

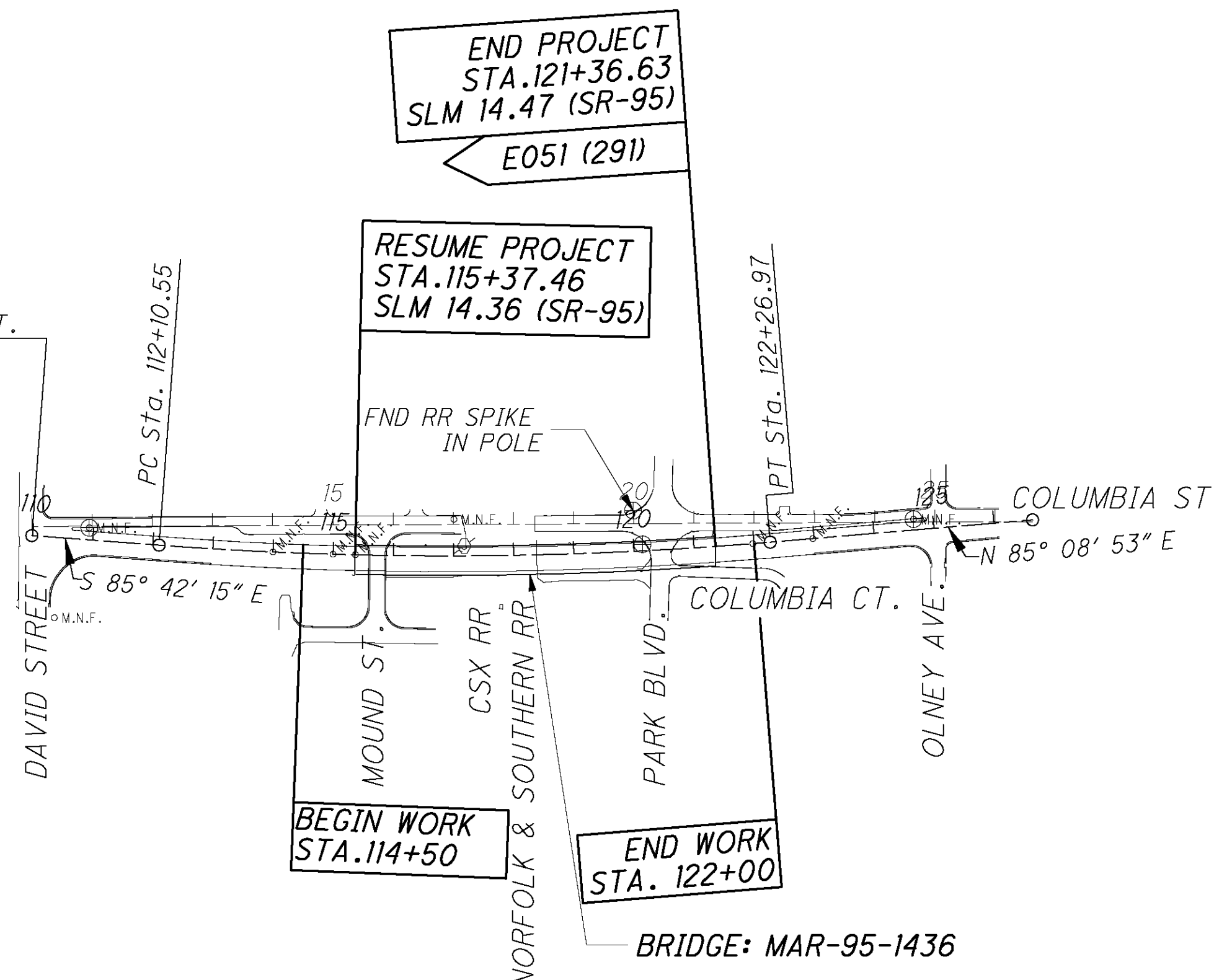


11/1/2007 10:28:16 AM BY: DAN-F  
 O:\DOT\W\79938\ROADWAY\SHSHEETS\7993805001.DGN  
 MODEL + SHEET

**Palmer** PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 ENGINEERING CINCINNATI, OH 45242  
 CINCINNATI, OH 45242

**CURVE DATA  
 COLUMBIA ST. OVERPASS**

P.I. STA. 117+19.84  
 $\Delta = 9^\circ 08' 52''$  (LT)  
 $D_c = 0^\circ 54' 00''$   
 $R = 6,366.20'$   
 $T = 509.29'$   
 $L = 1,016.42'$   
 $E = 20.34'$



**BENCHMARKS SR-4D**

SET MAG NAIL  
 ELEV. 970.07  
 STA 597+48.16 - 14.90' RT

SET MAG NAIL  
 ELEV. 975.55  
 STA 584+75.22 - 15.28' RT

ODOT DISK IN PIER  
 (88'± SOUTH OF HUBER ST)  
 ELEV. = 978.02  
 STA. 587+97.53 - 5.12 RT.

**☒ REFERENCES SR-4D**

MAG NAIL: STA. 583+52.25 - ☒

MAG NAIL: STA. 583+96.61 - ☒

MAG NAIL: STA. 584+73.91 - 24.97 LT.

MAG NAIL: STA. 584+73.91 - ☒

MAG NAIL: STA. 597+21.66 - 24.99 LT.

MAG NAIL: STA. 597+21.69 - ☒

BRIDGE: MAR-4D-0070

PI Sta. 595+16.50  
 DEF. 00° 07' 35"  
 (NO CURVE)

BEGIN WORK  
 STA. 584+11.90

BEGIN PROJECT  
 STA. 586+47.97  
 SLM 0.70 (SR-4D)

E051 (291)

SUSPEND PROJECT  
 STA. 594+45.68  
 SLM 0.55 (SR-4D)

END WORK  
 STA. 597+75.40

**BENCHMARKS SR-95**

SET MAG NAIL  
 ELEV. 958.71  
 STA. 124+67.50 - 17.94' LT

ODOT DISK IN BRIDGE PIER  
 ELEV. 956.68  
 STA. 120+14.87 - 10.96 LT.

SET MAG NAIL  
 ELEV. 954.99  
 STA. 110+92.84 - 20.18 LT.

**☒ REFERENCES SR-95**

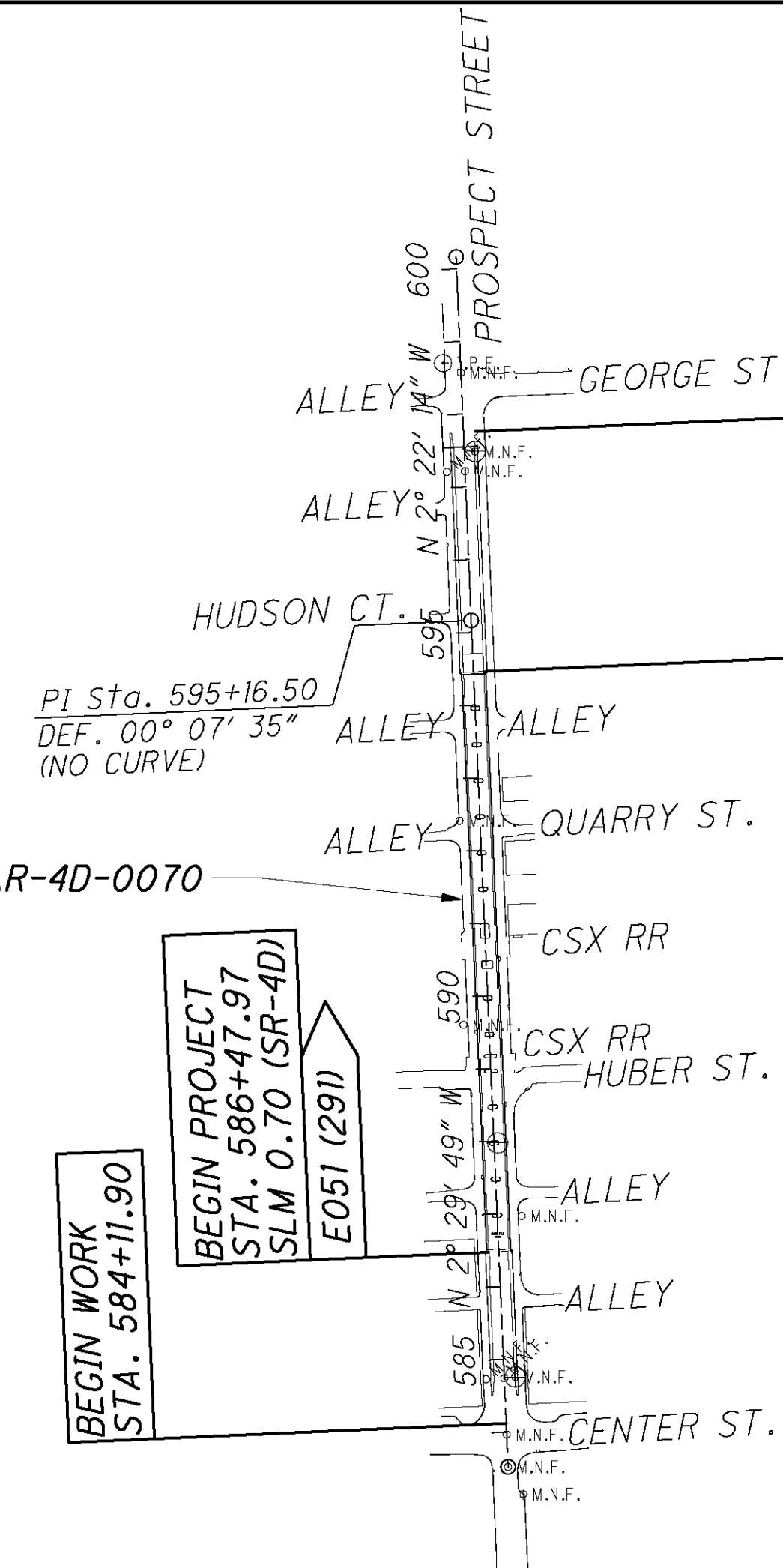
MAG NAIL: STA. 114+00.01 - 0.06 LT.

MAG NAIL: STA. 114+99.80 - ☒

MAG NAIL: STA. 115+37.17 - 0.04 RT.

MAG NAIL: STA. 121+98.18 - 0.02 RT.

MAG NAIL: STA. 122+98.03 - 0.08 RT.



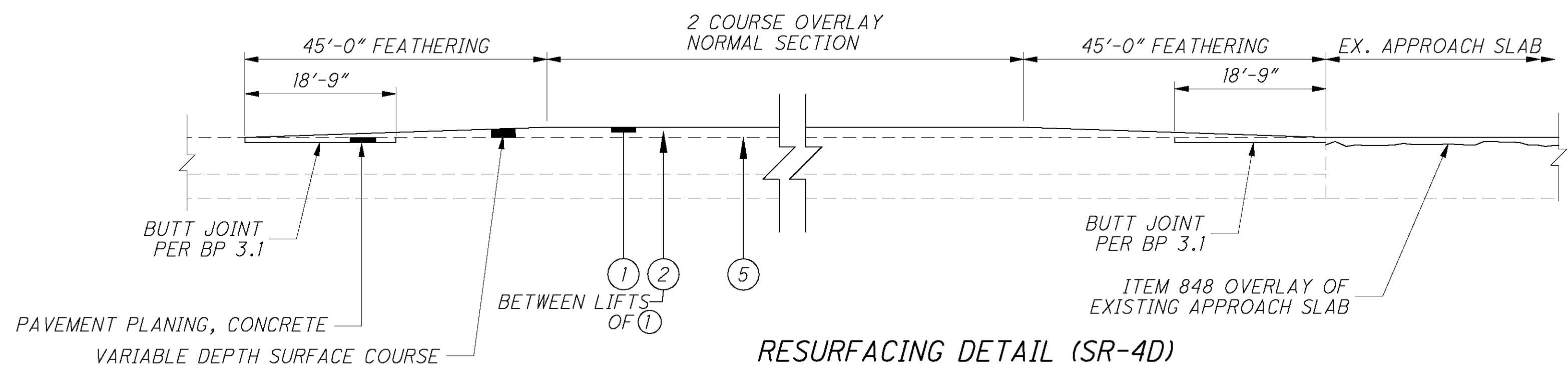
CALCULATED  
 DPF  
 CHECKED  
 DCJ

**SCHEMATIC PLAN**

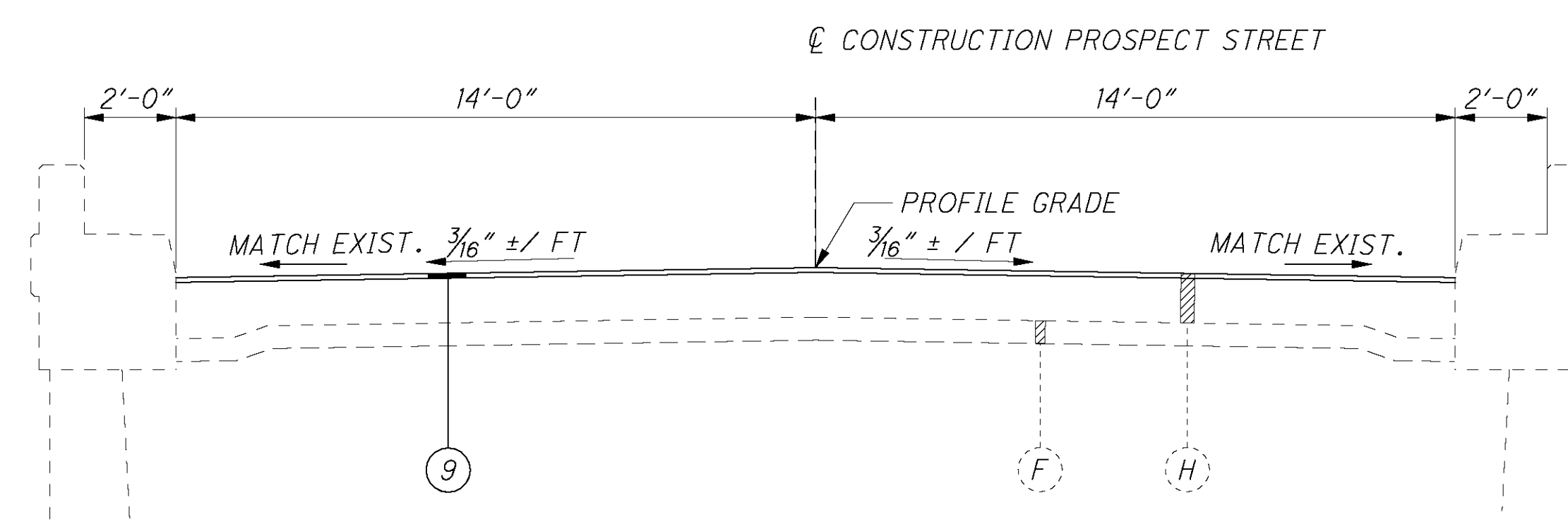
**MAR-4D-0.70  
 MAR-95-14.36**

2/8/2008 11:03:26 AM BY: DAN-F  
 D:\ODD\1\MAR\79938\ROADWAY\ SHEETS\79938GY001.DGN  
 MODEL: 79938GY001

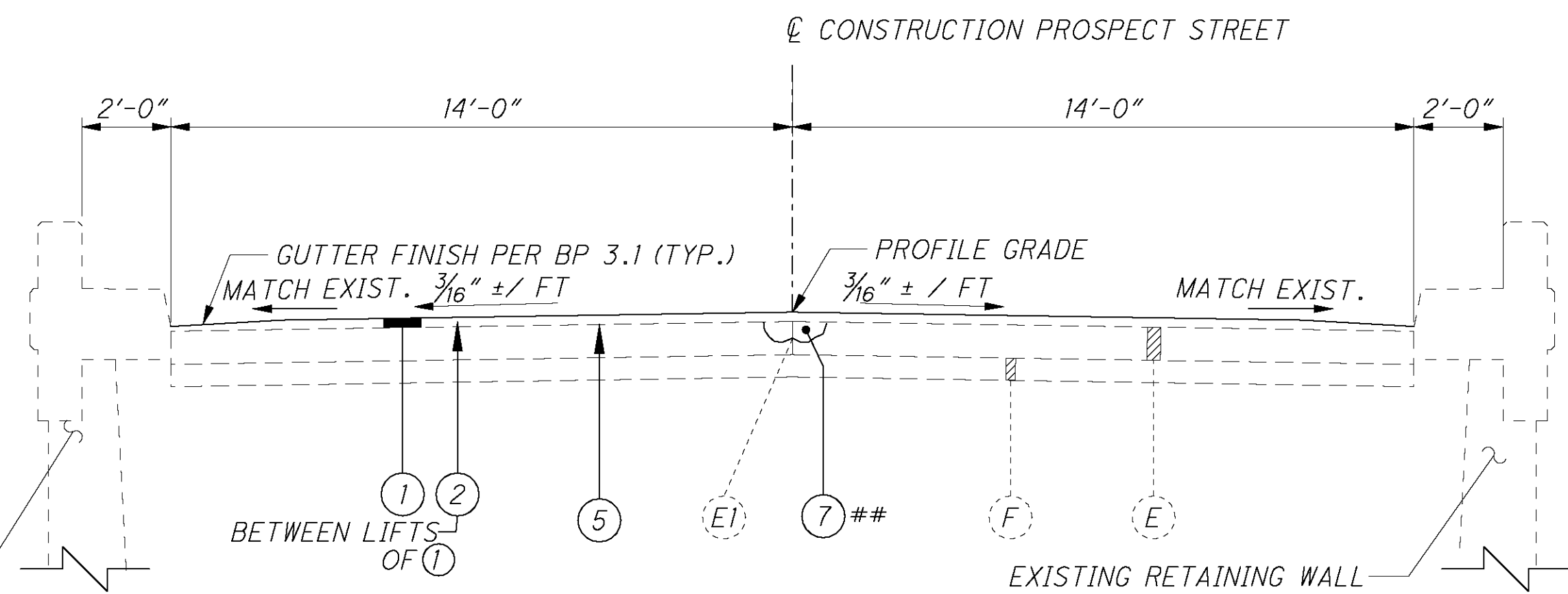
PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 (513) 751-1000 FAX (513) 751-1001



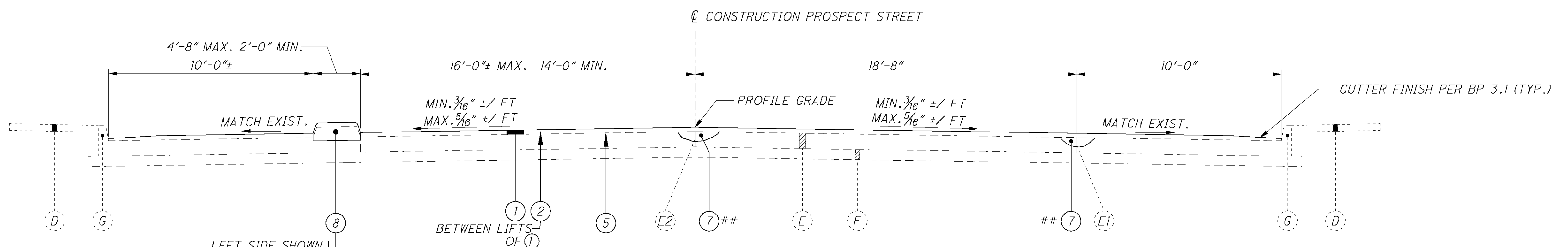
**RESURFACING DETAIL (SR-4D)**



**PROSPECT STREET (SR-4D) - APPROACH SLAB SECTION**  
 STATION 586+22.97 TO STATION 586+47.97 = 25.00 LIN FT  
 STATION 594+45.68 TO STATION 594+70.68 = 25.00 LIN FT



**PROSPECT STREET (SR-4D) - NORMAL SECTION**  
 STATION 584+73.50 TO STATION 597+75.40 = 454.19 LIN FT  
 (DEDUCT 847.71 LIN FT STATION 586+22.97 TO STATION 594+70.68 FOR STRUCTURE MAR-4D-0070)

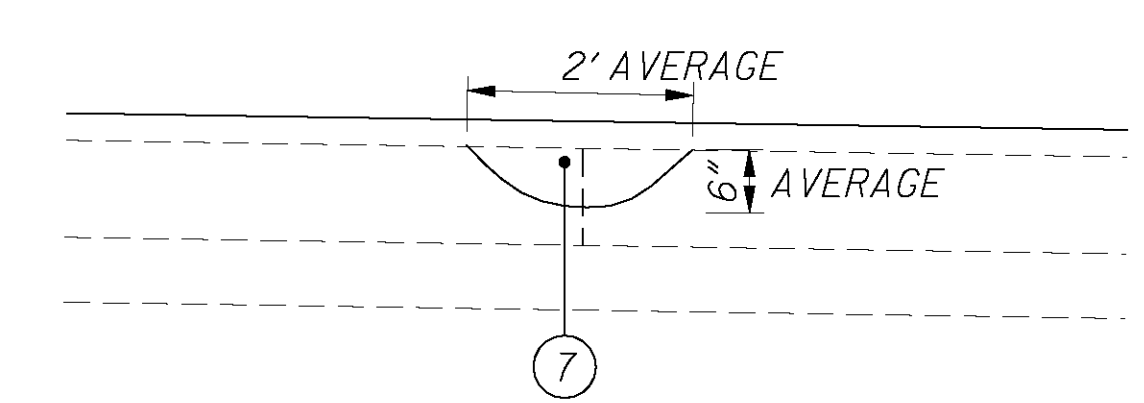


**PROSPECT STREET (SR-4D) - NORMAL SECTION**  
 STATION 584+11.90 TO STATION 584+73.50 = 61.60 LIN FT

**LEGEND**

- EXISTING ITEMS**
- (A) 2 1/2" ASPHALT CONCRETE
  - (B) 9" BITUMINOUS AGGREGATE BASE
  - (C) COMBINATION CURB & GUTTER, TYPE 2, MODIFIED AS PER PLAN
  - (D) 4" CONCRETE SIDEWALK
  - (E) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
  - (E1) STANDARD LONGITUDINAL JOINT
  - (E2) STANDARD LONGITUDINAL: KEY JOINT, WITHOUT TIE BARS
  - (F) 6" SUBBASE
  - (G) CONCRETE CURB, MODIFIED TYPE 2-A
  - (H) 13" REINFORCED CONCRETE APPROACH SLAB
  - (I) 1 1/4" ASPHALT CONCRETE
- PROPOSED ITEMS**
- (1) ITEM 448 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, (TWO EQUAL LIFTS)
  - (2) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
  - (4) ITEM 407 - TACK COAT
  - (5) ITEM 407 - TACK COAT, 702.13
  - (6) ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE
  - ## (7) ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR
  - (8) ITEM 609 - CONCRETE TRAFFIC ISLAND
  - # (9) ITEM 848 - 1 1/4" MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION
  - # (10) ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

# SEE STRUCTURE QUANTITIES  
 ## SEE DETAIL BELOW



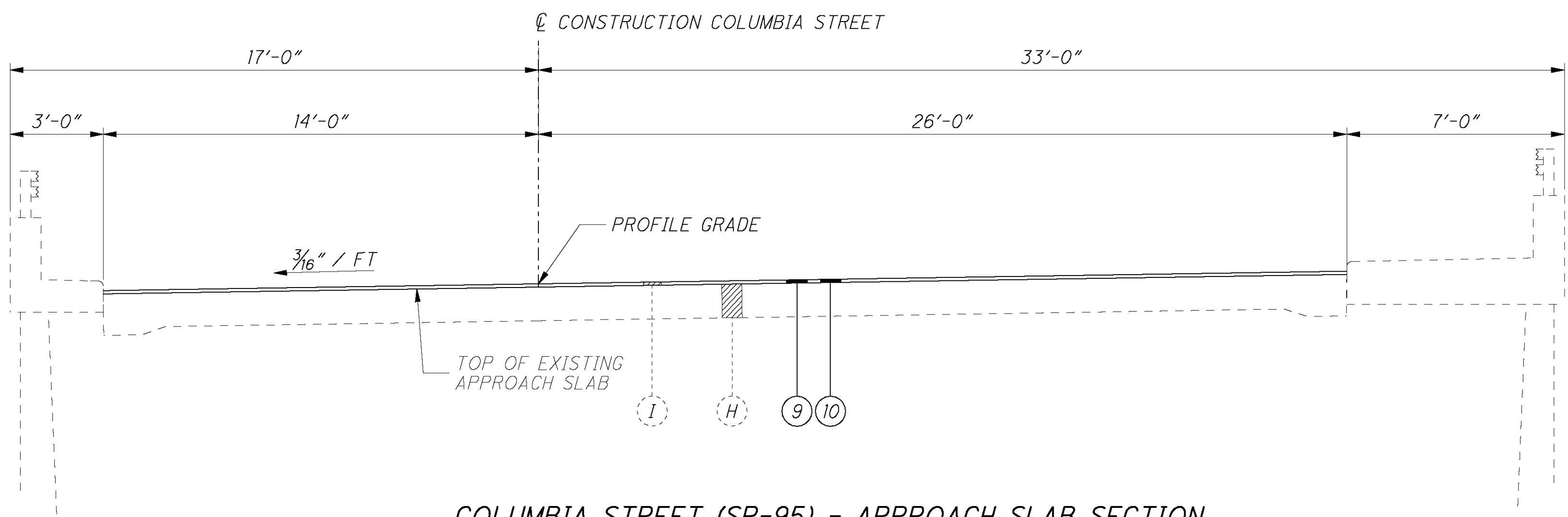
**DETAIL - ITEM 251 PARTIAL DEPTH PAVEMENT REPAIR**  
 (NOT TO SCALE)

**TYPICAL SECTIONS - PROSPECT STREET (SR-4D)**

**MAR-4D-0.70**  
**MAR-95-14.36**

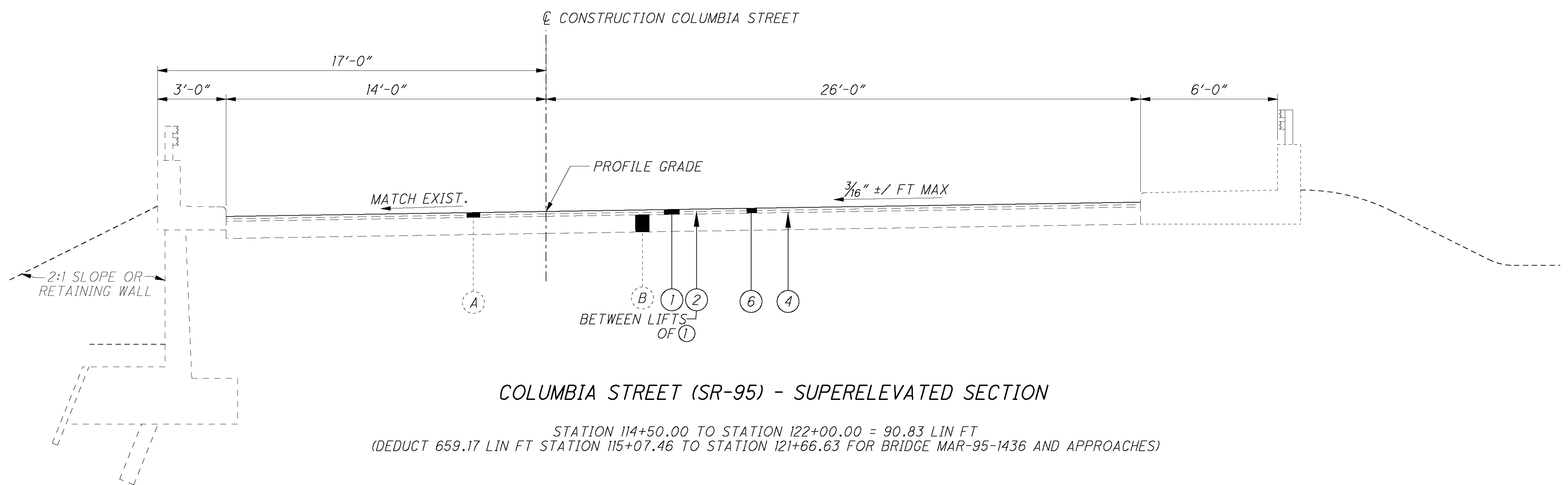
2/8/2008 11:03:29 AM BY: DAN-F  
 D:\0001\MAR\79938\ROADWAY SHEETS\79938GY002.DGN  
 MODEL: 79938GY002

**Palmer** PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 ENGINEERING CINCINNATI, OH 45242  
 CLEVELAND • HUBERTSVILLE •



**COLUMBIA STREET (SR-95) - APPROACH SLAB SECTION**

STATION 115+07.46 TO STATION 115+37.46 = 30.00 LIN. FT  
 STATION 121+36.63 TO STATION 121+66.63 = 30.00 LIN. FT



**COLUMBIA STREET (SR-95) - SUPERELEVATED SECTION**

STATION 114+50.00 TO STATION 122+00.00 = 90.83 LIN FT  
 (DEDUCT 659.17 LIN FT STATION 115+07.46 TO STATION 121+66.63 FOR BRIDGE MAR-95-1436 AND APPROACHES)

**TYPICAL SECTIONS - COLUMBIA STREET (SR-95)**

**MAR-4D-0.70**  
**MAR-95-14.36**



11/1/2007 10:28:30 AM BY: DAN-F  
O:\DDOT\WARY9938\ROADWAY\SHEETS\79938GN001.DGN  
MODEL: 79938GN001

**Palmer** PALMER ENGINEERING  
1300 CORNELL PARK DR  
ENGINEERING CINCINNATI, OH 45242  
CINCINNATI, OH 45242  
CINCINNATI, OH 45242

### UTILITIES

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

**GAS:**  
COLUMBIA GAS OF OHIO  
ATTN: MS. TIFFANY FRITCHLEY, P. E.  
OPERATIONS ENGINEER  
920 WEST GOODALE BOULEVARD  
COLUMBUS, OH 43212  
(614) 460-2120

**ELECTRIC:**  
OHIO EDISON COMPANY  
ATTN: DAWN HICKS  
1040 S. PROSPECT STREET  
MARION, OH 43302  
(937) 327-1235

**SANITARY/STORM**  
MARION CITY WPC  
233 WEST CENTER STREET  
MARION, OHIO 43301-1822  
(740) 387-2240

**CABLE T.V.:**  
TIME WARNER CABLE  
ATTN: MR. TERRY ALLEN  
1266 DUBLIN ROAD  
P. O. BOX 2553  
COLUMBUS, OH 43216-2553  
(614) 255-6349

**TELECOMMUNICATIONS:**  
VERIZON  
ATTN: MR. WILLIAM MUETHER  
550 LEADER STREET  
MARION, OH 43302  
(740) 383-0527

**WATER:**  
OHIO AMERICAN WATER  
ATTN: DON SCOTT  
365 EAST CENTER STREET  
MARION, OH 43302  
(740) 383-0931

**TRAFFIC SIGNALS:**  
CITY OF MARION  
MARION CITY ENGINEER  
233 WEST CENTER STREET  
MARION, OHIO 43302  
(740) 387-2240

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.

### EXISTING PLANS

EXISTING PLANS ENTITLED MAR-23-11.05, MAR-23D-0.87  
MAR-4-11.67, MAR-4D-0.68 MAY BE INSPECTED  
IN THE ODOT DISTRICT 6 OFFICE IN DELAWARE.

EXISTING PLANS ENTITLED COLUMBIA STREET -  
BLAINE AVENUE MAY BE INSPECTED  
AT THE CITY OF MARION ENGINEER'S OFFICE.

### CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 6:00 PM AND 8:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

### ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON NAVD 88.

### 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.

### CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, THERE IS AN AMOUNT OF OVERGROWTH THAT MAY REQUIRE REMOVAL. THEREFORE 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.

### PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 604 DRAINAGE STRUCTURES.

ITEM 305 9" CONCRETE BASE 8 SQ. YDS. (SEE SHEETS 12 & 14 FOR LOCATIONS, QUANTITIES ITEMIZED ON SHEET 11)

THE ABOVE QUANTITY IS BASED ON A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

### PAVEMENT RESTORATION FOR PIPE INSTALLATIONS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF PIPES UNDER ITEM 603.

ITEM 301 ASPHALT CONCRETE BASE, PG64-22 2 CU. YDS. (SEE SHEETS 16 & 17 FOR LOCATIONS, QUANTITIES ITEMIZED ON SHEET 11)

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH. SEE STANDARD CONSTRUCTION DRAWING DM-1.4 FOR TRENCH WIDTH FORMULA AND CALCULATION.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

### REVIEW OF DRAINAGE FACILITIES

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

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

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

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

### ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

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

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

SPECIAL, PIPE CLEANOUT 179 FT. (SEE SHEETS 16 & 17 FOR LOCATIONS, QUANTITIES ITEMIZED ON SHEET 11)

### SPECIAL REQUIREMENTS FOR PROTECTION OF ENDANGERED SPECIES HABITAT - INDIANA BAT

SPECIFIC DEAD TREES, SNAGS, AND LIVE TREES OR TREE CLUSTERS WITH EXFOLIATING BARK (SUCH AS SHAGBARK HICKORY AND SYCAMORE) WITHIN THE PROJECT LIMITS ARE POTENTIAL SUMMER ROOST TREES FOR THE INDIANA BAT, A FEDERAL ENDANGERED SPECIES. THESE TREES HAVE SPECIAL REQUIREMENTS FOR TIMING OF REMOVAL AND PROTECTION DURING ROOSTING SEASON.

