

PROPOSED NORMAL SECTION - IR-77 SOUTHBOUND
STA 1013+19.91 TO STA 1025+18.00

PROPOSED NORMAL SECTION - IR-77 NORTHBOUND
STA 1012+78.85 TO STA 1026+40.00

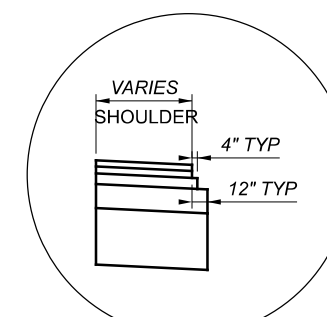
* THE SHOULDERS HAVE BEEN DESIGNED FOR MAINTENANCE OF TRAFFIC DURING CONSTRUCTION, THE PATTERN MAY BE PLACED IN THE MIDDLE OF THE SHOULDER.

A 3.90' TO 24.74' STA 1013+19.91 TO STA 1025+18.00

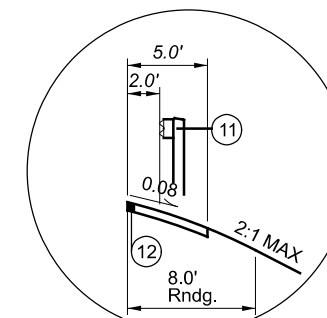
B 4.25' TO 4.12' STA 1012+78.85 TO STA 1014+20.00
4.17' TO 23.92' STA 1014+20.00 TO STA 1026+20.00
23.92' STA 1026+20.00 TO STA 1026+40.00

PROPOSED PAVEMENT LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> ① ITEM 442 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (447), AS PER PLAN ② ITEM 407 - NON-TRACKING TACK COAT (0.055 GAL/SY) ③ ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5mm, TYPE A (446) ④ ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=15"), AS PER PLAN ⑤ ITEM 302 - 7.5" ASPHALT CONCRETE BASE, PG 64-22 (449), AS PER PLAN ⑥ ITEM 452 - 11.5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1P WITH QC/QA ⑦ ITEM 304 - 6" AGGREGATE BASE ⑧ NOT USED ⑨ ITEM 206 - CEMENT STABILIZATION (12" DEEP) ⑩ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN WITH GEOTEXTILE FABRIC ⑪ ITEM 606 - GUARDRAIL, TYPE MGS ⑫ ITEM 441 - 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN ⑬ ITEM 659 - SEEDING AND MULCHING ⑭ ITEM 622 - CONCRETE BARRIER, TYPE D ⑮ ITEM 606 - CABLE BARRIER, WITH CONCRETE LINE POST FOUNDATION | <ul style="list-style-type: none"> ⑯ ITEM 441 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (446), PG64-22, AS PER PLAN ⑰ ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (446) ⑱ ITEM 302 - 6" ASPHALT CONCRETE BASE, PG 64-22 (449), AS PER PLAN ⑲ ITEM 618 - RUMBLE STRIPS (ASPHALT CONCRETE) ⑳ ITEM 609 - CURB, TYPE 4-C ㉑ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (3" DEPTH) ㉒ ITEM 206 - CEMENT STABILIZATION (14" DEEP) |
|--|---|



BASE AND SUBBASE STEP DETAIL



GUARDRAIL ROUNDING DETAIL

TYPICAL SECTIONS - PROPOSED

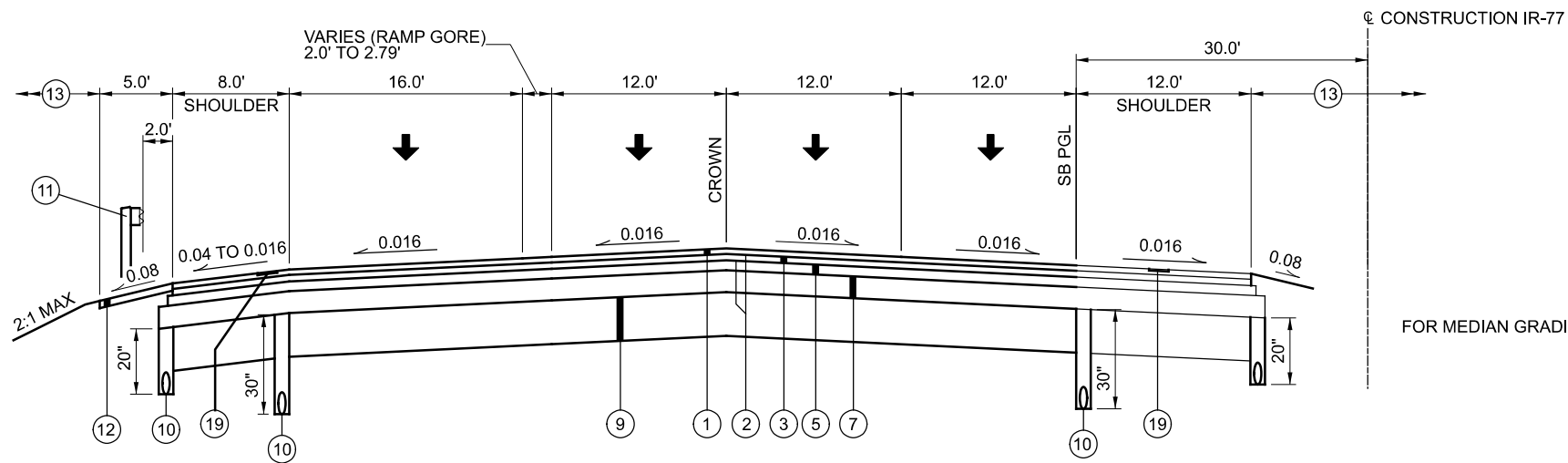
DESIGN AGENCY
Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.
2500 Corporate Exchange Drive
Columbus, OH 43221

DESIGNER
TQD

REVIEWER
DRJ 05/03/22

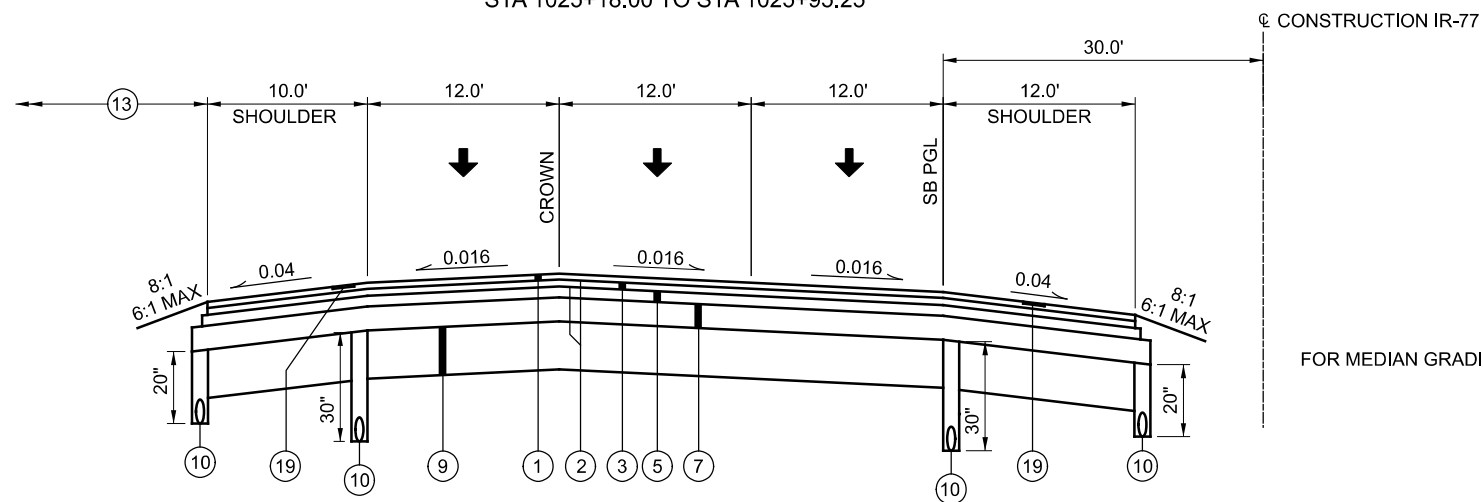
PROJECT ID
104983 (PRT 2)

