

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

PROJECT DESCRIPTION

A 2-LANE DISTRICT ALLOCATION FUNDED PROJECT TO RESURFACE SR 19 FROM CRAWFORD COUNTY LINE TO US 224. REPLACE CURB RAMPS THROUGH THE VILLAGE OF BLOOMVILLE. CULVERT REPLACEMENT ON SR 19 AT SLM 0.08. PERFORM NECESSARY RELATED WORK.

PROJECT EARTH DISTURBED AREA: 0.43 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: 0.43 ACRES

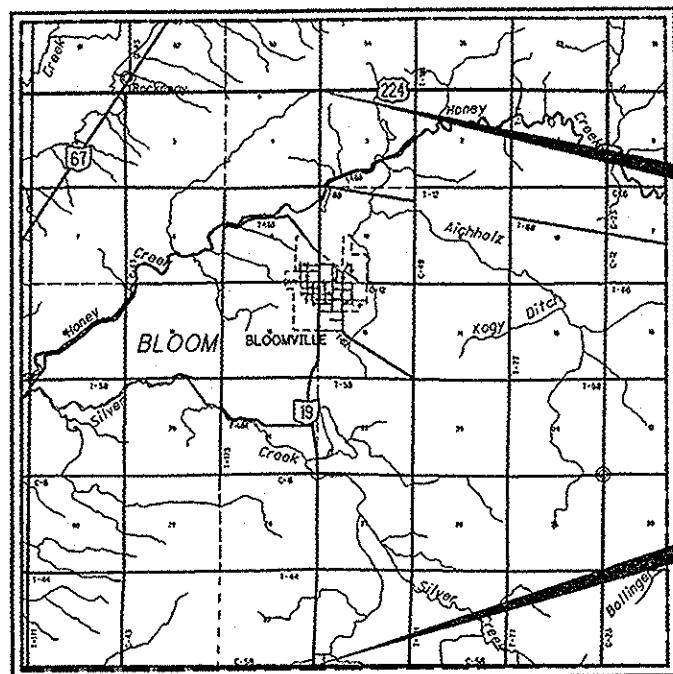
2013 SPECIFICATIONS

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

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

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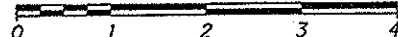
**BLOOM TOWNSHIP
SENECA COUNTY**



LOCATION MAP

LATITUDE: 41°01'43" LONGITUDE: -83°00'58"

SCALE IN MILES



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

DESIGN DESIGNATION

CURRENT ADT (2016)	-----	1600
DESIGN YEAR ADT (2020)	-----	1600
DESIGN HOURLY VOLUME (2020)	-----	140
DIRECTIONAL DISTRIBUTION	-----	70%
TRUCKS (24 HOUR B&C)	-----	9%
DESIGN SPEED	-----	VARIABLES
LEGAL SPEED	-----	VARIABLES
DESIGN FUNCTIONAL CLASSIFICATION:		
RURAL MAJOR COLLECTOR	-----	
NHS PROJECT	-----	NO

DESIGN EXCEPTIONS

NONE

INDEX OF SHEETS:

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UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

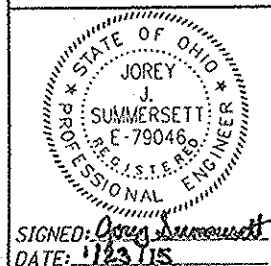
CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS UNDERGROUND
PROTECTION SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:
ODOT - DISTRICT 2
PRODUCTION

ENGINEERS SEAL:



STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	7/18/14	MT-97.10	7/18/14				
BP-7.1	7/18/14	MT-97.12	7/18/14	800	1/21/15	WATERWAY PERMIT	
		MT-99.20	7/19/13	832	1/17/14		
RM-1.1	7/18/14	MT-101.6	7/19/13				
		MT-105.10	7/19/13				
DM-1.1	1/18/13	TC-65.10	1/17/14				
DM-4.4	7/20/15	TC-65.11	7/18/14				
		TC-71.10	1/17/14				

APPROVED *Todd M. Quilley*
DATE 1/26/15 DISTRICT DEPUTY DIRECTOR

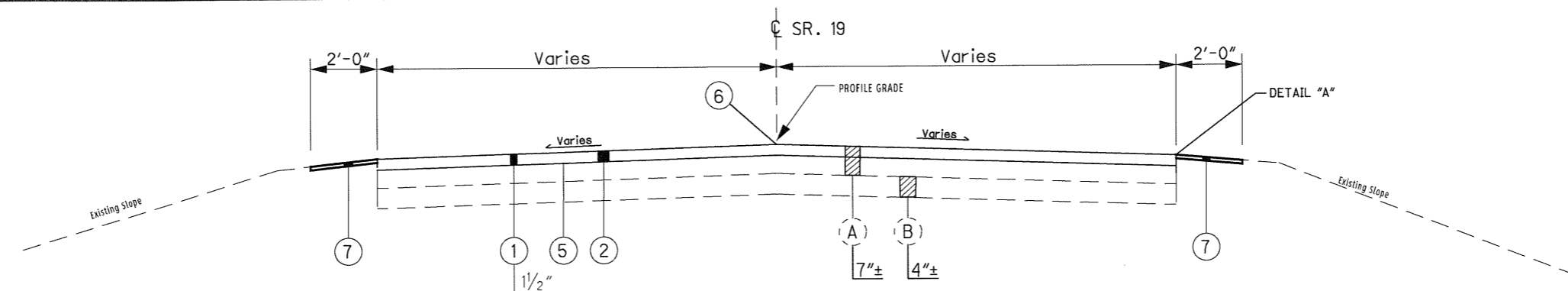
APPROVED *Greg Whay*
DATE 1-30-15 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. **E101082**
PID NO. **88521**
CONSTRUCTION PROJECT NO. **SEN-19-0.00**
RAILROAD INVOLVEMENT **NONE**
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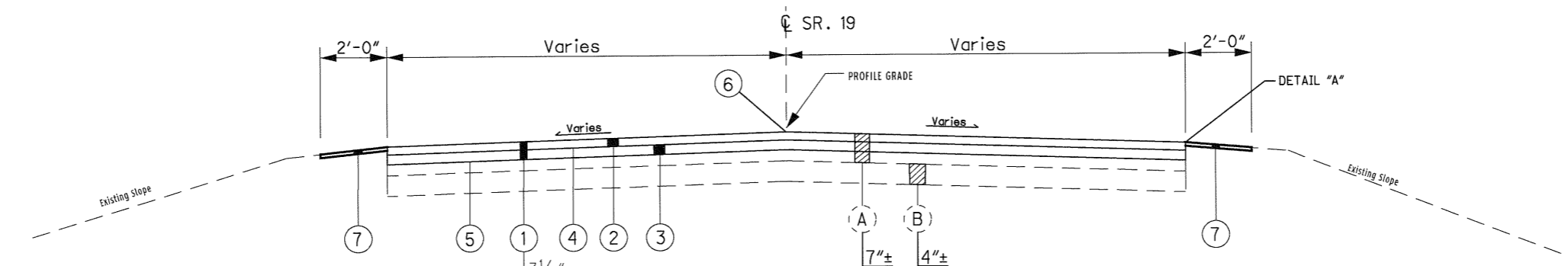
SEN - SR 19-0.00 Result
150237 PID - 88521
Dist 2 4/23/2015
Contract Proposal Available @ www.contracts.dot.state.oh.us/home

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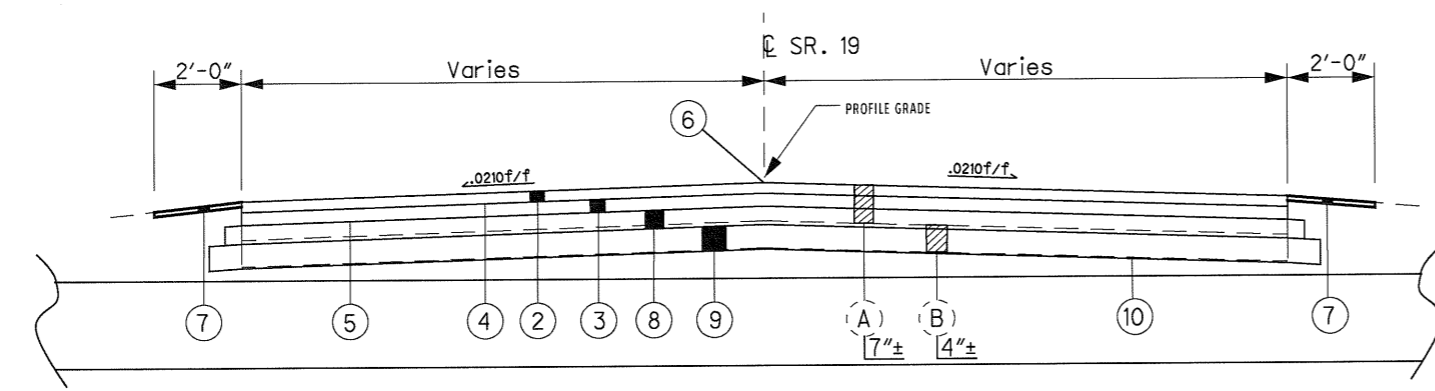
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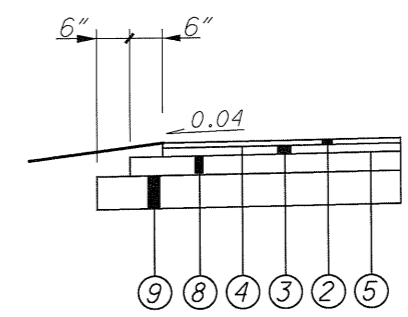
Sta. 0+12 to Sta. 3+00
Sta. 4+50 to Sta. 187+96.8
Sta. 234+43.2 to Sta. 259+03.10
Sta. 260+45.7 to Sta. 320+41



Sta. 187+96.8 to Sta. 234+43.2



Sta. 3+00 to 4+50



DETAIL "A"

ITEM 617, COMPACTED AGGREGATE

SAFETY EDGE

SHOULDER

LANE

PAVED SHOULDER

SURFACE COURSE

EX. PAVED SHOULDER

EXIST. PAVEMENT

EX. SURFACE

SEE NOTE 2

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

NOTES:

- SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
- CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
- BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.

* 40° MAX

Proposed Legend

- ① Item 254 Pavement Planing (Thickness Shown)
- ② Item 441 1 1/2" Asphalt Concrete Surface Course, Type 1, (448), PG64-22
- ③ Item 441 1 3/4" Asphalt Concrete Intermediate Course, Type 2, (448)
- ④ Item 407 Tack Coat for Intermediate Course (0.04 gal/sy)
- ⑤ Item 407 Tack Coat (0.075 gal/sy)
- ⑥ Item 409 Sealing, Misc.: Longitudinal Joint Sealer
- ⑦ Item 617 Compacted Aggregate
- ⑧ Item 301 8" Asphalt Concrete Base, PG64-22
- ⑨ Item 304 6" Aggregate Base
- ⑩ Item 204 SUBGRADE COMPACTION

Existing Legend

- (A) Existing Asphalt Surface Course (Thickness as Shown)
- (B) Bituminous Aggregate Base (Thickness as Shown)

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UTILITIES

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

GAS: COLUMBIA GAS OF OHIO
2901 E. MANHATTAN BLVD.
TOLEDO, OH 43611
419-539-6066

ELECTRIC: AEP-AMERICAN ELECTRIC POWER
2622 SR 100
TIFFIN, OH 44883
419-209-5583

ELECTRIC: OHIO EDISON
2508 W. PERKINS AVE.
SANDUSKY, OH 44870
419-627-6887

NORTH CENTRAL ELECTRIC COOPERATIVE, INC.
P.O. BOX 475
ATTICA, OH 44807
800-426-3072

TELEPHONE: FRONTIER NORTH
300 W. GYPSY LANE
BULDING A
BOWLING GREEN, OHIO 43402
419-354-9452

CENTURYLINK
122 S. ELIZABETH STREET
LIMA, OHIO 45801
419-226-6120

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 BE RESPONSIBLE FOR CONTACTING OUPS AND ALL APPROPRIATE UTILITY COMPANIES TO MAKE ARRANGEMENTS FOR ANY REQUIRED WORK IN THEIR AREA.

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY EMAIL AT: D02.PIO@DOT.STATE.OH.US
DISTRICT PERMIT SECTION BY FAX AT: 419-352-7524 OR EMAIL AT D02.PERMITS@DOT.STATE.OH.US
CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT: 614-728-4099 OR EMAIL AT HAULING.PERMITS@DOT.STATE.OH.US

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL BE AS SHOWN ON THE TYPICAL SECTIONS.

ELEVATION DATUM

ALL ELEVATIONS DATUM ARE BASED ON U.S.G.S DATUM.

ROUNDING

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

MONUMENTS:

CARE SHALL BE TAKEN NOT TO DISTURB EXISTING MONUMENTS WHICH ARE TO REMAIN IN PLACE.

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE 55 EACH.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 204 - PROOF ROLLING

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 1 HOUR.

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.

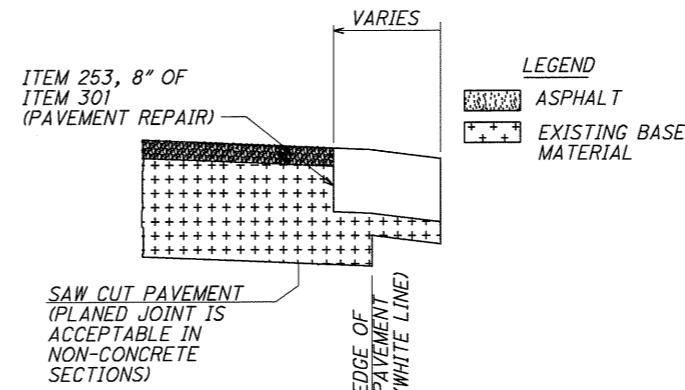
ITEM 253, PAVEMENT REPAIR:

ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE COATED WITH PG GRADE LIQUID ASPHALT (SIDES AND BOTTOM) AT AN APPLICATION RATE OF 0.25 GAL. PER SQ YD.)

THE FOLLOWING ESTIMATED QUANTITY ARE TO BE USED FOR 8" PAVEMENT REPAIR FOR SR 19 AS DIRECTED BY THE ENGINEER.

SR 19 - Sta 0+12 to 320+41 7548 SQ YD

QUANTITY CARRIED TO THE GENERAL SUMMARY.



NOTE: THE ENGINEER SHALL FIELD VERIFY ALL LOCATIONS PRIOR TO THE BEGINNING OF WORK. ANY ADJUSTMENTS NECESSARY SHALL BE AS DIRECTED BY THE ENGINEER. PAVEMENT REPAIRS SHALL BE DONE PRIOR TO PLANNING THE SURFACE.

ITEM 409, SEALER, MISC.: LONGITUDINAL JOINT SEALER

409.01 DESCRIPTION

THE WORK SHALL CONSIST OF FURNISHING AND INSTALLING A HOT-APPLIED ASPHALTIC JOINT ADHESIVE/SEALER ON LONGITUDINAL COLD CONSTRUCTION JOINTS IN ASPHALT CONCRETE PAVEMENTS AS SHOWN IN THE PLANS IN ACCORDANCE WITH THESE SPECIAL PROVISIONS.

409.02 MATERIALS

MATERIALS SHALL MEET THE FOLLOWING REQUIREMENTS:

Characteristic	Test	Value
Brookfield Viscosity @ 400° F	ASTM D 3236	4000-10000 cp
Cone Penetration @ 77° F	ASTM D 5329	60-100
Flow @ 140° F	ASTM D 5329	5mm max.
Resilience @ 77° F	ASTM D 5329	30% min.
Ductility @ 77° F	ASTM D 113	30 cm min.
Ductility @ 39.2° F	ASTM D 113	30 cm min.
Tensile Adhesion @ 77° F	ASTM D 5329	500% min.
Softening Point	ASTM D 36	170° F min.
Asphalt Compatibility	ASTM D 5329	Pass

THE MATERIAL SHALL BE "CRAFCA PAVEMENT JOINT ADHESIVE, PRODUCT NO. 34524" OR APPROVED EQUAL.

409.03 INSTALLATION

INSTALLATION SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.

409.04 BASIS OF PAYMENT

WORK UNDER THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER POUND, FURNISHED AND PLACED. PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO PERFORM THE WORK, COMPLETE IN PLACE AND ACCEPTED.

PAYMENT SHALL BE MADE UNDER:

ITEM 409 - SEALER, MISC.: LONGITUDINAL JOINT SEALER

$$\frac{32029 \text{ FT} \times 1 \text{ POUND}}{4 \text{ FT}} = 8008 \text{ POUND}$$

QUANTITY DETERMINED BY RATE OF 1 POUND/4 FT QUANTITY CARRIED TO THE GENERAL SUMMARY.

ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR

PARTIAL DEPTH PAVEMENT REPAIR HAS BEEN ESTABLISHED TO ADDRESS SURFACE REPAIRS THAT MAY BE NEEDED AFTER THE MILLING IS COMPLETE.

ITEM 251 - 450 SQ YD

PART-WIDTH CONSTRUCTION

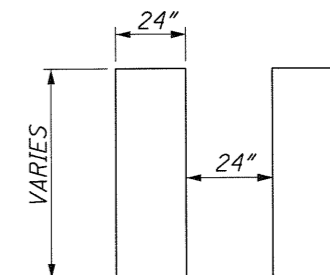
BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXTREME CARE SHALL BE TAKEN TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LONGITUDINAL JOINTS SHALL BE LAPPED AS SHOWN ON SCD BP-3.1.

PAVEMENT MARKINGS

THE CONTRACTOR SHALL MAKE NOTE OF ALL EXISTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS BEFORE PERFORMING ANY WORK.

ITEM 644, CROSSWALK LINE, AS PER PLAN

24" WHITE LONGITUDINAL LINES SHALL BE PLACED PARALLEL TO TRAFFIC FLOW AS SHOWN IN THE FOLLOWING DETAIL. THE MARKING DESIGN SHOULD AVOID THE WHEEL PATHS.



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CHECKED

GENERAL NOTES

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SEEDING AND MULCHING

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

659, TOPSOIL 95 CU. YD.

659, SEEDING AND MULCHING 861 SQ. YD.

659, REPAIR SEEDING AND MULCHING 43 SQ. YD

659, COMMERCIAL FERTILIZER 0.12 TON

659, WATER 4.6 M. GAL.

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 ARE BASED ON THESE LIMITS.

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.

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 RIGHT OF WAY LIMITS BY ITEM 611 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

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

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

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

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

611 8" CONDUIT, TYPE E 15 FT.

611 12" CONDUIT, TYPE E 15 FT.

**SAFETY EDGE
ITEMS 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1,
(448), PG64-22**

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANSTECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TRANSTECH SYSTEMS, INC.
1594 STATE STREET
SCHENECTADY, NY 12304
1-800-724-6306
WWW.TRANSTECHSYS.COM

ADVANT-EDGE PAVING EQUIPMENT LLC
P.O. BOX 9163
NISKAYUNA, NY 12309-0163
518-280-6090
WWW.ADVANTEDGEPAVING.COM

TROXLER ELECTRONIC LABORATORIES, INC.
3008 E. CORNWALLIS RD.
RESEARCH TRIANGLE PARK, NC 27709
1-877-TROXLER
WWW.TROXLERLABS.COM

CARLSON SAFETY EDGE END GATE
18425 50TH AVENUE EAST
TACOMA, WA 98446
253-875-8000

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 MM) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

ADDITIONAL QUANTITIES:

ITEMS 441, ASPHALT CONCRETE SURFACE COURSE, 53 CU. YD.
TYPE 1, (448), PG64-22

QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN ADDITIONAL WIDTH OF 10" OF EMBANKMENT, AGGREGATE, OR OTHER MATERIAL THAT EXISTS AT THE OUTSIDE EDGE OF PAVED ROADWAY TO PROVIDE A CROSS SECTION FOR A UNIFORM THICKNESS AND WIDTH OF SAFETY EDGE.

COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

A QUANTITY OF 10.38 MILES HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PREPARING SUBGRADE FOR SHOULDERS, APP.

ENVIRONMENTAL COMMITMENT

THE SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL, AND STANDARD DRAWINGS WILL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION.

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGE OF ENDANGERED BAT SPECIES. NO TREES 3 INCHES OR GREATER IN DIAMETER MAY BE REMOVED UNDER THIS PROJECT FROM APRIL 1 TO SEPTEMBER 30. ALL NECESSARY TREE REMOVALS MUST OCCUR FROM OCTOBER 1 TO MARCH 30.

THE PROJECT IS LOCATED IN OR NEAR THE BELLEVUE-CASTALIA KARST PLAIN SOURCE WATER PROTECTION AREA. IN ORDER TO MINIMIZE THE POTENTIAL TO CONTAMINATE THIS WATER SUPPLY, PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL NOT BE PERFORMED FOR THE WHOLE PROJECT LENGTH. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL EVENT SHALL BE REPORTED IMMEDIATELY TO THE SENECA COUNTY GENERAL HEALTH DISTRICT AT 419-447-3691. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTRACT A LOCAL HAZARDOUS MATERIAL RESPONSE TEAM FOR CLEAN-UP OF THE SPILL.

GENERAL NOTES

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ITEM 614, MAINTAINING TRAFFIC

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
EASTER	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A 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 PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

LOCATE 1 BARRICADE AT STA. 2+50 SOUTH OF STRUCTURE SEN-19-0800

LOCATE 1 BARRICADE AT STA. 5+00 NORTH OF STRUCTURE SEN-19-0080

NOTICE OF CLOSURE SIGNS, W20-H14, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST TWO WEEKS IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE.