ALL POTENTIAL ROOST TREES SHALL BE OUT AND REMOVED FROM THE PROJECT AREA BEFORE APRIL 15. IF THE ROOST TREES CANNOT BE REMOVED BY APRIL 15, THEN THEY SHALL REMAIN PROTECTED AND UNDISTURBED FOR A PERIOD BETWEEN APRIL 15 AND SEPTEMBER 15, PER THE REQUIREMENTS BELOW AND SUBSEQUENTLY REMOVED AFTER SEPTEMBER 15.

IF THE TREES DESCRIBED ABOVE ARE NOT REMOVED PRIOR TO THE NEXT BAT ROOSTING SEASON (APRIL 15), THEY SHALL BE PROTECTED BY INSTALLING WORK LIMIT FENCING AROUND EACH TREE OR TREE GROUP AT A RADIUS OF NOT LESS THAN 50 FEET FROM THE NEAREST POINT OF EACH ROOST TREE TRUNK. IF SUCH PROTECTION IS REQUIRED DUE TO THE TIMING OF CONSTRUCTION, IT SHALL NOT BE CAUSE FOR TIME DELAY OR EXTRA COMPENSATION CLAIMS BY THE CONTRACTOR, AND THE WORK SHALL BE PERFORMED PER BID FOR ITEM 201, CLEARING AND GRUBBING.

### CONTROL OF SPILLS

BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS, OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

### STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR STORM WATER POLLUTION PREVENTION AND EROSION CONTROL:

ITEM 832, EROSION CONTROL (2000 EACH)

### ENVIRONMENTAL COMMITMENTS

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTEWATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITHIN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE (E.G. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

CALCULATED  
DPF  
CHECKED  
DCJ

GENERAL NOTES

MAR-4D-0.70  
MAR-95-14.36

5  
43

**ITEM 614, MAINTAINING TRAFFIC**

MAR-4D-0070 (PROSPECT STREET)

PHASE 1:  
 PERFORM DECK REPAIRS BY HYDRODEMOLITION AND PLACE CONCRETE OVERLAY. REMOVE OVERLAY FROM APPROACH SLABS AND PLACE CONCRETE OVERLAY. BRIDGE SHALL BE CLOSED TO TRAFFIC SUBJECT TO THE RESTRICTIONS BELOW AND DETOURED PER SHEET 7.

PHASE 2:  
 PERFORM PATCHING OF CURBS AND PARAPETS, SEALING, CLEANING OF SUPERSTRUCTURE AND SUBSTRUCTURE AND OTHER STRUCTURAL REPAIRS AS NOTED ON THE BRIDGE PLANS. LANE CLOSURES MAY BE PERMITTED PER THE RESTRICTIONS NOTED BELOW. ADHERE TO SPECIAL RESTRICTIONS FOR AREAS BENEATH THE STRUCTURES AS NOTED.

PHASE 3:  
 RESURFACE APPROACH ROADWAYS. FLAGGERS AND LANE CLOSURES MAY BE PERMITTED PER THE RESTRICTIONS NOTED BELOW.

MAR-95-1436 (COLUMBIA STREET)

PHASE 1:  
 PERFORM DECK REPAIRS BY HYDRODEMOLITION AND PLACE CONCRETE OVERLAY. REMOVE OVERLAY FROM APPROACH SLABS AND PLACE CONCRETE OVERLAY. BRIDGE SHALL BE CLOSED TO TRAFFIC SUBJECT TO THE RESTRICTIONS BELOW AND DETOURED PER SHEET 8.

PHASE 2:  
 PERFORM PATCHING OF CURBS AND PARAPETS, SEALING, CLEANING OF SUPERSTRUCTURE AND SUBSTRUCTURE AND OTHER STRUCTURAL REPAIRS AS NOTED ON THE BRIDGE PLANS. REPAIR AND REPLACE PIPES AND DOWNSPOUT CONNECTIONS. LANE CLOSURES MAY BE PERMITTED PER THE RESTRICTIONS NOTED BELOW. ADHERE TO SPECIAL RESTRICTIONS FOR AREAS BENEATH THE STRUCTURES AS NOTED.

PHASE 3:  
 MILL AND RESURFACE APPROACH ROADWAYS. FLAGGERS AND LANE CLOSURES MAY BE PERMITTED PER THE RESTRICTIONS NOTED BELOW.

**ITEM 614, MAINTAINING TRAFFIC (ACCESS ROADS & UNDER BRIDGES)**

A MINIMUM OF 1 LANE(S) OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES ON THE SIDE ACCESS ROADS BY USE OF THE EXISTING PAVEMENT WHILE THE OVERPASSES ARE DETOURED.

REPAIR WORK TO THE SUPERSTRUCTURE AND PIERS MAY REQUIRE CLOSING OF AREAS UNDERNEATH THE BRIDGES. COORDINATE WITH THE CITY OF MARION (740-387-2240) FOR THE CLOSURE AREAS. DETOUR PEDESTRIAN TRAFFIC UNDERNEATH THE BRIDGES PER MT-110.20 AND MT-110.30

**ITEM 614, MAINTAINING TRAFFIC (PROSPECT AND COLUMBIA)**

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 10 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 7 & 8

BOTH BRIDGES SHALL NOT BE CLOSED AT THE SAME TIME

10 CONSECUTIVE CALENDAR DAYS OR SHORTER DURATION DETOURS MUST BE SEPARATED BY 10 OR MORE CONSECUTIVE CALENDAR DAYS IF MULTIPLE DETOUR PERIODS ARE USED.

**ITEM 614, MAINTAINING TRAFFIC (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	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
*POPCORN FESTIVAL RUNS	THURSDAY AFTER LABOR DAY THROUGH SATURDAY

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	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

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

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

**ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)**

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.



W20-H13

**ITEM 614, MAINTAINING TRAFFIC (ROAD CLOSED SIGN)**

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

- PROSPECT ROAD (MAR-4D-0070)  
STATION 597+75
- COLUMBIA STREET (MAR-95-1436)  
STATION 111+00
- STATION 124+60

**ITEM 614, MAINTAINING TRAFFIC**

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

**ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR)**

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL CAR WITH WORKING TOP-MOUNTED EMERGENCY FLASHING LIGHTS) SHALL 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.

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

LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEOS ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

MARION POLICE  
 233 WEST CENTER STREET  
 MARION, OHIO 43302  
 (740) 387-0541

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 QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR 25 HOURS

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

IF CONTRACTORS WISH TO UTILIZE LEOS FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614, MAINTAINING TRAFFIC. ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITHIN THE BID UNIT PRICE FOR ITEM 614 - LEO WITH PATROL CAR.

**MAINTENANCE OF RAILROAD TRAFFIC**

MAR-4D-0070

REPAIRS OF DETERIORATED CONCRETE ON PIER 5 THRU PIER 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING. DECK HYDRO-DEMOLITION ON SPAN 6 AND SPAN 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING. SEALING OF CONCRETE PARAPETS IN SPAN 6 AND SPAN 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING. ANY FULL DEPTH REPAIRS OVER RAILROAD WILL REQUIRE FLAGGING.

AAR/ODOT NOS.: 262 081A & 513 585V  
 CSXREFERENCE: MILEPOST Q1-100.85  
 MT. VICTORY SUBDIVISION  
 WESTERN DIVISION/WESTERN REGION  
 OP NO.: OH0592

MAR-95-1436

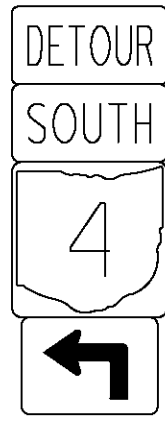
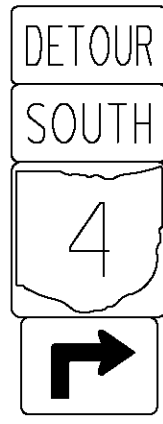

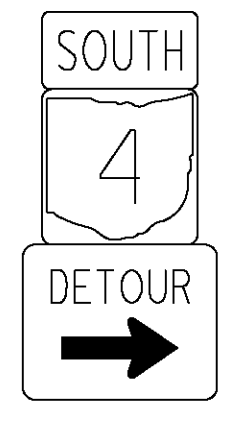


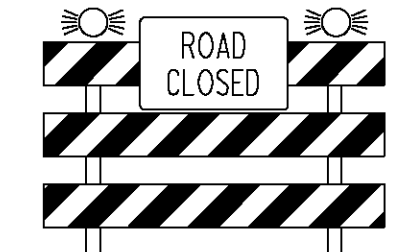
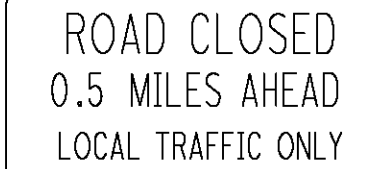
DECK HYDRO-DEMOLITION ON SPAN 4 WILL REQUIRE FULL TIME RAILROAD FLAGGING. SEALING OF CONCRETE PARAPETS ON SPAN 4 WILL REQUIRE FULL TIME RAILROAD FLAGGING. ANY FULL DEPTH REPAIRS OVER RAILROAD WILL REQUIRE FULL TIME FLAGGING.

AAR/DOT NO.: 228 719H  
 CSX REFERENCE: MILEPOST CD-45.20/COLUMBUS SUBDIVISION  
 APPALACHIAN DIVISION/CENTRAL REGION  
 OP NO.: OH0591



**DETOUR MAR-4D-0070**

**LEGEND**

<p><b>(A)</b></p>  <p>M4-8-24 M3-3-24 M1-5-24-2 M5-1L-24</p>	<p><b>(B)</b></p>  <p>M4-8-24 M3-3-24 M1-5-24-2 M5-1R-24</p>	<p><b>(C)</b></p>  <p>M4-8-24 M3-3-24 M1-5-24-2 M6-3-24</p>	<p><b>(D)</b></p>  <p>M3-3-24 M1-5-24-2 M4-9R-48</p>	<p><b>(E)</b></p>  <p>M4-8-24 M3-3-24 M1-5-24-2 M5-2L-24</p>	<p><b>(F)</b></p>  <p>M4-8A-24 M3-3-24 M1-5-24-2 M5-1R-24</p>
<p><b>(G)</b></p>  <p>R11-2-48 TYPE III BARRICADES</p>				<p><b>(H)</b></p>  <p>R11-3A-60</p>	<p>———— SIGNED DETOUR</p> <p>———— DESIGNATED LOCAL DETOUR ROUTE</p> <p>/////// PORTION TO BE CLOSED</p>

NOTE:  
 DETOUR SIGNAGE PAID AS ITEM 614 - DETOUR SIGNING, LUMP SUM

CALCULATED DPF  
 CHECKED DCJ



0 1000 2000  
 HORIZONTAL SCALE IN FEET

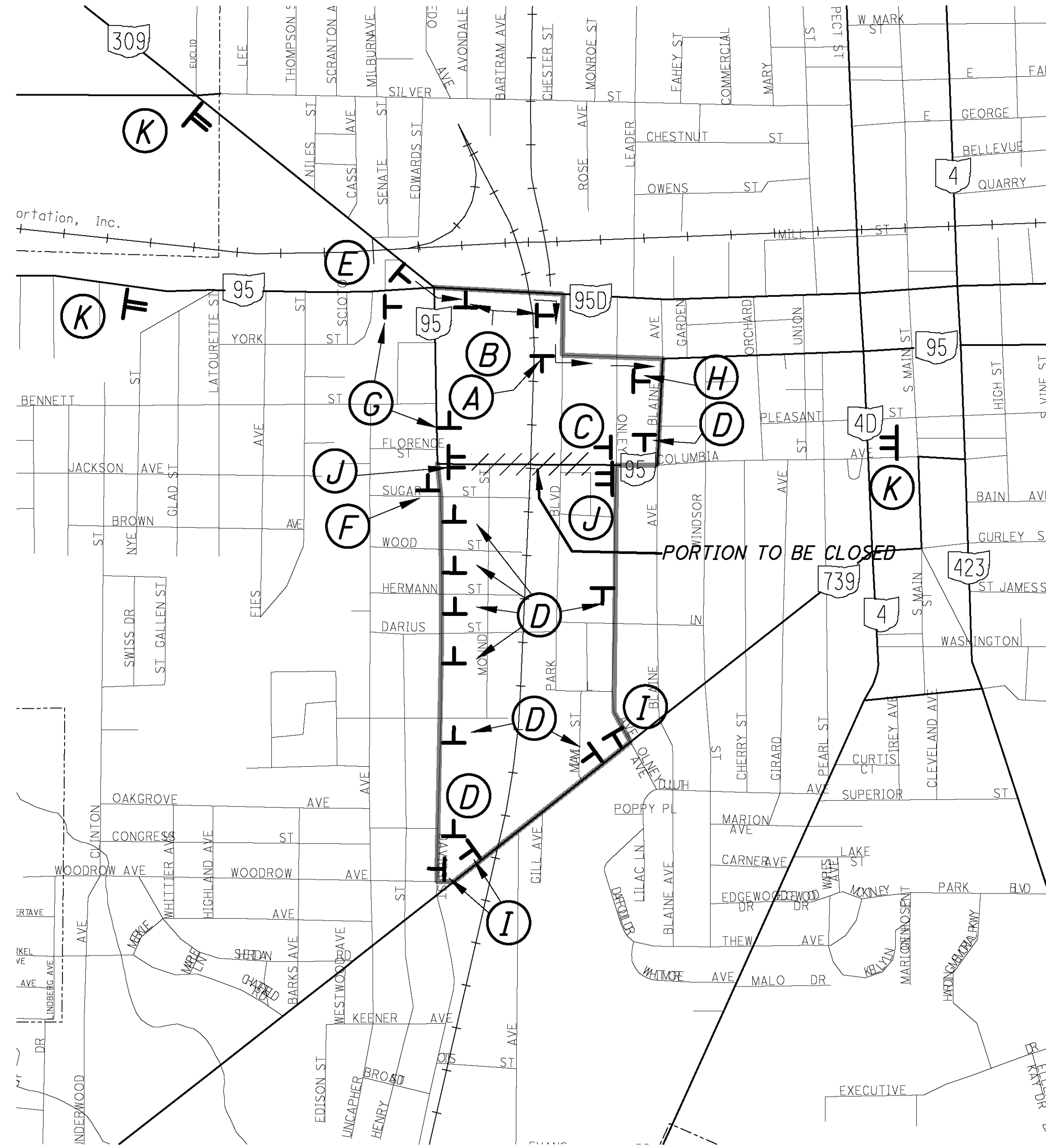
**DETOUR MAP  
 MAR-4D-0070 (PROSPECT ST)**

**MAR-4D-0.70  
 MAR-95-14.36**



11/1/2007 10:28:49 AM BY: DAN-F  
 O:\DDOT\W\79938\ROADWAY\ASHEETS\79938MD02.DGN  
 MODEL + SHEET

**Palmer** PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 WINCHESTER, MASSACHUSETTS  
 CLEVELAND, OHIO



### DETOUR MAR-95-1436

#### LEGEND

NOTE:  
 DETOUR SIGNAGE PAID AS ITEM 614 - DETOUR SIGNING, LUMP SUM

<p><b>A</b></p> <p>M4-8-24        M3-2-24        M1-5-24-2        M5-1L-24</p>	<p><b>B</b></p> <p>M4-8-24        M3-2-24        M1-5-24-2        M5-1R-24</p>	<p><b>C</b></p> <p>M4-8-24        D-3-1        M5-1L</p>	<p><b>D</b></p> <p>M4-8-24        D-3-1        M6-3-24</p>	<p><b>E</b></p> <p>M4-8-24        M3-2-24        M1-5-24-2        M5-2L-24</p>	<p><b>F</b></p> <p>M4-8A-24        D-3-1        M6-3-24</p>
<p><b>G</b></p> <p>M4-8-24        M3-2-24        M1-5-24-2        M6-3-24</p>	<p><b>H</b></p> <p>M4-8A-24        M3-2-24        M1-5-24-2        M6-3-24</p>	<p><b>I</b></p> <p>M4-8-24        D-3-1        M5-1R</p>	<p><b>J</b></p> <p>R11-2-48        TYPE III BARRICADES</p>	<p><b>K</b></p> <p>D-3-1        R11-3A-60</p>	<p>———— SIGNED DETOUR</p> <p>———— DESIGNATED LOCAL DETOUR ROUTE</p> <p>/////// PORTION TO BE CLOSED</p>



CALCULATED  
 DPF  
 CHECKED  
 DCJ

**DETOUR MAP  
 MAR-95-1436 (COLUMBIA ST)**

**MAR-4D-0.70  
 MAR-95-14.36**

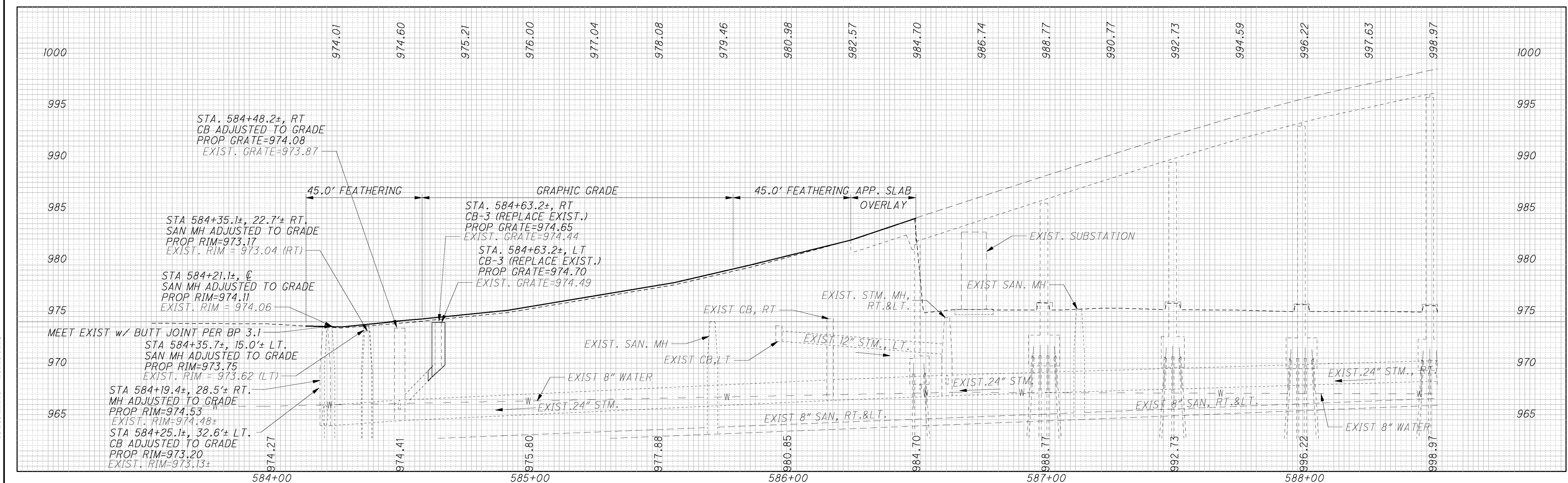
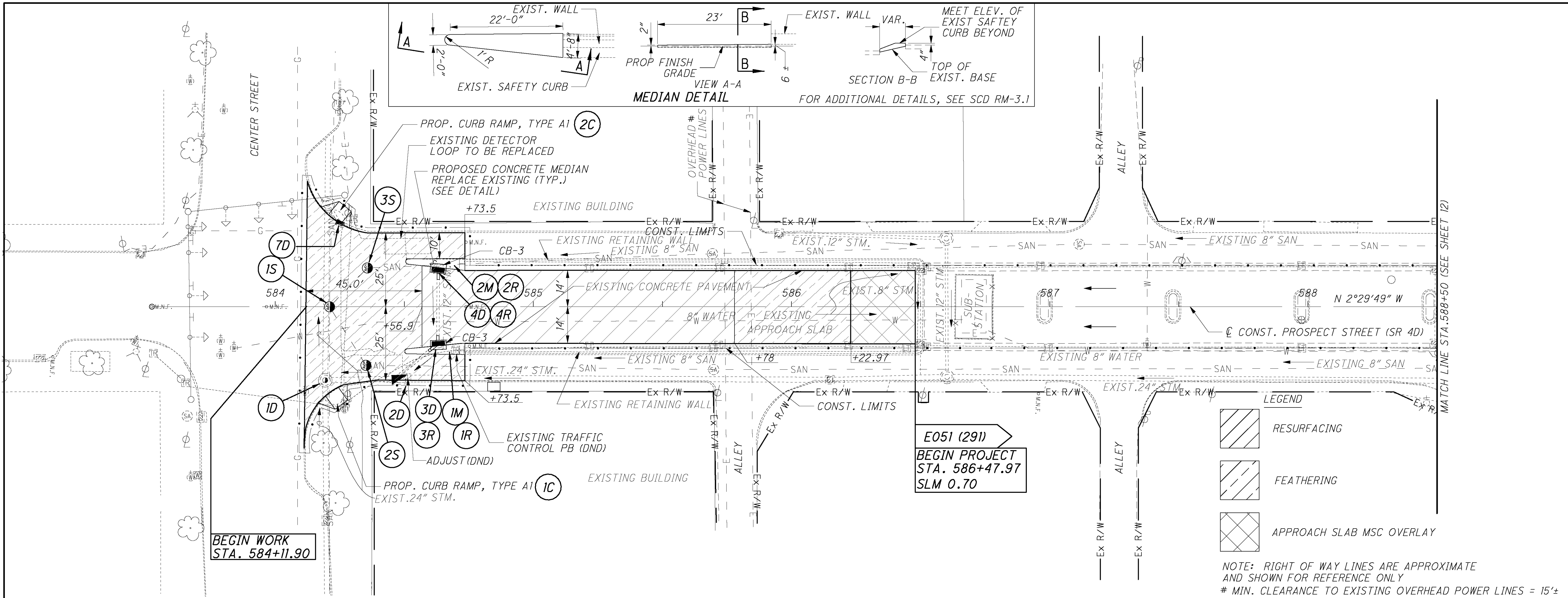




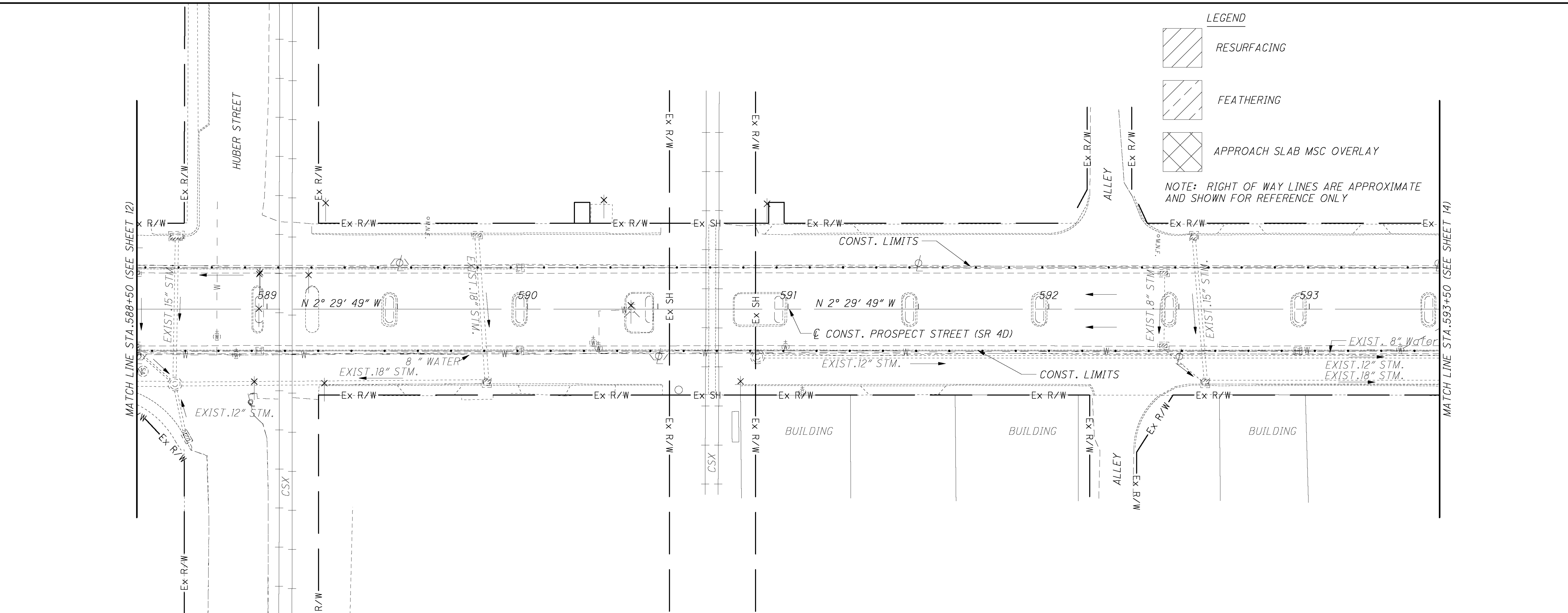
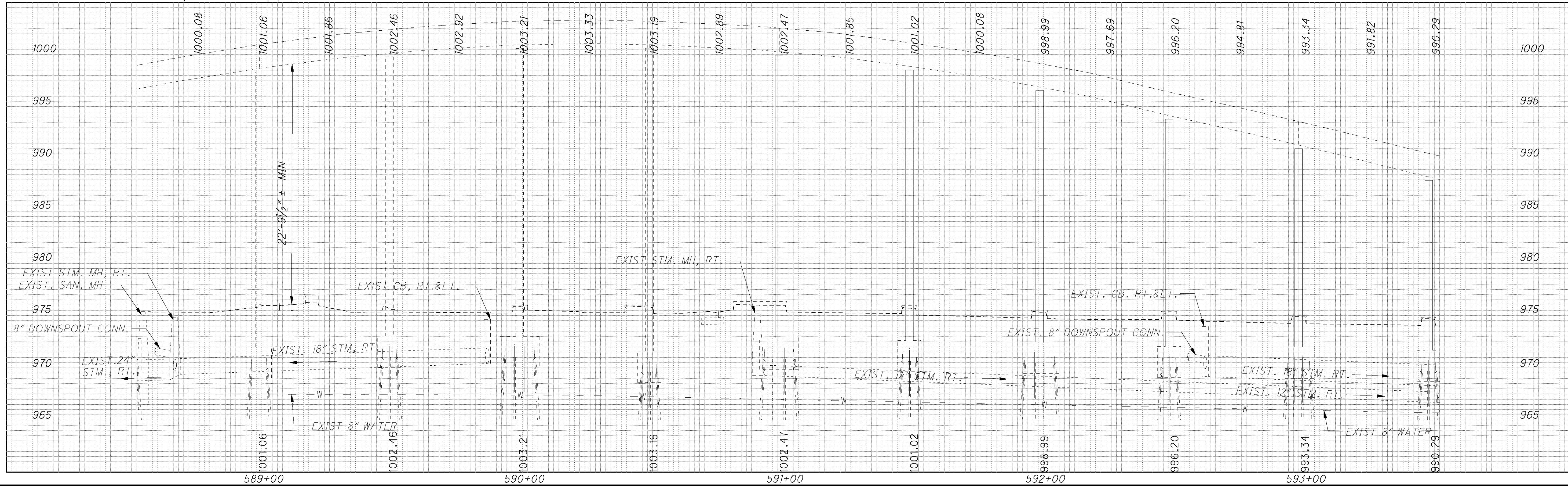


REF NO.	SHEET NO.	STATION		SIDE	202	202	202	SPECIAL	603	603	604	604	604	604	301	305	604	609	608			
		FROM	TO		CONCRETE MEDIUM REMOVED SQ.YD.	WALK REMOVED SQ.FT.	PIPE REMOVED 24" AND UNDER FEET	CATCH BASIN REMOVED EACH	PIPE CLEANOUT FEET	8" CONDUIT, TYPE C FEET	12" CONDUIT, TYPE B FEET	CB-3 EACH	CB ADJUSTED TO GRADE EACH	MH ADJUSTED TO GRADE EACH	ASPHALT CONCRETE BASE (PIPE RESTORATION WIDTH OF 4' and 6" DEPTH) CU.YD.	CONCRETE BASE (CB RESTORATION WIDTH OF 2') SQ.YD.	MH ADJUST TO GRADE (SANITARY) EACH	CONCRETE TRAFFIC ISLAND SQ.YD.	CURB RAMP, TYPE 1A SQ.FT.			
<b>PROSPECT STREET (SR-40)</b>																						
1R	12	584+50.20	SR 4D 584+73.50	RT	8																	
2R	12	584+50.50	SR 4D 584+73.50	LT	8																	
3R	12	584+63.20	SR 4D	RT				1														
4R	12	584+63.20	SR 4D	LT				1														
5R	14	597+52.80	SR 4D 597+74.90	RT	8																	
6R	14	597+52.80	SR 4D 597+75.30	LT	8																	
7R	14	597+63.50	SR 4D	RT				1														
8R	14	597+63.90	SR 4D	LT				1														
1D	12	584+19.4	SR 4D	RT										1								
2D	12	584+48.20	SR 4D	RT																		
3D	12	584+63.20	SR 4D	RT						8	1					2						
4D	12	584+63.20	SR 4D	LT						4	1					2						
5D	14	597+63.50	SR 4D	RT						8	1					2						
6D	14	597+63.90	SR 4D	LT						4	1					2						
7D	12	584+25.1	SR 4D	LT									1									
1C	12	584+25.00	SR 4D	RT		60																60
2C	12	584+25.00	SR 4D	LT		60																60
1M	12	584+50.20	SR 4D 584+73.50	RT																		8.3
2M	12	584+50.50	SR 4D 584+73.50	LT																		8.3
3M	14	597+52.80	SR 4D 597+74.90	RT																		8.3
4M	14	597+52.80	SR 4D 597+75.30	LT																		8.3
1S	12	584+21.10	SR 4D	⊘																		1
2S	12	584+35.10	SR 4D	RT																		1
3S	12	584+35.70	SR 4D	LT																		1
<b>COLUMBIA STREET (SR-95)</b>																						
9R	16	118+38.00	SR95 118+46.50	LT				12														
10R	6	118+97.50	SR95	LT				8														
11R	17	119+52.80	SR95	LT				9														
12R	17	120+11.70	SR95	LT				9														
13R	17	120+77.00	SR95 120+96.00	LT				25														
14R	17	121+20.00	SR95 121+32.00	LT				12														
10D	16	118+38.00	SR95 118+46.50	LT																		12
11D	16	118+46.50	SR95 120+00.00	LT				154														
12D	16	118+97.50	SR95	LT											0.6							
13D	16	119+52.80	SR95	LT											0.7							
14D	17	120+11.70	SR95	LT											0.7							
15D	17	120+00.00	SR95 120+25.00	LT																		25
16D	17	120+77.00	SR95 120+96.00	LT																		25
17D	17	121+20.00	SR95 121+32.00	LT																		12
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					32	120	75	4	179	75	24	4	2	1	2	8	3	33	120			

