

DESIGN EXCEPTIONS
NONE

PLAN PREPARED BY:

UNION COUNTY ENGINEER
233 WEST SIXTH ST.
MARYSVILLE, OHIO 43040
(937)–645–3018

ENGINEER'S SEAL

SIGNED: _____
DATE: _____

2022 GUARDRAIL UPGRADE PROGRAM

UNION COUNTY, OH

LIBERTY, MILLCREEK, PARIS, AND UNION TOWNSHIPS

- CR 22 – WATKINS–CALIFORNIA ROAD
- CR 57 – MIDDLEBURG–PLAIN CITY ROAD
- CR 96 – STATE ROAD
- CR 104 – WATKINS ROAD
- CR 114 – WALDO ROAD
- CR 191 – RAYMOND ROAD

INDEX OF SHEETS

TITLE SHEET _____	1
GENERAL NOTES _____	2
LOCATION MAPS AND GENERAL SUMMARY _____	3
LOCATION SHEETS _____	4–23



UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1–800–362–2764 (TOLL FREE)
OHIO UTILITIES PROTECTION
SERVICE
Non–members must be called directly

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
GR–1.1	07–20–12	MGS–1.1	07–21–21	800–2019	01–21–22
GR–2.1	07–20–12	MGS–2.1	01–19–18		
GR–2.2	07–20–12				
GR–2.4	07–20–12				
GR–4.1	07–20–12				

PROJECT DESCRIPTION
THIS PROJECT IS A COUNTY GUARDRAIL UPGRADING PROJECT ON VARIOUS COUNTY ROADS WITHIN UNION COUNTY.

2019 SPECIFICATIONS
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN 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, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

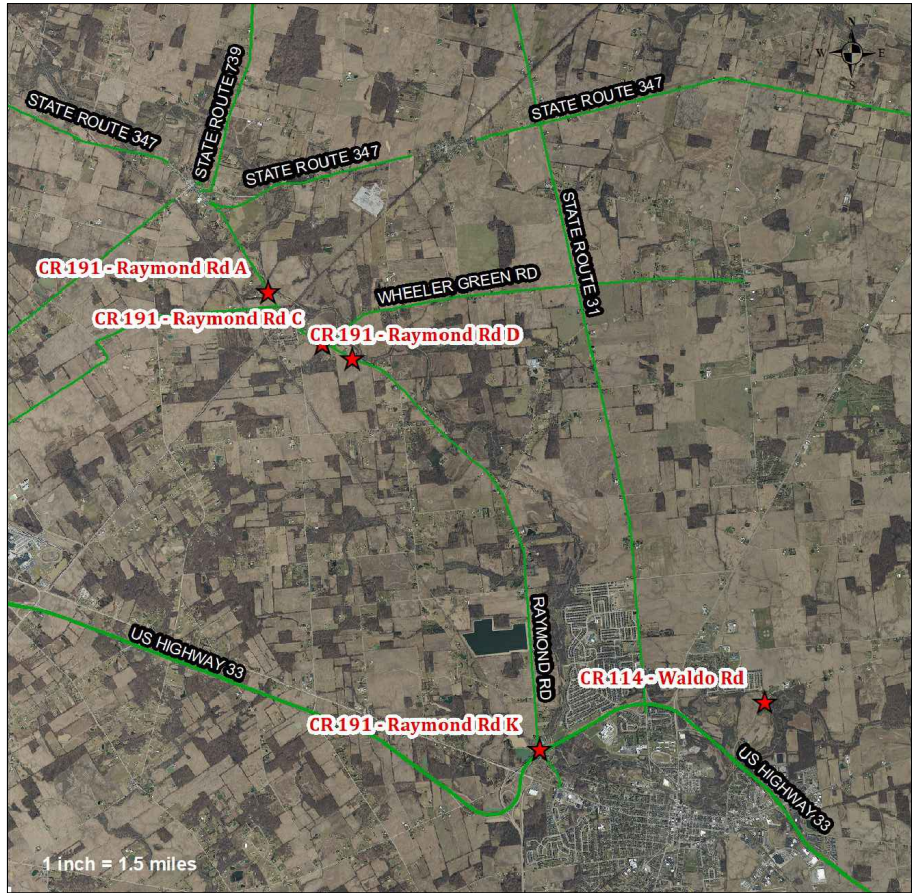
APPROVED _____
DATE _____ UNION COUNTY COMMISSIONER

APPROVED _____
DATE _____ UNION COUNTY COMMISSIONER

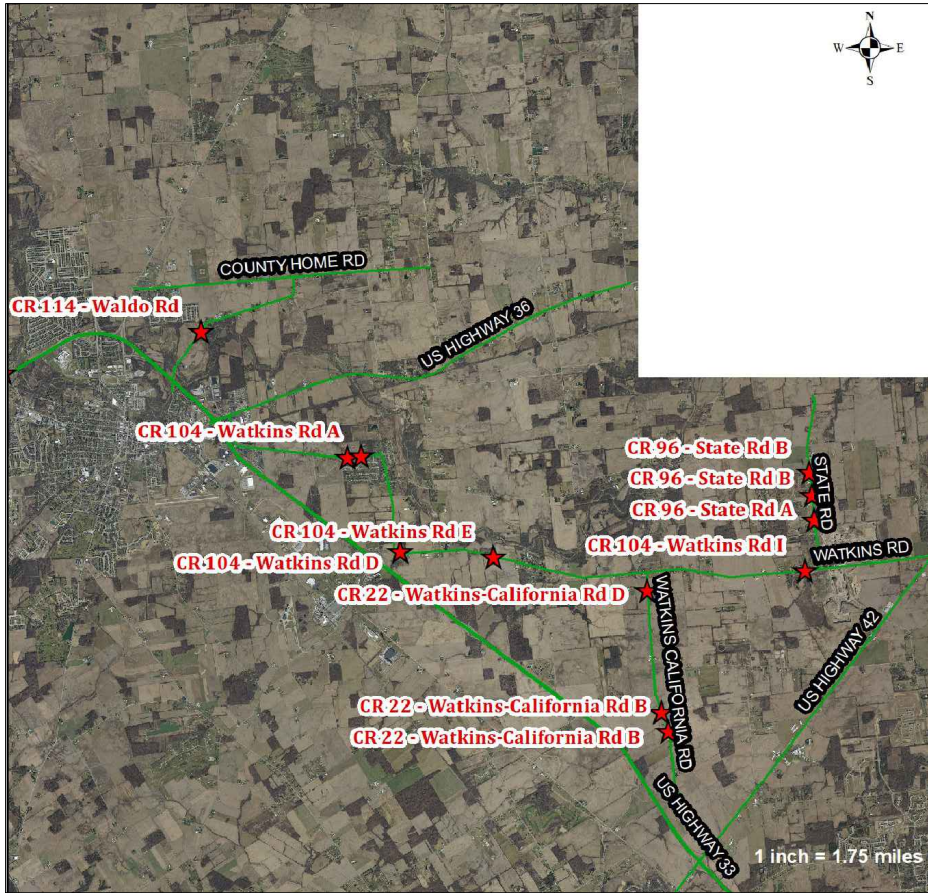
APPROVED _____
DATE _____ UNION COUNTY COMMISSIONER

