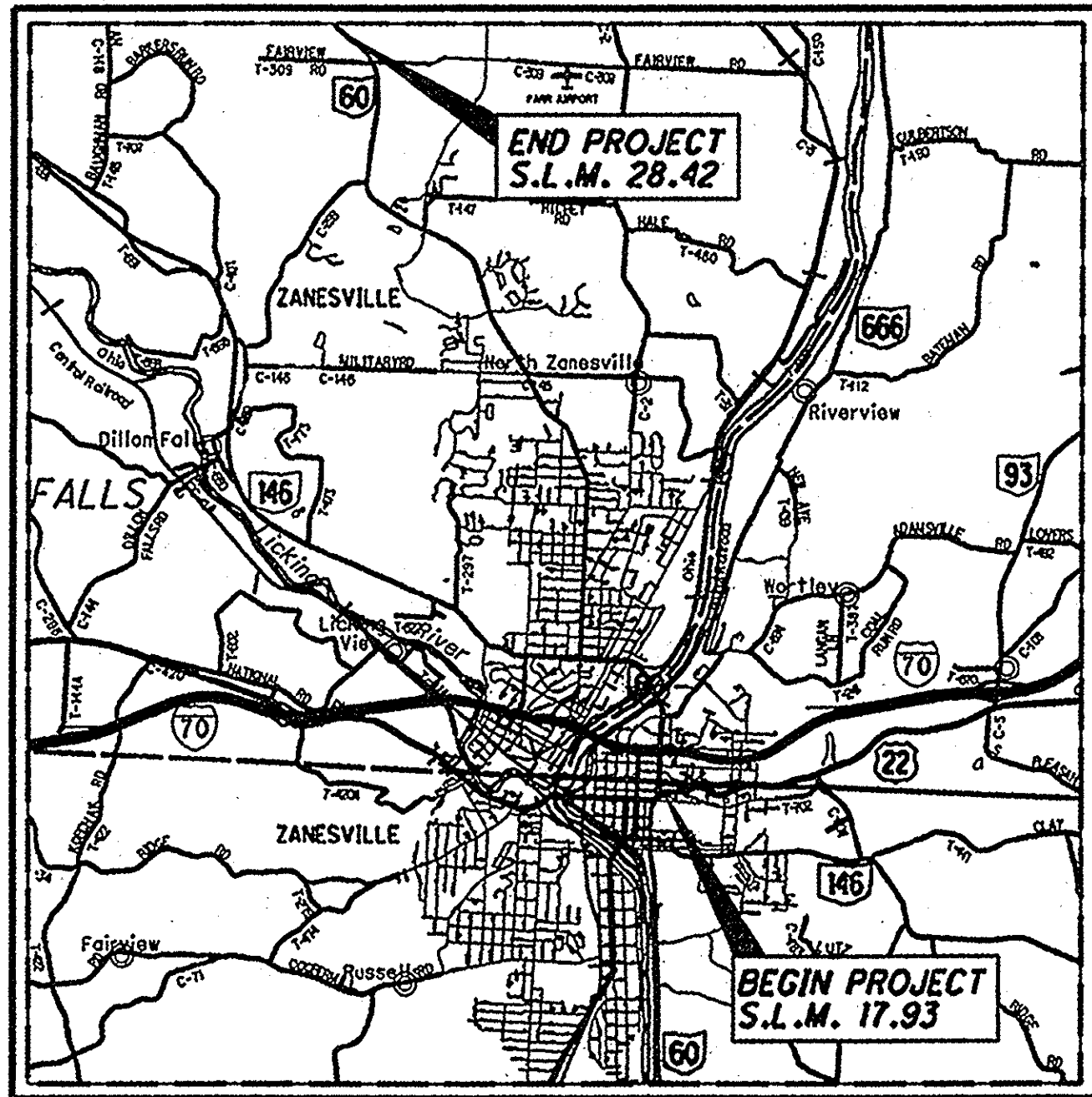
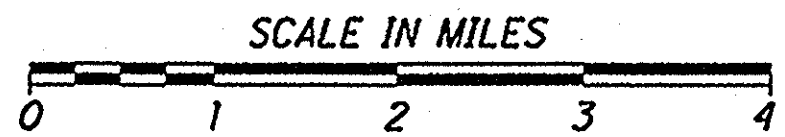


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
MUS-60-17.93
CITY OF ZANESVILLE
FALLS TOWNSHIP
MUSKINGUM COUNTY



LOCATION MAP

LATITUDE: 39°57'31" N LONGITUDE: 82°00'36" W



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

DESIGN DESIGNATION

CURRENT ADT (2011)	27,850
DESIGN YEAR ADT (2021)	30,100
DESIGN HOURLY VOLUME (2021)	2,709
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	11%
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE REQUIRED

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:
Ohio Department of Transportation
Dist. 5

INDEX OF SHEETS:

Title Sheet	1
Typical Sections	2-15
General Notes	16-18
General Summary	19
Calculations	20-29
Plan Sheets	30-108
Traffic Control Quantities	109-121

PROJECT DESCRIPTION

PAVEMENT PLANING AND RESURFACING
S.R. 60 CORRIDOR THROUGH THE CITY OF ZANESVILLE
FROM MAPLE ST. TO THE NORTHERN CORP., INCLUDING
TO S.L.M. 28.42.

PROJECT EARTH DISTURBED AREA: 0.44 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: NA

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.

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

ENGINEERS SEAL:	STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
 SIGNED: <i>Heather A. Gilbert</i> DATE: 2-28-2011	BP-3.1 10/19/07	800 4/15/11
	BP-4.1 7/16/04	832 5/5/09
	BP-7.1 10/15/10	
	MT-35.10 4/20/01	
	MT-95.31 7/17/09	TC-65.10 1/21/05
	MT-95.32 7/17/09	TC-65.11 1/21/05
	MT-101.90 1/16/09	TC-71.10 1/21/11
	MT-105.10 1/16/09	TC-82.10 1/21/11
		SPECIAL PROVISIONS

APPROVED *[Signature]*
DATE 3/17/11 DISTRICT DEPUTY DIRECTOR

APPROVED *[Signature]*
DATE 3-25-11 DIRECTOR, DEPARTMENT OF TRANSPORTATION

MUS - SR-60-17.93
110394 PID - 79622
Dist 5 6/16/2011
Contract Proposal available
@www.contracts.dot.
state.oh.us/home

FEDERAL PROJECT NO.
E050965

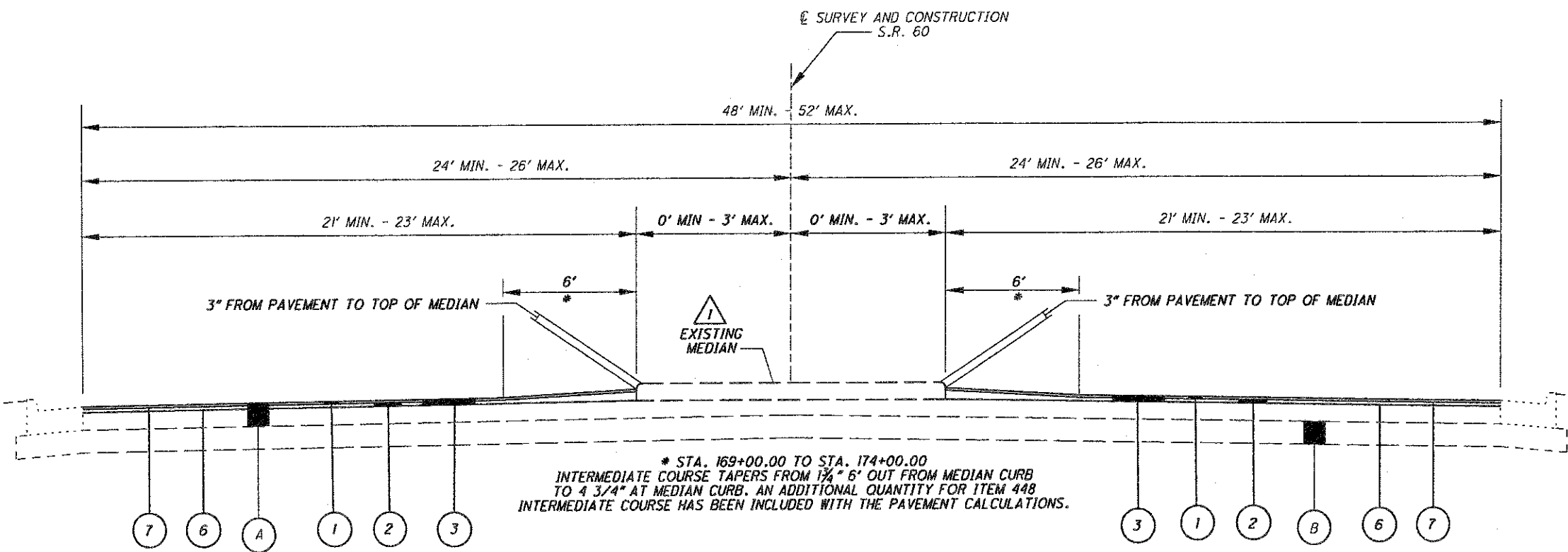
PID NO.
79622

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

MUS-60-17.93

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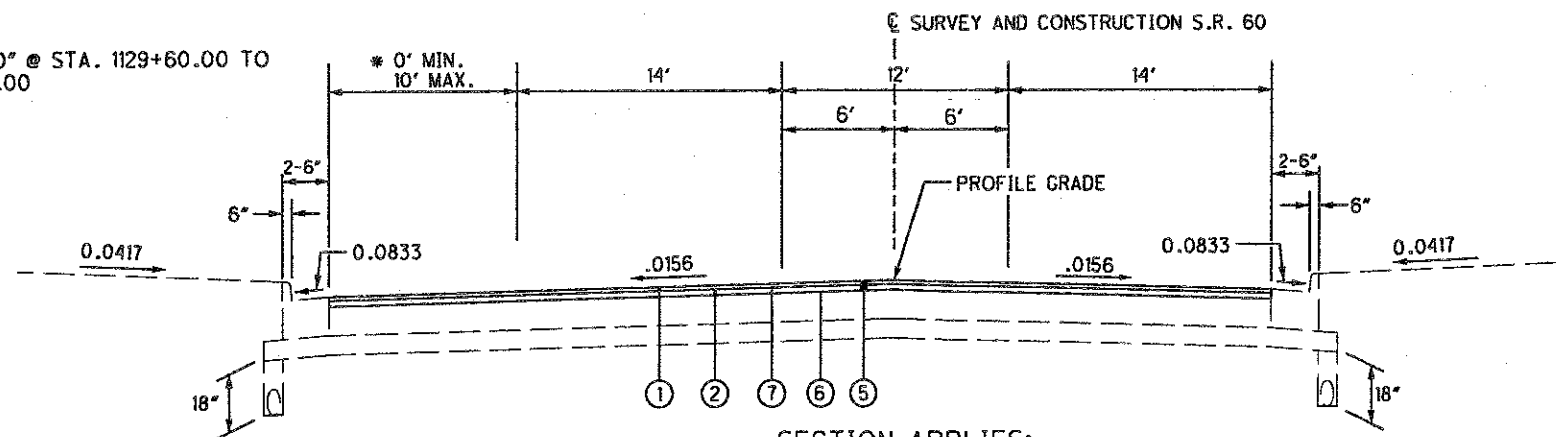


STA. 169+00.00 TO STA. 174+00.00 = 500.00 FT.

TAPERS FROM 2' RT. @ STA. 169+00.00 TO 6' LT.
@ STA. 169+20.00. 6' FROM STA. 169+20.00 TO STA. 174+00.00

- ① ITEM 448 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
- ② ITEM 448 1 1/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22
- ③ ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
- ④ ITEM 407 TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y.
- ⑤ ITEM 407 TACK COAT @ 0.075 GAL./S.Y.
- ⑥ ITEM 407 TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
- ⑦ ITEM 407 TACK COAT, TRACKLESS TACK, SURFACE COURSE
- (A) 9% ASPHALT CONCRETE
- (B) 6% AGGREGATE BASE

* VARIES FROM 10'-0" @ STA. 1129+60.00 TO
0' @ STA. 1132+50.00

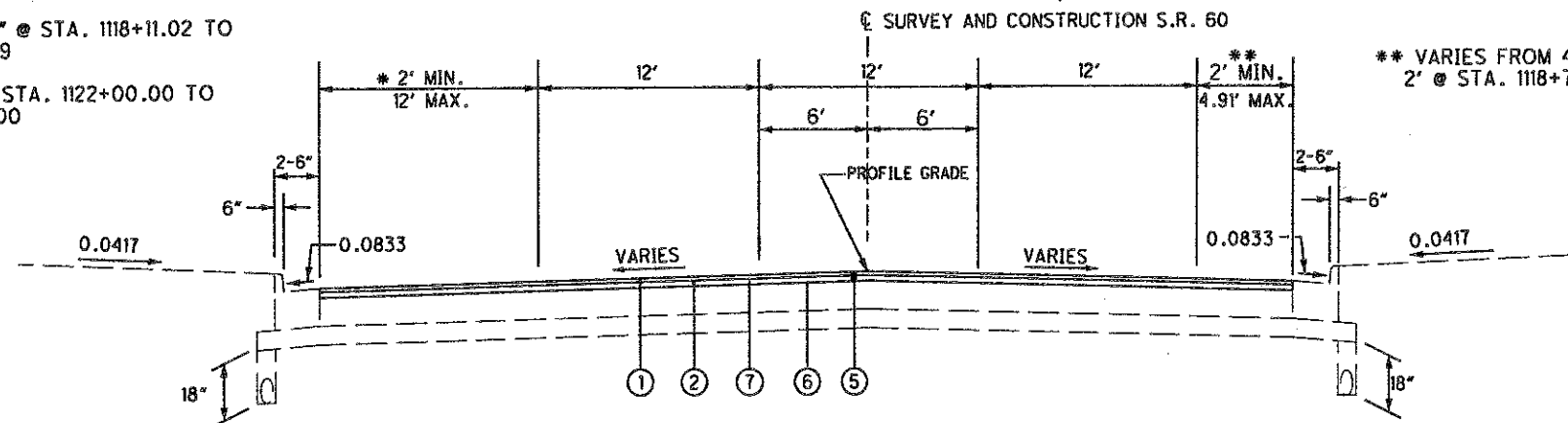


SECTION APPLIES:

STA. 1123+83.07 TO STA. 1134+05.30 = 1,022.23 FT.
TOTAL 1,022.23 FT.

* VARIES FROM 12'-0" @ STA. 1118+11.02 TO
2' @ STA. 1118+52.69

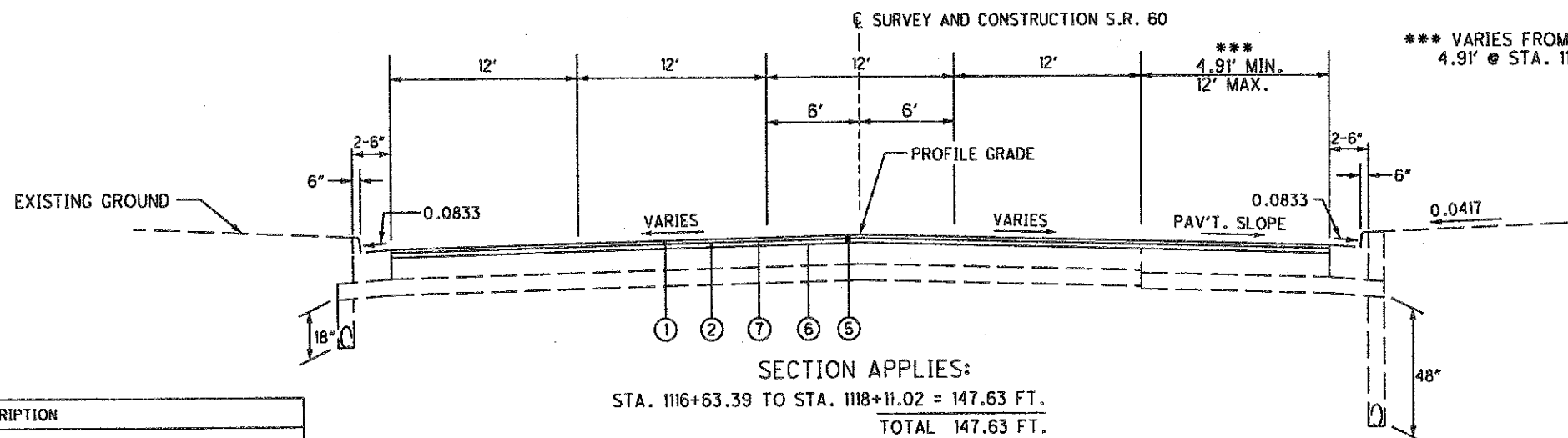
VARIES FROM 12' @ STA. 1122+00.00 TO
2' @ STA. 1123+30.00



SECTION APPLIES:

STA. 1118+11.02 TO STA. 1123+83.07 = 572.05 FT.
TOTAL 572.05 FT.

** VARIES FROM 4.91' @ STA. 1118+11.02 TO
2' @ STA. 1118+71.72



SECTION APPLIES:

STA. 1116+63.39 TO STA. 1118+11.02 = 147.63 FT.
TOTAL 147.63 FT.

