

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

**D12 BH FY2012
SPALL REMOVAL**

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF CONCRETE SPALL REMOVAL IN THE LOCATIONS DESCRIBED IN THESE PLANS.

THIS IS A MAINTENANCE PROJECT.

PROJECT EARTH DISTURBED AREA: N/A

ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A

NOTICE OF INTENT EARTH DISTURBED AREA: N/A

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2010 SPECIFICATIONS

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

LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	CITY
1	CUY-071-1401	1805150	CLEVELAND/BROOKLYN
2	CUY-071-1791	1805371	CLEVELAND
3	CUY-071-1848	1805495	CLEVELAND
4	CUY-071-1887	1805584	CLEVELAND
5	CUY-090-0648	1807765	ROCKY RIVER
6	CUY-090-0909	1808125	CLEVELAND
7	CUY-480-0870ES	1814249	BROOK PARK
8	CUY-480-0872	1814257	BROOK PARK
9	CUY-480-1054	1812904	BROOK PARK/CLEVELAND
10	CUY-480-1162	1812939	BROOKLYN
11	CUY-480-1506	1810073	CLEVELAND
12	CUY-042-1662	1807889	CLEVELAND
13	CUY-017-1227	1802402	BROOKLYN HEIGHTS
14	CUY-094-1020	1809644	CLEVELAND
15	CUY-237-1236	1808575	LAKEWOOD
16	CUY-252-0879	1810421	WESTLAKE

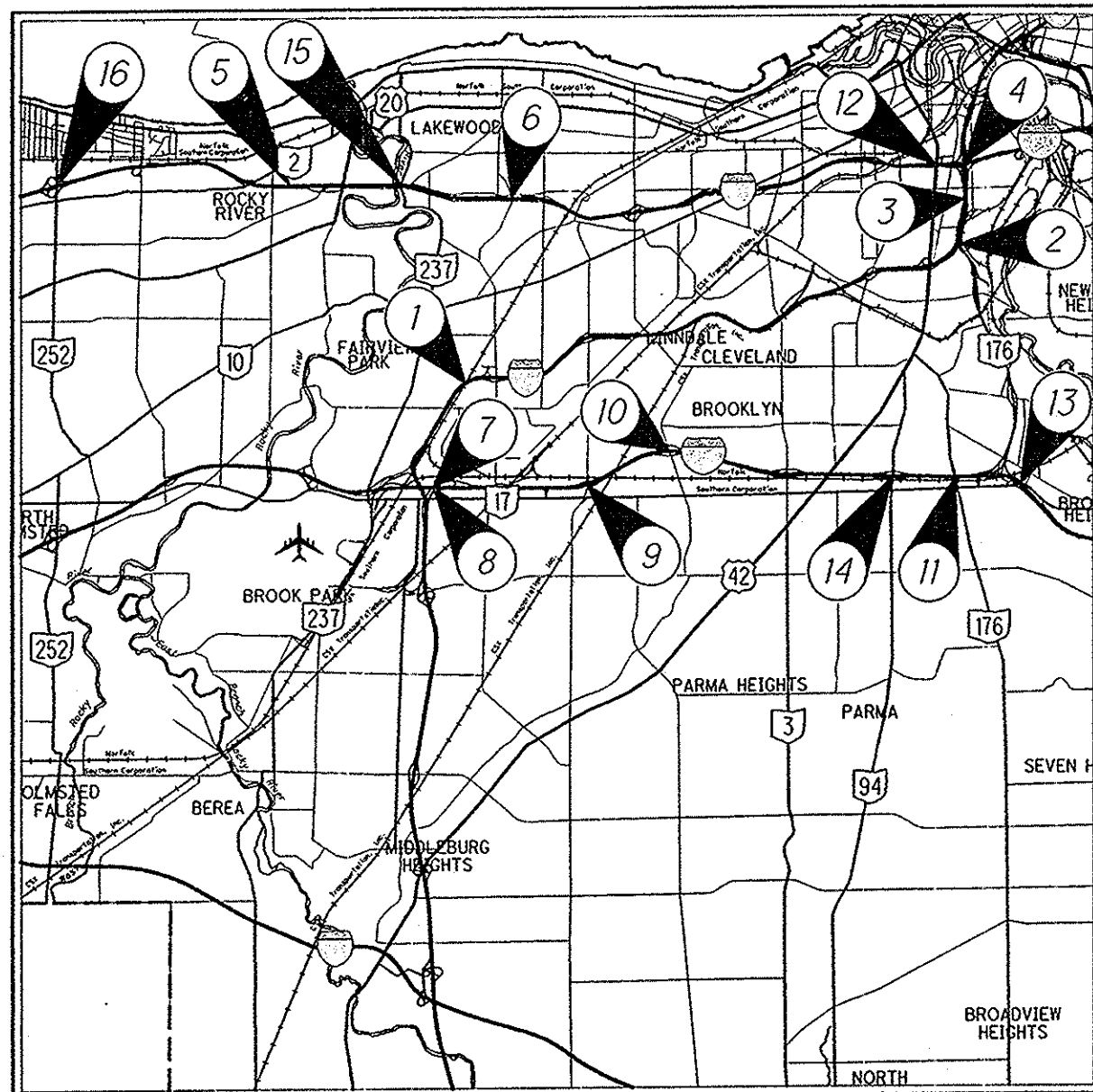
INDEX OF SHEETS:

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

APPROVED: *Mym S. Pol*
DATE: 04-21-11 DISTRICT DEPUTY DIRECTOR

APPROVED: *Ferry Zhang*
DATE: 5-6-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP
LATITUDE: 41° 24' 55" N LONGITUDE: 81° 36' 56" W
(NOTE: FOR COORDINATES PER LOCATION, SEE SHEET 3)



UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:

ODOT - DISTRICT 12
PRODUCTION DEPARTMENT
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OHIO 44125

ENGINEERS SEAL:



SIGNED: *Kevin M. Rohde*
Kevin M. Rohde

DATE: 04-21-11

STANDARD CONSTRUCTION DRAWINGS

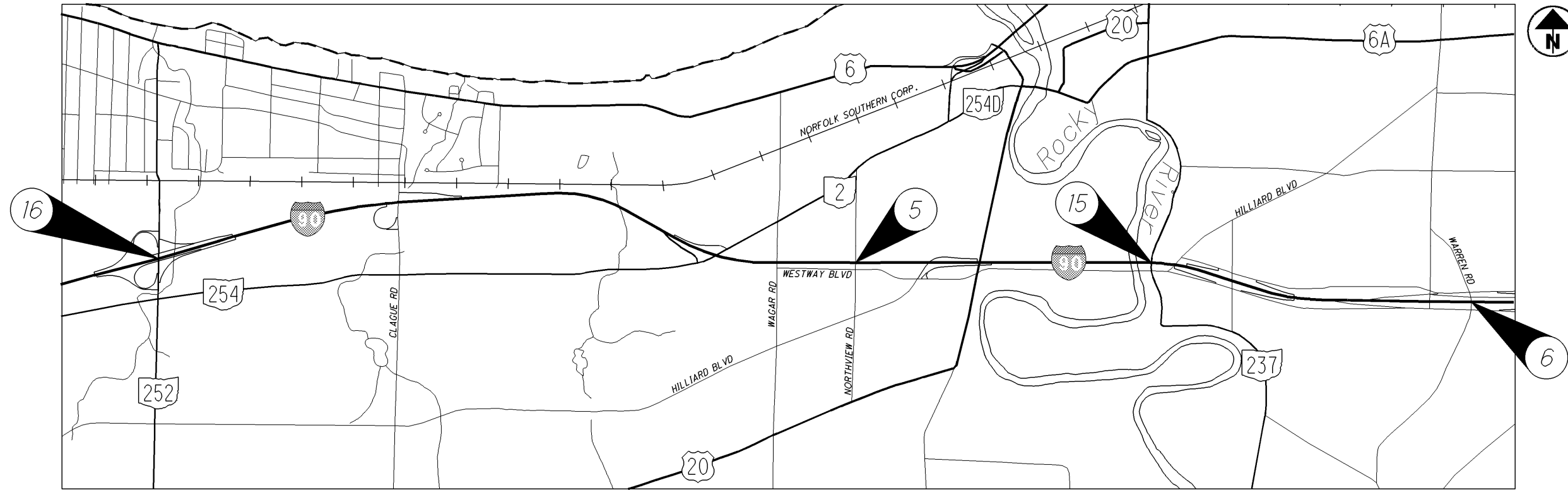
MT-35.10	4-20-07	TC-41.10	10-19-07						
		TC-41.20	1-19-07						
MT-95.30	7-17-09	TC-52.10	1-19-07						
MT-95.50	4-17-09	TC-52.20	1-19-07						
MT-97.10	10-15-10								
MT-98.10	7-17-09								
MT-98.11	7-17-09								
MT-98.20	7-17-09								
MT-98.22	7-17-09								
MT-98.28	7-17-09								
MT-98.29	7-17-09								
MT-105.10	1-16-09								

SPECIAL PROVISIONS

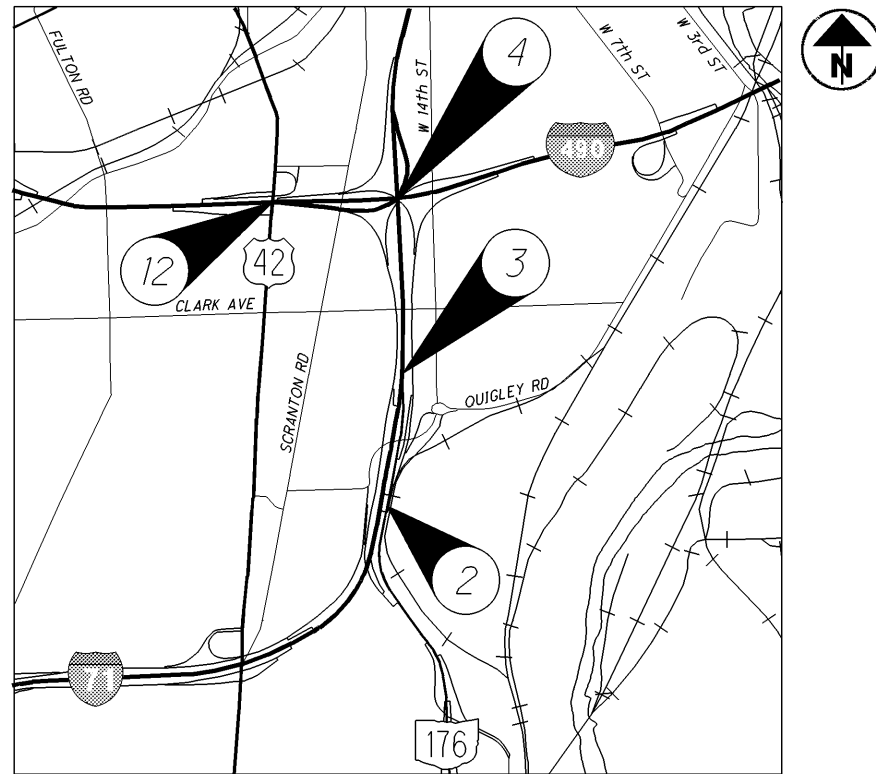
SPECIAL PROVISIONS

FEDERAL PROJECT NO. 100% STATE
PID NO. 90245
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
D12 BH FY2012 SPALL REMOVAL
1/42

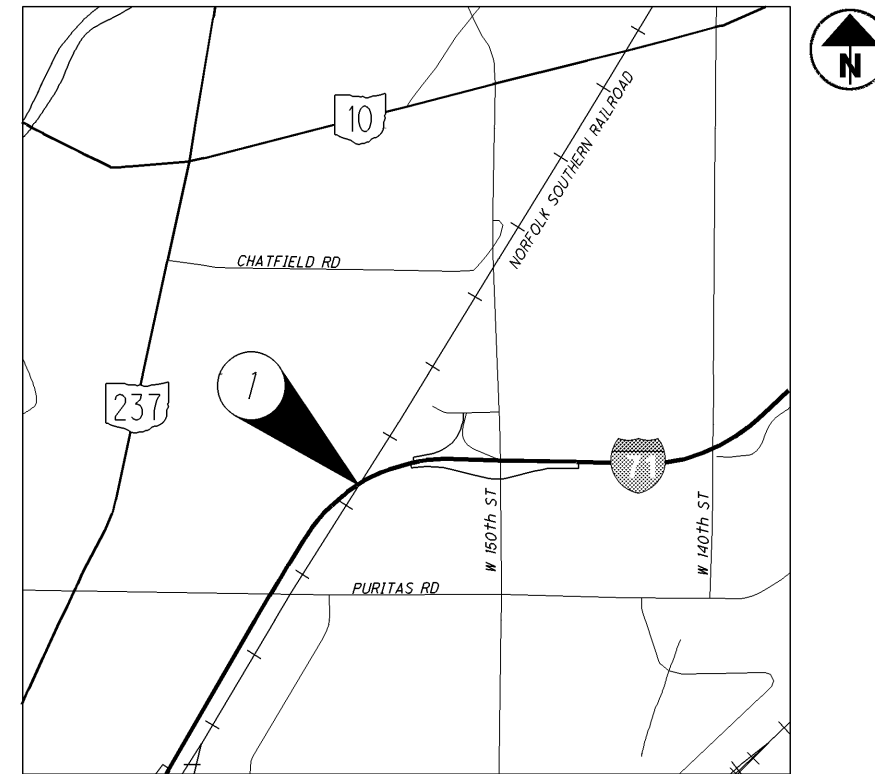
D12 - VA-BH-FY2012
110462 PID - 90245
Dist 12 7/21/2011
Contract Proposal available
@ www.contracts.dot.
state.oh.us/home



LOCATION MAP FOR LOCATIONS 5, 6, 15, & 16



LOCATION MAP FOR LOCATIONS 2, 3, 4, & 12



LOCATION MAP FOR LOCATION 1

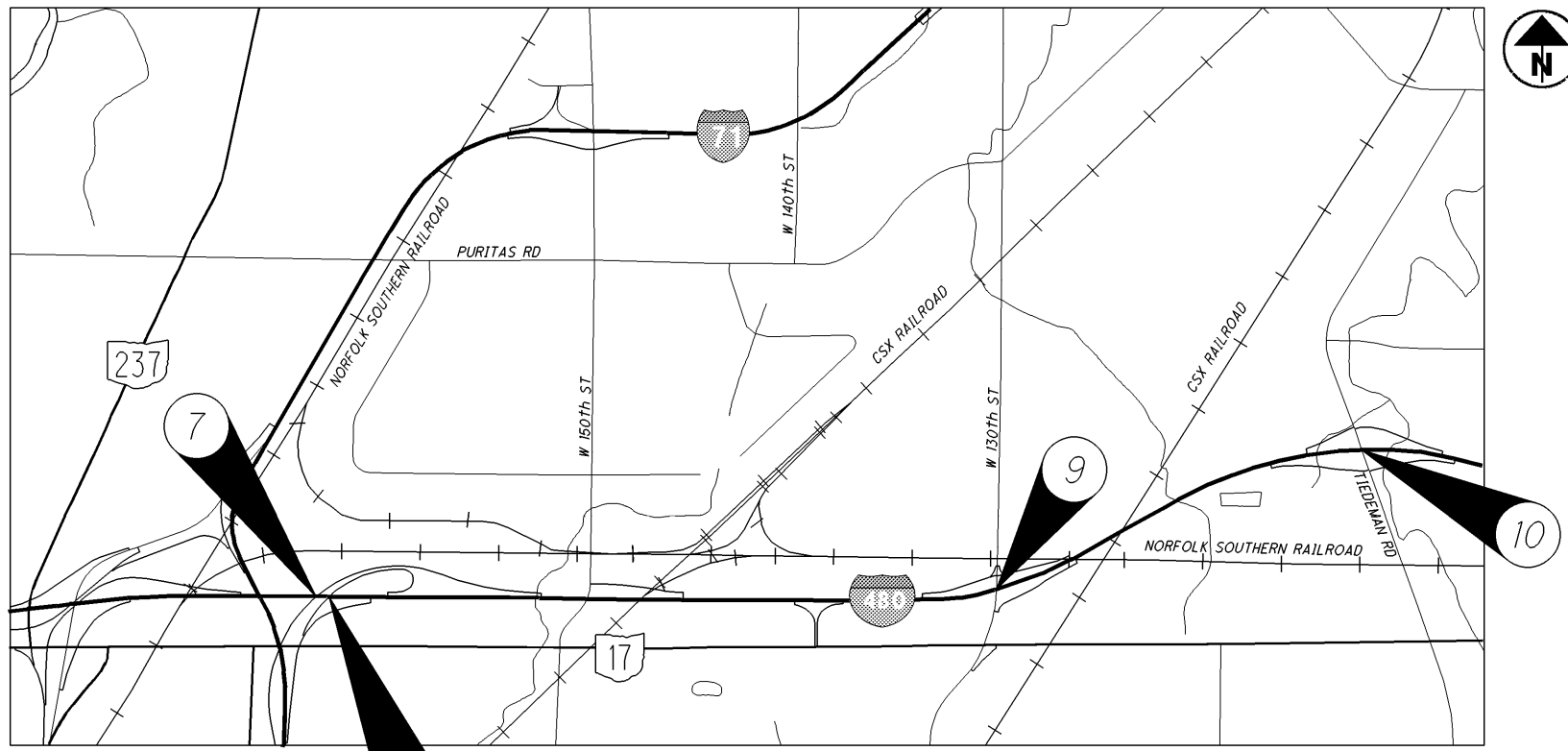
NOTES

1. FOR COORDINATES OF EACH LOCATION, SEE SHEET 3 OF 42.

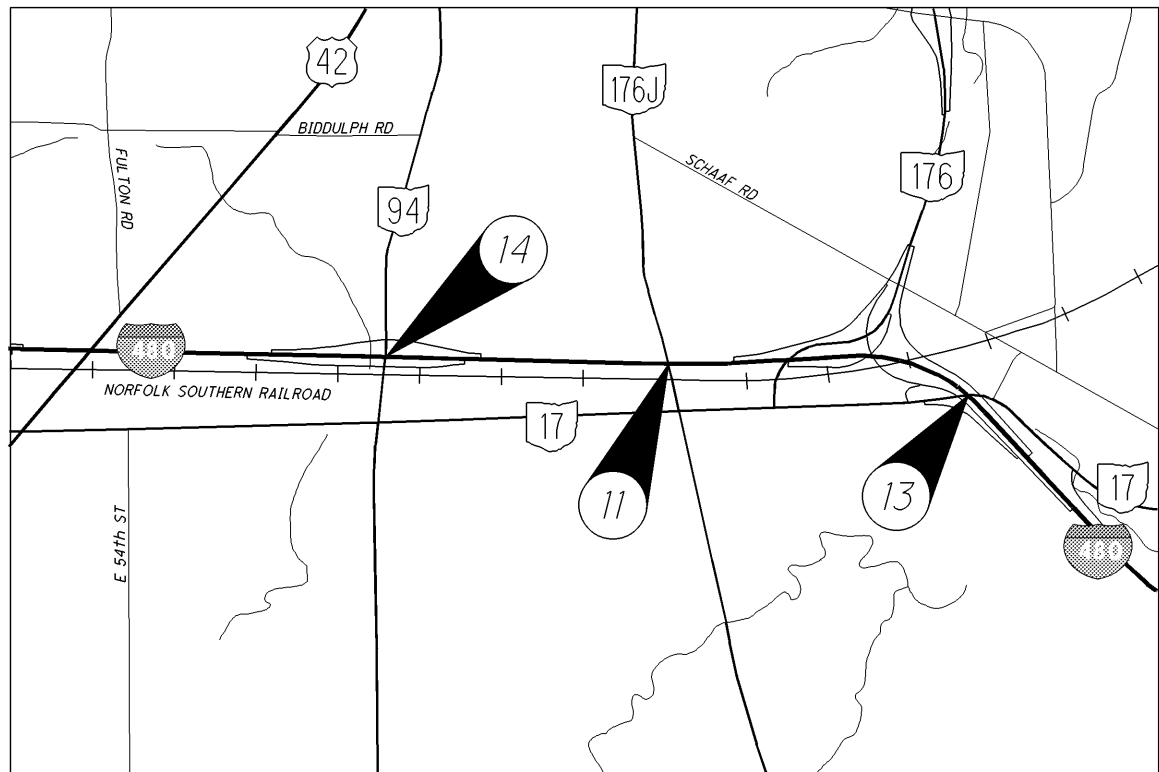
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LOCATION MAPS - 1

D12 BH FY2012
SPALL REMOVAL
PID No. 90245



LOCATION MAP FOR LOCATIONS 7, 8, 9, & 10



LOCATION MAP FOR LOCATIONS 11, 13, & 14

LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	DESCRIPTION	LATITUDE	LONGITUDE	DECK AREA* (SQ. FT.)
1	CUY-071-1401	1805150	IR-71 UNDER NSC RAILROAD	41°25'14" N	81°49'08" W	13,890
2	CUY-071-1791	1805371	IR-71 OVER SR-176	41°26'17" N	81°48'30" W	90,000
3	CUY-071-1848	1805495	IR-71 UNDER BUHRER PED BRIDGE	41°27'38" N	81°41'40" W	1,316
4	CUY-071-1887	1805584	IR-71 OVER IR-490	41°28'04" N	81°41'34" W	19,778
5	CUY-090-0648	1807765	IR-90 UNDER NORTHVIEW RD	41°28'27" N	81°41'35" W	5,609
6	CUY-090-0909	1808125	IR-90 UNDER WARREN RD	41°28'19" N	81°50'50" W	11,831
7	CUY-480-0870ES	1814249	IR-480 UNDER RAMP "R"	41°28'10" N	81°47'50" W	6,532
8	CUY-480-0872	1814257	IR-480 UNDER RAMP "T"	41°25'14" N	81°48'57" W	6,318
9	CUY-480-1054	1812904	IR-480 OVER CR-18 W130TH ST	41°25'14" N	81°46'49" W	15,083
10	CUY-480-1162	1812939	IR-480 UNDER TIEDEMAN RD	41°25'34" N	81°45'41" W	12,987
11	CUY-480-1506	1810073	IR-480 UNDER BROADVIEW RD	41°25'16" N	81°41'45" W	10,204
12	CUY-042-1662	1807889	US-42 OVER IR-90	41°28'27" N	81°41'58" W	14,206
13	CUY-017-1227	1802402	SR-17 OVER IR-480 (CUY-480-1586)	41°25'11" N	81°40'50" W	28,917
14	CUY-094-1020	1809644	SR-94 OVER IR-480 (CUY-480-1432)	41°25'17" N	81°42'36" W	15,608
15	CUY-237-1236	1808575	SR-237 OVER IR-90	41°28'19" N	81°49'22" W	7,662
16	CUY-252-0879	1810421	SR-252 OVER IR-90	41°28'22" N	81°54'06" W	14,601

* DECK AREAS GIVEN FOR INFORMATIONAL PURPOSES ONLY. THESE AREAS ARE THE TOTAL ESTIMATED AREAS PER LOCATION WITHIN THE INSPECTION LIMITS AS DESCRIBED IN THE GENERAL NOTE FOR ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL ON SHEET 4. ACTUAL INSPECTION AND REMOVAL AREAS SHALL BE FIELD DETERMINED.

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UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

EXISTING PLANS

EXISTING PLANS FOR STRUCTURES SHOWN ELSEWHERE IN THE PLANS MAY BE INSPECTED IN THE ODOT DISTRICT 12 OFFICE IN GARFIELD HEIGHTS.

PROPOSED WORK

THIS PROJECT INVOLVES REMOVING DELAMINATED CONCRETE FOR DESIGNATED BRIDGES IN CUYAHOGA COUNTY.

THE CONTRACTOR SHALL NOT PERFORM ANY BRIDGE WORK UNTIL HE RECEIVES THE AUTHORIZATION FROM THE ENGINEER.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

AS LISTED ON THE TITLE SHEET.

EXISTING STRUCTURE VERIFICATION

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

RIGHT-OF-WAY

ALL WORK WILL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY.

DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH CMS 107.10.

LIMITATIONS OF OPERATIONS

NO WORK IS TO BE WITHIN STREAMS OR WETLANDS.

THE CONTRACTOR'S ACTIVITIES AND WORK SCHEDULE SHALL

BE CONSTRAINED BY THE FOLLOWING SPECIAL LIMITATIONS:

1. MAINTENANCE OF TRAFFIC RESTRICTIONS (REFER TO THE MAINTENANCE OF TRAFFIC NOTES IN THIS PLAN).
2. LOCATION 1, BRIDGE CUY-71-1401: IR-71 UNDER NORFOLK SOUTHERN RAILROAD: THE CONTRACTOR SHALL ACCESS LOCATION 1 FROM THE ROADWAY BELOW ONLY. THE CONTRACTOR SHALL NOT ACCESS LOCATION 1 FROM THE TOP OF THE RAILROAD BRIDGE. THE CONTRACTOR SHALL NOT CONNECT APPARATUS TO ANY BRIDGE COMPONENT ON THE TOP OF THE RAILROAD BRIDGE TO ACCESS AND PERFORM WORK.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS WITH CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.08 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS IS INTENDED.

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC THE CONTRACTOR'S ATTENTION IS DIRECTED TO 614.03. IN ADDITION THE FOLLOWING PROVISIONS SHALL APPLY:

1. ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN THIRTY (30) DAYS.
2. THE STORAGE OF EQUIPMENT, MATERIALS, AND VEHICLES WITHIN THE HIGHWAY RIGHT OF WAY WILL BE PERMITTED. THE NUMBER OF AREAS AND EXACT LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE STATE.