APPROVED _____
DATE _____ UNION COUNTY ENGINEER

			CALCULATED		SAB		CHECKED		JAS	



CR 191



CR 22, 96, 104, 114

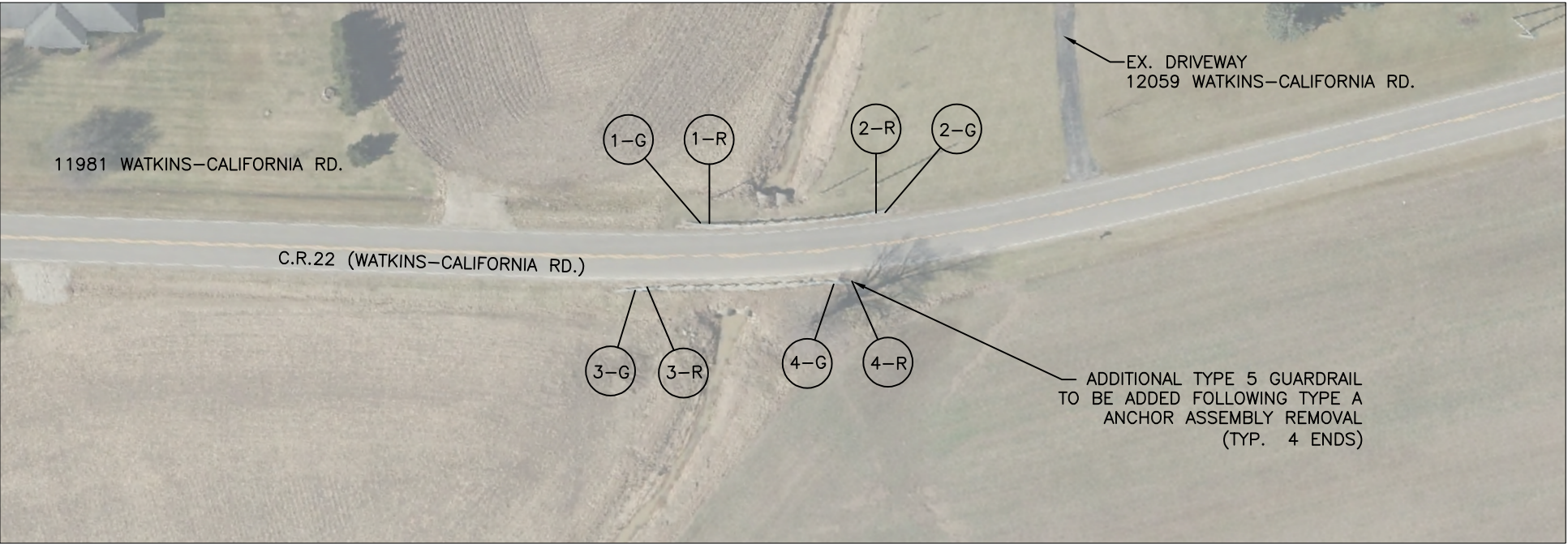


CR 57

GENERAL SUMMARY

	GEN NOTES	CR 22	CR 57	CR 96	CR 104	CR 114	CR 191		REF #	ITEM	GRAND TOTAL	UNIT	ITEM DESCRIPTION
SHEET	2	4-6	7-11	12-14	15-18	19	20-23						
	CONTINGENCY												
	250					170			1	202	420	LIN. FT.	GUARDRAIL REMOVED, AS PER PLAN
		12	19	12	19		16		2	202	78	EACH	ANCHOR ASSEMBLY REMOVED
	50	40	60	40	60	10	50		3	203	310	CU. YD.	EMBANKMENT, AS PER PLAN
	400	150	50	25	100	120			4	209	845	LIN. FT.	LINEAR GRADING - RESHAPING UNDER GUARDRAIL, APP
		150	50	25	100				5	606	325	LIN. FT.	GUARDRAIL, TYPE 5
						120			6	606	120	LIN. FT.	GUARDRAIL, TYPE MGS
		12	19	12	19		16		7	648	78	EACH	ANCHOR ASSEMBLY, TYPE E, AS PER PLAN
	500					2			8	648	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E, AS PER PLAN
	50								9	606	500	LIN. FT.	GUARDRAIL REBUILT, AS PER PLAN
									10	606	50	LIN. FT.	GUARDRAIL POSTS, 9 FT, AS PER PLAN
		12	30	12	28	3	26		11	648	111	EACH	BARRIER REFLECTORS, TYPE A2
		250	300	200	350	100	250		12	659	1450	SQ. YD.	REPAIR SEEDING AND MULCHING
													MISCELLANEOUS
									13	614	1	LUMP	MAINTAINING TRAFFIC
									14	623	1	LUMP	CONSTRUCTION LAYOUT STAKING
									15	624	1	LUMP	MOBILIZATION, AS PER PLAN

NOTE: INDIVIDUAL LOCATION
SUBSUMMARY SHOWN ON
EACH LOCATION SHEET.



CR 22 – WATKINS–CALIFORNIA ROAD B (1)

N.T.S.

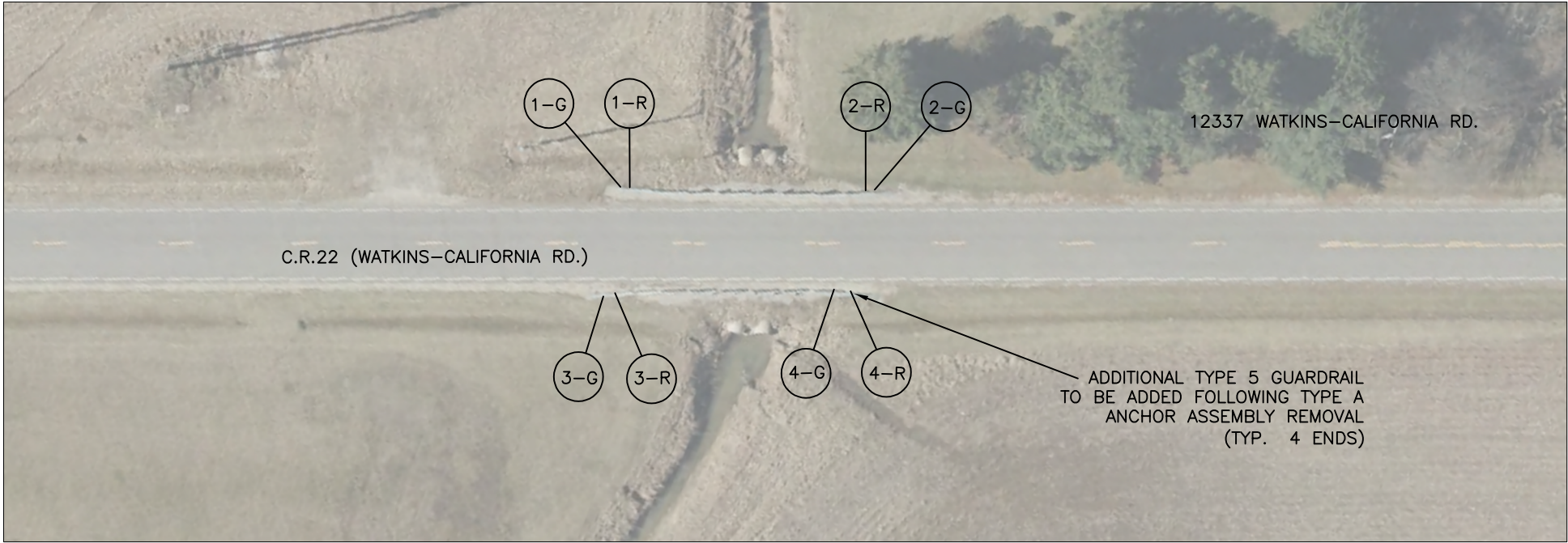
ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-22	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3	12.5		1	1	12.5	21
	2-G			LT			3	12.5		1	1	12.5	21
	3-G			RT			3	12.5		1	1	12.5	21
	4-G			RT			3	12.5		1	1	12.5	21
TOTALS						4	12	50		4	4	50	84