SHEET TOTAL
7 312



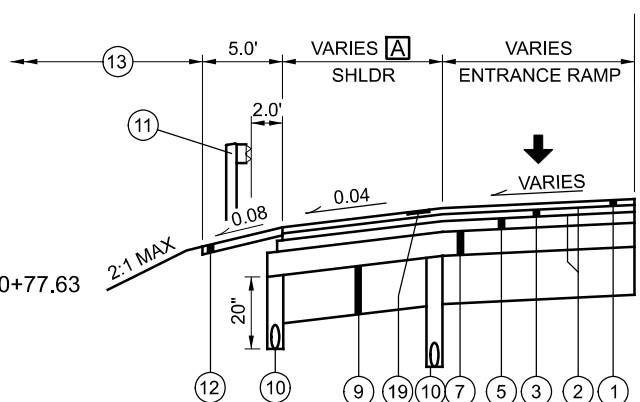
PROPOSED NORMAL SECTION - IR-77 SOUTHBOUND
STA 1025+18.00 TO STA 1025+95.25

FOR MEDIAN GRADING SEE SHEET 13

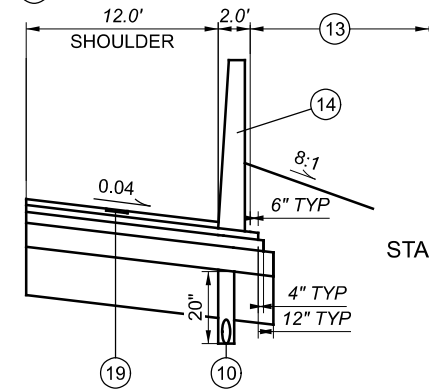


PROPOSED NORMAL SECTION - IR-77 SOUTHBOUND
STA 1028+79.19 TO STA 1048+33.11

FOR MEDIAN GRADING SEE SHEET 13

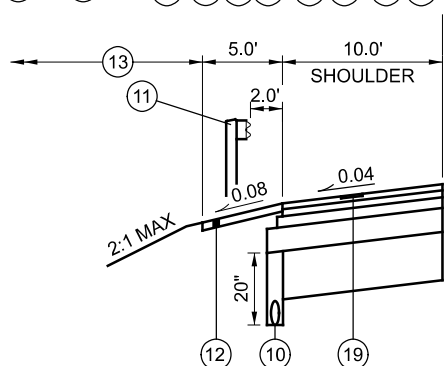


STA 1028+79.19 TO STA 1030+77.63

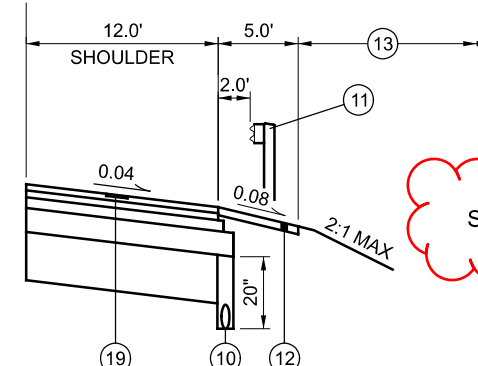


STA 1028+95.00 TO STA 1036+97.98

8.00' TO 6.00' STA 1029+35.00 TO STA 1029+84.83



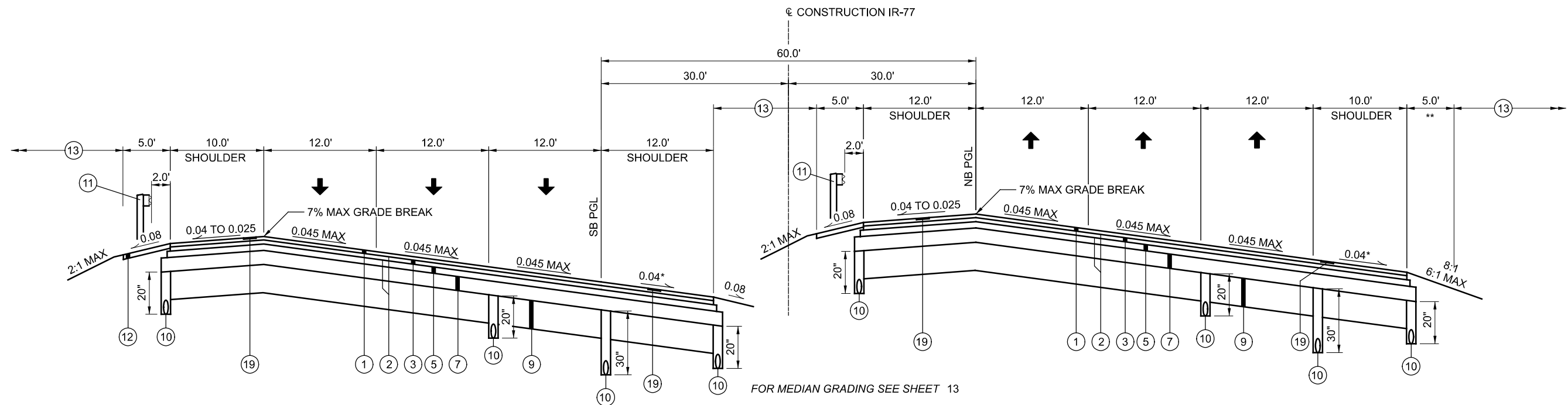
STA 1032+00.00 TO STA 1039+95.00
STA 1043+00.00 TO STA 1048+33.11



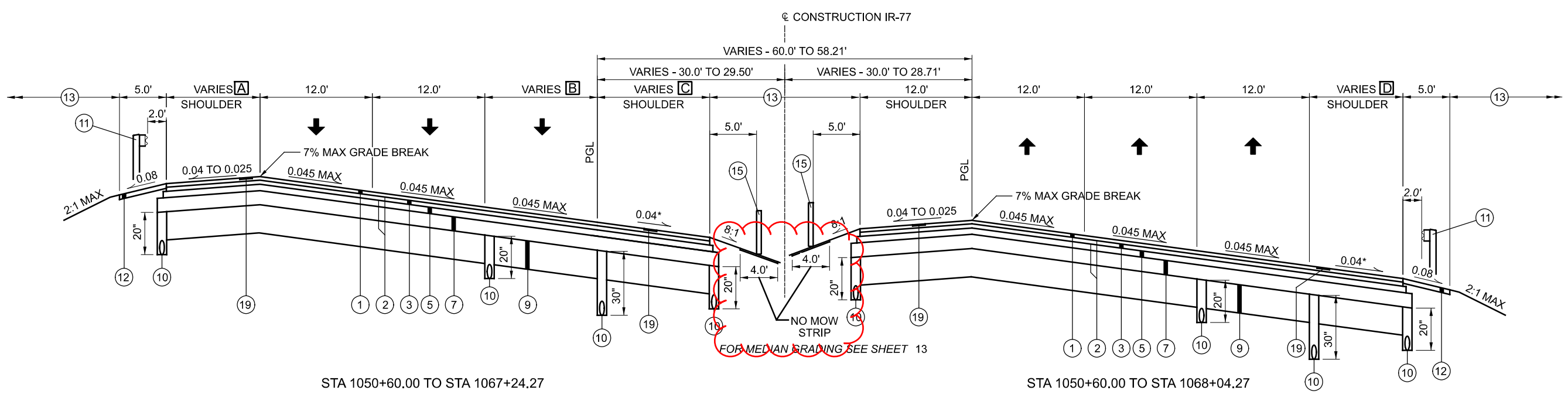
STA 1036+97.98 TO STA 1046+00.00

FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

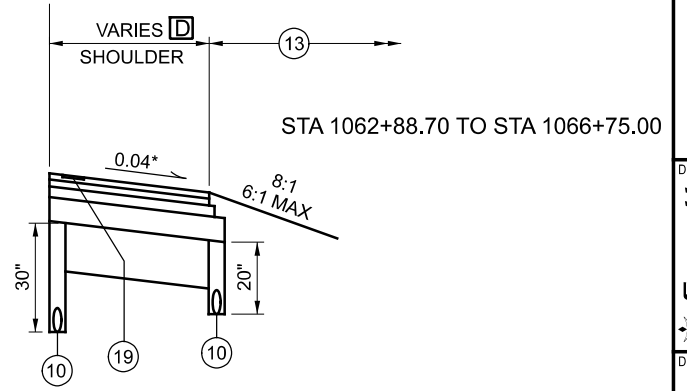


STA 1048+33.11 TO STA 1050+60.00 PROPOSED SUPERELEVATED BIFURCATED SECTION - IR-77 STA 1047+53.11 TO STA 1050+60.00



STA 1050+60.00 TO STA 1067+24.27 PROPOSED SUPERELEVATED SECTION - IR-77 STA 1050+60.00 TO STA 1068+04.27

- PROPOSED SUPERELEVATED SECTION - IR-77
- Ⓐ 10.0' STA 1050+50.00 TO STA 1066+75.00
10.0' TO 10.91' STA 1066+75.00 TO STA 1067+24.27
 - Ⓑ 12.0' STA 1050+50.00 TO STA 1066+75.00
12.0' TO 12.10' STA 1066+75.00 TO STA 1067+24.27
 - Ⓒ 12.0' STA 1050+50.00 TO STA 1066+75.00
12.0' TO 12.32' STA 1066+75.00 TO STA 1067+24.27
 - Ⓓ 10.0' STA 1050+50.00 TO STA 1066+75.00
10.0' TO 12.33' STA 1066+75.00 TO STA 1068+04.27