ITEM 202 – REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

THE CONTRACTOR SHALL PROVIDE ACCESS AND SOUND ALL POSSIBLE AREAS OF LOOSE CONCRETE FROM THE BACK OF THE PARAPETS AND BOTTOM OF THE OVERPASS DECK WITHIN THE LIMITS AS SHOWN IN THE PLANS. THE INSPECTION LIMITS SHOWN IN THE PLANS ARE DEFINED BY A THEORETICAL HORIZONTAL PLANE BOUNDED BY THE LIMITS OF THE UNDERPASS ROADWAY, INCLUDING SHOULDERS AND SIDEWALKS, WHICH ARE WITHIN THE LIMITS OF THE OVERPASS STRUCTURE. THE INSPECTION LIMITS SHALL ALSO INCLUDE THE DECK FASCIA AND BACK FACE OF THE PARAPETS. THE EXISTING CONCRETE PIER CAP AS NOTED AT LOCATION 2, ON SHEET 12 OF 42, SHALL ALSO BE INCLUDED IN THE INSPECTION AND REMOVAL LIMITS.

THE CONTRACTOR SHALL DETERMINE THE AREAS OF CONCRETE THAT ARE TO BE REMOVED SUBJECT TO THE APPROVAL OF THE ENGINEER. STANDARD DESCRIPTIONS OF

CONCRETE AREAS SUBJECT TO REMOVAL INCLUDE, BUT NOT LIMITED TO: SPALLED, DELAMINATED, MOTTLED, DAMP, HONEYCOMBED, EFFLORESCENCE, AND ETC.

THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN PROXIMITY TO THE EXISTING UTILITY FACILITIES. SECTIONS 105.07 AND 107.16 OF THE CMS REQUIRE THAT THE CONTRACTOR COOPERATE WITH ALL UTILITIES LOCATED WITHIN THE LIMITS OF THE CONSTRUCTION PROJECT AND TAKE RESPONSIBILITY FOR THE PROTECTION OF THE UTILITY PROPERTY AND SERVICES.

THE CONTRACTOR SHALL MAKE PROVISION TO ENSURE PUBLIC SAFETY WHILE REMOVING THE LOOSE AND DELAMINATED CONCRETE. THE REMOVED CONCRETE SHALL BE DISPOSED OF OFF SITE IN CONFORMANCE WITH LOCAL, STATE, AND FEDERAL POLLUTION CONTROL LAWS.

THE USE OF EXPLOSIVES, HEADACHE BALLS, AND/OR HOE RAMS WILL NOT BE PERMITTED.

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HAND HELD CONVENTIONAL HAMMERS MAY BE USED TO REMOVE MINOR SPALLS. HOWEVER, PNEUMATIC HAMMERS SHOULD ALSO BE EMPLOYED TO ENSURE COMPLETE REMOVAL OF ALL DELAMINATED CONCRETE. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH EXISTING REINFORCING STEEL.

PAYMENT FOR ALL LABOR, MATERIAL, ACCESS INCLUDING EQUIPMENT, SOUNDING, REMOVAL, PROTECTION OF THE PUBLIC AND EXISTING UTILITIES, DISPOSAL, AND ALL OTHER INCIDENTALS REQUIRED TO IDENTIFY AND REMOVE ALL THE LOOSE CONCRETE AND SPALLS WITHIN THE LIMITS DESCRIBED IN THE PLANS, LUMP SUM PER LOCATION, SHALL BE INCLUDED WITH THE FOLLOWING ITEM:

ITEM 202 – REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

COST FOR MAINTENANCE OF TRAFFIC SHALL BE PAID FOR AS A SEPARATE ITEM.

ITEM 202 – REMOVAL MISC.: TROWELABLE MORTAR REMOVED

THE CONTRACTOR SHALL REMOVE ALL EXISTING TROWELABLE MORTAR ON THE OUTSIDE FACE OF THE EXISTING PARAPETS AS DETAILED IN THE PLANS FOR LOCATION 2. THE REMOVAL LIMITS SHALL BE AS DIRECTED BY THE ENGINEER.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE TO ITEM 202, REMOVAL MISC.: DELAMINATED INSPECTION AND REMOVAL.

PAYMENT FOR ALL LABOR, ACCESS INCLUDING EQUIPMENT, PROTECTION OF THE PUBLIC AND EXISTING UTILITIES, DISPOSAL, AND ALL OTHER INCIDENTALS REQUIRED TO REMOVE ALL TROWELABLE MORTAR AS DESCRIBED IN THE PLANS, PER FOOT, SHALL BE INCLUDED WITH THE FOLLOWING ITEM:

ITEM 202 – REMOVAL MISC.: TROWELABLE MORTAR REMOVED

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ITEM 614 - MAINTAINING TRAFFIC

A. GENERAL

GENERALLY THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS AS TO PERFORM THE PROPOSED CONSTRUCTION WITH A MINIMUM OF HAZARD, DELAY, AND INCONVENIENCE TO THE MOTORISTS USING THE HIGHWAY. FURTHERMORE, IN ADDITION TO THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE FOLLOWING SPECIFIC PROVISIONS ARE MANDATORY.

B. NOTIFICATION

SINCE FUNCTIONAL TRAFFIC CONTROL IS A MAJOR CONCERN ON THIS PROJECT, IT IS ESSENTIAL THAT THE MOTORING PUBLIC BE ADEQUATELY FOREWARNED OF THE FUTURE LANE CLOSURES AND TRAFFIC CONSTRUCTIONS. THEREFORE, THE CONTRACTOR SHALL SUBMIT A SCHEDULE TO THE OHIO DEPARTMENT OF TRANSPORTATION PUBLIC INFORMATION OFFICER INDICATING THE LOCATIONS AND DATES OF THE LANES CLOSURES AND COMPLETE CLOSURES AT LEAST SEVEN (7) DAYS PRIOR TO THE IMPLEMENTATION OF ANY SUCH CLOSURES. THE CONTRACTOR SHALL ALSO NOTIFY THE LOCAL LAW ENFORCEMENT AGENCIES OF LANE CLOSURES AND COMPLETE CLOSURES AT LEAST THREE (3) DAYS PRIOR TO IMPLEMENTATION.

DISTRICT 12 PUBLIC INFORMATION OFFICER
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OHIO 44125-5396
PHONE: (216) 584-2006

C. RESTRICTIONS

- LANE CLOSURES ARE PERMITTED FOR CONSTRUCTION OPERATIONS AND DELIVERY OF MATERIALS AND EQUIPMENT. THE CONTRACTOR SHALL CLOSE LANES THAT ARE DIRECTLY BELOW THE AREA OF THE BRIDGE BEING WORKED ON AND ARE POTENTIALLY AFFECTED BY FALLING DEBRIS AND EQUIPMENT. LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEB SITE:

www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx

THE LATEST REVISION OF THE LANE CLOSURE LIST, AT 14 DAYS PRIOR TO THE BID DATE, SHALL BE IN EFFECT FOR THIS PROJECT.

ANY ROADWAY NOT LISTED IN THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" OR SPECIFIED IN THE NOTES SHALL NOT HAVE ANY CLOSURES WEEKDAYS FROM 7AM-9AM AND 3PM-6PM.

THE FOLLOWING SUPPLEMENTAL TABLE SHALL BE USED FOR LANE(S) CLOSURES ON RAMPS NOT SPECIFICALLY MENTIONED IN THE "DISTRICT 12 PERMITTED LANE CLOSURE TIMES" LIST:

Road	Permitted Ramp Closures			
	Short Term Closure			
	Weekdays		Weekends	
	1 Lane Closed	2 Lanes Closed	1 Lane Closed	2 Lanes Closed
Location 2 (Two Lane Ramp from Outer Road to SR-176 SB)	9 am – 2 pm 7 pm – 6 am	N/A	7 pm Fri – 6 am Mon	N/A
Location 2 (One Lane Ramp from I-71 SB to SR-176 SB)	9 pm – 5 am (Detour traffic per note C.5 on this sheet)	N/A	N/A	N/A
Location 4 (Two Lane Ramp from I-490 WB to I-71 SB)	9 am – 3 pm 7 pm – 6 am	N/A	8 pm Fri – 6 am Mon	N/A
Location 13 (Two Lane Ramp to I-480 EB)	9 am – 2 pm 7 pm – 6 am	N/A	7 pm Fri – 6 am Mon	N/A
Location 16 (One Lane Ramps) (Partial Width Closures Only - Maintain traffic)	9 am – 2pm 7pm – 6am	N/A	7 pm Fri – 6 am Mon	N/A

UNLESS NOTED OTHERWISE, AT LEAST ONE 11 FOOT WIDE LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES. THE CONTRACTOR, BY THEIR OWN MEANS AND METHODS, MUST ENSURE THAT ALL OPEN LANES OF TRAFFIC ARE PROTECTED FROM FALLING DEBRIS. ALL MATERIALS, LABOR, AND INCIDENTALS REQUIRED TO MEET THE ABOVE REQUIREMENTS SHALL BE INCLUDED IN PAYMENT FOR ITEM 614 – MAINTAINING TRAFFIC, LUMP SUM.

- DURING NON-WORKING HOURS, ALL AVAILABLE LANES SHALL BE IN FULL OPERATION, WITH ALL TRAFFIC CONTROL SIGNS, EXCEPT W20-1 ROAD WORK AHEAD SIGNS, REMOVED OR COVERED AND ALL CHANNELIZING DEVICES REMOVED FROM THE PAVEMENT SURFACES. CHANNELIZING DEVICES MAY NOT BE STORED ON THE SHOULDER. CONSTRUCTION EQUIPMENT, PRIVATE VEHICLES, AND MATERIALS SHALL NOT BE PARKED OR STORED ON THE ROADWAY OR WITHIN 30 FEET OF ANY TRAVELED LANES.
- LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS: NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

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

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 THE WEEK	TIMES 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 MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

- LIQUIDATED DAMAGES FOR LANE CLOSURES: IF LANE CLOSURES ARE IN PLACE OUTSIDE THE SPECIFIED TIME, LIQUIDATED DAMAGES SHALL BE ASSESSED TO THE CONTRACTOR IN ACCORDANCE WITH CMS 108.07.
- MAINTAINING TRAFFIC FOR LOCATION 2, IR-71 OVER SR-176: ONE LANE RAMP FROM I-71 SB TO SR-176 SB WILL BE PERMITTED TO BE CLOSED CONCURRENTLY WITH LANE CLOSURES. THE DETOUR FOR THIS RAMP CLOSURE SHALL REQUIRE A U-TURN OF TRAFFIC AT BOTH W.25TH ST. AND W.14TH ST. EXITS. THE RAMP SHALL BE CLOSED PER SCD MT-98.29 AND UTILIZING A PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) ROUTING TRAFFIC FROM I-71 SB TO SR-176 SB, A SECOND PCMS INDICATING A U-TURN AT THE W.25TH EXIT, AND A THIRD PCMS INDICATING A U-TURN AT THE W.14TH EXIT. ALL SIGNS, LABOR, AND INCIDENTALS REQUIRED TO SETUP, MAINTAIN, AND REMOVE THIS DETOUR SHALL BE PAID FOR UNDER ITEM 614 – MAINTAINING TRAFFIC, LUMP SUM.

A LEO WITH PATROL CAR (PAID FOR SEPARATELY) SHALL BE USED FOR THE RAMP CLOSURE AND BE PRESENT FOR THE ENTIRE CLOSURE TIME. THE LEO SHALL BE FROM THE SAME CITY THAT THE RAMP IS LOCATED. THE LEO SHALL HELP FACILITATE EMERGENCY VEHICLES IF NEEDED.

- MAINTAINING TRAFFIC FOR LOCATION 4, IR-71 OVER IR-490: RAMP SW (ONE LANE RAMP FROM I-71 NB TO I-490 WB) WILL BE PERMITTED TO BE CLOSED CONCURRENTLY WITH LANE CLOSURES. THE DETOUR FOR THIS RAMP CLOSURE SHALL REQUIRE A U-TURN OF TRAFFIC AT BROADWAY AVE. THE RAMP SHALL BE CLOSED PER SCD MT-98.29 AND UTILIZING A PCMS ROUTING TRAFFIC FROM I-71 NB TO I-490 EB AND A SECOND PCMS INDICATING A U-TURN AT THAT EXIT. ALL SIGNS, LABOR, AND INCIDENTALS REQUIRED TO SETUP, MAINTAIN, AND REMOVE THIS DETOUR SHALL BE PAID FOR UNDER ITEM 614 – MAINTAINING TRAFFIC, LUMP SUM.

A LEO WITH PATROL CAR (PAID FOR SEPARATELY) SHALL BE USED FOR THE RAMP CLOSURE AND BE PRESENT FOR THE ENTIRE CLOSURE TIME. THE LEO SHALL BE FROM THE SAME CITY THAT THE RAMP IS LOCATED. THE LEO SHALL HELP FACILITATE EMERGENCY VEHICLES IF NEEDED.

LANE CLOSURE MUST BE COORDINATED WITH THE INNERBELT PROJECT(S) UNDER CONSTRUCTION DURING THE DURATION OF THIS PROJECT.

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MAINTENANCE OF TRAFFIC GENERAL NOTES - 1

D12 BH FY2012 SPALL REMOVAL
PID No. 90245

ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

D. ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING, BY THE DIRECTOR.

E. REFERENCES

TEMPORARY LANE CLOSURES: SEE STANDARD CONSTRUCTION DRAWINGS (SCD) LISTED ON THE TITLE SHEET.

F. MAINTENANCE OF TRAFFIC SYSTEMS

1. WHEN REQUIRED:

WHENEVER ANY PART OF THE TRAVELED SURFACE IS BEING WORKED UPON OR IS OTHERWISE NOT SUITABLE FOR SAFE AND CONVENIENT USE BY VEHICLES, TRAFFIC CONTROL DEVICES SUFFICIENT TO PROTECT SUCH AREAS TO ASSURE THE SAFE AND CONVENIENT PASSAGE OF VEHICULAR TRAFFIC SHALL BE INSTALLED AND MAINTAINED. SUCH TRAFFIC CONTROL DEVICES AND THE MANNER IN WHICH THEY ARE USED SHALL BE CONSISTENT WITH THESE PLANS AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS HEREINAFTER REFERRED TO AS THE "MANUAL". THE TRAFFIC CONTROL DEVICE SYSTEM SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL FOR EACH PARTICULAR SITUATION. WHENEVER THE ENGINEER DEEMS IT NECESSARY, ESPECIALLY WHERE A GRADE, CURVE, OR MERGE CONDITION EXISTS, HE MAY DIRECT THAT ADDITIONAL OR ALTERNATIVE DEVICES BE USED.

2. CONDITIONS:

DURING ALL PARTS OF THIS PROJECT, SIGNING, BARRICADES, FLASHING ARROWS, ETC. SHALL BE LOCATED AS INDICATED IN THE MANUAL, AS SHOWN ON SCD LISTED ON THE TITLE SHEET.

3. ADVANCED WARNING SIGNS:

ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

4. FLASHING ARROW REQUIREMENT:

FLASHING ARROWS SHALL BE FURNISHED AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS OR ON SCD MT-95.30.

5. PROTECTION OF PUBLIC:

WHENEVER ANY WORK IS BEING DONE OVER A TRAVELED LANE OR SHOULDER, THE CONTRACTOR SHALL SUPPLY SUFFICIENT SAFETY EQUIPMENT AS APPROVED BY THE

DIRECTOR TO PROTECT THE TRAVELING PUBLIC FROM ANY CONSTRUCTION DEBRIS. IF TRAVELED LANES UNDER STRUCTURES ARE TO BE CLOSED FOR REASONS OF SAFETY, METHOD AND TIME OF CLOSURE MUST BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.

6. FLAGGERS:

FLAGGERS SHALL BE IN ACCORDANCE WITH SCD MT-97.10. THE MAINTENANCE OF TRAFFIC REQUIRES THE USE OF TWO (2) FLAGGERS. ADDITIONAL FLAGGERS SHALL BE USED AS DIRECTED BY THE ENGINEER.

7. FOR LAW ENFORCEMENT OFFICER WITH PATROL CAR, SEE NOTE ON SHEET 7.

8. WORKSITE TRAFFIC SUPERVISOR:

THE CONTRACTOR SHALL EMPLOY (OTHER THAN THE SUPERINTENDENT) AND SUBJECT TO THE APPROVAL OF THE ENGINEER, AS CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS). THE WTS MAY BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

- a) AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (A.T.S.S.A.) PHONE NUMBER 1-800-272-8772
- b) THE NATIONAL SAFETY COUNCIL, TRAFFIC CONTROL ZONES SUPERVISORS COURSE, PHONE NUMBER 1-800-441-5103
- c) NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0528

THE WTS POSITION IS ESTABLISHED FOR THE PURPOSE OF MONITORING AND CORRECTING ANY TRAFFIC CONTROL DEFICIENCIES IN THE WORK ZONE. THE WTS SHALL OVERSEE ALL OPERATIONS THAT AFFECT THE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE.

THE WTS SHALL BE PRESENT WHEN THE CONTRACTOR OR SUBCONTRACTOR INSTALLS A TRAFFIC RESTRICTION, LANE CLOSURE, ETC. IN LIEU OF THE WTS BEING PRESENT WHEN A SUBCONTRACTOR HAS A WORK ZONE IN PLACE, THE SUBCONTRACTOR MAY USE HIS OWN PERSONNEL THAT IS A CERTIFIED WTS. THE CONTRACTOR OR SUBCONTRACTOR MUST PRESENT A COPY OF HIS WTS CERTIFICATE TO THE PROJECT ENGINEER. A WTS MUST BE PRESENT WHEN THE WORK ZONE IS BEING SET UP. HE MUST APPROVE THE WORK ZONE BEFORE HE LEAVES OR PERFORMS OTHER DUTIES.

WHEN THE RESTRICTIONS ARE SHORT TERM, THE WTS SHALL MONITOR THE ZONE FOR COMPLIANCE. DURING THE LANE CLOSURE HE SHALL MAKE SURE ALL CONTROL ITEMS ARE FUNCTIONING PROPERLY. TRAFFIC CONTROL WILL BE THE WTS' MAIN DUTY DURING IMPLEMENTATION OF ZONES OR SHORT TERM ZONES. THE WTS SHALL HAVE THE AUTHORITY TO HAVE DEFICIENCIES CORRECTED AS SOON AS POSSIBLE. THE WTS SHALL PROVIDE THE DISTRICT WORK ZONE TRAFFIC CONTROL ENGINEER A SKETCH OF THE TRAFFIC CONTROL PLAN (TCP) EVERY DAY THERE IS TO BE A SHORT TERM TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THIS TCP SHALL SHOW HOW THE

WORK ZONES ARE TO BE IMPLEMENTED.

THE WTS SHALL BE AVAILABLE ON A 24-HOUR BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. A 24-HOUR PHONE NUMBER SHALL BE MADE AVAILABLE TO THE PROJECT ENGINEER IN ORDER TO CONTACT THE WTS. THE WTS SHALL HAVE A CELL PHONE AND THE PHONE NUMBER PROVIDED TO THE PROJECT ENGINEER.

FAILURE OF THE CONTRACTOR TO COMPLY WITH ANY OF THE ABOVE SHALL CONSTITUTE CAUSE FOR THE PROJECT ENGINEER TO DEDUCT \$500.00 PER DAY FROM MONEY DUE TO THE CONTRACTOR NOT AS A PENALTY, BUT AS LIQUIDATED DAMAGE.

PAYMENT FOR THE WTS SHALL BE INCLUDED UNDER THE LUMP SUM ITEM 614 – MAINTAINING TRAFFIC.

9. FAILURE TO COMPLY:

IF THE ENGINEER DEEMS THE CONTRACTOR FAILS TO COMPLY WITH PROVISIONS FOR TRAFFIC CONTROL SET OUT IN THESE PLANS AND NOTES, WITH PROVISIONS OF THE "MANUAL", OR FAILURE TO KEEP THE HIGHWAY IN THE VICINITY OF THE WORK AREA IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF THIS CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS. ANY COSTS OR DELAYS INCURRED AS A RESULT OF THE FAILURE SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR.

G. TRAFFIC CONTROL MATERIALS

1. SIGNS:

SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES SHALL BE AS PROVIDED IN THE "MANUAL" OR IN STANDARD CONSTRUCTION DRAWINGS PROVIDED BY ODOT. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THIS PROJECT.

2. SIGN SUPPORTS:

SIGN SUPPORTS SHALL BE AS SHOWN ON THE SCD MT-105.10.

3. FLASHING ARROW PANEL:

THE ELECTRIC FLASHING ARROW PANELS SHALL BE AS SHOWN ON SCD MT-35.10.

4. CONES:

CONES SHALL BE LOCATED AS SHOWN IN THE "MANUAL".

5. DRUMS:

DRUMS SHALL BE LOCATED AS SHOWN IN THE "MANUAL" AND ARE REQUIRED FOR NIGHTTIME CLOSURES UNLESS NOTED OTHERWISE.

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MAINTENANCE OF TRAFFIC GENERAL NOTES - 2

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ITEM 614 - MAINTAINING TRAFFIC (CONTINUED)

6. FLOODLIGHTING:

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATING PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

7. WORK VEHICLES:

ALL WORK VEHICLES LICENSED TO OPERATE ON THE HIGHWAY, INCLUDING TRUCKS, SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE TO ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF 1600 FEET IN BRIGHT SUNLIGHT AND SHALL BE IN OPERATION AT ALL TIMES WITHIN THE WORK ZONE AND WHILE TRAVELING TO AND FROM THE WORK ZONE WHENEVER THE VEHICLE SPEED IS BELOW 55 MPH. VEHICLE HAZARD LAMPS DO NOT SATISFY THIS REQUIREMENT. ALL OTHER EQUIPMENT SHALL BE EQUIPPED WITH A FLASHING, ROTATING OR OSCILLATING AMBER LIGHT VISIBLE IN ALL DIRECTIONS OF TRAFFIC FOR A MINIMUM OF 1600 FEET IN BRIGHT SUNLIGHT. THE AMBER LIGHT SHALL BE IN OPERATION WHILE THE EQUIPMENT IS WITHIN THE WORK ZONE.

H. PAYMENT

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR PROVIDING, ERECTING, MAINTAINING, AND REMOVING TEMPORARY MAINTENANCE OF TRAFFIC CONTROL DEVICES SHALL BE MADE UNDER LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

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 IN THIS NOTE WILL NOT BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

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

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

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

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 AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING ADDRESS AND TELEPHONE NUMBER.

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

LAW ENFORCEMENT OFFICERS (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). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS 500 HOURS

THE HOURS PAID SHALL INCLUDE 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.

APPLICATION FOR USE OF WEIGHTED CHANNELIZER (GRABBER CONE)

THE WEIGHTED CHANNELIZER MAY BE USED ON THIS PROJECT AS DESCRIBED BELOW.

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF A LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A "HANDLE" OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE STRIPES AND TWO WHITE STRIPES WITH THE TOP STRIPE BEING ORANGE. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF THE WEIGHTED CHANNELIZERS ON ODOT MAINTAINED HIGHWAYS SHALL BE AS FOLLOWS.