CALCULATED	SAB	CHECKED	JAS
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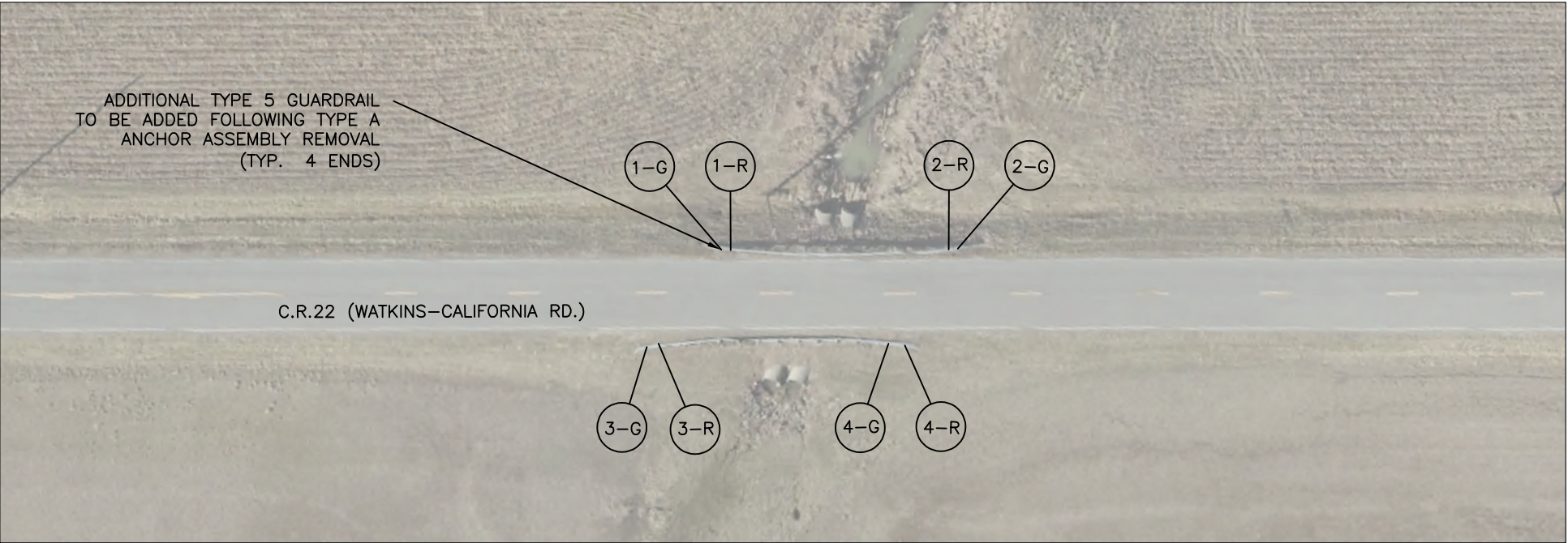
WATKINS–CALIFORNIA ROAD CR 22 B

UNI–VARIOUS–2022GR



CR 22 – WATKINS–CALIFORNIA ROAD B (2)
N.T.S.

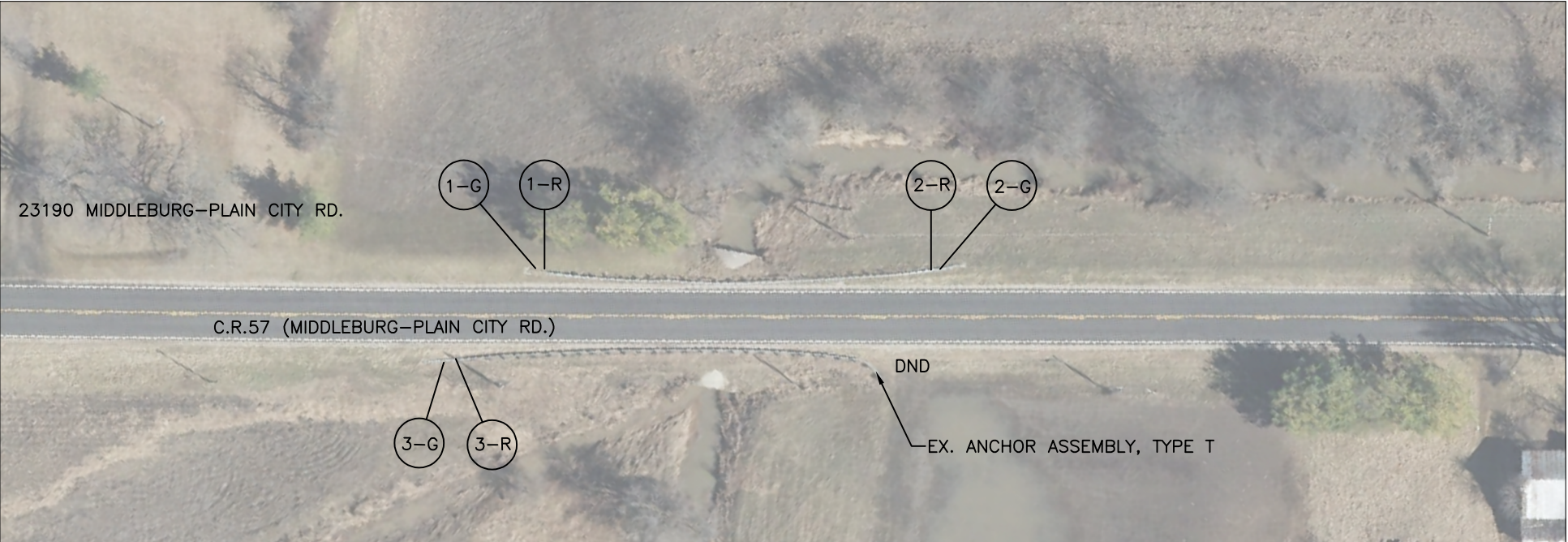
ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-22	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3	12.5		1	1	12.5	21
	2-G			LT			3	12.5		1	1	12.5	21
	3-G			RT			3	12.5		1	1	12.5	21
	4-G			RT			3	12.5		1	1	12.5	21
TOTALS						4	12	50		4	4	50	84



CR 22 – WATKINS–CALIFORNIA ROAD D

N.T.S.

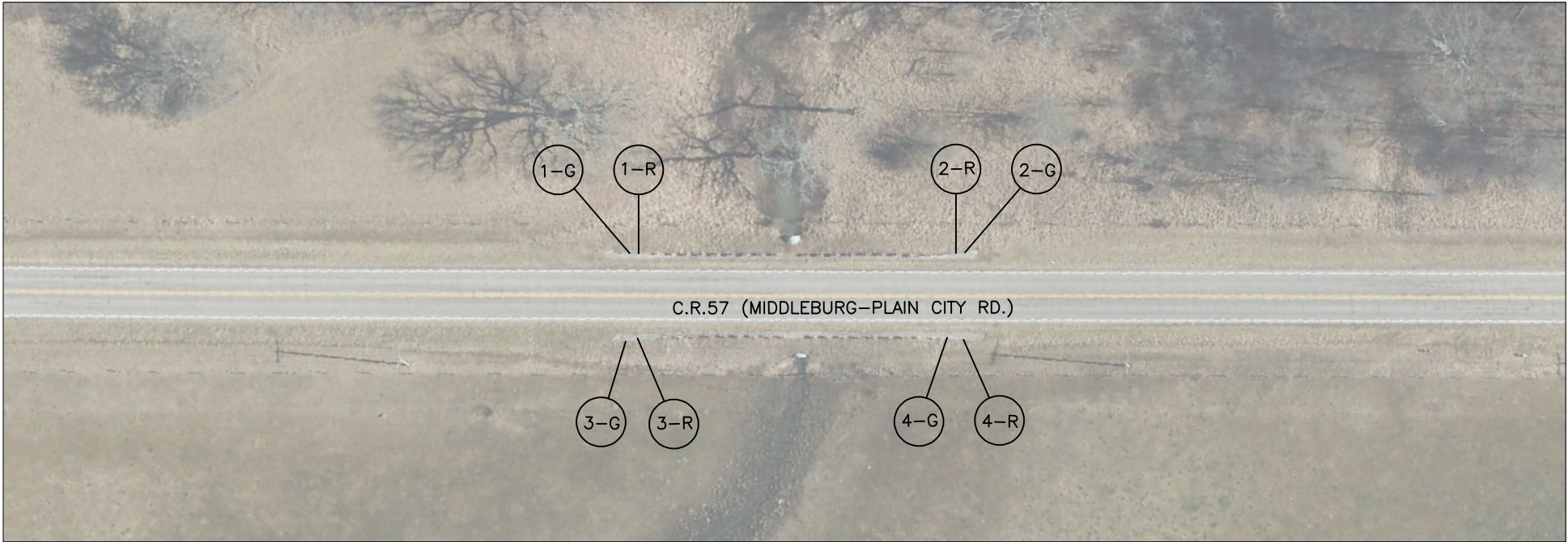
ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-22	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3	12.5		1	1	12.5	21
	2-G			LT			3	12.5		1	1	12.5	21
	3-G			RT			3	12.5		1	1	12.5	21
	4-G			RT			3	12.5		1	1	12.5	21
TOTALS						4	12	50		4	4	50	84



