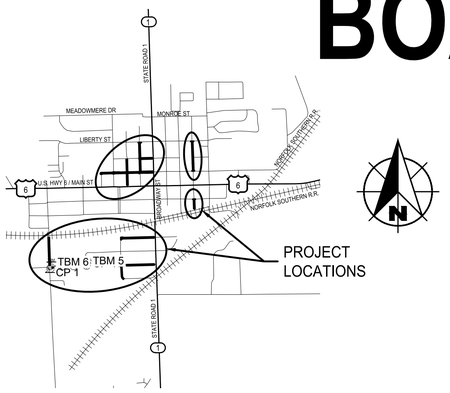
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

FOR THE

BOARD OF PUBLIC WORKS AND SAFETY

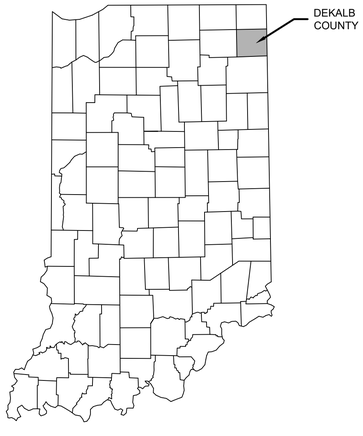
CITY OF BUTLER INDIANA



BUTLER, INDIANA

VICINITY MAP

SCALE: NONE



STATE LOCATION MAP

SCALE: NONE

INDIANA DEPARTMENT OF TRANSPORTATION
LOCAL ROADS AND BRIDGES MATCHING GRANT FUND
DES NO. 2301358

WESSLER ENGINEERING

More than a Project™

FORT WAYNE
6409 Constitution Drive
Fort Wayne, Indiana 46804
Phone: (260) 422-8279 - Fax: (260) 422-8280
www.wesslerengineering.com

PROJECT NO. 265123-04-001

DRAWINGS PREPARED FOR:

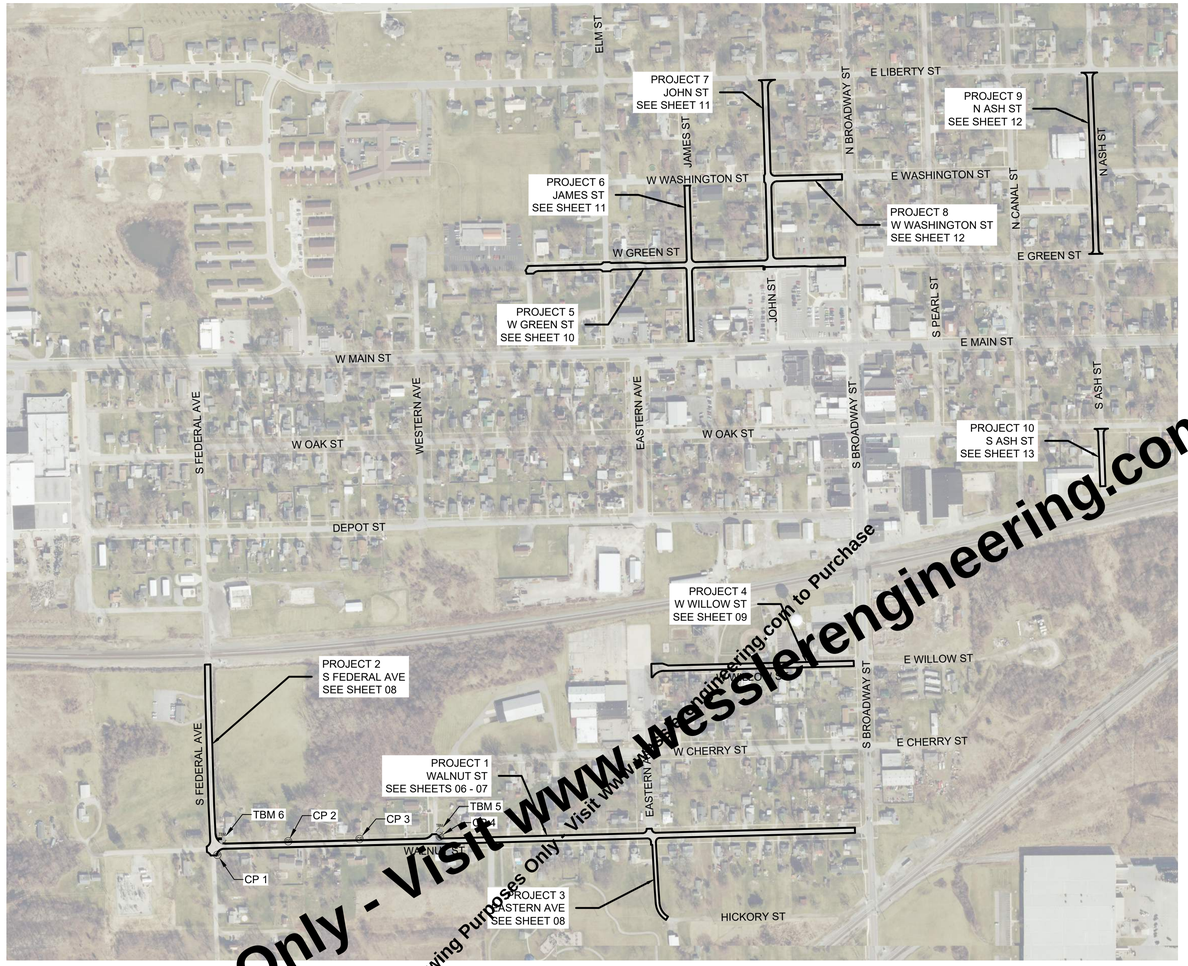
BOARD OF PUBLIC WORKS AND SAFETY

MIKE HARTMAN, MAYOR
BOB HAYWOOD, MEMBER
ERIC JOHNSON, MEMBER

JANUARY 2024

JUSTIN R. FRAZIER
REGISTERED
No. 10606088
STATE OF INDIANA
PROFESSIONAL ENGINEER
01/10/24

JUSTIN R. FRAZIER
REGISTERED ENGINEER STATE OF INDIANA NO. 20600035



LOCATION AND SCOPE OF WORK PLAN

0 150 300 600 FT

1"=300'

DRAWING INDEX

CONTROL POINTS

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP 1	2250555.11	543653.63	874.83	5/8" CAPPED REBAR
CP 2	2250608.74	543934.39	873.72	5/8" CAPPED REBAR
CP 3	2250617.45	544216.66	873.14	5/8" CAPPED REBAR
CP 4	2250627.96	544534.43	872.69	5/8" CAPPED REBAR

HORIZONTAL AND VERTICAL CONTROL INFORMATION

NOTES:
1. A FIELD SURVEY WAS PERFORMED ALONG WALNUT STREET ON DECEMBER 4, 2023.
2. COORDINATES (INDIANA STATE PLANE, EAST ZONE, NAD 83) AND ELEVATIONS (NAVD 88) ARE BASED ON INCORS.
3. UNITS ARE U.S. SURVEY FEET.
4. A LEVEL LOOP WAS PERFORMED ON THE CONTROL POINTS AND TBMS.

BENCHMARK DESCRIPTION:
1. TBM NO. 5 - CUT "X" ON NORTHWEST BONNET BOLT OF FIRE HYDRANT NORTHEASTERLY OF THE INTERSECTION OF WESTERN AVENUE AND WALNUT STREET.
   EL 875.38
2. TBM NO. 6 - CUT "X" ON NORTHWEST BONNET BOLT OF FIRE HYDRANT NORTHEASTERLY OF THE INTERSECTION OF FEDERAL AVENUE AND WALNUT STREET.
   EL 876.62

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

DRAWING INDEX AND LOCATION PLAN

SHEET NO. **02**

TOTAL SHEETS 21

EXISTING FEATURES LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
BM	BENCH MARK	DIS	CISTERN		EASEMENT - CONSTRUCTION/PERMANENT
TBM	TEMPORARY BENCH MARK	E/M	ELECTRIC METER		LOT BOUNDARY
SB 01	SOIL BORING LOCATION	AC	AIR CONDITIONING UNIT	R	PROPERTY BOUNDARY
	SECTION CORNER	XXX	UTILITY RISER (DEFINED BY UTILITY)		RIGHT-OF-WAY - TEMPORARY/PERMANENT
	DRILL HOLE IN CONCRETE/HARRISON MONUMENT	XXX	UTILITY PEDESTAL (DEFINED BY UTILITY)		SECTION BOUNDARY
CP	CONTROL POINT (SET/FOUND)	X	UTILITY MARKER (DEFINED BY UTILITY)		WETLANDS
MG	MAGNETIC NAIL (SET/FOUND)	J	JOINT POWER/TELEPHONE POLE	849	CONTOUR - INTERMEDIATE ELEVATION
BS	BOAT SPIKE (SET/FOUND)	L	LIGHT POLE	850	CONTOUR - INDEX ELEVATION
PK	PK NAIL (SET/FOUND)	LP	LIGHT ON POWER POLE	OHE OHE	OVERHEAD ELECTRIC
RS	RAILROAD SPIKE (SET/FOUND)	LJ	LIGHT ON JOINT POLE	OHC OHC	OVERHEAD CABLE TV
R/W	R/W MARKER - CONCRETE/GRANITE/STONE	P	POWER POLE	OHT OHT	OVERHEAD TELEPHONE
	IRON PIPE/IRON PIN/REBAR (WITH DIAMETER)	T	TELEPHONE POLE	UGC UGC	UNDERGROUND CABLE TV
BP	BRASS PLUG		LAMP POST	UGE UGE	UNDERGROUND ELECTRIC
C	CABLE TV MANHOLE		GUY ANCHOR	UGF UGF	UNDERGROUND FIBER OPTIC
E	ELECTRIC MANHOLE		GUY POLE OR STUB	G G G	GAS MAIN
G	GAS MANHOLE		CONTROLLER CABINET	DG DG	DIGESTER GAS
O	OTHER MANHOLE	FP	FLAG POLE	P P P	PETROLEUM MAIN
T	TELEPHONE MANHOLE		POST	UGT UGT	UNDERGROUND TELEPHONE
TEL	TELEPHONE VAULT		GROUND LIGHT	W W W	WATER MAIN
I	TRAFFIC MANHOLE	M	MAILBOX	W W W	WATER SERVICE
H	TRAFFIC HANDHOLE	M M	DOUBLE/MULTIPLE MAILBOX	FM FM	FORCEMAIN
W	WATER MANHOLE		MAST ARM POLE		GRAVITY SEWER PIPE
A	AIR RELEASE VALVE		TRAFFIC SIGNAL STRAIN POLE		PLANT CHLORINE PIPE
S	SANITARY SEWER MANHOLE		SIGNAL LOOP DETECTOR BOX		TOP OF BANK/TOE OF SLOPE
D	DRAINAGE/STORM SEWER MANHOLE		SIGNAL LOOP DETECTOR LOOP		CENTERLINE OF DITCH/SWALE/STREAM
CO	SANITARY SEWER CLEANOUT		SIGN - SINGLE POST	x x x x x x x x x	FENCE - FIELD
ST	SEPTIC TANK		SIGN - DOUBLE POST	o o o o o o o o o	FENCE - METAL
VV	VALVE VAULT		SIGN - RAILROAD SIGNAL	s s s s s s s s s	FENCE - WOOD
	BEEHIVE INLET	R/R	SIGN - RAILROAD CROSSING		GUARDRAIL
	CURB INLET		BUSH		STREAM
	DROP INLET		STUMP		TREE/BRUSH LINE
	CATCH BASIN		TREE - CONIFEROUS		
DS	DOWNSPOUT		TREE - DECIDUOUS		
GM	GAS METER		ROCK OUTCROP		
GV	GAS VALVE	SAT	SATELLITE		
GSO	GAS SERVICE VALVE	SPH	SPRINKLER CONTROL VALVE		
PV	PETROLEUM VALVE		WATER METER		
PSO	PETROLEUM SHUTOFF VALVE	WV	WATER VALVE		
GMW	GAS STATION MONITORING WELL	WSO	WATER SERVICE VALVE		
GFC	GAS STATION FILL CAP	W	WATER WELL		
GW	NATURAL GAS WELL/STORAGE WELL	WW	WET WELL		
SP	SPRINKLER HEAD		FIRE HYDRANT		
	YARD HYDRANT		PROCESS VALVE		

*NOTE: THIS TABLE IS A LISTING OF TYPICAL EXISTING SYMBOLS AND MAY NOT INCLUDE ALL EXISTING SYMBOLS FOUND WITHIN THIS PLAN SET. ALL UNDOCUMENTED ITEMS WILL BE CALLED OUT ON THEIR PLAN SHEETS. IF A QUESTION ARISES ON THE MEANING OF ANY SYMBOL NOT LISTED IN THIS TABLE, PLEASE CONTACT THE ENGINEER FOR CLARIFICATION. THE SYMBOLS ARE NOT TO SCALE.

TABLE OF ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	IPS	IRON PIPE SIZE
ALUM	ALUMINUM	ISPC	INDIANA STATE PLANE COORDINATE
APP	APPARENT	LB	POUND(S)
APPROX	APPROXIMATE(LY)	LF	LINEAR FEET
ASPH	ASPHALT	LN	LANE
ASSOC	ASSOCIATES	LS	LIFT STATION
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS	MA EX	MATCH EXISTING
AVE	AVENUE	MJ	MECHANICAL JOINT
AVG	AVERAGE	MATL	MATERIAL
BLDG	BUILDING	MAX	MAXIMUM
BLVD	BOULEVARD	MH	MANHOLE
BM	BENCHMARK	MIN	MINIMUM
CO	CLEANOUT	MISC	MISCELLANEOUS
CI	CAST IRON	MNFR	MANUFACTURER
CL	CENTER LINE	N	NORTHING, NORTH
CMA	COLD MIX ASPHALT	NGS	NATIONAL GEODETIC SURVEY
CMP	CORRUGATED METAL PIPE	NO.	NUMBER
CMU	CONCRETE MASONRY UNIT	OC	ON CENTER
CONC	CONCRETE	OD	OUTSIDE DIAMETER
CONT	CONTINUOUS	PC	POINT OF CURVE (BEGIN CURVE)
CNR	CORNER	POLY	POLYETHYLENE
CP	CONTROL POINT	PI	POINT OF INTERSECTION
CPP	CORRUGATED PLASTIC PIPE	POT	POINT ON TANGENT
CR STN	CRUSHED STONE	PT	POINT OF TANGENT (END CURVE)
CYD	CUBIC YARD	PSI	POUNDS PER SQUARE INCH
D	DEPTH	PT	POINT
DI	DUCTILE IRON	PVC	POLYVINYL CHLORIDE
DI MJ	DUCTILE IRON MECHANICAL JOINT	R	RADIUS
DBL	DOUBLE	ROW	RIGHT-OF-WAY
DIA	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	RD	ROAD
DIPS	DUCTILE IRON PIPE SIZE	S	SOUTH
DR	DRIVE	SR	STATE ROUTE
E	EASTING, EAST	SST	STAINLESS STEEL
EF	EACH FACE	SVA	SERVICE VALVE ASSEMBLY
EW	EACH WAY	SB	SOIL BORING
EA	EACH	SCHED	SCHEDULE
EJ	EAST JORDAN IRON WORKS	SDR	STANDARD DIMENSION RATIO
EL	ELEVATION	SECT	SECTION
EX	EXISTING	SF	SQUARE FEET
EXP	EXPANSION	SHT	SHEET
FFE	FINISH FLOOR ELEVATION	SPECS	SPECIFICATION(S)
FM	FORCE MAIN	SQ	SQUARE
FND	FOUND	SRF	STATE REVOLVING FUND
FT	FEET	ST	STREET
FTG	FOOTING	STA	STATION
GA	GALVANIZED	SYD	SQUARE YARD
GPS	GLOBAL POSITIONING SYSTEM	TBM	TEMPORARY BENCHMARK
HMA	HOT MIX ASPHALT	TC	TOP OF CASTING
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
HORIZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
ID	INSIDE DIAMETER	USGS	US GEOLOGICAL SURVEY
IE	INVERT ELEVATION	VERT	VERTICAL
INC	INCORPORATED	VLV	VALVE
INDOT	INDIANA DEPARTMENT OF TRANSPORTATION	W	WIDTH, WEST
INSTR	INSTRUMENT	WSE	WATER SURFACE ELEVATION
INV	INVERT	YR	YEAR

*NOTE: THIS TABLE IS A LISTING OF TYPICAL ABBREVIATIONS AND MAY NOT INCLUDE ALL ABBREVIATIONS FOUND WITHIN THIS PLAN SET. IF A QUESTION ARISES ON THE MEANING OF AN ABBREVIATION NOT LISTED IN THIS TABLE, PLEASE CONTACT THE ENGINEER FOR CLARIFICATION.