ON FREEWAYS AND MULTILANE HIGHWAYS

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATIONS, GENERALLY TWELVE HOURS OR LESS, FOR EITHER DAY OR NIGHT WORK. UPON COMPLETION OF WORK WITHIN THE ABOVE-NOTED TIME PERIOD, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED FROM THE ROADWAY. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES THAT IS EXPECTED TO REMAIN IN PLACE FOR MORE THAN TWELVE HOURS SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA OF WORK ZONES. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

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MAINTENANCE OF TRAFFIC GENERAL NOTES - 3

D12 BH FY2012
SPALL REMOVAL
PID No. 90245

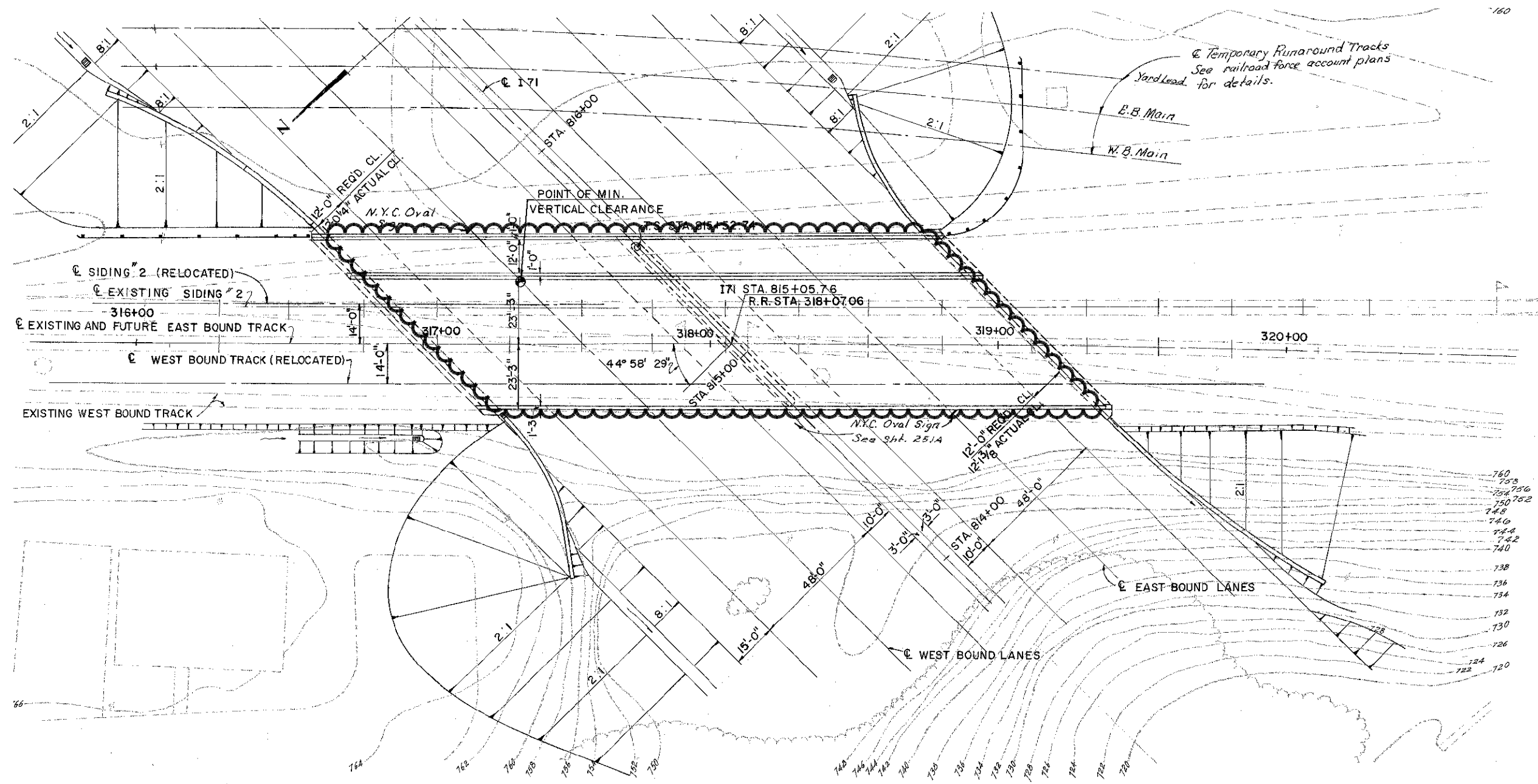
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LOCATION																ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16							
CUY-71-1401 1805150 UNDER NSC RAILROAD																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-71-1791 1805371 OVER SR-176																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-71-1848 1805495 UNDER BUHRER PEDESTRIAN BRIDGE																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-71-1887 1805584 OVER IR-490																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-90-0648 1807765 UNDER NORTHVIEW RD																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-90-0909 1808125 UNDER WARREN RD																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-480-0870ES 1814249 UNDER RAMP "R"																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-480-0872 1814257 UNDER RAMP "T"																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-480-1054 1812904 OVER W.130TH ST (CR-18)																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-480-1162 1812939 UNDER TIEDEMAN RD																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-480-1506 1810073 UNDER BROADVIEW RD																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-42-1662 1807889 OVER IR-90																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-17-1227 1802402 OVER IR-480 (CUY-480-1586)																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-94-1020 1809644 OVER IR-480 (CUY-480-1432)																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-237-1236 1808575 OVER IR-90																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
CUY-252-0879 1810421 OVER IR-90																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
																	202	98000	LUMP		REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL	4
	1600																202	98200	1600	FEET	REMOVAL MISC.: EXISTING TROWELABLE MORTAR REMOVED *	4, 13
																	614	11000	LUMP		MAINTAINING TRAFFIC	5-7
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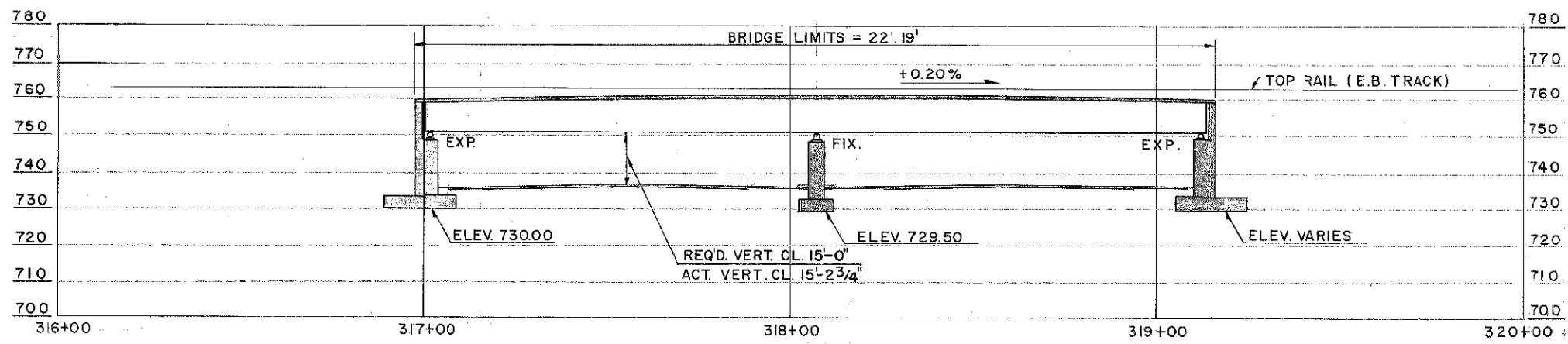
* = TO BE USED AS DIRECTED BY ENGINEER

CALCULATED KMR	CHECKED RHW	GENERAL SUMMARY
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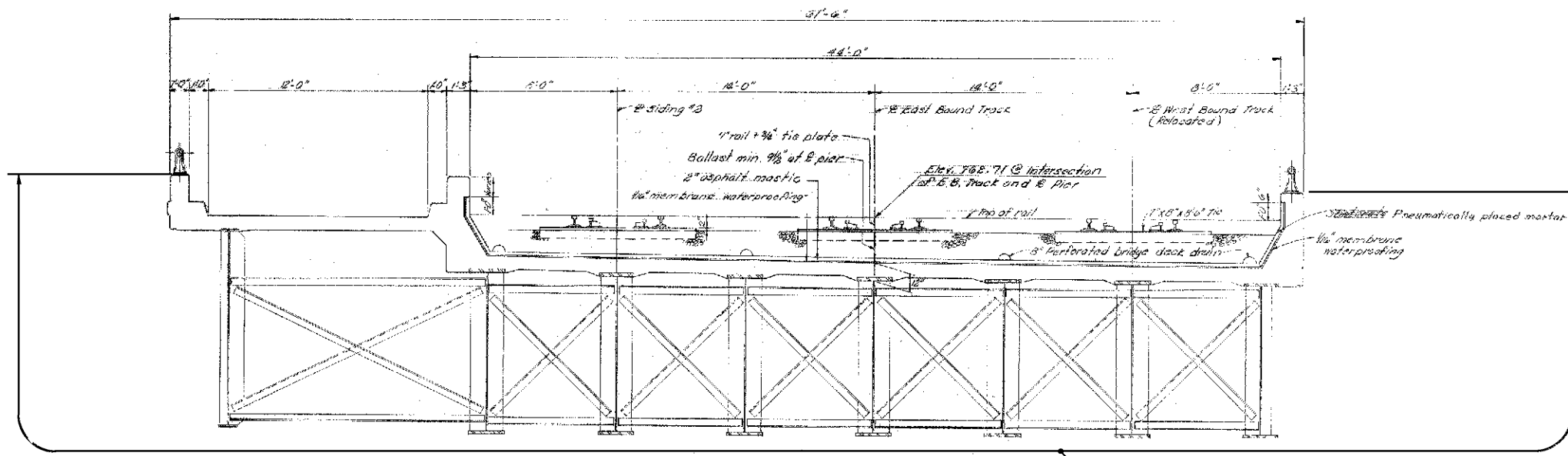
PROFILE ALONG EAST BOUND TRACK

- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 10 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT	DATE 4-21-11
	REVIEWED JRC
DESIGNED KMR	DRAWN KMR
	CHECKED RHW
STRUCTURE FILE NUMBER 1805150	REVISIONS
SITE PLAN - LOCATION 1	
BRIDGE NO. CUY-71-1401 IR-71 UNDER NSC RAILROAD	
D12-BH-FY2012 SPALL REMOVAL PID No. 90245	1 / 2
	9 42



TYPICAL SECTION THROUGH BRIDGE

LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

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**D12 BH FY2012
SPALL REMOVAL**
PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 1

BRIDGE No. CUY-71-1401
IR-71 UNDER NSC RAILROAD

DESIGNED
KMR
CHECKED
RHW

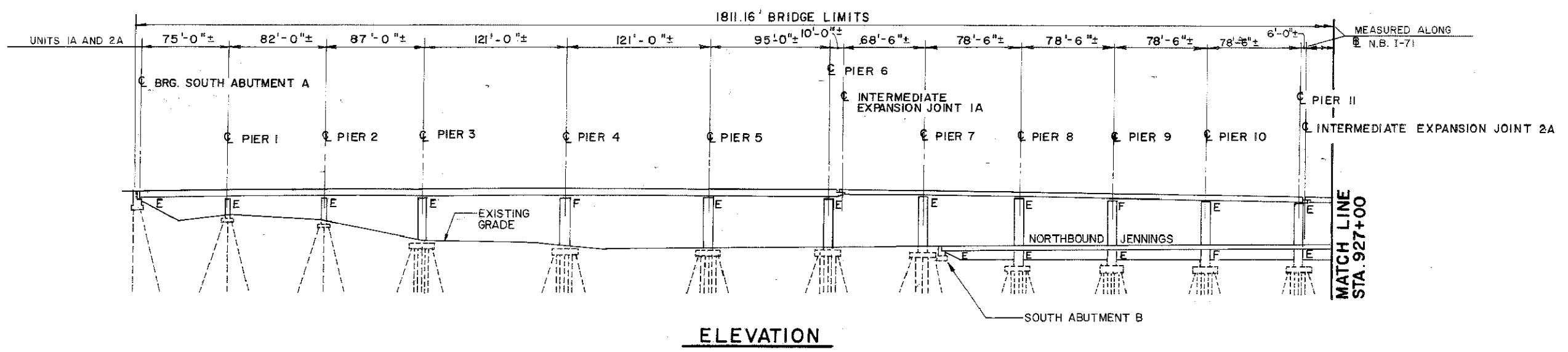
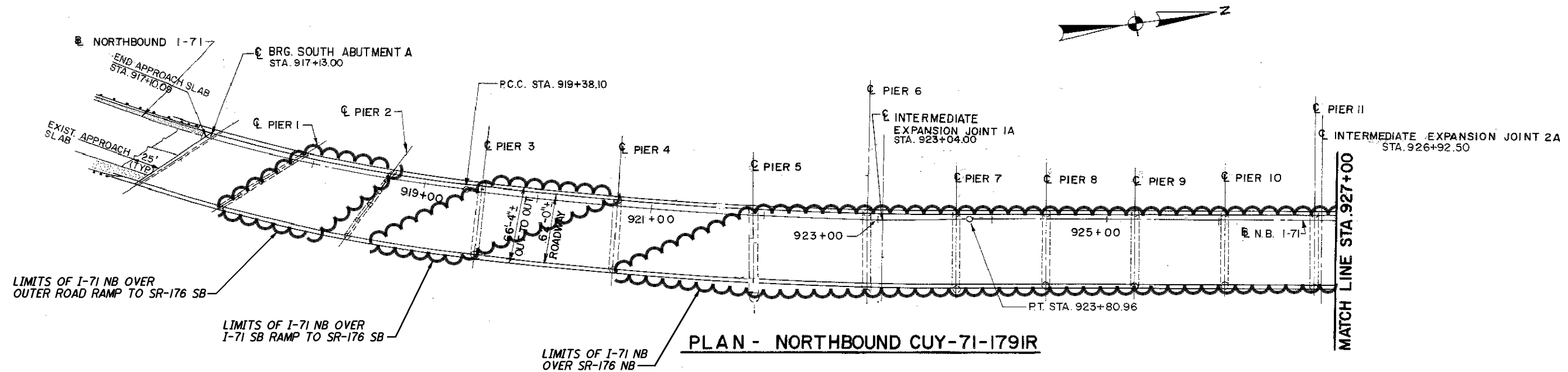
DRAWN
KMR
REVISED

REVIEWED
JRC
STRUCTURE FILE NUMBER
1805150

DATE
4-21-11

DESIGN AGENCY
ODOT DISTRICT 12
PRODUCTION DEPARTMENT

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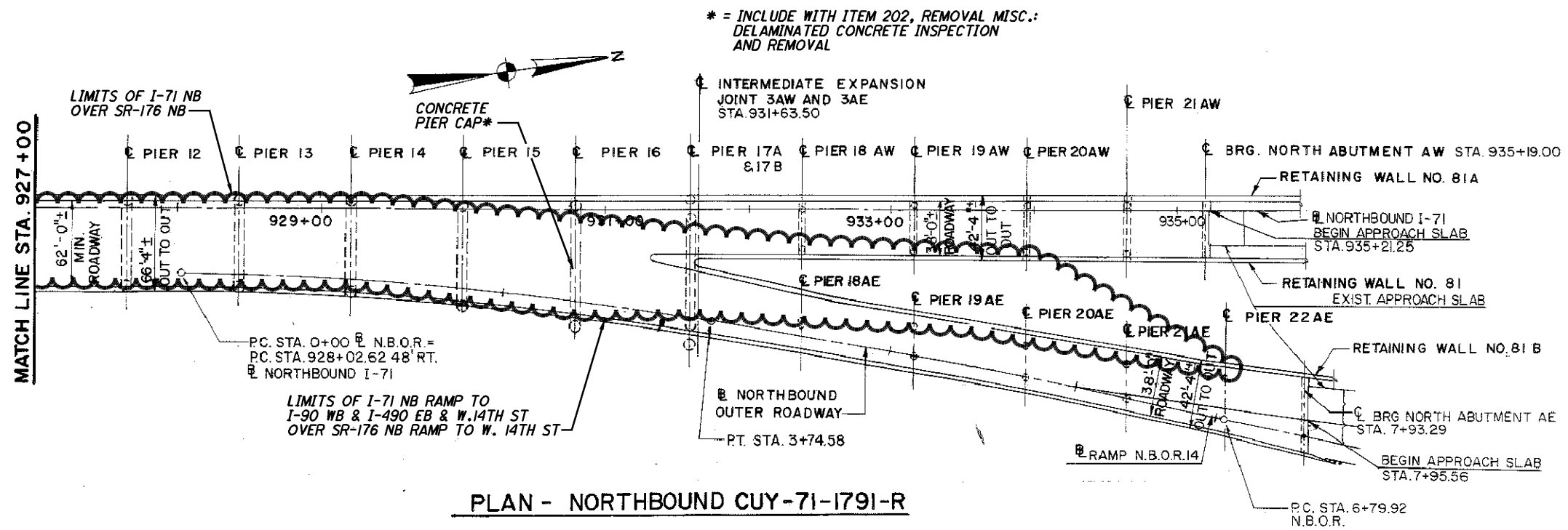
- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 13 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

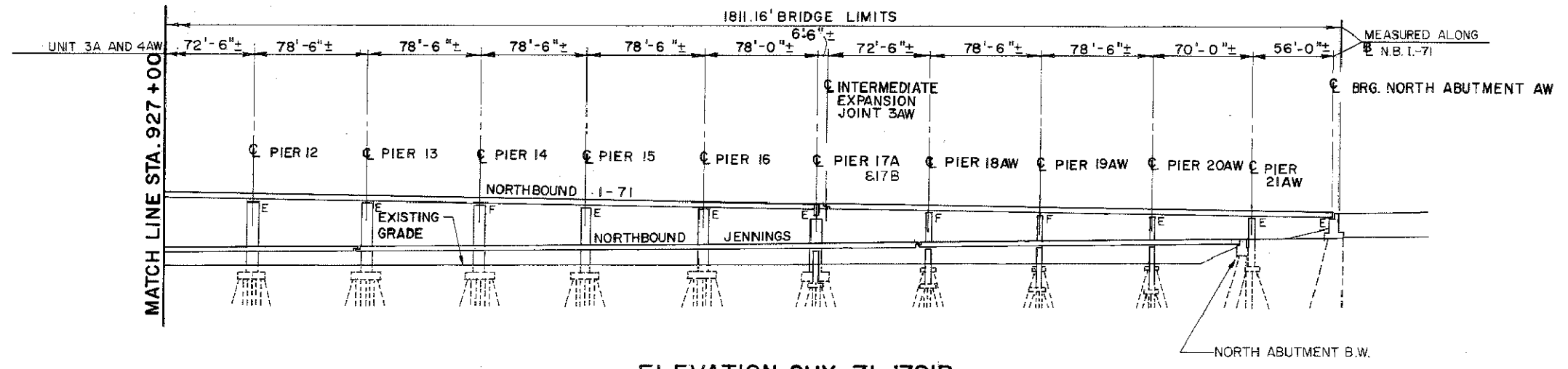
LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT	DATE 4-21-11
	REVIEWED JRC
DESIGNED KMR	STRUCTURE FILE NUMBER 1805371
	DRAWN KMR
CHECKED RHW	REVISED
SITE PLAN 1 OF 2 - LOCATION 2	
BRIDGE NO. CUY-71-1791 IR-71 OVER SR-176	
D12-BH-FY2012 SPALL REMOVAL PID No. 90245	
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PLAN - NORTHBOUND CUY-71-1791-R



ELEVATION CUY-71-1791R

* = INCLUDE WITH ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

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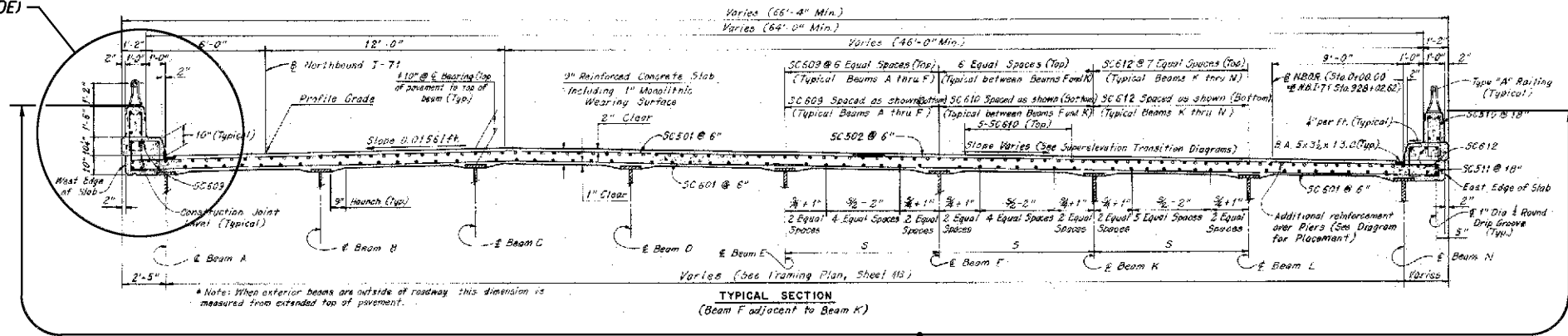
1. FOR TRANSVERSE SECTION, SEE SHEET 13 OF 42.
2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

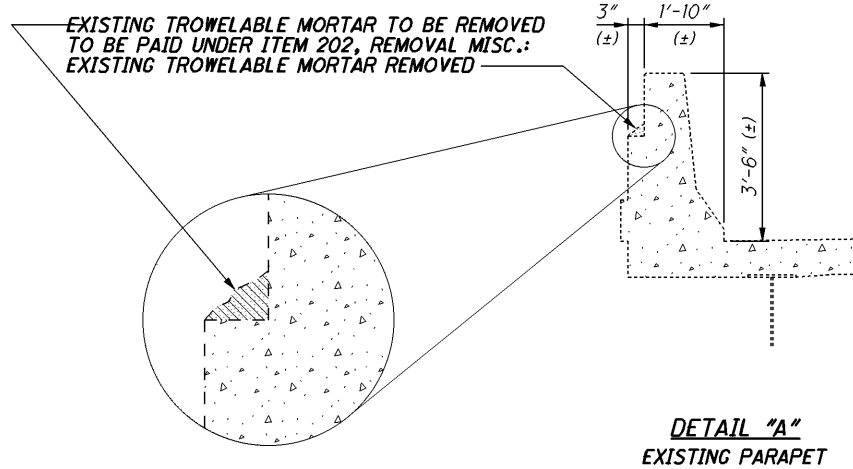
- LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1805371	DATE 4-21-11	DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
SITE PLAN 2 OF 2 - LOCATION 2				
BRIDGE NO. CUY-71-1791 IR-71 OVER SR-176				
D12-BH-FY2012 SPALL REMOVAL PID No. 90245				
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SEE DETAIL "A" THIS SHEET
(TYPICAL EACH SIDE)

