

VICINITY MAP
NOT TO SCALE

DESIGN DESIGNATION	SR 380	SR 73
CURRENT ADT (2025)	3200	11900
DESIGN YEAR ADT (2045)	4500	12200
DESIGN HOURLY VOLUME (2045)	390	1050
DIRECTION DISTRIBUTION	50%	57%
TRUCKS (24 HOUR B&C)	6.2%	10.6%
DESIGN SPEED	55 MPH	55 MPH
LEGAL SPEED	55 MPH	50 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	RURAL MAJOR COLLECTOR	RURAL MINOR ARTERIAL

DESIGN EXCEPTIONS	APPROVAL DATE	SHEET
SHOULDER WIDTH		3
HORIZONTAL CURVE		2
SUPERELEVATION		2

LEGEND	
	WATER METER
	WATER MANHOLE
	TELEPHONE BOX
	TRAFFIC SIGNAL BOX
	SIGN (1 POST)
	SIGN (2 POST)
	TREE
	BUSH
	MAILBOX
	GUARD POST
	LIGHT POLE
	UTILITY POLE
	GUY WIRE
	ELECTRIC MANHOLE
	ELECTRICAL BOX
	TRAFFIC SIGNAL POLE
	GAS VALVE
	FIRE HYDRANT
	WATER VALVE

	FENCE LINE
	WATERLINE
	UNDERGROUND GASLINE
	FIBER OPTIC
	OVERHEAD UTILITY
	UNGERGROUND ELECTRIC
	UNDERGROUND TELECOM
	EX. SWALE
	FLOW ARROW
	CONSTRUCTION LIMITS
	UNDERDRAIN

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

CITY OF WILMINGTON CLINTON COUNTY, OHIO

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PROJECT DESCRIPTION

THIS PROJECT INCLUDES IMPROVEMENTS NEAR THE INTERSECTION OF SR 380 AND SR 73. THE PROJECT INVOLVES WIDENING OF APPROXIMATELY 800 LINEAL FEET OF ROADWAY ALONG SR 380 AND APPROXIMATELY 400 LINEAL FEET OF IMPROVEMENTS ALONG SR 73 TO PROVIDE NEW ACCESS WITH ASSOCIATED TURN LANES FOR A PROPOSED SERVICE STATION. ASSOCIATED IMPROVEMENTS INCLUDE THE ADDITION AND/OR MODIFICATION OF PAVEMENT MARKINGS, SIGNAGE, TRAFFIC SIGNAL AND STORM SEWER.

2023 SPECIFICATIONS

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

PROJECT EARTH DISTURBED AREA:	1.12 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	1.12 ACRES

UNDERGROUND UTILITIES

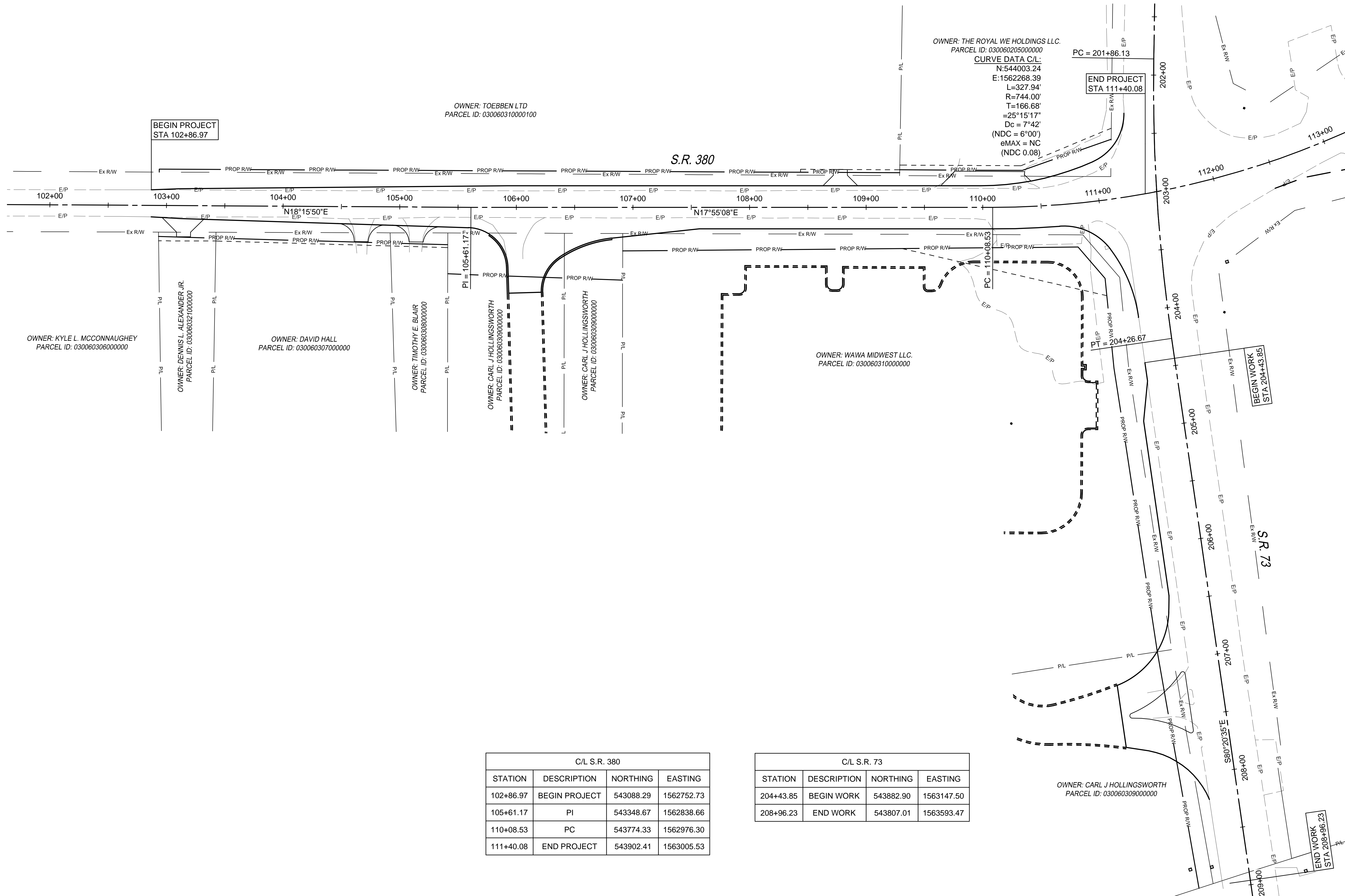
Contact Two Working Days
Before You Dig

Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

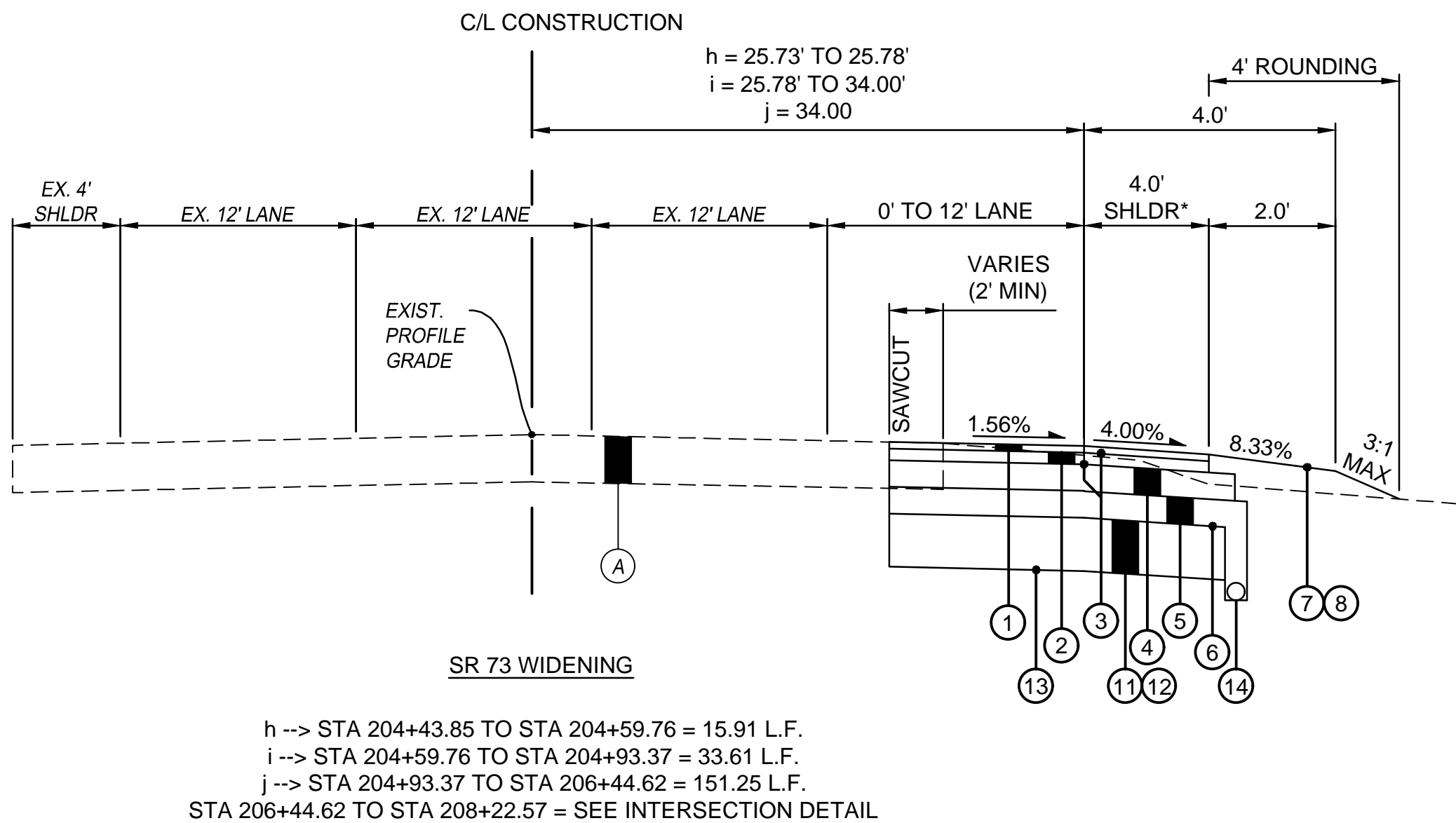
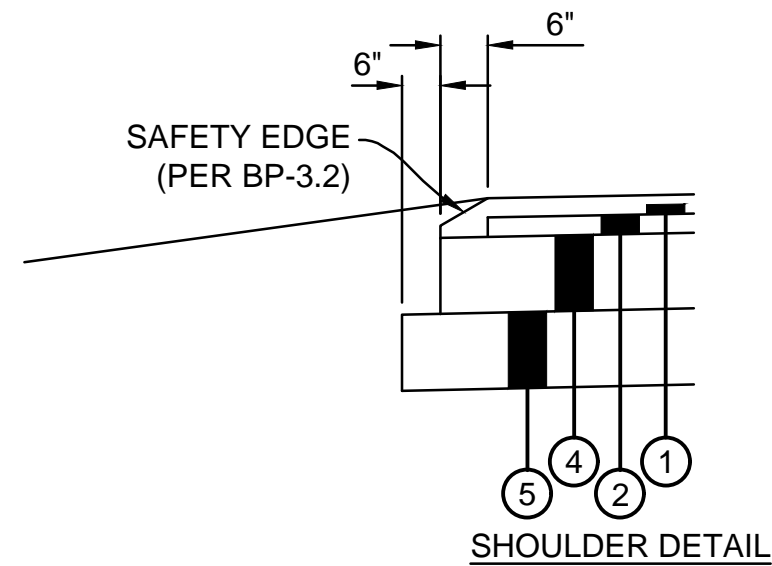
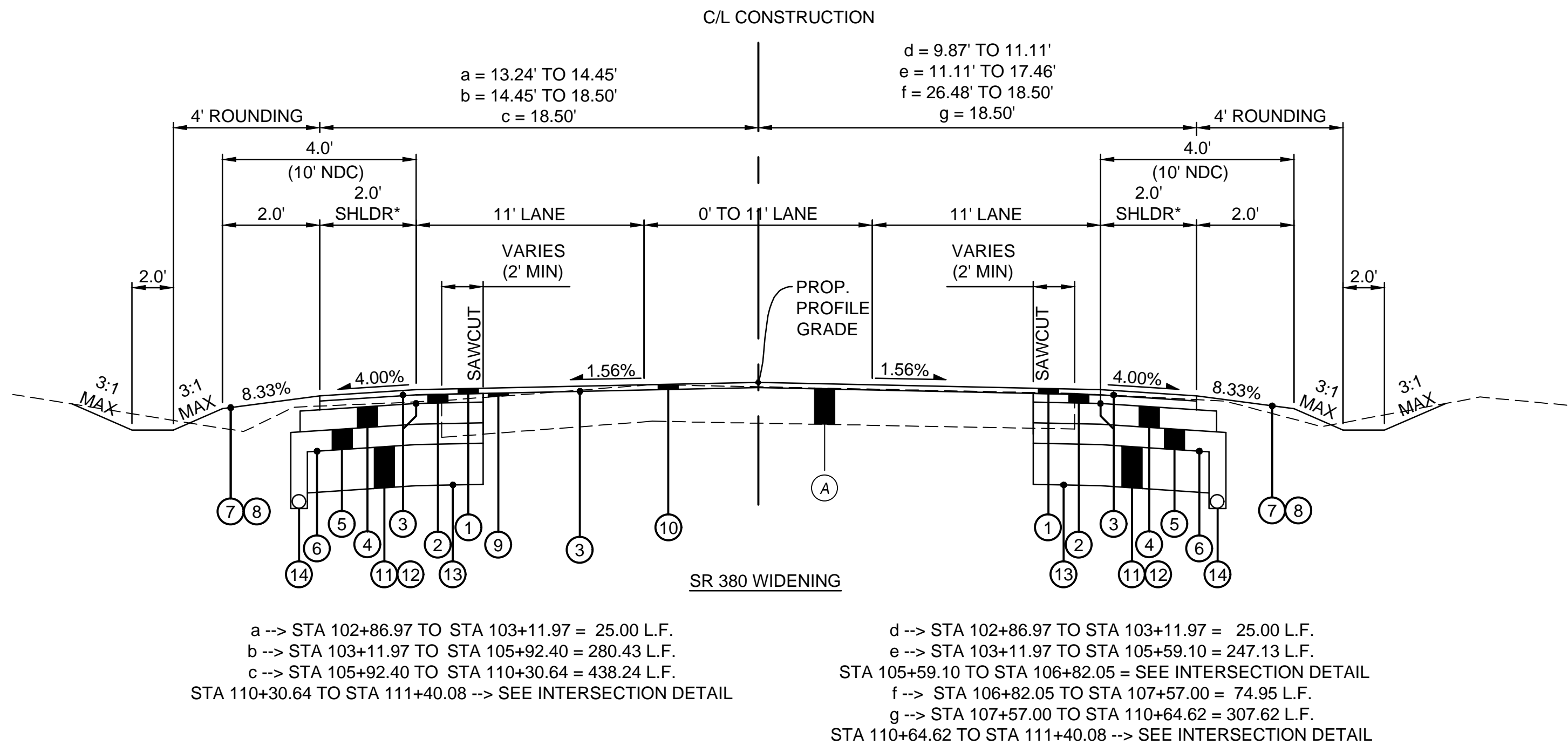
STANDARD CONSTRUCTION DRAWINGS								SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	1/19/24	MT-97.10	1/20/17			TC-12.31	04/15/22	800	01/17/2025
BP-3.2	1/18/19	MT-101.90	7/17/20			TC-41.41	07/19/19	809	01/17/2025
BP-4.1	7/19/13	MT-105.10	1/17/20			TC-52.20	01/15/21	832	07/19/2024
BP-5.1	1/17/25	MT-120.00	1/19/18			TC-65.10	01/17/14	909	01/17/2025
						TC-65.11	01/17/25		
CB-3A	7/19/24	TC-21.21	1/20/23			TC-81.22	01/17/25		
		TC-41.20	10/18/13						
DM-1.1	1/17/25	TC-42.20	10/18/13			TC-85.20	04/21/23		
DM-4.4	1/15/16	TC-71.10	4/21/23						
HW-2.1	7/15/22					HL-30.11	07/21/23		
HW-2.2	7/20/18					HL-30.22	01/17/25		

ENGINEER'S SEAL:	ENGINEER'S SEAL:



C/L S.R. 380			
STATION	DESCRIPTION	NORTHING	EASTING
102+86.97	BEGIN PROJECT	543088.29	1562752.73
105+61.17	PI	543348.67	1562838.66
110+08.53	PC	543774.33	1562976.30
111+40.08	END PROJECT	543902.41	1563005.53

C/L S.R. 73			
STATION	DESCRIPTION	NORTHING	EASTING
204+43.85	BEGIN WORK	543882.90	1563147.50
208+96.23	END WORK	543807.01	1563593.47



LEGEND:

- | | | |
|---|----------|--|
| ① | ITEM 442 | 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446) |
| ② | ITEM 442 | 2 1/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446) |
| ③ | ITEM 407 | NON-TRACKING TACK COAT 407.06-1 |
| ④ | ITEM 301 | 8" ASPHALT CONCRETE BASE, PG64-22, (449) |
| ⑤ | ITEM 304 | 6" AGGREGATE BASE |
| ⑥ | ITEM 204 | SUBGRADE COMPACTION W/PROOF ROLLING |
| ⑦ | ITEM 659 | SEEDING AND MULCHING |
| ⑧ | ITEM 653 | TOPSOIL FURNISHED AND PLACED (3" MIN.) |
| ⑨ | ITEM 442 | VARIABLE DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM TYPE B (449) |
| ⑩ | ITEM 254 | PAVEMENT PLANING, ASPHALT CONCRETE |
| ⑪ | ITEM 204 | EXCAVATION OF SUBGRADE, 14" |
| ⑫ | ITEM 204 | GRANULAR MATERIAL, TYPE C |
| ⑬ | ITEM 204 | GEOTEXTILE FABRIC |
| ⑭ | ITEM 605 | 6" BASE PIPE UNDERDRAINS |

Ⓐ EXISTING ASPHALT PAVEMENT

NOTES:

SEE CROSS SECTIONS FOR EXACT TIE-IN SLOPES

SAWCUT TO SOUND PAVEMENT

*SHOULDER WIDTH MAY VARY, SEE SHEETS 23-25 FOR DETAILS

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

TYPICAL SECTIONS

SPECIFICATIONS AND STANDARD CONSTRUCTION DRAWINGS

THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, 2023 CONSTRUCTION AND MATERIALS SPECIFICATIONS, AND THE NOTED STANDARD CONSTRUCTION DRAWINGS SHALL GOVERN THIS IMPROVEMENT.

WHEREVER THE WORD "STATE" OR DEPARTMENT OCCURS, IT IS TO MEAN CLINTON COUNTY OR THEIR REPRESENTATIVE. WHENEVER THE WORD "DIRECTOR" OR "ENGINEER" IS USED HEREIN, IT SHALL BE HELD TO MEAN THE COUNTY, OR DULY AUTHORIZED REPRESENTATIVE.

CONSTRUCTION LIMITS

THE CONTRACTOR SHALL RESTRICT ALL OF HIS ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE ACTUAL CONSTRUCTION LIMITS ARE SHOWN ON THE PLANS OR THE EXISTING OR PROPOSED R/W, WHICHEVER IS NEAREST. SHOULD THE CONTRACTOR WISH TO USE ANY AREA OUTSIDE THESE LIMITS, HE MUST SUBMIT HIS REQUEST IN WRITING TO THE ENGINEER. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA THAT THE CONTRACTOR PLANS TO USE AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. THE ENGINEER SHALL APPROVE THE REQUEST IN WRITING BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA. PRIOR TO THE BEGINNING OF WORK, THE CONTRACTOR, SUPERINTENDENT OR HIS REPRESENTATIVE, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY SHALL REVIEW AND RECORD ALL ADJACENT SITES WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS). A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF THE ADJACENT SITES WILL BE MADE. ANY AREAS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPAIRED OR REPLACED, AT THE CONTRACTOR'S EXPENSE, IN KIND OR AS DIRECTED BY THE ENGINEER.

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 CLOSURES, OR ROAD CLOSURES. THE COUNTY ENGINEER WILL FORWARD THIS INFORMATION TO THE COUNTY OFFICIAL RESPONSIBLE FOR PUBLIC NOTIFICATION. THIS OFFICIAL 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, VIA MEDIA SOURCES.

EXISTING FACILITIES

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FACILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL REPLACE THE DAMAGED PORTION AT HIS EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN SEWER FLOWS AT ALL TIMES THROUGH EXISTING FACILITIES WHICH ARE TO REMAIN IN PLACE AND THROUGH EXISTING FACILITIES TO BE REPLACED UNTIL NEW FACILITIES ARE COMPLETED AND PLACED IN USE. ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED. ALL EXISTING SEWERS 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.

MATERIALS AND WORKMANSHIP

UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW AND BOTH WORKMANSHIP AND MATERIALS SHALL BE OF THE FIRST QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF MATERIALS AND WORKMANSHIP. ALL ITEMS OF EQUIPMENT AND/OR MATERIALS PROPOSED FOR SUBSTITUTION MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR BE SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRED ENGINEERING REVISIONS, THE EXPENSE OF SUCH REVISIONS SHALL BE PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

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, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. IN ADDITION, ANY SUCH DEVICE SHALL NOT BE OPERATED AT ANY TIME 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.

