRAFFIC SIGNAL DETAILS

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7965 WESTON VILLAGE DR.
SUITE 270
ZIONSVILLE, OHIO 45459
PH (937)767-2193
www.cmtengr.com

DESIGNER GSH

REVIEWER SAK 07/01/25

PROJECT ID 117202

RIGHT OF WAY
LEGEND SHEET
MOT-TROTWOOD
OLIVE RD WALKS SA22

MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E

LOCATION MAP

LATITUDE: 39°82'19" LONGITUDE: -84°29'29"

N

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

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

INDEX OF SHEETS:

LEGEND SHEET	RW.1
CENTERLINE PLATS	RW.2- RW.4
PROPERTY MAP	RW.5 -RW.6
SUMMARY OF ADDITIONAL RIGHT OF WAY	RW.7
RIGHT OF WAY TOPO SHEET	RW.8 - RW.19 (EVEN PAGES)
RIGHT OF WAY BOUNDARY SHEET	RW.8 - RW.19 (ODD PAGES)

CONVENTIONAL SYMBOLS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (Ex) (Pr)
Center Line
Right of Way (Ex) Ex R/W
Right of Way (Pr) R/W
Standard Highway Ease.(Ex) Ex SH
Standard Highway Ease.(Pr) SH
Temporary Right of Way TMP
Channel Ease. (Pr) CH
Utility Ease. (Ex) Ex U
Railroad or
Guardrail (Ex) (Pr)
Construction Limits
Edge of Pavement (Ex)
Edge of Pavement (Pr)

Edge of Shoulder (Ex)
Edge of Shoulder (Pr)
Ditch / Creek (Ex)
Ditch / Creek (Pr)
Tree Line (Ex)
Ownership Hook Symbol , Example
Property Line Symbol , Example
Break Line Symbol , Example
Tree (Pr) , Tree (Ex) , Shrub (Ex)
Tree (Remove) , Shrub (Remove)
Evergreen (Ex) , Stump
Evergreen (Remove) , Stump (Remove)
Wetland (Pr) , Grass (Pr) , Aerial Target
Post (Ex) , Mailbox (Ex) MB , Mailbox (Pr) MB
Light (Ex) , Telephone Marker (Ex) TEL
Fire Hydrant (Ex) , Water Meter (Ex) WM
Water Valve (Ex) , Utility Valve Unknown (Ex.)
Telephone Pole (Ex) , Power Pole (Ex)
Light Pole (Ex)

DND = DO NOT DISTURB

FEDERAL PROJECT NUMBER
E220596

RAILROAD INVOLVEMENT
NONE

PROJECT DESCRIPTION
ADD 1,500 FEET OF NEW SIDEWALK (3 SEGMENTS) ALONG OLIVE ROAD & RECONSTRUCTION OF A TRAFFIC SIGNAL AT THE SR49/OLIVE ROAD INTERSECTION IN TROTWOOD, MONTGOMERY COUNTY OHIO

PLANS PREPARED BY:

FIRM NAME : CMT (CRAWFORD, MURPHY & TILLY)
R/W DESIGNER: SHELBY R. INGLE, PE
R/W REVIEWER: RYAN D. HILLARD, PE, PS
FIELD REVIEWER: BRANDI ROSS, EI
PRELIMINARY FIELD REVIEW DATE: 2024-01-17
OWNERSHIP UPDATED BY: 2024-09-17
DATE COMPLETED: 2024-10-21
FIELD REVIEWER: BRANDI ROSS, EI
FINAL FIELD REVIEW DATE: 2024-09-10
FINAL R/W PLAN DATE: 2024-10-21

TYPES OF TITLE LEGEND:

WD = WARRANTY DEED
SH = STANDARD HIGHWAY EASEMENT
T = TEMPORARY EASEMENT

NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTH DURATION.

STRUCTURE KEY
RESIDENTIAL
COMMERCIAL
OUT-BUILDING

WATER & SANITARY SEWER
CITY OF TROTWOOD
2400 OLIVE ROAD
TROTWOOD, OHIO 45426
TEL. (937) 837-1702
JMCCLUSKEY@TROTWOOD.ORG
JOHNNY MCCLUSKEY

MONTGOMERY COUNTY ENVIRONMENTAL SERVICES
1850 SPAULDING ROAD
KETTERING, OHIO 45432

TEL. (937)307-2759
SCHAFFERC@MCOHIO.ORG
CHARLIE SCHAFFER

TEL. (937)781-2632
SCHLAACKE@MCOHIO.ORG
ED SCHLAACK

CABLE
CHARTER COMMUNICATIONS
3691 TURNER ROAD
DAYTON, OHIO 45415
TEL. (937)396-8591
EIN.WHATLEY@CHARTER.COM
EIN WHATLEY

ELECTRIC
AES OHIO
1900 DRYDEN ROAD
DAYTON, OHIO 45439
TEL. (937)554-9063
WILLIAM.WARD@AES.COM
BILL WARD

TELECOMMUNICATIONS
FRONTIER COMMUNICATIONS
10 MULBERRY STREET
BROOKVILLE, OHIO 45309
TEL. (937)833-0468
CHARLES.BERNACCHI@FTR.COM
CHARLES BERNACCHI

GAS
CENTERPOINT ENERGY/GRIDHAWK
6500 CLYO ROAD
CENTERVILLE, OHIO 45459
TEL. (937)312-2521
PUBLICPROJECT@CENTERPOINTENERGY.COM
GREG.FISHMAN@CENTERPOINTENERGY.COM
GREG FISHMAN

NOTES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

UTILITIES ARE SHOWN AS FOUND ON THESE SITES IN RESPONSE TO OUPS TICKET #A310402987 DATED 4/14/2023.

I, Ryan D. Hillard, P.S. 8558 have conducted a survey of the existing conditions for the Ohio Department of Transportation in October, 2022. The results of that survey are contained herein. See the Survey Parameters note affixed to these plans for the horizontal and vertical survey parameters used for this project. As a part of this project, I have reestablished the locations of the existing boundary lines, the existing center line of Right of Way and the existing Right of Way limits as necessary for the property takes contained herein. As a part of this project I have established the proposed boundary lines, calculated the Gross Take, present road occupied (PRO), Net Take and Net Residue herein. As a part of this work, right of way monuments will be set at the locations shown herein per the Memorandum of Understanding between the Board of Registration for Engineers and Surveyors and the Ohio Department of Transportation dated 9-22-2010. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted. The words "I and my" as used herein are to mean that either myself or someone working under my direct supervision.

Ryan D. Hillard 10-21-24
Ryan D. Hillard Date

SURVEYORS SEAL

STATE OF OHIO
RYAN D. HILLARD
P.S. 8558
REGISTERED
PROFESSIONAL LAND SURVEYOR

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
17777 CENTER VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)781-2193
www.cmtengr.com

DESIGNER SRI
REVIEWER RDH 06/28/24
PROJECT ID 117202
SHEET RW.1 TOTAL RW.19

RIGHT OF WAY
LEGEND SHEET

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:37:38 PM USER: bross
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SURVEYORS SEAL

STATE OF OHIO
RYAN D. HILLARD
P.S. 8558
REGISTERED
PROFESSIONAL LAND SURVEYOR

RYAN D. HILLARD, PS No. 8558 — DATE 10-21-24

CENTERLINE PLAT

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E

LABEL NBR: 1 Type: DCE
Kind: PLAT
Recorded: 10/23/2024 at 01:48:13 PM
Fee Rcd: $259.20 Page 1
Montgomery County, OH
Stacey Benson-Taylor Recorder
File: 2024-00056878

244 p. 29

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- MAG SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- P.F. IRON PIPE FOUND
- P.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET
- M.N.F. MAG NAIL FOUND
- M.N.S. MAG NAIL SET

HORIZONTAL SCALE IN FEET 0 25 50 100

BASIS OF BEARINGS

BEARINGS ARE BASED ON THE CUSTOM OHDOT LDP, MONTGOMERY COUNTY SURVEY FT.

OCCUPATION:

EVIDENCE OF OCCUPATION SUPPORTS THE MONUMENTATION FOUND IN THE FIELD AND THE PROPERTY LINES SHOWN ON THIS PLAT.

SUBDIVISION PLATS

STEIN SUBDIVISION - SECTION ONE (PB 99 PG 40)
WESTBROOKE VILLAGE SECTION ONE (PB 80 PGs 23-24)
MONTGOMERY COUNTY BOARD OF DEVELOPMENTAL DISABILITIES SERVICES PLAT (PB 234, PG 54)
MAIN PROPERTIES PLAT NUMBER TWO (PB 125 PG 27)
WESTBROOKE VILLAGE APARTMENTS SECTION TWO (PB 97 PG 37)

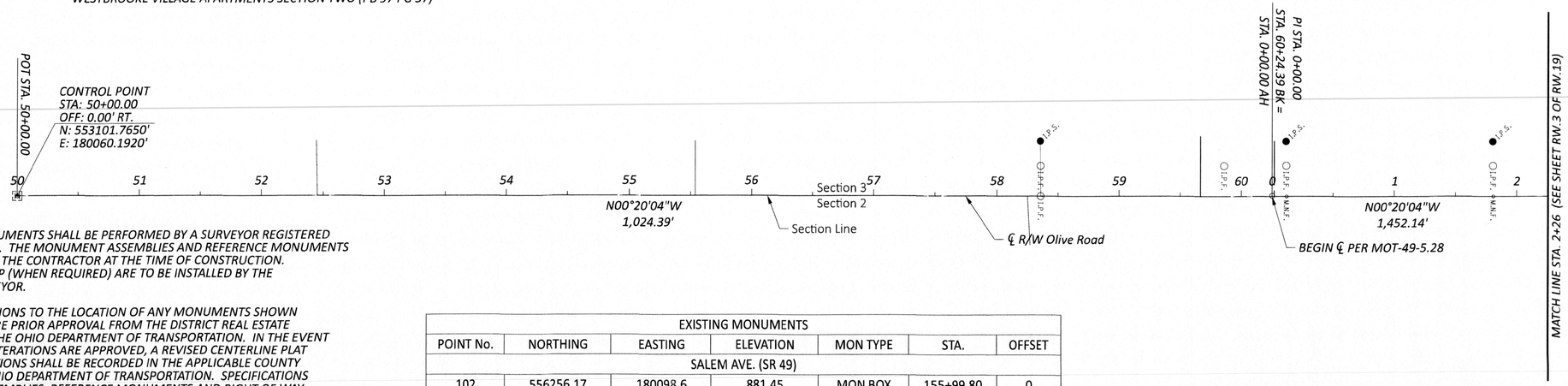
BASIS OF EX. C/L OF R/W WIDTH:

THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING THE CENTERLINE OF RIGHT OF WAY AND RIGHT OF WAY LIMITS WERE ESTABLISHED BY USING THE FOLLOWING OHIO DEPARTMENT OF TRANSPORTATION PLANS: MOT-49-5.28, REVISED 63-03-07, AS FOUND ON FILE AT THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 7 OFFICE AT SIDNEY, OHIO.