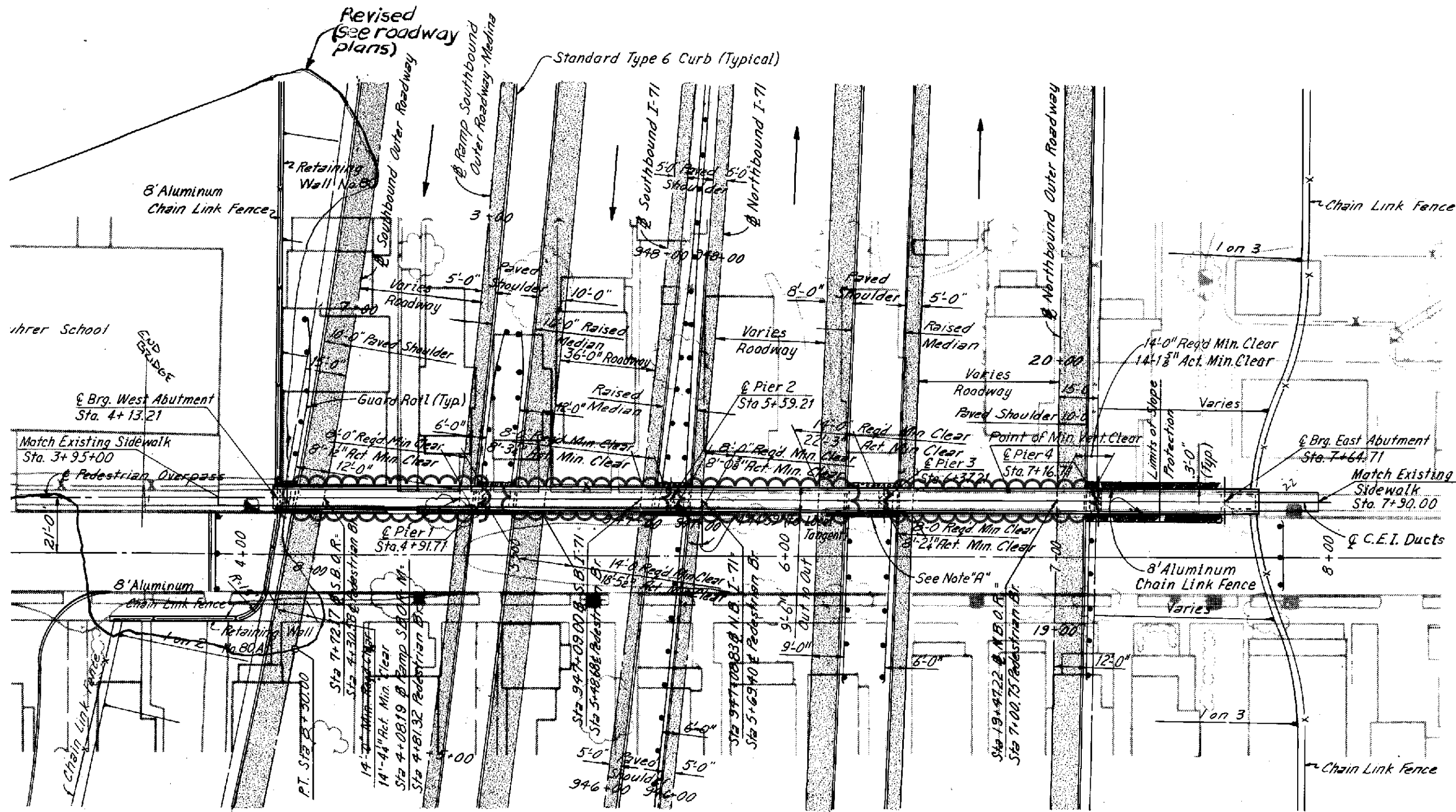


LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL



NOTES

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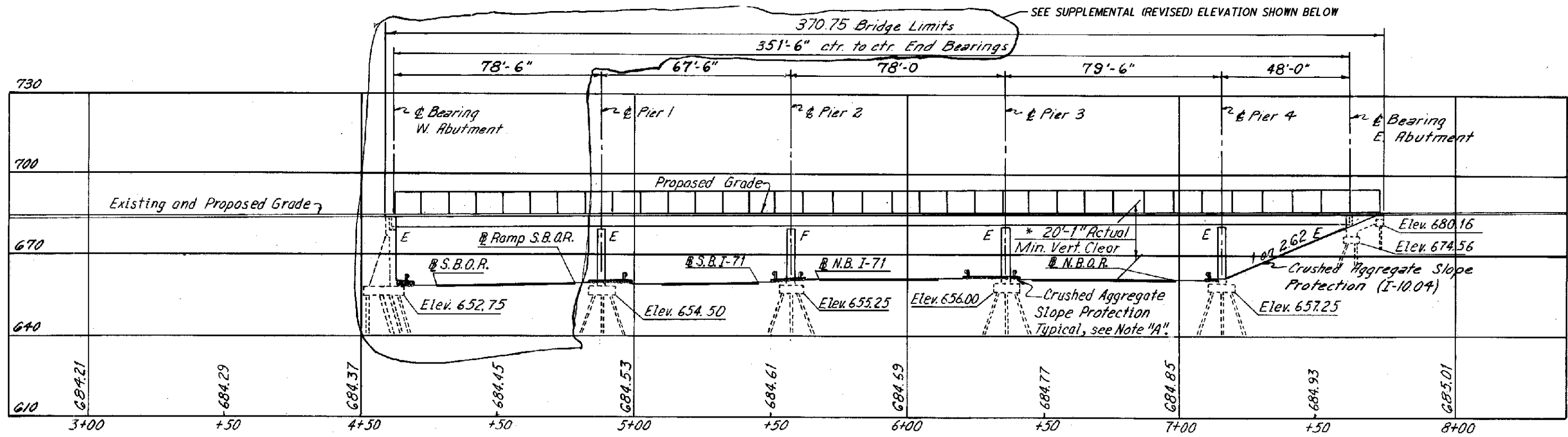
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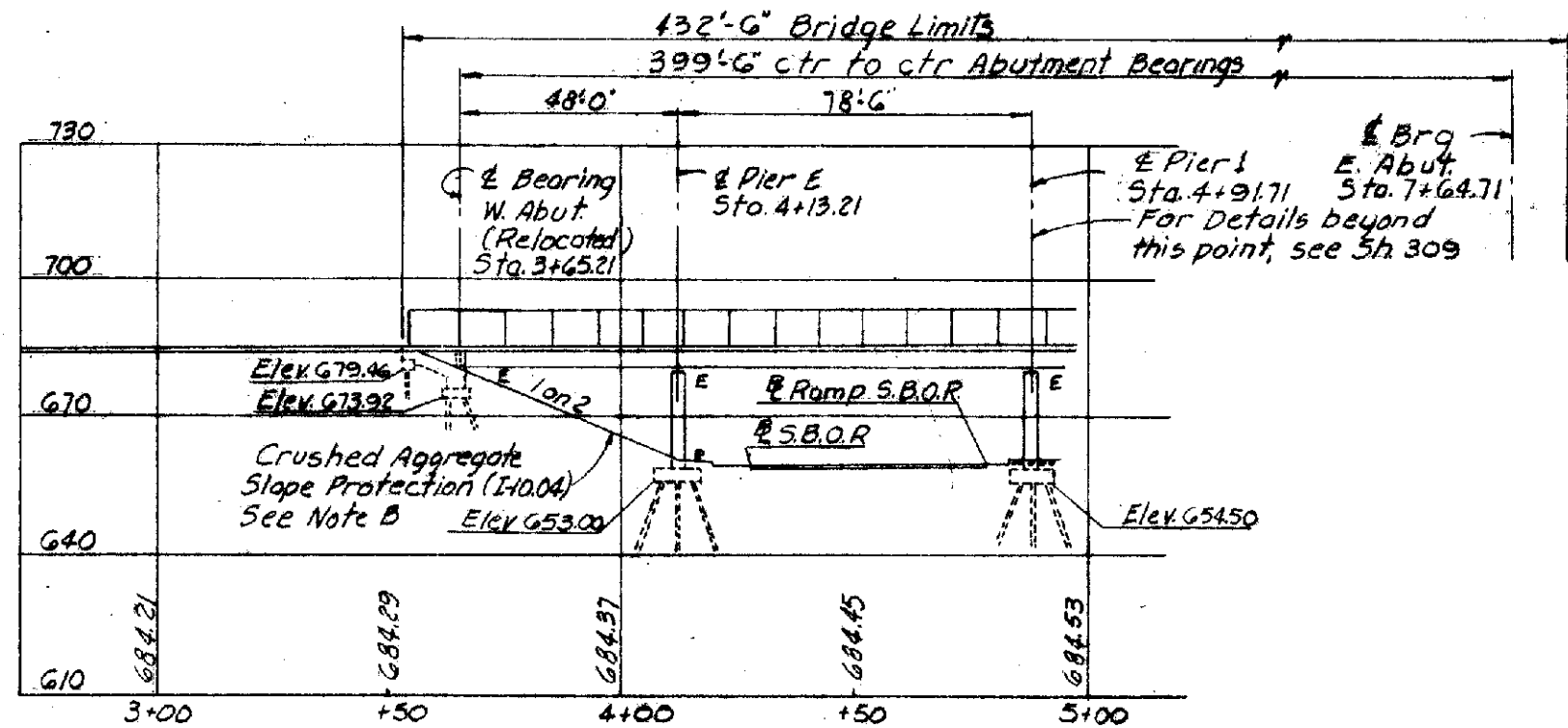
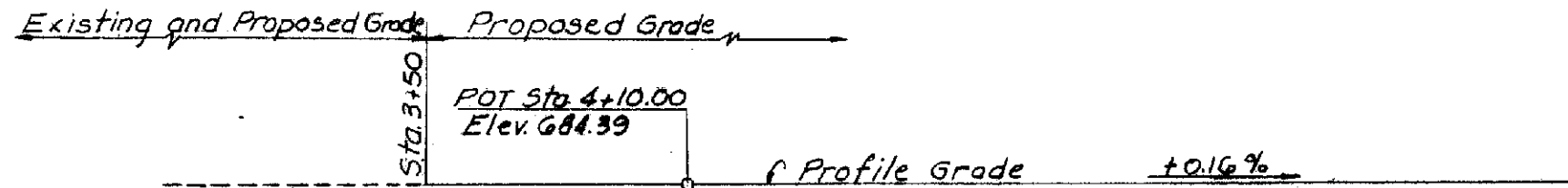
1. FOR TRANSVERSE SECTION, SEE SHEET 16 OF 42.
2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

 LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



ELEVATION

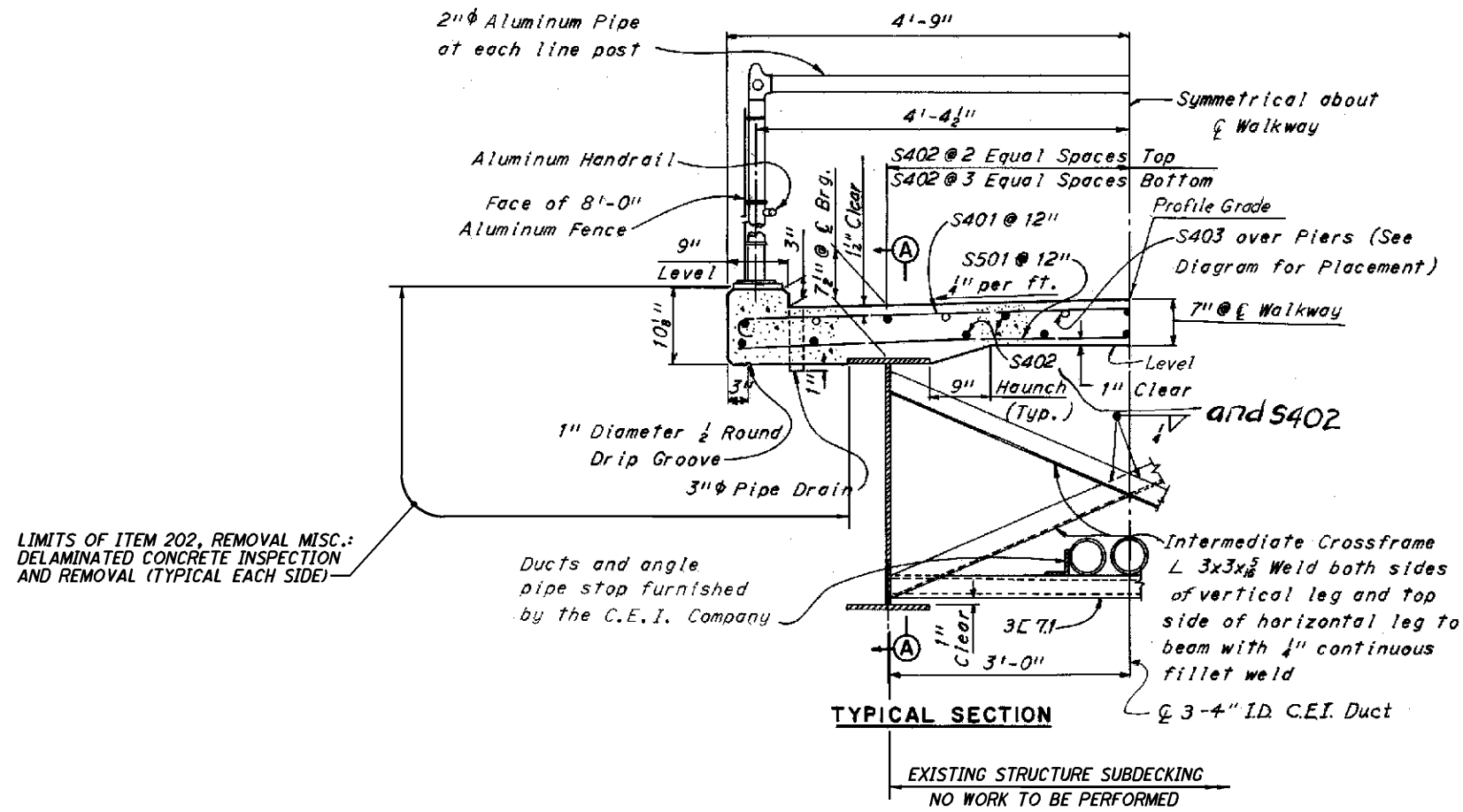


SUPPLEMENTAL ELEVATION

- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 16 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

I:\PROJECTS\PID90245\roadway\sheets\90245SP032.dgn 21-APR-2011 11:29AM krohde

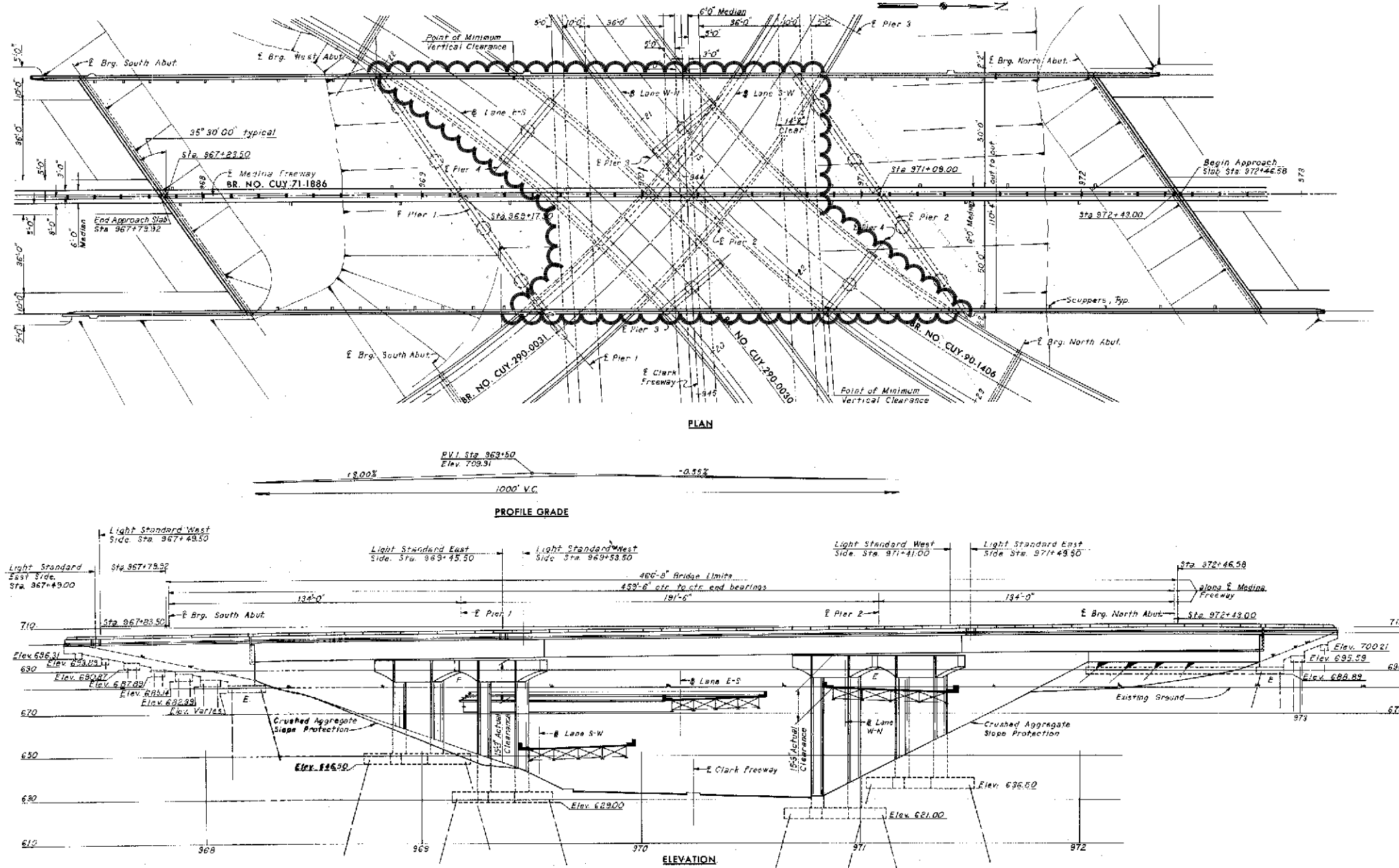
SITE PLAN 2 OF 2 - LOCATION 3 BRIDGE NO. CUY-71-1848 IR-71 UNDER BUHRER PEDESTRIAN BRIDGE	DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT	DATE 4-21-11 STRUCTURE FILE NUMBER 1805495
D12-BH-FY2012 SPALL REMOVAL PID No. 90245		
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED
	REVIEWED JRC	DATE 4-21-11



NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 3 BRIDGE No. CUY-71-1848 IR-71 UNDER BUHRER PEDESTRIAN BRIDGE		DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1805495	DATE 4-21-11	DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	3 / 3	16 / 42					



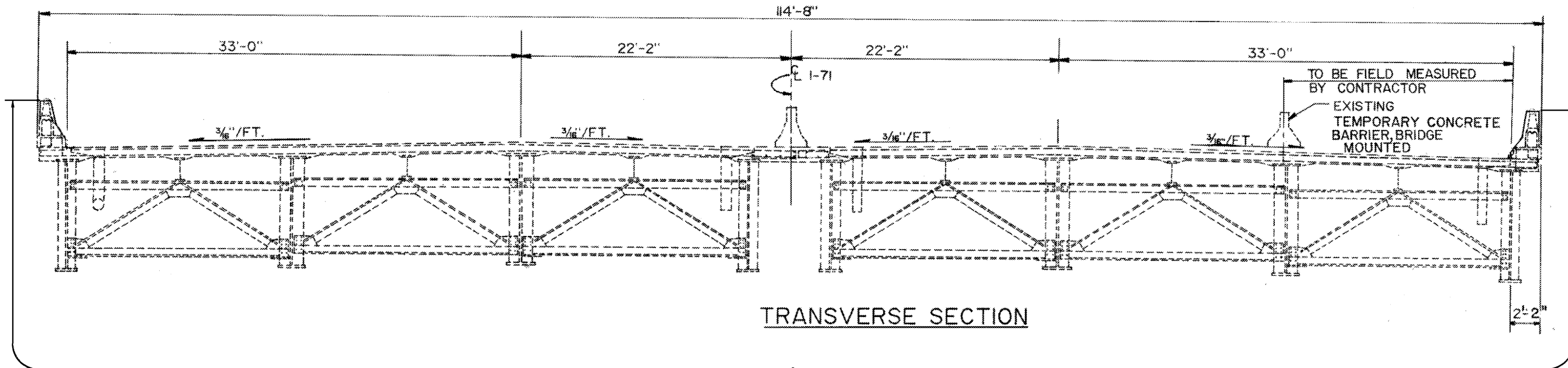
- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 18 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

 - LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

D12-BH-FY2012 SPALL REMOVAL PID No. 90245	SITE PLAN - LOCATION 4 BRIDGE NO. CUY-71-1887 IR-71 OVER IR-490		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1805584

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TRANSVERSE SECTION

LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

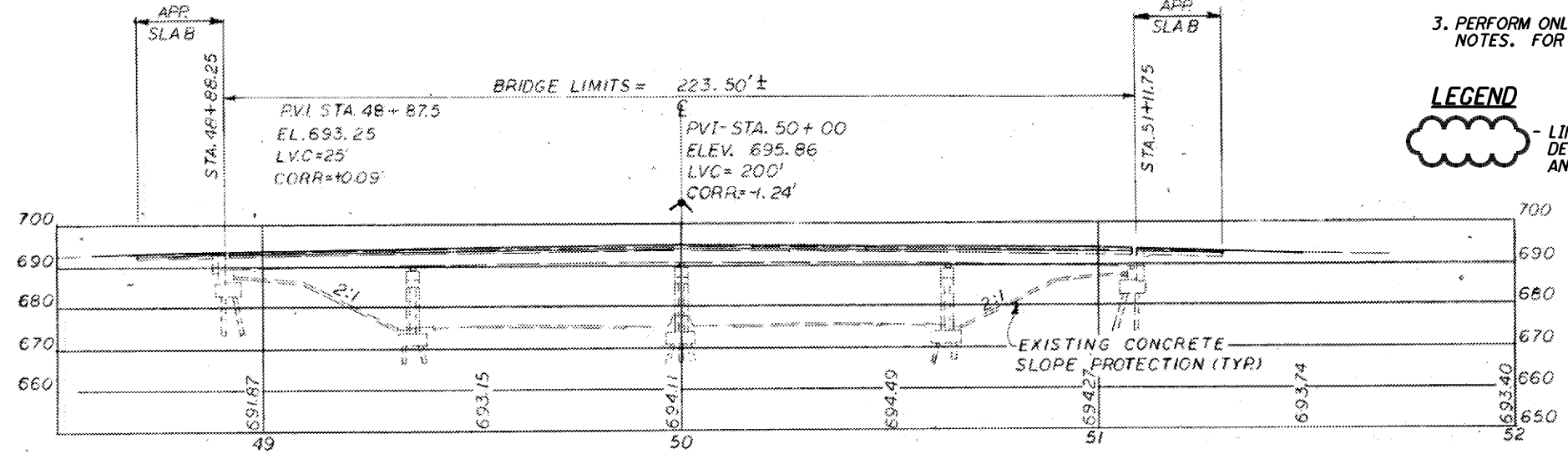
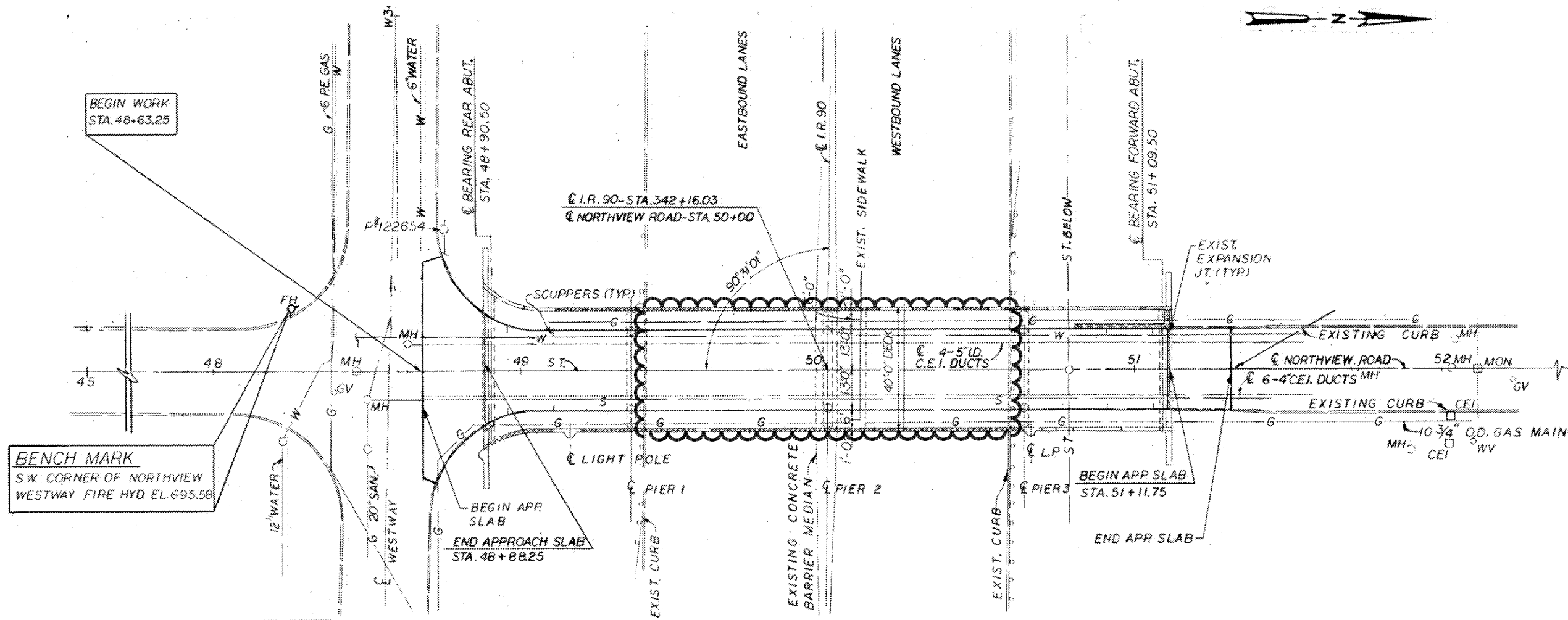
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

**D12 BH FY 2012
SPALL REMOVAL**
PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 4
BRIDGE No. CUY-71-1887
IR-71 OVER IR-490

DESIGNED	KMR	CHECKED	RHW
DRAWN	KMR	REVISED	
REVIEWED	JRC	STRUCTURE FILE NUMBER	1805584
DATE	4-21-11		

DESIGN AGENCY	ODOT DISTRICT 12
	PRODUCTION DEPARTMENT



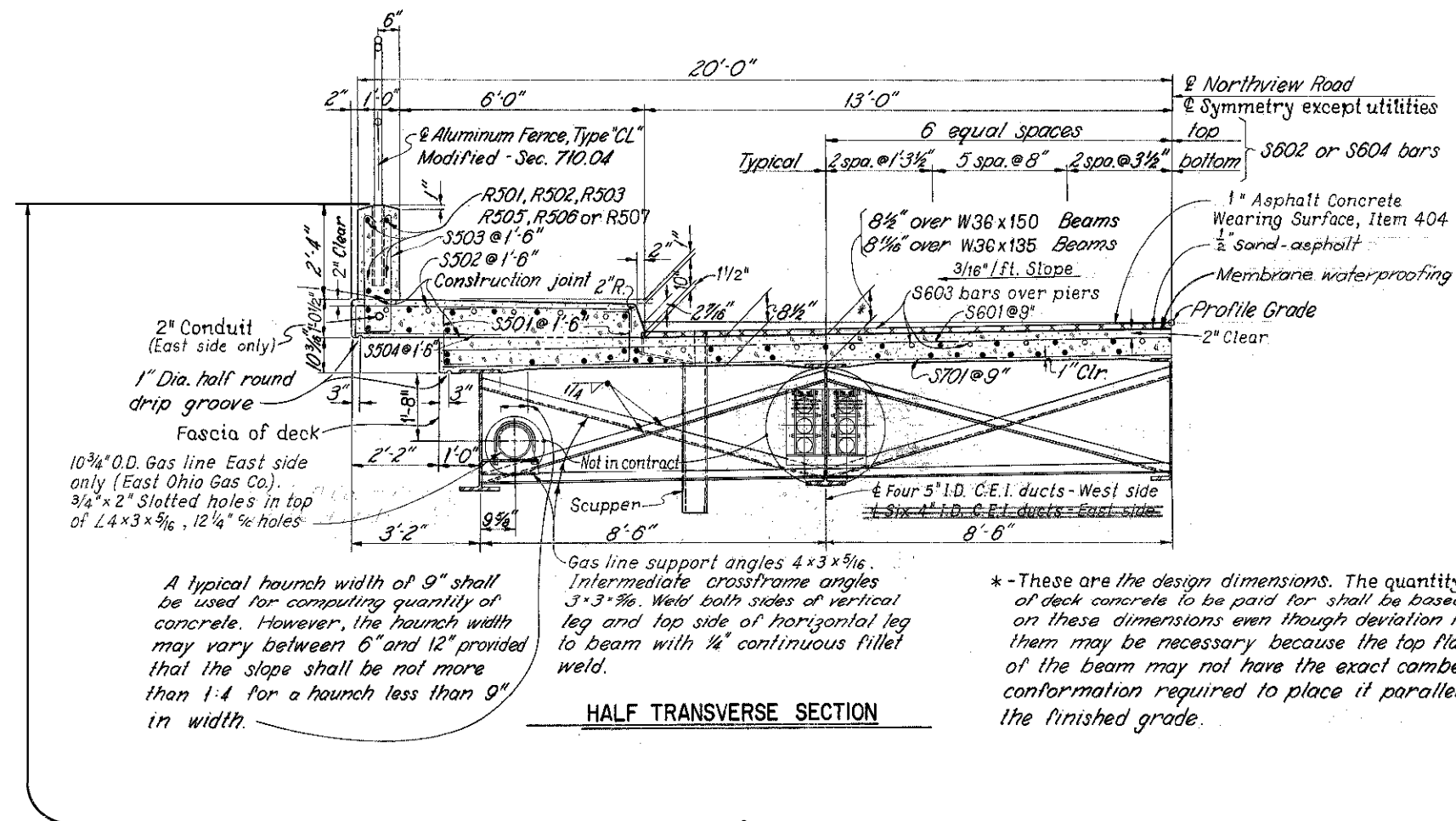
ELEVATION

NOTES

1. FOR TRANSVERSE SECTION, SEE SHEET 20 OF 42.
2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



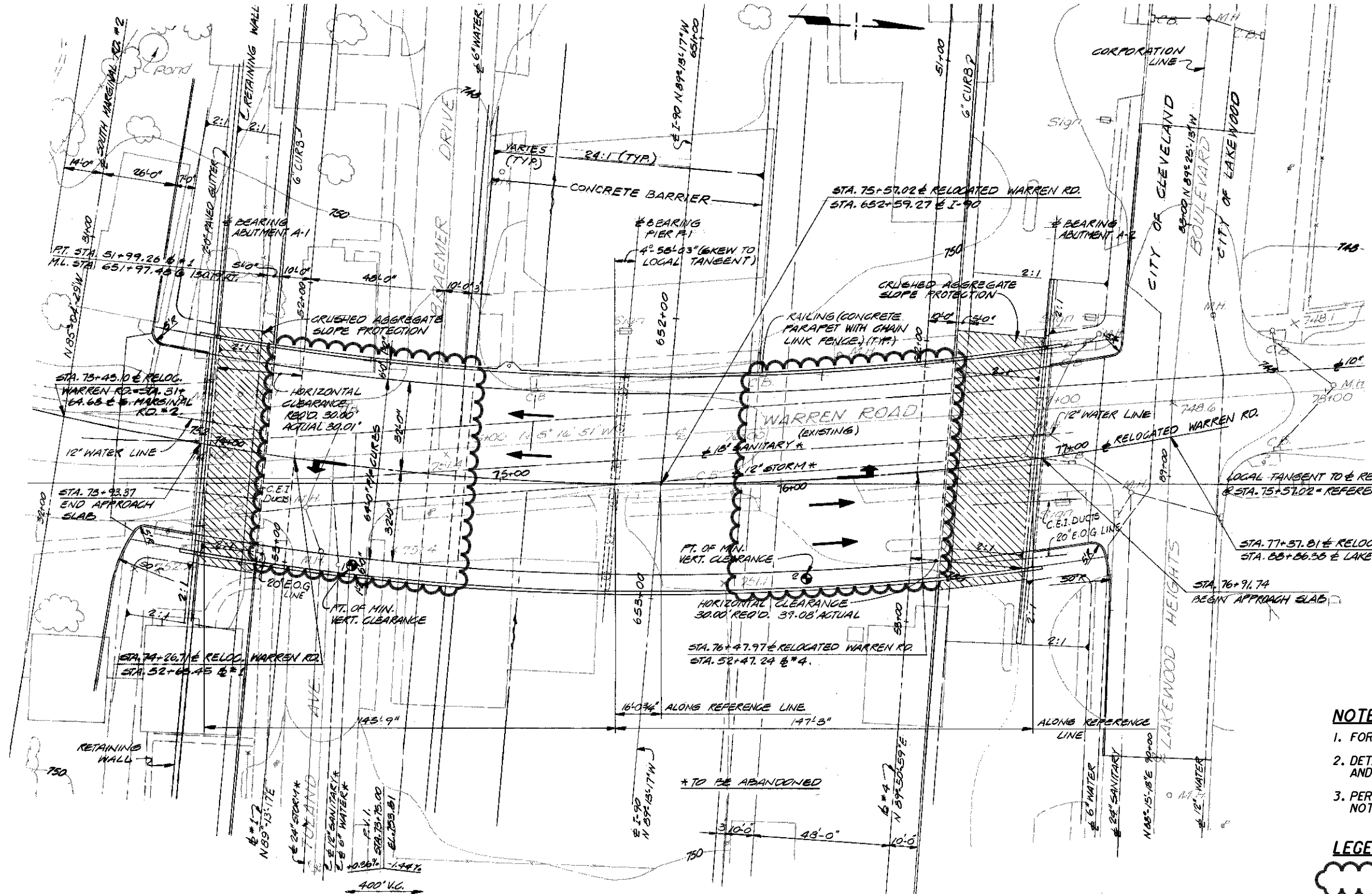
A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 5 BRIDGE No. CUY-90-0648 IR-90 UNDER NORTHVIEW RD		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1807765