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, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE SUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLAN.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 21 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON THIS SHEET. THIS CLOSURE MAY NOT TAKE PLACE UNTIL THE CULVERT AT SLM 1.23 ON SR 100 IS COMPLETED. THE ESTIMATED COMPLETION DATE FOR SR 100 IS AUGUST 1ST. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH CMS 108.07.

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	20 EACH
ITEM 614 - WORK ZONE CENTER LINE, CLASS II	13.0 MILE

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 10 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

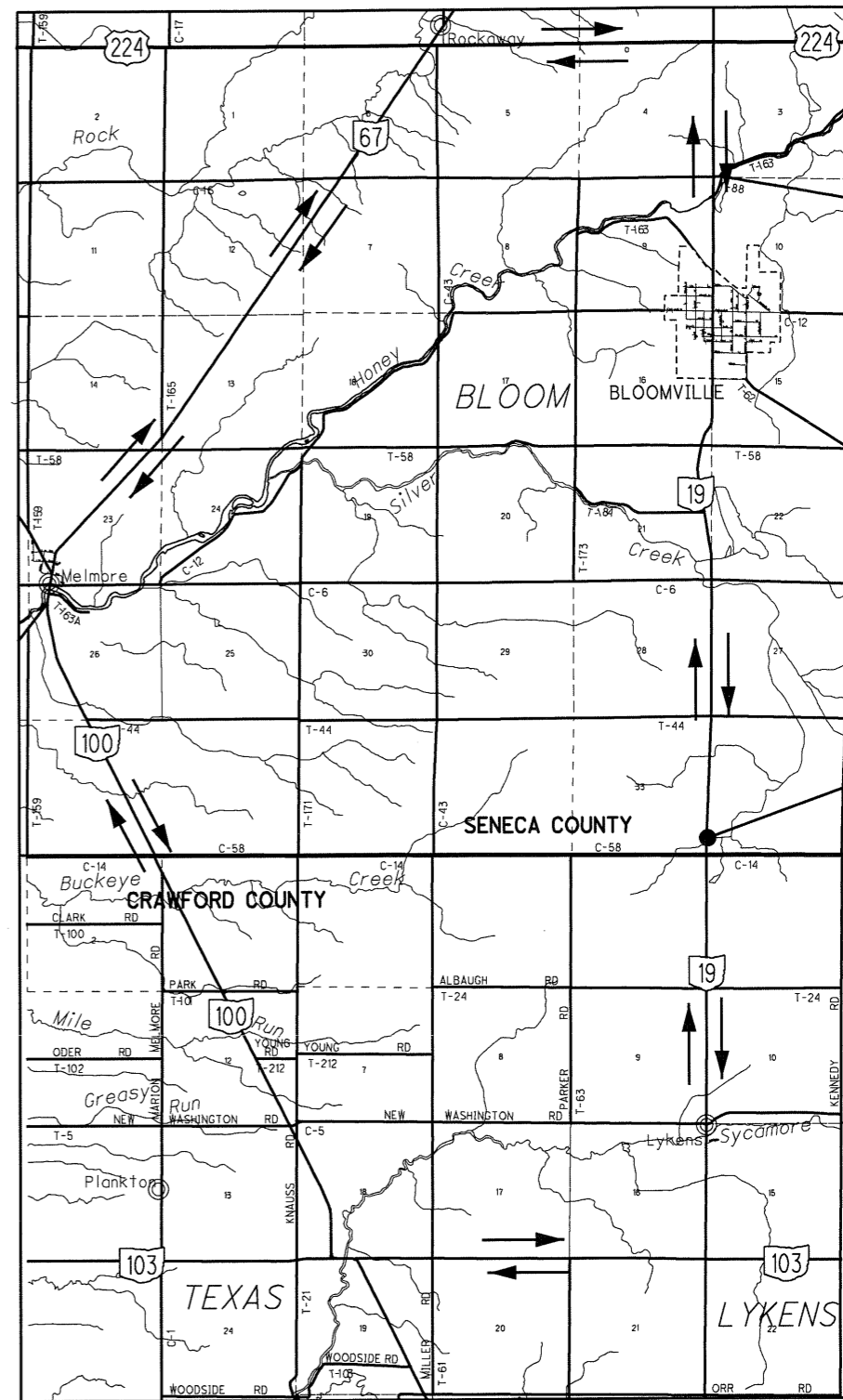
AN ESTIMATED QUANTITY OF 10 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

PLANED SURFACES

NO PLANED SURFACES SHALL BE OPEN TO THE PUBLIC FOR MORE THAN 5 DAYS.

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.



NORTHBOUND DETOUR

SOUTHBOUND SR 19 TO WESTBOUND SR 103
 WESTBOUND SR 103 TO NORTHBOUND SR 100
 NORTHBOUND SR 100 TO NORTHBOUND SR 67
 NORTHBOUND SR 67 TO EASTBOUND US 224
 EASTBOUND US 224 TO SOUTHBOUND SR 19

SOUTHBOUND DETOUR

NORTHBOUND SR 19 TO WESTBOUND US 224
 WESTBOUND US 224 TO SOUTHBOUND SR 67
 SOUTHBOUND SR 67 TO SOUTHBOUND SR 100
 SOUTHBOUND SR 100 TO EASTBOUND SR 103
 EASTBOUND SR 103 TO NORTHBOUND SR 19

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MAINTENANCE OF TRAFFIC NOTES

SEN-19-0.00

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SHEET NUMBER											PARTICIPATION			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	5	8	9	11	23	24	26	22	32	01/STR/PV								
																	TRAFFIC CONTROL		
				363								363	621	00100	363	EACH	RPM		
				308								308	621	54000	308	EACH	RAISED PAVEMENT MARKER REMOVED		
				27								27	630	03100	27	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
				4								4	630	80100	4	SF	SIGN, FLAT SHEET		
				11								11	642	00090	11	MILE	EDGE LINE, 4"		
				6.1								6.1	642	00290	6.1	MILE	CENTER LINE		
				777								777	644	00601	777	FT	CROSSWALK LINE, AS PER PLAN	3	
				2								2	644	01120	2	EACH	SCHOOL SYMBOL MARKING, 120"		
				806								806	644	01200	806	FT	PARKING LOT STALL MARKING		
				2								2	644	01600	2	EACH	HANDICAP SYMBOL MARKING		
																	STRUCTURE UNDER 20 FOOT SPAN (SEN-19-0.08)		
												LS	202	11000	LS		STRUCTURE REMOVED		
												LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING		
								210				210	503	21100	210	CY	UNCLASSIFIED EXCAVATION		
								3132				3132	509	10000	3132	LB	EPOXY COATED REINFORCING STEEL		
								34				34	511	46010	34	CY	CLASS QC1 CONCRETE		
								31				31	512	10050	31	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)		
								218				218	512	33000	218	SY	TYPE 2 WATERPROOFING		
								3				3	516	13600	3	SF	1" PREFORMED EXPANSION JOINT FILLER		
								2				2	518	21200	2	CY	POROUS BACKFILL WITH FILTER FABRIC		
								6				6	601	32200	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER		
								109				109	611	94900	109	FT	8' X 5' CONDUIT, TYPE A, 706.05		
																	STRUCTURE 20 FOOT SPAN AND OVER (SEN-19-0197)		
												164	202	23501	164	SY	WEARING COURSE REMOVED, AS PER PLAN	32	
												14	407	10000	14	GAL	TACK COAT		
												14	441	50000	14	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22		
												112	SPECIAL	51631200	112	FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	32	
																	MAINTENANCE OF TRAFFIC		
			20									20	614	12460	20	EACH	WORK ZONE MARKING SIGN		
			10									10	614	12500	10	EACH	REPLACEMENT SIGN		
			10									10	614	12600	10	EACH	REPLACEMENT DRUM		
			13									13	614	21400	13	MILE	WORK ZONE CENTER LINE, CLASS II		
																	INCIDENTALS		
												LS	614	11000	LS		MAINTAINING TRAFFIC		
												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING		
												LS	624	10000	LS		MOBILIZATION		

CALCULATED

CHECKED

GENERAL SUMMARY

SEN-19-0.00

7
36

STATION TO STATION		LIN. FT.	CADD AREA	202		254		204	209	301	304	407		441		617
				PAVEMENT REMOVED, ASPHALT	PAVEMENT PLANNING, 1 1/2"	PAVEMENT PLANNING, 3 1/4"	SUBGRADE COMPACTION	LINEAR GRADING	ASPHALT CONCRETE BASE, PG64-22	AGGREGATE BASE	TACK COAT (0.075 gal/sq yd)	TACK COAT FOR INTERMEDIATE COURSE (0.04 gal/sq yd)	ASPHALT CONCRETE SURFACE COURSE, TYPE 1,(448), PG64-22 1 1/2"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) 1 3/4"	COMPACTED AGGREGATE	
FROM	TO	SQ FT	SQ YD	SQ YD	SQ YD	SQ YD	MILE	CU YD	CU YD	GAL (A/9)0.075=	GAL (A/9)0.04=	CU YD 1 1/2"(A/9)/3=	CU YD 1 3/4"(A/9)/3=	CU YD .5"x2"xL/27x2=		
0+12.0	3+00.0	288.0	8163.8		907.09			0.11		68.03		37.80		5.33		
3+00.0	4+50.0	150.0	3783.6	420.40		420.40		0.06	93.6	31.53	16.82	17.52	20.44	2.78		
4+50.0	53+69.2	4919.2	125078.0		13897.55			1.86		1042.32		579.1		91.10		
53+69.2	100+82.1	4712.9	120540.6		13393.40			1.79		1004.51		558.1		87.28		
100+82.1	103+74.0	291.9	8010.6		890.07			0.11		66.76		37.1		5.41		
104+62.7	161+01.4	5638.7	143360.4		15928.93			2.14		1194.67		663.71		104.42		
161+01.4	187+96.8	2695.4	69470.1		7718.90			1.02		578.92		321.62		49.91		
187+96.8	234+43.2	4646.4	160769.8			17863.31		1.76		1339.75	714.53	744.30	868.34	51.10		
234+43.2	259+03.1	2459.9	59876.0		6652.89			0.93		498.97		277.20		45.55		
260+45.7	320+40.8	5995.1	150559.2		16728.80			2.27		1254.66		697.03		111.02		
TOTALS CARRIED TO GENERAL SUMMARY				420	76118	17863	420	12.05	94	70	7080	731	3934	889	554	

CALCULATED	JJS
	CHECKED
JMF	
PAVEMENT SUBSUMMARY	
SEN - 19 - 0.00	
8	36

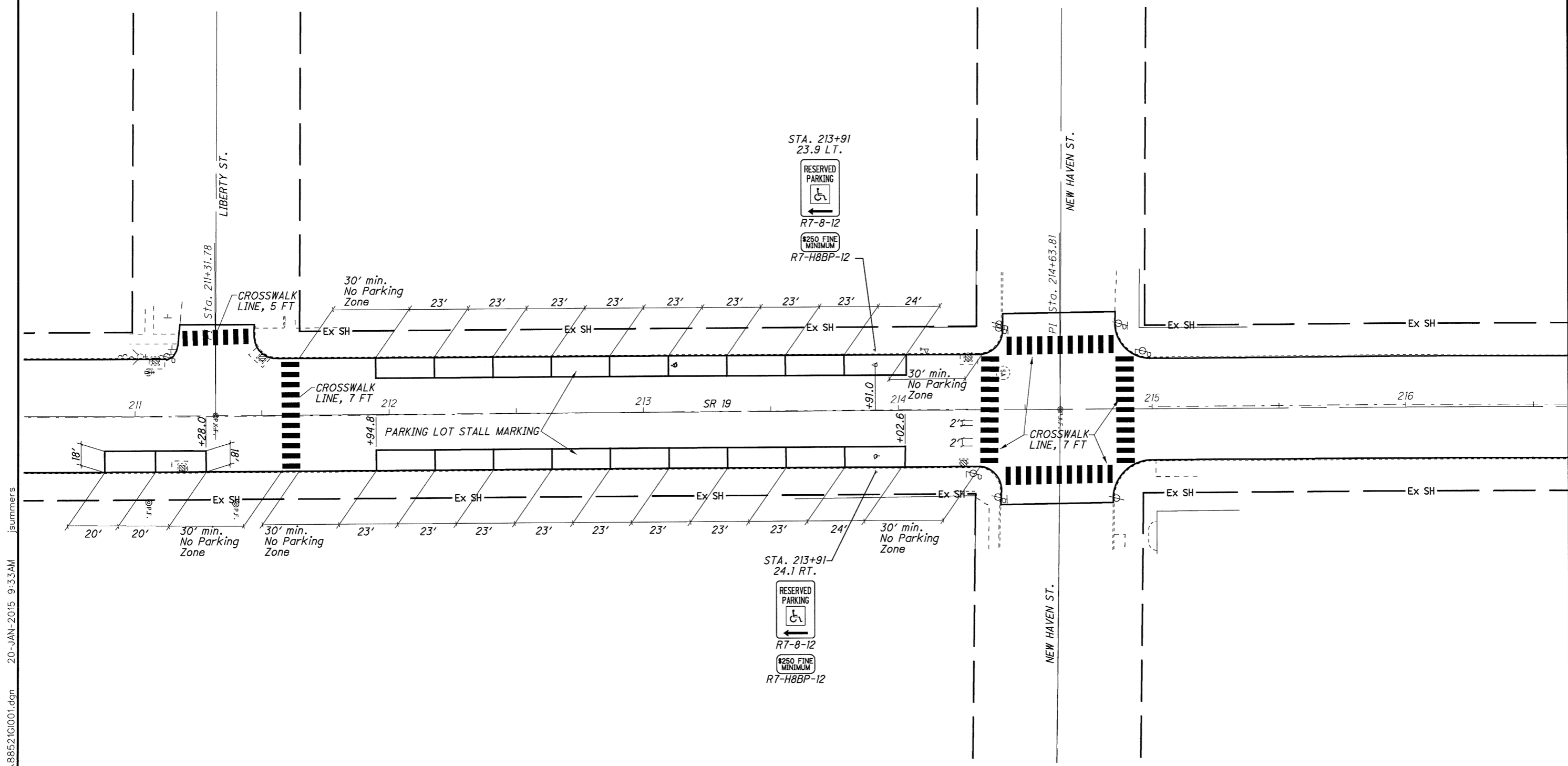
STATION TO STATION		LENGTH	621					630		642					644						
			RAISED PAVEMENT MARKERS					RAISED PAVEMENT MARKER REMOVED	GROUND MOUNTED SUPPORT, No. 3 POST	SIGN, FLAT SHEET	EDGE LINE		CENTER LINE			CROSSWALK LINE, AS PER PLAN	SCHOOL SYMBOL MARKING, 102"	HANDICAP MARKING	PARKING LOT STALL MARKING		
			ONE WAY		TWO WAY						WHITE	YELLOW	DOUBLE SOLID	DASHED SOLID	DASHED						
			WHITE	YELLOW	WHITE/WHITE	YELLOW/YELLOW	WHITE/RED													FEET	FT
FROM	TO	EACH	EACH	EACH	EACH	EACH	EACH	FT	SF	MILE	MILE	MILE	MILE	FEET	EACH	EACH	FEET				
0+12.0	178+01.0				222		187			6.74		0.84	1.44	1.17							
178+01.0	230+78.0				13		11			1.00		0.13	0.23	0.64	63	2					
230+78.0	320+41.0		16.0		112		110			3.40		0.24	0.95	0.51							
INTERSECTIONS																					
	BEEGLY AVE.														45						
	STOUT ST.														35						
	COLLEGE ST.														100						
	ELLEN ST.														134						
	LIBERTY ST.														93			87			
	NEW HAVEN ST.							27	4						252		2	719			
	KOHLER ST.														30						
	EARL ST.														25						
TOTALS					16	0	0	347	0	308	27	4	11.1	0.0	1.2	2.6	2.3	777	2	2.0	806
TOTALS CARRIED TO GENERAL SUMMARY					363					308	27	4	11.1		6.1			777	2	2	806

INTERSECTION OF SR 19 & NEW HAVEN ST.

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 CHECKED
 HORIZONTAL SCALE IN FEET
 0 10 20 40