GENERAL NOTES:

1. NOTIFY THE ENGINEER IF ANY CONFLICTING INFORMATION BECOMES APPARENT IN THE CONTRACT DOCUMENTS AS SOON AS POSSIBLE AND PRIOR TO THE COMMENCEMENT OF ANY WORK IN THE VICINITY OF OR RELATIVE TO THE APPARENT CONFLICT SO THAT CLARIFICATION MAY OCCUR PRIOR TO CONSTRUCTION.
2. ANY ALTERATIONS TO THESE DRAWINGS NOT AUTHORIZED BY WESSLER ENGINEERING AND NOT IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS AND RECORDS ON FILE AT WESSLER ENGINEERING SHALL RELIEVE WESSLER ENGINEERING OF ANY RESPONSIBILITY FOR THE ACCURACY OF THE DRAWINGS.
3. USE CAUTION DURING THE EXECUTION OF WORK TO PREVENT DAMAGE TO STATE, COUNTY, MUNICIPAL, AND PRIVATE PROPERTY. REPAIR ALL DAMAGES AS A RESULT OF OPERATIONS, INCLUDING DAMAGE TO DRAINAGE STRUCTURES, FIELD TILES, PUBLIC/PRIVATE ROADS, AND LANDSCAPING (INCLUDING FENCING). REPAIR AND REPLACE DAMAGED ITEMS AT NO ADDITIONAL COST TO THE OWNER. PERFORM ALL REPAIR AND REPLACEMENT WORK TO THE SATISFACTION OF THE PERMITTING AGENCY, THE OWNER AND THE ENGINEER.
4. TAKE CARE TO AVOID DAMAGE TO PAVED AREAS WHICH ARE NOT SPECIFICALLY CALLED OUT FOR REPAIR OR REPLACEMENT. REPAIR, OR REPLACE ALL SUCH PAVEMENTS WHICH ARE DAMAGED BY CONSTRUCTION ACTIVITIES AND CONSTRUCTION TRAFFIC AT NO ADDITIONAL COST TO THE OWNER.
5. OBTAIN ALL TEMPORARY EASEMENTS REQUIRED FOR THE CONSTRUCTION OF THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
6. COMPLY WITH ALL APPLICABLE PERMITS AND REGULATIONS. APPLICABLE PERMITS ISSUED TO THE OWNER WILL BE MADE AVAILABLE TO THE CONTRACTOR. CONTACT ALL APPLICABLE PERMITTING AGENCIES WITHIN THE TIME PERIOD SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.
7. ALL EXISTING AND NEW UTILITY INFORMATION, INCLUDING BUT NOT LIMITED TO LOCATION, SIZE AND INVERT ELEVATION, IS SHOWN BASED UPON AVAILABLE INFORMATION. THE ENGINEER DOES NOT GUARANTEE OR ASSUME SUCH INFORMATION TO BE TRUE, ACCURATE, EXCLUSIVE OR EVEN APPROXIMATE. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICE (811) AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY. CONTACT NON-MEMBER UTILITIES DIRECTLY.
8. DETERMINE WHICH UTILITIES MAY CONFLICT WITH THE WORK AND VERIFY THEIR LOCATION, SIZE AND ELEVATION PRIOR TO CONSTRUCTION AND DETERMINE IF THERE ARE ANY DISCREPANCIES OR CONFLICTS. IF ANY DISCREPANCIES OR CONFLICTS ARE DISCOVERED, NOTIFY THE ENGINEER AS SOON AS POSSIBLE.
9. EXISTING UTILITY SERVICE LINES TO INDIVIDUAL CUSTOMERS MAY NOT BE SHOWN ON THE DRAWINGS. ASSUME THAT UNDERGROUND SERVICE LINES FOR ALL UTILITIES EXIST TO EACH PROPERTY ALONG THE ROUTE OF THE PLANNED IMPROVEMENTS.
10. COORDINATE ALL WORK WITH THE RESPECTIVE UTILITIES. SCHEDULE WORK ACCORDINGLY, AND NOTIFY ALL UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.
11. COORDINATE PLANNED UTILITY SERVICE INTERRUPTIONS WITH THE RESPECTIVE UTILITIES AND THE UTILITIES' AFFECTED CUSTOMERS. SERVICE INTERRUPTIONS SHOULD NOT LAST MORE THAN FOUR (4) HOURS. GIVE WRITTEN NOTICE TO ALL AFFECTED UTILITY CUSTOMERS AND PROPERTY OWNERS AT LEAST SEVENTY-FOUR (24) HOURS BUT NOT MORE THAN SEVENTY-TWO (72) HOURS PRIOR TO ANY PLANNED INTERRUPTION OF UTILITY SERVICE.
12. USE CAUTION DURING THE EXECUTION OF WORK TO PREVENT DAMAGE TO EXISTING UTILITIES. REPAIR OR REPLACE ALL PUBLIC AND PRIVATE FACILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS.
13. BRACE AND PROTECT ALL UTILITY POLES AND EXISTING STRUCTURES ADJACENT TO NEW EXCAVATIONS. UTILITY POLE BRACING SHALL BE AS DIRECTED BY THE GOVERNING UTILITY.
14. MAINTAIN EXISTING STORMWATER DRAINAGE FOR THE ENTIRE DURATION OF THE PROJECT.
15. DO NOT DISTURB EXISTING MANHOLES OR INLETS, UNLESS NOTED OTHERWISE.
16. ALL EQUIPMENT, APPURTENANCES AND PIPING REMOVED AS PART OF THE DEMOLITION SHALL FIRST BE OFFERED TO THE OWNER FOR SALVAGE. DELIVER SALVAGED ITEMS SELECTED BY OWNER TO A LOCATION DESIGNATED BY THE OWNER OR ENGINEER. IN THE EVENT THE OWNER DOES NOT ELECT TO KEEP THE REMOVED ITEMS, REMOVE SUCH ITEMS FROM THE SITE AND DISPOSE OF AT A LOCATION APPROVED FOR SUCH DISPOSAL AT THE CONTRACTOR'S EXPENSE.
17. COORDINATE STAGING AREA LOCATIONS WITH THE OWNER.
18. ALL CONSTRUCTION TRAFFIC SHALL USE MAJOR ROADS. NO CONSTRUCTION TRAFFIC SHALL USE LOCAL STREETS FOR INDIRECT ACCESS.
19. TO CONTROL DUST, REMOVE SOIL FROM STREETS USED BY CONSTRUCTION TRAFFIC DAILY, VACUUM AND WATER AS NECESSARY AND/OR AS DIRECTED BY THE OWNER.
20. PLACE NEW ASPHALT PAVEMENT FLUSH WITH ADA RAMPS.
21. RESET ALL MAILBOXES AND SIGNS DISTURBED BY CONSTRUCTION ACTIVITIES.
22. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
23. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
24. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
25. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.

UTILITY CONTACTS

WATER
141 WEST WILLOW ST
BUTLER, IN 46721
260-868-5023

SEWER
695 EAST GREEN ST
BUTLER, IN 46721
260-868-2805

ELECTRIC
AMERICAN ELECTRIC POWER
614-933-2297
8600 SMITHS MILL RD
NEW ALBANY, OH 43054
ATTN JOSHUA ADAMS

GAS
NIPSCO
888-643-5427
801 E 86TH AVE
MERRIVILLE, IN 46410
ATTN: WALTER EVANS
OFFICE: 219-647-4019

TELEPHONE
FRONTIER COMMUNICATION
877-462-8188
ATTN: HENRY COOKS
henry.cooks@ftr.com

CABLE
MEDIACOM COMMUNICATIONS
1101 W AUBURN DR
AUBURN, IN 46706
260-927-5130 EXT: 3038
845-637-9841
ATTN: DUSTIN KROECKEL

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

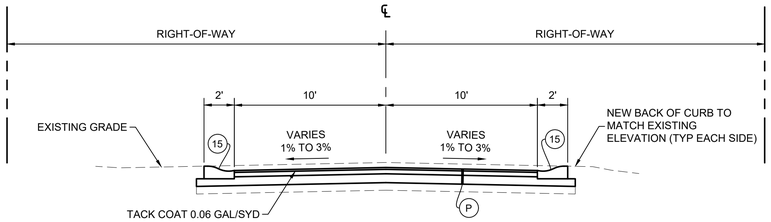
WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

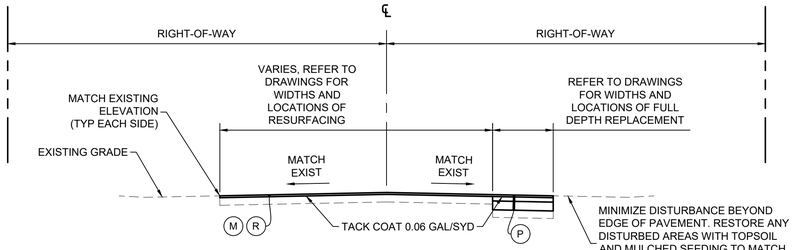
GENERAL INFORMATION

SHEET NO. 03
TOTAL SHEETS 21

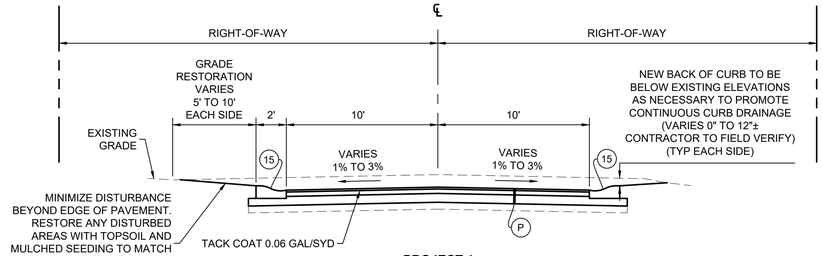
Drawing: X:\Butler\265123 Butler Streets Community Crossing\DWG\Sheets\265123-GS.dwg | Layout: GS-3 | Plotted: 01/10/24 @ 10:20:07 | LastSavedBy: JustinF



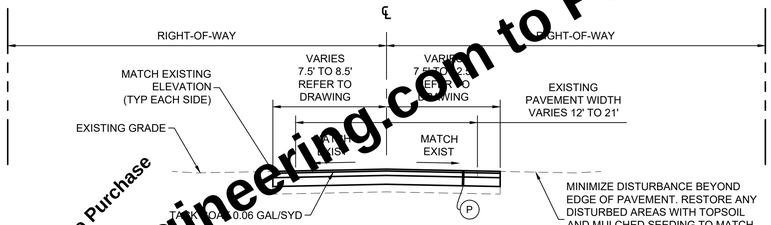
PROJECT 1
WALNUT STREET
FEDERAL AVENUE TO WESTERN AVENUE
(STANDARD AREAS WITH EXISTING LONGITUDINAL GRADE)



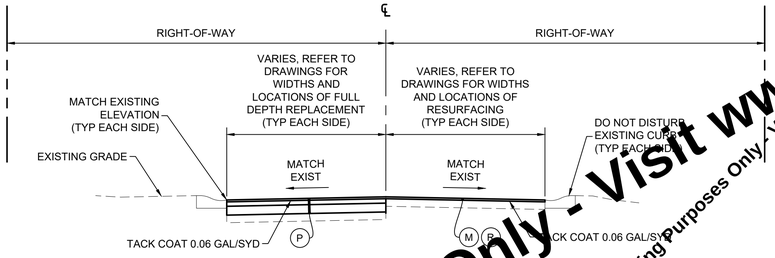
PROJECT 2
FEDERAL AVENUE
WALNUT STREET TO RAILROAD



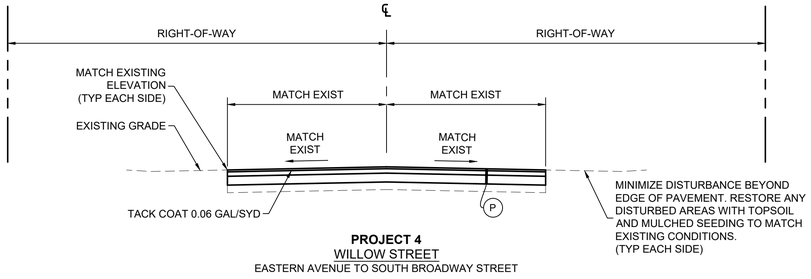
PROJECT 1
WALNUT STREET
FEDERAL AVENUE TO WESTERN AVENUE
(REGRADED AREAS PROMOTING CURB DRAINAGE)



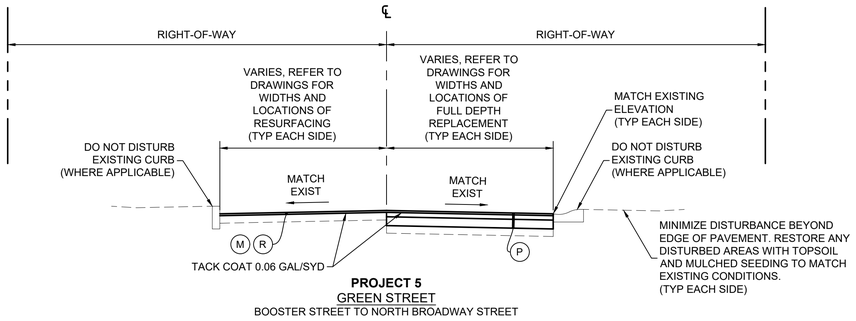
PROJECT 3
EASTERN AVENUE
WALNUT STREET TO HICKORY STREET



PROJECT 1
WALNUT STREET
WESTERN AVENUE TO SOUTH BROADWAY STREET



PROJECT 4
WILLOW STREET
EASTERN AVENUE TO SOUTH BROADWAY STREET



PROJECT 5
GREEN STREET
BOOSTER STREET TO NORTH BROADWAY STREET

NOTES:

1. ALL WORK SHALL BE DONE WITHIN EXISTING CITY RIGHT-OF-WAY. NO WORK WITHIN INDOT RIGHT-OF-WAY.
2. ASPHALT MILLING SHALL BE 1.5" BELOW THE EXISTING GRADE. THE EXISTING PAVEMENT SHALL BE CUT TO PROVIDE A VERTICAL FACE OF 1.5" FOR THE TERMINI OF THE NEW SURFACE.

LEGEND:

- (M)(R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT, 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

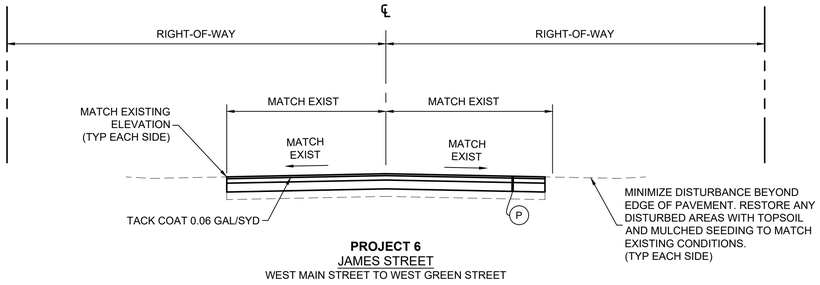
WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

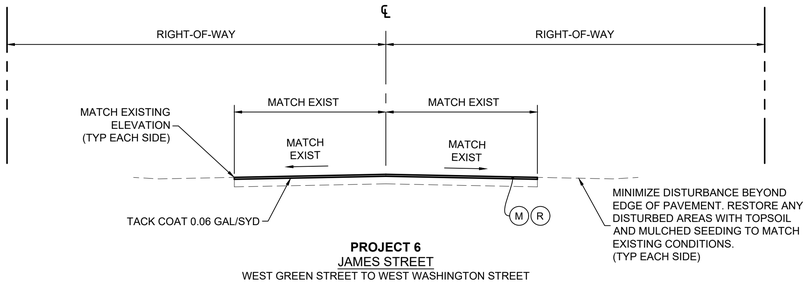
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

TYPICAL SECTIONS

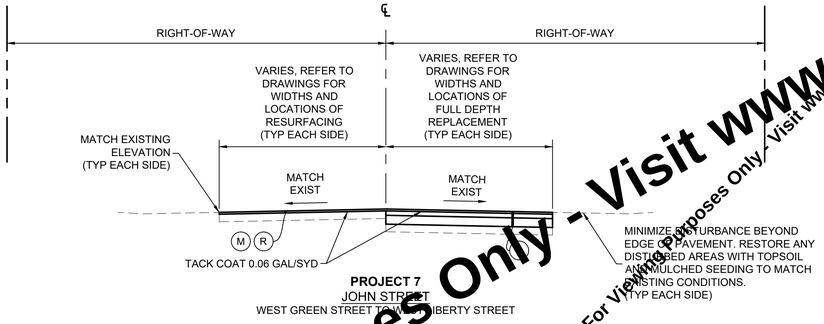
SHEET NO. 04
TOTAL SHEETS 21



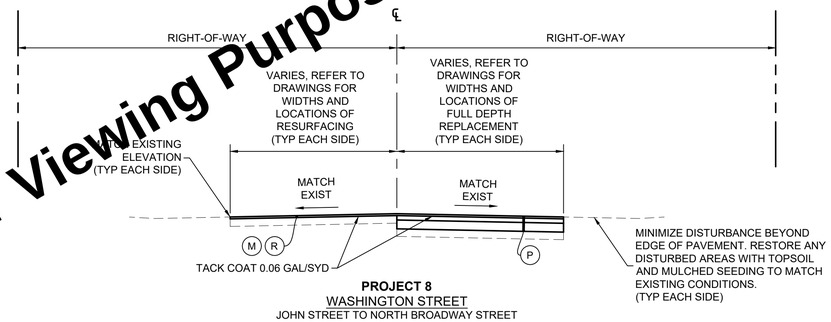
PROJECT 6
JAMES STREET
WEST MAIN STREET TO WEST GREEN STREET



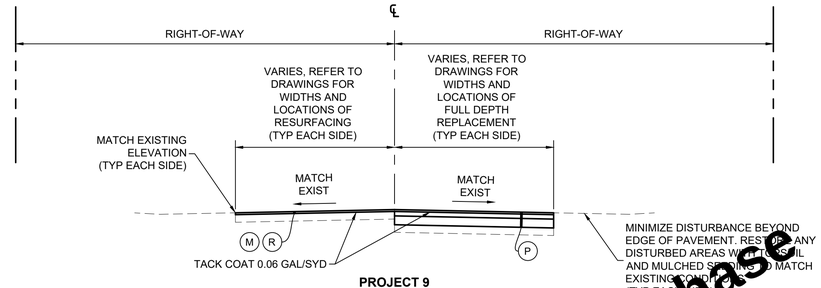
PROJECT 6
JAMES STREET
WEST GREEN STREET TO WEST WASHINGTON STREET



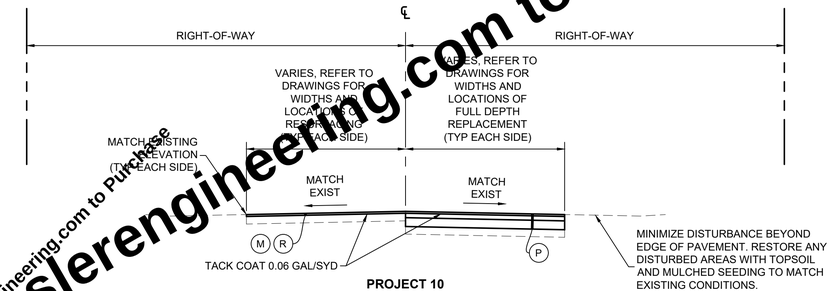
PROJECT 7
JOHN STREET
WEST GREEN STREET TO WEST LIBERTY STREET



PROJECT 8
WASHINGTON STREET
JOHN STREET TO NORTH BROADWAY STREET



PROJECT 9
NORTH ASH STREET
EAST GREEN STREET TO EAST LIBERTY STREET



PROJECT 10
SOUTH ASH STREET
RAILROAD STREET TO EAST OAK STREET

NOTES:

1. ALL WORK SHALL BE DONE WITHIN EXISTING CITY RIGHT-OF-WAY. NO WORK WITHIN INDOT RIGHT-OF-WAY.
2. ASPHALT MILLING SHALL BE 1.5" BELOW THE EXISTING GRADE. THE EXISTING PAVEMENT SHALL BE CUT TO PROVIDE A VERTICAL FACE OF 1.5" FOR THE TERMINI OF THE NEW SURFACE.