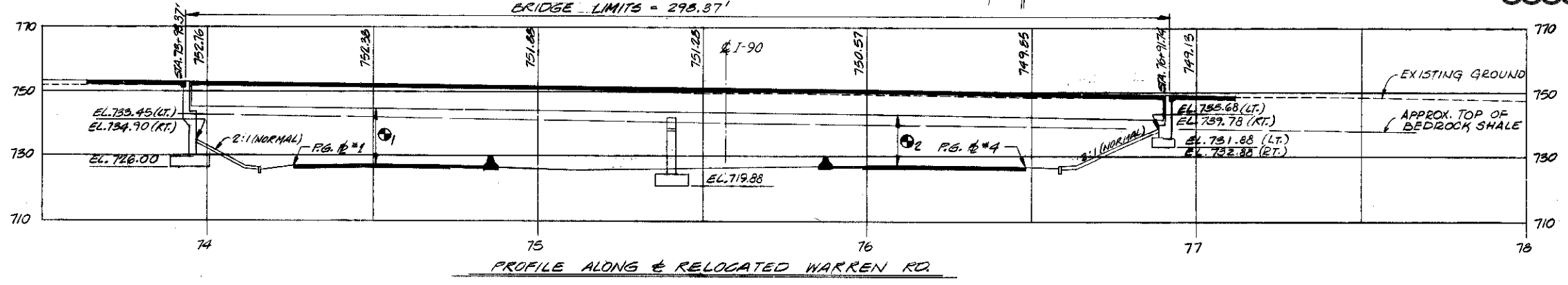


NOTES

- FOR TRANSVERSE SECTION, SEE SHEET 22 OF 42.
- DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
- PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

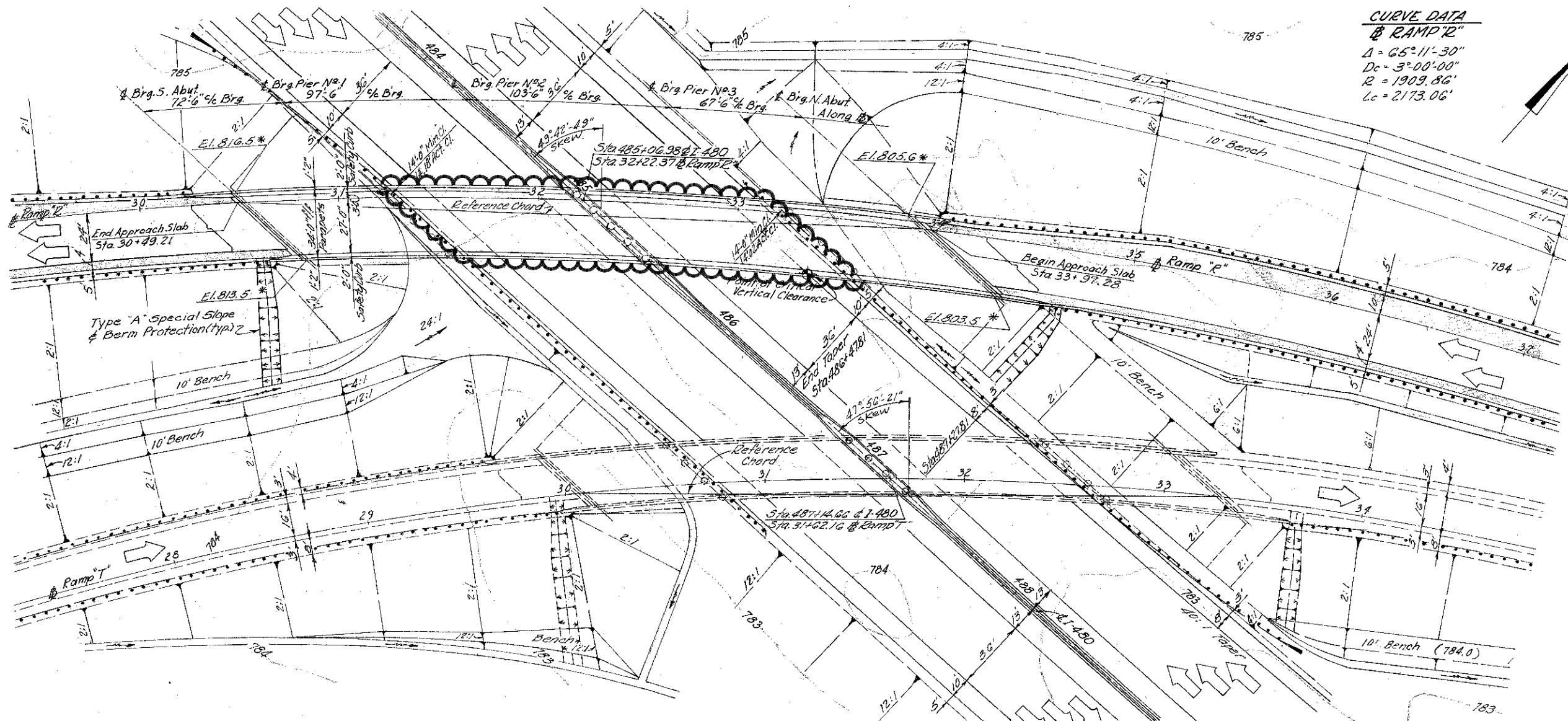
LEGEND

- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



D12-BH-FY2012 SPALL REMOVAL PID No. 90245	SITE PLAN - LOCATION 6 BRIDGE NO. CUY-90-0909 IIR-90 UNDER WARREN RD	DESIGNED: KMR CHECKED: RHW	DRAWN: KMR REVISED:	REVIEWED: JRC STRUCTURE FILE NUMBER: 1808125	DATE: 4-21-11	DESIGN AGENCY: ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	1 / 2					
	21					
	42					

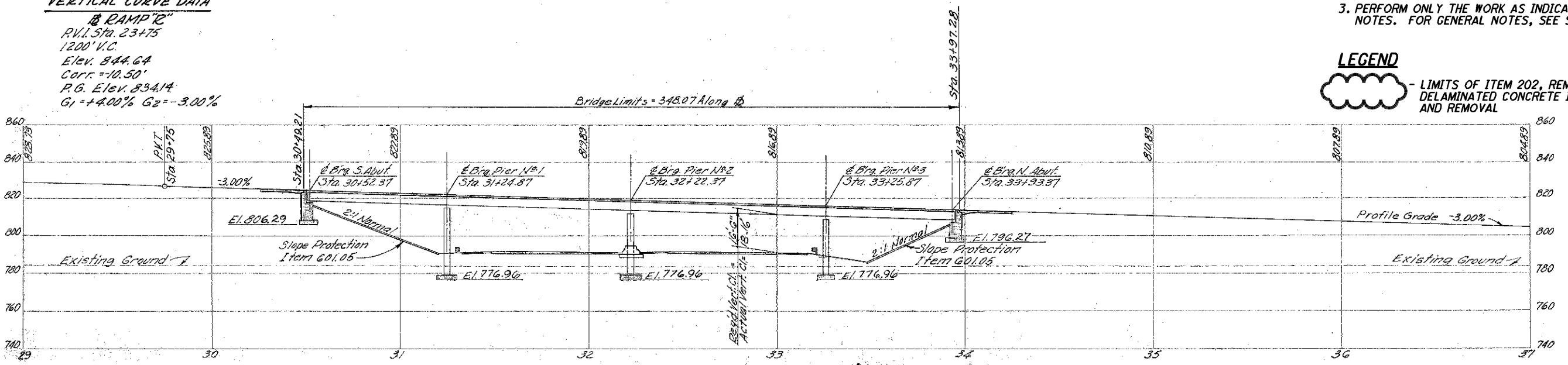
I:\PROJECTS\PID90245\roadway\sheet\90245SP071.dgn 21-APR-2011 11:30AM krohde



**CURVE DATA
@ RAMP "R"**
 $\Delta = 65^\circ 11' 30''$
 $D_c = 3^\circ 00' 00''$
 $R = 1909.86'$
 $L_c = 2173.06'$

PLAN

**VERTICAL CURVE DATA
@ RAMP "R"**
 R.V.I. Sta. 23+75
 1200' V.C.
 Elev. 844.64
 Corr. = -10.50'
 P.G. Elev. 834.14
 $G_1 = +4.00\%$ $G_2 = -3.00\%$



PROFILE ALONG @ RAMP "R"

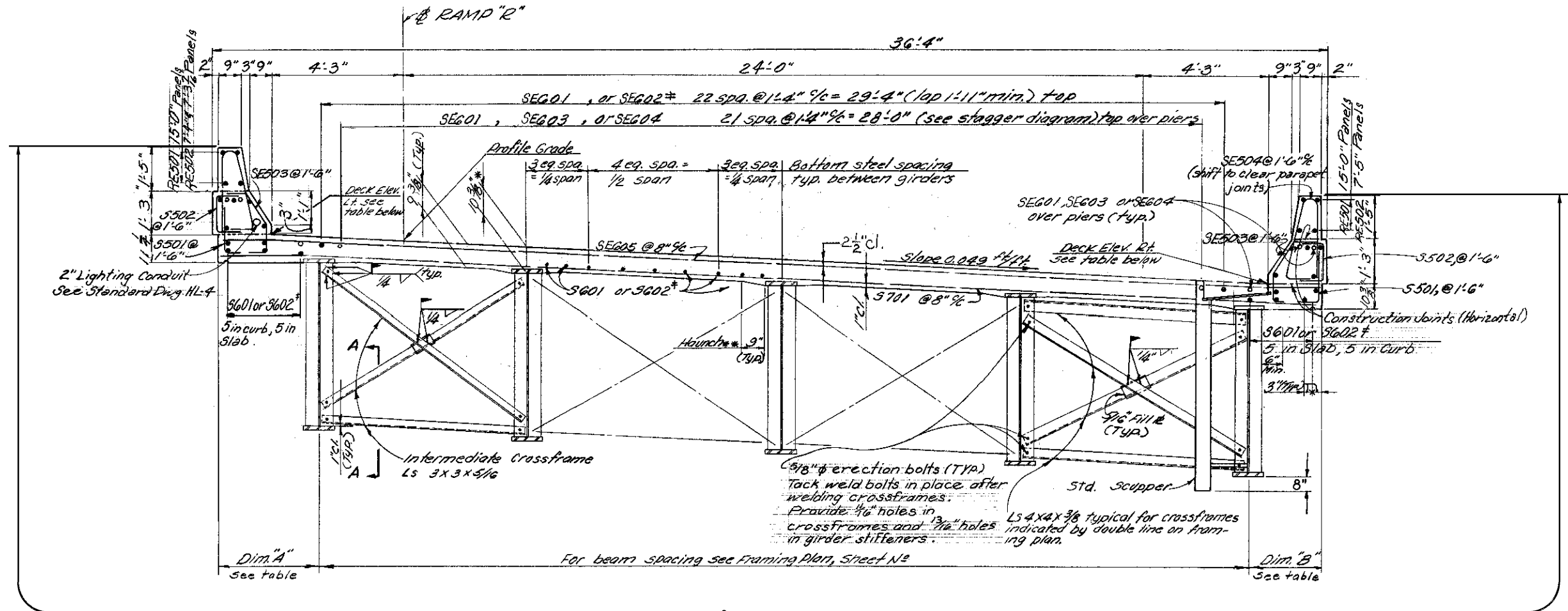
NOTES

1. FOR TRANSVERSE SECTION, SEE SHEET 24 OF 42.
2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT	DATE 4-21-11
	REVIEWED JRC
DESIGNED KMR	STRUCTURE FILE NUMBER 1814249
	DRAWN KMR
CHECKED RHW	REVISIONS
SITE PLAN - LOCATION 7	
BRIDGE NO. CUY-480-0870ES IR-480 UNDER RAMP "R"	
D12-BH-FY2012 SPALL REMOVAL PID No. 90245	
1 / 2	
23 42	



LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

**D12 BH FY 2012
SPALL REMOVAL**
PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 7

BRIDGE No. CUY-480-0870ES
IR-480 UNDER RAMP "R"

DESIGNED
KMR

DRAWN
KMR

REVIEWED
JRC

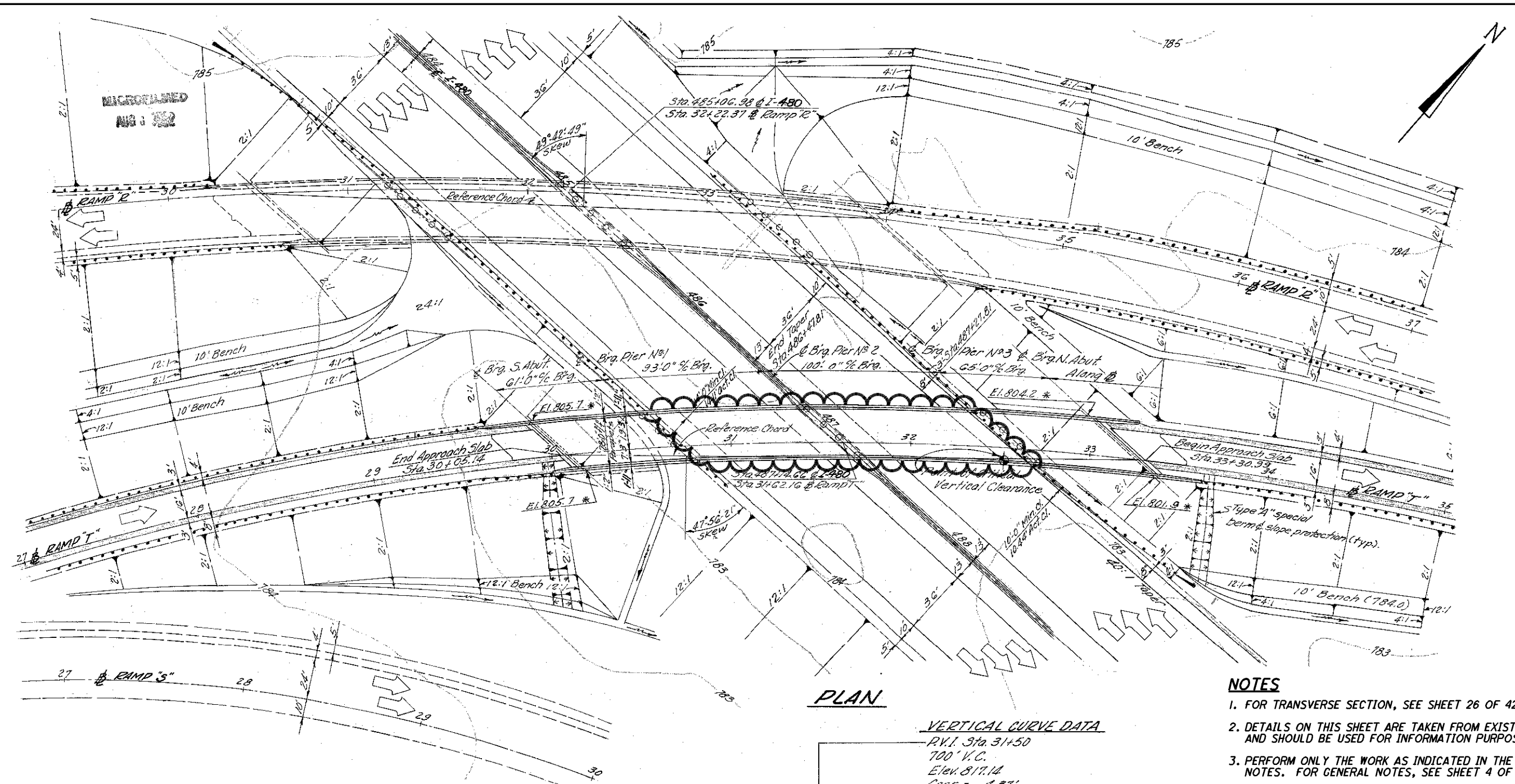
DATE
4-21-11

DESIGN AGENCY
ODOT DISTRICT 12

PRODUCTION DEPARTMENT

STRUCTURE FILE NUMBER
1814249

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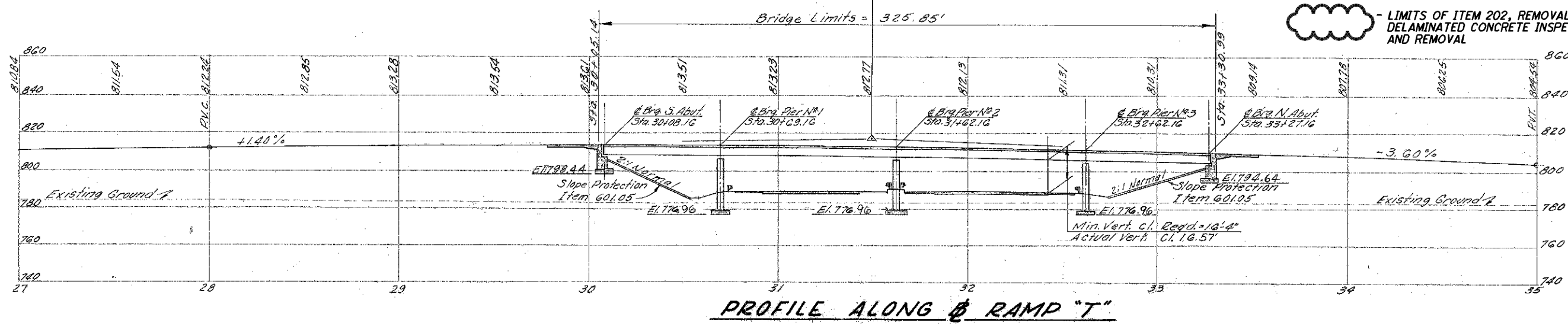
PLAN

VERTICAL CURVE DATA
 P.V.I. Sta. 31+50
 700' V.C.
 Elev. 817.14
 Corr. = -4.37'
 P.G. Elev. 812.77
 G₁ = +1.40% G₂ = -3.60%

- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 26 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



PROFILE ALONG RAMP "T"

DESIGN AGENCY: ODOT DISTRICT 12
 PRODUCTION DEPARTMENT

DATE: 4-21-11
 REVIEWED: JRC
 STRUCTURE FILE NUMBER: 1814257

DESIGNED: KMR
 CHECKED: RHW

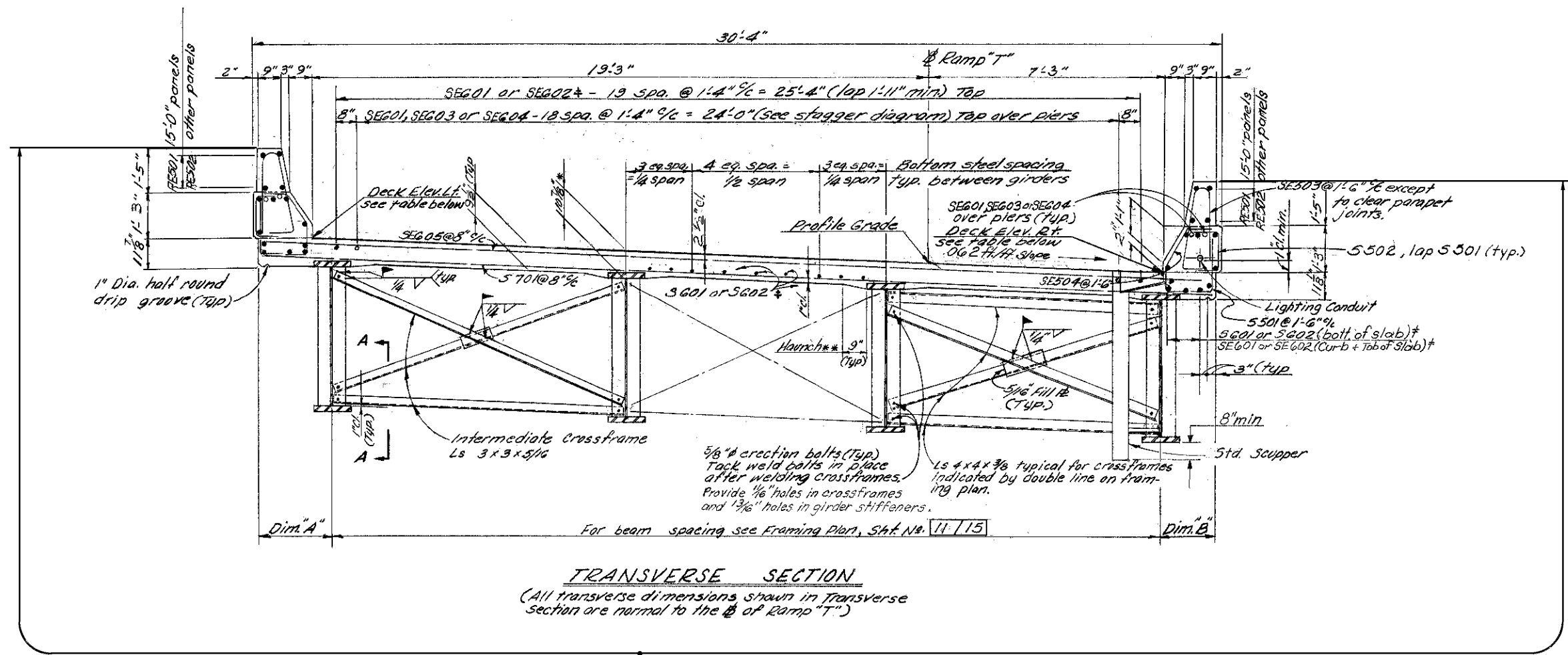
DRAWN: KMR
 REVISED:

SITE PLAN - LOCATION B
 BRIDGE NO. CUY-480-0872
 IR-480 UNDER RAMP "T"