THE STATIONING FOR OLIVE ROAD WAS ESTABLISHED USING R/W MONUMENTS FOUND AT STA. 50+00.00 TO 22+00.00

MONUMENT TABLE

℄ of OLIVE ROAD		PROJECT COORDINATES SEE SURVEY CERTIFICATION		MONUMENTS TO BE SET DURING CONSTRUCTION		R/W MON. EXPECTED TO BE DISTURBED	
STATION	OFFSET	NORTH (Y)	EAST (X)	MON. ASSY.	REF. MON.	R/W MON.	DESCRIPTION
14+52.14	℄	555578.2519	180045.7378	1			ON SECTION LINE AT TS OF SPIRAL CURVE - R/W MON SET
TOTAL CARRIED TO GENERAL SUMMARY SHEET				1			



SETTING OF ALL MONUMENTS SHALL BE PERFORMED BY A SURVEYOR REGISTERED IN THE STATE OF OHIO. THE MONUMENT ASSEMBLIES AND REFERENCE MONUMENTS WILL BE INSTALLED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE IRON PIN AND CAP (WHEN REQUIRED) ARE TO BE INSTALLED BY THE CONTRACTOR'S SURVEYOR.

CHANGES OR ALTERATIONS TO THE LOCATION OF ANY MONUMENTS SHOWN IN THIS TABLE, REQUIRE PRIOR APPROVAL FROM THE DISTRICT REAL ESTATE ADMINISTRATOR OF THE OHIO DEPARTMENT OF TRANSPORTATION. IN THE EVENT THAT CHANGES OR ALTERATIONS ARE APPROVED, A REVISED CENTERLINE PLAT WITH THE NEW LOCATIONS SHALL BE RECORDED IN THE APPLICABLE COUNTY RECORDS AND THE OHIO DEPARTMENT OF TRANSPORTATION. SPECIFICATIONS FOR MONUMENT ASSEMBLIES, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1.

THE FOLLOWING VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS WERE USED FOR ALL SURVEYING ON THIS PROJECT:

SURVEYING PARAMETERS

POSITIONING METHOD:	ODOT CORS
MONUMENT TYPE:	B
VERTICAL POSITIONING	
ORTHOMETRIC HEIGHT DATUM:	NAVD88
GEOID:	18
HORIZONTAL POSITIONING	
REFERENCE FRAME:	NAD83 (2011)
ELLIPSOID:	GRS80
MAP PROJECTION:	TRANSVERSE MERCATOR
COORDINATE SYSTEM:	OCCS, MONTGOMERY COUNTY
COMBINED SCALE FACTOR:	1.000038
ORIGIN OF COORDINATE SYSTEM	
FALSE EASTING (X):	164,041.67
FALSE NORTHING (Y):	0
UNITS ARE IN U.S. SURVEY FEET	

USE THE FOLLING CONVERSION FACTOR:
1 METER = 3.280833333 U.S. SURVEY FEET

EXISTING MONUMENTS

POINT No.	NORTHING	EASTING	ELEVATION	MON TYPE	STA.	OFFSET
SALEM AVE. (SR 49)						
102	556256.17	180098.6	881.45	MON BOX	155+99.80	0
OLIVE ROAD						
103	555556.05	180257.97	866.23	IPIN (Fd)	14+28.70	212.1
104	555772.22	180175.52	862.99	IPIN (Fd)	17+19.15	79.12
105	555713.41	180104.17	867.97	IPIN (Fd)	16+02.03	46.37
106	553101.77	180060.19	858.62	MON BOX	50+00.00	0
107	554905.6	180024.83	867.45	IPIN (Fd)	7+79.62	-24.84
1737	555660.09	180001.27	872.64	IPIN (Fd)	15+30.49	-46.29
108	553937.6	180055.27	862.9	IPIN (Fd)	58+35.85	-0.04
109	554087.57	180029.59	862.7	IPIN (Fd)	59+85.97	-24.85
110	554137.56	180029.17	863.23	IPIN (Fd)	0+11.57	-24.98
111	554137.99	180054.11	864.02	MAG (Fd)	0+11.85	-0.03
112	554307.02	180053.12	864.69	MAG (Fd)	1+80.89	-0.04
113	554306.61	180028.09	864.14	IPIN (Fd)	1+80.62	-25.07
114	553937.36	180030.64	862.71	IPIN (Fd)	58+35.76	-24.68
115	555105.99	180048.42	871.12	MAG (Fd)	9+79.87	-0.07
116	555105.1	179998.48	871.16	IPIN (Fd)	9+79.27	-50.02
117	555441.13	179996.48	876.14	IPIN (Fd)	13+15.31	-50.06
118	555006.07	180049.07	869.75	IPIN (Fd)	8+79.95	0
119	555005.61	180024.04	868.97	IPIN (Fd)	8+79.63	-25.04
120	554576.18	180026.57	863.73	IPIN (Fd)	4+50.19	-25.02

APPROVED FOR CENTERLINE DATA ONLY

Wayne Bell — MONTGOMERY COUNTY ENGINEER — 2024-0170 FILE NUMBER

WAYNE — CHECKED BY — 10/23/24 DATE

STATE OF OHIO
RYAN D. HILLARD
P.S. 8558
REGISTERED
PROFESSIONAL LAND SURVEYOR

RECEIVED _____, 20 ___
RECORDED _____, 20 ___
BOOK _____ PAGE _____

COUNTY RECORDER

CENTERLINE PLAT
MOT-TROTWOOD OLIVE RD WALKS SA22
STA. 50+00 TO STA. 2+26

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
10737 LEBANON VILLAGE DR
SUITE 270
CINCINNATI, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.2 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RC201 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:37:44 PM USER: bross
L:\TrotwoodOH\18062101.00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\RW\Sheets\117202_RC201.dgn

CENTERLINE PLAT

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E

LABEL NBR: 1 Type: DEE
Cust: PLAT
Recorded: 10/23/2024 at 01:48:13 PM
Fee Rec: $253.28 Page 1
Montgomery County, OH
Stacey Benson-Taylor Recorder
File: 2024-00056878

244 p. 29 A

SUBDIVISION PLATS

STEIN SUBDIVISION - SECTION ONE (PB 99 PG 40)
WESTBROOKE VILLAGE SECTION ONE (PB 80 PGs 23-24)
MONTGOMERY COUNTY BOARD OF DEVELOPMENTAL DISABILITIES SERVICES PLAT (PB 234, PG 54)
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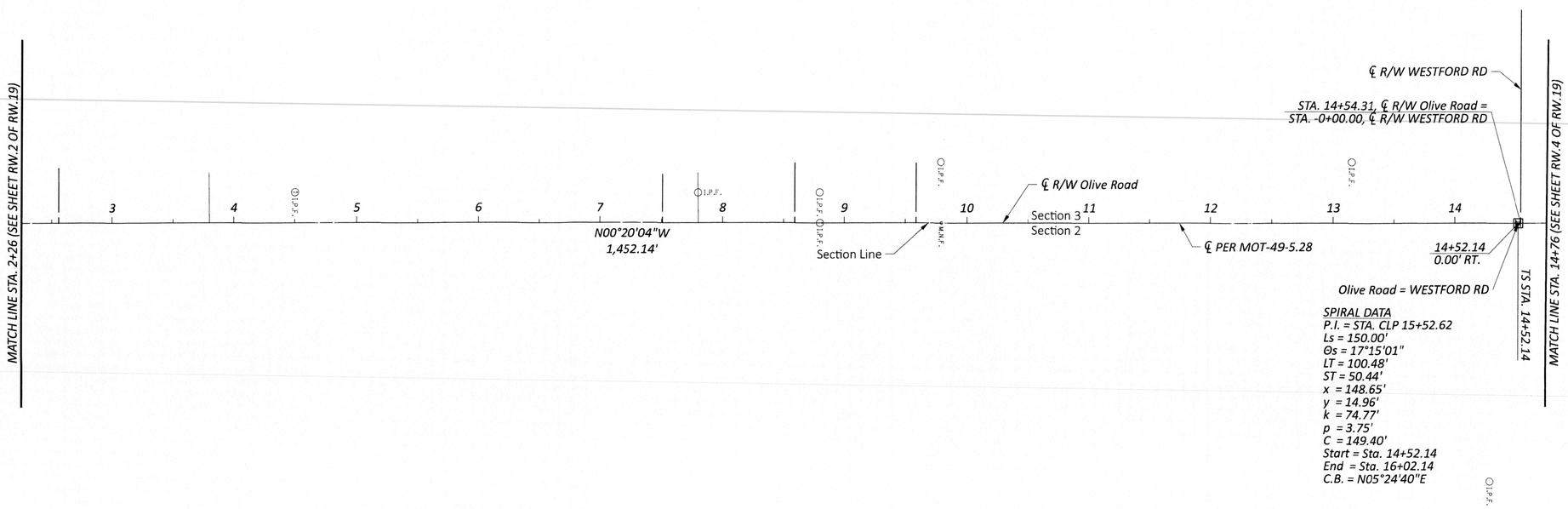


SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

FOR SURVEYING PARAMETERS, BASIS OF BEARINGS AND BASIS OF EX. C/L OF R/W, SEE SHEET RW.2.

FOR MONUMENT TABLE AND LEGEND, SEE SHEET RW.2.

RECEIVED _____, 20 ____
RECORDED _____, 20 ____
BOOK _____ *PAGE* _____

COUNTY RECORDER

HORIZONTAL SCALE IN FEET
0 25 50 100

CENTERLINE PLAT
MOT-TROTWOOD OLIVE RD WALKS SA22
STA. 2+26 TO STA. 14+76

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
SUITE 1 WASHINGTON VILLAGE DR
DAYTON, OHIO 45459
(937) 435-8584
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.3 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RC202 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:08 PM USER: brosss
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\RW\Sheets\117202_RC202.dgn