PAVEMENT SAWING

ALL PAVEMENT SAWING IS INCIDENTAL TO PAVEMENT REMOVAL, CURB REMOVAL OR WALK REMOVAL AND SHALL SAWCUTTING WORK BE PAID UNDER THE ASSOCIATED REMOVAL ITEM.

PERMITS, FEES AND NOTICES

THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ANY AND ALL PERMITS AND INSPECTIONS REQUIRED FOR THE PROSECUTION OF THE WORK BY LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS.

PRE-CONSTRUCTION MEETING

FOLLOWING THE AWARD OF THE CONTRACT AND BEFORE STARTING ANY WORK, THE CONTRACTOR AND HIS SUPERINTENDENT, SHALL MEET WITH THE ENGINEER FOR A PRE-CONSTRUCTION MEETING. THE PURPOSE OF SUCH IS FOR REVIEWING THE SITE, AND ANY RESTRICTIONS AND REGULATIONS GOVERNING THE WORK.

ANY SCHEDULES, REQUESTS, PAPERS, APPROVALS, SUBMITTALS, SHOP DRAWINGS, CHANGES, ETC. AS CALLED FOR IN THE CONTRACT DOCUMENTS SHALL BE DONE AT THIS TIME UNLESS OTHERWISE DIRECTED.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE. 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 STATE. ALL EXISTING SEWERS 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 FOR THE PERTINENT 611 CONDUIT ITEMS.

WEATHER CONDITIONS

NO CONSTRUCTION SHALL BE DONE DURING STORMY, FREEZING, OR INCLEMENT WEATHER UNLESS PERMISSION IS GIVEN BY THE ENGINEER. WHENEVER WORK PROCEEDS DURING SUCH WEATHER, THE CONTRACTOR SHALL PROVIDE APPROVED FACILITIES, INCLUDING HEAT (IF REQUIRED), FOR THE PROTECTION OF ALL MATERIALS AND FINISHED WORK.

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.

COOPERATION WITH UTILITY COMPANIES

WHILE THE WORK OF THIS CONTRACT IS BEING PERFORMED, THE UTILITY COMPANIES MAY BE WORKING IN THE AREA ADJUSTING AND RESETTNG EXISTING FACILITIES. THE CONTRACTOR SHALL FULLY COOPERATE WITH UTILITY COMPANIES SO THAT THE ENTIRE WORK IS COMPLETED IN A MANNER CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. THE CONTRACTOR, UTILITIES, AND ENGINEER SHALL DISCUSS THE NECESSARY CONSTRUCTION SCHEDULES TO COMPLETE THE PROJECT AT THE PRE-CONSTRUCTION MEETING.

ALL UTILITIES WHICH ARE SHOWN OR LOCATED DURING THE COURSE OF CONSTRUCTION THAT ARE FOUND TO BE IN CONFLICT WITH THESE PLANS ARE TO BE RELOCATED OR ADJUSTED BY THE OWNER OF THE UTILITY.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE.

THE UNDERGROUND UTILITIES SHOWN ON THE PLAN HAVE BEEN LOCATED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT; BUT THEIR ACCURACY OR COMPLETENESS IS NOT GUARANTEED.

UTILITIES NOTIFICATION

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLAN.

THE OWNER OF THE UNDERGROUND FACILITY SHALL, WITHIN 48 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS), MARK THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE AND THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF THE PLANNED CONSTRUCTION.

PROTECTING EXISTING UNDERGROUND UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING, MARKING, OR OTHERWISE DESIGNATING THE LOCATIONS OF THE UNDERGROUND UTILITIES IN THE CONSTRUCTION AREAS IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH OF WHICH THEY WERE INSTALLED. THE MARKING OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO DAYS AHEAD OF PLANNED CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN THE VICINITY OF THE EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ISOLATE, BRACE, SUPPORT, SHEET, ETC. AND PROTECT THE EXISTING UTILITY FROM MOVING EITHER HORIZONTALLY OR VERTICALLY. IF SUCH MOVEMENT DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL REPAIR THE UTILITY AT HIS EXPENSE. THE CONTRACTOR MAY ELECT TO REMOVE AND RECONSTRUCT PORTIONS OF THE EXISTING UTILITY AT HIS OWN EXPENSE IF HE SO DESIRES.

SHOULD AN UNLOCATED OR AN EXTREME VARIANCE IN LOCATION OF A UTILITY BE ENCOUNTERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY FOR DIRECTIONS.

DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED AND USED BY THE ENGINEER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICING HAS BEEN PROVIDED. COOPERATION WITH THE ENGINEER IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION IS ESSENTIAL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING UTILITY. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE CONTRACTOR'S OPERATIONS, HE SHALL NOTIFY THE ENGINEER IMMEDIATELY AND REPLACE THE DAMAGED PORTION IMMEDIATELY, AND AT HIS EXPENSE.

UTILITY COORDINATION

THE FOLLOWING IS A LIST OF THE KNOWN EXISTING UTILITIES IN THE PROJECT AREA ALONG WITH THE RESPECTIVE OWNERS. THE LIST IS INCLUDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY OWNERS IN THE PROJECT AREA PRIOR TO START OF CONSTRUCTION WHETHER LISTED ON THIS PAGE OR NOT.

ELECTRIC

AES OHIO
PO BOX 1247
DAYTON, OH 45401
WILLIAM WARD
937-554-9063

WATER

WESTERN WATER CO.
3639 BENNETT RD.
MORROW, OH 45152
513-722-1682

COMMUNICATION

CHARTER
3691 TURNER ROAD
DAYTON, OH 45415
EIN WHATLEY
937-396-8591

FRONTIER

241 S NELSON AVE.
WILMINGTON OH 45177
DAVID LONGWORTH
937-283-5735

MANHOLES AND VALVES ADJUSTED TO GRADE (PRIVATELY OWNED)

ALL MANHOLES AND VALVES ENCOUNTERED IN AREAS THAT REQUIRE GRADE ADJUSTMENT WILL BE PERFORMED PRIOR TO THE APPLICATION OF THE SURFACE COURSE BY THE UTILITY OWNER. CONTACT THE UTILITY OWNER 2 WEEKS PRIOR TO WHEN THE ADJUSTMENT ARE TO BE COMPLETED.

PROTECTION OF EXISTING TREES AND VEGETATION

THE CONTRACTOR SHALL PROTECT EXISTING TREES AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING AND BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS, OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY FENCES, BARRICADES OR GUARDS AS REQUIRED TO PROTECT TREES AND VEGETATION. THE CONTRACTOR SHALL WATER TREES AND OTHER VEGETATION WITHIN THE CONSTRUCTION AREA TO MAINTAIN THEIR HEALTH DURING THE COURSE OF CONSTRUCTION OPERATIONS. NO TREES SHALL BE REMOVED UNLESS APPROVED BY THE ENGINEER. PROVIDE PROTECTION FOR ROOTS OVER 1 1/2" DIAMETER THAT ARE CUT DURING CONSTRUCTION OPERATIONS. COAT AND CUT FACES WITH AN EMULSIFIED ASPHALT OR OTHER ACCEPTABLE COATING, ESPECIALLY FOR MUTILATED OR HORTICULTURE USE ON CUT OR DAMAGED PLANT TISSUES. TEMPORARILY COVER ALL EXPOSED ROOTS WITH WET BURLAP TO PREVENT ROOTS FROM DRYING OUT. PROVIDE EARTH COVER AS SOON AS POSSIBLE.

THE CONTRACTOR SHALL REPAIR OR REPLACE TREES AND VEGETATION WHICH ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER ACCEPTABLE TO THE ENGINEER. ALL TREES WHICH CANNOT BE REPAIRED AND RESTORED TO FULL-GROWTH STATUS, AS DETERMINED BY A TREE SURGEON, SHALL BE REPLACED.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE CONTRACTOR SHALL PERFORM THE NECESSARY PRECAUTIONS TO AVOID EXCESSIVE SOIL EROSION AND THE RUNOFF OF SEDIMENT INSIDE AND DOWNSTREAM OF THE PROJECT TO THE SATISFACTION OF THE ENGINEER. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, ERECTION OF SILT FENCE (SF) ALONG THE PERIMETER OF THE CONSTRUCTION LIMITS AND PLACEMENT OF FILTER BARRIERS (FB) AS DITCH CHECKS. DITCH CHECKS SHALL BE PLACED AT A MAXIMUM SPACING OF 50 FEET ALONG ALL PROPOSED DITCHES. COST FOR SSB AND / OR FB DITCH CHECKS SHALL BE PAID FOR UNDER ITEM 207, FILTER FABRIC DITCH CHECK.

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 SEDIMENT BASINS/DAMS, PERIMETER FILTER FABRIC FENCE, AND DITCH CHECKS SHALL BE CONCURRENT WITH THE CLEARING AND GRUBBING AND/OR GRADING OPERATIONS. ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

AREAS TO REMAIN DORMANT FOR MORE THAN 45 DAYS SHOULD BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION CONTROL MEASURES. COST FOR TEMPORARY SEEDING AND MULCHING SHALL BE INCIDENTAL TO THE OVERALL CONTRACT.

EXAMINATION OF THE SITE

THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE OF THE PROPOSED WORK, THE PLANS AND SPECIFICATIONS. THE SUBMISSION OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS MADE SUCH EXAMINATION AND IS SATISFIED AS TO THE CONDITIONS TO BE ENCOUNTERED IN PERFORMING THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

DOWN TIME DUE TO FIELD CONFLICTS

DURING THE CONSTRUCTION ACTIVITIES OF THIS PROJECT, THERE MAY BE TIMES WHEN THE CONSTRUCTION IN SOME AREAS MAY NEED TO BE SUSPENDED PENDING FEED BACK ON, OR A RESOLUTION OF AN ISSUE WITH THE OWNER AND/ OR ENGINEER. THE CONTRACTOR, IN THIS CASE SHALL MOVE THE CREWS AND EQUIPMENT TO WORK IN A DIFFERENT AREA OR ON A DIFFERENT TASK. COST OF MOBILIZING AND DEMOBILIZING OF THE CONTRACTORS WORK CREWS AND EQUIPMENT INCLUDING ANY " DOWNTIME" SHALL BE INCIDENTAL TO THE OVERALL BID PRICE FOR THIS PROJECT.

RESTORATION

THE CONTRACTOR SHALL PROVIDE FOR PROTECTION OF THE FOLLOWING: EXISTING STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, RE-SEEDING/RE-SODDING, REMOVAL OF TREES, RESTORATION OF AGRICULTURAL LAND, THE MAINTENANCE OF THE CONSTRUCTION AREA DURING PROGRESS OF THE WORK AND THE COMPLETE RESTORATION OF THE CONSTRUCTION AREA TO ITS ORIGINAL CONDITION AT THE COMPLETION OF THE WORK. THE CONTRACTOR SHALL CONTINUOUSLY CARRY ON WITH THE FINAL RESTORATION OF THE CONSTRUCTION AREA AFTER THE BACKFILLING IS COMPLETED, AND HE SHALL PROCEED TO RESTORE TO ITS ORIGINAL CONDITION ALL STREETS, DRIVEWAYS, SIDEWALKS, CURBS, GUTTERS, STRUCTURES, AND ALL AREAS THAT WERE DAMAGED, DISTURBED, OR OCCUPIED BY THE CONTRACTOR IN CONNECTION WITH ANY PHASE OF THE WORK.

PAVEMENTS, TREES, SHRUBS, FENCES, POLES, OR OTHER PROPERTY AND SURFACE STRUCTURES WHICH HAVE BEEN DAMAGED, REMOVED, OR DISTURBED BY THE CONTRACTOR, WHETHER DELIBERATELY OR THROUGH FAILURE TO CARRY OUT THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, STATE LAWS, MUNICIPAL ORDINANCES, THE SPECIFIC DIRECTION OF THE ENGINEER, OR THROUGH FAILURE TO EMPLOY USUAL AND REASONABLE SAFEGUARDS SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

ALL TEMPORARY SIGNS, SPRINKLER SYSTEMS, LANDSCAPING, ORNAMENTAL FENCING, ETC., LOCATED WITHIN THE PROJECT LIMITS MUST BE REPLACED OR RELOCATED UPON COMPLETION OF THE CONSTRUCTION.

SECURITY AND PROTECTION PROVISIONS

THE TYPES OF TEMPORARY SECURITY AND PROTECTION PROVISIONS REQUIRED INCLUDE, BUT NOT BY WAY OF LIMITATION, BARRICADES, WARNING SIGNS/LIGHTS, SITE ENCLOSURE FENCE, ETC. AND SIMILAR PROVISIONS INTENDED TO MINIMIZE PROPERTY LOSSES, PERSONAL INJURIES AND CLAIMS FOR DAMAGE TO THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE ANY PROTECTION SERVICES AND SYSTEMS IN COORDINATION WITH ACTIVITIES AND IN A MANNER TO ACHIEVE 24-HOUR, 7-DAY PER-WEEK EFFECTIVENESS.

TRENCHES THAT ARE OPEN SHALL NOT REMAIN UNPROTECTED AT ANY TIME. DURING NON-WORKING HOURS, TRENCHES SHALL BE CLOSED AND ANY EQUIPMENT ON THE SITE SHALL BE ADEQUATELY FENCED.

SHOP DRAWINGS

THE PROJECT SHALL MEET THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND DETAILS OUTLINED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW ONLY FOR DEVIATIONS FROM WHAT IS SPECIFIED ON THESE PLANS. SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR REVIEW UNDER THESE CONDITIONS SHALL CLEARLY IDENTIFY THE AREAS THAT DIFFER FROM THE STANDARDS CALLED OUT IN THE CONSTRUCTION DOCUMENTS AND/OR DETAILS.

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

GENERAL NOTES

NOT FOR CONSTRUCTION



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ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE (1) LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, EXCEPT ONE LANE OF TWO WAY TRAFFIC MAYBE MAINTAINED DURING WORK HOURS.

TRAFFIC SHALL BE CONTROLLED WITH TEMPORARY TRAFFIC CONTROL DEVICES ARRANGED AS INDICATED IN THE O MUTCD, THE APPLICABLE STANDARD DRAWINGS FOR MAINTENANCE OF TRAFFIC, AND THE DETAILS PROVIDED HEREIN.

THE CONTRACTOR SHALL PROVIDE, ERECT, AND SUBSEQUENTLY REMOVE ALL WARNING AND INFORMATIONAL SIGNS AND OTHER TRAFFIC CONTROL DEVICES NECESSARY IN MAINTAINING TRAFFIC. TRAFFIC CONTROL DEVICES SHALL E SET UP PRIOR TO THE E START OF CONSTRUCTION AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT BY THE CONTRACTOR. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED AND SHALL BE IMMEDIATELY REMOVED THEREAFTER.

WHERE OPERATIONS ARE PERFORMED IN STAGES, THERE SHALL BE IN PLACE ONLY THOSE DEVICES THAT APPLY TO THE CONDITIONS DURING THAT STAGE OF PROGRESS ALL SIGNS WITH MESSAGES WHICH DO NOT APPLY DURING A CERTAIN PERIOD SHALL BE COVERED OR SET ASIDE OUT OF VIEW OF TRAFFIC.

UNLESS OTHERWISE APPROVED BY THE ENGINEER, WORK SHALL BE LIMITED TO ONE SIDE/SECTION AT A TIME. UNLESS DETAILED HEREIN OR OTHERWISE APPROVED BY THE ENGINEER, ALL NORMAL TRAFFIC MOVEMENTS FOR CROSS STREET INTERSECTIONS ARE TO BE MAINTAINED AT ALL TIMES. A MINIMUM LANE WIDTH OF TEN (10) FEET SHALL BE MAINTAINED AT ALL TIMES. AS PER THE O MUTCD, OPPOSING TRAFFIC SHALL BE SEPARATED BY A RETRO-REFLECTIVE CENTERLINE OR APPROPRIATELY SPACED DRUMS AT ALL TIMES.

TRAFFIC IS TO BE MAINTAINED IN A UNIFORM PATTERN THOUGH THE ENTIRE LENGTH OF THE PROJECT AND SHALL NOT BE SUBJECTED TO CONSTANT LANE SHIFTS.

ACCESS TO ALL ABUTTING BUSINESS AND RESIDENCES, AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE O MUTCD SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

THE CONTRACTOR SHALL SUBMIT TO ODOT A DESCRIPTION OF THE PROPOSED SEQUENCE OF CONSTRUCTION OPERATIONS, LANE CLOSURES, AND DRIVE ACCESS FOR APPROVAL PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING 48 HOURS IN ADVANCE OF ANY STREET CLOSURE OR LANE CLOSURE:

CLINTON COUNTY SHERIFF'S DEPARTMENT, PHONE 937.382.1611

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EQUIPMENT AND INFRASTRUCTURE FOR THE DURATION OF THE PROJECT.

TRAFFIC SHALL BE MAINTAINED AT ALL INTERSECTIONS AND DRIVES AT ALL TIMES AND SHALL BE CONTROLLED WITH FLAGGERS AND TRAFFIC CONTROL DEVICES AS REQUIRED AND SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. UNLESS OTHERWISE SPECIFIED, A SEPARATE LEFT TURN STORAGE LANE WITH A MINIMUM OF FIFTY (50) FEET IN LENGTH IS TO BE PROVIDED AT ALL TIMES AT APPROPRIATE INTERSECTIONS BY MEANS OF CHANNELIZING DEVICES.

THE NORMAL OPERATION OF ALL TRAFFIC SIGNALS SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE APPROVED IN ADVANCE BY THE ENGINEER. CARE SHALL BE EXERCISED NOT TO PERFORM ANY WORK WHICH MIGHT AFFECT THE OPERATION OF TRAFFIC SIGNAL DETECTORS OR UNDERGROUND WIRING UNTIL ARRANGEMENTS HAVE BEEN MADE WITH ODOT DISTRICT 8.

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.

PRIOR TO IMPLEMENTING EACH PHASE, AS DETAILED ON THE MAINTENANCE OF TRAFFIC SEQUENCE TABLE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH LOCAL BUSINESSES AND OTHER STAKEHOLDERS IMPACTED DURING THE PHASE. THE CONTRACTOR SHALL CONTINUOUSLY UPDATE THESE STAKEHOLDERS AS TO THE LOCATION OF WORK AND ANTICIPATED COMPLETION DATE.

ITEM 614 - MAINTAINING TRAFFIC (CONT.)

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

CHRISTMAS	FOURTH OF JULY	RENAISSANCE FESTIVAL
NEW YEARS	LABOR DAY	
MEMORIAL DAY	THANKSGIVING	

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)	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

REFERENCE OTHER CONTRACT DOCUMENTS (SPECIAL CONDITIONS) FOR ADDITIONAL SPECIAL EVENTS AFFECTED BY THIS PROJECT.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$50 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

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

NOTIFICATION OF TRAFFIC RESTRICTIONS
THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE CITY. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

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

NOTIFICATION TIME TABLE

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

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

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

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE O MUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE O MUTCD, 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 A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.