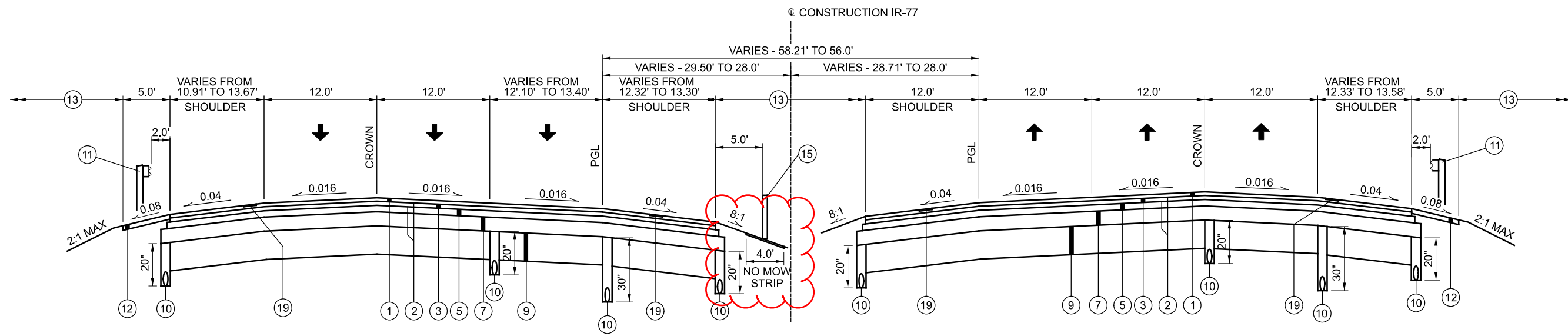
STA 1062+88.70 TO STA 1066+75.00

FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89

* OR RATE OF SUPERELEVATION IF GREATER

** REFER TO SB TYPICAL, LEFT SIDE, FOR SHOULDER AND GUARDRAIL

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

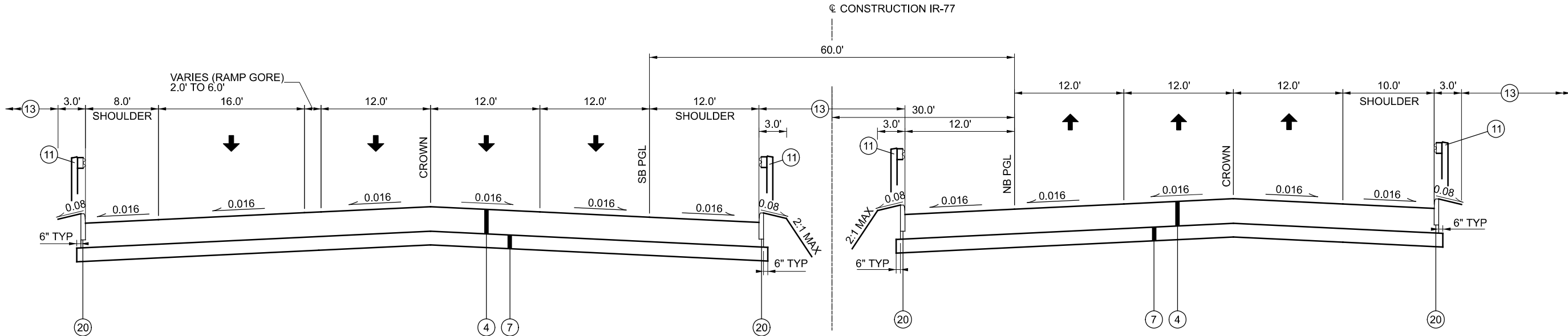


FOR MEDIAN GRADING SEE SHEET 13

PROPOSED NORMAL SECTION - IR-77

STA 1067+24.27 TO STA 1068+75.00

STA 1068+04.27 TO STA 1068+75.00

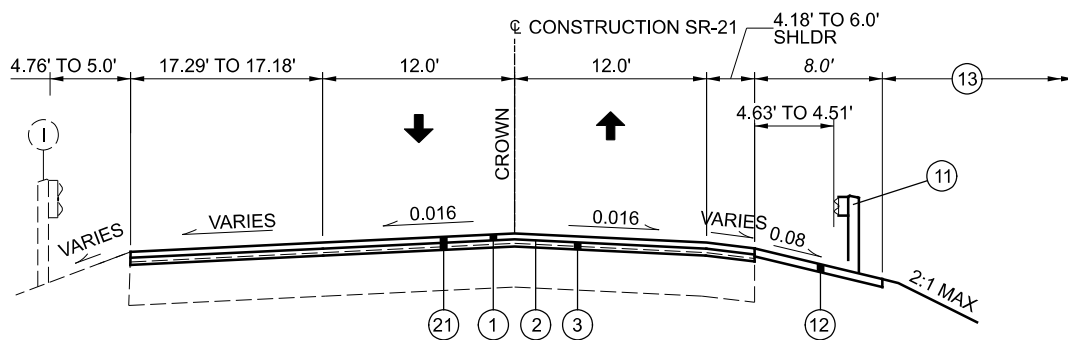


FOR MEDIAN GRADING SEE SHEET 13

PROPOSED APPROACH SLAB - IR-77

STA 1025+95.25 TO STA 1026+20.25
BRIDGE: STA 1026+20.25 TO STA 1028+54.19
STA 1028+54.19 TO STA 1028+79.19

STA 1026+61.03 TO STA 1026+86.03
BRIDGE: STA 1026+86.03 TO STA 1029+02.85
STA 1029+02.85 TO STA 1029+27.85

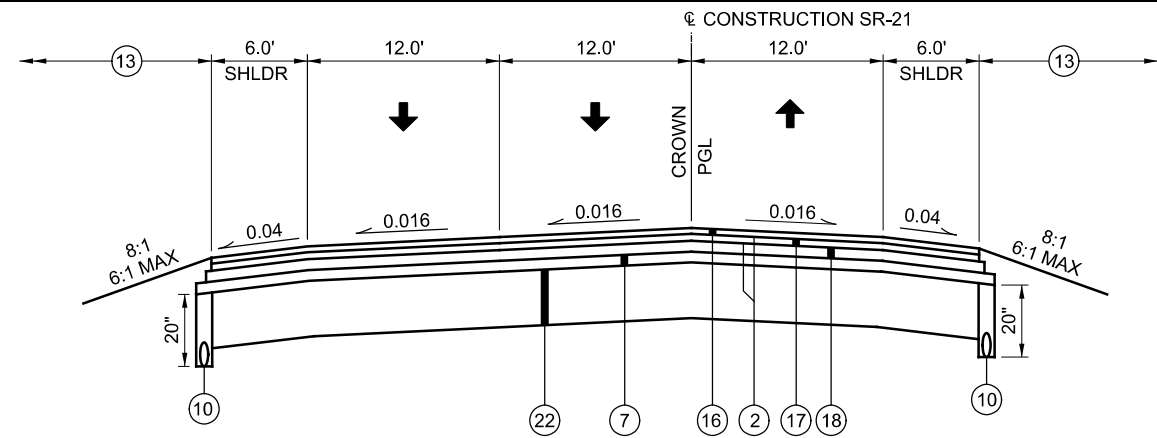
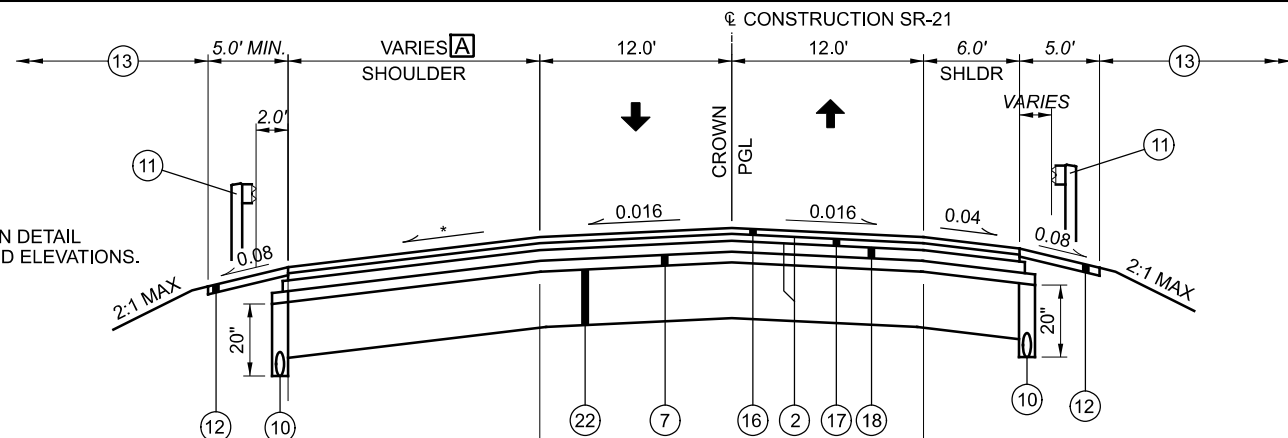


EXISTING APPROACH SLAB SECTION - SR-21
STA 495+60.00 TO STA 495+73.38

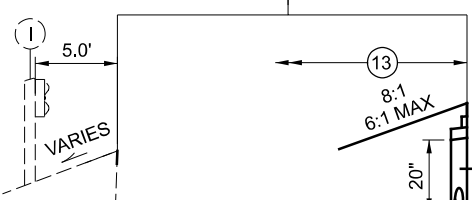
FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

* REFER TO INTERSECTION DETAIL SHEETS FOR SLOPES AND ELEVATIONS.