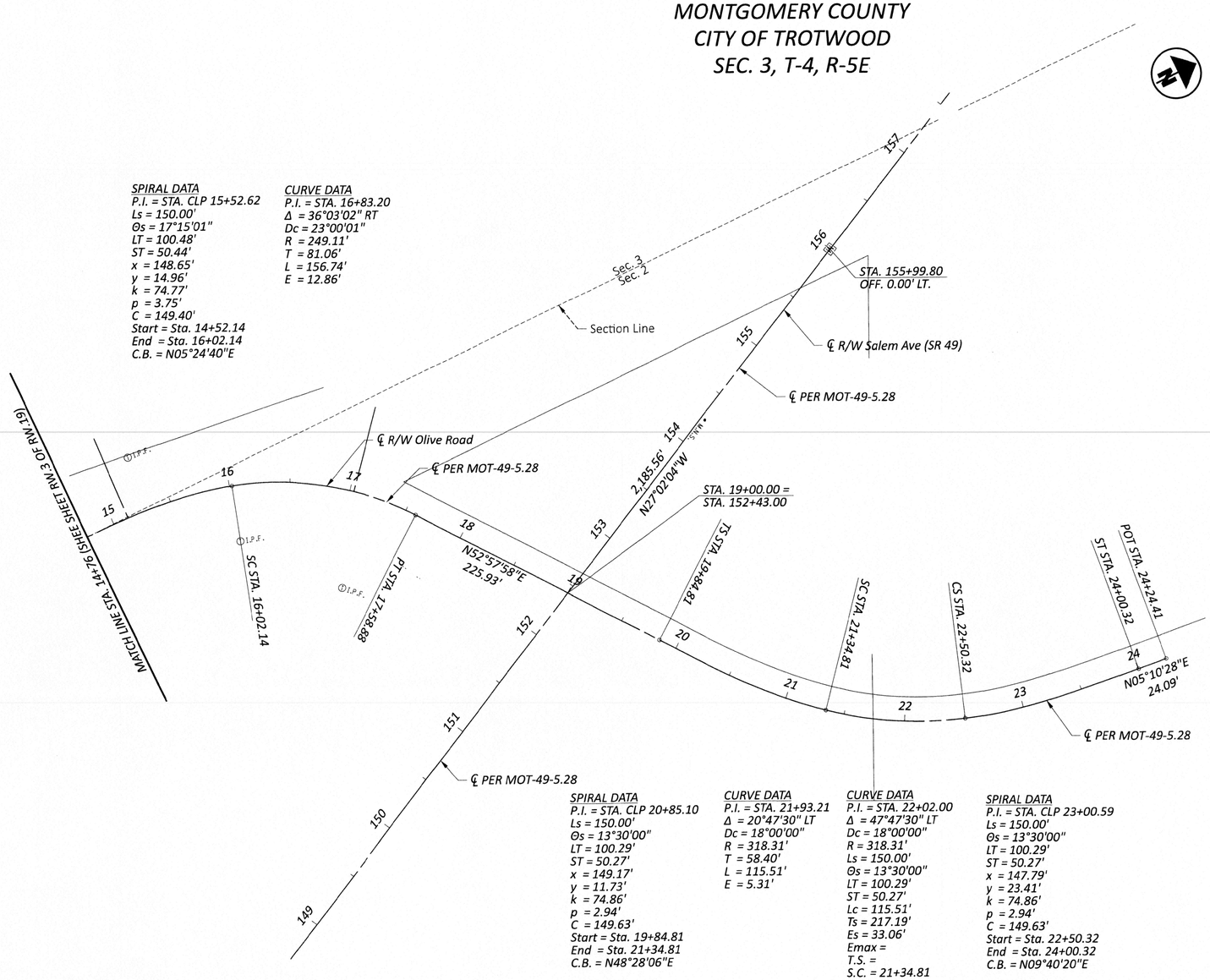
CENTERLINE PLAT

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E

LABEL NBR: 1 Type: SEE
Kind: PLAT
Recorded: 10/23/2024 at 01:48:13 PM
Fee Amt: $253.20 Page 1
Montgomery County, OH
Stacey Benson-Taylor Recorder
File: 2024-00056878

244 p.29 B

HORIZONTAL SCALE IN FEET
0 25 50 100



SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

CURVE DATA
P.I. = STA. 16+83.20
Δ = 36°03'02" RT
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'

SPIRAL DATA
P.I. = STA. CLP 20+85.10
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 149.17'
y = 11.73'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 19+84.81
End = Sta. 21+34.81
C.B. = N48°28'06"E

CURVE DATA
P.I. = STA. 21+93.21
Δ = 20°47'30" LT
Dc = 18°00'00"
R = 318.31'
T = 58.40'
L = 115.51'
E = 5.31'

CURVE DATA
P.I. = STA. 22+02.00
Δ = 47°47'30" LT
Dc = 18°00'00"
R = 318.31'
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
Lc = 115.51'
Ts = 217.19'
Es = 33.06'
Emax =
T.S. =
S.C. = 21+34.81
C.S. = 22+50.32
S.T. =

SPIRAL DATA
P.I. = STA. CLP 23+00.59
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 147.79'
y = 23.41'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 22+50.32
End = Sta. 24+00.32
C.B. = N09°40'20"E

SUBDIVISION PLATS

STEIN SUBDIVISION - SECTION ONE (PB 99 PG 40)
WESTBROOKE VILLAGE SECTION ONE (PB 80 PGs 23-24)
MONTGOMERY COUNTY BOARD OF DEVELOPMENTAL DISABILITIES SERVICES PLAT (PB 234, PG 54)
MAIN PROPERTIES PLAT NUMBER TWO (PB 125 PG 27)
WESTBROOKE VILLAGE APARTMENTS SECTION TWO (PB 97 PG 37)

FOR SURVEYING PARAMETERS, BASIS OF BEARINGS AND BASIS OF EX. C/L OF R/W, SEE SHEET RW.2.

FOR MONUMENT TABLE AND LEGEND, SEE SHEET RW.2.

RECEIVED _____, 20 ____
RECORDED _____, 20 ____
BOOK _____ *PAGE* _____
COUNTY RECORDER

CENTERLINE PLAT
MOT-TROTWOOD OLIVE RD WALKS SA22
STA. 14+76 TO STA. 24+24.41

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
5777 WASHINGTON VILLAGE DR
DAYTON, OHIO 45224
(937) 296-2021
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.4 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RC203 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:09 PM USER: bross
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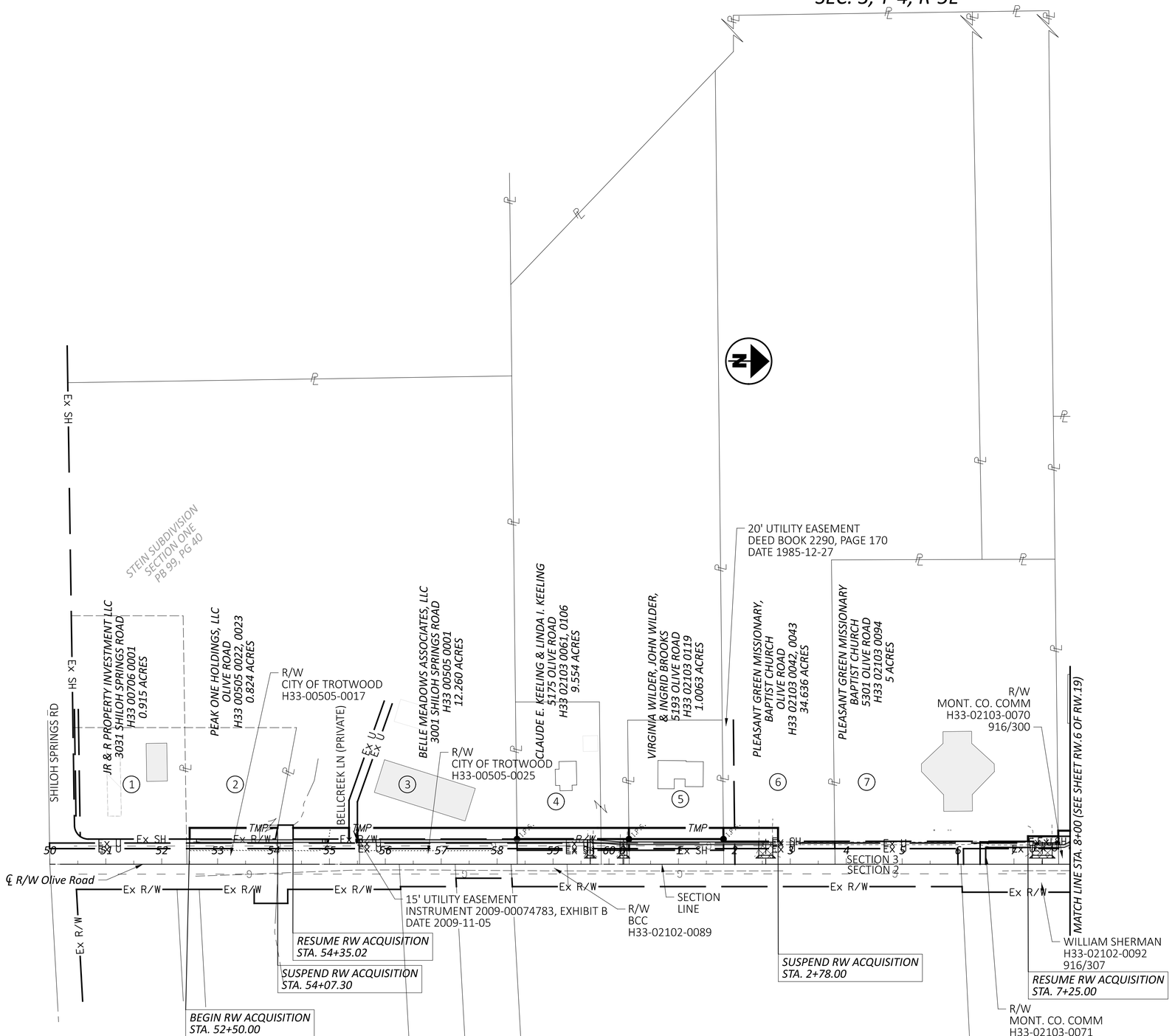
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 50 100 200

PROPERTY MAP
MOT-TROTWOOD OLIVE RD WALKS SA22

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RM101 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:10 PM USER: bross
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REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALTON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)707-2193
www.cmtengr.com

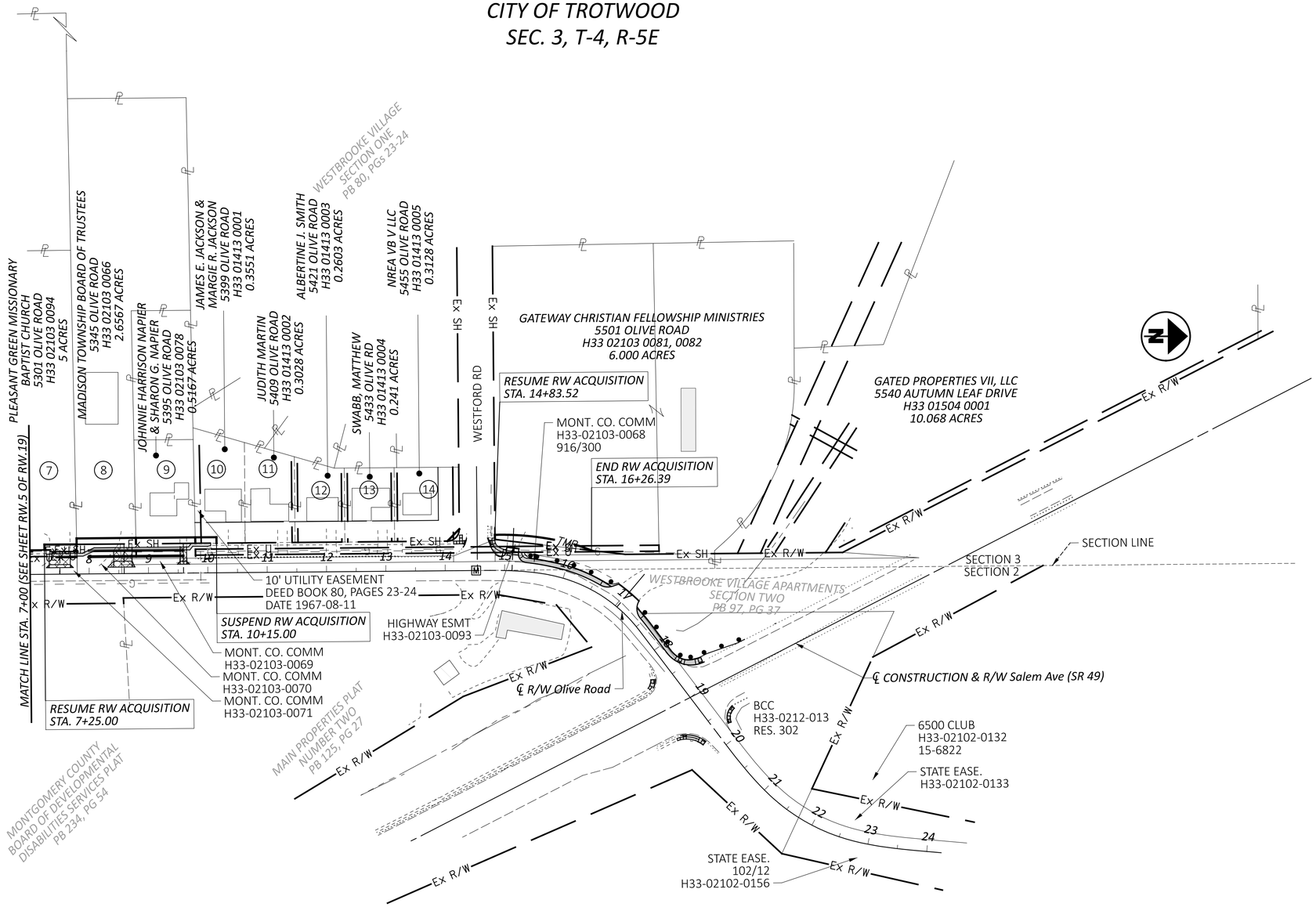
DESIGNER
SRI

REVIEWER
RDH 06/28/24

PROJECT ID
117202

SHEET RW.5 TOTAL RW.19

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 50 100 200

PROPERTY MAP
MOT-TROTWOOD OLIVE RD WALKS SA22

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RM102 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:12 PM USER: bross
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REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
TROTWOOD, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER
SRI