LEGEND:

(M)(R)	165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
(P)	SAWCUT & REMOVE EXISTING PAVEMENT, 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
(15)	CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

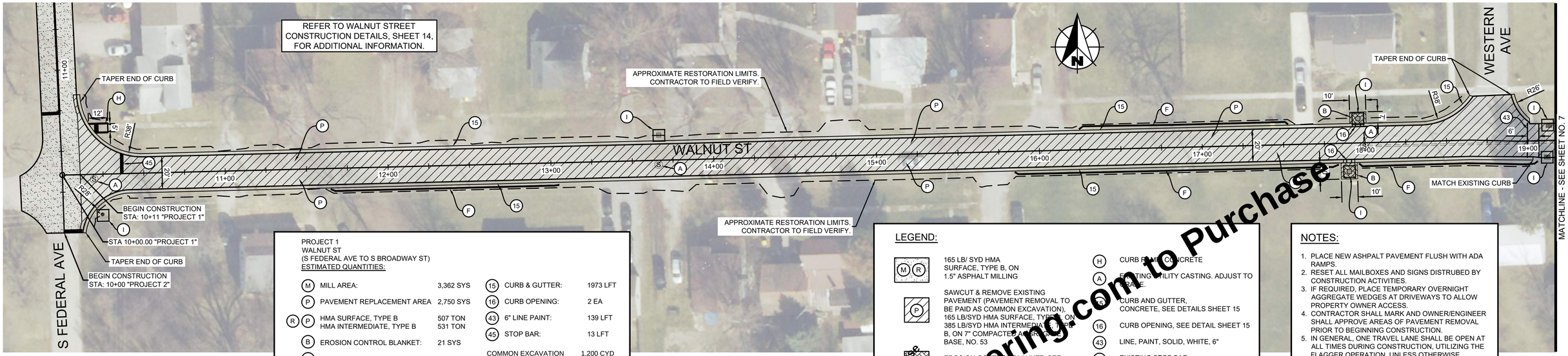
JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

TYPICAL SECTIONS

SHEET NO. **05**
TOTAL SHEETS 21



PROJECT 1
WALNUT ST
(S FEDERAL AVE TO S BROADWAY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	3,362 SYS	15	CURB & GUTTER:	1973 LFT
P	PAVEMENT REPLACEMENT AREA	2,750 SYS	16	CURB OPENING:	2 EA
R P	HMA SURFACE, TYPE B HMA INTERMEDIATE, TYPE B	507 TON 531 TON	43	6" LINE PAINT:	139 LFT
			45	STOP BAR:	13 LFT
B	EROSION CONTROL BLANKET:	21 SYS		COMMON EXCAVATION	1,200 CYD
H	CURB RAMP:	9 SYS			

LEGEND:

- M R — 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- P — SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION). 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- B — EROSION CONTROL BLANKET, SEE DETAIL SHEET
- I — INLET PROTECTION, SEE DETAIL SHEET 18
- F — FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- H — CURB RAMP, CONCRETE
- A — EXISTING UTILITY CASTING. ADJUST TO GRADE.
- 15 — CURB AND GUTTER, CONCRETE, SEE DETAILS SHEET 15
- 16 — CURB OPENING, SEE DETAIL SHEET 15
- 43 — LINE, PAINT, SOLID, WHITE, 6"
- 44 — EXISTING STOP BAR
- 45 — TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- 46 — DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- 47 — LINE, PAINT SOLID, WHITE 4"

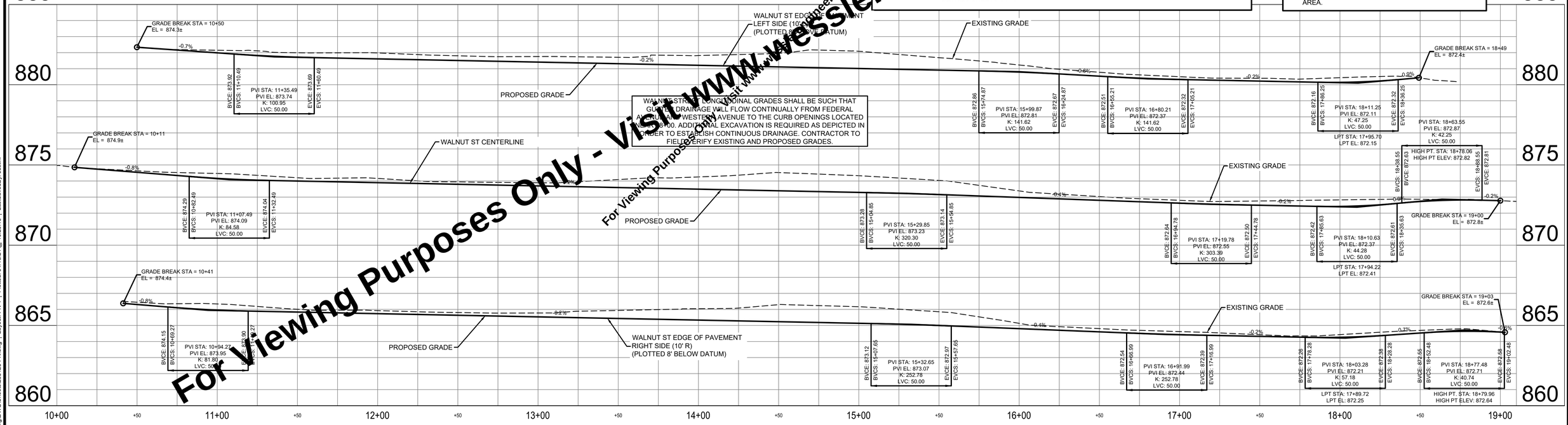
NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

PROJECT 1
WALNUT ST
(S FEDERAL ST TO S BROADWAY ST)

0 15 30 60 FT

885



PROFILE - WALNUT ST
HORIZ SCALE: 1" = 30'
VERT SCALE: 1" = 3'

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

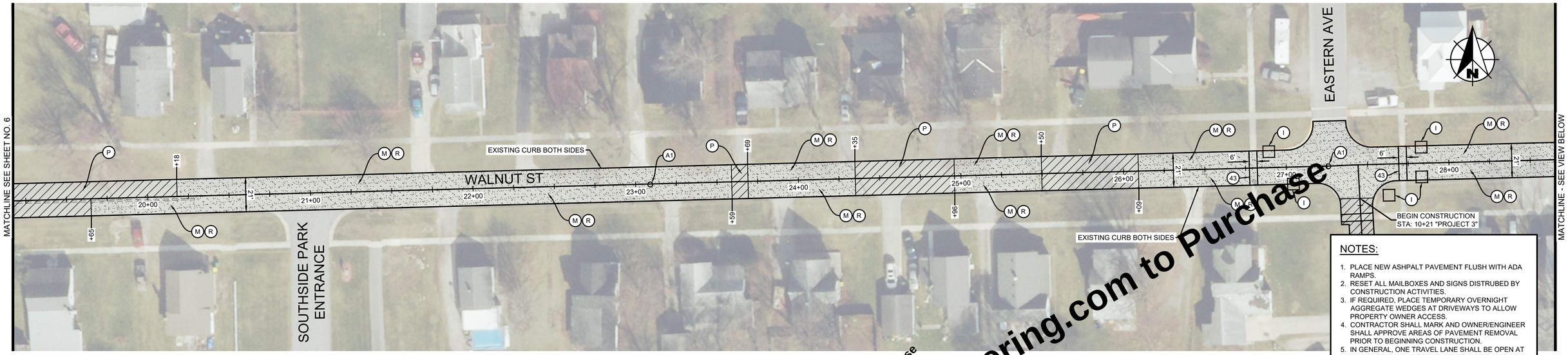
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO. 06
TOTAL SHEETS 21

Drawing: X:\Butler\265123 Butler Streets Community Crossing\DWG\Sheets\265123-PN.dwg | Layout: PN-1 | Plotted: 01/10/24 @ 10:20:18 | LastSavedBy: JustinF



PROJECT 1
WALNUT ST
(S FEDERAL ST TO S BROADWAY ST)

0 15 30 60 FT

PROJECT 1
WALNUT ST
(S FEDERAL ST TO S BROADWAY ST)

0 15 30 60 FT

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPRARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

- (M)(R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (B) EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
- (I) INLET PROTECTION, SEE DETAIL SHEET 18
- (F) FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- (H) CURB RAMP, CONCRETE
- (A1) EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
- (16) CURB OPENING, SEE DETAIL SHEET 15
- (43) LINE, PAINT, SOLID, WHITE, 6"
- (44) EXISTING STOP BAR
- (45) TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- (46) DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- (47) LINE, PAINT SOLID, WHITE 4"
- (48) LINE, PAINT, SOLID, BLUE 4"
- (49) ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)

SCALE VERIFICATION	DRAWN BY	DMG
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL
	APPROVED BY	JRF
	ISSUE DATE	JANUARY 2024
	PROJECT NUMBER	265123-04-001

NO.	DATE	INITIALS	REVISION DESCRIPTIONS

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/11/24

WESSLER ENGINEERING
More than a Project™

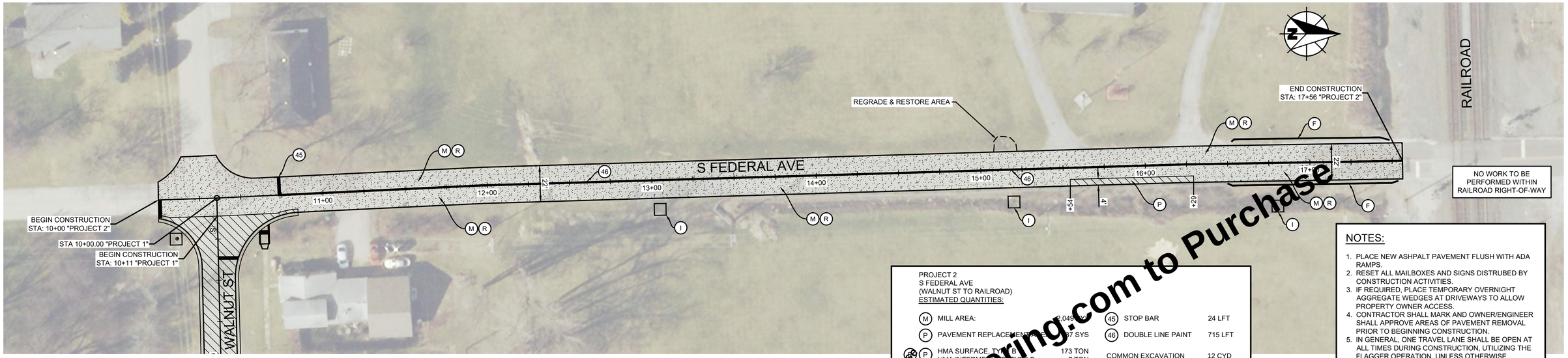
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO.
07
TOTAL SHEETS
21

Drawing: X:\Butler\265123 Butler Streets Community Crossing\DWG\Sheets\265123-PN.dwg | Layout: PN-2 | Plotted: 01/10/24 @ 10:20:32 | LastSavedBy: JustinF



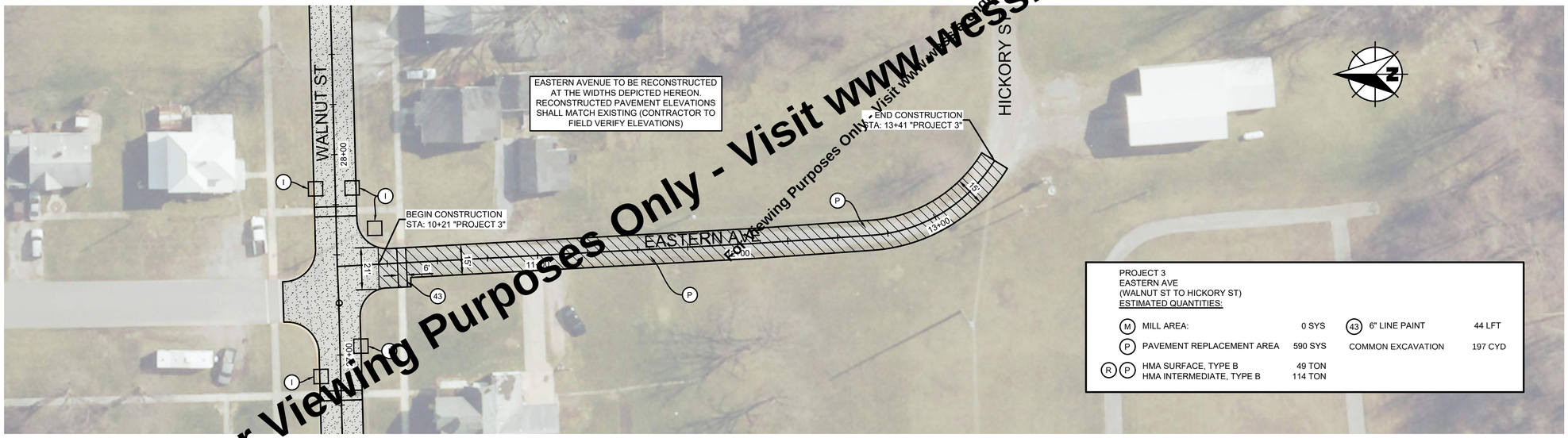
PROJECT 2
S FEDERAL AVE
(WALNUT ST TO RAILROAD)
0 15 30 60 FT

PROJECT 2
S FEDERAL AVE
(WALNUT ST TO RAILROAD)
ESTIMATED QUANTITIES:

M	MILL AREA:	2,049 SYS	45	STOP BAR	24 LFT
P	PAVEMENT REPLACEMENT AREA	387 SYS	46	DOUBLE LINE PAINT	715 LFT
R P	HMA SURFACE, TYPE B	173 TON		COMMON EXCAVATION	12 CYD
	HMA INTERMEDIATE, TYPE B	7 TON			

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.



PROJECT 3
EASTERN AVE
(WALNUT ST TO HICKORY ST)
0 15 30 60 FT

PROJECT 3
EASTERN AVE
(WALNUT ST TO HICKORY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	0 SYS	43	6" LINE PAINT	44 LFT
P	PAVEMENT REPLACEMENT AREA	590 SYS		COMMON EXCAVATION	197 CYD
R P	HMA SURFACE, TYPE B	49 TON			
	HMA INTERMEDIATE, TYPE B	114 TON			

LEGEND:

- (M R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (B) EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
- (I) INLET PROTECTION, SEE DETAIL SHEET 18
- (F) FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- (H) CURB RAMP, CONCRETE
- (A1) EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
- (16) CURB OPENING, SEE DETAIL SHEET 15
- (43) LINE, PAINT, SOLID, WHITE, 6"
- (44) EXISTING STOP BAR
- (45) TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- (46) DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- (47) LINE, PAINT SOLID, WHITE 4"
- (48) LINE, PAINT, SOLID, BLUE 4"
- (49) ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO. 08
TOTAL SHEETS 21

Drawing: X:\Butler\265123 Butler Streets Community Crossing\DWG\Sheets\265123-PN.dwg | Layout: PN-3 | Plotted: 01/10/24 @ 10:20:46 | LastSavedBy: JustinF

PROJECT 4
W WILLOW ST
(EASTERN AVE TO S BROADWAY ST)

0 15 30 60 FT

PROJECT 4
W WILLOW ST
(EASTERN AVE TO S BROADWAY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	0 SYS
P	PAVEMENT REPLACEMENT AREA	2,163 SYS
R P	HMA SURFACE, TYPE B	179 TON
	HMA INTERMEDIATE, TYPE B	417 TON
	COMMON EXCAVATION	721 CYD

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

M R	165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
P	SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
B	EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
I	INLET PROTECTION, SEE DETAIL SHEET 18
F	FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
H	CURB RAMP, CONCRETE
A1	EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
15	CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
16	CURB OPENING, SEE DETAIL SHEET 15
43	LINE, PAINT, SOLID, WHITE, 6"
44	EXISTING STOP BAR
45	TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
46	DOUBLE LINE, PAINT, SOLID YELLOW, 4"
47	LINE, PAINT SOLID, WHITE 4"
48	LINE, PAINT, SOLID, BLUE 4"
49	ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

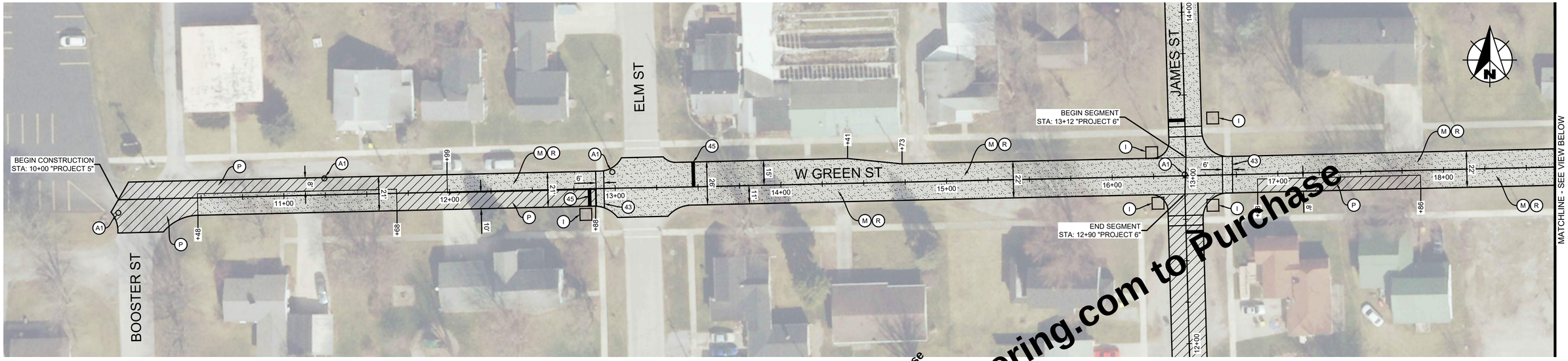
JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