PAVEMENT MARKING INTERSECTIN DETAIL

SEN-19-0.00



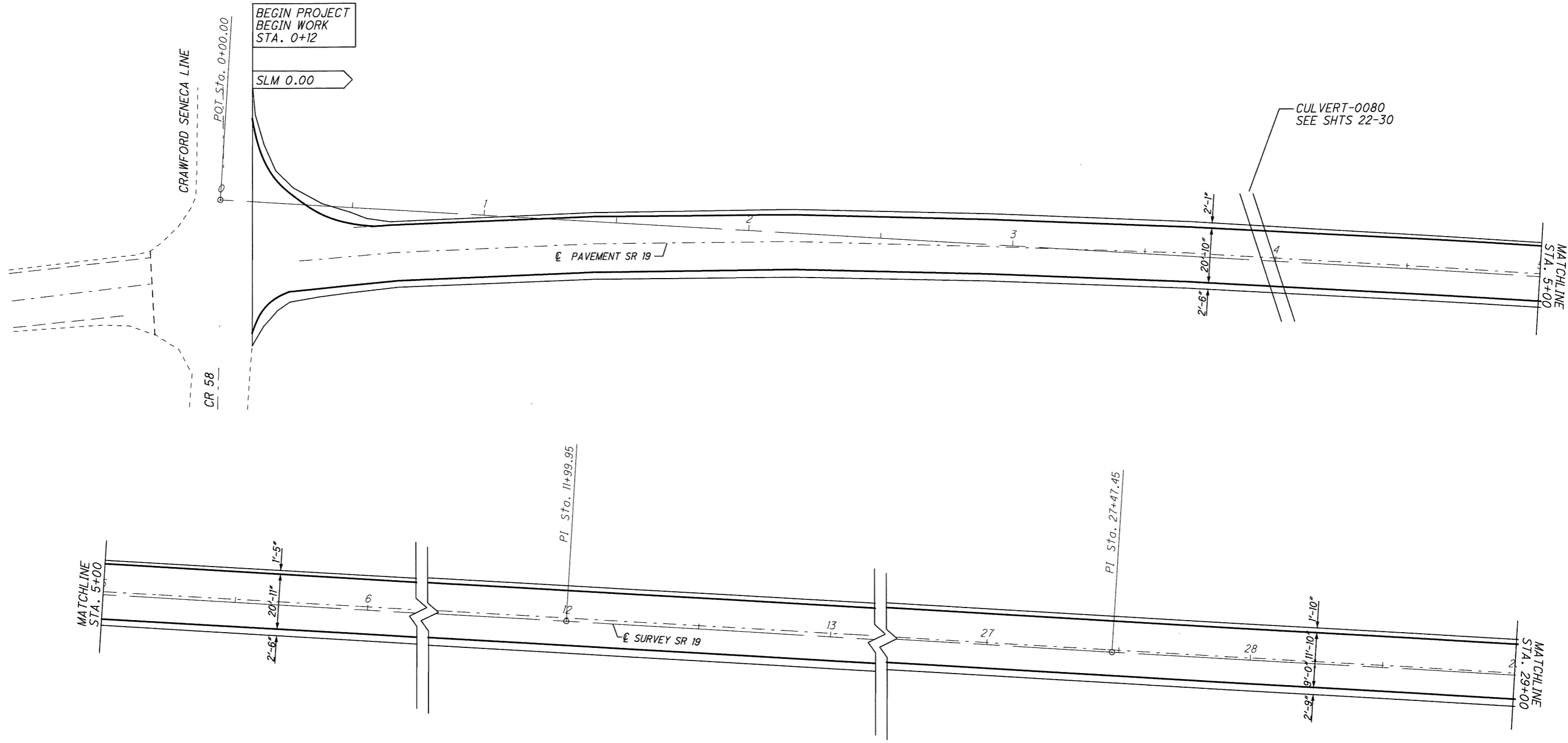
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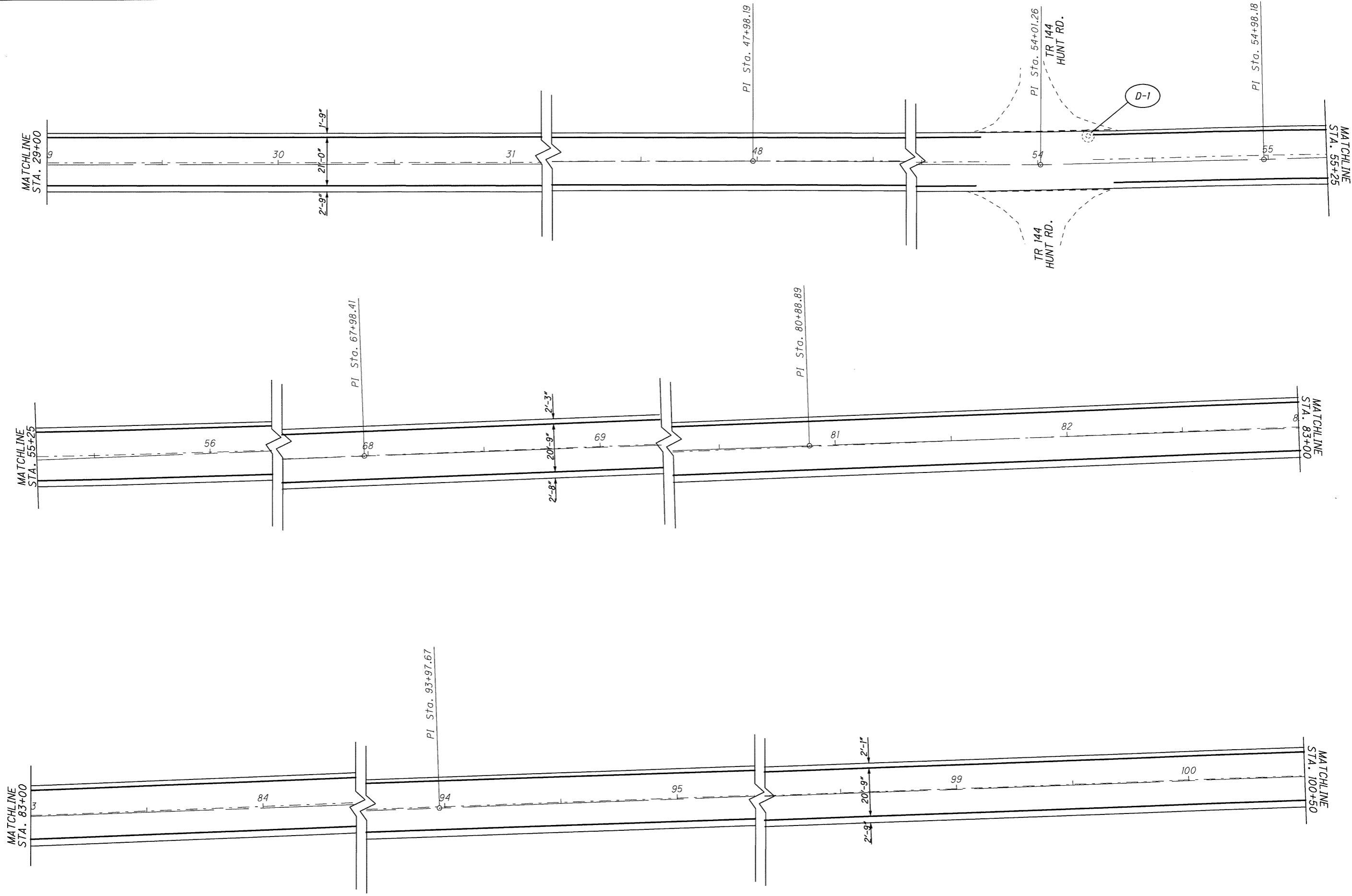
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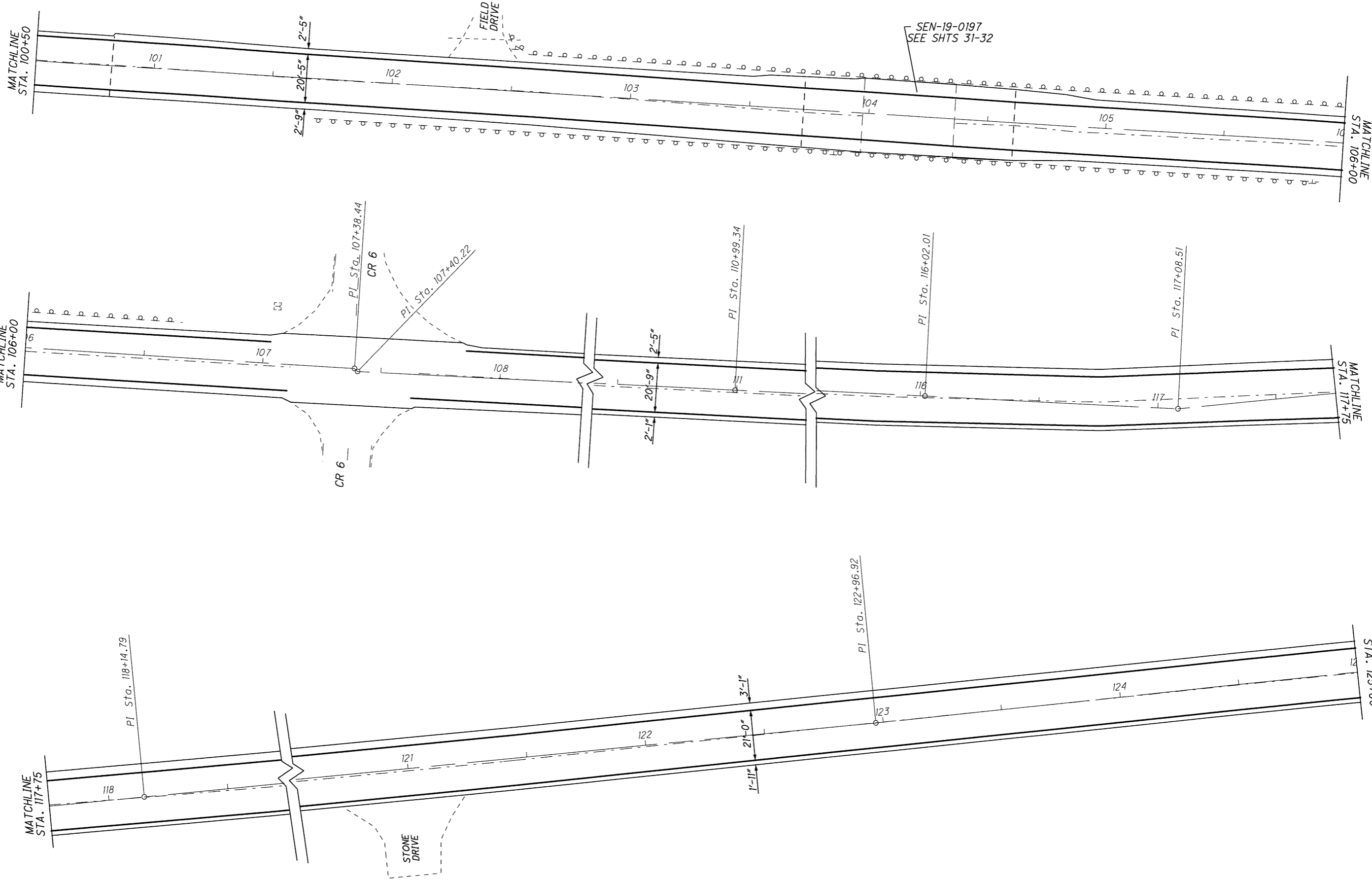
SHEET NO.	REFERENCE NO.	ROUTE	STATION	SIDE	NEAREST CROSS STREET NAME	202	608				659
						WALK REMOVED	CURB RAMP, TYPE A1	CURB RAMP, TYPE A2	CURB RAMP, TYPE B2	CURB RAMP, TYPE D	SEEDING AND MULCHING
						SQ FT	SQ FT	SQ FT	SQ FT	SQ FT	SQ YD
22	CR-1	SR 19	198+09	RT	BEEGHL Y AVE.	45		45			
22	CR-2	SR 19	198+50	RT	BEEGHL Y AVE.	89				89	
24	CR-3	SR 19	199+47	LT		88	88				
24	CR-4	SR 19	199+47	RT		89			89		
24	CR-5	SR 19	202+56	RT	STOUT ST.	52		52			
24	CR-6	SR 19	202+74	RT	STOUT ST.	61		61			
24	CR-7	SR 19	202+62	LT	STOUT ST.	48		48			
24	CR-8	SR 19	202+77	LT	STOUT ST.	50		50			
24	CR-9	SR 19	204+80	RT	COLLEGE ST.	54		54			
24	CR-10	SR 19	205+08	RT	COLLEGE ST.	96		96			
24	CR-11	SR 19	205+16	LT	COLLEGE ST.			42			
24	CR-12	SR 19	204+88	LT	COLLEGE ST.	33					4
24	CR-13	SR 19	208+08	RT	ELLEN ST.	61				61	
25	CR-14	SR 19	208+32	RT	ELLEN ST.	39		39			
25	CR-15	SR 19	208+06	LT	ELLEN ST.	40		40			
25	CR-16	SR 19	208+31	LT	ELLEN ST.	60				60	
24	CR-17	SR 19	211+60	RT	LIBERTY ST.	200			200		
25	CR-18	SR 19	211+17	LT	LIBERTY ST.	39		39			
25	CR-19	SR 19	211+54	LT	LIBERTY ST.	260				260	
25	CR-20	SR 19	214+36	RT	NEW HAVEN ST.	198				198	
24	CR-21	SR 19	214+36	LT	NEW HAVEN ST.	244				244	
25	CR-22	SR 19	214+91	RT	NEW HAVEN ST.	280				280	
25	CR-23	SR 19	214+91	LT	NEW HAVEN ST.	241				241	
25	CR-24	SR 19	220+35	LT	KOHLER ST.	63		63			
24	CR-25	SR 19	220+62	LT	KOHLER ST.	64		64			
25	CR-26	SR 19	223+77	LT	EARL AVE.	50		50			
25	CR-27	SR 19	223+98	LT	EARL AVE.	63		63			
TOTALS CARRIED TO GENERAL SUMMARY						2607	88	806	289	1433	4 *

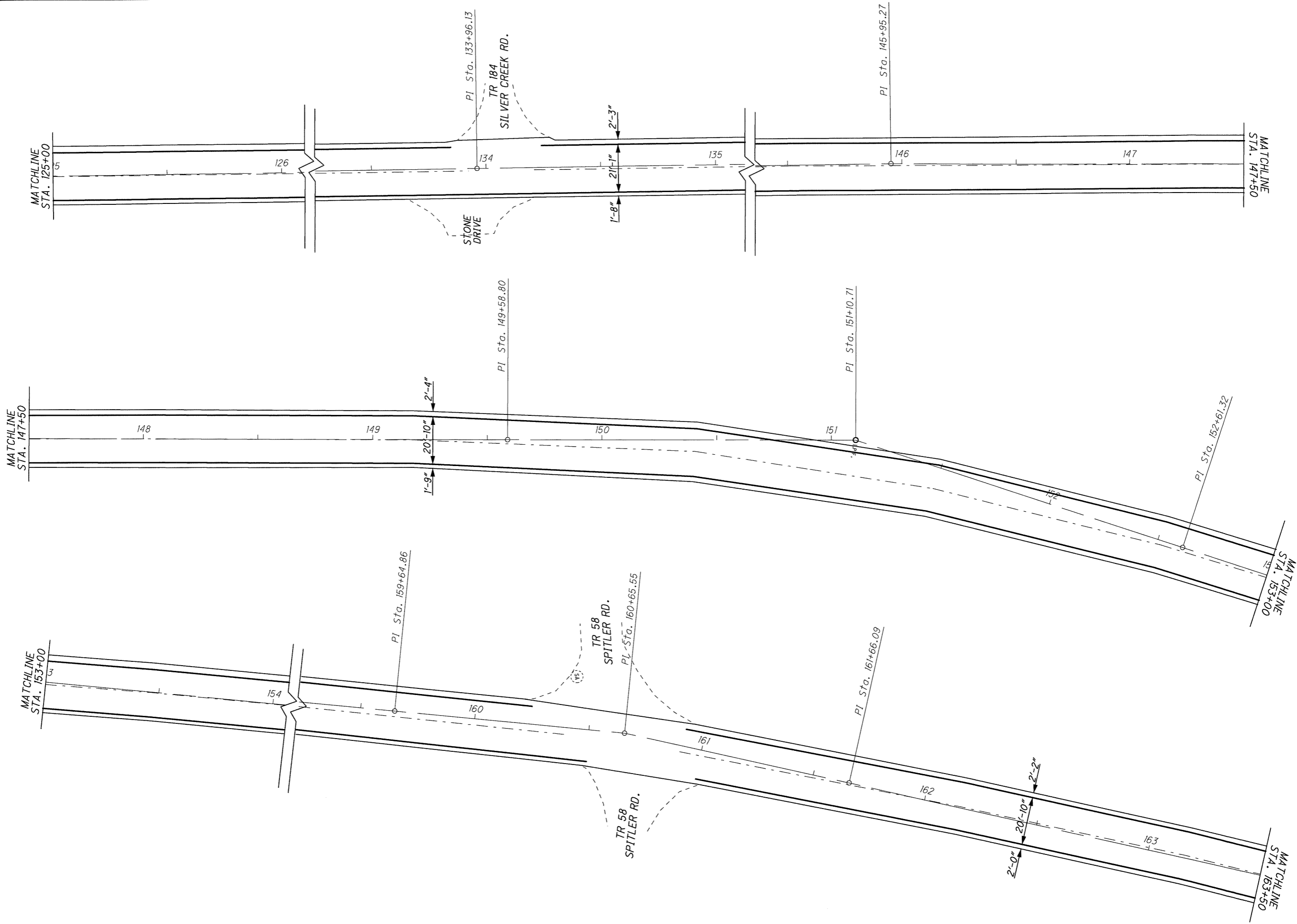
* CARRIED TO GENERAL NOTES

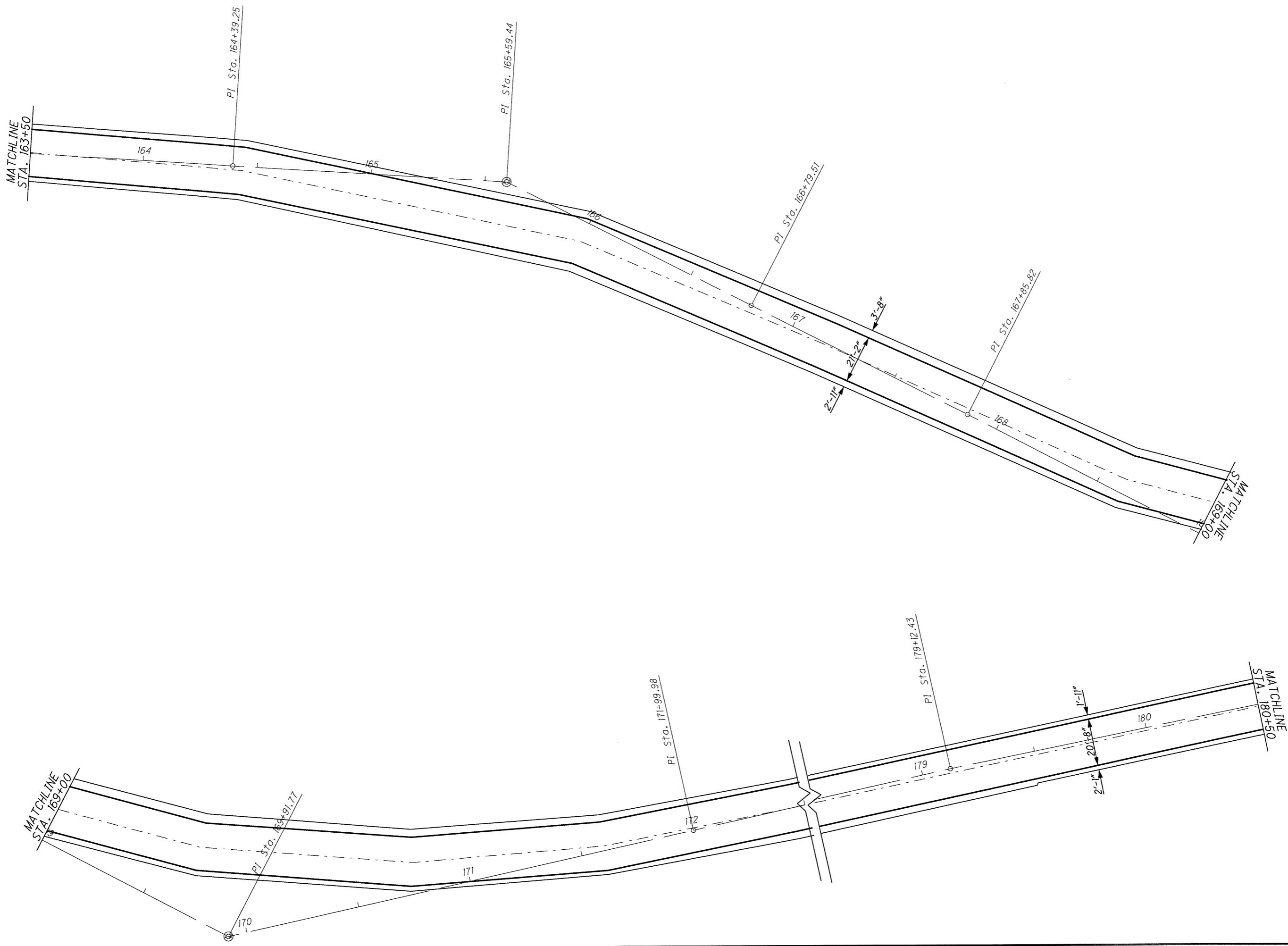
SHEET No.	REFERENCE No.	DRAINAGE		
		604		638
		CATCH BASIN ADJUSTED TO GRADE	MANHOLE ADJUSTED TO GRADE	WATER VALVE ADJUSTED TO GRADE
		EACH	EACH	EACH
17	D-1		1	
17	D-2			1
17	D-3			1
17	D-4	1		1
17	D-5	1		
17	D-6	1		
17	D-7	1		
17	D-8		1	
17	D-9	1		
18	D-13	1		
18	D-14	1		
18	D-15			1
18	D-16	1		
18	D-17	1		
18	D-18	1		
18	D-19	1		
18	D-20		1	
18	D-21	1		
18	D-22			1
18	D-23	1		
18	D-24	1		
18	D-25	1		
18	D-26			1
18	D-27	1		
18	D-28			1
18	D-29	1		
18	D-30			1
17	D-31			1
TOTALS CARRIED TO GENERAL SUMMARY		17	3	9

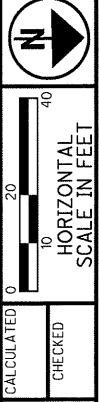
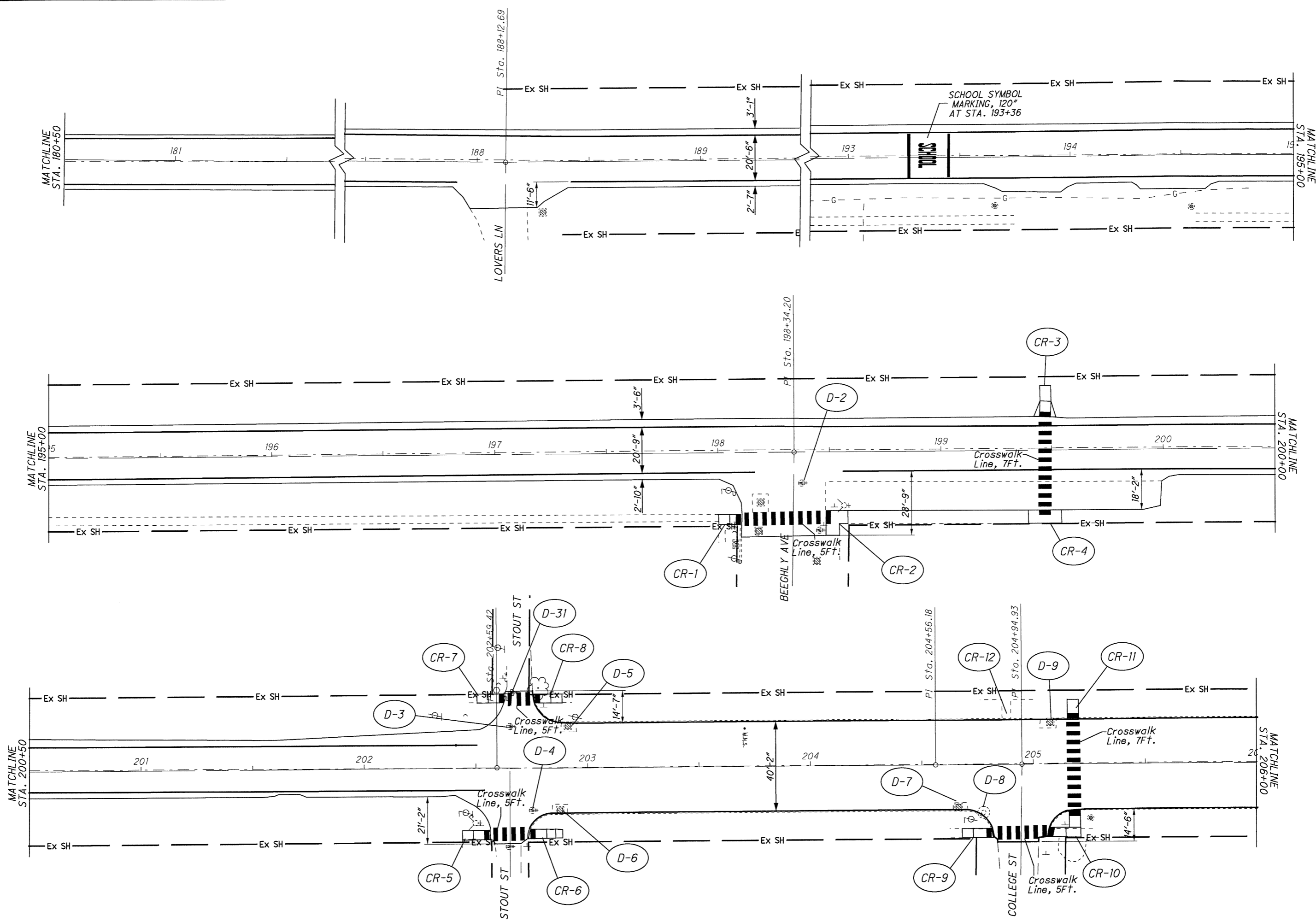