REVIEWER
RDH 06/28/24

PROJECT ID
117202

SHEET RW.6 TOTAL RW.19

TOTAL NUMBER OF:
15 - OWNERSHIPS 0 - TOTAL TAKES
20 - PARCELS 0 - OWNERSHIPS W/STRUCTURES INVOLVED

RECORD AREA - TOTAL PRO - NET TAKE **= NET RESIDUE**
GROSS TAKE - PRO IN TAKE **= NET TAKE**
ALL AREAS IN ACRES

GRANTEE:
ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE CITY OF TROTWOOD.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD BOOK	OWNERS RECORD PAGE/INST	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS	AS ACQUIRED BOOK	AS ACQUIRED PAGE
1	JR & R PROPERTY INVESTMENT, LLC	5	I.R. DEED	14-049774	H33 00706 0001	0.918	0.000		0.000						NO ADDITIONAL R/W REQUIRED		
2-T	PEAK ONE HOLDINGS, LLC	5,8,9	I.R. DEED	19-069406	H33 00505 0022,0023	0.824	0.000	0.071	0.000	0.071					FOR GRADING PURPOSES		
3-T	BELLE MEADOWS ASSOCIATES, LLC	5,8,9	I.R. DEED	09-074783	H33 00505 0001	12.260	0.000	0.184	0.000	0.184					FOR GRADING PURPOSES; OLD SIGN FOUNDATION ENCROACHMENT WITHIN EX. R/W		
4-WD	CLAUDE E. KEELING & LINDA I. KEELING	5,10,11	DMF	96-340A07	H33 02103 0106	1.000	0.086	0.155	0.086	0.069		0.845			R/W REQUIRED		
		5,10,11	DMF	96-340A07	H33 02103 0061	8.554	0.029	0.052	0.029	0.023		8.502			R/W REQUIRED		
	TOTAL					9.554	0.115	0.207	0.115	0.092		9.347					
4-T		5,10,11					0.000	0.069	0.000	0.069					FOR GRADING PURPOSES		
		5,10,11					0.000	0.023	0.000	0.023					FOR GRADING PURPOSES		
	TOTAL						0.000	0.092	0.000	0.092							
5-WD	VIRGINIA WILDER, JOHN WILDER & INGRID BROOKS	5,10,11	I.R. DEED	23-017608	H33 02103 0119	1.006	0.097	0.175	0.097	0.078		0.831			R/W REQUIRED		
5-T		5,10,11					0.000	0.078	0.000	0.078					FOR GRADING PURPOSES		
6-T	PLEASANT GREEN MISSIONARY, BAPTIST CHURCH	5,12,13	DMF	00-620C11	H33 02103 0042,0043	34.636	0.000	0.054	0.000	0.054					FOR GRADING PURPOSES		
7-T	PLEASANT GREEN MISSIONARY BAPTIST CHURCH	5,6,12,13	DMF	95-316E07	H33 02103 0094	5.000	0.000	0.011	0.000	0.011					FOR GRADING PURPOSES		
8-T	MADISON TOWNSHIP BOARD OF TRUSTEES	6,14,15	DB	2522-0262	H33 02103 0066	2.657	0.000	0.023	0.000	0.023					FOR GRADING PURPOSES		
9-T	JOHNNIE HARRISON NAPIER & SHARON G. NAPIER	6,14,15	I.R. DEED	20-003670	H33 02103 0078	0.517	0.000	0.023	0.000	0.023					FOR GRADING PURPOSES		
10-T	JAMES E. JACKSON & MARGIE R. JACKSON	6,14,15	DMF	96-457B01	H33 01413 0001	0.355	0.000	0.008	0.000	0.008					FOR GRADING PURPOSES		
11	JUDITH MARTIN	6,14,15	I.R. DEED	13-040039	H33 01413 0002	0.303	0.000		0.000						NO ADDITIONAL R/W REQUIRED		
12	ALBERTINE J. SMITH	6,14,15,16,17	DMF	79-086B02	H33 01413 0003	0.260	0.000		0.000						NO ADDITIONAL R/W REQUIRED		
13	MATTHEW D. SWABB	6,16,17	I.R. DEED	20-076330	H33 01413 0004	0.241	0.000		0.000						NO ADDITIONAL R/W REQUIRED		
14-T	NREA VB V, LLC	6,16,17	I.R. DEED	19-007555	H33 01413 0005	0.313	0.000	0.003	0.000	0.003					FOR GRADING PURPOSES; INSTALLATION OF NEW WALK		
15-T	GATEWAY CHRISTIAN FELLOWSHIP MINISTRIES	6,16,17	I.R. DEED	14-008302	H33 02103 0081, 0082	6.000	0.000	0.035	0.000	0.035					FOR GRADING PURPOSES		

TYPES OF TITLE LEGEND:
WD = FEE SIMPLE
T = TEMPORARY EASEMENT

NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTH DURATION

NOTE: UNDER NO CIRCUMSTANCE ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE

RECORD AREA | TOTAL P.R.O. | GROSS TAKE | P.R.O. IN TAKE | NET TAKE

NEW RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE
NET TAKE = GROSS TAKE - PRO IN TAKE
ALL AREAS IN ACRES

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

SUMMARY OF ADDITIONAL RIGHT OF WAY

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:13 PM USER: bross
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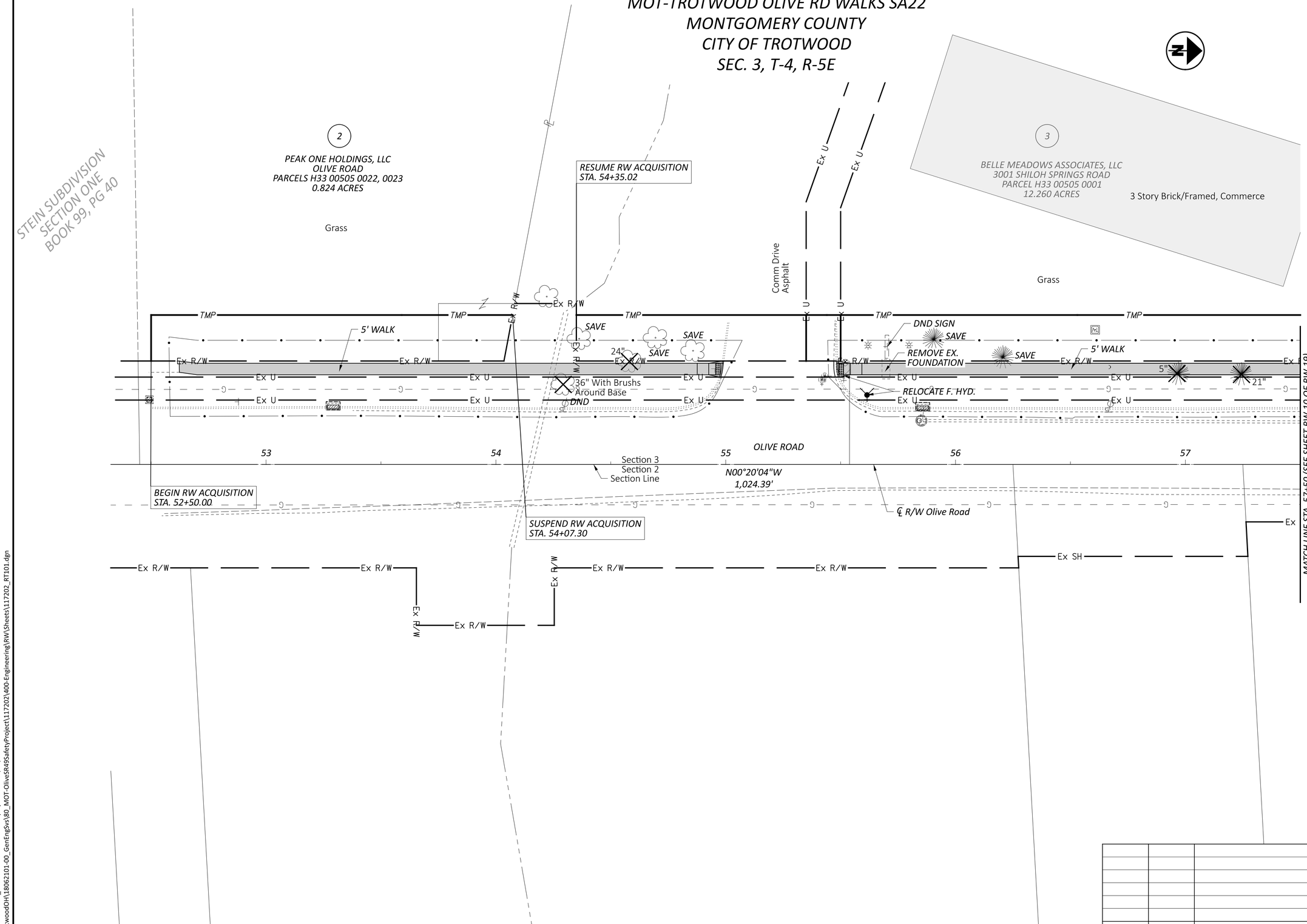
DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE WASTON VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)767-2193
www.cmtengi.com

DESIGNER SRI
REVIEWER RDH 06/28/24
PROJECT ID 117202
SHEET RW.7 TOTAL RW.19

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 52+32 TO STA. 57+50

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WINTON VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2193
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.8 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

