

# HURON COUNTY ENGINEER HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)

## FITCHVILLE TOWNSHIP HURON COUNTY

### PROJECT DESCRIPTION

THE PROJECT CONSISTS OF UTILIZING THE EXISTING FITCHVILLE RIVER RD. HORIZONTAL ALIGNMENT FOR PLANING AND RESURFACING; REALIGNMENT OF A PORTION OF FITCHVILLE RIVER RD. ON AN IMPROVED VERTICAL ALIGNMENT; REALIGNMENT OF PROSPECT RD. ON AN IMPROVED HORIZONTAL AND VERTICAL ALIGNMENT; PAVEMENT RECONSTRUCTION; SHOULDER IMPROVEMENTS; GRADING; DRAINAGE AND TRAFFIC CONTROL

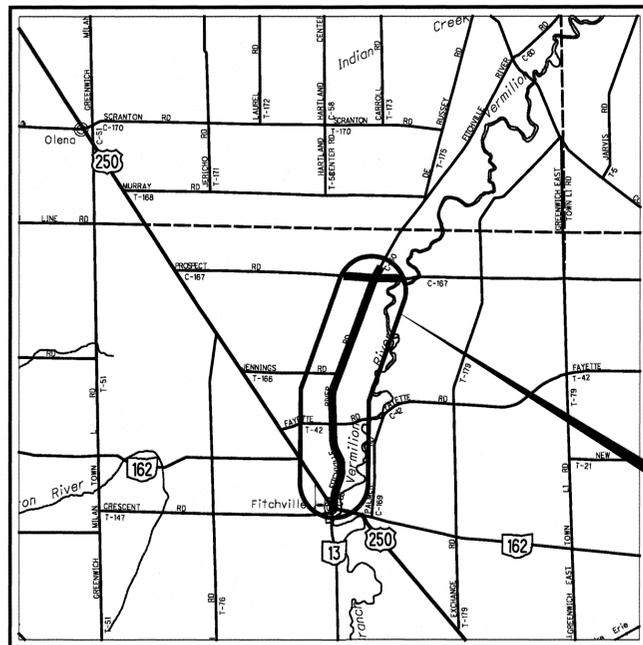
PROJECT LENGTH = 2.9 MILES.

PROJECT EARTH DISTURBED AREA: 2.58 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.00 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: 2.58 ACRES

### 2019 SPECIFICATIONS

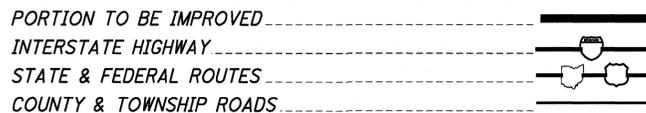
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 13-14.



LOCATION MAP

LATITUDE: 41°07'50" N LONGITUDE: 82°28'45" W



### INDEX OF SHEETS:

TITLE SHEET .....	1
SCHEMATIC/PROJECT SITE PLAN .....	2-4
TYPICAL SECTIONS .....	5
GENERAL NOTES .....	6-9
MAINTENANCE OF TRAFFIC .....	10-14
GENERAL SUMMARY .....	15-16
CALCULATIONS .....	17-24
SUBSUMMARIES .....	25-28
PLAN - CR 60 (FITCHVILLE RIVER RD.) .....	29-35
PLAN & PROFILE - CR 167 (PROSPECT RD.) .....	36-39
CROSS SECTIONS - CR 167 (PROSPECT RD.) .....	40-51
SUPERELEVATION TABLE .....	52
DRAINAGE DETAILS .....	53
TRAFFIC CONTROL PLAN .....	54-57
RIGHT OF WAY .....	58-64

### DESIGN DESIGNATION

	CR 60 (FITCHVILLE RIVER RD.)	CR 167 (PROSPECT RD.)
CURRENT ADT (2019) .....	1050	340
DESIGN YEAR ADT (2039) .....	1260	400
DESIGN HOURLY VOLUME (2039) .....	164	40
DIRECTIONAL DISTRIBUTION .....	57%	55%
TRUCKS (24 HOUR B&C) .....	19%	8%
DESIGN SPEED .....	55 MPH	*40 MPH
LEGAL SPEED .....	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	RURAL MINOR COLLECTOR	RURAL LOCAL
NHS PROJECT .....	NO	

\* AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS SECTION 5.2; TABLE 5-1 MINIMUM DESIGN SPEEDS FOR LOCAL RURAL ROADS AND AASHTO GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT<400)

### DESIGN EXCEPTIONS

NONE

PLAN PREPARED BY:

**RICHLAND ENGINEERING LIMITED**  
  
 29 NORTH PARK STREET  
 MANSFIELD OHIO 44902  
 PHONE: (419) 524-0074 FAX: (419) 524-1812

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

ENGINEERS SEAL:

STATE OF OHIO  
 REGISTERED PROFESSIONAL ENGINEER  
 PATRICK SCHWAN  
 61571  
 SIGNED: [Signature]  
 DATE: 8-13-19

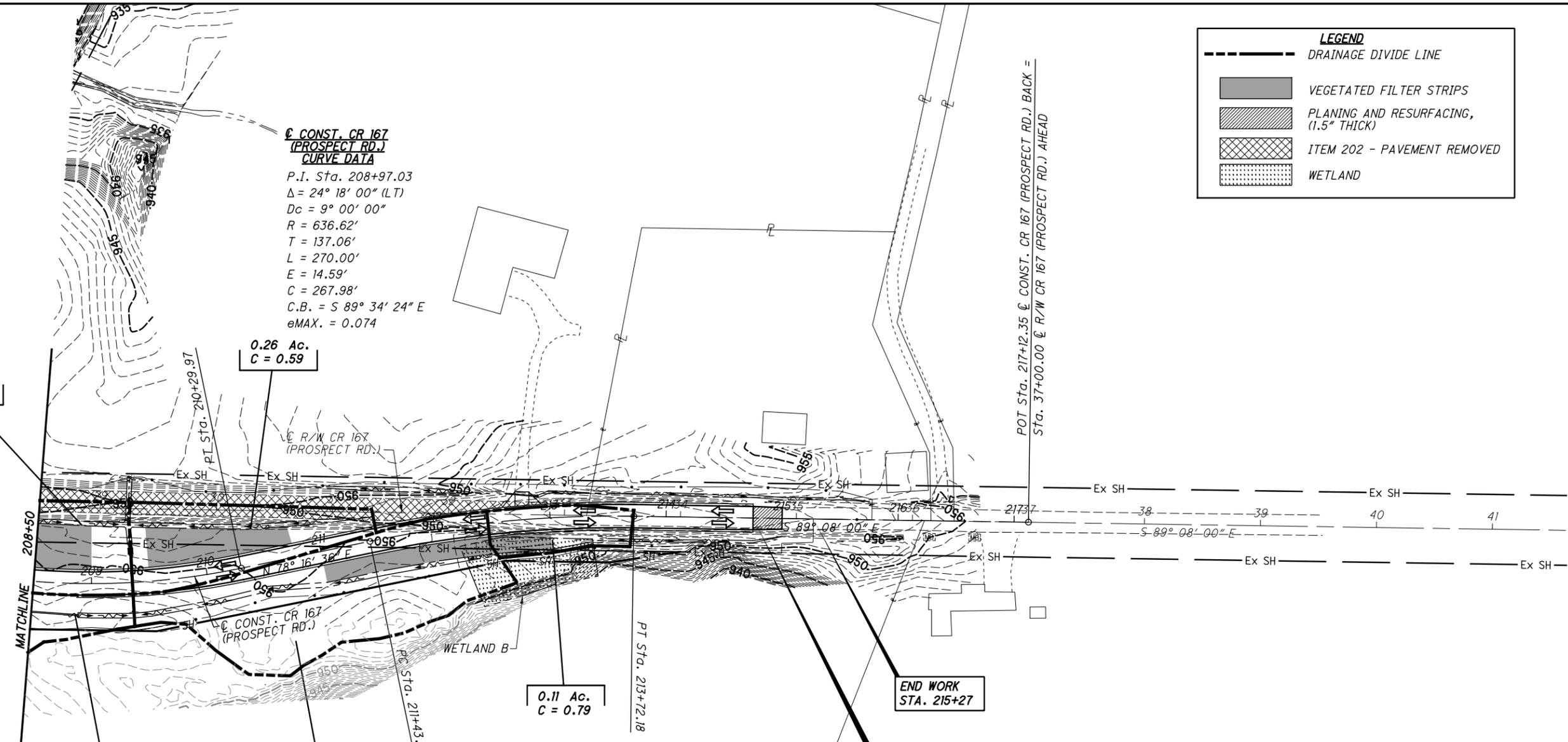
STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	7-18-14	HW-2.1	7-20-18	TC-41.20	10-18-13
BP-4.1	7-19-13	HW-2.2	7-20-18	TC-41.30	10-18-13
				TC-41.40	10-18-13
CB-4.2	1-18-13	MT-96.11	1-18-19	TC-42.20	10-18-13
		MT-96.20	7-15-16	TC-52.10	10-18-13
DM-1.1	7-21-17	MT-97.10	7-18-14	TC-52.20	7-20-18
		MT-97.11	4-19-19		
MGS-1.1	1-19-18	MT-99.20	4-19-19		
MGS-2.1	1-19-18	MT-101.60	1-20-17		
MGS-4.2	7-19-13	MT-101.90	7-21-17		
MGS-4.3	1-18-13				
MGS-5.3	7-15-16				
RM-1.1	7-18-14				

APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_ HURON COUNTY ENGINEER  
 APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_ HURON COUNTY COMMISSIONER  
 APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_ HURON COUNTY COMMISSIONER  
 APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_ HURON COUNTY COMMISSIONER

FEDERAL PROJECT NO. E160 (889)  
 PID NO. 102915  
 CONSTRUCTION PROJECT NO.  
 RAILROAD INVOLVEMENT NONE  
 HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)  
 1/64



F:\2015\15017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915GB002.dgn 10/31/2019 1:22:14 PM SteveMorr



**CONST. CR 167  
(PROSPECT RD.)  
CURVE DATA**  
 P.I. Sta. 208+97.03  
 $\Delta = 24^\circ 18' 00''$  (LT)  
 $D_c = 9^\circ 00' 00''$   
 $R = 636.62'$   
 $T = 137.06'$   
 $L = 270.00'$   
 $E = 14.59'$   
 $C = 267.98'$   
 $C.B. = S 89^\circ 34' 24'' E$   
 $eMAX. = 0.074$

0.26 Ac.  
C = 0.59

0.40 Ac.  
C = 0.62

0.11 Ac.  
C = 0.79

END WORK  
STA. 215+27

END PROJECT  
STA. 214+75.00  
E160 (889)

**CONST. CR 167  
(PROSPECT RD.)  
CURVE DATA**  
 P.I. Sta. 212+58.19  
 $\Delta = 12^\circ 35' 24''$  (RT)  
 $D_c = 5^\circ 30' 00''$   
 $R = 1,041.74'$   
 $T = 114.92'$   
 $L = 228.91'$   
 $E = 6.32'$   
 $C = 228.45'$   
 $C.B. = N 84^\circ 34' 18'' E$   
 $eMAX. = 0.058$

0.71 Ac.  
C = 0.52

0.54 Ac.  
C = 0.56

**LEGEND**

- DRAINAGE DIVIDE LINE
- VEGETATED FILTER STRIPS
- PLANING AND RESURFACING, (1.5" THICK)
- ITEM 202 - PAVEMENT REMOVED
- WETLAND

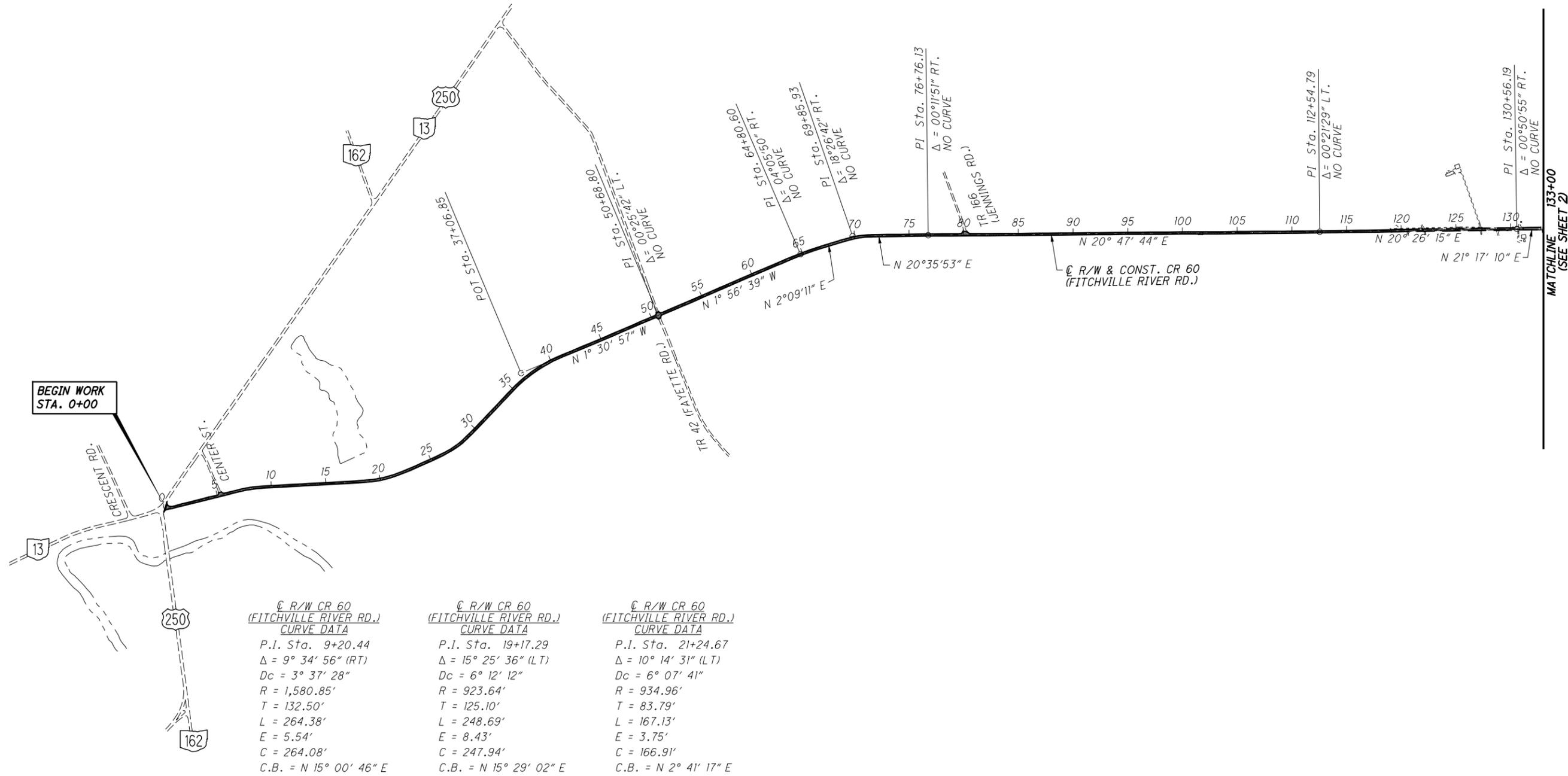
CALCULATED  
DAW  
CHECKED  
ALP

0 50 100  
25  
HORIZONTAL  
SCALE IN FEET

**SCHEMATIC / PROJECT SITE PLAN**

**HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)**

**NOTE**  
1. FOR NOTES SEE SHEET 2.



CALCULATED  
DAW  
CHECKED  
ALP

0 500 1000  
HORIZONTAL  
SCALE IN FEET

**SCHEMATIC / PROJECT SITE PLAN**

**HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)**



**ENGINEER**

THE TERM "ENGINEER" AS NOTED IN THE PLANS SHALL BE CONSIDERED THE "HURON COUNTY ENGINEER".

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

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

**WATER**

NORTHERN OHIO RURAL WATER  
2205 US 20  
NORWALK, OHIO 44857  
(419) 668-7213  
ATTN.: BRYAN PUDER

**ELECTRIC**

FIRELANDS ELECTRIC  
ONE ENERGY PLACE  
NEW LONDON, OHIO 44851  
(419) 929-1571  
ATTN.: DON ENGLT

**COMMUNICATIONS**

FRONTIER COMMUNICATIONS  
83 TOWNSEND AVENUE  
NORWALK, OHIO 44857  
(419) 744-3613  
ATTN.: SCOTT WETZEL

**CABLE**

CHARTER COMMUNICATIONS (TIME WARNER)  
1575 LEXINGTON AVE.  
MANSFIELD, OHIO 44904  
(330) 906-6096  
ATTN.: RON FERDINAND

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C. THE CONTRACTOR SHALL VERIFY OWNERSHIP AND LOCATION PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN PROXIMITY OF UTILITIES.

**SURVEING PARAMETERS**

**PROJECT BEARINGS**

BEARINGS ARE BASED ON A RTK GLOBAL POSITIONING TRAVERSE ORIGINATING ON THE ODOT CORS VRS NETWORK, BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, NAD83(2011), NORTH ZONE.

**HORIZONTAL DATUM**

NAD83(2011), NORTH ZONE

**VERTICAL DATUM**

NAVD88 DATUM PROVIDED BY HURON COUNTY ENGINEER.

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING. SEE TABLE ON THIS SHEET FOR PROJECT CONTROL INFORMATION.

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

**PROJECT CONTROL**

POSITIONING METHOD: RTK VRS GLOBAL POSITIONING  
MONUMENT TYPE: 5/8" REBAR WITH TRAVERSE CAP PROVIDED BY HURON COUNTY ENGINEER PT. 10083 AND 10404.

**VERTICAL POSITIONING**

ORTHOMETRIC HEIGHT DATUM: NAVD88 (PROVIDED BY HURON COUNTY ENGINEER)  
GEOID: GEOID12A

**HORIZONTAL POSITIONING**

REFERENCE FRAME: NAD83(2011)  
ELLIPSOID: GRS80  
MAP PROJECTION: LAMBERT CONIC CONFORMAL  
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE  
COMBINED SCALE FACTOR: 0.999899043  
PROJECT ADJUSTMENT FACTOR: 1.000100967  
ORIGIN OF COORDINATE SYSTEM: X=0, Y=0

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

UNITS ARE IN U.S. SURVEY FEET.

**WORK LIMITS**

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

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**CONSTRUCTION NOISE**

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

PROJECT CONTROL						
RIGHT OF WAY CR 167 (PROSPECT RD.)		PROJECT GROUND COORDINATES PAF = 1.000100967		PROJECT GRID COORDINATES NAD83(2011) DATUM		
STATION	OFFSET	NORTH (Y) U.S. FT.	EAST (X) U.S. FT.	NORTH (Y) U.S. FT.	EAST (X) U.S. FT.	DESCRIPTION
PROJECT CONTROL						
23+71.22	790.26'RT	532791.3805	1974027.2132	532737.5915	1973827.9213	5/8" REBAR FOUND
26+55.84	℄	533562.0209	1974361.2682	533508.1540	1974161.9426	IRON PIN IN MONUMENT BOX FOUND
28+15.82	264.69'LT	532791.3805	1974027.2132	532737.5915	1973827.9213	5/8" REBAR FOUND
RIGHT OF WAY CR 167 (PROSPECT RD.)						
200+00.00	℄	533603.5205	1973706.7418	533547.1726	1973498.3206	POT RIGHT OF WAY = POT STA. 20+00.00 RIGHT OF WAY
203+83.76	℄	533579.5371	1974089.7357	533523.1917	1973881.2741	PC RIGHT OF WAY = POT STA 23+83.76 RIGHT OF WAY
205+32.14	℄	533558.3460	1974236.4818	533502.0029	1974028.0047	PT RIGHT OF WAY
207+59.97	℄	533508.7359	1974458.8493	533452.3980	1974250.3487	PC RIGHT OF WAY
210+29.97	℄	533506.7402	1974726.8228	533450.4025	1974518.2939	PT RIGHT OF WAY
211+43.27	℄	533529.7609	1974837.7584	533473.4208	1974629.2178	PC RIGHT OF WAY
213+72.18	℄	533551.3721	1975065.1826	533495.0297	1974856.6180	PT RIGHT OF WAY = POT STA 33+59.84 RIGHT OF WAY
217+12.35	℄	533546.2267	1975405.3080	533489.8848	1975196.7075	POT RIGHT OF WAY = POT STA 37+00.00 RIGHT OF WAY

CALCULATED  
PRS  
CHECKED  
ALP

GENERAL NOTES

HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)

F:\2015\115017\_Huron County Safety Study\15017\roadway\sheets\102915IGN001.dgn 10/31/2019 1:23:59 PM SteveMorr

**ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN**

MISCELLANEOUS TREES OR STUMPS HAVE BEEN SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT. UNLESS SPECIFICALLY DESIGNATED "SAVE" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE RIGHT OF WAY AS APPROVED BY THE ENGINEER. ALL PROVISIONS AS SET FORTH IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS UNDER THIS ITEM SHALL BE ADHERED TO.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

SIZES	NO. TREES	NO. STUMPS	SUBTOTAL
18"	3	0	3
30"	3	0	3

PRIOR TO THE REMOVAL OF ANY MISCELLANEOUS OBSTRUCTIONS, WHICH MAY BE PERSONAL PROPERTY, THE CONTRACTOR SHALL CONTACT THE PROPERTY OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE NEED FOR REMOVAL TO ALLOW THE PROPERTY OWNER AN OPPORTUNITY TO REMOVE THE OBSTRUCTION PRIOR TO THE REMOVAL BY CONTRACTOR FORCES. ALL COSTS ASSOCIATED WITH THIS COORDINATION AND REMOVAL SHALL BE INCLUDED WITH ITEM 201.

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE COUNTY WILL REVIEW AND RECORD, INCLUDING PROJECT VIDEO TAPING, ALL PERSONAL PROPERTY ITEMS WITHIN THE PROJECT LIMITS. PERSONAL PROPERTY INCLUDES SUCH ITEMS AS SIGNING, LANDSCAPING PLANTS, LANDSCAPING IRRIGATION SYSTEMS, PAVEMENT, PARKING LOT LIGHTING, AND THE UNDERGROUND PLUMBING AND OR CABLING CONNECTING THESE SYSTEMS. NOTATIONS WILL BE MADE AS TO THE FUNCTIONALITY OF THE VARIOUS MECHANICAL AND ELECTRICAL SYSTEMS. A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, A REVIEW OF THE PERSONAL PROPERTY ITEMS WILL BE MADE TO ENSURE THAT THEY ARE FUNCTIONING AT THE SAME CAPACITY AS NOTED PRIOR TO THE CONSTRUCTION.

IN THE EVENT THAT PERSONAL PROPERTY ITEMS ARE LOCATED WITHIN THE CONSTRUCTION LIMITS THE CONTRACTOR SHALL IDENTIFY THE PERSONAL PROPERTY ITEM, NOTIFY THE PROJECT ENGINEER, DETERMINE IF IT WILL BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION ACTIVITIES. IF IT WILL BE IN CONFLICT, SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER INDICATING THE MEANS AND METHODS TO AVOID OR MINIMIZE THE CONFLICT OR TO REMOVE, RELOCATE, ABANDON AND/OR RECONSTRUCT THE ITEM. THE WRITTEN REQUEST MUST CLEARLY IDENTIFY THE ITEM AND EXPLAIN THE PROPOSED INTENTIONS TO DEAL WITH THE PERSONAL PROPERTY ITEM CONFLICT.

THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO MODIFY THE PERSONAL PROPERTY ITEM.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

ALL COSTS INCLUDING LABOR, MATERIALS, TOOLS, EQUIPMENT AND INCIDENTALS TO PERFORM THIS WORK AS APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN.

**ITEM SPECIAL - PIPE CLEANOUT, 24" AND UNDER**

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS AS DIRECTED BY THE ENGINEER. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER CMS 105.16 AND CMS 105.17. ALL PIPES SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL-PIPE CLEANOUT, 24" AND UNDER. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE ABOVE NOTED WORK:

ITEM SPECIAL - PIPE CLEANOUT, 24" AND UNDER	50 FT
---	-------

**SUBSURFACE INVESTIGATION**

IT IS THE OBLIGATION AND RESPONSIBILITY OF THE BIDDER TO MAKE HIS OWN INVESTIGATIONS OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. THE BIDDER MAY EXAMINE ANY EXISTING RECORDS OF TEST EXCAVATIONS AND OTHER SUBSURFACE INVESTIGATIONS FOR HIS OWN INFORMATION. ALL AVAILABLE SOIL INFORMATION IS ON FILE AT THE HURON COUNTY SOIL AND WATER CONSERVATION DISTRICT. THE CONTRACTOR AGREES THAT HE WILL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER IF, IN CARRYING OUT THE WORK, HE FINDS THAT THE ACTUAL SUBSURFACE CONDITIONS ENCOUNTERED DO NOT CONFORM TO THOSE INDICATED BY SAID BORINGS, TEST EXCAVATIONS OR OTHER SUBSURFACE INVESTIGATIONS.

**SOILS TECHNICIAN**

THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT, STATE CERTIFIED, SOILS TECHNICIAN, TO BE PRESENT AT THE JOB SITE DURING ITEMS OF WORK INVOLVING EXCAVATION, EMBANKMENT, SUBGRADE PREPARATION AND SUBGRADE COMPACTION. THE SOILS TECHNICIAN SHALL PERFORM ALL SOILS AND COMPACTION TESTS AS NECESSARY TO ENSURE THE EMBANKMENT MATERIALS, SOILS AND COMPACTION REQUIREMENTS OF THE SPECIFICATIONS ARE BEING MET. THE SOILS TECHNICIAN SHALL ASSIST THE OWNER IN DETERMINING THE LOCATIONS AND DEPTHS OF SOFT OR UNSUITABLE SUB-GRADE MATERIAL TO BE REMOVED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. THE SOILS TECHNICIAN SHALL FURNISH COPIES OF ALL TEST RESULTS TO THE OWNER AND AT COMPLETION OF THE EARTHWORK, SHALL CERTIFY THAT ALL EMBANKMENT MATERIALS, SOILS AND COMPACTION REQUIREMENTS OF THE SPECIFICATIONS HAVE BEEN MET.

ALL COSTS INVOLVED IN HIRING THE SOILS TECHNICIAN AND RELATED COSTS OF THE TECHNICIAN TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE UNIT PRICE BIDS FOR ITEM 203 - EXCAVATION AND ITEM 203 - EMBANKMENT.

**EARTHWORK FOR PROJECT TRANSITION**

A CONTINGENCY OF ITEM 203 - EMBANKMENT AND ITEM 203 - EXCAVATION IS BEING PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO TAPER THE EARTHWORK INTO THE EXISTING GROUND LINE WITHIN THE PROJECT LIMITS.

ITEM 203 - EXCAVATION	50 CY
ITEM 203 - EMBANKMENT	50 CY

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS SHALL BE AS DIRECTED BY THE ENGINEER. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 204.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS). UNSUITABLE SUBGRADE SHALL BE UNDERCUT 3' BELOW THE SUBGRADE.  
  
IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO CMS 204.03.
- THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.  
  
PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO CMS 204.06.
- EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO CMS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
- PROOF ROLL THE STABILIZED AREAS ACCORDING TO CMS 204.06 TO VERIFY STABILITY.
- FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 - EXCAVATION OF SUBGRADE.

**UNSUITABLE SUBGRADE**

THERE MAY BE UNSUITABLE MATERIAL WITHIN THE PROJECT LIMITS. WHERE UNSUITABLE SUBGRADE IS FOUND DURING CONSTRUCTION OF THE PROPOSED ROADWAY, THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE ENGINEER, UNDERCUT THE UNSUITABLE SUBGRADE MATERIAL AND REPLACE IT WITH ITEM 204 - GRANULAR MATERIAL, TYPE B, AS PER PLAN, OVER ITEM 204 - GEOTEXTILE FABRIC. THE LIMITS OF THE UNDERCUT SHALL BE THE EXTENTS OF THE UNSUITABLE MATERIAL TO A MAXIMUM DEPTH OF 36" BELOW THE TOP OF THE PROPOSED SUBGRADE AND 18" BEYOND THE EDGE OF PAVEMENT AS APPROVED BY THE ENGINEER.

AN ESTIMATED QUANTITY OF EXCAVATION, GRANULAR EMBANKMENT MATERIAL, GEOTEXTILE FABRIC, AND GEOGRID HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 204 - EXCAVATION OF SUBGRADE	256 CY
ITEM 204 - GRANULAR MATERIAL - TYPE B, AS PER PLAN	256 CY
ITEM 204 - GEOTEXTILE FABRIC	256 SY
ITEM 204 - GEOGRID FOR SUBGRADE STABILIZATION	256 SY

**ITEM 204 - GRANULAR MATERIAL, TYPE B, AS PER PLAN**

THE CMS 703.17 MATERIAL PERMITTED FOR THIS ITEM SHALL BE CRUSHED CARBONATE STONE (LIMESTONE).

**ITEM 204 - PROOF ROLLING**

A QUANTITY IS PROVIDED IN THE CALCULATIONS AND CARRIED TO THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

**ITEM 209 - DITCH CLEANOUT, AS PER PLAN**

THIS WORK SHALL CONSIST OF RE-ESTABLISHING THE CROSS SECTION ON AN EXISTING DITCH. SURPLUS OR UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER, SHALL BE DISPOSED OF. EMBANKMENT REQUIRED FOR ERODED CONDITIONS SHALL MEET THE REQUIREMENTS OF CMS 203.02R EXCEPT THAT THE COMPACTION REQUIREMENTS ARE WAIVED. ALSO INCLUDED IN THIS ITEM SHALL BE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO SEED AND MULCH THE CLEANED OUT DITCH AS PER ITEM 659 - SEEDING AND MULCHING UNLESS OTHER PERMANENT EROSION CONTROL MEASURES HAVE BEEN PROVIDED IN THE PLANS. THE CONTRACTOR SHALL RESTORE, TO THE SATISFACTION OF THE ENGINEER, ANY DISTURBED AREAS CAUSED BY CONSTRUCTION OF THIS ITEM AT NO ADDITIONAL COST TO THE COUNTY.

MEASUREMENT OF THE DITCH CLEANOUT SHALL BE THE FEET MEASURED ALONG THE CENTERLINE OF THE DITCH.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 209 - DITCH CLEANOUT, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 209 - DITCH CLEANOUT, AS PER PLAN	400 FT
--	--------

**ITEM 623 - MONUMENT ASSEMBLIES, AS PER PLAN**

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE HURON COUNTY STANDARD DETAILS AT THE LOCATIONS PROVIDED IN THE RIGHT OF WAY PLANS.

**ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

**ITEM 606 - GUARDRAIL, TYPE MGS, WITH LONG POSTS**

AN ADDITIONAL QUANTITY SHALL BE PROVIDED AND USED AS DIRECTED BY THE ENGINEER.

ITEM 606 - GUARDRAIL, TYPE MGS, WITH LONG POSTS	50 FT
---	-------

**ITEM SPECIAL - MAILBOX SUPPORT**

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH THESE PLAN NOTES, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO CMS 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING (BUT NOT LIMITED TO) PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF CMS 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH CMS 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, SINGLE AND ITEM SPECIAL - MAILBOX SUPPORT SYSTEM, DOUBLE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE ABOVE NOTED WORK:

ITEM SPECIAL - MAILBOX SUPPORT SYSTEM, SINGLE	2	EACH
ITEM SPECIAL - MAILBOX SUPPORT SYSTEM, DOUBLE	1	EACH

**EROSION CONTROL**

ITEMS 601 AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES OF THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

**SEEDING AND MULCHING OF LAWNS**

IN ADDITION TO "AREAS IN FRONT OF RESIDENCES" REFERRED TO IN ODOT CMS 659.10, THE SPECIAL PREPARATION SHALL BE EXTENDED TO ENCOMPASS ALL LAWNS AND/OR LAWN-LIKE AREAS AS DETERMINED BY THE ENGINEER.

**TOPSOIL**

TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE EXCAVATED OR FILLED. ADDITIONAL MATERIAL REQUIRED TO FILL THE TOPSOIL STRIP AREA IN EMBANKMENT AREAS, TOPSOIL STRIPPING AND ANY STOCKPILING INCLUDING ANY LABOR, TOOLS, EQUIPMENT, MATERIAL AND INCIDENTALS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT BID FOR ITEM 203 - EXCAVATION OR ITEM 203 - EMBANKMENT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

**SEEDING AND MULCHING**

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

ITEM 659 - SOIL ANALYSIS TEST	2	EACH
ITEM 659 - TOPSOIL	1103	CY
ITEM 659 - SEEDING AND MULCHING	9936	SY
ITEM 659 - REPAIR SEEDING AND MULCHING	497	SY
ITEM 659 - INTER-SEEDING	497	SY
ITEM 659 - COMMERCIAL FERTILIZER	1.38	TON
ITEM 659 - LIME	2.05	ACRE
ITEM 659 - WATER	55	MGAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ON PROSPECT ROAD ARE BASED ON THESE LIMITS AND SHOWN ON THE CROSS SECTIONS.

THE SEEDING ALONG FITCHVILLE RIVER ROAD WITHIN THE LIMITS OF THE RECONSTRUCTED ROADWAY IS BASED UPON THE AREA BETWEEN THE RIGHT OF WAY LINES AS SHOWN BELOW:

STA. 133+85.00 TO STA. 138+01.65	= 416.65 x (60 - 24) =	14999.40 SQ. FT.
STA. 139+84.20 TO STA. 142+26.75	= 242.55 x (60 - 24) =	8731.80 SQ. FT.
	TOTAL =	23731.20 SQ. FT.
	23731.20 SQ. FT. ÷ 9 =	2636.80 SQ. YD.
	USE =	2637 SQ. YD.

**POST CONSTRUCTION STORM WATER TREATMENT**

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT. SEE PROJECT SITE PLAN SHEETS 2-3.

**VEGETATED FILTER STRIPS**

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE ITEM 659 - SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670 - SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, BEGINNING AT THE EDGE OF SHOULDER AND ENDING AT THE BOTTOM OF THE FORESLOPE AS SPECIFIED IN THE PLANS.

**STORM WATER POLLUTION PREVENTION PLAN**

THE CONDITIONS OF THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT (SEE PROPOSAL) SHALL BE MET DURING ALL STAGES OF CONSTRUCTION. THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACTS ON RECEIVING WATERS. IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN SHALL CONTINUE THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UPSLOPE DISTURBED AREAS ARE STABILIZED.

INSTALLATION OF ALL TEMPORARY SEDIMENT AND EROSION CONTROL ITEMS SHALL BE AS PER ODOT SUPPLEMENTAL SPECIFICATION 832.

ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

AREAS TO REMAIN DORMANT FOR MORE THAN 14 DAYS SHOULD BE IMMEDIATELY STABILIZED WITH CONSTRUCTION SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

PRIOR TO CONSTRUCTION, THE CONTRACTOR IS TO PREPARE AND HAVE APPROVED A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH SS 832. AN ELECTRONIC FILE IN MICROSTATION FORMAT OF THE PROJECT SITE PLAN WILL BE PROVIDED FOR THE CONTRACTOR'S USE.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 832 - STORM WATER POLLUTION PREVENTION PLAN	LS
ITEM 832 - STORM WATER POLLUTION PREVENTION INSPECTIONS	LS
ITEM 832 - EROSION CONTROL	25000 EACH

SEE SHEETS 2-4 FOR PROJECT SITE PLAN.

**FARM DRAINS**

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 611 - CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY ITEM 611 - TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM 611 - TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 8" CONDUIT, TYPE B	25	FT
ITEM 611 - 8" CONDUIT, TYPE F	25	FT

**CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES**

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE COUNTY, REPRESENTATIVES OF THE COUNTY AND THE CONTRACTOR, ALONG WITH OTHER LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS AND DRAINAGE DITCHES WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS, THEIR APPURTENANCE AND DRAINAGE DITCHES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE COUNTY AND THE CONTRACTOR.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE COUNTY.

ALL EXISTING SEWERS AND DRAINAGE DITCHES INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE BID FOR ITEM 203 - EXCAVATION AND THE PERTINENT 611 CONDUIT ITEMS.

CALCULATED PRS CHECKED ALP	<b>GENERAL NOTES</b>
<b>HUR-C.R. 60-0.00</b> <b>(FITCHVILLE RIVER RD.)</b>	
8 64	

**RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS**

EXISTING ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS DISTURBED BY THE WORK SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING CONDUIT TYPE MAY BE USED: CMS 707.45

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 611 - 6" CONDUIT, TYPE B	<u>25</u>	FT
ITEM 611 - 6" CONDUIT, TYPE C	<u>25</u>	FT
ITEM 611 - 12" CONDUIT, TYPE B	<u>25</u>	FT
ITEM 611 - 12" CONDUIT, TYPE C	<u>25</u>	FT

**PROPOSED/EXISTING DRAINAGE**

PROPOSED AND EXISTING DRAINAGE ITEMS MAY EXTEND ACROSS ADJOINING CONSTRUCTION PHASES. IN THESE SITUATIONS THE CONTRACTOR SHALL PROVIDE AND INSTALL TEMPORARY PLUGS/CAPS OR TEMPORARY CONDUIT OUTLETS. DURING CONSTRUCTION OF THE SUBSEQUENT PHASE, THE TEMPORARY PLUG/CAP OR TEMPORARY CONDUIT OUTLET SHALL BE REMOVED AND THE PROPOSED DRAINAGE ITEM COMPLETED OR CONTINUED TO THE NEXT PHASE LIMITS. ALL MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO PROVIDE THESE TEMPORARY DRAINAGE ITEMS, TO THE SATISFACTION OF THE ENGINEER, SHALL BE INCLUDED IN THE COST OF ITEMS 202, 605 AND 611.