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

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

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

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

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

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

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

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

NOT FOR CONSTRUCTION

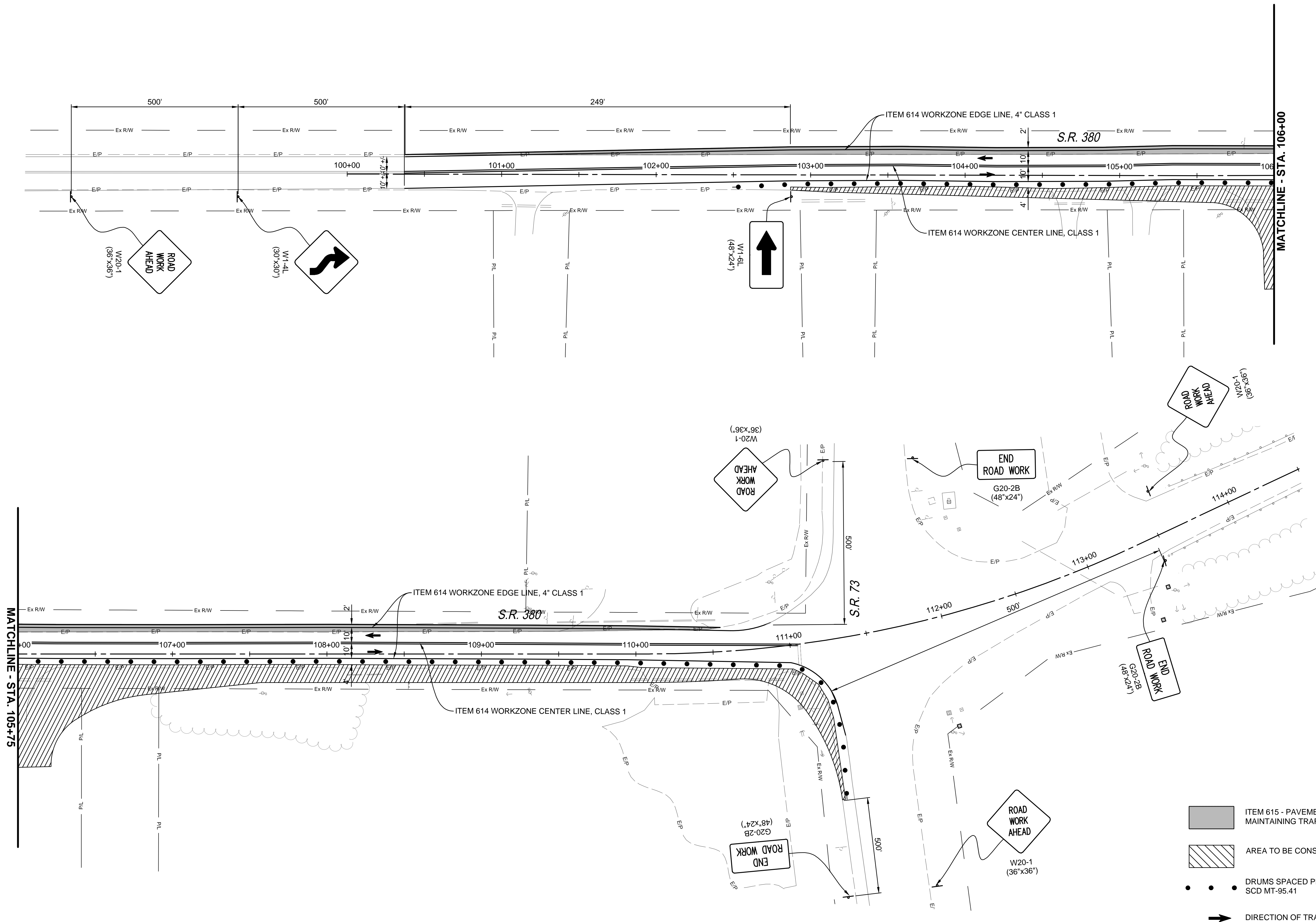
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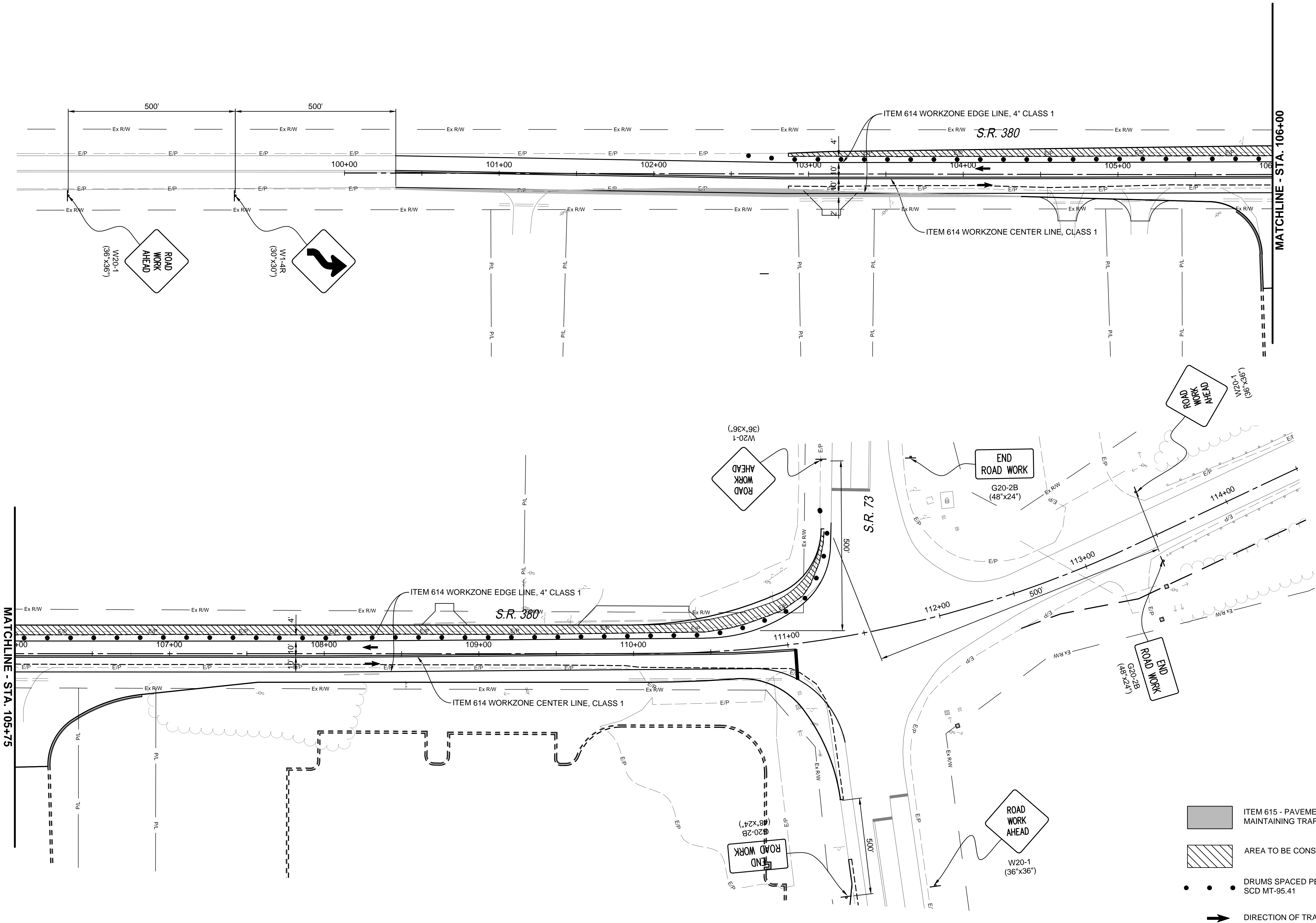



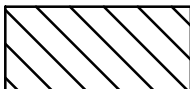


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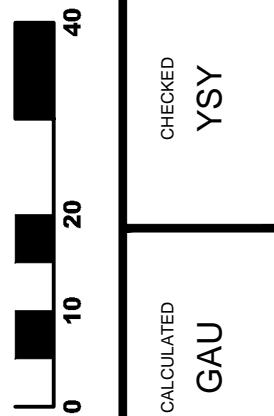
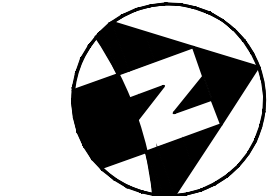


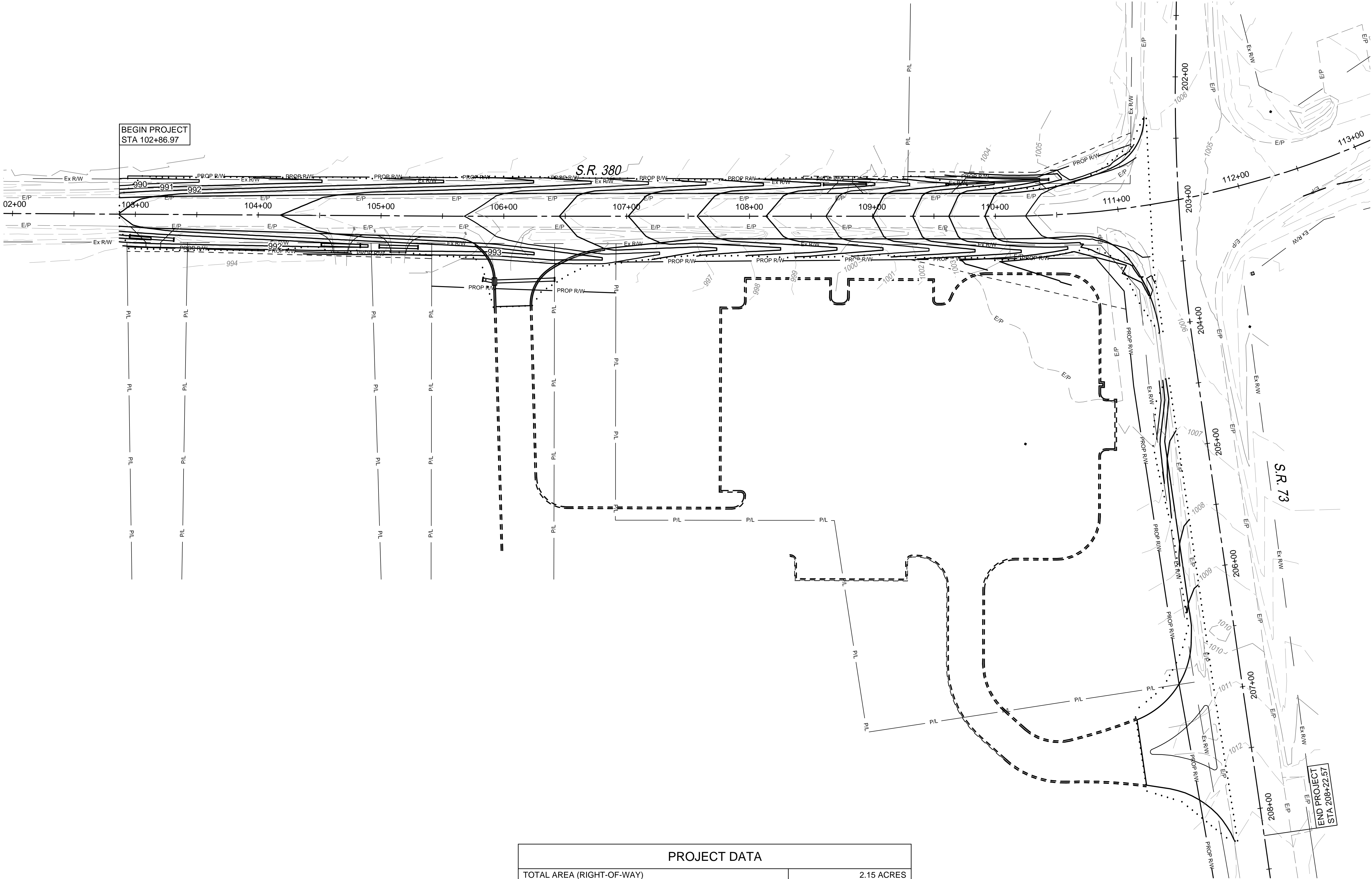


-  ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, TYPE A
-  AREA TO BE CONSTRUCTED
-  DRUMS SPACED PER ODOT SCD MT-95.41
-  DIRECTION OF TRAFFIC

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS
MAINTENANCE OF TRAFFIC - PHASE 2

NOT FOR
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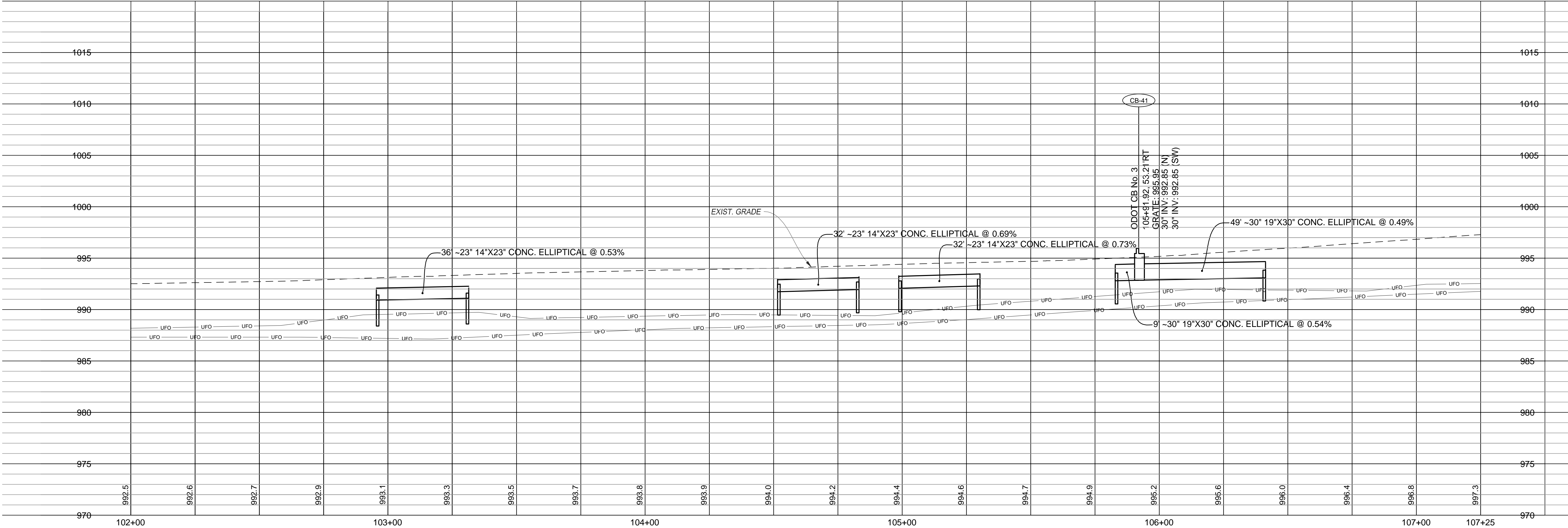
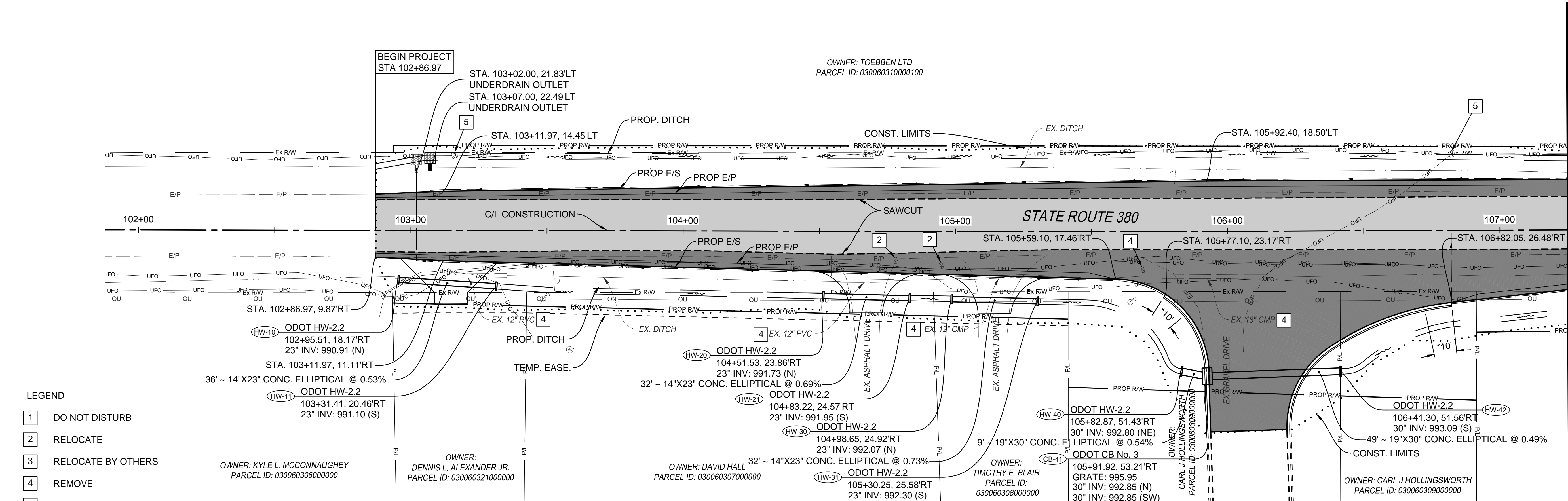




PROJECT DATA	
TOTAL AREA (RIGHT-OF-WAY)	2.15 ACRES
PROJECT EARTH DISTURBED AREA	1.12 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA	0.00 ACRES
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE	0.73
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE	0.79
IMMEDIATE RECEIVING WATERS	LITTLE CREEK
SUBSEQUENT RECEIVING WATERS	TODD FORK
PRE-CONSTRUCTION PAVED AREA	1.25 ACRES
POST-CONSTRUCTION PAVED AREA	1.54 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA	1.14 ACRES

PROJECT DESCRIPTION

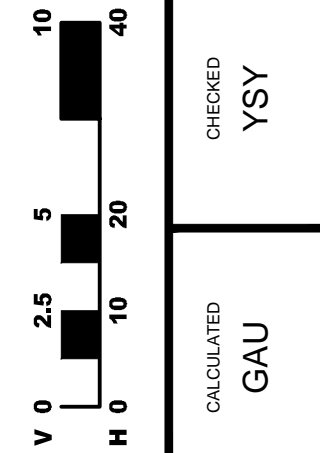
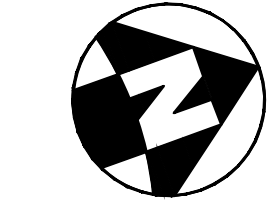
THIS PROJECT INCLUDES IMPROVEMENTS NEAR THE INTERSECTION OF SR 380 AND SR 73. THE PROJECT INVOLVES WIDENING OF APPROXIMATELY 800 LINEAL FEET OF ROADWAY ALONG SR 380 AND APPROXIMATELY 400 LINEAL FEET OF IMPROVEMENTS ALONG SR 73 TO PROVIDE NEW ACCESS WITH ASSOCIATED TURN LANES FOR A PROPOSED SERVICE STATION. ASSOCIATED IMPROVEMENTS INCLUDE THE ADDITION AND/OR MODIFICATION OF PAVEMENT MARKINGS, SIGNAGE, TRAFFIC SIGNAL AND STORM SEWER.



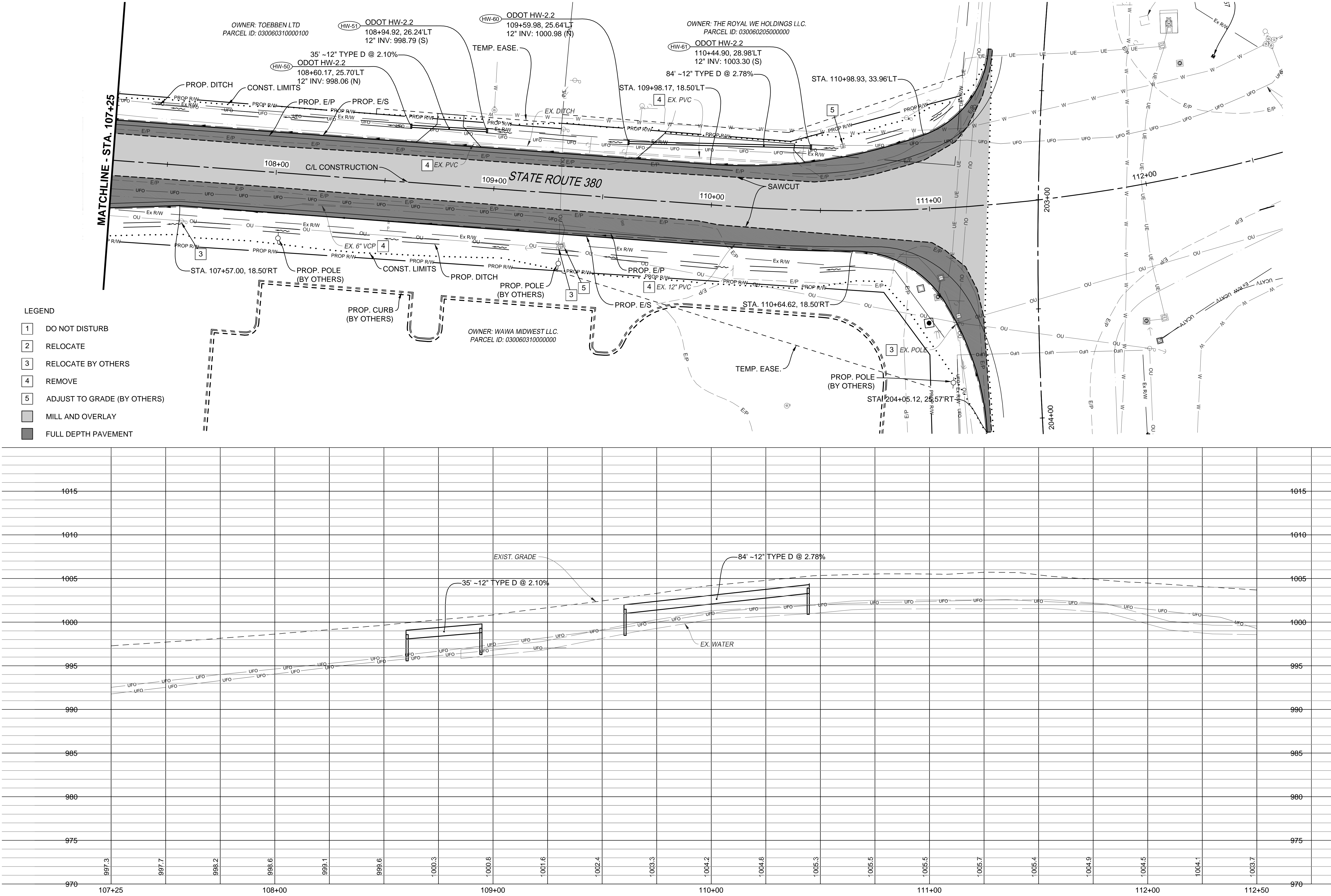
NOTE:
*TAPER CURB HEIGHT 0" TO 6".