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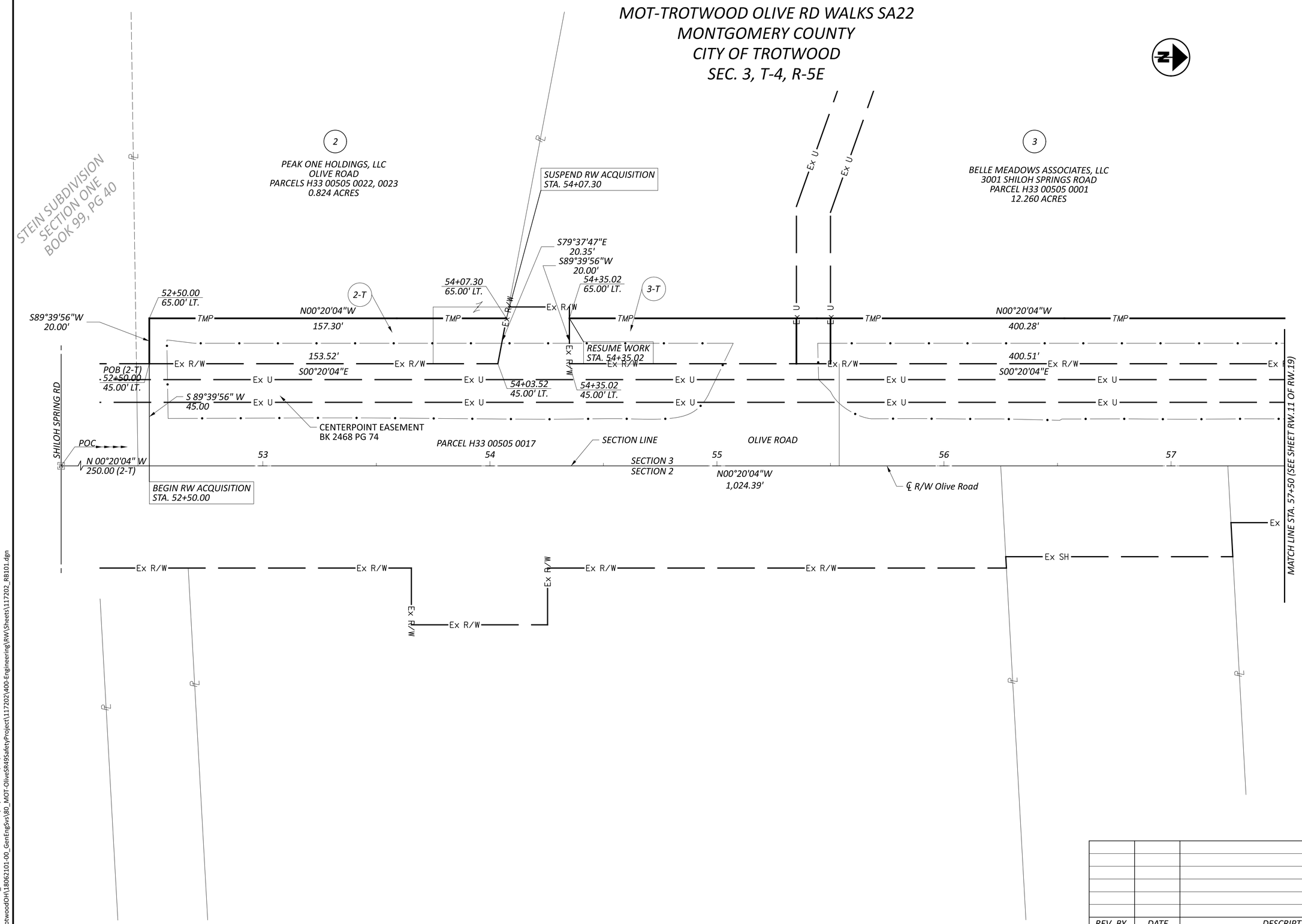
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 52+32 TO STA. 57+50

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WASHINGTON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2139
www.cmtengr.com

DESIGNER
SRI

REVIEWER
RDH 06/28/24

PROJECT ID
117202

SHEET RW.9 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

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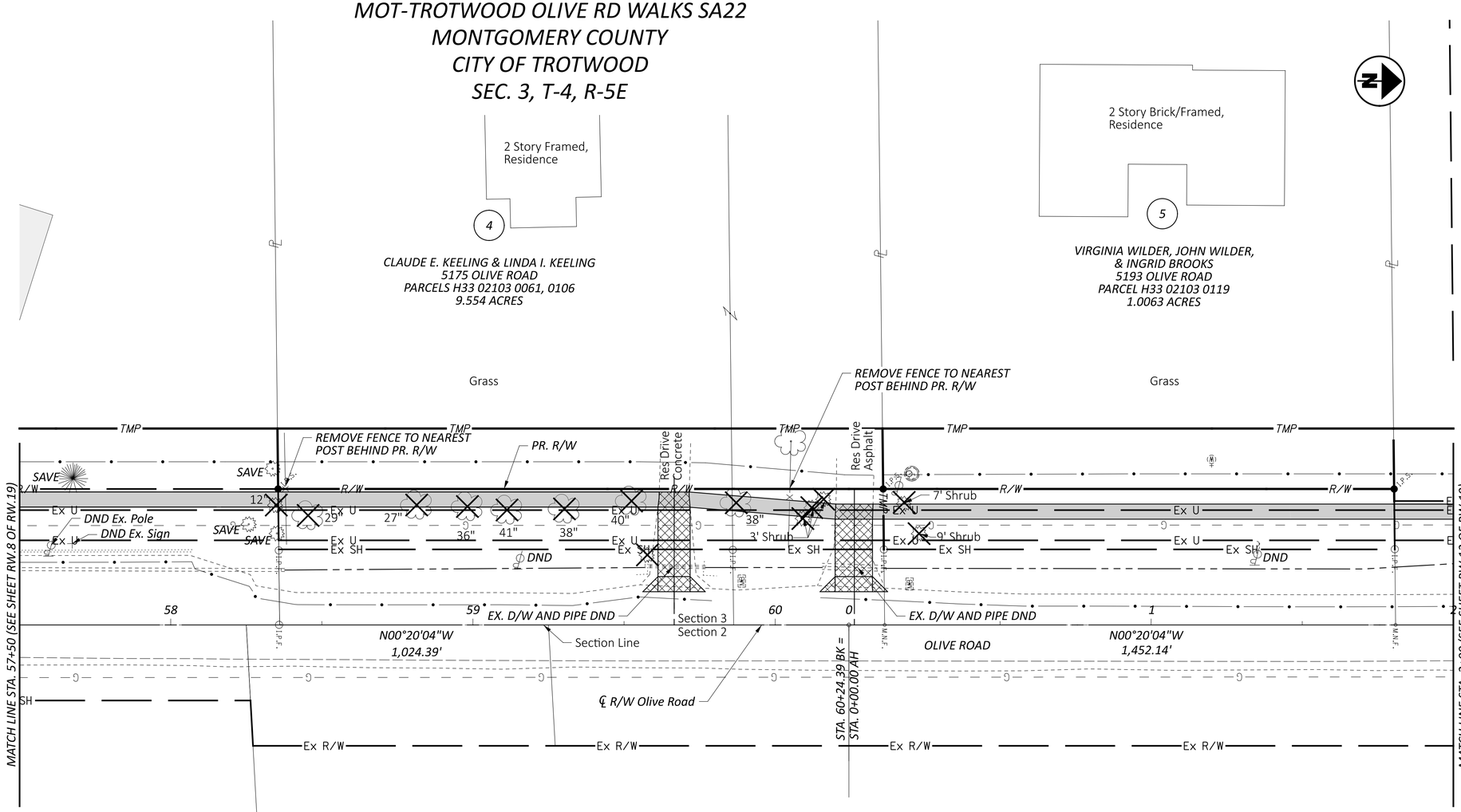
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 57+50 TO STA. 2+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2183
www.cmtengr.com

DESIGNER SRI

REVIEWER RDH 06/28/24

PROJECT ID 117202

SHEET RW.10 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RT102 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:20 PM USER: bross
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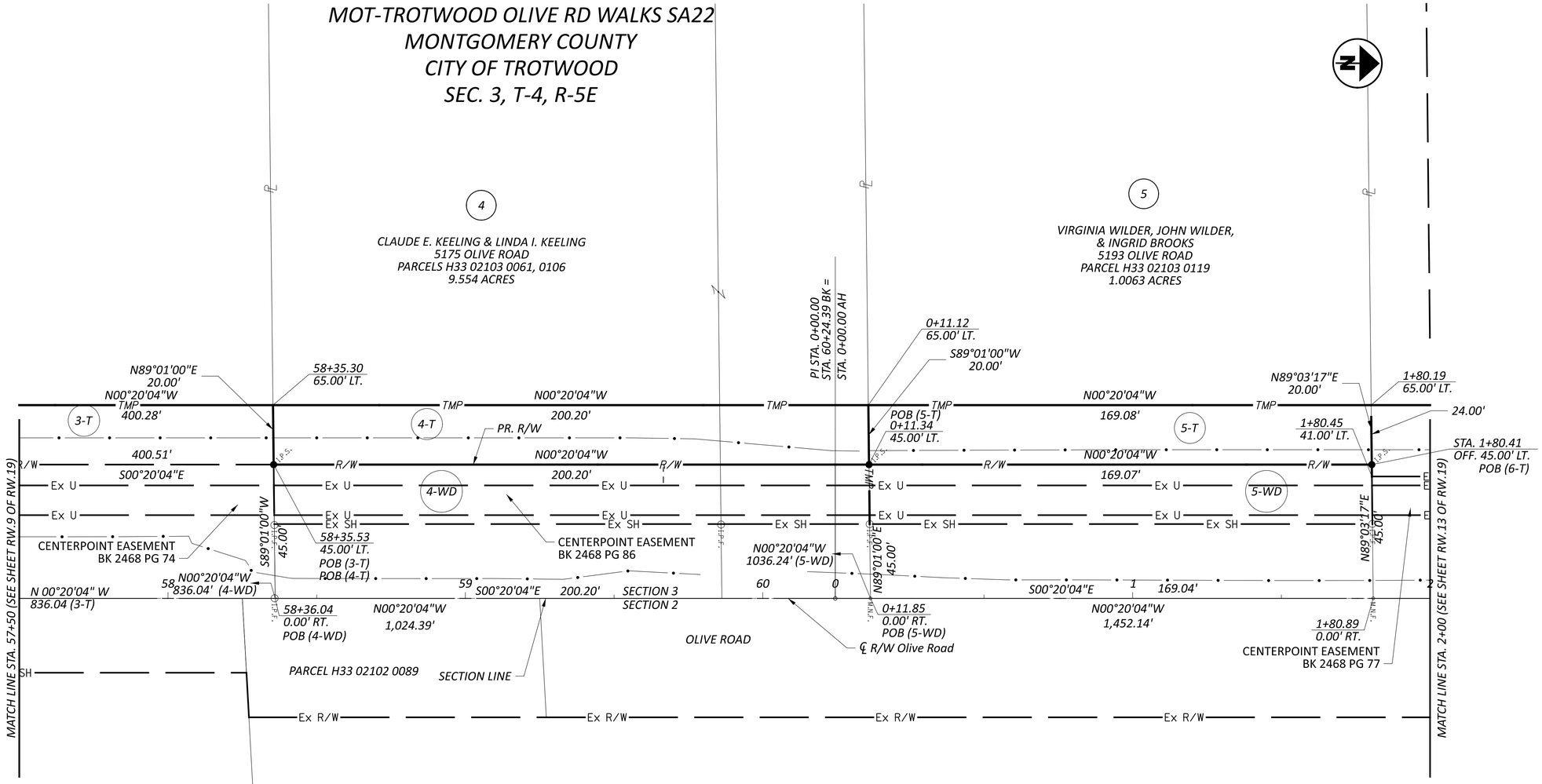
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 57+50 TO STA. 2+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
77 ALBANY STREETON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)787-2193
www.cmtengi.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.11 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