**UNRECORDED UNTREATED NON-STORMWATER DRAINAGE**

FURNISH NO CONTINUANCE FOR ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE SUCH AS UNTREATED SEPTIC, UNTREATED WASTEWATER, UNTREATED CURTAIN/GRADIENT DRAINS, AND UNTREATED FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. THE CONTRACTOR SHALL CONTACT THE COUNTY AND THE COUNTY HEALTH DEPARTMENT IMMEDIATELY UPON DISCOVERY OF UNRECORDED NON-STORMWATER DRAINAGE TO OBTAIN APPROVAL BY THE COUNTY HEALTH DEPARTMENT TO PLUG THE UNTREATED DRAINAGE. UPON WRITTEN APPROVAL BY THE COUNTY HEALTH DEPARTMENT, PLUG ANY UNRECORDED UNTREATED NON-STORMWATER DRAINAGE WITH CONCRETE AT THE RIGHT OF WAY LINE. PAYMENT FOR ALL LABOR, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO COORDINATE AND TO PLUG THE UNTREATED NON-STORMWATER DRAINAGE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 202 OR 203 ITEM.

**ITEM 605 - AGGREGATE DRAINS**

AGGREGATE DRAINS SHALL BE PLACED AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FEET FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FOOT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE.

**ITEM 611 - INLET, SIDE DITCH**

DUE TO THE FLAT NATURE OF THE EXISTING TOPOGRAPHY ON THE PROJECT AND THE CLOSE RELATIONSHIP OF MANY OF THE DRIVES, ISOLATED AREAS OF STANDING WATER MAY OCCUR IN THE TREE LAWN AREA.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO PROVIDE AN INLET AND CONNECT THEM TO THE DRAINAGE SYSTEM:

ITEM 611 - INLET SIDE DITCH	<u>2</u>	EACH
ITEM 611 - 12" CONDUIT, TYPE C	<u>25</u>	FT

**PART-WIDTH CONSTRUCTION**

EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES OF LONGITUDINAL JOINTS. LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON SCD BP-3.1.

**PROFILE AND ALIGNMENT FITCHVILLE RIVER RD.**

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLANE 1.5" OF THE EXISTING ASPHALT, PLACE TACK COAT AND RESURFACE WITH PROPOSED ASPHALT CONCRETE AS SHOWN ON THE CR 60 (FITCHVILLE RIVER RD.) TYPICAL SECTIONS.

**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN**

PRIOR TO THE PLACEMENT OF THE PROPOSED ASPHALT COURSES ON THE EXISTING PAVEMENT, AREAS WHICH ARE BADLY RAVELED OR APPEAR TO BE AN UNSTABLE BASE FOR THE FINAL ASPHALT SURFACE SHALL BE REPAIRED IN ACCORDANCE WITH ODOT CMS 253. THE REPAIR AREAS SHALL BE AS OUTLINED BY THE ENGINEER IN ACCORDANCE WITH ODOT CMS 253.02. THE AREAS TO BE REPAIRED SHALL BE SAW CUT TO PROVIDE A NEAT VERTICAL EDGE AND THE UNSTABLE MATERIAL SHALL BE REMOVED TO A DEPTH AS DIRECTED BY THE ENGINEER TO CONSTRUCT A BUILDUP OF 6" OF ITEM 304 - AGGREGATE BASE AND 9" OF ITEM 302 - ASPHALT CONCRETE BASE, PG64-22, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ALL LABOR, TOOLS, EQUIPMENT, INCIDENTALS, AND MATERIAL TO CONSTRUCT THIS ITEM COMPLETE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT BID FOR ITEM 253 - PAVEMENT REPAIR, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN	<u>200</u>	SY
---	------------	----

**ITEM 302 - ASPHALT CONCRETE BASE, PG64-22**

**ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN**

**ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN**

ODOT CMS 401.20 WILL NOT APPLY TO THIS PROJECT. PAYMENT FOR THESE ITEMS WILL BE AT THE UNIT PRICE BID FOR ASPHALT CONCRETE ITEMS UTILIZED FOR THIS PROJECT. SEE BID BOOKS FOR HURON COUNTY'S SUPPLEMENT ASPHALT SPECIFICATIONS.

**ITEM 304 - AGGREGATE BASE, AS PER PLAN**

THE CMS 703.17C MATERIAL PERMITTED FOR THIS ITEM SHALL BE CRUSHED CARBONATE STONE (LIMESTONE).

**ITEM 407 - TACK COAT**

THE ENGINEER SHALL ADJUST THE RATE OF APPLICATION IN THE FIELD OF ITEM 407 - TACK COAT AS NEEDED. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE FOR THESE ITEMS. DO NOT ORDER MATERIALS FOR THESE ITEMS UNLESS AUTHORIZED BY THE ENGINEER.

ITEM 407 - TACK COAT (MILLED ASPHALT SURFACE)	<u>0.09</u>	GAL/SY
ITEM 407 - TACK COAT (NEW ASPHALT)	<u>0.06</u>	GAL/SY

**DRIVE APRONS**

WITHIN THE LIMITS OF THE FITCHVILLE RIVER RD. RESURFACING PROVIDE A 2' WIDE ASPHALT APRON AT EACH DRIVE (INCLUDING FARM DRIVES). THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED TO CONSTRUCT THE APRONS.

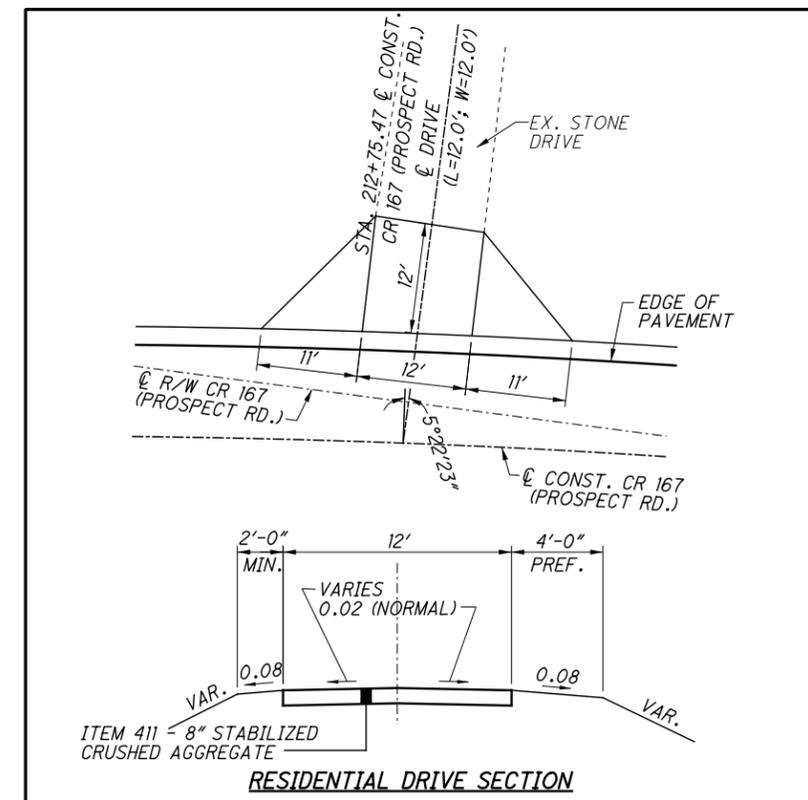
ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), AS PER PLAN (VARIES 3" TO 0")	<u>65</u>	CY
---	-----------	----

THE DRIVE AT STA. 208+60 ON PROSPECT RD. WILL HAVE A 4' PAVED APRON. THE 4' PAVED APRON WILL HAVE A BUILD-UP OF 2" ITEM 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), AS PER PLAN. THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR THE DRIVE APRON CONSTRUCTION.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), AS PER PLAN	<u>2</u>	CY
---	----------	----

**ENVIRONMENTAL COMMITMENTS**

1. THE SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATION, SUPPLEMENTAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD CONSTRUCTION DRAWINGS WILL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.
2. THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE PROJECT ENGINEER WILL FORWARD THE INFORMATION TO THE COUNTY FOR USE TO COORDINATE WITH EMERGENCY SERVICES AND THE PUBLIC A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED: LOCAL FIRE DEPARTMENT, FITCHVILLE TOWNSHIP, HURON COUNTY SHERIFF AND NEW LONDON SCHOOL DISTRICT. INCLUDED IN THIS NOTIFICATION WILL BE THE PROPOSED LANE RESTRICTIONS/ROAD CLOSURES REQUIRED BY THE PROJECT.
3. ENDANGERED BAT HABITAT REMOVAL - THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.
4. THE HURON COUNTY ENGINEER WILL OBTAIN ALL APPROPRIATE WATERWAY PERMITS PRIOR TO ANY WORK BELOW THE ORDINARY HIGH WATER MARK OF ANY WATERWAY OR WORK WITHIN THE BOUNDARIES OF A WETLAND. ALL SPECIAL PROVISIONS FOR WATERWAY PERMITS WILL BE INCLUDED IN THE PROJECT PLANS.



CALCULATED  
PRS  
CHECKED  
ALP

GENERAL NOTES

HUR-C.R. 60-0-00  
(FITCHVILLE RIVER RD.)

**ITEM 614 - MAINTAINING TRAFFIC**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO CONSTRUCTION, SUBMIT A CONSTRUCTION SCHEDULE TO THE HURON COUNTY ENGINEER FOR APPROVAL INDICATING DATES AND DURATION OF EACH STAGE/PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY HURON COUNTY IN WRITING A MINIMUM OF 14 DAYS IN ADVANCE OF THE FIRST ANTICIPATED CLOSING/DETOUR OF THROUGH TRAFFIC OF A PORTION OF THE FITCHVILLE RIVER ROAD AND PROSPECT ROAD RECONSTRUCTION.

THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED:

- LOCAL FIRE DEPARTMENT    FITCHVILLE TOWNSHIP    NEW LONDON FIRE    FIRELANDS AMBULANCE SERVICE
- HURON COUNTY SHERIFF    TOWNSEND TOWNSHIP FIRE    NEW LONDON SCHOOL DISTRICT    HURON COUNTY EMA

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ODOT ITEM 614 - MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC AND ADJACENT PROPERTY OWNERS/TENANTS. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TIME THE EXPOSED PLANED PAVEMENT IS USED AS THE ROADWAY TRAVEL SURFACE, AS APPROVED BY THE ENGINEER DUE TO THE POTENTIAL FOR DETERIORATION OF THE PAVEMENT. THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND PHASING PLAN FOR THE PROPOSED WORK PRIOR TO CONSTRUCTION WHICH WILL LIMIT THE TIME FRAME THE PLANED SURFACE IS UTILIZED AS A TRAVEL SURFACE PRIOR TO THE PLACEMENT OF THE ASPHALT CONCRETE OVERLAY. THE SCHEDULE AND PHASING PLAN SHALL BE ACCEPTED BY THE COUNTY AND ENGINEER PRIOR TO THE COMMENCEMENT OF THE PROPOSED PAVEMENT WORK. ADDITIONAL PAVEMENT DETERIORATION DUE TO A LENGTHY DURATION OF EXPOSED PLANED SURFACE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.

**A. FITCHVILLE RIVER ROAD**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND TEMPORARY SURFACES USING ITEMS 410 AND 614 EXCEPT AS NOTED BELOW. FITCHVILLE RIVER ROAD MAY BE CLOSED TO THROUGH TRAFFIC UPON APPROVAL BY THE COUNTY FOR A PERIOD NOT TO EXCEED 60 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 13. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF 15800 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. ADDITIONALLY, WITHIN THE 60 DAY CLOSURE TO THROUGH TRAFFIC, THE PLANING AND RESURFACING CAN BE COMPLETED. ALL PAVEMENT WORK SHALL BE COMPLETED AND TRAFFIC CONTROL MEASURES SHALL BE IN PLACE PRIOR TO OPENING THE ROADWAY, AS APPROVED BY THE ENGINEER. IF FITCHVILLE RIVER ROAD IS OPENED PRIOR TO THE COMPLETION OF PROSPECT ROAD, ADDITIONAL TRAFFIC CONTROL MEASURES SHALL BE ERECTED AT THE INTERSECTION. RESIDENTS WITHIN THE LIMITS OF THE DETOUR SHALL BE NOTIFIED OF THE COMPLETE CLOSURE AT LEAST 14 DAYS IN ADVANCE. SEE SHEET 13 FOR LOCATION OF COMPLETE CLOSURE. THE CLOSURE SHALL BE PER MT-101.60 DURING CONSTRUCTION.

DURING PAVEMENT PLANING AND RESURFACING; AND FOR DRAINAGE INSTALLATION/REMOVAL WITHIN/OR ACROSS THE ROADWAY, ONE WAY TRAFFIC WILL BE PERMITTED AS DETAILED ON STANDARD CONSTRUCTION DRAWINGS MT-97.10 AND MT-97.11 AND SHALL BE LIMITED TO THE CLOSURE LENGTH NECESSARY TO PERFORM THE CONSTRUCTION AND EFFECTIVELY MAINTAIN TRAFFIC, AS APPROVED BY THE ENGINEER. IT IS THE INTENT TO LIMIT THE TIME FRAME AND LENGTH OF ROADWAY CLOSED TO PERFORM THE NECESSARY WORK.

PLANING AND RESURFACING REQUIRE PART-WIDTH CONSTRUCTION. THROUGH TRAFFIC WILL BE DETOURED IF DURING THE 60 DAY ROAD CLOSURE PERIOD. ONE LANE OF TRAFFIC WILL BE MAINTAINED USING FLAGGERS OR TEMPORARY TRAFFIC SIGNALS PER MT-96.20. DROP-OFFS WITHIN THE WORK AREA SHALL BE PROTECTED PER MT-101.90.

WHERE INTERSECTING ROADS OR DRIVES FALL WITHIN THE LANE CLOSURE, ADDITIONAL FLAGGERS, SIGNING, DRUMS, OTHER TRAFFIC CONTROL DEVICES AND TEMPORARY DRIVES SHALL BE USED TO SUPPLEMENT THE CLOSURE, AS DIRECTED BY THE ENGINEER, TO ALLOW VEHICULAR INGRESS AND EGRESS AT ALL TIMES. DRUMS AT MAXIMUM 5 FOOT SPACING SHALL BE USED TO DELINEATE DRIVE OPENINGS WITHIN THE LANE CLOSURE THROUGH THIS SECTION. ADDITIONAL QUANTITIES OF 410, 614 AND 616 HAVE BEEN INCLUDED FOR USE, AS DIRECTED BY THE ENGINEER, TO MAINTAIN ACCESS. DRIVE APPROACH CONSTRUCTION SHALL BE DONE PART WIDTH AND/OR USING TEMPORARY DRIVES TO MAINTAIN ACCESS. THE CONTRACTOR SHALL COORDINATE DRIVE CONSTRUCTION WITH PROPERTY OWNERS/TENANTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

ADDITIONAL TRAFFIC CONTROL ITEMS MAY BE DEEMED NECESSARY BY THE ENGINEER TO ENSURE THE SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF THE WORKERS WITHIN THE CONSTRUCTION ZONE. ANY ADDITIONAL WORK INCLUDING LABOR, TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS NOT SPECIFICALLY ITEMIZED BUT REQUIRED FOR MAINTAINING TRAFFIC AND SAFETY DURING CONSTRUCTION, AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

**B. PROSPECT ROAD**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND TEMPORARY SURFACES USING ITEMS 410 AND 614 EXCEPT AS NOTED BELOW. PROSPECT ROAD MAY BE CLOSED TO THROUGH TRAFFIC UPON APPROVAL BY THE COUNTY FOR A PERIOD NOT TO EXCEED 90 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 14. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF 11100 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. ALL PAVEMENT WORK SHALL BE COMPLETED AND TRAFFIC CONTROL MEASURES SHALL BE IN PLACE PRIOR TO OPENING THE ROADWAY, AS APPROVED BY THE ENGINEER. IF FITCHVILLE RIVER ROAD IS OPENED PRIOR TO THE COMPLETION OF PROSPECT ROAD, ADDITIONAL TRAFFIC CONTROL MEASURES SHALL BE ERECTED AT THE INTERSECTION. RESIDENTS WITHIN THE LIMITS OF THE DETOUR SHALL BE NOTIFIED OF THE COMPLETE CLOSURE AT LEAST 14 DAYS IN ADVANCE. SEE SHEET 14 FOR LOCATION OF COMPLETE CLOSURE. THE CLOSURE SHALL BE PER MT-101.60 DURING CONSTRUCTION.

DURING PAVEMENT PLANING AND RESURFACING; AND FOR DRAINAGE INSTALLATION/REMOVAL WITHIN/OR ACROSS THE ROADWAY, ONE WAY TRAFFIC WILL BE PERMITTED AS DETAILED ON STANDARD CONSTRUCTION DRAWINGS MT-97.10 AND MT-97.11 AND SHALL BE LIMITED TO THE CLOSURE LENGTH NECESSARY TO PERFORM THE CONSTRUCTION AND EFFECTIVELY MAINTAIN TRAFFIC, AS APPROVED BY THE ENGINEER. IT IS THE INTENT TO LIMIT THE TIME FRAME AND LENGTH OF ROADWAY CLOSED TO PERFORM THE NECESSARY WORK.

WHERE INTERSECTING ROADS OR DRIVES FALL WITHIN THE LANE CLOSURE, ADDITIONAL FLAGGERS, SIGNING, DRUMS, OTHER TRAFFIC CONTROL DEVICES AND TEMPORARY DRIVES SHALL BE USED TO SUPPLEMENT THE CLOSURE, AS DIRECTED BY THE ENGINEER, TO ALLOW VEHICULAR INGRESS AND EGRESS AT ALL TIMES. DRUMS AT MAXIMUM 5 FOOT SPACING SHALL BE USED TO DELINEATE DRIVE OPENINGS WITHIN THE LANE CLOSURE THROUGH THIS SECTION. ADDITIONAL QUANTITIES OF 410, 614 AND 616 HAVE BEEN INCLUDED FOR USE, AS DIRECTED BY THE ENGINEER, TO MAINTAIN ACCESS. DRIVE APPROACH CONSTRUCTION SHALL BE DONE PART-WIDTH AND/OR USING TEMPORARY DRIVES TO MAINTAIN ACCESS. CONTRACTOR SHALL COORDINATE DRIVE CONSTRUCTION WITH PROPERTY OWNERS/TENANTS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE GATES AND BARRICADES AT THE APPROXIMATE WORK LIMITS OF THE PROJECT AND THE ADVANCE WARNING SIGNS AS SHOWN ON STANDARD CONSTRUCTION DRAWING MT-101.60.

ADDITIONAL TRAFFIC CONTROL ITEMS MAY BE DEEMED NECESSARY BY THE ENGINEER TO ENSURE THE SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF THE WORKERS WITHIN THE CONSTRUCTION ZONE. ANY ADDITIONAL WORK INCLUDING LABOR, TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS NOT SPECIFICALLY ITEMIZED BUT REQUIRED FOR MAINTAINING TRAFFIC AND SAFETY DURING CONSTRUCTION, AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

**C. LOCAL DRIVEWAY ACCESS**

ACCESS TO ALL PROPERTIES WITHIN THE WORK LIMITS SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR THE FOLLOWING PERIODS, THROUGH THE USE OF PART-WIDTH CONSTRUCTION AND TEMPORARY SURFACE USING 410 OR 614 IN ACCORDANCE WITH THE SPECIFICATIONS:

- 1. FOR MINIMUM PERIODS CONSISTENT WITH THE REQUIREMENTS FOR THE PROTECTION OF THE COMPLETED ASPHALT COURSES.

FOR PROPERTIES WITH MORE THAN ONE ACCESS, THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE OPENING AT ALL TIMES. THE CONTRACTOR SHALL CONTACT THE PROPERTY OWNER/TENANT PRIOR TO CONSTRUCTION AT THE LOCATION OF THE DRIVEWAYS. PROPERTY OWNERS/TENANTS WITH SPECIAL ACCESS REQUIREMENTS SHALL BE COORDINATED AND ASSISTED BY THE CONTRACTOR TO ACCESS THEIR PROPERTY AT ALL TIMES, AS APPROVED BY THE ENGINEER. WRITTEN DOCUMENTATION INCLUDING PROPOSED CONSTRUCTION, TIME FRAME AND POTENTIAL ACCESS RESTRICTIONS SHALL BE PREPARED AND COPIES PROVIDED TO THE PROPERTY OWNER/TENANT, COUNTY, AND PROJECT FILES PRIOR TO CONSTRUCTION. ALL WORK INCLUDING LABOR, TOOLS, MATERIAL, EQUIPMENT, AND INCIDENTALS TO COORDINATE THIS WORK AND MAINTAIN ACCESS SHALL BE INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC.

RESIDENCES WITHIN THE WORK LIMITS SHALL HAVE ACCESS MAINTAINED AT ALL TIMES THROUGH THE USE OF THE EXISTING PAVEMENT, COMPLETED PAVEMENT, AND TEMPORARY SURFACES USING ITEMS 410 AND 614. THE CONTRACTOR SHALL GIVE NOTICE TO PROPERTY OWNERS/TENANTS BEFORE WORKING ON DRIVEWAYS. NO DRIVEWAYS SHALL BE WORKED ON UNTIL ACCESS AND PARKING ARRANGEMENTS HAVE BEEN MADE WITH THE PROPERTY OWNER/TENANT. THE CONTRACTOR WILL PROVIDE ADDITIONAL WORK INCLUDING LABOR, TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS NOT SPECIFICALLY ITEMIZED BUT REQUIRED TO MAINTAIN ACCESS FOR PROPERTY OWNERS/TENANTS WITH SPECIAL ACCESS REQUIREMENTS, AS APPROVED BY THE ENGINEER. WHERE POSSIBLE, PART-WIDTH DRIVE CONSTRUCTION SHOULD BE USED TO MAINTAIN ACCESS AT ALL TIMES.

ALL EXISTING LANES SHALL BE OPEN AND AVAILABLE TO TRAFFIC BETWEEN OCTOBER 15 AND APRIL 1. OCTOBER 15 SHALL BE CONSIDERED TO CONSTITUTE THE INTERIM COMPLETION DATE WHEREAS THE CONTRACTOR SHALL HAVE ALL LANES OF TRAFFIC OPEN AND AVAILABLE FOR TRAFFIC.

DURING THE PLACEMENT OF THE PROPOSED FINAL SURFACE COURSE, ONE LANE TWO-WAY TRAFFIC MAY BE MAINTAINED USING FLAGGERS AS PER STANDARD DRAWING MT-97.10 DURING WORKING HOURS ONLY.

SURFACES REQUIRED FOR MAINTAINING ACCESS WITHIN THE WORK LIMITS FOR, THE DURATION OF THE PROJECT, SHALL BE MAINTAINED IN A CONDITION WHICH IS SMOOTH AND FREE FROM RUTS, RIDGES, BUMPS, DUST & STANDING WATER, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE TEMPORARY BARRICADES, STEEL PLATES OR OTHER ACCEPTABLE MEANS ON THE SIDES OF THE PROPOSED CONSTRUCTION TO ADEQUATELY PROVIDE SAFETY FOR HIS OPERATIONS DURING CONSTRUCTION IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS INCLUDING SAFETY FOR POTENTIAL UNAUTHORIZED PEDESTRIAN USAGE. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ERECT, MAINTAIN, ADJUST, AND REMOVE THE SAFETY DEVICES. PAYMENT FOR ALL LABOR, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

IT IS THE INTENT OF THIS PROJECT TO MINIMIZE IMPACT TO THE EXISTING UTILITIES. IN ADDITION TO ODOT CMS 107.16 AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES TO LIMIT THE ACTUAL TIME THAT ANY UTILITY ADJUSTMENT REQUIRED TO CONSTRUCT PROSPECT ROAD IMPROVEMENTS IS NECESSARY TO PREVENT ADVERSE IMPACTS TO THE UTILITY. THIS COORDINATION SHALL BE INCLUDED IN THE UNIT COST FOR ITEM 614 - MAINTAINING TRAFFIC, LUMP SUM AND SHALL BE INCLUSIVE OF ALL MATERIALS, TOOLS, EQUIPMENT, LABOR AND INCIDENTALS REQUIRED TO COORDINATE WITH AND LIMIT CONFLICTS IN ACCORDANCE WITH THE UTILITY REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COMPENSABLE COST DUE TO THE UTILITY.

THE CONTRACTOR SHALL SUBMIT A PLAN OF PROPOSED CLOSURES FOR APPROVAL BY THE ENGINEER. ANY ADDITIONAL WORK INCLUDING LABOR, TOOLS, EQUIPMENT, INCIDENTALS AND MATERIALS NOT SPECIFICALLY ITEMIZED BUT REQUIRED TO MAINTAIN ACCESS AT ALL TIMES, AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN WILL BE PUT INTO EFFECT UNTIL THE APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE COUNTY ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B	<u>100</u>	CY
ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	<u>50</u>	CY
ITEM 616 - WATER	<u>2</u>	MGAL

AFTER THE COMPLETION OF THE PLACING OF 441 INTERMEDIATE COURSE AND PRIOR TO OPENING THE COMPLETED ROADWAY TO TWO WAY TRAFFIC, WORK ZONE CENTER LINES AND STOP LINES ARE TO BE PLACED. THE MARKING ON THE 441 SURFACE COURSE MAY BE OMITTED IF THE PERMANENT PAVEMENT MARKINGS ARE TO BE PLACED WITHIN 24 HOURS AS APPROVED BY THE ENGINEER. THE WORK ZONE PAVEMENT MARKINGS ARE TO BE PLACED IN THE SAME LOCATION AS THE PERMANENT MARKINGS.

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN ODOT SCD MT-101.60 AT THE APPROXIMATE WORK LIMITS OF THE PROJECT INCLUDING SIDEROADS AND COMMERCIAL DRIVEWAYS DURING PERIODS IN WHICH THE AFFECTED PORTIONS OF ROADS ARE CLOSED TO TRAFFIC.

THE WORK ZONES AND CONTRACTOR'S EQUIPMENT SHALL BE SET UP AND OPERATED IN SUCH A MANNER THAT VEHICULAR INGRESS AND EGRESS SHALL BE PROVIDED AT ALL TIMES FOR PROPERTIES ADJACENT TO THE WORK. FOR ADDITIONAL REQUIREMENTS, SEE 104.04 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ROAD WORK AHEAD (W20-1) SIGNS SHALL BE PLACED AT THE BEGINNING & END OF THE PROJECT ON FITCHVILLE RIVER ROAD AND ON ALL SIDEROADS IN PROJECT LENGTH, APPROXIMATELY 200 FEET IN ADVANCE OF THE WORK AREA.

END CONSTRUCTION (G20-2) SIGNS SHALL BE PLACED AT THE BEGINNING & END OF THE PROJECT AND ON SIDE ROADS APPROXIMATELY 100 FEET BEYOND THE WORK AREA.

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

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 - WATER	<u>7</u>	MGAL
------------------	----------	------

**WORK ZONE MARKINGS AND SIGNS**

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11:

ITEM 614 - WORK ZONE MARKING SIGN	TOTAL	<u>15</u>	EACH
NO EDGE LINES (W8-H13-36)		<u>5</u>	EACH
DO NOT PASS (R4-1)		<u>5</u>	EACH
PASS WITH CARE (R4-2)		<u>5</u>	EACH
ITEM 614 - WORK ZONE CENTER LINE, CLASS II		<u>5.64</u>	MILE
ITEM 614 - WORK ZONE STOP LINE, CLASS I		<u>216</u>	FT

**TRENCH FOR WIDENING**

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES AS PER THE ODOTCD. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

**OVERNIGHT TRENCH CLOSING**

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

**SUSPENSION OF WORK**

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR MAINTENANCE OF TRAFFIC AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE ODOTCD, THE ENGINEER MAY SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS. NO COMPENSATION WILL BE PAID FOR SUSPENSION OF WORK.

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

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

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

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

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

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

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE.

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

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

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	<u>40</u>	HOURS
---	-----------	-------

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

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

**EQUIPMENT AND MATERIAL STORAGE**

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC, THE CONTRACTOR'S ATTENTION IS DIRECTED TO CMS 614.035. IN ADDITION, THE FOLLOWING PROVISIONS SHALL APPLY:

1. ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN FOURTEEN (14) DAYS.
2. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE COUNTY.
3. NO REMOVED ITEM SHALL BE STORED WITHIN 12' OF THE EDGE OF ROADWAY IN ANY SECTION NOT CLOSED TO THROUGH TRAFFIC.

**FLASHING ARROW PANELS**

WHEN FLASHING ARROW PANELS ARE UTILIZED FOR NIGHT LANE CLOSURES, SOLAR, ELECTRIC, OR BATTERY POWERED EQUIPMENT SHALL BE EXCLUSIVELY UTILIZED WHEN LOCATED WITHIN 300 FEET OF ANY RESIDENCE. DIESEL OR GASOLINE POWERED GENERATORS WILL NOT BE PERMITTED IN THESE AREAS, EXCEPT WHEN USED INTERMITTENTLY FOR THE SOLE PURPOSE OF CHARGING INTERNAL BATTERIES WHICH PROVIDE THE PRIMARY POWER FOR THE EQUIPMENT.

**PLACEMENT OF ASPHALT CONCRETE**

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

**TEMPORARY TRENCH RESTORATION**

TRENCH RESTORATION IN PAVEMENT AREAS FOR THE STORM SEWER CONSTRUCTION (UNTIL THE NEW PAVEMENT IS CONSTRUCTED) SHALL BE IN ACCORDANCE WITH CMS 611. THE ROADWAY SURFACE OVER THE TRENCHES SHALL BE ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B FOR SHORT PERIODS OF TIME. A MINIMUM 2" OF ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PLACED AT THE TRENCH WITHIN 14 DAYS OF CONSTRUCTION AS APPROVED BY THE ENGINEER. THE SURFACE SHALL BE MAINTAINED SMOOTH AND FREE OF RUTS, AS APPROVED BY THE ENGINEER.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT SURFACE RESTORATION FOLLOWING INSTALLATION OF PIPES UNDER ITEM 611.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CY

THE ABOVE QUANTITY IS BASED ON AN ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC THICKNESS OF 2 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH FOR 611 ITEMS. THE TRENCH WIDTH WAS ASSUMED TO EQUAL THE SPAN TIMES 1.25 PLUS ONE FOOT.

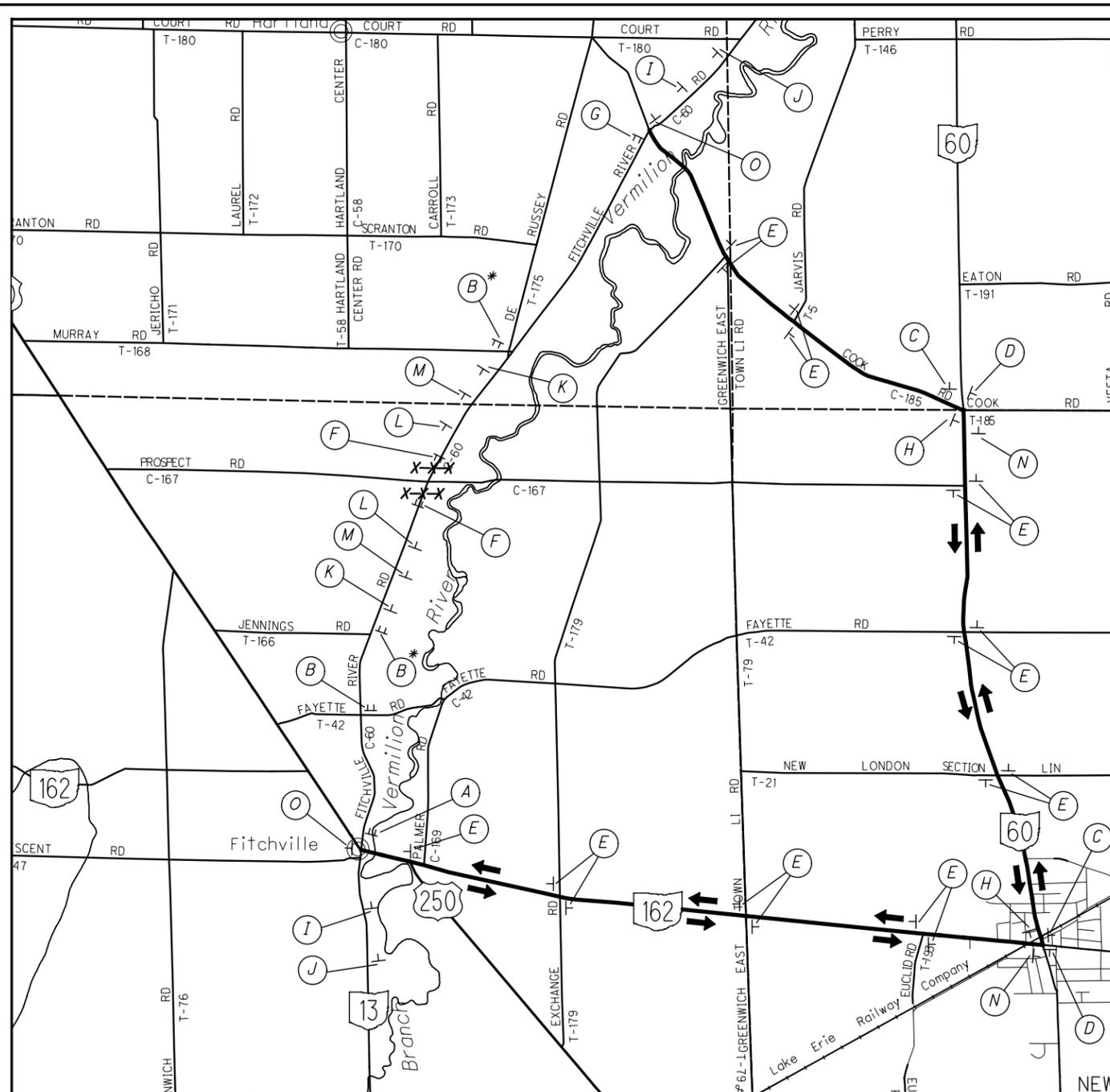
ADDITIONAL MEASURES: MATERIALS MAY BE REQUIRED TO MAINTAIN A UNIFORM, SMOOTH SURFACE UNTIL THE NEW PAVEMENT IS CONSTRUCTED. PAYMENT FOR THIS WORK INCLUDING ALL LABOR, TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

CALCULATED  
PRS  
CHECKED  
ALP

MAINTENANCE OF TRAFFIC GENERAL NOTES

HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915MD001.dgn 10/31/2019 1:25:23 PM SteveMorr

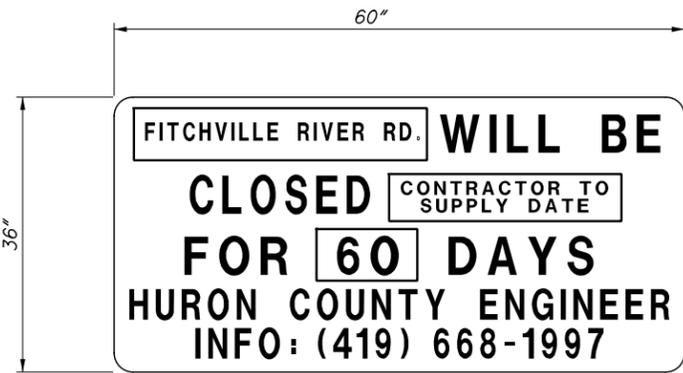


**COUNTY ROAD 60 (FITCHVILLE RIVER RD.) DETOUR ROUTE**

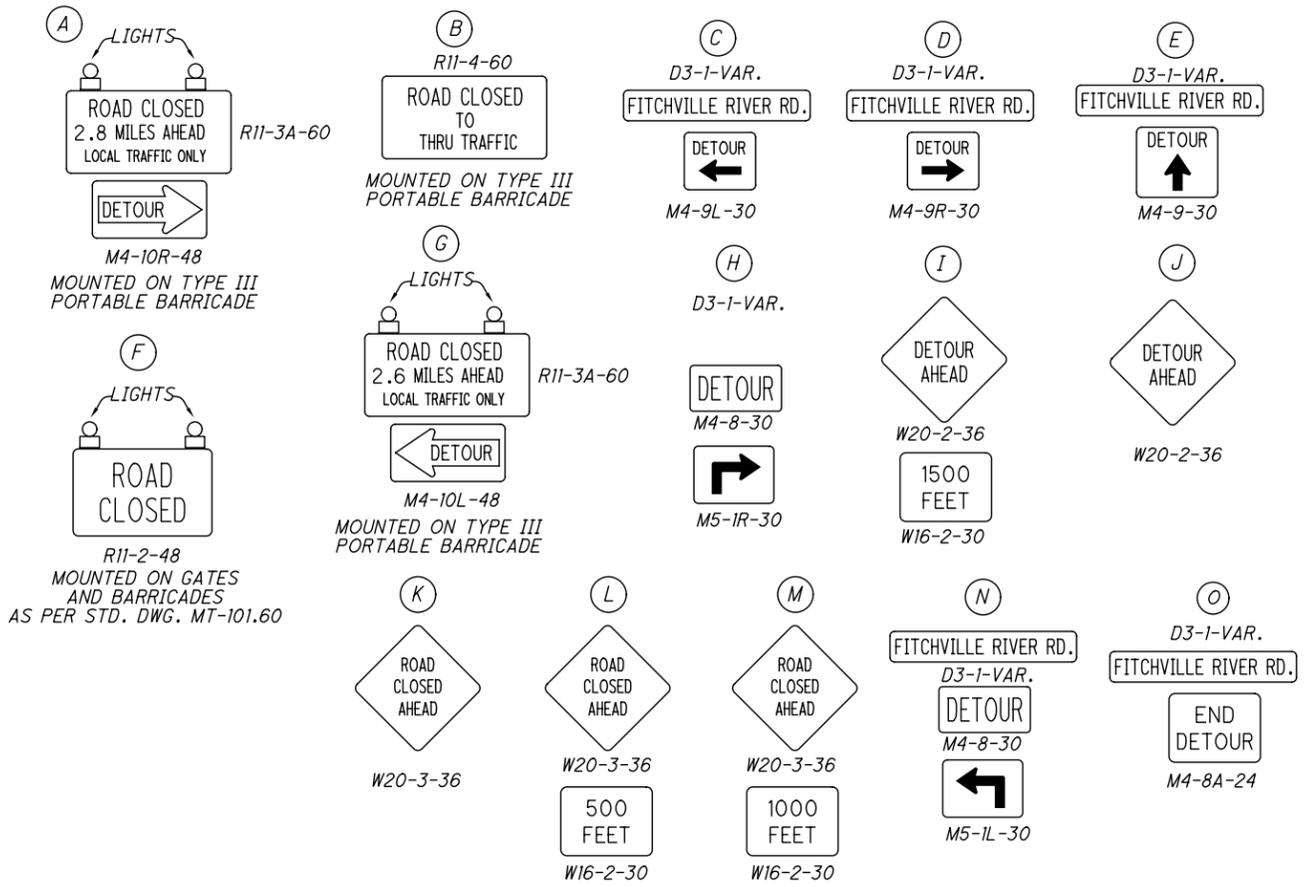
DENOTES DETOUR ROUTE  
 X-X-X DENOTES GATES & BARRICADES AS PER ODOT SCD MT-101.60

**ITEM 614 - DETOUR SIGNING**

COUNTY ROAD 60 (FITCHVILLE RIVER RD.)	LS
TOTAL CARRIED TO GENERAL SUMMARY	LS



W20-H13-60



**NOTE:**  
 TYPE A YELLOW FLASHING LIGHTS ARE REQUIRED ON ALL SIGNS SHOWN WITH LIGHTS.

**DETOUR SIGNING**

THE CONTRACTOR WILL PROVIDE, INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING AS DETAILED ON THIS SHEET. THE DETOUR SIGNING SHALL BE COVERED WHEN THE DETOUR IS NOT IN PLACE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNING.