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS
PLAN AND PROFILE 380 - STA 102+00.00 TO STA 107+25.00

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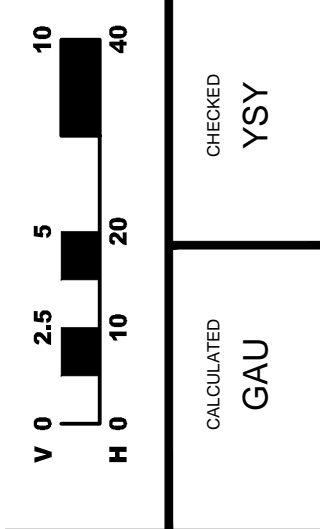
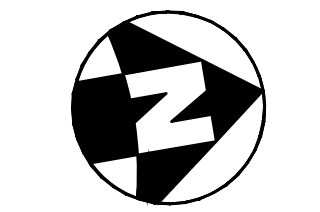


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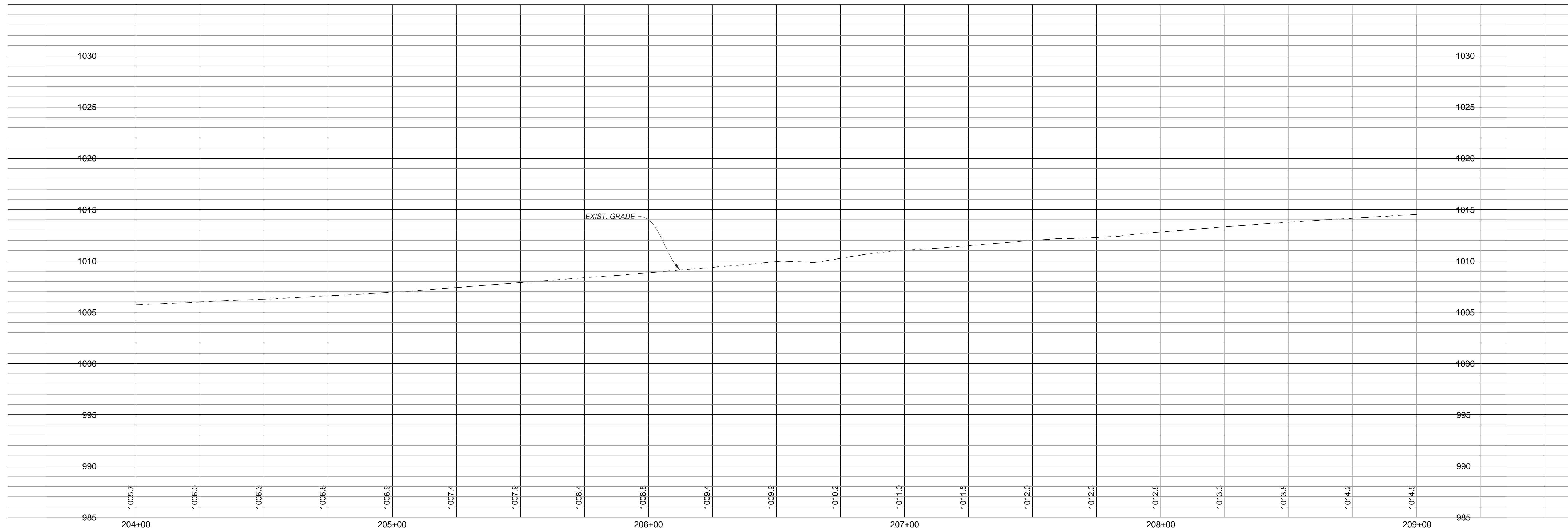
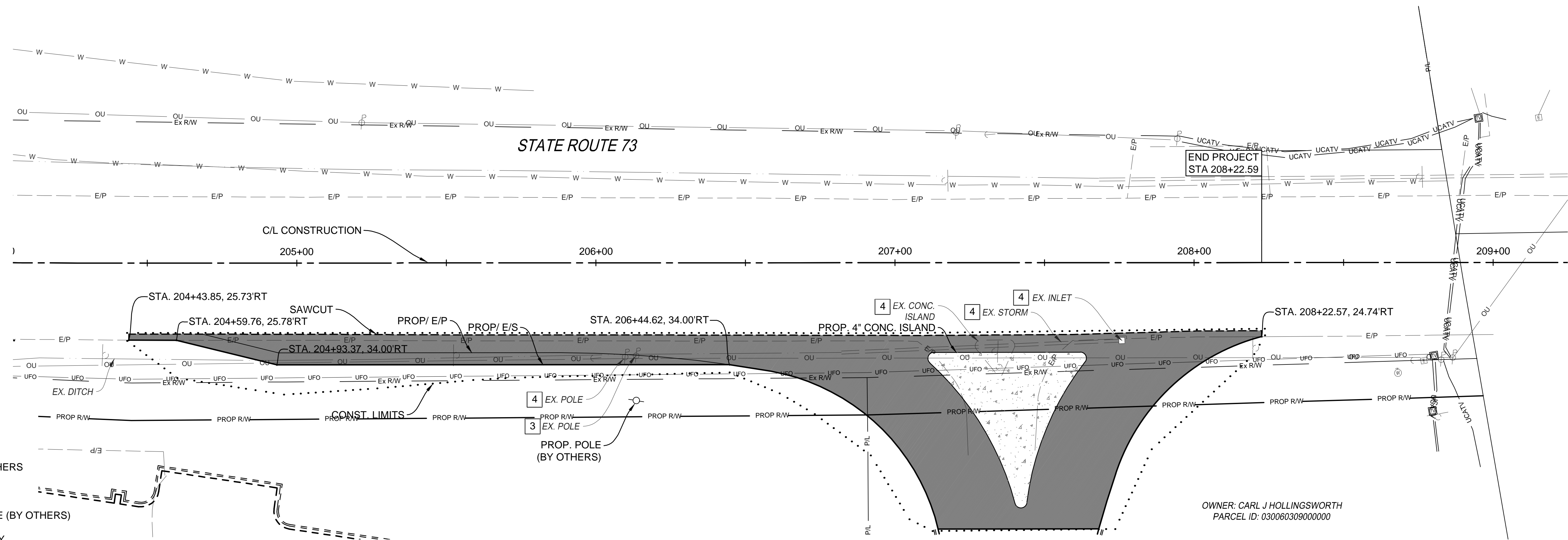
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PLAN AND PROFILE 380 - STA 107+25.00 TO STA 112+50.00

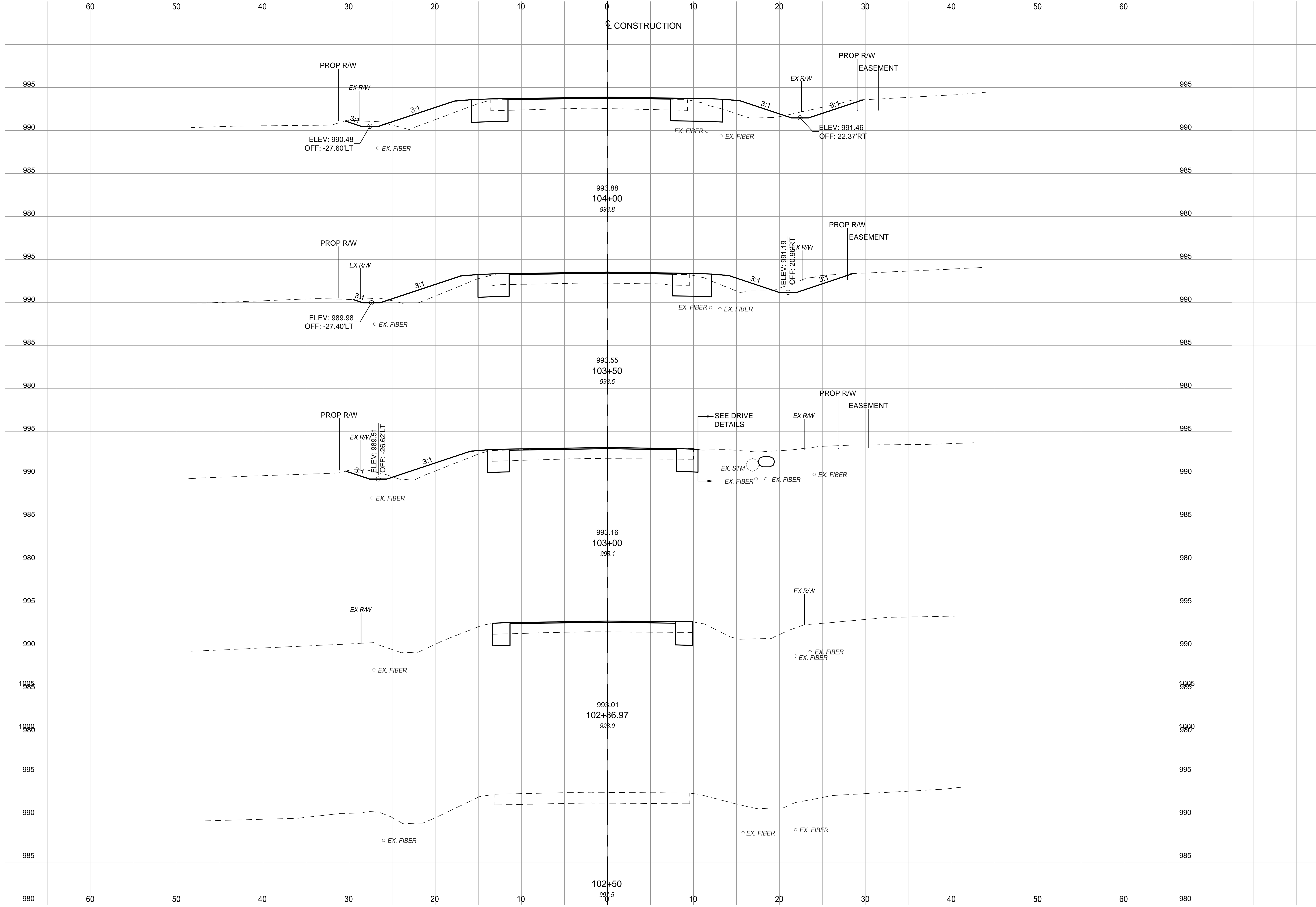
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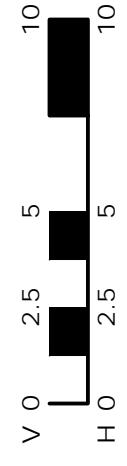
S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

CROSS SECTIONS - 380 - STA 102+86.97 TO STA 104+50

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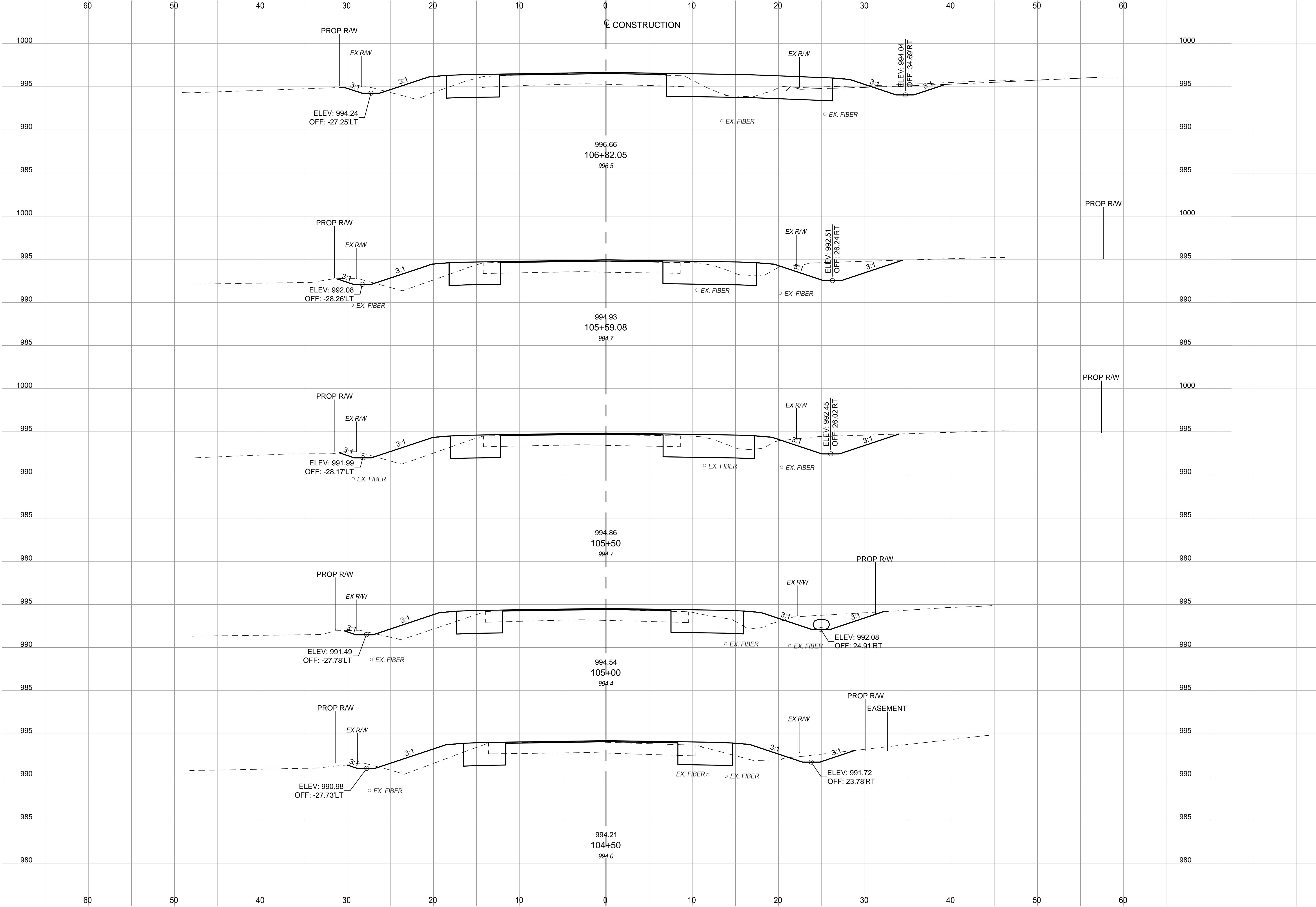
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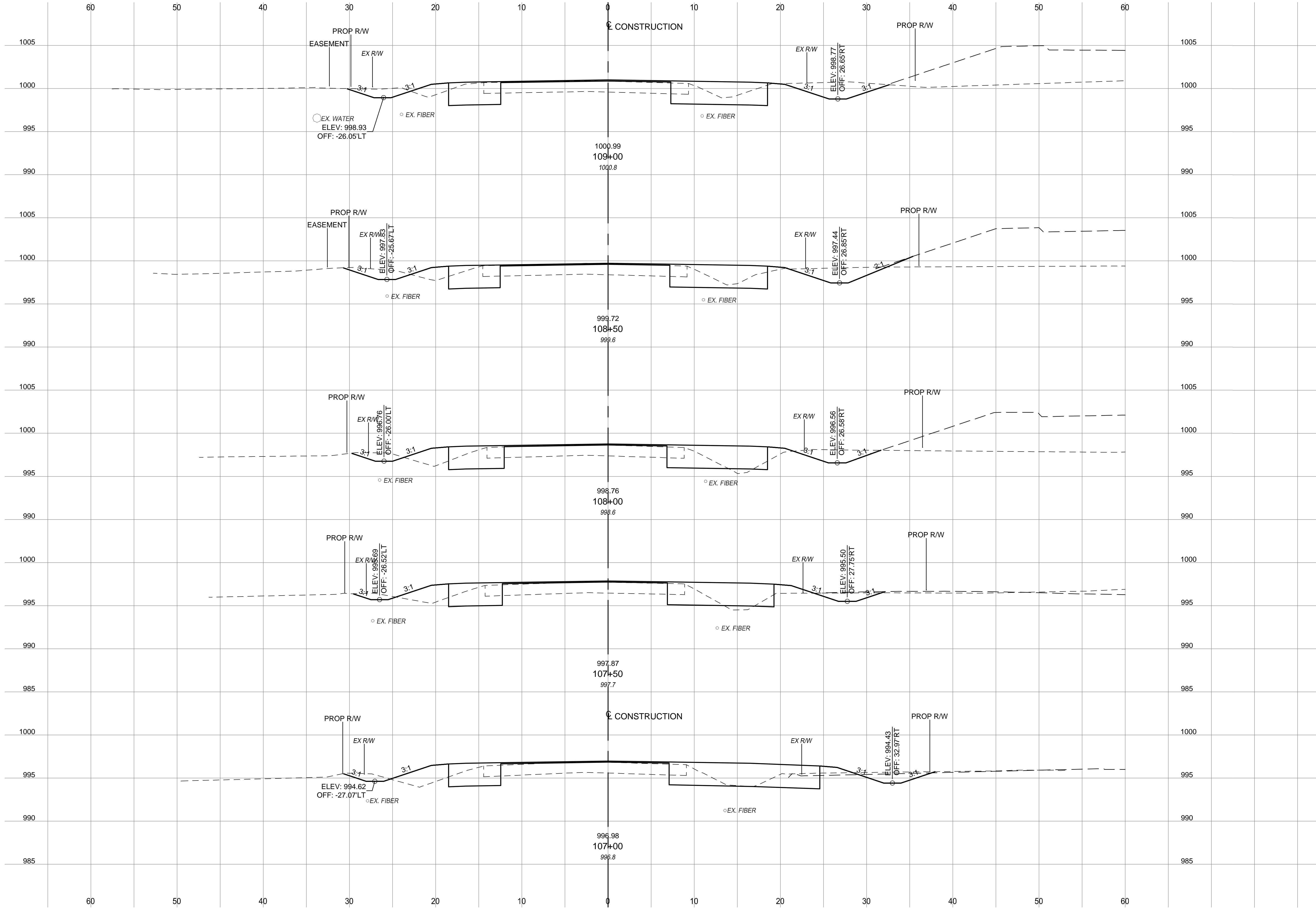
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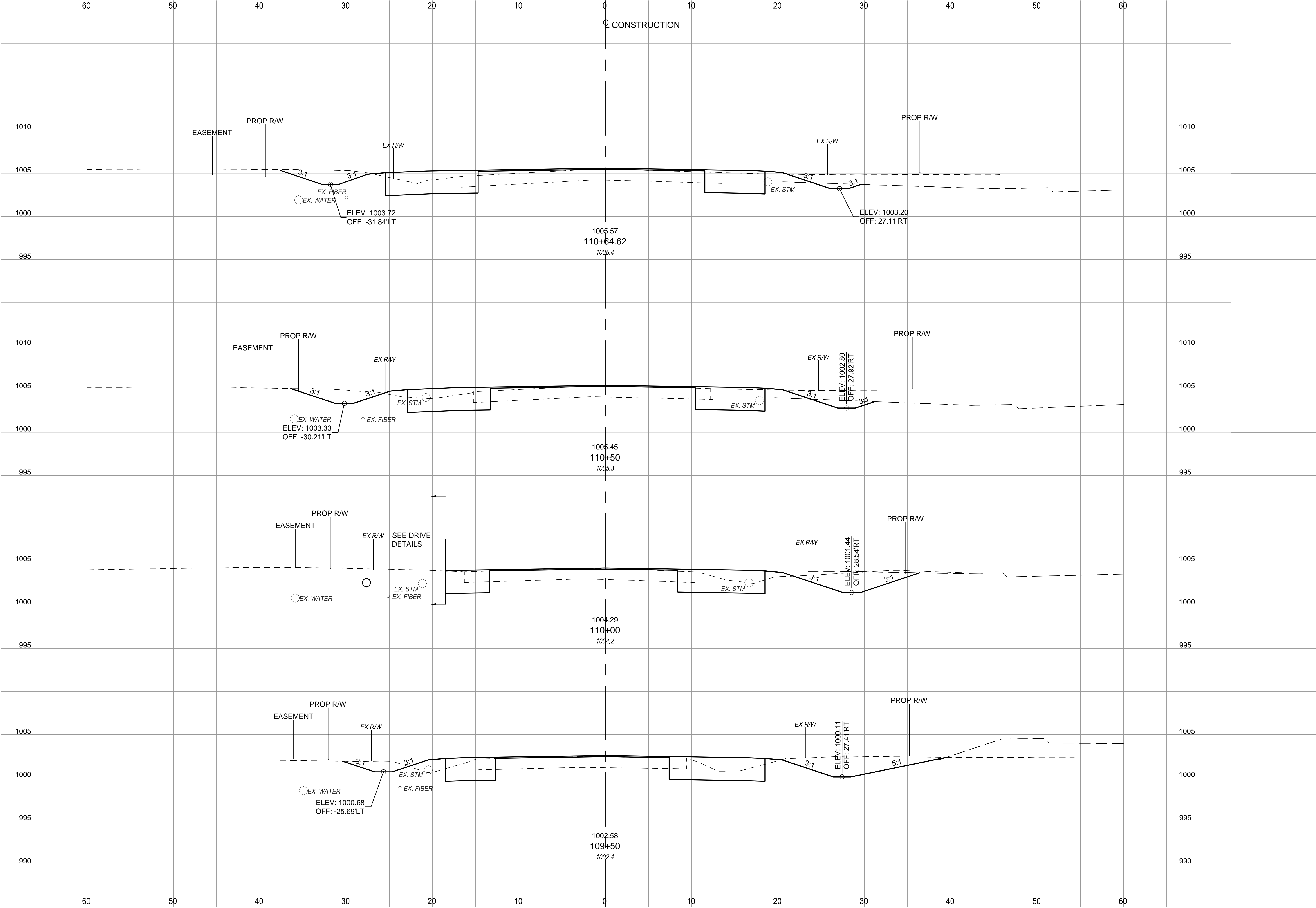
CROSS SECTIONS - 380 - STA 105+00 TO STA 107+00

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S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