D12-BH-FY2012 SPALL REMOVAL
 PID No. 90245

1 / 2

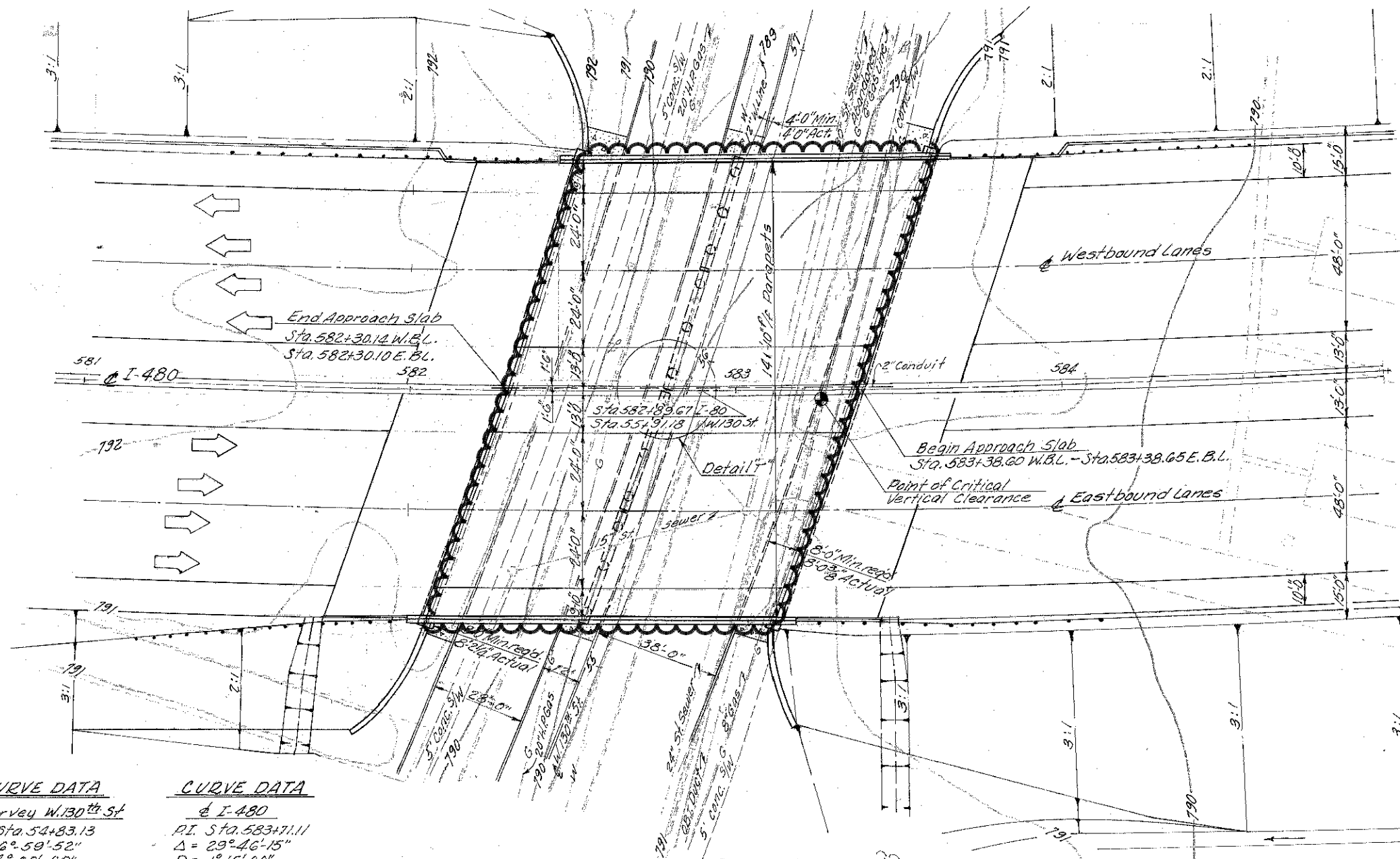
25 / 42



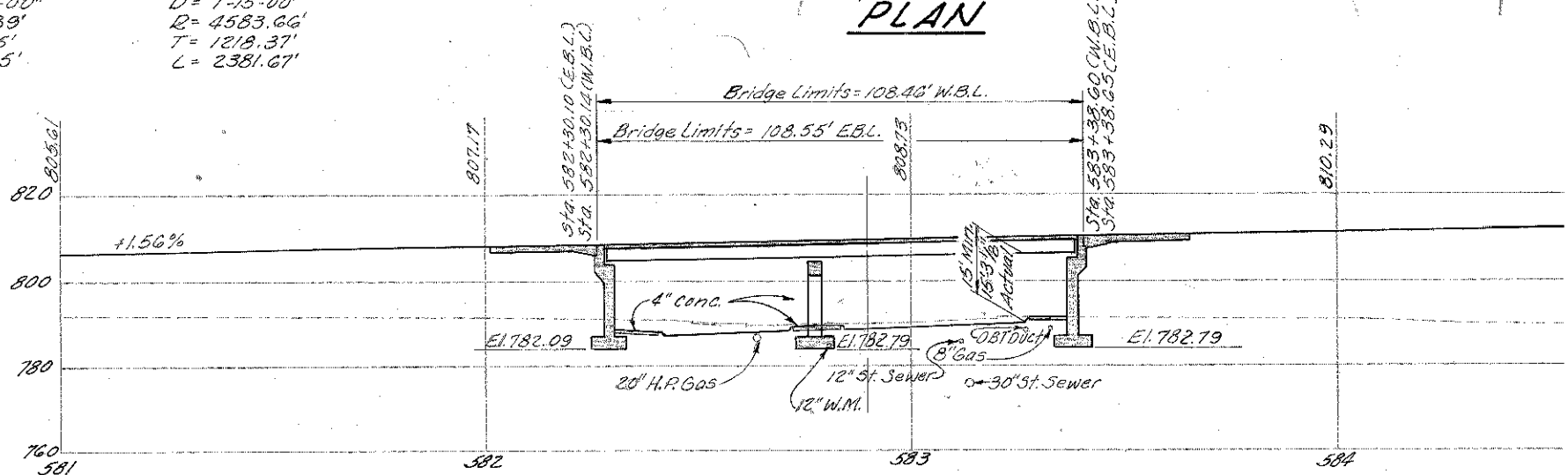
LIMITS OF ITEM 202, REMOVAL MISC.:
 DELAMINATED CONCRETE INSPECTION
 AND REMOVAL

- NOTES**
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 8 BRIDGE No. CUY-480-0872 IR-480 UNDER RAMP "T"		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1814257



CURVE DATA	CURVE DATA
Survey W.130 th St	I-480
PI Sta. 54+83.13	PI Sta. 583+71.11
$\Delta = 16^{\circ} 59' 52''$	$\Delta = 29^{\circ} 46' 15''$
$D = 4^{\circ} 00' 00''$	$D = 1^{\circ} 15' 00''$
$R = 1432.39'$	$R = 4583.66'$
$T = 214.05'$	$T = 1218.37'$
$L = 424.95'$	$L = 2381.67'$

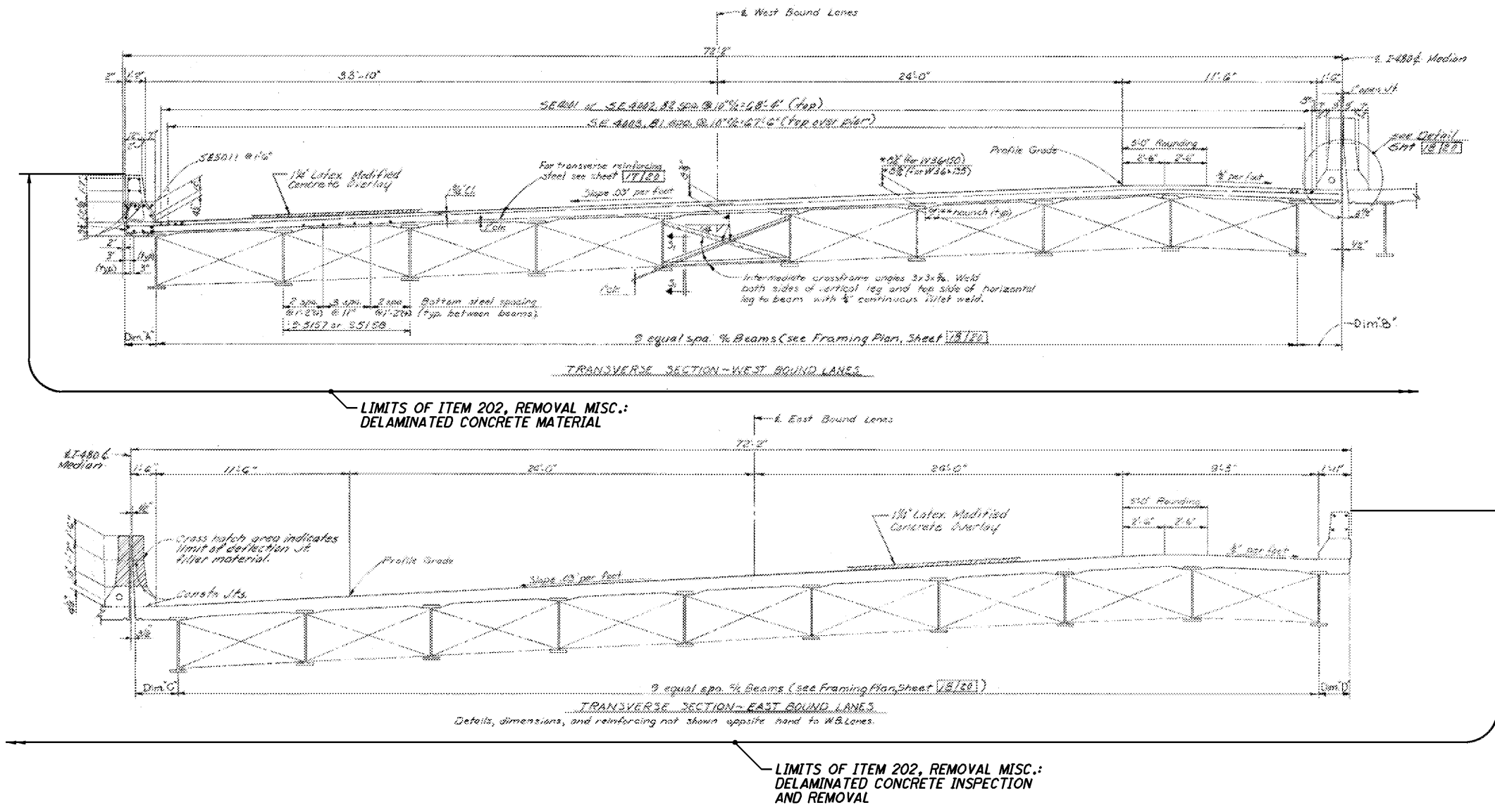


PROFILE ALONG ϕ I-480

- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 28 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

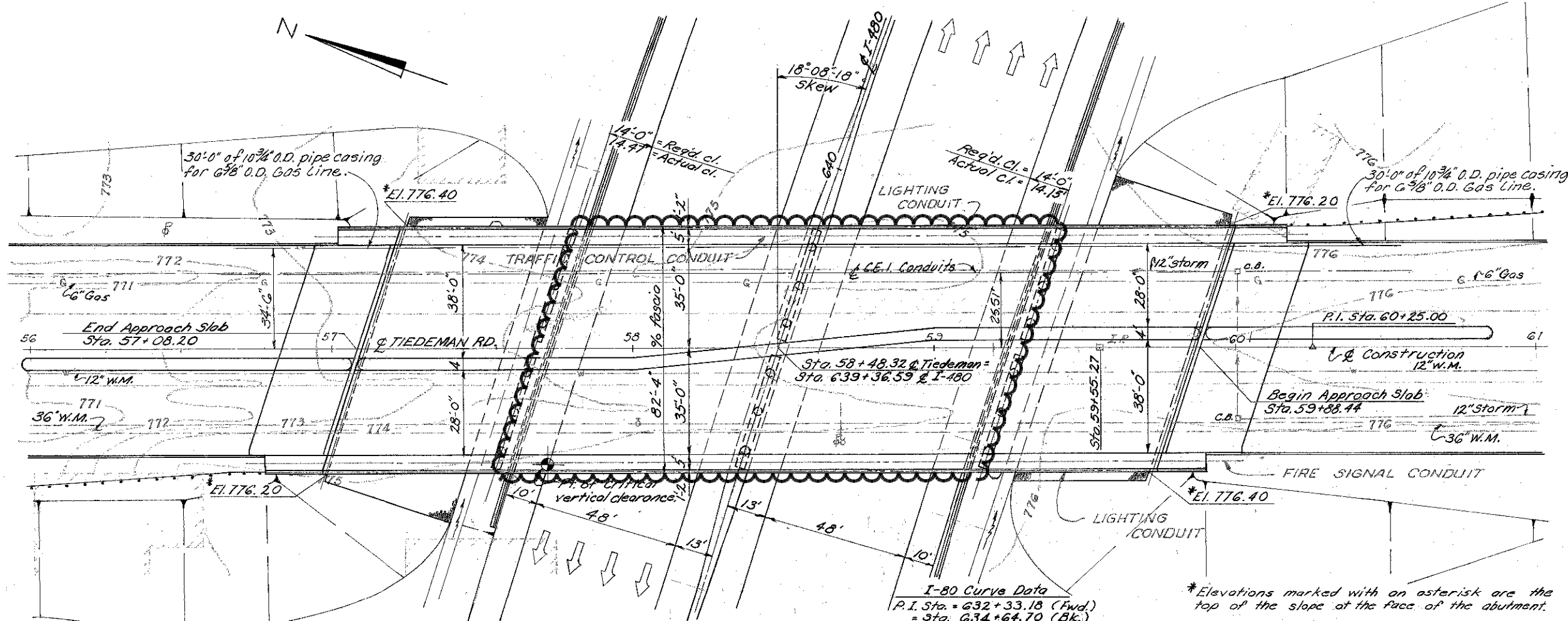
LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



- NOTES**
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 9 BRIDGE No. CUY-480-1054 IR-480 OVER CR-18 W130TH ST		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1812904

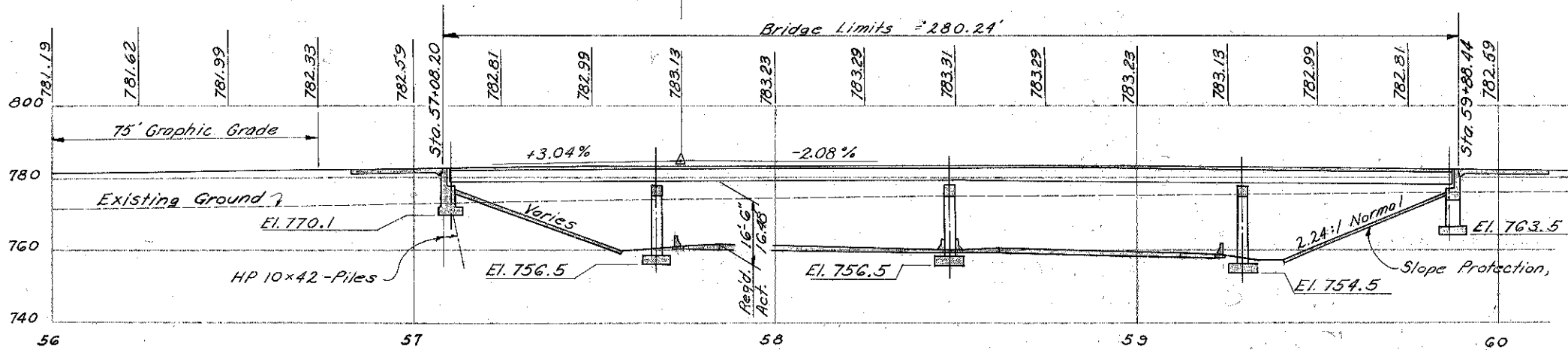


PLAN

I-80 Curve Data
 P.I. Sta. = 632+33.18 (Fwd.)
 = Sta. 634+64.70 (Bk.)
 $\Delta = 44^{\circ}06'29''$
 $D = 1^{\circ}00'00''$
 $R = 5,729.58'$
 $T = 2,321.19'$
 $L = 4,410.86'$
 $C = 4,302.69'$

*Elevations marked with an asterisk are the top of the slope at the face of the abutment.
 Earthwork limits shown are schematic.
 Actual slopes shall conform to plan cross-sections.

P.V.I. Sta. 57+75.00
 800' V.C.
 Elev. 788.13
 Corr. = -5.12
 P.G. = 783.01



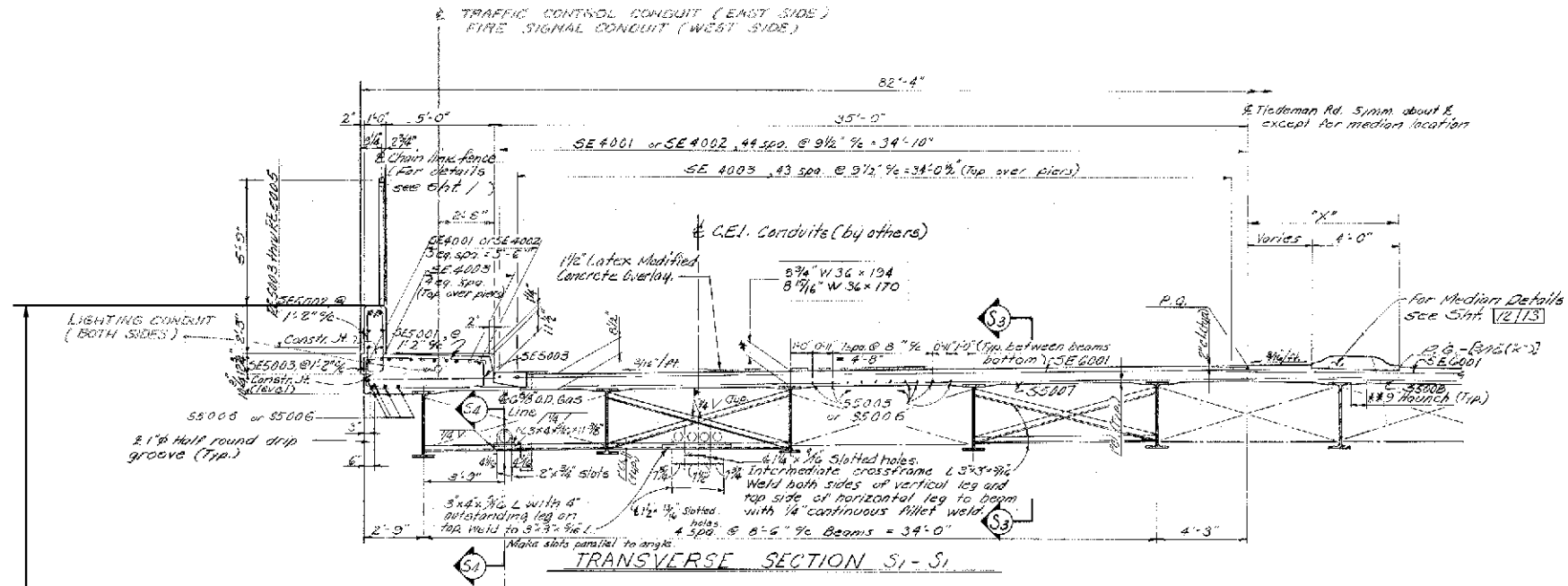
PROFILE ON & OF TIEDEMAN ROAD

NOTES

- FOR TRANSVERSE SECTION, SEE SHEET 30 OF 42.
- DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
- PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

**D12 BH FY2012
SPALL REMOVAL**
PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 10

BRIDGE No. CUY-480-1162
JR-480 UNDER TIEDEMAN RD

DESIGNED
KMR

DRAWN
KMR

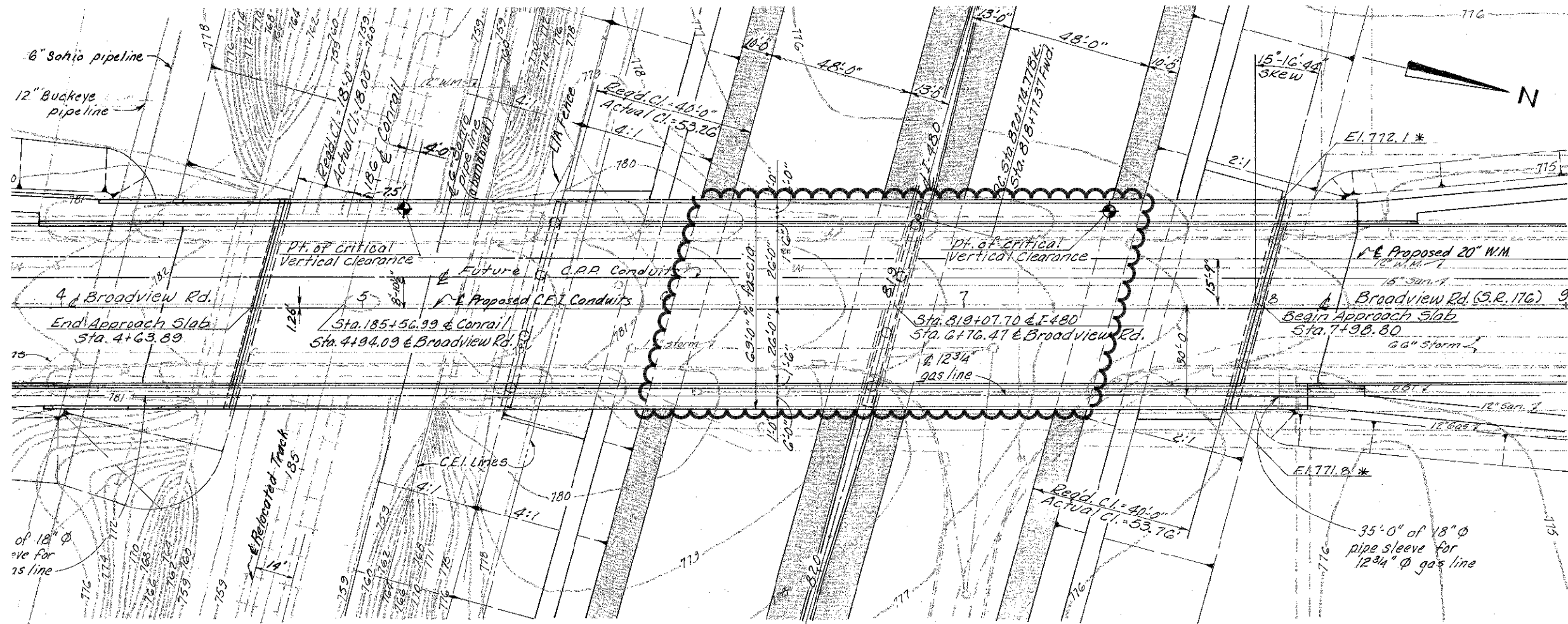
REVIEWED
JRC

DATE
4-21-11

DESIGN AGENCY
ODOT DISTRICT 12

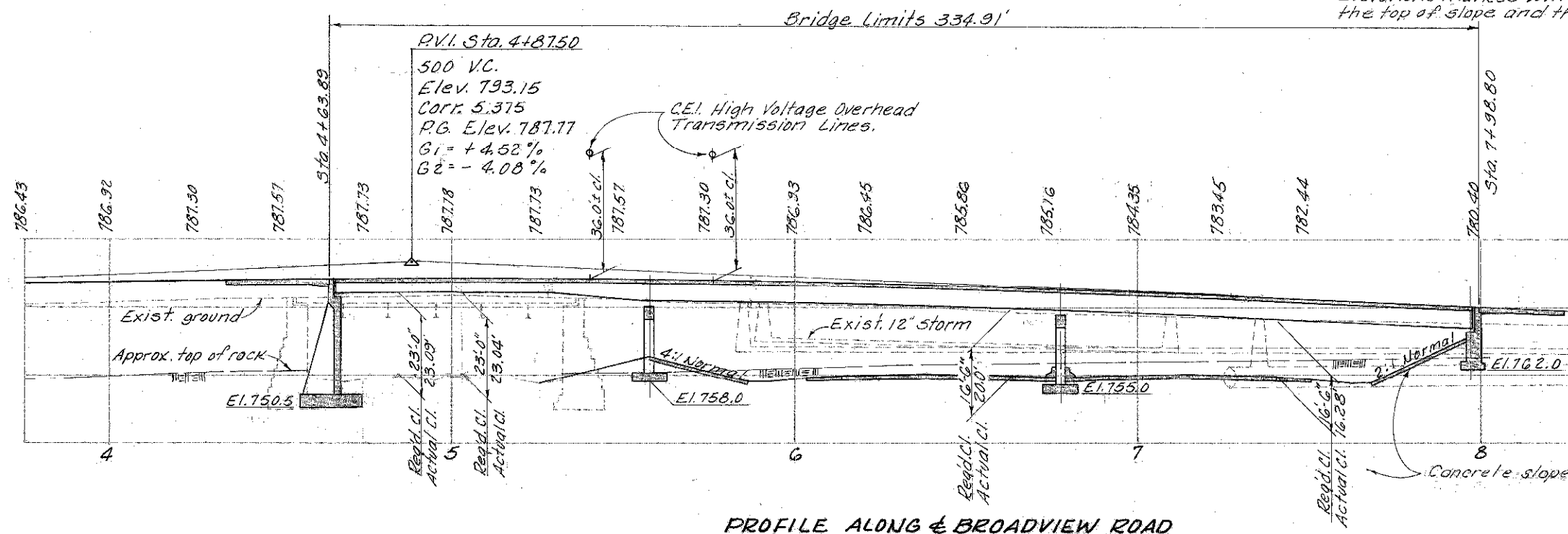
PRODUCTION DEPARTMENT

STRUCTURE FILE NUMBER
1812939



PLAN

NOTE:
 Earthwork limits shown are approximate. Actual slopes shall conform to plan cross-sections.
 * Elevations marked with an asterisk are at the top of slope and the face of abutment.