**NOTICE OF CLOSURE SIGNS**

NOTICE OF CLOSURE SIGNS (W20-H13), AS DETAILED ON THIS SHEET, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THE SIGNS SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS ON THE ROADWAY. THE SIGNS SHOULD BE ERECTED AT THE POINT OF CLOSURE.

PAYMENT FOR THESE SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE SIGNS INCLUDING SUPPORTS.

**COOPERATION BETWEEN CONTRACTORS**

SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT OR ON ADJACENT PROJECTS SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS, COMPLETION OR WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

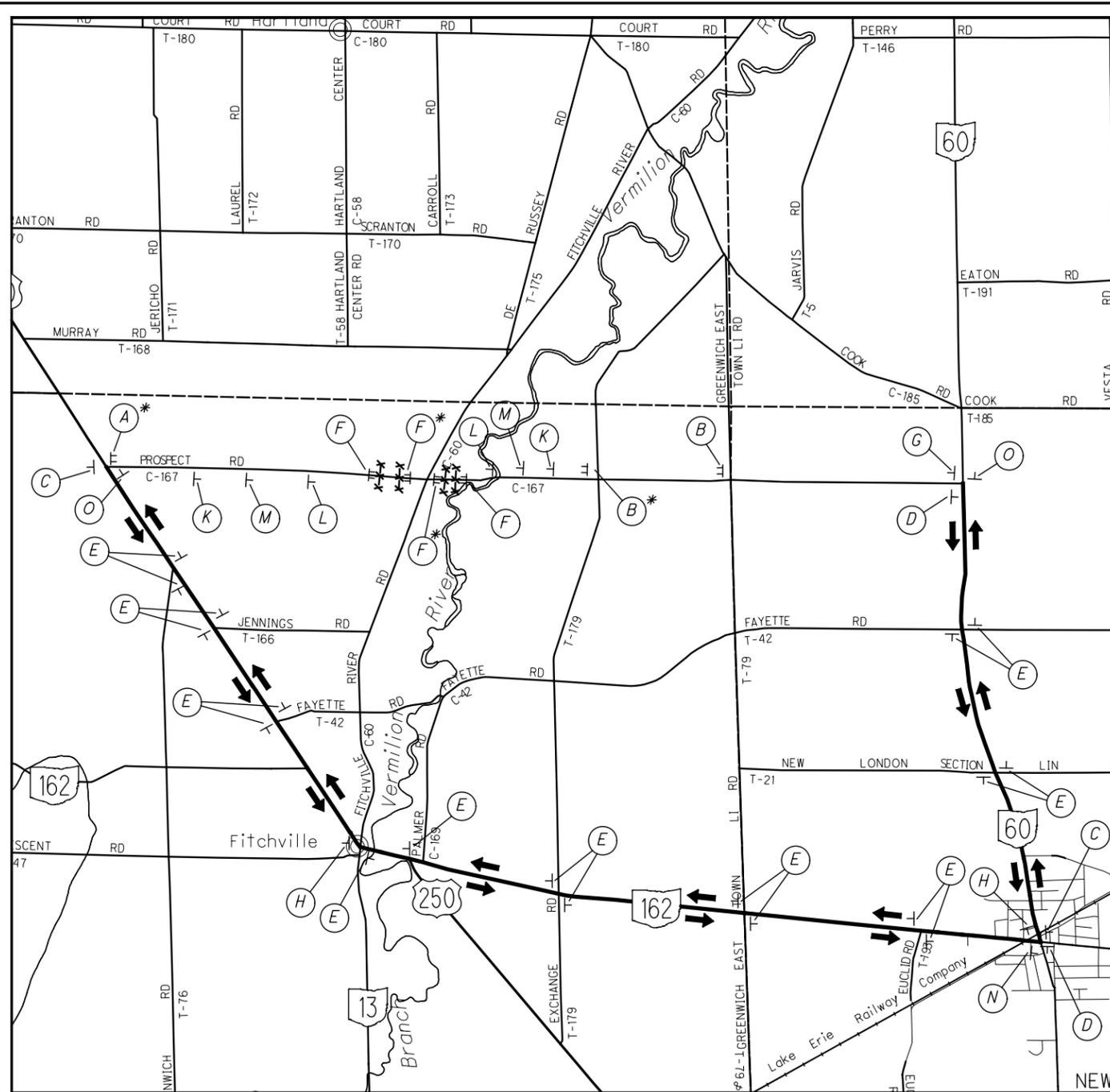
\*ADD "NO OUTLET" (W14-2, 30"x30") AT ROAD CLOSURE TYPE III PORTABLE BARRICADES AS INDICATED.



**MAINTENANCE OF TRAFFIC DETOUR MAP  
 C.R. 60 (FITCHVILLE RIVER RD.)**

**HUR-C.R. 60-0-00  
 (FITCHVILLE RIVER RD.)**

F:\2015\115017 Huron County Safety Study\15017\roadway\sheets\102915MD002.dgn 10/31/2019 1:25:42 PM SteveMorr



**COUNTY ROAD 167 (PROSPECT RD.) DETOUR ROUTE**

DENOTES DETOUR ROUTE

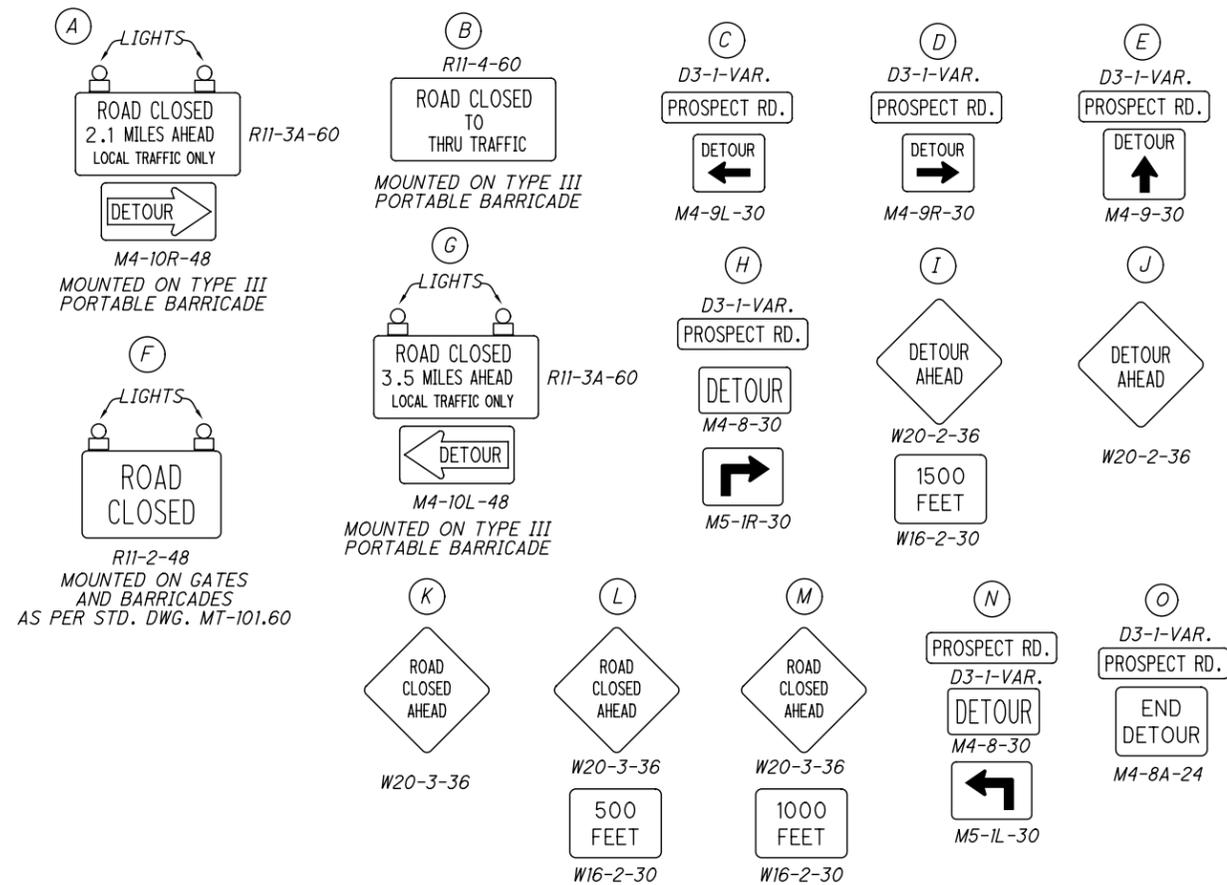
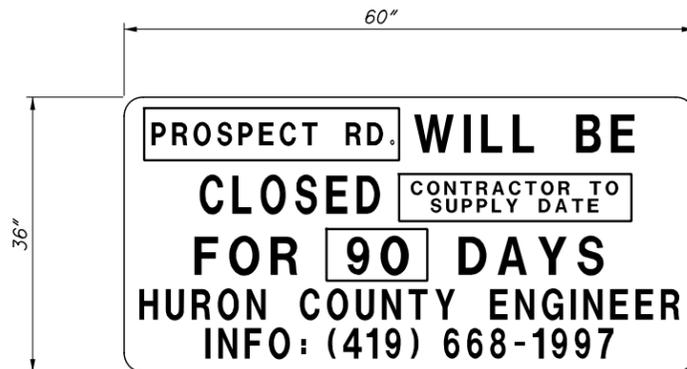
DENOTES GATES & BARRICADES AS PER ODOT SCD MT-101.60

**ITEM 614 - DETOUR SIGNING**

COUNTY ROAD 167 (PROSPECT RD.)	LS
TOTAL CARRIED TO GENERAL SUMMARY	LS

**LEGEND**

\*WHEN FITCHVILLE RIVER RD. IS OPEN TO THROUGH TRAFFIC, BARRICADE PROSPECT RD. AT FITCHVILLE RIVER RD. INTERSECTION



**NOTE:**  
TYPE A YELLOW FLASHING LIGHTS ARE REQUIRED ON ALL SIGNS SHOWN WITH LIGHTS.

**DETOUR SIGNING**

THE CONTRACTOR WILL PROVIDE, INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING AS DETAILED ON THIS SHEET. THE DETOUR SIGNING SHALL BE COVERED WHEN THE DETOUR IS NOT IN PLACE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNING.

**NOTICE OF CLOSURE SIGNS**

NOTICE OF CLOSURE SIGNS (W20-H13), AS DETAILED ON THIS SHEET, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THE SIGNS SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS ON THE ROADWAY. THE SIGNS SHOULD BE ERECTED AT THE POINT OF CLOSURE.

PAYMENT FOR THESE SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE SIGNS INCLUDING SUPPORTS.

**COOPERATION BETWEEN CONTRACTORS**

SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT OR ON ADJACENT PROJECTS SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS, COMPLETION OR WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

\*ADD "NO OUTLET" (W14-2, 30"x30") AT ROAD CLOSURE TYPE III PORTABLE BARRICADES AS INDICATED.



**MAINTENANCE OF TRAFFIC DETOUR MAP  
C.R. 167 (PROSPECT RD.)**

**HUR-C.R. 60-0-00  
(FITCHVILLE RIVER RD.)**





F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915GCC001.dgn 10/31/2019 1:26:24 PM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
<b>PROSPECT RD. CALCULATIONS</b>			
<b>CR 167 (PROSPECT RD.) PAVEMENT PLANING AND RESURFACING</b>			
1	STA 202+60.00 TO STA 202+85.00	= 25.00 FT X ( 19.4 + 20.0 ) / 2	492.50 SF
2	STA 214+75.00 TO STA 215+00.00	= 25.00 FT X ( 20.0 + 18.6 ) / 2	482.50 SF
3	SUM LINES 1 AND 2		975.00 SF
<b>CR 167 (PROSPECT RD.) FULL DEPTH PAVEMENT AREA</b>			
4	STA 202+85.00 TO STA 205+76.84	= 291.84 FT X 20 FT	5836.80 SF
5	STA 205+76.84 TO STA 206+37.50	= 60.66 FT X 20 FT	1213.20 SF
6	STA 205+76.84 TO STA 206+37.50	= 88.04 RADIUS RETURN LT & RT	COMPUTER GENERATED AREA 1071.97 SF
7	STA 206+58.20 TO STA 207+23.53	= 93.00 RADIUS RETURN LT & RT	COMPUTER GENERATED AREA 1302.42 SF
8	STA 206+58.20 TO STA 207+23.53	= 65.33 FT X 20 FT	1306.60 SF
9	STA 207+23.53 TO STA 214+75.00	= 751.47 FT X 20 FT	15029.40 SF
10	SUM LENGTH 4 TO 9	= 1350.34	
11	SUM LINES 4 TO 9		25760.39 SF
<b>ITEM 202 - PAVEMENT REMOVED, ASPHALT</b>			
12	STA 204+45.16 TO STA 206+49.69		COMPUTER GENERATED AREA 2433.11 SF
13	STA 206+75.53 TO STA 213+12.54		COMPUTER GENERATED AREA 10747.90 SF
14	SUM LINES 12 AND 13	= 13181.01 SF / 9	1464.56 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 1465 SY</b>
<b>ITEM 202 - FENCE REMOVED</b>			
15	STA LT 201+25.00 TO STA 204+93.46	=	373.00 FT
16	STA RT 206+71.24 TO STA 206+73.88	=	15.00 FT
17	STA 207+01.65 TO STA 215+27.00	=	819.00 FT
18	STA 208+79.27 TO STA 211+57.15	=	334.00 FT
19	SUM LINES 15 TO 18	=	1541.00 FT
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 1541 FT</b>
<b>ITEM 203 - EXCAVATION</b>			
DRIVEWAY STA 212+75.47 LT			
20	SUM LINES 73 TO 75	= 276.55 SF X 8 IN / 12 / 27	6.83 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 7 CY</b>
<b>ITEM 203 - EMBANKMENT</b>			
TO FILL AREAS OF EXISTING PAVEMENT			
21	STA 203+00.00 TO 203+50.00	= 50.00 FT X 1.06 SF / 27	1.96 CY
22	STA 203+50.00 TO 204+00.00	= 50.00 FT X 2.44 SF / 27	4.52 CY
23	STA 204+00.00 TO 204+50.00	= 50.00 FT X 3.48 SF / 27	6.44 CY
24	STA 204+50.00 TO 205+00.00	= 50.00 FT X 6.12 SF / 27	11.33 CY
25	STA 205+00.00 TO 205+50.00	= 50.00 FT X 8.96 SF / 27	16.59 CY
26	STA 205+50.00 TO 206+00.00	= 50.00 FT X 8.07 SF / 27	14.94 CY
27	STA 206+00.00 TO 206+50.00	= 50.00 FT X 4.63 SF / 27	8.57 CY
28	STA 206+50.00 TO 207+00.00	= 50.00 FT X 17.77 SF / 27	32.91 CY
29	STA 207+00.00 TO 207+50.00	= 50.00 FT X 27.72 SF / 27	51.33 CY
30	STA 207+50.00 TO 208+00.00	= 50.00 FT X 22.69 SF / 27	42.02 CY
31	STA 208+00.00 TO 208+50.00	= 50.00 FT X 22.37 SF / 27	41.43 CY
32	STA 208+50.00 TO 209+00.00	= 50.00 FT X 22.28 SF / 27	41.26 CY
33	STA 209+00.00 TO 209+35.00	= 35.00 FT X 11.15 SF / 27	14.45 CY
34	STA 209+35.00 TO 209+50.00	= 15.00 FT X 11.19 SF / 27	6.22 CY
35	STA 209+50.00 TO 210+00.00	= 50.00 FT X 22.52 SF / 27	41.70 CY
36	STA 210+00.00 TO 210+50.00	= 50.00 FT X 22.81 SF / 27	42.24 CY
37	STA 210+50.00 TO 211+00.00	= 50.00 FT X 20.93 SF / 27	38.76 CY
38	STA 211+00.00 TO 211+50.00	= 50.00 FT X 19.63 SF / 27	36.35 CY
39	STA 211+50.00 TO 212+00.00	= 50.00 FT X 21.24 SF / 27	39.33 CY
40	STA 212+00.00 TO 212+50.00	= 50.00 FT X 21.62 SF / 27	40.04 CY
41	STA 212+50.00 TO 213+00.00	= 50.00 FT X 17.07 SF / 27	31.61 CY
42	STA 213+00.00 TO 213+50.00	= 50.00 FT X 8.76 SF / 27	16.22 CY
43	STA 213+50.00 TO 214+00.00	= 50.00 FT X 2.84 SF / 27	5.26 CY
44	STA 214+00.00 TO 214+50.00	= 50.00 FT X 0.59 SF / 27	1.09 CY
45	SUM LINES 21 TO 44		586.57 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 587 CY</b>

CALCULATED DAW CHECKED ALP  
**CALCULATIONS**  
 HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)  
 17  
 64

CONTINUED ON NEXT SHEET

F:\2015\15017 Huron County Safety Study\15017roadway\sheets\102915GCC001.dgn 10/31/2019 1:26:30 PM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
<b>ITEM 204 - SUBGRADE COMPACTION</b>			
FULL DEPTH			
46	LINE 11	=	25760.39 SF
47	LINE 10	= 1350.34 FT X 2 SIDES X ( 12 " / 12 )	= 2700.68 SF
48	SUM LINES 46 AND 47	= 28461.07 SF / 9	= 3162.34 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 3163 SY</b>
<b>ITEM 204 - PROOF ROLLING</b>			
49	LINE 48	= 3162.34 SY X ( 1 HR / 2000 SY )	= 1.58 HOUR
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 2 HOUR</b>
<b>ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5" THICK)</b>			
50	LINE 3	= 975.00 SF / 9	= 108.33 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 109 SY</b>
<b>ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22</b>			
FULL DEPTH			
51	LINE 11	= 25760.39 SF X ( 6 " / 12 ) / 27	= 477.04 CY
52	LINE 10	= 1350.34 FT X 2 SIDES X ( 6 " / 12 ) X ( 6 " / 12 ) / 27	= 25.01 CY
53	SUM LINES 51 AND 52		= 502.05 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 503 CY</b>
<b>ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN</b>			
FULL DEPTH			
54	LINE 11	= 25760.39 SF X ( 6 " / 12 ) / 27	= 477.04 CY
55	LINE 10	= 1350.34 FT X 2 SIDES X ( 12 " / 12 ) X ( 6 " / 12 ) / 27	= 50.01 CY
56	SUM LINES 54 AND 55		= 527.05 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 528 CY</b>
<b>ITEM 407 - TACK COAT (MILLED ASPHALT SURFACE)</b>			
57	LINE 3	= 975.00 SF / 9 X 0.09 GAL/SY	= 9.75 GAL
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 10 GAL</b>
<b>ITEM 407 - TACK COAT (NEW ASPHALT)</b>			
PLANING AND RESURFACING			
58	LINE 3	= 975.00 SF / 9 X 0.06 GAL/SY	= 6.50 GAL
FULL DEPTH			
59	LINE 11	= 25760.39 SF / 9 X 0.06 GAL/SY X 2 APLICATIONS	= 343.47 GAL
60	SUM LINES 58 AND 59		= 349.97 GAL
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 350 GAL</b>
61	NOT USED		
62	NOT USED		
63	NOT USED		
64	NOT USED		
<b>ITEM 411 - 8" STABILIZED CRUSHED AGGREGATE</b>			
65	STA LT 202+85.00 TO STA 206+00.08	= 315.08 FT X 2 FT	= 630.16 SF
66	STA LT THROUGH RADIUS 206+00.08 TO STA 206+48.53	= 64.76 FT X 2 FT	= 129.52 SF
67	STA RT 202+85.00 TO STA 205+76.84	= 291.84 FT X 2 FT	= 583.68 SF
68	STA RT THROUGH RADIUS 205+76.84 TO STA 206+24.19	= 85.04 FT X 2 FT	= 170.08 SF
69	STA LT THROUGH RADIUS 206+75.10 TO STA 207+23.53	= 89.26 FT X 2 FT	= 178.52 SF
70	STA LT 207+23.53 TO STA 214+75.00	= 751.47 FT X 2 FT	= 1502.94 SF
71	STA RT THROUGH RADIUS 206+49.60 TO STA 206+98.92	= 68.91 FT X 2 FT	= 137.82 SF
72	STA RT 206+98.92 TO STA 214+75.00	= 776.08 FT X 2 FT	= 1552.16 SF
ADDITIONAL AT DRIVEWAY STA 208+60.00 RT			
72A	MAIN DRIVE = 20.00 FT X 28.00 FT		= 560.00 SF
72B	FLARED END LEFT = 20.00 FT X 18.00 FT / 2		= 180.00 SF
72C	FLARED END RIGHT = 20.00 FT X 18.00 FT / 2		= 180.00 SF
ADDITIONAL AT DRIVEWAY STA 212+75.47 LT			
73	MAIN DRIVE = 12.00 FT X 12.00 FT		= 144.00 SF
74	FLARED END LEFT = 11.00 FT X 12.70 FT / 2		= 69.85 SF
75	FLARED END RIGHT = 11.00 FT X 11.40 FT / 2		= 62.70 SF
76	SUM LINES 65 TO 75	= 6081.43 SF X ( 8 " / 12 ) / 27	= 150.16 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 151 CY</b>

CALCULATED	DAW	CHECKED	ALP
CALCULATIONS			
HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)			
18 64			

CONTINUED ON NEXT SHEET

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915GC001.dgn 10/31/2019 1:26:37 PM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
	<b>ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN</b>		
	PLANING AND RESURFACING		
77	LINE 3	=	975.00 SF
	FULL DEPTH		
78	LINE 11	=	25760.39 SF
79	SUM LINES 77 AND 78	=	26735.39 SF
80	LINE 79	= 26735.39 SF X ( 1 1/4 " / 12 ) / 27	103.15 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 104 CY</b>
	<b>ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN</b>		
	PLANING AND RESURFACING		
81	LINE 3	=	975.00 SF
	FULL DEPTH		
82	LINE 11	=	25760.39 SF
83	SUM LINES 81 AND 82	=	26735.39 SF
84	LINE 83	= 26735.39 SF X ( 1 3/4 " / 12 ) / 27	144.40 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 145 CY</b>

CALCULATED	DAW	CHECKED	ALP
<b>CALCULATIONS</b>			
<b>HUR-C.R. 60-0.00</b>			
<b>(FITCHVILLE RIVER RD.)</b>			
19			
64			

CONTINUED ON NEXT SHEET

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915GCC001.dgn 10/31/2019 1:26:47 PM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
<b>FITCHVILLE RIVER RD. CALCULATIONS</b>			
<b>CR 60 (FITCHVILLE RIVER RD.) PAVEMENT PLANING AND RESURFACING</b>			
FROM USR 250 TO CENTER ST.			
1	STA 0+07.86 TO STA 0+69.95	= 62.09 FT X ( 19.65 + 19.65 ) / 2	= 1220.07 SF
2	RADIUS RETURN LT & RT ONTO USR 250		COMPUTER GENERATED AREA = 806.89 SF
3	STA 0+69.95 TO STA 0+81.11	= 11.16 FT X ( 19.73 + 17.83 ) / 2	= 209.58 SF
4	STA 0+81.11 TO STA 5+19.02	= 437.91 FT X ( 17.83 + 19.66 ) / 2	= 8208.62 SF
5	RADIUS RETURN LT ONTO CENTER ST.		COMPUTER GENERATED AREA = 85.08 SF
6	SUM LINES 1 TO 5		= 10530.24 SF
CENTER ST. AT CENTER ST. INTERSECTION			
7	STA 5+19.02 TO STA 5+41.58	= 23.61 FT X ( 19.42 + 18.40 ) / 2	= 446.47 SF
FITCHVILLE RIVER RD. AT CENTER ST. INTERSECTION			
8	STA 5+19.02 TO STA 5+41.58	= 22.44 FT X ( 18.80 + 18.69 ) / 2	= 420.64 SF
FROM CENTER ST. TO TR 42 (FAYETTE RD.)			
9	RADIUS RETURN LT ONTO CENTER ST.		COMPUTER GENERATED AREA = 201.04 SF
10	STA 5+41.58 TO STA 39+54.35	= 3412.77 FT X ( 18.69 + 19.52 ) / 2	= 65200.97 SF
11	STA 40+21.70 TO STA 50+57.54	= 1035.84 FT X ( 19.49 + 19.30 ) / 2	= 20090.12 SF
12	RADIUS RETURN LT & RT ONTO TR 42 (FAYETTE RD.)		COMPUTER GENERATED AREA = 342.79 SF
13	SUM LINES 9 TO 12		= 85834.92 SF
FAYETTE RD. AT TR 42 (FAYETTE RD.) INTERSECTION			
14	STA LT 50+57.54 TO STA 50+80.13	= 22.59 FT X ( 19.90 + 19.80 ) / 2	= 448.41 SF
15	STA RT 50+57.54 TO STA 50+80.13	= 22.59 FT X ( 20.92 + 20.88 ) / 2	= 472.13 SF
16	SUM LINES 14 AND 15		= 920.54 SF
FITCHVILLE RIVER RD. AT TR 42 (FAYETTE RD.) INTERSECTION			
17	STA 50+57.54 TO STA 50+80.13	= 22.59 FT X ( 19.36 + 19.56 ) / 2	= 439.60 SF
FROM TR 42 (FAYETTE RD.) TO TR 166 (JENNINGS RD.)			
18	RADIUS RETURN LT & RT ONTO TR 42 (FAYETTE RD.)		COMPUTER GENERATED AREA = 313.15 SF
19	STA 50+80.13 TO STA 79+93.52	= 2913.39 FT X ( 19.56 + 18.50 ) / 2	= 55441.81 SF
20	RADIUS RETURN LT ONTO TR 166 (JENNINGS RD.)		COMPUTER GENERATED AREA = 153.10 SF
21	SUM LINES 18 TO 20		= 55908.06 SF
JENNINGS RD. AT TR 166 (JENNINGS RD.) INTERSECTION			
22	STA 79+93.52 TO STA 80+30.15	= 36.63 FT X ( 19.97 + 20.01 ) / 2	= 732.23 SF
FITCHVILLE RIVER RD. AT TR 166 (JENNINGS RD.) INTERSECTION			
23	STA 79+93.52 TO STA 80+30.15	= 36.63 FT X ( 19.14 + 19.23 ) / 2	= 702.75 SF
FROM TR 166 (JENNINGS RD.) TO CR 167 (PROSPECT RD.)			
24	RADIUS RETURN LT ONTO TR 166 (JENNINGS RD.)		COMPUTER GENERATED AREA = 223.73 SF
25	STA 80+30.15 TO STA 131+14.29	= 5084.14 FT X ( 19.23 + 19.53 ) / 2	= 98530.63 SF
26	SUM LINES 24 TO 25		= 98754.36 SF
NEW FULL DEPTH COUNTY PAVEMENT			
26A	STA 131+14.29 TO STA 133+85.00	= 270.71 FT X ( 22.00 + 22.00 ) / 2	= 5955.62 SF
PLANING AND RESURFACING			
26B	STA 142+26.75 TO STA 142+51.75	= 25 FT X ( 20.00 + 19.70 ) / 2	= 496.25 SF
27	SUM LENGTH 1 TO 26B	= 13440.09 FT	
28	SUM LINES 6, 7, 8, 13, 16, 17, 21, 22, 23, 26, 26A AND 26B		= 261141.68 SF
<b>CR 60 (FITCHVILLE RIVER RD.) FULL DEPTH PAVEMENT AREA</b>			
29	STA 133+85.00 TO STA 138+01.65	= 416.65 FT X 22	= 9166.30 SF
30	STA 138+01.65 TO STA 138+83.37	= 81.72 FT X ( 22 + 22.00 ) / 2	= 1797.84 SF
30A	STA 138+83.37 TO STA 138+93.59	= 10.22 FT X ( 22.00 + 22.00 ) / 2	= 224.84 SF
31	STA 138+93.59 TO STA 139+84.20	= 90.61 FT X ( 22.00 + 22.00 ) / 2	= 1993.42 SF
32	STA 139+84.20 TO STA 142+26.75	= 242.55 FT X 22	= 5336.10 SF
33	SUM LENGTH 29 TO 32	= 841.75 FT	
34	SUM LINES 29 TO 33		= 18518.50 SF

CALCULATED	DAW	CHECKED	ALP
<b>CALCULATIONS</b>			
<b>HUR-C.R. 60-0.00</b>			
<b>(FITCHVILLE RIVER RD.)</b>			
20			
64			

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915GCC001.dgn 11/1/2019 10:53:20 AM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
<b>ITEM 202 - PAVEMENT REMOVED</b>			
34	NOT USED		
35	NOT USED		
DRIVE AT STA 101+45.05			
36	STA RT 101+45.05 TO STA 101+85.47	= 40.42 FT X 3 FT	= 121.26 SF
37	TAKE OUT FLARED ENDS 101+45.05 TO STA 101+85.47	= 3.00 FT X 3 FT X 2 / 2	= -9.00 SF
DRIVE AT STA 119+37.68			
38	STA LT 119+37.68 TO STA 120+03.57	= 65.89 FT X 3 FT	= 197.67 SF
39	SUM LINES 34 TO 38	= 309.93 SF / 9	= 34.44 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 35 SY</b>
<b>ITEM 202 - GUARDRAIL REMOVED</b>			
40	STA LT 27+97.95 TO STA 32+15.95		= 418.00 FT
41	STA RT 28+26.41 TO STA 28+85.49		= 59.08 FT
42	STA RT 29+06.02 TO STA 32+72.40		= 366.38 FT
43	STA LT 67+17.06 TO STA 67+94.54		= 77.48 FT
44	STA RT 67+28.00 TO STA 67+92.25		= 64.25 FT
45	SUM LINES 40 TO 44		= 985.19 FT
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 986 FT</b>
<b>ITEM 204 - SUBGRADE COMPACTION</b>			
FULL DEPTH			
46	LINE 33		= 18518.50 SF
47	STA RT 133+85.00 TO STA 138+01.52	= 416.52 FT X ( 12 " / 12 ) X 2 SIDES	= 833.04 SF
48	STA RT 138+01.52 TO STA 138+21.54	= 20.02 FT X ( 12 " / 12 )	= 20.02 SF
49	STA LT 139+18.84 TO STA 139+84.08	= 65.24 FT X ( 12 " / 12 )	= 65.24 SF
50	STA RT 139+49.61 TO STA 139+84.20	= 34.59 FT X ( 12 " / 12 )	= 34.59 SF
51	STA RT 139+84.20 TO STA 142+26.75	= 242.55 FT X ( 12 " / 12 ) X 2 SIDES	= 485.10 SF
52	SUM LINES 46 TO 51	= 19956.49 SF / 9	= 2217.39 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 2218 SY</b>
<b>ITEM 204 - PROOF ROLLING</b>			
FULL DEPTH			
53	LINE 52	= 2030.45 SY X ( 1 HR / 2000 SY )	= 1.02 HOUR
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 2 HOUR</b>
<b>ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS</b>			
54	STA LT 27+98.20 TO 32+10.70		= 412.50 FT
55	STA RT 28+26.50 TO 28+31.48		= 12.50 FT
56	STA RT 28+43.75 TO 28+68.32		= 25.00 FT
57	STA LT 28+80.64 TO 28+85.67		= 12.50 FT
58	STA RT 29+08.25 TO 29+14.07		= 12.50 FT
59	STA RT 29+26.57 TO 32+79.70		= 350.00 FT
60	STA LT 67+13.20 TO 68+00.70		= 87.50 FT
61	STA RT 67+27.71 TO 67+90.21		= 62.50 FT
62	STA LT 125+07.20 TO 125+57.20		= 50.00 FT
63	STA RT 125+12.20 TO 125+62.20		= 50.00 FT
64	SUM LINES 54 TO 63		= 1075.00 FT
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 1075 FT</b>
<b>ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E</b>			
65	STA LT 27+98.20		= 1 EACH
66	STA LT 32+10.70		= 1 EACH
67	STA RT 32+79.70		= 1 EACH
68	STA LT 67+13.20		= 1 EACH
69	STA RT 67+27.71		= 1 EACH
70	STA RT 67+90.21		= 1 EACH
71	STA LT 68+00.70		= 1 EACH
72	STA LT 125+07.20		= 1 EACH
73	STA RT 125+12.20		= 1 EACH
74	STA LT 125+57.20		= 1 EACH
75	STA RT 125+62.20		= 1 EACH
76	SUM LINES 65 TO 75		= 11 EACH
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 11 EACH</b>

CALCULATED DAW CHECKED ALP  
**CALCULATIONS**  
 HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)  
 21  
 64

F:\2015\115017\_Huron County Safety\_Study\15017\_roadway\_sheets\102915GCC001.dgn 11/1/2019 11:03:36 AM SteveMorr

LINE	DESCRIPTION	CALCULATION	QUANTITY
<b>ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE T</b>			
77	STA RT	28+31.48 TO 28+43.75	= 1 EACH
78	STA RT	28+68.32 TO 28+80.64	= 1 EACH
79	STA RT	29+14.07 TO 29+26.57	= 1 EACH
80	SUM LINES	77 TO 79	= 3 EACH
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 3 EACH</b>
<b>ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1.5" THICK)</b>			
PLANING AND RESURFACING			
81	LINE	28 = 261141.68 SF / 9	= 29015.74 SY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 29016 SY</b>
<b>ITEM 302 - 6" ASPHALT CONCRETE BASE, PG64-22</b>			
FULL DEPTH			
82	LINE	33 = 18518.50 SF X ( 6 " / 12 ) / 27	= 342.94 CY
83	STEP	= 1437.99 FT X ( 6 " / 12 ) X ( 6 " / 12 ) / 27	= 13.31 CY
84	SUM LINES	82 AND 83	= 356.25 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 357 CY</b>
<b>ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN</b>			
FULL DEPTH			
85	LINE	33 = 18518.50 SF X ( 6 " / 12 ) / 27	= 342.94 CY
86	STEP	= 1437.99 FT X ( 12 " / 12 ) X ( 6 " / 12 ) / 27	= 26.63 CY
DRIVES			
87	SUM LINES	34 TO 38 = 309.93 SF X ( 6 " / 12 ) / 27	= 5.74 CY
88	SUM LINES	85 TO 87	= 375.31 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 376 CY</b>
<b>ITEM 407 - TACK COAT (MILLED ASPHALT SURFACE)</b>			
PLANING AND RESURFACING			
89	LINE	28 = 261141.68 SF / 9 X 0.09 GAL/SY	= 2611.42 GAL
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 2612 GAL</b>
<b>ITEM 407 - TACK COAT (NEW ASPHALT)</b>			
PLANING AND RESURFACING			
90	LINE	28 = 261141.68 SF	= 261141.68 SF
FULL DEPTH			
91	LINE	33 = 18518.50 SF X 2 APPLICATIONS	= 37037.00 SF
DRIVES			
92	SUM LINES	34 TO 38	= 309.93 SF
93	SUM LINES	90 TO 92	= 298488.61 SF
94	LINE	93 = 298488.61 SF / 9 X 0.06 GAL/SY	= 1989.92 GAL
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 1990 GAL</b>
<b>ITEM 209 - RESHAPING UNDER GUARDRAIL</b>			
95	STA LT	27+46.24 TO 32+61.23 = 512.50 FT / 100	= 5.13 STA
96	STA RT	28+26.50 TO 28+85.67 = 50.00 FT / 100	= 0.50 STA
97	STA RT	29+08.25 TO 33+30.31 = 412.50 FT / 100	= 4.13 STA
98	STA LT	66+62.60 TO 68+51.30 = 187.50 FT / 100	= 1.88 STA
98A	STA RT	66+77.14 TO 68+40.78 = 162.50 FT / 100	= 1.63 STA
98B	STA LT	124+56.59 TO 156+07.80 = 150.00 FT / 100	= 1.50 STA
98B	STA RT	124+61.58 TO 126+12.81 = 150.00 FT / 100	= 1.50 STA
98D	SUM LINES	95 TO 98C	= 16.27 STA
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 17 STA</b>
<b>ITEM 411 - 8" STABILIZED CRUSHED AGGREGATE</b>			
FULL DEPTH			
99	STA	133+85.00 TO STA 138+01.65 = 416.65 FT X 2 FT X 2 SIDES	= 1666.60 SF
100	STA RT	138+01.54 TO STA 138+21.54 = 20.00 FT X 2 FT	= 40.00 SF
101	STA RT	139+49.61 TO STA 139+84.32 = 34.71 FT X 2 FT	= 69.42 SF
102	STA LT	139+18.84 TO STA 139+84.08 = 65.24 FT X 2 FT	= 130.48 SF
103	STA	139+84.08 TO STA 142+26.75 = 242.67 FT X 2 FT X 2 SIDES	= 970.68 SF
104	SUM LINES	100 TO 102 = 2877.18 FT X 8 " / 12 ) / 27	= 71.04 CY
			<b>TOTAL CARRIED TO GENERAL SUMMARY = 72 CY</b>