ESTIMATED QUANTITIES	CALCULATED DPF
MAR-4D-0.70	CHECKED DCJ
MAR-95-14.36	







**LEGEND**

- RESURFACING
- FEATHERING
- APPROACH SLAB MSC OVERLAY

NOTE: RIGHT OF WAY LINES ARE APPROXIMATE AND SHOWN FOR REFERENCE ONLY

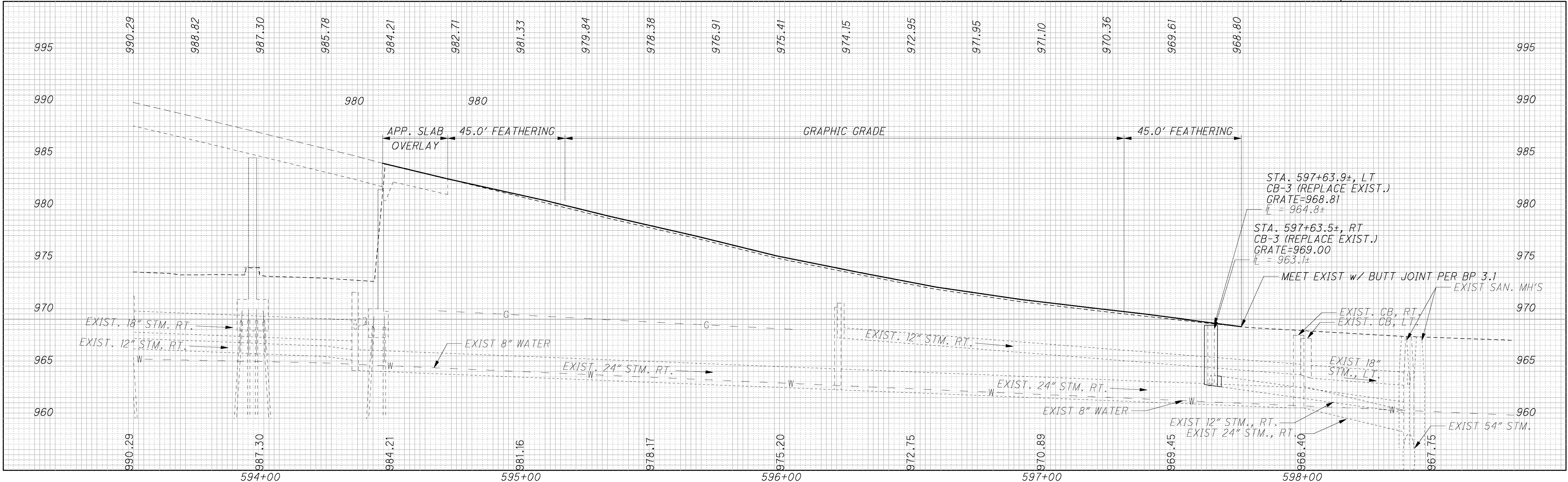
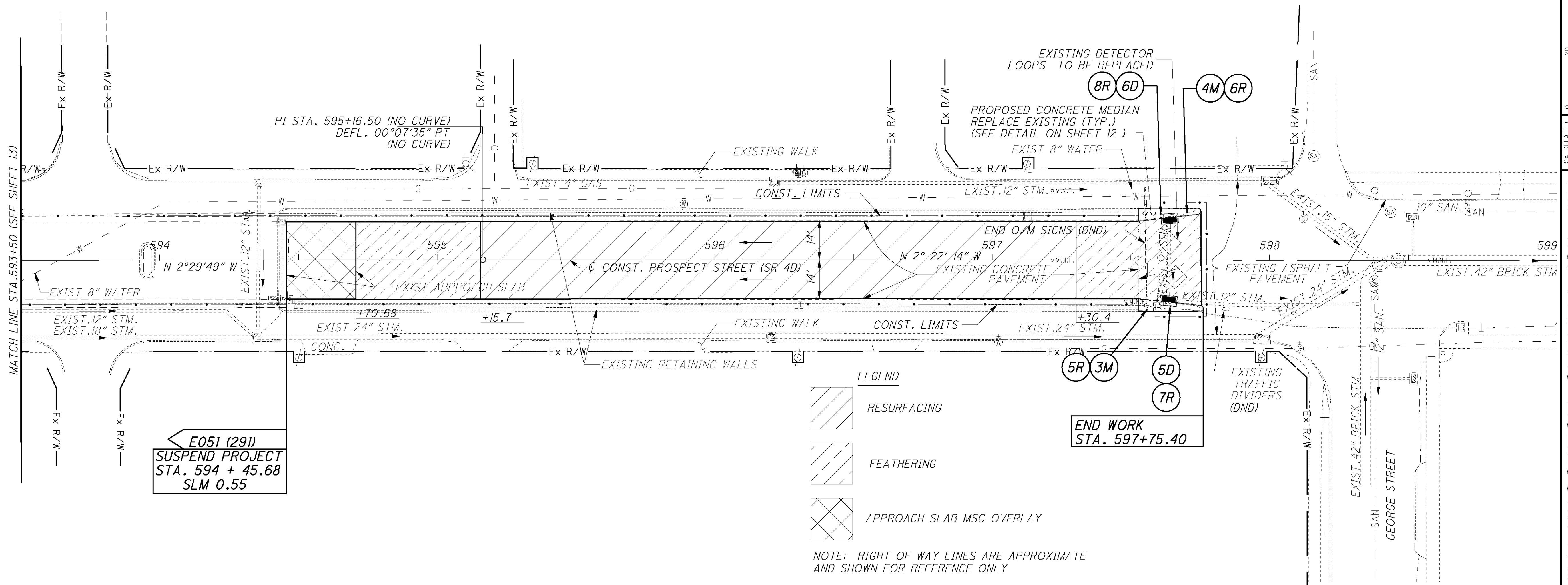
CALCULATED DPF  
 CHECKED DCJ

0 10 20 40  
 HORIZONTAL SCALE IN FEET

**N**

**PLAN AND PROFILE PROSPECT STREET (SR 4D)  
 STA 588+50 TO STA 593+50**

**MAR-4D-0.70  
 MAR-95-14.36**

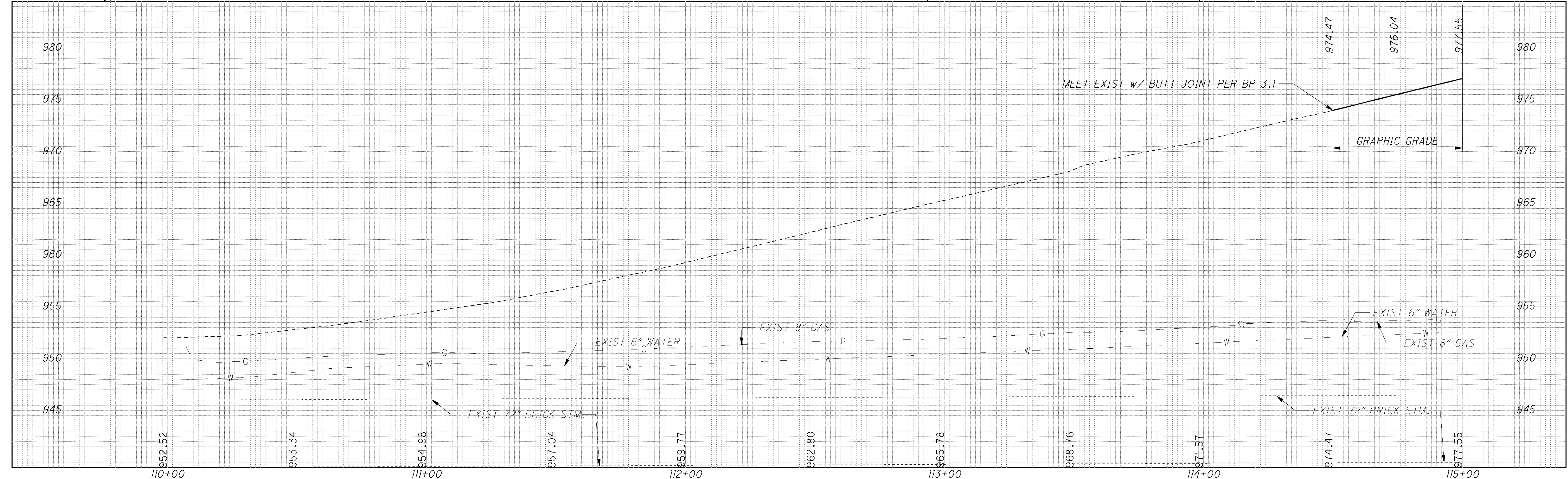
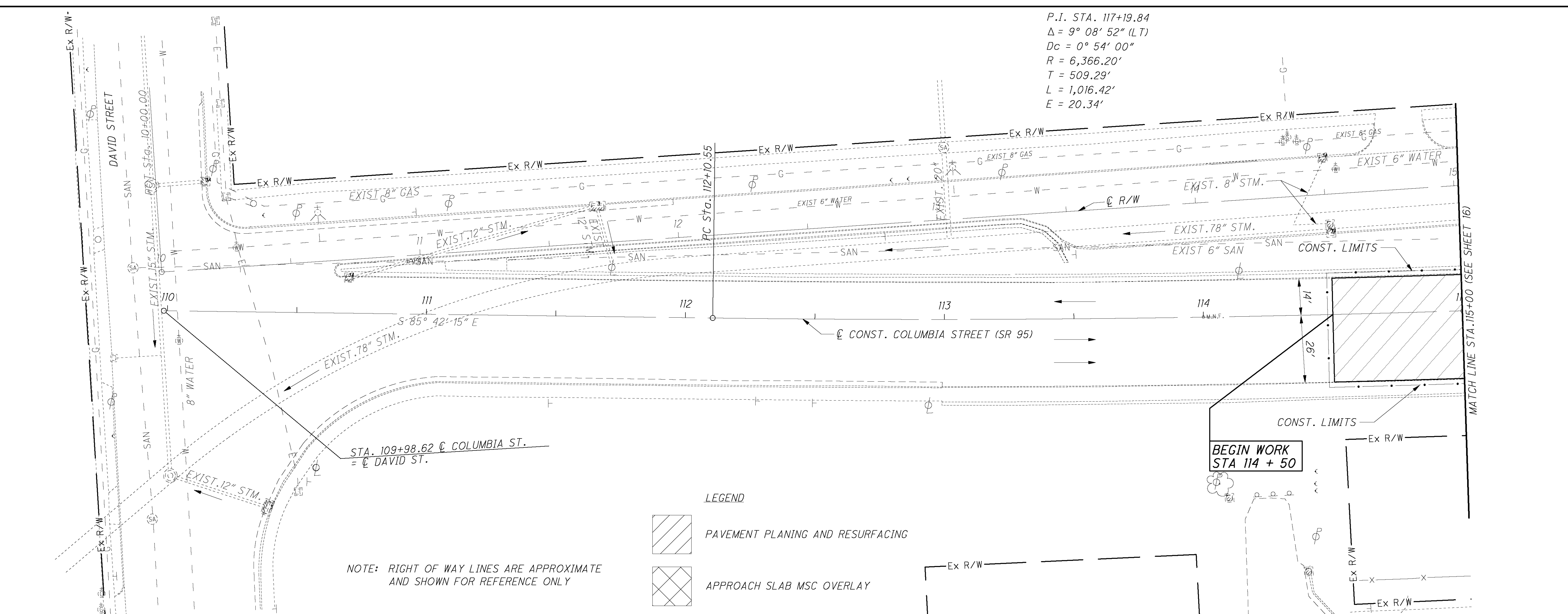




P.I. STA. 117+19.84  
 $\Delta = 9^\circ 08' 52''$  (LT)  
 $Dc = 0^\circ 54' 00''$   
 $R = 6,366.20'$   
 $T = 509.29'$   
 $L = 1,016.42'$   
 $E = 20.34'$

CALCULATED  
 DPF  
 CHECKED  
 DCJ

HORIZONTAL  
 SCALE IN FEET

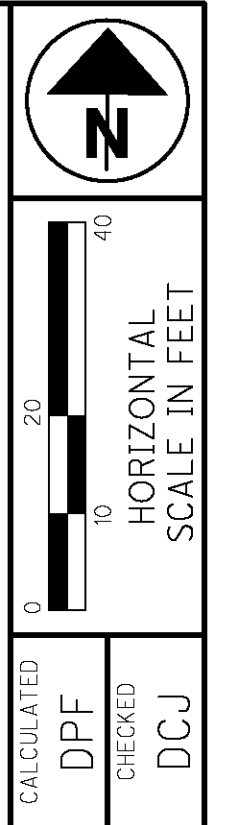
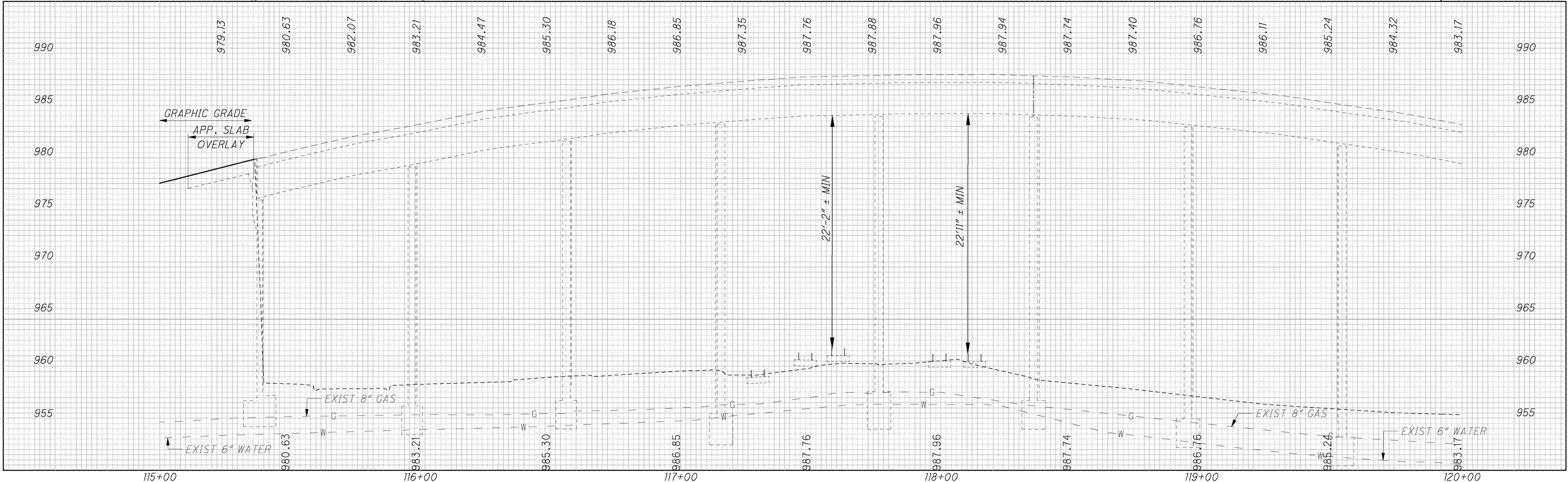
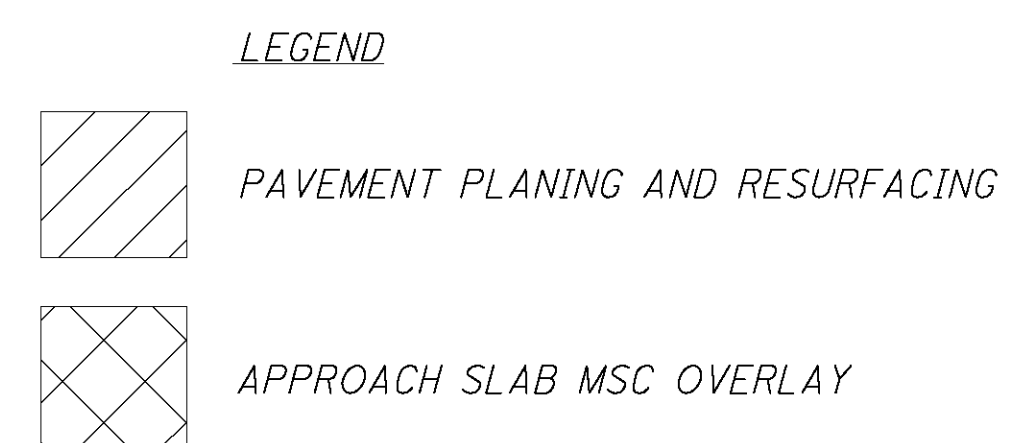
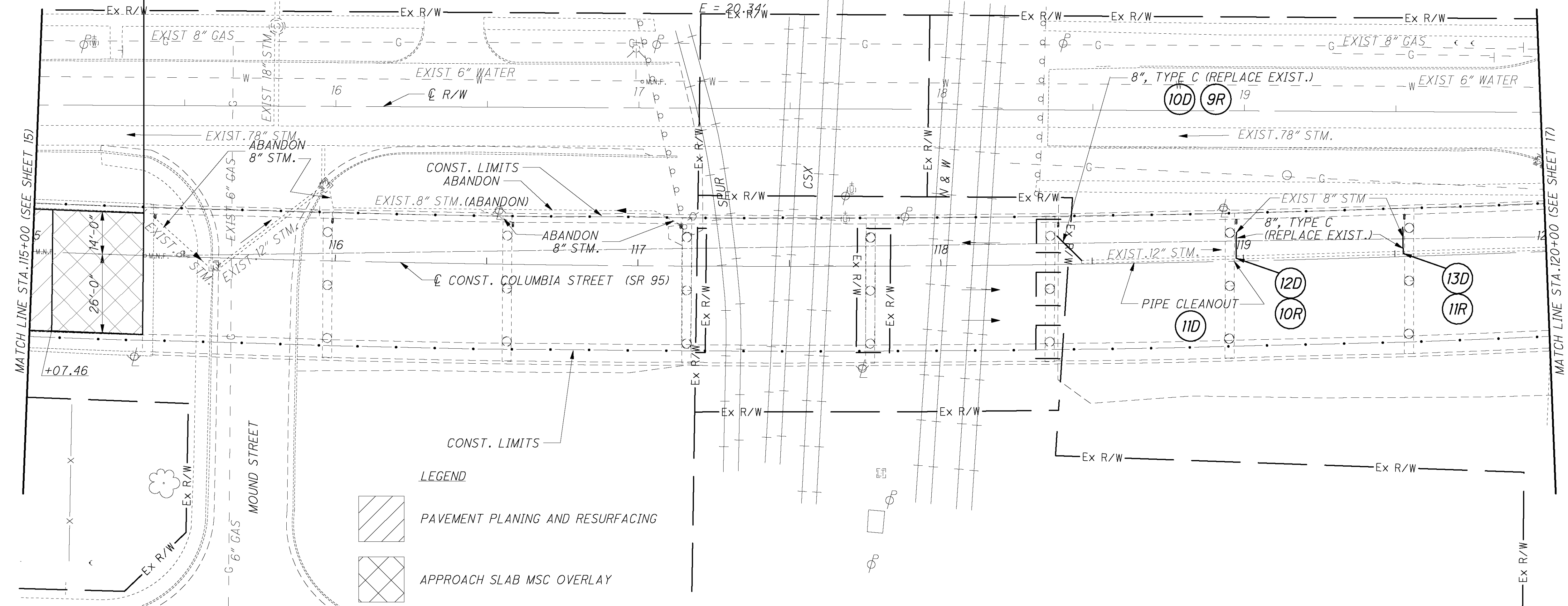


**PLAN AND PROFILE COLUMBIA STREET (SR 95)  
 STA 110+00 TO STA 115+00**

**MAR-4D-0.70  
 MAR-95-14.36**

RESUME PROJECT  
 STA 115+37.46  
 SLM 14.36  
 E051 (291)

P.I. STA. 117+19.84  
 $\Delta = 9^\circ 08' 52''$  (LT)  
 $Dc = 0^\circ 54' 00''$   
 $R = 6,366.20'$   
 $T = 509.29'$   
 $L = 1,016.42'$   
 $E = 20.71'$

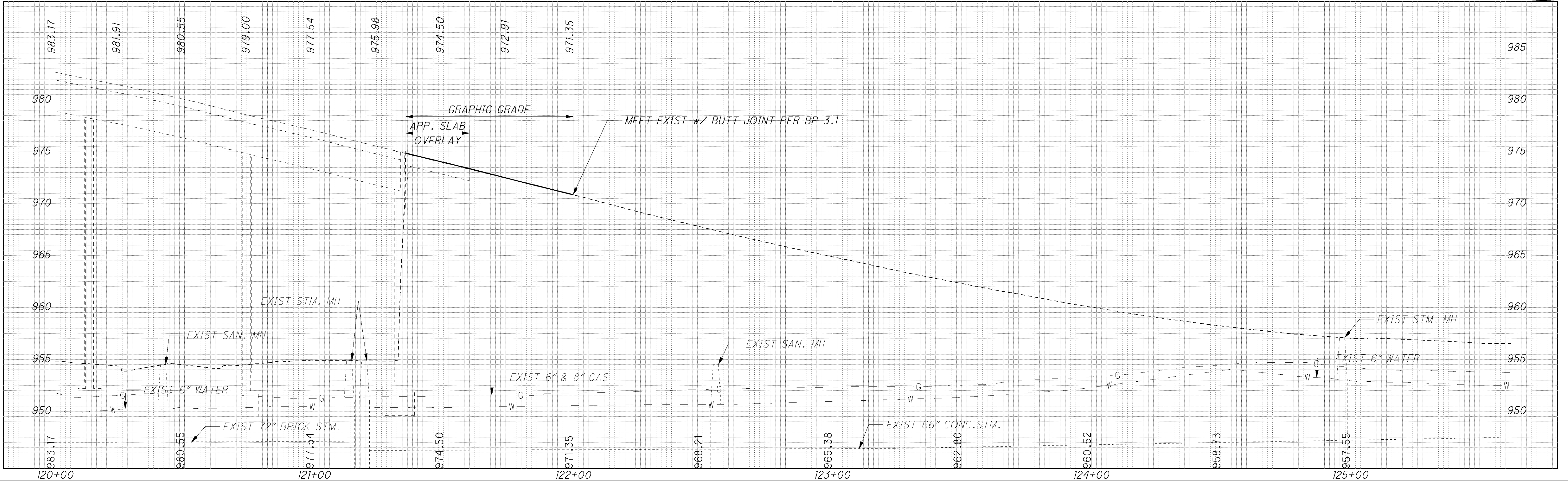
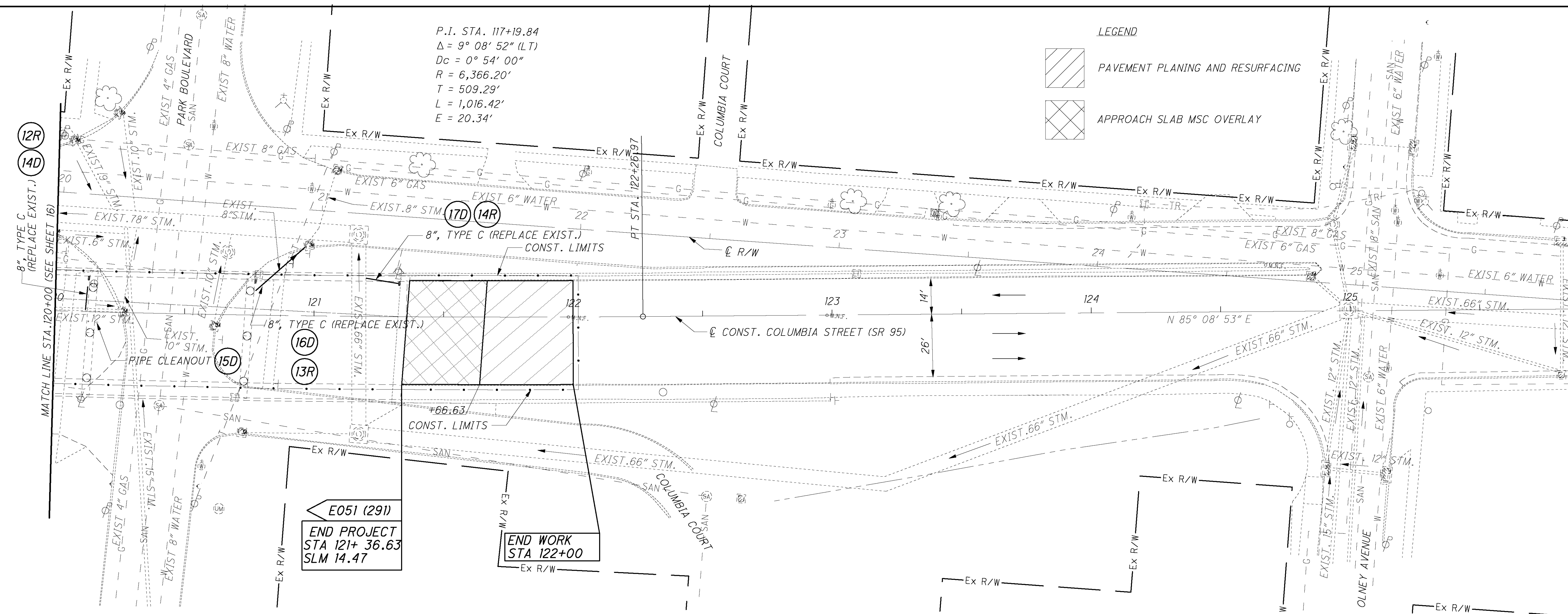


CALCULATED DPF  
 CHECKED DCJ

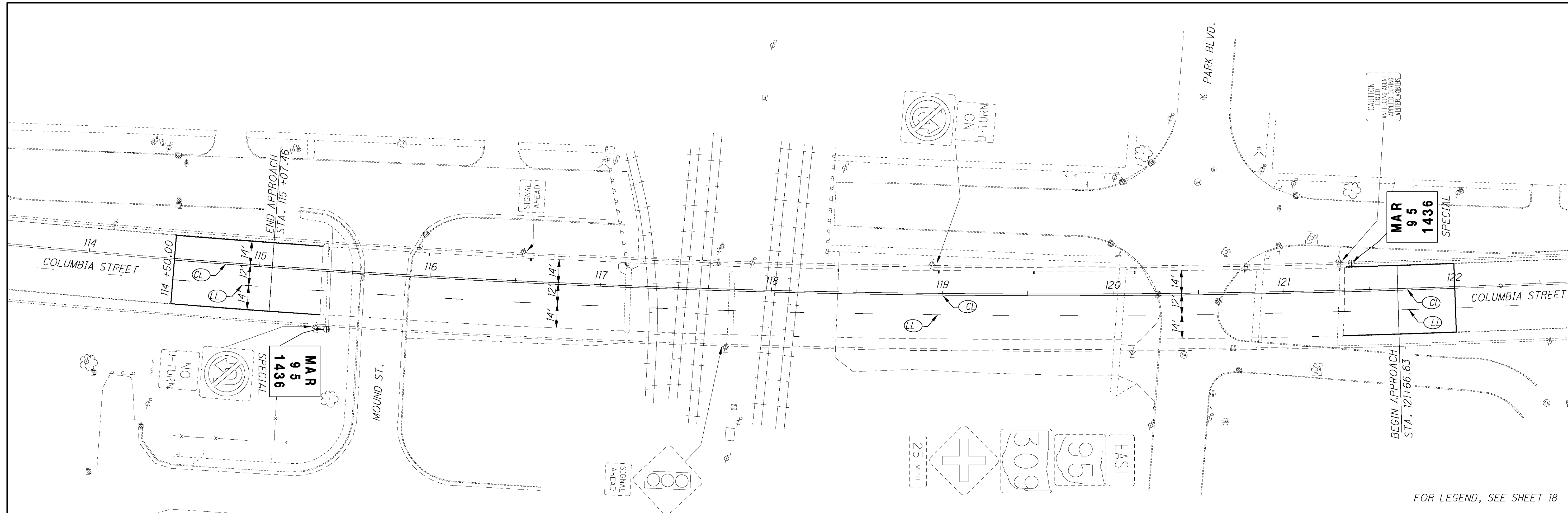
**PLAN AND PROFILE COLUMBIA STREET (SR 95)  
 STA 115+00 TO STA 120+00**

**MAR-4D-0.70  
 MAR-95-14.36**









FOR LEGEND, SEE SHEET 18

REF NO.	SHEET NO.	STATION		SIDE	632				646													
		FROM	TO		LOOP DETECTOR TIE-IN	LOOP DETECTOR	CURB MARKING, YELLOW, AS PER PLAN	STOP LINE, AS PER PLAN	CROSSWALK LINE, AS PER PLAN	CHANNELIZING LINE, AS PER PLAN	LANE ARROW, AS PER PLAN	LANE LINE, AS PER PLAN	CENTER LINE, DOUBLE SOLID LINE, AS PER PLAN									
18		584+11.90	584+25.00	SR 4D																		
18		584+40.00	584+40.00	SR 4D																		
18		584+40.00	585+25.00	SR 4D																		
18		584+25.00	584+50.00	SR 4D																		
18		584+40.00	584+50.00	SR 4D																		
18		584+50.00	584+73.50	SR 4D																		
18		584+50.00	584+73.50	SR 4D																		
18		585+10.00	585+10.00	SR 4D																		
18		585+25.00	586+22.97	SR 4D																		
18		586+22.97	594+70.68	SR 4D																		
18		594+70.68	597+75.40	SR 4D																		
18		597+52.80	597+75.00	SR 4D																		
18		597+52.80	597+75.00	SR 4D																		
18		584+30.00	584+60.00	SR 4D																		
18		597+60.00	597+60.00	SR 4D																		
19		114+50.00	115+07.46	SR 95																		
19		115+07.46	121+66.63	SR 95																		
19		121+66.63	122+00.00	SR 95																		
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					<b>3</b>	<b>3</b>	<b>188</b>	<b>46</b>	<b>144</b>	<b>105</b>	<b>6</b>	<b>0.38</b>	<b>0.15</b>									

**ITEM 630-SIGN, FLAT SHEET, AS PER PLAN**  
**ITEM 630-GROUND MOUNTED SUPPORT, NO. 2 POST**

THESE ITEMS SHALL BE USED TO PLACE NEW STRUCTURE IDENTIFICATION SIGNS AT THE FOLLOWING STRUCTURES:

MAR-4D-0070 (PARAPET MOUNTED)  
 MAR-95-1436 (POST MOUNTED)

EACH SIGN SHALL BE ATTACHED TO THE CONCRETE PARAPET WITH CONCRETE ANCHORS AT THE RIGHT, REAR (AND FORWARD LEFT IF TWIN BRIDGES) LOCATION. IF THE BRIDGE DOES NOT HAVE A CONCRETE PARAPET, THE SIGN SHALL BE POST MOUNTED TO ONE NEW NO. 2 POST AS PER CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION USING TWO 3/16" ALUMINUM BOLTS 2-1/2" IN LENGTH. THE POST SHALL BE 7'-0" LONG.

SIGNS SHALL BE SIZED AS PER THE EXAMPLE. SIGNS SHALL BE ALUMINUM AND HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND AS PER CMS 730.20. THE LETTERS SHALL BE BLACK 2" IN HEIGHT, SERIES C STROKE WIDTH, AND SILK SCREENED AS PER CMS 730.22.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

ITEM 630 SIGN, FLAT SHEET AS PER PLAN, 730.20, 1 SQ FT (4 LOCATIONS)  
 ITEM 630 GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT (2 LOCATIONS)

**646 EPOXY PAVEMENT MARKINGS, AS PER PLAN**

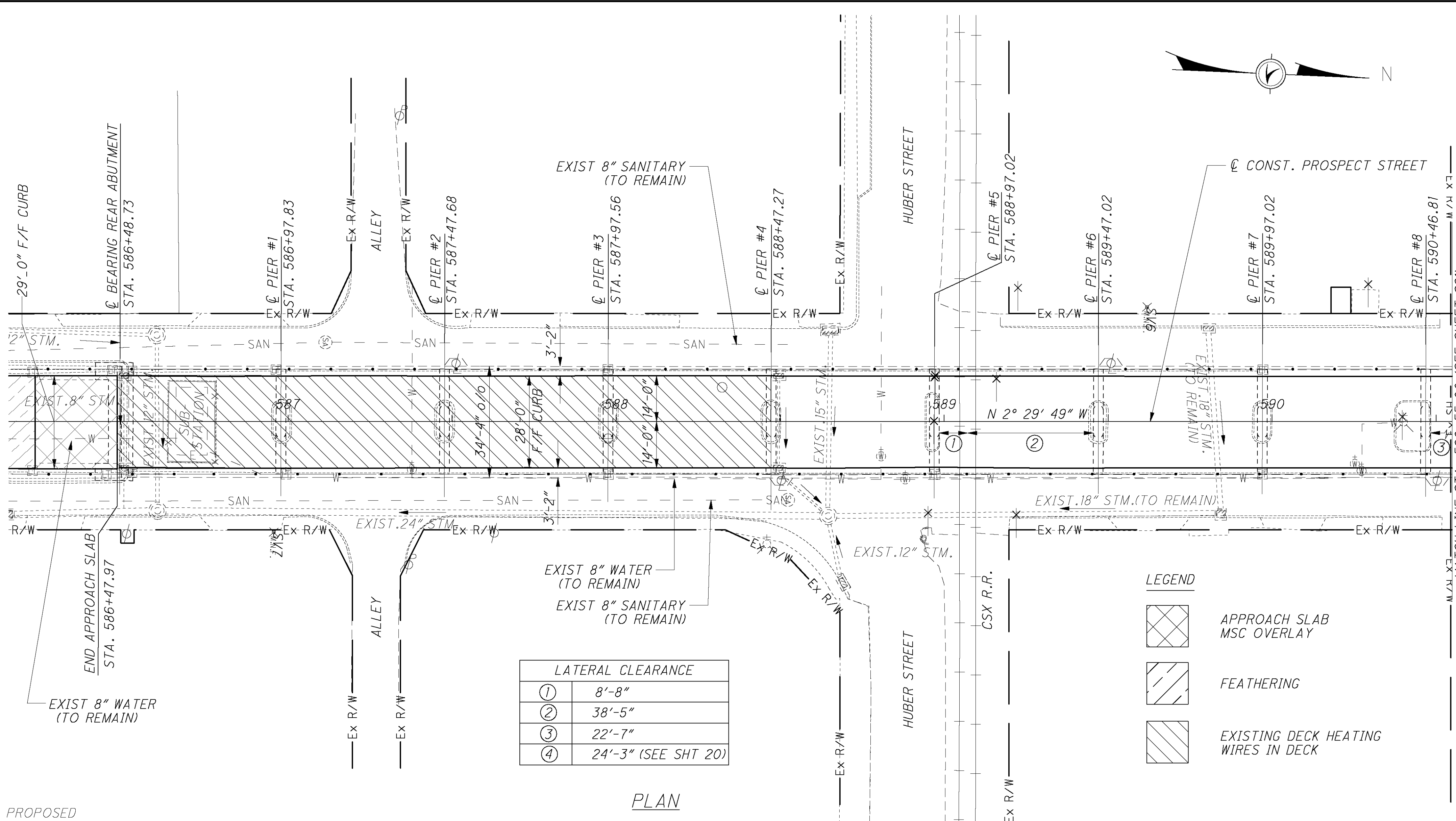
THE EPOXY PAVEMENT MARKING MATERIAL FURNISHED UNDER THESE ITEMS SHALL BE EPOPLEX LS-60 AS FURNISHED BY EPOPLEX, MAPLE SHADE, NEW JERSEY.