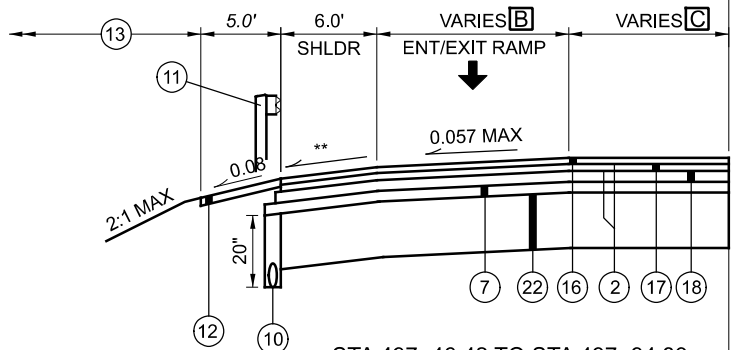


PROPOSED NORMAL SECTION - SR-21
STA 501+28.65 TO STA 503+11.58

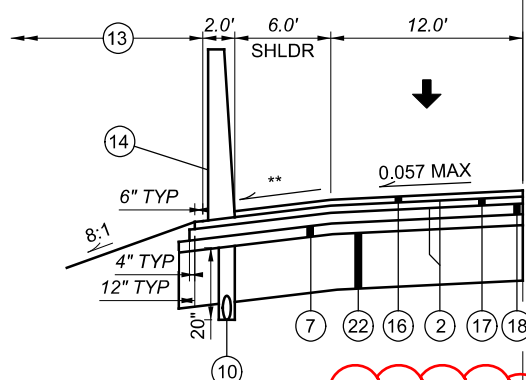


STA 495+73.38 TO STA 495+76.94

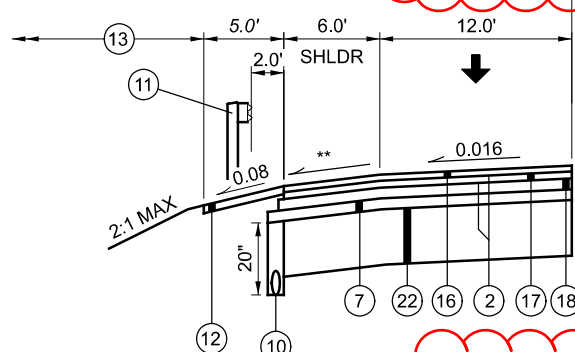
STA 497+16.16 TO STA 497+46.42



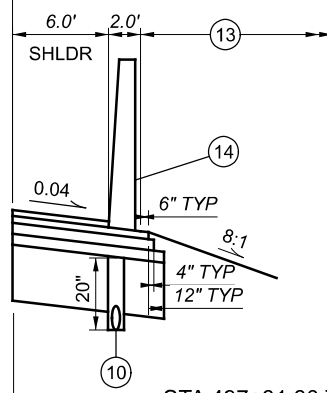
STA 497+46.42 TO STA 497+94.39



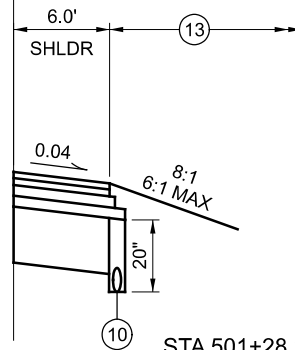
STA 497+94.39 TO STA 500+54.07



STA 500+54.07 TO STA 501+28.65



STA 497+31.30 TO STA 499+95.48

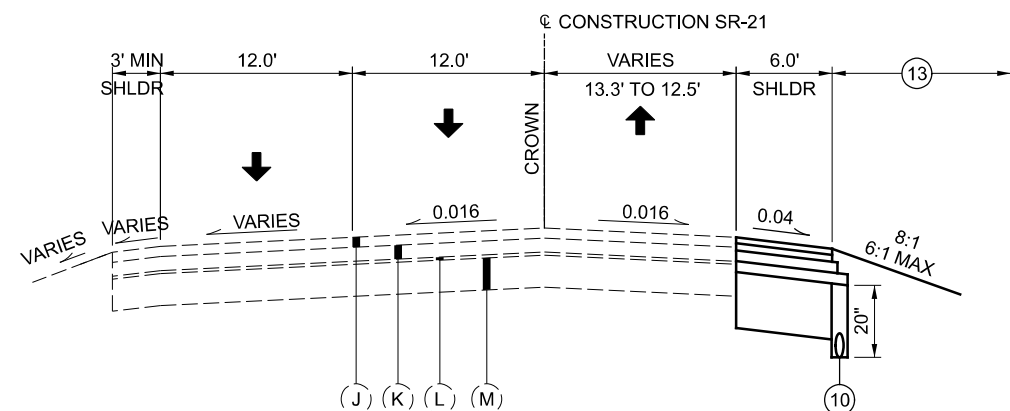


STA 501+28.31 TO STA 501+28.65

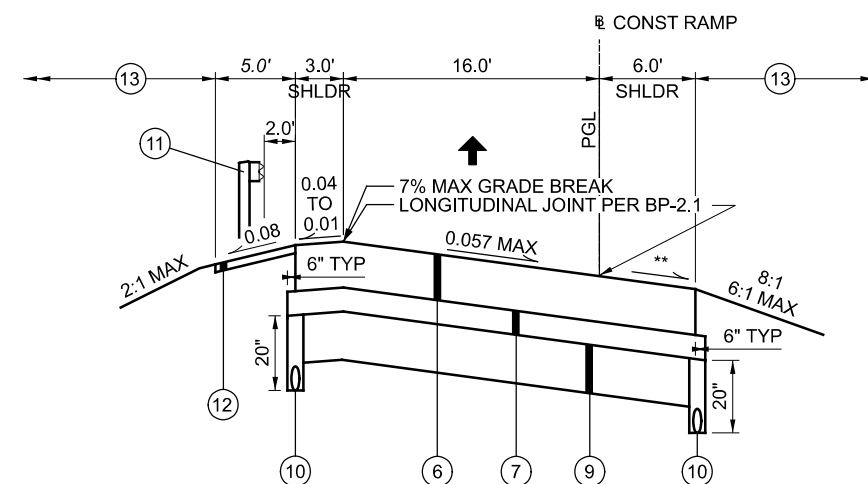
PROPOSED NORMAL SECTION - SR-21
STA 495+73.38 TO STA 501+28.65

- A** 17.18' TO 16' STA 495+73.38 TO STA 497+16.16
- B** 16.0' TO 12.0' STA 497+16.16 TO STA 498+70.19
- C** 16.0' TO 0' STA 497+16.16 TO STA 498+70.19

** CROSS SLOPE SHALL BE 0.04 OR MATCH SUPERELEVATION RATE IF GREATER THAN 0.04.

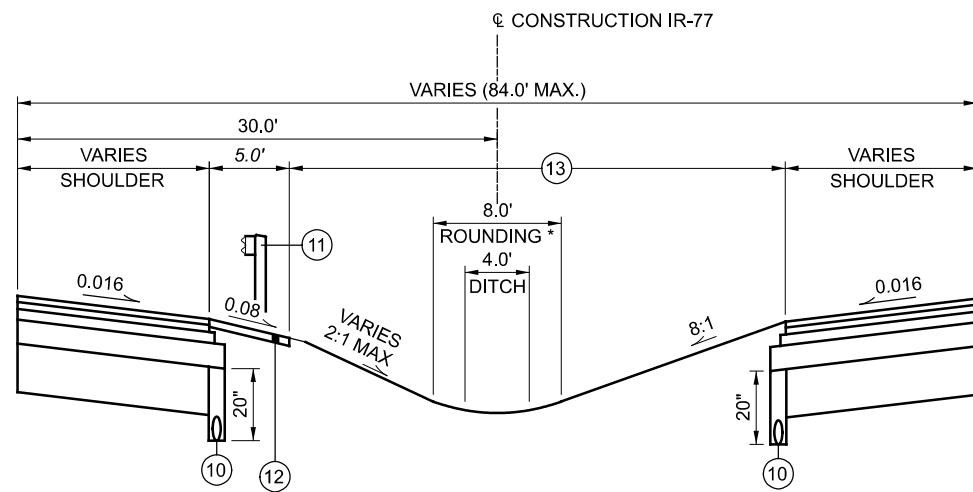


EXISTING NORMAL SECTION - SR-21
STA 503+11.58 TO STA 506+05.74

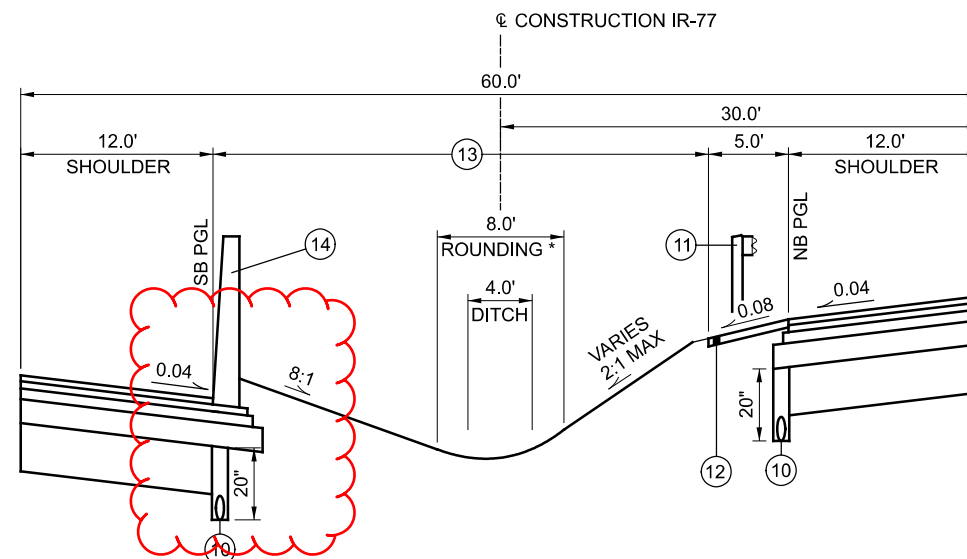


PROPOSED SUPERELEVATED SECTION - SR-21 RAMP G
STA 10008+56.05 TO STA 10020+57.11

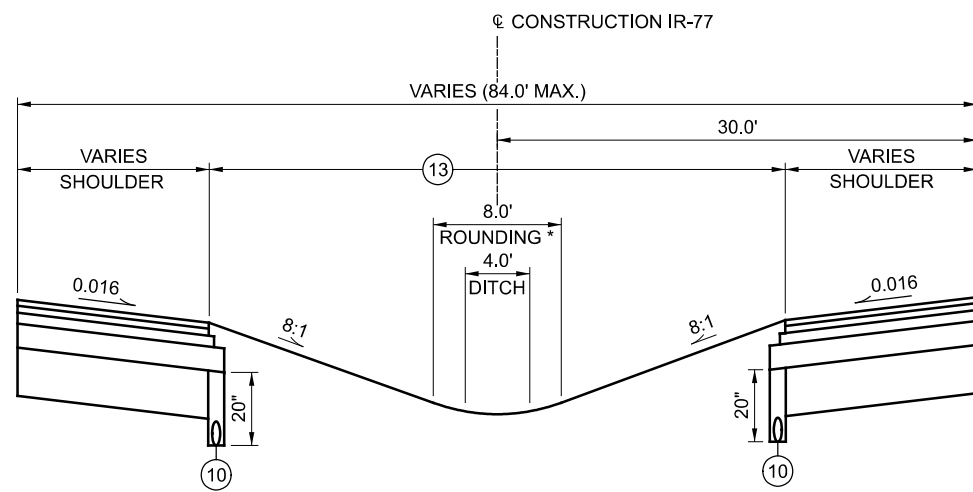
FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR GUARDRAIL LOCATIONS, SEE SHEETS 83 - 89
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7