CALCULATED DAW CHECKED ALP  
**CALCULATIONS**  
 HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)  
 22  
 64

CONTINUED ON NEXT SHEET

F:\2015\115017 Huron County Safety Study\15017roadway\sheets\102915GGC001.dgn 10/31/2019 1:27:19 PM SteveMorr

LINE	DESCRIPTION	CALCULATION										QUANTITY		
<b>ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN</b>														
PLANING AND RESURFACING														
105	LINE 28	=	261141.68	SF										
FULL DEPTH														
106	LINE 33	=	18518.50	SF										
DRIVES														
107	SUM LINES 34 TO 38	=	309.93	SF										
108	SUM LINES 105 TO 107	=	279970.11	SF										
109	LINE 108	=	279970.11	SF	X ( 1 1/4 " / 12 ) / 27					1080.13	CY			
											TOTAL CARRIED TO GENERAL SUMMARY	=	1081	CY
<b>ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN</b>														
PLANING AND RESURFACING														
110	LINE 28	=	261141.68	SF										
FULL DEPTH														
111	LINE 33	=	18518.50	SF										
DEDUCT FOR WORK BY OTHERS														
112	STA 131+14.29 TO STA 133+85.00	=	270.71	FT	X 20 FT									
DRIVES														
113	SUM LINES 34 TO 38	=	309.93	SF										
114	SUM LINES 110 TO 113	=	274555.91	SF										
115	LINE 114	=	274555.91	SF	X ( 1 3/4 " / 12 ) / 27					1482.94	CY			
											TOTAL CARRIED TO GENERAL SUMMARY	=	1483	CY
<b>ITEM 617 - COMPACTED AGGREGATE (3" AVG.)</b>														
PLANING AND RESURFACING														
116	LINE 27	=	13415.09	FT	X 1 FT		X ( 3 " / 12 ) X 2 SIDES							
117	LINE 116	=	6707.55	CF	/ 27									
											TOTAL CARRIED TO GENERAL SUMMARY	=	249	CY
<b>ITEM 617 - SHOULDER PREPARATION</b>														
PLANING AND RESURFACING														
118	LINE 27	=	13440.09	FT	X 1 FT		X 2 SIDES / 9							
											TOTAL CARRIED TO GENERAL SUMMARY	=	2986.69	SY
<b>ITEM 203 - EMBANKMENT</b>														
119	STA BEGIN EARTHWORK 133+85.00 TO 134+00.00	=	15.00	FT	X 0.50 SF		/ 27							
120	STA 134+00.00 TO 135+25.00	=	125.00	FT	X 0.50 SF		/ 27							
121	STA 135+25.00 TO 136+50.00	=	125.00	FT	X 0.00 SF		/ 27							
122	STA 136+50.00 TO 137+75.00	=	125.00	FT	X 0.50 SF		/ 27							
123	STA SUSPEND EARTHWORK 137+75.00 TO 138+25.00	=	50.00	FT	X 0.50 SF		/ 27							
121	STA RESUME EARTHWORK 139+84.20 TO 140+00.00	=	15.80	FT	X 0.00 SF		/ 27							
122	STA 140+00.00 TO 140+75.00	=	75.00	FT	X 0.00 SF		/ 27							
123	STA 140+75.00 TO 141+50.00	=	75.00	FT	X 0.00 SF		/ 27							
124	STA 141+50.00 TO 142+25.00	=	75.00	FT	X 0.00 SF		/ 27							
125	STA END EARTHWORK 142+25.00 TO 142+26.75	=	1.75	FT	X 0.00 SF		/ 27							
124	SUM LINES 119 TO 123	=	5.83	CY										
											TOTAL CARRIED TO GENERAL SUMMARY	=	6	CY
<b>ITEM 203 - EXCAVATION</b>														
125	STA BEGIN EARTHWORK 133+85.00 TO 134+00.00	=	15.00	FT	X 28.00 SF		/ 27							
126	STA 134+00.00 TO 135+25.00	=	125.00	FT	X 62.00 SF		/ 27							
127	STA 135+25.00 TO 136+50.00	=	125.00	FT	X 58.50 SF		/ 27							
128	STA 136+50.00 TO 137+75.00	=	125.00	FT	X 43.50 SF		/ 27							
129	STA SUSPEND EARTHWORK 137+75.00 TO 138+25.00	=	50.00	FT	X 19.00 SF		/ 27							
127	STA RESUME EARTHWORK 139+84.20 TO 140+00.00	=	15.80	FT	X 22.50 SF		/ 27							
128	STA 140+00.00 TO 140+75.00	=	75.00	FT	X 48.00 SF		/ 27							
129	STA 140+75.00 TO 141+50.00	=	75.00	FT	X 58.50 SF		/ 27							
130	STA 141+50.00 TO 142+25.00	=	75.00	FT	X 59.00 SF		/ 27							
131	STA END EARTHWORK 142+25.00 TO 142+35.00	=	10.00	FT	X 26.00 SF		/ 27							
130	SUM LINES 125 TO 129	=	1292.53	CY										
											TOTAL CARRIED TO GENERAL SUMMARY	=	1293	CY

CALCULATED: DAW, CHECKED: ALP  
**CALCULATIONS**  
 HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)  
 23 / 64

CONTINUED ON NEXT SHEET

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915GCC001.dgn 10/31/2019 1:27:26 PM SteveMorr

LINE	DESCRIPTION	CALCULATION		QUANTITY
	<b>EROSION CONTROL</b>			
	<b>659 - SEEDING AND MULCHING</b>			
1			TOTAL FROM CROSS SECTION SHEET <u>51</u> FOR PROSPECT RD. =	7299.00 SY
3	LINE 1		TOTAL FROM GENERAL NOTE SHEET <u>8</u> FOR FITCHVILLE RIVER RD. =	2637.00 SY
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>9936 SY</b>
	<b>659 - TOPSOIL</b>			
4	LINE 1	=	9936.00 SY X 111 CY / 1000 SY	1102.90 CY
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>1103 CY</b>
	<b>659 - COMMERCIAL FERTILIZER</b>			
5	LINE 1	=	9936.00 SY X 1 TON / 7410 SY )	1.34 TON
6	LINE 11	=	496.80 SY X 1 TON / 11111 SY )	0.04 TON
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>1.38 TON</b>
	<b>659 - LIME</b>			
7	LINE 1	=	9936.00 SY / 4840 SY PER ACRE )	2.05 ACRE
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>2.05 ACRE</b>
	<b>659 - WATER</b>			
8	LINE 1	=	9936.00 SY X 0.0027 MGAL / SY X 2 APPLICATIONS )	53.65 MGAL
9	LINE 11	=	496.80 SY X 0.0027 MGAL / SY X 1 APPLICATIONS )	1.34 MGAL
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>55 MGAL</b>
	<b>659 - REPAIR SEEDING AND MULCHING</b>			
10	LINE 1	=	9936.00 SY X 5%	496.80 SY
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>497 SY</b>
	<b>659 - INTER-SEEDING</b>			
11	LINE 1	=	9936.00 SY X 5%	496.80 SY
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>497 SY</b>
	<b>659 - SOIL ANALYSIS TEST</b>			
12	LINE 4	=	1102.90 CY X 1 TEST / 10000 CY	0.11 EACH
			(MINIMUM OF 2 TESTS)	
			<b>TOTAL CARRIED TO GENERAL NOTES =</b>	<b>2 EACH</b>

CALCULATED	DAW	CHECKED	ALP
<b>CALCULATIONS</b>			
HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)			
24 64			

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\_sheets\102915DS001.dgn 10/31/2019 1:27:47 PM SteveMorr

SHEET NO.	REFERENCE NO.	STATION	SIDE	202	601	602	605	611			670										
				PIPE REMOVED, 24" AND UNDER FT	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC CY	CONCRETE MASONRY CY	AGGREGATE DRAINS FT	8" CONDUIT, TYPE D FT	12" CONDUIT, TYPE D FT	15" CONDUIT, TYPE A, 706.02 FT	SLOPE EROSION PROTECTION SY										
		FROM	TO																		
<b>CR 167 (PROSPECT RD.)</b>																					
<b>AGGREGATE DRAINS</b>																					
		203+05.00	RT				10.5														
		203+30.00	LT				9														
		203+55.00	RT				10														
		203+80.00	RT				10														
		204+05.00	RT				10														
		204+30.00	RT				11.5														
		204+55.00	RT				13														
		204+80.00	RT				12.5														
		205+05.00	RT				12														
		205+30.00	RT				13.5														
		205+55.00	RT				15														
		205+80.00	RT				15														
		207+05.00	LT				15														
		207+30.00	LT				24														
		207+55.00	LT				26														
		207+80.00	LT				31														
		208+05.00	LT				33														
		208+30.00	LT				37.5														
		208+55.00	LT				39														
		208+80.00	LT				39														
		209+05.00	LT				37.5														
		209+30.00	LT				36														
		209+55.00	LT				34														
		209+80.00	LT				31														
		210+05.00	LT				28														
		210+30.00	LT				23														
		210+55.00	LT				18														
		210+80.00	RT				14														
		211+05.00	RT				14														
		211+30.00	RT				14														
		211+55.00	RT				14														
		211+80.00	RT				14														
		212+05.00	RT				14														
		212+30.00	RT				14														
		212+55.00	RT				14														
		212+80.00	RT				13														
		213+05.00	RT				12														
		213+30.00	RT				10														
		213+55.00	RT				8														
		213+80.00	RT				8														
		214+05.00	RT				8														
		214+30.00	LT				8														
		214+55.00	RT				8														
<b>TOTALS CARRIED TO SHEET 26.</b>							<b>781</b>														

<b>DRAINAGE SUBSUMMARY</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">CALCULATED</td> <td style="font-size: small;">DAW</td> </tr> <tr> <td style="font-size: small;">CHECKED</td> <td style="font-size: small;">ALP</td> </tr> </table>	CALCULATED	DAW	CHECKED	ALP
CALCULATED	DAW				
CHECKED	ALP				
HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)					
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">25</td> <td style="width: 50%; text-align: center;">64</td> </tr> </table>		25	64		
25	64				



F:\2015\115017 Huron County Safety Study\15017roadway\sheets\102915TS001.dgn 10/31/2019 1:28:10 PM SteveMorr

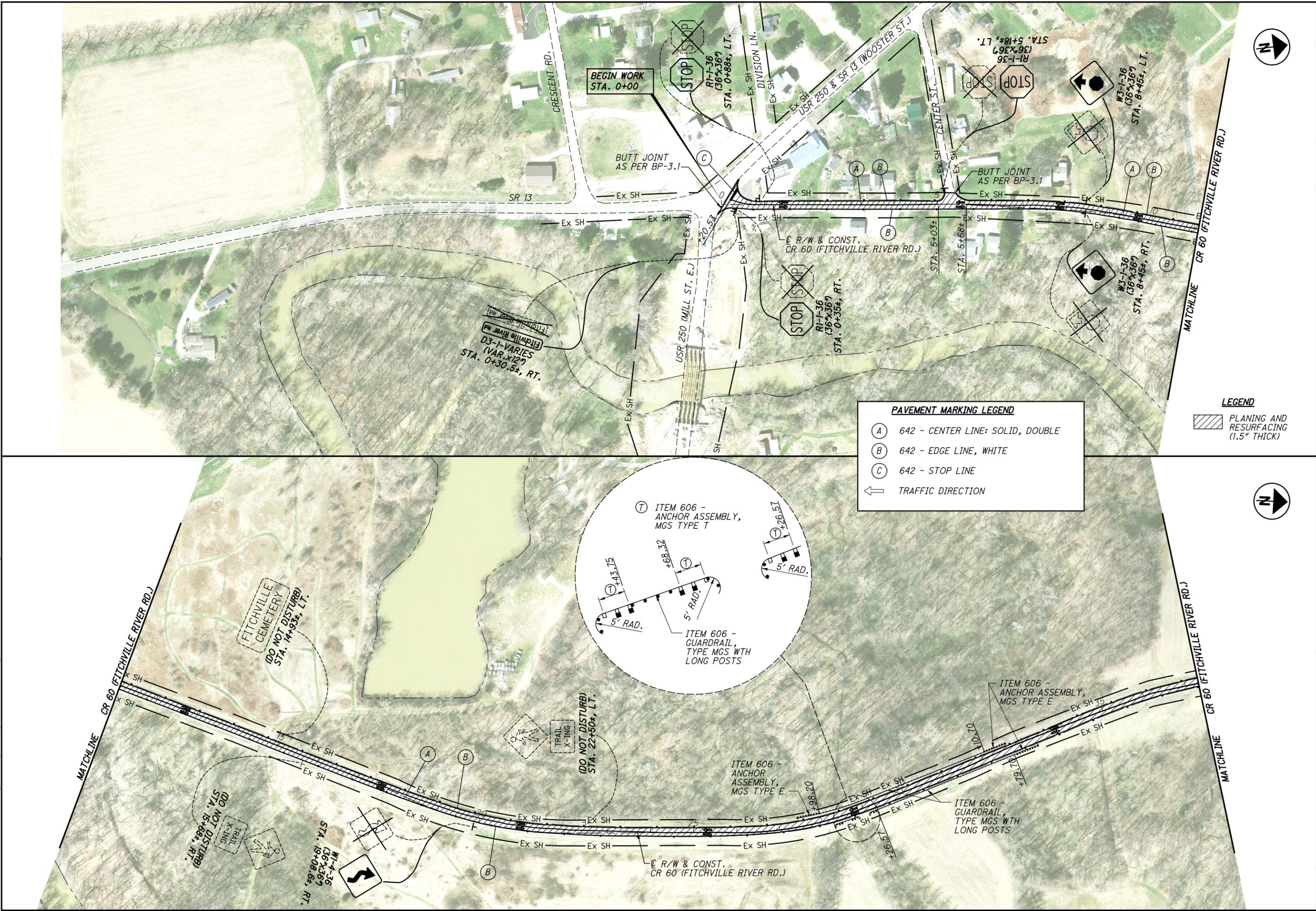
SHEET NO.	REFERENCE NO.	STATION	SIDE	CODE	SIZE			630										642				
					FROM	TO	IN.	X	IN.	FT	FT	FT	FT	EACH	SF	EACH	EACH	EACH	MILE	MILE	MILE	MILE
<b>SIGNS</b>																						
<i>CR 167 (PROSPECT RD.)</i>																						
54	S-1	201+93.00	LT	W1-2R-36	36	X	36															
				W13-1P-24	24	X	24															
54	S-2	201+93.00	RT	W1-2R-36	36	X	36															
				W13-1P-24	24	X	24															
54	S-3	202+93.00	LT	W3-1-36	36	X	36															
54	S-4	202+93.00	RT	W3-1-36	36	X	36															
55	S-5	205+05.00±	LT																			
55	S-6	205+87.40±	LT																			
55	S-7	205+95.40±	LT																			
55	S-8	206+00.00	LT	R1-1-48	48	X	48															
55	S-9	206+00.00	RT	R1-1-48	48	X	48															
55	S-10	206+10.00	RT	D3-1-VARIES	VAR	X	12															
				D3-1-VARIES	VAR	X	12															
55	S-11	206+17.10±	RT																			
55	S-12	207+00.00	LT	R1-1-48	48	X	48															
55	S-13	207+00.00	RT	R1-1-48	48	X	48															
55	S-14	207+24.50±	LT																			
55	S-15	207+28.40±	LT																			
55	S-16	207+60.00±	LT																			
56	S-17	210+07.00	LT	W3-1-36	36	X	36															
56	S-18	210+07.00	RT	W3-1-36	36	X	36															
56	S-19	211+56.40±	LT																			
56	S-20	211+63.80±	LT																			
57	S-21	214+97.00	LT	W1-4L-36	36	X	36															
				W13-1P-24	24	X	24															
57	S-22	214+97.00	RT	W1-4L-36	36	X	36															
				W13-1P-24	24	X	24															
<i>CR 60 (FITCHVILLE RIVER RD.)</i>																						
55	S-23	135+25.00	LT	W2-1-36	36	X	36															
				W16-H8P-48	48	X	8															
55	S-24	135+25.00	RT	W2-1-36	36	X	36															
				W16-H8P-48	48	X	8															
55	S-25	142+25.00	LT	W2-1-36	36	X	36															
				W16-H8P-48	48	X	8															
55	S-26	142+25.00	RT	W2-1-36	36	X	36															
				W16-H8P-48	48	X	8															
<b>TOTALS CARRIED TO SHEET 28.</b>																						
								214.6	58.4	11.1	12	198.8	2	10	9							

CALCULATED	DAW
CHECKED	ALP
<b>TRAFFIC CONTROL SUBSUMMARY</b>	
HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)	
27	64

F:\2015\115017 Huron County Safety Study\5017roadway\sheets\102915TS001.dgn 10/31/2019 1:28:17 PM SteveMorr

SHEET NO.	REFERENCE NO.	STATION		SIDE	CODE	SIZE			630								642									
		FROM	TO			IN.	X	IN.	FT	FT	FT	FT	EACH	SF	EACH	EACH	EACH	MILE	MILE	MILE	MILE	FT				
<i>CR 60 (FITCHVILLE RIVER RD.)</i>																										
29		0+35.00±	0+35.00±	RT	R1-1-36	36	X	36							1	9.0		1	2							
29		0+30.50±	0+30.50±	RT	D3-1-VARIES	VAR	X	12						9.5			1	1	1							
29		0+88.00±	0+88.00±	LT	R1-1-36	36	X	36							1	9.0		1	1							
29		5+81.00±	5+81.00±	LT	R1-1-36	36	X	36							1	9.0		1	1							
29		8+45.00±	8+45.00±	LT	W3-1-36	36	X	36							1	9.0		1	1							
29		8+45.00±	8+45.00±	RT	W3-1-36	36	X	36							1	9.0		1	1							
29		19+08.60±	19+08.60±	RT	W1-4-36	36	X	36							1	9.0		1	1							
30		45+38.20±	45+38.20±	LT	W1-4-36	36	X	36							1	9.0		1	1							
30		50+53.90±	50+53.90±	LT	D3-1-VARIES	VAR	X	12						10.6			1	1	1							
					D3-1-VARIES	VAR	X	12									1	1	1							
30		50+56.40±	50+56.40±	LT	R1-1-36	36	X	36							1	9.0		1	1							
30		50+85.90±	50+85.90±	RT	R1-1-36	36	X	36							1	9.0		1	1							
30		59+50.80±	59+50.80±	RT	W1-2R-36	36	X	36							1	9.0		1	1							
30		69+77.20±	69+77.20±	LT	W1-8R-18	18	X	24	9.5						1	3.0		1	1							
					W1-8R-18	18	X	24							1	3.0		1								
30		70+27.70±	70+27.70±	LT	W1-8R-18	18	X	24	9.5						1	3.0		1	1							
					W1-8R-18	18	X	24							1	3.0		1								
30		71+11.80±	71+11.80±	LT	W1-8R-18	18	X	24	9.5						1	3.0		1	1							
					W1-8R-18	18	X	24							1	3.0		1								
30		77+45.50±	77+45.50±	LT	W1-2L-36	36	X	36							1	9.0		1	1							
30		79+94.40±	79+94.40±	LT	R1-1-36	36	X	36							1	9.0		1	1							
30		79+96.00±	79+96.00±	LT	D3-1-VARIES	VAR	X	12						10.6			1	1	1							
					D3-1-VARIES	VAR	X	12									1	1	1							
31		125+25.00±	125+25.00±	RT	S3-1-36	36	X	36							1	9.0		1	1							
31		133+16.00±	133+16.00±	LT	S3-1-36	36	X	36							1	9.0		1	1							
<b>PAVEMENT MARKING</b>																										
<i>CR 167 (PROSPECT RD.)</i>																										
54-55		202+60.00	205+76.84														633.68	316.84								
55		205+76.84	206+27.20														152.85	50.36			39					
55		206+72.38	207+23.53														186.00	51.15			39					
55-57		207+23.53	215+00.00														1552.94	776.47								
<i>CR 60 (FITCHVILLE RIVER RD.)</i>																										
29		0+00.00	5+03.00														1006.00	503.00			30					
29		5+03.00	5+68.00														130.00									
29-30		5+68.00	50+28.00														8920.00	4460.00								
30		50+28.00	51+08.00														160.00									
30		51+08.00	79+70.00														5724.00	2862.00								
30		79+70.00	80+68.00														196.00									
30-31		80+68.00	88+26.00														1516.00	758.00								
31		88+26.00	92+41.00														830.00		415.00							
31		92+41.00	94+05.00														328.00	164.00								
31		94+05.00	103+02.00														1794.00			897.00						
31		103+02.00	103+93.00														182.00	91.00								
31		103+93.00	110+98.00														1410.00		705.00							
31,55		110+98.00	138+51.86														5507.72	2753.86								
55		138+93.84	140+09.20														230.72	115.36								
<b>TOTALS (CARRIED FROM SHEET 27)</b>																										
<b>TOTALS (FROM THIS SHEET)</b>									28.5	214.6	58.4	11.1	12	198.8	2	10	9									
<b>CONVERT FEET TO MILES WHERE APPLICABLE ( FT/5280)</b>																										
<b>SUBTOTALS</b>									28.5	386.0	58.4	41.8	32	342.8	7	35	30	5.77	2.44	0.21	0.17	108				
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>									28.5	386.0	58.4	41.8	32	342.8	7	35	30	5.77	2.44	0.21	0.17	108				

CALCULATED	DAW	CHECKED	ALP
<b>TRAFFIC CONTROL SUBSUMMARY</b>			
<b>HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)</b>			
28			
64			



BEGIN WORK  
STA. 0+00

BUTT JOINT  
AS PER BP-3.1

BUTT JOINT  
AS PER BP-3.1

PAVEMENT MARKING  
D3-1-VARIES  
(VAR X12)  
STA. 0+30.5±, RT.

STOP  
RI-1-36  
(36"x36")  
STA. 0+35±, RT.

STOP  
RI-1-36  
(36"x36")  
STA. 5+18±, LT.

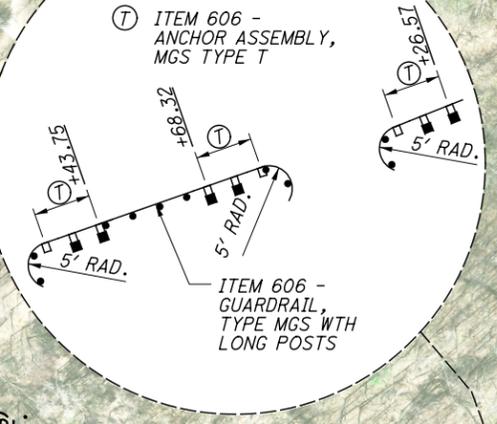
STOP  
W3-1-36  
(36"x36")  
STA. 8+45±, LT.

**PAVEMENT MARKING LEGEND**

- (A) 642 - CENTER LINE: SOLID, DOUBLE
- (B) 642 - EDGE LINE, WHITE
- (C) 642 - STOP LINE
- ← TRAFFIC DIRECTION

**LEGEND**

PLANNING AND RESURFACING (1.5" THICK)



DO NOT DISTURB  
TRAIL X-ING  
STA. 15+08±, RT.

W1-4-36  
(36"x36")  
STA. 18+08.6±, RT.

DO NOT DISTURB  
TRAIL X-ING  
STA. 22+50±, LT.

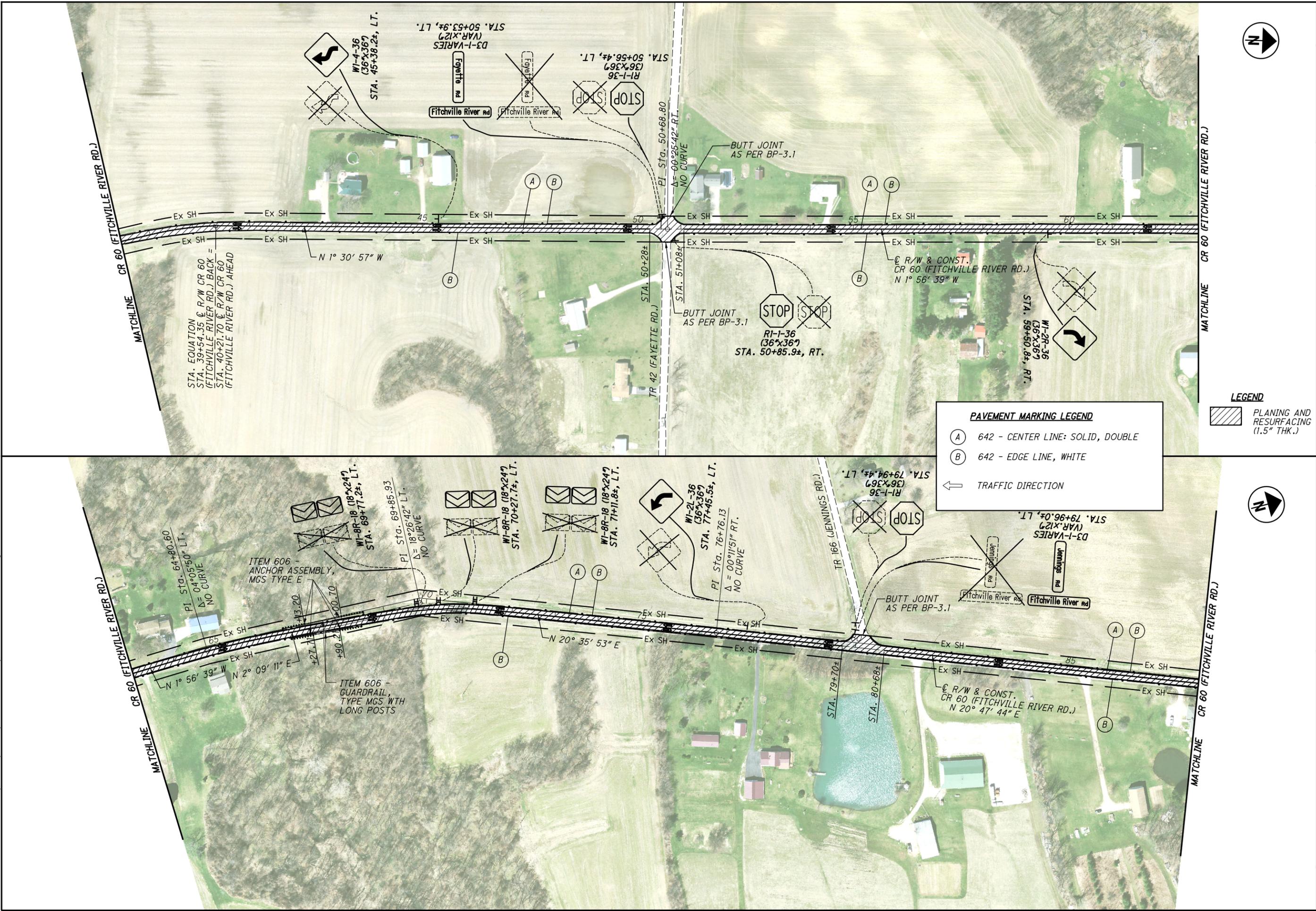
ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS



**PLAN**  
**CR 60 (FITCHVILLE RIVER RD.)**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**



**PAVEMENT MARKING LEGEND**

- (A) 642 - CENTER LINE: SOLID, DOUBLE
- (B) 642 - EDGE LINE, WHITE
- ← TRAFFIC DIRECTION

**LEGEND**

- PLANING AND RESURFACING (1.5\"/>

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

**PLAN**  
**CR 60 (FITCHVILLE RIVER RD.)**

30  
64

CALCULATED  
DAW  
CHECKED  
ALP

0 100 200  
HORIZONTAL  
SCALE IN FEET





CALCULATED  
CHECKED

PLAN AND PROFILE - CR 60 (FITCHVILLE RIVER RD.)  
STA. 131+00 TO STA. 136+00

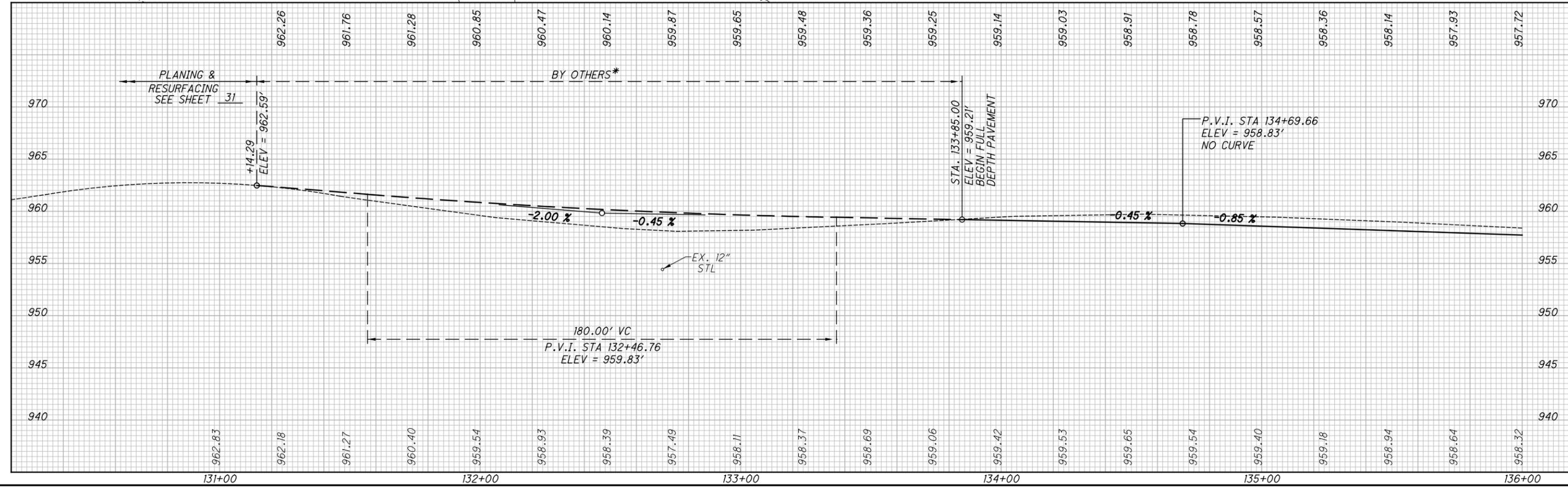
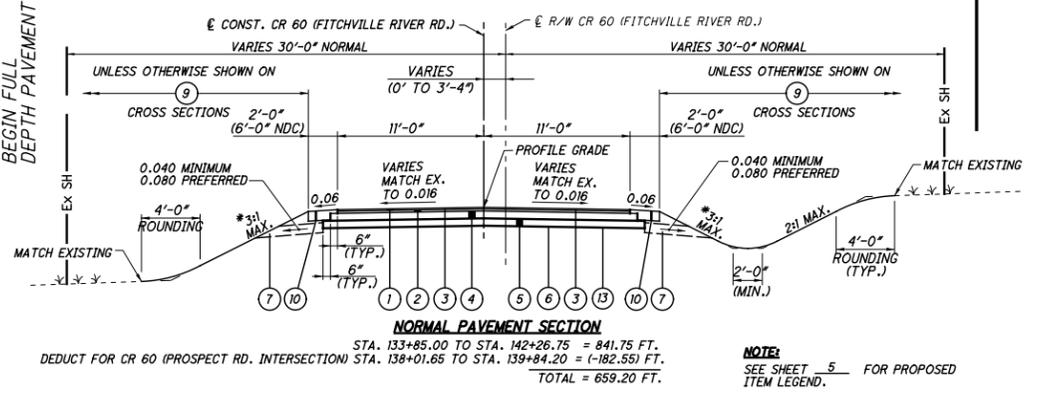
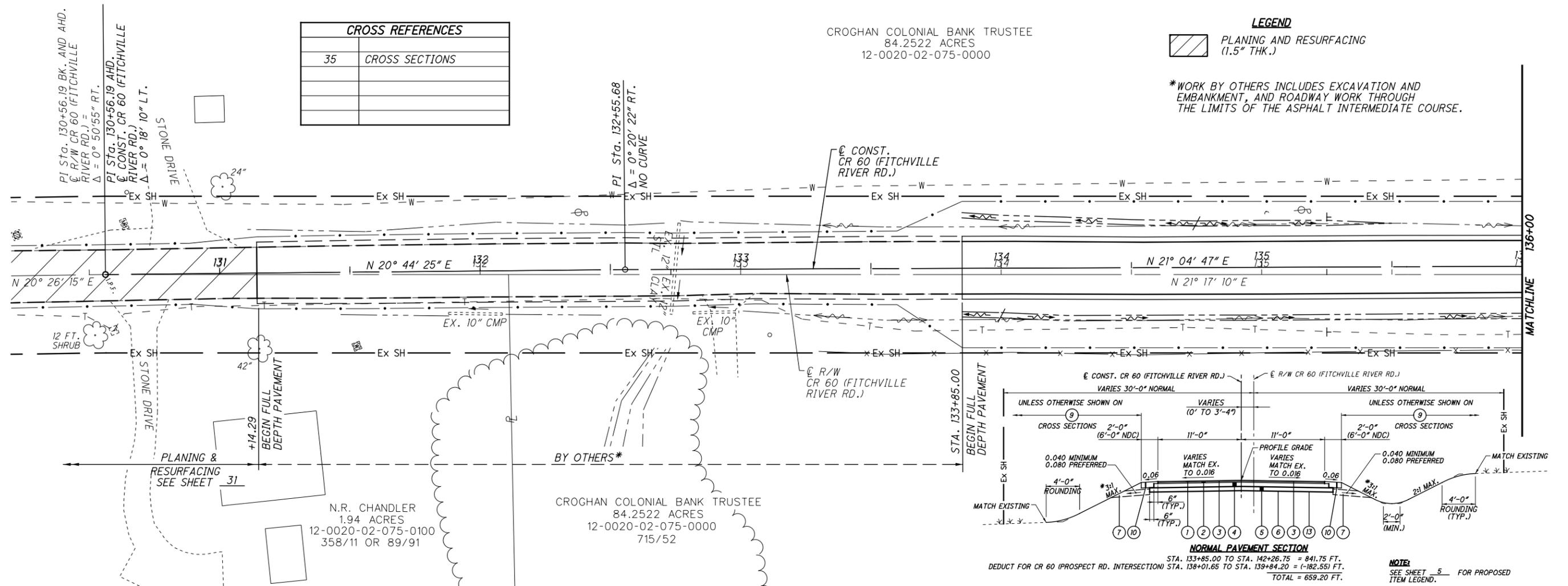
HUR-C.R. 60-0-00  
(FITCHVILLE RIVER RD.)