CROSS SECTIONS - 380 - STA 110+00 TO STA 110+64.62

INSPIRED PEOPLE CREATIVE DESIGN TRANSFORMING COMMUNITIES

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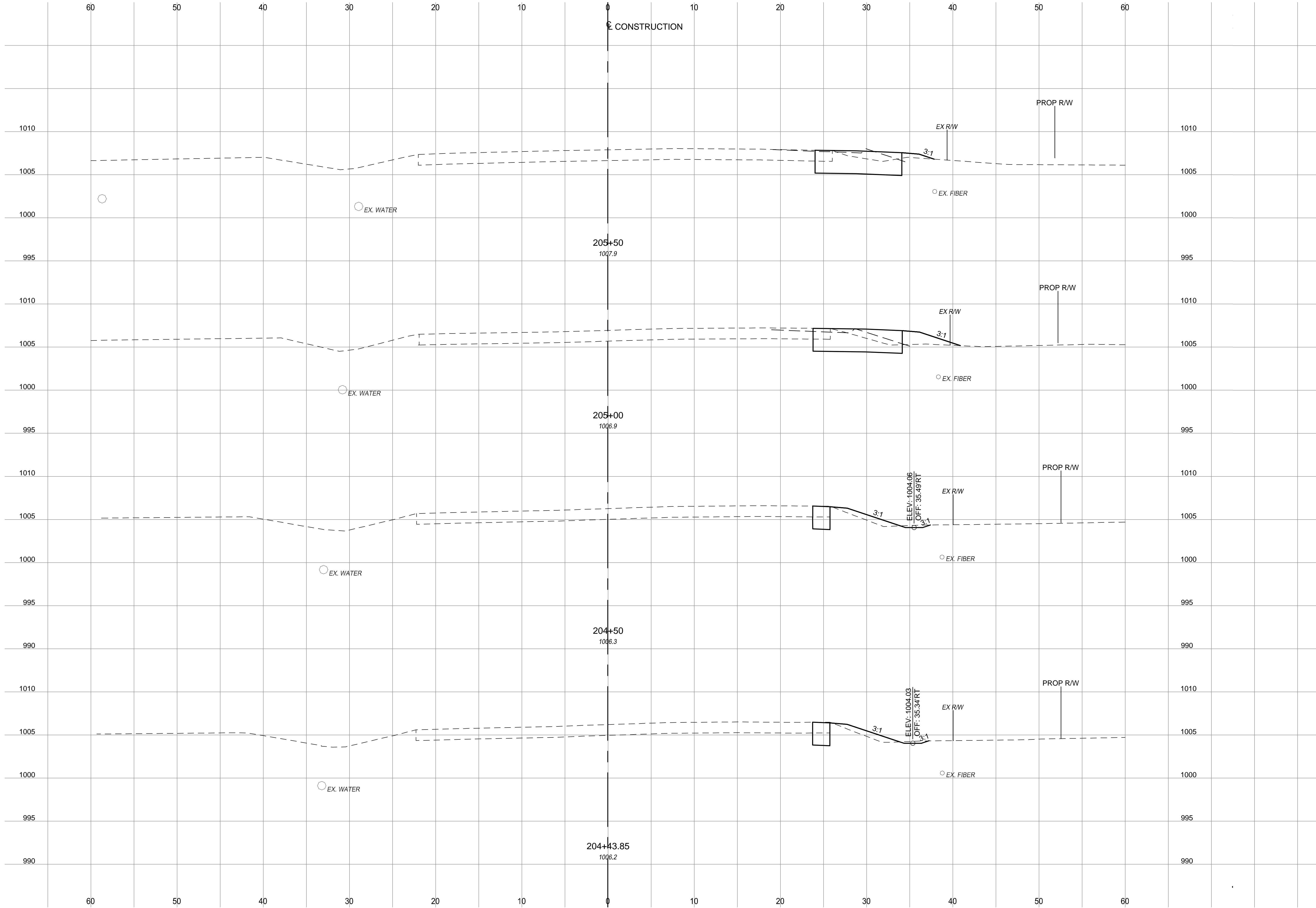
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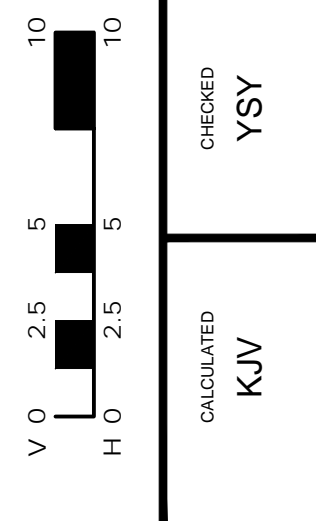
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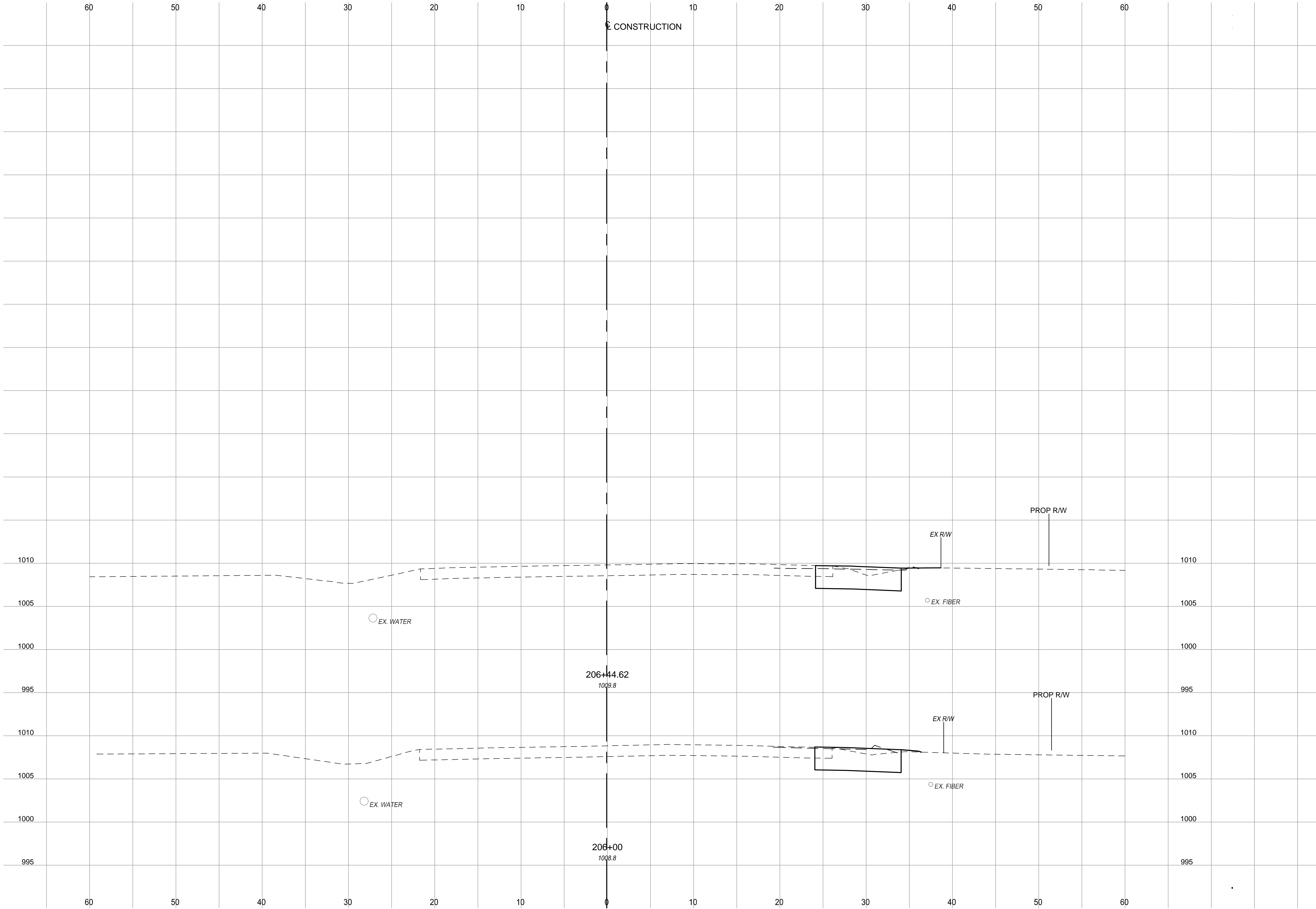


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S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

CROSS SECTIONS - 73 - STA 204+83.85 TO STA 205+50





S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

CROSS SECTIONS - 73 - STA 206+00 TO STA 206+44.62

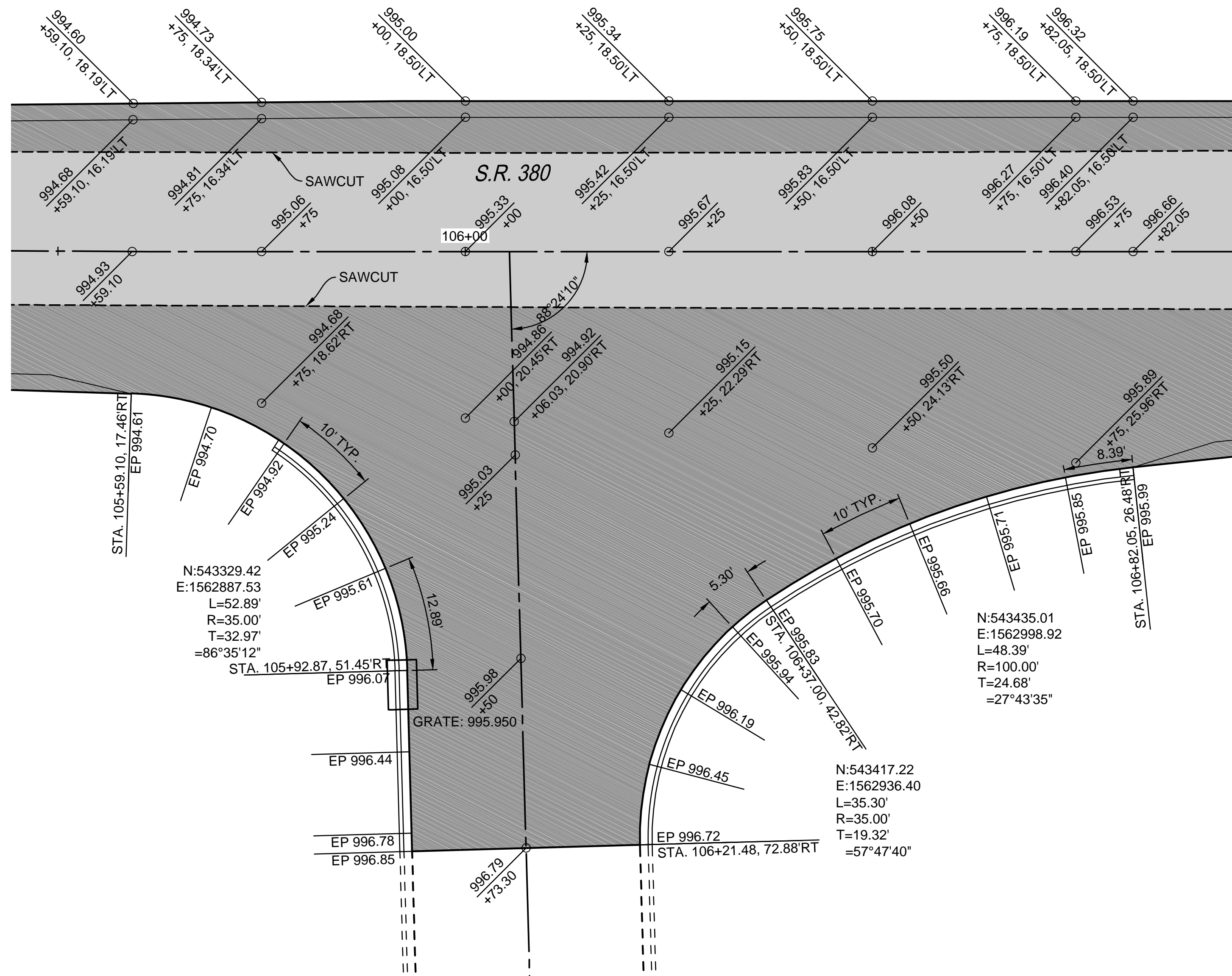
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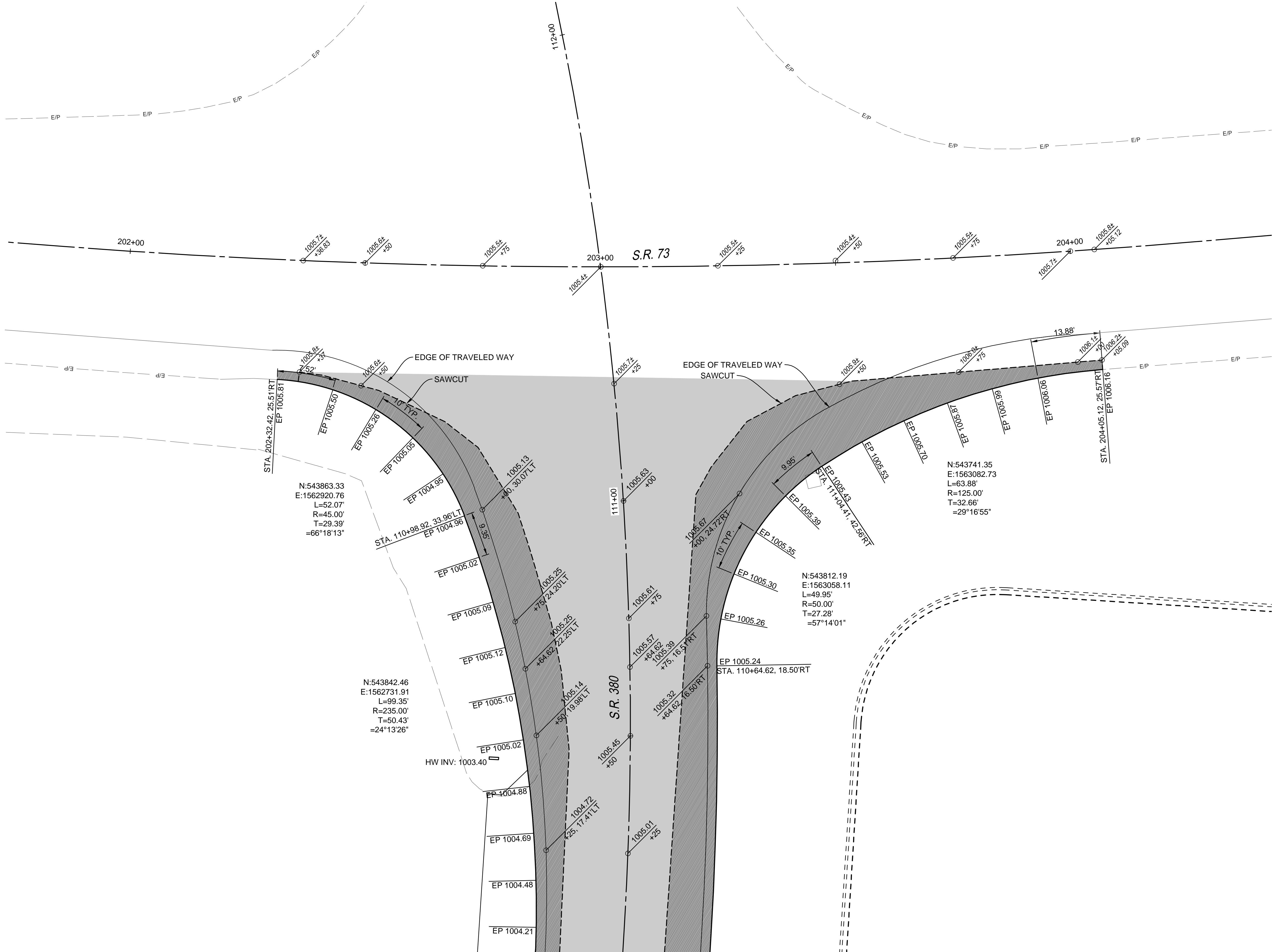
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Category	Value
CALCULATED KJV	2.5
CHECKED YSY	8.5