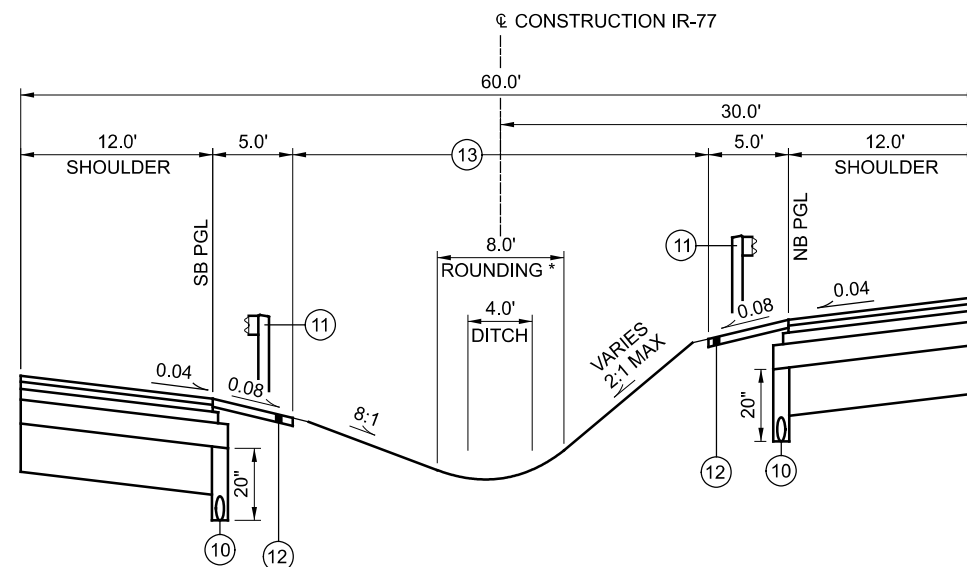
PROPOSED MEDIAN GRADING - IR-77
STA 1012+78.85 TO STA 1016+43.00



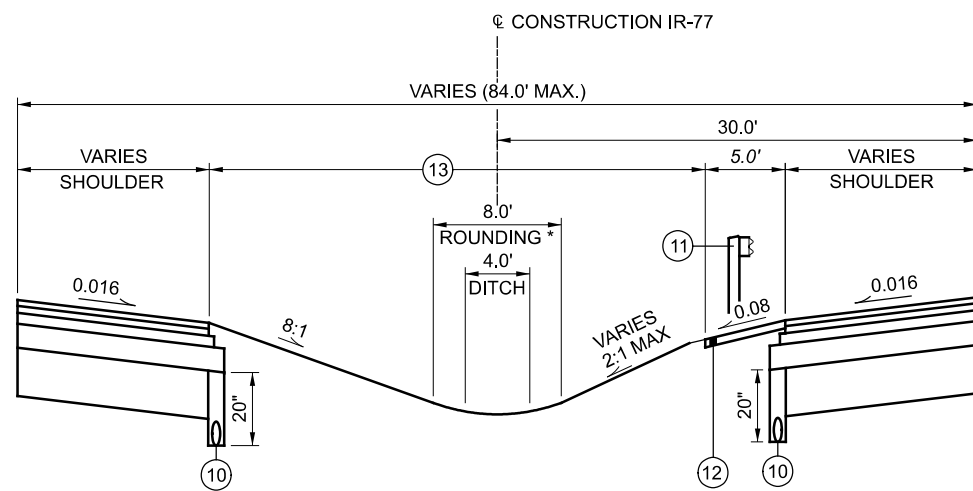
PROPOSED BIFURCATED MEDIAN GRADING - IR-77
STA 1029+27.19 TO STA 1037+00.00



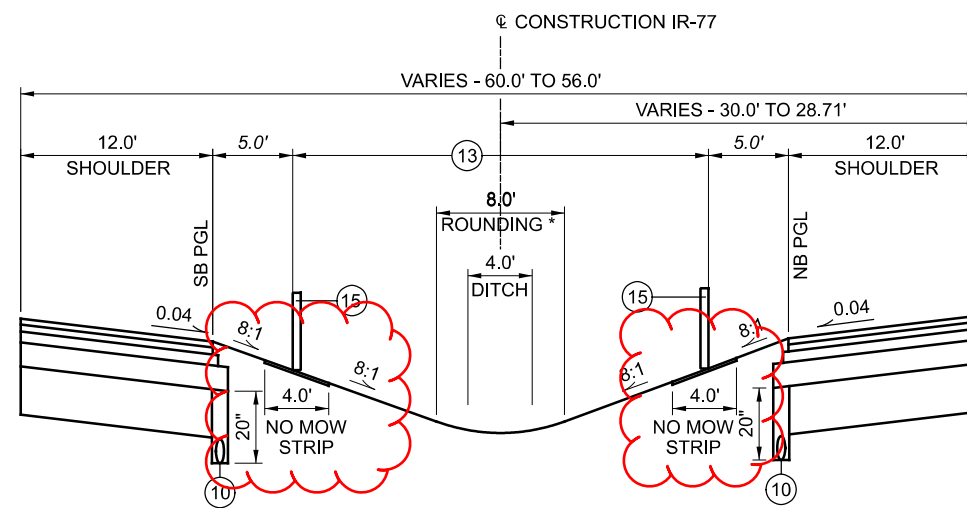
PROPOSED MEDIAN GRADING - IR-77
STA 1016+43.00 TO STA 1024+11.00



PROPOSED BIFURCATED MEDIAN GRADING - IR-77
STA 1037+00.00 TO STA 1050+60.00



PROPOSED MEDIAN GRADING - IR-77
STA 1024+11.00 TO STA 1026+40.00



PROPOSED MEDIAN GRADING - IR-77
STA 1050+60.00 TO STA 1068+75.00

* WHERE VEGETATED BIOFILTERS ARE PROPOSED, NO ROUNDING IS REQUIRED.

FOR BASE AND SUBBASE STEP DETAIL, SEE SHEET 7
FOR GUARDRAIL ROUNDING DETAIL, SEE SHEET 7
FOR PROPOSED PAVEMENT LEGEND, SEE SHEET 7

ROUNDING

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

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO 811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MATT STEELE, 330-786-4832) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OHIO 811 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS DIRECTLY)

ODOT 330-786-4832 (MATT STEELE)

ODOT ITS LAB 1606 W. BROAD ST, COLUMBUS, OH 43223, EMAIL: CEN.ITS.LAB@DOT.OHIO.GOV

(EMAIL FOR ITS LOCATES AS WE ARE NOT A MEMBER OF OUPS)

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

AT&T OHIO
13630 LORAIN AVE 2ND FLOOR
CLEVELAND OHIO 44111
216-750-0135
MIKE DEIDERICH
MD4145@ATT.COM

AT&T TRANSMISSION
155 COMMERCE PARK DR. SUITE #1
WESTERVILLE, OHIO 43082
770-584-7083
CHAD HARKNESS
CHAD.HARKNESS@MCGFIBER.COM

CENTURYLINK (LEVEL 3 COMMUNICATIONS)
100 S. CINCINNATI AVE., SUITE 1200
TULSA, OK. 74103
NATIONALRELO@CENTURYLINK.COM
KENDALL ZETINA
KENDALL.ZETINA@CENTURYLINK.COM

CHARTER COMM
8179 DOW CIRCLE
STRONGSVILLE, OHIO 44136
216-575-8016
Gary Naumann
GARY.NAUMANN1@CHARTER.COM

CENTURYLINK/LUMEN
ATTN: ALAN PETERS
3801 ELM RD WARREN, OHIO 44483
330-841-1309
330-219-3306 CELL
ALAN.L.PETERS@LUMEN.COM

UTILITIES (CONTINUED)

FRONTIER COMM
6223 NORWALK ROAD
MEDINA, OHIO 44256
330-772-9586
RANDY HOWARD
J.HOWARD@FTR.COM

MCI
120 RAVINE ST
AKRON, OHIO 44303
330 253 8267
DANIEL ARZ
DANIEL.ARZ@VERIZON.COM
ALLAN GUEST
ALLAN.GUEST@VERIZON.COM

WINDSTREAM
560 TARNES AVE.
ELYRIA, OHIO 44035
440 329-4245
GEOFFREY HAMM
GEOFFREY.P.HAMM@WINDSTREAM.COM
216 385-1669
JEFF GULYAS
JEFF.GULYAS@WINDSTREAM.COM

CLEVELAND WATER DEPARTMENT
1201 LAKESIDE AVE.
CLEVELAND, OH 44114
216-362-6370
FRED ROBERTS, PE
fred_roberts@clevelandwater.com

COUNTY OF SUMMIT - DEPT OF SANITARY
RUSSELL M. PRY BUILDING
1180 SOUTH MAIN STREET
SUITE 201
AKRON, OH 44301
330-926-2405
MELISSA MCFADDEN
MELISSAMCFADDEN@SUMMITOH.NET

DOMINION ENERGY
320 SPRINGSIDE DR, SECOND FLOOR
AKRON OHIO 44333
330-664-2783
MICHAEL A. SALVATORE, S.I.T.
michael.a.salvatore@dominionenergy.com
330-664-2409
JASON ROSS
JASON.M.ROSS@DOMINIONENERGY.COM
RELOCATIONS@DOMINIONENERGY.COM

OHIO EDISON (FIRST ENERGY CORP) - (USIC)
76 S MAIN ST
AKRON, OH 44308
MICHAEL JANSON
JANSONM@FIRSTENERGYCORP.COM

SUNOCO PIPELINE
8111 WESTCHESTER DRIVE
DALLAS, TX 75225
216-346-1561
713-989-7079
RAY LEPOSKY
AGT_COMM@IRTH.COM

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.

SUE LEVEL A TEST HOLE INFORMATION DATED 09-09-21 IS AVAILABLE FOR UTILITIES ALONG SR-21.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 4 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: STATIC GNSS METHODS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFROMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE (3401)
COMBINED SCALE FACTOR: 1.00010358070
ORIGIN OF COORDINATE SYSTEM: (0,0)

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

UNITS ARE IN U.S. SURVEY FEET.

WORK LIMITS

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

ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE CMS, THIS ITEM OF WORK WILL INCLUDE THE FOLLOWING ADDITIONAL REQUIREMENTS.