CROGHAN COLONIAL BANK TRUSTEE  
84.2522 ACRES  
12-0020-02-075-0000

**LEGEND**  
[Hatched box symbol] PLANING AND RESURFACING  
(1.5" THK.)

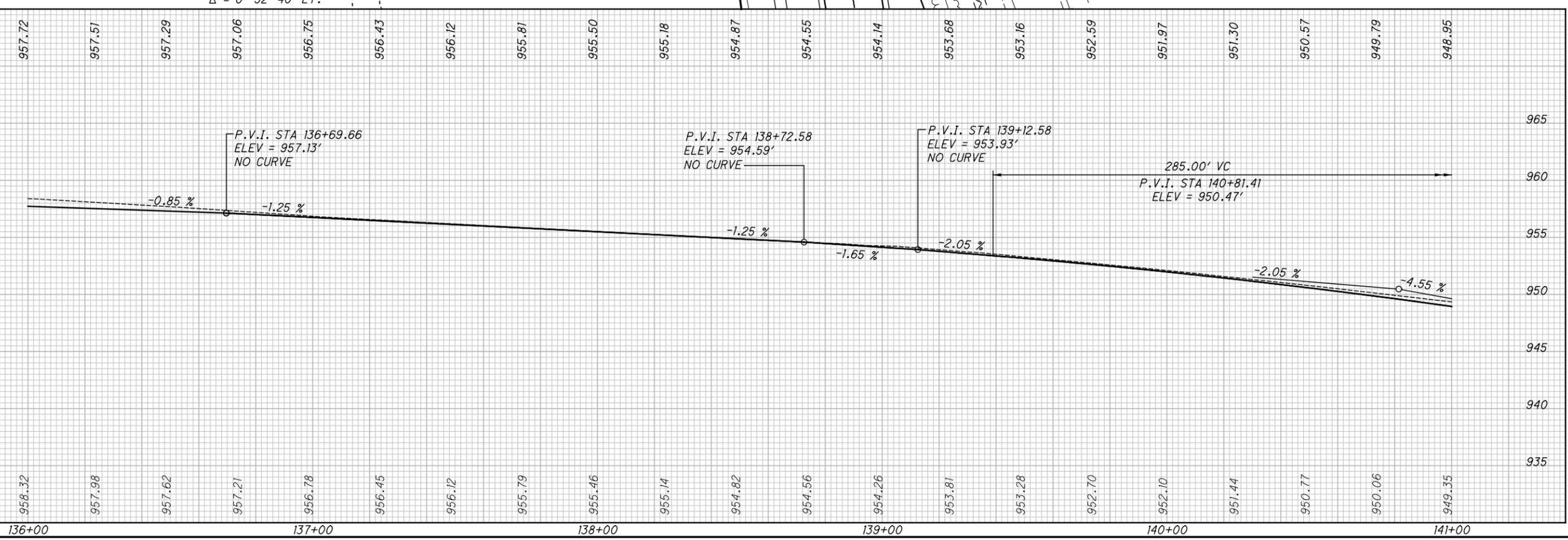
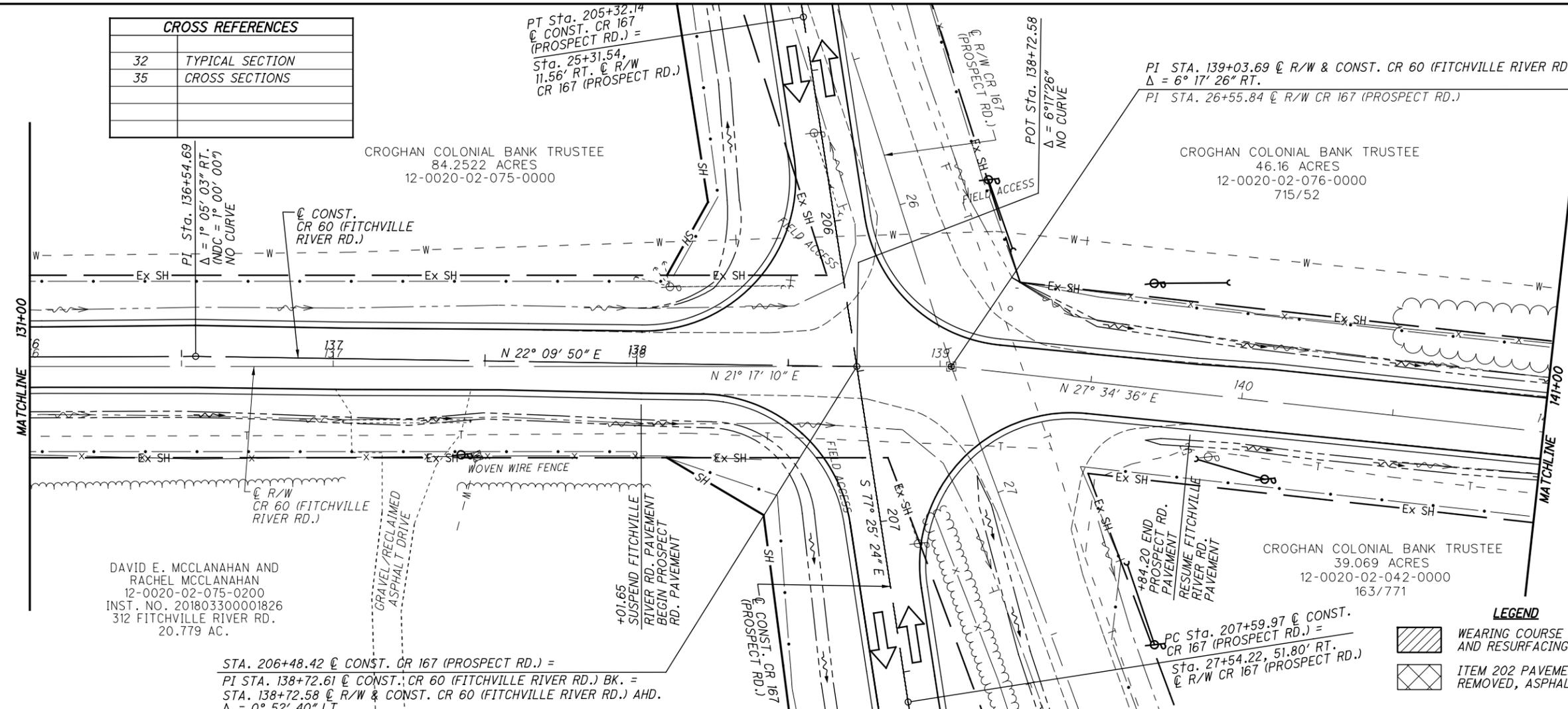
\*WORK BY OTHERS INCLUDES EXCAVATION AND  
EMBANKMENT, AND ROADWAY WORK THROUGH  
THE LIMITS OF THE ASPHALT INTERMEDIATE COURSE.

CROSS REFERENCES	
35	CROSS SECTIONS



F:\2015\15017 Huron County Safety Study\15017\roadway\sheets\102915GP204.dgn 10/31/2019 11:33:42 PM SteveMorr

CROSS REFERENCES	
32	TYPICAL SECTION
35	CROSS SECTIONS



DAVID E. MCCLANAHAN AND  
RACHEL MCCLANAHAN  
12-0020-02-075-0200  
INST. NO. 201803300001826  
312 FITCHVILLE RIVER RD.  
20.779 AC.

CROGHAN COLONIAL BANK TRUSTEE  
84.2522 ACRES  
12-0020-02-075-0000

CROGHAN COLONIAL BANK TRUSTEE  
46.16 ACRES  
12-0020-02-076-0000  
715/52

CROGHAN COLONIAL BANK TRUSTEE  
39.069 ACRES  
12-0020-02-042-0000  
163/771

- LEGEND**
- WEARING COURSE REMOVED AND RESURFACING
  - ITEM 202 PAVEMENT REMOVED, ASPHALT

STA. 206+48.42 @ CONST. CR 167 (PROSPECT RD.) =  
PI STA. 138+72.61 @ CONST. CR 60 (FITCHVILLE RIVER RD.) BK. =  
STA. 138+72.58 @ R/W & CONST. CR 60 (FITCHVILLE RIVER RD.) AHD.  
 $\Delta = 0^\circ 52' 40''$  LT.

PI STA. 139+03.69 @ R/W & CONST. CR 60 (FITCHVILLE RIVER RD.) =  
 $\Delta = 6^\circ 17' 26''$  RT.  
PI STA. 26+55.84 @ R/W CR 167 (PROSPECT RD.)

PT Sta. 205+32.14  
@ CONST. CR 167  
(PROSPECT RD.) =  
Sta. 25+31.54,  
11.56' RT. @ R/W  
CR 167 (PROSPECT RD.)

PLAN AND PROFILE - CR 60 (FITCHVILLE RIVER RD.)  
STA. 136+00 TO STA. 141+00

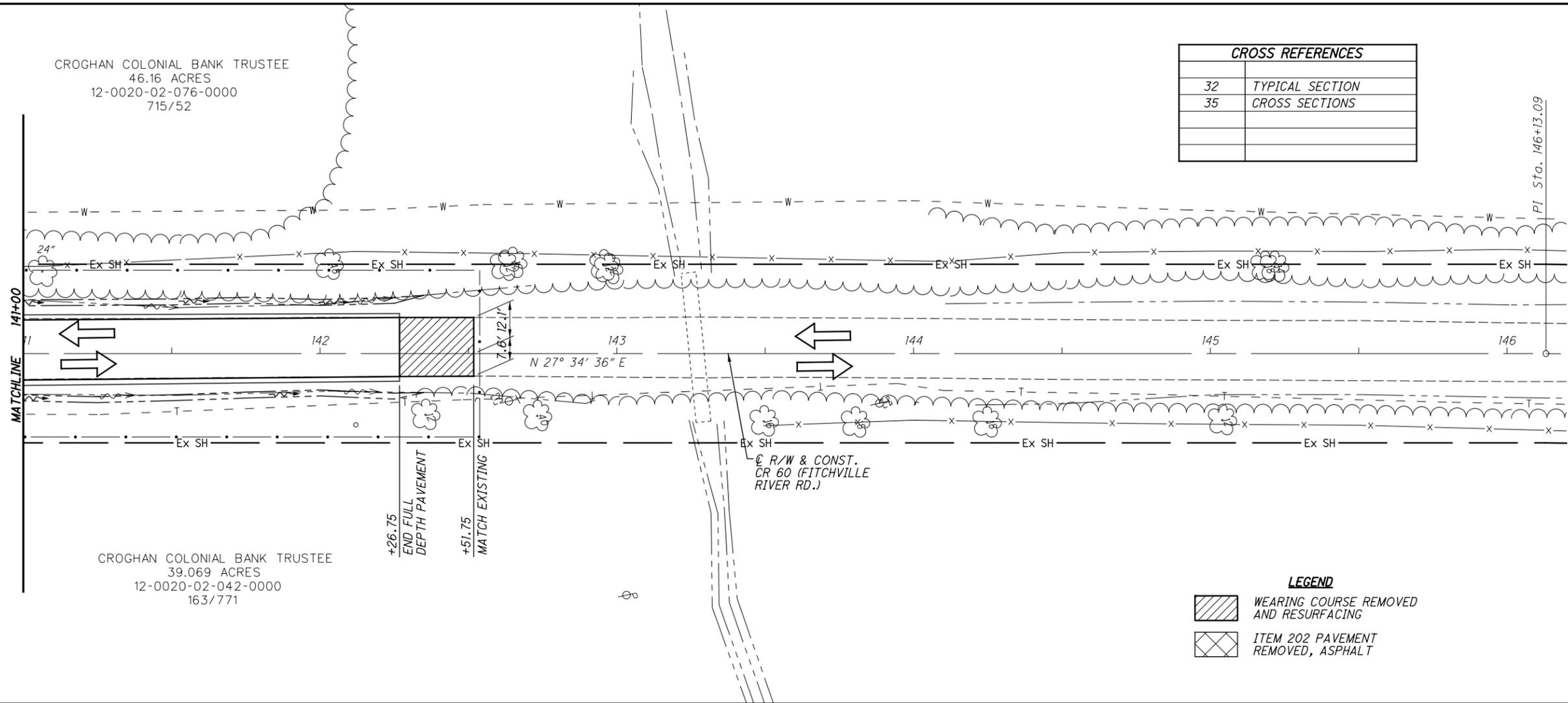
HUR-C.R. 60-0-00  
(FITCHVILLE RIVER RD.)

33  
64

CROGHAN COLONIAL BANK TRUSTEE  
46.16 ACRES  
12-0020-02-076-0000  
715/52

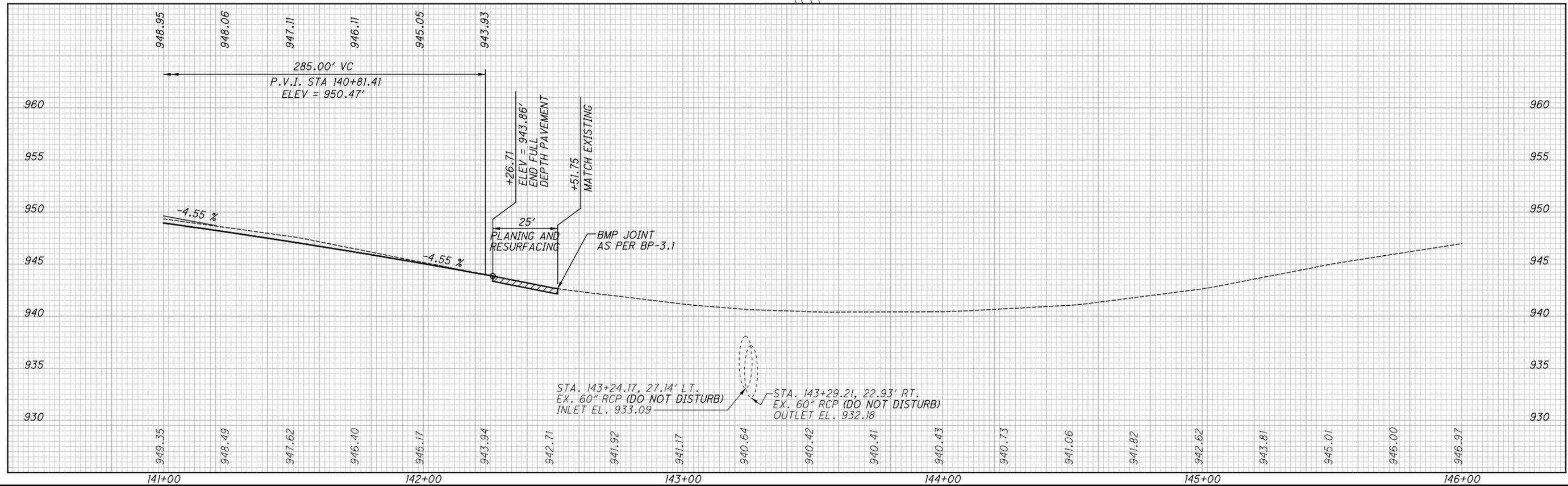
CROGHAN COLONIAL BANK TRUSTEE  
39.069 ACRES  
12-0020-02-042-0000  
163/771

CROSS REFERENCES	
32	TYPICAL SECTION
35	CROSS SECTIONS



**LEGEND**

	WEARING COURSE REMOVED AND RESURFACING
	ITEM 202 PAVEMENT REMOVED, ASPHALT



STA. 143+24.17, 27.14' LT.  
EX. 60" RCP (DO NOT DISTURB)  
INLET EL. 933.09

STA. 143+29.21, 22.93' RT.  
EX. 60" RCP (DO NOT DISTURB)  
OUTLET EL. 932.18

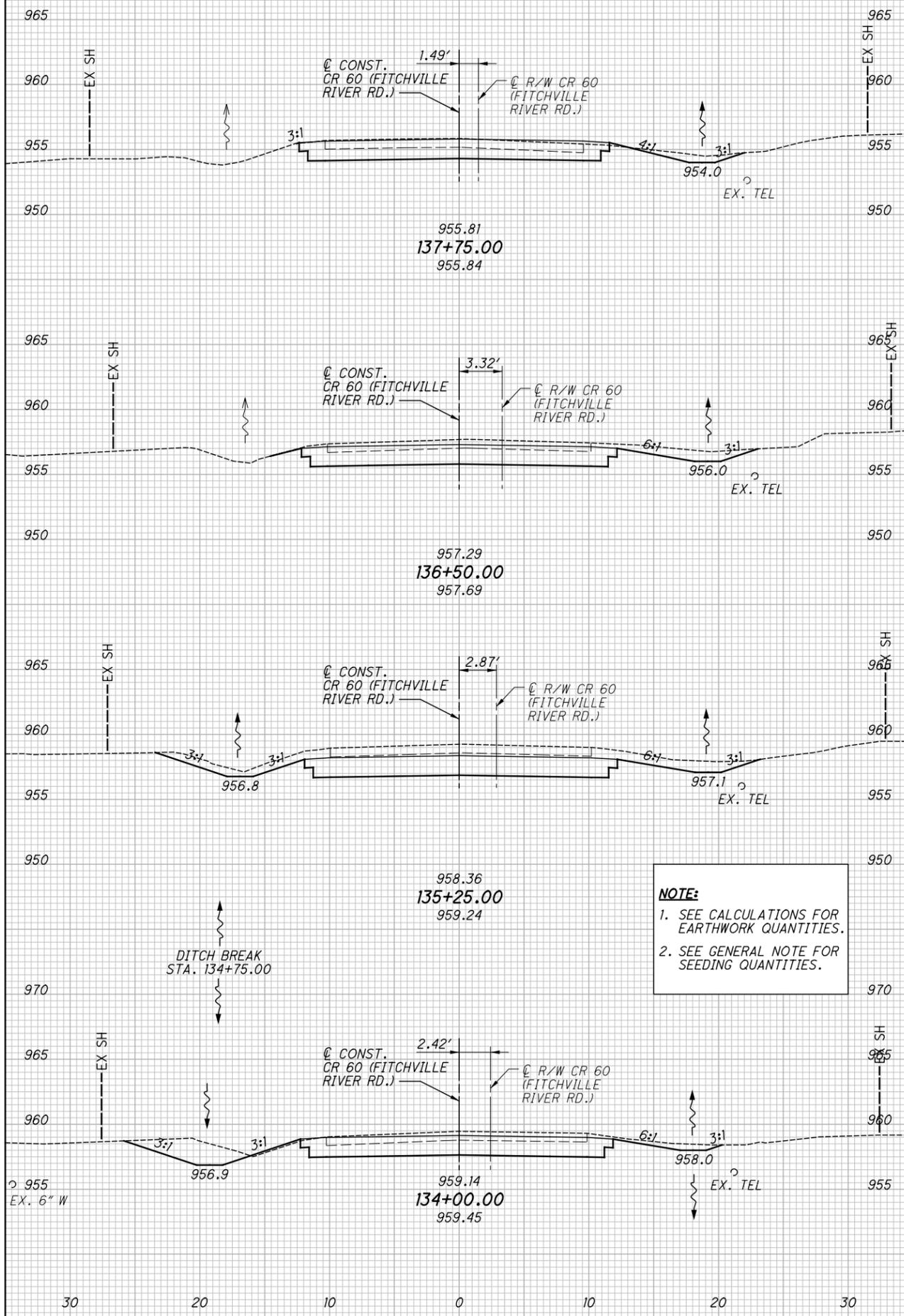


CALCULATED  
CHECKED

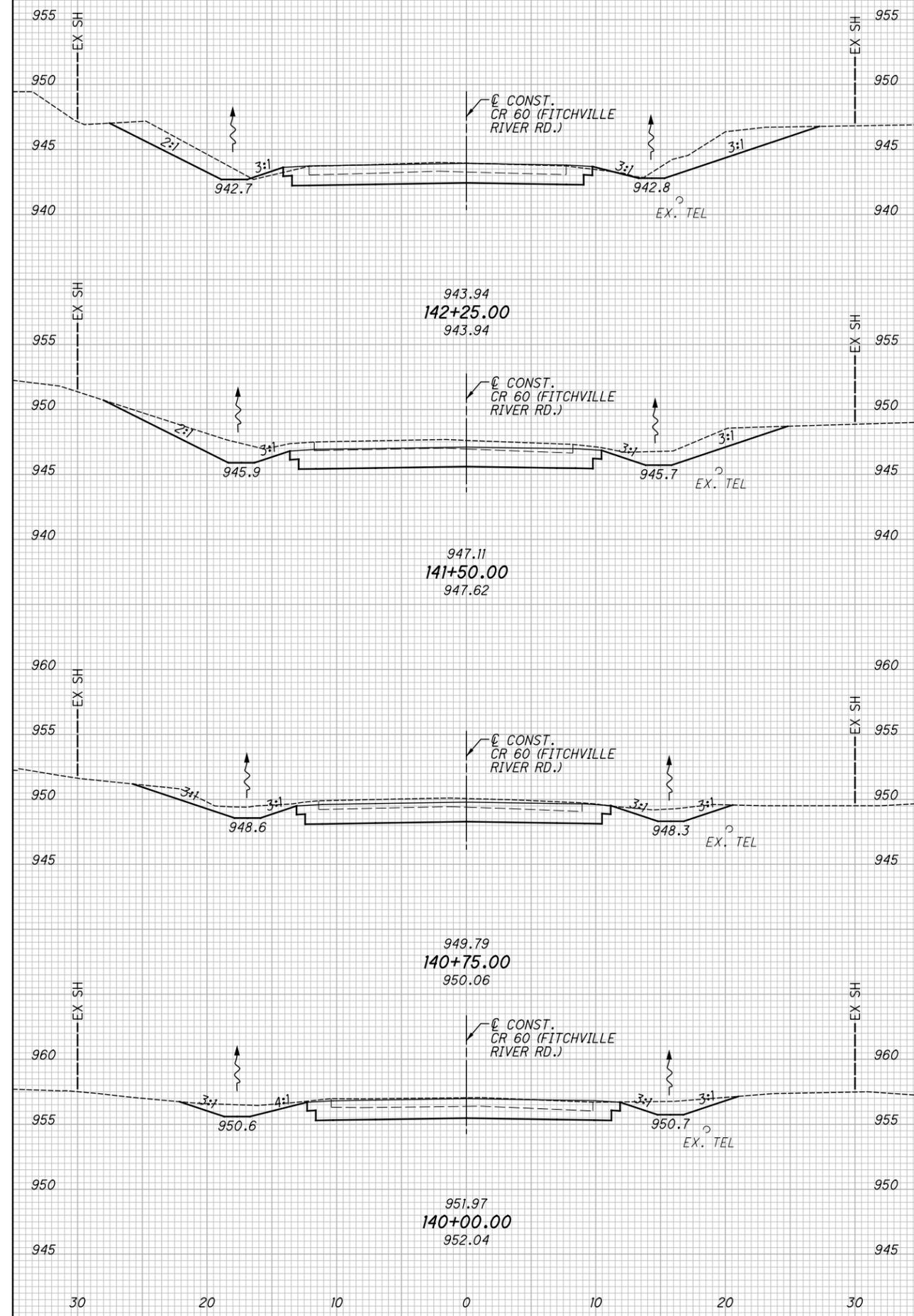
PLAN AND PROFILE - CR 60 (FITCHVILLE RIVER RD.)  
STA. 141+00 TO STA. 146+00

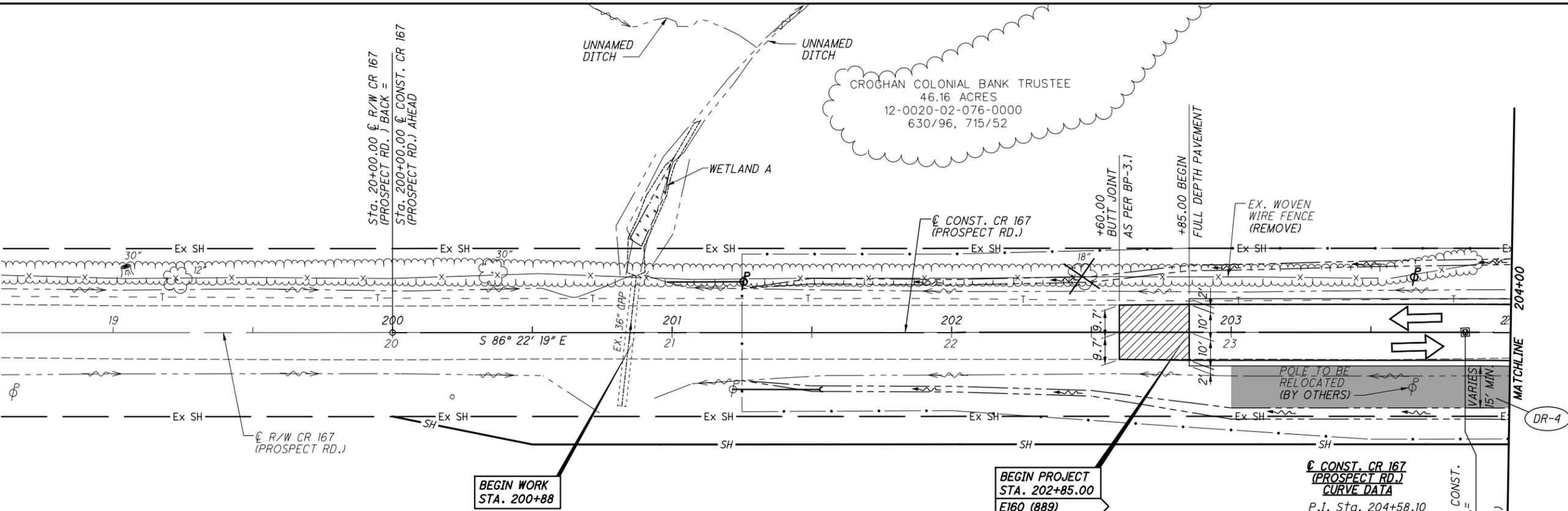
HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)

34  
64



**NOTE:**  
 1. SEE CALCULATIONS FOR EARTHWORK QUANTITIES.  
 2. SEE GENERAL NOTE FOR SEEDING QUANTITIES.





CROSS REFERENCES	
5	TYPICAL SECTIONS
40-51	CROSS SECTIONS
54-57	TRAFFIC CONTROL PLAN

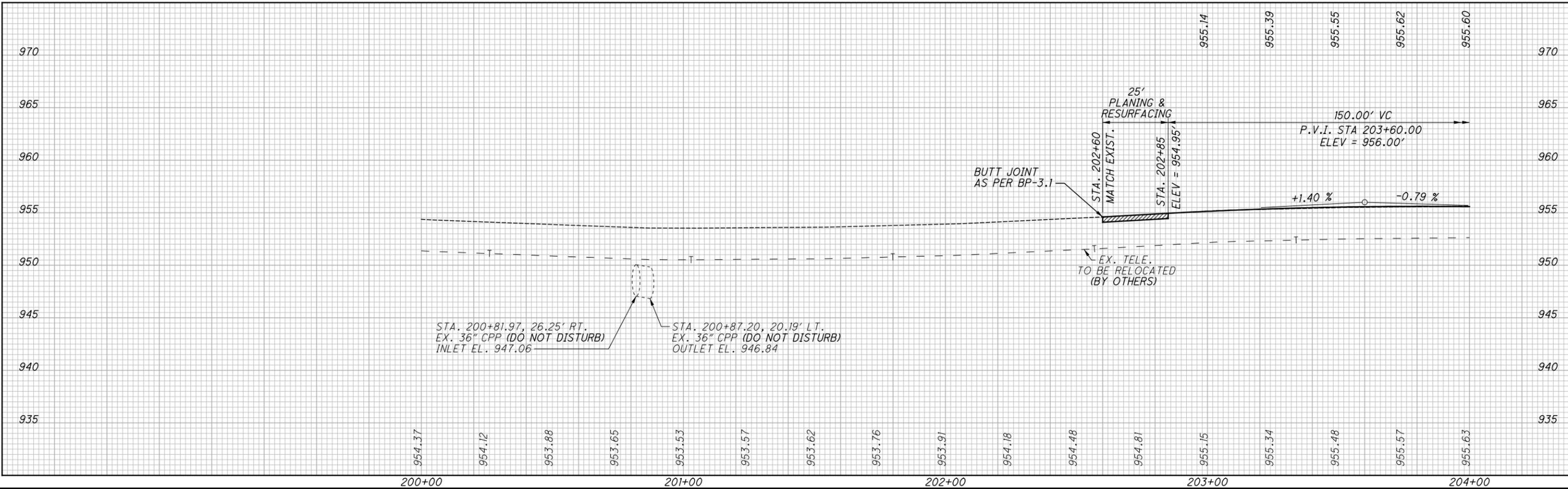
**LEGEND**

- PLANING AND RESURFACING (1.5\"/>
- VEGETATED FILTER STRIPS
- RELOCATED POLE

CROGHAN COLONIAL BANK TRUSTEE  
 63.473 ACRES  
 12-0020-02-075-0000  
 630/96, 715/52

**C CONST. CR 167 (PROSPECT RD.) CURVE DATA**  
 P.I. Sta. 204+58.10  
 $\Delta = 8^\circ 56' 56''$  (RT)  
 $Dc = 6^\circ 01' 52''$   
 $R = 950.00'$   
 $T = 74.34'$   
 $L = 148.38'$   
 $E = 2.90'$   
 $C = 148.23'$   
 $C.B. = S 81^\circ 53' 52'' E$   
 $e_{MAX.} = 0.061$

PC Sta. 203+83.76 C CONST. CR 167 (PROSPECT RD.)  
 Sta. 23+83.76 C R/W CR 167 (PROSPECT RD.)





0 20 40  
 HORIZONTAL SCALE IN FEET

CALCULATED DAW CHECKED ALP

**PLAN AND PROFILE - CR 167 (PROSPECT RD.)  
 STA. 200+00 TO STA. 204+00**

**HUR-C.R. 60-0-00  
 (FITCHVILLE RIVER RD.)**

36  
 64

CROSS REFERENCES	
5	TYPICAL SECTIONS
29-31	PAVEMENT MARKINGS (FITCHVILLE RIVER RD.)
40-51	CROSS SECTIONS
54-57	TRAFFIC CONTROL PLAN

CROGHAN COLONIAL BANK TRUSTEE  
46.16 ACRES  
12-0020-02-076-0000  
630/96, 715/52

- LEGEND**
- PLANING AND RESURFACING (1.5" THK.)
  - ITEM 202 - PAVEMENT REMOVED, ASPHALT
  - VEGETATED FILTER STRIPS
  - RELOCATED POLES

STA. 139+03.69 @ R/W & CONST. CR 60 (FITCHVILLE RIVER RD.) =  
 $\Delta = 6^\circ 17' 26''$  RT.  
STA. 26+55.84 @ R/W CR 167 (PROSPECT RD.)

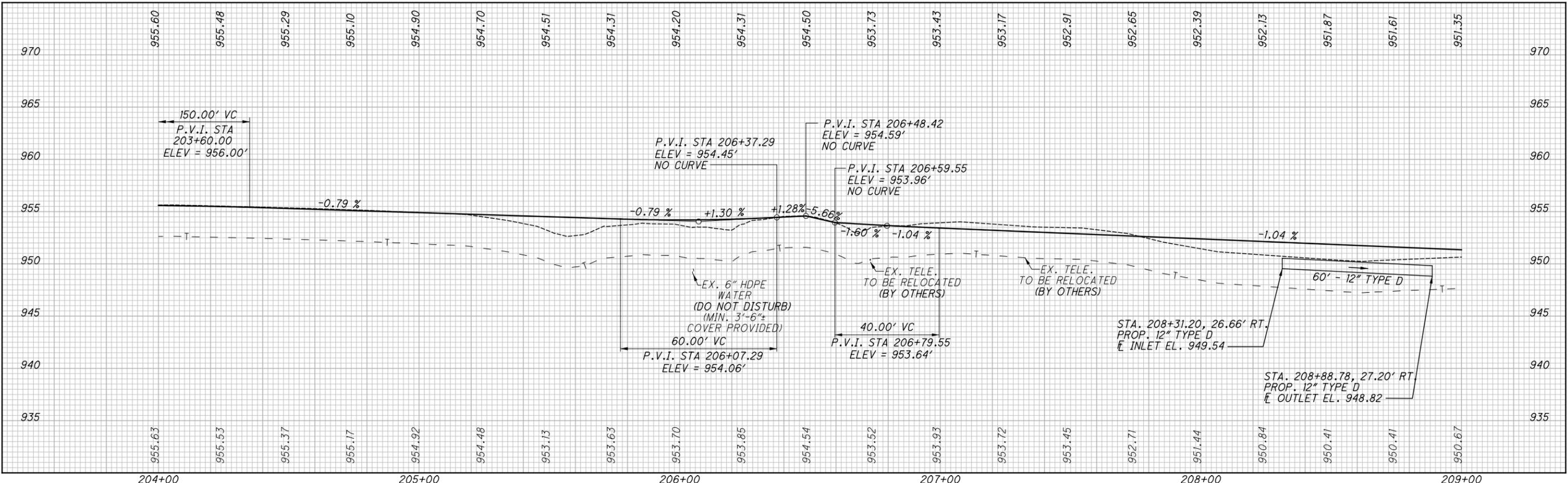
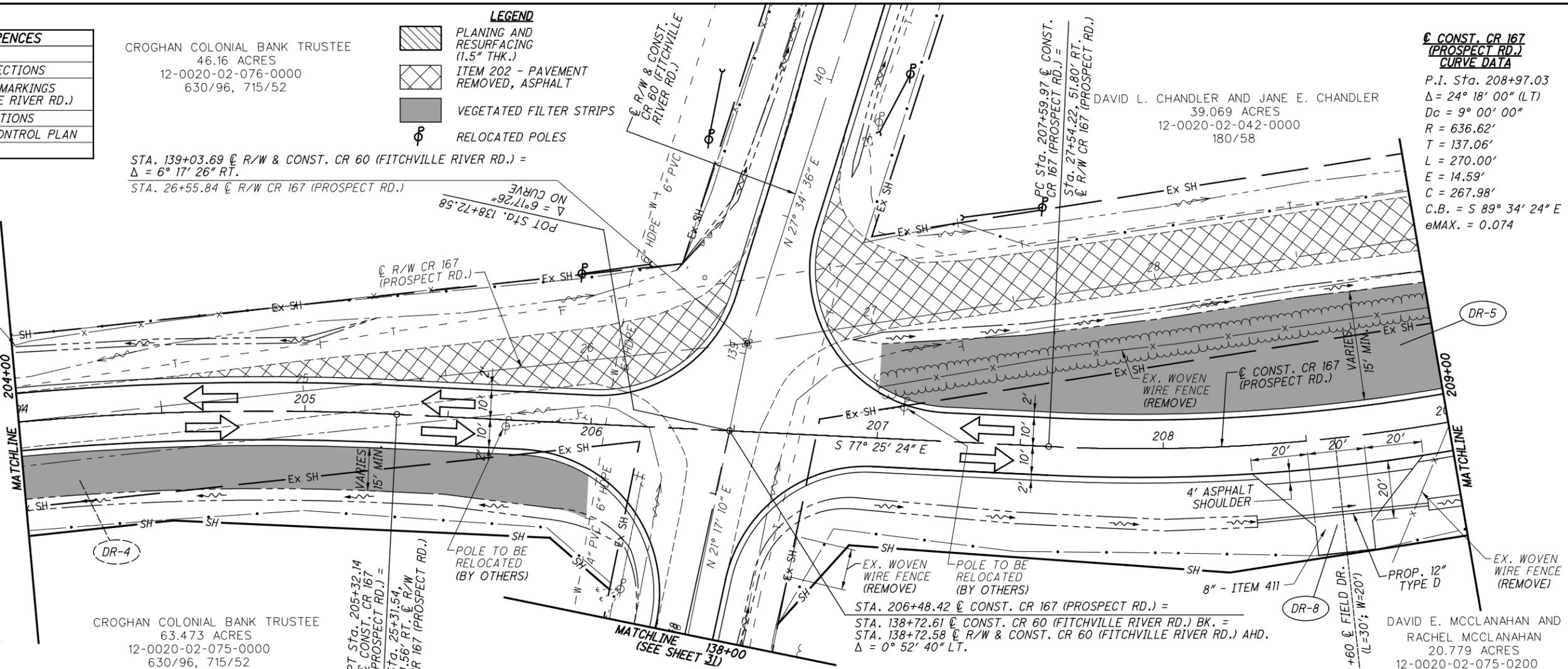
DAVID L. CHANDLER AND JANE E. CHANDLER  
39.069 ACRES  
12-0020-02-042-0000  
180/58

**CONST. CR 167 (PROSPECT RD.) CURVE DATA**  
P.I. Sta. 208+97.03  
 $\Delta = 24^\circ 18' 00''$  (LT)  
 $Dc = 9^\circ 00' 00''$   
 $R = 636.62'$   
 $T = 137.06'$   
 $L = 270.00'$   
 $E = 14.59'$   
 $C = 267.98'$   
 $C.B. = S 89^\circ 34' 24'' E$   
 $\theta_{MAX.} = 0.074$

**CONST. CR 167 (PROSPECT RD.) CURVE DATA**  
P.I. Sta. 204+58.10  
 $\Delta = 8^\circ 56' 56''$  (RT)  
 $Dc = 6^\circ 01' 52''$   
 $R = 950.00'$   
 $T = 74.34'$   
 $L = 148.38'$   
 $E = 2.90'$   
 $C = 148.23'$   
 $C.B. = S 81^\circ 53' 52'' E$   
 $\theta_{MAX.} = 0.061$