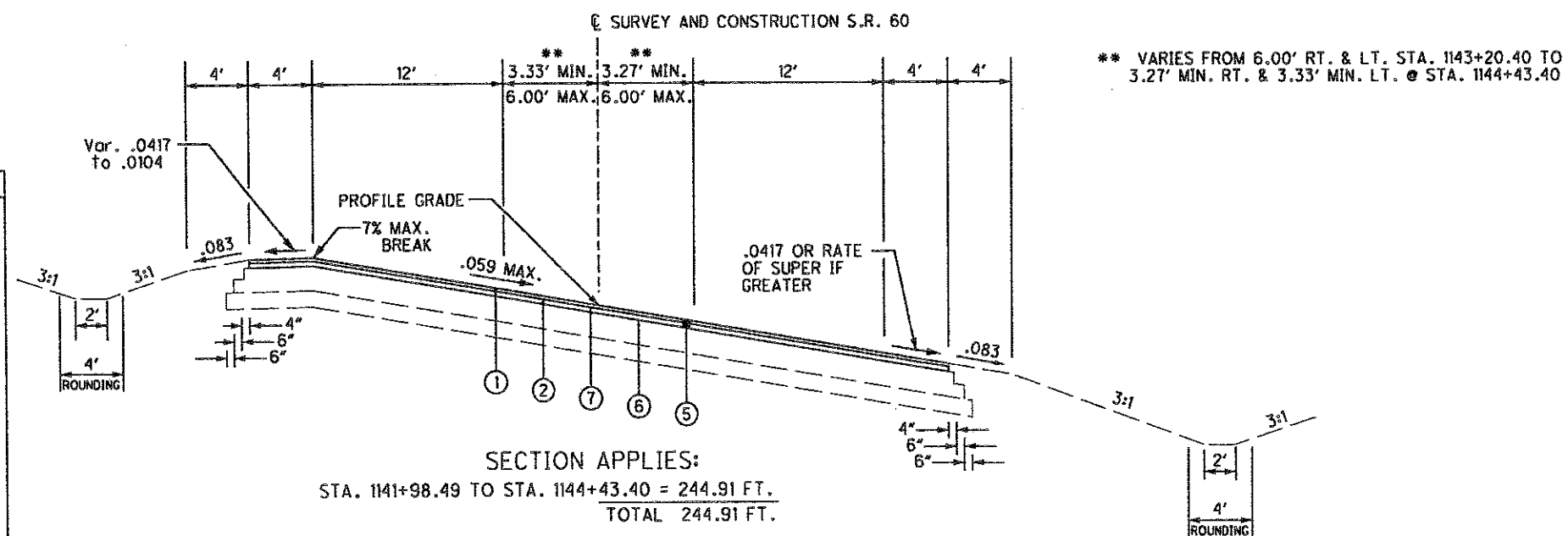
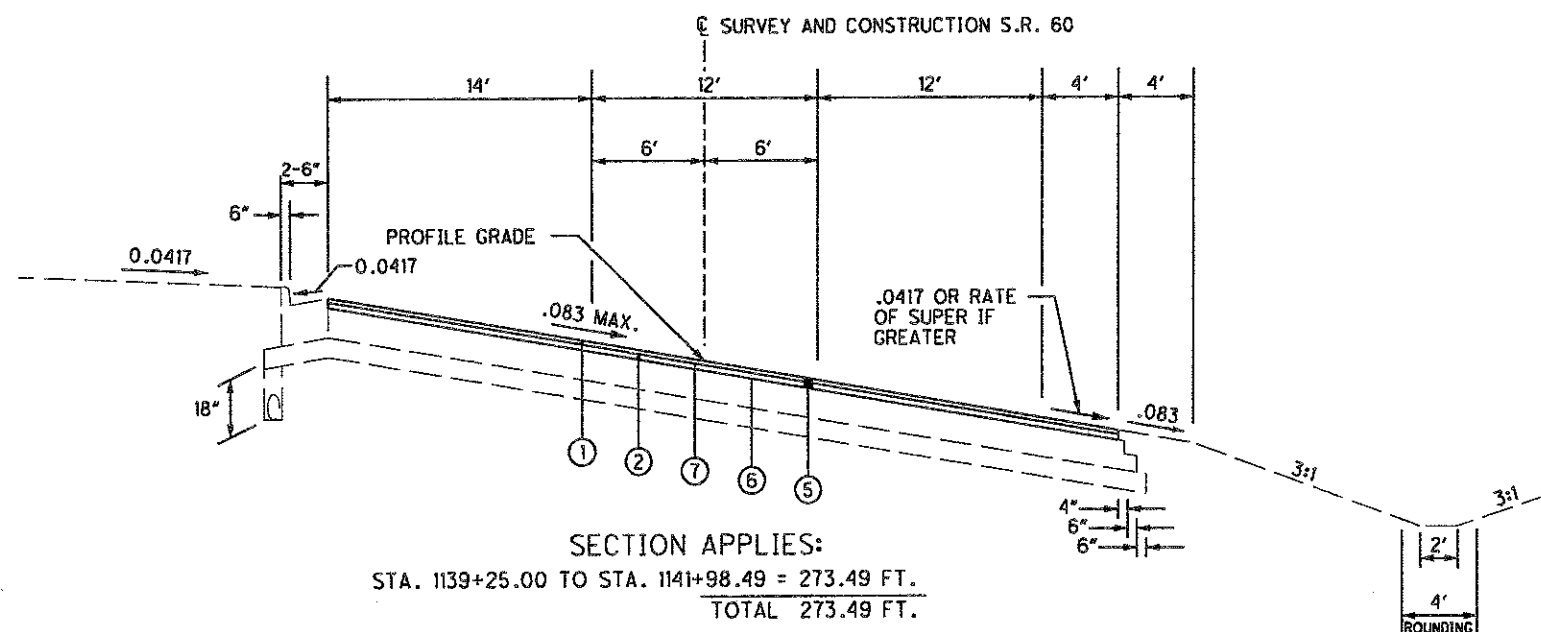
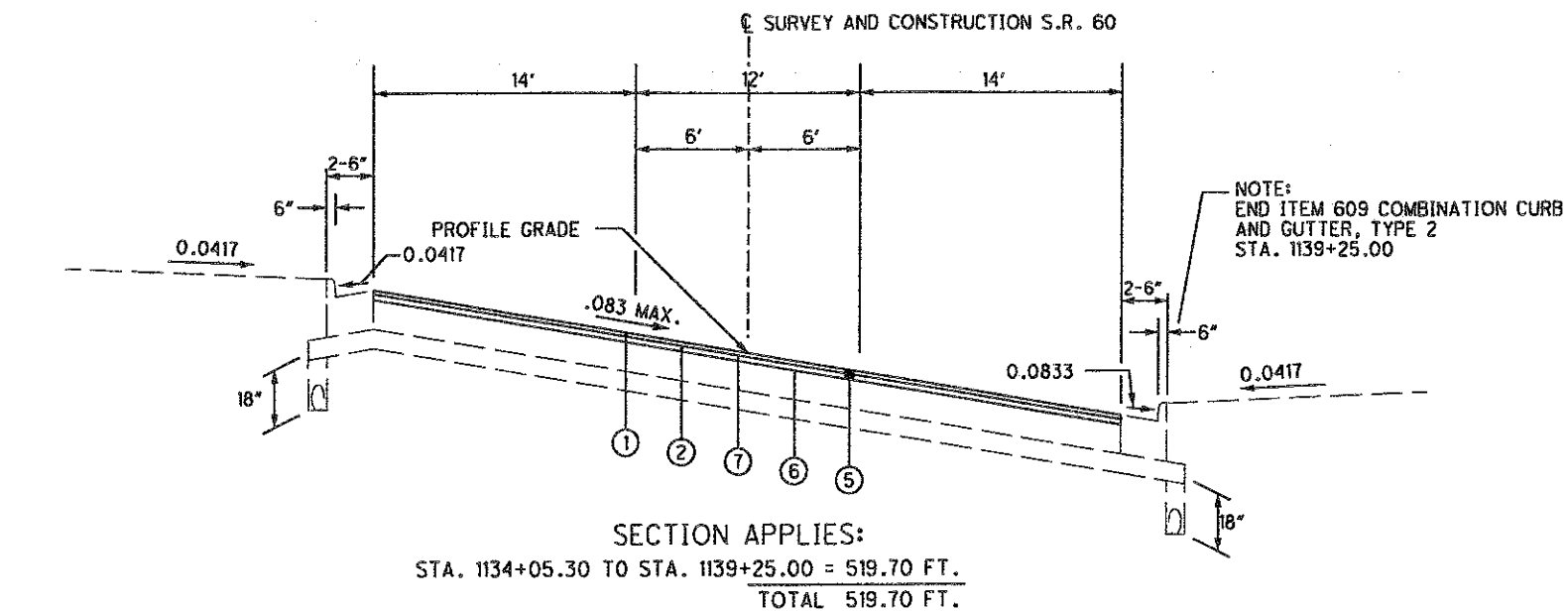
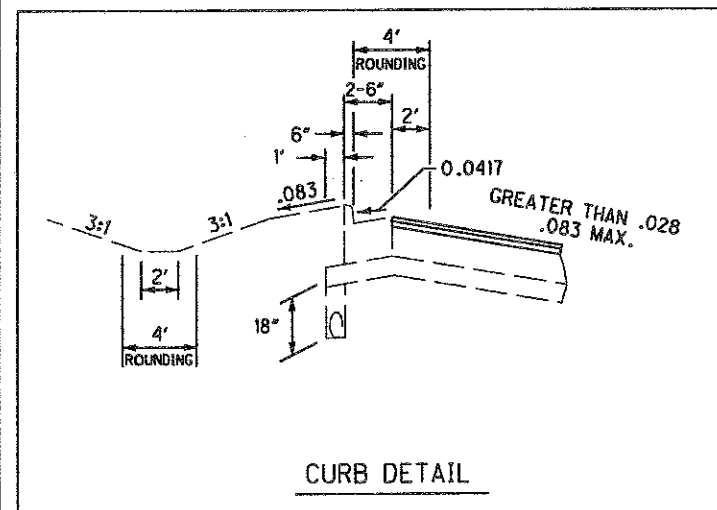
*** VARIES FROM 12' @ STA. 1116+63.39 TO
4.91' @ STA. 1118+11.02

MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 1/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE
⑥	407	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
⑦	407	TACK COAT, TRACKLESS TACK, SURFACE COURSE

PROPOSED TYPICAL SECTIONS

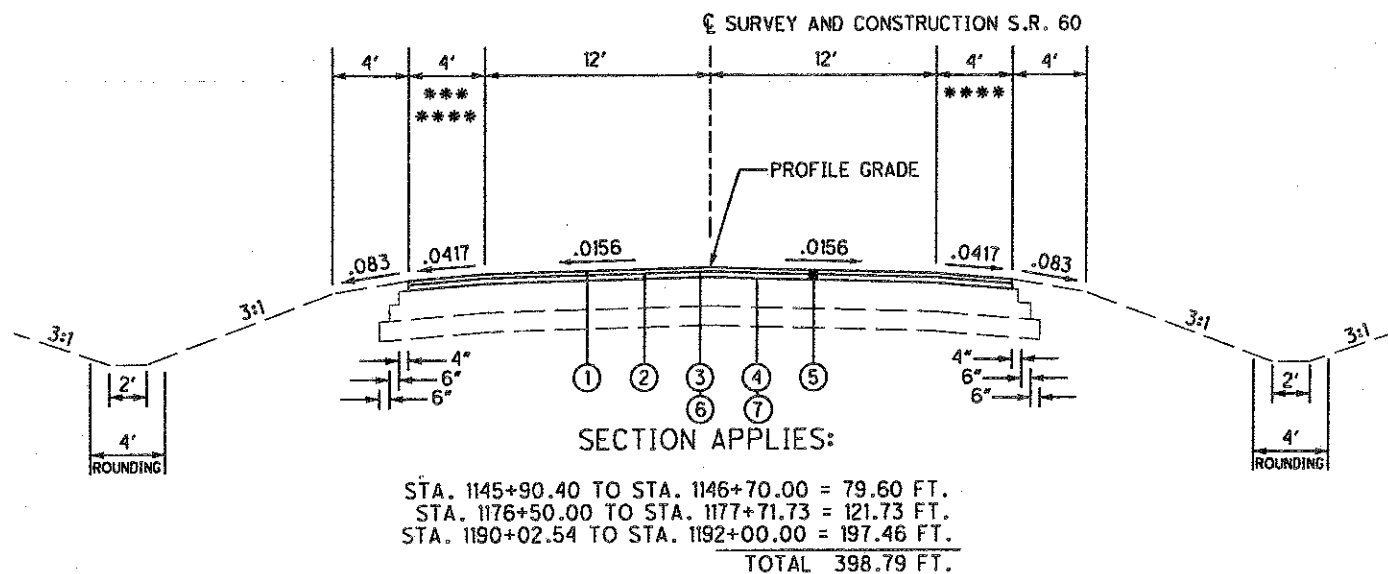
MUS-60-17.93

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121



MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE
⑥	407	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
⑦	407	TACK COAT, TRACKLESS TACK, SURFACE COURSE

0602183 DGM 6-6-11 ADDENDA

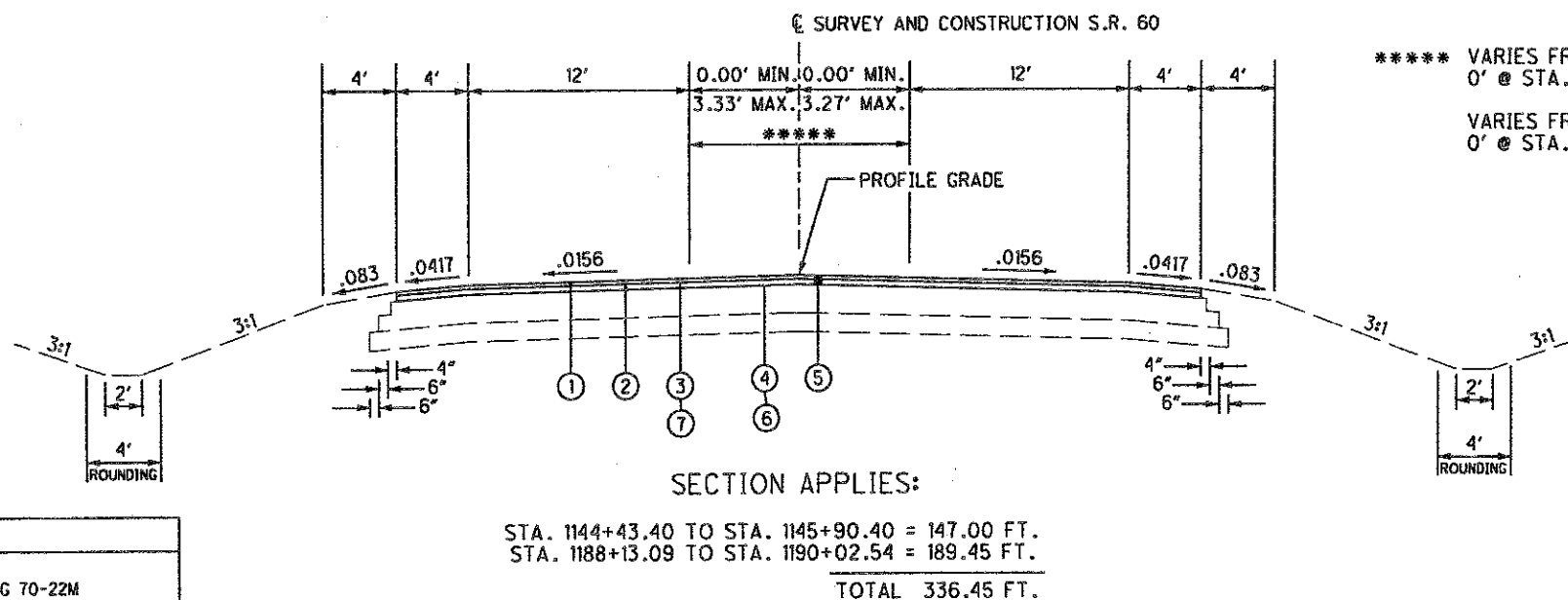


*** VARIES FROM 4.0' @ STA. 1145+90.40 TO 2.0' @ STA. 1146+70.00

**** VARIES FROM 2.0' @ STA. 1176+50.00 TO 4.00' @ STA. 1177+50.00

VARIES FROM 4.0' @ STA. 1191+00.00 TO 2.00' @ STA. 1192+00.00

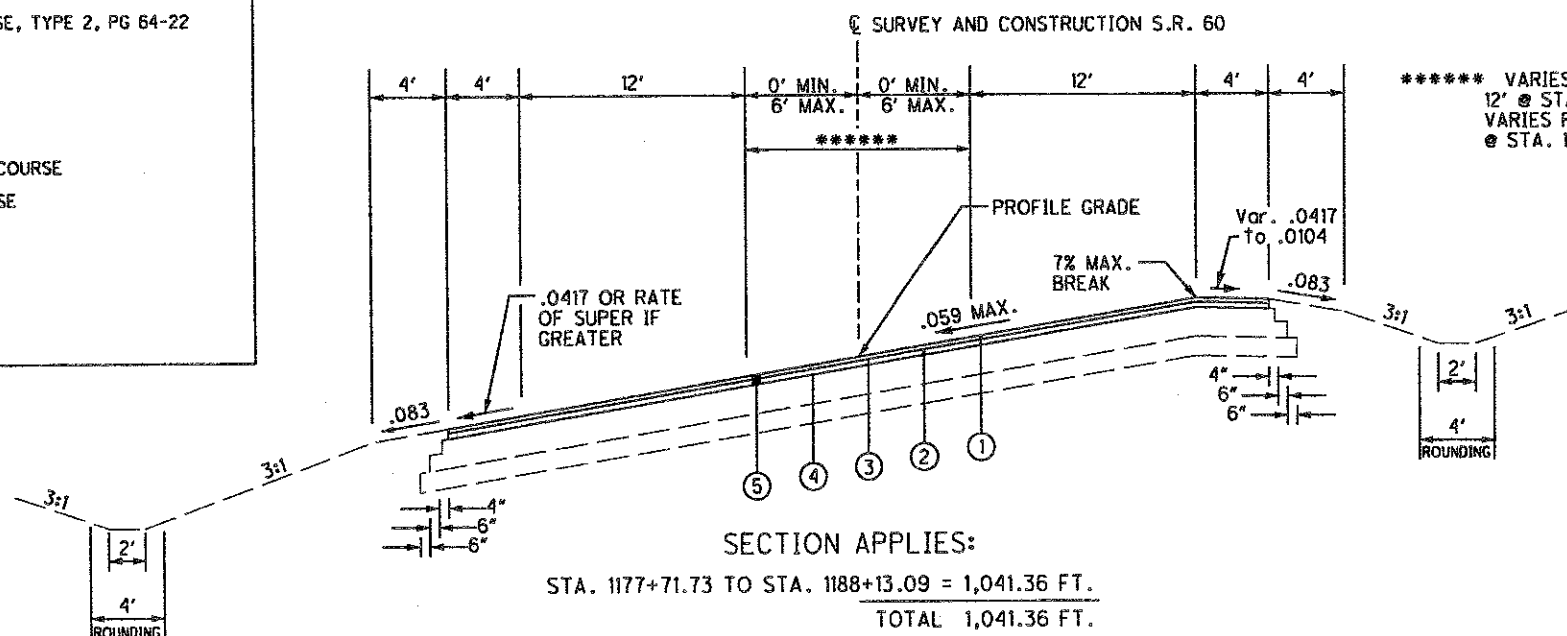
NOTE:
END ITEM 407 TRACKLESS TACK COATS @ STA. 1146+70.00



***** VARIES FROM 6.53' @ STA. 1144+43.40 TO 0' @ STA. 1145+90.40

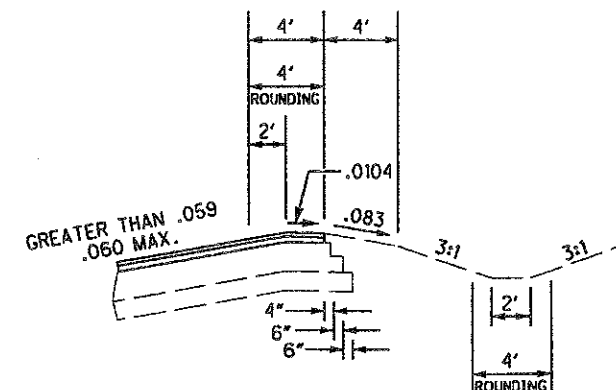
VARIES FROM 6.88' @ STA. 1188+13.09 TO 0' @ STA. 1190+02.54

MARK	ITEM	DESCRIPTION
①	448	1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE
⑥	407	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
⑦	407	TACK COAT, TRACKLESS TACK, SURFACE COURSE



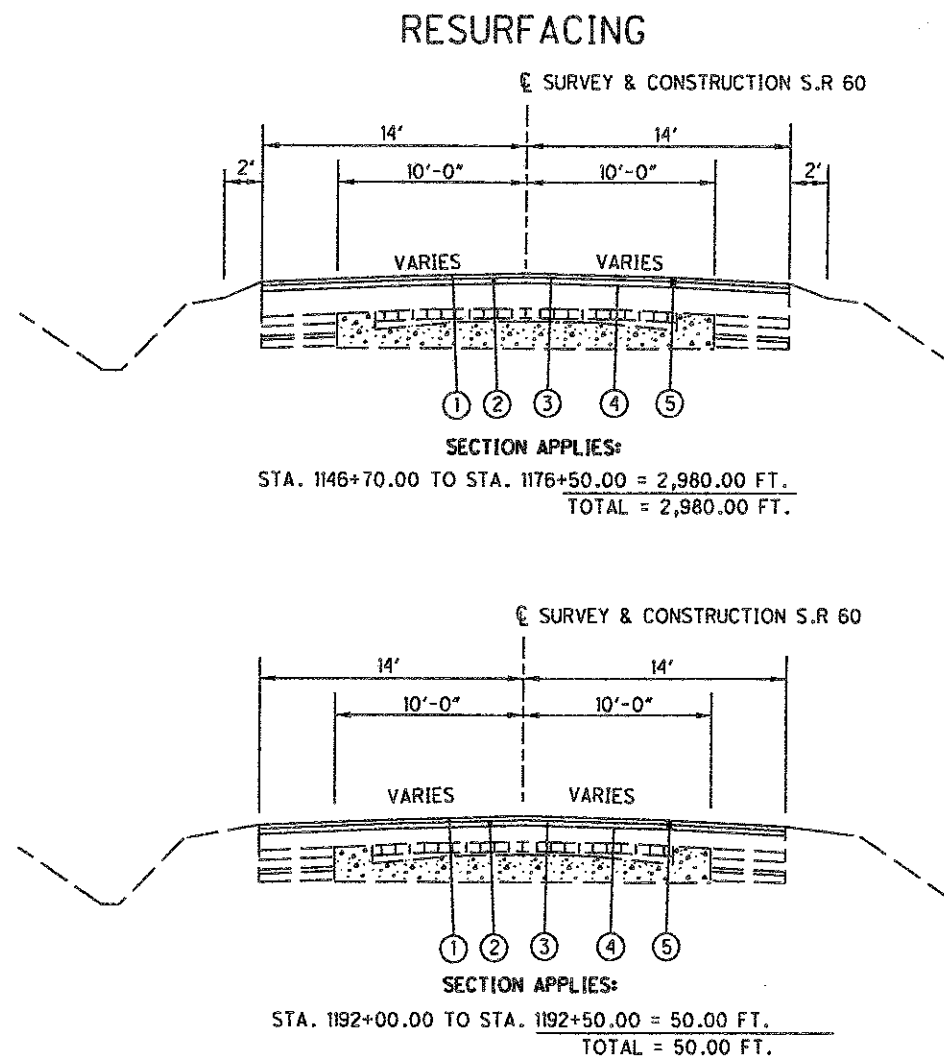
***** VARIES FROM 0' @ STA. 1177+92.55 TO 12' @ STA. 1181+22.55 TO STA. 1186+72.54