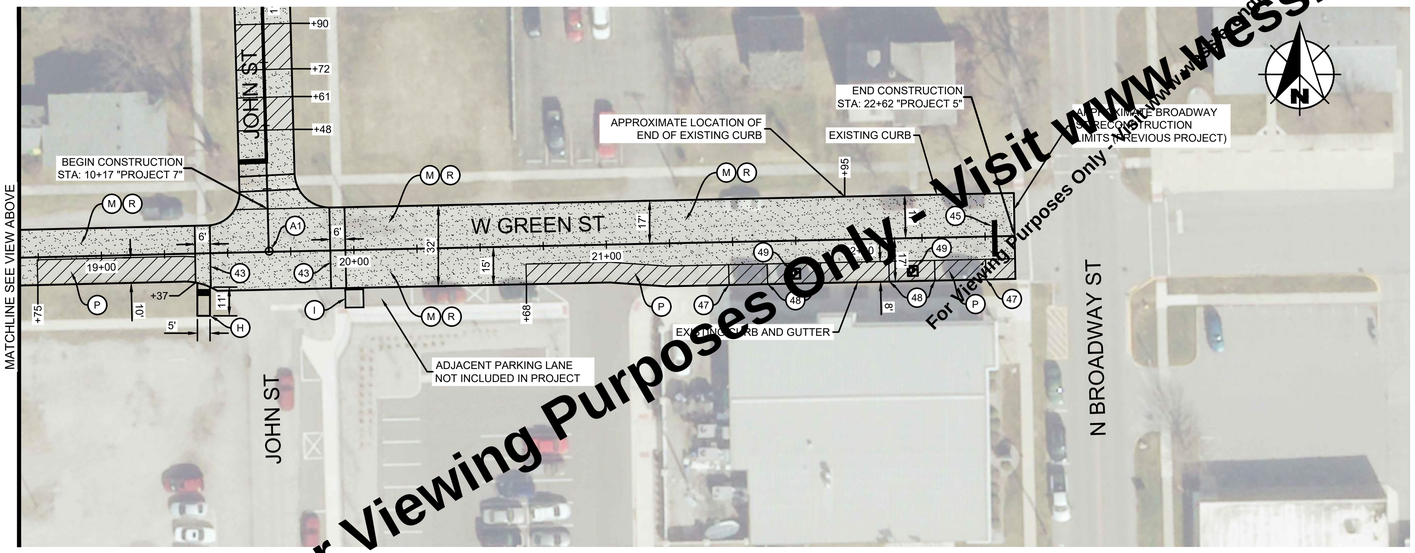
ROADWAY IMPROVEMENT PLANS

SHEET NO. **09**
TOTAL SHEETS 21



PROJECT 5
W GREEN ST
(BOOSTER ST TO N BROADWAY ST)

0 15 30 60 FT



PROJECT 5
W GREEN ST
(BOOSTER ST TO N BROADWAY ST)

0 15 30 60 FT

PROJECT 5
W GREEN ST
(BOOSTER ST TO N BROADWAY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	3,109 SYS	43	6" LINE PAINT:	171 LFT
P	PAVEMENT REPLACEMENT AREA	832 SYS	45	STOP BAR:	33 LFT
R P	HMA SURFACE, TYPE B HMA INTERMEDIATE, TYPE B	327 TON 160 TON	47 48 49	4" LINE PAINT:	53 LFT
H	CURB RAMP:	8 SYS		COMMON EXCAVATION	277 CYD

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

- (M R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (B) EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
- (I) INLET PROTECTION, SEE DETAIL SHEET 18
- (F) FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- (H) CURB RAMP, CONCRETE
- (A1) EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
- (16) CURB OPENING, SEE DETAIL SHEET 15
- (43) LINE, PAINT, SOLID, WHITE, 6"
- (44) EXISTING STOP BAR
- (45) TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- (46) DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- (47) LINE, PAINT SOLID, WHITE 4"
- (48) LINE, PAINT, SOLID, BLUE 4"
- (49) ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)

SCALE VERIFICATION	DRAWN BY	DMG
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL
	APPROVED BY	JRF
	ISSUE DATE	JANUARY 2024
	PROJECT NUMBER	265123-04-001

NO.	DATE	INITIALS	REVISION DESCRIPTIONS

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

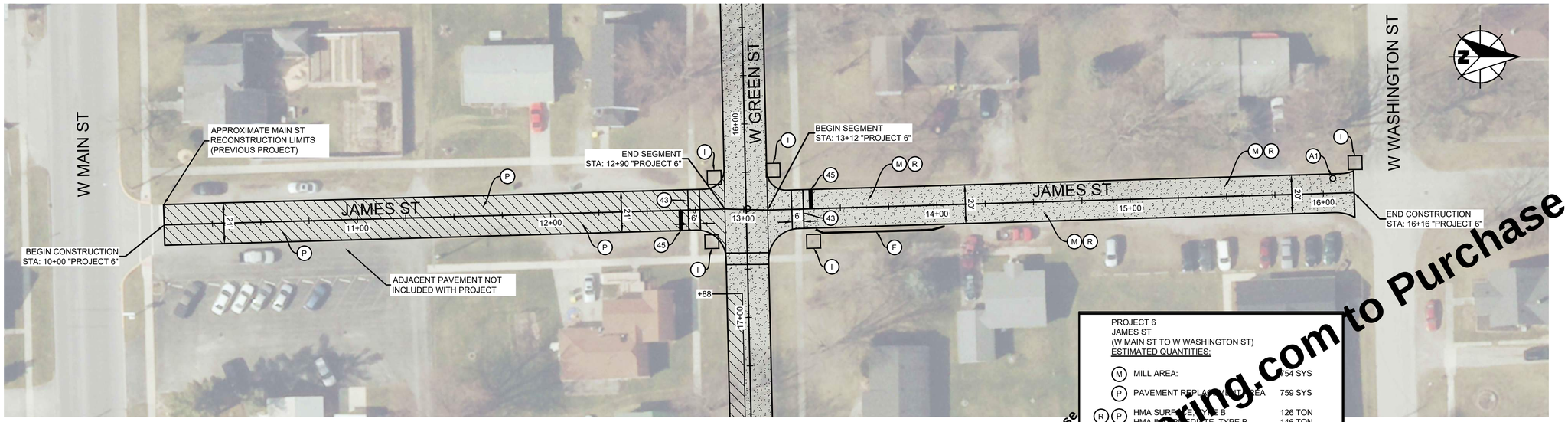
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO. 10

TOTAL SHEETS 21

Drawing: X:\Butler\2651\23 Butler Streets Community Crossing\DWG\Sheets\265123-PN.dwg | Layout: PN-5 | Plotted: 01/10/24 @ 10:21:01 | LastSavedBy: JustinF



PROJECT 6
JAMES ST
(W MAIN ST TO W WASHINGTON ST)

0 15 30 60 FT

PROJECT 6
JAMES ST
(W MAIN ST TO W WASHINGTON ST)
ESTIMATED QUANTITIES:

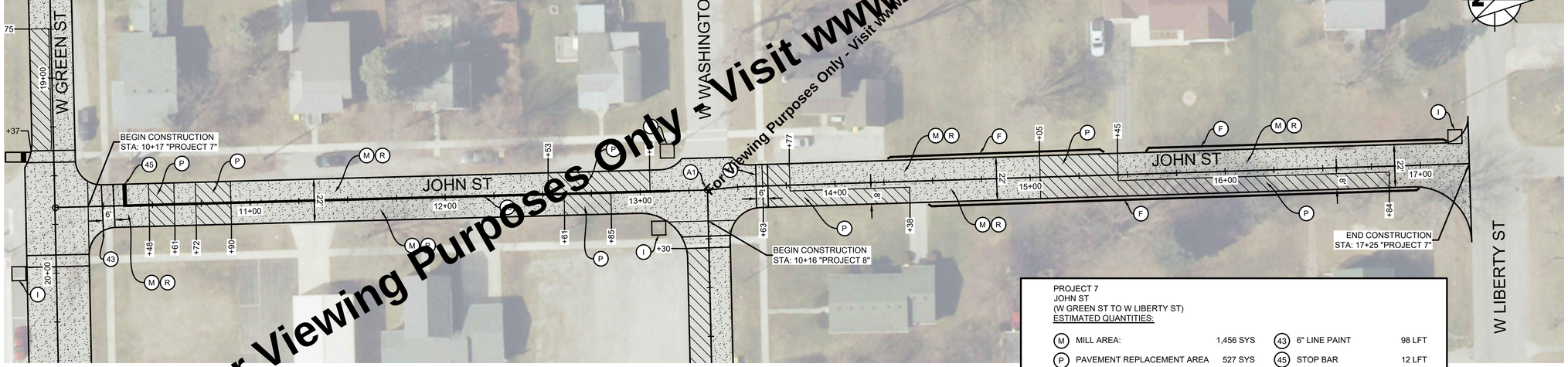
M	MILL AREA:	754 SYS
P	PAVEMENT REPLACEMENT AREA	759 SYS
R P	HMA SURFACE, TYPE B	126 TON
	HMA INTERMEDIATE, TYPE B	146 TON
43	6" LINE PAINT	90 LFT
	COMMON EXCAVATION	253 CYD

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

- (M)(R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (B) EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
- (I) INLET PROTECTION, SEE DETAIL SHEET 18
- (F) FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- (H) CURB RAMP, CONCRETE
- (A1) EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
- (16) CURB OPENING, SEE DETAIL SHEET 15
- (43) LINE, PAINT, SOLID, WHITE, 6"
- (44) EXISTING STOP BAR
- (45) TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- (46) DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- (47) LINE, PAINT SOLID, WHITE 4"
- (48) LINE, PAINT, SOLID, BLUE 4"
- (49) ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)



PROJECT 7
JOHN ST
(W GREEN ST TO W LIBERTY ST)

0 15 30 60 FT

PROJECT 7
JOHN ST
(W GREEN ST TO W LIBERTY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	1,456 SYS	43	6" LINE PAINT	98 LFT
P	PAVEMENT REPLACEMENT AREA	527 SYS	45	STOP BAR	12 LFT
R P	HMA SURFACE, TYPE B	165 TON	46	4" DOUBLE LINE PAINT	612 LFT
	HMA INTERMEDIATE, TYPE B	102 TON		COMMON EXCAVATION	176 CYD

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS	
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL					
	APPROVED BY	JRF					
	ISSUE DATE	JANUARY 2024					
	PROJECT NUMBER	265123-04-001					

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

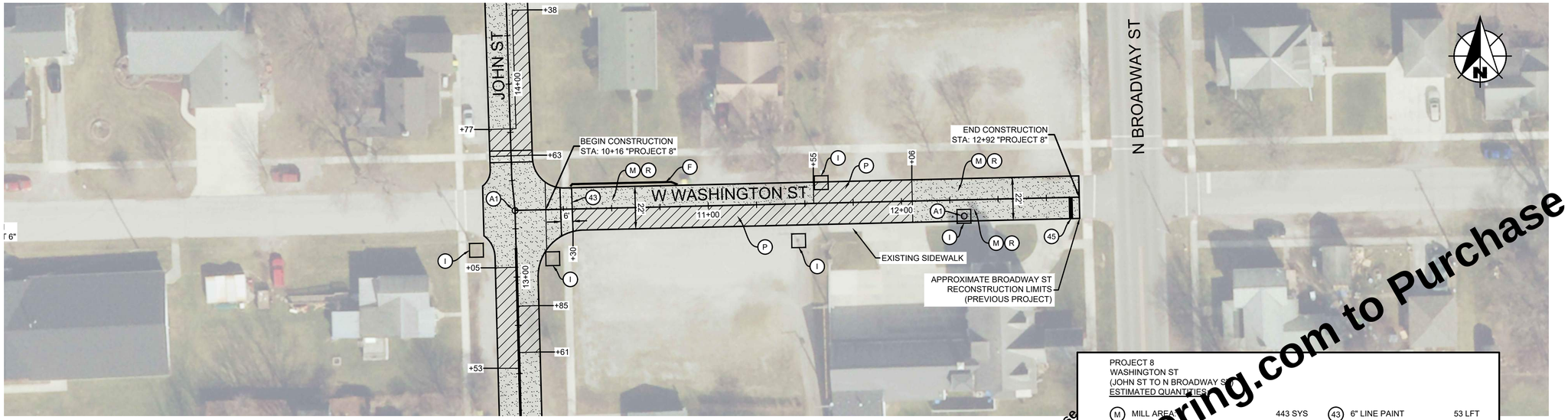
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO. 11

TOTAL SHEETS 21



PROJECT 8
W WASHINGTON ST
(JOHN ST TO N BROADWAY ST)

0 15 30 60 FT

PROJECT 8
WASHINGTON ST
(JOHN ST TO N BROADWAY ST)
ESTIMATED QUANTITIES:

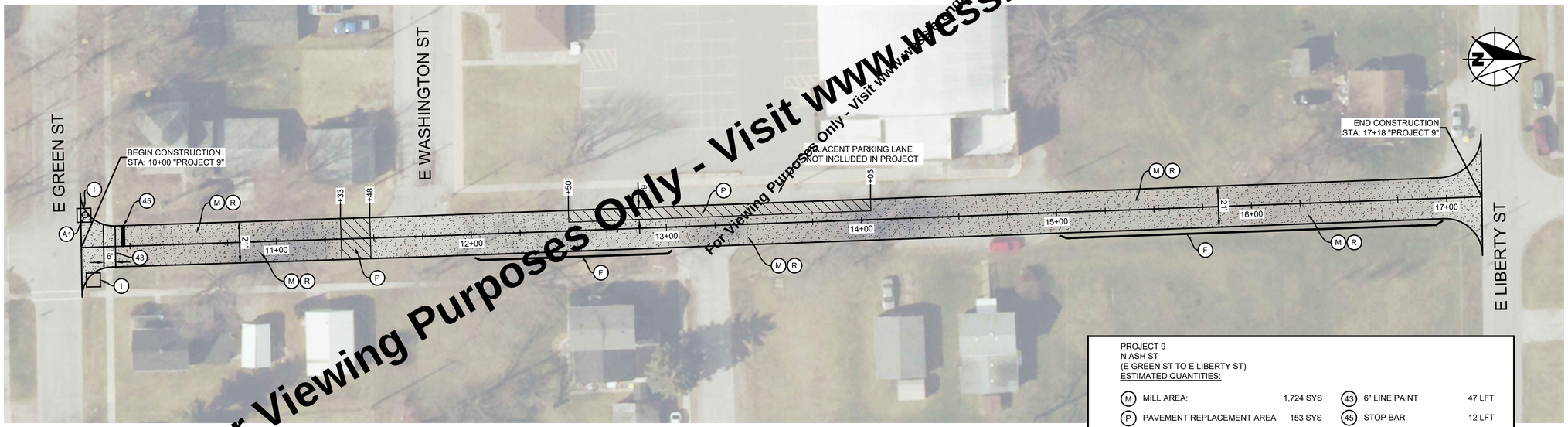
M	MILL AREA	443 SYS	43	6" LINE PAINT	53 LFT
P	PAVEMENT REPLACEMENT AREA	309 SYS	45	STOP BAR	12 LFT
R	HMA SURFACE, TYPE B	62 TON		COMMON EXCAVATION	103 CYD
R	HMA INTERMEDIATE, TYPE B	60 TON			

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

- (M)(R) 165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
- (P) SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
- (B) EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
- (I) INLET PROTECTION, SEE DETAIL SHEET 18
- (F) FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
- (H) CURB RAMP, CONCRETE
- (A1) EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
- (15) CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
- (16) CURB OPENING, SEE DETAIL SHEET 15
- (43) LINE, PAINT, SOLID, WHITE, 6"
- (44) EXISTING STOP BAR
- (45) TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
- (46) DOUBLE LINE, PAINT, SOLID YELLOW, 4"
- (47) LINE, PAINT SOLID, WHITE 4"
- (48) LINE, PAINT, SOLID, BLUE 4"
- (49) ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)



PROJECT 9
N ASH ST
(E GREEN ST TO E LIBERTY ST)

0 15 30 60 FT

PROJECT 9
N ASH ST
(E GREEN ST TO E LIBERTY ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	1,724 SYS	43	6" LINE PAINT	47 LFT
P	PAVEMENT REPLACEMENT AREA	153 SYS	45	STOP BAR	12 LFT
R P	HMA SURFACE, TYPE B	156 TON		COMMON EXCAVATION	51 CYD
R P	HMA INTERMEDIATE, TYPE B	30 TON			

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS	
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL					
	APPROVED BY	JRF					
	ISSUE DATE	JANUARY 2024					
	PROJECT NUMBER	265123-04-001					

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

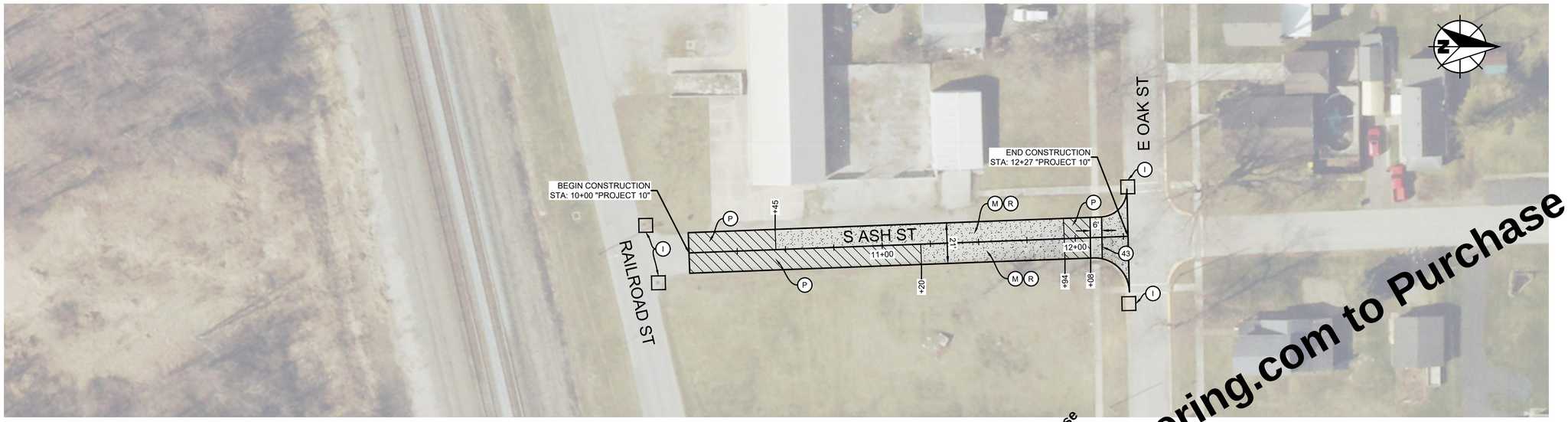
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