CROGHAN COLONIAL BANK TRUSTEE  
63.473 ACRES  
12-0020-02-075-0000  
630/96, 715/52

DAVID E. MCCLANAHAN AND RACHEL MCCLANAHAN  
20.779 ACRES  
12-0020-02-075-0200



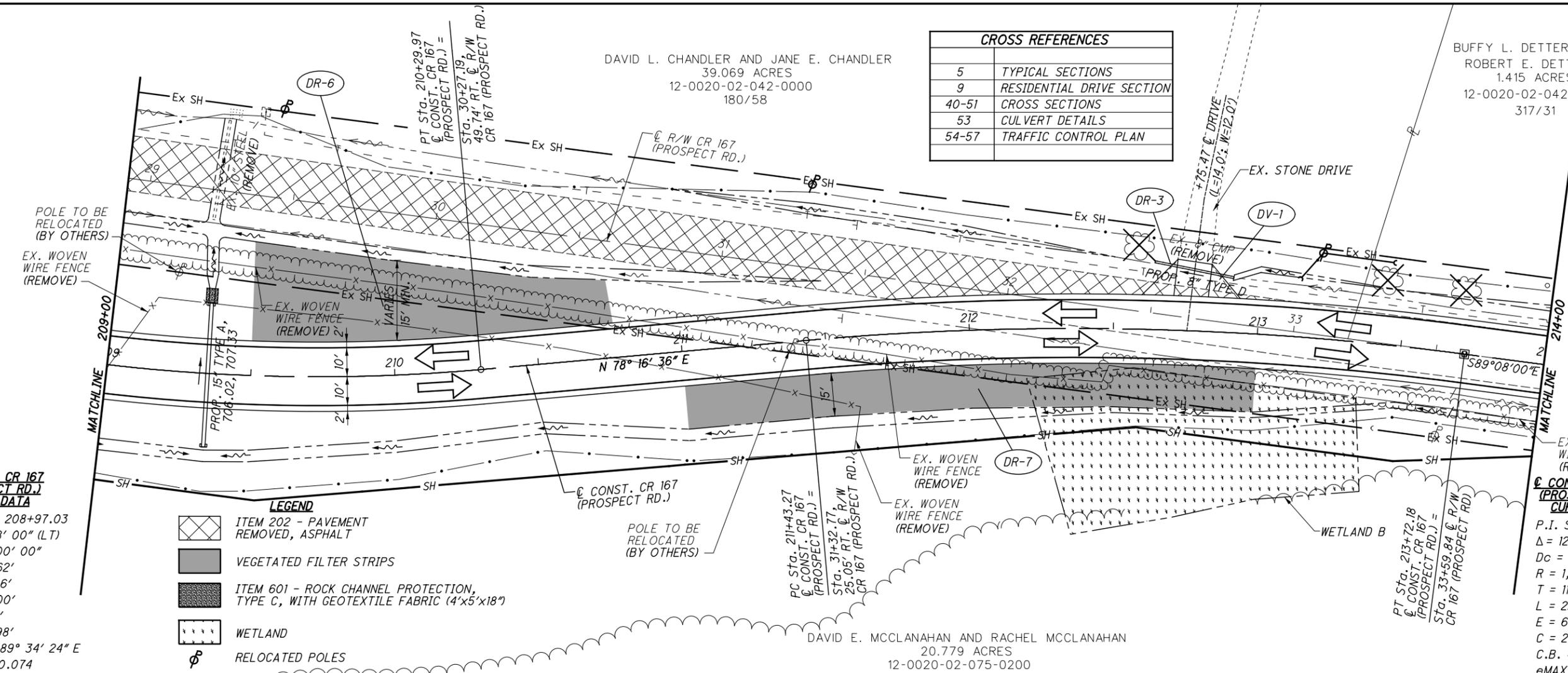
F:\2015\115017 Huron County Safety Study\15017\roadway\sheets\102915GP002.dgn 10/31/2019 1:36:15 PM SteveMorr



CROSS REFERENCES	
5	TYPICAL SECTIONS
9	RESIDENTIAL DRIVE SECTION
40-51	CROSS SECTIONS
53	CULVERT DETAILS
54-57	TRAFFIC CONTROL PLAN

DAVID L. CHANDLER AND JANE E. CHANDLER  
 39.069 ACRES  
 12-0020-02-042-0000  
 180/58

BUFFY L. DETTERMAN AND  
 ROBERT E. DETTERMAN  
 1.415 ACRES  
 12-0020-02-042-0300  
 317/31

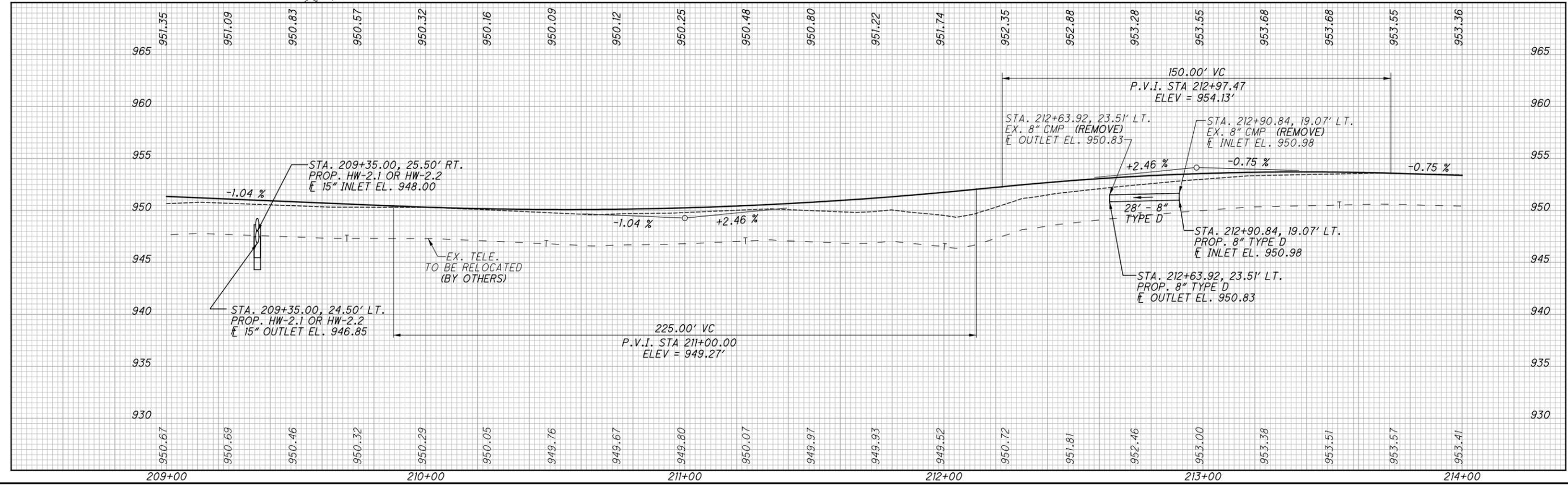


**CONST. CR 167 (PROSPECT RD.) CURVE DATA**  
 P.I. Sta. 208+97.03  
 $\Delta = 24^\circ 18' 00''$  (LT)  
 $D_c = 9^\circ 00' 00''$   
 $R = 636.62'$   
 $T = 137.06'$   
 $L = 270.00'$   
 $E = 14.59'$   
 $C = 267.98'$   
 $C.B. = S 89^\circ 34' 24'' E$   
 $e_{MAX.} = 0.074$

- LEGEND**
- ITEM 202 - PAVEMENT REMOVED, ASPHALT
  - VEGETATED FILTER STRIPS
  - ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C, WITH GEOTEXTILE FABRIC (4'x5'x18')
  - WETLAND
  - RELOCATED POLES

**CONST. CR 167 (PROSPECT RD.) CURVE DATA**  
 P.I. Sta. 212+58.19  
 $\Delta = 12^\circ 35' 24''$  (RT)  
 $D_c = 5^\circ 30' 00''$   
 $R = 1,041.74'$   
 $T = 114.92'$   
 $L = 228.91'$   
 $E = 6.32'$   
 $C = 228.45'$   
 $C.B. = N 84^\circ 34' 18'' E$   
 $e_{MAX.} = 0.058$

DAVID E. MCCLANAHAN AND RACHEL MCCLANAHAN  
 20.779 ACRES  
 12-0020-02-075-0200



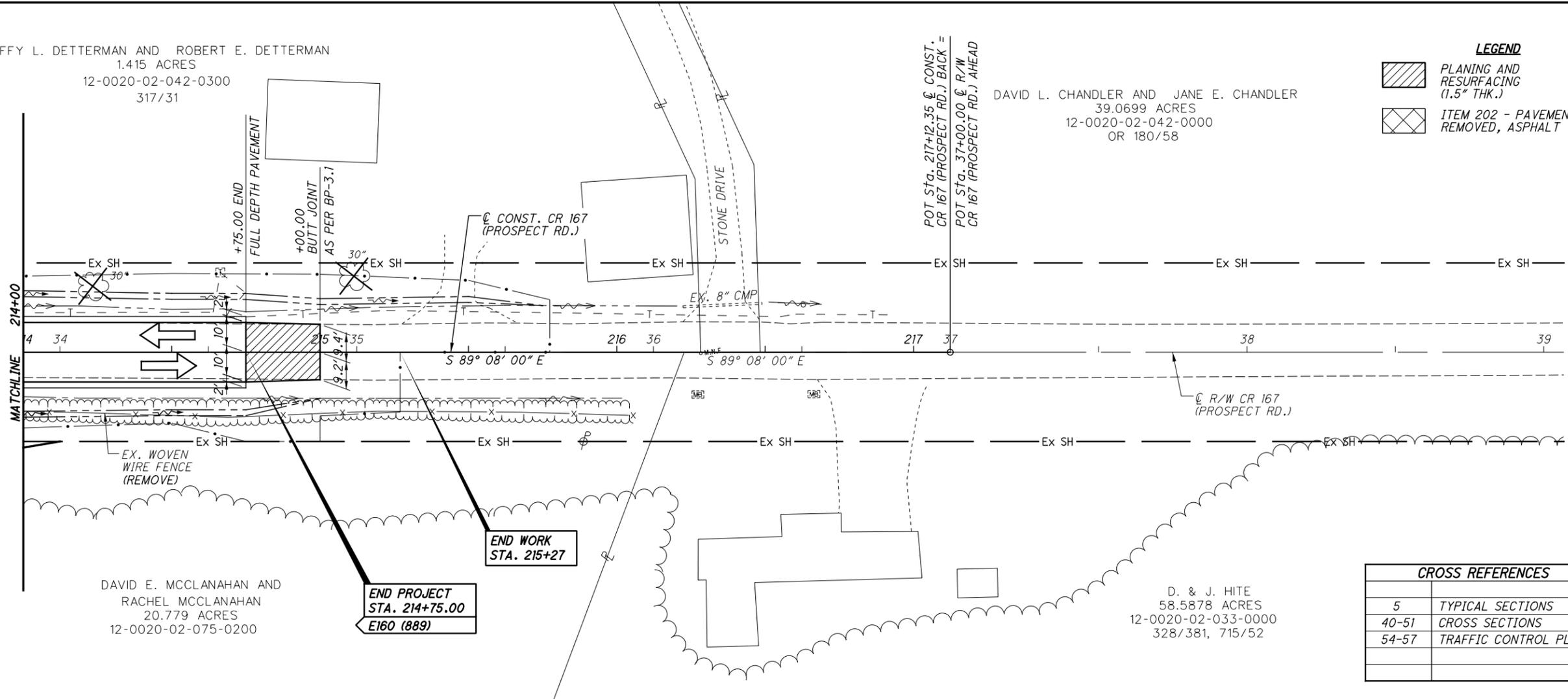
PLAN AND PROFILE - CR 167 (PROSPECT RD.)  
 STA. 209+00 TO STA. 214+00

HUR-C.R. 60-0-00  
 (FITCHVILLE RIVER RD.)

BUFFY L. DETTERMAN AND ROBERT E. DETTERMAN  
1.415 ACRES  
12-0020-02-042-0300  
317/31

DAVID L. CHANDLER AND JANE E. CHANDLER  
39.0699 ACRES  
12-0020-02-042-0000  
OR 180/58

**LEGEND**  
 PLANING AND RESURFACING (1.5" THK.)  
 ITEM 202 - PAVEMENT REMOVED, ASPHALT

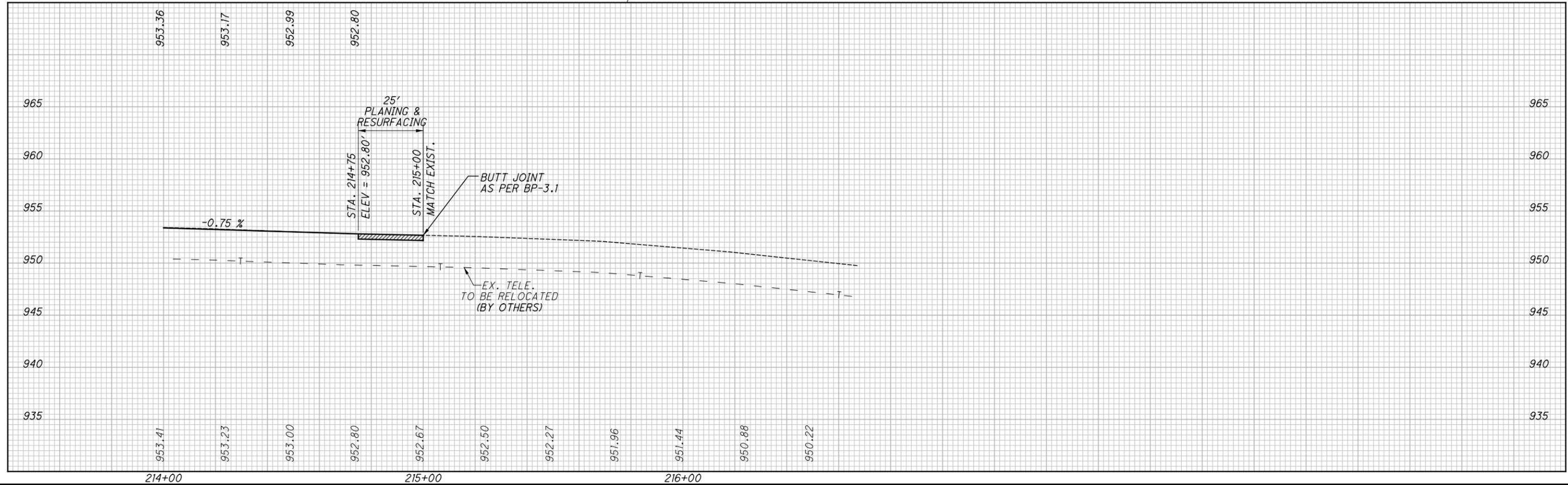


DAVID E. MCCLANAHAN AND RACHEL MCCLANAHAN  
20.779 ACRES  
12-0020-02-075-0200

**END PROJECT  
STA. 214+75.00  
E160 (889)**

**END WORK  
STA. 215+27**

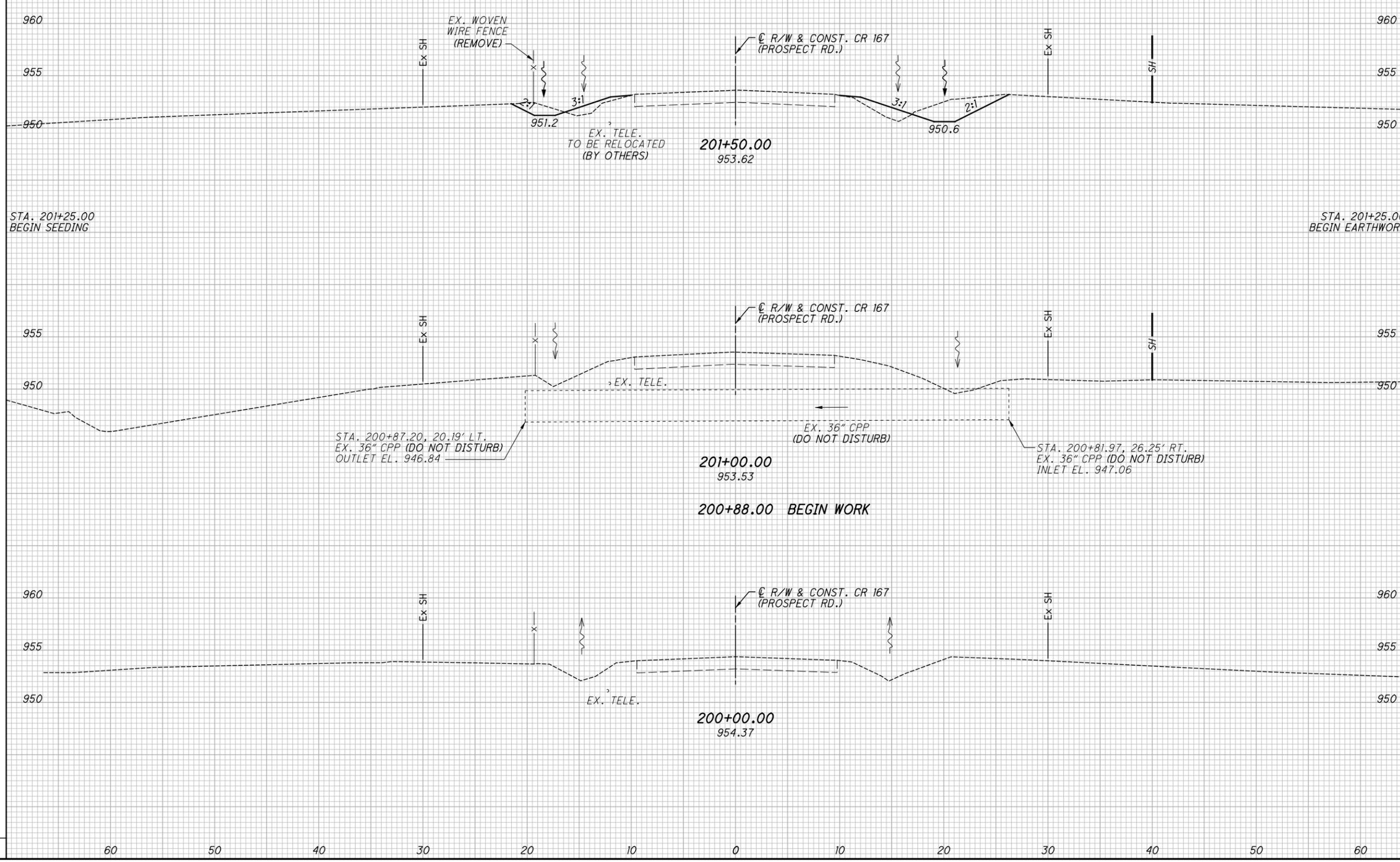
CROSS REFERENCES	
5	TYPICAL SECTIONS
40-51	CROSS SECTIONS
54-57	TRAFFIC CONTROL PLAN



SEEDING  
 END SO.  
 WIDTH YDS.  
 49

END AREA		VOLUME		CALCULATED DAW	CHECKED ALP
CUT	FILL	CUT	FILL		
15	8	7	4		
0	0				
		7	4		

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:09 PM SteveMorr

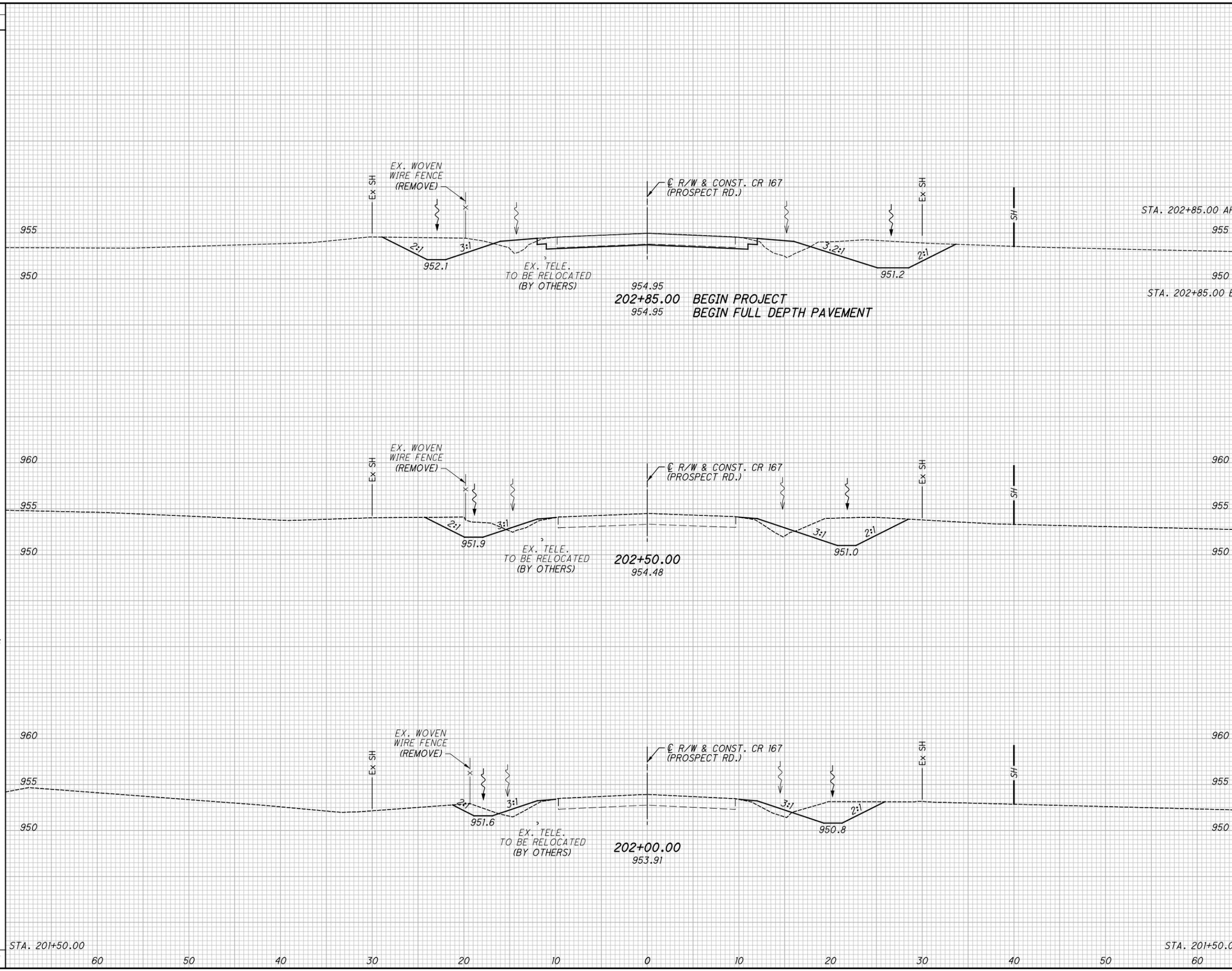


**CROSS SECTIONS  
 STA. 200+00 TO STA. 201+50**

**HUR-C.R. 60-0.00  
 (FITCHVILLE RIVER RD.)**

40  
 64

SEEDING  
 END SO.  
 WIDTH YDS.  
 45  
 166  
 40  
 206  
 34  
 192  
 35



END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
76	10			
48	10			
	54	10		
34	5			
	49	11		
18	6			
	31	13		
15	8			
	134	34		

**CROSS SECTIONS**  
**STA. 202+00 TO STA. 202+85**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

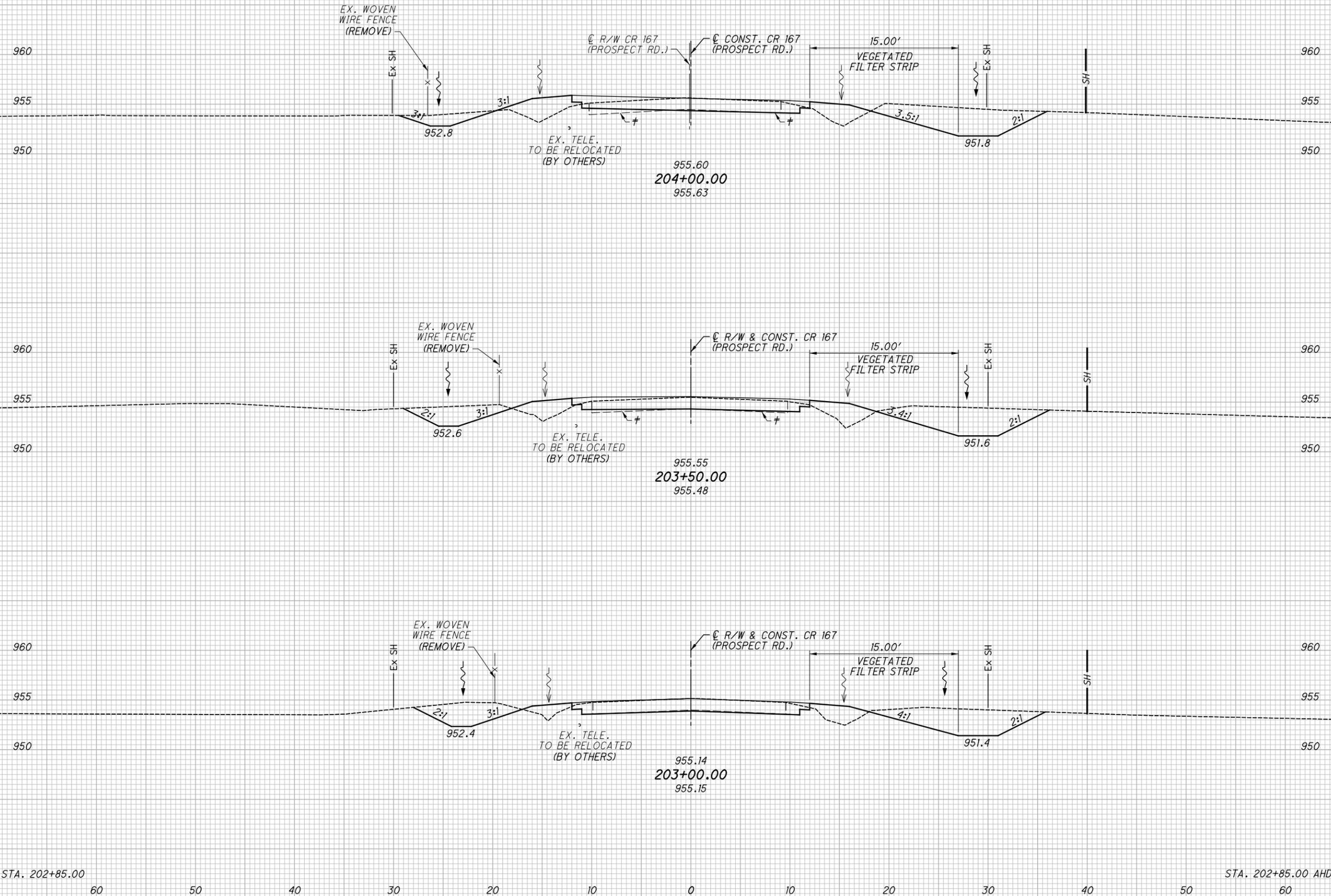
41  
 64

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:16 PM SteveMorr

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:23 PM SteveMorr

SEEDING	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
48	66	19	66	19
267	71	17	127	34
262	74	12	135	27
76	76	10	42	7
45	76	10	304	68

**LEGEND**  
 # SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

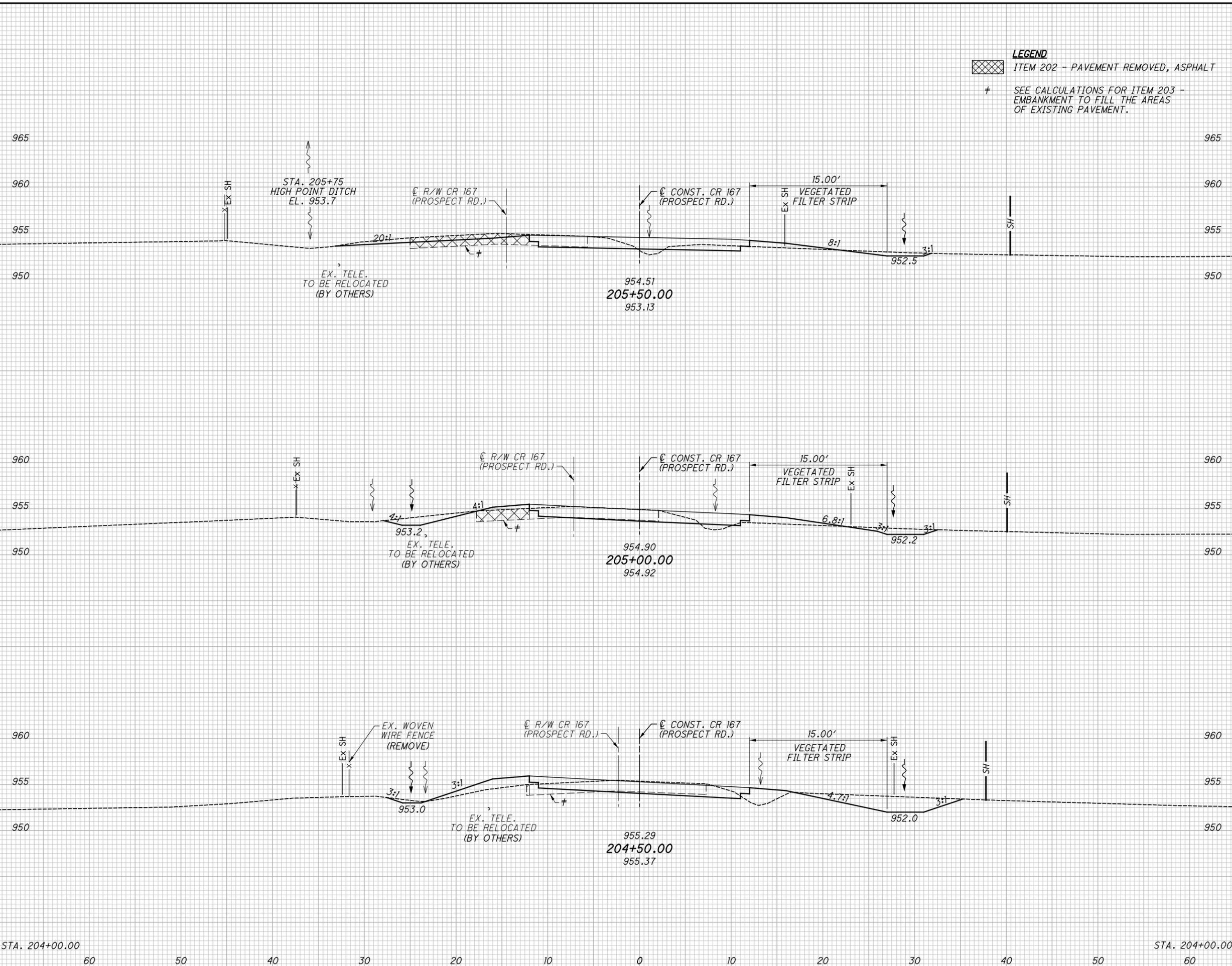


**CROSS SECTIONS  
 STA. 203+00 TO STA. 204+00  
 HUR-C.R. 60-0.00  
 (FITCHVILLE RIVER RD.)**

42  
64

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:30 PM SteveMorr

SEEDING	
END WIDTH	SO. YDS.
46	245
42	239
44	256
48	740

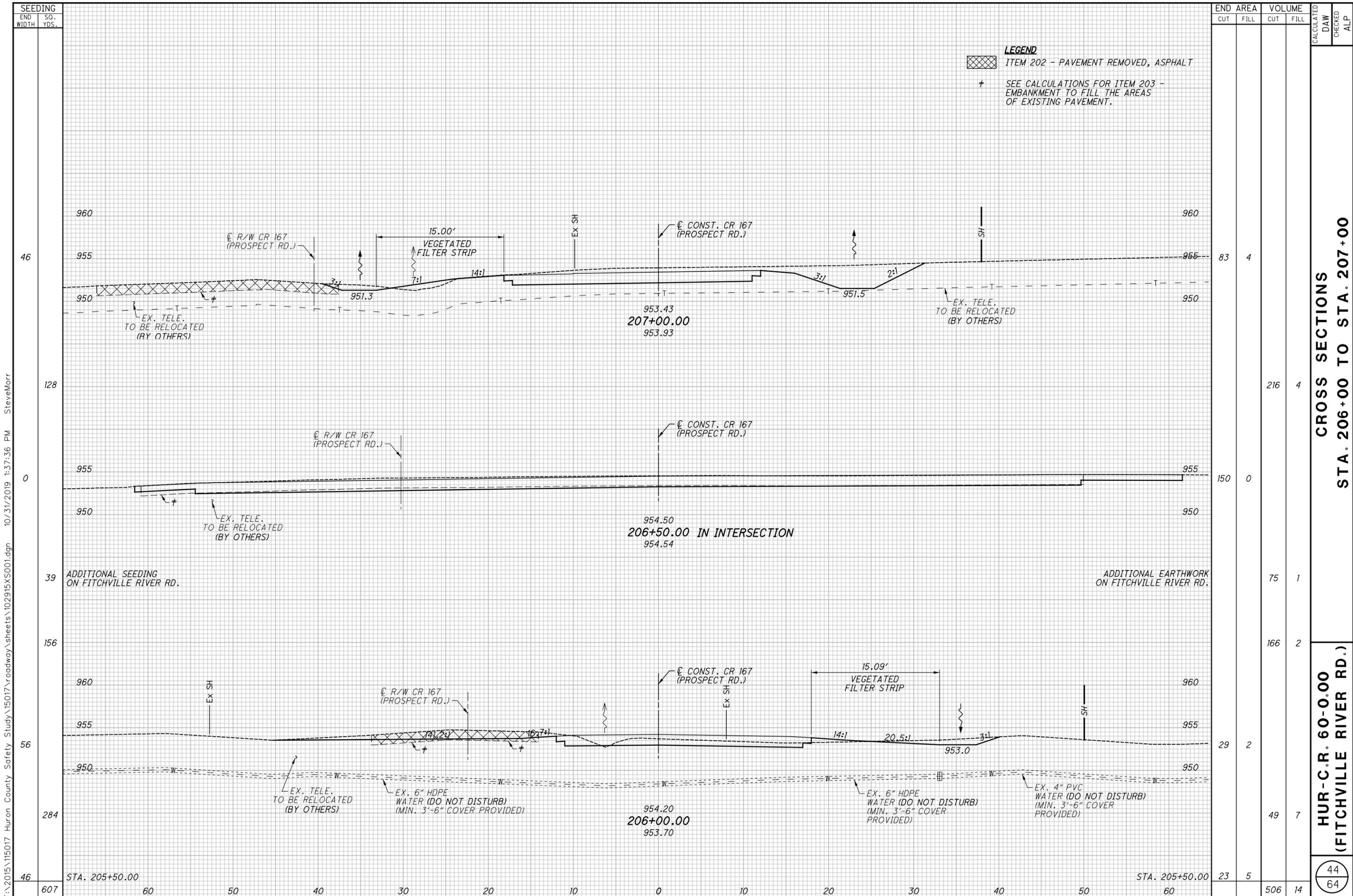


**LEGEND**  
 ITEM 202 - PAVEMENT REMOVED, ASPHALT  
 # SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

END AREA	VOLUME	
	CUT	FILL
23	5	
31	9	
48	15	
66	19	
	106	32
	230	68

**CROSS SECTIONS**  
**STA. 204+50 TO STA. 205+50**  
**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

43  
64



**LEGEND**  
 [Hatched Box] ITEM 202 - PAVEMENT REMOVED, ASPHALT  
 # SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
83	4			
150	0			
75	1			
166	2			
29	2			
49	7			
23	5			
506	14			

**CROSS SECTIONS**  
**STA. 206+00 TO STA. 207+00**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

44  
 64

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:36 PM SteveMorr

SEEDING  
END SO.  
WIDTH YDS.