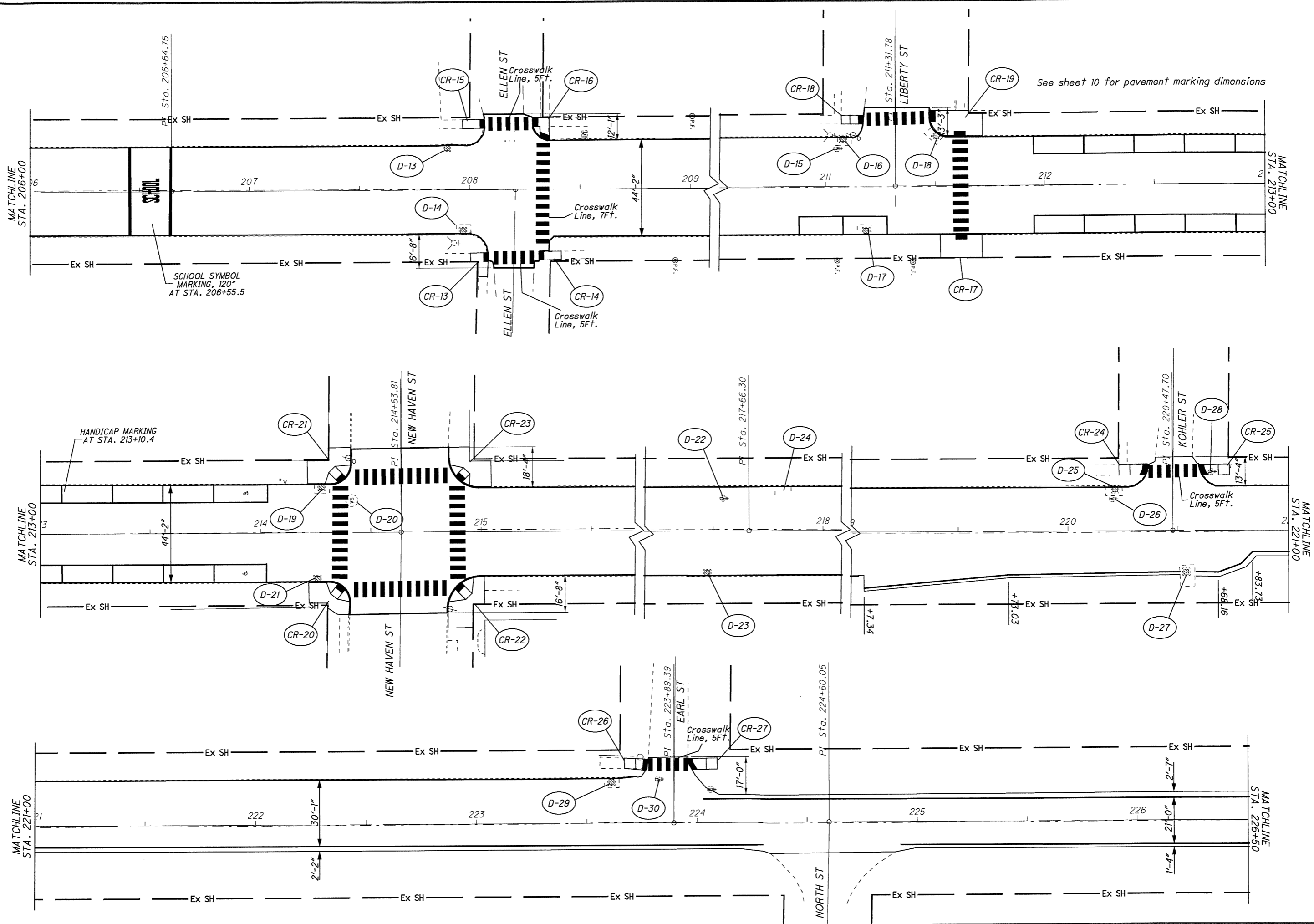






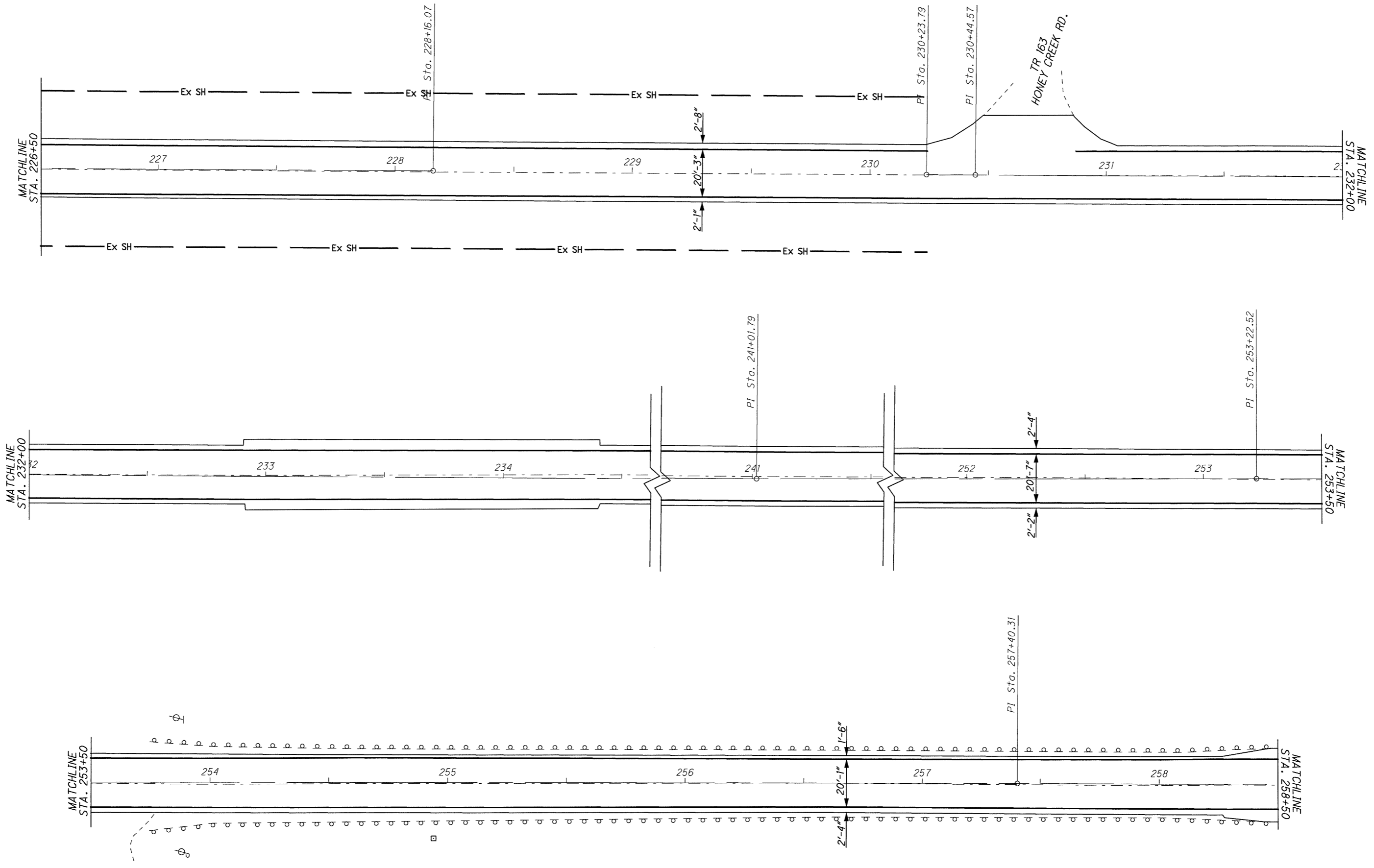


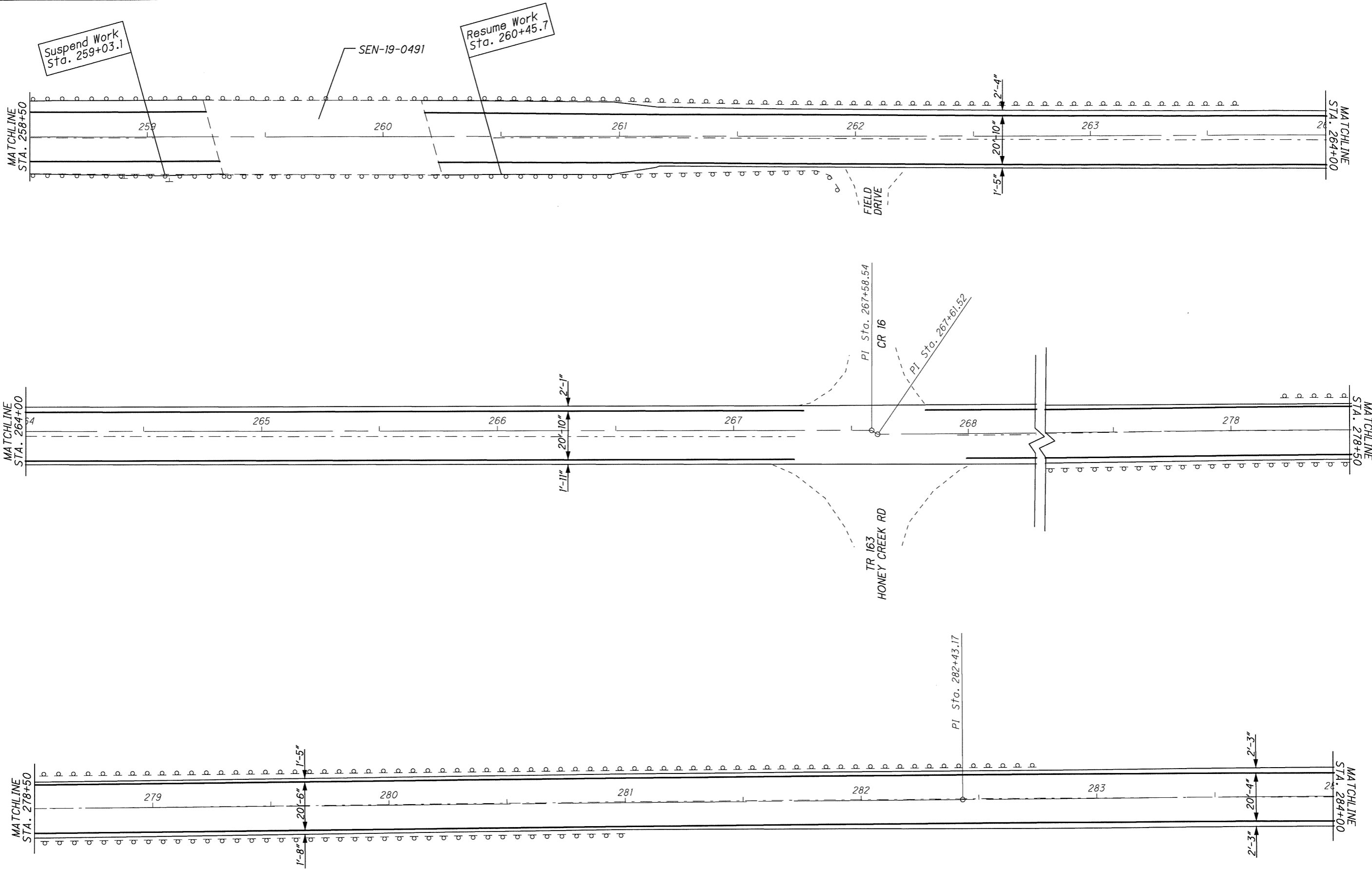
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PLAN SHEET - SR 19
STA. 206+00 TO STA. 226+50

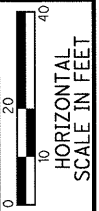
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Suspend Work
Sta. 259+03.1

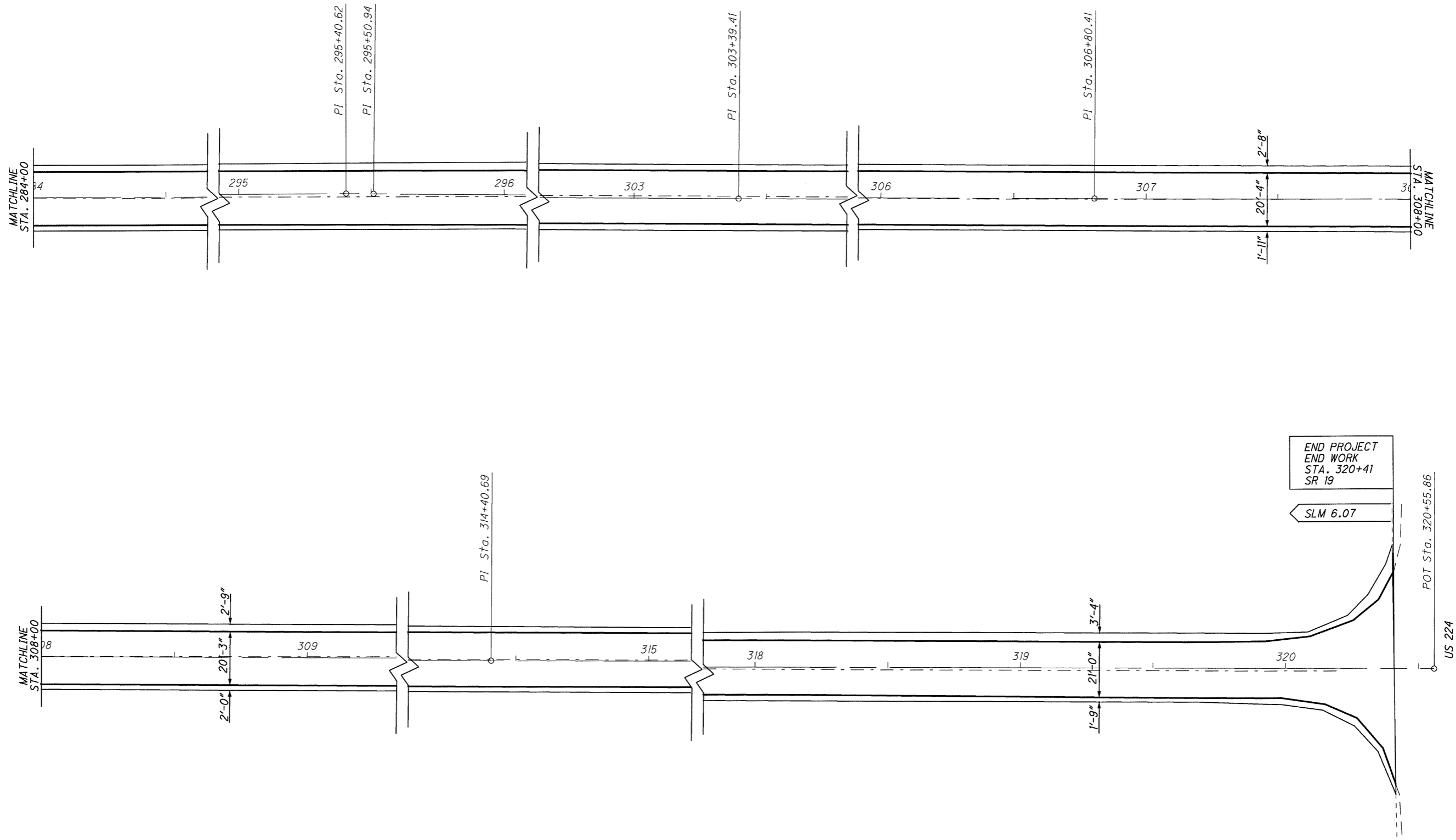
Resume Work
Sta. 260+45.7



CALCULATED 0
CHECKED

PLAN SHEET - SR 19
STA. 258+50 TO STA. 284+00

SEN-19-0.00



CALCULATED

CHECKED

0 20 40

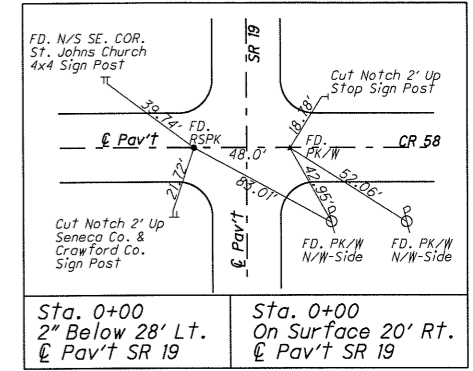
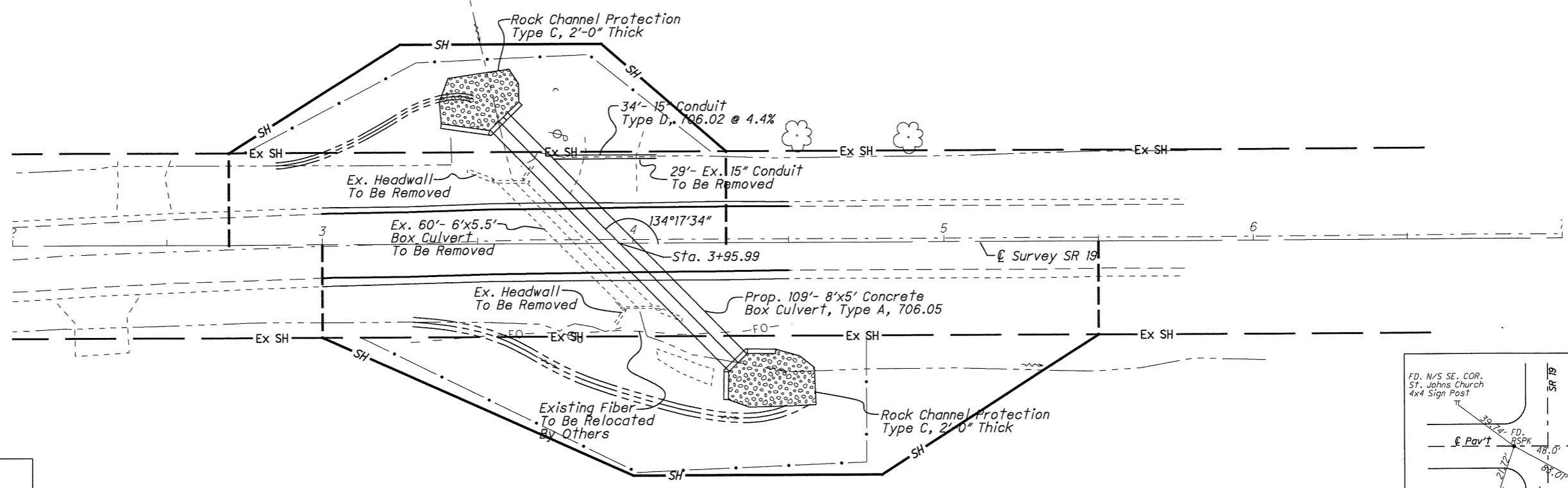
HORIZONTAL SCALE IN FEET

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PLAN SHEET - SR 19

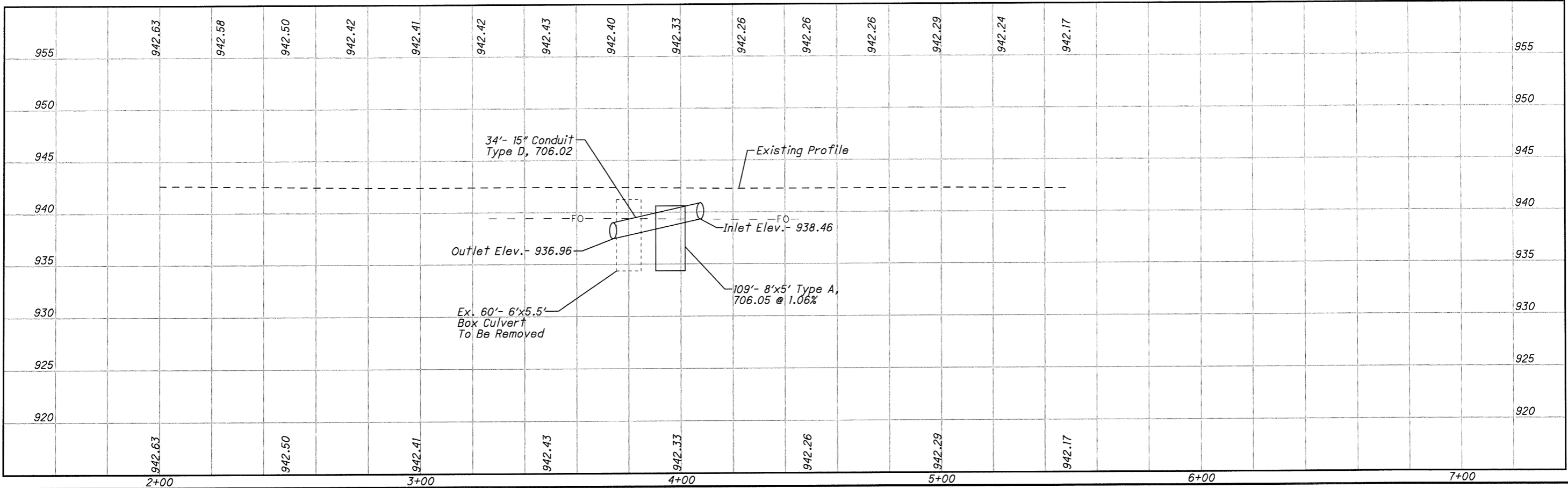
STA. 284+00 TO STA. 320+41

SEN-19-0.00



BM #1
 ELEV. - 941.11
 In Stump ±150'
 NW of Culvert

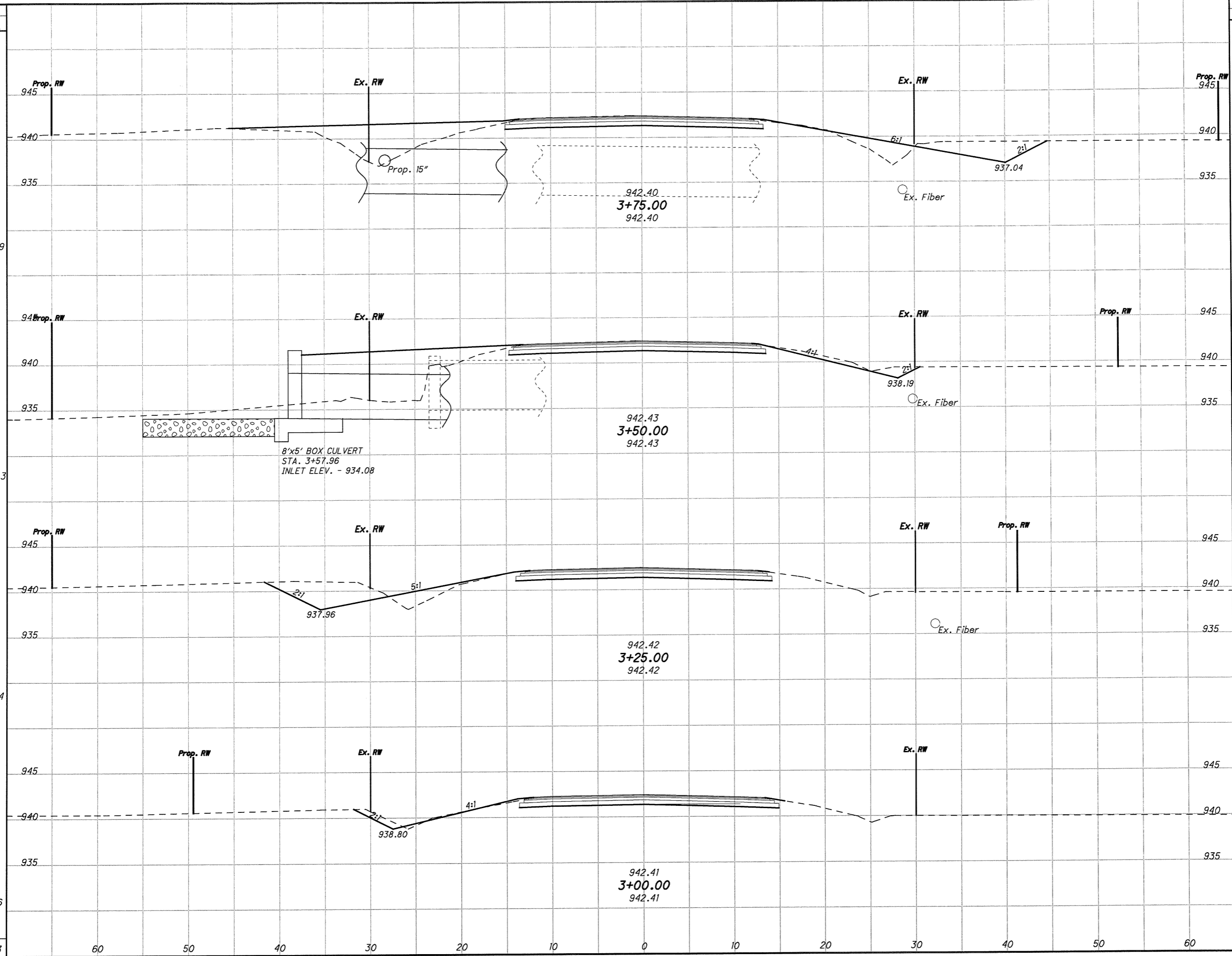
BM #2
 ELEV. - 942.78
 Spike (set) in PP East Side
 300' North of Culvert