AN OHIO PROFESSIONAL SURVEYOR SHALL DETERMINE THE MINIMUM VERTICAL CLEARANCES OF ALL BRIDGES WITHIN THE PROJECT LIMITS AFTER COMPLETION OF ALL WORK, BUT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. AS A MINIMUM, MEASUREMENTS SHALL BE TAKEN ALONG THE CENTERLINE OF EACH FASCIA BEAM AT THE EDGE OF SHOULDERS, EDGE LINES, LANE LINES, AND CROWN OF THE ROADWAY BELOW. THE MEASUREMENTS SHALL BE DOCUMENTED ON THE ODOT VERTICAL CLEARANCE SURVEY FORM. THE FORM SHALL BEAR THE STAMP OR SEAL OF THE OHIO PROFESSIONAL SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THE OHIO PROFESSIONAL SURVEYOR SHALL SUBMIT THE COMPLETED FORM TO THE PROJECT ENGINEER AND THE DISTRICT BRIDGE MAINTENANCE ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

PAYMENT FOR ALL OF THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID FOR ITEM 623, CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK ABOVE.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS 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 LANDSCAPING ITEMS WILL BE MADE.

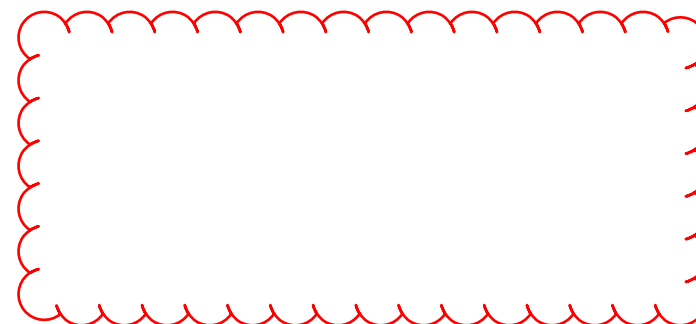
CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

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

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 441 - ANTI-SEGREGATION EQUIPMENT

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO PAY ITEM ANTI-SEGREGATION EQUIPMENT.

ITEM 441 - ANTI-SEGREGATION EQUIPMENT 3443 CY.

ITEM 606 - CABLE GUARDRAIL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY ONE OF THE HIGH TENSION FOUR CABLE GUARDRAIL SYSTEMS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION, AND ITEM 606 CABLE BARRIER, ANCHOR ASSEMBLY AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL HIGH TENSION CABLE GUARDRAIL SYSTEM NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. THE LENGTH OF THE TENSIONED CABLE NECESSARY TO INSTALL A FUNCTIONAL ANCHOR SYSTEM SHALL BE INCLUDED IN ITEM 606, CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

SYSTEMS SHALL HAVE A MAXIMUM DEFLECTION OF 8 FEET AND THE MAXIMUM LONGITUDINAL DISTANCE BETWEEN POSTS SHALL BE 15 FEET.

INSTALLATION WILL BE A FOUR CABLE HIGH TENSION SYSTEM INSTALLED IN SOCKETED POSTS FOUNDATION WITH A FOUR FOOT WIDE "NO MOW STRIP". NO MOW STRIP SHALL CONSIST OF THE FOLLOWING:

- ITEM 203 - 6" EXCAVATION
- ITEM 301 - 3" ASPHALT CONCRETE BASE, PG64-22
- ITEM 304 - 3" AGGRGATE BASE.

DELINEATE THE CABLE BARRIER USING TYPE 6 BARRIER REFLECTORS PER ITEM 626 OR USING FLEXIBLE POSTS PER ITEM 620 AS CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.

ANCHOR TERMINAL STRUTS SHALL BE COVERED COMPLETELY ON BOTH SIDES WITH YELLOW TYPE J, ASTM D 4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

TRANSITIONS TO W-BEAM GUARDRAIL ARE NOT ALLOWED.

REFER TO MANUFACTURER FOR MAXIMUM OFFSET FROM BREAK POINT.

TORPEDO OR BULLET SPLICES ARE NOT ALLOWED. ALL CABLE SPLICES SHALL BE A SWAGED OR OPEN BODY DESIGN THAT ALLOWS FOR ANNUAL INSPECTION BETWEEN THE WEDGE AND STRANDS OF CABLE.

POSTS ARE SET IN SOCKETED CONCRETE FOUNDATIONS AND SHALL NOT BE PERMANENTLY INSTALLED UNTIL THEIR RESPECTIVE RUNS OF TENSIONED CABLE GUARDRAIL ARE READY FOR FINAL CONNECTION TO THE END TERMINAL ASSEMBLY. THE CONTRACTOR SHALL REPLACE ANY POSTS DAMAGED DURING INSTALLATION AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

PAYMENT FOR ALL THE ABOVE WORK, INCLUDING THE "NO MOW STRIP", SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF APPLICABLE 606 CABLE BARRIER PAY ITEM.

POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIP(S) FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 659 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670, SLOPE EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

REMOVAL MISC.: CONCRETE PAD

REMOVE EXISTING CONCRETE PADS NOTED ON PLANS. BACKFILL THE CAVITY CREATED BY THE REMOVAL ITEM ACCORDING TO CMS 202.02. PROPERLY DISPOSE OF THE MATERIAL OFF THE PROJECT SITE.

THE COST OF CONCRETE PAD AND DISPOSAL WILL BE PAID AT THE UNIT PRICE BID PER SQUARD YARD.

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING LESS THAN 24" IN DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES. PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSSECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

REMOVAL MISC.: EXISTING ODOT ITS HIGHWAY ADVISORY RADIO

REMOVE EXISTING ODOT ITS HIGHWAY ADVISORY RADIO ON WOOD POLE FROM THE FOLLOWING LOCATIONS: STATION 1026+79.34 RT AND 1028+39.68 RT. UNDERGROUND CABLE AND PULL BOXES IS TO BE ABANDONED IN PLACE. SERVICE NEEDS TO BE DISCONNECTED TO HIGHWAY ADVISORY RADIO. THE POWER SERVICE ARE TO BE MAINTAINED FOR FUTURE USE. PROPERLY DISPOSE OF THE ADVISORY RADIO OFF THE PROJECT SITE.

THE COST OF ITS HIGHWAY ADVISORY RADIO REMOVAL AND DISPOSAL WILL BE PAID AT THE UNIT BID PER EACH.

ROUNDING

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

ITEM SPECIAL - MISC.: RECORD DRAWINGS

THE FOLLOWING SHALL APPLY AND BE PAID FOR UNDER THIS PAY ITEM.

CONTRACTOR SHALL MAINTAIN AND PROVIDE ODOT WITH RECORD DRAWINGS AS SPECIFIED HEREIN. RECORD DRAWINGS SHALL INCLUDE COMPLETE DOCUMENTATION OF FIELD REVISIONS TO THE CONTRACT DOCUMENTS.

FILING

1. THE CONTRACTOR SHALL MAINTAIN IN HIS FIELD OFFICE IN A CLEAN, DRY, LEGIBLE CONDITION THE FOLLOWING: CONTACT DRAWINGS, SPECIFICATIONS, ADDENDA, CONFORMING SHOP DRAWINGS, CHANGE ORDERS, OTHER MODIFICATIONS TO THE CONTRACT, TEST RECORDS, SURVEY DATA AND ALL OTHER DOCUMENTS PERTINENT TO THE CONTRACTOR'S WORK.
2. THE CONTRACTOR SHALL PROVIDE FILES AND RACKS FOR PROPER STORAGE AND EASY ACCESS. FILING SHALL BE ESTABLISHED IN A FORMAT ACCEPTABLE TO ODOT.
3. THE CONTRACTOR SHALL MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR INSPECTION BY ODOT OR THEIR REPRESENTATIVES.
4. RECORD DRAWINGS SHALL NOT BE USED FOR ANY OTHER PURPOSE AND SHALL NOT BE REMOVED FROM THE LOCATIONS WITHOUT ODOT APPROVAL.
5. RECORDS MUST BE KEPT CURRENT IN ELECTRONIC FORMAT AND FURNISHED AT ANY TIME THROUGHOUT THE PROJECT, UPON REQUEST.

RECORDING

1. THE CONTRACTOR SHALL KEEP ALL RECORDS CURRENT.
2. THE CONTRACTOR SHALL NOT PERMANENTLY CONCEAL ANY WORK UNTIL REQUIRED INFORMATION HAS BE RECORDED.
3. CONTRACT DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION INCLUDING:
 - A. DEPTHS OF VARIOUS ELEMENTS OF FOUNDATION IN RELATION TO DATUM.
 - B. HORIZONTAL AND VERTICAL LOCATIONS OF UNDERGROUND UTILITIES AND APPURTENANCES REFERENCED TO PERMANENT SURFACE IMPROVEMENTS.
 - C. FIELD CHANGES OF DIMENSION AND DETAIL.
 - D. CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
 - E. DETAILS NOT ON ORIGINAL CONTRACT DOCUMENTS.
4. SPECIFICATIONS AND ADDENDA: LEGIBLY MARK EACH SECTION TO RECORD:
 - A. MANUFACTURERS, TRADE NAME, CATALOG NUMBER AND SUPPLIER OF EACH PRODUCT AND ITEM OF EQUIPMENT ACTUALLY INSTALLED.
 - B. CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
 - C. OTHER MATTERS NOT ORIGINALLY SPECIFIED.

RECORD RETENTION

AS ODOT MAY LEGITIMATELY REQUEST FROM TIME TO TIME, THE CONTRACTOR AGGRESS TO MAKE AVAILABLE FOR INSPECTION AND/OR REPRODUCTION BY THE LPA OR ODOT, ALL RECORDS, BOOKS, AND DOCUMENTS OF ANY KIND AND DESCRIPTION GENERATED BY THE CONTRACTOR THAT RELATE TO THIS CONTRACT. THESE RECORDS MUST BE MADE AVAILABLE IN ELECTRONIC FORMAT.

SUBMITTALS

A. THE CONTRACTOR SHALL ANNOTATE ALL RECORD DRAWINGS REVISIONS INTO ELECTRONIC COPIES OF PLAN DRAWINGS PROVIDED BY THE ENGINEER USING MICROSTATION, AS APPROVED BY THE ENGINEER. AT THE COMPLETION OF THE PROJECT, DELIVER ONE (1) PDF, ONE (1) COMPLETE PAPER COPY, AND ONE (1) COMPLETE ELECTRONIC COPY IN TIFF FORMAT OF RECORD DRAWING ORIGINAL DOCUMENTS TO THE ENGINEER FOR DELIVERY. HIGHLIGHT CHANGES WITH CLOUDS AND SHOW MICOSTATION CHANGES ON A SEPARATE LAYER.