939 60 50 40 30 20 10 0 10 20 30 40 50 60

46 STA. 207+00.00

300 945

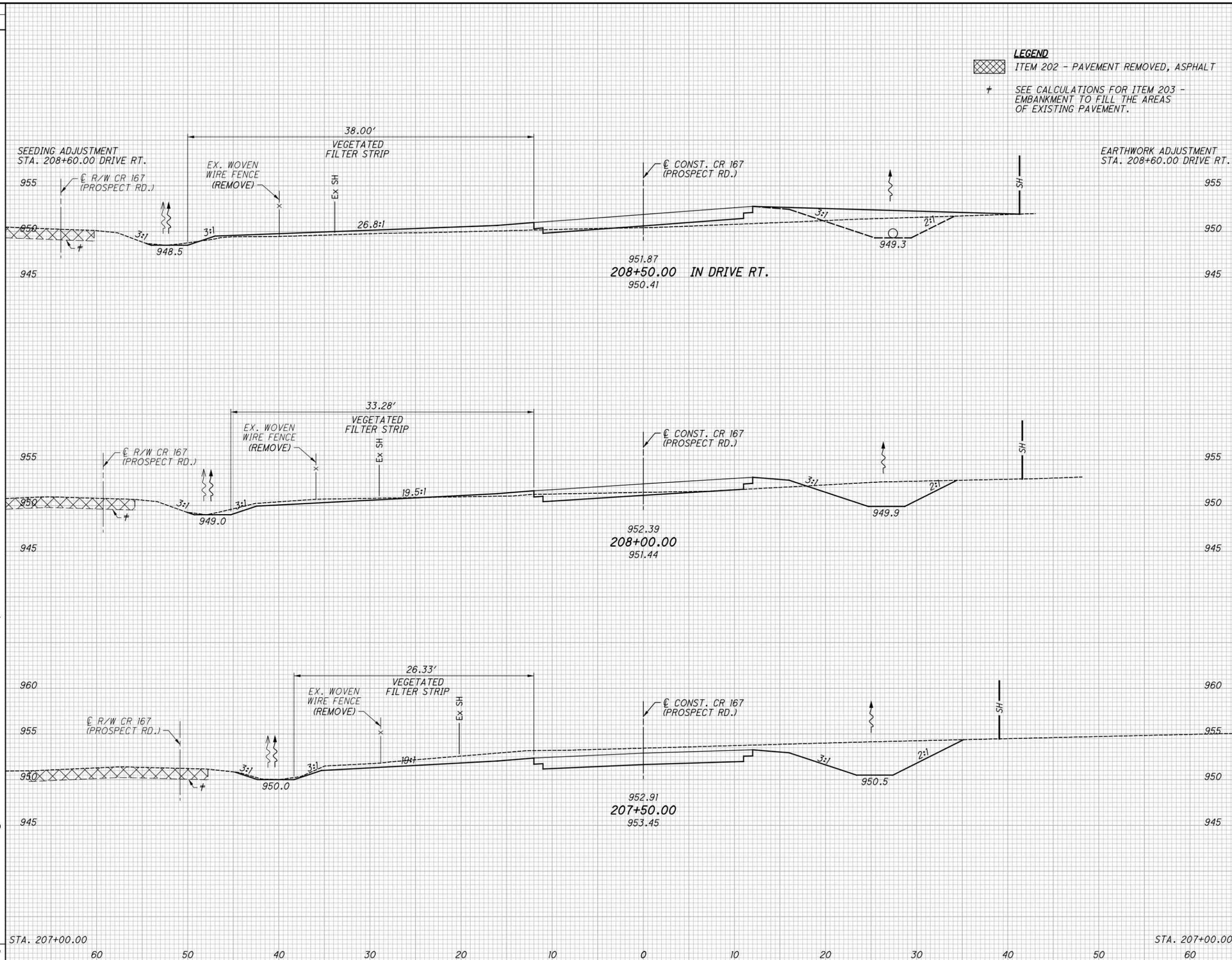
62 955

356 960

66 945

71 950

98 955



**LEGEND**

ITEM 202 - PAVEMENT REMOVED, ASPHALT

# SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
-44		2		
23	31			
62	37			
43	8			
141	8			
109	0			
178	4			
83	4			
337	51			

**CROSS SECTIONS**  
**STA. 207+50 TO STA. 208+50**  
**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

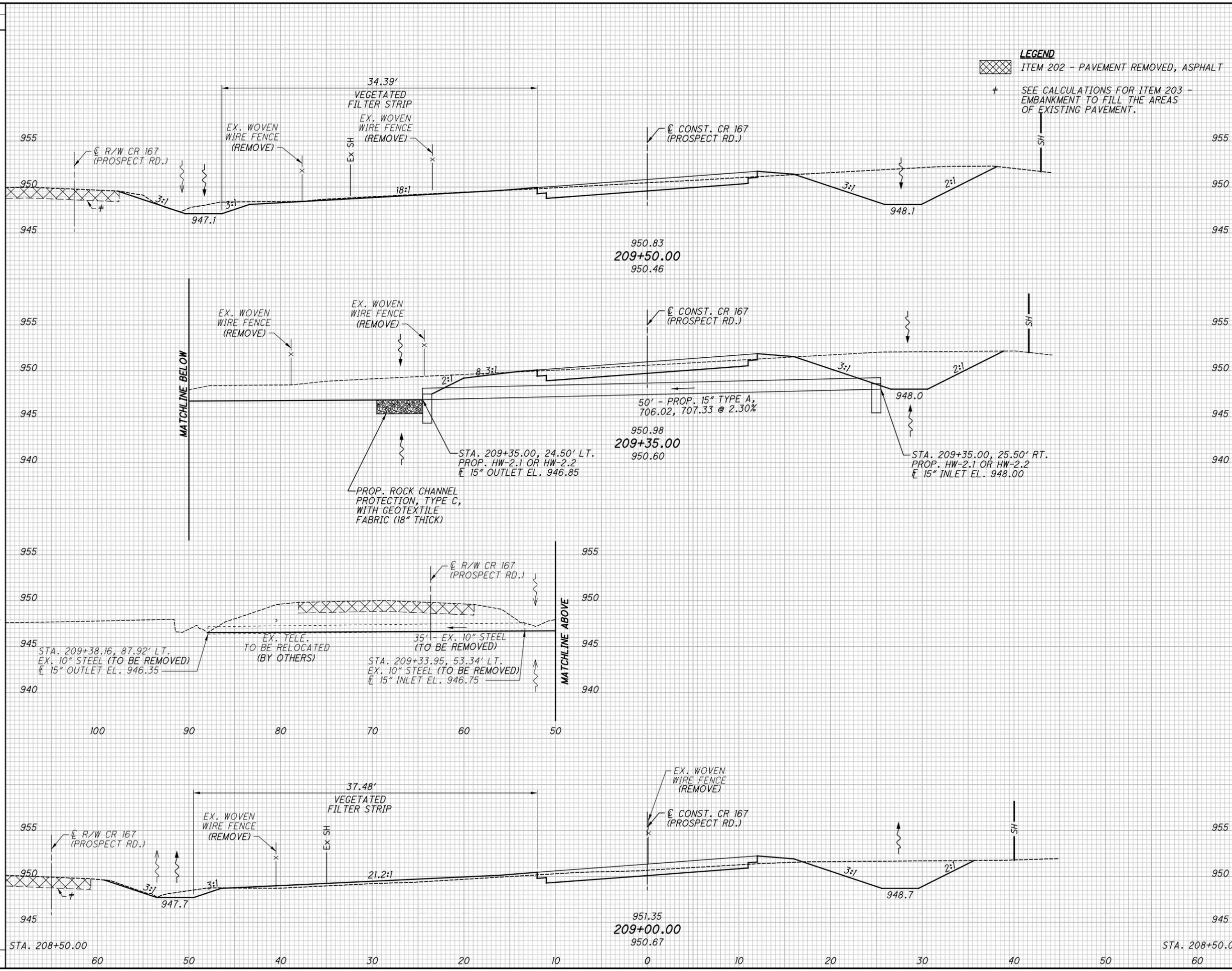
45  
64

F:\2015\115017 Roadway\_Safety\_Study\15017\roadway\sheets\102915XS001.dgn 10/31/2019 1:37:43 PM SteveMorr

SEEDING  
END WIDTH SO. YDS.

79  
158  
110  
364  
77  
412  
71

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:49 PM SteveMorr



**LEGEND**  
 ITEM 202 - PAVEMENT REMOVED, ASPHALT  
 # SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
81	2			
80	2			
206	2			
168	10			
53	12			
23	31	71	40	
319	52			

**CROSS SECTIONS**  
**STA. 209+00 TO STA. 209+50**  
**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

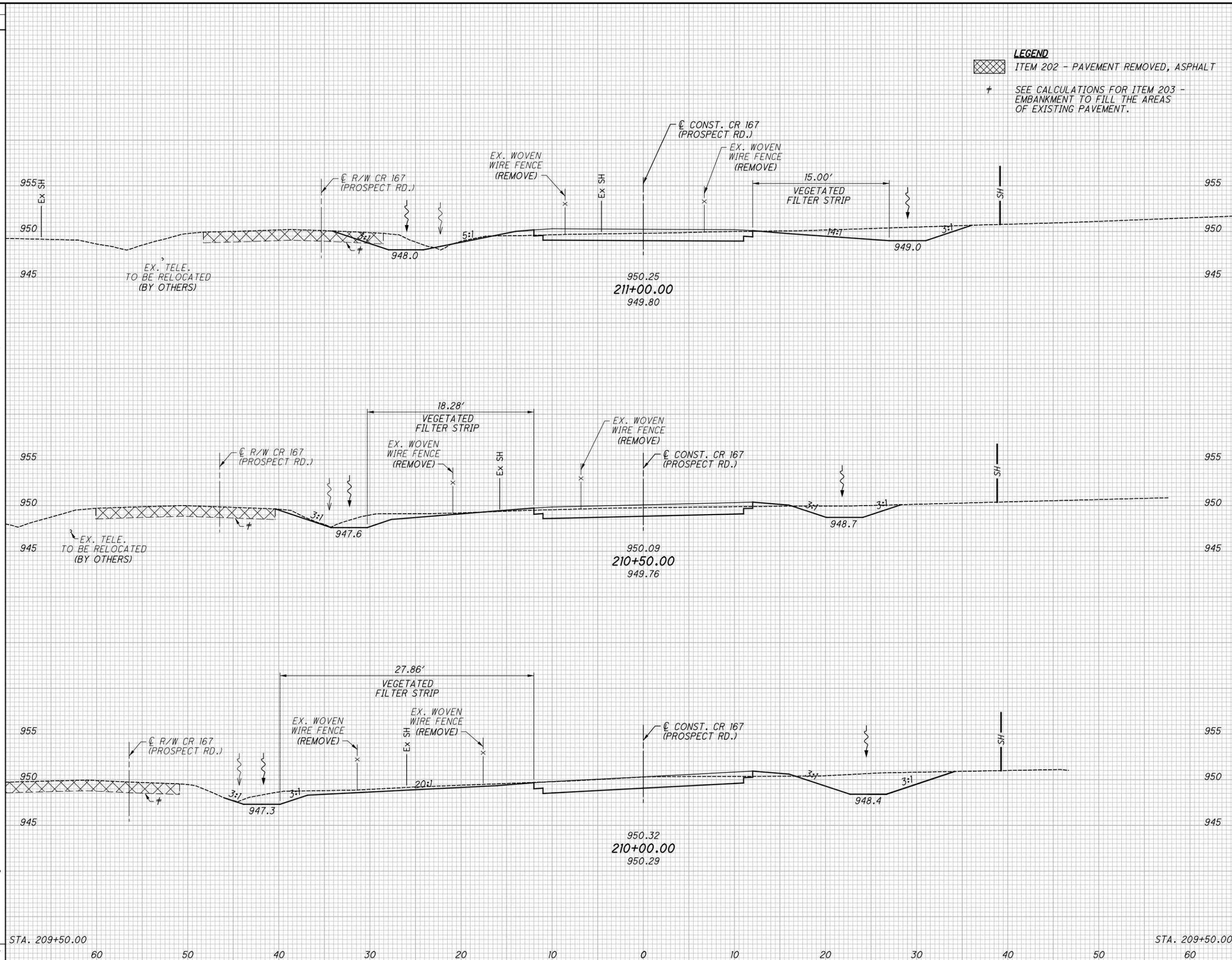
SEEDING  
END SO.  
WIDTH YDS.

52  
284  
50  
312  
62  
392  
79

888  
60  
50  
40  
30  
20  
10  
0  
10  
20  
30  
40  
50  
60

STA. 209+50.00

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:37:56 PM SteveMorr



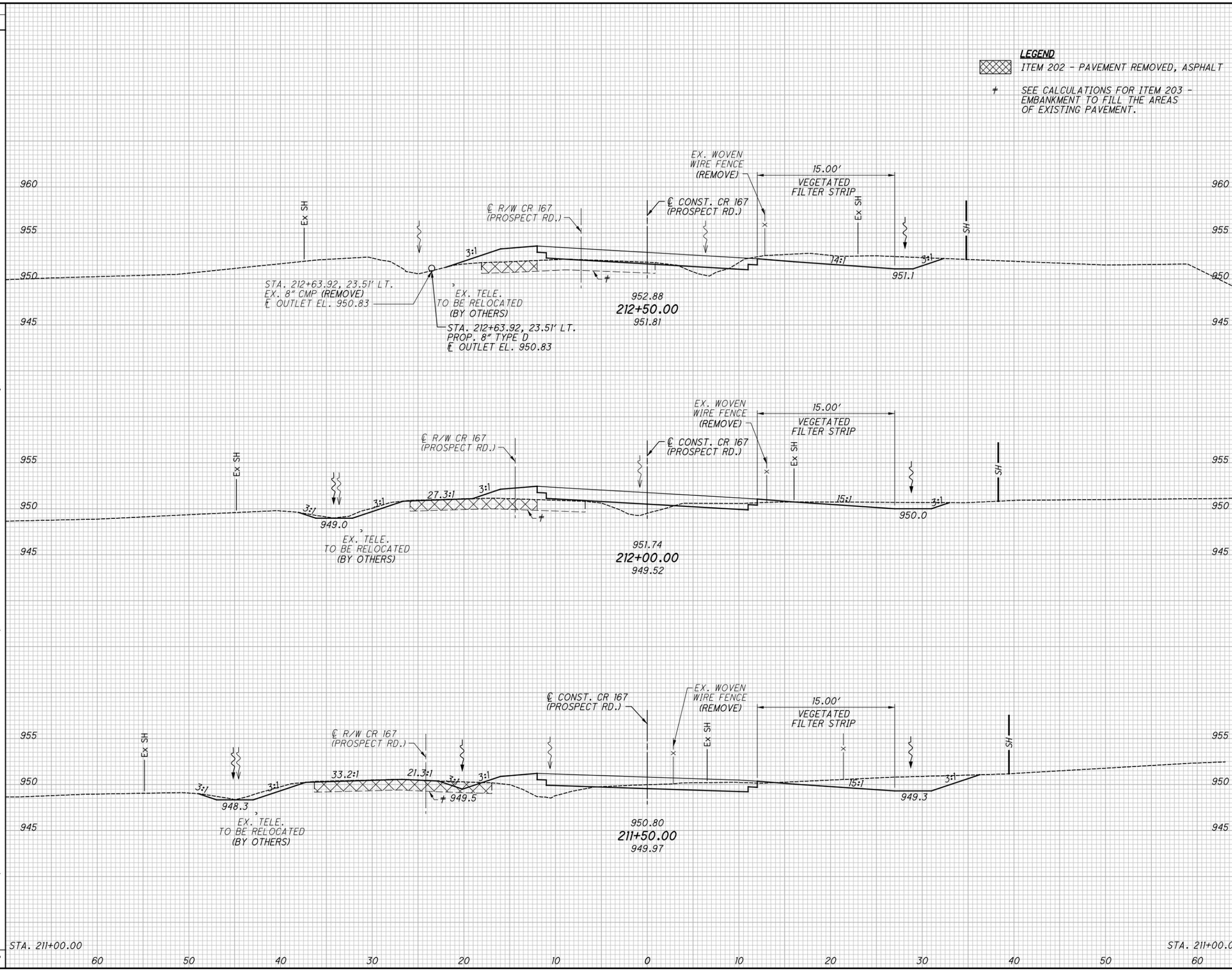
END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
45		3		
80		5		
41		2		
97		4		
63		2		
134		4		
81	2			
311	13			

**CROSS SECTIONS  
STA. 210+00 TO STA. 211+00**

**HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)**

47  
64

SEEDING  
END WIDTH SO. YDS.  
35  
242  
52  
325  
65  
325  
52



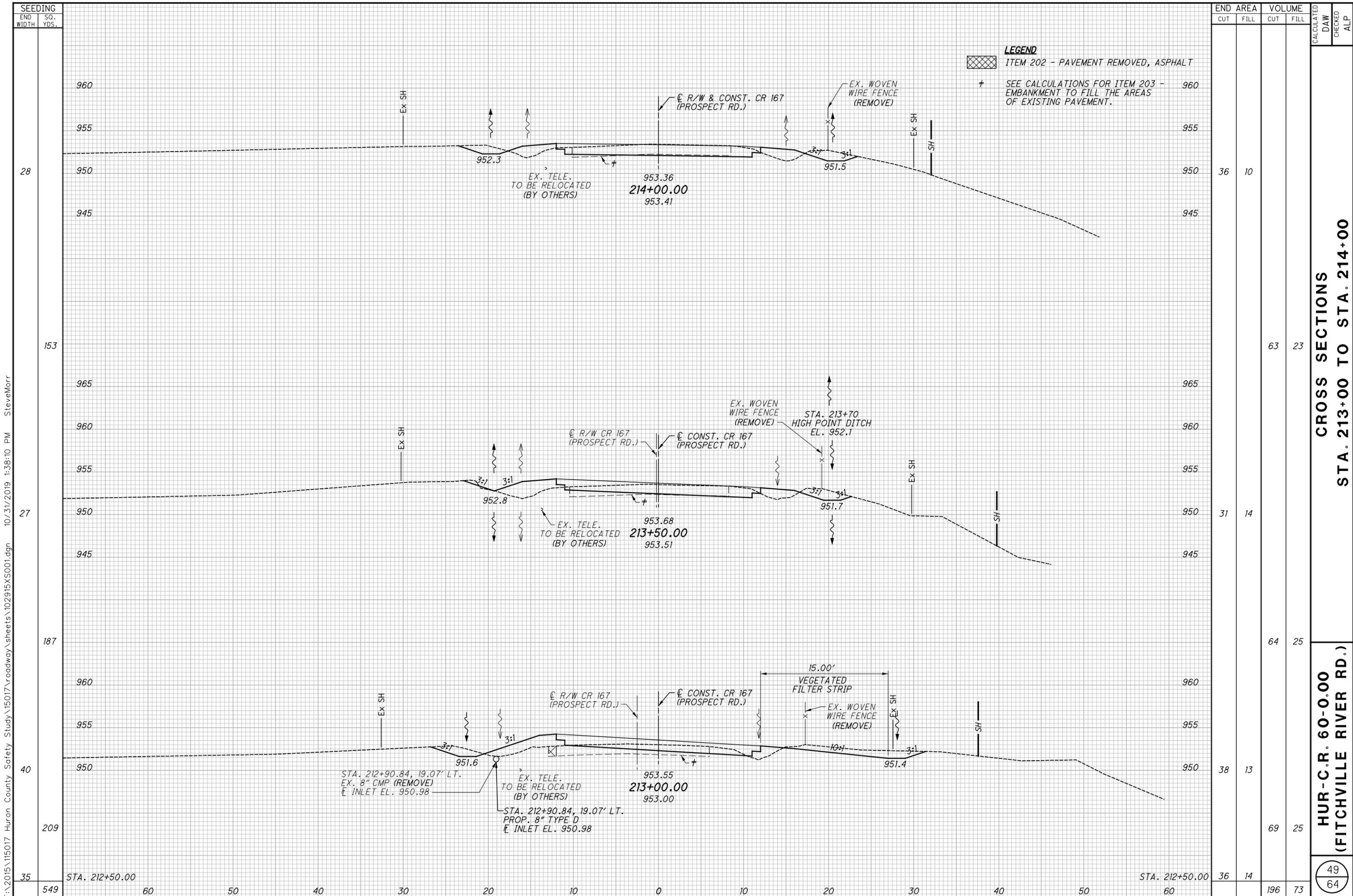
**LEGEND**  
 [Hatched Box] ITEM 202 - PAVEMENT REMOVED, ASPHALT  
 # SEE CALCULATIONS FOR ITEM 203 - EMBANKMENT TO FILL THE AREAS OF EXISTING PAVEMENT.

END AREA	VOLUME		CALCULATED DAW	CHECKED ALP
	CUT	FILL		
36	14			
21	15	53	27	
35	13	52	26	
45	3	75	15	
892	60	180	68	

**CROSS SECTIONS**  
**STA. 211+50 TO STA. 212+50**  
**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

48  
64

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:38:02 PM SteveMorr



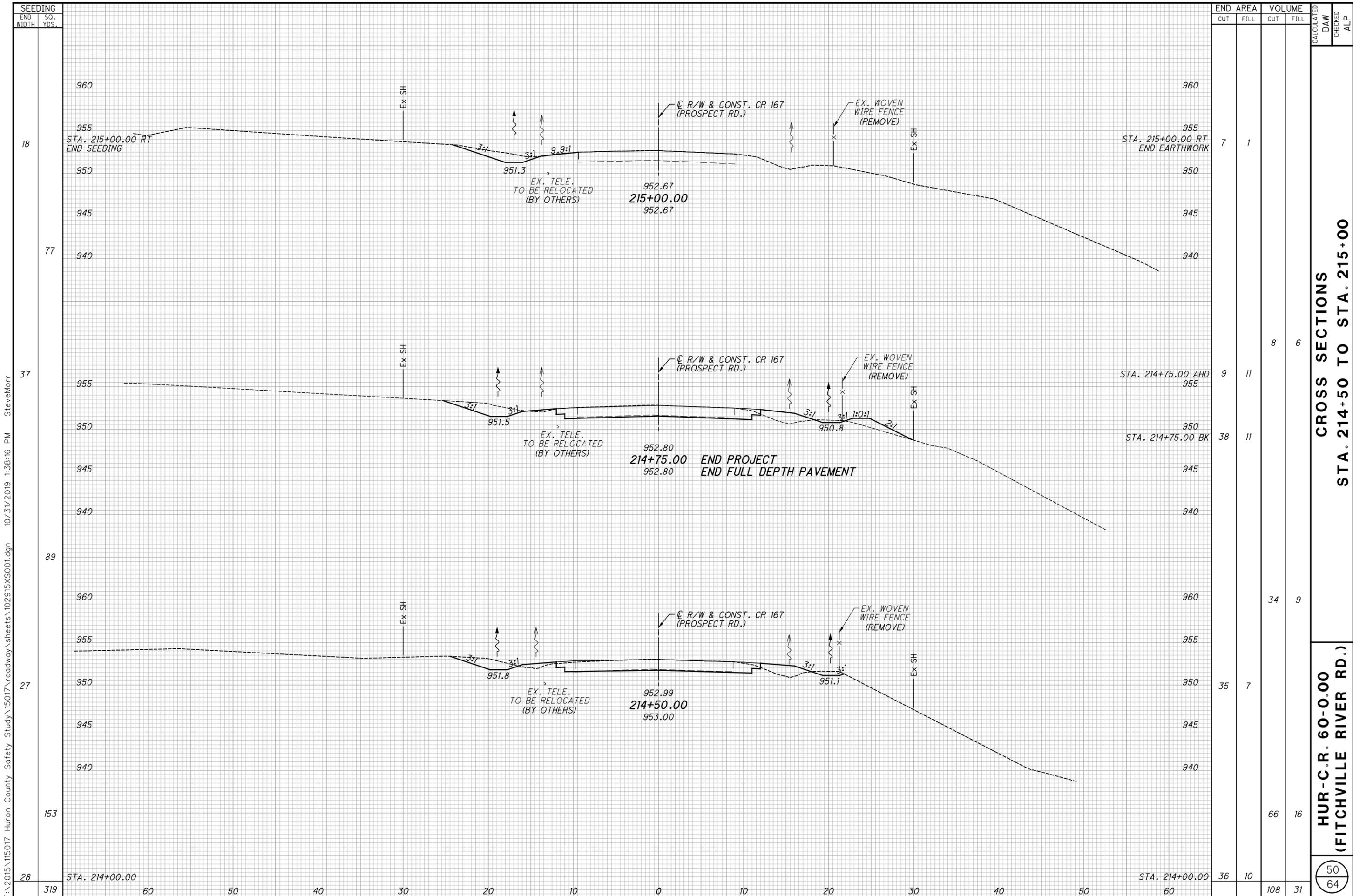
END AREA	VOLUME		CALCULATED	CHECKED
	CUT	FILL		
36	10			
63	23			
31	14			
64	25			
38	13			
69	25			
36	14			
196	73			

**CROSS SECTIONS**  
**STA. 213+00 TO STA. 214+00**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

49  
 64

F:\2015\115017\_Huron County\_Safety\_Study\15017\_roadway\sheets\102915XS001.dgn 10/31/2019 1:38:10 PM SteveMorr



SEEDING	
END WIDTH	SO. YDS.
18	60
77	50
37	40
89	30
27	20
153	10
28	0
319	10

END AREA		VOLUME		CALCULATED DAW	CHECKED ALP
CUT	FILL	CUT	FILL		
7	1				
9	11	8	6		
38	11				
35	7	34	9		
36	10	66	16		
36	10	108	31		

**CROSS SECTIONS  
STA. 214+50 TO STA. 215+00**

**HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)**

50  
64

F:\2015\115017 Roadway\_Safety\_Study\15017\roadway\sheets\102915XS001.dgn 10/31/2019 1:38:16 PM SteveMorr

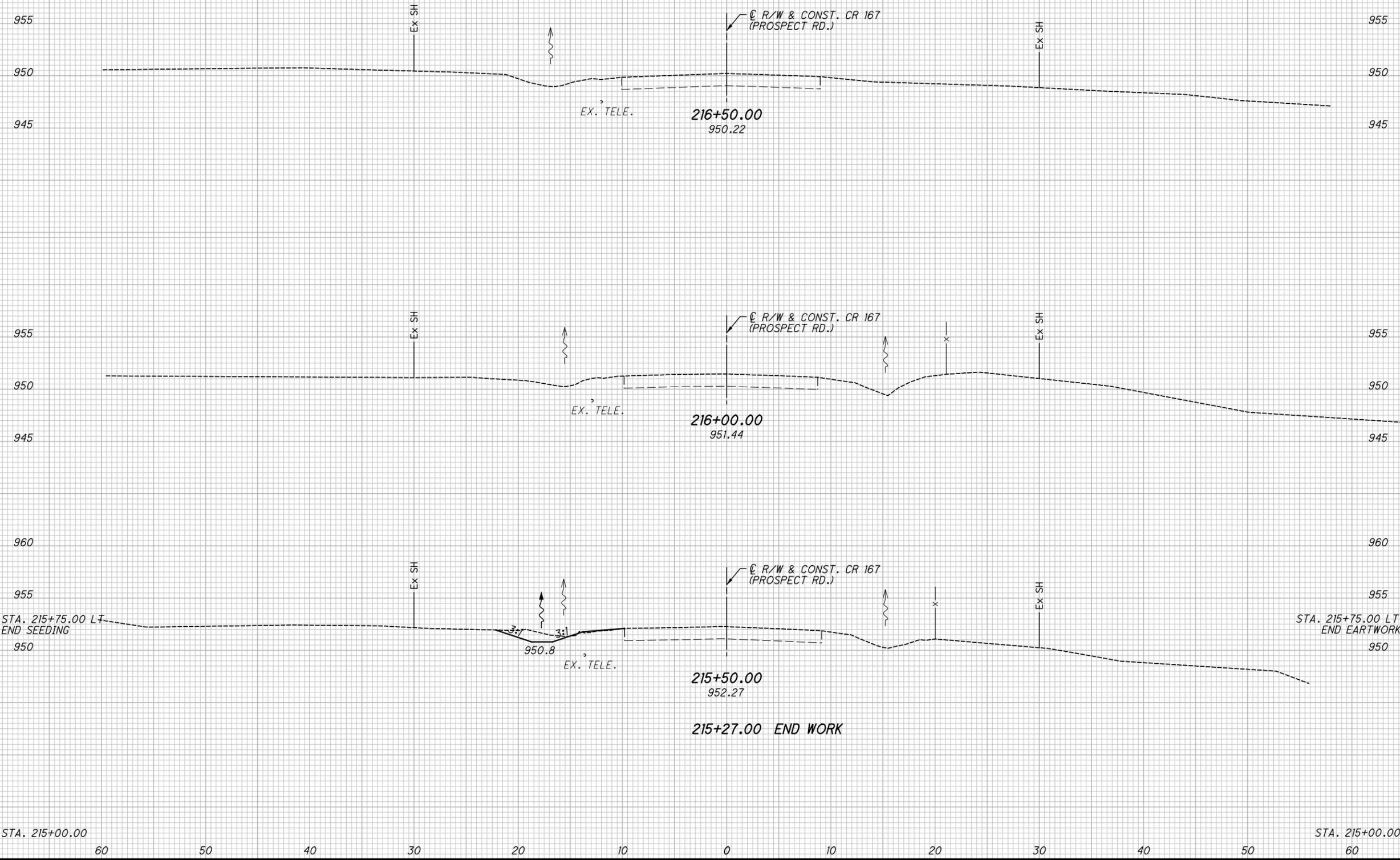
F:\2015\115017\_Huron County\_Safety\_Study\15017\roadway\sheets\102915XS001.dgn 10/31/2019 1:38:22 PM SteveMorr

SEEDING	
END WIDTH	SO. YDS.
7299	

TOTAL SEEDING QUANTITIES CARRIED TO GENERAL NOTES

TOTAL EARTHWORK QUANTITIES CARRIED TO GENERAL SUMMARY

END AREA		VOLUME		CALCULATED DAW	CHECKED ALP
CUT	FILL	CUT	FILL		
		2647	479		



CROSS SECTIONS  
STA. 215+50 TO STA. 216+50

HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)

51  
64

### SUPERELEVATION TABLE

DESCRIPTION	STATION	PROP. EDGE OF PAVT. AT 10' LT.	TRANSITION RATE LT.	PAVT. WIDTH LEFT	PAVT. CROSS SLOPE LT.	PROP. C.L. PROFILE	PAVT. CROSS SLOPE RT.	PAVT. WIDTH RIGHT	TRANSITION RATE RT.	PROP. EDGE OF PAVT. AT 10' RT.
MATCH EXISTING BEGIN TRANSITION	202+85.00	954.56		10	-0.0392	954.95	-0.0401	10		954.55
	203+00.00	954.82		10	-0.0317	955.14	-0.0366	10		954.77
	203+25.00	955.20	199.4:1	10	-0.0191	955.39	-0.0307	10		955.08
BEGIN SUPER TRANSITION LEFT	203+31.26	955.28		10	-0.0160	955.44	-0.0292	10	424.3:1	955.15
	203+50.00	955.50		10	-0.0052	955.55	-0.0248	10		955.30
	203+59.26	955.59		10	0.0002	955.59	-0.0226	10		955.36
	203+75.00	955.71		10	0.0093	955.62	-0.0189	10		955.43
BEGIN SUPER TRANSITION RIGHT	203+87.26	955.78	172.7:1	10	0.0164	955.62	-0.0160	10		955.46
	204+00.00	955.84		10	0.0238	955.60	-0.0234	10		955.37
	204+25.00	955.86		10	0.0383	955.48	-0.0381	10	171.1:1	955.10
	204+50.00	955.82		10	0.0527	955.29	-0.0527	10		954.76
BEGIN FULL SUPER	204+64.26	955.79		10	0.0610	955.18	-0.0610	10		954.57
END FULL SUPER	204+79.64	955.67		10	0.0610	955.06	-0.0610	10		954.45
	205+00.00	955.39		10	0.0492	954.90	-0.0436	10		954.46
	205+25.00	955.05		10	0.0347	954.70	-0.0314	10	171.1:1	954.39
	205+50.00	954.71		10	0.0203	954.51	-0.0192	10		954.32
	205+56.64	954.61	172.7:1	10	0.0164	954.45	-0.0160	10		954.29
	205+75.00	954.37		10	0.0058	954.31	-0.0160	10		954.15
HALF FLAT	205+84.64	954.24		10	0.0002	954.24	-0.0160	10		954.08
	206+00.00	954.11		10	-0.0087	954.20	-0.0160	10		954.04
	206+04.00	954.10		10	-0.0110	954.21	-0.0140	10	196.7:1	954.07
	206+25.00	954.20		10	-0.0110	954.31	-0.0033	10		954.28
MATCH CROSS SLOPE AT FITCHVILLE RIVER RD LEFT	206+39.33	954.36		10	-0.0110	954.47	0.0040	10		954.51
	206+50.00	954.39		10	-0.0115	954.50	0.0081	10		954.58
MATCH CROSS SLOPE AT FITCHVILLE RIVER RD RIGHT REVERSE CROWN	206+60.23	953.83		10	-0.0120	953.95	0.0120	10		954.07
	206+75.00	953.57		10	-0.0160	953.73	0.0160	10		953.89
	207+00.00	953.17		10	-0.0257	953.43	0.0160	10		953.59
	207+23.97	952.83		10	-0.0351	953.18	0.0160	10		953.34
	207+25.00	952.82		10	-0.0355	953.17	0.0166	10		953.34
	207+50.00	952.46	256.8:1	10	-0.0452	952.91	0.0311	10		953.22
	207+75.00	952.10		10	-0.0549	952.65	0.0456	10	172.4:1	953.11
	208+00.00	951.74		10	-0.0647	952.39	0.0601	10		952.99
BEGIN FULL SUPER	208+23.97	951.40		10	-0.0740	952.14	0.0740	10		952.88
	208+25.00	951.39		10	-0.0740	952.13	0.0740	10		952.87
	208+50.00	951.13		10	-0.0740	951.87	0.0740	10		952.61
	208+75.00	950.87		10	-0.0740	951.61	0.0740	10		952.35
	209+00.00	950.61		10	-0.0740	951.35	0.0740	10		952.09
	209+25.00	950.35		10	-0.0740	951.09	0.0740	10		951.83
	209+50.00	950.09		10	-0.0740	950.83	0.0740	10		951.57
END FULL SUPER	209+62.97	949.95		10	-0.0740	950.69	0.0740	10		951.43
	209+75.00	949.90		10	-0.0671	950.57	0.0671	10		951.24
	210+00.00	949.79		10	-0.0528	950.32	0.0528	10		950.85
	210+25.00	949.78		10	-0.0384	950.16	0.0384	10		950.54
	210+50.00	949.85		10	-0.0241	950.09	0.0241	10		950.33
	210+75.00	950.02	174.5:1	10	-0.0098	950.12	0.0098	10	174.5:1	950.22
	211+00.00	950.30		10	0.0045	950.25	-0.0045	10		950.21
	211+25.00	950.67		10	0.0189	950.48	-0.0189	10		950.29
	211+50.00	951.13		10	0.0332	950.80	-0.0332	10		950.47
	211+75.00	951.70		10	0.0475	951.22	-0.0475	10		950.75
BEGIN FULL SUPER	211+93.27	952.17		10	0.0580	951.59	-0.0580	10		951.01
	212+00.00	952.32		10	0.0580	951.74	-0.0580	10		951.16
	212+25.00	952.93		10	0.0580	952.35	-0.0580	10		951.77
	212+50.00	953.46		10	0.0580	952.88	-0.0580	10		952.30
	212+75.00	953.86		10	0.0580	953.28	-0.0580	10		952.70
	213+00.00	954.13		10	0.0580	953.55	-0.0580	10		952.97
END FULL SUPER	213+22.18	954.25		10	0.0580	953.67	-0.0580	10		953.09
	213+25.00	954.24		10	0.0564	953.68	-0.0564	10		953.12
	213+50.00	954.10		10	0.0419	953.68	-0.0418	10		953.26
	213+75.00	953.83		10	0.0275	953.55	-0.0272	10		953.28
	213+94.18	953.57		10	0.0164	953.41	-0.0160	10		953.25
	214+00.00	953.49	181.7:1	10	0.0130	953.36	-0.0175	10	734.7:1	953.19
	214+22.18	953.20		10	0.0002	953.20	-0.0233	10		952.97
	214+25.00	953.16		10	-0.0014	953.17	-0.0241	10		952.93
	214+50.18	952.83		10	-0.0160	952.99	-0.0307	10		952.68
MATCH EXISTING	214+75.00	952.54		10	-0.0261	952.80	-0.0372	10		952.43

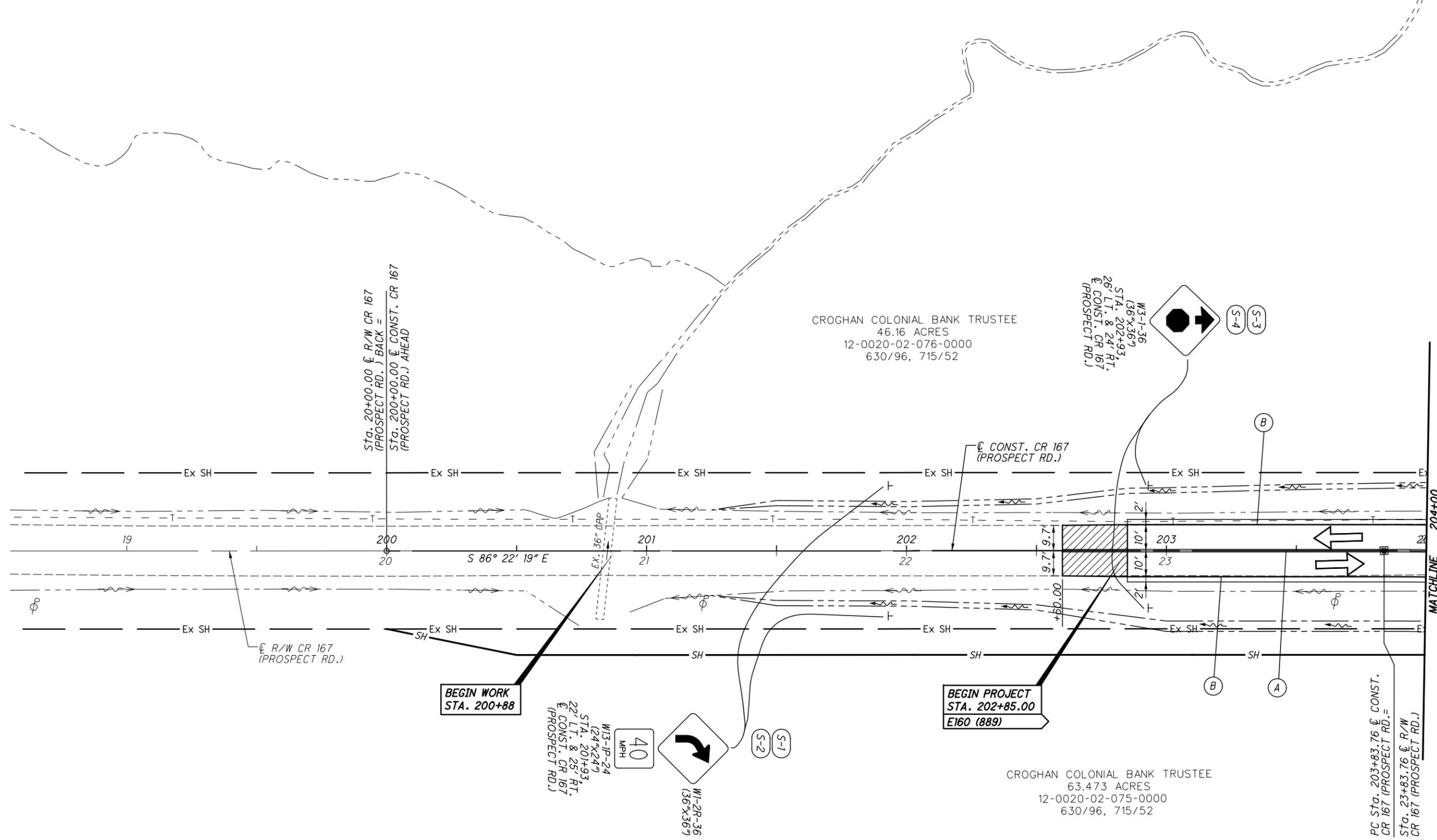
F:\2015\115017\_Huron County\_Safety\_Study\15017\roadway\sheets\102915GE001.dgn 10/31/2019 1:39:12 PM SteveMorr

CALCULATED  
DAW  
CHECKED  
ALP

### SUPERELEVATION TABLE

HUR - C.R. 60-0.00  
(FITCHVILLE RIVER RD.)





- NOTES:**
1. ALL TRAFFIC CONTROL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND APPLICABLE SECTIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (O.D.O.T.) CONSTRUCTION AND MATERIALS SPECIFICATIONS INCLUDING STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS LISTED ON THE TITLE SHEET.
  2. SIGNING STATIONS ARE IN REFERENCE TO THE  $\phi$  CONSTRUCTION OF THE ADJACENT PAVEMENT.
  3. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTING TRAFFIC CONTROL ITEMS.
  4. FOR ADDITIONAL DETAILS SEE O.D.O.T. STD. CONSTRUCTION DWG. TC-42.20.