**646 EPOXY PAVEMENT MARKINGS - (POLYCARB) - ALTERNATE BID**

THE EPOXY PAVEMENT MARKING MATERIAL SHALL BE MARK 55.4 AS FURNISHED BY POLYCARB, CLEVELAND, OHIO.

EXAMPLE



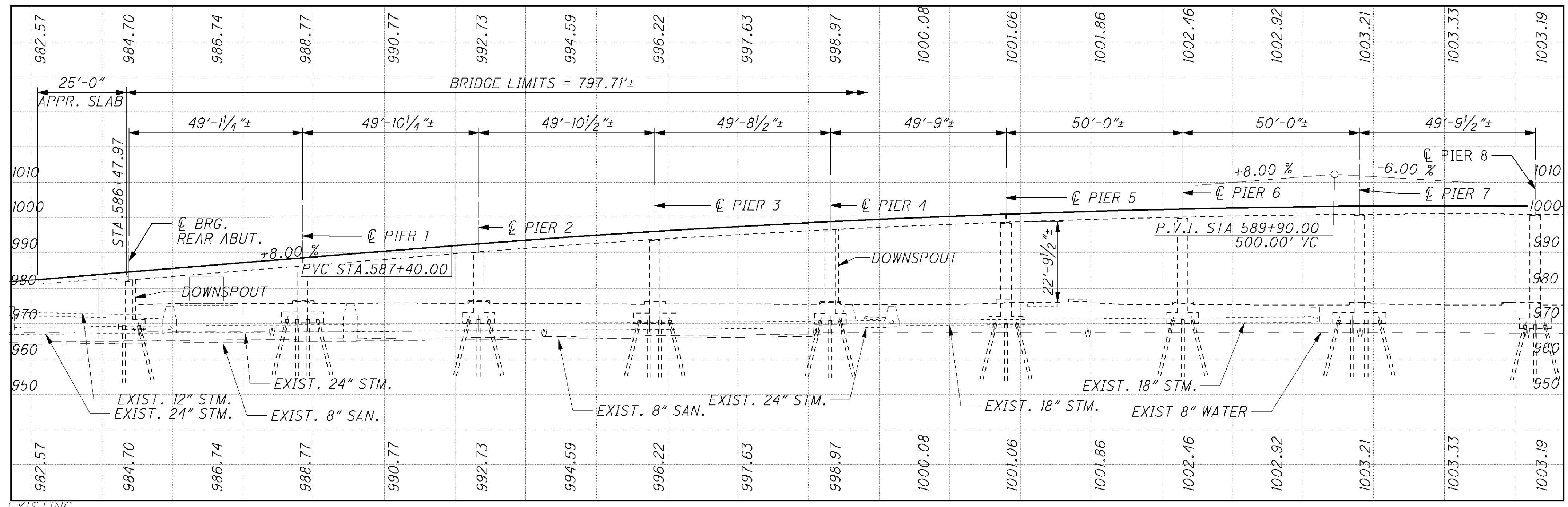


LATERAL CLEARANCE	
①	8'-8"
②	38'-5"
③	22'-7"
④	24'-3" (SEE SHT 20)

**LEGEND**

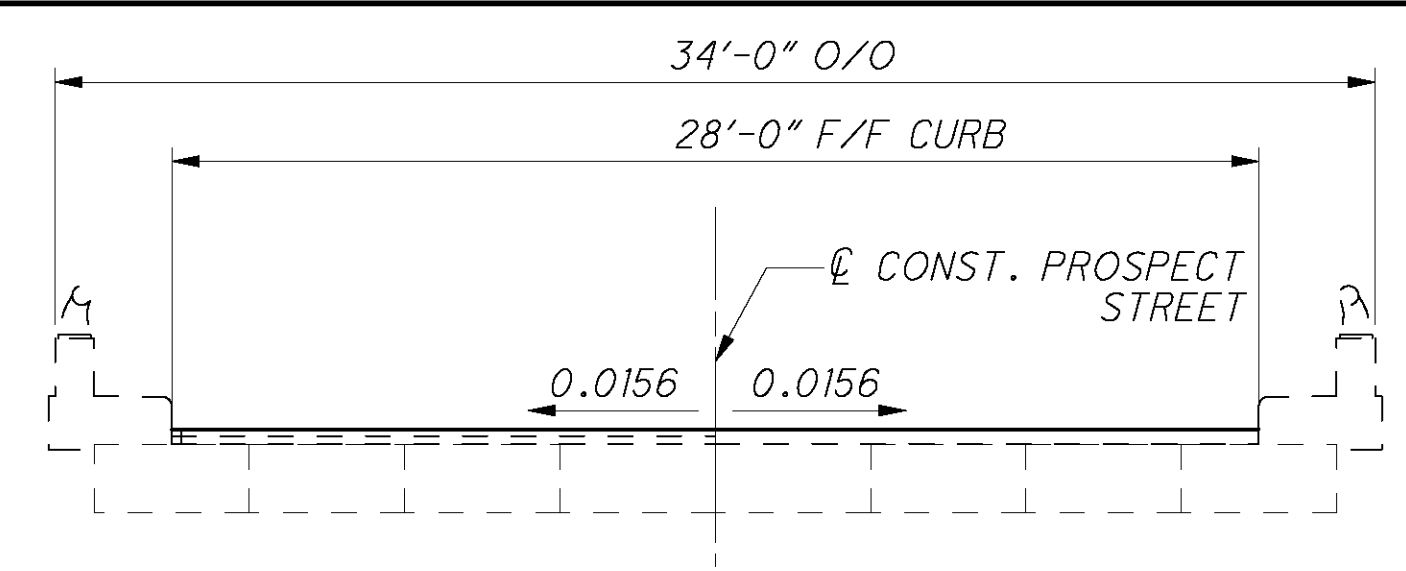
- APPROACH SLAB MSC OVERLAY
- FEATHERING
- EXISTING DECK HEATING WIRES IN DECK

PROPOSED P.G. ELEVATIONS



EXISTING P.G. ELEVATIONS

PROFILE ALONG  $\bar{C}$  CONSTRUCTION PROSPECT STREET



TRANSVERSE SECTION

**BENCHMARK DATA**

BM #1 STA. 597+48.16	ELEV. 970.07	OFFSET 14.90 RT
BM #2 STA. 584+75.22	ELEV. 975.55	OFFSET 15.28 RT
BM #3 STA. 587+97.53	ELEV. 978.02	OFFSET 5.12 RT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 2/43

- NOTES:**
- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
  - DATUM ADJUSTMENT: EXISTING STRUCTURE ELEVATIONS ARE 0.80± LOWER THAN THOSE SHOWN ON THE ORIGINAL CONSTRUCTION PLANS.
- DESIGN TRAFFIC:**  
 2008 ADT = 7118      2008 ADTT = 569  
 2028 ADT = 8685      2028 ADTT = 695  
 DIRECTIONAL DISTRIBUTION = 55%

**EXISTING STRUCTURE**

TYPE: PRESTRESSED CONCRETE BOX BEAMS (CB21-48) WITH COMPOSITE CONCRETE DECK AND LATEX MODIFIED CONCRETE OVERLAY ON REINFORCED CONCRETE PIERS AND ABUTMENTS

SPANS: 16 SPANS; FOR LENGTH, SEE PROFILE VIEW

ROADWAY: 28'-0" F/F SAFETY CURB

LOADING: S20-60

SKEW: NONE

APPROACH SLABS: AS-1-54, 25' LONG

WEARING SURFACE: LATEX MODIFIED CONCRETE

ALIGNMENT: TANGENT

CROWN: NORMAL

STRUCTURAL FILE NUMBER: 5100240

DATE BUILT: 1968

DISPOSITION: FAIR

**PROPOSED STRUCTURE**

TYPE: EXISTING PRESTRESSED CONCRETE BOX BEAMS (CB21-48) WITH EXISTING COMPOSITE CONCRETE DECK ON EXISTING REINFORCED CONCRETE PIERS AND ABUTMENTS WITH NEW 1/4" MICROSILICA CONCRETE OVERLAY. FOR PROPOSED WORK, SEE SHEET S2/S9.

SPANS: SAME

ROADWAY: 28'-0" F/F SAFETY CURB

LOADING: N/A

SKEW: SAME

APPROACH SLABS: SAME

WEARING SURFACE: MICROSILICA CONCRETE OVERLAY

ALIGNMENT: SAME

CROWN: .0156 FT/FT

COORDINATES: LATITUDE N 40° 35' 25"  
 LONGITUDE W 87° 07' 50"

CSX AAR/DOT NO.: 262 081A  
 513 585V

DESIGN AGENCY: PALMER ENGINEERING, INC.  
 13300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 PALMER ENGINEERING, INC.  
 1100 WEST WILSON AVENUE  
 SUITE 1000  
 WILMINGTON, OH 45390

DATE: 4/07

REVIEWED: RSP

STRUCTURE FILE NUMBER: 5100240

DRAWN: VMK

DESIGNED: WAH

CHECKED: BUF

MARION COUNTY  
 STA. 586+47.97  
 STA. 594+45.68

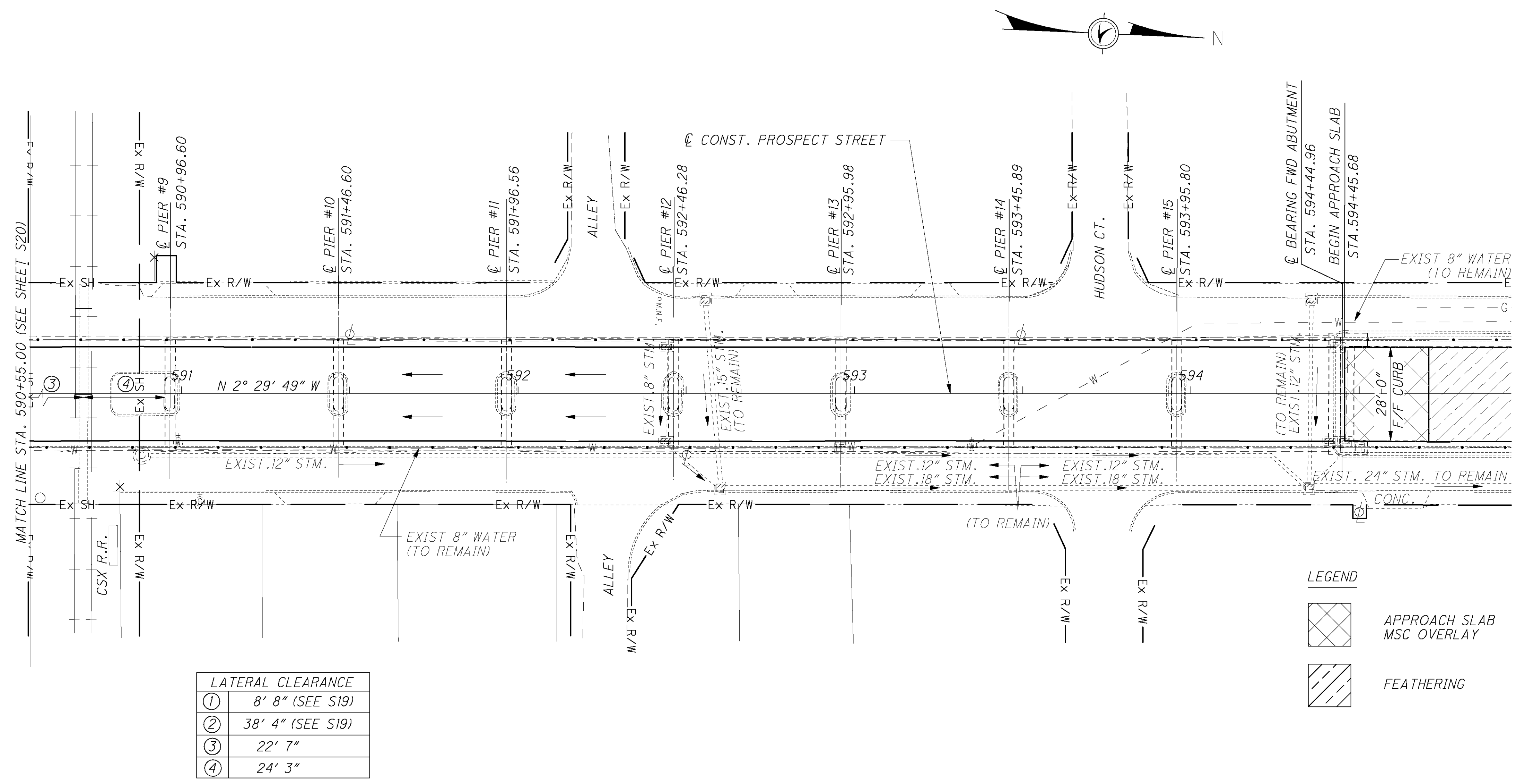
**SITE PLAN**  
 MAR-4D-0070  
 PROSPECT STREET OVER CSX RAILROAD

MAR-4D-0.70  
 MAR-95-14.36  
 PID No. 79938

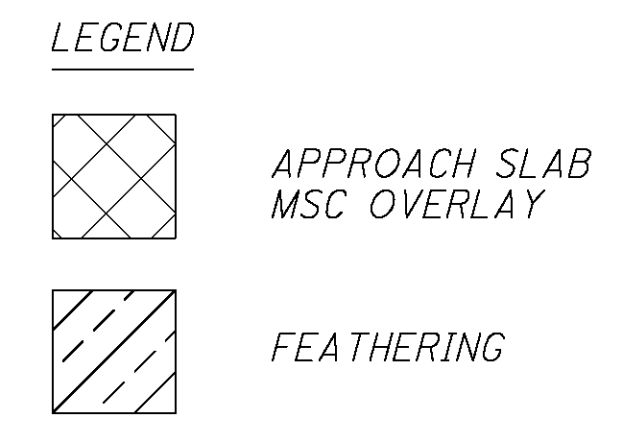
1 / 9

20 / 43

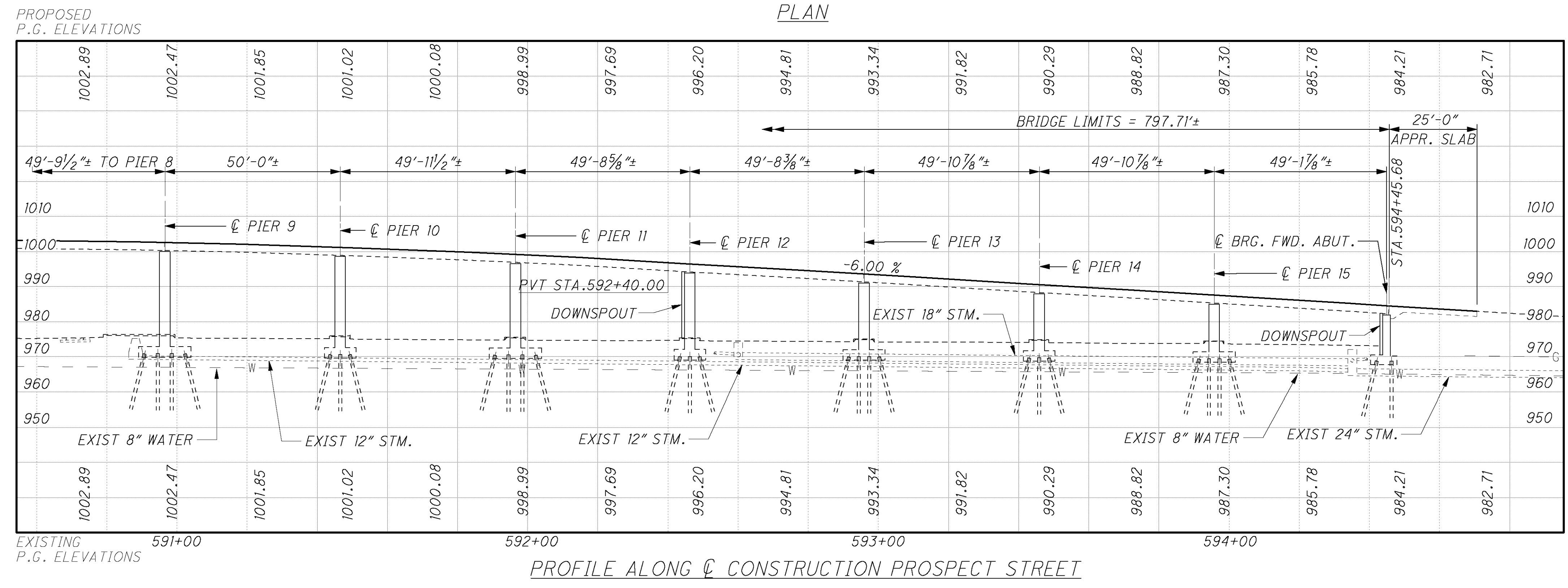




LATERAL CLEARANCE	
①	8' 8" (SEE S19)
②	38' 4" (SEE S19)
③	22' 7"
④	24' 3"



- PROPOSED WORK**
- REMOVE EXISTING LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION AND REPLACE WITH A 1/4" MICRO-SILICA CONCRETE OVERLAY.
  - PATCH EXISTING CONCRETE PARAPETS AND SAFETY CURBS ON THE SUPERSTRUCTURE AND THE APPROACHES.
  - SEAL THE EXTERIOR BEAMS AND THE PARAPETS AND SAFETY CURBS ON THE SUPERSTRUCTURE AND THE APPROACHES WITH EPOXY-URETHANE SEALER AS SHOWN ON THE PLANS. SEAL FACES OF ABUTMENT BRESTWALLS. THE COLOR SHALL BE FEDERAL COLOR NO. 595B-17778 (LIGHT NEUTRAL).
  - CLEAN SEDIMENT AND DEBRIS FROM THE STRIP SEAL EXPANSION JOINTS AT BOTH ABUTMENTS, PIER 4, PIER 8 AND PIER 12.
  - CLEAN DEBRIS FROM THE EXISTING SCUPPERS AND DOWNSPOUTS AT BOTH ABUTMENTS, PIER 4 AND PIER 12.
  - CLEAN THE JOINTS OF THE EXISTING DOWNSPOUTS AND APPLY A WATER TIGHT SEALANT.
  - REMOVE THE EXISTING ASPHALT OVERLAY FROM THE APPROACH SLABS AND REPLACE WITH A MICRO-SILICA CONCRETE OVERLAY.
  - REPAIR AREAS OF DETERIORATED CONCRETE ON THE ABUTMENTS AND PIERS WITH ITEM 519 PATCHING CONCRETE STRUCTURES, AS SHOWN IN THE PLANS.
  - INSTALL BRIDGE MARKER SIGNS. FOR PAYMENT SEE 18/43 OF ROADWAY PLANS
  - REPLACE THE MISSING ELASTOMERIC BEARING PAD UNDER BEAM 2 AT THE REAR ABUTMENT AND RESET ANY MISALIGNED BEARING PADS, AS DIRECTED BY THE ENGINEER.
  - PATCH THE APPROACH PAVEMENT CONCRETE AND PLACE A NEW ASPHALT OVERLAY ON THE APPROACHES.
  - CLEAN THE SPALLED AREA ON BEAM 8 AND SEAL IT WITH EPOXY-URETHANE AS SHOWN IN THE PLANS.



PROFILE ALONG C CONSTRUCTION PROSPECT STREET

DESIGN AGENCY: PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 WINCHESTER, MASSACHUSETTS 01890

DATE: 4/07  
 REVIEWED: RSP  
 STRUCTURE FILE NUMBER: 51 00240

DESIGNED: WAH  
 CHECKED: BUF

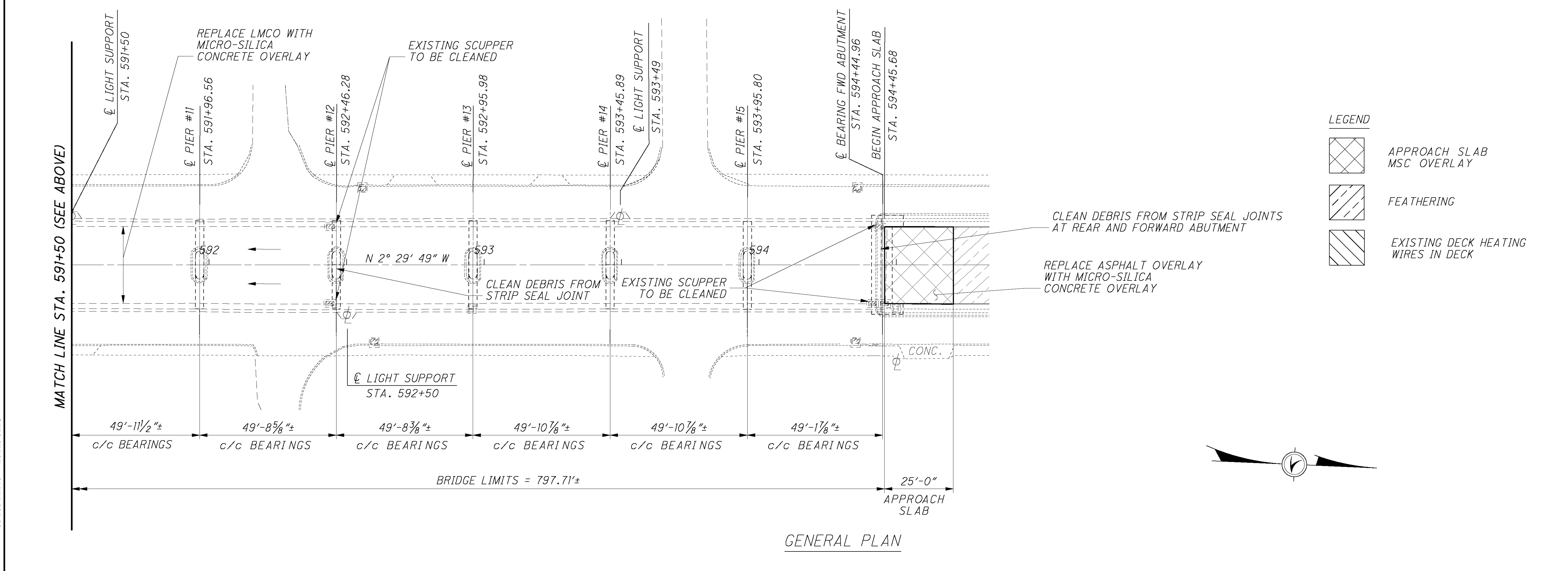
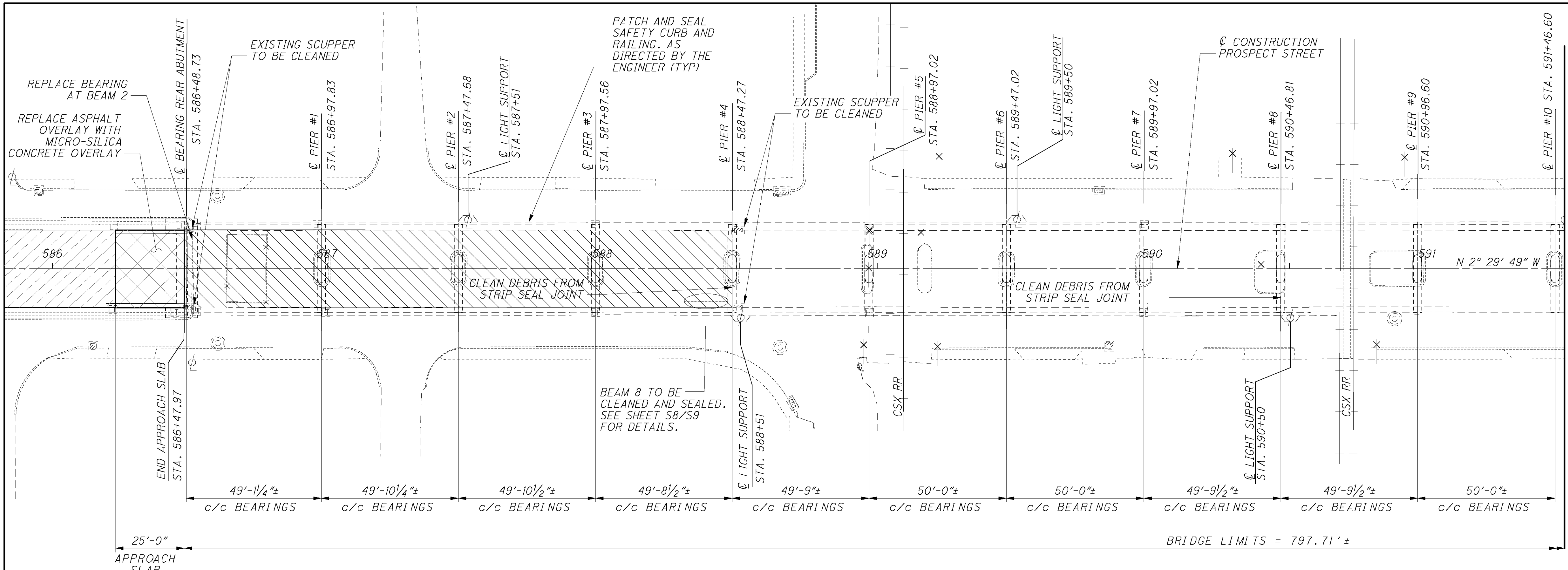
MARTON COUNTY  
 STA. 586+47.97  
 STA. 594+45.68

**SITE PLAN**  
 MAR-4D-0070  
 PROSPECT STREET OVER CSX RAILROAD

MAR-4D-0.70  
 MAR-95-14.36  
 PID No. 79938

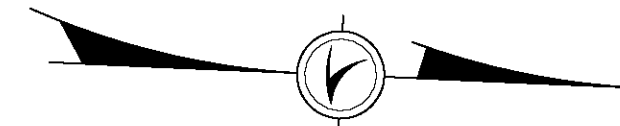
2 / 9

21  
 43



**LEGEND**

- APPROACH SLAB  
MSC OVERLAY
- FEATHERING
- EXISTING DECK HEATING  
WIRES IN DECK



GENERAL PLAN

<p><b>MAR-4D-0.70</b>  <b>MAR-95-14.36</b>          PID No. 79938</p>	<p>DESIGNED WAH</p>	<p>DRAWN DF</p>	<p>REVIEWED RSP</p>	<p>DATE 4/07</p>
	<p>CHECKED BUF</p>	<p>REVISED</p>	<p>STRUCTURE FILE NUMBER 5100240</p>	<p>DESIGN AGENCY PALMER ENGINEERING 13300 CORNELL PARK DR CINCINNATI, OH 45242 WINCHESTER, MASS 01890</p>
<p><b>GENERAL PLAN</b>          MAR-4D-0070          PROSPECT STREET OVER CSX RAILROAD</p>				
<p>BRIDGE LIMITS = 797.71' ±</p>				
<p>MATCH LINE STA. 591+50 (SEE ABOVE)</p>				
<p>MATCH LINE STA. 591+50 (SEE BELOW)</p>				

11/1/2007 10:30:35 AM BY: DAN F  
 O:\DDOT\WAR79938\BRIDGE\WAR004\_00700\SHEETS\004\_00700\001.DGN  
 MODEL SHEET  
 PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 WINCHESTER, MASSACHUSETTS

**REFERENCE SHALL BE MADE TO SUPPLEMENTAL SPECIFICATIONS**

848 DATED (REVISED) 04-15-05

**DECK PROTECTION METHOD**

MICRO-SILICA CONCRETE OVERLAY

EPOXY SEAL CURBS AND PARAPETS WITH EPOXY-URETHANE SEALER, FEDERAL COLOR NO. 595B-17778 (LIGHT NEUTRAL).

**EXISTING STRUCTURE VERIFICATION**

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

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

**ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE THE EXISTING ASPHALT WEARING SURFACE FROM THE APPROACH SLABS DOWN TO THE CONCRETE SURFACE. PAYMENT FOR ALL LABOR AND EQUIPMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN.

**ITEM 511 CLASS C - CONCRETE, ABUTMENT, AS PER PLAN**

THIS ITEM WILL BE USED TO REBUILD THE MISSING CURTAIN WALL ON THE LEFT SIDE OF THE REAR ABUTMENT. THE CLASS C CONCRETE, REINFORCING STEEL, DOWEL HOLES, GROUT AND ANY OTHER MATERIALS NECESSARY ALONG WITH LABOR AND EQUIPMENT SHALL BE INCLUDED IN THIS PAY ITEM. ESTIMATED QUANTITIES OF THE NECESSARY MATERIALS ARE SHOWN ON SHEET 7/9.

**ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO RESET ANY MISALIGNED BEAM BEARINGS IDENTIFIED BY THE ENGINEER. INCLUDED SHALL BE INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND OR BEARINGS ARE "FLOATING". ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516-REFURBISH BEARING DEVICES, AS PER PLAN. A QUANTITY OF 10 BEARINGS HAS BEEN INCLUDED FOR ESTIMATING PURPOSES.

**ITEM 516 - ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN**

THIS SHALL ONLY APPLY TO BEAM 2 BEARING AT REAR ABUTMENT. FOR BEARING PLAN NOTES, SEE SHEET 8/9.

**ITEM 518 STRUCTURE DRAINAGE, MISC: CLEANING AND SEALING SCUPPERS AND DOWNSPOUTS**

THIS SHALL APPLY TO CLEANING THE DRAINAGE SCUPPERS AND DOWNSPOUTS AND SEALING THE JOINTS IN THE DOWNSPOUTS AT THE REAR ABUTMENT, PIERS #4 AND #12, AND THE FORWARD ABUTMENT. THE CONTRACTOR MAY CLEAN THE DOWNSPOUTS USING HIGH PRESSURE WATER, OR OTHER METHODS APPROVED BY THE ENGINEER, THAT DOES NOT DAMAGE THE SCUPPERS OR DOWNSPOUTS. AFTER CLEANING, THE SCUPPERS AND DOWNSPOUTS MUST DRAIN FREELY AND TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL CLEAN THE RUST AND DIRT FROM THE JOINTS IN THE DOWNSPOUTS WITHOUT DAMAGING THE PIPES. THE CONTRACTOR SHALL THEN APPLY TO THE PIPE JOINTS A WATER TIGHT SEALANT FOR METAL CONDUITS. PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM 518, STRUCTURE DRAINAGE, MISC. ESTIMATED QUANTITIES OF SCUPPERS AND DOWNSPOUTS TO BE CLEANED AND SEALED ARE:

LINEAL FT OF DOWNSPOUTS = 132  
 NUMBERS OF SCUPPERS = 8

**ITEM 519 - PATCHING CONCRETE STRUCTURES AS PER PLAN**

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING. THE CITY OF MARION SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY PAINTED SIGNS ON THE BRIDGE SUBSTRUCTURE THAT WILL BE DAMAGED BY THIS PATCHING. PAYMENT FOR ALL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM 519, PATCHING CONCRETE STRUCTURES AS PER PLAN.

**ITEM SPECIAL-STRUCTURE MISC: BEAM REPAIR**

THIS ITEM SHALL APPLY TO THE SPALLED AREA ON BEAM 8 IN SPAN 4. THE CONTRACTOR SHALL REMOVE ANY LOOSE CONCRETE THAT COULD POSE A FALLING HAZARD USING HAND TOOLS OR AS DIRECTED BY THE ENGINEER. THE EXPOSED AREA SHALL BE SEALED WITH EPOXY-URETHANE SEALER. COLOR SHALL BE FEDERAL COLOR NO. 595B-17778 (LIGHT NEUTRAL). PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM SPECIAL-STRUCTURE MISC.

**ITEM SPECIAL-STRUCTURE MISC: CLEANING DEBRIS**

THIS ITEM SHALL INCLUDE THE REMOVAL OF ALL DEBRIS FROM THE EXISTING ELASTOMERIC STRIP SEAL JOINTS ON THE BRIDGE DECK. PAYMENT FOR THIS WORK INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM SPECIAL-STRUCTURE MISC.: CLEANING DEBRIS

**RAILROAD**

REPAIRS OF DETERIORATED CONCRETE ON PIER 5 THRU PIER 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING.

DECK HYDRO-DEMOLITION ON SPAN 6 AND SPAN 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING.

SEALING OF CONCRETE PARAPETS IN SPAN 6 AND SPAN 9 WILL REQUIRE FULL TIME RAILROAD FLAGGING.

AAR/DOT NOS.: 262 081A AND 513 585V

CSXT REFERENCE: MILEPOST QI-100.85  
 MT. VICTORY SUBDIVISION  
 WESTERN DIVISION / WESTERN REGION  
 OP NO.: OH0592

**ENVIRONMENTAL CONSIDERATIONS**

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANT, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITH IN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL OR TREAT ANY BRIDGE STRUCTURE (e.g. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

UNAVOIDABLE CUTTING OF ANY TREES WHICH MAY PROVIDE SUITABLE ROOSTING OR BROOD-REARING HABITAT FOR THE INDIANA BAT (i.e. LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES, OR CAVITIES) WILL BE PERFORMED ONLY BEFORE APRIL 15 OR AFTER SEPTEMBER 15 WHEN THE INDIANA BAT WOULD NOT BE USING SUCH HABITAT.

HOURS OF CONSTRUCTION EQUIPMENT OPERATION WILL BE FROM 8am TO 6pm.