ITEM SPECIAL - MISC.: RECORD DRAWINGS (CONTINUED)

B. PROVIDE TRANSMITTAL LETTER CONTAINING THE FOLLOWING INFORMATION:

1. DATE
2. PROJECT TITLE AND PROJECT NUMBER
3. CONTRACTOR'S NAME AND ADDRESS
4. TITLE AND NUMBER OF EACH DRAWING
5. CERTIFICATION OF LICENSED PROFESSIONAL ENGINEER IN THE STATE OF OHIO AND LEVEL II PREQUALIFIED BY ODOT FOR BRIDGE PROJECTS.
6. SIGNATURE OF CONTRACTOR OR HIS AUTHORIZED REPRESENTATIVE.

PAYMENT

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE ENGINEER.

625, TEMPORARY LIGHTING

THE TEMPORARY LIGHTING SHALL INCLUDE THE REMOVAL OF THE EXISTING LIGHTING WITHIN INFIELD OF RAMP G FROM SR-21 TO I-77 SOUTHBOUND. THERE ARE 8 EXISTING LIGHT POLES, LUMINAIRES, FOUNDATIONS AND APPURTENANCES TO REMOVE IN ACCORDANCE WITH CMS 625.21 AND AS SHOWN ON THE PLANS. THE LIGHT POLE FOUNDATION SHALL BE REMOVED TO A MINIMUM OF 1 FOOT BELOW THE FINISHED GRADE, PROPOSED PAVEMENT BASE OR REMOVE THE FOUNDATION COMPLETELY, AND SHALL INCLUDE BACKFILLING THE RESULTANT DEPRESSION WITH COMPACTED SOIL. ALL CABLES SHALL BE REMOVED AND CONDUITS ABANDONED.

THE CONTRACTOR SHALL COORDINATE PROJECT PID 111405 TO BE SOLD JULY 2023, WHERE PERMANENT LIGHTING WILL BE INSTALLED. PERMANENT LIGHTING SHOULD BE INSTALLED BY THE END OF PHASE 2 (OPENING OF RAMP G).

THE CONTRACTOR SHALL NOT PROCEED WITH THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW TEMPORARY LIGHTING IS OPERATIONAL. THE POLES SHALL BE SPACED AT 150 FEET, BRACKET ARMS SHALL BE 30 FEET, LUMINAIRES SHALL PROVIDE THE STATED FOOTCANDLES OR AT A MINIMUM MATCH THE EXISTING LIGHTING, 30-FOOT MOUNTING HEIGHT OF LUMINAIRES, OVERHEAD WIRING METHODS, SHALL BE PLACED OUTSIDE THE CLEAR ZONE. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "B" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND SHALL BE LEFT IN PLACE AT THE END OF THE CONTRACT.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED POWER SERVICES AFTER ACCEPTANCE OF THE TEMPORARY LIGHTING WORK.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER LUMP SUM FOR ITEM 625 TEMPORARY LIGHTING AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TESTING AND INCIDENTALS TO REMOVE THE EXISTING LIGHTING AND PLACE A TEMPORARY LIGHTING SYSTEM COMPLETE, FULLY OPERATIONAL AND IN PLACE.



DESIGNER	TQD
REVIEWER	DRJ 05/03/22
PROJECT ID	104983 (PRT 2)
SHEET	TOTAL
17	312

SUM-77-3227L BRIDGE SUMMARY										CALCULATED: RSN 01/09/22	CHECKED: SAT 02/03/22	REVISED: SAT 08/30/22			
ITEM	ITEM EXT.	TOTAL PER SPLIT		TOTAL PER PHASE			GRAND TOTAL	UNIT	DESCRIPTION	PHASE 1			PHASE 2	GENERAL	SHEET REF.
		05/IMS/BR	06/IMS/BR	PH 1	PH 2	GEN				ABUT.	PIERS	SUPER			
202	11203		LS			LS	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN					LS	2
202	22900	334		74	260		334	SY	APPROACH SLAB REMOVED	74			260		
503	21101	135	263	398			398	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	140	258				18
505	11100		LS			LS	LS		PILE DRIVING EQUIPMENT MOBILIZATION, AS PER PLAN					LS	2
507	00500		850	850			850	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	850					
507	00550		950	950			950	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	950					
507	00600		840	840			840	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN		840				
507	00650		960	960			960	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		960				
509	10001		73,658	73,658			73,658	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	6,376	16,261	51,021			3
509	20001		300			300	300	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN					300	3
509	30020		4,640	4,640			4,640	FT	NO. 4 GFRP DEFORMED BARS			4,640			
510	10001		22	22			22	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER PLAN	22					3
511	34446		158	158			158	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			158			
511	34451		46	46			46	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			46			3
511	42012		77	77			77	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		77				
511	44112		54	54			54	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	54					
511	46512		86	86			86	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	46	40				
512	10101	166	485	651			651	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	65	307	279			18
512	33000		7	7			7	SY	TYPE 2 WATERPROOFING	7					
512	74000		357	357			357	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		357				
513	10260		155,046	155,046			155,046	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			155,046			
513	20000		1,989	1,989			1,989	EACH	WELDED STUD SHEAR CONNECTORS			1,989			
513	95020		LS			LS	LS		STRUCTURAL STEEL, MISC.:					LS	3
514	00060		5,401	5,401			5,401	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			5,401			
514	00066		5,401	5,401			5,401	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			5,401			
514	00504		2	2			2	MNHR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL			2			
514	10000		6	6			6	EACH	FINAL INSPECTION REPAIR			6			
514	27800		LS	LS			LS		FIELD PAINTING, MISC.: REMOVAL AND REPAIR OF EXISTING GALVANIC COATING ON STRUCTURAL STEEL			1			4
516	10010	173	54	90	137		227	FT	ARMORLESS PREFORMED JOINT SEAL	90			137		
516	13600		25	25			25	SF	1" PREFORMED EXPANSION JOINT FILLER	25					
516	13900		99	99			99	SF	2" PREFORMED EXPANSION JOINT FILLER	99					
516	14020		108	108			108	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL			108			
516	44100		3	3			3	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (14"x9.50"x2.96" BEARING WITH 15"x10.50" LOAD PLATE AND BEVELED HP10x42 PEDESTAL)	3					
516	44100		6	6			6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (18"x13"x2.59" BEARING WITH 19"x14" BEVELED LOAD PLATE)		6				
516	44200		3	3			3	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (13.50"x11.50"x3.08" BEARING WITH 14.50"x12.50" LOAD PLATE AND BEVELED HP10x42 PEDESTAL)	3					
518	21200		39	39			39	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	39					
518	40000		90	90			90	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	90					
518	40010		60	60			60	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	60					
SPECIAL	51900100		2,020	2,020			2,020	SF	COMPOSITE FIBER WRAP SYSTEM		2,020				18
519	11100	202		202			202	SF	PATCHING CONCRETE STRUCTURE		202				
523	20001		4	4			4	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2	2				3
523	20501		4	4			4	EACH	RESTRIKE, AS PER PLAN	2	2				3
526	25011	329	108	175	262		437	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN	175			262		33
526	90030	173	54	90	137		227	FT	TYPE C INSTALLATION	90			137		
601	20000		487			487	487	SY	CRUSHED AGGREGATE SLOPE PROTECTION					487	
613	41200		17			17	17	CY	LOW STRENGTH MORTAR BACKFILL					17	
625	33000		1			1	1	EACH	STRUCTURE GROUNDING SYSTEM					1	

ESTIMATED QUANTITIES
 BRIDGE NO. SUM-77-3227L
 IR-77 OVER SR-21 (BRECKSVILLE RD.)

SFN 7704712
 DESIGN AGENCY
Gannett Fleming
 ENGINEERS AND ARCHITECTS, P.C.
 2800 Corporate Exchange Drive
 Suite 200
 Columbus, OH 43231