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SEEDING	
END WIDTH	SG. YDS.
65.8	
151.9	
43.6	
104.3	
31.5	
75.4	
22.8	
31.6	
363	



END AREA	VOLUME	CALCULATED		JUS	CHECKED
		CUT	FILL		
34.33	60.26				
26.06	19.84				
21.95	47.4				
28.38	25.87				
39.34	8.48				
26.3	4.47				
17.4	1.18				
8	0.55				
89	81				

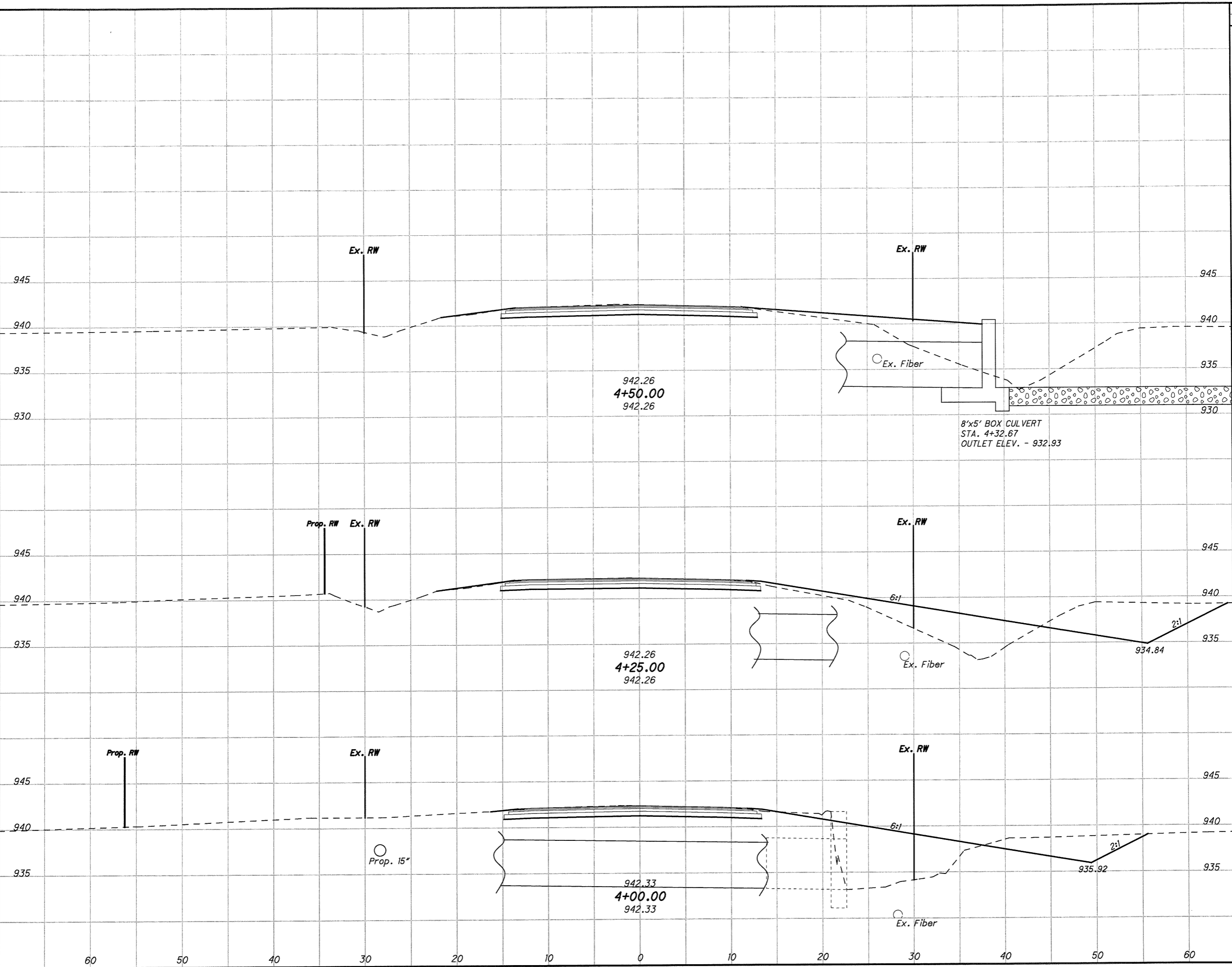
CROSS SECTIONS
STA. 3+00 TO STA. 3+75

SEN-19-0.00

2/9
23/36

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SEEDING	END SO.	
	WIDTH	YDS.
47.6		
34.3		
134.9		
62.8		
153.8		
47.9		
157.9		
494	60	50

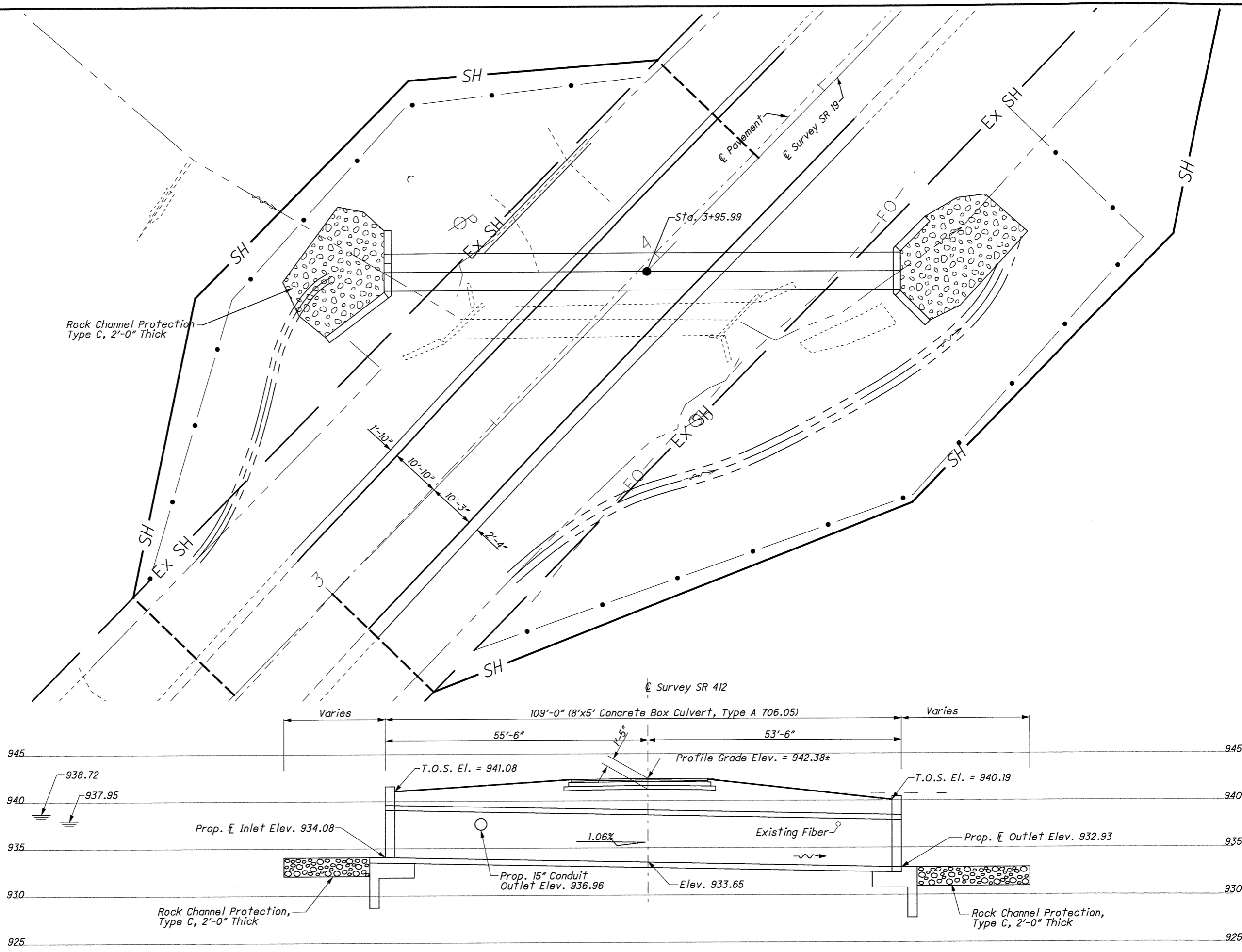


END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
14.6	46.5	6.8	21.5		
69.24	57.3	38.8	48.1		
46.22	74.1	53.4	60.8		
137	193	37.3	62.2		

CROSS SECTIONS
STA. 4+00 TO STA. 4+50

SEN-19-0.00

3/9
24/36



Existing Structure

To be removed as per Item 202.
 Type: 6'x 5.5' Box Culvert
 Length: 60'
 Roadway: 24'-0"
 Skew: 133°56'47"
 Wearing Surface: Bituminous

Hydraulic Data

Drainage Area: 492.8 Acres
 Discharge: 25 Yr = 132 cfs
 100 Yr = 168 cfs
 Velocity: 25 Yr = 3.6 fps
 100 Yr = 4.2 fps
 Headwater Elevation:
 25 Yr = 937.95
 100 Yr = 938.72

Proposed Structure

Type: 8'x5' Concrete Box Culvert with Concrete Headwalls
 Span: 8'
 Rise: 5'
 Skew: 134°17'33"
 Loading: HL-93
 Wearing Surface: Asphalt Conc.
 Approach Slabs: None
 Coordinates
 Latitude: 40°57'31"
 Longitude: 83°00'59"

Design Traffic

2016 ADT = 1600

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ESTIMATED QUANTITIES									
ITEM	ITEM EXT.	UNIT	TOTAL	DESCRIPTION	CULVERT	HEADWALLS	GEN.	SHEET	
202	11000		LUMP	STRUCTURE REMOVED			LUMP		
202	20010	EACH	2	HEADWALL REMOVED			-		
503	11100		LUMP	COFFERDAMS AND EXCAVATION BRACING					
503	21100	CU YD	210	UNCLASSIFIED EXCAVATION		-			
509	10000	POUND	3132	EPOXY COATED REINFORCING STEEL		-			
511	46010	CU YD	34	CLASS QC1 CONCRETE		-			
512	10050	SQ YD	31	SEALING OF CONCRETE SURFACES (NON-EPOXY)		-			
512	33000	SQ YD	218	TYPE 2 WATERPROOFING		-			
516	13600	SQ FT	3	1" PREFORMED EXPANSION JOINT FILLER		-			
518	21200	CU YD	2	POROUS BACKFILL WITH FILTER FABRIC		--			
601	32104	CU YD	6	ROCK CHANNEL PROTECTION, TYPE C WITH FABRIC FILTER					
611	06400	FT	34	15" CONDUIT, TYPE D					
611	94900	FT	109	8' X 5' CONDUIT, TYPE A, 706.05					

GENERAL NOTES

DESIGN SPECIFICATIONS: THIS STANDARD DRAWING CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN DATA: THE FOLLOWING DESIGN DATA IS ASSUMED:

INTERNAL ANGLE OF FRICTION () = 30 DEGREES
 COEFFICIENT OF FRICTION () = 0.30
 UNIT WEIGHT OF SOIL = 120 PCF
 UNIT WEIGHT OF CONCRETE = 150 PCF
 SLOPE OF BACKFILL = 2:1 (TYPE A & B HEADWALLS)
 HEIGHT OF LIVE LOAD SURCHARGE = 2 FT (TYPE C HEADWALLS)
 MAXIMUM FOUNDATION BEARING PRESSURE = 2000 P.S.F.

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI (FOOTING, WINGWALL AND FORESLOPE WALL)

REINFORCING STEEL - ASTM A615, A616, OR A617
 GRADE 60 MINIMUM YIELD STRENGTH
 60,000 PSI (ALL REINFORCING SHALL BE EPOXY COATED)

PRECAST CONCRETE: AT THE OPTION OF THE CONTRACTOR, PRECAST WINGWALLS MAY BE USED PROVIDED THEY ARE SIZED TO MEET THE SOIL PARAMETERS AND MEET OR EXCEED THE MATERIAL STRENGTHS SPECIFIED HEREIN. THE CONTRACTOR SHALL SUBMIT DESIGNS AND SHOP DRAWINGS TO THE OFFICE OF STRUCTURAL ENGINEERING FOR APPROVAL.

BACKFILL LIMITATION: WHEN THE DESIGN HEIGHT IS GREATER THAN 10 FT, THE BACKFILL BEHIND THE WINGWALLS SHALL NOT BE PLACED HIGHER THAN THE ELEVATION OF THE SOIL ABOVE THE TOE. WHEN THE SOIL ABOVE THE TOE IS AT ITS FINISHED ELEVATION, THE REMAINDER OF THE BACKFILL MAY BE PLACED.

ITEM 511 WINGWALLS OR HEADWALLS FOR 611 ITEMS

FOR ITEMS 706.05, 706.051, 706.052 AND 706.053 WITH A CAST-IN-PLACE WINGWALL OR HEADWALL A PRECAST ALTERNATIVE MAY BE FURNISHED PER 611.03. THE PRECAST ALTERNATIVE WILL MEET THE CAST-IN-PLACE STRUCTURAL DESIGN LOADINGS, DESIGN HEIGHT, AND DESIGN LENGTH DIMENSIONS.

FULL COMPENSATION FOR THE PRECAST WINGWALL OR HEADWALL IS THE NUMBER OF CUBIC YARDS OF ITEM 511 AND POUNDS OF ITEM 509 FOR THE CORRESPONDING CAST-IN-PLACE STRUCTURE.

POROUS BACKFILL WITH FILTER FABRIC 1'-6" THICK SHALL BE PLACED BEHIND THE WINGWALLS ONLY AND SHALL EXTEND TO 12" BELOW THE EMBANKMENT SURFACE. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE POROUS BACKFILL AND REPLACED EXCAVATION ADJACENT TO THE STRUCTURE. IT SHALL TURN UNDER THE BOTTOM OF THE POROUS BACKFILL AND RETURN 6" ABOVE THE TOP ELEVATION OF THE WEEPHOLE.

WEEPHOLES SHALL BE PLACED 6" TO 12" ABOVE THE NORMAL WATER ELEVATION OR GROUND LINE AND SHALL HAVE A MAXIMUM SPACING OF 10'-0". A MINIMUM OF ONE WEEPHOLE SHALL BE PROVIDED PER WINGWALL.

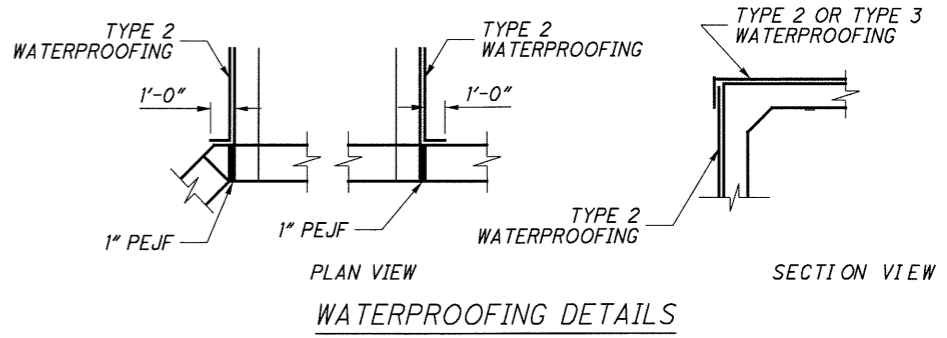
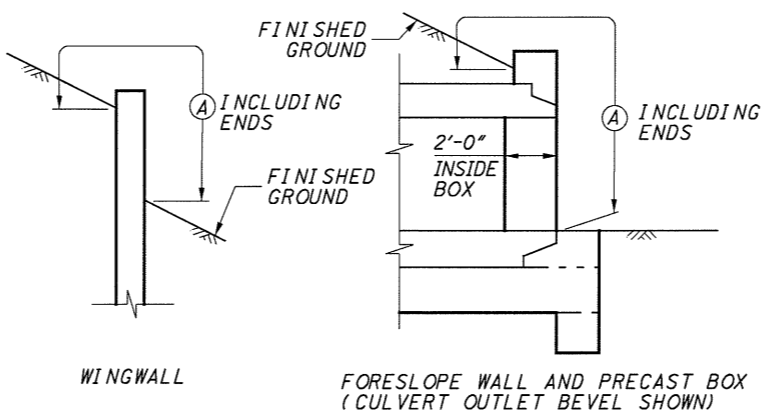
PREFORMED EXPANSION JOINT FILLER: PREFORMED EXPANSION JOINT FILLER (PEJF) CONFORMING TO CMS 705.03, 1 INCH THICK, SHALL BE PLACED ABOVE THE FOOTING BETWEEN THE SIDES OF THE BOX CULVERT AND THE ENDS OF THE WINGWALLS. PAYMENT FOR MATERIALS AND INSTALLATION SHALL BE INCLUDED WITH ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER.

SEALING OF FORESLOPE WALL AND WINGWALLS: ALL EXPOSED FORESLOPE WALL AND WINGWALL CONCRETE SHALL BE SEALED WITH EPOXY-URETHANE SEALER. THE LIMITS SHALL BE AS SHOWN IN THE DIAGRAMS BELOW. PAYMENT FOR THE EPOXY-URETHANE SEALER SHALL BE PER ITEM 512 - SEALING OF CONCRETE SURFACES.

WATERPROOFING: TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25, SHALL EXTEND VERTICALLY DOWN THE ENTIRE SIDES OF THE PRECAST CULVERT SECTIONS FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

IF PAVEMENT IS NOT PLACED DIRECTLY ON TOP OF THE CULVERT, TYPE 2 WATERPROOFING, PER CMS 512.09 AND 711.25 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 2 WATERPROOFING.