DESIGN AGENCY  
 PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 WINCHESTER, MASSACHUSETTS

DATE	4/07
REVIEWED	RSP
STRUCTURE FILE NUMBER	5100240
DRAWN	KJD
REVISD	
DESIGNED	WAH
CHECKED	BUF

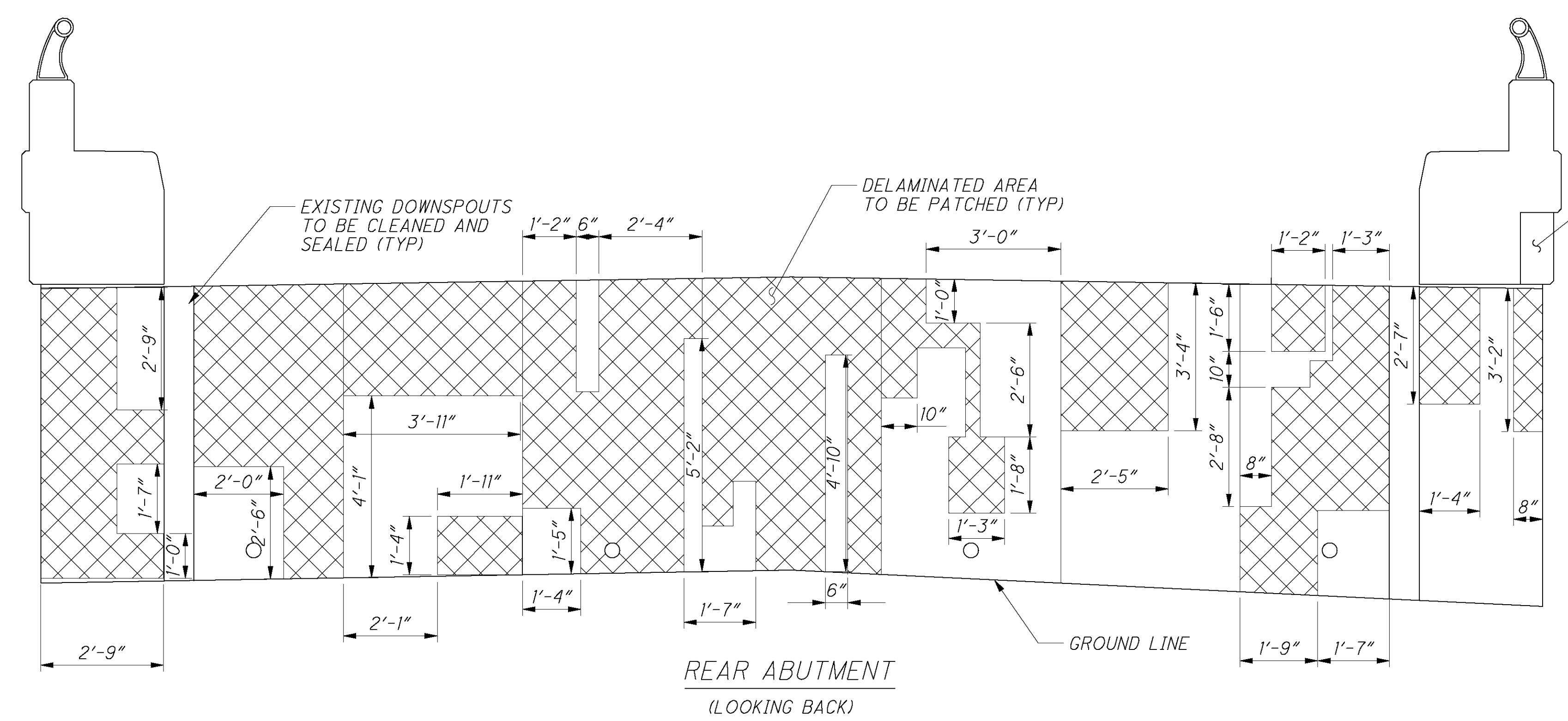
**GENERAL NOTES**  
 MAR-4D-0070  
 MAR-4D-14.36  
 PROSPECT STREET OVER CSX RAILROAD

MAR-4D-0.70  
 MAR-95-14.36  
 PID No. 79938  
 4 / 9  
 23  
 43

COMPUTED BY: WAH DATE: 1-11-07  
 CHECKED BY: CEJ DATE: 8-2-07

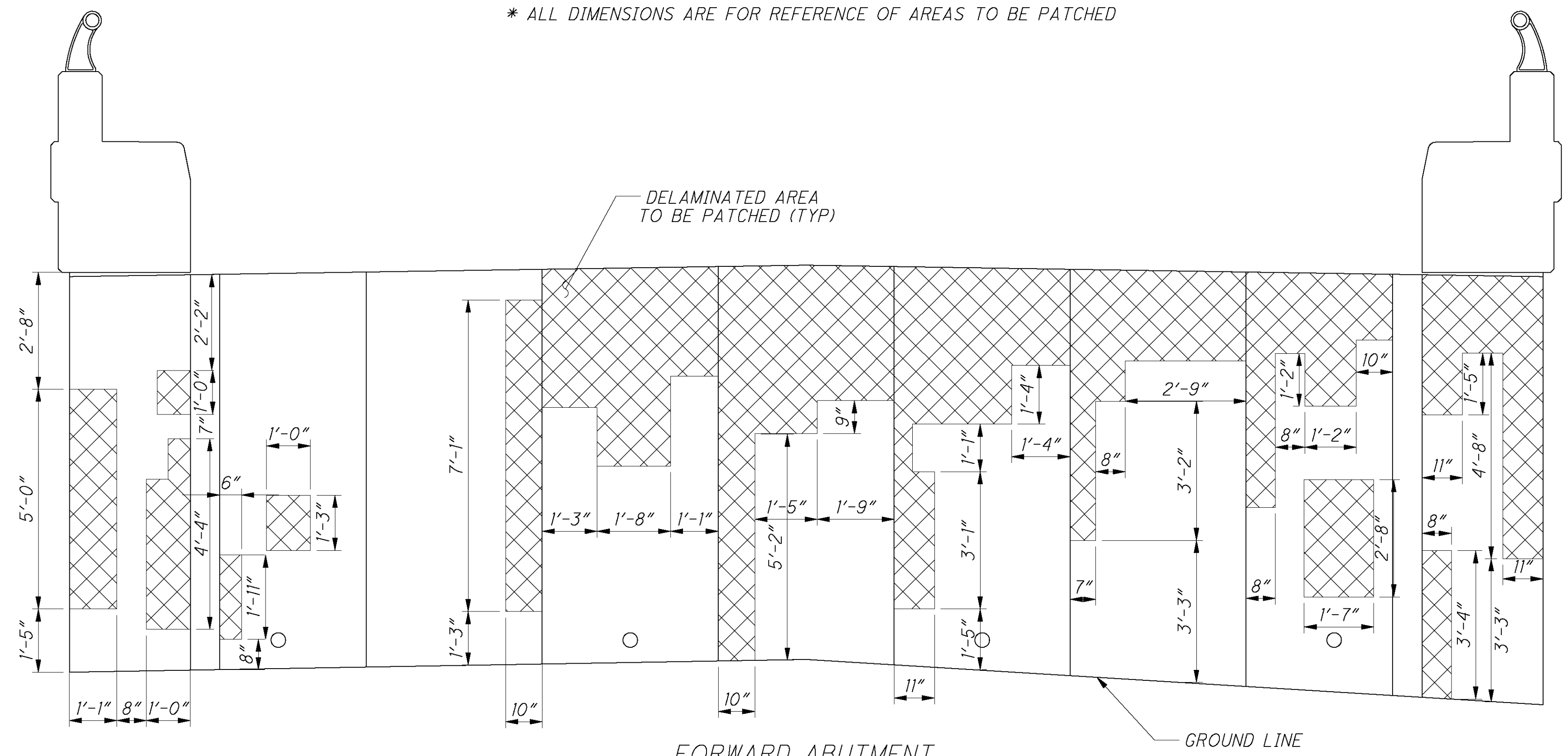
ITEM	ITEM EXT.	GRAND TOTAL (100% STATE)	UNIT	DESCRIPTION	REAR ABUT.	FWD. ABUT.	PIERS	SUPER	GENERAL	SHEET REF.
202	23501	156	SQ YD	WEARING COURSE REMOVED, AS PER PLAN					156	4/9
511	45701	1	CU YD	CLASS "C" CONCRETE, ABUTMENT, AS PER PLAN	1					
512	10100	2252	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	27	35		2190		
516	43101	1	EACH	ELASTOMERIC BEARING, WITH INTERNAL LAMINATES ONLY (NEOPRENE), AS PER PLAN (12" X 7" X 1 3/4")				1		4/9 & 8/9
516	45305	10	EACH	REFURBISH BEARING DEVICE, AS PER PLAN				10		4/9
518	62100	132	FT	STRUCTURE DRAINAGE, MISC.: CLEANING AND SEALING SCUPPERS AND DOWNSPOUTS					132	4/9
519	11101	2819	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	194	146	684	1795		4/9
SPECIAL	53000200	LUMP		STRUCTURE, MISC.: BEAM REPAIR					LUMP	4/9
SPECIAL	53000200	LUMP		STRUCTURE, MISC.: CLEANING DEBRIS					LUMP	4/9
848	10000	2638	SQ YD	MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (1 1/4" THICK)				2482	156	4/9
848	20000	2482	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION				2482		
848	30000	41	CU YD	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY				41		
848	50000	87	SQ YD	HAND CHIPPING				87		
848	50100	LUMP		TEST SLAB					LUMP	
848	50200	16	CU YD	FULL DEPTH REPAIR				16		
848	50320	2482	SQ YD	EXISTING CONCRETE OVERLAY REMOVED, 1 1/4" NOMINAL THICKNESS				2482		
848	50340	869	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY				869		





**REAR ABUTMENT**  
(LOOKING BACK)

\* ALL DIMENSIONS ARE FOR REFERENCE OF AREAS TO BE PATCHED

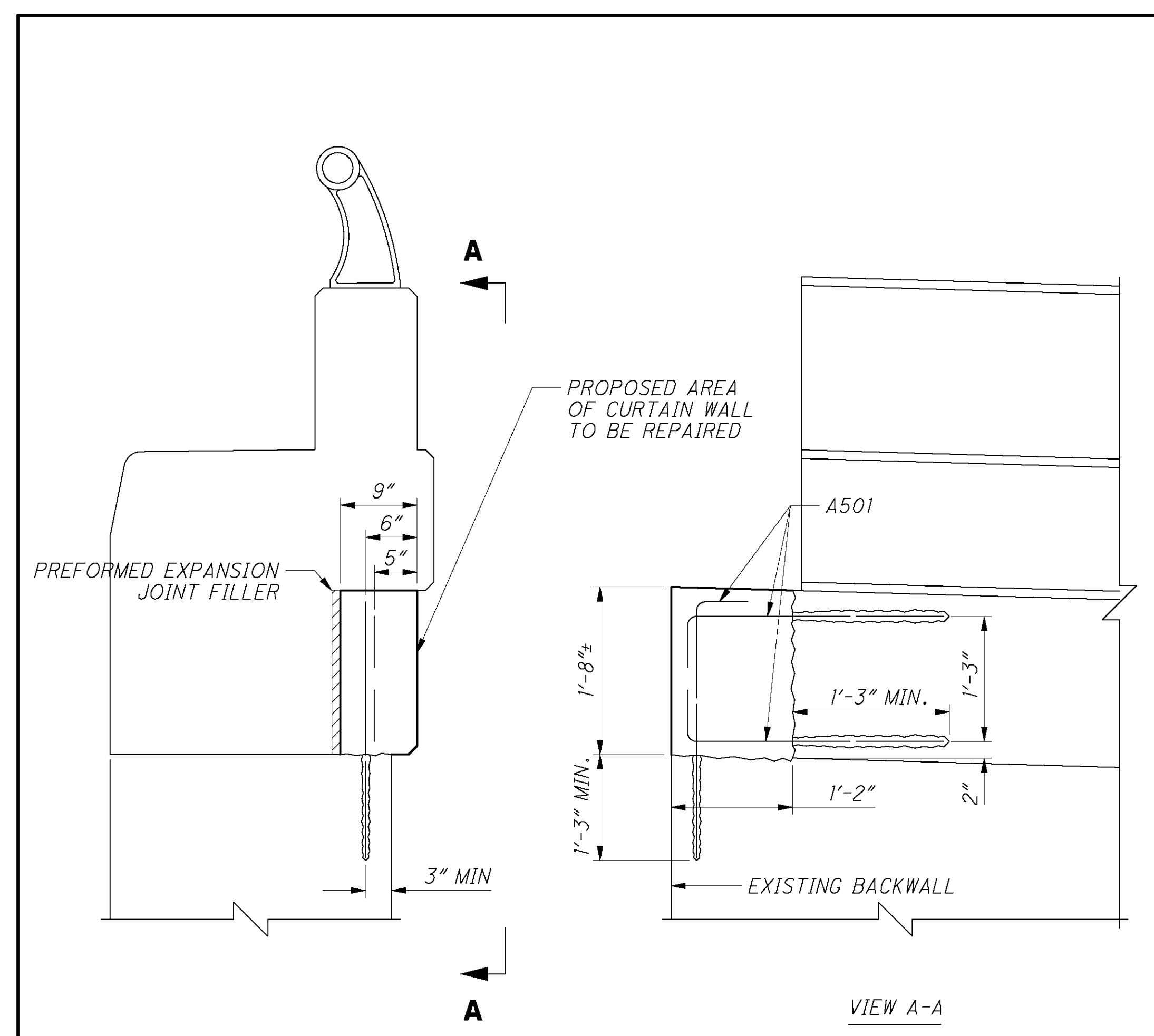


**FORWARD ABUTMENT**  
(LOOKING FORWARD)

\* ALL DIMENSIONS ARE FOR REFERENCE OF AREAS TO BE PATCHED

ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
REAR ABUTMENT	128	1.25	160
FORWARD ABUTMENT	104	1.25	130
REAR ABUTMENT RETAINING WALLS	27	1.25	34
FORWARD ABUTMENT RETAINING WALLS	13	1.25	16

REPLACE CURTAIN WALL  
 SEE DETAIL 'A'  
 THIS SHEET



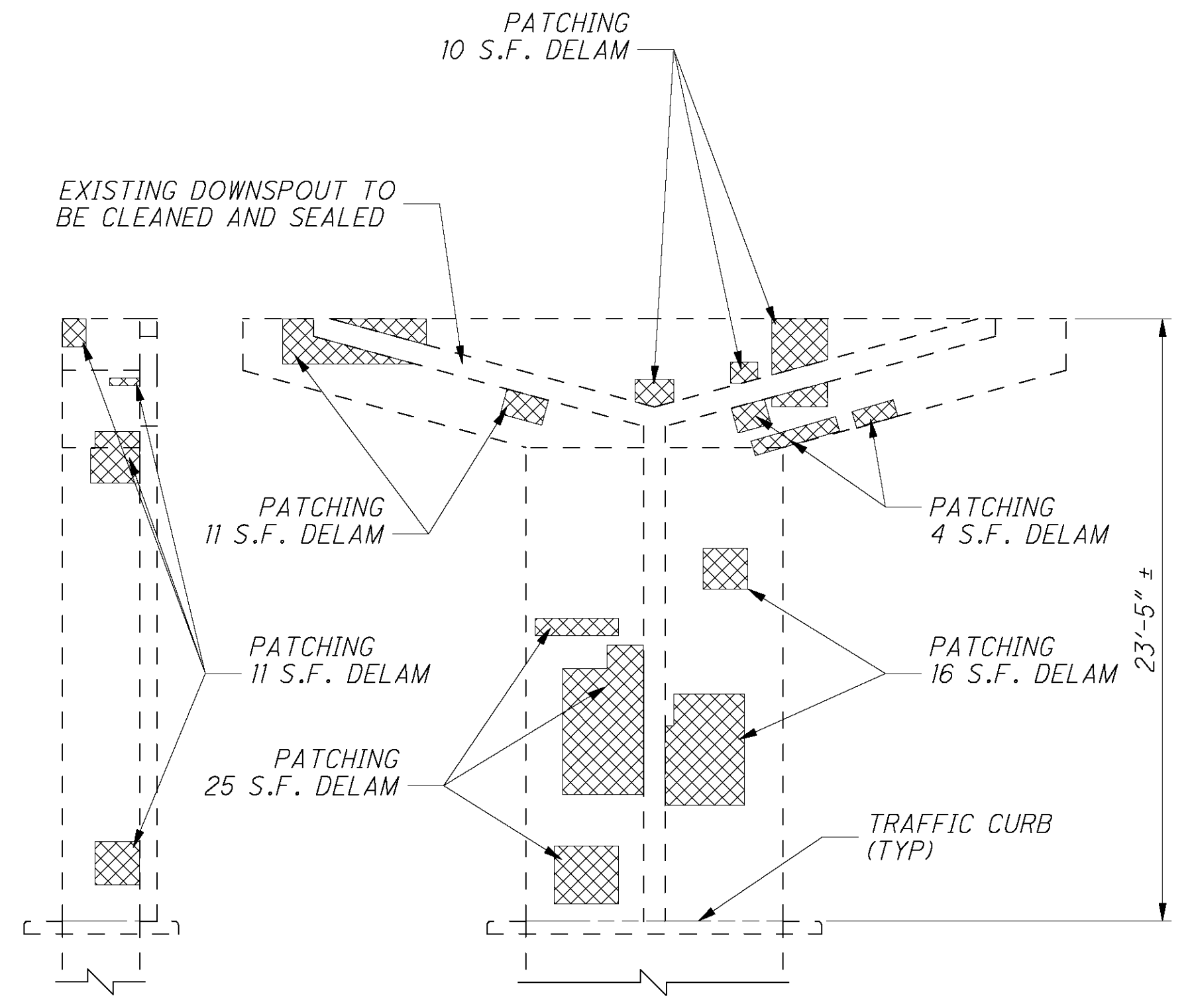
**NOTE:**  
 AREA WILL REQUIRE CLEANING AND SOME  
 HAND CHIPPING TO REMOVE ANY LOOSE  
 CONCRETE BEFORE REPAIR IS TO BE MADE.

**ESTIMATED QUANTITIES**

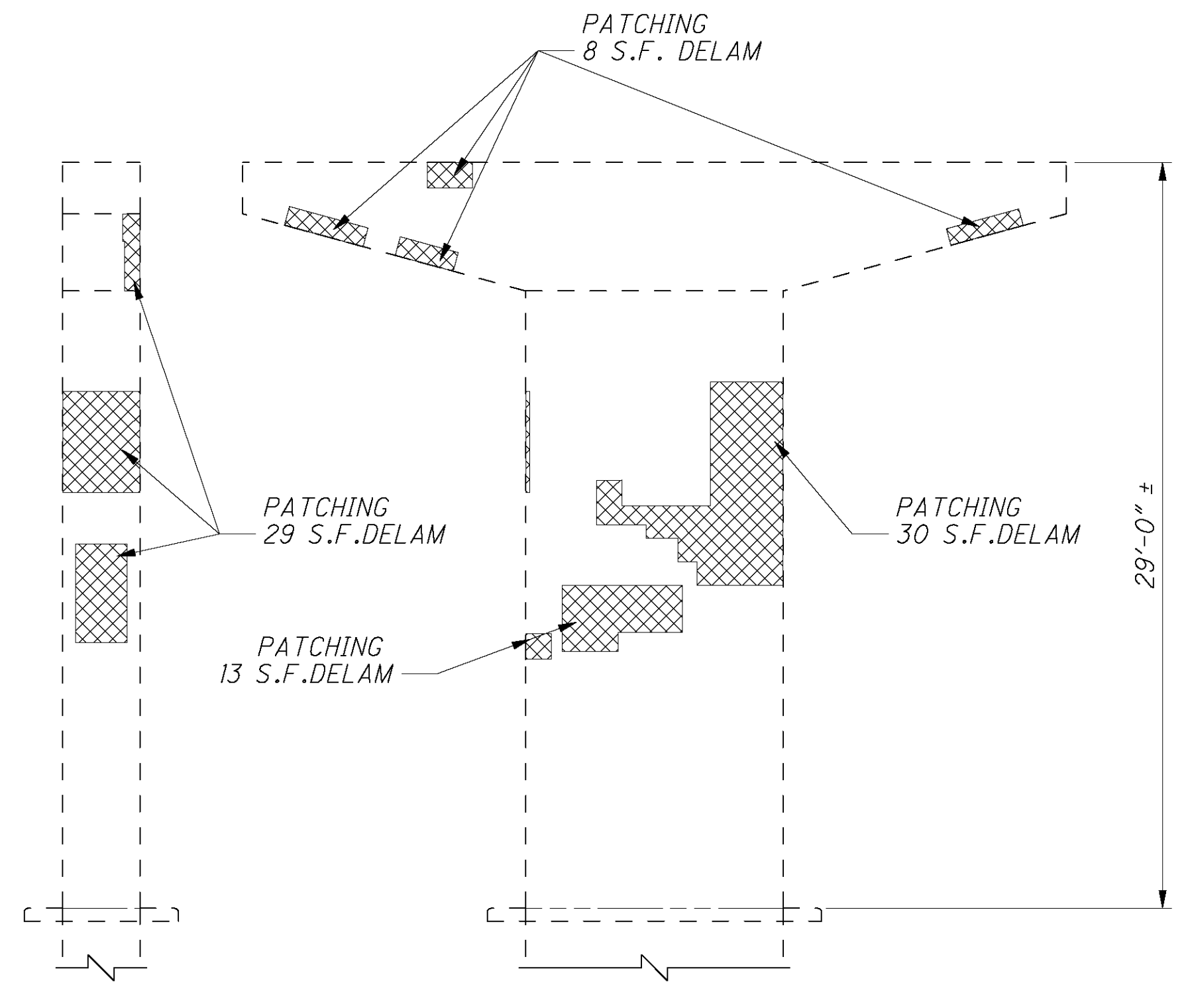
1. CLASS "C" CONCRETE = .06 CU YD
2. EPOXY COATED RESTEEL = 9'-0" @ 9.50 lbs.
3. PREFORMED EXPANSION JOINT FILLER = 1.25 SQ FT

**DETAIL A**

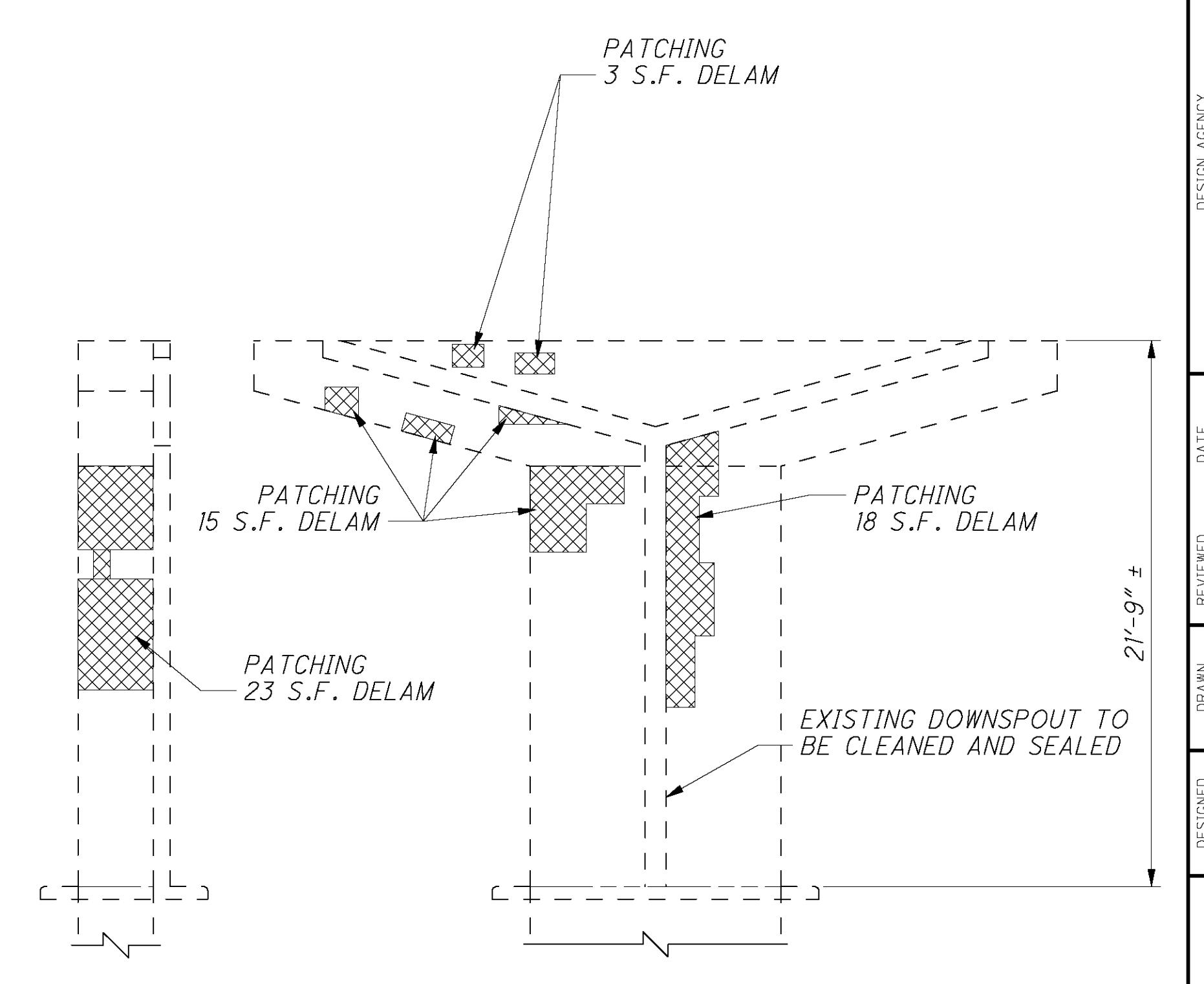
11/1/2007 10:30:51 AM BY: DAN-F  
 O:\DDOT\WAR79938\BR110E\WAR004\_00700\SHEETS\004\_00700P1001.DGN  
 MODEL + SHEET



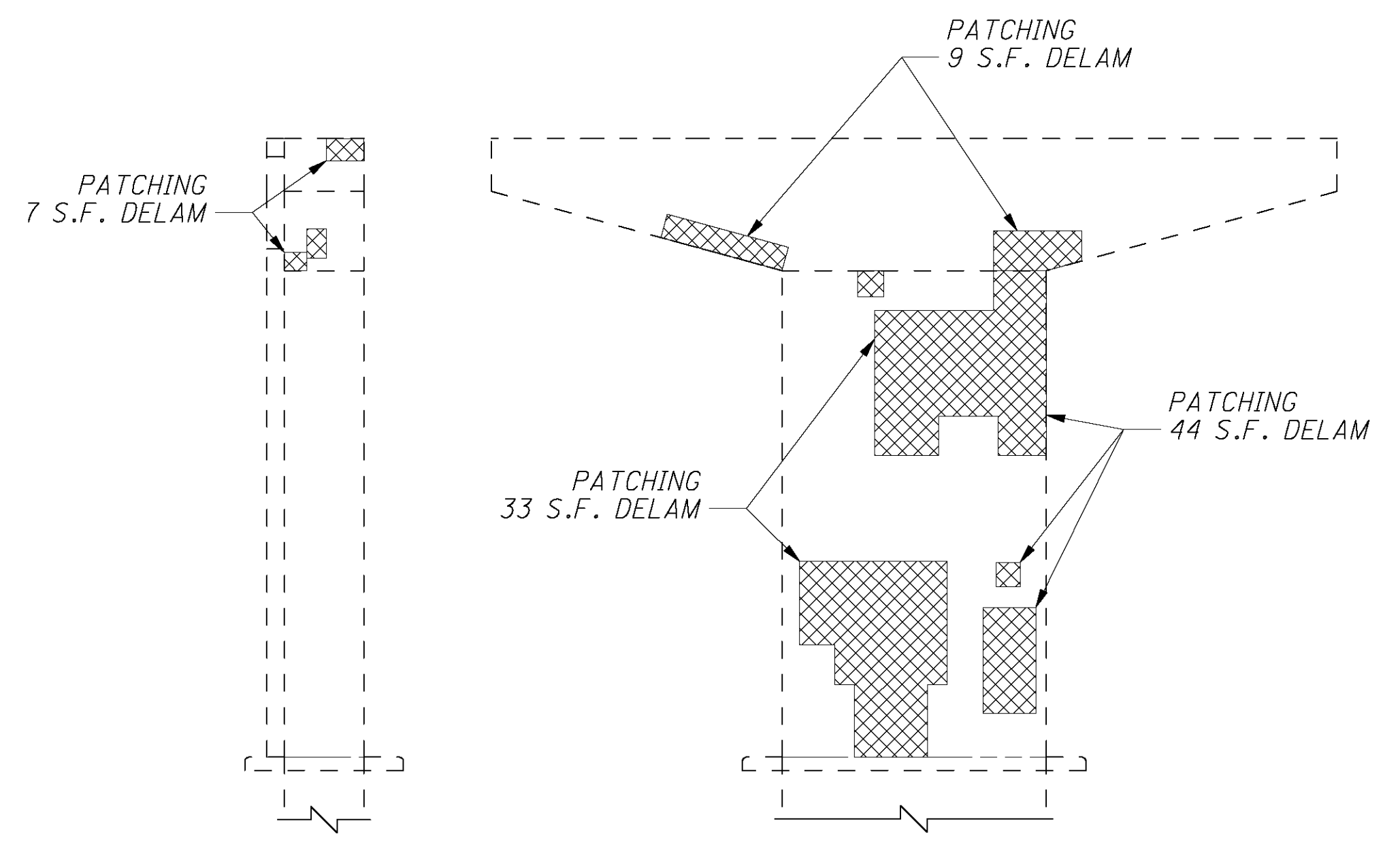
PIER 4 ELEVATION  
(LOOKING BACK)



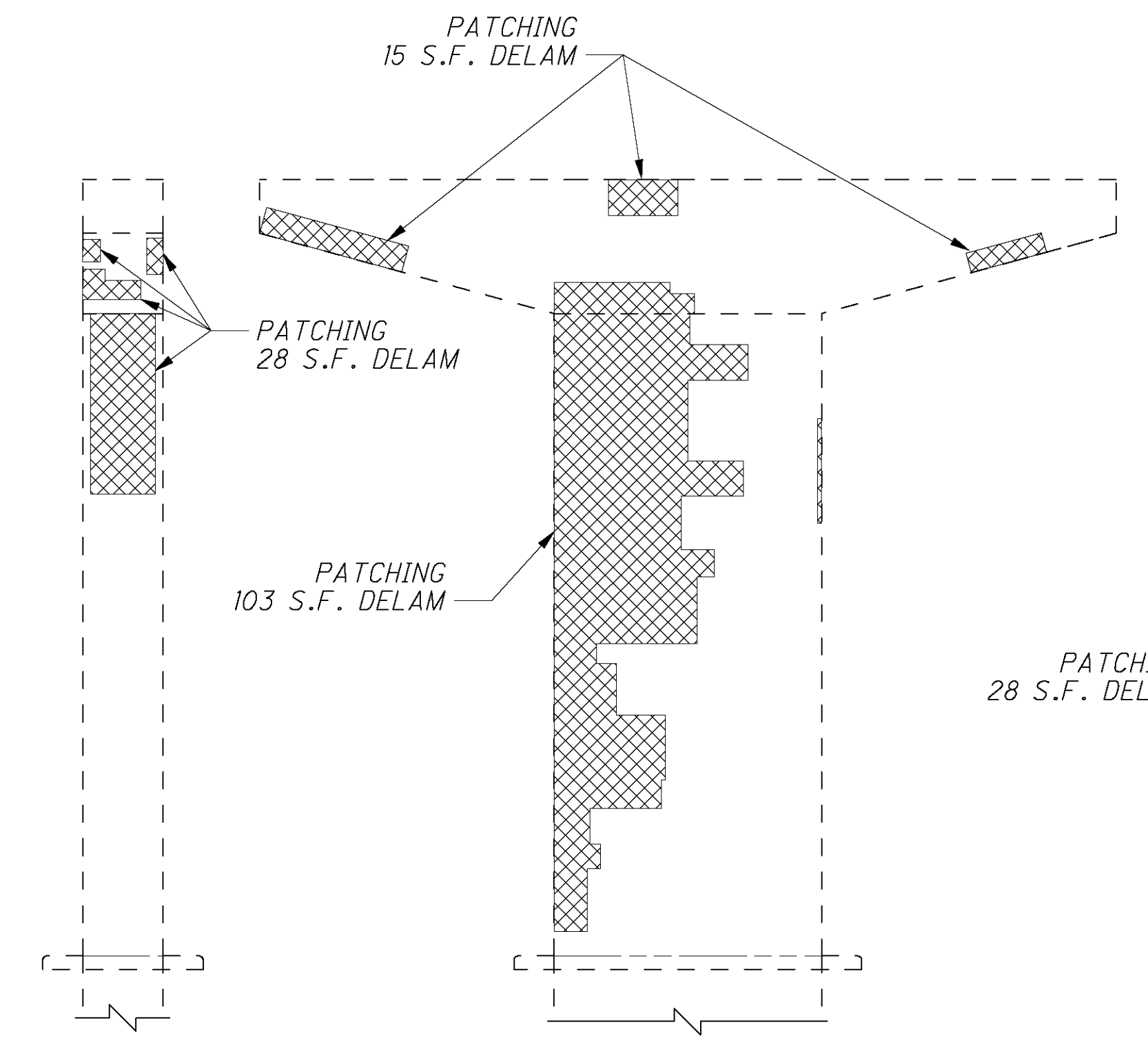
PIER 8 ELEVATION  
(LOOKING BACK)