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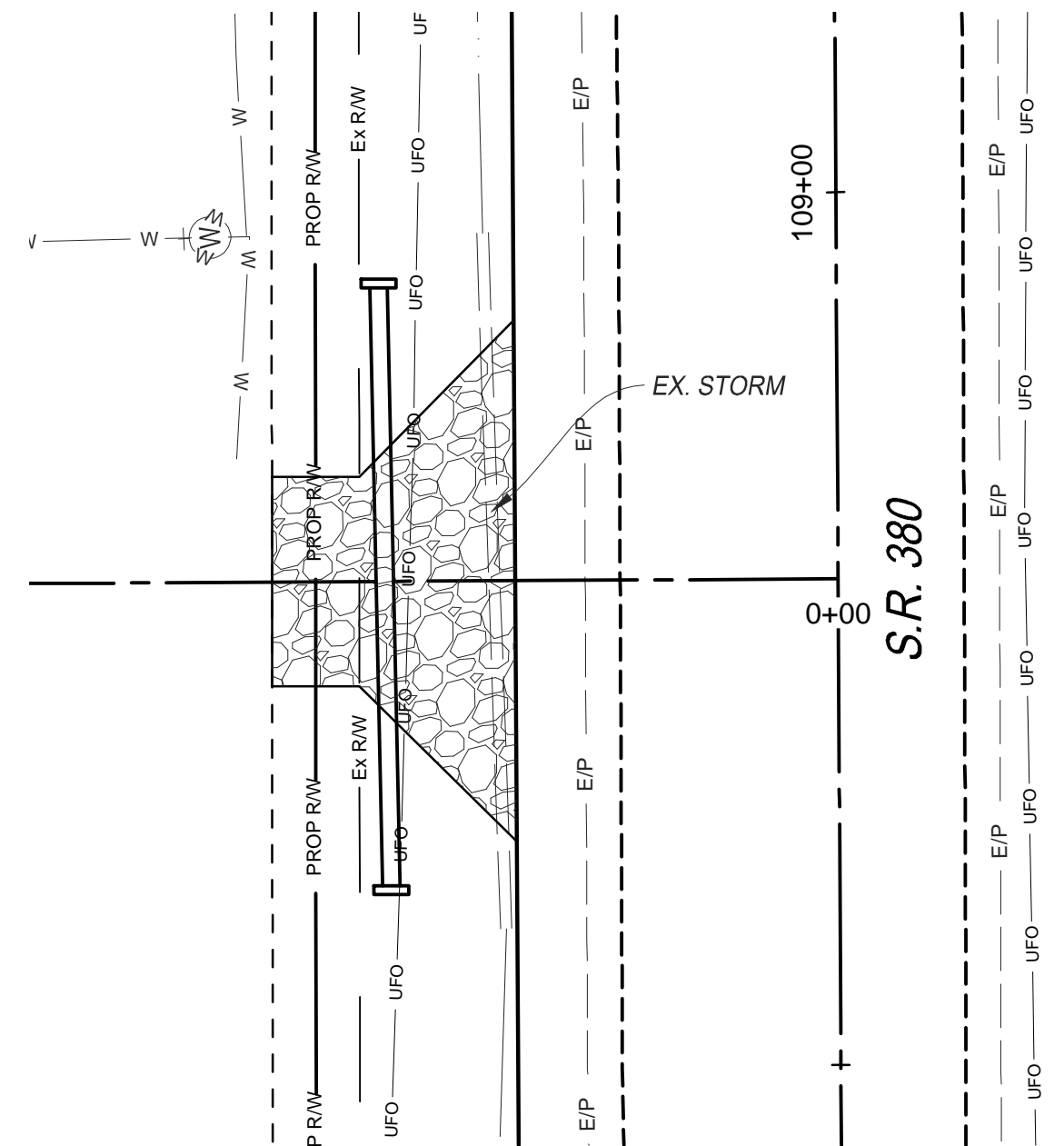
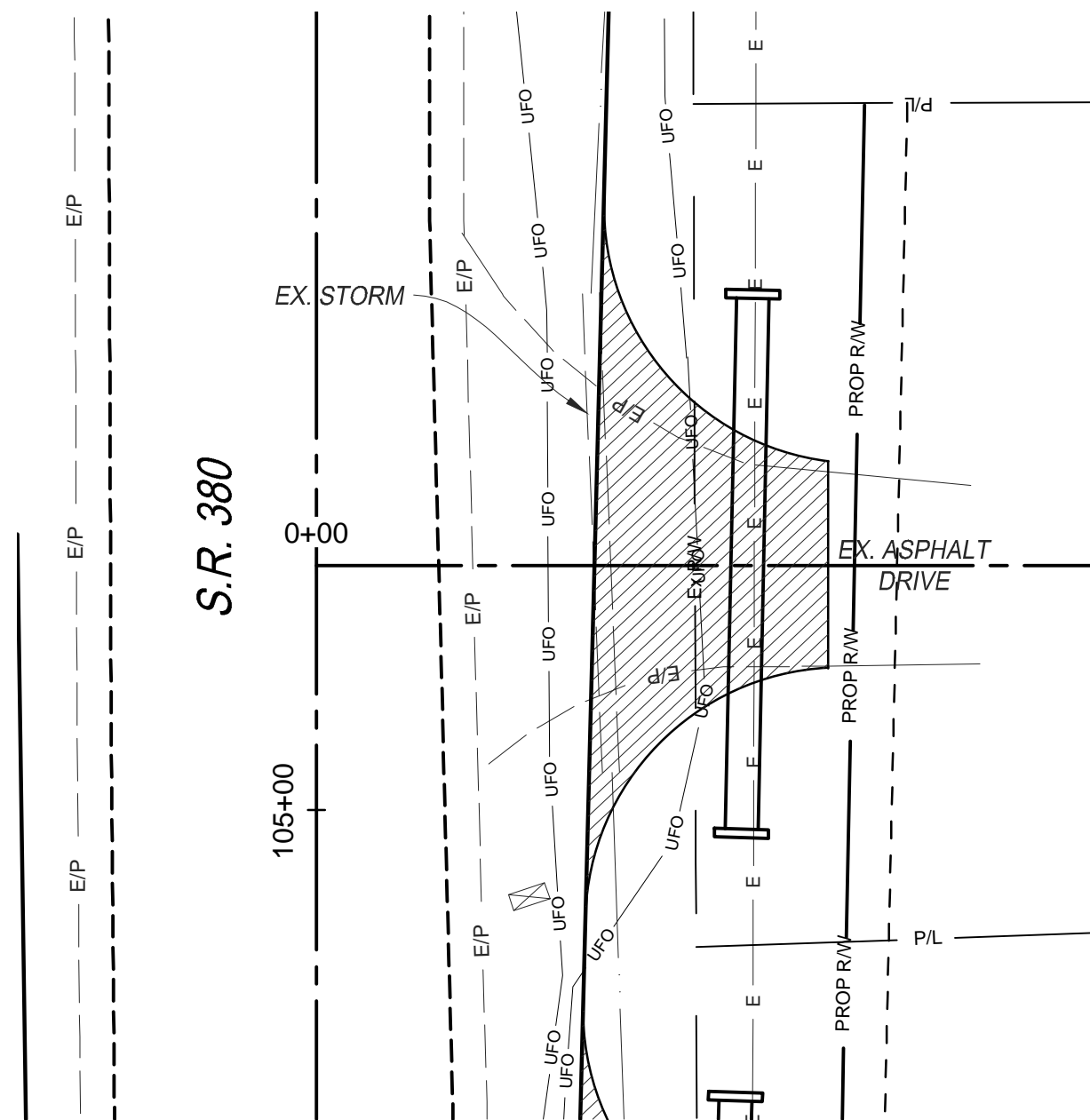
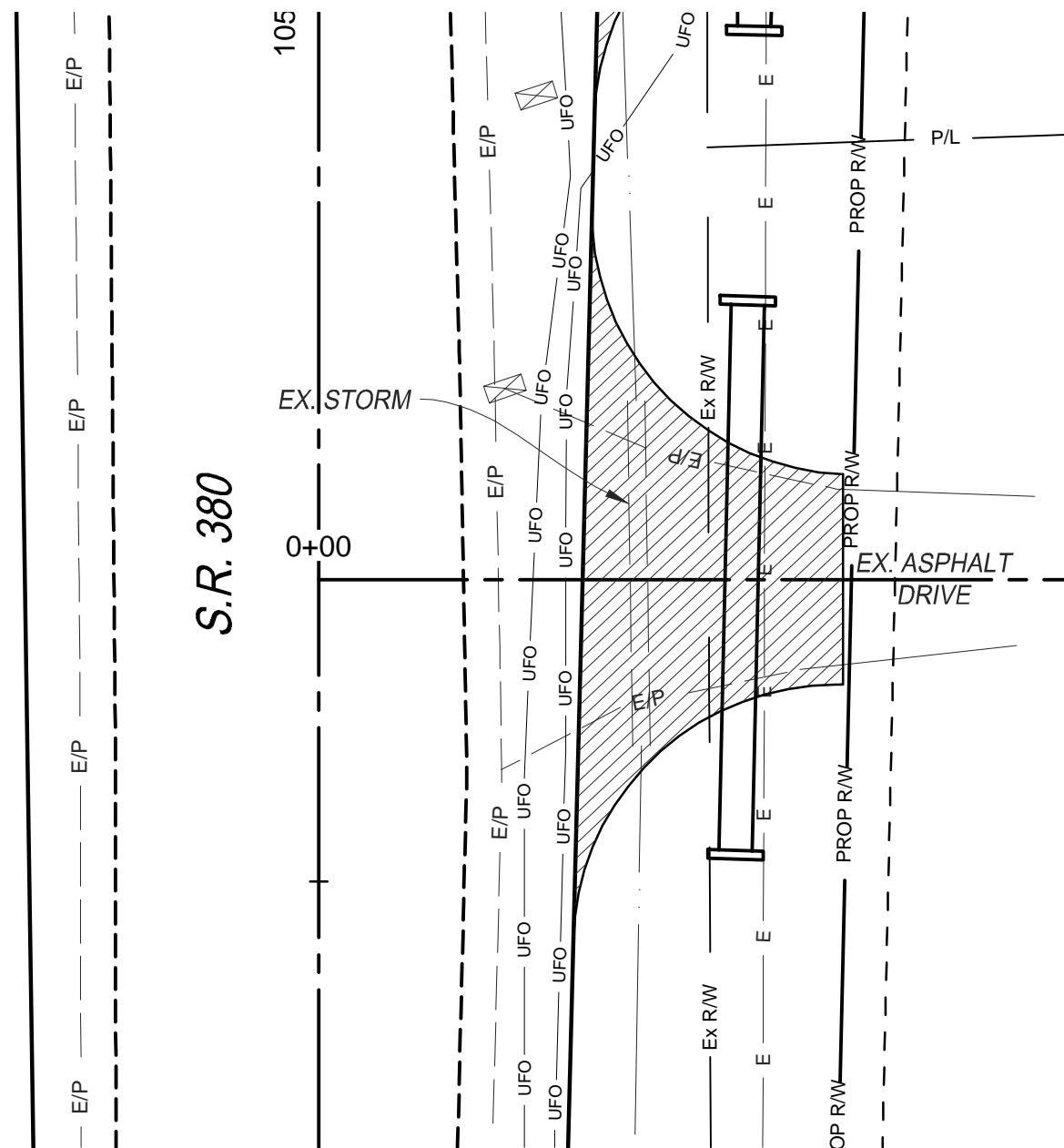
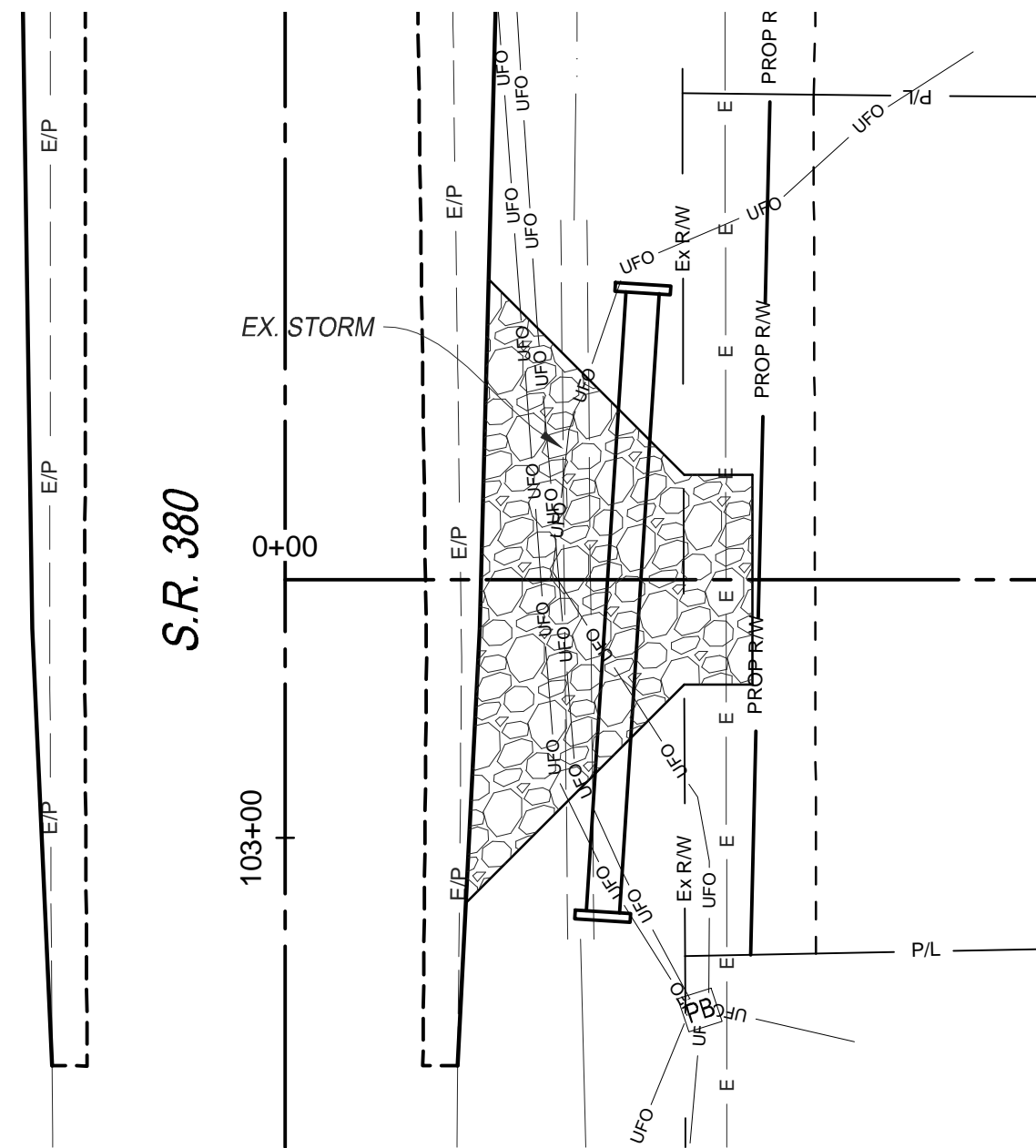
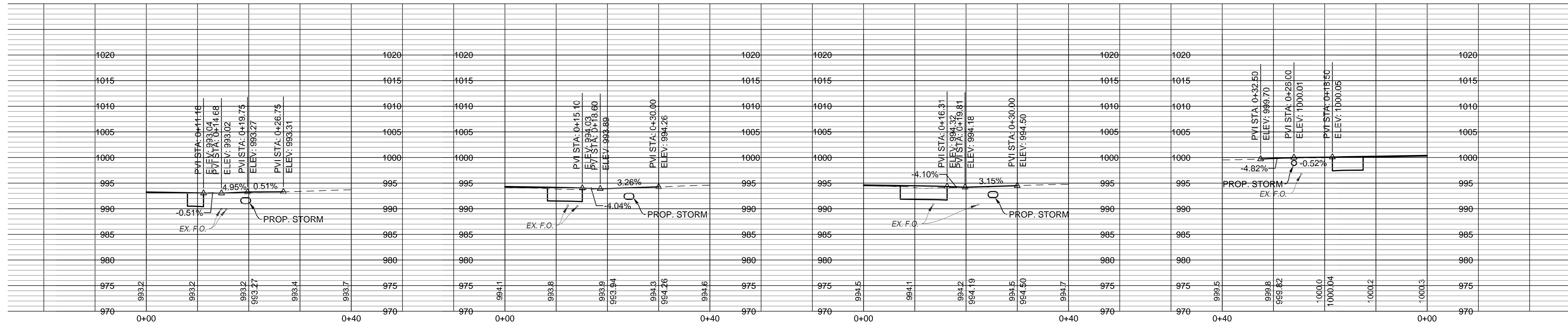
S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

INTERSECTION DETAILS




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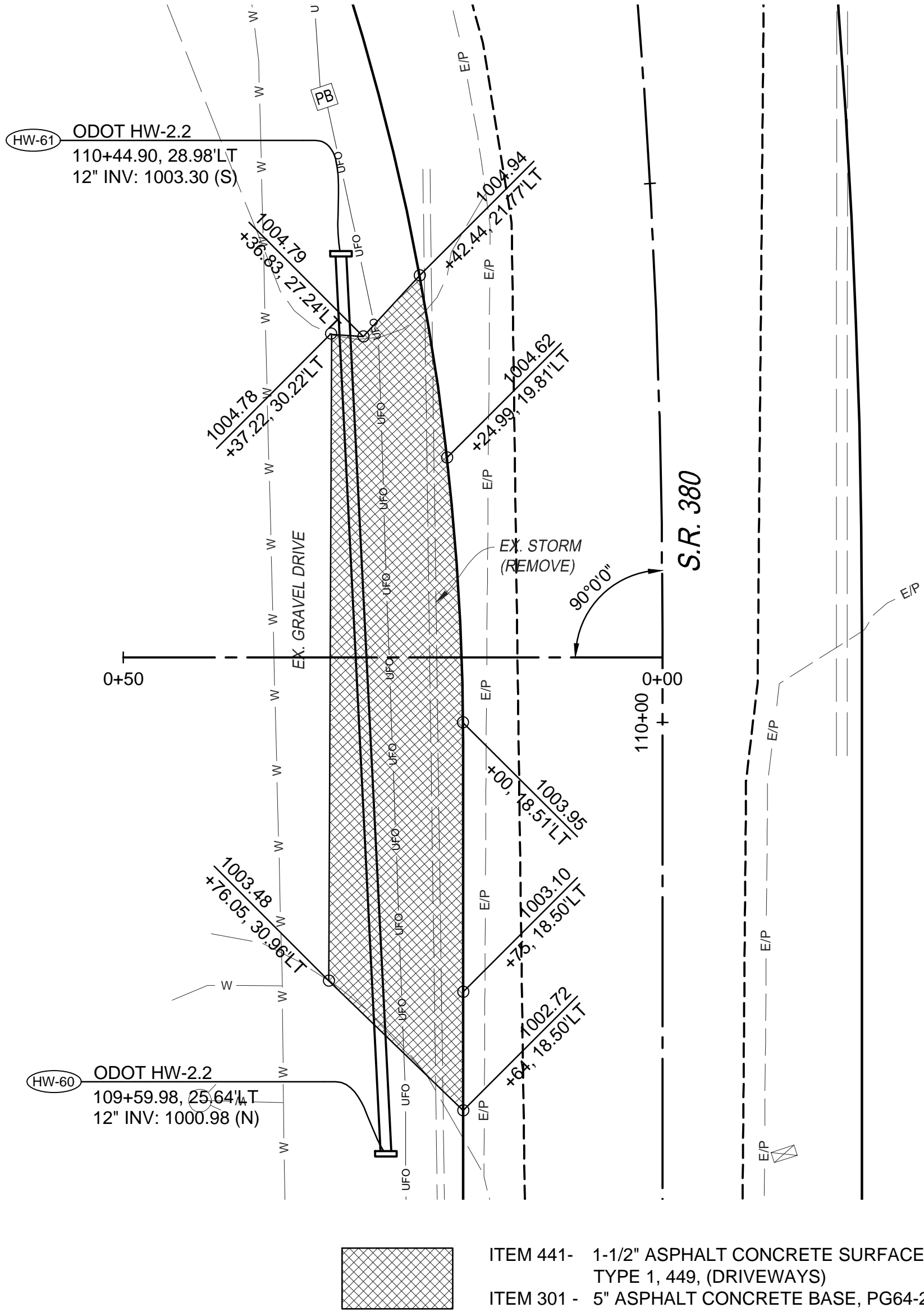
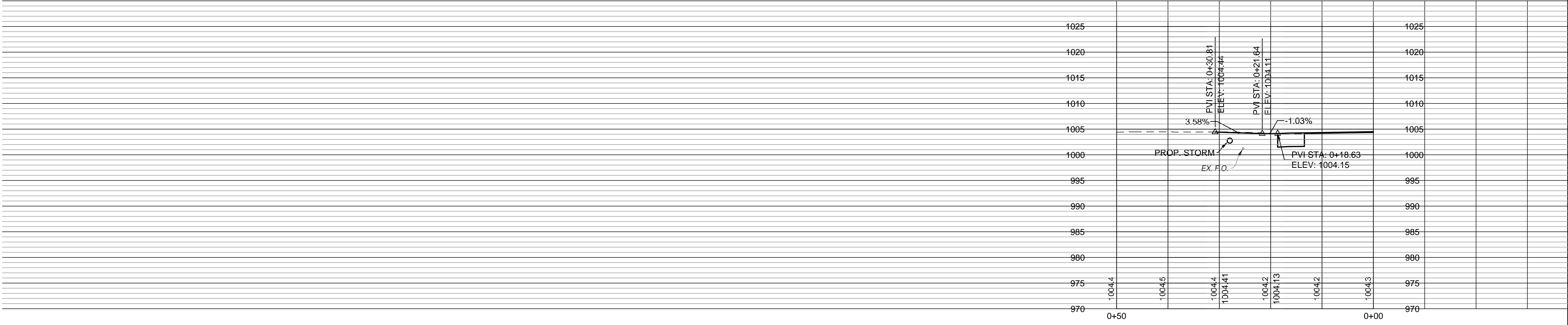
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ITEM 304 - 8" AGGREGATE BASE



ITEM 441- 1-1/2" ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, 449, (DRIVEWAYS)
ITEM 301 - 3-1/2" ASPHALT CONCRETE BASE, PG64-22, (449)



ITEM 441- 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, 449, (DRIVEWAYS)
ITEM 301 - 5" ASPHALT CONCRETE BASE, PG64-22, (449)

DRIVE PROFILE
STATION 110+06.00 LT

NOT FOR CONSTRUCTION

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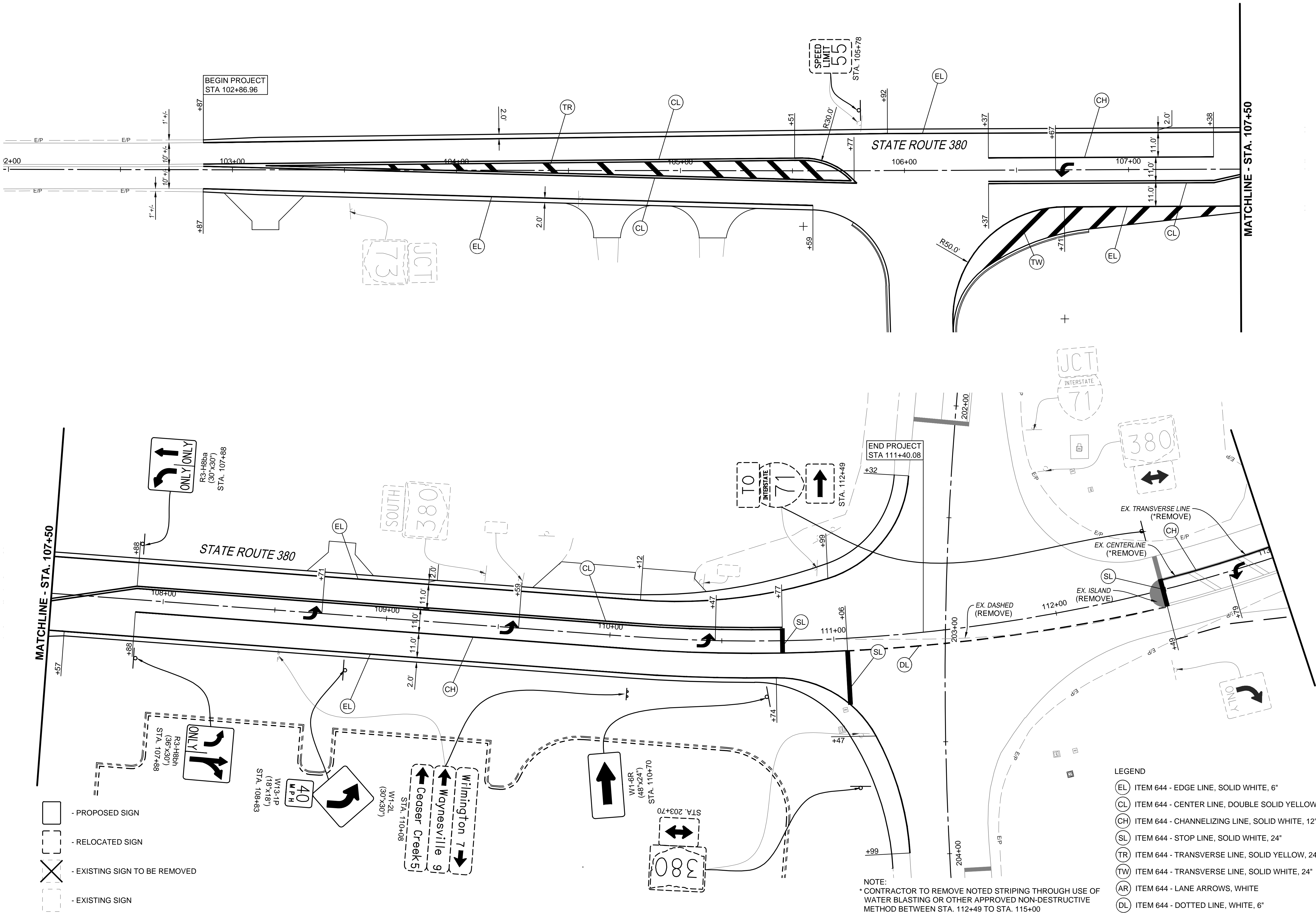
S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

COMMERCIAL DRIVE DETAILS

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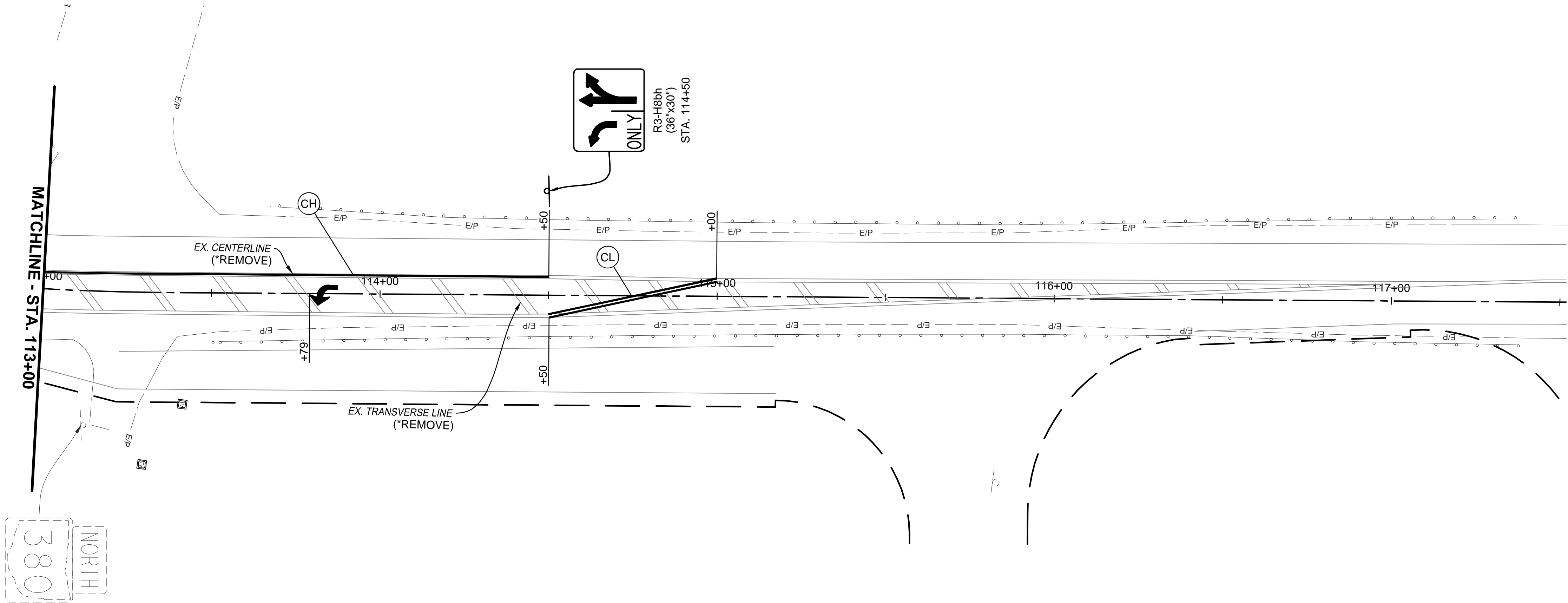
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S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS
TRAFFIC CONTROL 380 - STA 102+00.00 TO STA 107+25.00