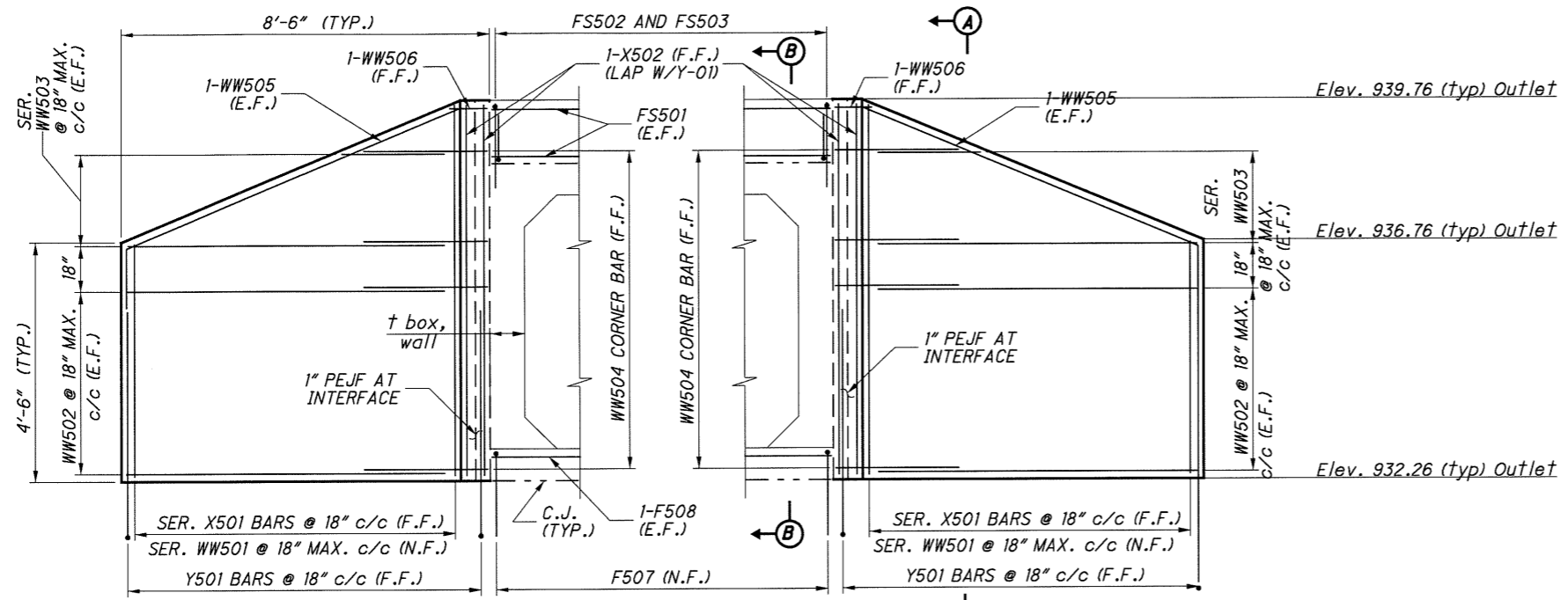
IF PAVEMENT IS TO BE USED DIRECTLY ON TOP OF THE CULVERT, TYPE 3 WATERPROOFING, PER CMS 512.10 AND 711.29 SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE PRECAST CULVERT SECTIONS AND SHALL EXTEND ONE FOOT VERTICALLY DOWN THE SIDES FOR ALL PORTIONS OF THE CULVERT WHICH SHALL BE IN CONTACT WITH THE BACKFILL. PAYMENT FOR THE MEMBRANE WATERPROOFING SHALL BE AT THE CONTRACT PRICE BID PER SQUARE YARD FOR ITEM 512 - TYPE 3 WATERPROOFING.



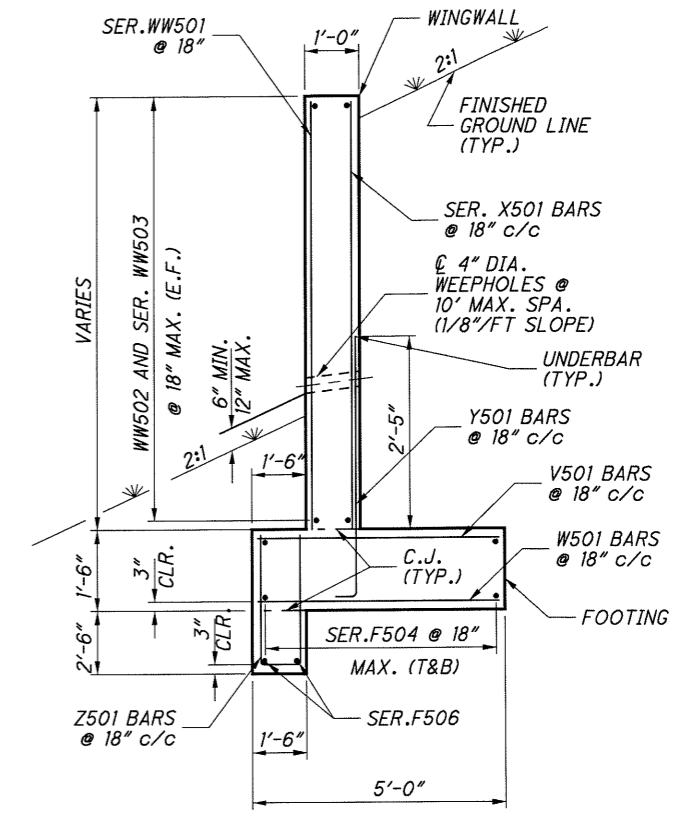
BASIS OF PAYMENT: ALL LABOR, EQUIPMENT AND INCIDENTALS REQUIRED TO CONSTRUCT THE FOOTING, CUTOFF WALL, WINGWALLS AND FORESLOPE WALL SHALL BE INCLUDED WITH ITEM 511 - CLASS C CONCRETE (RET-WALL/WINGWALL- INCLUDING FOOTING). PAYMENT FOR REINFORCING STEEL SHALL BE INCLUDED WITH ITEM 509 - EPOXY COATED REINFORCING STEEL.

LIMITS OF ITEM 512-SEALING CONCRETE SURFACES
 (A) - SEAL ENTIRE CONCRETE SURFACE AREA

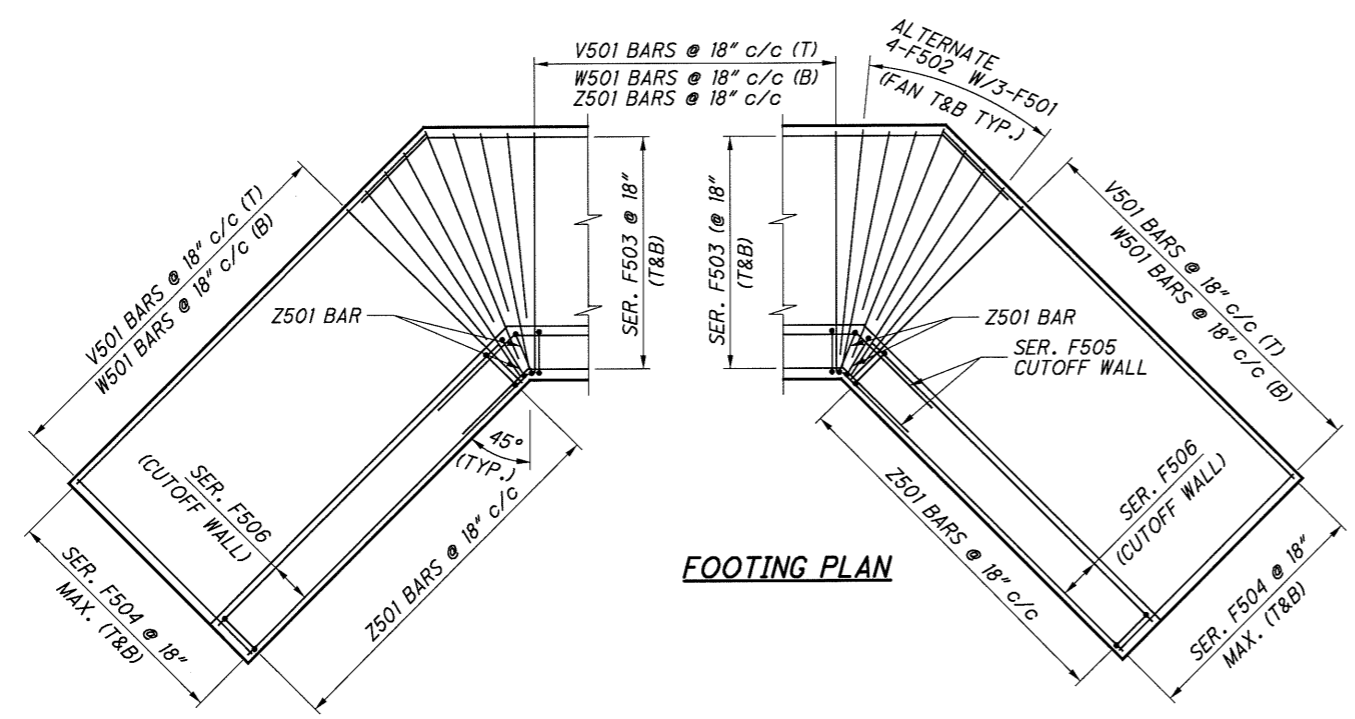
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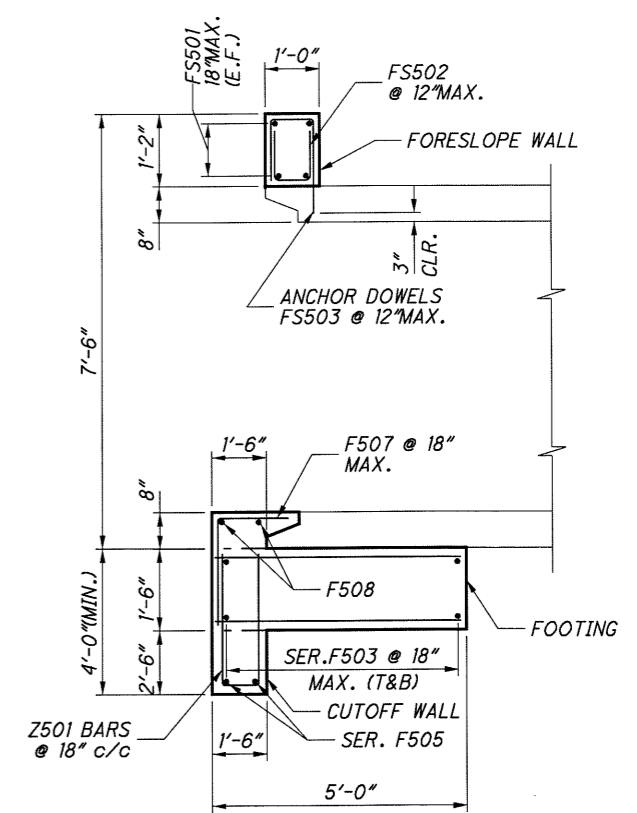
WINGWALL ELEVATION
(FOOTING NOT SHOWN)



SECTION A-A
(POROUS BACKFILL NOT SHOWN FOR CLARITY)



FOOTING PLAN

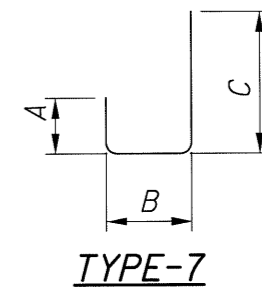
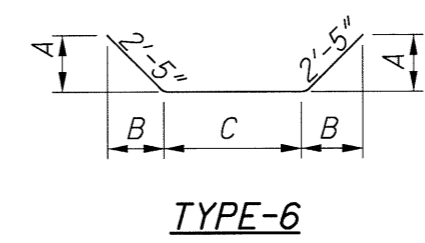
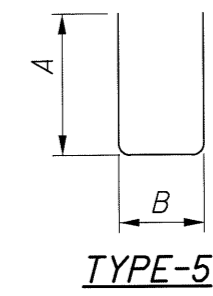
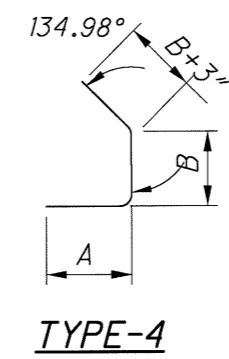
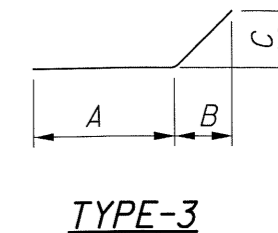
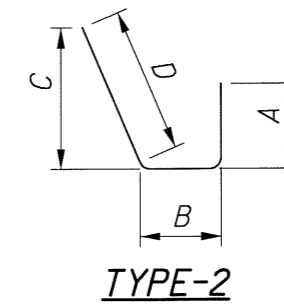
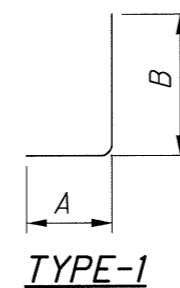


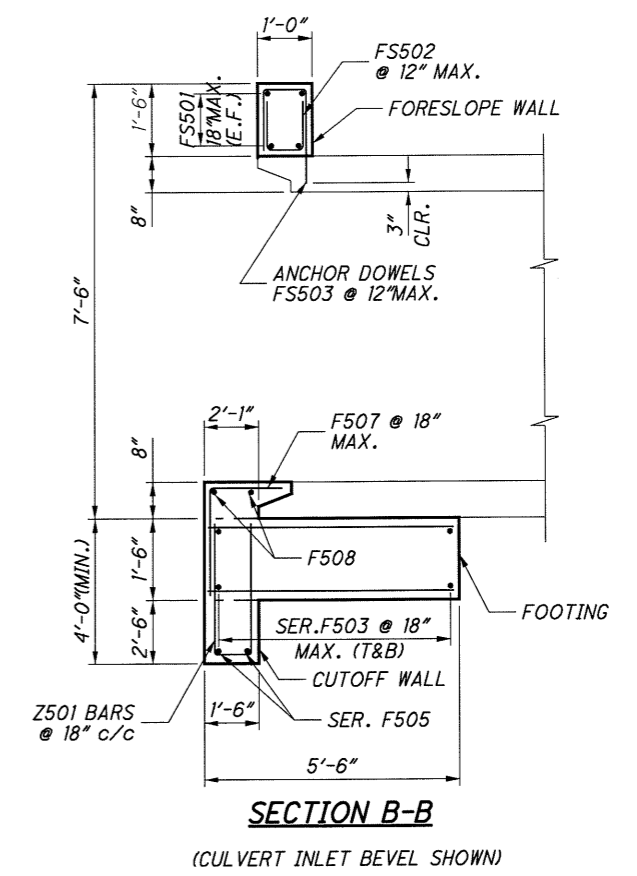
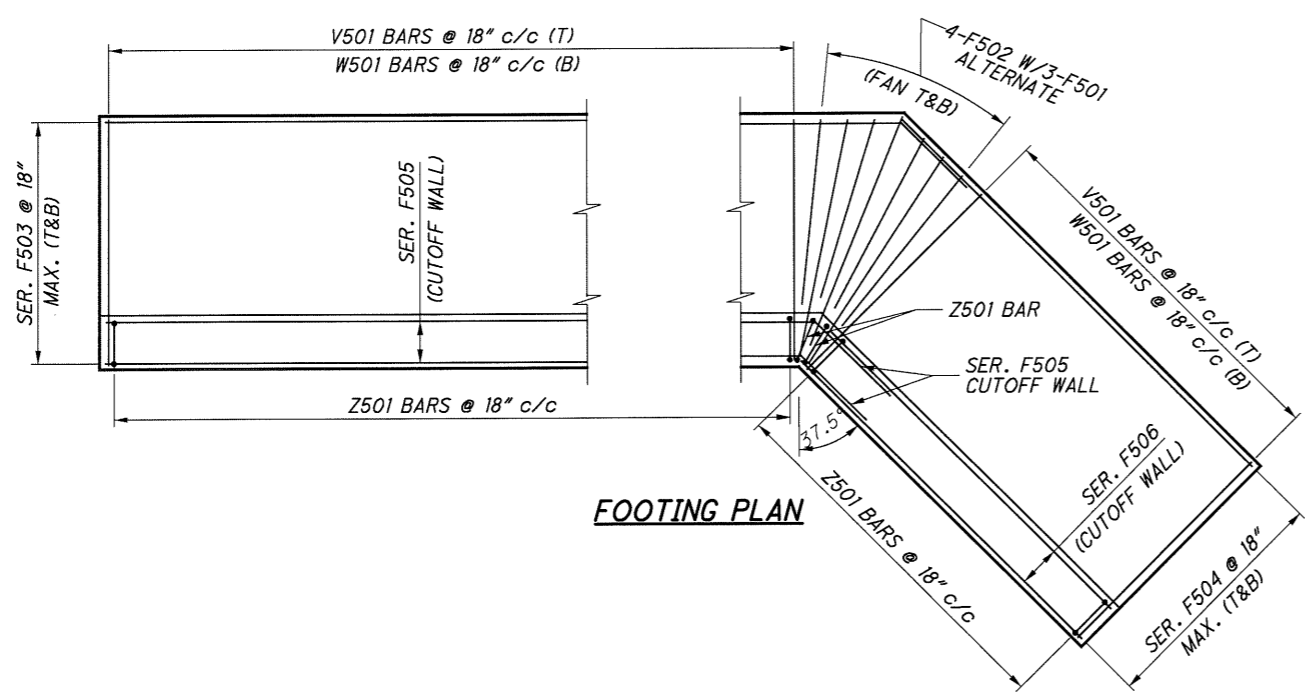
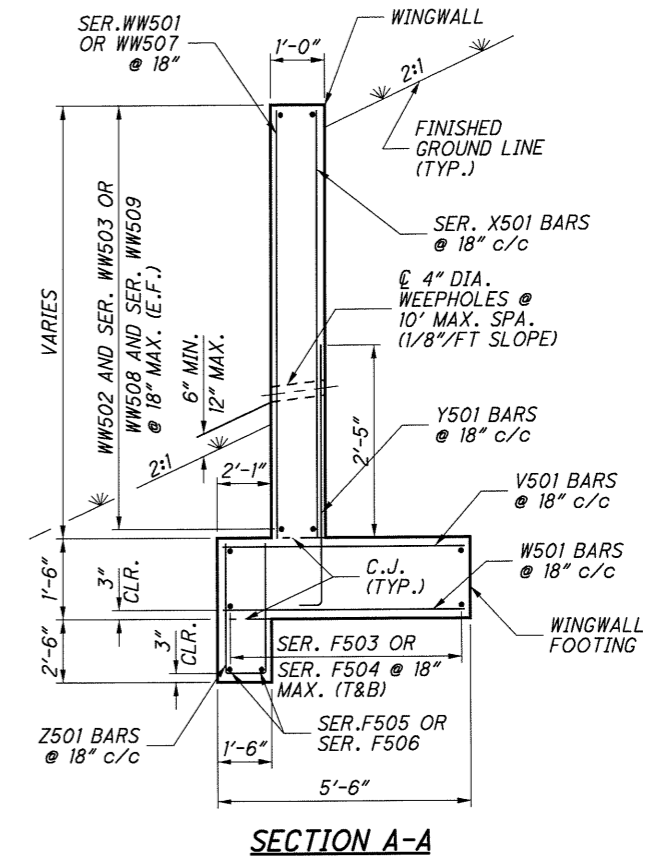
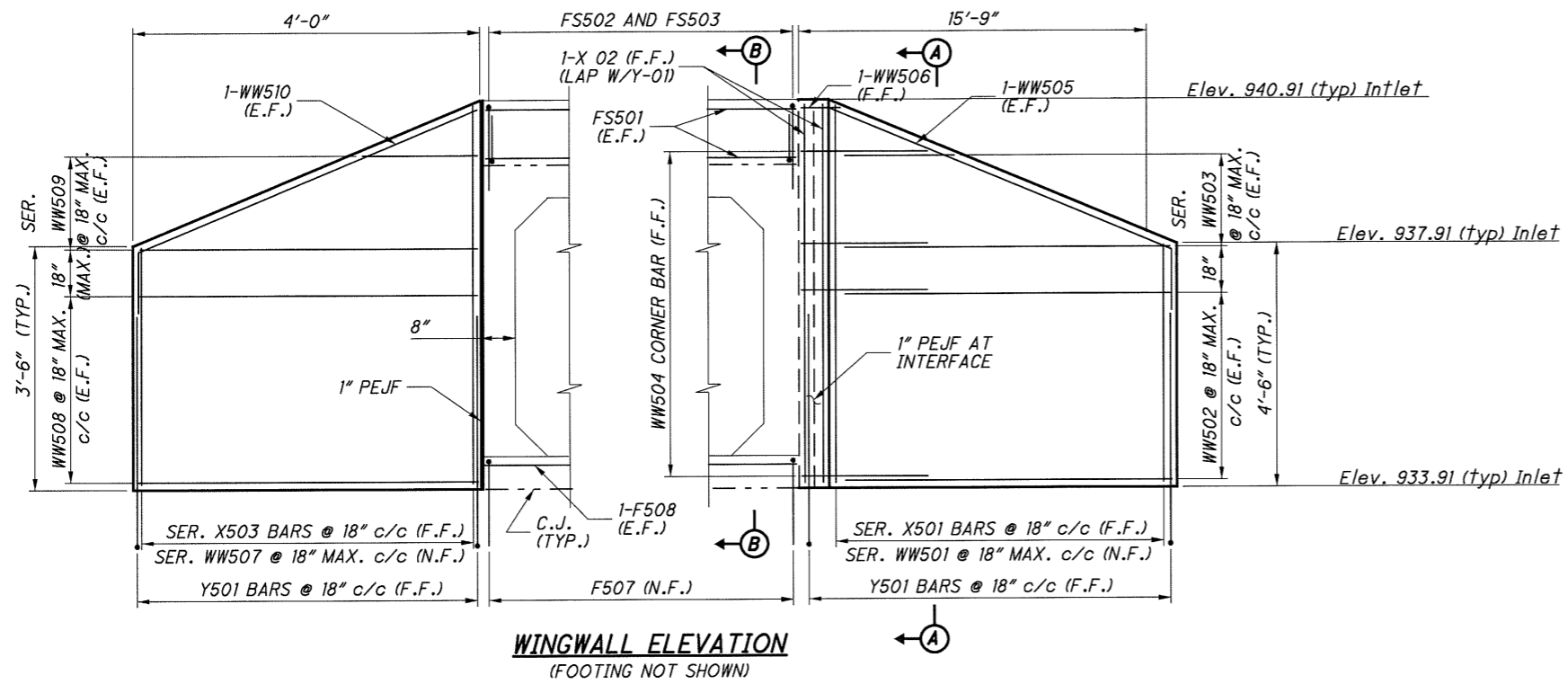
SECTION B-B
(CULVERT INLET BEVEL SHOWN)