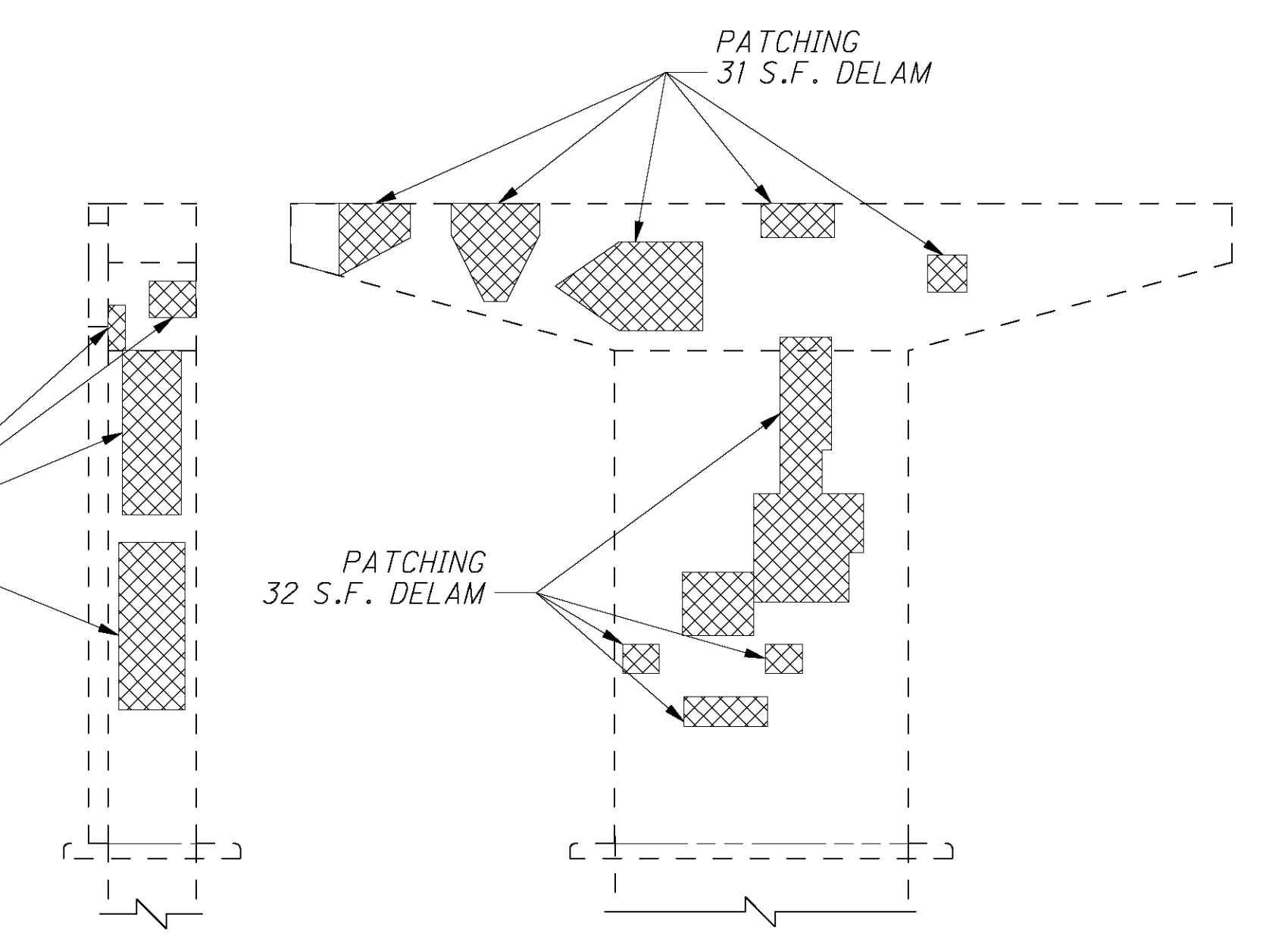
PIER 12 ELEVATION  
(LOOKING BACK)



PIER 4 ELEVATION  
(LOOKING FORWARD)



PIER 8 ELEVATION  
(LOOKING FORWARD)

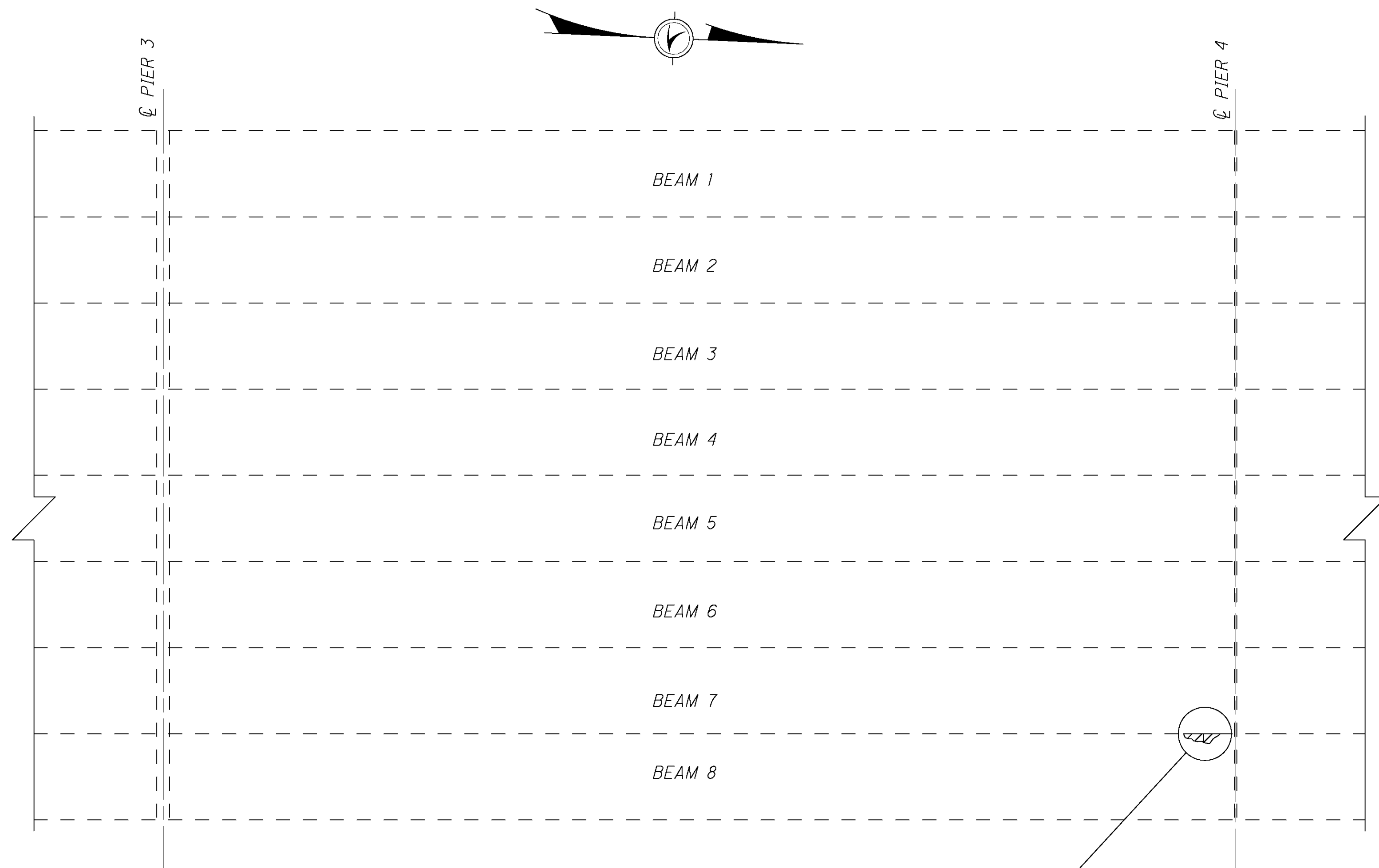


PIER 12 ELEVATION  
(LOOKING FORWARD)

ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
PIER 4	170	1.25	213
PIER 8	226	1.25	283
PIER 12	150	1.25	188

11/1/2007 10:30:55 AM BY: DAN-F  
 O:\DDOT\WAR\79938\BR100E\WAR004\_0070C\SHEETS\004\_0070BR001.DGN  
 MODEL: SHEET

**Palmer** PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 CLEVELAND, OH 44115  
 COLUMBUS, OH 43260  
 DAYTON, OH 45424  
 LEXINGTON, OH 45158  
 MARIETTA, OH 45750  
 WHEELING, OH 44793

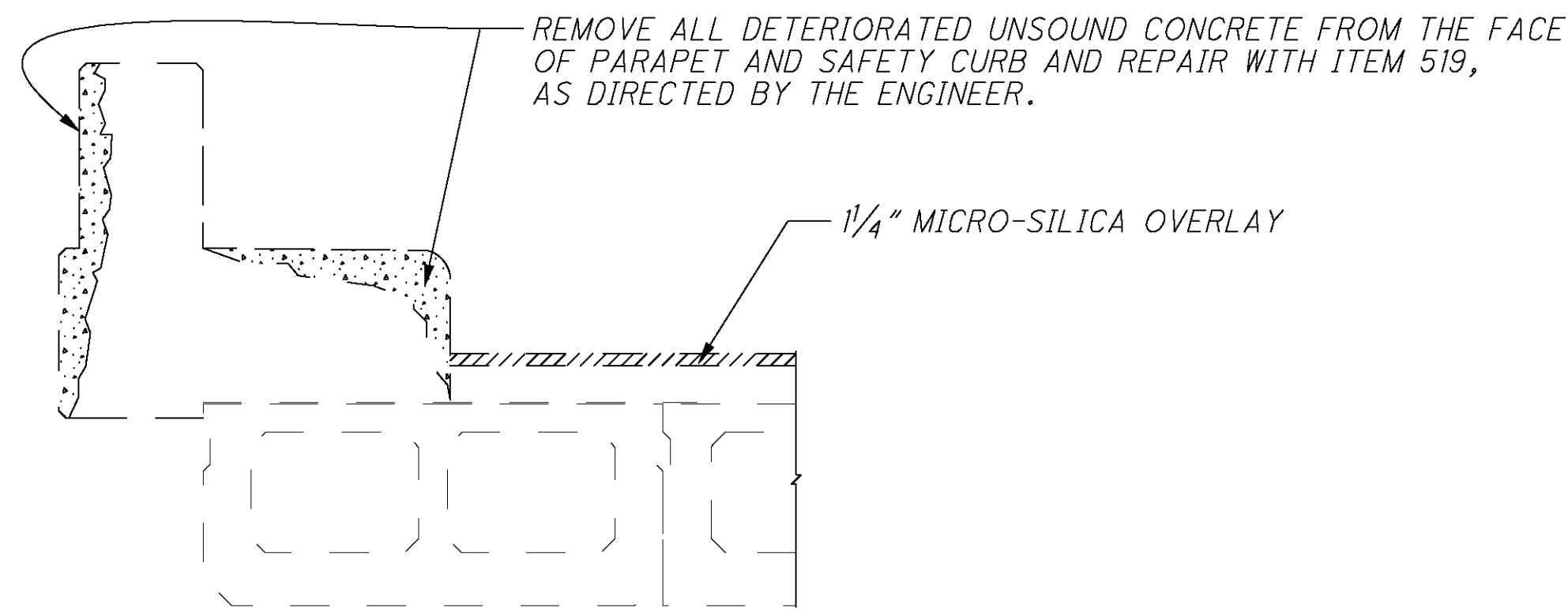


CLEAN SPALL AND SEAL WITH EPOXY URETHANE

**BEAM REPAIR DETAIL**

**NOTE:**

REMOVE ANY LOOSE CONCRETE ON UNDERSIDE OF BEAM 8, AS DIRECTED BY ENGINEER, USING HAND TOOLS AND SEAL WITH EPOXY-URETHANE. PAYMENT SHALL BE INCLUDED WITH ITEM SPECIAL-STRUCTURE, MISC: BEAM REPAIR

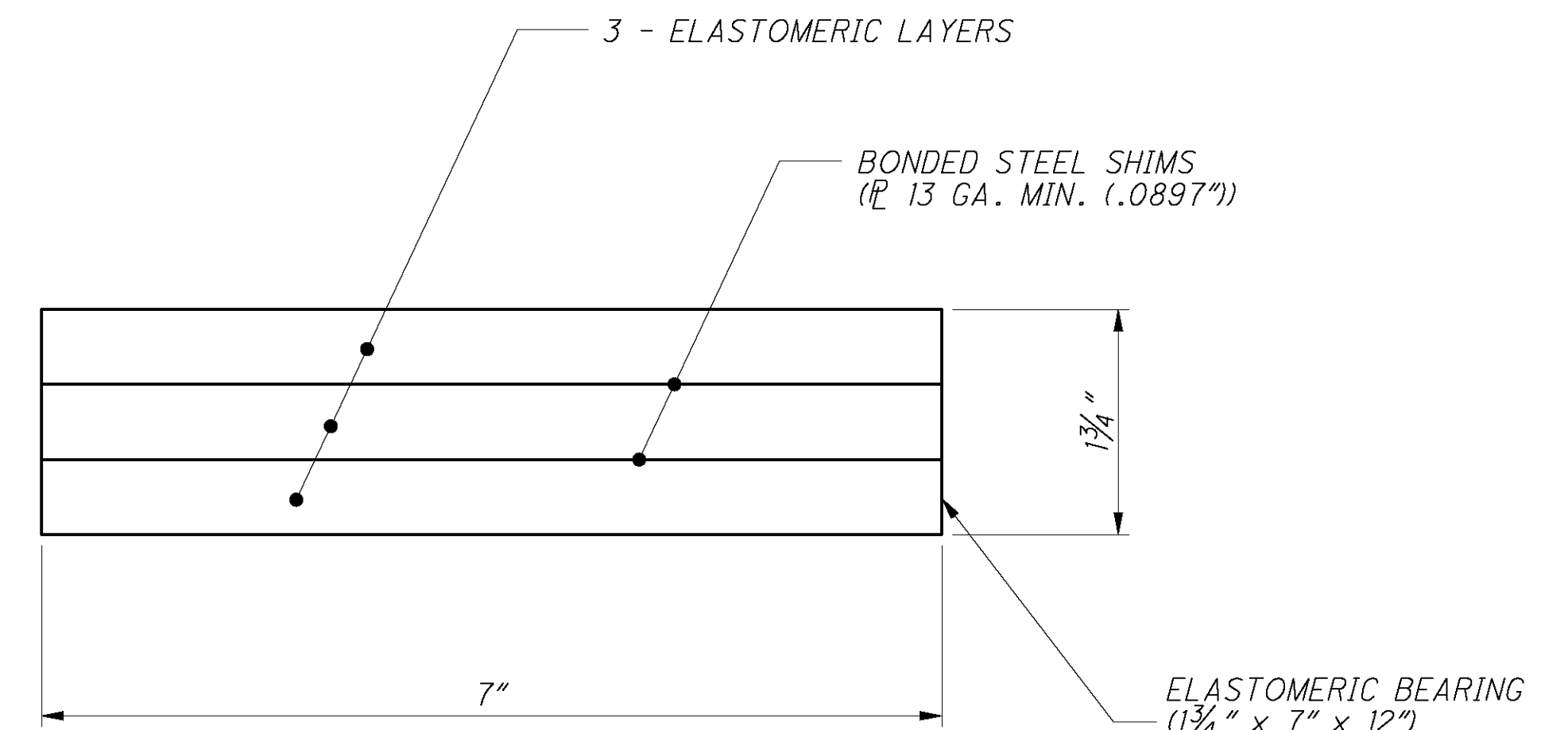


REMOVE ALL DETERIORATED UNSOUND CONCRETE FROM THE FACE OF PARAPET AND SAFETY CURB AND REPAIR WITH ITEM 519, AS DIRECTED BY THE ENGINEER.

1/4" MICRO-SILICA OVERLAY

**PARAPET DETAIL**

NOTE: APPROACH PARAPETS ARE SIMILAR



**BEARING PAD DETAIL**

**NOTES:**

ELASTOMERIC BEARING PADS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION 11, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED IN ARTICLE 18.7.4.5. OF THE AASHTO DOCUMENT LISTED ABOVE. BEARINGS WERE DESIGNED UNDER SECTION 14.6.6 OF SECTION 14, BEARINGS, DIVISION 1 DESIGN. TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS, EACH.

BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, ELASTOMERIC BEARINGS.

THIS PAD SHALL BE INSTALLED AT THE REAR ABUTMENT AT BEAM 2.

DESIGN AGENCY  
**Palmer** PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 CLEVELAND, OH 44115  
 COLUMBUS, OH 43260  
 DAYTON, OH 45424  
 LEXINGTON, OH 45158  
 MARIETTA, OH 45750  
 WHEELING, OH 44793

DESIGNED	WAH	REVIEWED	RSP	DATE	4/07
CHECKED	WAH	REVIS		STRUCTURE FILE NUMBER	5100240

DRAWN	SDW	REVIEWED	
DESIGNED	WAH	CHECKED	WAH

**SUPERSTRUCTURE DETAILS**  
 MAR-4D-0070  
 PROSPECT STREET OVER CSX RAILROAD

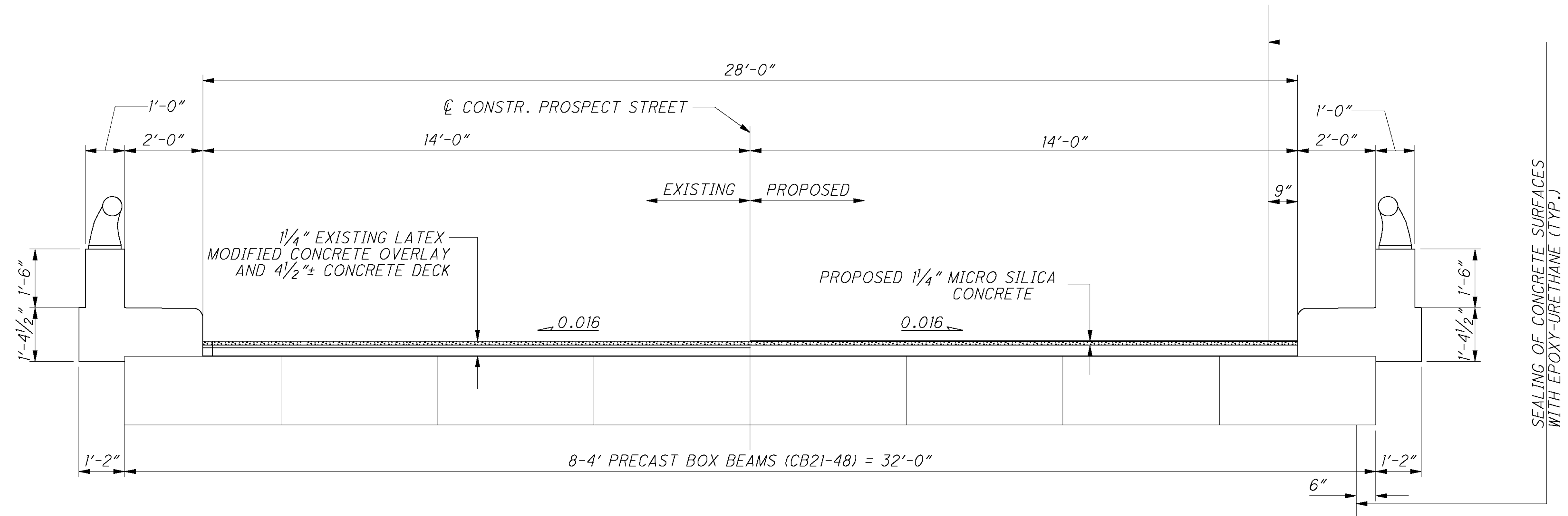
**MAR-4D-0.70**  
**MAR-95-14.36**  
 PID No. 79938

8 / 9

27  
 43

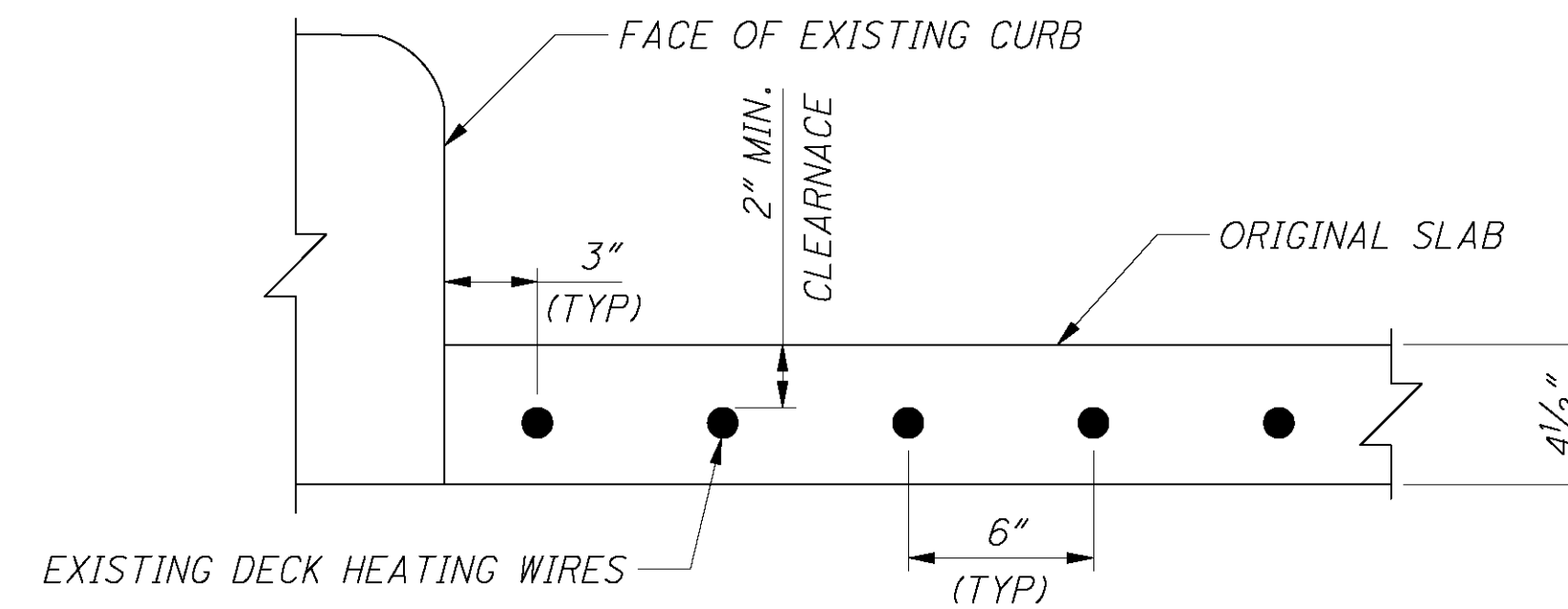
11/1/2007 10:31:01 AM BY: DAN-F  
 O:\DOT\WAR\79938\BR100E\WAR004\_0070C\SHEETS\004\_0070TS001.DGN  
 MODEL: SHEET

**Palmer** PALMER ENGINEERING  
 11300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 CLEVELAND, OH 44115



TRANSVERSE SECTION

REMOVE EXISTING LMCO USING HYDRODEMOLITION AND REPLACE WITH MSCO



EXISTING DECK HEATING WIRES

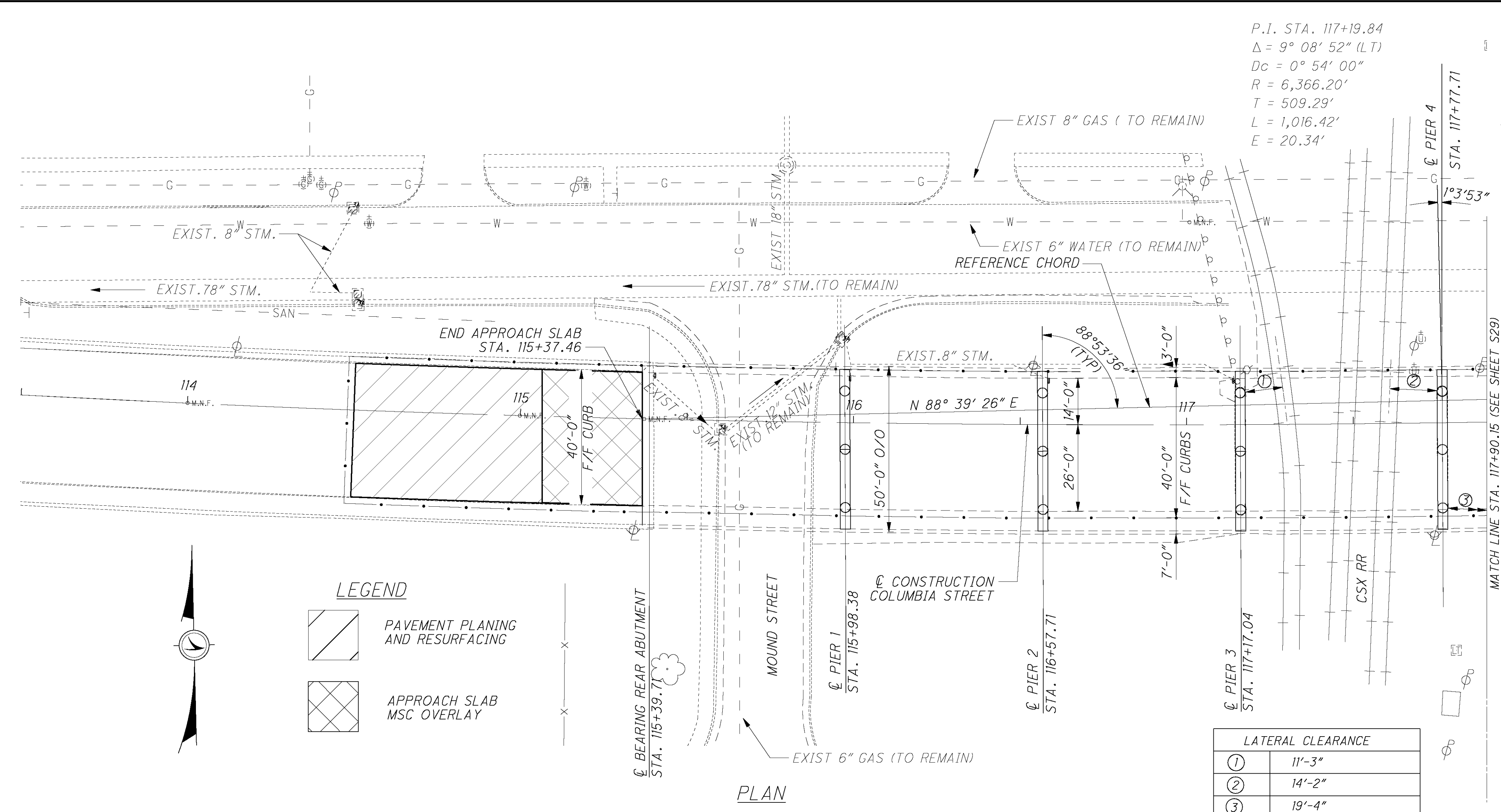
DECK HEATING WIRES ARE PRESENT IN 4 1/2" CONCRETE DECK FROM STA. 584+25.60 TO STA. 588+47.27 BUT ARE NO LONGER FUNCTIONING.

DESIGNED WAH		DESIGNED WAH	DRAWN ALZ	REVIEWED RSP	DATE 4/07	DESIGN AGENCY PALMER ENGINEERING 11300 CORNELL PARK DR CINCINNATI, OH 45242 CLEVELAND, OH 44115
CHECKED BJF		CHECKED BJF	REVISED	STRUCTURE FILE NUMBER 5100240		
<b>TRANSVERSE SECTION</b>						
MAR-4D-0070 PROSPECT STREET OVER CSX RAILROAD						
MAR-4D-0.70		MAR-95-14.36		PID No. 79938		
9 / 9		28 / 43				

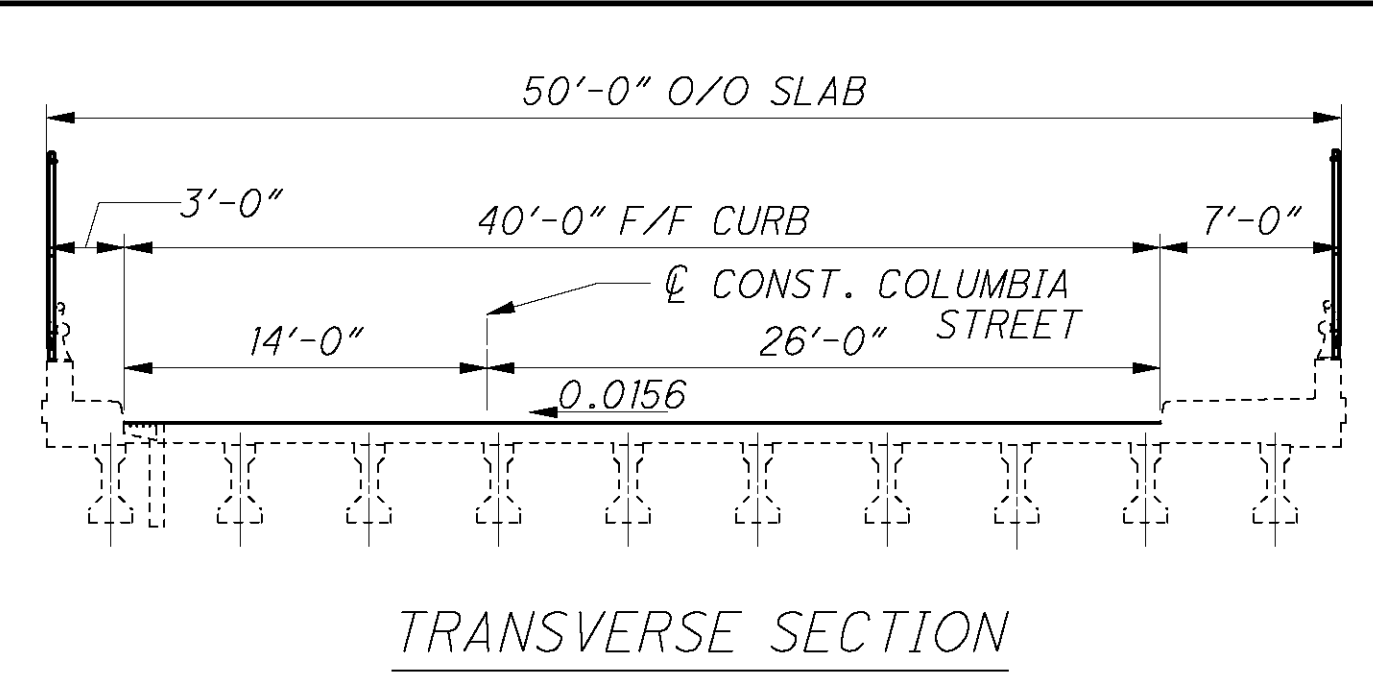


11/1/2007 10:31:09 AM BY: DAN-F  
 0:\DDOT\WAR79938\BR100E\WAR095\_1436C\SHEETS\095\_1436SP001.DGN  
 MODEL + SHEET

Palmer Engineering  
 11300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 PALMER ENGINEERING, INC. - CINCINNATI, OH 45242



P.I. STA. 117+19.84  
 $\Delta = 9^\circ 08' 52''$  (LT)  
 $Dc = 0^\circ 54' 00''$   
 $R = 6,366.20'$   
 $T = 509.29'$   
 $L = 1,016.42'$   
 $E = 20.34'$



**BENCHMARK DATA**

BM #1 STA. 124+67.50	ELEV. 958.71	OFFSET 17.94' LT
BM #2 STA. 120+14.87	ELEV. 956.68	OFFSET 10.96' LT
BM #3 STA. 110+92.84	ELEV. 954.99	OFFSET 20.18' LT

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 23

**NOTES:**  
 1.) EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.  
 2.) DATUM ADJUSTMENT: EXISTING STRUCTURE ELEVATIONS ARE 1.0'± LOWER THAN THOSE SHOWN ON THE ORIGINAL CONSTRUCTION PLANS.

**DESIGN TRAFFIC:**  
 2008 ADT = 7794      2008 ADTT = 312  
 2028 ADT = 11580      2028 ADTT = 464  
 DIRECTIONAL DISTRIBUTION = 55%

**EXISTING STRUCTURE**

TYPE: PRESTRESSED CONCRETE I-BEAM WITH CONCRETE DECK AND OVERLAY ON REINFORCED CONCRETE ABUTMENTS AND CAP AND COLUMN PIERS ON PILING.