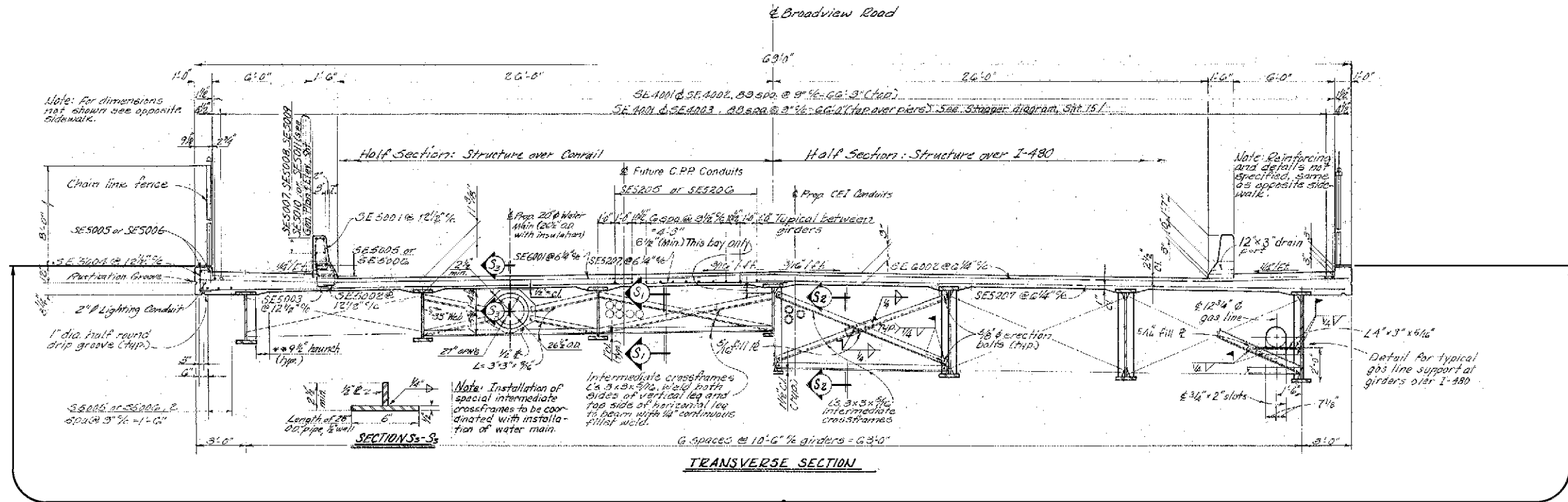
PROFILE ALONG BROADVIEW ROAD

- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 32 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

DESIGN AGENCY	ODOT DISTRICT 12
PRODUCTION DEPARTMENT	
DATE	4-21-11
REVIEWED	JRC
STRUCTURE FILE NUMBER	1810073
DRAWN	KMR
REVISION	
DESIGNED	KMR
CHECKED	RHW
SITE PLAN - LOCATION 11	
BRIDGE NO. CUY-480-1506	
IR-480 UNDER BROADVIEW RD	
D12-BH-FY2012 SPALL REMOVAL	
PID No. 90245	
1 / 2	
31	
42	

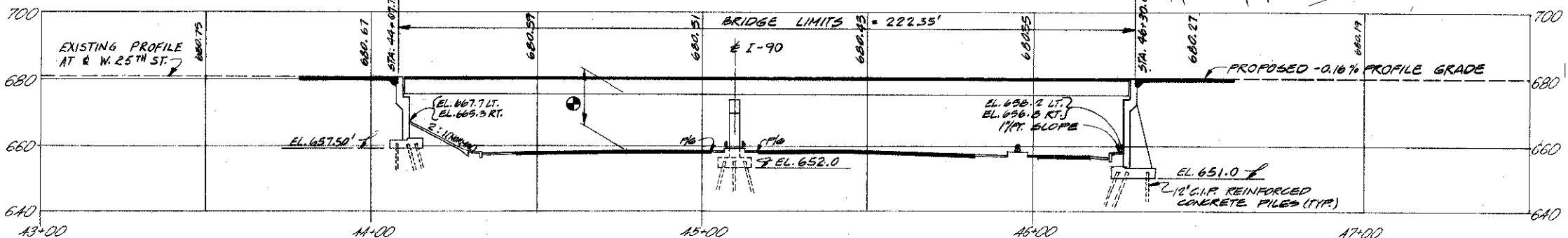
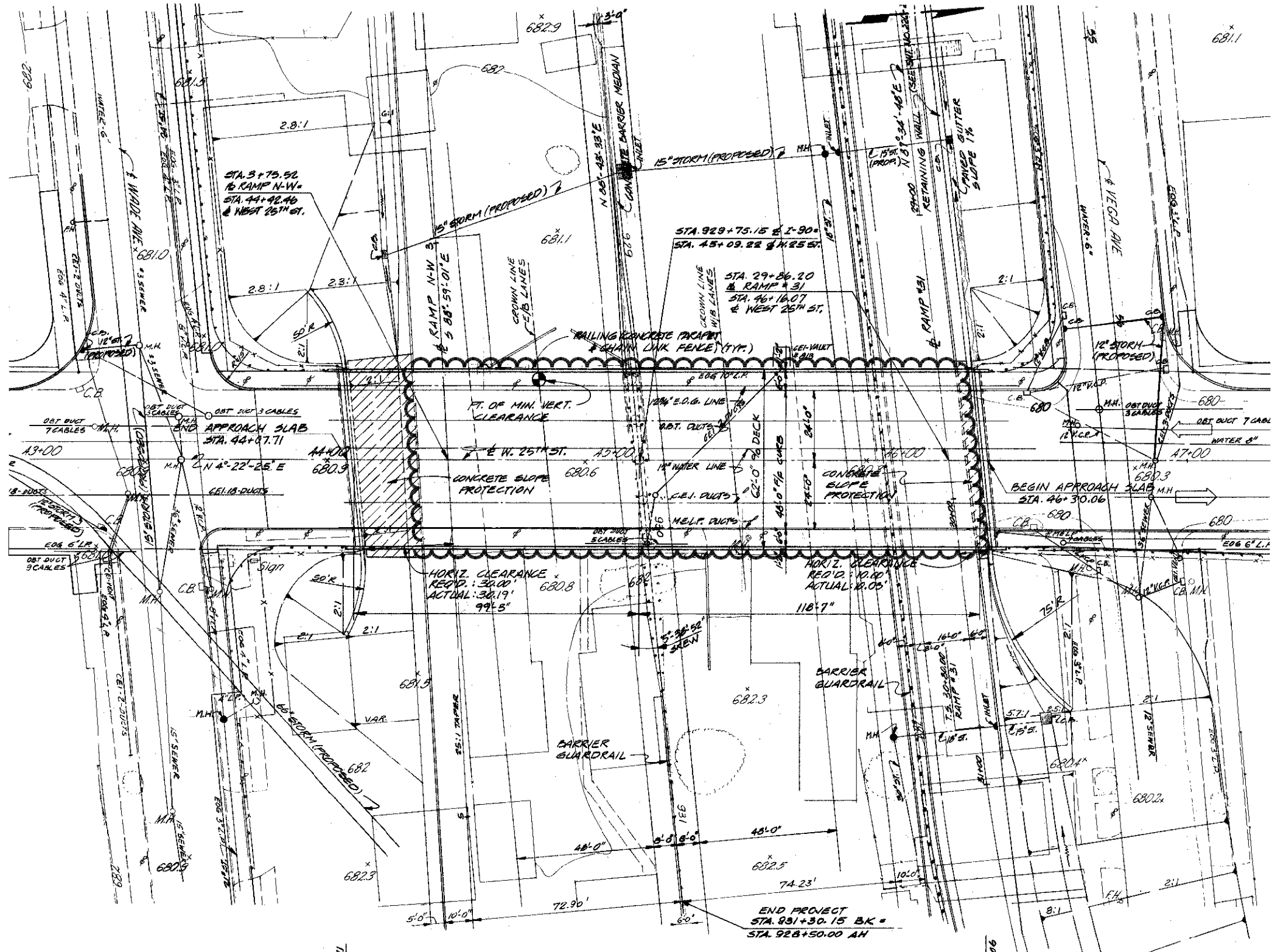


LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

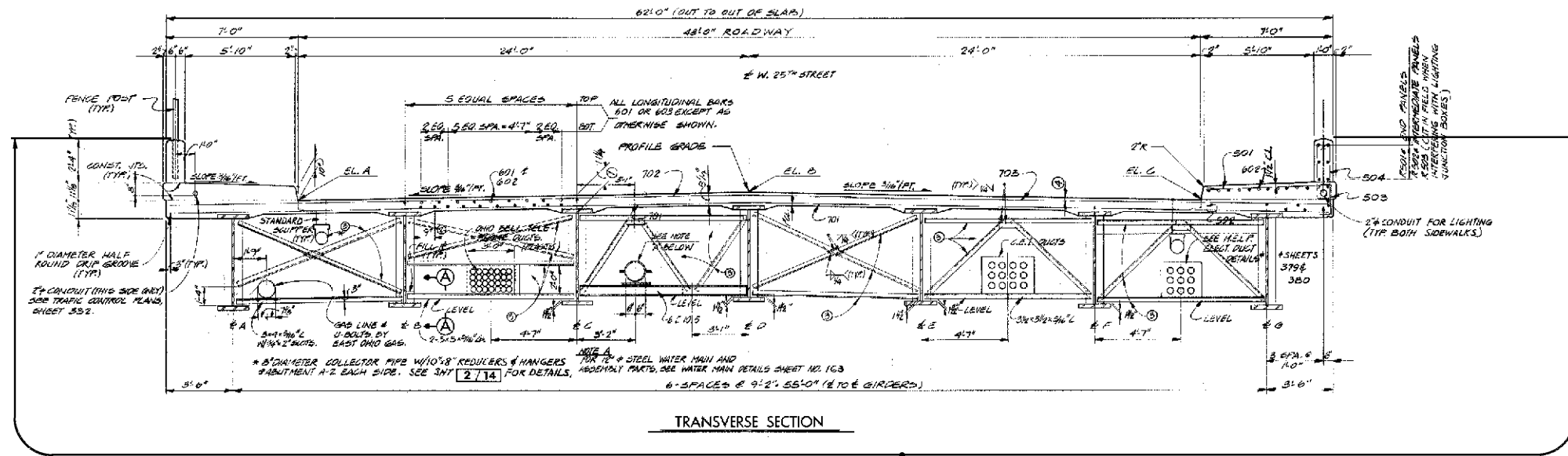
NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 11 BRIDGE No. CUY-480-1506 IR-480 UNDER BROADVIEW RD		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1810073



- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 34 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.
- LEGEND**
- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



TRANSVERSE SECTION

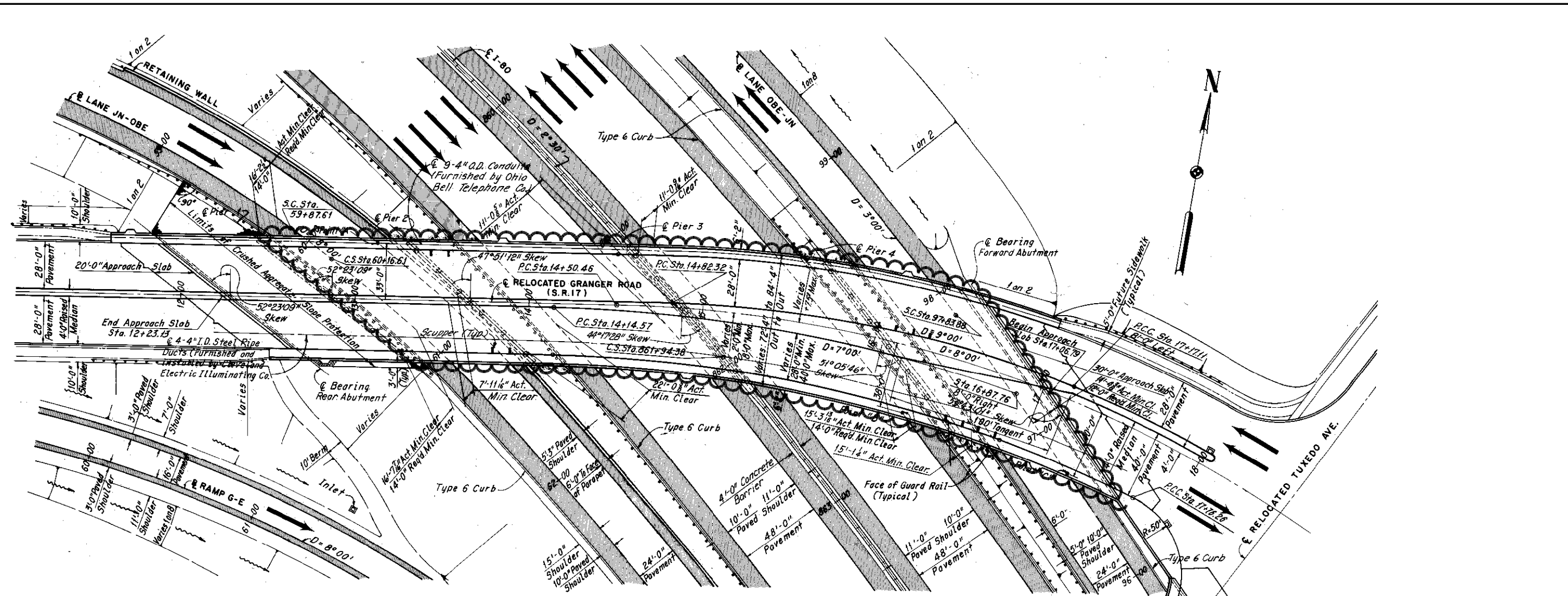
LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

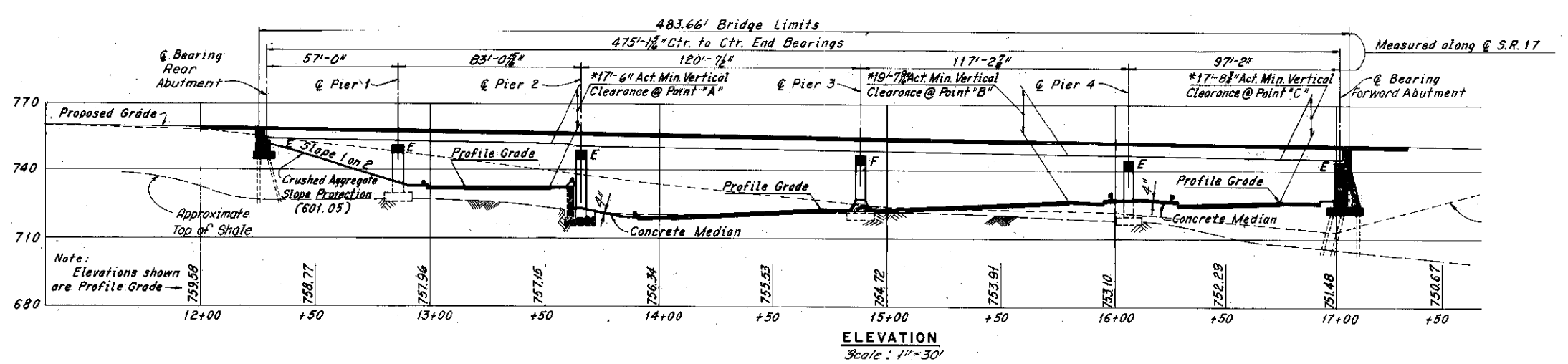
D12 BH FY 2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 12 BRIDGE NO. CUY-42-1662 US-42 OVER IR-90		DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT
	DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	REVIEWED JRC STRUCTURE FILE NUMBER 1807889

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PLAN
Scale: 1" = 30'

*Note:
16'-4" Required minimum vertical clearance over I-80.
15'-0" Required minimum vertical clearance over Lane OBE-JN and Lane JN-OBE.



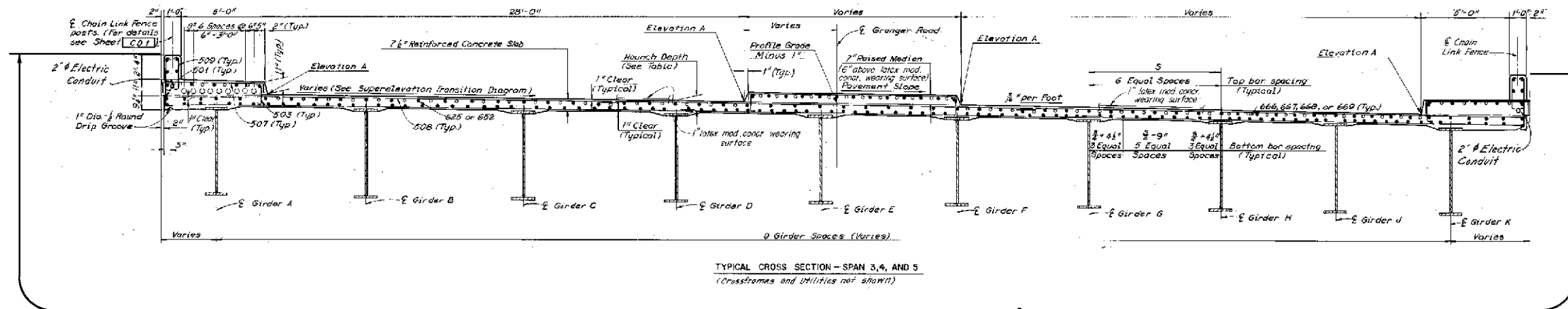
ELEVATION
Scale: 1" = 30'

- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 36 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	DATE 4-21-11	DESIGN AGENCY ODOT DISTRICT 12
		STRUCTURE FILE NUMBER 1802402	PRODUCTION DEPARTMENT
SITE PLAN - LOCATION 13			
BRIDGE NO. CUY-17-1227			
SR-17 OVER IR-480 (CUY-480-1586)			
D12-BH-FY2012 SPALL REMOVAL			
PID No. 90245			
1 / 2			
35 42			



TYPICAL CROSS SECTION - SPAN 3, 4, AND 5
(Crossframes and Utilities not shown)

LIMITS OF ITEM 202, REMOVAL MISC.:
DELAMINATED CONCRETE INSPECTION
AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

**D12 BH FY 2012
SPALL REMOVAL**
PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 13

BRIDGE No. CUY-017-1227
SR-17 OVER IR-480 (CUY-480-1586)

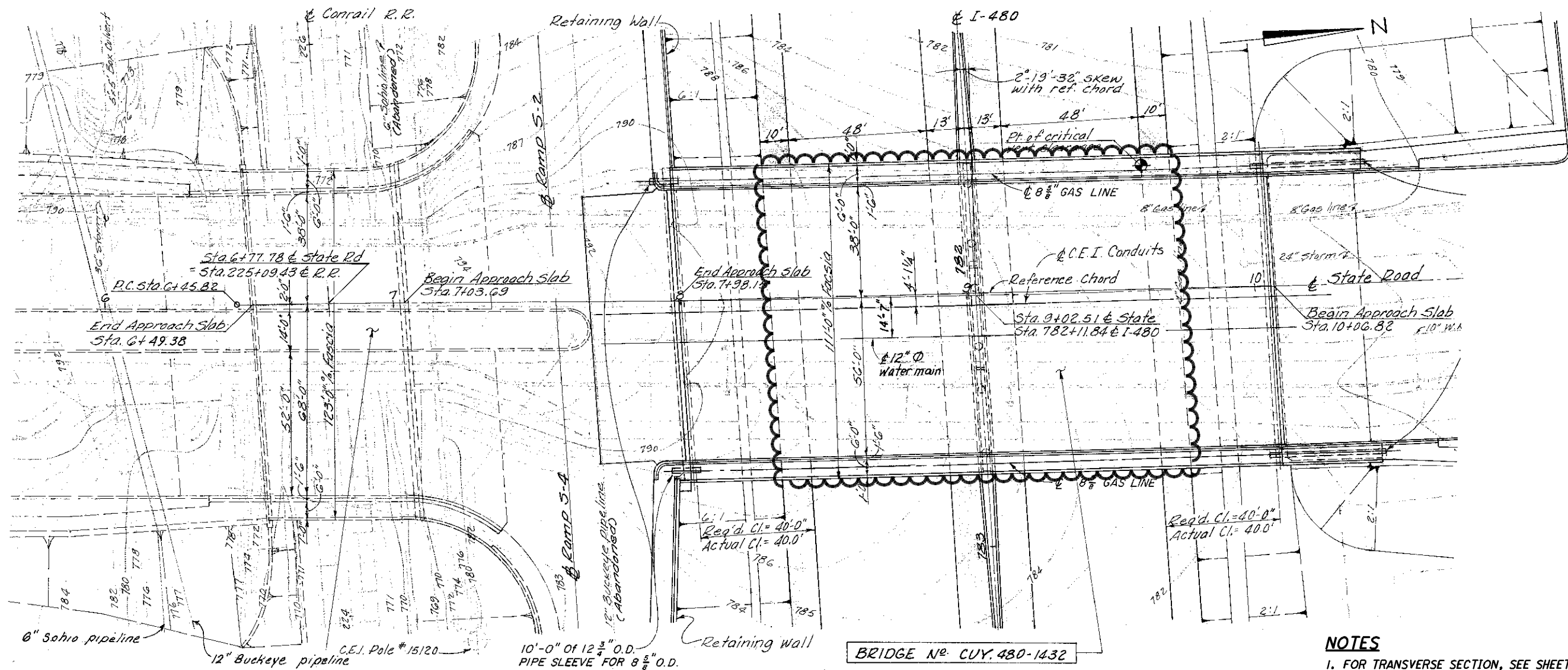
DESIGNED
KMR
CHECKED
RHW

DRAWN
KMR
REVISED

REVIEWED
JRC
STRUCTURE FILE NUMBER
1802402

DATE
4-21-11

DESIGN AGENCY
ODOT DISTRICT 12
PRODUCTION DEPARTMENT



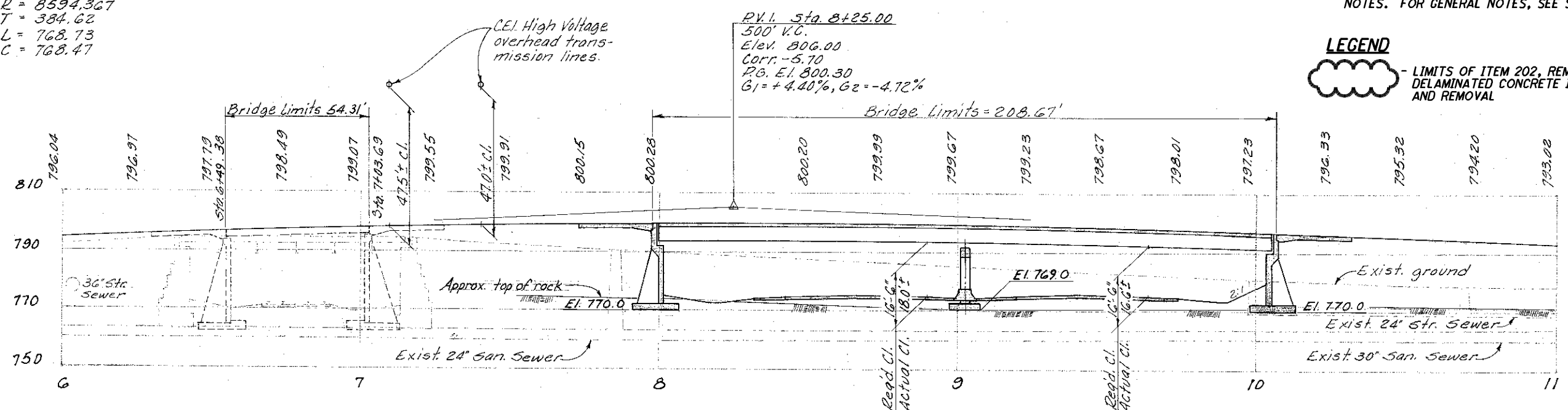
STATE RD. CURVE DATA
 P.I. Sta. 10+30.44
 $\Delta = 5^{\circ}07'30''$
 $D_c = 0^{\circ}40'00''$
 $R = 8594.367$
 $T = 384.62$
 $L = 768.73$
 $C = 768.47$