CR 57 – MIDDLEBURG-PLAIN CITY ROAD B

N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-57	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	1-G			LT			3			3	1		14
	2-G			LT			3			3	1		14
	3-G			RT			3			3	1		14
TOTALS						3	9			6	3		42



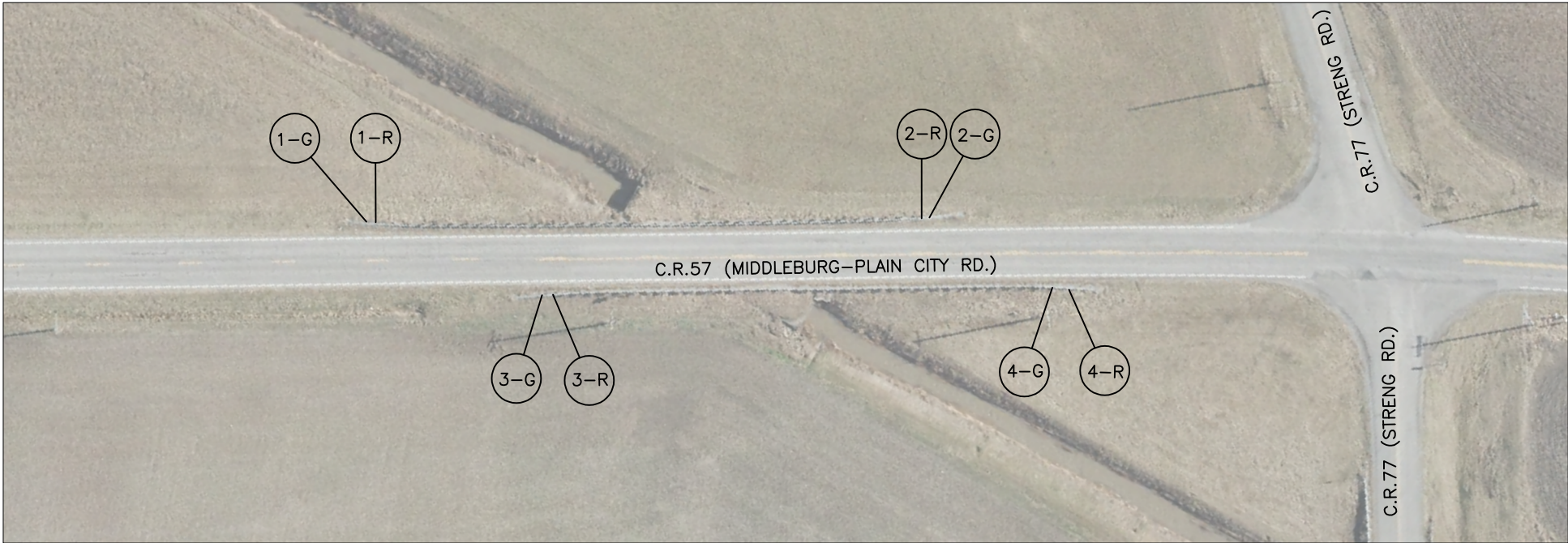
CR 57 – MIDDLEBURG–PLAIN CITY ROAD F (1)
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-57	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			1	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			1	1		14
TOTALS						4	12			4	4		56



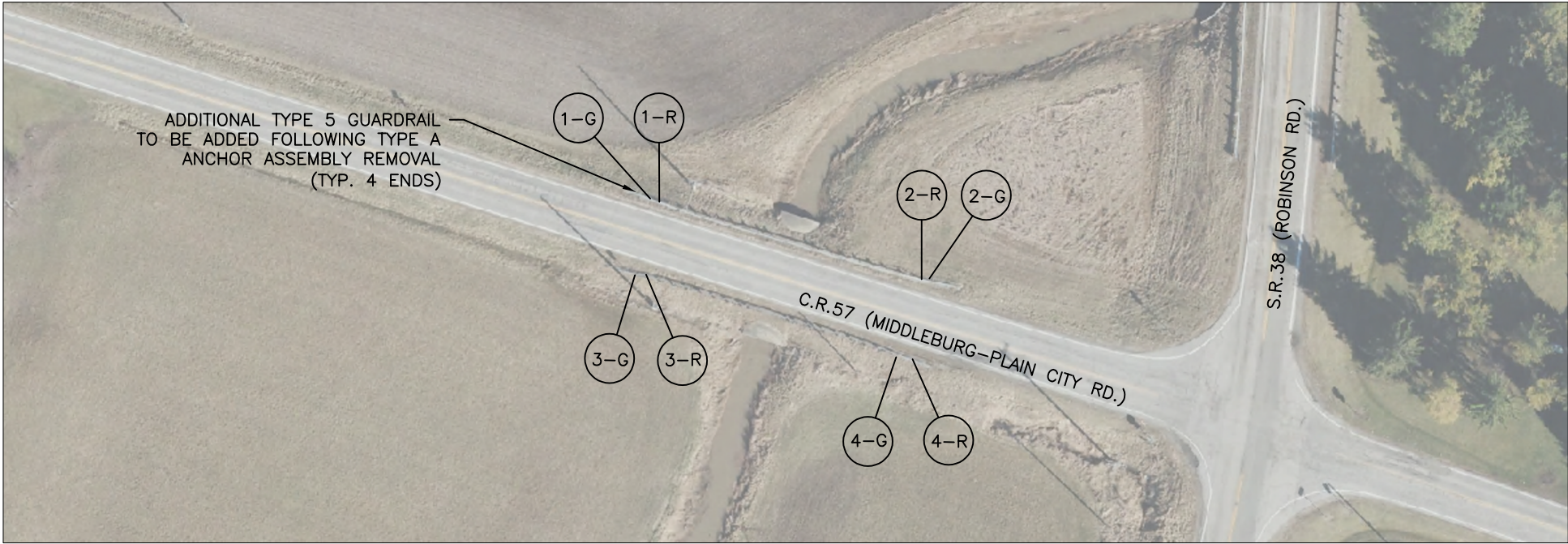
CR 57 – MIDDLEBURG–PLAIN CITY ROAD F (2)
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-57	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			4	1		14
	2-G			LT			3			4	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			1	1		14
TOTALS						4	12			10	4		56



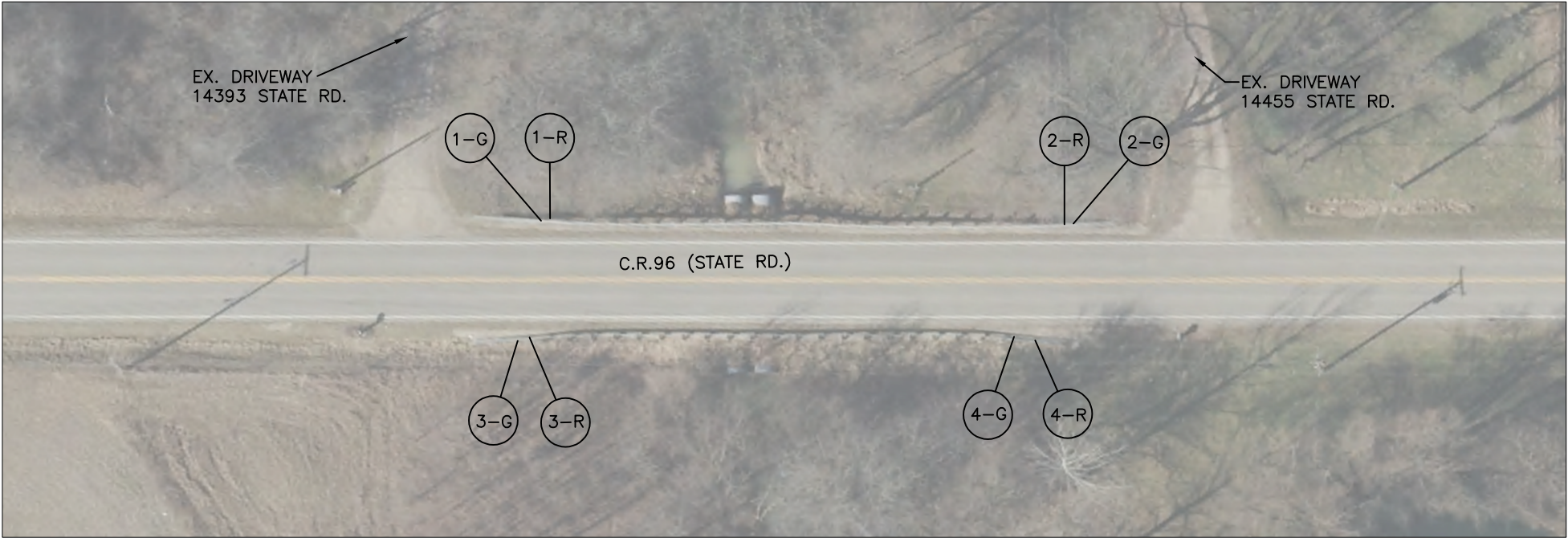
CR 57 – MIDDLEBURG–PLAIN CITY ROAD F (3)
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-57	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			2	1		14
	2-G			LT			3			1	1		14
	3-G			RT			3			2	1		14
	4-G			RT			3			1	1		14
TOTALS						4	12			6	4		56