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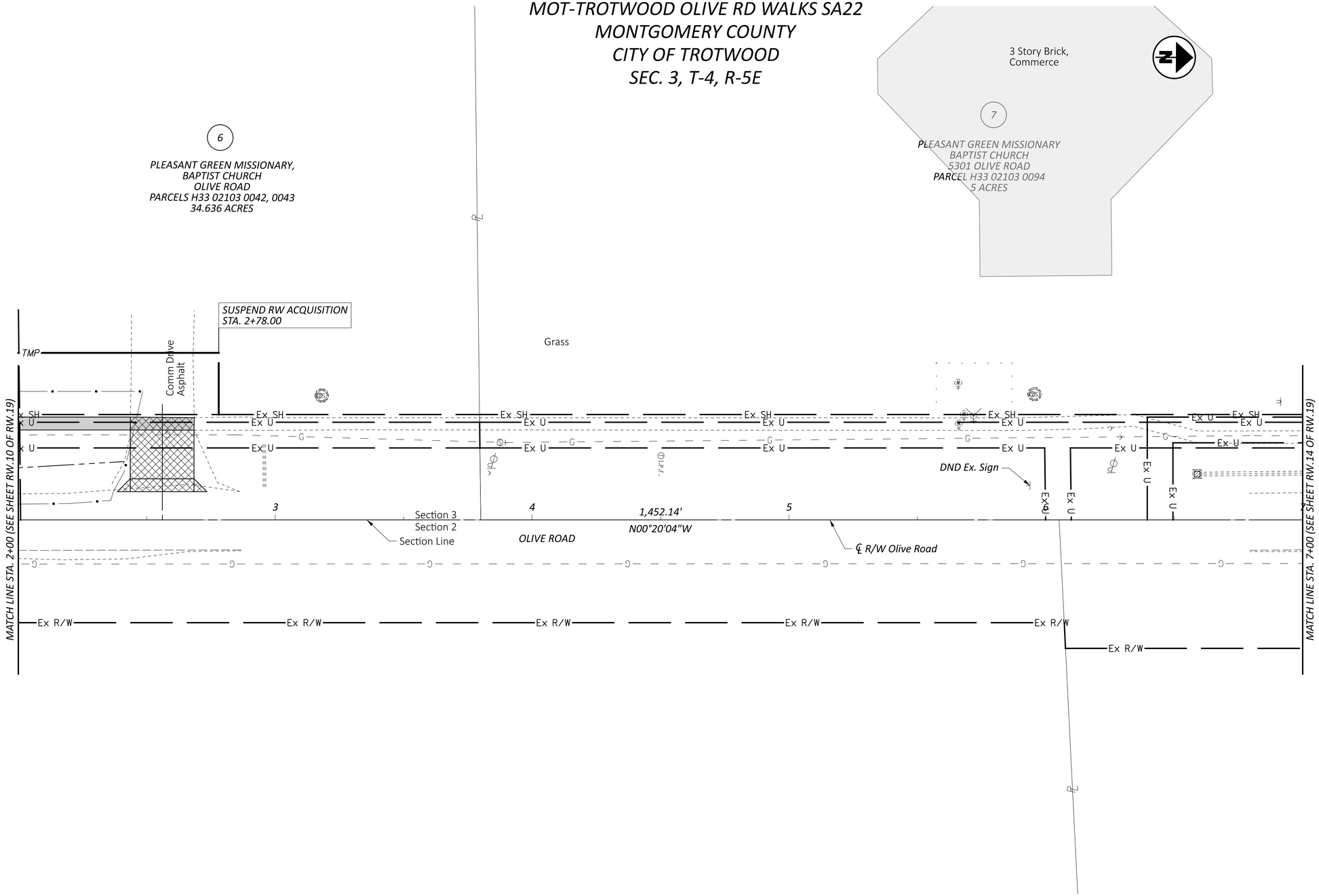
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 2+00 TO STA. 7+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH: (937)707-2193
www.cmtengr.com

DESIGNER
SRI

REVIEWER
RDH 06/28/24

PROJECT ID
117202

SHEET RW.12 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RT103 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:25 PM USER: bross
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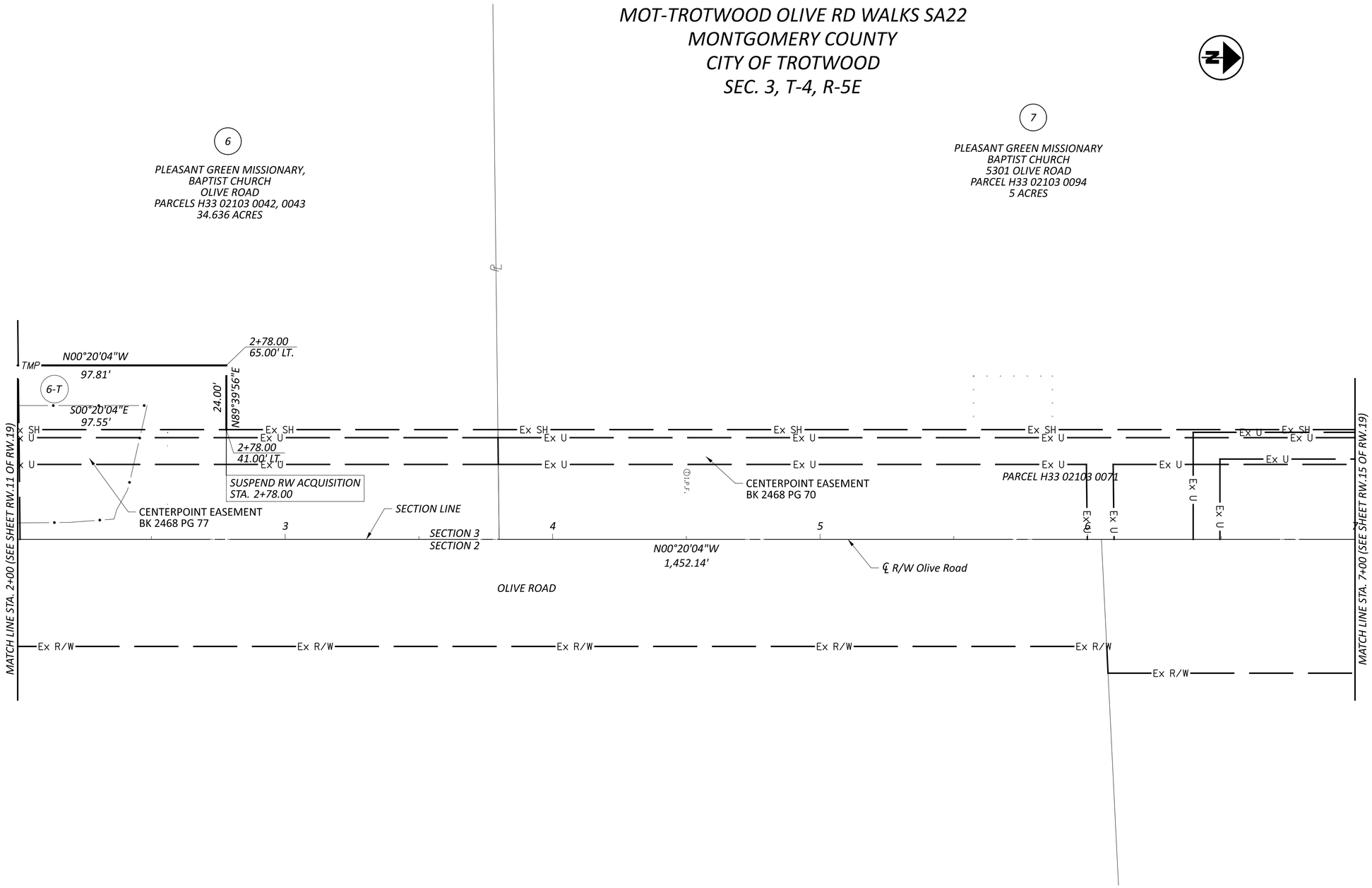
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 2+00 TO STA. 7+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

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CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WASHINGTON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)701-2139
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.13 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RB103 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:27 PM USER: bross
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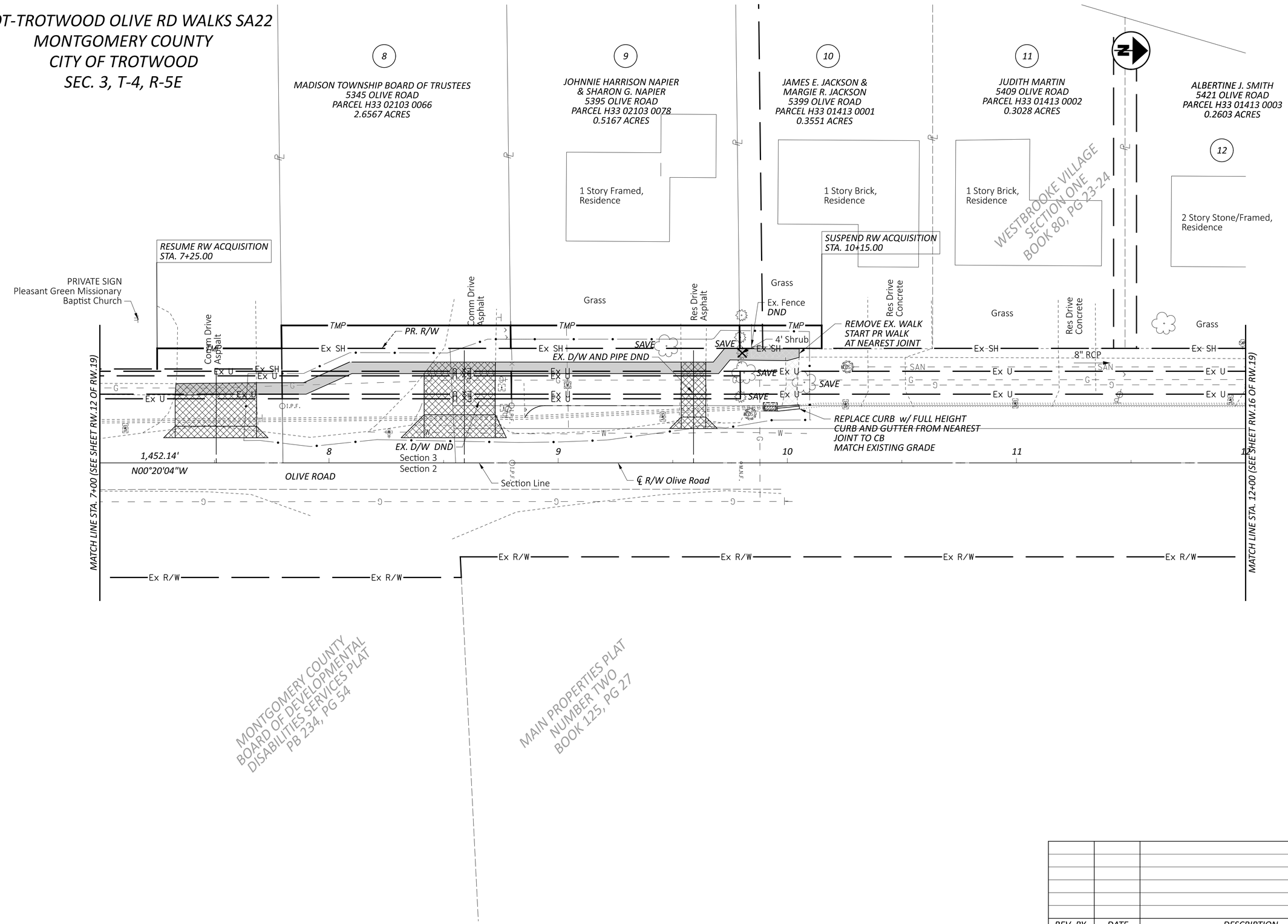
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 7+00 TO STA. 12+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WINTON VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)767-2193
www.cmtengr.com