NOT FOR
CONSTRUCTION

- PROPOSED SIGN
- RELOCATED SIGN
- EXISTING SIGN TO BE REMOVED
- EXISTING SIGN



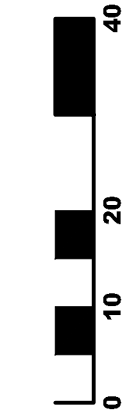
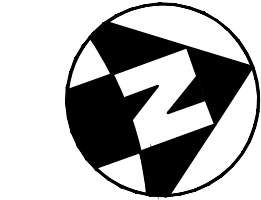
NOTE:
* CONTRACTOR TO REMOVE NOTED STRIPING THROUGH USE OF WATER BLASTING OR OTHER APPROVED NON-DESTRUCTIVE METHOD BETWEEN STA. 112+49 TO STA. 115+00

- LEGEND
- (EL) ITEM 644 - EDGE LINE, SOLID WHITE, 6"
 - (CL) ITEM 644 - CENTER LINE, DOUBLE SOLID YELLOW, 4"
 - (CH) ITEM 644 - CHANNELIZING LINE, SOLID WHITE, 12"
 - (SL) ITEM 644 - STOP LINE, SOLID WHITE, 24"
 - (TR) ITEM 644 - TRANSVERSE LINE, SOLID YELLOW, 24"
 - (TW) ITEM 644 - TRANSVERSE LINE, SOLID WHITE, 24"
 - (AR) ITEM 644 - LANE ARROWS, WHITE
 - (DL) ITEM 644 - DOTTED LINE, WHITE, 6"

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

TRAFFIC CONTROL 380 - STA 113+00.00 TO STA 117+00.00

NOT FOR CONSTRUCTION

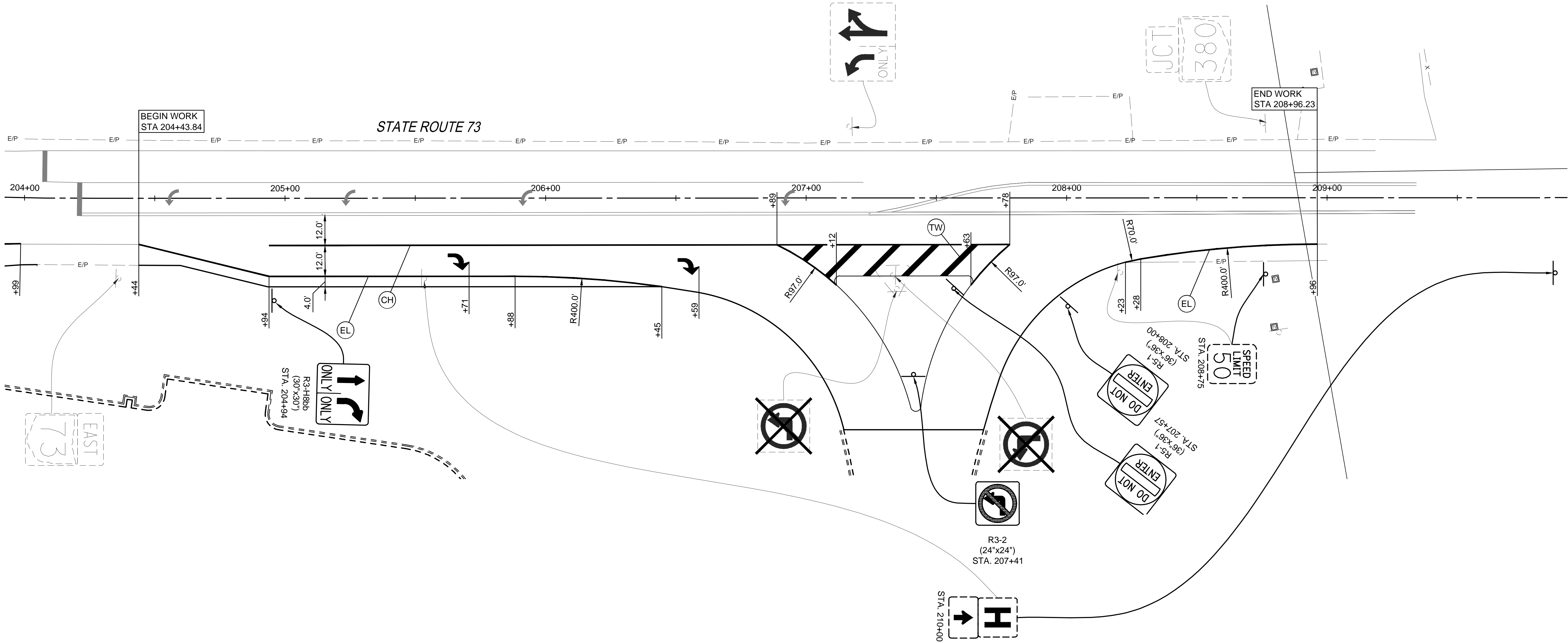


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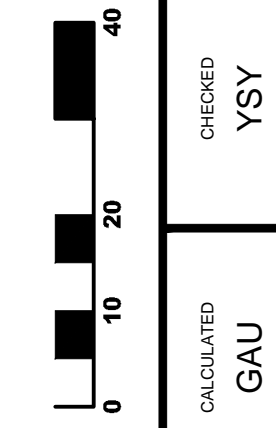
- PROPOSED SIGN
- RELOCATED SIGN
- EXISTING SIGN TO BE REMOVED
- EXISTING SIGN

- LEGEND
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 - (AR) ITEM 644 - LANE ARROWS, WHITE
 - (DL) ITEM 644 - DOTTED LINE, WHITE, 6"

S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

TRAFFIC CONTROL 73 - STA 204+00.00 TO STA 209+34.57

NOT FOR
CONSTRUCTION



TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

DRAWINGS IN THESE PLANS SHALL BE CONSIDERED AS REFERENCE TO ITEMS 625, 630, 631, 632, 633, 725, 730, 731, 732, AND 733 RESPECTIVELY.

SPECIFICATION COMPLIANCE

ALL MATERIALS MUST BE IN COMPLIANCE WITH CONTRACT SPECIFICATIONS UNLESS OTHERWISE APPROVED BY THE ENGINEER. ALL WORK AND MATERIALS NOT SPECIFICALLY REFERENCED IN THE CONTRACT SHALL MEET OR EXCEED THE REQUIREMENTS OF:

OHIO DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2023

THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (2012)

THE MOST RECENT REVISIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, STANDARD CONSTRUCTION DRAWINGS:

TC-12.31	TC-85.10
TC-21.21	TC-85.20
TC-52.20	HL-30.11
TC-81.22	HL-30.22

UNDERGROUND UTILITIES

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY SHOWN ON THE PLANS.

THE OWNER OF THE UNDERGROUND UTILITY FACILITY SHALL WITHIN FORTY-EIGHT HOURS, EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, AFTER NOTICE IS RECEIVED, STAKE, MARK, OR OTHERWISE DESIGNATE THE LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED.

SIGNAL ACTIVATION

PRIOR TO ACTIVATING THE NEW TRAFFIC SIGNAL TO STOP-AND-GO MODE AND/OR REMOVING THE EXISTING TRAFFIC SIGNAL FROM SERVICE, ALL ITEMS IN THE PROPOSED SIGNAL PLAN SHALL BE FULLY COMPLETED, (I.E., VEHICLE DETECTION, PEDESTRIAN SIGNAL HEADS, ETC.). IF THERE ARE CONSTRUCTABILITY ISSUES (I.E., ROADWAY WIDENING, ETC.) THAT PREVENT THE SIGNAL FROM BEING COMPLETED PRIOR TO ACTIVATION, IT SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER. THE DISTRICT TRAFFIC ENGINEER WILL THEN REVIEW, APPROVE OR REJECT PROPOSALS TO ACTIVATE THE TRAFFIC SIGNAL PRIOR TO COMPLETION.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND DISTRICT TRAFFIC ENGINEER AT LEAST 10 WORKING DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION OF THE SIGNAL INSTALLATION. FINAL INSPECTION IS NOT CONSIDERED COMPLETE UNTIL DESIGNATED DISTRICT TRAFFIC PERSONNEL INSPECT THE TRAFFIC SIGNAL AND ISSUE WRITTEN APPROVAL. IF ISSUES ARE FOUND DURING THE FINAL INSPECTION THAT EFFECT THE SAFETY OF THE TRAVELING PUBLIC AND/OR THE EFFICIENCY OF THE INTERSECTION, THE SIGNAL SHALL NOT BE ACTIVATED ON THE PROPOSED DATE. ANY PUNCH LIST ITEMS THAT ARE FOUND SHALL BE CORRECTED AND REINSPECTED BY DISTRICT TRAFFIC PERSONNEL PRIOR TO FINAL ACCEPTANCE. ODOT FORCES SHALL ONLY ASSUME DAY TO DAY MAINTENANCE OF THE TRAFFIC SIGNAL AFTER FINAL WRITTEN ACCEPTANCE HAS BEEN ISSUED.

DETECTION MAINTENANCE

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

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

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

WORK INSPECTION

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

MAINTENANCE OF TRAFFIC SIGNAL / FLASHER INSTALLATION

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

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

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE CRASH THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 2 HOURS AND SHALL NOT INCLUDE THE HOURS OF 06:00 TO 20:00. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED BY OFF-DUTY POLICE, HIRED BY THE CONTRACTOR:

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

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

- TIME OF NOTIFICATION OF MALFUNCTION;
- TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
- ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
- A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
- TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

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

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

GUARANTEE

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

EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLER, CABINET, UNINTERRUPTIBLE POWER SUPPLY, VEHICLE DETECTION EQUIPMENT, LED LAMP UNITS, NETWORK AND COMMUNICATION/INTERCONNECT EQUIPMENT.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

ITEM 632 SIGNAL SUPPORT FOUNDATION

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

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

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

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

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

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE AND WILL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH SUPPORT FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

ITEM 632 - SIGNALIZATION, MISC.: STOP-LINE RADAR DETECTION RELOCATED

THIS ITEM OF WORK SHALL CONSIST REMOVING AND RE-INSTALLING A WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT. THE RELOCATION OF DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

- 1. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET. ANY ADDITIONAL CABLE NECESSARY TO POWER THE RADAR UNIT FROM THE TRAFFIC CABINET SHALL BE INCLUDED IN THIS PAY ITEM.
- 2. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- 3. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
- 4. THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.

PAYMENT FOR ITEM 632 SIGNALIZATION, MISC.: STOP-LINE RADAR DETECTION RELOCATED SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED.

GROUNDING AND BONDING

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

- A. ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.
- B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.
- C. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.
- D. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.
- E. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.
- F. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

GROUNDING AND BONDING (CONT'D)

2. CONDUITS.

- A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.
- B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.
- C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.
- D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3. WIRE FOR GROUNDING AND BONDING.

- A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:
 - i. USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.
 - ii. USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
 - iii. USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.
 - iv. THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.
- B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

4. GROUND ROD.

- A. A 3/4-INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
- B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

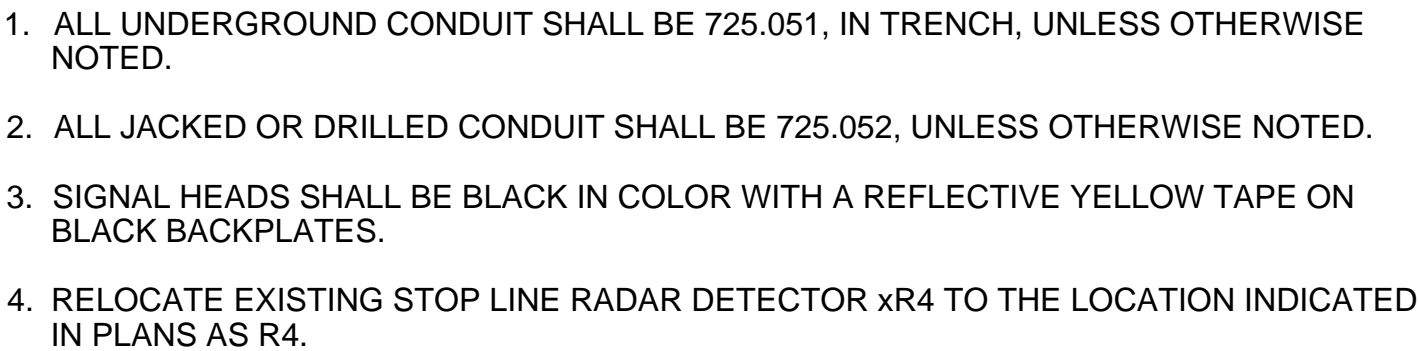
5. THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

NO.	COLOR	VEHICLE SIGNAL	PEDESTRIAN SIGNAL
1	BLACK	GREEN BALL	#1 WALK
2	WHITE	AC NEUTRAL	AC NEUTRAL
3	RED	RED BALL	#1 DW/FDW
4	GREEN	EQUIPMENT GROUND	EQUIPMENT GROUND
5	ORANGE	YELLOW BALL	#2 DW/FDW
6	BLUE	GREEN ARROW	#2 WALK
7	WHITE/BLACK STRIPE	YELLOW ARROW	NOT USED

6. POWER SERVICE AND DISCONNECT SWITCH.

- A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPLICE.
- B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.
 - i. NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.
 - ii. IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

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



x2A, x2B, x2C, x4A, x4B, x4C,
x6A, x6B, x6C, x8A, x8B

2A, 2B, 2C,
4A, 4B

R3-5
xS1, xS2

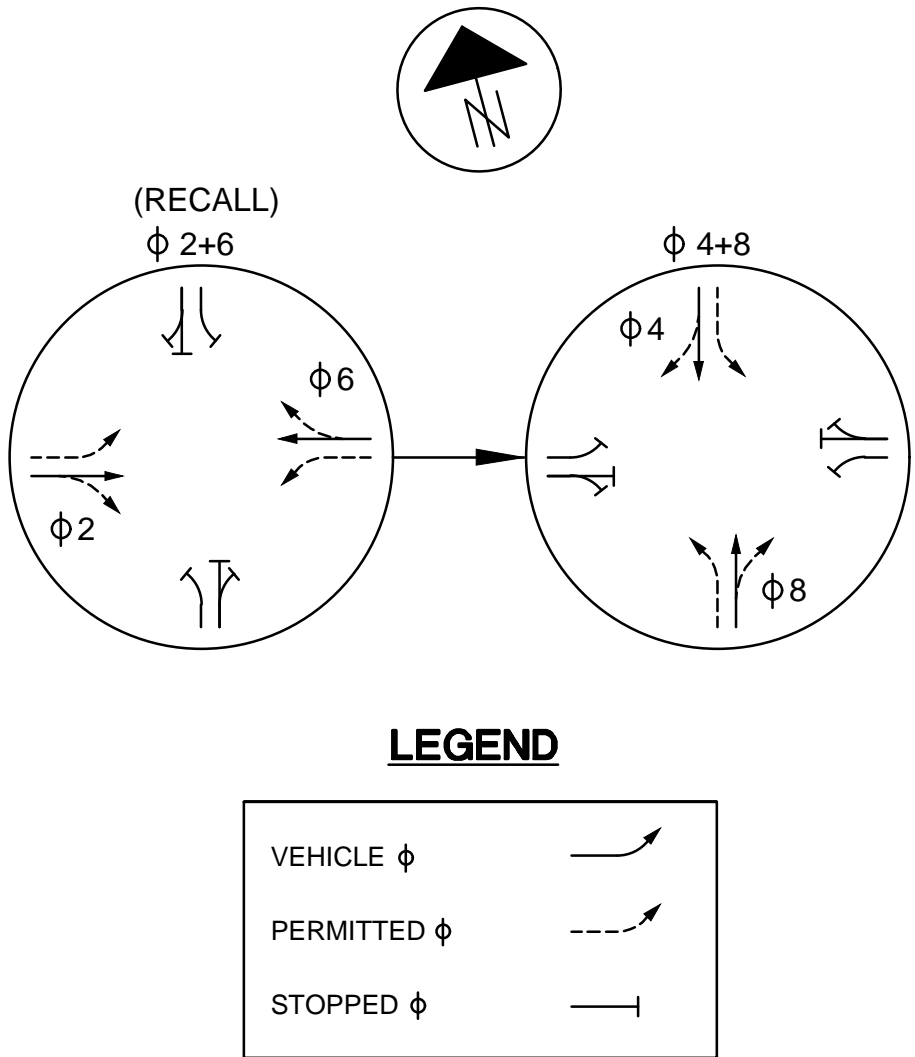
R3-5
30"x36"
S1, S2

SIGNAL TIMING CHART

INTERSECTION: SR-73 @ SR-380				ODOT							
MAINTAINING AGENCY:				DUAL ENTRY: YES PHASES: 2+6, 4+8							
START UP				REST IN RED:		RING 1		RING 2			
START IN: ALL-RED FLASH				OVERLAP		A	B	C	D		
TIME FOR: FLASH , ALL RED (SEC.): 9, 6											
FIRST PHASE(S): 2+6				PHASES		-	-	-	-		
COLOR DISPLAYED: GREEN											
INTERVAL OR FEATURE				CONTROLLER MOVEMENT NO.							
INTERSECTION MOVEMENT (PHASE)				1	2	3	4	5	6	7	8
DIRECTION				-	EB	-	SB	-	WB	-	NB
MINIMUM GREEN (INITIAL) (SEC.)				-	EX.	-	EX.	-	EX.	-	EX.
ADDED INITIAL (SEC./ACTUATION)				-	-	-	-	-	-	-	-
MAXIMUM INITIAL (SEC.)				-	-	-	-	-	-	-	-
PASSAGE TIME (PRESET GAP) (SEC.)				-	EX.	-	EX.	-	EX.	-	EX.
TIME BEFORE REDUCTION (SEC.)				-	-	-	-	-	-	-	-
MINIMUM GAP (SEC.)				-	-	-	-	-	-	-	-
TIME TO REDUCE (SEC.)				-	-	-	-	-	-	-	-
MAXIMUM GREEN I (SEC.)				-	EX.	-	EX.	-	EX.	-	EX.
MAXIMUM GREEN II (SEC.)				-	-	-	-	-	-	-	-
YELLOW CHANGE (SEC.)				-	6.0	-	4.5	-	6.0	-	4.5
ALL RED CLEARANCE (SEC.)				-	3.0	-	2.5	-	3.0	-	2.5
DELAYED GREEN (LPI) (SEC.)				-	-	-	-	-	-	-	-
FLASHING YELLOW ARROW DELAY (SEC.)				-	-	-	-	-	-	-	-
WALK (SEC.)				-	-	-	-	-	-	-	-
PEDESTRIAN CLEARANCE (SEC.)				-	-	-	-	-	-	-	-
RECALL	MAXIMUM (ON/OFF)			-	OFF	-	OFF	-	OFF	-	OFF
	MINIMUM (ON/OFF)			-	ON	-	OFF	-	ON	-	OFF
	PEDESTRIAN (ON/OFF)			-	OFF	-	OFF	-	OFF	-	OFF
MEMORY (ON/OFF)				-	OFF	-	OFF	-	OFF	-	OFF

1. FOR ANY ENTRY TO FLASHING OPERATION PROGRAMMING SHALL RUN MINOR STREET GREEN, ALL-RED CLEARANCE AND THEN FLASHING OPERATION.