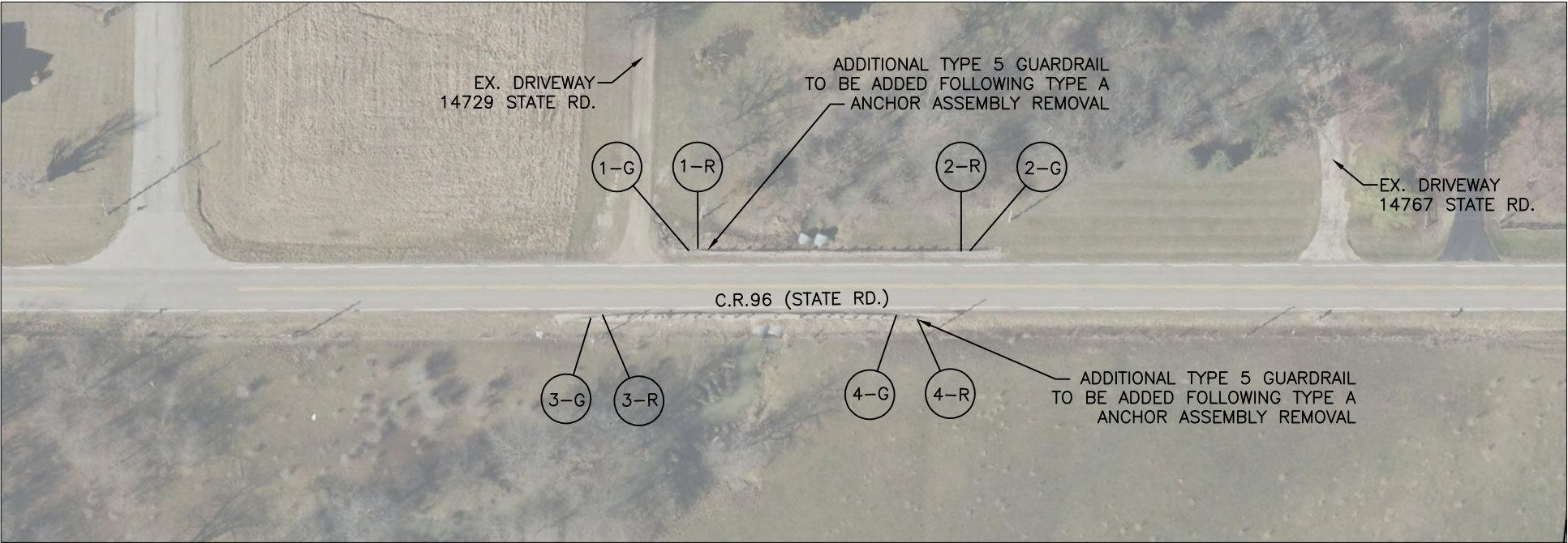
CR 57 – MIDDLEBURG–PLAIN CITY ROAD H
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	STATION	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-57	1-R			LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3	12.5		1	1	12.5	21
	2-G			LT			3	12.5		1	1	12.5	21
	3-G			RT			3	12.5		1	1	12.5	21
	4-G			RT			3	12.5		1	1	12.5	21
TOTALS						4	12	50		4	4	50	84



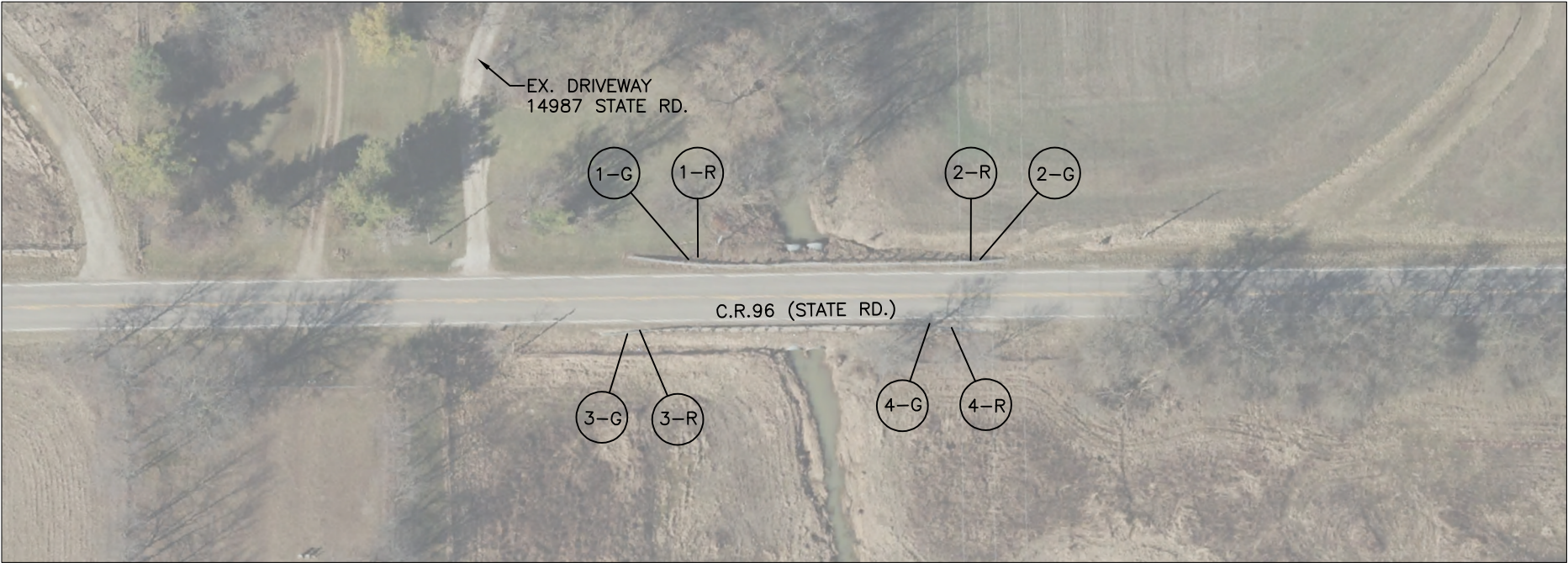
CR 96 – STATE ROAD A
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-96	1-R		MILLCREEK	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			1	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			1	1		14
TOTALS						4	12			4	4		56



CR 96 – STATE ROAD B (1)
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-96	1-R		MILLCREEK	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3	12.5		1	1	12.5	21
	2-G			LT			3			1	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3	12.5		1	1	12.5	21
TOTALS						4	12	25		4	4	25	70