VARIES FROM 12' @ STA. 1186+72.54 TO 6.89' @ STA. 1188+13.09



10/03/87

MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE



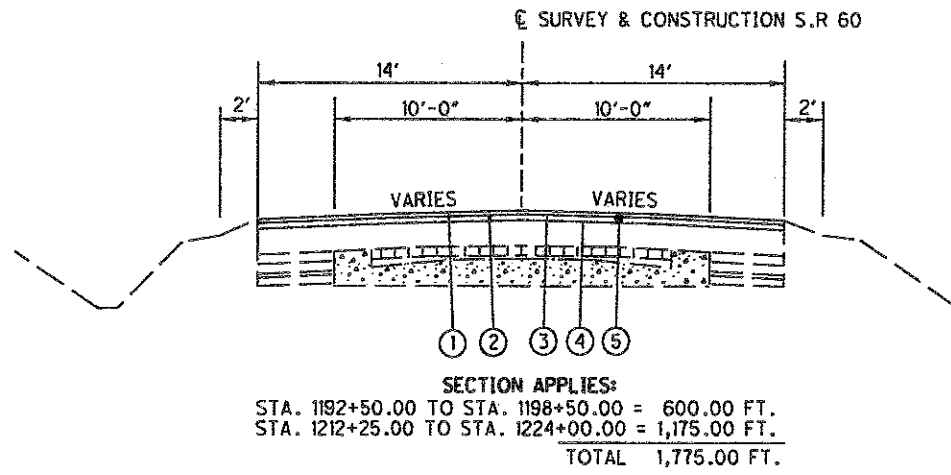
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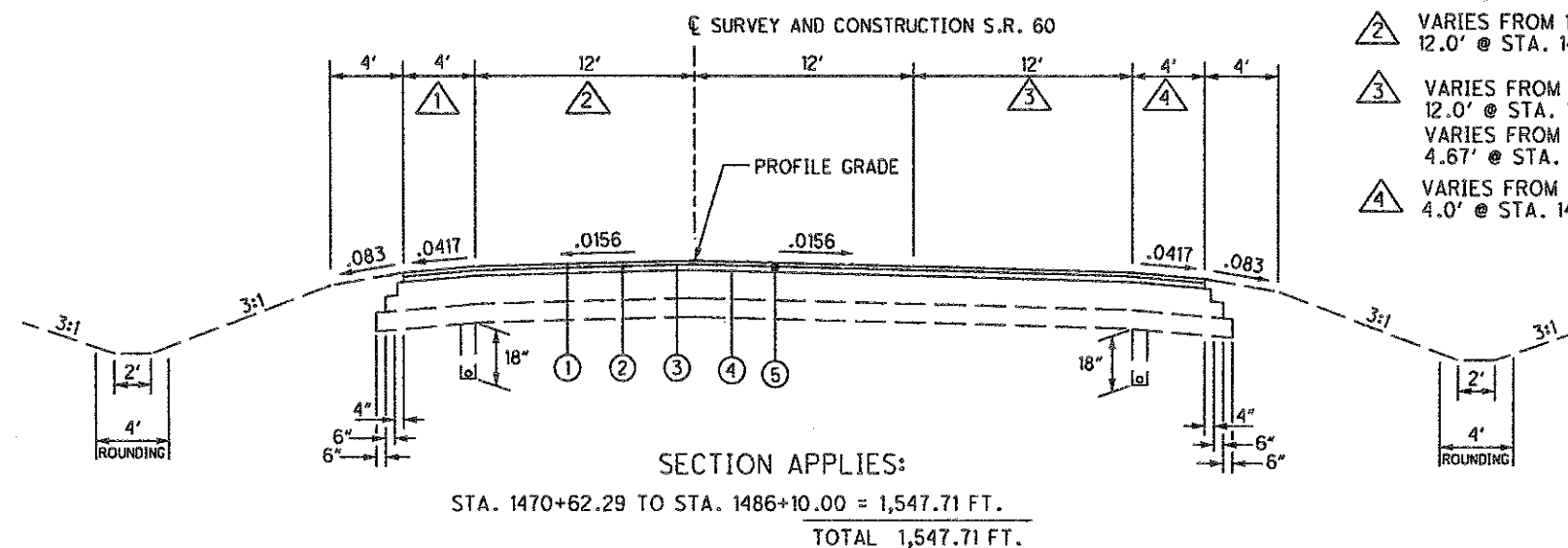
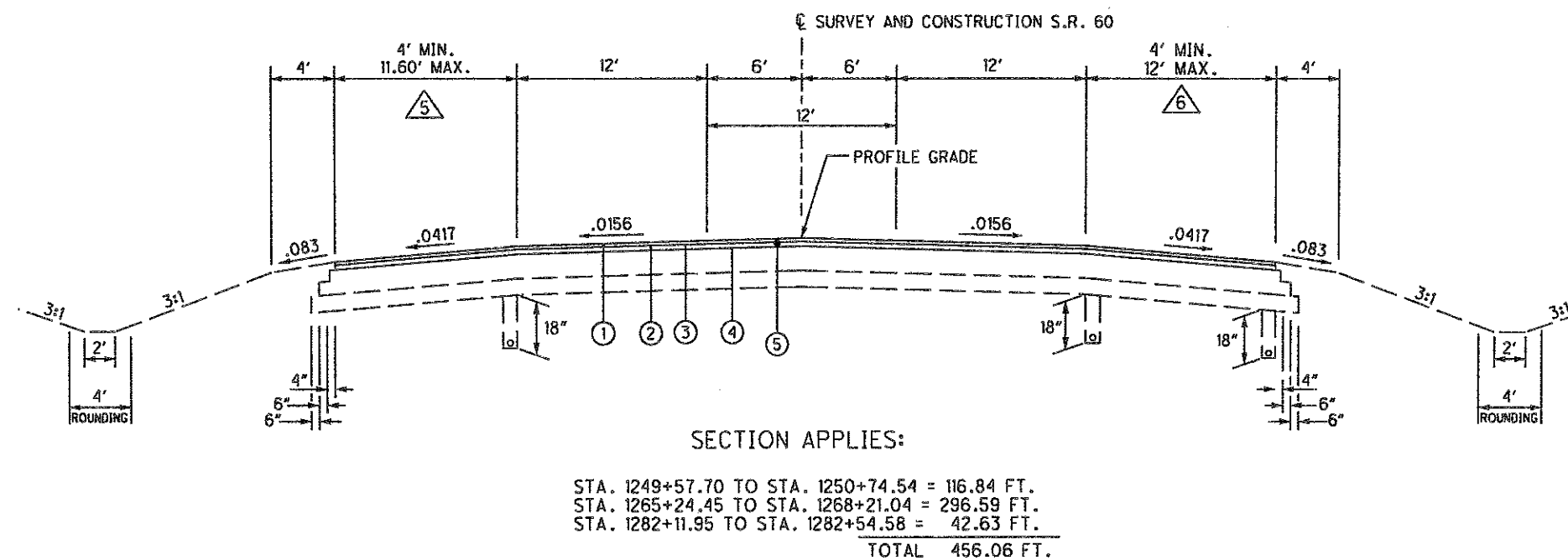
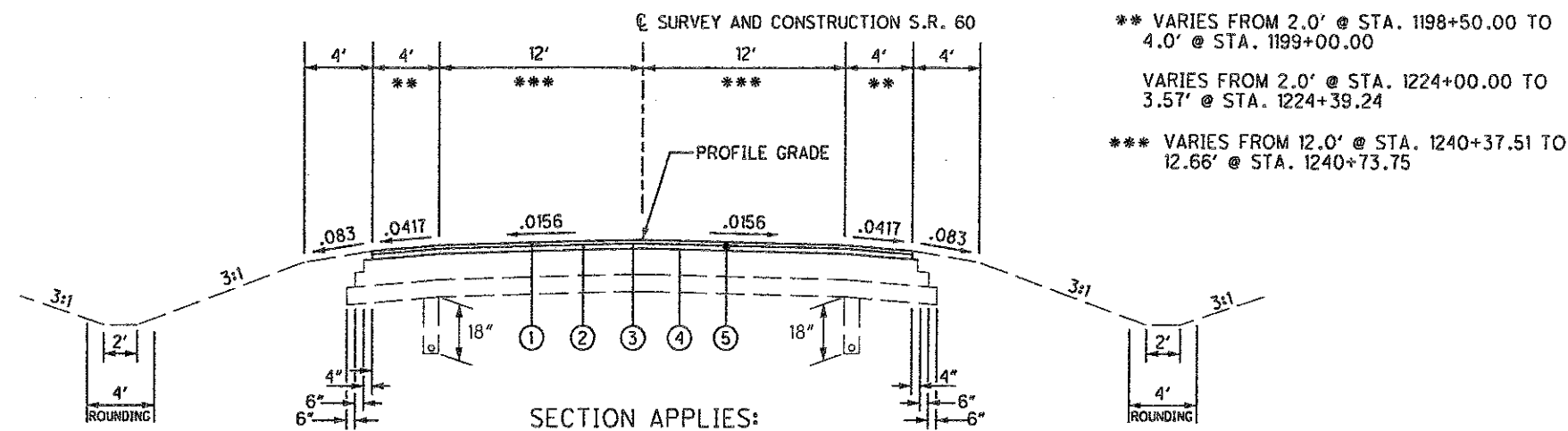
MUS-60-17.93

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121

CHECKED
10/6/87
U.S.
10/28/87

MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE

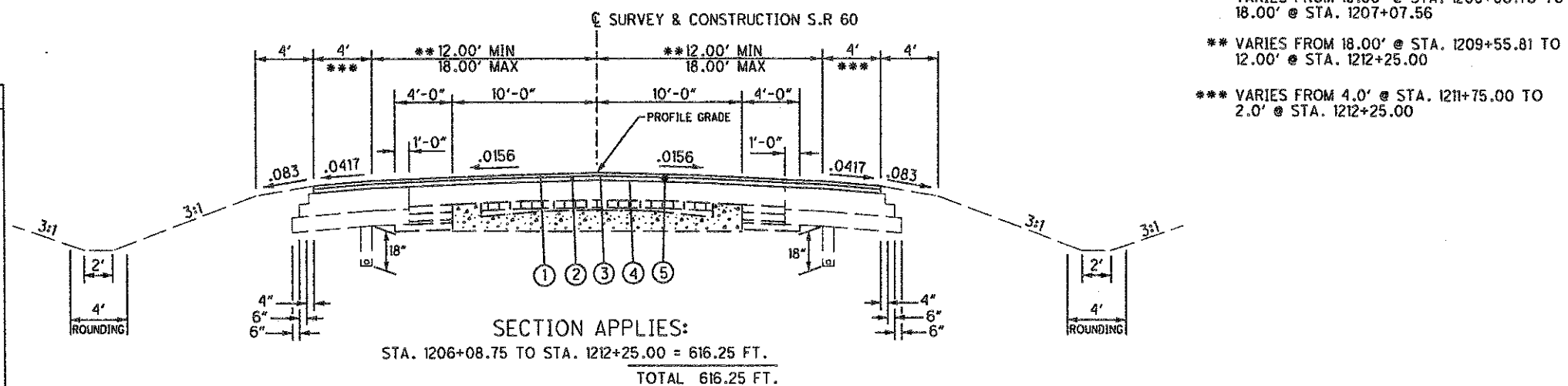
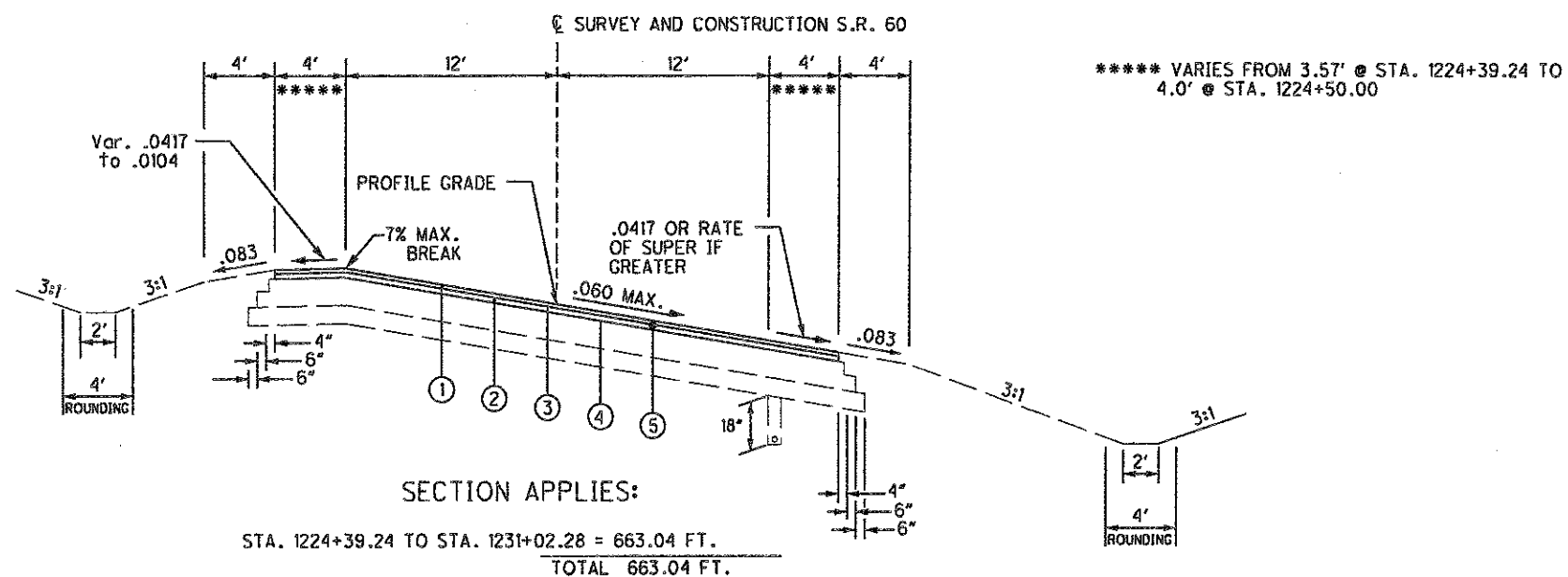
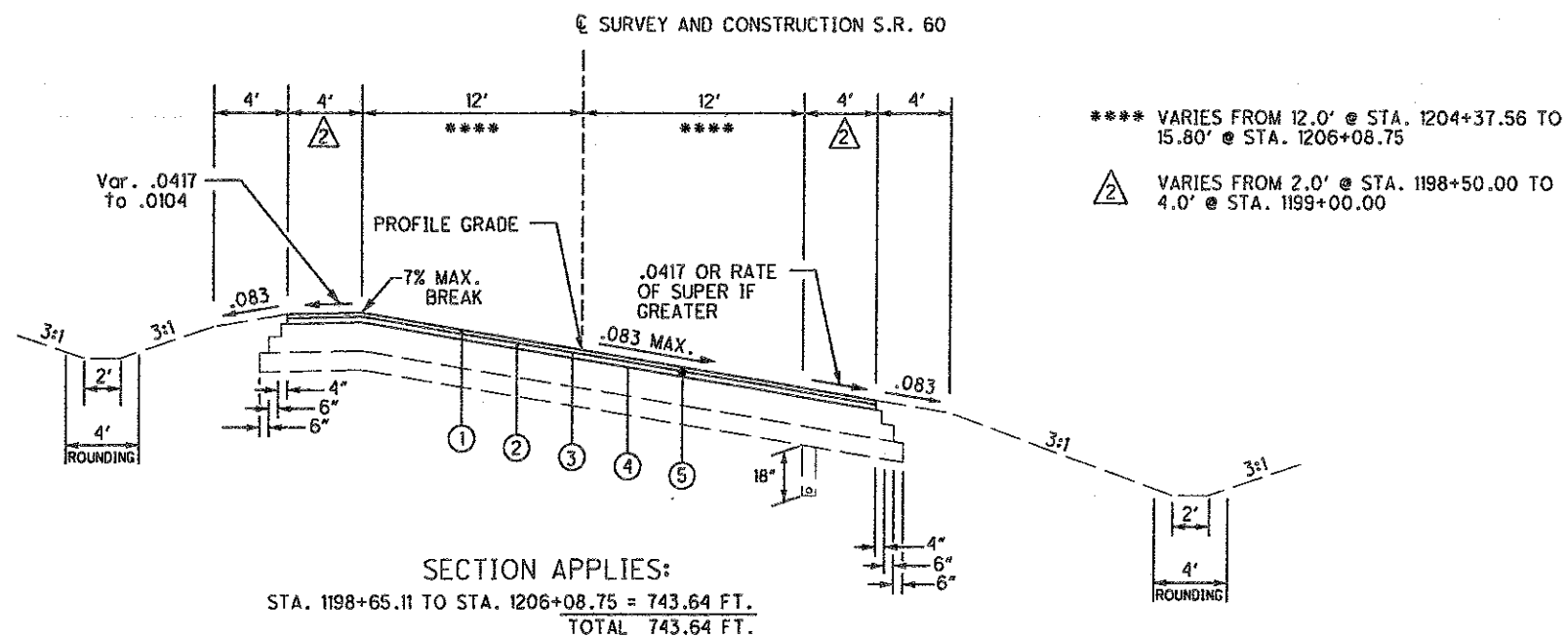




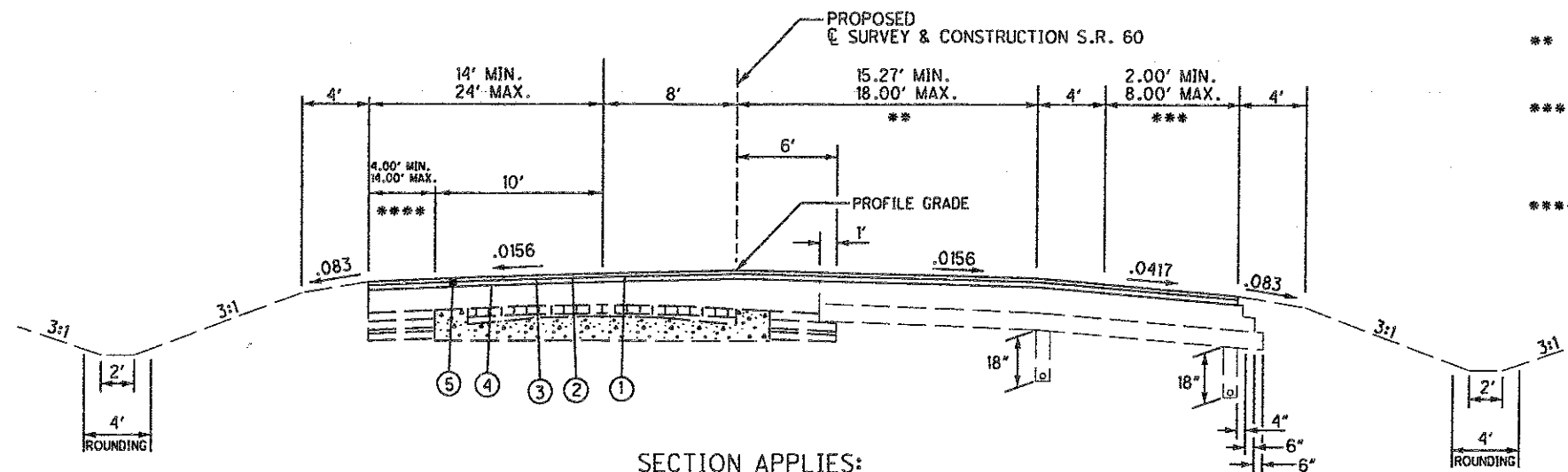
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③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE

PROPOSED TYPICAL SECTIONS

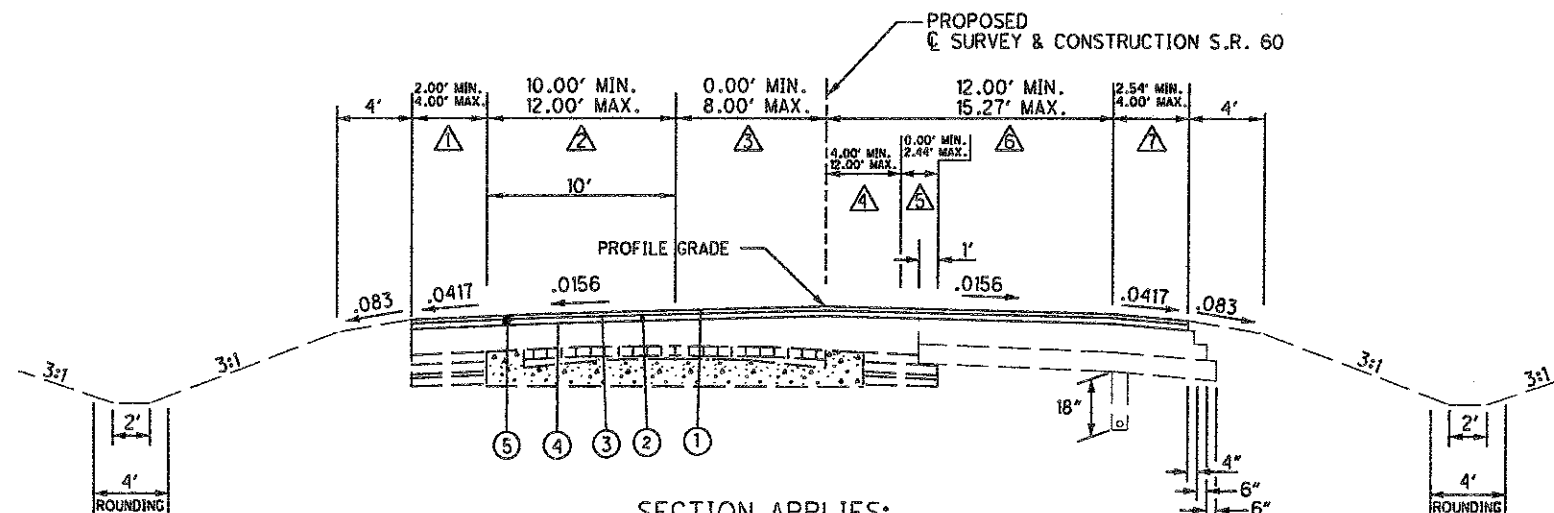
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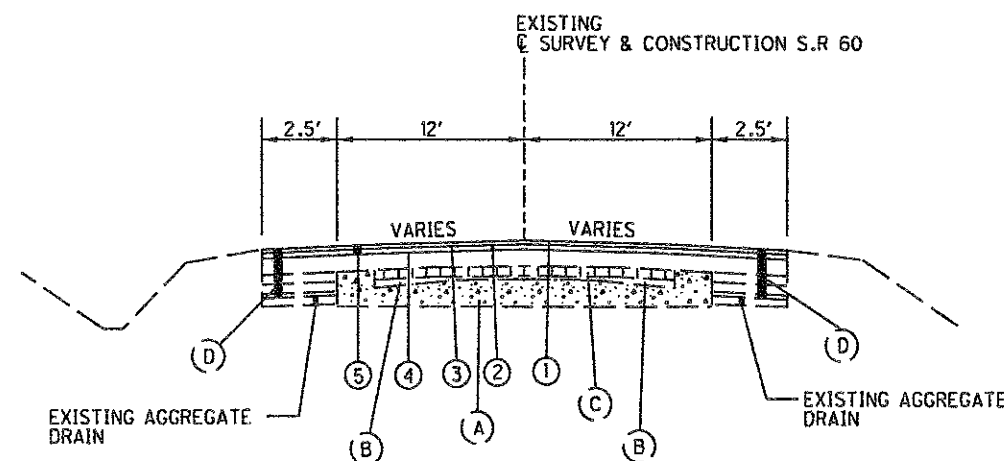
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③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE



SECTION APPLIES:
 STA. 1250+74.54 TO STA. 1256+14.42 = 539.88 FT.
 STA. 1283+02.77 (AH) TO STA. 1304+97.39 = 2,194.62 FT.
 TOTAL 2,734.50 FT.