**LEGEND**  
 PLANNING AND RESURFACING (1.5" THK.)

**PAVEMENT MARKING LEGEND**

- (A) 642 - CENTER LINE: SOLID, DOUBLE
- (B) 642 - EDGE LINE, WHITE
- (C) 642 - STOP LINE
- TRAFFIC DIRECTION

**SIGNING LEGEND**

- PROPOSED SIGN, FLAT SHEET
- EXISTING SIGN AND SUPPORT TO BE REMOVED
- + + EXISTING SIGN LOCATIONS
- + + + PROPOSED SIGN LOCATIONS

CALCULATED  
 DAW  
 CHECKED  
 ALP

0 10 20 40  
 HORIZONTAL SCALE IN FEET

**TRAFFIC CONTROL PLAN**  
**STA. 200+00 TO STA. 204+00**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

F:\2015\15017\_Huron County\_Safety\_Study\15017roadway\sheets\102915TP002.dgn 10/31/2019 1:40:47 PM SteveMorr

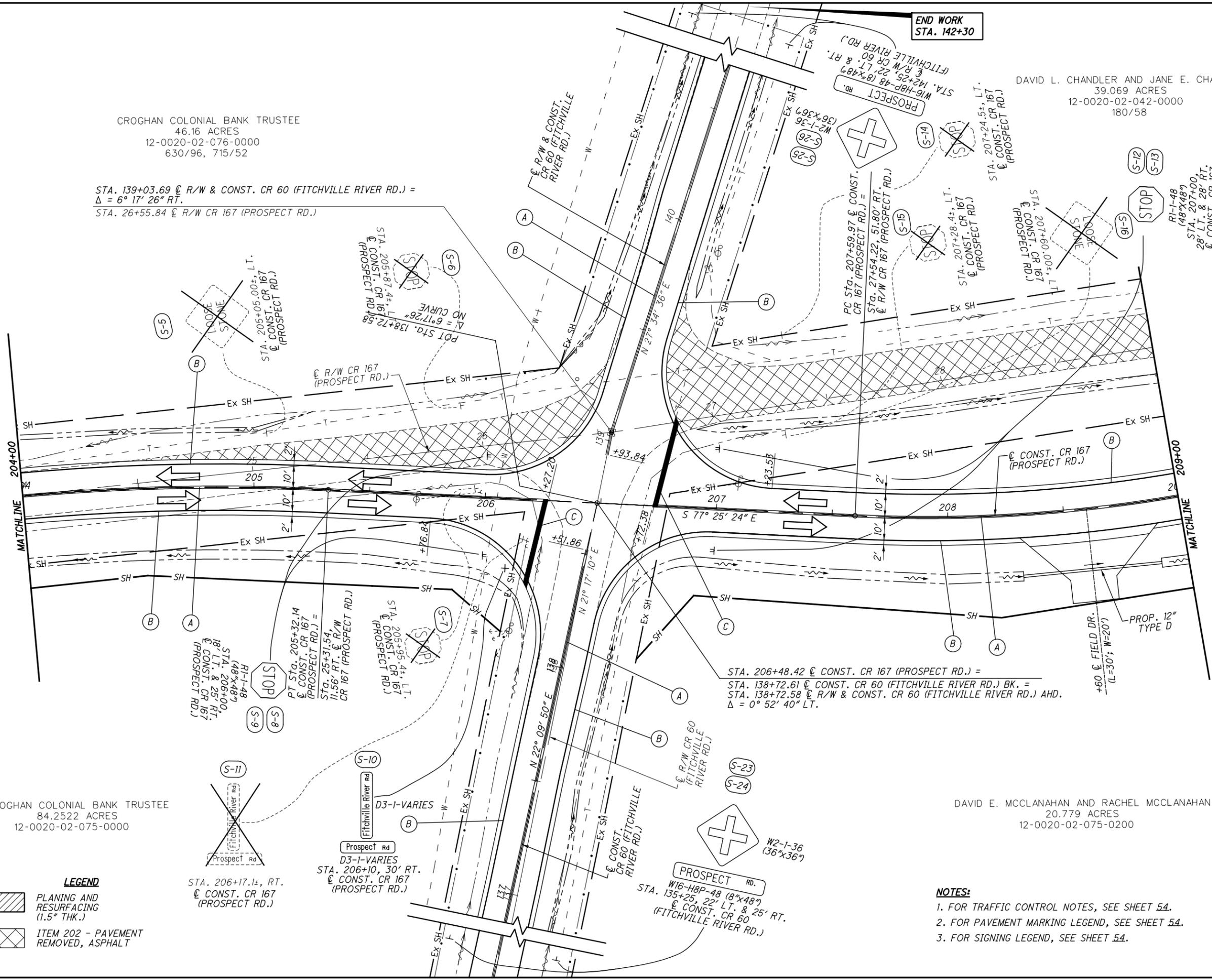
CROGHAN COLONIAL BANK TRUSTEE  
46.16 ACRES  
12-0020-02-076-0000  
630/96, 715/52

STA. 139+03.69 @ R/W & CONST. CR 60 (FITCHVILLE RIVER RD.) =  
 $\Delta = 6^\circ 17' 26''$  RT.  
STA. 26+55.84 @ R/W CR 167 (PROSPECT RD.)

CROGHAN COLONIAL BANK TRUSTEE  
84.2522 ACRES  
12-0020-02-075-0000

**LEGEND**

-  PLANING AND RESURFACING (1.5" THK.)
-  ITEM 202 - PAVEMENT REMOVED, ASPHALT



END WORK  
STA. 142+30

DAVID L. CHANDLER AND JANE E. CHANDLER  
39.069 ACRES  
12-0020-02-042-0000  
180/58

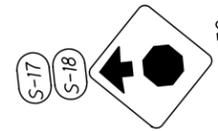
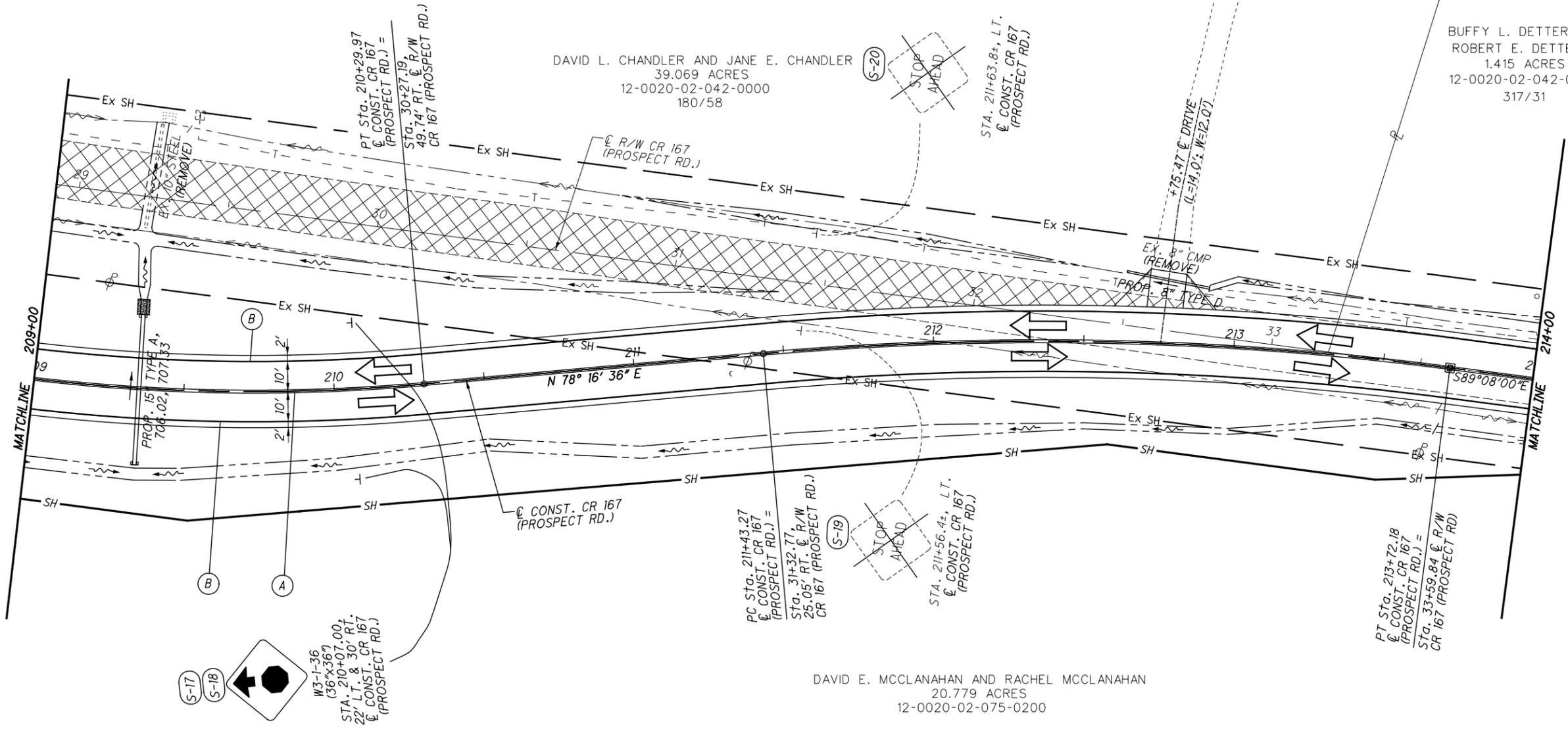
DAVID E. MCCLANAHAN AND RACHEL MCCLANAHAN  
20.779 ACRES  
12-0020-02-075-0200

- NOTES:**
1. FOR TRAFFIC CONTROL NOTES, SEE SHEET 54.
  2. FOR PAVEMENT MARKING LEGEND, SEE SHEET 54.
  3. FOR SIGNING LEGEND, SEE SHEET 54.



TRAFFIC CONTROL PLAN  
STA. 204+00 TO STA. 209+00

HUR-C.R. 60-0-00  
(FITCHVILLE RIVER RD.)



W3-1-36  
(36"x36")  
STA. 210+07.00,  
22' LT. & 30' RT.  
C/L CONST. CR 167  
(PROSPECT RD.)

**LEGEND**

 ITEM 202 - PAVEMENT REMOVED, ASPHALT

**NOTES:**

1. FOR TRAFFIC CONTROL NOTES, SEE SHEET 54.
2. FOR PAVEMENT MARKING LEGEND, SEE SHEET 54.
3. FOR SIGNING LEGEND, SEE SHEET 54.

CALCULATED  
DAW  
CHECKED  
ALP



HORIZONTAL SCALE IN FEET

**TRAFFIC CONTROL PLAN**  
**STA. 209+00 TO STA. 214+00**

**HUR-C.R. 60-0.00**  
**(FITCHVILLE RIVER RD.)**

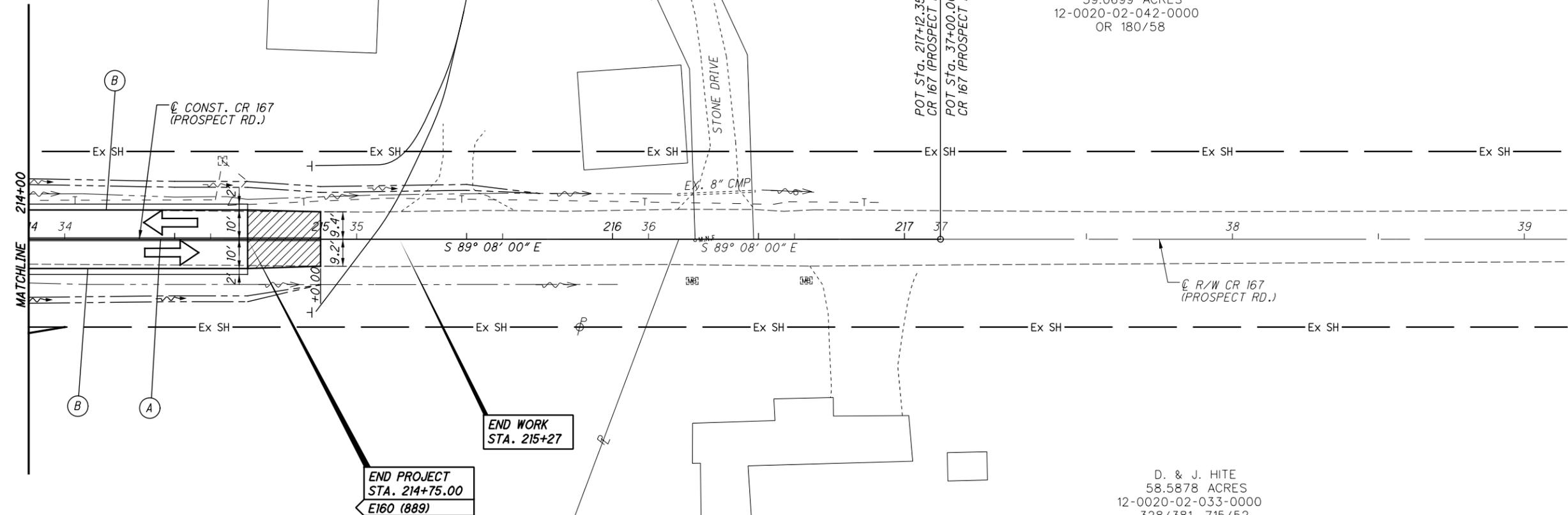
F:\2015\15017 Huron County Safety Study\15017\roadway\sheets\102915TP004.dgn 10/31/2019 1:41:16 PM SteveMorr

BUFFY L. DETTERMAN AND ROBERT E. DETTERMAN  
1.415 ACRES  
12-0020-02-042-0300  
317/31

WI-4L-36  
(36"x36")

WI-1P-24  
(24"x24")  
STA. 214+97.00,  
22' LT. & RT.  
¢ CONST. CR 167  
(PROSPECT RD.)

40  
MPH



DAVID E. MCCLANAHAN AND RACHEL MCCLANAHAN  
20.779 ACRES  
12-0020-02-075-0200

DAVID L. CHANDLER & JANE E. CHANDLER  
39.0699 ACRES  
12-0020-02-042-0000  
OR 180/58

D. & J. HITE  
58.5878 ACRES  
12-0020-02-033-0000  
328/381, 715/52

END PROJECT  
STA. 214+75.00  
E160 (889)

END WORK  
STA. 215+27

**LEGEND**

PLANING AND RESURFACING (1.5" THK.)

**NOTES:**

1. FOR TRAFFIC CONTROL NOTES, SEE SHEET 54.
2. FOR PAVEMENT MARKING LEGEND, SEE SHEET 54.
3. FOR SIGNING LEGEND, SEE SHEET 54.

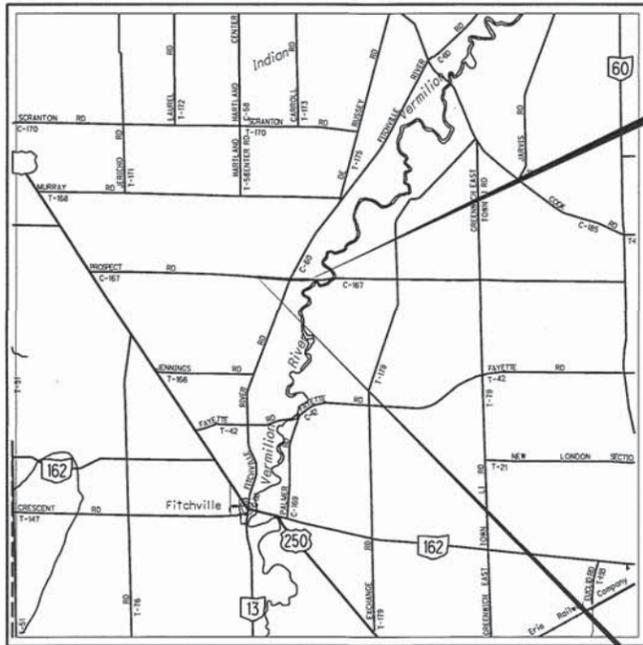
CALCULATED  
DAW  
CHECKED  
ALP

0 10 20 40  
HORIZONTAL  
SCALE IN FEET

**TRAFFIC CONTROL PLAN**  
**STA. 214+00 TO STA. 217+00**

**HUR-C.R. 60-0-00**  
**(FITCHVILLE RIVER RD.)**

F:\2015\115017 Huron County Safety Study\15017\row\sheet\102915RL001.dgn 7/3/2018 7:47:18 AM Roger Brokaw



LOCATION MAP

LATITUDE: 41° 07' 52" N LONGITUDE: 82° 28' 46" W

SCALE IN MILES



UTILITY OWNERS

ELECTRIC

FIRELANDS ELECTRIC
ONE ENERGY PLACE
NEW LONDON, OHIO 44851
(419)-929-1571
ATTN.: DENNY MARUGG

WATER

NORTHERN OHIO RURAL WATER
2205 U.S. 20
NORWALK, OHIO 44857
(419)-668-7213
ATTN.: BRYAN PUDER

COMMUNICATIONS

FRONTIER COMMUNICATIONS
83 TOWNSEND AVENUE
NORWALK, OHIO 44857
(419)-744-3613
ATTN.: SCOTT WETZEL

CABLE

CHARTER COMMUNICATIONS (SPECTRUM)
1575 LEXINGTON AVE.
MANSFIELD, OHIO 44904
(330)-9006-6096
ATTN.: RON FERDINAND

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

CONVENTIONAL SYMBOLS

Table listing various symbols for County Line, Township Line, Section Line, Corporation Line, Fence Line, Center Line, Right of Way, Standard Highway Ease., Temporary Right of Way, Channel Ease., Utility Ease., Railroad, Guardrail, Construction Limits, Edge of Pavement, Edge of Shoulder, Ditch / Creek, Tree Line, Ownership Hook Symbol, Property Line Symbol, Break Line Symbol, Tree, Shrub, Evergreen, Stump, Wetland, Aerial Target, Post, Mailbox, Light, Telephone Marker, Fire Hydrant, Water Meter, Water Valve, Telephone Pole, Power Pole, Light Pole, etc.

END ACQUISITION STA. 34+00.00

BEGIN ACQUISITION STA. 20+00.00

RIGHT OF WAY LEGEND SHEET HUR-C.R. 60-0.00 (FITCHVILLE RIVER RD.)

HURON COUNTY

FITCHVILLE TOWNSHIP

PT. OF GREAT LOTS 3 AND 4, SEC. 2 T.2 N., R.21 W.

INDEX OF SHEETS:

Table listing sheet numbers: LEGEND SHEET (1), CENTERLINE PLAT (2), PROPERTY MAP (3), SUMMARY OF ADDITIONAL RIGHT OF WAY (4), R/W DETAIL (5-7)

STRUCTURE KEY

- RESIDENTIAL (white square), COMMERCIAL (black square), OUT-BUILDING (hatched square)

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX (square with X), PROPOSED R/W MONUMENT BOX (square with dot), MAG NAIL FOUND (circle with dot)

TYPES OF TITLE LEGEND: SH = STANDARD HIGHWAY EASEMENT

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF UTILIZING THE EXISTING FITCHVILLE RIVER ROAD HORIZONTAL ALIGNMENT FOR PLANING AND RESURFACING; REALIGNMENT OF PROSPECT ROAD ON AN IMPROVED HORIZONTAL AND VERTICAL ALIGNMENT; PAVEMENT RECONSTRUCTION; SHOULDER IMPROVEMENTS; GRADING; DRAINAGE; AND TRAFFIC CONTROL.

PROJECT LENGTH = 2.05 MILES

PROJECT CONTROL

STATE PLANE GRID: OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83(2011),

PROJECT ADJUSTMENT FACTOR: 1.000100967

THE EXISTING AND PROPOSED RIGHT OF WAY SHALL BE REFERENCED FROM THE EXISTING CENTERLINE OF RIGHT OF WAY

PLANS PREPARED BY:

FIRM NAME: RICHLAND ENGINEERING LIMITED
R/W DESIGNER: BRIAN BESECKER
R/W REVIEWER: ROBERT J. MCAULEY
FIELD REVIEWER: ROBERT J. MCAULEY

PRELIMINARY FIELD REVIEW DATE: 10/26/17

TRACINGS FIELD REVIEW DATE: 6/14/18

OWNERSHIP UPDATED BY: BRIAN BESECKER

DATE COMPLETED: 6/14/18

PLAN COMPLETION DATE: 6/15/18

I, GARY LYNN GILLEN, P. S. HAVE CONDUCTED A SURVEY OF THE EXISTING CONDITIONS FOR THE HURON COUNTY ENGINEER IN 2015. THE RESULTS OF THAT SURVEY ARE CONTAINED HEREIN. THE HORIZONTAL COORDINATES EXPRESSED HEREIN ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE ON NAD 83 (2011) DATUM. THE PROJECT COORDINATES (US SURVEY FEET) ARE RELATIVE TO STATE PLANE GRID COORDINATES (US SURVEY FEET) BY A PROJECT ADJUSTMENT FACTOR MULTIPLIER OF 1.000100967. AS A PART OF THIS PROJECT I HAVE REESTABLISHED THE LOCATIONS OF THE EXISTING PROPERTY LINES AND CENTERLINE OF EXISTING RIGHT OF WAY FOR PROPERTY TAKES CONTAINED HEREIN. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH OHIO ADMINISTRATIVE CODE 4733-37 COMMONLY KNOWN AS "A MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO" UNLESS NOTED. THE WORDS I AND MY AS USED HEREIN ARE TO MEAN EITHER MYSELF OR SOMEONE WORKING UNDER MY DIRECT SUPERVISION.

GARY LYNN GILLEN, PROFESSIONAL LAND SURVEYOR NO. 7617, DATE: 7-10-18

I, ROBERT J. MCAULEY, P. S. HAVE CALCULATED THE GROSS TAKE, PRESENT ROADWAY OCCUPIED (PRO), NET TAKE AND NET RESIDUE; AS WELL AS PREPARED THE LEGAL DESCRIPTION NECESSARY TO ACQUIRE THE PARCEL AS SHOWN HEREIN. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH OHIO ADMINISTRATIVE CODE 4733-37 COMMONLY KNOWN AS "MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO" UNLESS NOTED. THE WORDS I AND MY AS USED HEREIN ARE TO MEAN EITHER MYSELF OR SOMEONE WORKING UNDER MY DIRECT SUPERVISION.

ROBERT J. MCAULEY, PROFESSIONAL LAND SURVEYOR NO. 7209, DATE: 18 June 2018

SURVEYORS SEAL



SURVEYORS SEAL



FEDERAL PROJECT NO. E160(889)
PID NO. 102915
CALCULATED BB CHECKED RJM
RIGHT OF WAY LEGEND SHEET
HUR-C.R.60-0.00 (FITCHVILLE RIVER ROAD)
1/7
58/64

**MONUMENT TABLE**

☐ of RIGHT OF WAY C.R. 167 (PROSPECT RD.)		PROJECT COORDINATES SEE SURVEY CERTIFICATION		MONUMENTS TO BE SET DURING CONSTRUCTION		R/W MON. EXPECTED TO BE DISTURBED	
STATION	OFFSET	NORTH (Y)	EAST (X)	MON. ASSY.	REF. MON.	R/W MON.	DESCRIPTION
0+00.00	☐	533761.8424	1971713.1177				MAG NAIL FOUND
14+37.50	☐	533639.1138	1973145.3683				MAG NAIL FOUND
15+32.02	0.03' RT.	533633.1036	1973239.7020				MAG NAIL FOUND
26+55.84	☐	533562.0209	1974361.2682	1		1	IRON PIN IN MONUMENT BOX FOUND
33+19.00	0.23' RT.	533551.7643	1975024.3443				MAG NAIL FOUND
36+10.34	0.06' RT.	533547.5203	1975315.3529				MAG NAIL FOUND
36+15.96	0.30' RT.	533547.1932	1975321.2748				MAG NAIL FOUND
46+13.17	☐	533532.4139	1976318.3735				IRON PIN IN MONUMENT BOX FOUND
PROPOSED							
23+83.76	☐	533579.2371	1974089.7357	1			IRON PIN IN MONUMENT BOX SET
33+59.84	☐	533551.3721	1975065.1826	1			IRON PIN IN MONUMENT BOX SET
TOTAL CARRIED TO GENERAL SUMMARY SHEET				3		1	

**HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)**

HURON COUNTY  
FITCHVILLE TOWNSHIP  
SEC. 2, GREAT LOTS 3 AND 4, T. 2 N., R. 21 W.

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED BY THE HURON COUNTY ENGINEER.

**BASIS FOR BEARINGS:**

ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY. BEARINGS ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, NAD83(2011), NORTH ZONE, ORIGINATING ON THE ODOT CORS NETWORK.

**MONUMENT LEGEND**

- ☐ EXISTING R/W MONUMENT BOX
- ☐ PROPOSED R/W MONUMENT BOX
- ☐ M.N.F. MAG NAIL FOUND

**☐ CONST. CR 167  
(PROSPECT RD.)  
CURVE DATA**

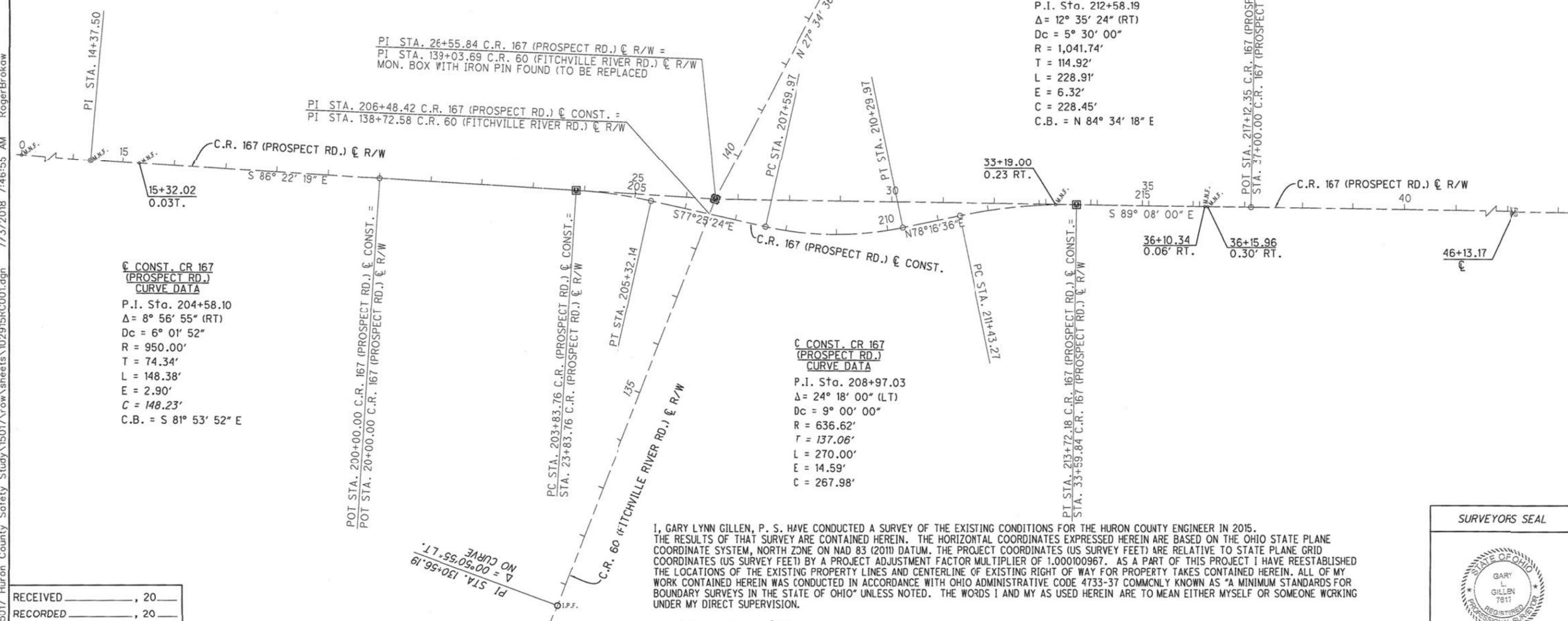
P.I. Sta. 212+58.19  
Δ = 12° 35' 24" (RT)  
Dc = 5° 30' 00"  
R = 1,041.74'  
T = 114.92'  
L = 228.91'  
E = 6.32'  
C = 228.45'  
C.B. = N 84° 34' 18" E

**☐ CONST. CR 167  
(PROSPECT RD.)  
CURVE DATA**

P.I. Sta. 204+58.10  
Δ = 8° 56' 55" (RT)  
Dc = 6° 01' 52"  
R = 950.00'  
T = 74.34'  
L = 148.38'  
E = 2.90'  
C = 148.23'  
C.B. = S 81° 53' 52" E

**☐ CONST. CR 167  
(PROSPECT RD.)  
CURVE DATA**

P.I. Sta. 208+97.03  
Δ = 24° 18' 00" (LT)  
Dc = 9° 00' 00"  
R = 636.62'  
T = 137.06'  
L = 270.00'  
E = 14.59'  
C = 267.98'



I, GARY LYNN GILLEN, P. S. HAVE CONDUCTED A SURVEY OF THE EXISTING CONDITIONS FOR THE HURON COUNTY ENGINEER IN 2015. THE RESULTS OF THAT SURVEY ARE CONTAINED HEREIN. THE HORIZONTAL COORDINATES EXPRESSED HEREIN ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE ON NAD 83 (2011) DATUM. THE PROJECT COORDINATES (US SURVEY FEET) ARE RELATIVE TO STATE PLANE GRID COORDINATES (US SURVEY FEET) BY A PROJECT ADJUSTMENT FACTOR MULTIPLIER OF 1.000100967. AS A PART OF THIS PROJECT I HAVE REESTABLISHED THE LOCATIONS OF THE EXISTING PROPERTY LINES AND CENTERLINE OF EXISTING RIGHT OF WAY FOR PROPERTY TAKES CONTAINED HEREIN. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH OHIO ADMINISTRATIVE CODE 4733-37 COMMONLY KNOWN AS "A MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO" UNLESS NOTED. THE WORDS I AND MY AS USED HEREIN ARE TO MEAN EITHER MYSELF OR SOMEONE WORKING UNDER MY DIRECT SUPERVISION.

*Gary Lynn Gillen*  
GARY LYNN GILLEN, PROFESSIONAL LAND SURVEYOR NO. 7617,

7-10-19  
DATE:

SURVEYORS SEAL



F:\2015\115017 Huron County Safety Study\15017\row\sheets\102915RC001.dgn 7/3/2018 7:46:55 AM RogerBrokaw

RECEIVED \_\_\_\_\_, 20\_\_\_\_  
RECORDED \_\_\_\_\_, 20\_\_\_\_  
BOOK \_\_\_\_\_ PAGE \_\_\_\_\_  
COUNTY RECORDER

CENTERLINE PLAT

HUR-C.R. 60-0.00  
(FITCHVILLE RIVER RD.)

PID NO. 102915

R/W DESIGNER BB R/W REVIEWER RJM

2 / 7

59  
64







HURON COUNTY  
 FITCHVILLE TOWNSHIP  
 SEC. 2, GREAT LOTS 3 AND 4, T. 2 N., R. 21 W.

⑩  
 ELMER CHANDLER LIVING TRUST,  
 NORMAN CHANDLER TRUST FUND  
 CROGHAN COLONIAL BANK TRUSTEE  
 12-0020-02-076-0000  
 O.R.V. 630, PG. 96  
 O.R.V. 715, PG. 52  
 FITCHVILLE RIVER RD.  
 46.16 AC.

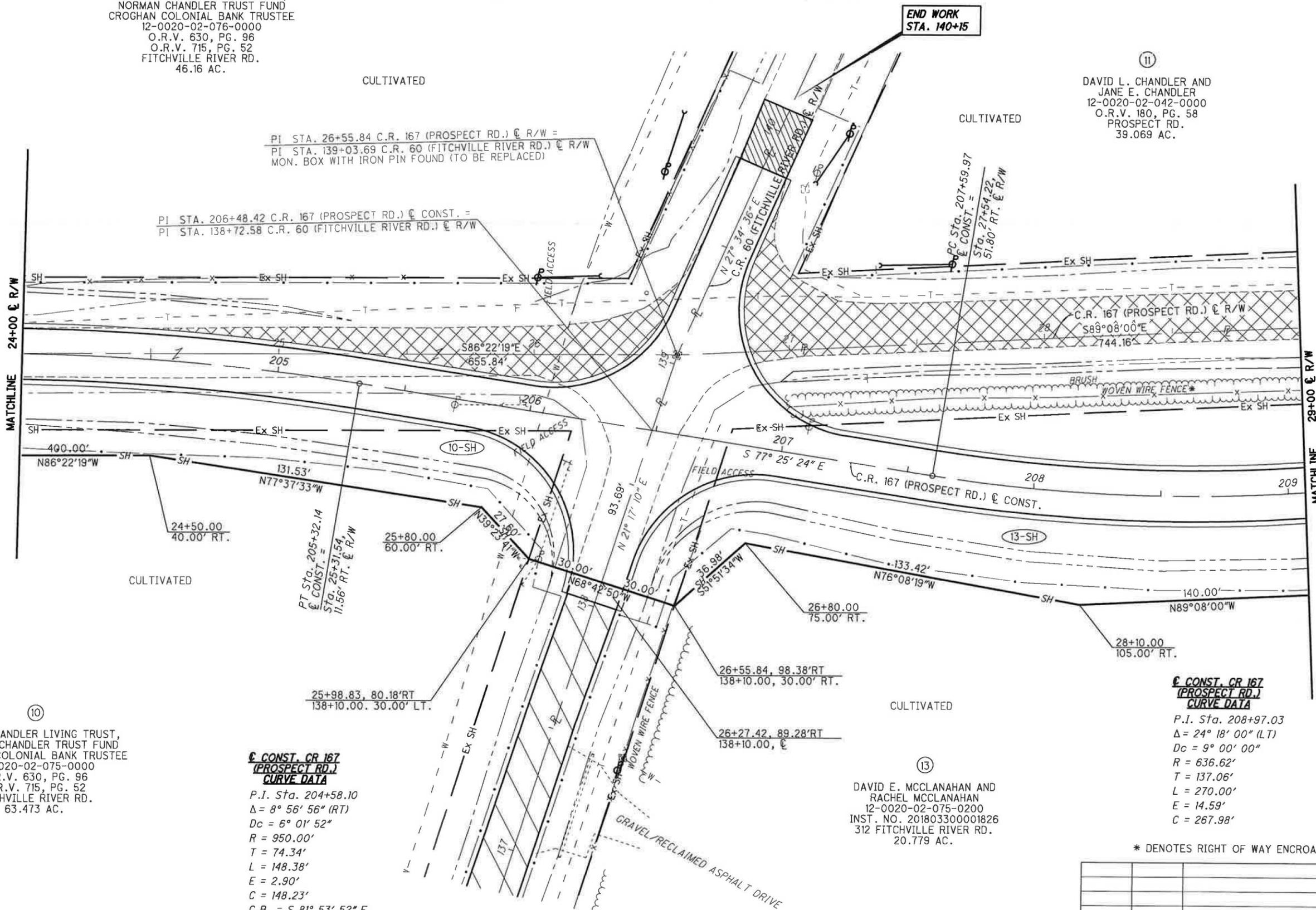
⑪  
 DAVID L. CHANDLER AND  
 JANE E. CHANDLER  
 12-0020-02-042-0000  
 O.R.V. 180, PG. 58  
 PROSPECT RD.  
 39.069 AC.

⑩  
 ELMER CHANDLER LIVING TRUST,  
 NORMAN CHANDLER TRUST FUND  
 CROGHAN COLONIAL BANK TRUSTEE  
 12-0020-02-075-0000  
 O.R.V. 630, PG. 96  
 O.R.V. 715, PG. 52  
 FITCHVILLE RIVER RD.  
 63.473 AC.

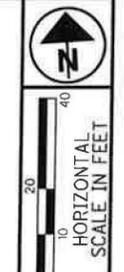
**CONST. CR 167  
 (PROSPECT RD.)  
 CURVE DATA**  
 P.I. Sta. 204+58.10  
 $\Delta = 8^\circ 56' 56''$  (RT)  
 $D_c = 6^\circ 01' 52''$   
 $R = 950.00'$   
 $T = 74.34'$   
 $L = 148.38'$   
 $E = 2.90'$   
 $C = 148.23'$   
 $C.B. = S 81^\circ 53' 52'' E$

**CONST. CR 167  
 (PROSPECT RD.)  
 CURVE DATA**  
 P.I. Sta. 208+97.03  
 $\Delta = 24^\circ 18' 00''$  (LT)  
 $D_c = 9^\circ 00' 00''$   
 $R = 636.62'$   
 $T = 137.06'$   
 $L = 270.00'$   
 $E = 14.59'$   
 $C = 267.98'$

⑬  
 DAVID E. MCCLANAHAN AND  
 RACHEL MCCLANAHAN  
 12-0020-02-075-0200  
 INST. NO. 201803300001826  
 312 FITCHVILLE RIVER RD.  
 20.779 AC.



END WORK  
 STA. 140+15



PID NO. 102915

R/W DESIGNER BB  
 R/W REVIEWER RJM

RIGHT OF WAY PLAN  
 STA. 24+00.00 TO STA. 29+00.00

HUR-C.R. 60-0-00  
 (FITCHVILLE RIVER RD.)

6/7  
 63  
 64

\* DENOTES RIGHT OF WAY ENCROACHMENT

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 6/15/18

F:\2015\115017\_Huron County Safety\_Study\15017\raw\sheets\102915RD002.dgn 6/15/2018 4:03:26 PM BrianBesecker