PLAN

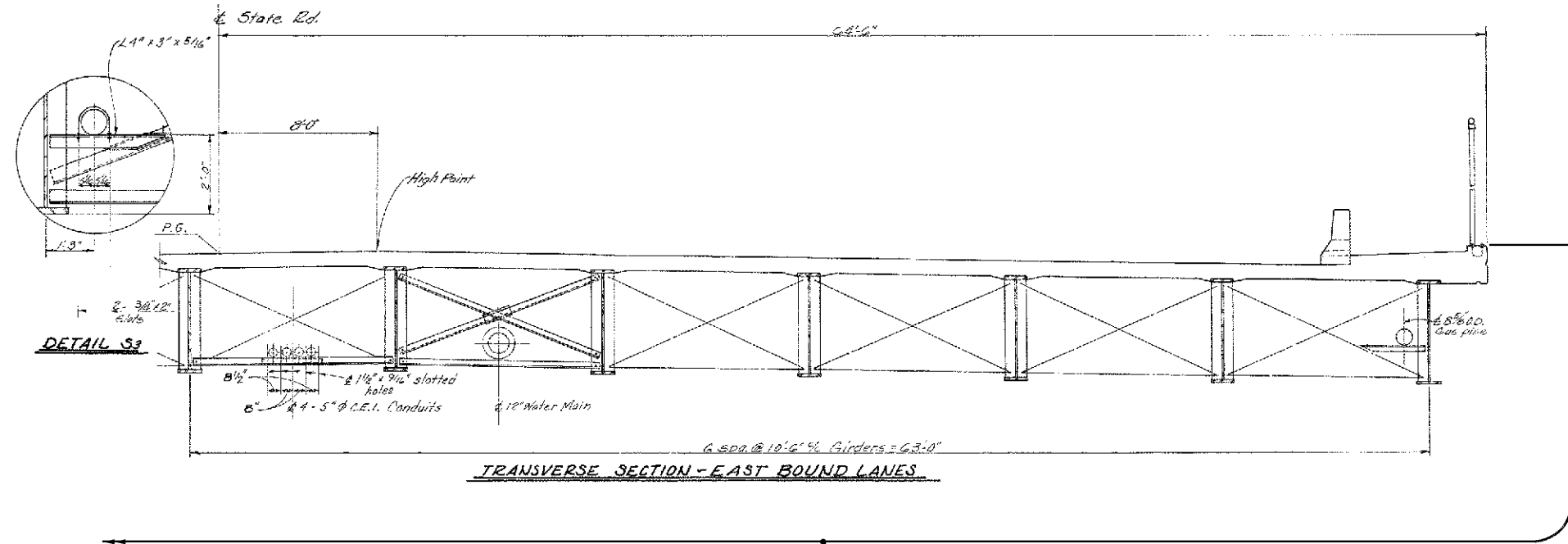
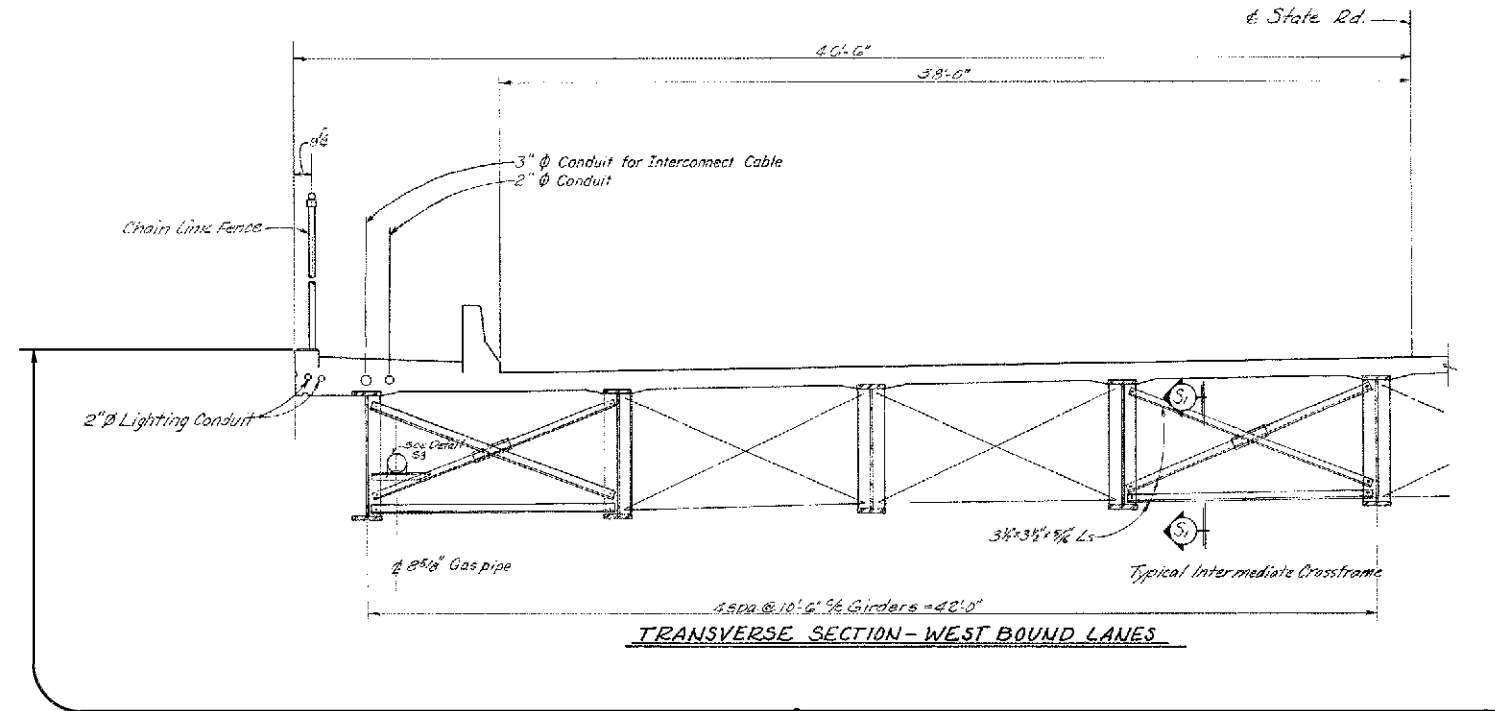
- NOTES**
1. FOR TRANSVERSE SECTION, SEE SHEET 38 OF 42.
 2. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 3. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

- LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



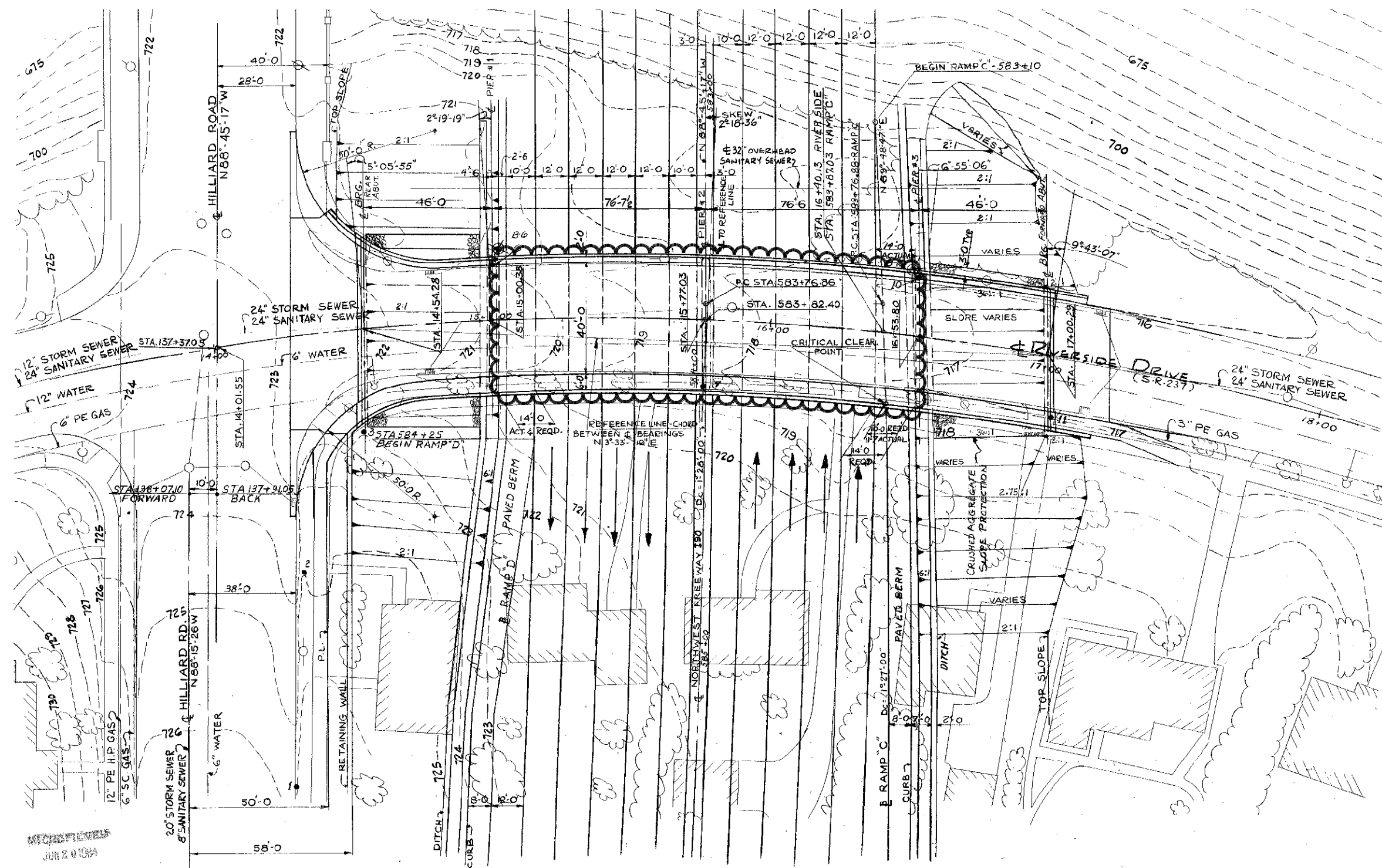
PROFILE ALONG STATE ROAD



NOTES

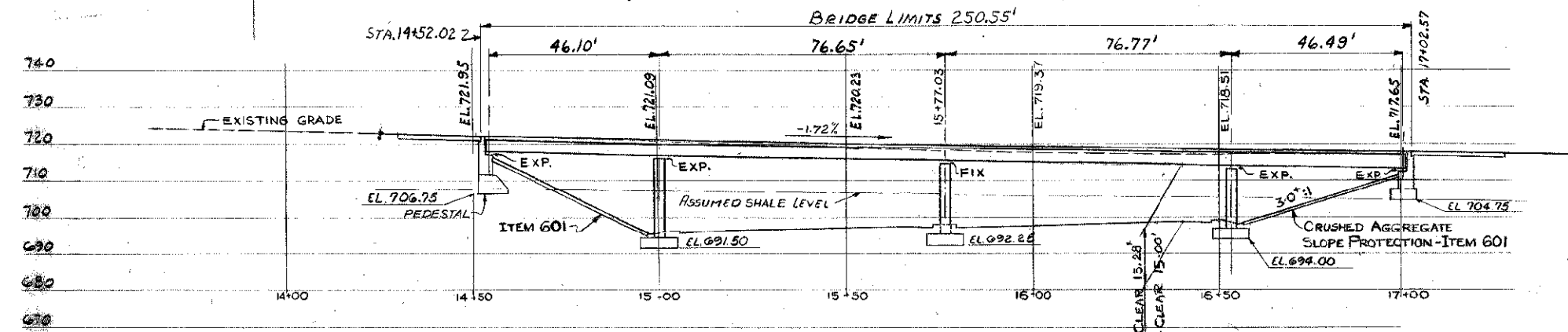
1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

D12 BH FY2012 SPALL REMOVAL PID No. 90245	EXISTING TRANSVERSE SECTION - LOCATION 14 BRIDGE No. CUY-94-1020 SR-94 OVER IR-480 (CUY-480-1432)	DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT	REVIEWED JRC DATE 4-21-11 STRUCTURE FILE NUMBER 1809644
DESIGNED KMR CHECKED RHW	DRAWN KMR REVISED	DATE 4-21-11 STRUCTURE FILE NUMBER 1809644	DESIGN AGENCY ODOT DISTRICT 12 PRODUCTION DEPARTMENT



N

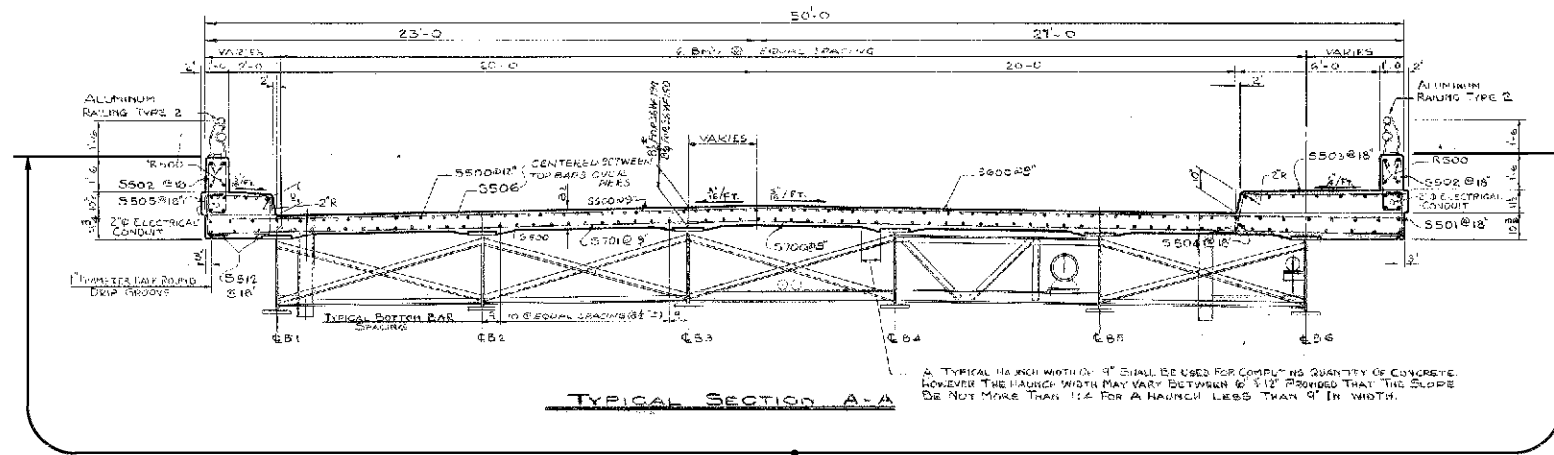
CURVE DATA	
NORTHWEST FREEWAY - 190	
P.I. STA.	589+66.50
D	1° 28' 00"
R	3906.53
Δ	17° 10' 00" R
T	589.64
L	1170.45'



- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 40 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



LIMITS OF ITEM 202, REMOVAL MISC.:
 DELAMINATED CONCRETE INSPECTION
 AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

**D12 BH FY2012
 SPALL REMOVAL**
 PID No. 90245

EXISTING TRANSVERSE SECTION - LOCATION 15

BRIDGE No. CUY-237-1236
 SR-237 OVER IR-90

DESIGNED
 KMR
 CHECKED
 RHW

DRAWN
 KMR
 REVISED

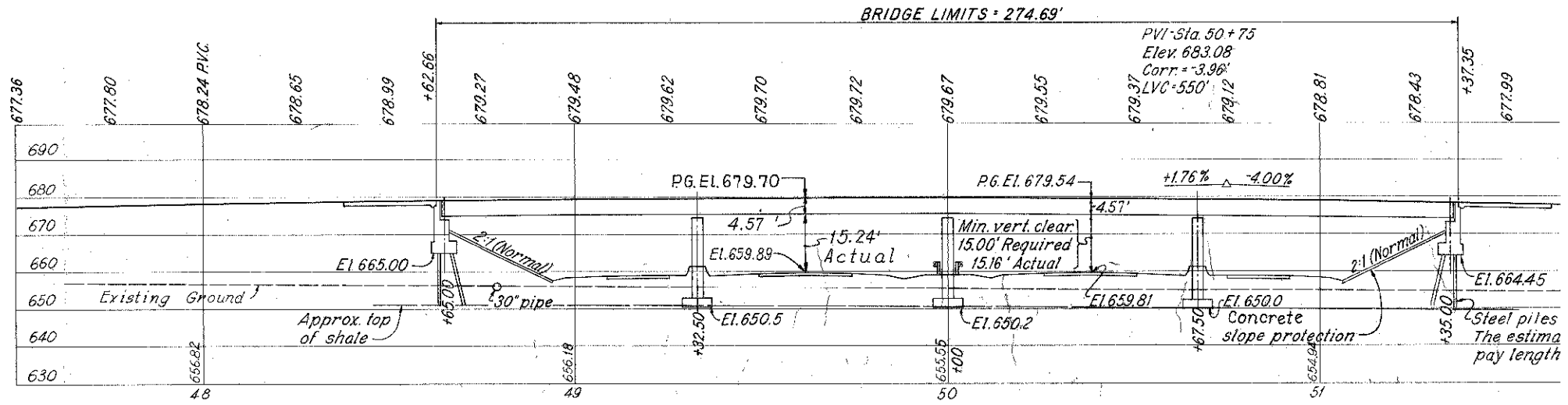
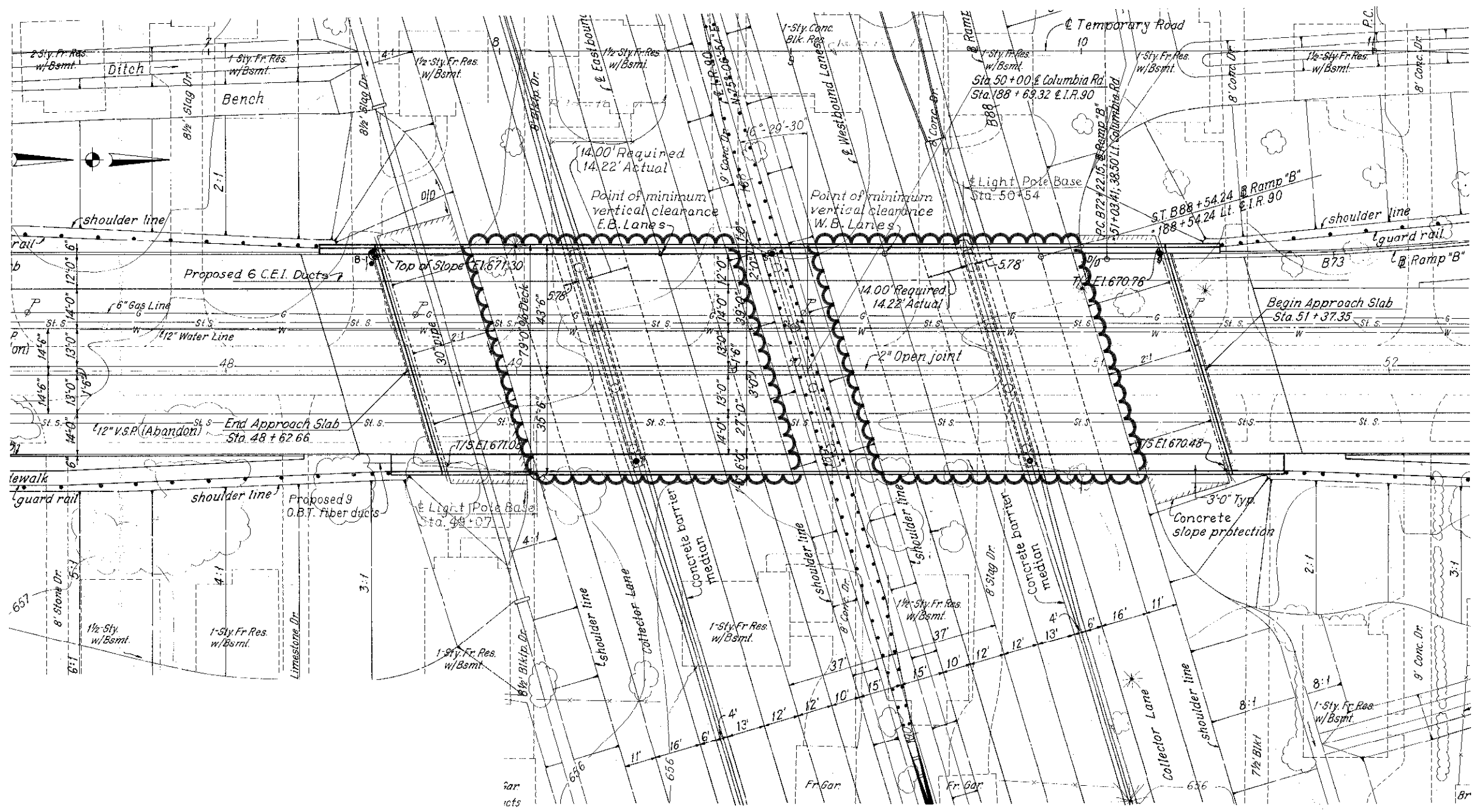
REVIEWED
 JRC
 STRUCTURE FILE NUMBER
 1808575

DATE
 4-21-11

DESIGN AGENCY
 ODOT DISTRICT 12
 PRODUCTION DEPARTMENT

2 / 2

40
 42

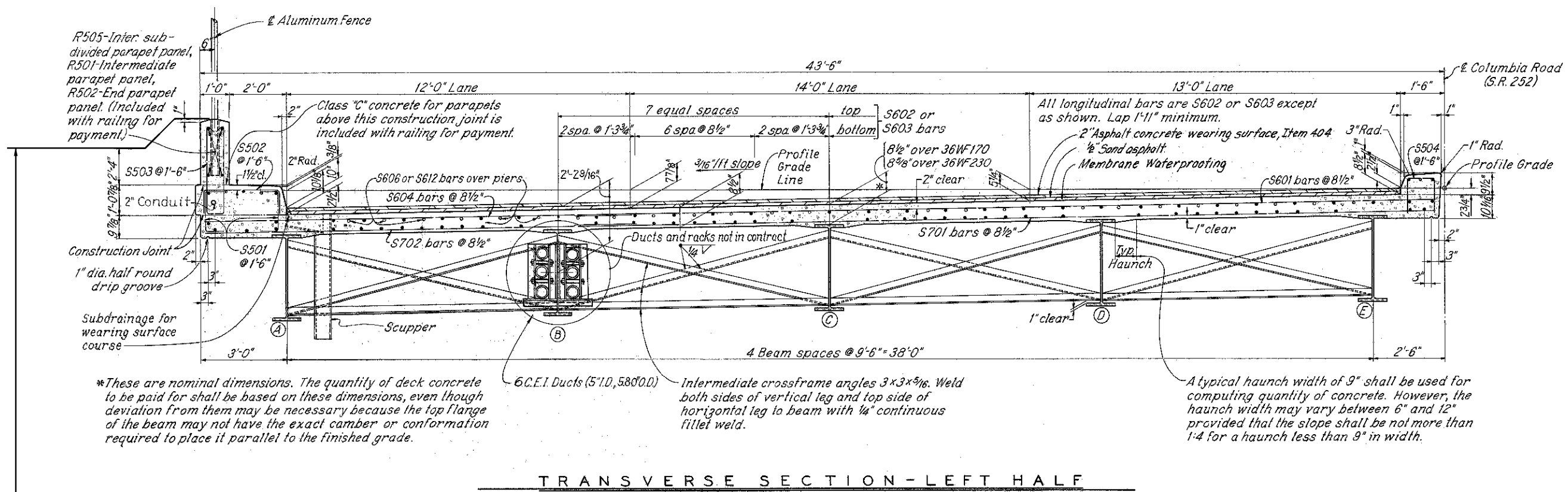


- NOTES**
- FOR TRANSVERSE SECTION, SEE SHEET 42 OF 42.
 - DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
 - PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

LEGEND

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

I:\PROJECTS\PID90245\roadway\sheets\90245\TS161.dgn 21-APR-2011 11:30AM krohde



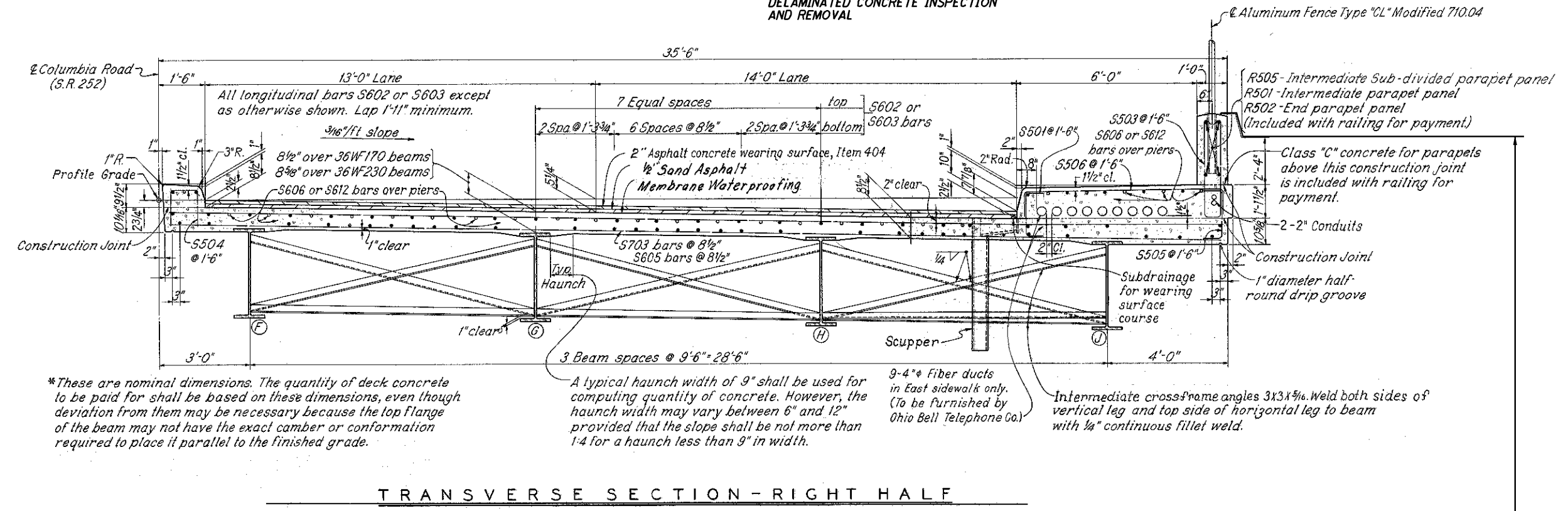
*These are nominal dimensions. The quantity of deck concrete to be paid for shall be based on these dimensions, even though deviation from them may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

6 C.E.I Ducts (5'1.0, 5'8.0) Intermediate crossframe angles 3x3x5/16. Weld both sides of vertical leg and top side of horizontal leg to beam with 1/4" continuous fillet weld.

A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

TRANSVERSE SECTION - LEFT HALF

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL



*These are nominal dimensions. The quantity of deck concrete to be paid for shall be based on these dimensions, even though deviation from them may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

A typical haunch width of 9" shall be used for computing quantity of concrete. However, the haunch width may vary between 6" and 12" provided that the slope shall be not more than 1:4 for a haunch less than 9" in width.

9-4" Fiber ducts in East sidewalk only. (To be furnished by Ohio Bell Telephone Co.) Intermediate crossframe angles 3x3x5/16. Weld both sides of vertical leg and top side of horizontal leg to beam with 1/4" continuous fillet weld.

TRANSVERSE SECTION - RIGHT HALF

LIMITS OF ITEM 202, REMOVAL MISC.: DELAMINATED CONCRETE INSPECTION AND REMOVAL

NOTES

1. DETAILS ON THIS SHEET ARE TAKEN FROM EXISTING PLANS AND SHOULD BE USED FOR INFORMATION PURPOSES ONLY.
2. PERFORM ONLY THE WORK AS INDICATED IN THE GENERAL NOTES. FOR GENERAL NOTES, SEE SHEET 4 OF 42.

DESIGN AGENCY	ODOT DISTRICT 12
PRODUCTION DEPARTMENT	
DATE	4-21-11
REVIEWED	JRC
STRUCTURE FILE NUMBER	1810421
DRAWN	KMR
REVISER	
DESIGNED	KMR
CHECKED	RHW
EXISTING TRANSVERSE SECTION - LOCATION 16	
BRIDGE No. CUY-252-0879	
SR-252 OVER IR-90	
D12 BH FY2012 SPALL REMOVAL	
PID No. 90245	
2	2
42	42