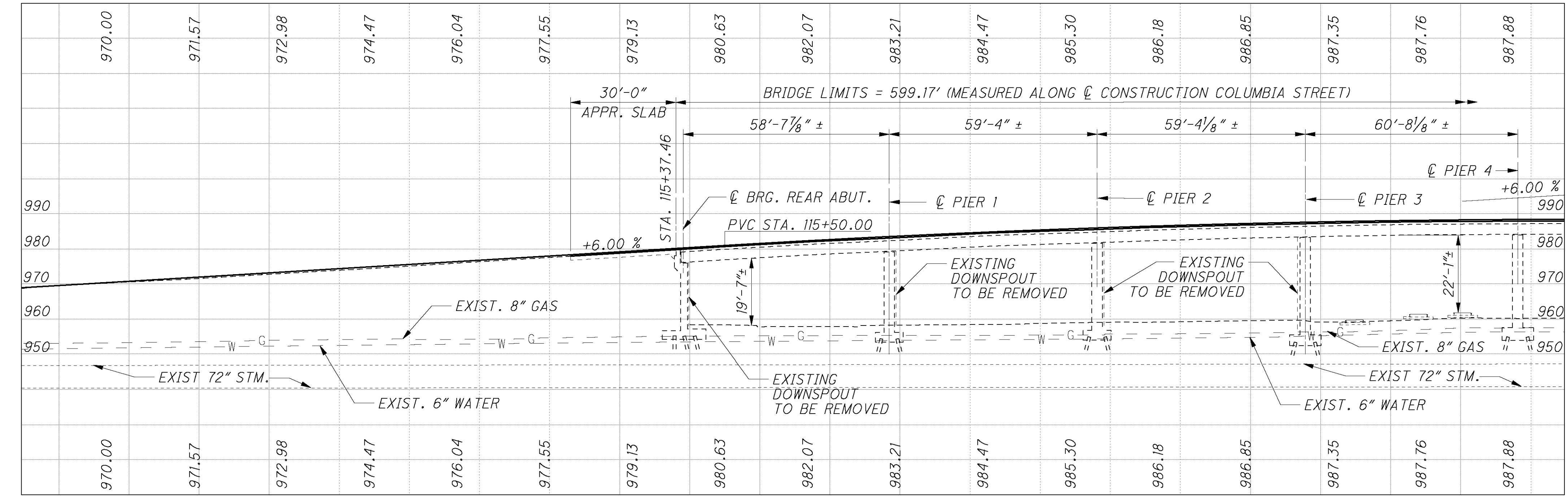
SPANS: 10 SPANS - SEE PROFILE FOR LENGTHS  
 ROADWAY: 48'-0" F/ SAFETY CURB TO F/ SIDEWALK  
 LOADING: HS20-44  
 SKEW: 1°-03'-53" L.F. WITH RESPECT TO REFERENCE LINE  
 APPROACH SLABS: AS-1-67, 30' LONG  
 WEARING SURFACE: LATEX MODIFIED CONCRETE  
 ALIGNMENT: 0°-54' CURVE LEFT  
 CROWN: NORMAL  
 STRUCTURAL FILE NUMBER: 5102561  
 DATE BUILT: 1975  
 DISPOSITION: FAIR

**PROPOSED STRUCTURE**

TYPE: EXISTING PRESTRESSED CONCRETE I-BEAM WITH EXISTING CONCRETE DECK ON EXISTING REINFORCED CONCRETE ABUTMENTS AND CAP AND COLUMN PIERS ON PILING WITH NEW 1/4" MICROSILICA CONCRETE OVERLAY FOR PROPOSED WORK SEE SHEET S2/S15

SPANS: SAME  
 ROADWAY: SAME  
 LOADING: N/A  
 SKEW: SAME  
 APPROACH SLABS: SAME  
 WEARING SURFACE: MICROSILICA CONCRETE  
 ALIGNMENT: SAME  
 CROWN: .0156 FT/FT  
 CSX AAR/DOT NO.: 228 719H  
 COORDINATES: LATITUDE: N 40°35'04"  
 LONGITUDE: W 83°08'26"

PROPOSED P.G. ELEVATIONS



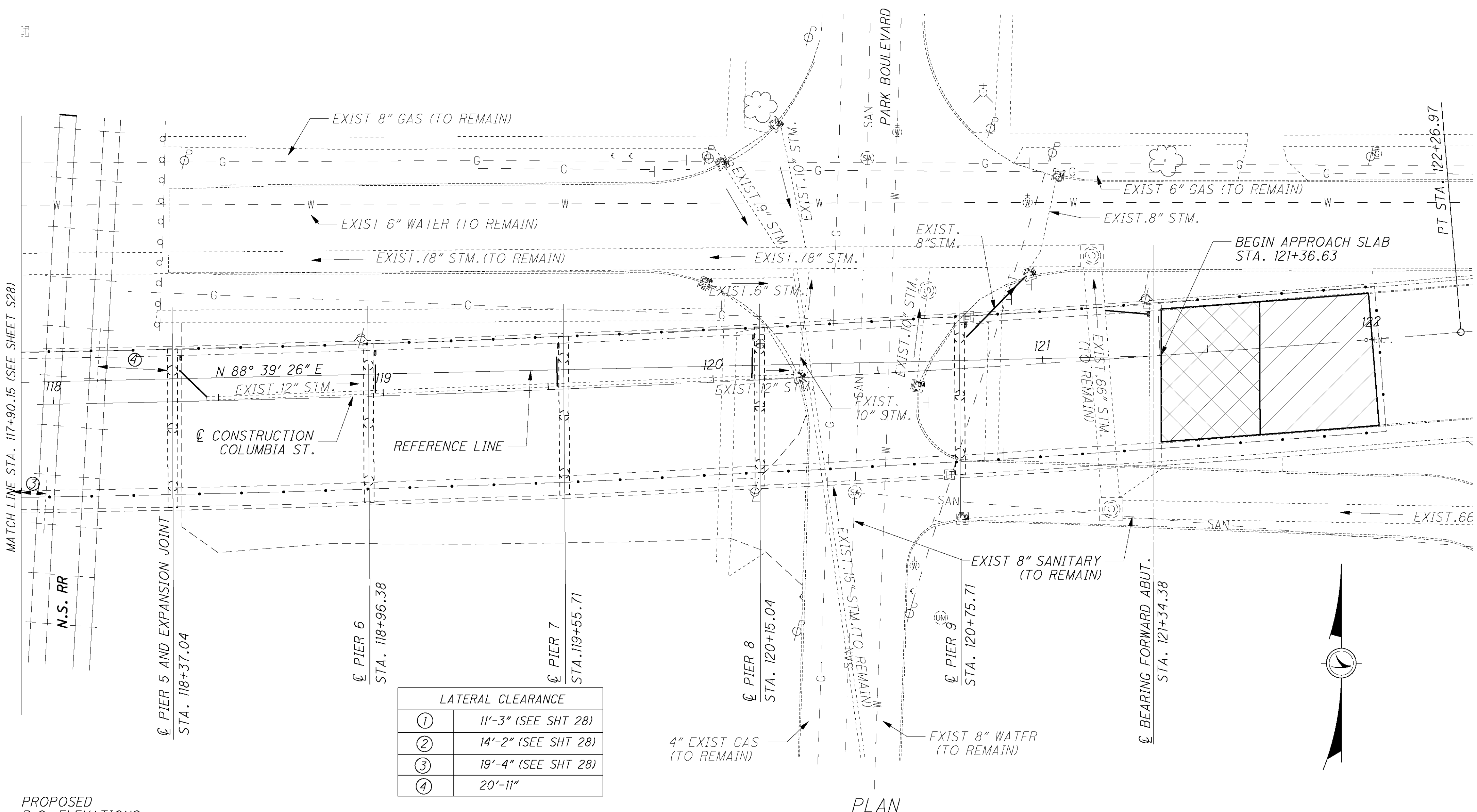
EXISTING P.G. ELEVATIONS      114+00      115+00      116+00      117+00

PROFILE ALONG C CONSTRUCTION COLUMBIA STREET

**LATERAL CLEARANCE**

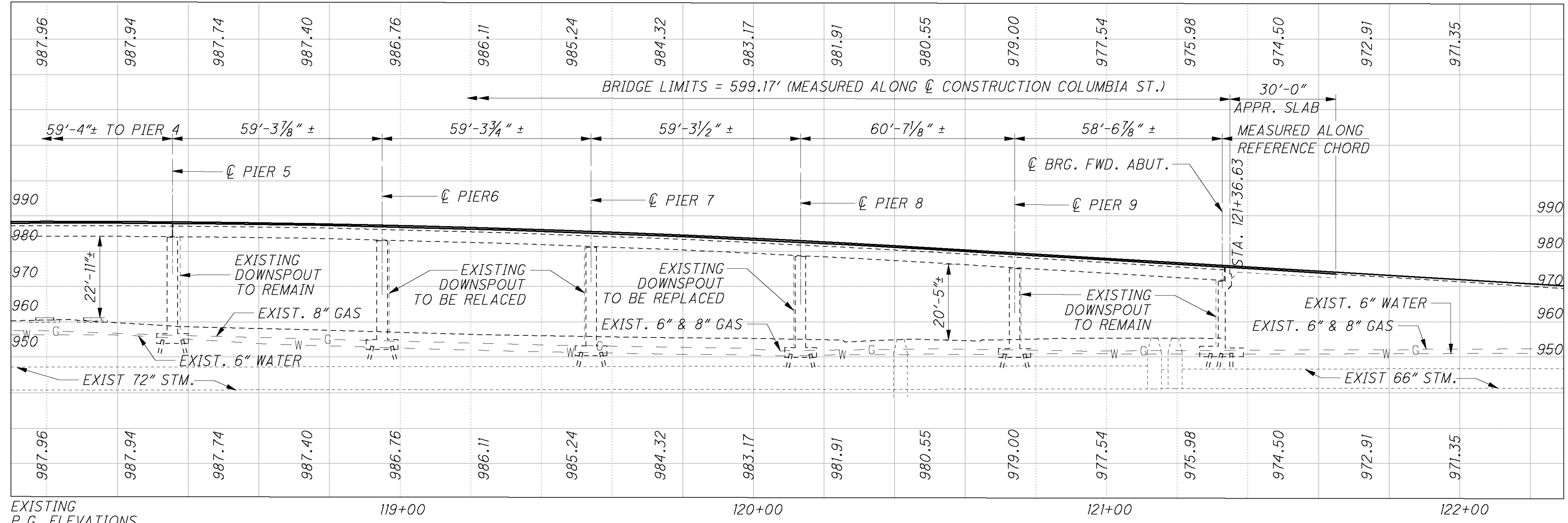
①	11'-3"
②	14'-2"
③	19'-4"
④	20'-11" (SEE SHT 29)

DESIGN AGENCY: PALMER ENGINEERING, INC. - CINCINNATI, OH 45242  
 DATE: 4/07  
 REVIEWED: RSP  
 DRAWN: VWK  
 DESIGNED: WAH  
 CHECKED: BUF  
 MARION COUNTY STA. 115+37.46  
 SITE PLAN MAR-95-1436  
 COLUMBIA STREET OVER CSX AND NS RAILROADS  
 MAR-4D-0.70  
 MAR-95-14.36  
 PID No. 79938  
 1/15  
 29/43



LATERAL CLEARANCE	
①	11'-3" (SEE SHT 28)
②	14'-2" (SEE SHT 28)
③	19'-4" (SEE SHT 28)
④	20'-11"

PROPOSED P.G. ELEVATIONS

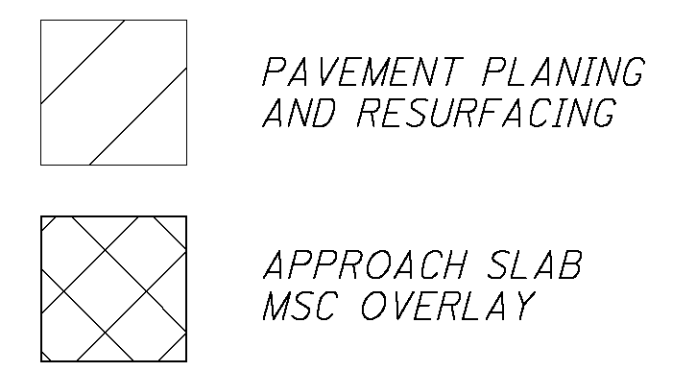


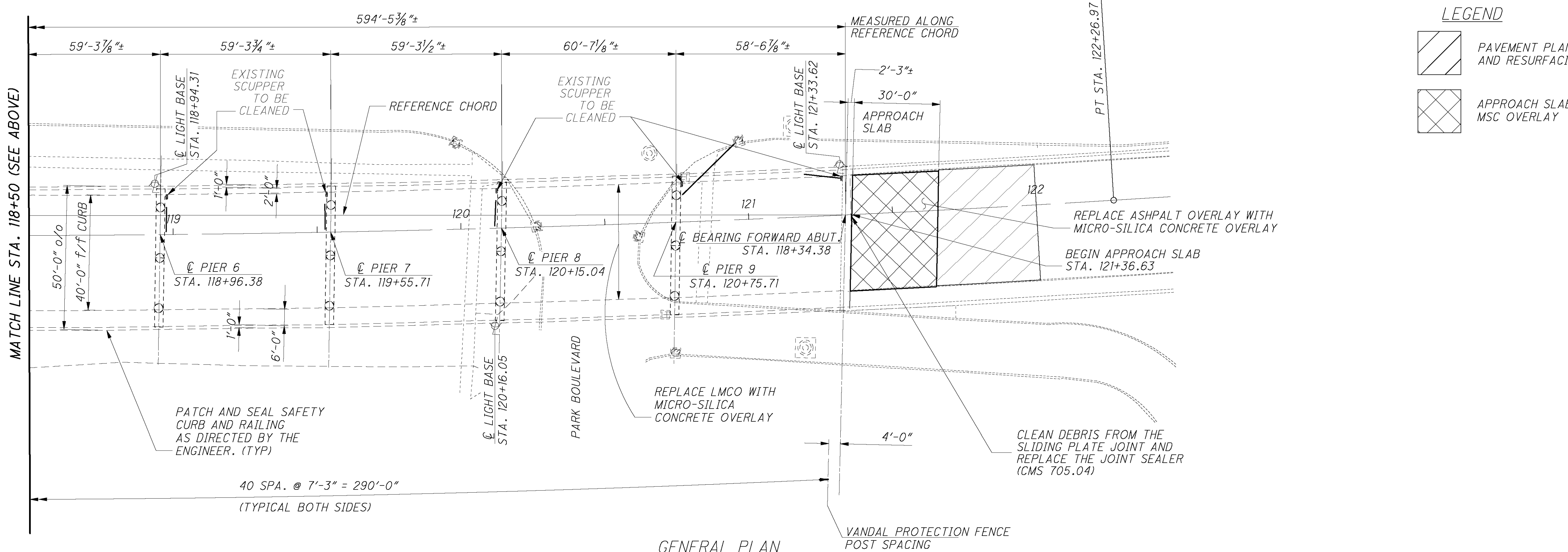
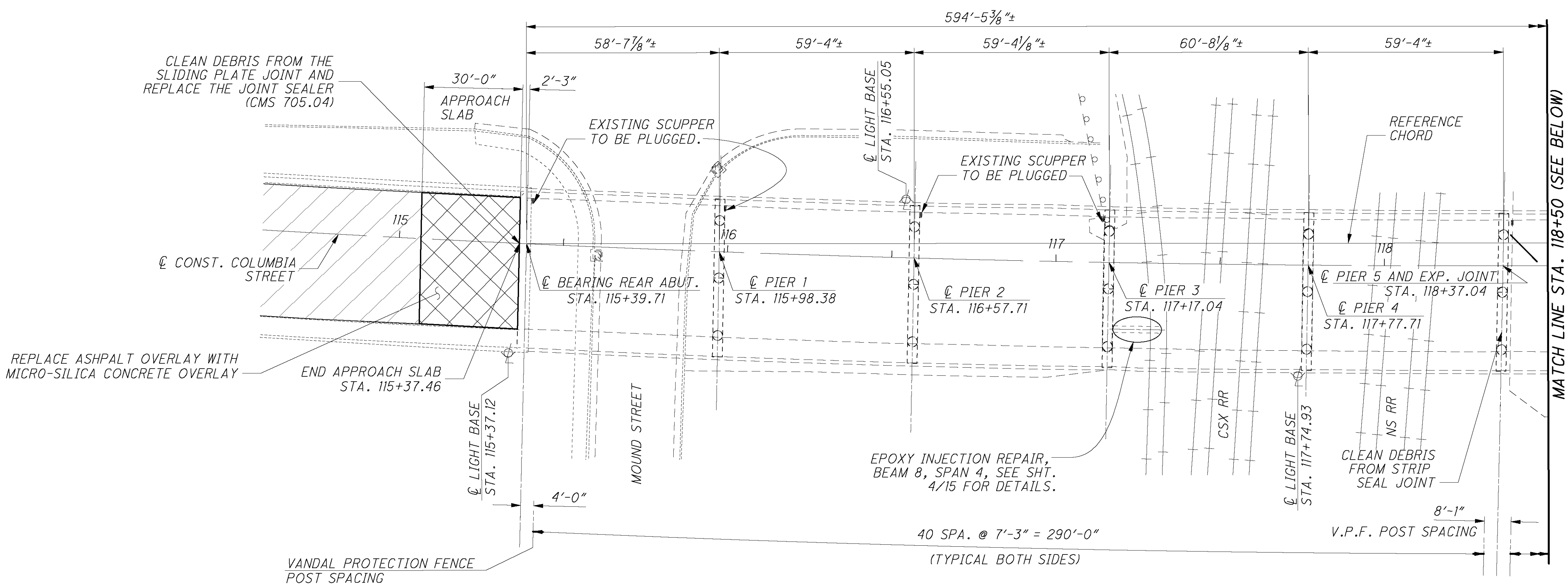
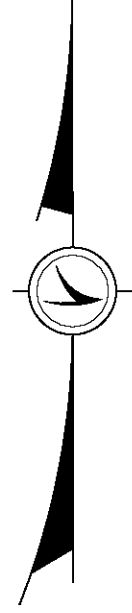
PROFILE ALONG C/C CONSTRUCTION COLUMBIA STREET

**PROPOSED WORK**

- REMOVE EXISTING LATEX MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION AND REPLACE WITH A 1 1/4" MICRO-SILICA CONCRETE OVERLAY.
- SEAL THE PARAPETS, SIDEWALK, AND SAFETY CURB WITH EPOXY-URETHANE SEALER, AS SHOWN IN THE PLANS. THE COLOR SHALL BE FEDERAL COLOR NO. 595B-17778 (LIGHT NEUTRAL).
- CLEAN SEDIMENT AND DEBRIS FROM THE SLIDING PLATE JOINTS AT BOTH ABUTMENTS AND REPLACE THE JOINT SEALER.
- CLEAN SEDIMENT AND DEBRIS FROM THE STRIP SEAL EXPANSION JOINT AT PIER 5.
- PLUG EXISTING SCUPPERS AND REMOVE DOWNSPOUTS NO LONGER NEEDED IN THE DRAINAGE SYSTEM, AS SHOWN IN THE PLANS. PLUG THE STORM DRAINS OF THE REMOVED DOWNSPOUTS BELOW THE GROUND.
- REPLACE DAMAGED OR MISSING DOWNSPOUTS, AS SHOWN IN THE PLANS. ADD CLEANOUTS TO THE EXISTING DOWNSPOUTS THAT ARE TO REMAIN. CLEAN DEBRIS FROM THE EXISTING SCUPPERS AND DOWNSPOUTS THAT ARE TO REMAIN.
- REMOVE THE EXISTING ASPHALT OVERLAY FROM THE APPROACH SLABS AND REPLACE WITH A MICRO-SILICA CONCRETE OVERLAY.
- REPAIR AREAS OF DETERIORATED CONCRETE ON THE ABUTMENTS AND PIERS WITH ITEM 519 PATCHING CONCRETE STRUCTURES, AS SHOWN IN THE PLANS.
- INSTALL BRIDGE MARKER SIGNS. FOR PAYMENT SEE 19/43 OF ROADWAY PLANS
- CLEAN THE DEBRIS FROM THE BEAM SEATS.
- MILL THE APPROACH PAVEMENT AND PLACE A NEW ASPHALT OVERLAY ON THE APPROACHES.
- REPAIR THE CRACK IN BEAM 8 WITH EPOXY INJECTION, AS SHOWN IN THE PLANS.
- INSTALL AN 8'-0" STRAIGHT VANDAL PROTECTION FENCE ON BOTH SIDES OF THE BRIDGE.

**LEGEND**





**LEGEND**

- PAVEMENT PLANING AND RESURFACING
- APPROACH SLAB MSC OVERLAY

**GENERAL PLAN**

	DESIGN AGENCY	DATE
	PALMER ENGINEERING 1300 CORNELL PARK DR CINCINNATI, OH 45242 (513) 751-1000	4/07
DRAWN	REVIEWED	STRUCTURE FILE NUMBER
WAH	RSP	5102561
CHECKED	REVISED	
BUF		

**GENERAL PLAN**  
 MAR-95-1436  
 COLUMBIA STREET OVER CSX AND NS RAILROADS

**MAR-4D-0.70**  
**MAR-95-14.36**  
**PID No. 79938**

3 / 15

31  
43



11/1/2007 10:31:29 AM BY: DAN-F  
 0:\DDOT\WAR79938\BR1DOE\WAR095\_1436C\SHEET\095\_1436GN001.DGN  
 MODEL+ SHEET  
 PALMER ENGINEERING  
 1300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 WINCHESTER, MASSACHUSETTS  
 COLUMBIA STREET OVER CSX AND NS RAILROADS

**REFERENCE SHALL BE MADE TO STANDARD DRAWING(S)**

VPF-1-90 DATED (REVISED) 07-19-02

**AND TO SUPPLEMENTAL SPECIFICATION(S):**

848 DATED (REVISED) 04-15-05

**DECK PROTECTION METHOD**

MICRO-SILICA CONCRETE OVERLAY

EPOXY SEAL CURBS AND PARAPETS WITH EPOXY-URETHANE SEALER, FEDERAL COLOR NO. 595B-17778 (LIGHT NEUTRAL).

**EXISTING STRUCTURE VERIFICATION**

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

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

**ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN**

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE THE EXISTING ASPHALT WEARING SURFACE FROM THE APPROACH SLABS DOWN TO THE CONCRETE SURFACE. PAYMENT FOR ALL LABOR AND EQUIPMENT WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN.

**ITEM 518 - STRUCTURE DRAINAGE, MISC.: 6" PIPE DOWNSPOUT REMOVED**

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING DOWNSPOUTS AND THEIR CLAMP ASSEMBLIES ATTACHED TO THE REAR ABUTMENT AND PIERS 1, 2, 3, 6, 7 AND 8. HOLES LEFT IN THE CONCRETE SUB-STRUCTURE AFTER REMOVAL OF THE CLAMP ANCHORS SHALL BE FILLED WITH AN EPOXY COMPOUND TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE MADE IN THE CONTRACT PRICE BID FOR ITEM 518-STRUCTURE DRAINAGE, MISC. ESTIMATED QUANTITY OF DOWNSPOUTS TO BE REMOVED: LINEAR FT OF DOWNSPOUTS = 172.

**ITEM 518 - STRUCTURE DRAINAGE, MISC: CLEANING SCUPPERS AND DOWNSPOUTS**

THIS SHALL APPLY TO CLEANING THE DRAINAGE SCUPPERS AND DOWNSPOUTS AT PIER 5, PIER 9, AND THE FORWARD ABUTMENT. THE CONTRACTOR MAY CLEAN THE DOWNSPOUTS USING HIGH PRESSURE WATER, OR OTHER METHOD APPROVED BY THE ENGINEER, THAT DOES NOT DAMAGE THE SCUPPERS OR DOWNSPOUTS. AFTER CLEANING, THE SCUPPERS AND DOWNSPOUTS MUST DRAIN FREELY AND TO THE APPROVAL OF THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM 518, STRUCTURE DRAINAGE, MISC. ESTIMATED QUANTITIES OF SCUPPERS AND DOWNSPOUTS TO BE CLEANED ARE: LINEAR FT OF DOWNSPOUTS = 63, NUMBER OF SCUPPERS = 3.

**ITEM 518 - DOWNSPOUT MODIFICATION 6"**

THIS ITEM SHALL INCLUDE THE INSTALLATION OF CLEANOUT FITTINGS ON THE EXISTING DOWNSPOUTS AT PIER 5, PIER 9 AND THE FORWARD ABUTMENT. PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE MADE IN THE CONTRACT BID PRICE FOR ITEM 518, DOWNSPOUT MODIFICATION 6".

**ITEM 518 - 6" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE INSTALLATION OF NEW DOWNSPOUTS WITH CLEANOUTS AND THE FITTINGS, ELBOWS, APERTURES AND CLAMP ASSEMBLIES NECESSARY TO SUITABLY REPLACE THE EXISTING DOWNSPOUTS AT PIERS 6, 7 AND 8. PAYMENT FOR THIS WORK, INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT SHALL BE MADE IN THE CONTRACT BID PRICE FOR ITEM 518, 6" PIPE DOWNSPOUTS, INCLUDING SPECIALS, AS PER PLAN.

**ITEM 519 - PATCHING CONCRETE STRUCTURES AS PER PLAN**

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

**ITEM - SPECIAL-STRUCTURE MISC.: CLEANING DEBRIS**

THIS ITEM SHALL INCLUDE THE REMOVAL OF ALL DEBRIS FROM THE EXISTING SLIDING PLATE JOINTS AT EACH ABUTMENT AND THE ELASTOMERIC STRIP SEAL JOINT AT PIER 5. IT SHALL ALSO INCLUDE THE REMOVAL OF ALL DEBRIS ON THE ABUTMENT BEAM SEATS. PAYMENT FOR THIS WORK INCLUDING ALL LABOR, MATERIALS AND EQUIPMENT WILL BE MADE IN THE CONTRACT PRICE BID FOR ITEM - SPECIAL-STRUCTURE, MISC.: CLEANING DEBRIS.

**ITEM 848 - MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE PLUGGING OF EXISTING SCUPPERS ON THE BRIDGE DECK AND EXISTING STORM DRAINS BELOW THE GROUND WITH OVERLAY MATERIAL AT THE REAR ABUTMENT AND PIERS 1 THRU 3. CONCRETE USED TO PLUG THE SCUPPERS SHALL BE FINISHED AT THE SURFACE TO MATCH FINISH, LONGITUDINAL GRADE AND CROSS SLOPE OF THE PROPOSED CONCRETE OVERLAY. CONCRETE USED TO PLUG THE STORM DRAINS SHALL BE FINISHED AT THE SURFACE OF THE SURROUNDING ASPHALT PAVEMENT. PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 848. MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN.

**RAILROAD**

DECK HYDRODEMOLITION ON SPAN 4 WILL REQUIRE FULL TIME RAILROAD FLAGGING. (CSX)  
 SEALING OF CONCRETE PARAPETS ON SPAN 4 WILL REQUIRE FULL TIME RAILROAD FLAGGING. (CSX)

AAR/DOT NO.: 228 719H

CSXT REFERENCE: MILEPOST CD-45.20/COLUMBUS SUBDIVISION  
 APPALACHIAN DIVISION/CENTRAL REGION  
 OP NO.: OH0591

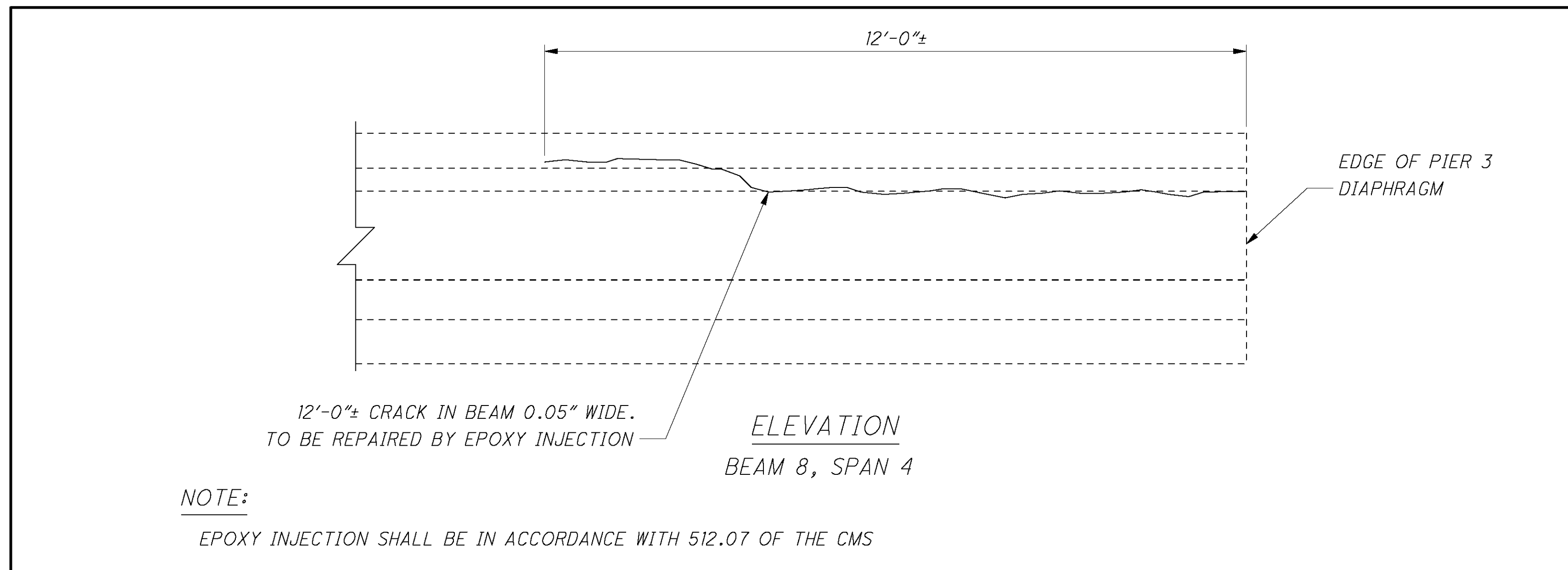
ALL REPAIR WORK OVER NORFOLK SOUTHERN TRACKS INCLUDING PATCHING AT PIERS 5 & 6 WILL REQUIRE FLAGGING. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT THE PROPOSED DEMOLITION AND REPAIR PROCEDURE TO NORFOLK SOUTHERN FOR REVIEW AND APPROVAL.

**ENVIRONMENTAL CONSIDERATIONS**

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANT, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTEWATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITH IN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL OR TREAT ANY BRIDGE STRUCTURE (e.g. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

UNAVOIDABLE CUTTING OF ANY TREES WHICH MAY PROVIDE SUITABLE ROOSTING OR BROOD-REARING HABITAT FOR THE INDIANA BAT (i.e. LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES, OR CAVITIES) WILL BE PERFORMED ONLY BEFORE APRIL 15 OR AFTER SEPTEMBER 15 WHEN THE SPECIES WOULD NOT BE USING SUCH HABITAT.

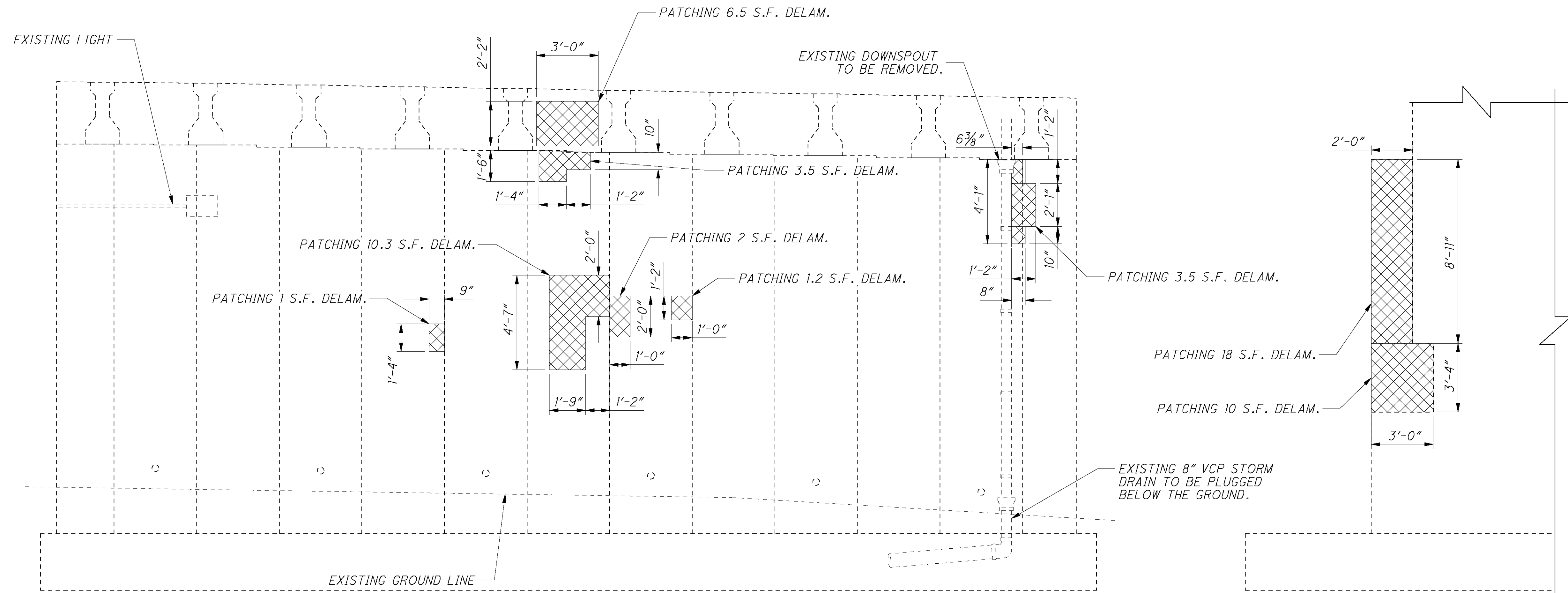
HOURS OF CONSTRUCTION EQUIPMENT OPERATION WILL BE FROM 8am TO 6pm.