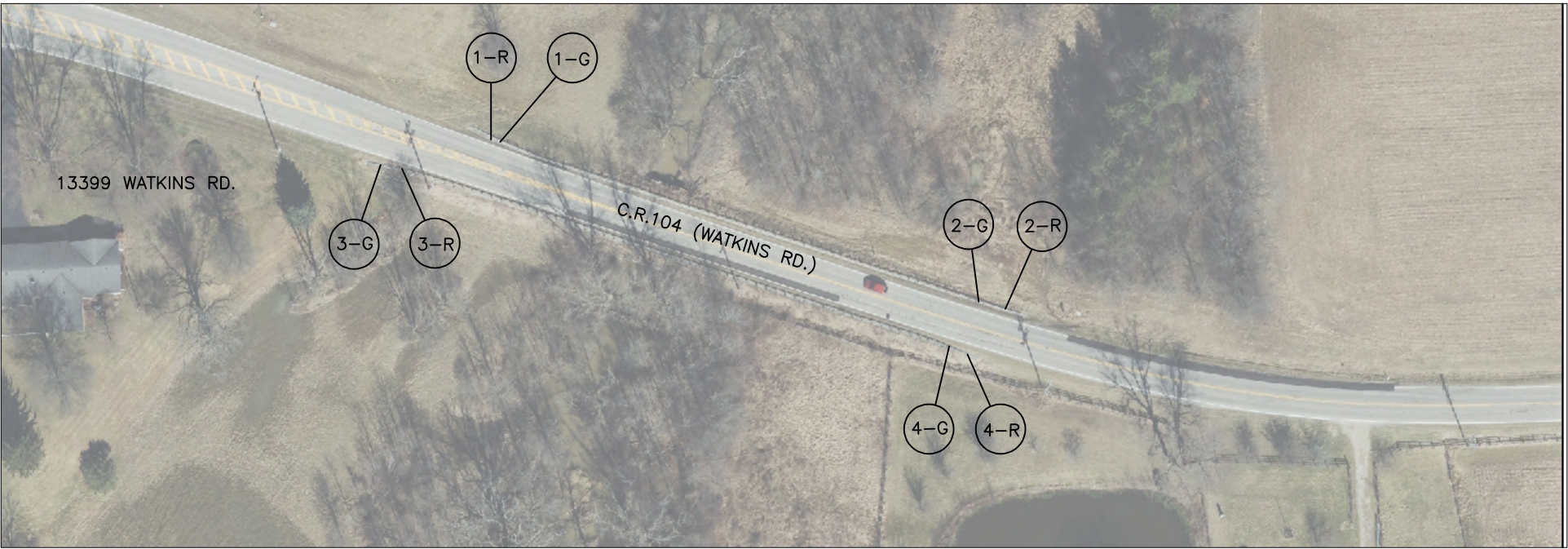
CR 96 – STATE ROAD B (2)
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-96	1-R		MILLCREEK	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			1	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			1	1		14
TOTALS						4	12			4	4		56



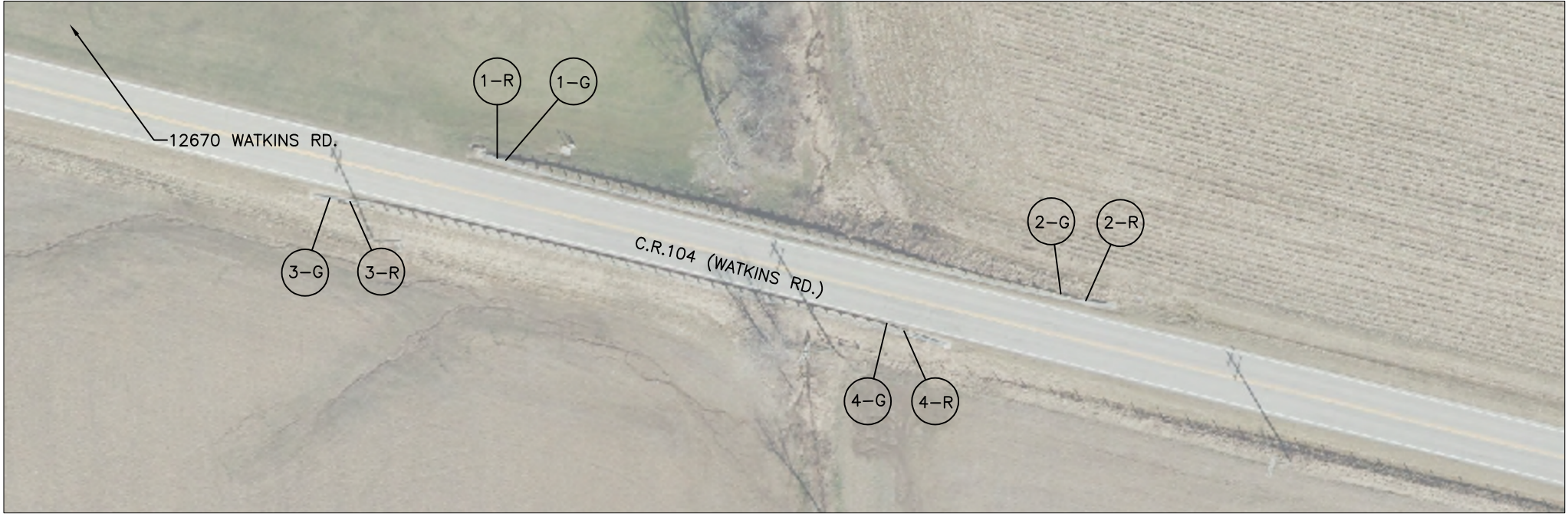
CR 104 – WATKINS ROAD A
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-104	1-R		PARIS			1							
	2-R					1							
	3-R					1							
	4-R					1							
	5-R					1							
	6-R					1							
	7-R					1							
	8-R					1							
	1-G						3			1	1		14
	2-G						3			1	1		14
	3-G						3			1	1		14
	4-G						3			1	1		14
	1-G						3	25		1	1	25	28
	2-G						3	25		1	1	25	28
	3-G						3	25		1	1	25	28
	4-G						3	25		1	1	25	28
			TOTALS			8	24	100		8	8	100	168



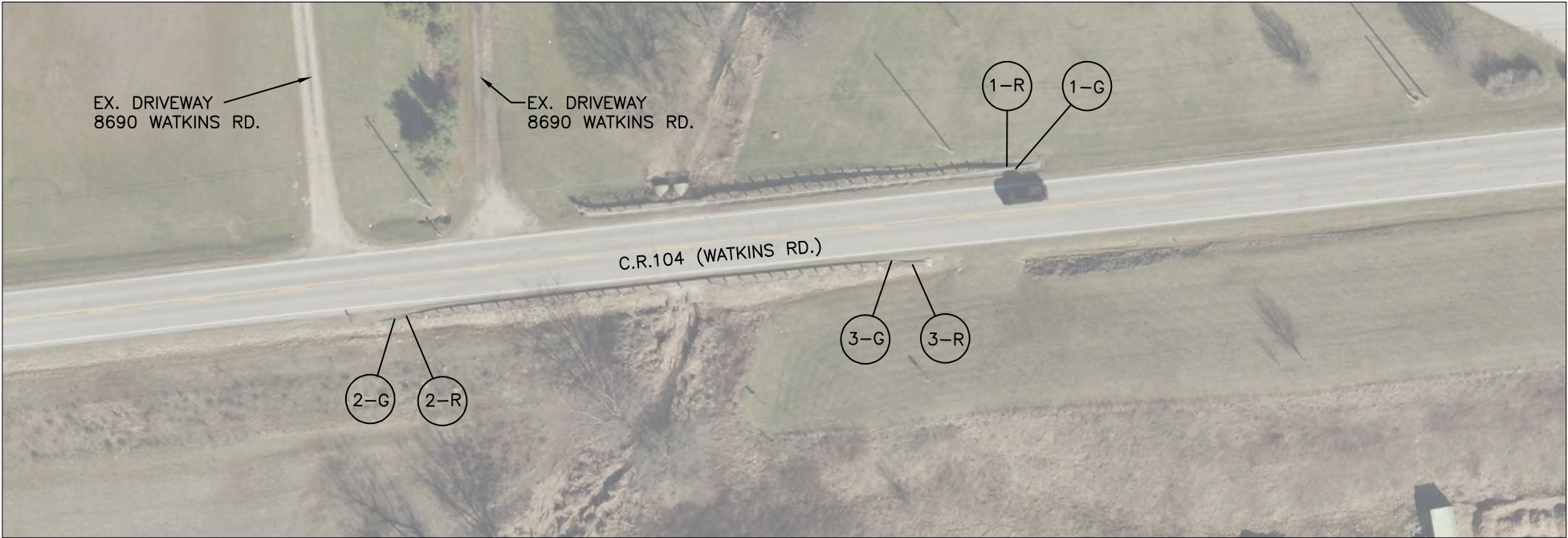
CR 104 – WATKINS ROAD D
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	262	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	FEET	EACH	FEET	SQ. YD.
CR-104	1-R		MILLCREEK	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			2	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			2	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			8	4		56