DESIGNER SRI
REVIEWER RDH 06/28/24
PROJECT ID 117202
SHEET RW.14 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RT104 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:29 PM USER: bross
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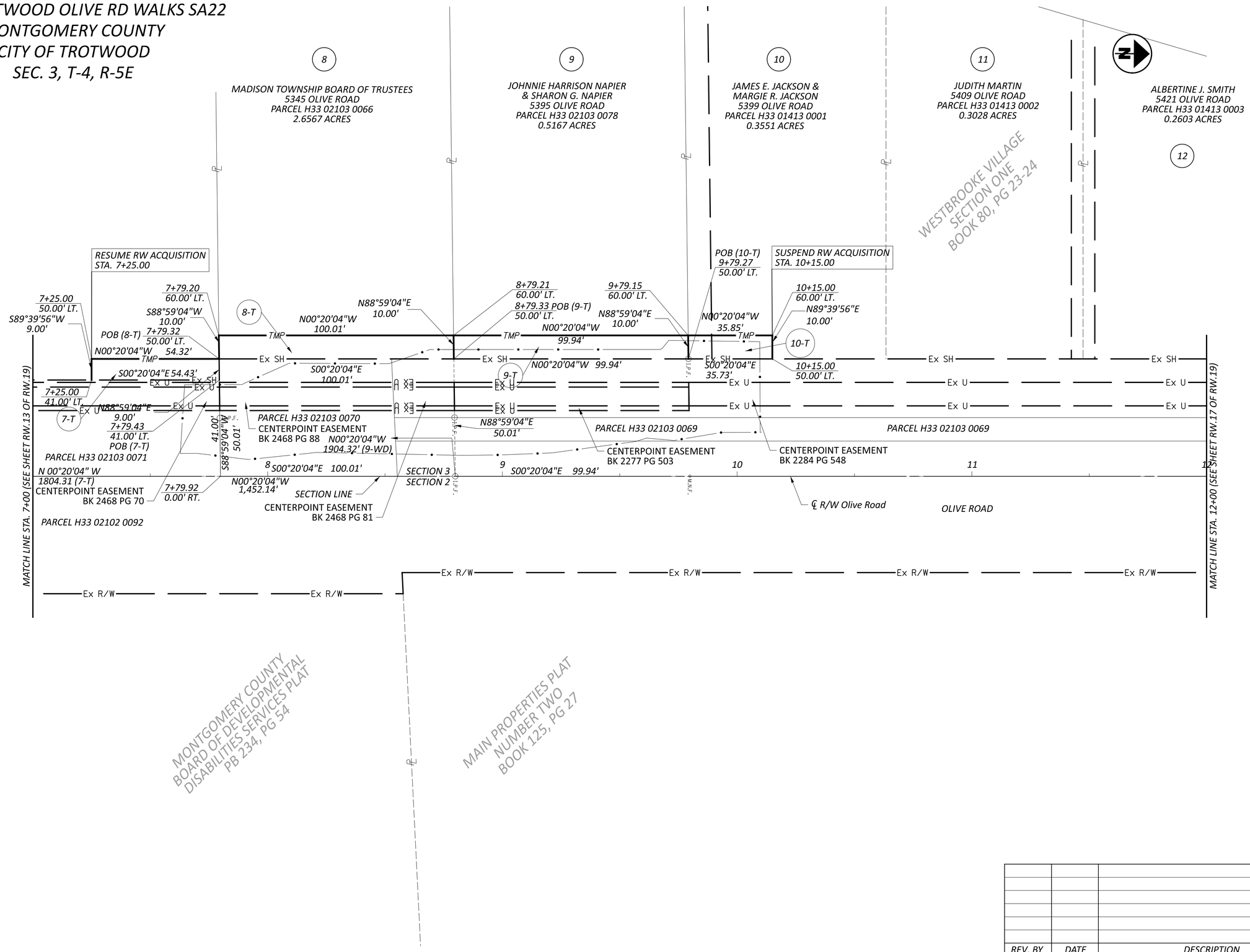
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 7+00 TO STA. 12+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WASHINGTON VILLAGE DR.
SUITE 270
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PH (937)701-2139
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DESIGNER
SRI

REVIEWER
RDH 06/28/24

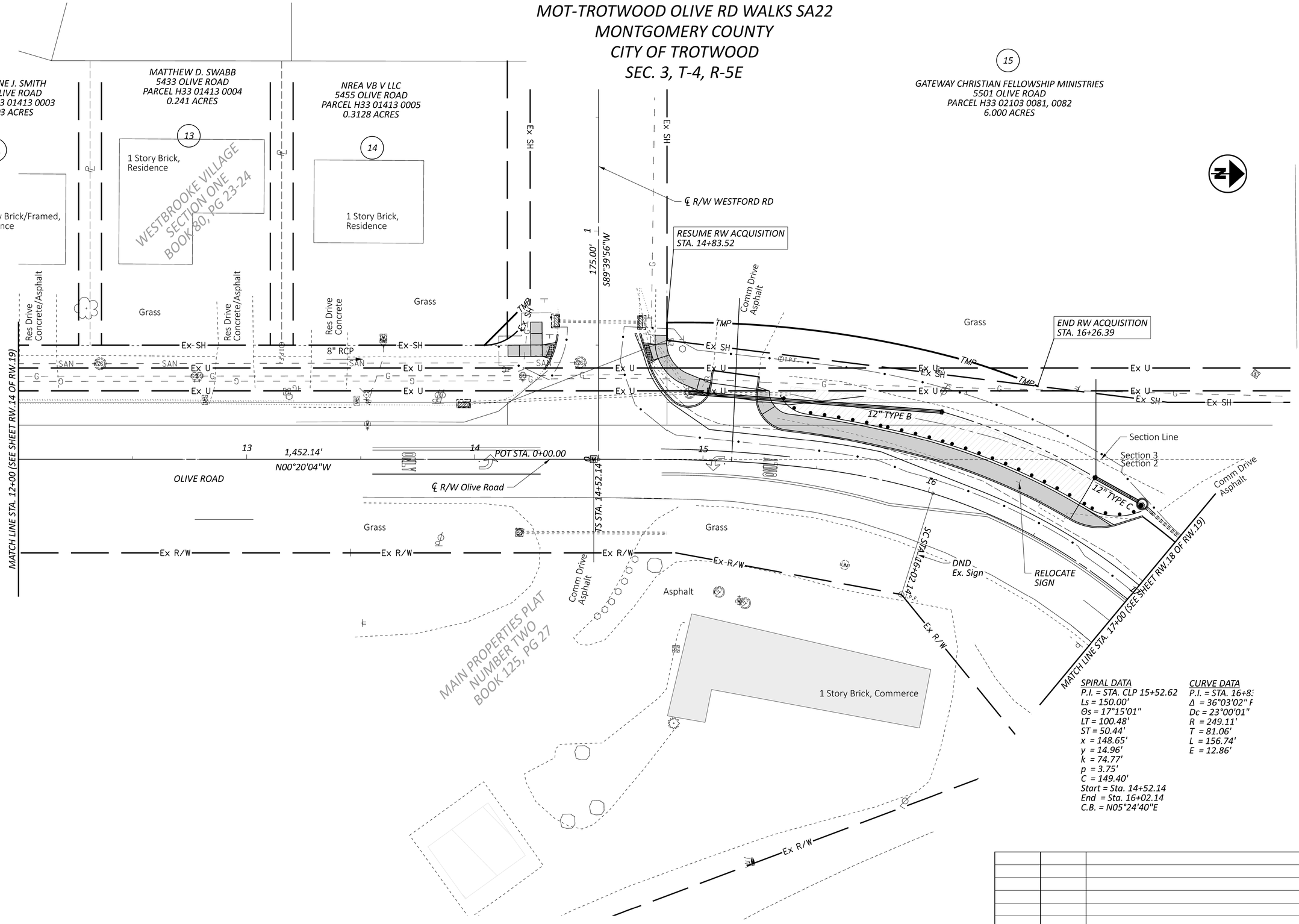
PROJECT ID
117202

SHEET RW.15 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RB104 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:32 PM USER: bross
L:\TrotwoodOH\18062101-00_GenEngSvs\80_MOT-OliveSR49SafetyProject\117202\400-Engineering\RW\Sheets\117202_RB104.dgn

MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

CURVE DATA
P.I. = STA. 16+8
Δ = 36°03'02" F
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

HORIZONTAL SCALE IN FEET 0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 12+00 TO STA. 17+00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
TIPP CITY/WESTON VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH: (937)701-2193
www.cmtengr.com

DESIGNER SRI
REVIEWER RDH 06/28/24
PROJECT ID 117202
SHEET RW.16 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RT105 PAPERSIZE: 34x22 (in.) DATE: 12/10/2024 TIME: 6:01:52 AM USER: lwilson
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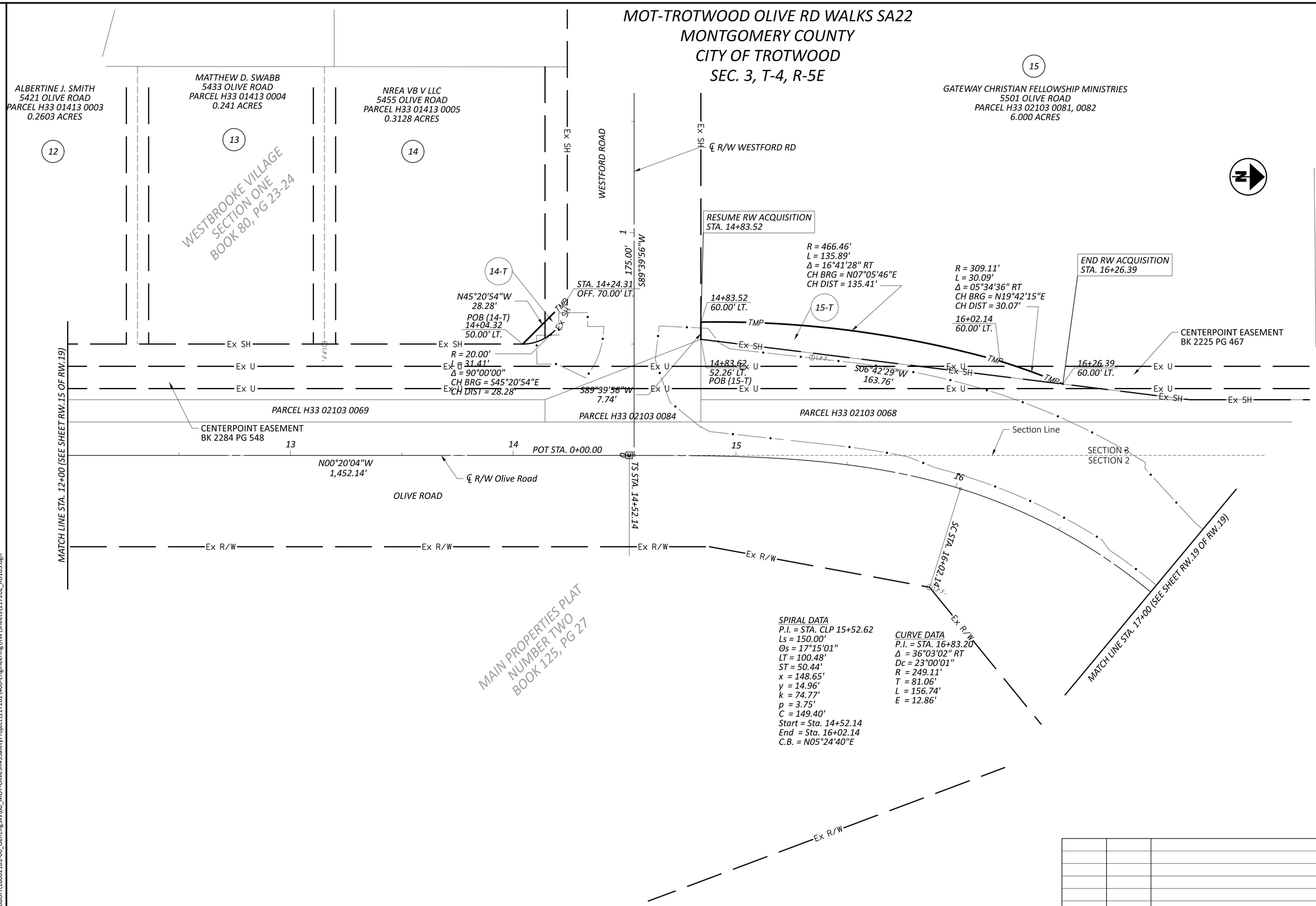
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