DESIGN AGENCY <b>Palmer Engineering</b> 1300 CORNELL PARK DR CINCINNATI, OH 45242 WINCHESTER, MASSACHUSETTS	DATE	4/07
	REVIEWED	RSP
STRUCTURE FILE NUMBER	5102561	
DESIGNED	WAH	CHECKED
DRAWN	KJD	REVISED
<b>STRUCTURE GENERAL NOTES</b> MAR-95-1436 COLUMBIA STREET OVER CSX AND NS RAILROADS		
<b>MAR-4D-0.70</b> <b>MAR-95-14.36</b> PID No. 79938	4 / 15 32 / 43	

COMPUTED BY: WAH DATE: 1-11-07  
 CHECKED BY: CEJ DATE: 8-2-07

ITEM	ITEM EXT.	GRAND TOTAL (100% STATE)	UNIT	DESCRIPTION	REAR ABUT.	FWD. ABUT.	PIERS	SUPER	GENERAL	SHEET REF.
202	23501	267	SQ YD	WEARING COURSE REMOVED, AS PER PLAN					267	4/15
512	10100	1809	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	100	89		1620		
512	10600	12	FT	CONCRETE REPAIR BY EPOXY INJECTION				12		4/15
516	31000	80	FT	JOINT SEALER				80		
518	43301	78	FT	6" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN			78			4/15
518	51300	3	EACH	DOWNSPOUT MODIFICATION: 6" PIPE		1	2			4/15
518	62100	63	FT	STRUCTURE DRAINAGE, MISC.: CLEANING SCUPPERS AND DOWNSPOUTS		16	47			4/15
518	62100	172	FT	STRUCTURE DRAINAGE, MISC.: 6" PIPE DOWNSPOUT REMOVED	17		155			4/15
519	11101	3188	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	70	135	339	2644		4/15
SPECIAL	53000200	LUMP		STRUCTURE, MISC.: CLEANING DEBRIS					LUMP	4/15
SPECIAL	60739910	1176	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC				1176		15/15
848	10001	2930	SQ YD	MICRO-SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION (1 1/4" THICK), AS PER PLAN				2663	267	4/15
848	20000	2663	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION				2663		
848	30000	148	CU YD	MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS) MATERIAL ONLY				148		
848	50000	199	SQ YD	HAND CHIPPING				199		
848	50100	LUMP		TEST SLAB					LUMP	
848	50200	38	CU YD	FULL DEPTH REPAIR				38		
848	50320	2663	SQ YD	EXISTING CONCRETE OVERLAY REMOVED, 1 1/4" NOMINAL THICKNESS				2663		
848	50340	1989	SQ YD	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY				1989		

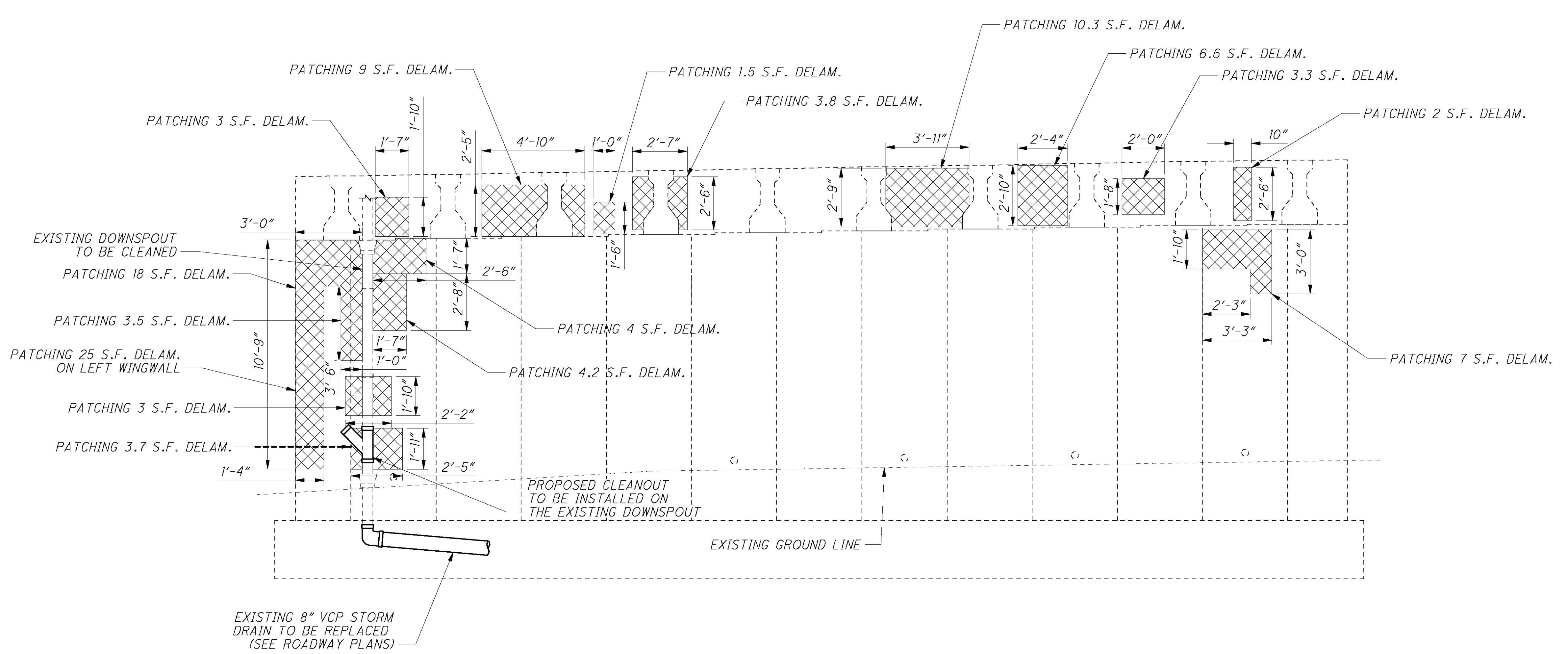


REAR ABUTMENT ELEVATION

LEFT WINGWALL

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
REAR ABUTMENT	56	1.25	70

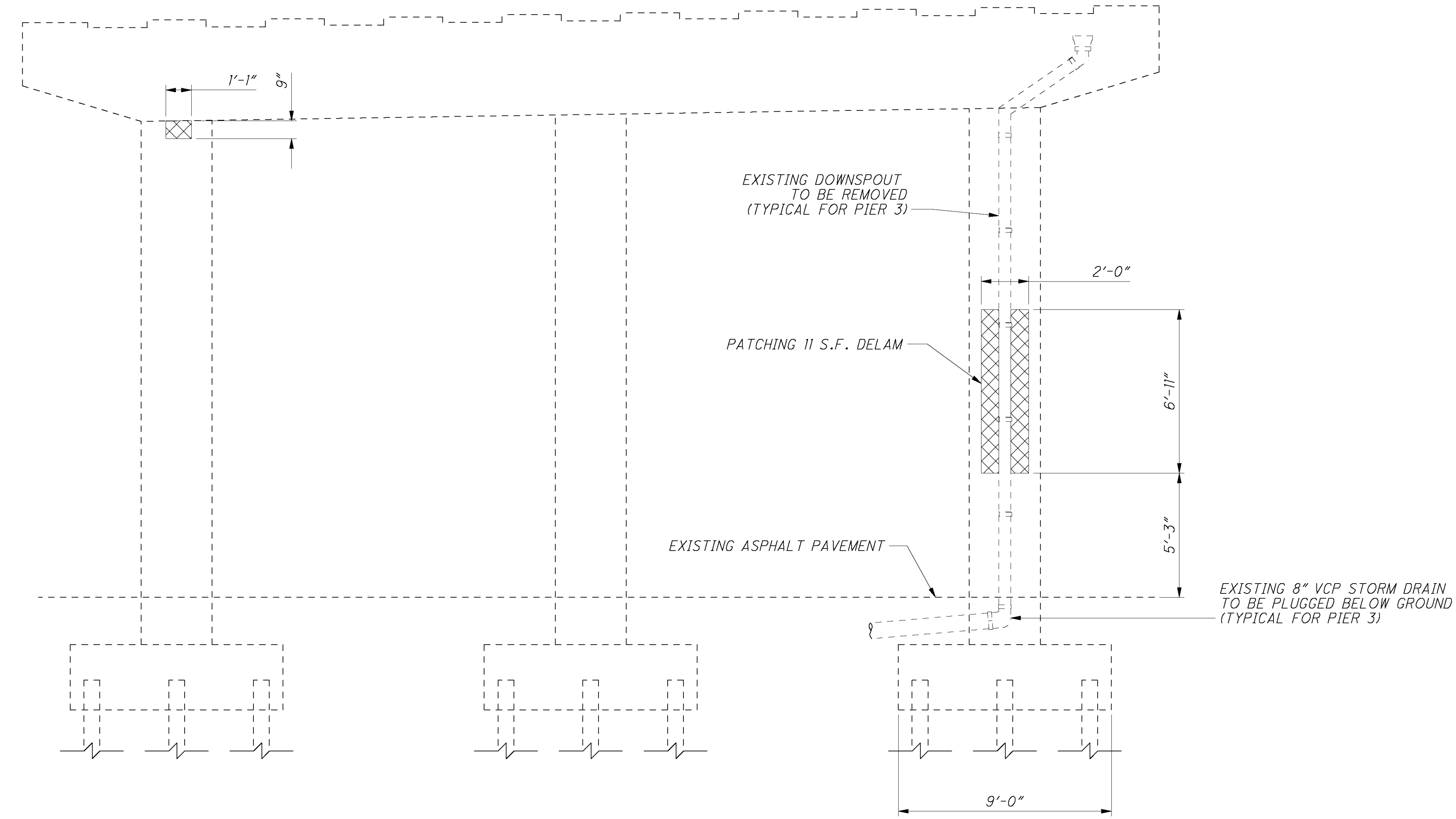




FORWARD ABUTMENT ELEVATION

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
FWD ABUTMENT	108	1.25	135





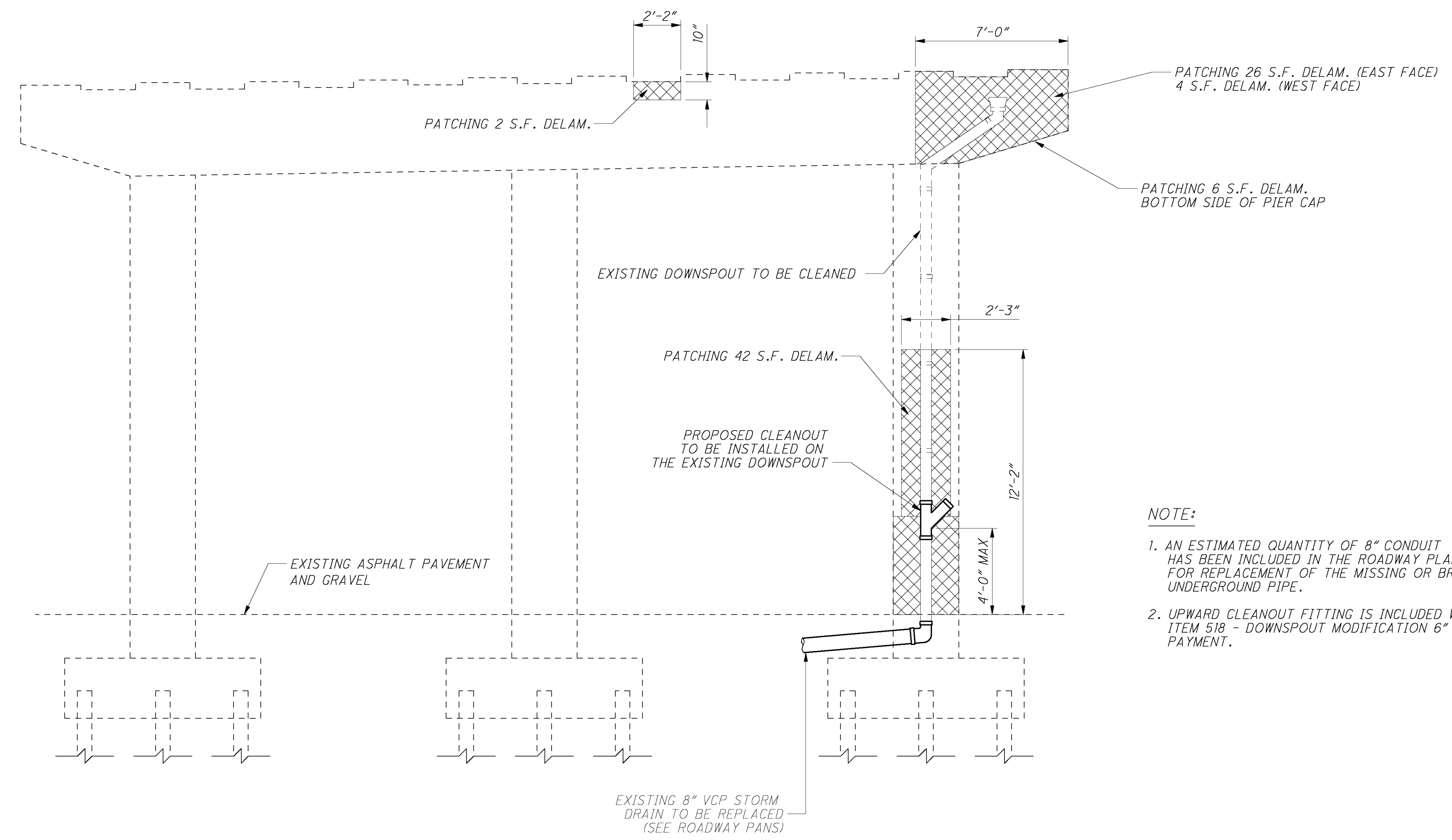
PIER 2 ELEVATION VIEW  
 (LOOKING BACK)

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
P2	12	1.25	15



11/1/2007 10:31:48 AM BY: DAN-F  
 O:\DDOT\WAR\79938\BR1100E\WAR095\_1436C\SHEETS\095\_1436P1003.DGN  
 MODEL: SHEET

**Palmer** PALMER ENGINEERING  
 11300 CORNELL PARK DR  
 CINCINNATI, OH 45242  
 CLEVELAND, OH 44130



**NOTE:**

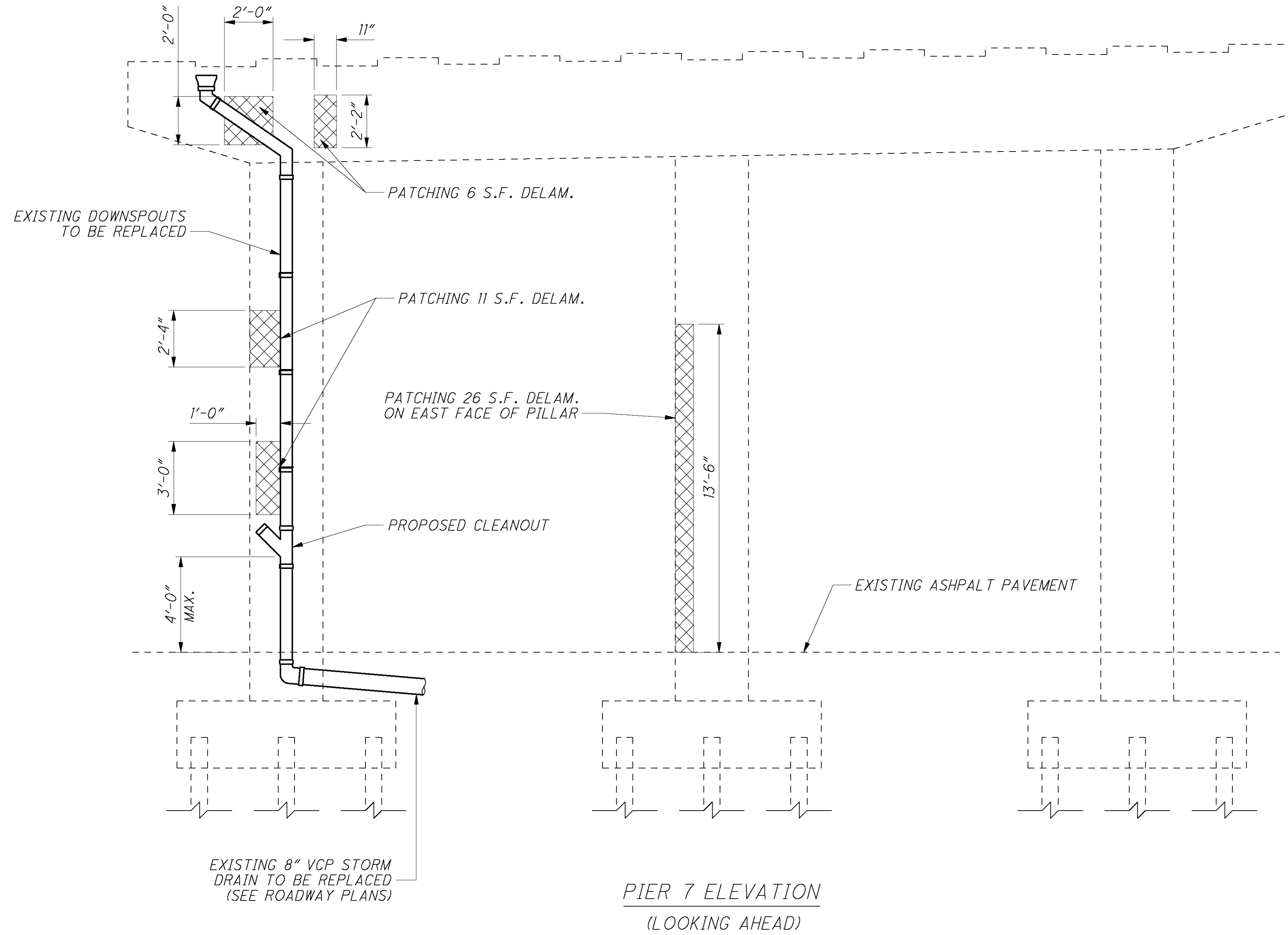
1. AN ESTIMATED QUANTITY OF 8" CONDUIT HAS BEEN INCLUDED IN THE ROADWAY PLANS FOR REPLACEMENT OF THE MISSING OR BROKEN UNDERGROUND PIPE.
2. UPWARD CLEANOUT FITTING IS INCLUDED WITH ITEM 518 - DOWNSPOUT MODIFICATION 6" FOR PAYMENT.

PIER 5 ELEVATION VIEW  
 (LOOKING BACK)

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
P5	80	1.25	100

PALMER ENGINEERING 11300 CORNELL PARK DR CINCINNATI, OH 45242 CLEVELAND, OH 44130	DESIGN AGENCY	DATE	REVIEWED	DRAWN	DESIGNED		
	PALMER ENGINEERING 11300 CORNELL PARK DR CINCINNATI, OH 45242 CLEVELAND, OH 44130	4/07	RSP	KLF	WAH		
	STRUCTURE FILE NUMBER	REVISED	CHECKED	BUF			
	5102561						
<b>PIER 5 DETAIL</b> MAR-95-1436 COLUMBIA STREET OVER CSX AND NS RAILROADS							
MAR-4D-0.70 MAR-95-14.36 PID No. 79938							
10 / 15							
<table border="1"> <tr> <td>38</td> </tr> <tr> <td>43</td> </tr> </table>						38	43
38							
43							





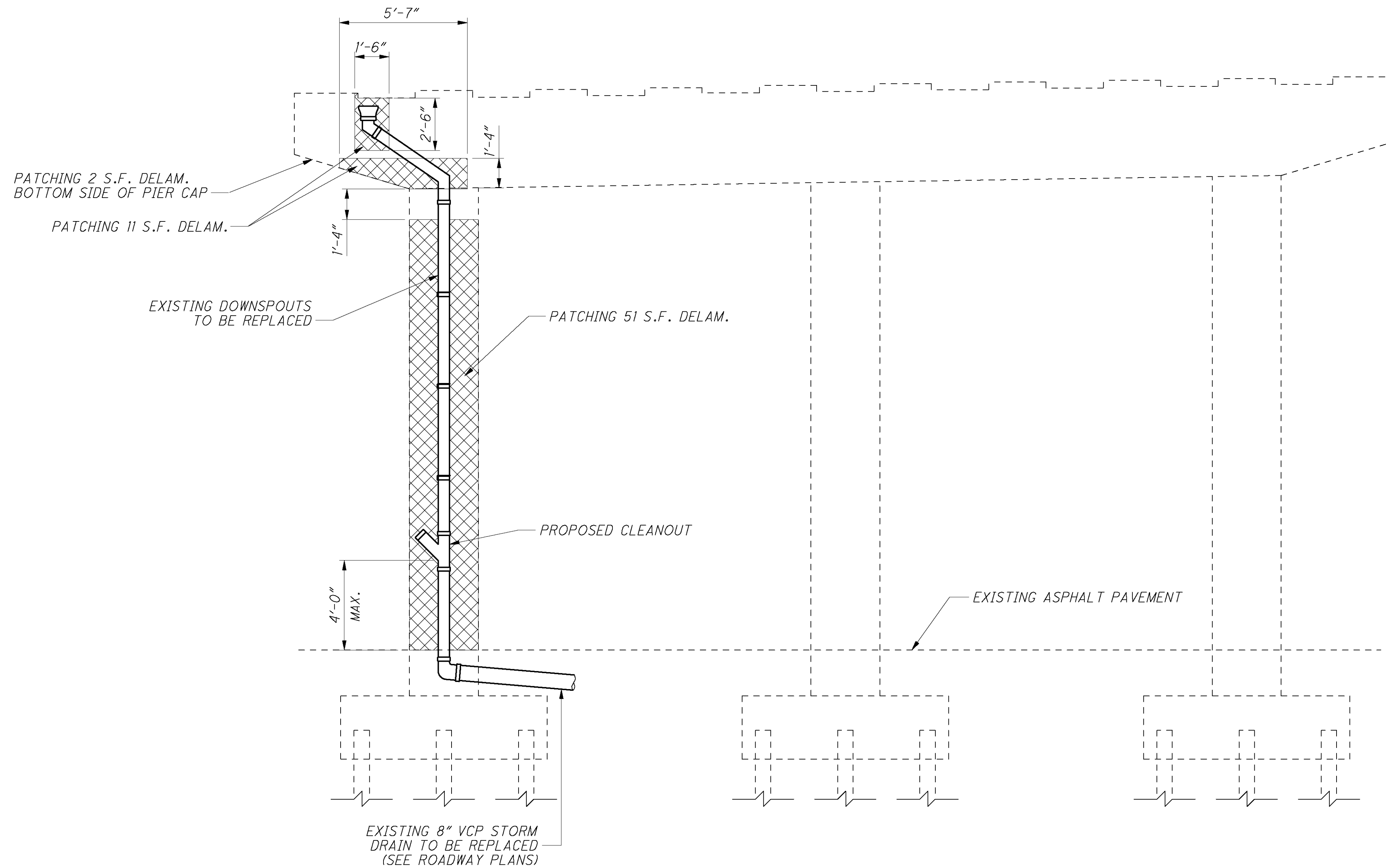
**NOTE:**

THE DOWNSPOUTS SHALL BE REPLACED IN A CONFIGURATION SIMILAR TO THE EXISTING DOWNSPOUTS. THIS SHALL BE PAID FOR UNDER ITEM 519 - 6" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN.

AN ESTIMATED QUANTITY OF 8" CONDUIT HAS BEEN INCLUDED IN THE ROADWAY PLANS FOR REPLACEMENT OF THE MISSING OR BROKEN UNDERGROUND PIPE.

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE

LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
PIER 7	43	1.25	54



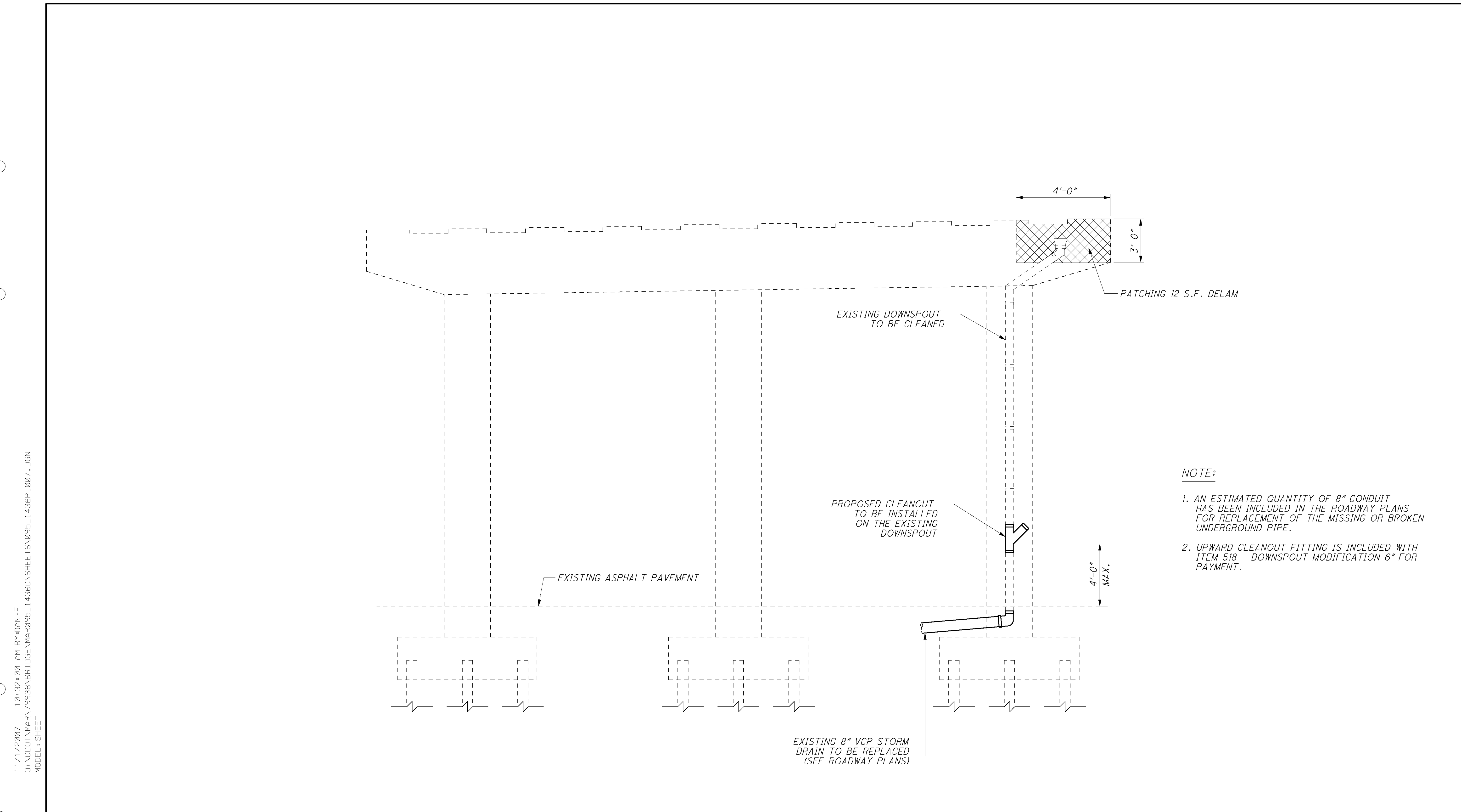
PIER 8 ELEVATION  
 (LOOKING AHEAD)

**NOTE:**  
 THE DOWNSPOUTS SHALL BE REPLACED IN A CONFIGURATION SIMILAR TO THE EXISTING DOWNSPOUTS. THIS SHALL BE PAID FOR UNDER ITEM 519 - 6" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN.  
 AN ESTIMATED QUANTITY OF 8" CONDUIT HAS BEEN INCLUDED IN THE ROADWAY PLANS FOR REPLACEMENT OF THE MISSING OR BROKEN UNDERGROUND PIPE.

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE

LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
PIER 8	64	1.25	80



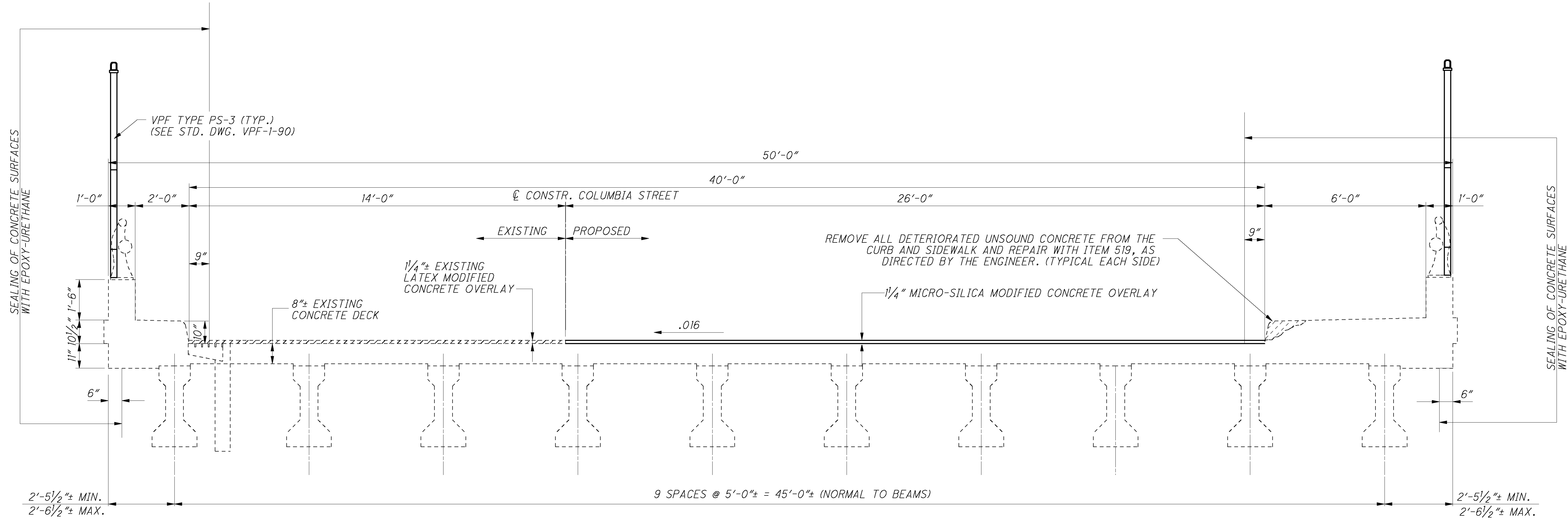


PIER 9 ELEVATION VIEW  
 (LOOKING BACK)

- NOTE:**
1. AN ESTIMATED QUANTITY OF 8" CONDUIT HAS BEEN INCLUDED IN THE ROADWAY PLANS FOR REPLACEMENT OF THE MISSING OR BROKEN UNDERGROUND PIPE.
  2. UPWARD CLEANOUT FITTING IS INCLUDED WITH ITEM 518 - DOWNSPOUT MODIFICATION 6" FOR PAYMENT.

PIER CONCRETE ITEM 519 PATCHING - SUMMARY TABLE			
LOCATION	MEASURED QTY (S.F.)	CONTINGENCY FACTOR	TOTAL (S.F.)
P9	12	1.25	15

<b>MAR-4D-0.70</b> <b>MAR-95-14.36</b> <b>PID No. 79938</b>	<b>PIER 9 DETAIL</b> MAR-95-1436 COLUMBIA STREET OVER CSX AND NS RAILROADS		DESIGNED WAH	CHECKED BUF	DRAWN KLF	REVISED	REVIEWED RSP	DATE 4/07	STRUCTURE FILE NUMBER 5102561	DESIGN AGENCY PALMER ENGINEERING 11300 CORNELL PARK DR CINCINNATI, OH 45242 CLEVELAND • DAYTON • COLUMBUS • OHIOVILLE
	14	15	42 43							



TRANSVERSE SECTION

ITEM 848 EXISTING CONCRETE OVERLAY REMOVED USING HYDRODEMOLITION.

<b>MAR-4D-0.70</b> <b>MAR-95-14.36</b> PID No. 79938	<b>TRANSVERSE SECTION</b> MAR-95-1436 COLUMBIA STREET OVER CSX AND NS RAILROADS		DESIGNED WAH	CHECKED BJF	DRAWN ALZ	REVISED	REVIEWED RSP	DATE 4/07	DESIGN AGENCY PALMER ENGINEERING 1300 CORNELL PARK DR CINCINNATI, OH 45242 CINCINNATI, OH 45242
			STRUCTURE FILE NUMBER 5102561						