ROADWAY IMPROVEMENT PLANS

SHEET NO. 12

TOTAL SHEETS 21



PROJECT 10
S ASH ST
(RAILROAD ST TO E OAK ST)

0 15 30 60 FT

PROJECT 10
S ASH ST
(RAILROAD TO E OAK ST)
ESTIMATED QUANTITIES:

M	MILL AREA:	348 SYS	43	6" LINE PAINT	47 LFT
P	PAVEMENT REPLACEMENT AREA	251 SYS		COMMON EXCAVATION	84 CYD
R P	HMA SURFACE, TYPE B HMA INTERMEDIATE, TYPE B	50 TON 48 TON			

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

M R	165 LB/ SYD HMA SURFACE, TYPE B, ON 1.5" ASPHALT MILLING
P	SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
B	EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
I	INLET PROTECTION, SEE DETAIL SHEET 18
F	FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
H	CURB RAMP, CONCRETE
A1	EXISTING UTILITY CASTING. ADJUST TO GRADE AS DETERMINED IN FIELD.
15	CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
16	CURB OPENING, SEE DETAIL SHEET 15
43	LINE, PAINT, SOLID, WHITE, 6"
44	EXISTING STOP BAR
45	TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
46	DOUBLE LINE, PAINT, SOLID YELLOW, 4"
47	LINE, PAINT SOLID, WHITE 4"
48	LINE, PAINT, SOLID, BLUE 4"
49	ADA SYMBOL, SEE DETAIL SHEET NO. 15 (TO BE PAID AS 20 LFT OF 4" BLUE PAINT)

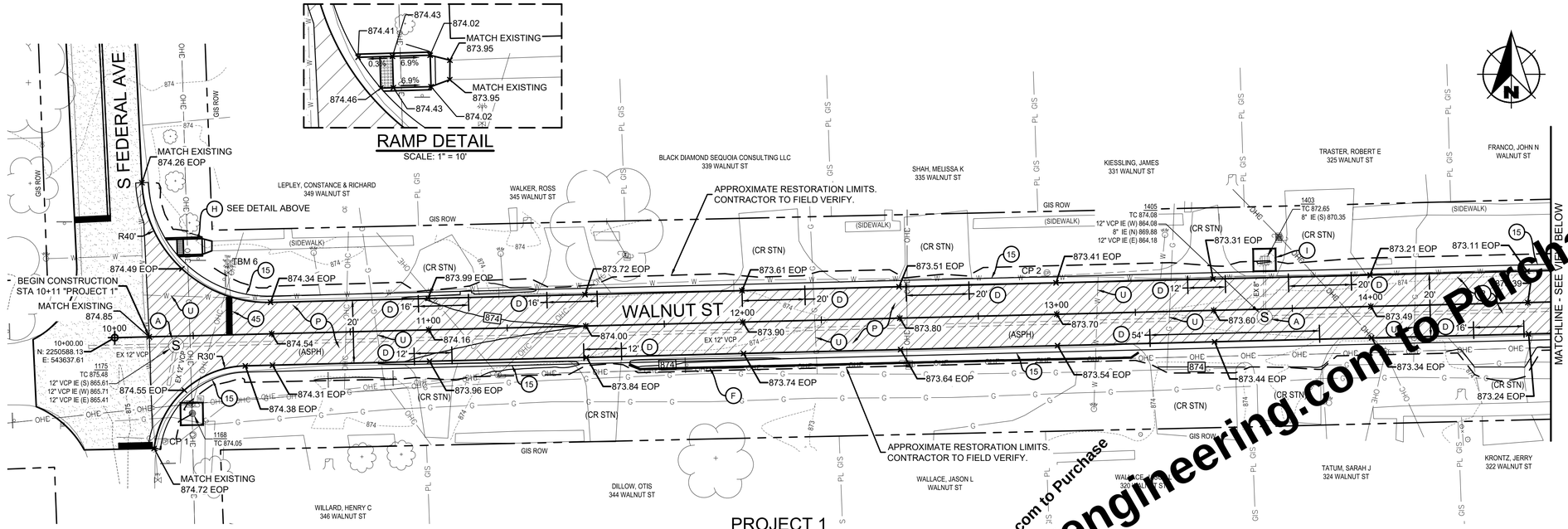
SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS	
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL					
	APPROVED BY	JRF					
	ISSUE DATE	JANUARY 2024					
	PROJECT NUMBER	265123-04-001					

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA
ROADWAY IMPROVEMENT PLANS

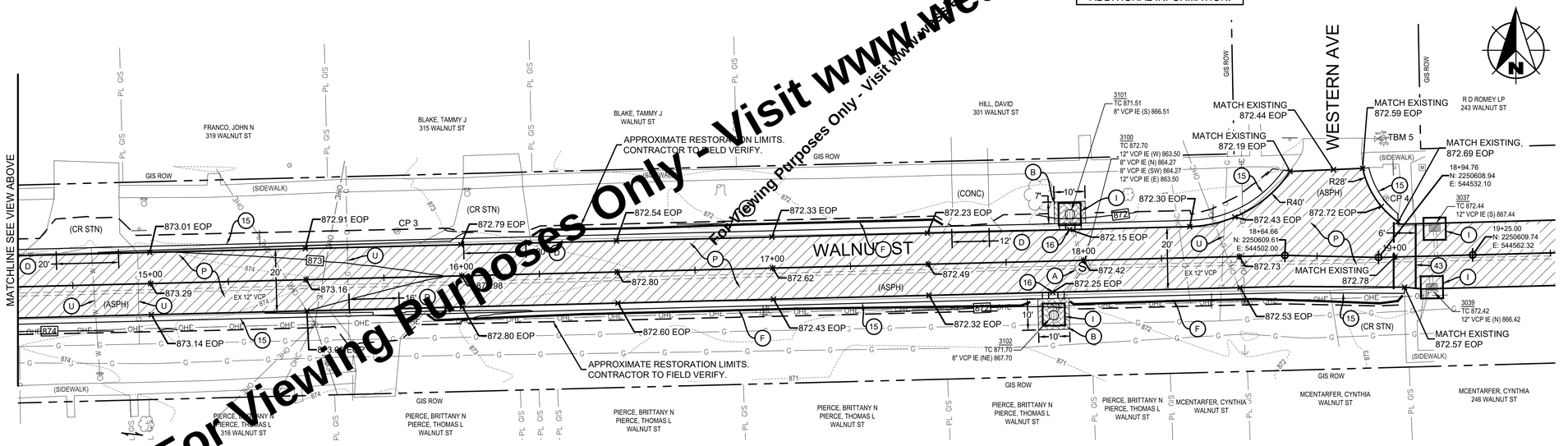
SHEET NO. **13**
TOTAL SHEETS 21



PROJECT 1
WALNUT ST
(CONSTRUCTION DETAILS - FEDERAL AVE TO WESTERN AVE))

0 10 20 40 FT

REFER TO WALNUT STREET ROADWAY IMPROVEMENT PLANS, SHEET 06, FOR ADDITIONAL INFORMATION.



PROJECT 1
WALNUT ST
(CONSTRUCTION DETAILS - FEDERAL AVE TO WESTERN AVE))

0 10 20 40 FT

NOTES:

1. PLACE NEW ASHPALT PAVEMENT FLUSH WITH ADA RAMPS.
2. RESET ALL MAILBOXES AND SIGNS DISTRUBED BY CONSTRUCTION ACTIVITIES.
3. IF REQUIRED, PLACE TEMPORARY OVERNIGHT AGGREGATE WEDGES AT DRIVEWAYS TO ALLOW PROPERTY OWNER ACCESS.
4. CONTRACTOR SHALL MARK AND OWNER/ENGINEER SHALL APPROVE AREAS OF PAVEMENT REMOVAL PRIOR TO BEGINNING CONSTRUCTION.
5. IN GENERAL, ONE TRAVEL LANE SHALL BE OPEN AT ALL TIMES DURING CONSTRUCTION, UTILIZING THE FLAGGER OPERATION, UNLESS OTHERWISE APPROVED BY THE OWNER.
6. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AT LEAST ONE WEEK PRIOR TO CLOSING TRAVEL LANES AND DRIVEWAYS FOR CONSTRUCTION.
7. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN OR AS DETERMINED NECESSARY BY CONTRACTOR TO PROVIDE ADEQUATE CONTROL FOR THE CONSTRUCTION AREA.

LEGEND:

(P)	SAWCUT & REMOVE EXISTING PAVEMENT (PAVEMENT REMOVAL TO BE PAID AS COMMON EXCAVATION), 165 LB/SYD HMA SURFACE, TYPE B, ON 385 LB/SYD HMA INTERMEDIATE, TYPE B, ON 7" COMPACTED AGGREGATE BASE, NO. 53
(B)	EROSION CONTROL BLANKET, SEE DETAIL SHEET 18
(I)	INLET PROTECTION, SEE DETAIL SHEET 18
(F)	FILTER TUBE OR SILT FENCE, SEE DETAILS SHEETS 18-19
(H)	CURB RAMP, CONCRETE
(A)	EXISTING UTILITY CASTING. ADJUST TO GRADE.
(D)	DEPRESSED CURB THROUGH DRIVEWAY (SEE DETAIL SHEET 15). TRANSITION FROM ROLLED CURB TO DEPRESSED CURB OVER 5 FEET. RESTORE DRIVEWAY. OWNER TO FIELD VERIFY LOCATIONS AND WIDTHS OF DEPRESSED CURB.
(U)	EXISTING UNDERGROUND UTILITY. DETERMINE LOCATION AND ELEVATION IN FIELD. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
(15)	CURB AND GUTTER, CONCRETE, SEE DETAIL SHEET 15
(16)	CURB OPENING, SEE DETAIL SHEET 15
(43)	LINE, PAINT, SOLID, WHITE, 6"
(45)	TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR, 24"
XXX.XX	PROPOSED GRADE CENTERLINE
XXX.XX EOP	PROPOSED GRADE EDGE OF PAVEMENT

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

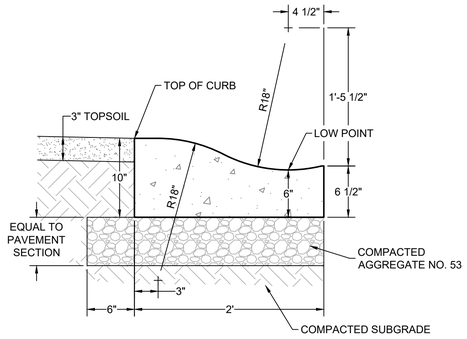
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

CONSTRUCTION DETAILS - WALNUT ST

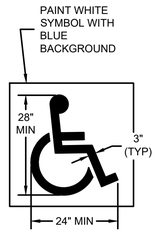
SHEET NO. 14

TOTAL SHEETS 21

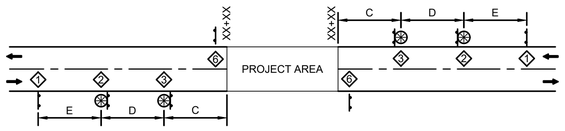


NOTES:
1. REFER TO SPECIFICATIONS FOR MATERIAL AND CONSTRUCTION REQUIREMENTS

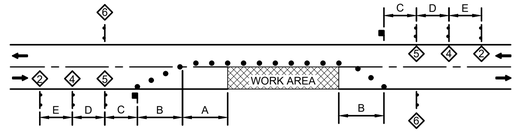
CONCRETE CURB AND GUTTER (2' ROLLED CURB)
SCALE: NONE



ACCESSIBLE PARKING SYMBOL
SCALE: NONE



CONSTRUCTION SIGN PLACEMENT
SCALE: NONE



TEMPORARY FLAGGER OPERATION
SCALE: NONE

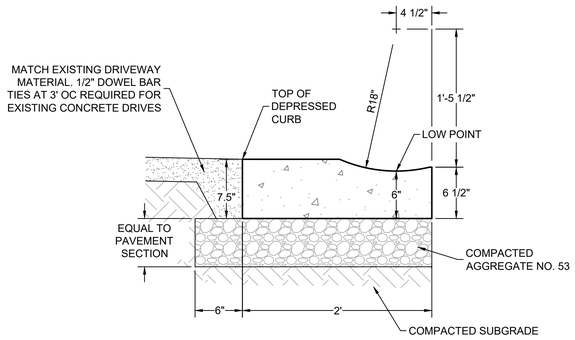
SPEED (MPH)	DISTANCE (FEET)				
	A	B	C	D	E
20 OR LESS	120	100	100	100	100
25	160	100	100	100	100
30	200	100	100	100	100
35	280	100	150	350	350
40	320	100	300	350	350
45	360	100	500	500	500
50	400	100	500	500	500
55	520	100	500	500	500
60	600	100	1,000	1,600	2,640
65	680	100	1,000	1,600	2,640
70	760	100	1,000	1,600	2,640

NOTES:
1. DISTANCES SHOWN ARE APPROXIMATE. ADJUST SIGN FOR CURVES, HILLS, INTERSECTIONS, DRIVEWAYS, ETC TO IMPROVE SIGN VISIBILITY.
2. THE SPACING OF CHANNELIZING DEVICES SHOULD BE A DISTANCE IN FEET EQUAL TO THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH USED FOR TANGENT CHANNELIZATION.

ADVANCE WARNING SIGN AND FLAGGER OPERATION SPACING
SCALE: NONE

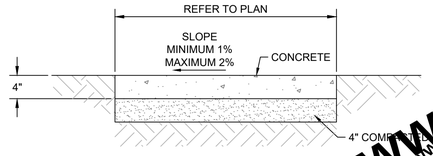
- WORK AREA(S)
- TYPE A CONSTRUCTION WARNING LIGHT
- 1 NOT USED
- 2 "ROAD WORK AHEAD" (W20-1) OR "UTILITY WORK AHEAD" (W21-7)
- 3 "ROAD WORK - XXX FT" (W20-1)
- 4 "ONE LANE ROAD AHEAD" (W20-4)
- 5 FLAGGER SIGN (W20-7)
- 6 "END ROAD WORK" (G20-2)
- BARRICADE TYPE IIIB
- TRAFFIC CONTROL DRUM
- TRAFFIC FLOW DIRECTION
- FLAGGER
- SIGN, FACING LEFT
- SIGN, FACING RIGHT

TRAFFIC CONTROL LEGEND
SCALE: NONE

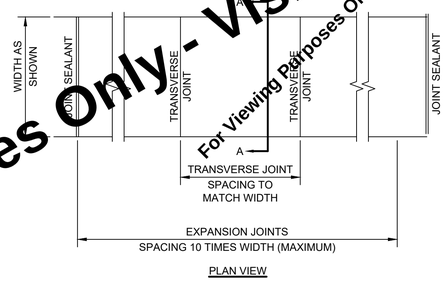


NOTES:
1. REFER TO SPECIFICATIONS FOR MATERIAL AND CONSTRUCTION REQUIREMENTS

CONCRETE DEPRESSED CURB
SCALE: NONE

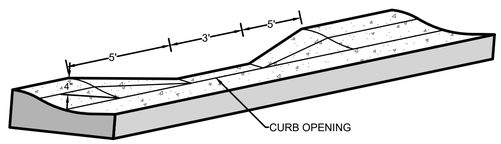


TYPICAL SIDEWALK SECTION A



PLAN VIEW

CONCRETE SIDEWALK
SCALE: NONE



CURB OPENING
SCALE: NONE

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

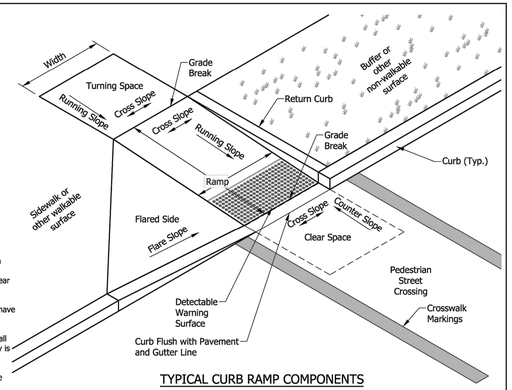
MISCELLANEOUS DETAILS

SHEET NO. **15**
TOTAL SHEETS 21

INDEX	
SHEET NO.	SUBJECT
1	Curb Ramp Drawing Index and General Notes
2-3	Perpendicular Curb Ramp Typical Placement
4	Perpendicular Curb Ramp Component Details
5	One-Way-Directional Perpendicular Curb Ramp Typical Placement
6	One-Way-Directional Perpendicular Curb Ramp Component Details
7	Parallel Curb Ramps Typical Placement
8	Parallel Curb Ramp Component Details
9	Blended Transition Curb Ramp, Depressed Curb Ramp and Diagonal Curb Ramp Typical Placement
10	Blended Transition Curb Ramp Component Details
11	Median Cut-Through and Median Perpendicular Curb Ramp Typical Placement
12-13	Detectable Warning Surface Placement and Configuration
14	Detectable Warning Surface Details

GENERAL NOTES:

1. All slopes are absolute rather than relative to the sidewalk or roadway grade. Slopes at least 0.50% less than the maximum are preferred.
2. Ramp or Blended Transition. A ramp or blended transition shall be used to lower or raise the sidewalk to connect with the street or highway.
3. Turning Space. A turning space shall be provided at the top of a perpendicular ramp, bottom of a parallel ramp, or where the pedestrian travel requires a change in direction. A common turning space may be shared by adjacent ramps. The turning space shall have a minimum clear dimension of 4 ft x 4 ft. Where the turning space is constrained at the back of the sidewalk by a curb, retaining wall, building, or feature over 2 inches in height, the minimum clear dimension shall be 4 ft x 5 ft, with the 5-ft dimension in the direction of the ramp running slope.
4. Flared Side. A flared side shall be used adjacent to a walkable surface. A flared side may be used adjacent to a non-walkable surface. A flared side shall have a maximum slope of 10.00% measured parallel to the back of the curb.
5. Return Curb. A return curb is placed perpendicular to the roadway curb. A return curb may be used adjacent to a non-walkable surface. A return curb shall not be used adjacent to a walkable surface. The return curb may be omitted where the non-walkable surface is flared and the curb adjacent the roadway is tapered to meet the flush curb at the bottom of the ramp.
6. Clear Space. A clear space shall be provided beyond the bottom grade break of a curb ramp wholly contained within the crosswalk and wholly outside the parallel vehicular travel path. The clear space shall have a minimum clear dimension of 4 ft x 4 ft.
7. Detectable Warning Surface. A detectable warning surface shall consist of truncated domes and be placed at each street, highway, or railroad crossing. The detectable warning surface shall extend a minimum of 2 ft in the direction of pedestrian travel and be placed the entire width of a ramp, blended transition, or turning space.
8. Running Slope. The running slope of a ramp, blended transition, or turning space shall be measured parallel to the direction of pedestrian travel.
   a. A running slope of 2.00% or less is considered level.
   b. A ramp shall have a maximum running slope of 8.33% but shall not require a ramp length to exceed 15 ft.
   c. A blended transition shall have a maximum running slope of 5.00%.
   d. A turning space shall have a maximum running slope of 2.00%.
9. Width. Unless otherwise noted, minimum width of a ramp, blended transition, or turning space, excluding flared sides or return curb, shall be 4 ft.
10. Grade Break. A grade break at the top and bottom of a ramp, blended transition, or turning space shall be perpendicular to the running slope. Grade breaks shall not be within the ramp, blended transition, turning space, or detectable warning surface. Grade breaks shall be flush. Vertical discontinuities shall not be greater than 1/2 in. Where a discontinuity is greater than 1/4 in. the surface shall be beveled with a slope not steeper than 1V:2H.
11. Cross Slope Exceptions. The cross slope of a ramp, blended transition, or turning space shall be measured perpendicular to the direction of pedestrian travel.
   a. The maximum cross slope at a pedestrian street crossing without posted yield or stop control shall be 5.00%.
   b. The maximum cross slope at a pedestrian street crossing with posted yield or stop control shall be 2.00%.
   c. The maximum cross slope at a midblock crossing shall be the established grade of the adjacent roadway.
12. Counter Slope. A counter slope is the cross slope of the gutter or street adjacent the running slope of the ramp, blended transition, or turning space. See Standard Drawing E 604-SWCR-14 for counter slope details.
13. Objects such as a utility cover, vault frame, and grating shall be placed outside the curb ramp.
14. Curb ramps shall be placed within the marked crosswalk area.
15. Drainage inlets should be located uphill from a curb ramp to prevent ponding in the path of pedestrian travel.



TYPICAL CURB RAMP COMPONENTS

INDIANA DEPARTMENT OF TRANSPORTATION

CURB RAMP DRAWING INDEX AND GENERAL NOTES

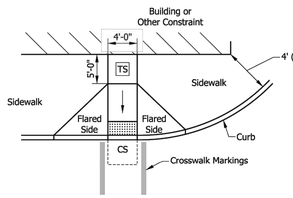
SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-01

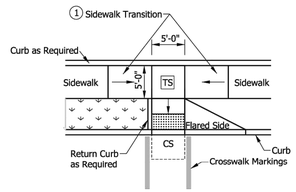
ELIZABETH W. PHILLIPS REGISTERED No. 10200124 STATE OF INDIANA PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/20/18
DESIGN STANDARDS ENGINEER DATE

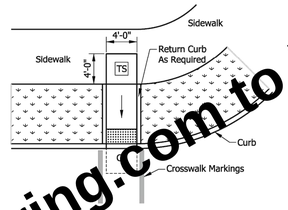
/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE



PERPENDICULAR CURB RAMP ADJACENT WALKABLE SURFACE



TIERED PERPENDICULAR CURB RAMP



PERPENDICULAR CURB RAMP ADJACENT NON-WALKABLE SURFACE

NOTES:

1. Where insufficient width between the curb and back of sidewalk prevent a standard perpendicular curb ramp running slope, a sidewalk transition may be used to lower the sidewalk grade. The sidewalk transition running slope shall not exceed 8.33%. See Standard Drawing Series E 604-SDWK for sidewalk details.
2. The turning space shall have a minimum clear dimension of 4 ft x 4 ft and a running slope of 2.00% maximum. Where the turning space is constrained at the back of the sidewalk, the minimum clear dimension shall be 4 ft x 5 ft, with the 5-ft dimension in the direction of the ramp running slope.

LEGEND:

- Buffer or Other Non-Walkable Surface
- Ramp
- Detectable Warning Surface
- TS Turning Space
- CS Clear Space

INDIANA DEPARTMENT OF TRANSPORTATION

PERPENDICULAR CURB RAMP TYPICAL PLACEMENT

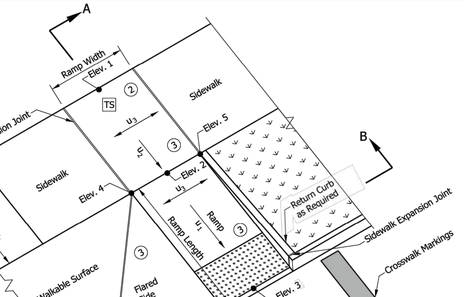
SEPTEMBER 2018

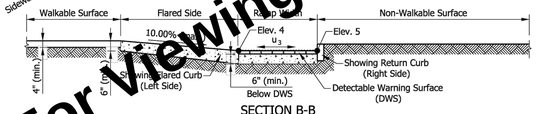
STANDARD DRAWING NO. E 604-SWCR-02

ELIZABETH W. PHILLIPS REGISTERED No. 10200124 STATE OF INDIANA PROFESSIONAL ENGINEER

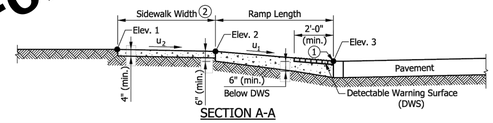
/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE





SECTION B-B



SECTION A-A

NOTES:

1. The bottom edge of the ramp and top of curb shall be flush with the edge of adjacent pavement and gutter line.
2. The turning space shall have a minimum clear dimension of 4 ft x 4 ft. Where the turning space is constrained at the back of the sidewalk, the minimum clear dimension shall be 4 ft with the 5-ft dimension in the direction of the ramp running slope. Where a tiered perpendicular curb ramp is used, a constrained turning space shall have a minimum clear dimension of 5 ft x 5 ft.
3. Curb ramp surface shall have fine coarse broom finish transverse to the running slope.
4. See Standard Drawing E 604-SWCR-01 for cross slope exceptions.
5. See Standard Drawing E 604-SWCR-12, -13, and -14 for Detectable Warning Surface placement, configuration, and details.
6. See Standard Drawing E 604-CCSJ-01 for sidewalk expansion joint details.

Compliant Slope Equations:

Ramp u_1 = Running Slope	$\frac{\text{Elev. 2 - Elev. 3}}{\text{Ramp Length}}$	≤ 8.33%
Turning Space u_2 = Running Slope	$\frac{\text{Elev. 1 - Elev. 2}}{\text{Sidewalk Width}}$	≤ 2.00%
Ramp and Turning Space u_3 = Cross Slope	$\frac{\text{Elev. 4 - Elev. 5}}{\text{Ramp or Turning Space Width}}$	≤ 2.00% 4

LEGEND:

- Buffer or Other Non-Walkable Surface
- Ramp
- Detectable Warning Surface
- TS Turning Space

INDIANA DEPARTMENT OF TRANSPORTATION

PERPENDICULAR CURB RAMP COMPONENT DETAILS

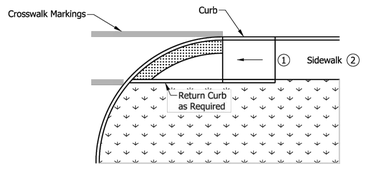
SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-04

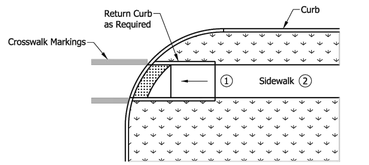
ELIZABETH W. PHILLIPS REGISTERED No. 10200124 STATE OF INDIANA PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE



ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP ADJACENT CURB



ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP WITH BUFFER

NOTES:

1. A turning space is not required at the top of the ramp for a one-way directional perpendicular curb ramp.
2. Where there is no buffer between the sidewalk and curb the preferred minimum sidewalk width is 6 ft. Where a buffer is placed between the sidewalk and curb, the preferred minimum sidewalk width is 5 ft. See Standard Drawing Series E 604-SDWK for sidewalk details.

LEGEND:

- Buffer or Other Non-Walkable Surface
- Ramp
- Detectable Warning Surface

INDIANA DEPARTMENT OF TRANSPORTATION

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP TYPICAL PLACEMENT

SEPTEMBER 2016

STANDARD DRAWING NO. E 604-SWCR-05

ELIZABETH W. PHILLIPS REGISTERED No. 10200124 STATE OF INDIANA PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/15/16
DESIGN STANDARDS ENGINEER DATE

/s/ Mark A. Miller 03/18/16
CHIEF ENGINEER DATE

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

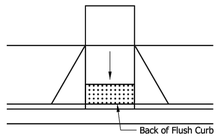
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

MISCELLANEOUS DETAILS

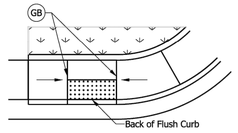
SHEET NO. 16

TOTAL SHEETS 21

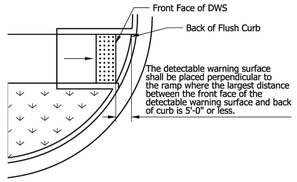
Drawing: X:\Butler\265123 Butler Streets Community Crossing\DWG\Sheets\265123-MS.dwg | Layout: MS-2 | Plotted: 01/10/24 @ 10:21:36 | LastSavedBy: JustinF

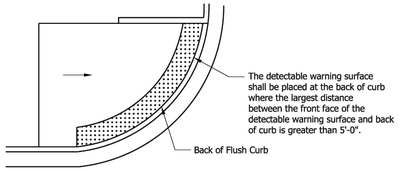


PERPENDICULAR CURB RAMP

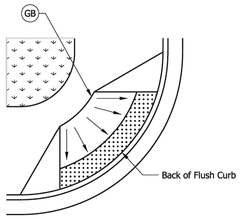


PARALLEL CURB RAMP (4)

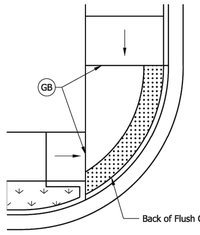




ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMPS ON A RADIUS (3)



BLENDED TRANSITION CURB RAMP (5)



DEPRESSED CORNER CURB RAMP (5) (7)

NOTES:

1. A detectable warning surface shall be placed at each street, highway, or railroad crossing. See Standard Drawing E 604-SDWK-03 for a detectable warning surface placement at a sidewalk driveway crossing.
2. The detectable warning surface shall extend a minimum of 2 ft in the direction of pedestrian travel and extend the full width as shown. The detectable warning surface shall not be placed across a grade break.
3. Where the distance from the face of the detectable warning surface is 5 ft or less from the back of curb, the detectable warning surface shall be placed perpendicular to the ramp. Where the distance from the face of the detectable warning surface is more than 5 ft from the back of curb, the detectable warning surface shall be placed at the back of curb as shown or in an alternate placement configuration. See Standard Drawing E 604-SWCR-13 for alternate detectable warning surface placement.
4. The detectable warning surface on a parallel curb ramp shall be placed on the turning space at the flush transition between the street and turning space at the back of curb.
5. The detectable warning surface on a blended transition or depressed corner shall be placed at the back of curb as shown or in an alternate placement configuration. See Standard Drawing E 604-SWCR-13 for alternate detectable warning surface placement.
6. See Standard Drawing E 604-SWCR-14 for detectable warning surface details.

LEGEND:

- Buffer or Other Non-Walkable Surface
- Detectable Warning Surface (DWS)
- Ramp
- GB Grade Break

INDIANA DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE PLACEMENT AND CONFIGURATION

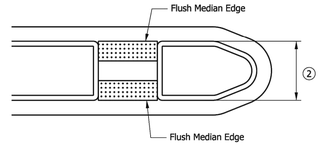
SEPTEMBER 2018

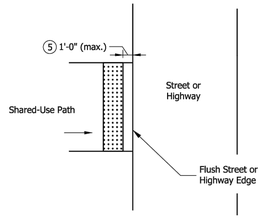
STANDARD DRAWING NO. E 604-SWCR-12

ELIZABETH W. PHILLIPS — REGISTERED — No. 10200124 — STATE OF INDIANA — PROFESSIONAL ENGINEER

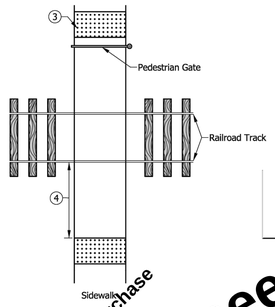
/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE





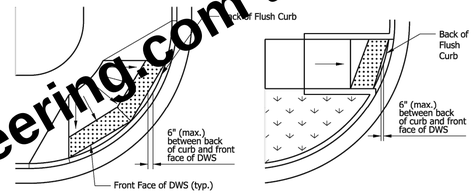
SHARED-USE PATH



RAILROAD CROSSING

LEGEND:

- Buffer or Other Non-Walkable Surface
- Detectable Warning Surface (DWS)
- Ramp
- GB Grade Break



ALTERNATE DETECTABLE WARNING SURFACE PLACEMENT (6)

NOTES:

1. The detectable warning surface shall extend a minimum lenght of 2 ft in the direction of pedestrian travel and extend the full width as shown. The detectable warning surface shall not be placed across a grade brea. The edges of adjacent panes shall be parallel and tightly abutted.
2. The detectable warning surface on a median cut-through shall be placed at the flush transition between the street and median cut-through. Where a median is less than 6ft, a detectable warning surface shall not be placed.
3. Where a pedestrian gate is provided at a railroad crossing, the detectable warning surface shall be placed on the side of the gate opposite the railroad crossing.
4. The edge of the detectable warning surface nearest to the railroad crossign shall be placed 6 ft minimum and 15 ft maximum from the centerline of the nearest rail.
5. Where shared-use path intersects a street or highway, the detectable warning surface shall be placed on the shared-use path within 1 ft of the street or highway edge.
6. Plate ends shall be placed at the back of curb. The distance between the back of curb and the front face of the detectable warning surface shall not exceed 6 in. between the ends.
7. See Standard Drawing E 604-SWCR-14 for detectable warning surface details.

INDIANA DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE PLACEMENT AND CONFIGURATION

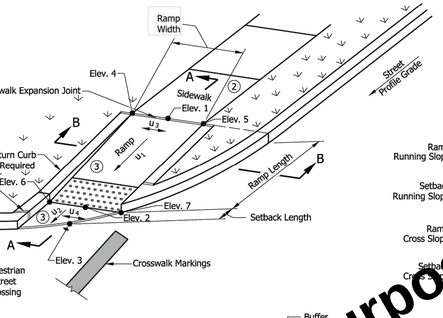
SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-13

ELIZABETH W. PHILLIPS — REGISTERED — No. 10200124 — STATE OF INDIANA — PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE



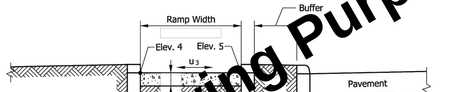
Component Slope Equations:

Ramp u_1 = Running Slope $\frac{|\text{Elev. 1} - \text{Elev. 2}|}{\text{Ramp Length}} \leq 8.33\%$

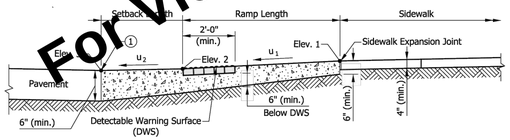
Setback u_2 = Running Slope $\frac{|\text{Elev. 2} - \text{Elev. 3}|}{\text{Setback Length}}$ = the slope of the adjacent street

Ramp u_3 = Cross Slope $\frac{|\text{Elev. 4} - \text{Elev. 5}|}{\text{Ramp Width}} \leq 2.00\%$ (4)

Setback u_2 = Cross Slope $\frac{|\text{Elev. 6} - \text{Elev. 7}|}{\text{Ramp Width}} \leq 2.00\%$ (4)



SECTION B-B



SECTION A-A

NOTES:

1. The bottom edge of the ramp or setback and top of curb shall be flush with the edge of adjacent pavement and gutter line.
2. A turning space is not required at the top of the ramp for one-way directional perpendicular curb ramp.
3. Curb ramp surface shall be coarse broom transverse to the running slope.
4. See Standard Drawing E 604-SWCR-01 for ramp slope exceptions.
5. See Standard Drawing E 604-SWCR-12, -13, and -14 for Detectable Warning Surface placement, configuration, and details.
6. See Standard Drawing E 604-SDWK-01 for sidewalk expansion joint details.