SPIRAL DATA
P.I. = STA. CLP 15+52.62
Ls = 150.00'
Θs = 17°15'01"
LT = 100.48'
ST = 50.44'
x = 148.65'
y = 14.96'
k = 74.77'
p = 3.75'
C = 149.40'
Start = Sta. 14+52.14
End = Sta. 16+02.14
C.B. = N05°24'40"E

CURVE DATA
P.I. = STA. 16+83.20
Δ = 36°03'02" RT
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'

HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 12+00 TO STA. 17+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WASHINGTON VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)743-2193
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.17 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RB105 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:36 PM USER: bross
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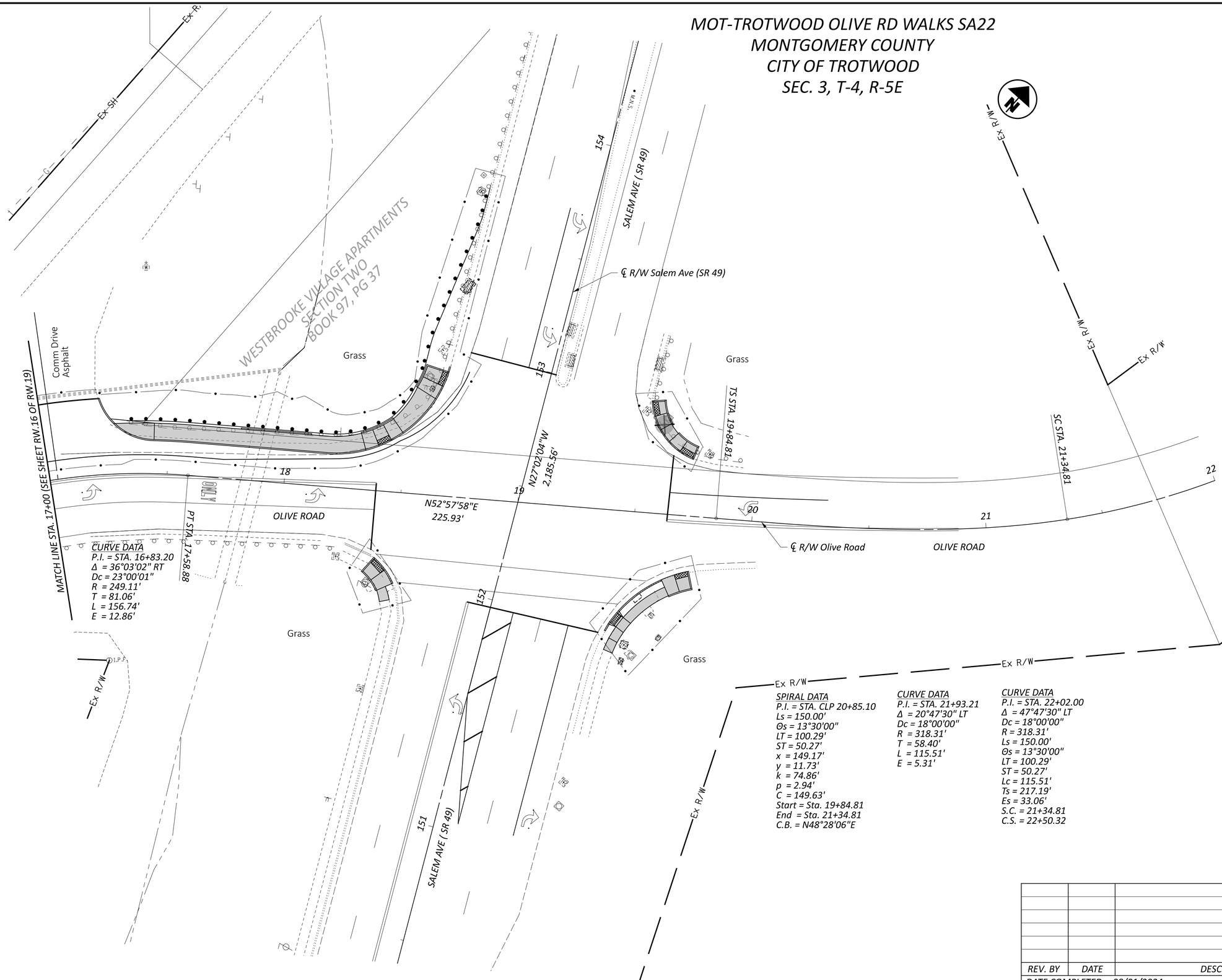
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



HORIZONTAL SCALE IN FEET
0 10 20 40

RIGHT OF WAY TOPO SHEET
STA. 17+00 TO STA. 22+00

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WALNUT GROVE VILLAGE DR.
SUITE 270
DAYTON, OHIO 45459
PH (937)707-2193
www.cmtengr.com

DESIGNER: SRI
REVIEWER: RDH 06/28/24
PROJECT ID: 117202
SHEET: RW.18 TOTAL: RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RT106 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:38 PM USER: bross
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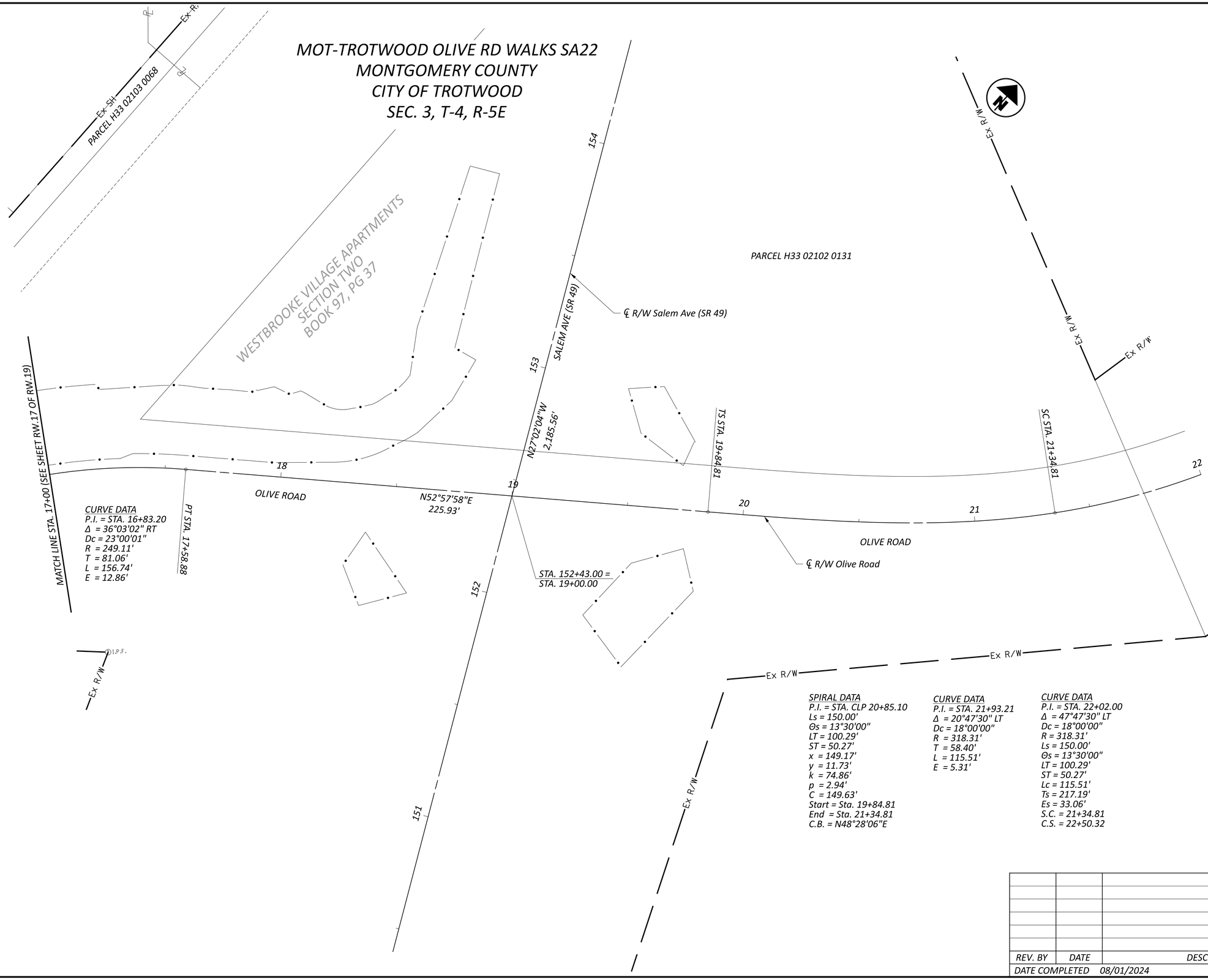
MOT-TROTWOOD OLIVE RD WALKS SA22
MONTGOMERY COUNTY
CITY OF TROTWOOD
SEC. 3, T-4, R-5E



CURVE DATA
P.I. = STA. 16+83.20
Δ = 36°03'02" RT
Dc = 23°00'01"
R = 249.11'
T = 81.06'
L = 156.74'
E = 12.86'

SPIRAL DATA
P.I. = STA. CLP 20+85.10
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
x = 149.17'
y = 11.73'
k = 74.86'
p = 2.94'
C = 149.63'
Start = Sta. 19+84.81
End = Sta. 21+34.81
C.B. = N48°28'06"E

CURVE DATA
P.I. = STA. 21+93.21
Δ = 20°47'30" LT
Dc = 18°00'00"
R = 318.31'
T = 58.40'
L = 115.51'
E = 5.31'

CURVE DATA
P.I. = STA. 22+02.00
Δ = 47°47'30" LT
Dc = 18°00'00"
R = 318.31'
Ls = 150.00'
Θs = 13°30'00"
LT = 100.29'
ST = 50.27'
Lc = 115.51'
Ts = 217.19'
Es = 33.06'
S.C. = 21+34.81
C.S. = 22+50.32

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 08/01/2024

HORIZONTAL SCALE IN FEET 0 10 20 40

RIGHT OF WAY BOUNDARY SHEET
STA. 17+00 TO STA. 22+00

DESIGN AGENCY
CMT
CRAWFORD, MURPHY & TILLY, INC.
7777 WASHINGTON VILLAGE DR
SUITE 270
DAYTON, OHIO 45459
PH (937)743-2193
www.cmtengr.com

DESIGNER SRI
REVIEWER RDH 06/28/24
PROJECT ID 117202
SHEET RW.19 TOTAL RW.19

MOT TROTWOOD OLIVE RD WALKS SA22

MODEL: 117202_RB106 PAPERSIZE: 34x22 (in.) DATE: 10/15/2024 TIME: 12:38:40 PM USER: bross
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