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TYPE A HEADWALL REINFORCING SCHEDULE									
BAR MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	BAR TYPE DIMENSIONS				INC.
					A	B	C	D	
WINGWALLS									
X501	2 SERIES	4'- 4" TO	86	STR.					0'- 6 "
	of 7	7'- 4"							
X502	4	7'- 4"	31	STR.					
Y501	18	4'- 0"	76	1	0'- 6"	3'- 8"			
WW501	2 SERIES	4'- 4" TO	86	STR.					0'- 6 "
	of 7	7'- 4"							
WW502	12	8'- 2"	103	STR.					
	4	4'- 1"							
WW503	SERIES	TO	52	STR.					4'- 1 "
	of 2	8'- 2"							
WW504	10	3'- 6"	37	2	0'- 7"	0'- 2 "	2'- 1/4"	2'- 10 "	
WW505	4	11'- 1"	47	3	2'- 5"	2'- 10"	8'- 2"		
WW506	2	1'- 1"	3	4	0'- 7"	0'- 2 "			
FOOTING & CUTOFF WALL									
V501	21	4'- 8"	103	STR.					
W501	21	4'- 8"	103	STR.					
Z501	25	8'- 2"	213	5	3'- 7"	1'- 2"			
F501	12	4'- 3"	54	STR.					
F502	16	3'- 4"	56	STR.					
	2	13'- 4"					8'- 4 3/4"		
F503	SERIES	TO	160	6	1'- 9"	1'- 9"	TO	0'- 11 5/8"	
	of 5	17'- 2"					12'- 3 1/4"		
	4	7'- 9"							
F504	SERIES	TO	182	STR.				0'- 5 3/4"	
	of 5	9'- 8"							
	1	13'- 4"					8'- 4 3/4"		
F505	SERIES	TO	29	6	1'- 9"	1'- 9"	TO	0'- 11 3/4"	
	2	14'- 4"					9'- 4 1/2"		
	2	7'- 9"							
F506	SERIES	TO	34	STR.				0'- 5 "	
	2	8'- 2"							
F507	7	3'- 3"	24	1	1'- 6"	1'- 10"			
F508	2	9'- 0"	19	STR.					
FORESLOPE WALL									
FS501	4	9'- 0"	38	STR.					
FS502	10	2'- 1"	22	5	0'- 10"	0'- 8"			
FS503	10	2'- 8"	28	7	0'- 10"	0'- 8"	1'- 5"		
		TOTAL	1,586						





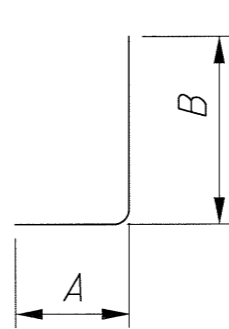
θ = ∠ CULVERT SKEW FROM LINE NORMAL TO ROADWAY
(ROUNDED TO NEAREST 15° INCREMENT FROM 0° TO 45°)

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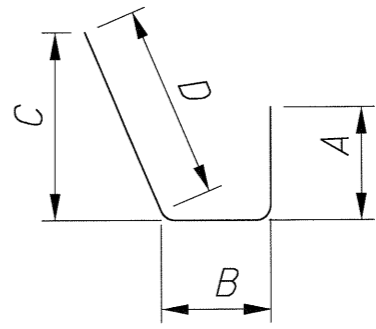
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TYPE B HEADWALL REINFORCING SCHEDULE

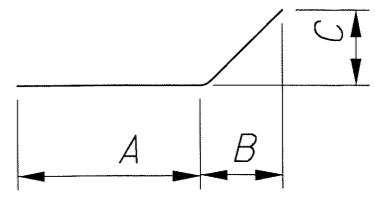
BAR MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	BAR TYPE DIMENSIONS				INC.
					A	B	C	D	
WINGWALLS									
X501	1 SERIES TO of 12	4'- 4"	74	STR.					0'- 3 3/8"
X502	2 1	7'- 4"	16	STR.					
X503	SERIES TO of 4	3'- 4"	23	STR.					1'- 4 "
Y501	18	4'- 0"	76	1	0'- 6"	3'- 8"			
WW501	1 SERIES TO of 12	4'- 4"	74	STR.					0'- 3 3/8"
WW502	6 2	15'- 5"	97	STR.					
WW503	SERIES TO of 2	7'- 9"	49	STR.					7'- 8 "
WW504	5	4'- 0"	21	2	0'- 7"	0'- 5 1/4"	2'- 10 1/2"	3'- 1 1/4"	
WW505	2	18'- 1"	38	3	2'- 5"	2'- 10"	15'- 5"		
WW506	1	1'- 7"	2	8	0'- 7"	0'- 5 1/4"			
WW507	1 SERIES TO of 4	3'- 4"	23	STR.					1'- 4 "
WW508	6 2	3'- 8"	23	STR.					
WW509	SERIES TO of 3	1'- 3"	16	STR.					1'- 2 1/2"
WW510	2	7'- 9"	17	3	2'- 5"	3'- 10"	3'- 8"		
FOOTING & CUTOFF WALL									
V501	20	5'- 2"	108	STR.					
W501	20	5'- 2"	108	STR.					
Z501	22	8'- 2"	188	5	3'- 7"	1'- 2"			
F501	6	4'- 8"	30	STR.					
F502	8 2	3'- 8"	31	STR.					
F503	SERIES TO of 5	14'- 4"	168	3	11'- 10 3/4"	0'- 11 1/4"	2'- 3 "		0'- 10 1/2"
F504	SERIES TO of 5	17'- 10"	167	STR.					0'- 10 1/2"
F505	2 1	14'- 3"	31	3	11'- 10 3/4"	0'- 11 1/4"	2'- 3 "		0'- 9 1/8"
F506	SERIES TO 2	15'- 1"	31	STR.					0'- 10 1/8"
F507	7	3'- 10"	28	1	2'- 1"	1'- 10"			
F508	2	9'- 0"	19	STR.					
FORESLOPE WALL									
FS501	4	9'- 0"	38	STR.					
FS502	10	2'- 1"	22	5	0'- 10"	0'- 8"			
FS503	10	2'- 8"	28	7	0'- 10"	0'- 8"	1'- 5"		
		TOTAL	1,546						



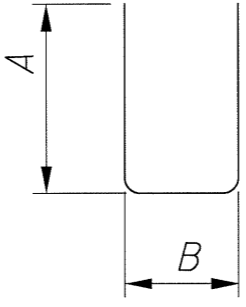
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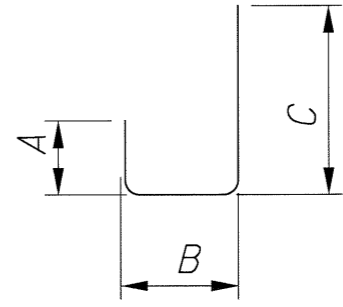
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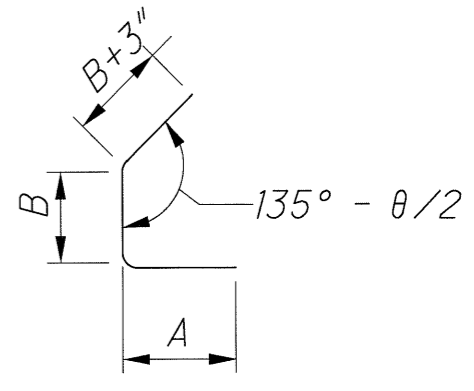
TYPE-3



TYPE-5

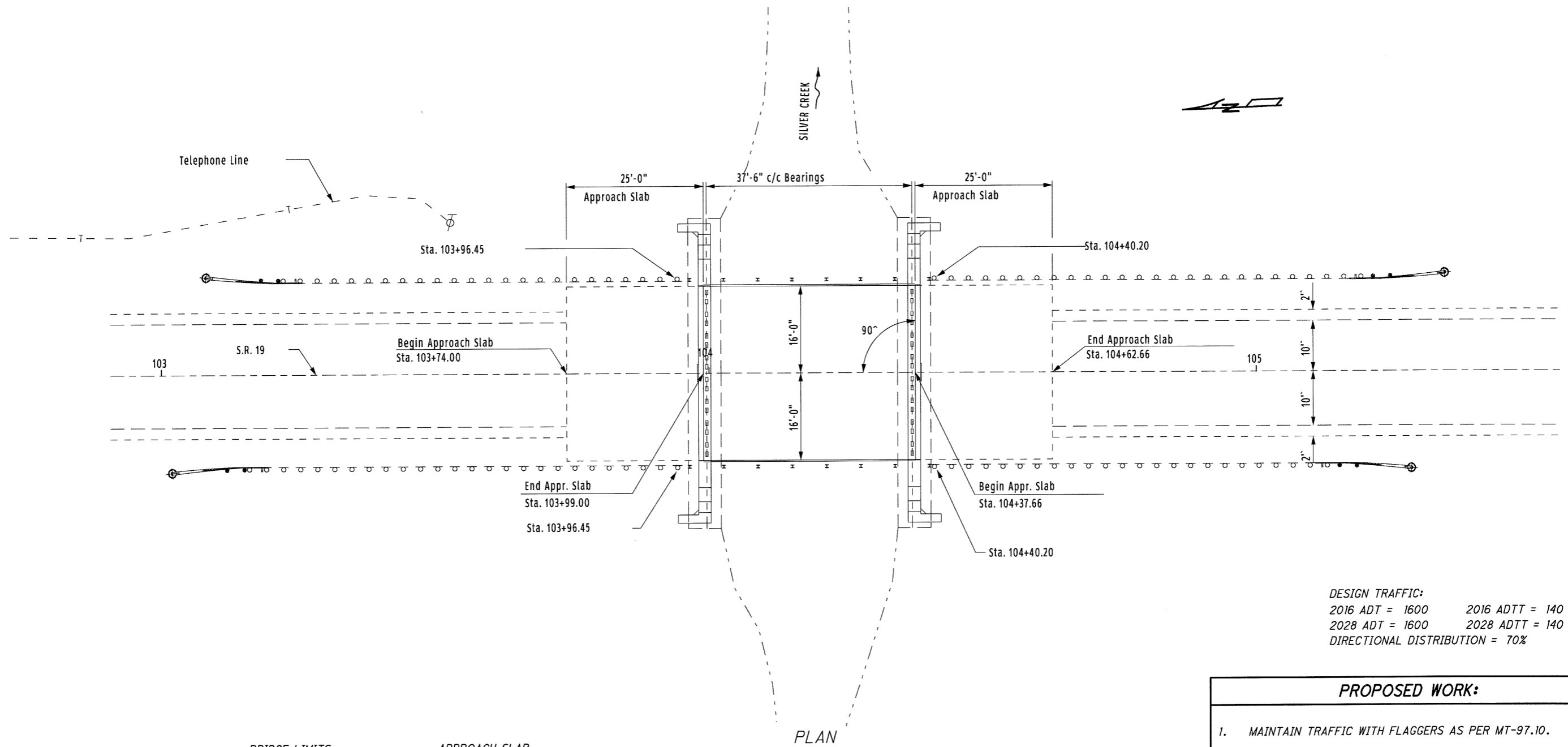


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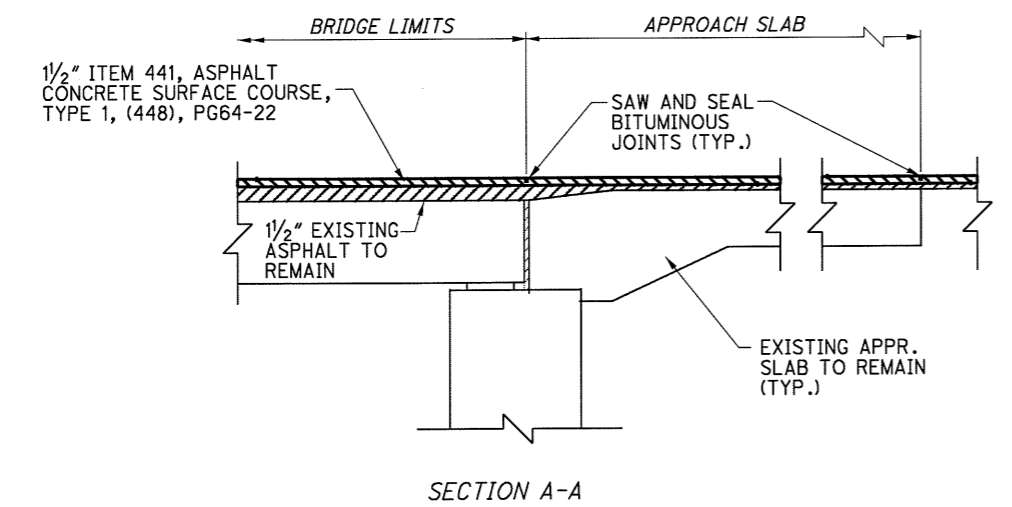


TYPE-8

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DESIGN TRAFFIC:
 2016 ADT = 1600 2016 ADTT = 140
 2028 ADT = 1600 2028 ADTT = 140
 DIRECTIONAL DISTRIBUTION = 70%



- PROPOSED WORK:**
1. MAINTAIN TRAFFIC WITH FLAGGERS AS PER MT-97.10.
 2. REPLACE 1/2" OF EXISTING BITUMINOUS WEARING SURFACE WITH 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22M.
 3. SAW AND SEAL BITUMINOUS JOINTS.

EXISTING STRUCTURE

TYPE: PRESTRESSED CONCRETE BOX BEAMS ON MODIFIED EXISTING ABUTMENTS.

SPANS: 37'-6" c/c BEARING
 ROADWAY: 32'-0" F/F GUARDRAIL
 LOADING: HS 20 AND THE ALTERNATE MILITARY LOADING
 SKEW: 0°00'00" L.F.
 APPROACH SLABS: AS-1-81 (25'-0" LONG)
 ALIGNMENT: TANGENT
 WEARING SURFACE: BITUMINOUS
 STRUCTURAL FILE NUMBER: 7400969
 DATE BUILT: 1936/1984

ESTIMATED QUANTITIES (01/STR/PV)

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET #
202	23501	164	SQ YD	WEARING COURSE REMOVED, AS PER PLAN			138	164	
407	10000	14	GALLON	TACK COAT			11	14	
441	50000	14	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448) PG64-22			6	8	
SPECIAL	51631200	112	FT	SAWING AND SEALING BITUMINOUS CONCRETE JOINTS			64	48	

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 513.04.

CONTRACT BID PRICES SHALL BE BASED UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ITEM 202, WEARING COURSE REMOVED, AS PER PLAN

THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN MACHINE GRINDING ON THE BRIDGE SUPERSTRUCTURE AND APPROACH SLABS. THE CONTRACTOR SHOULD VERIFY THE GRINDER DEPTH TO INSURE THAT NO DAMAGE FROM OVER GRINDING WILL OCCUR.

DAMAGE TO EXISTING ITEMS TO REMAIN FROM REMOVAL OPERATIONS WILL BE REPAIRED OR REPLACED AT THE OPTION OF THE ENGINEER. CONCRETE REPAIRS SHALL BE AS PER ITEM 519. ALL COST FOR REPAIRS OR REPLACEMENT DUE TO IMPROPER REMOVAL PROCEDURES SHALL BE BORN BY THE CONTRACTOR.

ITEM SPECIAL-SAWING AND SEALING BITUMINOUS CONCRETE JOINTS

1) DESCRIPTION:

THIS WORK SHALL CONSIST OF CUTTING AND SEALING TRANSVERSE JOINTS IN THE NEW BITUMINOUS CONCRETE OVERLAY. BITUMINOUS CONCRETE JOINTS SHALL BE CONSTRUCTED DIRECTLY OVER, AND IN LINE WITH, THE EXISTING UNDERLYING TRANSVERSE JOINT OF THE APPROACH SLAB & APPROACH PAVEMENT.

2) MATERIALS:

THE JOINT SEALANT SHALL MEET THE REQUIREMENTS OF ITEM 705.04, JOINT SEALANTS, HOT-POURED, FOR CONCRETE AND ASPHALT PAVEMENTS. ACCEPTABLE ALTERNATE MATERIALS ARE:

A SILICONE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-001543A CLASS A (ONE-PART SILICONE SEALANTS) AND TT-S-00230C CLASS A (ONE-COMPONENT SEALANTS), SUCH AS THOSE MANUFACTURED BY GENERAL ELECTRIC, SILICONE PRODUCTS DIVISION, 4015 EXECUTIVE PARK DRIVE, CINCINNATI, OHIO 45242 (513-243-1953) OR DOW CORNING, 400 TECHNE CENTER, SUITE 103, MILFORD, OHIO 45150 (513-831-3586); OR SOF-SEAL, A COLD-APPLIED, LOW-MODULUS, TWO-COMPONENT POLY-MERIC COMPOUND HORIZONTAL SEALANT AS MANUFACTURED BY W.R.MEADOWS, INC., P.O. BOX 543, ELGIN, ILLINOIS 60121 (800-342-5976).

3) CONSTRUCTION DETAILS:

A) GENERAL: THE CONTRACTOR SHALL CONDUCT HIS OPERATION SO THAT THE CUTTING, CLEANING AND SEALING OF TRANSVERSE JOINTS IS A CONTINUOUS OPERATION THAT WILL BE PERFORMED AS SOON AS PRACTICAL AFTER THE PAVING, BUT NO LATER THAN FOUR (4) DAYS AFTER PLACEMENT OF THE ASPHALT CONCRETE SURFACE COURSE. TRAFFIC SHALL NOT BE ALLOWED TO KNEAD TOGETHER OR DAMAGE JOINT CUT PRIOR TO SEALING.

B) CUTTING OF TRANSVERSE JOINTS: THE CONTRACTOR SHALL SAW OR ROUT TRANSVERSE JOINTS TO THE DIMENSIONS SHOWN IN THE DETAILS ON THIS SHEET. THE CUT JOINTS SHALL LIE DIRECTLY ABOVE EACH APPROACH SLAB END.

THE BLADE OR BLADES SHALL BE OF SUCH SIZE THAT THE FULL WIDTH AND DEPTH OF THE CUT CAN BE MADE WITH ONE PASS. DRY OR WET CUTTING WILL BE ALLOWED. JOINTS SHALL EXTEND THE FULL WIDTH OF THE BRIDGE.

C) CLEANING JOINTS: DRY SAWED JOINTS SHALL BE THOROUGHLY CLEANED WITH A SUFFICIENT AMOUNT OF COMPRESSED AIR TO REMOVE ANY DIRT, DUST, OR DELETERIOUS MATTER. WET SAWED JOINTS SHALL BE WASHED CLEAN OF ALL CUTTINGS BY FLUSHING WITH A JET OF WATER AND WITH OTHER TOOLS AS NECESSARY.

AFTER FLUSHING, THE JOINT SHALL BE BLOWN OUT WITH COMPRESSED AIR. WHEN THE SURFACES ARE THOROUGHLY CLEAN AND DRY, AND JUST PRIOR TO PLACING THE JOINT SEALER, COMPRESSED AIR HAVING A PRESSURE OF AT LEAST 90 P.S.I. SHALL BE USED TO BLOW OUT THE JOINT AND REMOVE ALL TRACES OF DUST.

IN THE EVENT FRESHLY CUT JOINTS BECOME CONTAMINATED BEFORE THEY ARE SEALED, THEY SHALL BE RECLEANED OF ALL FOREIGN MATERIAL BY HIGH PRESSURE WATER JET.

D) SEALING JOINTS: THE JOINT SHALL BE THOROUGHLY DRY WHEN THE SEALANT IS PLACED. AFTER CLEANING AND DRYING, A BOND-BREAKER MATERIAL SHALL BE APPLIED TO THE BOTTOM OF THE GROOVE.

HOT-POURED JOINT SEALANT MATERIAL SHALL BE HEATED IN A KETTLE OR MELTER CONSTRUCTED AS A DOUBLE BOILER, WITH THE SPACE BETWEEN THE INNER AND OUTER SHELLS FILLED WITH OIL OR OTHER HEAT TRANSFER MEDIUM. POSITIVE TEMPERATURE CONTROL AND MECHANICAL AGITATION SHALL BE PROVIDED. HEATING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. JOINT SEALER MATERIAL SHALL NEVER BE KEPT HEATED AT THE POURING TEMPERATURE FOR MORE THAN FOUR (4) HOURS AND SHALL NEVER BE REHEATED. SEALER LEFT IN THE APPLICATOR AT THE END OF A DAY'S WORK SHALL NOT BE USED.

HOT-POURED SEALANT SHALL BE APPLIED IMMEDIATELY THROUGH A NOZZLE, WHICH MUST PROJECT INTO THE SAWED JOINT, FILLING FROM THE BOTTOM UP. THE SEALANT SHALL COMPLETELY FILL THE JOINT IN SUCH A MANNER THAT, AFTER COOLING, THE LEVEL OF THE SEALANT WILL NOT BE HIGHER THAN 1/8" BELOW THE PAVEMENT SURFACE. ANY DEPRESSION IN THE COOLED SEAL GREATER THAN 3/16" SHALL BE BROUGHT UP TO THE SPECIFIED LIMIT BY FURTHER ADDITION OF HOT-POURED SEALANT. CARE SHALL BE TAKEN IN THE SEALING OF THE JOINTS SO THAT THE FINAL APPEARANCE WILL PRESENT A NEAT FINE LINE.

THE COLD APPLIED SEALANT MATERIALS (POLYURETHANE, SILICONE, AND POLYMERIC COMPOUNDS) SHALL BE INSTALLED AS PER MANUFACTURERS' RECOMMENDATIONS, EXCEPT AS MODIFIED BY THIS DRAWING. THE SEALANT SHALL BE INSTALLED WHEN THE AMBIENT TEMPERATURE IS 40 DEGREES F OR HIGHER. TRAFFIC SHALL NOT BE ALLOWED ON THE JOINT FOR ONE HOUR AFTER APPLICATION OF THE SEALANT.