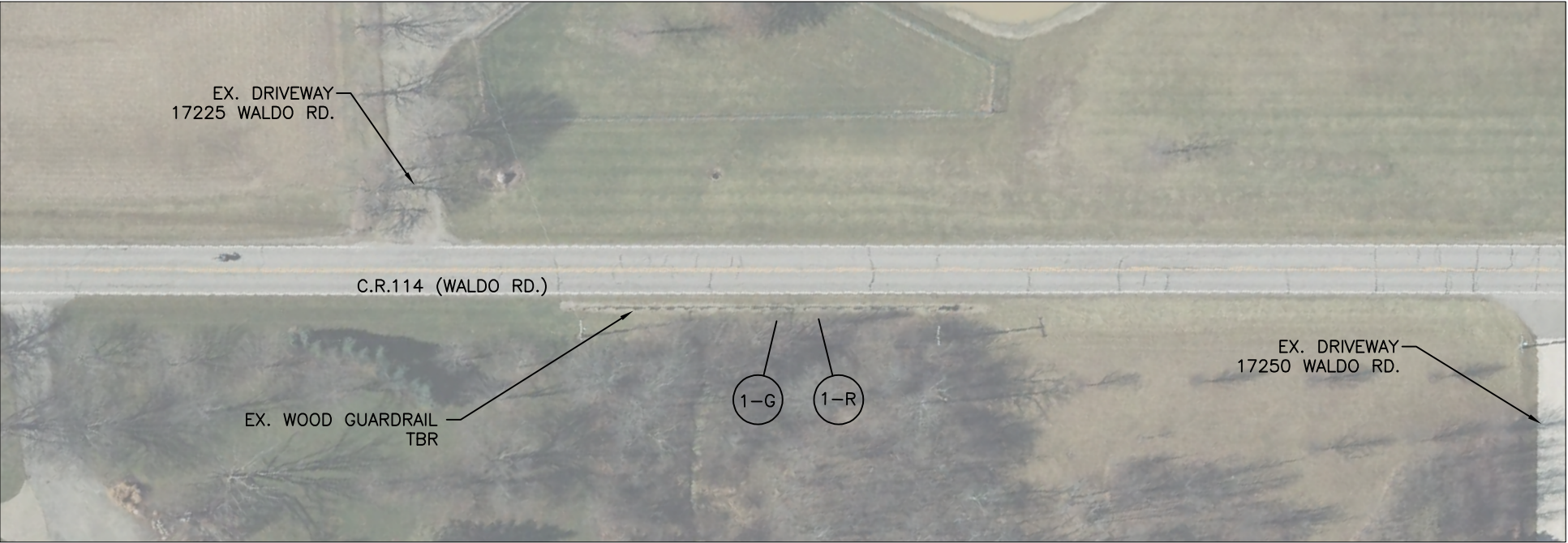
CR 104 – WATKINS ROAD E
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-104	1-R		MILLCREEK	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			6	4		56



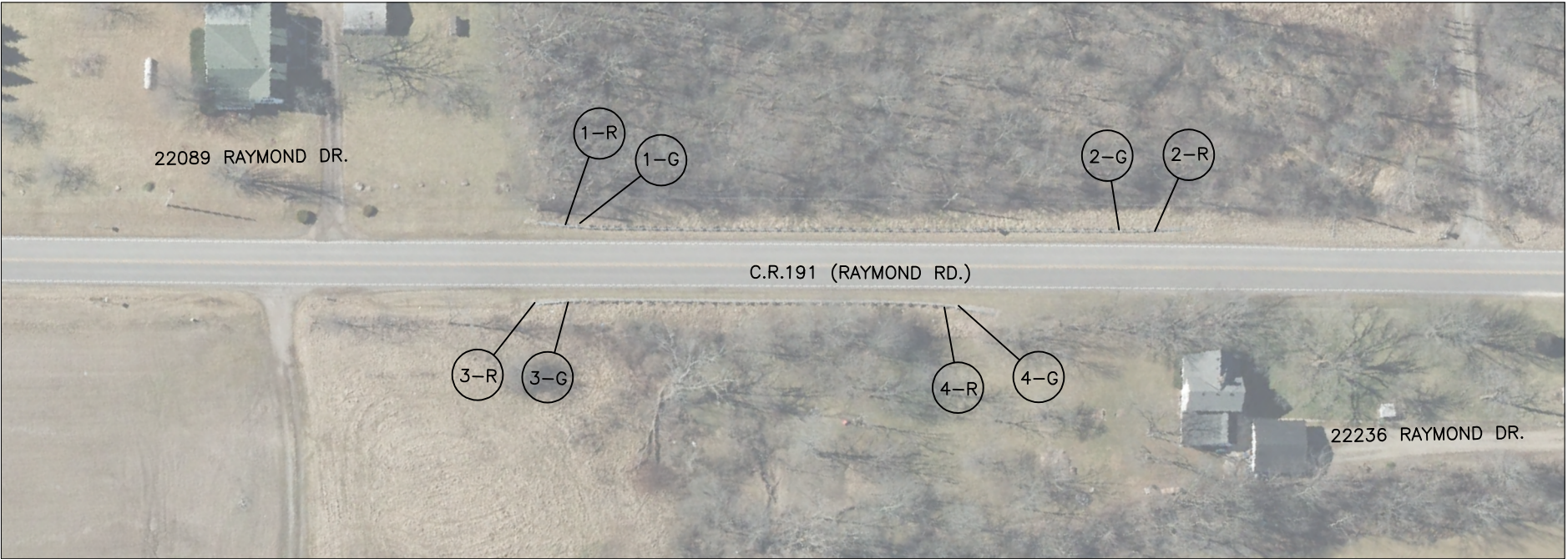
CR 104 – WATKINS ROAD I
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-104	1-R		MILLCREEK	LT		1							
	2-R			RT		1							
	3-R			RT		1							
	1-G			LT			3			2	1		14
	2-G			RT			3			2	1		14
	3-G			RT			3			2	1		14
TOTALS						3	9			6	3		42