LEGEND:

- Buffer or Other Non-Walkable Surface
- Ramp
- Detectable Warning Surface

INDIANA DEPARTMENT OF TRANSPORTATION

ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP COMPONENT DETAILS

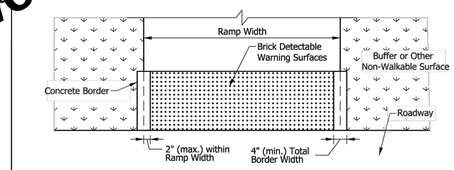
SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-06

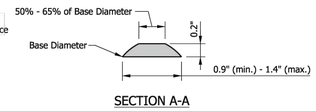
ELIZABETH W. PHILLIPS — REGISTERED — No. 10200124 — STATE OF INDIANA — PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

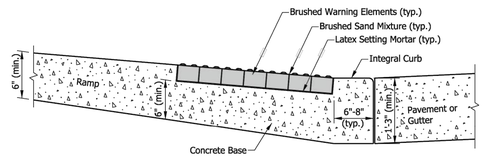
/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE



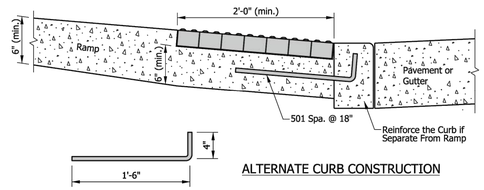
BRICK DETECTABLE WARNING SURFACE WITH CONCRETE BORDER (6) (7)



SECTION A-A

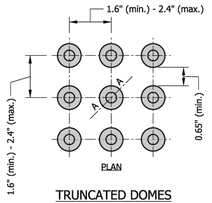


TYPICAL RAMP AND BRICK SURFACE CONSTRUCTION DETAIL

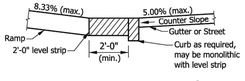


501 x 1'-10"

ALTERNATE CURB CONSTRUCTION



TRUNCATED DOMES



CHANGE OF GRADE > 11% (5)

NOTES:

1. Detectable warning surface shall consist of truncated domes. Domes shall be aligned in a square or radial grid pattern with diameter and center-to-center spacing within the ranges specified.
2. The detectable warning surface may be field cut. Truncated dome spacing between adjacent panels shall be within the ranges specified.
3. The detectable warning surface shall contrast visually with adjacent surfaces, either light-on-dark or dark-on-light.
4. The detectable warning surface shall extend a minimum of 2 ft in the direction of pedestrian travel and extend the full width as shown. The detectable warning surface shall not be placed across a grade break.
5. The maximum counter slope of the gutter or street at the bottom of the ramp shall be 5.00%. Where the algebraic difference between the running slope and the counter slope exceeds 11%, a 2-ft minimum level strip should be provided at the bottom of the ramp.
6. Where a concrete border is used for forming, the border shall be cast monolithically with the curb ramp concrete. The concrete border shall not reduce the ramp width by more than 2 in. on each side.
7. Where forming other than a concrete border is used, the edge restraint shall not encroach upon the ramp width.

INDIANA DEPARTMENT OF TRANSPORTATION

DETECTABLE WARNING SURFACE DETAILS

SEPTEMBER 2018

STANDARD DRAWING NO. E 604-SWCR-14

ELIZABETH W. PHILLIPS — REGISTERED — No. 10200124 — STATE OF INDIANA — PROFESSIONAL ENGINEER

/s/ Elizabeth W. Phillips 03/29/18
DESIGN STANDARDS ENGINEER DATE

/s/ John Leckie 04/25/18
CHIEF ENGINEER DATE

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER — REGISTERED — No. 10606088 — STATE OF INDIANA — PROFESSIONAL ENGINEER — 01/10/24

WESSLER ENGINEERING — More than a Project™

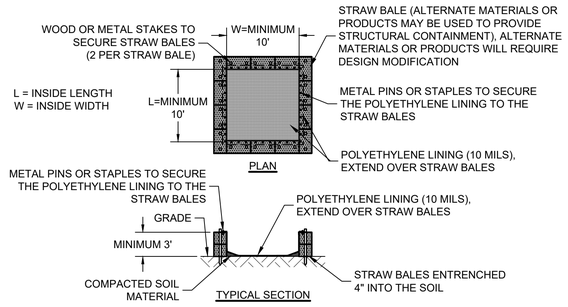
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

MISCELLANEOUS DETAILS

SHEET NO. 17

TOTAL SHEETS 21

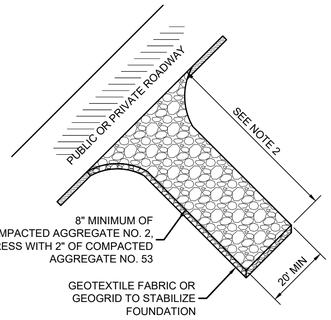


NOTES:
1. LOCATE WASHOUTS AT LEAST 50' FROM ANY CREEKS, WETLANDS, DITCHES, KARST FEATURES, OR STORM DRAIN/CONVEYANCES.

WASHOUT PROCEDURES:
1. DO NOT LEAVE EXCESS MUD IN THE CHUTES OR HOPPER AFTER POURING CONCRETE. MAKE EVERY EFFORT TO EMPTY THE CHUTE AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT FLOW TO AN AREA THAT IS TO BE PROTECTED.
2. SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON-WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
3. STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE WATER IS NOT BEING CONTAINED WITHIN THE WASHOUT AREA.
4. DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE.
5. DO NOT USE ADDITIVES WITH WASH WATER.
6. DO NOT WASH OUT OR DRAIN WASTE WATERS TO STORM DRAINS, WETLANDS, STREAMS, RIVERS, CREEKS, DITCHES OR STREETS.

MAINTENANCE:
1. MAINTENANCE REQUIREMENTS PROVIDED IN SPECIFICATIONS.

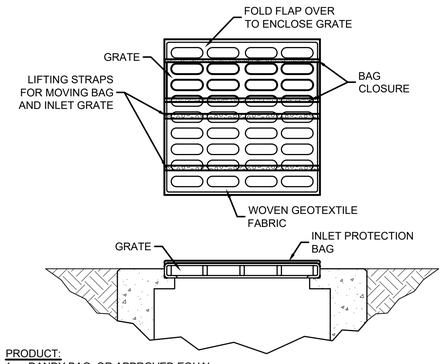
CONCRETE WASHOUT
SCALE: NONE



NOTES:
1. PLACE CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS AND AT ALL TEMPORARY CONSTRUCTION DRIVES THAT ARE INSTALLED.
2. FOR LARGE SITES (2 ACRES OR LARGER) THE MINIMUM LENGTH IS 150'. FOR SMALLER SITES (LESS THAN 2 ACRES) THE MINIMUM LENGTH IS 50'.
3. PROVIDE CULVERT OR OTHER METHODS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.

MAINTENANCE:
1. INSPECT DAILY AND REPLACE DISPLACED STONE.
2. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED ONTO PAVEMENT/ROADWAY.
3. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
4. AT COMPLETION OF PROJECT COMPLETELY REMOVE AND RESTORE SITE TO ORIGINAL CONDITIONS, OR AS APPLICABLE USE FOR BASE OF NEW PERMANENT DRIVE, MAINTAINING DESIGN ELEVATIONS AND SECTION.

CONSTRUCTION ENTRANCE
SCALE: NONE



PRODUCT:
1. DANDY BAG, OR APPROVED EQUAL.

INSTALLATION:
1. THE EMPTY INLET PROTECTION BAG SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END.
2. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE.
3. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

MAINTENANCE:
1. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT.
2. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE INLET PROTECTION BAG AS NEEDED.
3. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND ONCE EVERY 7 CALENDAR DAYS.

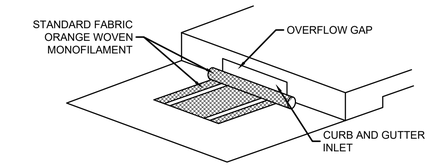
INLET PROTECTION BAG
SCALE: NONE

APPLICATIONS:
1. TOP OF SLOPES.
2. AT PROJECT PERIMETER.

INSTALLATION:
1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. USE THE APPROPRIATE SIZE, LENGTH AND DISTANCE BETWEEN TUBES AS SPECIFIED BY THE MANUFACTURER.
3. ENTRENCH PER MANUFACTURER'S INSTRUCTIONS.

MAINTENANCE:
1. REMOVE ALL ACCUMULATED SEDIMENT WHEN IT REACHES 1/4 THE HEIGHT OF THE TUBE.
2. REPAIR ERODED AND DAMAGED AREAS.
3. IF PONDING BECOMES EXCESSIVE DUE TO REDUCED FILTERING CAPACITY, REMOVE THE TUBE AND EITHER RECONSTRUCT OR REPLACE WITH NEW PRODUCT.
4. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.

FIBER FILTRATION TUBES - SLOPE
SCALE: NONE



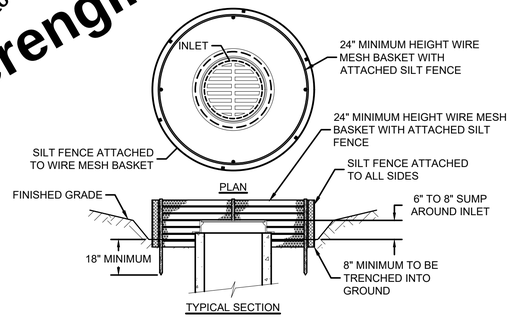
DESIGN CONFORMS TO ALL SHAPES OF CONCRETE CURBS

PRODUCT:
1. DANDY CURB SACK, OR APPROVED EQUAL.

INSTALLATION:
1. REMOVE THE GRATE FROM THE CATCH BASIN AND STAND ON END.
2. CRADLE THE GRATE BETWEEN THE UPPER AND LOWER STRAPS.
3. INSERT THE GRATE INTO THE INLET WITH THE LIFTING DEVICES. LOWER BACK EDGE WITH TUBE INTO PLACE. TUBE SHOULD PARTIALLY BLOCK THE CURB HOOD OPENING.

MAINTENANCE:
1. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT.
2. REMOVE THE SEDIMENT THAT HAS ACCUMULATED WITHIN THE FABRIC AS NEEDED.
3. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.

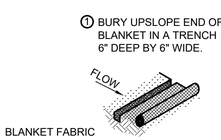
CURB AND GUTTER INLET PROTECTION
SCALE: NONE

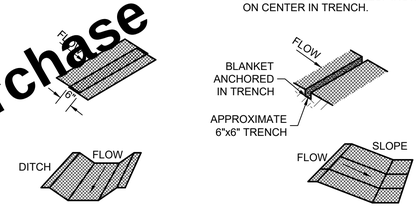


NOTES:
1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF WOVEN OR NON-WOVEN GEOTEXTILE FABRIC AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:
   a. TEXTILE STRENGTH AT 20% (MAXIMUM) ELONGATION, PER ASTM D4632.
   b. WOVEN EXTRA STRENGTH - 50 LB/LIN IN. (MINIMUM), NON-WOVEN EXTRA STRENGTH - 70 LB/IN. (MINIMUM).
   c. WOVEN STANDARD STRENGTH - 30 LB/LIN IN. (MINIMUM), NON-WOVEN STANDARD STRENGTH - 50 LB/IN. (MINIMUM).
   d. APPARENT OPENING SIZE (AOS) (U.S. SIEVE) - NO. 30 PARTICLE SIZE OF 0.6 mm (MAXIMUM), PER ASTM D4751.
   e. PERMITTIVITY - 0.05 S^{-1} (MAXIMUM), PER ASTM D4491.
2. WHEN STANDARD STRENGTH FILTER FABRIC IS USED WITH A WIRE MESH SUPPORT FENCE FASTEN THE FABRIC SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY 1" WIRE STAPLES, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2" AND SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.

MAINTENANCE:
1. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND DAILY DURING PROLONGED RAINFALL. INSPECT AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. REPLACE THE FABRIC PROMPTLY IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE. IMMEDIATELY MAKE ANY REQUIRED REPAIRS.
3. REMOVE SEDIMENT DEPOSITS FROM THE POOL AREA AFTER EACH STORM EVENT AND WHEN IT REACHES HALF THE HEIGHT OF THEE BARRIER.
4. SPREAD ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED, AND DRESS TO CONFORM WITH THE FINISHED GRADING.

SILT FENCE INLET SEDIMENT BARRIER
SCALE: NONE





PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW. DO NOT JOIN STRIPS IN THE CENTER OF THE DITCH. USE CHECK SLOTS AS REQUIRED.

PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW AND ANCHOR SECURELY. BRING BLANKET TO A LEVEL AREA BEFORE TERMINATING THE INSTALLATION.

PRODUCT:
1. NORTH AMERICAN GREEN SC150, OR EQUAL.

NOTES:
1. PROTECT THE SLOPES WITH AN EROSION CONTROL BLANKET WHERE CONSTRUCTION DISTURBS SLOPES EQUAL OR STEEPER THAN 3:1.

MAINTENANCE:
1. INSPECT FOR EROSION AFTER EACH STORM EVENT DURING VEGETATION ESTABLISHMENT, AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. IF ANY AREAS SHOW EROSION, PULL BACK THAT PORTION OF THE BLANKET, ADD SOIL, RESEED, RELAY AND STAPLE THE BLANKET.
3. CHECK AREAS PERIODICALLY AFTER VEGETATION ESTABLISHMENT.

EROSION CONTROL BLANKET
SCALE: NONE

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

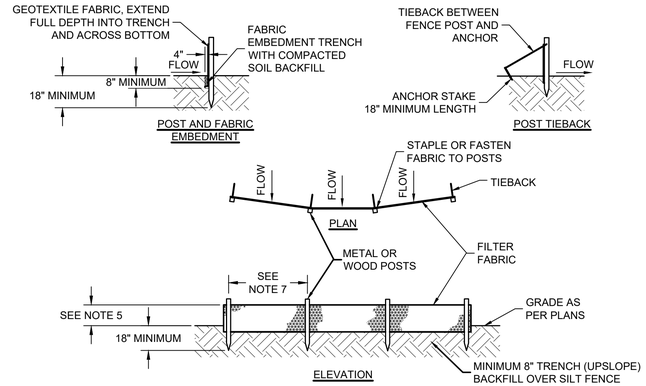
JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

EROSION CONTROL DETAILS

SHEET NO. **18**
TOTAL SHEETS 21



NOTES:
1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF WOVEN OR NON-WOVEN GEOTEXTILE FABRIC AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:
   a. TEXTILE STRENGTH AT 20% (MAXIMUM) ELONGATION, PER ASTM D4632.
   b. WOVEN EXTRA STRENGTH - 50 LB/LINEAR INCH (MINIMUM), NON-WOVEN EXTRA STRENGTH - 70 LB/INCH (MINIMUM).
   c. WOVEN STANDARD STRENGTH - 30 LB/LINEAR INCH (MINIMUM), NON-WOVEN STANDARD STRENGTH - 50 LB/INCH (MINIMUM).
   d. APPARENT OPENING SIZE (AOS) (U.S. SIEVE) - NO. 30 PARTICLE SIZE OF 0.6 mm (MAXIMUM), ASTM D4751.
   e. PERMITTIVITY - 0.05 S^{-1} (MAXIMUM), ASTM D4491.
2. POSTS FOR SILT FENCES SHALL BE EITHER 2"X2" SQUARE WOOD OR EQUIVALENT METAL POSTS WITH A MINIMUM LENGTH OF 5'. METAL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
3. ANCHOR STAKES FOR SILT FENCES SHALL BE 1"x2" WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 18".
4. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42" IN HEIGHT, A MINIMUM OF 14 GAUGE, AND SHALL HAVE A MAXIMUM MESH SPACING OF 6".
5. THE HEIGHT OF THE BARRIER SHALL BE A MINIMUM OF 18" AND A MAXIMUM OF 30".
6. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER FABRIC SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP, AND SECURELY SEALED.
7. POSTS SHALL BE SPACED A MAXIMUM OF 6' APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 18"). WHEN STANDARD STRENGTH FABRIC IS USED WITH THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 8'.
8. THE SPACING OF TIEBACKS SHALL EQUAL THE SPACING OF THE POSTS. ADDITIONAL POST DEPTH OR TIEBACKS MAY BE REQUIRED IN UNSTABLE SOILS.
9. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE AND A MINIMUM OF 8" DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
10. WHEN STANDARD STRENGTH FILTER FABRIC IS USED WITH A WIRE MESH SUPPORT FENCE IT SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY 1" WIRE STAPLES, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2" AND SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE.
11. THE STANDARD STRENGTH FILTER FABRIC, WITHOUT A WIRE MESH SUPPORT FENCE, SHALL BE STAPLED OR WIRED TO THE FENCE, AND A MINIMUM 8" OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36" ABOVE THE ORIGINAL GROUND SURFACE. DO NOT STAPLE FILTER FABRIC TO EXISTING TREES.
12. WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND POST SPACING IS LESS THAN THE MAXIMUM SPECIFIED SPACING OF 6', THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED.
13. BACKFILL THE TRENCH AND COMPACT THE SOIL OVER THE FILTER FABRIC.
14. REMOVE SILT FENCES WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
15. SILT FENCE SHALL NOT BE USED AS A DIVERSION AND SHALL NOT BE INSTALLED ACROSS A STREAM, CHANNEL, DITCH, SWALE, ETC.

MAINTENANCE:
1. INSPECT AFTER EACH RAINFALL AND DAILY DURING PROLONGED RAINFALL. INSPECT AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. REPLACE OR REPAIR FABRIC IMMEDIATELY IF IT DECOMPOSES OR IS INEFFECTIVE.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY HALF THE HEIGHT OF THE BARRIER.
4. SPREAD ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED AND DRESS TO CONFORM WITH THE FINISHED GRADING.

SILT FENCE
SCALE: NONE

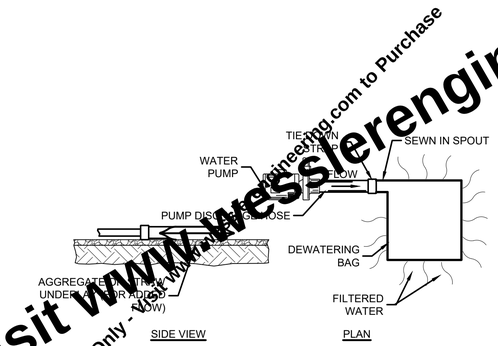
SEASONAL SOIL PROTECTION CHART

STABILIZATION PRACTICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
PERMANENT SEEDING						A						
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C, E				E		D			
SODDING						F						
MULCHING						G						

A. = KENTUCKY BLUEGRASS 40 LB/ACRE
B. = KENTUCKY BLUEGRASS 210 LB/ACRE
C. = SPRING OATS 100 LB/ACRE (1" PLANTING DEPTH)
D. = WHEAT OR RYE 150 LB/ACRE (1" - 1.5" PLANTING DEPTH)
E. = ANNUAL RYEGRASS 40 LB/ACRE (1/4" PLANTING DEPTH)
F. = SOD
G. = ANCHORED STRAW/HAY (2 TONS/ACRE) OR WOOD FIBER/CELLULOSE (1 TON/ACRE)

NOTES:
1. IRRIGATION NEEDED DURING MAY THROUGH SEPTEMBER.
2. IRRIGATION NEEDED FOR 2 TO 3 WEEKS AFTER APPLYING SOD.
3. ANCHORED MULCH IS REQUIRED FOR PERMANENT, DORMANT AND TEMPORARY SEEDING.
4. OPTIMUM SEEDING DATES PROVIDED. DATES MAY BE EXTENDED OR SHORTENED BASED ON PROJECT LOCATION.
5. SEED MIXTURES PROVIDED FOR LAWNS AND HIGH MAINTENANCE AREAS.