DESIGNER CHECKER
 SAT CTM

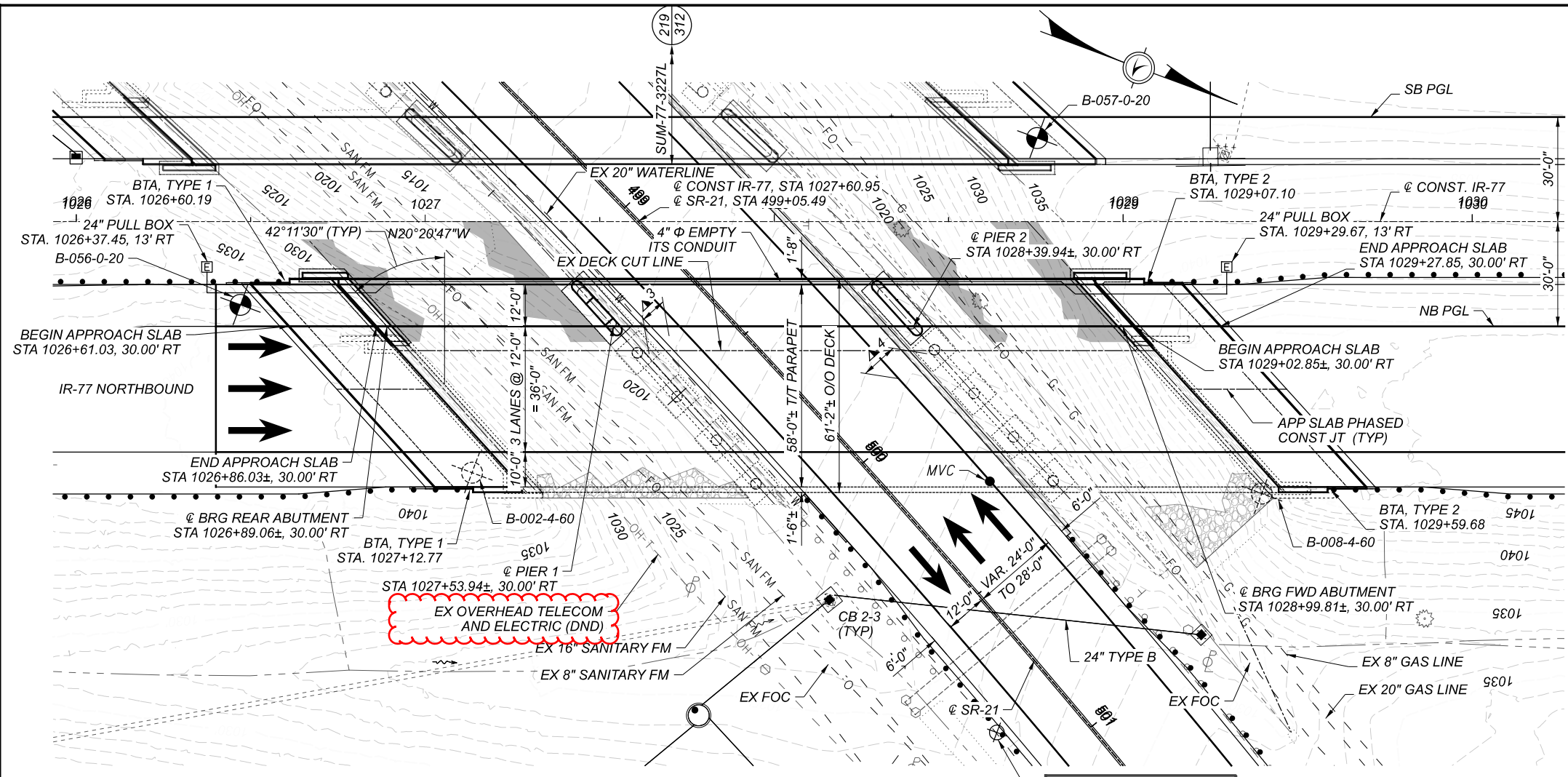
REVIEWER
 MTO 3/22

PROJECT ID
 104983 (PRT 2)

SUBSET TOTAL
 5 38

SHEET TOTAL
 223 312

SUM-77-32.27
 MODEL: Sheet PAPER: 17x11 (in.) DATE: 10/6/2022 TIME: 2:14:50 PM USER: edies
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 SUBMITTAL: Trading PDF
 PLOT DRIVER: OHDOT_PDF.plt
 PENTABLE: 104983_OHDOT_Pen.tbl
 SUBSET: 15



PLAN
 (ALL EXISTING UTILITIES TO REMAIN UNLESS NOTED OTHERWISE)

** SUE LEVEL A TEST HOLE INFORMATION, DATED 09-09-21, IS AVAILABLE FOR UTILITIES ALONG SR-21

WATERLINE SUE LEVEL** TEST HOLE #8 LOCATION

BENCHMARK DATA		
BM #120, STA 1000+00.25	ELEV 995.78	OFFSET 85.45' RT
BM #121 STA 1036+81.45	ELEV 1048.90	OFFSET 83.94' FT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 4/312

NOTES
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:	
CURRENT ADT (2028)	58,970
DESIGN YEAR ADT (2048)	69,490
DIRECTIONAL DISTRIBUTION	7%
DESIGN SPEED	70 MPH

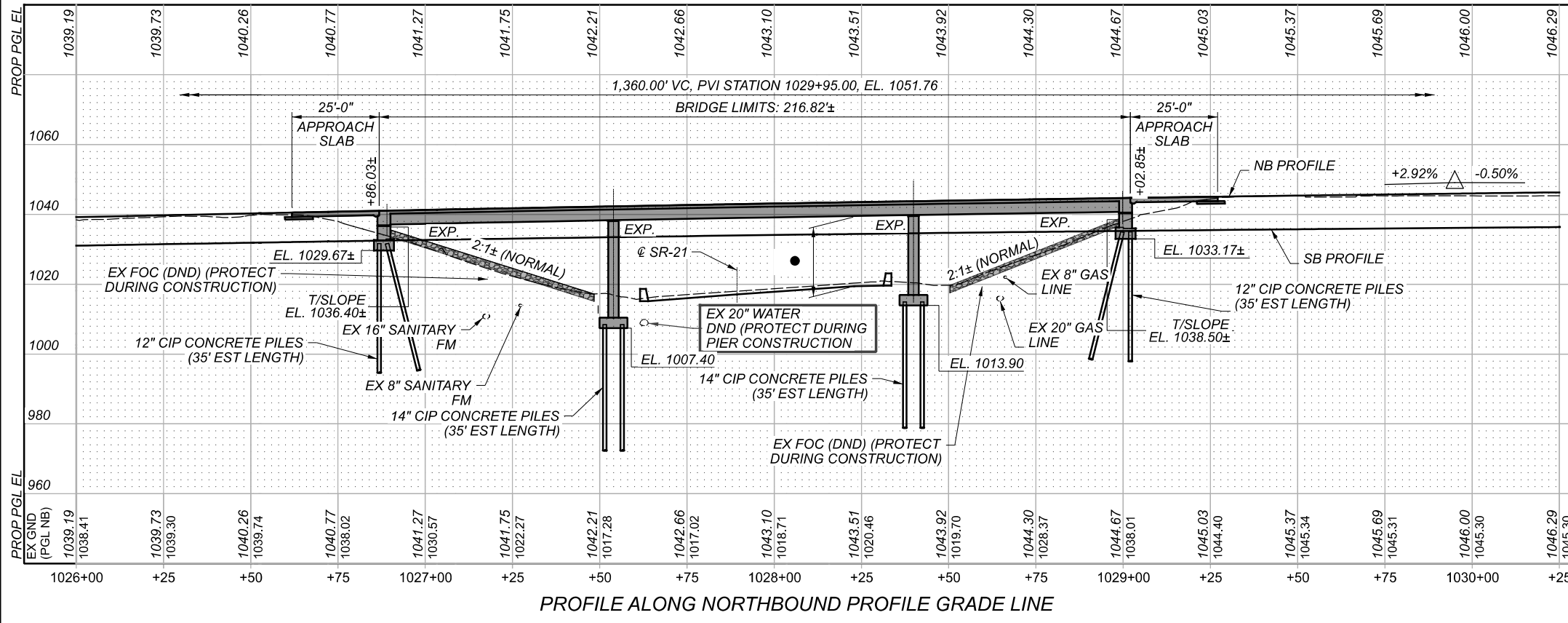
- LEGEND**
- PROJECT BORING LOCATION
 - HISTORIC BORING LOCATION

- HORIZONTAL AND VERTICAL CLEARANCES**
- 15.61' EXIST. ACTUAL 16.59' PROP. ACTUAL 14.50' REQUIRED
 - 3 11.51' ACTUAL 7.67' REQ'D 19'-0" CLEAR ZONE (BARRIER PROTECTED)
 - 4 12.58' ACTUAL 7.67' REQ'D 19'-0" CLEAR ZONE (BARRIER PROTECTED)

- EXISTING AGGREGATE SLOPE PROTECTION (TO REMAIN)
- PROPOSED AGGREGATE SLOPE PROTECTION (INSTALLED WITH THIS PROJECT)

EXISTING STRUCTURE	
TYPE:	CONTINUOUS COMPOSITE STEEL BEAMS WITH CONCRETE DECK AND SEMI-INTEGRAL SUBSTRUCTURE
SPANS:	64'-10 ¹ / ₂ '±, 86'-0"±, 59'-10 ¹ / ₂ '± C/C BRGS.
ROADWAY:	40'-0"± TOE/TOE PARAPET
LOADING:	HS25 CASE I AND ALTERNATE MILITARY LOADING (SUPERSTRUCTURE), HS20-44 AND ALTERNATE MILITARY LOADING (SUBSTRUCTURES) 60 PSF FWS
SKEW:	42°11'30"± RIGHT FORWARD
WEARING SURFACE:	1" MONOLITHIC CONCRETE
APPROACH SLABS:	25' LONG (AS-1-81 MODIFIED)
ALIGNMENT:	TANGENT
CROWN:	0.016±
STRUCTURE FILE NUMBER:	7704747
DATE BUILT:	1962, MODIFIED 2011
DISPOSITION:	TO BE REHABILITATED

PROPOSED STRUCTURE	
TYPE:	WIDENED CONTINUOUS COMPOSITE BEAMS WITH CONCRETE DECK SLAB ON WIDENED PIERS AND WIDENED SEMI-INTEGRAL ABUTMENTS
SPANS:	64'-10 ¹ / ₂ '±, 86'-0"±, 59'-10 ¹ / ₂ '± C/C BRGS.
ROADWAY:	58'-0"± TOE/TOE PARAPET
LOADING:	SEE GENERAL NOTES
SKEW:	42°11'30"± RIGHT FORWARD
WEARING SURFACE:	1" MONOLITHIC CONCRETE
APPROACH SLABS:	25' LONG (AS-1-15, AS-2-15), TYPE C INSTALLATION
ALIGNMENT:	TANGENT
CROWN:	0.016±
DECK AREA:	13,273 SF
COORDINATES:	LATITUDE 41°15'31.27" LONGITUDE 81°37'54.15"



PROFILE ALONG NORTHBOUND PROFILE GRADE LINE

SITE PLAN
 BRIDGE NO. SUM-77-3227R
 IR-77 OVER SR-21 (BRECKSVILLE RD.)

SFN	7704747
DESIGN AGENCY	Gannett Fleming
ENGINEERS AND ARCHITECTS, P.C.	2800 Corporate Exchange Drive, Suite 200, Columbus, OH 43221
DESIGNER/CHECKER	SAT/CTM
REVIEWER	MTO/2/22
PROJECT ID	104983 (PRT 2)
SUBSET	1/37
SHEET	257/312