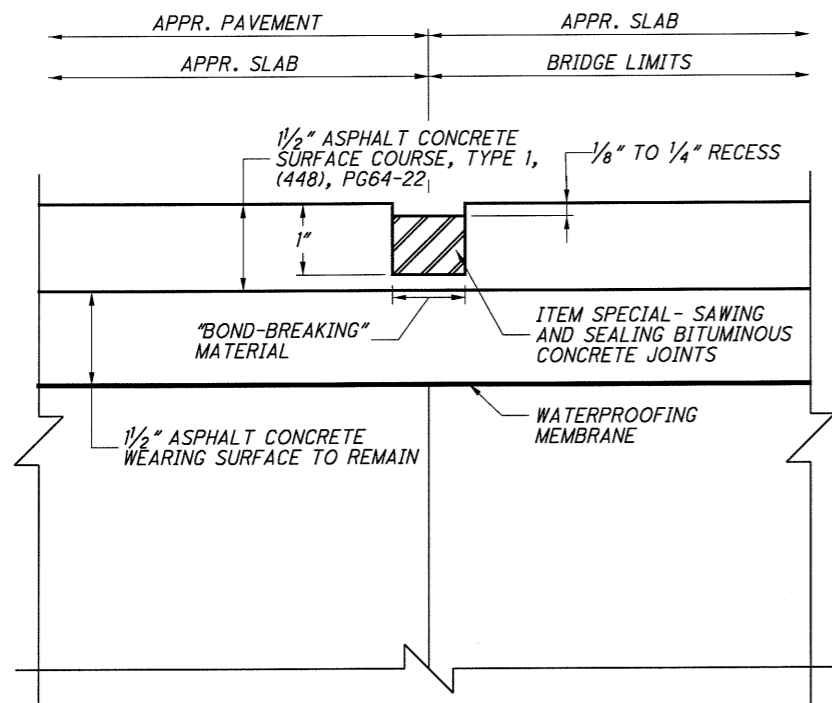
4) METHOD OF MEASUREMENT:

THE QUANTITY TO BE PAID FOR UNDER THIS ITEM WILL BE THE NUMBER OF LINEAR FEET OF JOINTS SAWED AND SEALED AS PER THE ABOVE REQUIREMENTS.

5) BASIS OF PAYMENT:

THE UNIT PRICE PER LINEAR FOOT FOR ITEM SPECIAL-"SAWING AND SEALING BITUMINOUS CONCRETE JOINTS" SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING THE FURNISHING AND PLACING OF THE JOINT SEALER MATERIAL.

THIS ITEM SHALL MEET THE MATERIAL (SECTION 2) AND SEALING (SECTION 3D) SPECIFICATIONS OF ITEM SPECIAL-SAWING AND SEALING BITUMINOUS CONCRETE JOINTS.



SEALING OF JOINTS AT ABUTMENTS AND ENDS OF APPROACH SLABS

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DESIGN AGENCY: OHIO DEPARTMENT OF TRANSPORTATION
 DATE: 7400969
 REVIEWED: MRC
 DRAWN: MRC
 DESIGNED: MRC
 CHECKED: MRC
 SAWING AND SEALING DETAILS
 BRIDGE NO. SEN-19-0197
 OVER SILVER CREEK
 SEN-19-0.00
 PID No. 88521
 2 / 2
 32
 36

RIGHT OF WAY LEGEND SHEET SEN-19-0.00

SENECA COUNTY
 BLOOM TOWNSHIP
 TOWN 1 NORTH, RANGE 16 EAST
 SECTIONS 33 & 34

PROJECT DESCRIPTION
 A 2-LANE DISTRICT ALLOCATION FUNDED PROJECT TO RESURFACE SR-19 FROM CRAWFORD COUNTY LINE TO US-224; PERFORM NECESSARY RELATED WORK

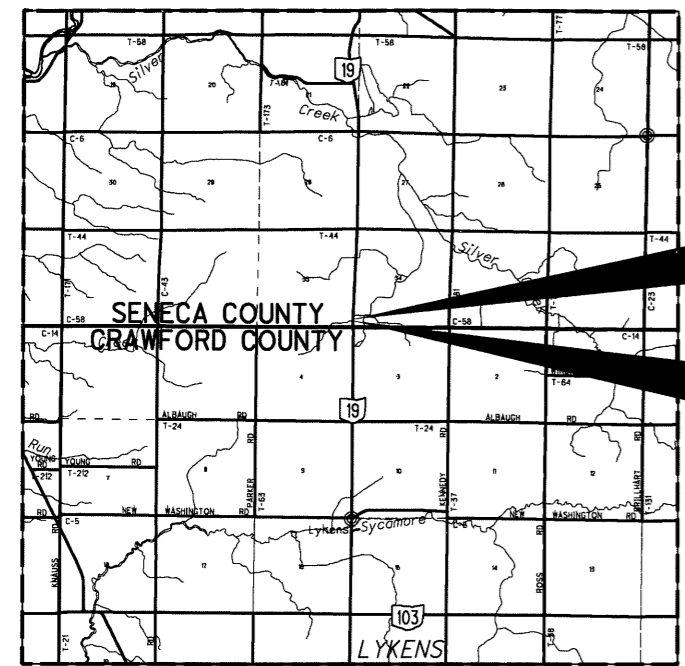
PROJECT CONTROL
 STATE PLANE GRID - OHIO NORTH NAD83 (2011)
 PROJECT ADJUSTMENT FACTOR - 1.0000000
 GEOID MODEL - 2012A

NOTE: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED USING ODOT R/W PLANS TITLED "STATE HIGHWAYS SENECA COUNTY", SENECA COUNTY COMMISSIONERS JOURNAL VOL. 1, PG. 100 DATED 1828, AND ODOT REFERENCE TIES, IN ADDITION TO SURVEYS RECORDED AT THE SENECA COUNTY ENGINEERS OFFICE FOR SECTIONS 33 AND 34, T-1-N, R-16-E, BLOOM TOWNSHIP.

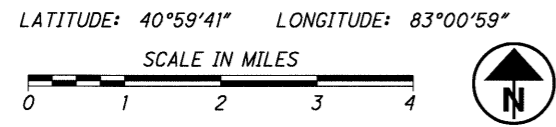
PLANS PREPARED BY:
 FIRM NAME : O.D.O.T.
 R/W DESIGNER: MARTIN J. FARKAS
 R/W REVIEWER: DAVID E. SEASLY
 FIELD REVIEWER: MARTIN J. FARKAS
 PRELIMINARY FIELD REVIEW DATE: 8/13/14
 TRACINGS FIELD REVIEW DATE: _____
 OWNERSHIP UPDATED BY: _____
 DATE COMPLETED: _____
 PLAN COMPLETION DATE: 8/15/14

TYPES OF TITLE LEGEND:
 SH = STANDARD HIGHWAY EASEMENT

STRUCTURE KEY
 RESIDENTIAL
 COMMERCIAL
 OUT-BUILDING



LOCATION MAP



UTILITY OWNERS	
NORTH CENTRAL ELECTRIC COOP P.O. BOX 475 ATTICA, OH 44807 (800) 426-3072	CENTURYLINK 122 S. ELIZABETH ST. LIMA, OH 45801 (419) 226-6120
AMERICAN ELECTRIC POWER (AEP) 2622 SR 100 TIFFIN, OH 44883 (419) 209-5583	FRONTIER (FORMERLY VERIZON) 300 WEST GYPSY LANE ROAD BOWLING GREEN, OH 43402 (419) 354-9452

END ACQUISITION
 STATE ROUTE 19
 S.L.M. 0.10

BEGIN ACQUISITION
 STATE ROUTE 19
 S.L.M. 0.05

INDEX OF SHEETS:

LEGEND	1
PROPERTY MAP	2
SUMMARY OF ADDITIONAL R/W	3
R/W DETAIL SHEET	4

MONUMENT LEGEND

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

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

County Line ————— Township Line - - - - - Section Line - - - - - Corporation Line ——— or ——— Fence Line (Ex) — x — x — (Pr) — x — x — Center Line ————— Right of Way (Ex) ——— Ex R/W ——— Right of Way (Pr) ——— R/W ——— Standard Highway Ease.(Ex) ——— Ex SH ——— Temporary Right of Way ——— TMP ——— Channel Ease. (Pr) ——— CH ——— Utility Ease. (Ex) ——— Ex U ——— Railroad ————— or ————— Guardrail (Ex) — o — o — o — o — (Pr) — o — o — o — o — Construction Limits ——— . ——— . ——— . ——— . ——— Edge of Pavement (Ex) ——— Edge of Pavement (Pr) ——— Edge of Shoulder (Ex) ——— Edge of Shoulder (Pr) ———	Ditch / Creek (Ex) ——— Ditch / Creek (Pr) ——— Tree Line (Ex) ——— Ownership Hook Symbol ↗ , Example ↗ Property Line Symbol ⊞ , Example ⊞ Break Line Symbol ⚡ , Example ⚡ Tree (Pr) ☁ , Tree (Ex) ☁ , Shrub (Ex) ☁ Tree (Remove) ✂ , Shrub (Remove) ✂ Evergreen (Ex) 🌲 , Stump 🌲 Evergreen (Remove) ✂ , Stump (Remove) ✂ Wetland (Pr) 🌿 , Grass (Pr) 🌿 , Aerial Target ⚡ Post (Ex) ○ , Mailbox (Ex) 📧 , Mailbox (Pr) 📧 Light (Ex) ☼ , Telephone Marker (Ex) TEL Fire Hydrant (Ex) 🔥 , Water Meter (Ex) ⚡ Water Valve (Ex) ⚡ , Utility Valve Unknown (Ex.) ⚡ Telephone Pole (Ex) ⚡ , Power Pole (Ex) ⚡ Light Pole (Ex) ⚡ Underground Water Line ——— W ——— Underground Fiber Optic ——— FO ———
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I, David E. Seasly, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on 30 January 2014. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinates System North Zone on NAD 83 (2011) datum. The Project Coordinates (US Survey Feet) are relative to State Plane Grid Coordinates (Meters or US Survey Feet) by a Project Adjustment Factor of 1.0000000. As a part of this project I have reestablished the locations of the existing property lines and the existing centerline of Right of Way for property takes contained herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire the parcels as shown herein. As a part of this work I have set right of way monuments at the property corners, property line intersection, points along the right of way and/or angle points on the right of way, Section Corners and other points 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.

David E. Seasly, Professional Land Surveyor 7050

Date:

SURVEYORS SEAL

SENECA COUNTY
BLOOM TOWNSHIP
TOWN 1 NORTH, RANGE 16 EAST
SECTIONS 33 & 34

10 DEBORAH S. TUCK

11 MICHAEL R. AND TERRY L. SWARTZMILLER, FEE
DWIGHT WEISENAUER, LAND CONTRACT



PID NO.
88251

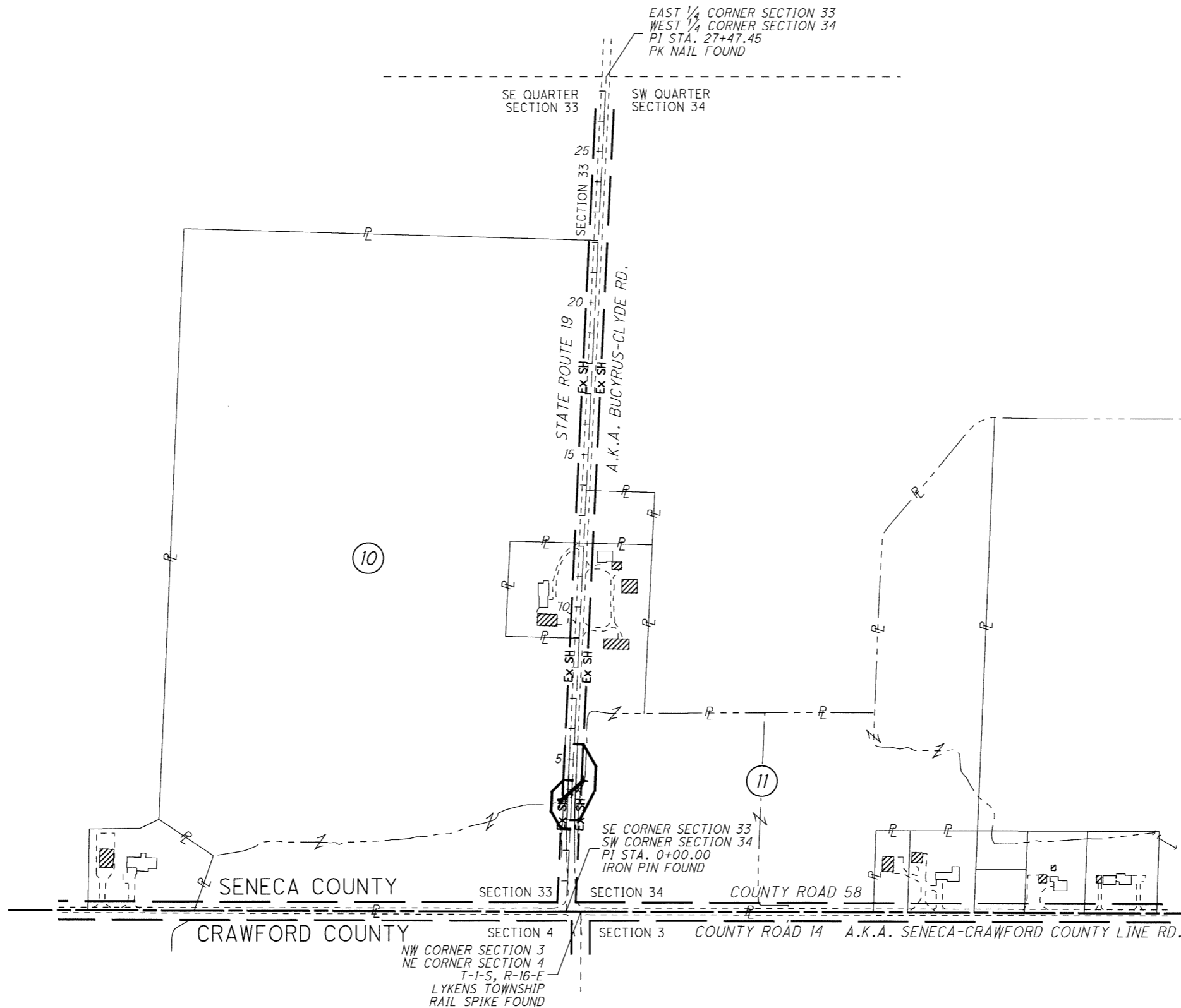
R/W DESIGNER
M.J.F.
R/W REVIEWER
DES

PROPERTY MAP

SEN-19-0.00

2 / 4

34
36



STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

REV. BY	DATE	DESCRIPTION

DATE COMPLETED AUGUST 22, 2014

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TOTAL NUMBER OF :

2 OWNERSHIPS 0 TOTAL TAKES
 2 PARCELS 0 OWNERSHIPS W/ STRUCTURES INVOLVED

NET TAKE = GROSS TAKE - PRO IN TAKE
 NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

* DENOTES RIGHT OF WAY ENCROACHMENT

ALL AREAS IN ACRES

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS	AS ACQUIRED	
											LEFT	RIGHT			BOOK	PAGE
1-9	NOT USED															
10-SH	DEBORAH S. TUCK	2,4	D.V. 454, PG. 69	C13000136400000	62.578	2.114	0.201	0.110	0.091		60.373		STATE			
11-SH	MICHAEL R. AND TERRY L. SWARTZMILLER, FEE DWIGHT WEISENAUER, LAND CONTRACT	2,4	O.R. 134, PG. 209 O.R. 310, PG. 2230	C13000142880000	24.37 22.134	1.507	0.343	0.172	0.171		22.692		STATE	THE LAND CONTRACT INTEREST COVERS 22.134 ACRES OF THE LAND OWNERS' 24.37 ACRES.		

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FEDERAL PROJECT NO. _____
 PID NO. **88251**
 STATE JOB NO. **520311**
 R/W DESIGNER MJF
 R/W REVIEWER DES
SUMMARY OF ADDITIONAL RIGHT OF WAY
SEN-19-0.00
 3 / 4

(c) = CALCULATED AREA

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

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

GRANTEE:
 ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE STATE OF OHIO
 UNLESS OTHERWISE SHOWN.

TYPES OF TITLE LEGEND:
 SH = STANDARD HIGHWAY EASEMENT

REV. BY	DATE	DESCRIPTION

FIELD REVIEW BY _____ DATE: _____
 OWNERSHIP VERIFIED BY _____ DATE: _____
 DATE COMPLETED AUGUST 22, 2014

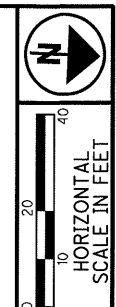
BASIS FOR BEARINGS:

ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY. BEARINGS SHOWN ON THIS PLAT ARE BASED UPON OHIO STATE NORTH ZONE NAD 83 (2011), GEIOD MODEL 2012A. THE EAST LINE OF SECTION 33 / WEST LINE OF SECTION 34, TOWN 1 NORTH, RANGE 16 EAST, BLOOM TOWNSHIP, SENECA COUNTY WAS ESTABLISHED THROUGH GPS OBSERVATIONS OF FOUND MONUMENTS AND DETERMINED TO BE BEARING NORTH 2° 38' 01" EAST.

SENECA COUNTY
BLOOM TOWNSHIP
TOWN 1 NORTH, RANGE 16 EAST
SECTIONS 33 & 34

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING



PID NO.
88521

R/W DESIGNER MUF
R/W REVIEWER DES

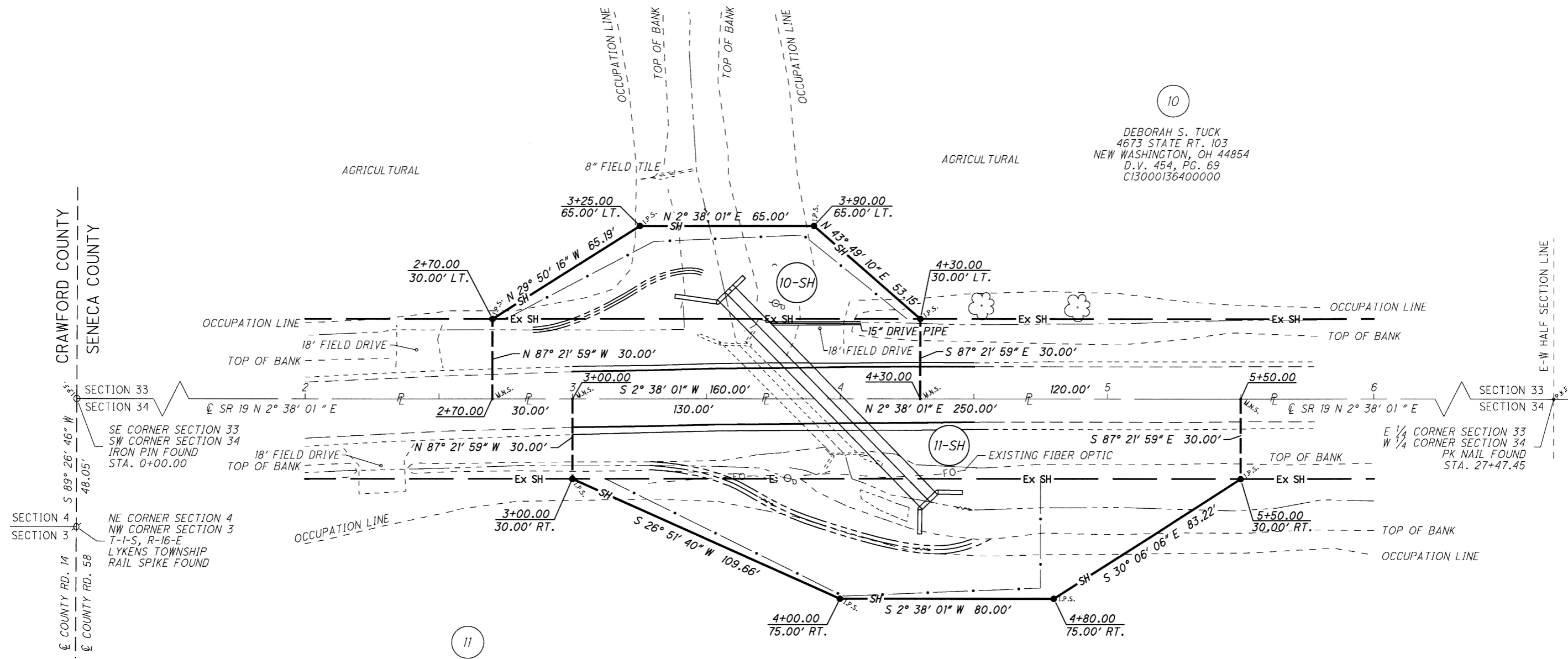
RIGHT OF WAY DETAIL SHEET
STA. 2+00 TO STA. 6+00

SEN-19-0.00

4 / 4
36 / 36

10

DEBORAH S. TUCK
4673 STATE RT. 103
NEW WASHINGTON, OH 44854
D.V. 454, PG. 69
C13000136400000



- MONUMENT LEGEND**
- EXISTING R/W MONUMENT BOX
 - PROPOSED R/W MONUMENT BOX
 - EXISTING CONCRETE MONUMENT
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 - P.K.S. P.K. NAIL SET
 - M.N.F. MAG NAIL FOUND
 - M.N.S. MAG NAIL SET

MICHAEL R. AND TERRY L. SWARTZMILLER, FEE
8229 E. COUNTY RD. 58
BLOOMVILLE, OH 44818
O.R. 134, PG. 209

DWIGHT WEISNAUER, LAND CONTRACT
1125 YOUNG RD.
BLOOMVILLE, OH 44818
O.R. 310, PG. 2230
C13000142880000

REV. BY	DATE	DESCRIPTION
DATE COMPLETED		AUGUST 22, 2014

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