SECTION APPLIES:
 STA. 1304+97.39 TO STA. 1311+17.46 = 620.07 FT.
 TOTAL 620.07 FT.



SECTION APPLIES:
 STA. 1311+17.46 TO STA. 1470+62.29 = 15,944.83 FT.
 TOTAL = 15,944.83 FT.

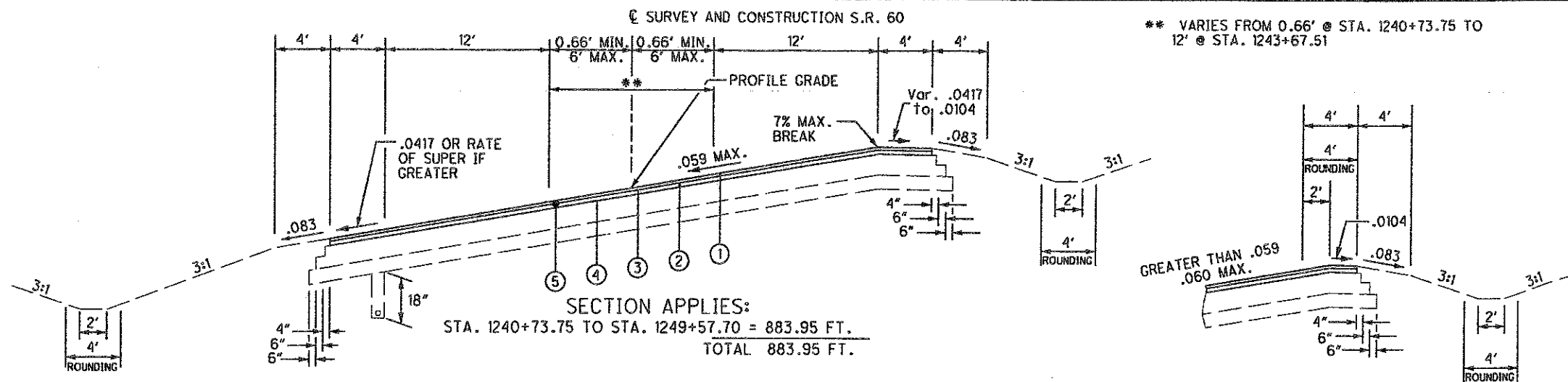
** VARIES FROM 18.00' @ STA. 1303+47.39 TO 15.27' @ STA. 1304+97.39
 *** 8.00' FROM STA. 1283+02.77 (AH) TO STA. 1285+00.00
 TAPERS FROM 8.00' AT STA. 1285+00.00 TO 2.00' AT STA. 1285+50.00
 **** 14.00' FROM STA. 1283+02.77 (AH) TO STA. 1284+72.25
 4.00' FROM STA. 1285+44.25 TO STA. 1304+97.39

△ TAPERS FROM 4.00' @ STA. 1304+97.39 TO 2.11' @ STA. 1309+37.46
 VARIES FROM 2.11' @ STA. 1309+37.46 TO 2.00' @ STA. 1311+17.46
 △ TAPERS FROM 10.00' @ STA. 1304+97.39 TO 12.00' @ STA. 1309+37.46
 △ TAPERS FROM 8.00' @ STA. 1304+97.39 TO 0.00' @ STA. 1309+37.46
 △ TAPERS FROM 4.00' @ STA. 1304+97.39 TO 12.00' @ STA. 1309+37.46
 △ VARIES FROM 2.00' @ STA. 1304+97.39 TO 2.44' @ STA. 1309+83.10
 TAPERS FROM 2.44' @ STA. 1309+83.10 TO 0.00' @ STA. 1311+17.46
 △ TAPERS FROM 15.27' @ STA. 1309+37.46 TO 12.00' @ STA. 1311+17.46
 △ TAPERS FROM 4.00' @ STA. 1310+67.46 TO 2.54' @ STA. 1311+17.46

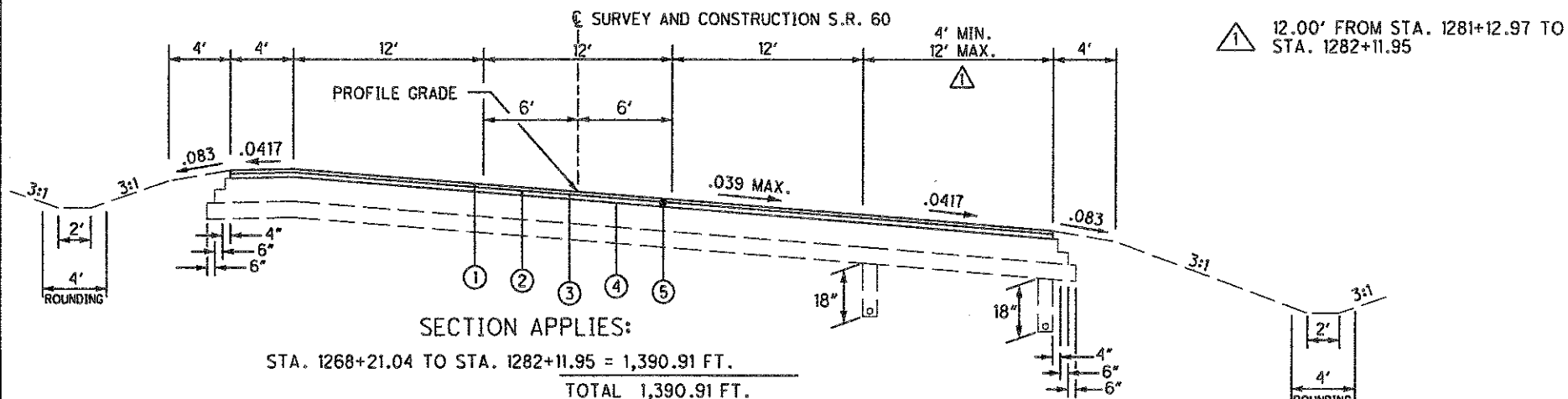
LEGEND

- (A) EXISTING CONCRETE PAVEMENT
- (B) EXISTING SAND LEVELING COURSE
- (C) EXISTING BRICK
- (D) EXISTING ASPHALT CONCRETE

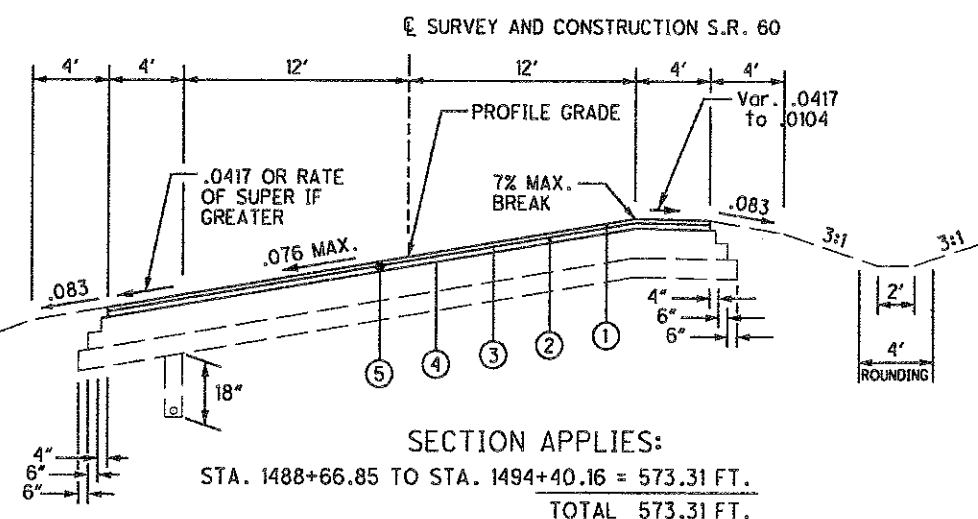
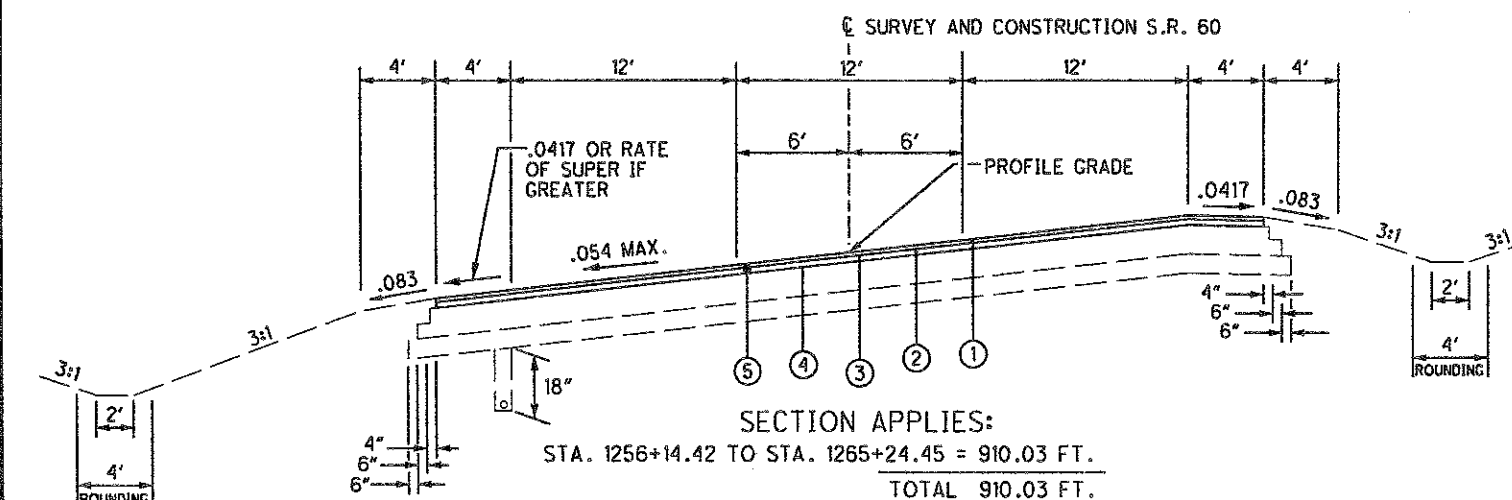
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③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE



** VARIES FROM 0.66' @ STA. 1240+73.75 TO 12' @ STA. 1243+67.51

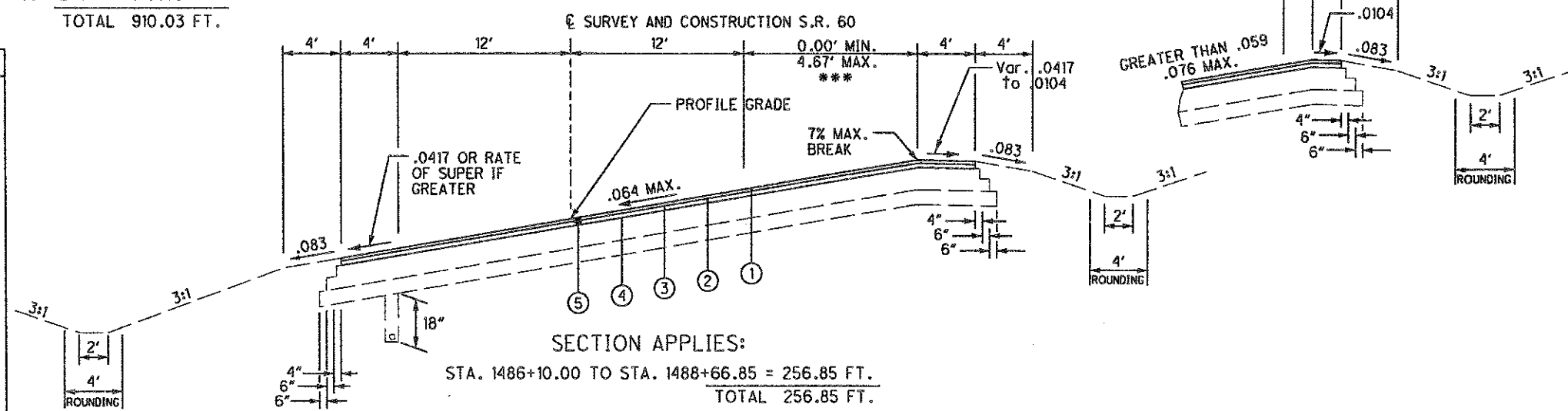


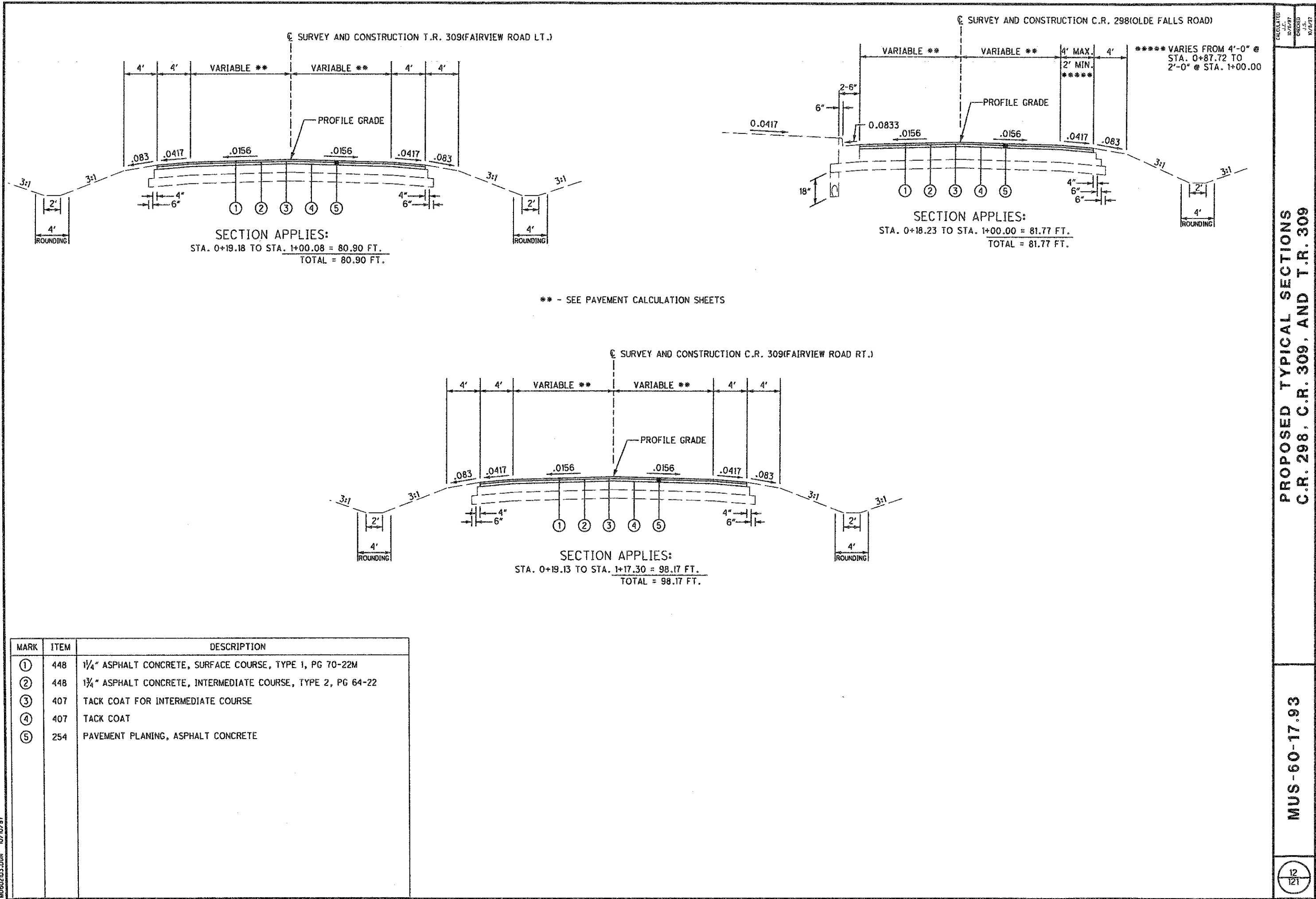
12.00' FROM STA. 1281+12.97 TO STA. 1282+11.95



*** VARIES FROM 4.67' @ STA. 1486+10.00 TO 0.00' @ STA. 1488+66.85

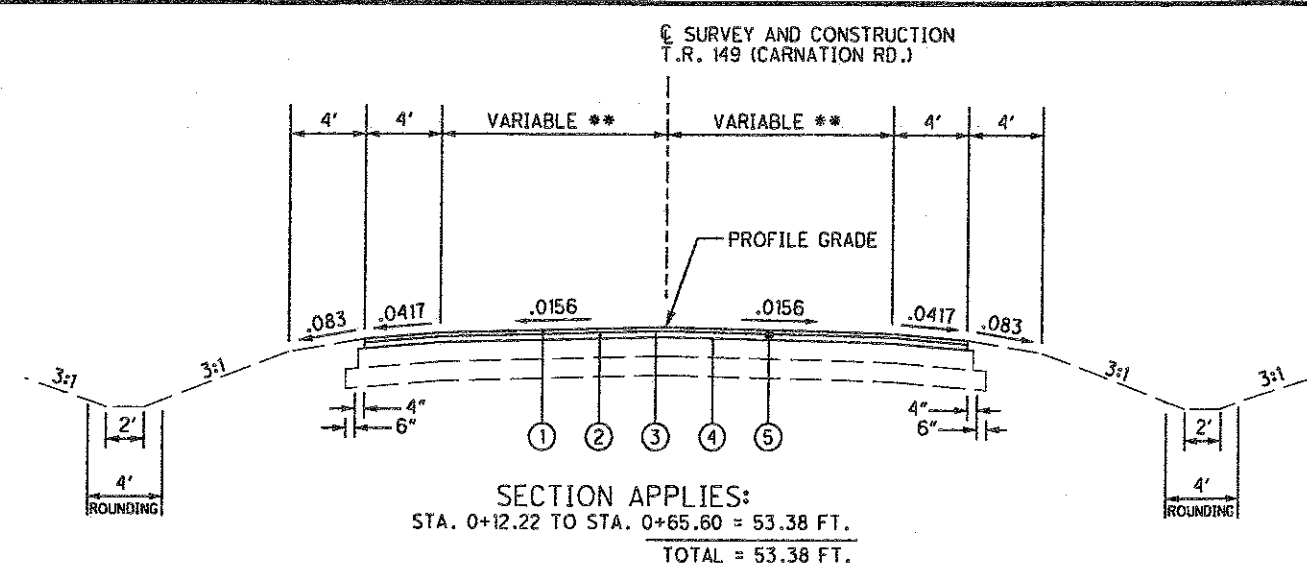
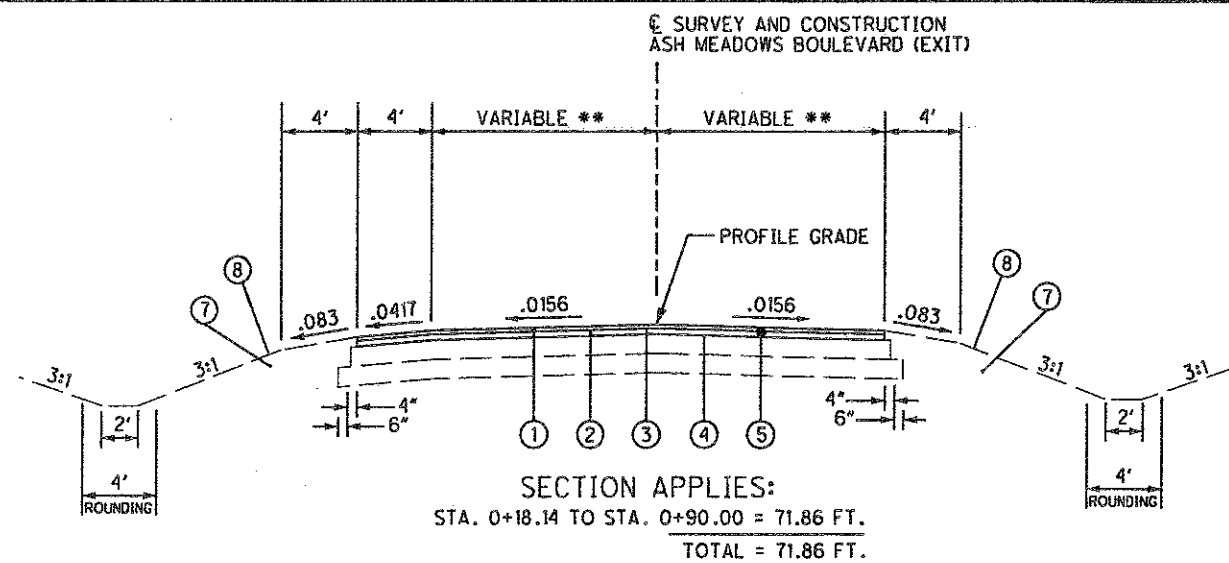
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③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE



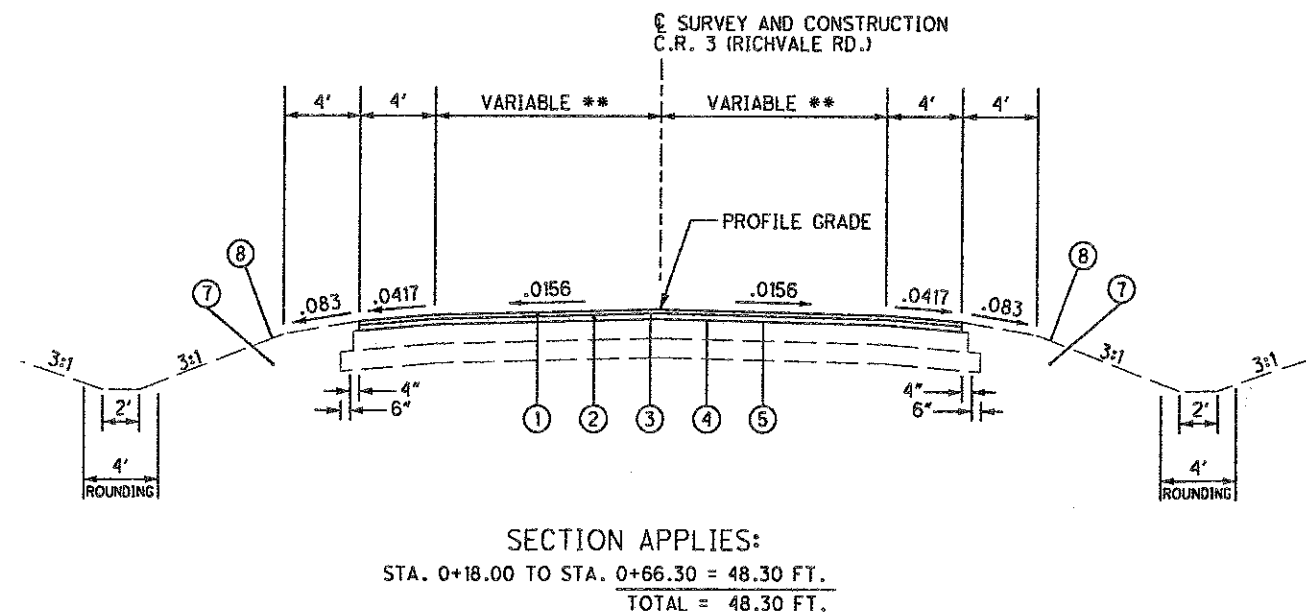
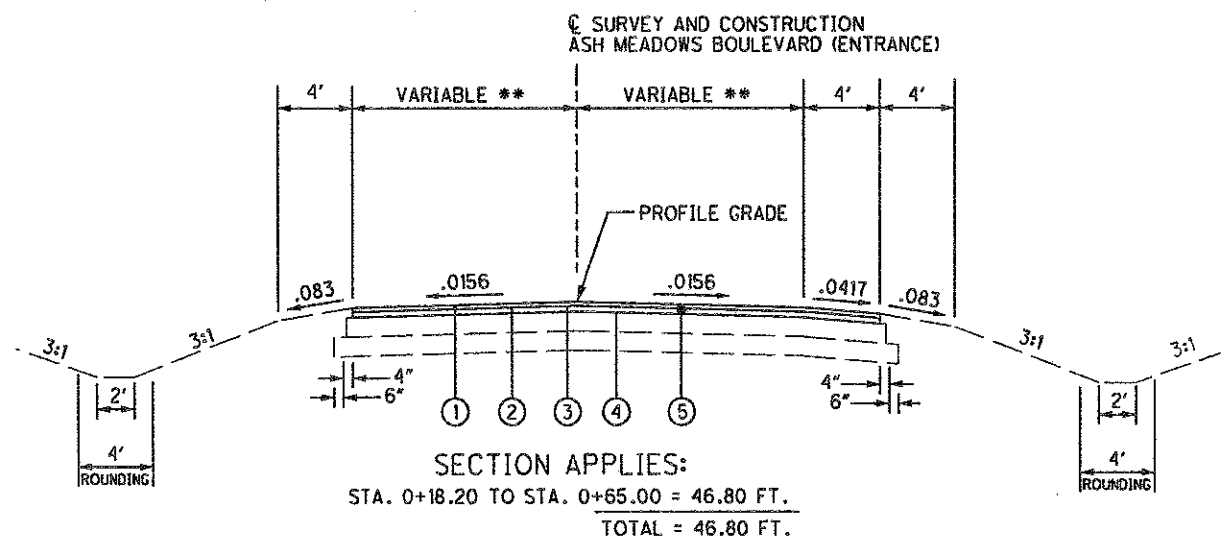


PROPOSED TYPICAL SECTIONS
 C.R. 298, C.R. 309, AND T.R. 309

MUS-60-17.93



** - SEE PAVEMENT CALCULATION SHEETS



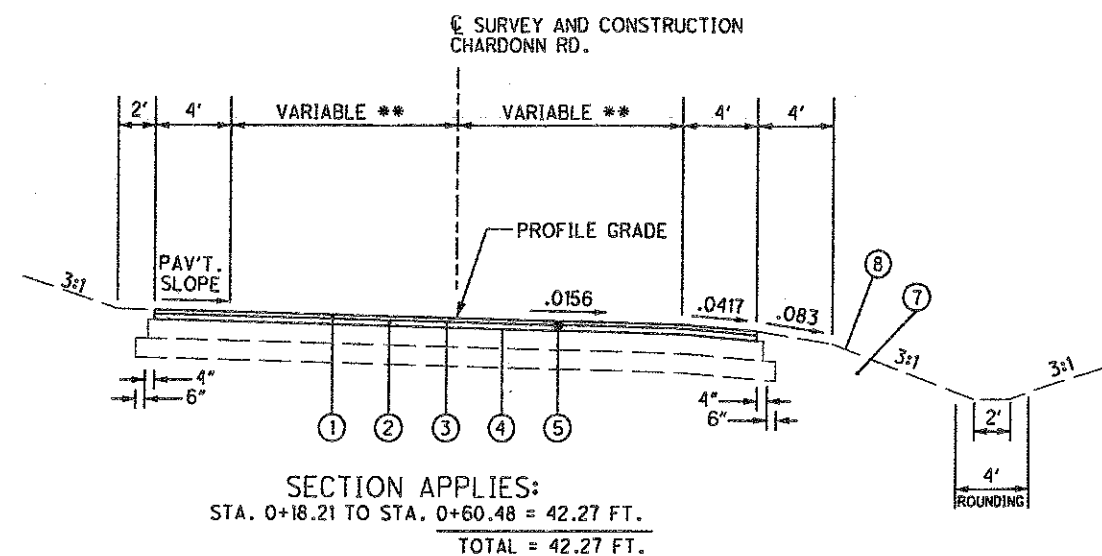
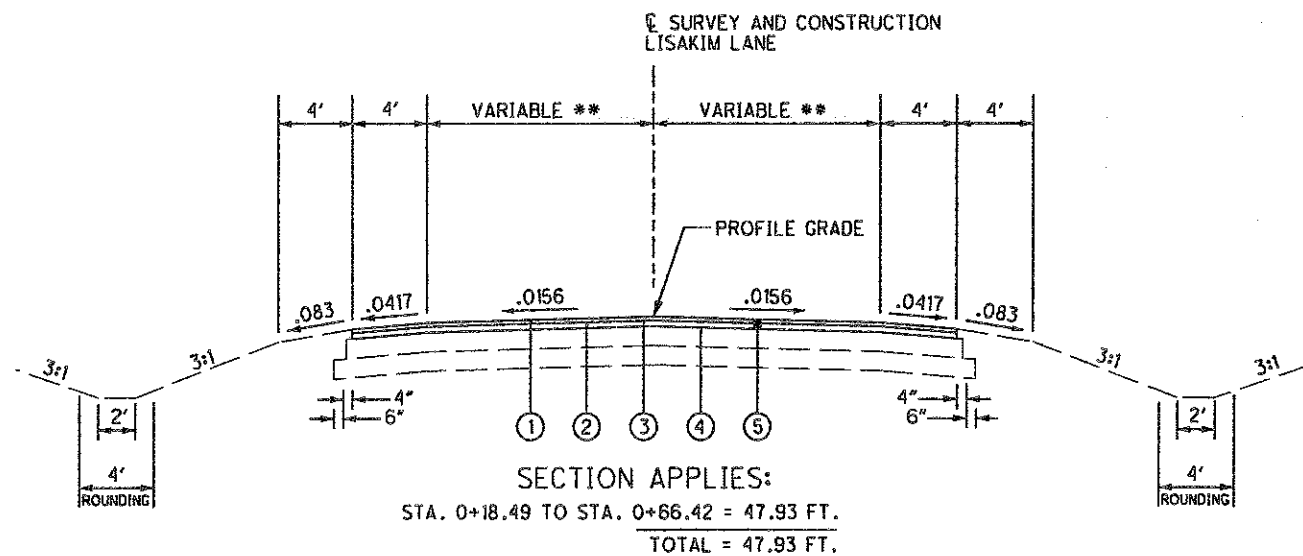
MARK	ITEM	DESCRIPTION
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④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE

PROPOSED TYPICAL SECTIONS
APPROACHES

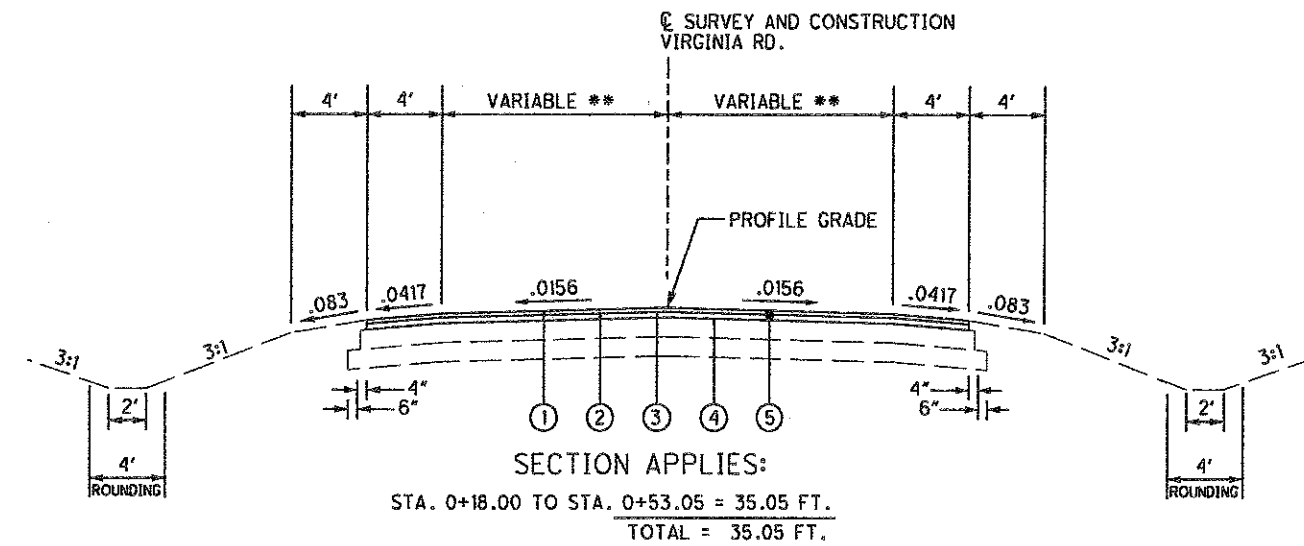
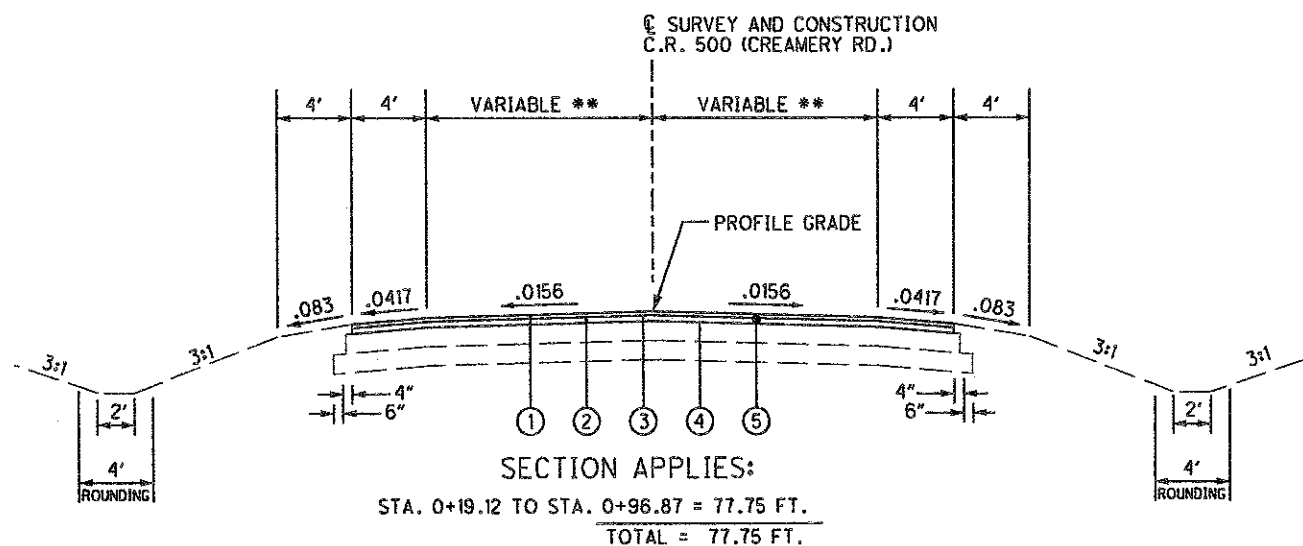
MUS-60-17.93

13
121

CHECKED
J.C.
01/27/98
B.F.B.
07/01/98



** - SEE PAVEMENT CALCULATION SHEETS

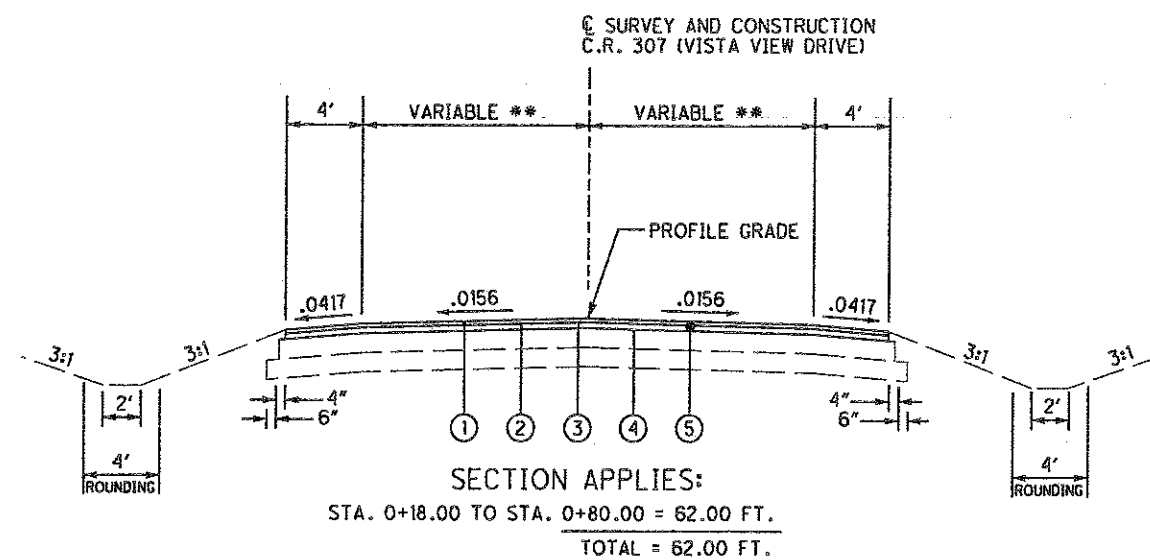
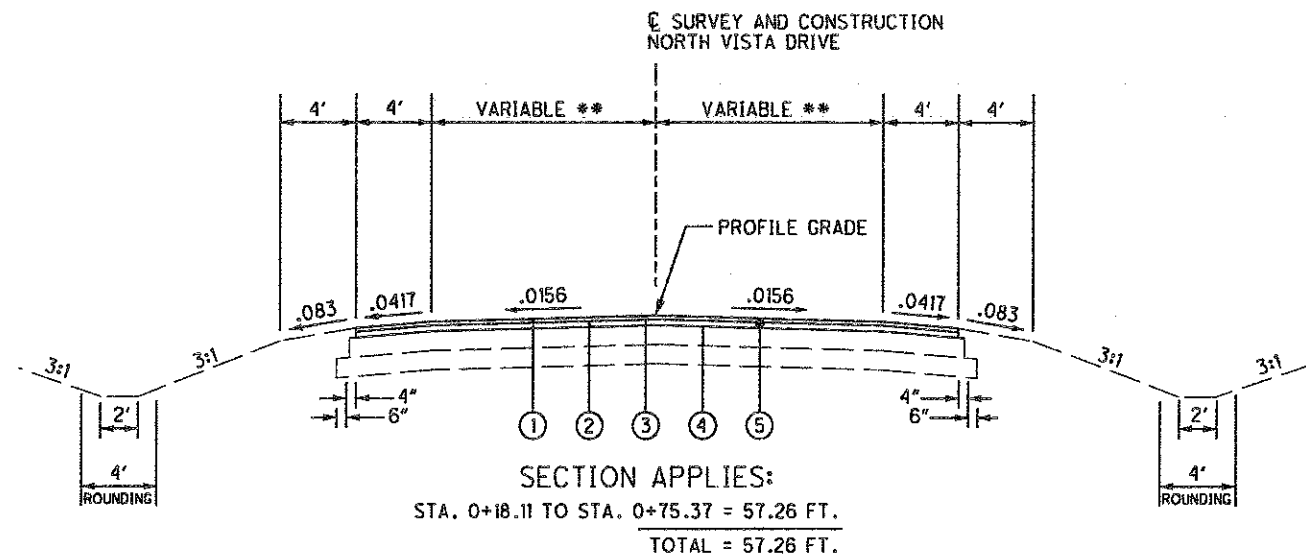


MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE

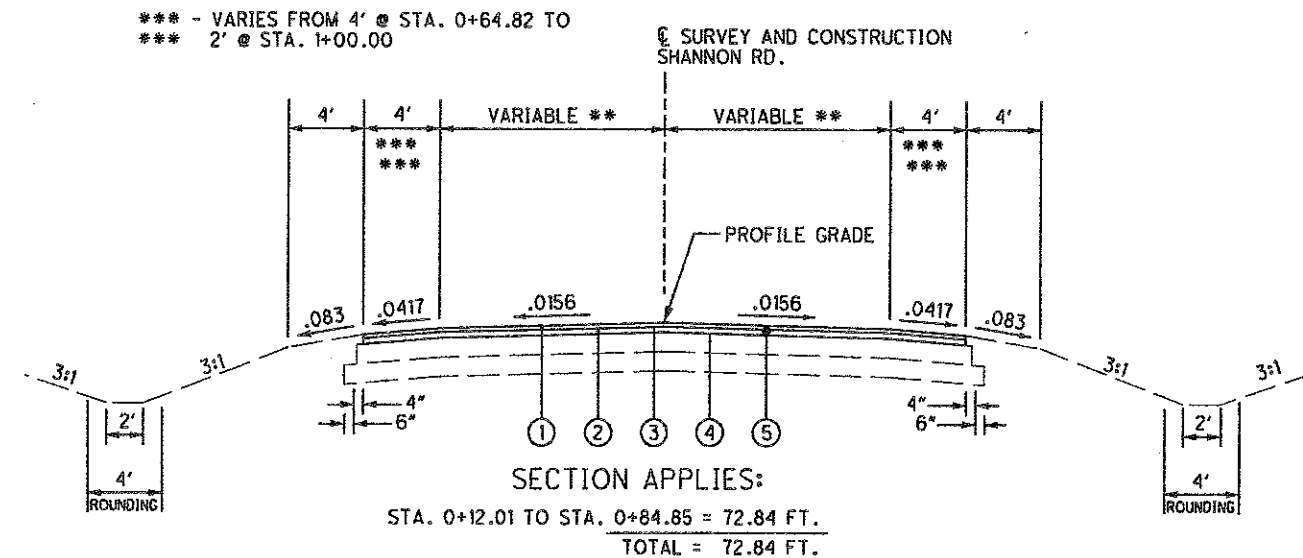
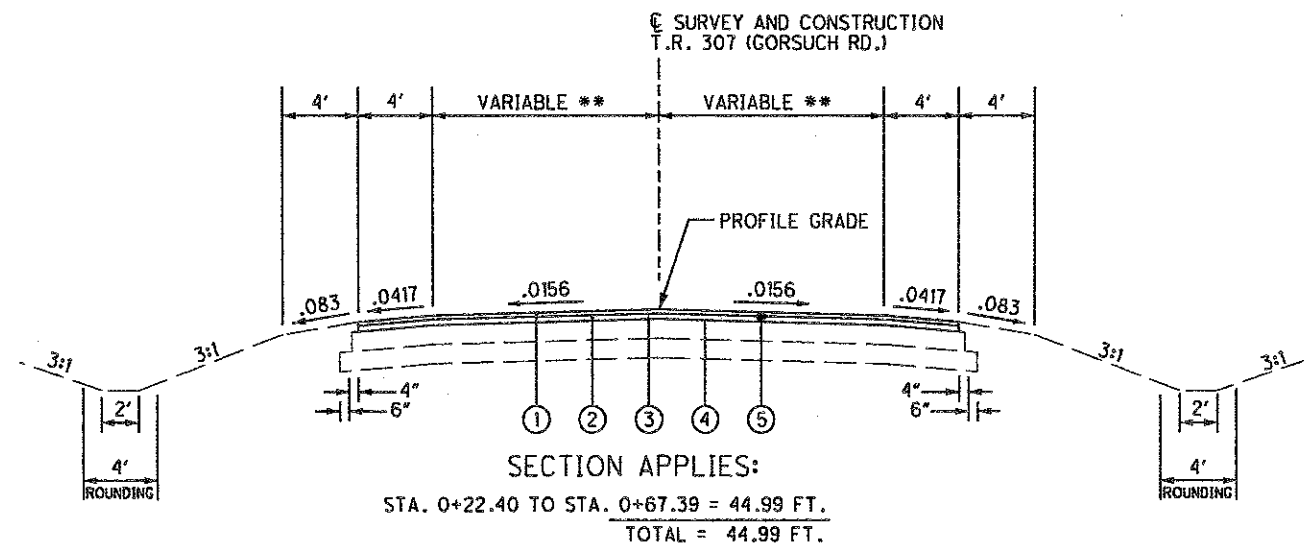
PROPOSED TYPICAL SECTIONS
APPROACHES

MUS-60-17.93

14
121



** - SEE PAVEMENT CALCULATION SHEETS



MARK	ITEM	DESCRIPTION
①	448	1 1/4" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 70-22M
②	448	1 3/4" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
③	407	TACK COAT FOR INTERMEDIATE COURSE
④	407	TACK COAT
⑤	254	PAVEMENT PLANING, ASPHALT CONCRETE

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

American Electric Power Co.
850 Tech Center Drive
Gahanna, Ohio 43230
Attn: Paul Paxton

Columbia Gas of Ohio
2429 Linden Avenue
Zanesville, Ohio 43701
Attn: Craig Flynn
740-450-1205

Time Warner Cable
3760 Interchange Drive
Columbus, Ohio 43204
Attn: Terry Allen
614-255-6349

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE. ODOT ASSUMES NO RESPONSIBILITY FOR THE LOCATION OR THE DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THESE PLANS.

PROFILE AND ALIGNMENT

CONTINGENCY QUANTITIES

FEATHERING

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 120 FT. . IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

Express Processing Center
The Federal Aviation Administration
Southwest Regional Office
Air Traffic Airspace Branch ASW-520
2601 Meacham Blvd.
Fort Worth, TX 76137-4298

Ohio Department of Transportation
Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235
614-387-2346

IN ORDER FOR ODOT TO PROPERLY PERMIT
OVERSIZE LOADS, PREPARE PROPER SIGNING
WHEN REQUIRED AND FURTHER TO NOTIFY THE
GENERAL MOTORING PUBLIC, THE CONTRACTOR
WILL NOTIFY (IN WRITING) THE DISTRICT 5
HIGHWAY MANAGEMENT ADMINISTRATOR WITH
COPIES FOR THE DISTRICT 5 ROADWAY SERVICES
MANAGER AND PROJECT ENGINEER NOT LESS THAN
21 DAYS BEFORE SUCH CLOSURE OR LANE
RESTRICTIONS.

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT
ADMINISTRATOR
P.O. BOX 306
JACKSONTOWN, OH. 43030
PHONE: (740) 323-4400

ITEM 604 MANHOLE ADJUSTED TO GRADE
ITEM 638 VALVE BOX ADJUSTED TO GRADE

EXISTING MANHOLES AND VALVE BOXES THAT ARE TO BE ADJUSTED TO GRADE ARE LISTED BELOW. THESE NUMBERS ARE TAKEN FROM FIELD COUNTS, HOWEVER THE ACTUAL NUMBER THAT ARE TO BE ADJUSTED TO GRADE WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION, PAYMENT SHALL BE FOR THE ACTUAL NUMBERS OF EACH ITEM THAT ARE ADJUSTED TO GRADE AS DETERMINED BY THE ENGINEER. WHEN ADJUSTING MANHOLES EXTREME CARE SHALL BE TAKEN WHEN REMOVING CONCRETE, SO AS NOT TO DAMAGE MANHOLE COVERS AND FRAMES. MANHOLES SHALL BE ADJUSTED USING CONCRETE SHOWN IN DRAWING BP-3.1. WHEN ADJUSTING MANHOLES AND VALVE BOXES ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND ANY OTHER INCIDENTALS AND REMOVAL OF THE EXISTING CONCRETE SHALL BE PAID FOR UNDER EACH ITEM AS SHOWN ON THE GENERAL SUMMARY.

ITEM 604 MANHOLE ADJUSTED TO GRADE	88 EACH
ITEM 604 GAS VALVE BOX ADJUSTED TO GRADE	33 EACH
ITEM 638 VALVE BOX ADJUSTED TO GRADE	56 EACH

AN ESTIMATED QUANTITY OF ITEM 448 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT)

PRESENT 17. THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON, AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVEWAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (4' MAX) BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M AND ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2. PG 64-22.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 75 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M 60 CU.YD.

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M AND ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 140 CU.YD.

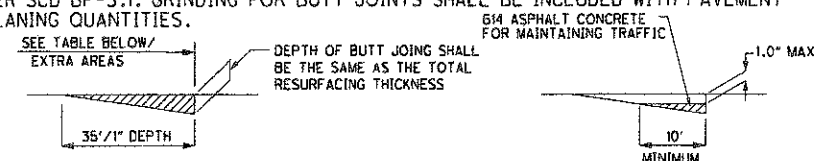
ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M 110 CU. YD.

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. THE DEPTH OF REPAIR SHALL BE SIX INCHES TO FOUR INCHES IN DEPTH (6"x4"). ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR. THIS OPERATION WILL BE PERFORMED BEFORE THE PAVEMENT PLANING OPERATION OCCURS.

ITEM 253 PAVEMENT REPAIR 600 CU.YD.

(LOCATION: S.L.M. 17.93 TO S.L.M. 21.00)

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT EXTRA AREAS WITH WEARING COURSE REMOVED. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE ELIMINATED BY IMMEDIATELY PLACING THE PROPOSED INTERMEDIATE COURSE TO WITHIN 1.0" OF EXISTING PAVEMENT ELEVATION AFTER PLANING OPERATION OR BY PLACING AN ASPHALT CONCRETE WEDGE. BUTT JOINTS SHALL BE AS PER SCD BP-3.1. GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH PAVEMENT PLANING QUANTITIES.



COUNTY	ROUTE	DESCRIPTION	ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU.YD.
MUS	S.R. 60	BEGIN WORK	2
		APPROACH ROADS	30
		BRIDGES	6
MUS	S.R. 60	END WORK	2
TOTAL			40

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWINGS MT-95.31 & MT-95.32.

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

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIME TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL CONFLICTING SIGNS AND PAVEMENT MARKINGS, WHETHER INSIDE OR OUTSIDE THE WORK LIMITS, SHALL BE COVERED OR REMOVED. WHERE APPLICABLE, AND WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLACE TEMPORARY SIGNS OR TEMPORARY PAVEMENT MARKING AT THESE LOCATIONS.

THE CONTRACTOR SHALL SUBMIT, IN WRITING A SCHEDULE OF OPERATIONS TO THE DISTRICT DEPUTY DIRECTOR AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICE AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY, AS PER 614.03.

THE CONTRACTOR SHALL BE REQUIRED TO CONTACT THE PROPERTY OWNERS AT LEAST 24 HOURS PRIOR TO ALL DRIVE CLOSURES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 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 AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 614, MAINTAINING TRAFFIC LUMP

ITEM 614 MAINTAINING TRAFFIC

ALL PLANED SURFACES SHALL BE OVERLAYED WITH AT LEAST ASPHALT CONCRETE INTERMEDIATE COURSE BEFORE OPENING TO TRAFFIC. TRAFFIC SHALL NOT BE MAINTAINED ON A PLANED SURFACE. EITHER TEMPORARY OR PERMANENT PAVEMENT MARKINGS SHALL BE IN PLACE BEFORE OPENING ANY LANES TO TRAFFIC.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE 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.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 632 DETECTOR LOOP, AS PER PLAN

ALL DETECTOR LOOPS SHALL BE CUT INTO THE PLANED SURFACE OR THE PROPOSED INTERMEDIATE COURSE AT A DEPTH OF 4" FROM THE PROPOSED SURFACE ELEVATION. IF THE CONTRACTOR SO CHOOSES, THEY MAY CUT THE DETECTOR LOOPS INTO THE EXISTING ASPHALT SURFACE COURSE BEFORE PLANING BUT SHALL MAKE SURE THE MATERIAL USED TO FILL THE SAW CUT IS LEFT FAR ENOUGH BELOW THE SURFACE COURSE THAT IT WILL NOT BE DISTURBED DURING THE PLANING OPERATION. THE CONTRACTOR SHALL TEST ALL LEAD-IN CABLES PRIOR TO MAKING FINAL SPLICE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10. FINAL LOCATIONS, SIZE AND ORIENTATION WILL BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632 DETECTOR LOOP, AS PER PLAN.

ITEM 632 DETECTOR LOOP, AS PER PLAN 6 EACH

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:

MEMORIAL DAY
FOURTH OF JULY
LABOR DAY

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY 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 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS 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 A DISINCENTIVE OF \$500.00 DOLLARS FOR EACH HOUR THAT THE CONTRACTOR IS NONCOMPLIANT WITH THE REQUIREMENTS LISTED ABOVE.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF CMS 614.11.

ITEM 614 WORK ZONE CENTER LINE, CLASS I, 642 PAINT 16.34 MILE
ITEM 614 WORK LANE LINE, CLASS I, 642 PAINT 4.64 MILE
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT 5,911 FT.
ITEM 614 WORK ZONE, STOP LINE, CLASS I, 642 PAINT 2,638 FT.
ITEM 614 WORK ZONE, CROSSWALK LINE, CLASS I, 642 PAINT 3,894 FT.

ITEM 407 TACK COAT, TRACKLESS TACK, INTERMEDIATE AND SURFACE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

ALTERNATE PRODUCTS TO BE USED MUST BE ON FILE WITH THE NEW PRODUCT ENGINEER AT THE TIME OF THE ADVERTISEMENT DATE OF THE PROJECT PLANS. PLEASE CONTACT BRAD YOUNG, ODOT NEW PRODUCT ENGINEER, 614-351-2882.

THIS WORK IS CONSIDERED AN EXPERIMENTAL CONSTRUCTION FEATURE FOR EVALUATION OF PRODUCTS THAT ARE ON FILE WITH THE NEW PRODUCT ENGINEER.

MEET ALL REQUIREMENTS OF ODOT 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

A MANUFACTURER'S REPRESENTATIVE MUST BE AT THE PROJECT SITE DURING THE FIRST TWO DAYS OF APPLICATION OF TRACKLESS TACK.

MATERIAL: IF USING BLACKLIDGE TRACKLESS TACK THE MATERIAL WILL CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FURUL VISCOSITY, SFS @ 25°C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	-	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	-	5
RESIDUE BY DISTILLATION, %	AASHTO T59	50	-
OIL DISTILLATE, %	AASHTO T59	-	1
SIEVE TEST, %	AASHTO T59	-	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C	AASHTO T49	-	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	-
SOLUBILITY, %	AASHTO T44	97.5	-
ORIGINAL BINDER DSR@82°C GYSIN 3.10 RAD/SEC	AASHTO T315	1.00	-

FOR TRACKLESS TACK OTHER THAN BLACKLIDGE TRACKLESS TACK, THE MATERIAL WILL CONFORM TO THE PHYSICAL PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER FOR THE TESTS LISTED BELOW.

PARAMETER	TEST METHOD
SAYBOLT FURUL VISCOSITY, SFS @ 25°C	AASHTO T59
STORAGE STABILITY, 24 HRS, %	AASHTO T59
STORAGE STABILITY, 5 DAYS, %	AASHTO T59
RESIDUE BY DISTILLATION, %	AASHTO T59
OIL DISTILLATE, %	AASHTO T59
SIEVE TEST, %	AASHTO T59
TEST ON RESIDUE	
PENETRATION, @ 25°C	AASHTO T49
SOFTENING POINT RANGE DEG C	AASHTO T53
SOLUBILITY, %	AASHTO T44
ORIGINAL BINDER DSR@82°C GYSIN 3.10 RAD/SEC	AASHTO T315

NOTE: TRACKLESS TACK SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC.

ACCEPTANCE AND SAMPLING OF MATERIALS: FOR ALL TRACKLESS TACK SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LABORATORY TO THE ENGINEER AND TO THE DISTRICT LABORATORY SHOWING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS THE PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF 2 QUARTS OF TRACKLESS TACK SAMPLED FROM THE DISTRIBUTOR ON THE FIRST DAY OF APPLICATION. CLEARLY MARK ON THE SAMPLES THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

ADDITIONAL SAMPLING OF BLACKLIDGE TRACKLESS TACK WILL FOLLOW THE REQUIREMENTS OF ITEM 407. FOR ALTERNATE TRACKLESS TACK MATERIAL, 2 QUARTS OF MATERIAL WILL BE SAMPLED EACH DAY THE MATERIAL IS USED.

EQUIPMENT: SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR

REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.08 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 180°F TO 180°F. DO NOT EXCEED 180°F. THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: FOR ANY TRACKLESS TACK USED SUPPLY DATA FOR SHEAR AND TENSILE BOND STRENGTH ACCORDING TO METHODS DESCRIBED IN VIRGINIA TRANSPORTATION RESEARCH COUNCIL REPORT VTRC 09-R21. RANDOMLY TAKE 8-1 INCH DIAMETER CORES FROM THE PROJECT AND PERFORM 3 SHEAR AND 3 TENSILE BOND STRENGTH TESTS. BE SURE CORES TAKEN INCLUDE BOTH AN ASPHALT LAYER ABOVE AND ASPHALT LAYER BELOW THE TRACKLESS TACK LAYER.

DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DET AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY BLACKLIDGE TRACKLESS TACK FOR THE REMAINDER OF THE PROJECT AT NO COST TO THE DEPARTMENT.

ANY FAILING EXPERIMENTAL TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE NEW PRODUCT ENGINEER'S LIST.

IN THE EVENT THE PRODUCT FAILS TO PERFORM TO THE SATISFACTION OF THE DEPARTMENT, THE MANUFACTURER MAY PERFORM THE FOLLOWING ITEMS IN ORDER TO BE CONSIDERED FOR FUTURE EXPERIMENTAL CONSTRUCTION FEATURE PROJECTS:

1. SUBMIT IN WRITING TO THE DEPARTMENT THE REASON(S) WHY THE PRODUCT FAILED TO PERFORM AND DETAIL CHANGES THAT WILL BE MADE TO ELIMINATE THE CAUSE(S) OF FAILURE, AND
2. PROPOSE CHANGES TO THE PRODUCT'S SPECIFICATIONS, AND
3. SUBMIT SAMPLES OF THE REDEVELOPED PRODUCT TO THE LABORATORY FOR TESTING TO THE NEW SPECIFICATIONS, AND
4. DEMONSTRATE TO THE DEPARTMENT SUCCESSFUL USE OF THE MATERIAL ON AT LEAST ONE NON-ODOT PROJECT.

WHEN THE ABOVE ITEMS ARE COMPLETED TO THE DEPARTMENT'S SATISFACTION, THE REDEVELOPED AND FIELD TESTED PRODUCT MAY BE PUT BACK ON FILE WITH THE NEW PRODUCT ENGINEER AND EVALUATED ON FUTURE ODOT PROJECTS USING THE EXPERIMENTAL CONSTRUCTION FEATURE PROCESS.

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

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE 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) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

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

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT 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 THE FOLLOWING TRAFFIC CONTROL 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 FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). 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.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE 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 WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 100 HOURS

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

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

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS,
AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THIS LIST IS AVAILABLE ON THE ODOT WEB SITE AT [HTTP://WWW.DOT.STATE.OH.US/TEST LAB/APPLISTS/MISC/PCMS.HTM](http://www.dot.state.oh.us/test_lab/applists/misc/pcms.htm). THE LIST CURRENTLY CONTAINS CLASS I, II, AND III UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 1250 FT., 850 FT. AND 650 FT., RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETRO REFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE WILL BE SHOWN IN THE MAINTENANCE OF TRAFFIC PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION.

THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH-INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRE CONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN,
AS PER PLAN 300 DAYS

(NOTE: 2 SIGNS WILL BE REQUIRED FOR THIS PROJECT,
2 SIGNS x 5 MONTHS = 300 DAYS)

GENERAL NOTES

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SHEET NUMBER																					PARTICIPATION				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	J.C.	R.G.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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GENERAL SUMMARY

MUS-60-17.93

82757.GGS-001.DGN 6-6-II APPEND A

PAVEMENT CALCULATIONS

[illegible]

① BRIDGE LIMITS STA. 230+48.40 - STA. 231+08.40

PAVEMENT CALCULATIONS

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PAVEMENT CALCULATIONS

S.R. 60 (MAPLE AVENUE) APPROACHES	PAVEMENT WIDTH	PAVEMENT LENGTH	PAVEMENT AREA (AREA BY COMPUTER)	448 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	448 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22			407 TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE	407 TACK COAT, TRACKLESS TACK, SURFACE COURSE		254 PAVEMENT PLANING, ASPHALT CONCRETE		608 DETECTABLE WARNING	
	FEET	FEET	SQ. YD.	CU. YD.	CU. YD.			GAL.	GAL.		SO. YD.		SO. FT.	
THURMAN STREET (RT)			90	3.2	4.4			4.5	6.8		90		32	
FOREST AVENUE (LT.)			31	1.1	1.5			1.6	2.4		31			
FOREST AVENUE (RT.)			75	2.6	3.6			3.8	5.6		75		32	
SHERIDAN STREET (RT)			27	1.0	1.3			1.4	2.0		27			
LOCUST AVENUE (LT)			77	2.7	3.7			3.9	5.8		77			
WEBSTER STREET (RT)			58	2.0	2.8			2.9	4.4		58		32	
LENOX AVENUE (LT)			75	2.6	3.7			3.8	5.6		75		32	
VAN HORN AVENUE (RT)			75	2.6	3.6			3.8	5.6		75		32	
FAIRMONT AVENUE (LT)			72	2.5	3.5			3.6	5.4		72		32	
96+05.60			SUSPEND RESURFACING					SUSPEND RESURFACING			SUSPEND RESURFACING		SUSPEND RESURFACING	
104+00.00			RESUME RESURFACING					RESUME RESURFACING			RESUME RESURFACING		RESUME RESURFACING	
IMLAY DRIVE (RT)			62	2.2	3.0			3.1	4.7		62		32	
JACOBS STREET (LT)			76	2.6	3.7			3.8	5.7		76		32	
GLENDALE AVENUE (RT)			76	2.6	3.7			3.8	5.7		76		32	
HEADLEY STREET (LT)			72	2.5	3.5			3.6	5.4		72		32	
SOMERS STREET (LT)			78	2.7	3.8			3.9	5.9		78		32	
BROOKOVER DRIVE (RT)			82	2.9	4.0			4.1	6.2		82		32	
ARTIS DRIVE (LT)			75	2.6	3.6			3.8	5.6		75		32	
TAYLOR STREET (RT)			95	3.3	4.6			4.8	7.1		95			
TAYLOR STREET (LT)			105	3.7	5.1			5.3	7.9		105			
WINTON AVENUE (RT)			76	2.6	3.7			3.8	5.7		76		32	
KINZEL DRIVE (RT)			92	3.2	4.5			4.6	6.9		92		32	
FRANCIS STREET (LT)			75	2.6	3.6			3.8	5.6		75		32	
RICHMOND AVENUE (RT)			76	2.6	3.7			3.8	5.7		76		32	
WABASH AVENUE (LT)			75	2.6	3.6			3.8	5.6		75		32	
CAMBRIDGE STREET (RT)			80	2.8	3.9			4.0	6.4		80			
LEONARD AVENUE (LT)			20	1.0	1.0			1.0	1.5		20		32	
PRINCETON AVENUE (LT)			130	4.5	6.3			6.5	9.8		130			
HARDING ROAD (RT)			108	3.8	5.3			5.4	8.1		108		32	
62+50.00			SUSPEND RESURFACING					SUSPEND RESURFACING			SUSPEND RESURFACING		SUSPEND RESURFACING	
64+40.00			RESUME RESURFACING					RESUME RESURFACING			RESUME RESURFACING		RESUME RESURFACING	
JAMES ROAD (RT)			25	1.0	1.2			1.3	1.9		25			
COUNTRY CLUB DRIVE (LT)			97	3.4	4.7			4.9	7.3		97			
BEVERLY AVENUE (LT)			115	4.0	5.6			5.8	8.6		115			
MILITARY ROAD (RT)			210	7.3	10.2			10.5	15.8		210			
MILITARY ROAD (LT)			155	5.4	7.5			7.8	11.6		155			
ORCHARD HILL (RT)			70	2.5	3.4			3.5	5.3		70			
GARDEN ROAD (RT)			70	2.5	3.4			3.5	5.3		70			
GROVE ROAD (RT)			80	2.8	3.9			4.0	6.0		80			
BRANDYWINE BLVD. (LT)			135	4.7	6.6			6.8	10.1		135			
BRANDYWINE BLVD. (RT)			120	4.2	5.8			6.0	9.0		120			
COLONY DRIVE (RT)			200	7.0	9.7			10.0	15.0		200			
KAY DRIVE (RT)			205	7.1	10.0			10.3	15.4		205			
TOTALS (CARRIED TO THE GENERAL SUMMARY)				123.0	170.7			176.6	254.6		3,515.0		640.0	

PAVEMENT CALCULATIONS

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PAVEMENT CALCULATIONS

(C) - AREA BY COMPUTER

STATION TO STATION S.R. 60 & APPROACHES	WIDTH PAV'T.	FEET	PAVEMENT AREA	448	448				407	407	407	407		254
				1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22				TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y. GAL.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE GAL.	TACK COAT, TRACKLESS TACK, SURFACE COURSE GAL.		PAVEMENT PLANING, ASPHALT CONCRETE SQ. YD.
S.R. 60	(FEET)		SO. YD.	CU. YD.	CU. YD.									
BRANDYWINE & RICHEY RD.	34.5 AVG.	180.0	(C) 980.0	34.0	47.6						49.0	73.5		980.0
1116+63.39 - 1118+11.02	8.46' AVG.	147.63'	138.8	4.8	6.8						6.4	10.4		179.8
1118+11.02 - 1119+13.39	VAR.	102.37'	(C) 516.2	17.9	25.1						25.8	38.7		629.9
1119+13.39 - 1139+25.00	40.0'	2,011.61'	8,940.5	310.4	434.6						447.0	670.5		10,058.1
TURN LANES - 1122+00-1123+30 & 1129+60-1132+50	10'-12'	420.0	496.0	17.2	24.1						24.8	37.2		496.0
1139+25.00 - 1141+98.49	38.0'	273.49'	1,154.7	40.1	56.1						57.7	86.6		1,230.7
1141+98.49 - 1143+20.40	37.0' AVG.	121.91'	501.2	17.4	24.4						25.1	37.6		535.1
1143+20.40 - 1145+90.40	30.0' AVG.	270.00'	900.0	31.3	43.8						45.0	67.5		900.0
1145+90.40 - 1146+70.00	24.0'	79.60'	212.3	7.4	10.3						10.6	15.9		212.3
1146+70.00 - 1176+50.00	24.0'	2,980.00'	7,946.7	275.9	386.3				397.3	596.0				7,946.7
1176+50.00 - 1177+92.55	24.0'	142.55'	380.1	13.2	18.5				19.0	28.5				380.1
1177+92.55 - 1181+22.55	30.0' AVG.	330.00'	1,100.0	38.2	53.5				55.0	82.5				1,100.0
1181+22.55 - 1186+72.54	36.0'	549.99'	2,200.0	76.4	106.9				110.0	165.0				2,200.0
1186+72.54 - 1190+02.54	30.0' AVG.	330.00'	1,100.0	38.2	53.5				55.0	82.5				1,100.0
1190+02.54 - 1192+00.00	24.0'	197.46'	526.6	18.3	25.6				26.3	39.5				526.6
1192+00.00 - 1192+50.00	24.0'	50.00'	133.3	4.6					6.7	10.0				133.3
C.R. 298 (OLDE FALLS ROAD)														
0+18.23 - 0+79.33 (RADIUS)	VAR.	61.10'	(C) 332.6	11.5	16.2						16.6	24.9		349.6
0+79.33 - 0+87.72	26.0'	8.39'	24.2	0.8	1.2						1.2	1.8		26.5
0+87.72 - 1+00.00	25.21' AVG.	12.28'	34.4	1.2	1.7						1.7	2.6		34.4
C.R. 309 (FAIRVIEW ROAD RT.)														
0+19.13 - 1+17.30 (RADIUS)	VAR.	98.17'	(C) 462.2	16.0	22.5				23.1	35.7				462.2
T.R. 309 (FAIRVIEW ROAD LT.)														
0+19.18 - 1+00.08 (RADIUS)	VAR.	80.90'	(C) 397.1	13.8	19.3				19.9	29.8				397.1
TOTALS (CARRIED TO THE GENERAL SUMMARY)				988.6	1,378.0				712.3	1,069.5	710.9	1,067.2		29,878.4

PAVEMENT CALCULATIONS

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SHOULDER CALCULATIONS

STATION TO STATION SURVEY AND CONSTRUCTION S.R. 60 AND APPROACHES	LT. SIDE		RT. SIDE		SHOULDER AREA SQ. YD.	448	448			407	407	407	407	254	
	WIDTH BERM (FEET)	FEET	WIDTH BERM (FEET)	FEET		1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M CU. YD.	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU. YD.			TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y. GAL.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE GAL.	TACK COAT, TRACKLESS TACK, SURFACE COURSE GAL.	PAVEMENT PLANING, ASPHALT CONCRETE SQ. YD.	
1139+25.00 - 1146+70.00			4.0'	745.00'	331.1	11.5	16.1					16.6	24.8	331.1	
1146+70.00 - 1176+50.00			2.0'	2,980.00'	662.2	23.0	32.2					33.1	49.7	662.2	
1176+50.00 - 1177+50.00			3.0'AVG.	100.00'	33.3	1.2	1.6					1.7	2.5	33.3	
1177+50.00 - 1183+02.12			4.0'	552.13'	245.4	8.5	11.9					12.3	18.4	245.4	
1184+54.11 - 1191+00.00			4.0'	645.89'	287.1	10.0	14.0					14.4	21.5	287.1	
1191+00.00 - 1192+00.00			3.0'AVG.	100.00'	33.3	1.2	1.6					1.7	2.5	33.3	
1192+00.00 - 1192+50.00			2.0'	50.00'	11.1	0.4	0.5					0.6	0.8	11.1	
1443+20.21 - 1145+90.40	4.0'	270.19'			120.1	4.2	5.8					6.0	9.0	120.1	
1145+90.40 - 1146+70.00	3.0'AVG.	79.60'			26.5	0.9	1.3					1.3	2.0	26.5	
1146+70.00 - 1176+50.00	2.0'	2,980.00'			662.2	23.0	32.2			33.1	49.7			662.2	
1176+50.00 - 1177+50.00	3.0'AVG.	100.00'			33.3	1.2	1.6			1.7	2.5			33.3	
1177+50.00 - 1183+55.97	4.0'	605.97'			269.3	9.4	13.1			13.5	20.2			269.3	
1184+99.77 - 1191+00.00	4.0'	600.23'			266.8	9.3	13.0			13.3	20.0			266.8	
1191+00.00 - 1192+00.00	3.0'AVG.	100.00'			33.3	1.2	1.6			1.7	2.5			33.3	
1192+00.00 - 1192+50.00	2.0'	50.00'			11.1	0.4	0.5			0.6	0.8			11.1	
C.R. 298(OLDE FALLS RD.) 0+18.23 - 0+59.0(RADIUS)			4.0'	70.7'	31.4	1.1	1.5					1.6	2.4	31.4	
0+59.01 - 0+90.00			4.0'	30.99'	13.8	0.5	0.7					0.7	1.0	13.8	
0+90.00 - 1+00.00			3.0'AVG.	10.00'	3.3	0.1	0.2					0.2	0.3	3.3	
C.R. 309(FAIRVIEW RD. RT.) 0+19.13 - 1+17.30(RADIUS)			4.0'	119.7'	53.2	1.8	2.6			2.7	4.0			53.2	
0+19.23 - 0+65.51(RADIUS)	4.0'	87.40'			38.8	1.3	1.9			1.9	2.9			38.8	
0+65.51 - 1+17.30	4.0'	51.79'			23.0	0.8	1.1			1.2	1.7			23.0	
T.R. 309(FAIRVIEW RD. LT.) 0+19.18 - 1+00.08(RADIUS)			4.0'	101.20'	45.0	1.6	2.2			2.3	3.4			45.0	
0+19.18 - 0+50.80(RADIUS)	4.0'	63.40'			28.2	1.0	1.4			1.4	2.1			28.2	
0+50.80 - 1+00.08	4.0'	49.28'			21.9	0.8	1.1			1.1	1.6			21.9	
TOTALS (CARRIED TO THE GENERAL SUMMARY)						114.4	159.7			74.5	111.4	90.2	134.9	3,284.7	

SHOULDER CALCULATIONS

MUS-60-17.93

PAVEMENT CALCULATIONS

(C) - AREA BY COMPUTER

STATION TO STATION SURVEY & CONSTRUCTION S.R. 60	PAV'T. WIDTH		PAVEMENT AREA	448	448					407	407				254
				1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22					TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.				PAVEMENT PLANING, ASPHALT CONCRETE
	(FEET)	FEET	SQ. YD.	CU. YD.	CU. YD.					GAL.	GAL.				SQ. YD.
1192+50.00 - 1198+50.00	24.37 AVG.	600.00	1624.7	56.4	79.0					81.2	121.9				1624.7
1198+50.00 - 1204+37.65	24.00	587.65	1567.1	54.4	76.2					78.4	117.5				1567.1
1204+37.65 - 1206+08.75	27.80 AVG.	171.10	528.5	18.4	25.7					26.4	39.6				528.5
1206+08.75 - 1207+07.56	23.3 AVG.	98.81	255.8	8.9	12.4					12.8	19.2				255.8
FULL DEPTH	11.0 AVG.	98.81	120.8	4.2	5.9					6.0	9.1				120.8
1207+07.56 - 1209+55.81	23.75' AVG.	248.25	655.1	22.7	31.8					32.8	49.1				655.1
FULL DEPTH	11.50 AVG.	248.25	317.2	11.0	15.4					15.9	23.8				317.2
1209+55.81 - 1212+25.00	23.75 AVG.	269.19	710.4	24.7	34.5					35.5	53.3				710.4
FULL DEPTH	5.5 AVG.	269.19	164.5	5.7	8.0					8.2	12.3				164.5
1212+25.00 - 1224+00.00	24.00	1175.00	3133.3	108.8	152.3					156.7	235.0				3133.3
1224+00.00 - 1240+37.51	24.00	1637.51	4366.7	151.6	212.3					218.3	327.5				4366.7
1240+37.51 - 1243+67.51	30.00 AVG.	330.00	1100.0	38.2	53.5					55.0	82.5				1100.0
1243+67.51 - 1250+74.54	36.00	707.03	2828.1	98.2	137.5					141.4	212.1				2828.1
1250+74.54 - 1256+14.42	21.00 AVG.	539.88	1259.7	43.7	61.2					63.0	94.5				1259.7
FULL DEPTH	15.00 AVG.	539.88	899.8	31.2	43.7					45.0	67.5				899.8
1256+14.42 - 1282+54.58	36.00	2640.16	10560.6	366.7	513.4					528.0	792.0				10560.6
APPROACH SLAB															
1282+54.58 - 1282+69.58															
BRIDGE LIMITS															
1282+69.58 - 1283+04.25															
APPROACH SLAB															
1283+04.25 - 1283+02.77															
1283+02.77 - 1303+47.39	24.00	2044.62	5452.3	189.3	265.0					272.6	408.9				5452.3
FULL DEPTH	12.00	2044.62	2726.2	94.7	132.5					136.3	204.5				2726.2
1303+47.39 - 1311+17.46	24.00	770.07	2053.5	71.3	99.8					102.7	154.0				2053.5
FULL DEPTH	6.00 AVG.	770.07	513.4	17.8	25.0					25.7	38.5				513.4
1311+17.46 - 1470+62.29	24.00	15944.83	42519.5	1476.4	2066.9					2126.0	3189.0				42519.5
1470+62.29 - 1471+00.00	24.11 AVG.	37.71	101.0	3.5	4.9					5.1	7.6				101.0
1471+00.00 - 1477+22.29	30.37 AVG.	622.29	2099.9	72.9	102.1					105.0	157.5				2099.9
1477+22.29 - 1482+06.85	36.00	484.56	1938.2	67.3	94.2					96.9	145.4				1938.2
1482+06.85 - 1488+66.85	30.00 AVG.	660.00	2200.0	76.4	106.9					110.0	165.0				2200.0
1488+66.85 - 1500+00.00	24.00	1133.15	3021.7	104.9	146.9					151.1	226.6				3021.7
1500+00.00 - 1500+50.00	23.54 AVG.	50.00	130.8	4.5	6.4					6.5	9.8				130.8
APPROACH ROAD QUANTITIES															
ARROWHEAD DRIVE	26.5 AVG.	20.0	59.0	2.0	2.9					3.0	4.4				59.0
KENLO WOODS DRIVE	26.5 AVG.	30.0	175.0	6.1	8.5					8.8	13.1				175.0
POWELSON DRIVE	69 AVG.	55.0	422.0	14.6	20.5					21.1	31.7				422.0
JONES RD. TWP. RD. 470	37 AVG.	35.0	144.0	5.0	7.0					7.2	10.8				144.0
FAWN RD.	37 AVG.	25.0	103.0	3.6	5.0					5.2	7.7				103.0
MCCLADE SCHOOL RD.	44 AVG.	35.0	171.0	5.9	8.3					8.6	12.8				171.0
NEW RILEY RD.	41 AVG.	25.0	114.0	4.0	5.5					5.7	8.6				114.0
TOTALS (CARRIED TO THE GENERAL SUMMARY)				3,265.0	4,571.1					4,702.1	7,052.8				94,036.8

ADDENDUM
PAVEMENT CALCULATIONS

MUS-60-17.93

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STATION TO STATION SURVEY & CONSTRUCTION APPROACHES	WIDTH PAV'T. (FEET)	FEET	PAVEMENT AREA SQ. YD.	448	448					407	407		254		
				1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22					TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y. GAL.	TACK COAT @ 0.075 GAL./S.Y. GAL.		PAVEMENT PLANING, ASPHALT CONCRETE		
ASH MEADOWS DRIVE (EXIT)															
0+18.14 - 0+51.76	VAR.	33.62	(C) 101.2	3.5	4.9					5.1	7.6		(C) 101.2		
0+51.76 - 0+90.00	17.75	38.24	75.4	2.6	3.7					3.8	5.7		75.4		
ASH MEADOWS DRIVE (ENTRANCE)															
0+18.20 - 0+59.11	VAR.	40.91	(C) 134.8	4.9	6.6					6.7	10.1		(C) 134.8		
0+59.11 - 0+65.00	17.04	5.89	11.2	0.4	0.5					0.6	0.8		11.2		
T.R. 149 (CARNATION RD.)															
0+12.22 - 0+65.60	VAR.	53.38	(C) 217.7	7.6	10.6					10.9	16.3		(C) 217.7		
C.R. 3 (RICHVALE RD.)															
0+18.00 - 0+66.30	VAR.	48.30	(C) 251.7	8.7	12.2					12.6	18.9		(C) 251.7		
LIASKIM LANE															
0+18.49 - 0+66.42	VAR.	47.93	(C) 194.4	6.8	9.5					9.7	14.6		(C) 194.4		
CHARDON RD.															
0+18.21 - 0+60.48	VAR.	42.27	(C) 165.3	5.7	8.0					8.3	12.4		(C) 165.3		
C.R. 500 (CREAMERY RD.)															
0+19.12 - 0+96.87	VAR.	77.75	(C) 360.9	12.5	17.5					18.0	27.1		(C) 360.9		
T.R. 307 (CONN RD.)															
0+12.02 - 0+75.00	VAR.	62.98	(C) 183.1	6.4	8.9					9.2	13.7		(C) 183.1		
VIRGINIA RD.															
0+18.00 - 0+53.05	VAR.	35.05	152.0	5.3	7.4					7.6	11.4		152.0		
NORTH VISTA DRIVE															
0+18.11 - 0+75.37	VAR.	57.26	(C) 275.4	9.6	13.4					13.8	20.7		(C) 275.4		
0+75.37 - 0+95.37	22.62 AVG.	20.00	50.3	1.7	2.4					2.5	3.8		50.3		
T.R. 307 (GORSUCH RD.)															
0+22.40 - 0+67.39	VAR.	44.99	(C) 253.7	8.8	12.3					12.7	19.0		(C) 253.7		
C.R. 307 (VISTA VIEW DR.)															
0+18.00 - 0+80.00	VAR.	62.00	(C) 252.9	8.8	12.3					12.6	19.0		(C) 252.9		
SHANNON RD.															
0+12.01 - 0+64.82	VAR.	52.81	(C) 260.7	9.1	12.7					13.0	19.6		(C) 260.7		
0+64.82 - 0+84.85	21.94 AVG.	20.03	48.8	1.7	2.4					2.4	3.7		48.8		
SUB-TOTALS															
TOTALS (CARRIED TO THE GENERAL SUMMARY)				104.1	145.3					149.5	224.4		2,989.5		

ALCULATED	J.C.	4/1/98	CHECKED	B.B.	4/3/98
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SHOULDER CALCULATIONS

MUS-60-17.93

M608CALCL1.DGN

(C) - AREA BY COMPUTER

STATION TO STATION & SURVEY AND CONSTRUCTION S.R. 60	LT. SIDE		RT. SIDE		SHOULDER AREA	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M CU. YD.	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU. YD.				TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.		PAVEMENT PLANING, ASPHALT CONCRETE
	WIDTH BERM (FEET)	FEET	WIDTH BERM (FEET)	FEET										
1192+50.00 - 1198+50.00	2.3 AVG.	600.00			153.3	5.3	7.5				7.7	11.5		153.3
1198+50.00 - 1199+00.00	3 AVG.	50.00			16.7	0.6	0.8				0.8	1.3		16.7
1199+00.00 - 1208+61.91	4	961.91			427.5	14.8	20.8				21.4	32.1		427.5
1209+10.88 - 1209+19.22	4	8.34			(C) 2.4	0.1	0.1				0.1	0.2		2.4
1209+74.04 - 1211+75.00	4	200.96			89.3	3.1	4.3				4.5	6.7		89.3
1211+75.00 - 1212+25.00	3 AVG.	50.00			16.7	0.6	0.8				0.8	1.3		16.7
1212+25.00 - 1224+00.00	2	1175.00			261.1	9.1	12.7				13.1	19.6		261.1
1224+00.00 - 1224+50.00	3 AVG.	50.00			16.7	0.6	0.8				0.8	1.3		16.7
1224+50.00 - 1226+58.44	4	208.44			92.6	3.2	4.5				4.6	6.9		92.6
1227+51.71 - 1248+57.04	4	2105.33			935.7	32.5	45.5				46.8	70.2		935.7
1249+54.46 - 1250+74.54	4	120.08			53.4	1.9	2.6				2.7	4.0		53.4
1250+74.54 - 1254+52.57	4	378.03			168.0	5.8	8.2				8.4	12.6		168.0
1255+45.61 - 1256+14.42	4	68.81			30.6	1.1	1.5				1.5	2.3		30.6
1256+14.42 - 1270+99.83	4	1485.41			660.2	22.9	32.1				33.0	49.5		660.2
1272+26.78 - 1282+54.58	4	1027.80			456.8	15.9	22.2				22.8	34.3		456.8
* 1281+86.06 - 1282+54.58	7.60	68.52			57.9	2.0	2.8				2.9	4.3		
APPROACH SLAB														
1282+54.58 - 1282+69.58														
BRIDGE LIMITS														
1282+69.58 - 1283+04.25														
APPROACH SLAB														
1283+04.25 - 1283+02.77														
1283+02.77 - 1284+50.75	4	147.98			65.8	2.3	3.2				3.3	4.9		65.8
* 1283+02.77 - 1284+72.25	8	169.48			150.6	5.2	7.3				7.5	11.3		150.6
1285+44.75 - 1298+76.43	4	1331.68			591.9	20.6	28.8				29.6	44.4		591.9
1300+00.45 - 1304+97.39	4	496.94			220.9	7.7	10.7				11.0	16.6		220.9
1304+97.39 - 1309+37.46	3.06 AVG.	440.07			149.6	5.2	7.3				7.5	11.2		149.6
1309+37.46 - 1311+17.46	2	180.00			40.0	1.4	1.9							