PHASING DIAGRAM



FIELD WIRING HOOKUP CHART

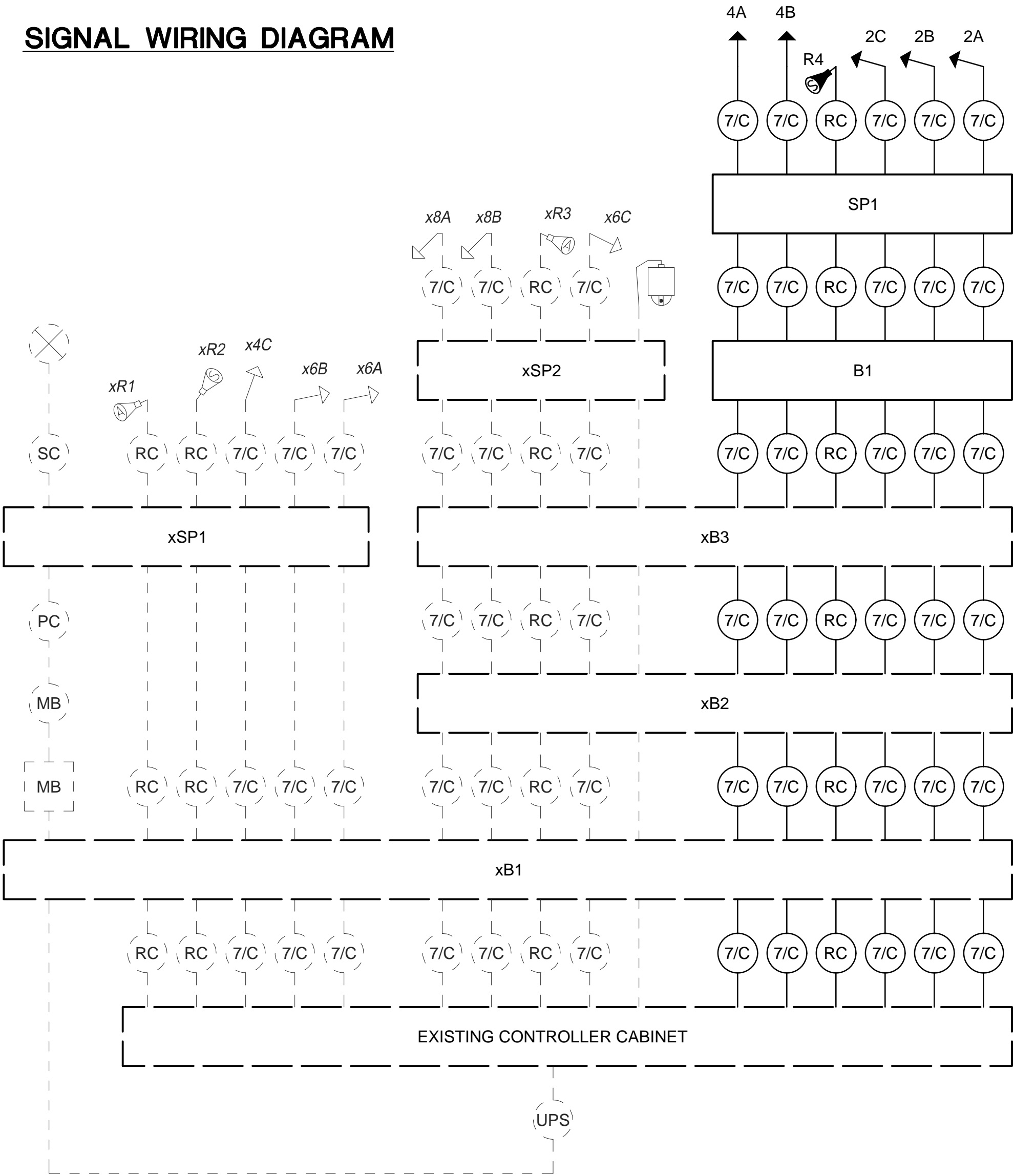
SIGNAL HEAD	INDICATION	FIELD TERMINAL	FLASH
2A, 2B, 2C (EB)	R	2 R	R
	Y	2 Y	
	G	2 G	
4A, 4B (SB)	R	4 R	R
	Y	4 Y	
	G	4 G	

RADAR DETECTION CHART

DETECTION ZONE	MOVEMENT	PULSE OR PRESENCE	ASSOCIATED PHASE	DELAY PROGRAMMED IN CONTROLLER (SEC.)	EXTENSION PROGRAMMED IN CONTROLLER (SEC.)	DETECTOR NO.	PURPOSE	DETECTION ZONE LENGTH (FT)
RZ2	EB THRU	PRESENCE	2	-	-	xR1	ADVANCE	-
RZ4A	SB LT	PRESENCE	4	-	-	xR2	STOP-LINE	40'
RZ4B	SB THRU	PRESENCE	4	-	-	xR2	STOP-LINE	40'
RZ6	WB THRU	PRESENCE	6	-	-	xR3	ADVANCE	-
RZ8A	NB LT	PRESENCE	8	-	-	R4	STOP-LINE	40'
RZ8B	NB THRU	PRESENCE	8	-	-	R4	STOP-LINE	40'

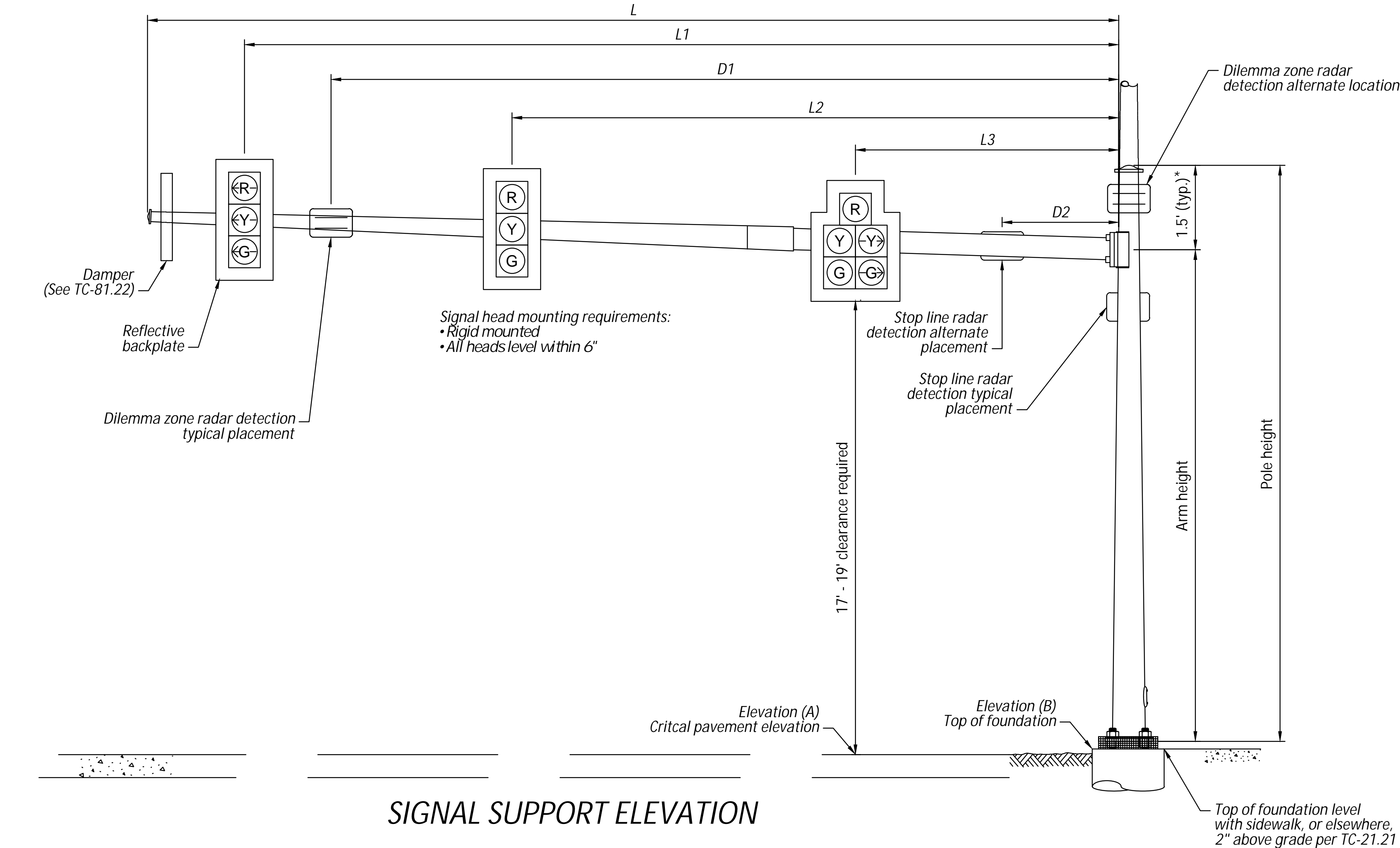
1. RADAR DETECTION UNITS FOR DILEMMA ZONE DETECTION SHALL PLACE A CONSTANT CALL TO THE CONTROLLER WHEN VEHICLE TRAVEL TIMES TO THE STOP BAR ARE BETWEEN 2.5 AND 6.0 SECONDS. SPEED TRIGGER SHALL BE SET FOR VEHICLES TRAVELING 35 MPH AND GREATER.
2. ALL DETECTOR DELAYS SHALL BE PLACED ON THE CONTROLLER.

SIGNAL WIRING DIAGRAM



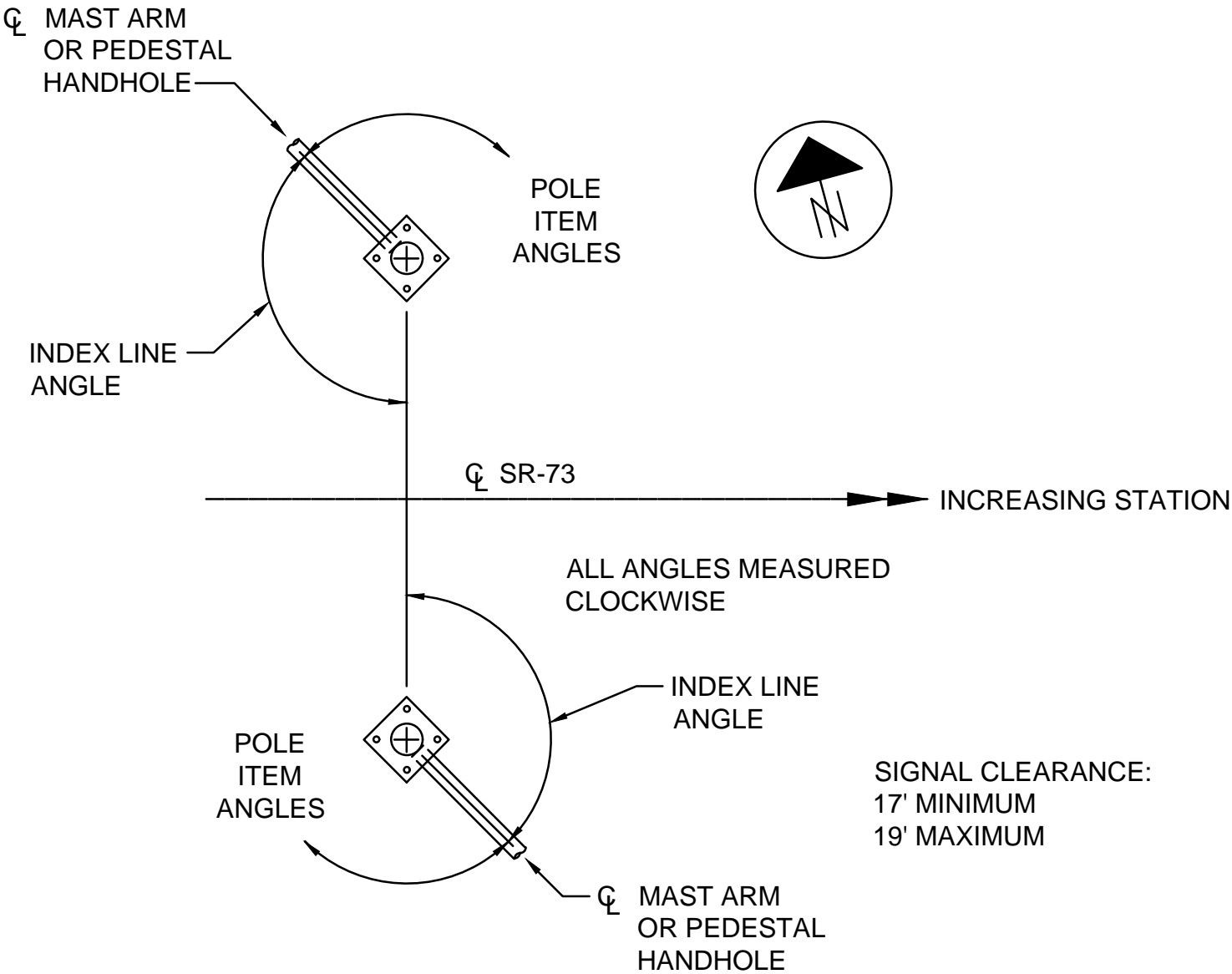
SIGNAL WIRING LEGEND

EXISTING	PROPOSED	
		3 SECTION VEHICULAR SIGNAL HEAD, 1-WAY
		POWER SOURCE
		METER BASE
		SIGNAL DISCONNECT SWITCH
		SERVICE CABLE
		POWER CABLE
		UNINTERRUPTIBLE POWER SUPPLY CABLE
		SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
		SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
		RADAR DETECTION CABLE
		PTZ CAMERA
		STOP BAR RADAR DETECTION
		STOP BAR RADAR DETECTION
		SIGNAL WIRE



POLE CHART

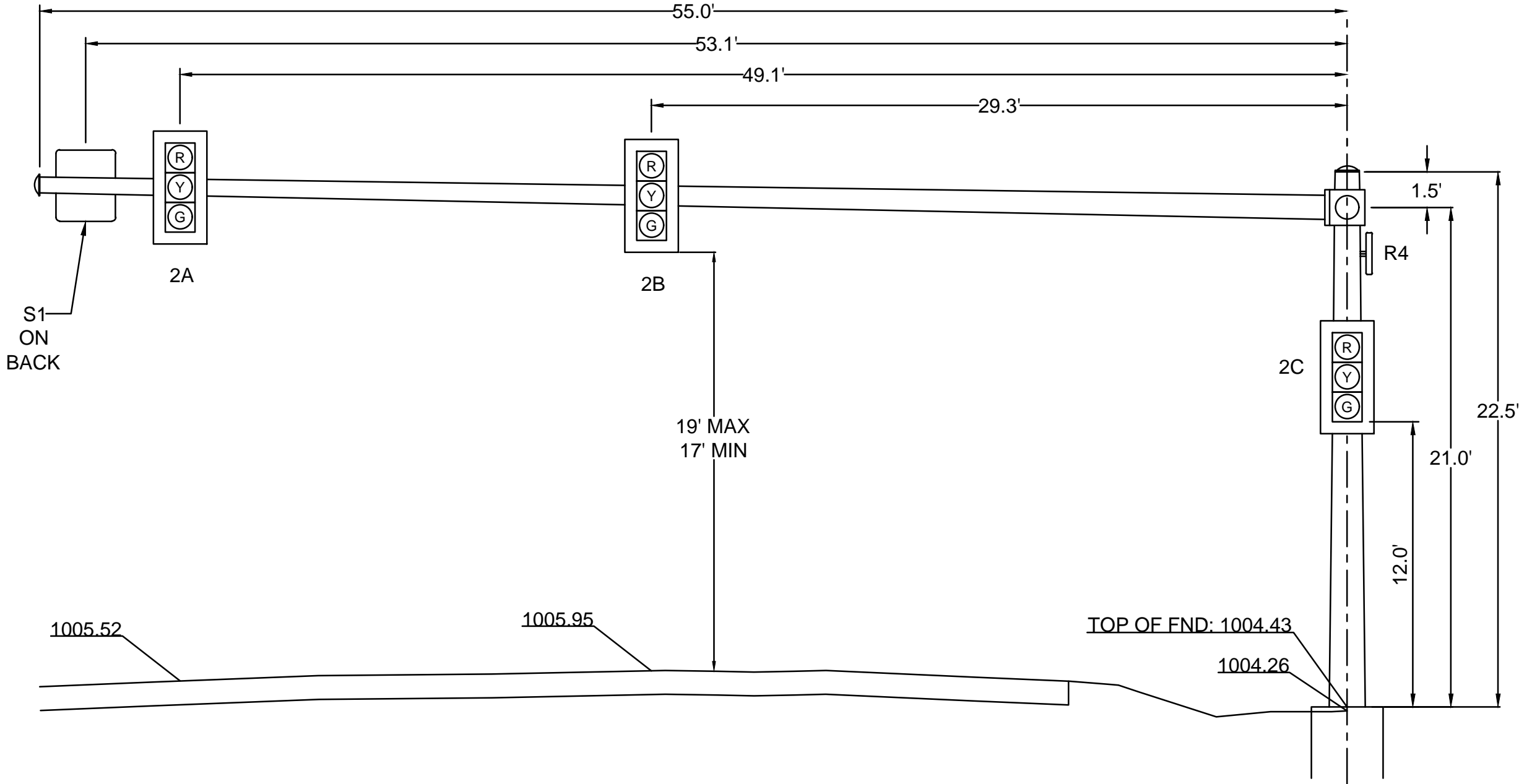
POLE NO.	ARM DESIGNATION	CRITICAL ELEVATION UNDER SIGNAL HEADS (ELEVATION A)	TOP OF FOUNDATION (ELEVATION B)	SIGNAL SUPPORT DETAILS									INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE ANGLE			
				POLE DESIGN TYPE	POLE DESIGN NO.	ARM DESIGN	POLE HEIGHT (FT.)	MAST ARM ATTACHMENT HEIGHT (FT.)	MAST ARM LENGTH (FT.)	L1 (SIGNAL /SIGN)	L2 (SIGNAL /SIGN)	L3 (SIGNAL /SIGN)		D1 (RADAR)	MAST ARM	SIGNAL HEAD	HANDHOLE
SP1	A	1005.95	1004.26	TC-12.31	DES 10	13	22.5	21.0	55.0	53.1	49.1	29.3	-	350°	0°	280°	180°
SP1	B	1005.58				13		21.0	56.0	54.2	50.2	40.5	-		270°		



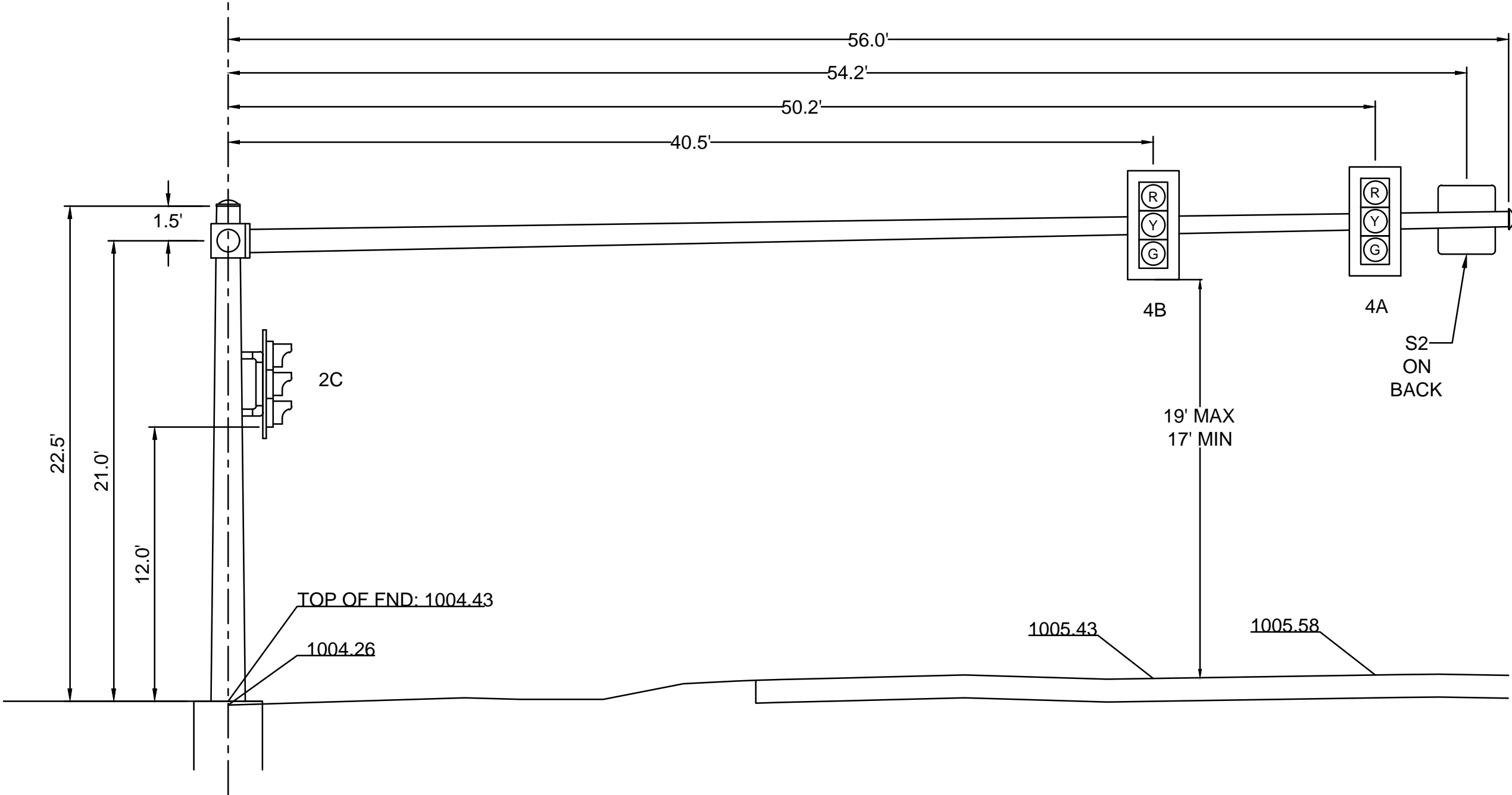
S.R. 380 AT S.R. 73 ROADWAY IMPROVEMENTS

TRAFFIC SIGNAL DETAIL

NOT FOR CONSTRUCTION



SP1 - EASTBOUND
ARM A



SP1 - SOUTHBOUND
ARM B

NOT FOR
CONSTRUCTION