MAINTENANCE:
1. INSPECT WITHIN 24 HOURS OF EACH RAIN EVENT AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. CHECK FOR EROSION AND MOVEMENT OF MULCH AND REPAIR IMMEDIATELY.
3. MONITOR FOR EROSION DAMAGE AND ADEQUATE COVER (70% DENSITY).
4. RESEED, FERTILIZE OR APPLY MULCH WHERE NECESSARY.



MECHANICAL PROPERTIES	TEST METHOD	UNITS	INDUSTRY STANDARD
GRAB TENSILE STRENGTH	ASTM D4632	kN (LB)	0.9 (205) X 0.9 (205)
GRAB TENSILE ELONGATION	ASTM D4632	%	50 X 50
PUNCTURE STRENGTH	ASTM D4833	kN (LB)	0.58 (130)
MULLEN BURST STRENGTH	ASTM D3786	kPa (PSI)	2618 (380)
TRAPEZOID TEAR STRENGTH	ASTM D4533	kN (LB)	0.36 (80) X 0.36 (80)
UV RESISTANCE	ASTM D4355	%	70
APPARENT OPENING SIZE	ASTM D4751	Mm (US STD SIEVE)	0.180 (80)
FLOW RATE	ASTM D4491	1/MIN/M² (GAL/MIN/FT²)	3866 (95)
PERMITTIVITY	ASTM D4491	S^{-1}	1.2

MAINTENANCE:
1. DURING THE ACTIVE DEWATERING PROCESS, INSPECTION OF THE PUMPING BAG SHOULD BE REVIEWED FREQUENTLY. SPECIAL ATTENTION SHOULD BE PAID TO THE BUFFER AREA FOR ANY SIGN OF EROSION AND CONCENTRATION OF FLOW. OBSERVE WHERE POSSIBLE THE VISUAL QUALITY OF THE EFFLUENT AND DETERMINE IF ADDITIONAL TREATMENT CAN BE PROVIDED.
2. DISPOSE OF ACCUMULATED SEDIMENT REMOVED DURING PUMPING OPERATIONS IN CONFORMANCE WITH THE SPECIFICATIONS.
3. REPLACE THE BAG OR DISPOSE OF SILT WHEN HALF FULL OF SEDIMENT OR WHEN SEDIMENT HAS REDUCED THE FLOW RATE TO AN IMPRACTICAL RATE.

SOURCE:
KRISTAR
DANDY DEWATERING BAG
SEDCATCH

PUMPING BAG
SCALE: NONE

EROSION CONTROL SCHEDULE

CONSTRUCTION ACTIVITY	SCHEDULE CONSIDERATION
PRECONSTRUCTION ACTIVITIES: POST THE FOLLOWING INFORMATION NEAR THE MAIN ENTRANCE OF THE PROJECT SITE OR AT A PUBLICLY ACCESSIBLE LOCATION: NOTICE OF INTENT (NOI) DOCUMENT, COPY OF THE PUBLIC NOTICE, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NUMBER, NAME, ADDRESS, AND PHONE NUMBER OF THE LOCAL CONTACT PERSON, AND LOCATION OF A COPY OF THE CONSTRUCTION DRAWINGS AND STORMWATER POLLUTION PREVENTION PLAN (SWP3). MAINTAIN DOCUMENTATION ON-SITE PER SPECIFICATION 02101 FOR THE PROJECT MANAGEMENT LOG. THE SWPPP SHOULD BE ONSITE AND SELF-MONITORING INSPECTION REPORTS MUST BE AVAILABLE WITHIN 48 HOURS OF REQUEST. INFORM OR TRAIN PERSONNEL ASSOCIATED WITH THE PROJECT OF THE TERMS AND CONDITIONS OF THE AND THE SWPPP REQUIREMENTS.	AUTHORIZATION UNDER THE CSGP IS EFFECTIVE 48-HOURS AFTER SUBMITTAL OF THE NOTICE OF INTENT TO IDEM AND LOCAL AUTHORITY BY THE OWNER.
REVIEW THE EROSION CONTROL SCHEDULE, DRAWINGS AND REVISE AS NEEDED TO ASSURE CONSTRUCTION ACTIVITIES TO MINIMIZE THE FOOTPRINT OF DISTURBED UNSTABLE AREAS. SUBMIT REVISED EROSION CONTROL SCHEDULE, DRAWINGS FOR TEMPORARY AND PERMANENT EROSION CONTROL WORK AS APPLICABLE.	COMPLETE BEFORE CONSTRUCTION BEGINS.
CONSTRUCTION ACCESS - ENTRANCE TO SITE, CONSTRUCTION ROUTES, AREAS DESIGNATED FOR EQUIPMENT PARKING OR MATERIAL STAGING AND WASTE HANDLING.	THIS IS THE FIRST LAND-DISTURBING ACTIVITY. AS SOON AS CONSTRUCTION BEGINS, STABILIZE ANY BARE AREAS WITH AGGREGATE AND TEMPORARY VEGETATION.
SEDIMENT TRAPS AND BARRIERS - BASIN TRAPS, SILT FENCE AND PERIMETER PROTECTION.	AFTER CONSTRUCTION IS ACCESSED, BASINS SHALL BE INSTALLED, WITH THE ADDITION OF MORE TRAPS AND BARRIERS AS NEEDED DURING GRADING. SET UP PROTECTION FOR NATURAL FEATURES, TREES AND BUFFERS.
RUNOFF CONTROL - DIVERSIONS, PERIMETER PROTECTION, CHECK DAMS, OUTLET PROTECTION.	RUNOFF CONTROL PRACTICES SHALL BE INSTALLED AFTER THE INSTALLATION OF SEDIMENT TRAPS AND BEFORE LAND GRADING. ADDITIONAL RUNOFF CONTROL MEASURES MAY BE INSTALLED DURING GRADING.
RUNOFF CONVEYANCE SYSTEM - STABILIZE STREAM BANKS, STORM DRAINS, CHANNELS, INLET AND OUTLET PROTECTION, SLOPE DRAINS.	AS NECESSARY, STABILIZE STREAM BANKS AND SIDE SLOPES OF RUNOFF SYSTEMS AS SOON AS POSSIBLE. USE EROSION CONTROL BLANKETS OR SLOPE DRAINS TO PREVENT EROSION. INSTALL INLET PROTECTION TO PREVENT SEDIMENTS FROM ENTERING STORM DRAINAGE SYSTEMS. PROTECT STORM OUTLETS TO PREVENT EROSION.
LAND CLEARING AND GRADING - SITE PREPARATION (CUTTING, FILLING, AND GRADING, SEDIMENT TRAPS, BARRIERS, DIVERSIONS, DRAINS, SURFACE ROUGHENING).	IMPLEMENT CLEARING AND GRADING AFTER INSTALLATION OF SEDIMENT TRAPS AND RUNOFF CONTROL MEASURES, AND INSTALL ADDITIONAL CONTROL MEASURES AS GRADING CONTINUES. CLEAR BORROW AND DISPOSAL AREAS AS NEEDED.
SURFACE STABILIZATION - TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIPRAP, EROSION CONTROL BLANKET.	APPLY TEMPORARY OR PERMANENT STABILIZING MEASURES IMMEDIATELY TO ANY DISTURBED AREAS WHERE WORK HAS BEEN EITHER COMPLETED OR DELAYED.
CONSTRUCTION - STRUCTURES, UTILITIES, PAVING, CONCRETE WASHOUT, AND CONSTRUCTION ENTRANCES.	DURING CONSTRUCTION, INSTALL ANY EROSION AND SEDIMENTATION CONTROL MEASURES THAT ARE NEEDED.
LANDSCAPING AND FINAL STABILIZATION - TOPSOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING, RIPRAP.	THIS IS THE LAST CONSTRUCTION PHASE. STABILIZE ALL DISTURBED AREAS, INCLUDING BORROW AND SPOIL AREAS, AND REMOVE ALL TEMPORARY CONTROL MEASURES. FINAL STABILIZATION IS WHEN A UNIFORM DENSITY OF 70% VEGETATION COVER IS MET. PROVIDE NOTIFICATION TO THE OWNER WHEN THE ENTIRE SITE HAS BEEN STABILIZED AND ALL CONSTRUCTION MATERIALS, WASTES, AND EQUIPMENT HAVE BEEN REMOVED.

EROSION CONTROL SCHEDULE
SCALE: NONE

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

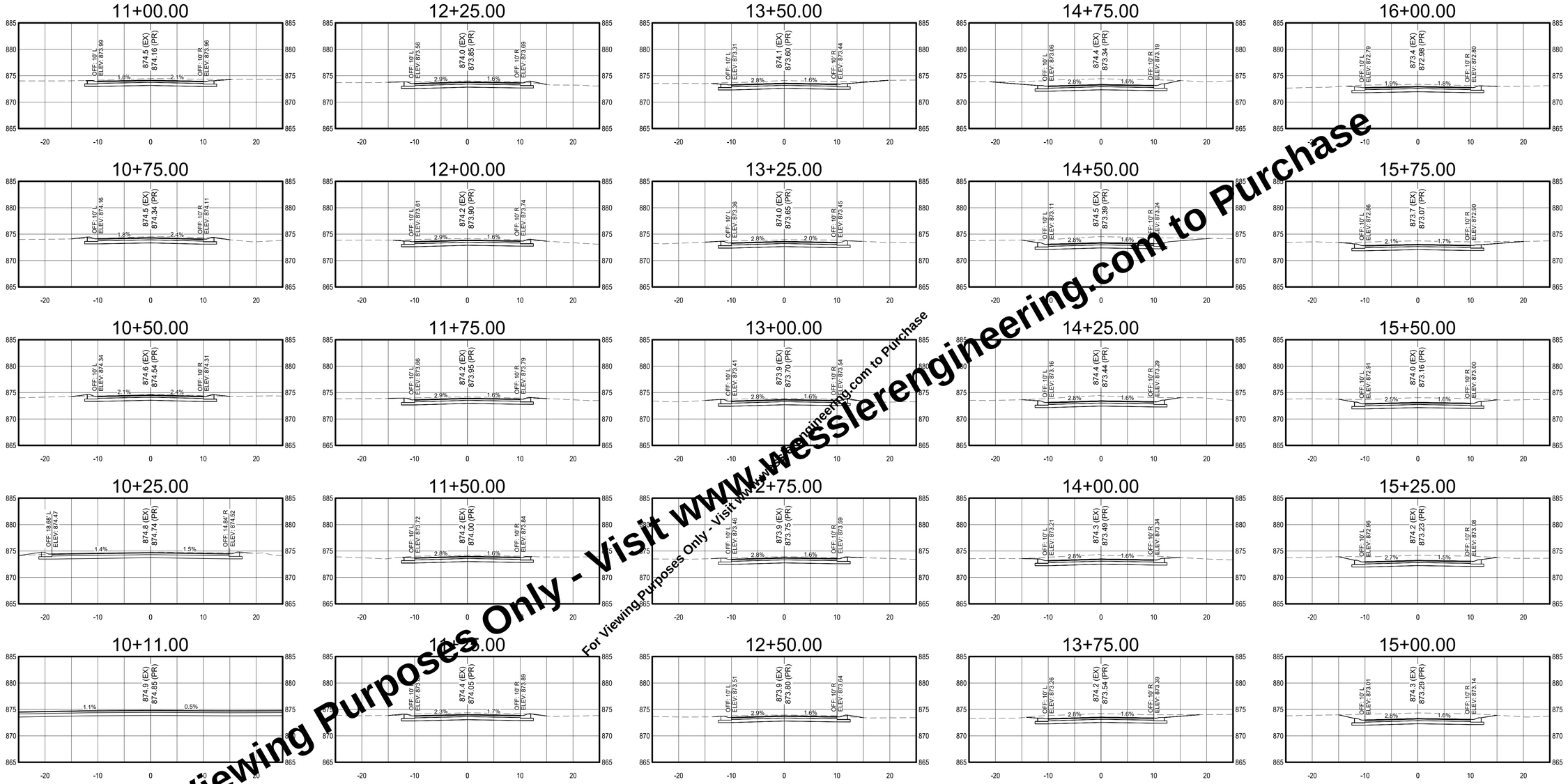
JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
10/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

EROSION CONTROL DETAILS

SHEET NO. 19
TOTAL SHEETS 21



CROSS SECTIONS

(WALNUT ST - FEDERAL AVE TO WESTERN AVE)

0 5 10 20 FT

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL				
	APPROVED BY	JRF				
	ISSUE DATE	JANUARY 2024				
	PROJECT NUMBER	265123-04-001				

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER 01/10/24

WESSLER ENGINEERING
More than a Project™

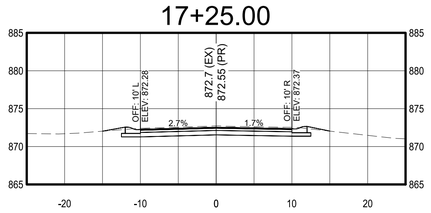
2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

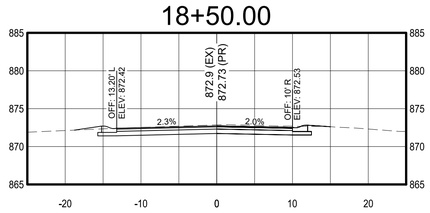
BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

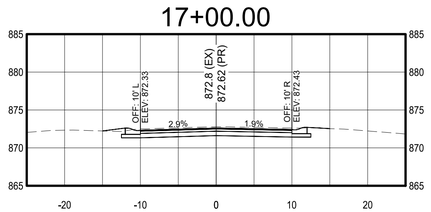
CROSS SECTIONS - WALNUT ST

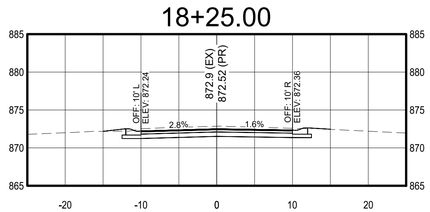
SHEET NO. **20**

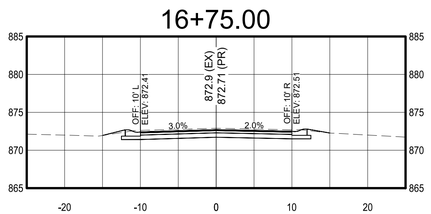
TOTAL SHEETS 21

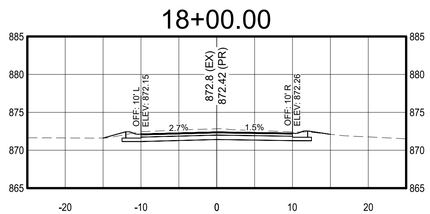


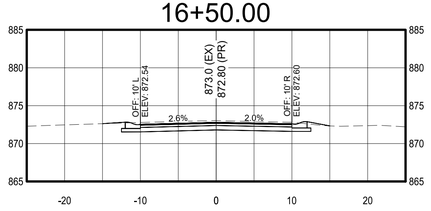


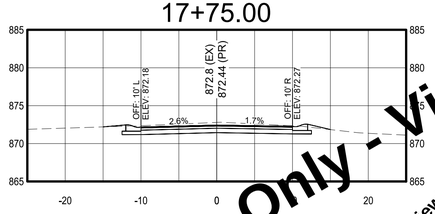


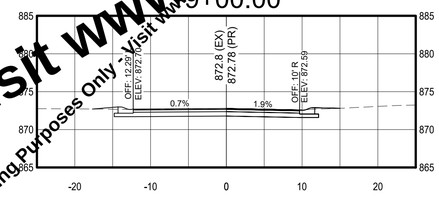


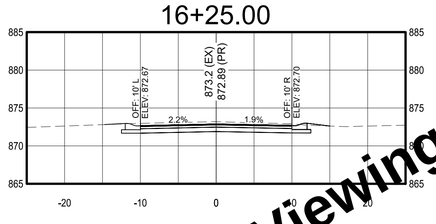


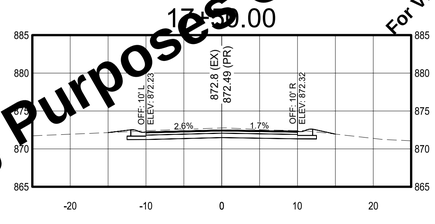


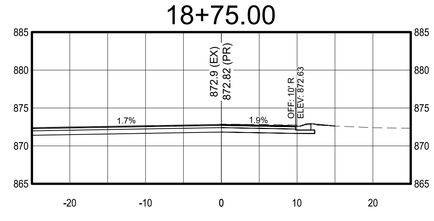












CROSS SECTIONS
(WALNUT ST - FEDERAL AVE TO WESTERN AVE)

0 5 10 20 FT

SCALE VERIFICATION	DRAWN BY	DMG	NO.	DATE	INITIALS	REVISION DESCRIPTIONS	
BAR IS ONE INCH LONG ON ORIGINAL DRAWING	CHECKED BY	JLL					
	APPROVED BY	JRF					
	ISSUE DATE	JANUARY 2024					
	PROJECT NUMBER	265123-04-001					

JUSTIN R. FRAZIER REGISTERED No. 10606088 STATE OF INDIANA PROFESSIONAL ENGINEER
01/10/24

WESSLER ENGINEERING
More than a Project™

2023 COMMUNITY CROSSINGS ROAD IMPROVEMENTS

BOARD OF PUBLIC WORKS AND SAFETY
CITY OF BUTLER INDIANA

CROSS SECTIONS - WALNUT ST

SHEET NO. **21**

TOTAL SHEETS 21