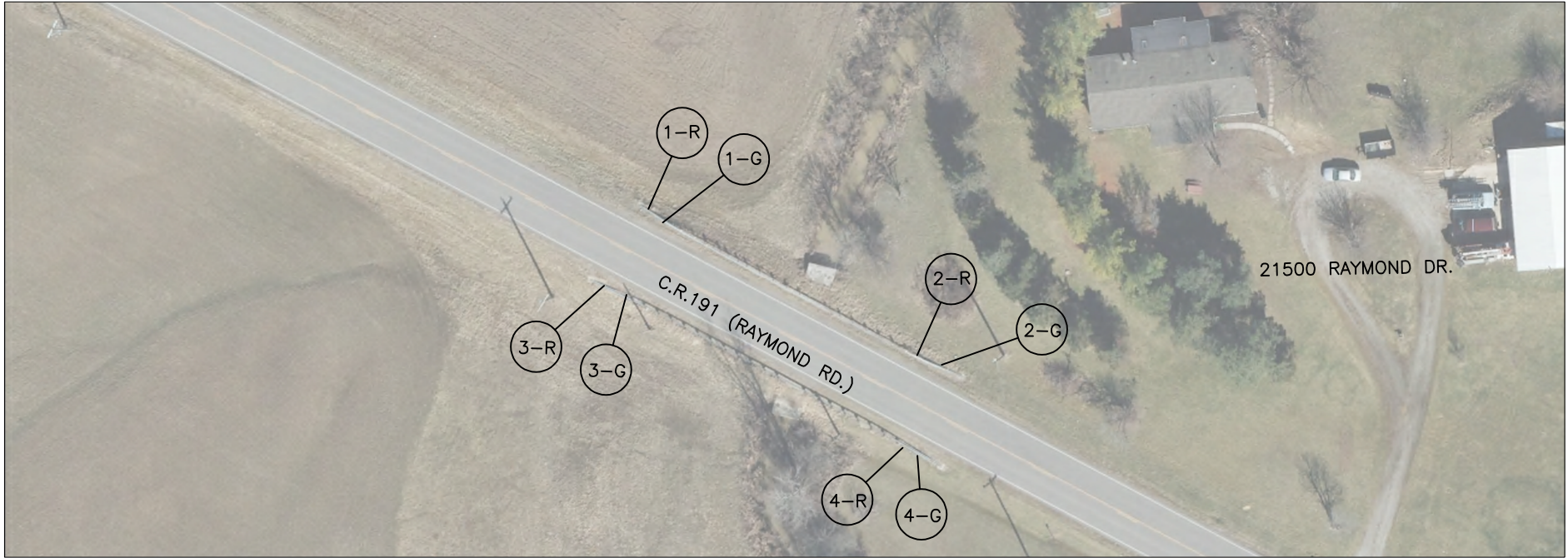
CR114 – WALDO RD
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-114	1-R		PARIS	LT	170								
	1-G			LT			6		120	3	2	120	95
TOTALS					170		6		120	3	2	120	95



CR 191 – RAYMOND ROAD A
N.T.S.

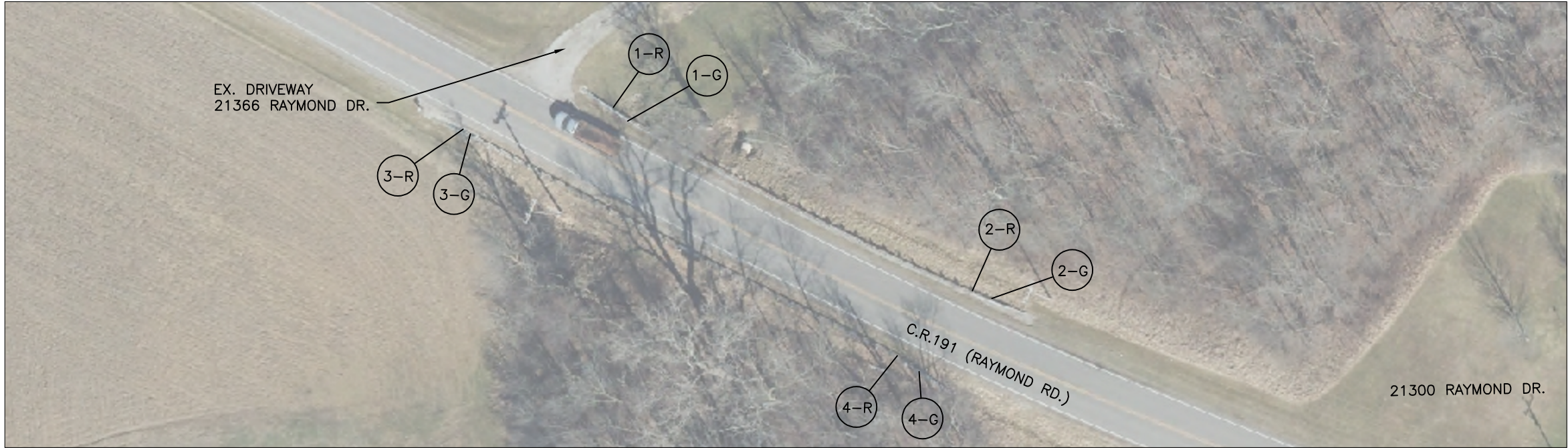
ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-114	1-R		LIBERTY	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			6	4		56



CR 191 – RAYMOND ROAD C

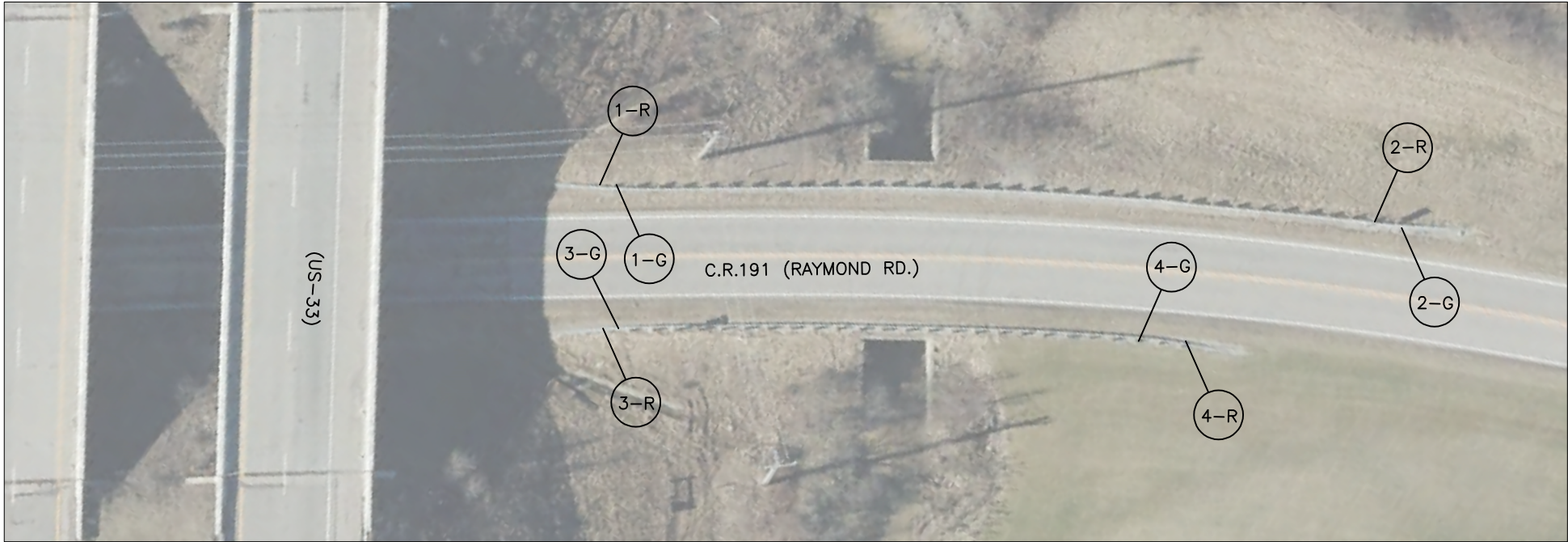
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-114	1-R		LIBERTY	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			6	4		56



CR 191 – RAYMOND ROAD D
N.T.S.

ESTIMATED QUANTITIES - SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	202	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	GUARDRAIL REBUILT, APP	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	FEET	EACH	FEET	SQ. YD.
CR-114	1-R		LIBERTY	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			1	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			1	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			6	4		56



CR 191 – RAYMOND ROAD K
N.T.S.

ESTIMATED QUANTITIES – SUBSUMMARY													
ROAD NO.	REF. NO.	ITEM EXT.	TOWNSHIP	SIDE	202	202	203	606	606	626	606	209	659
					GUARDRAIL REMOVED, APP	ANCHOR ASSEMBLY REMOVED	EMBANKMENT, APP	GUARDRAIL, TYPE 5	GUARDRAIL, TYPE MGS	BARRIER REFLECTORS, TYPE A2	ANCHOR ASSEMBLY, TYPE E	LINEAR GRADING, APP	REPAIR SEEDING AND MULCHING
					FEET	EACH	CU. YD.	FEET	FEET	EACH	EACH	FEET	SQ. YD.
CR-114	1-R		LIBERTY	LT		1							
	2-R			LT		1							
	3-R			RT		1							
	4-R			RT		1							
	1-G			LT			3			2	1		14
	2-G			LT			3			2	1		14
	3-G			RT			3			2	1		14
	4-G			RT			3			2	1		14
TOTALS						4	12			8	4		56