MUS-60-17.93

$$\frac{27}{121}$$

BCALCL02.DGN 4/3/98

CALCULATED	J.C.	4/1/98	CHECKED	S.B.	4/3/98
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SHOULDER CALCULATIONS

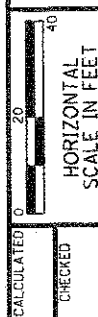
M608ACALCL3.DGN

MS-60-17.93

28
121

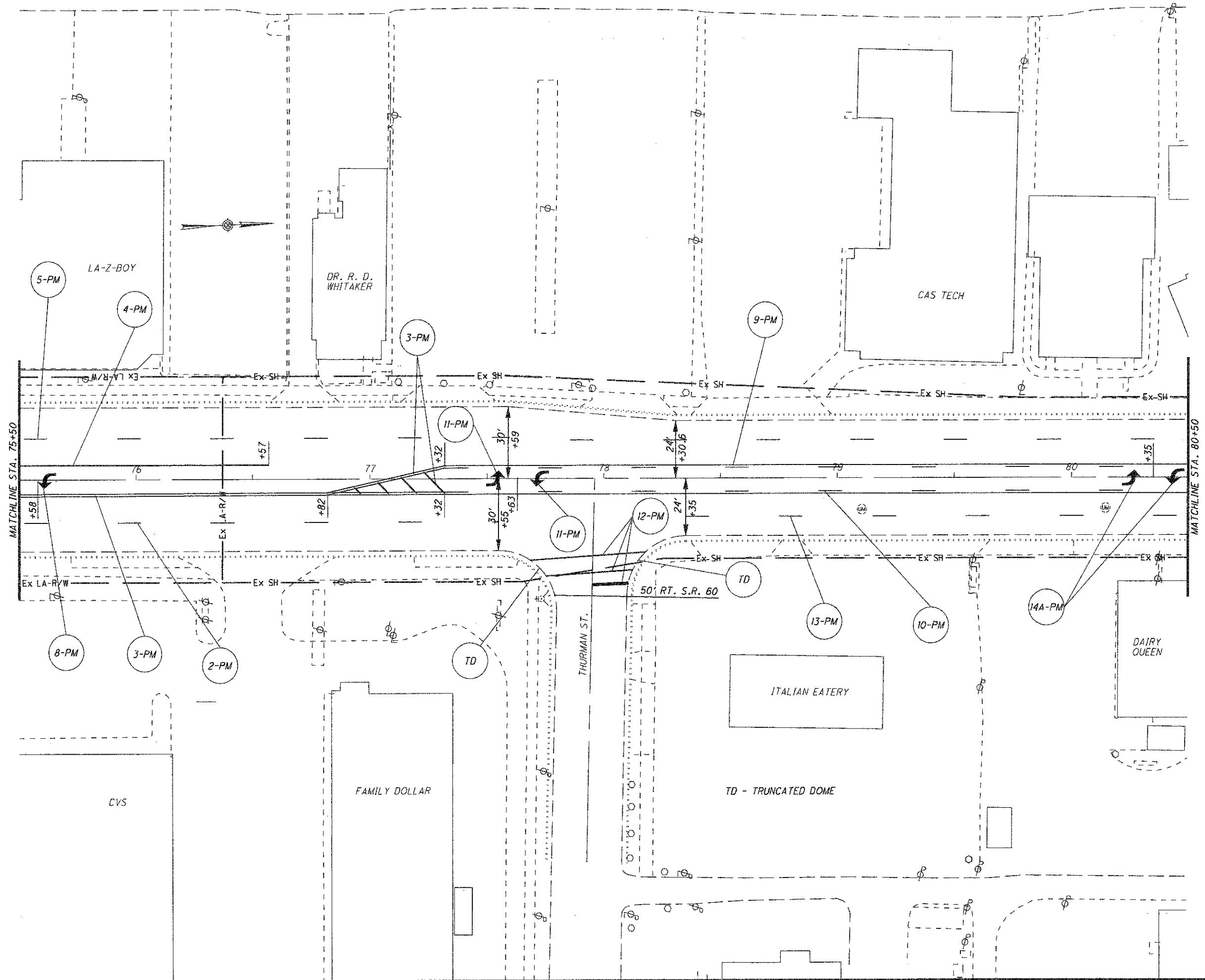
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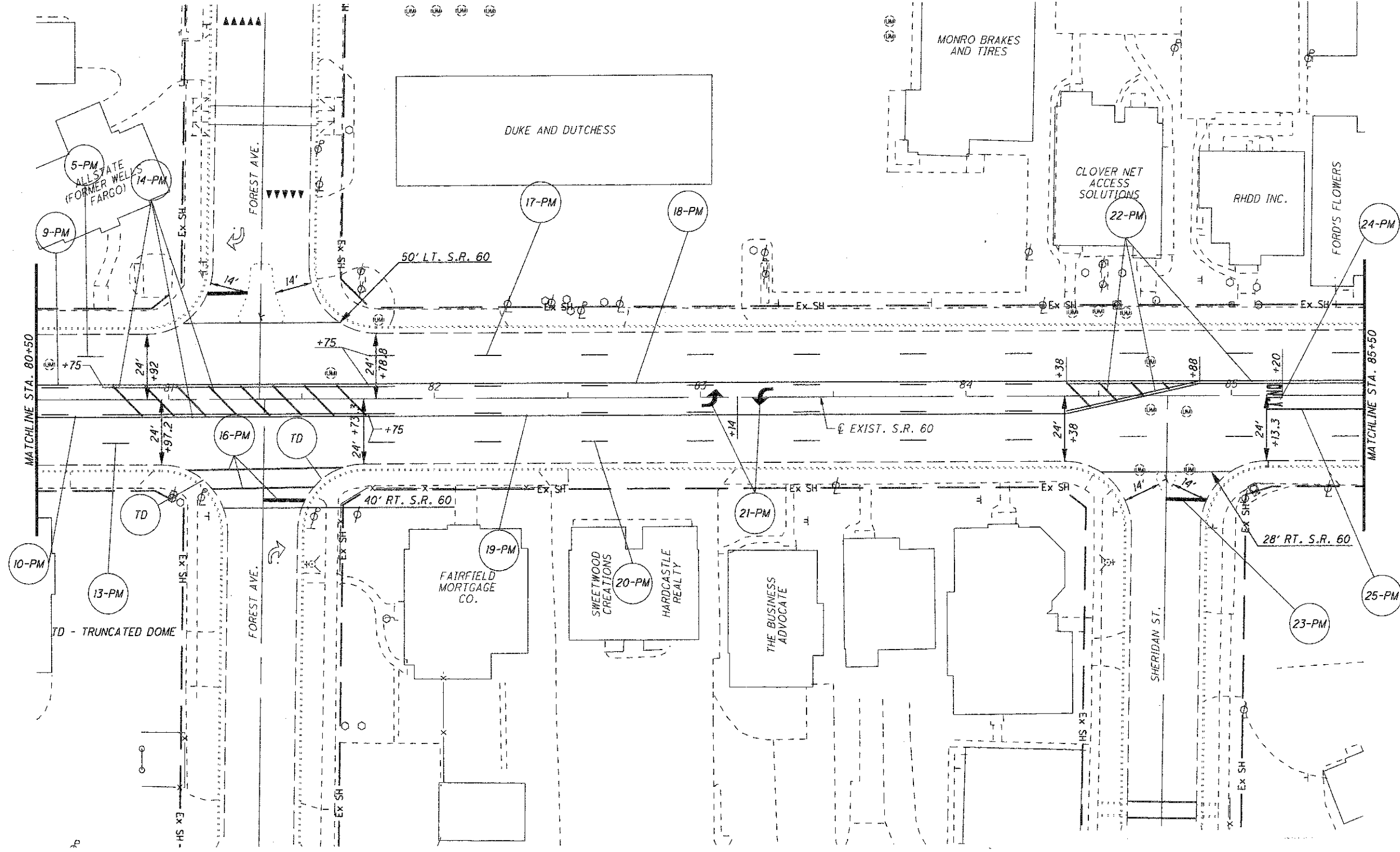
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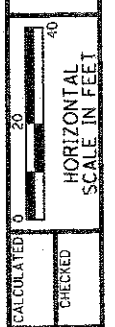
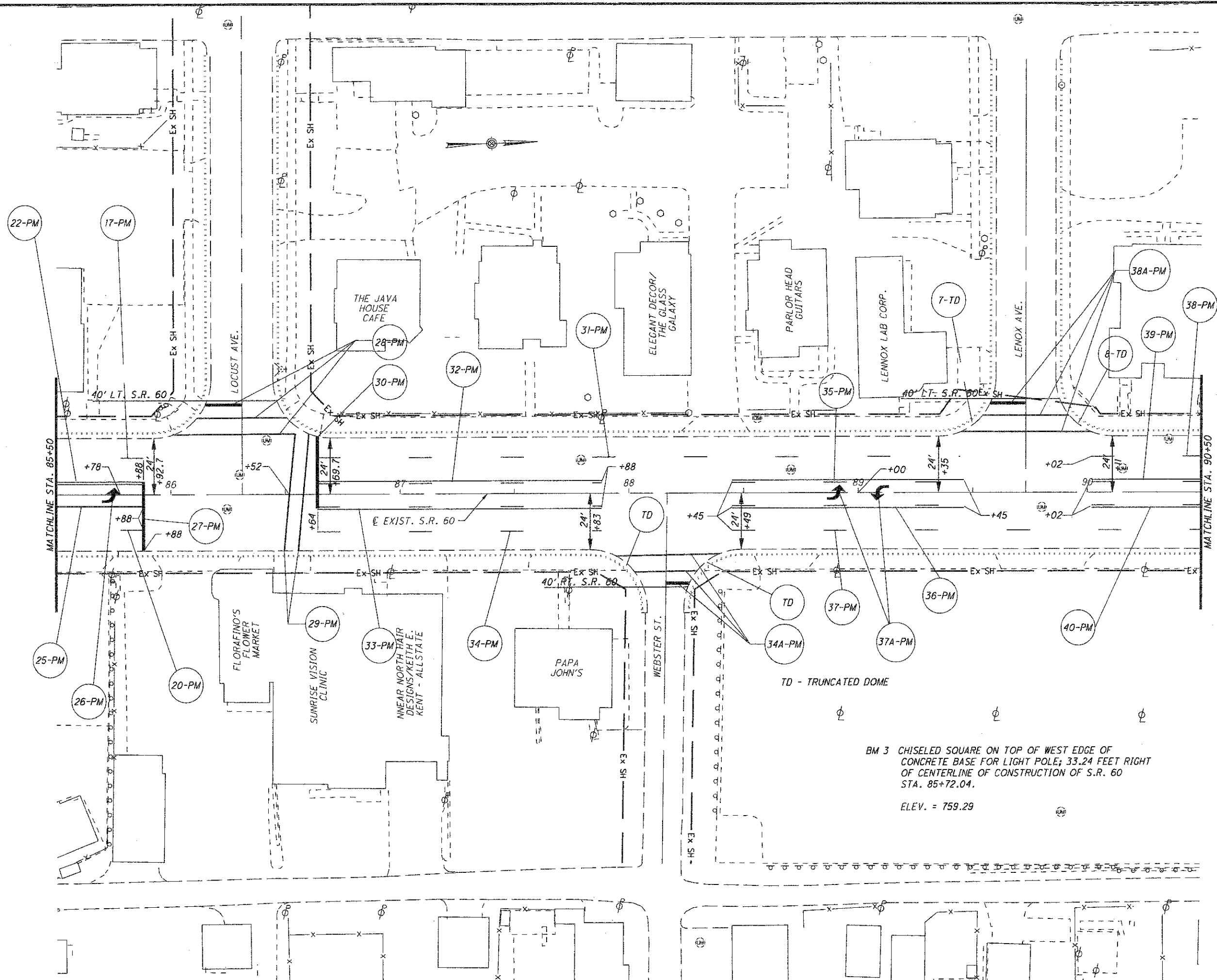


MUS-60-17.93

$$\frac{30}{121}$$



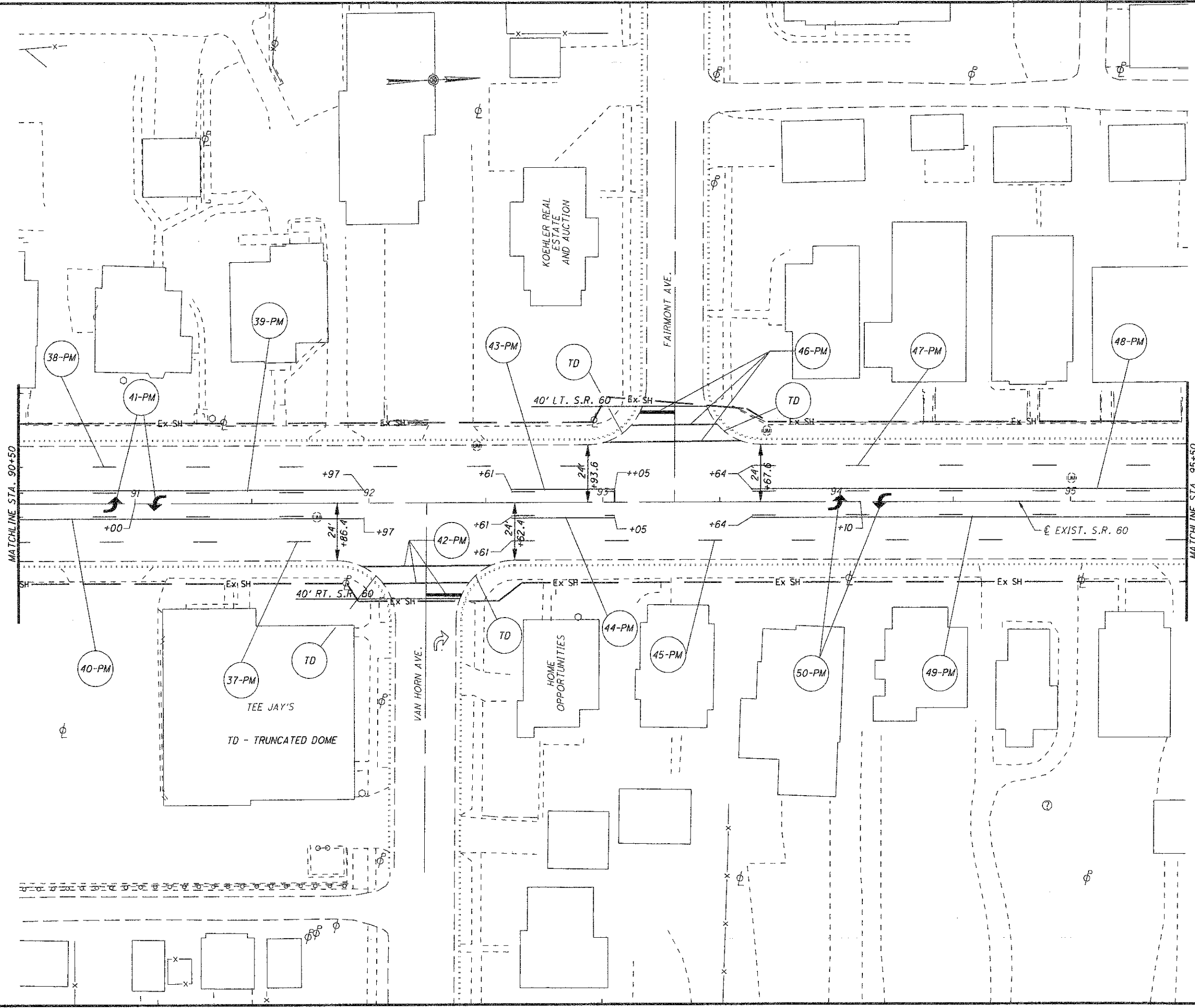


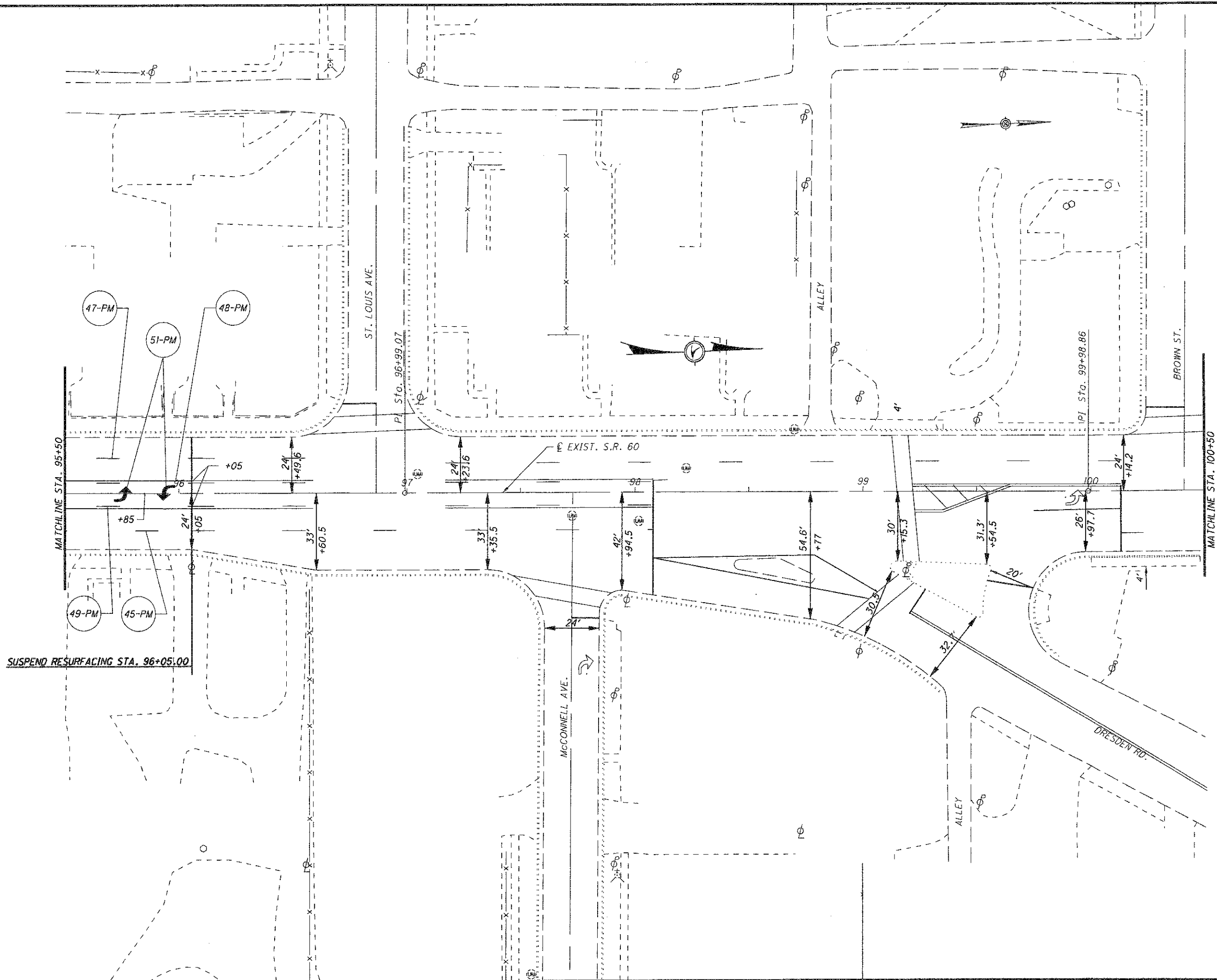


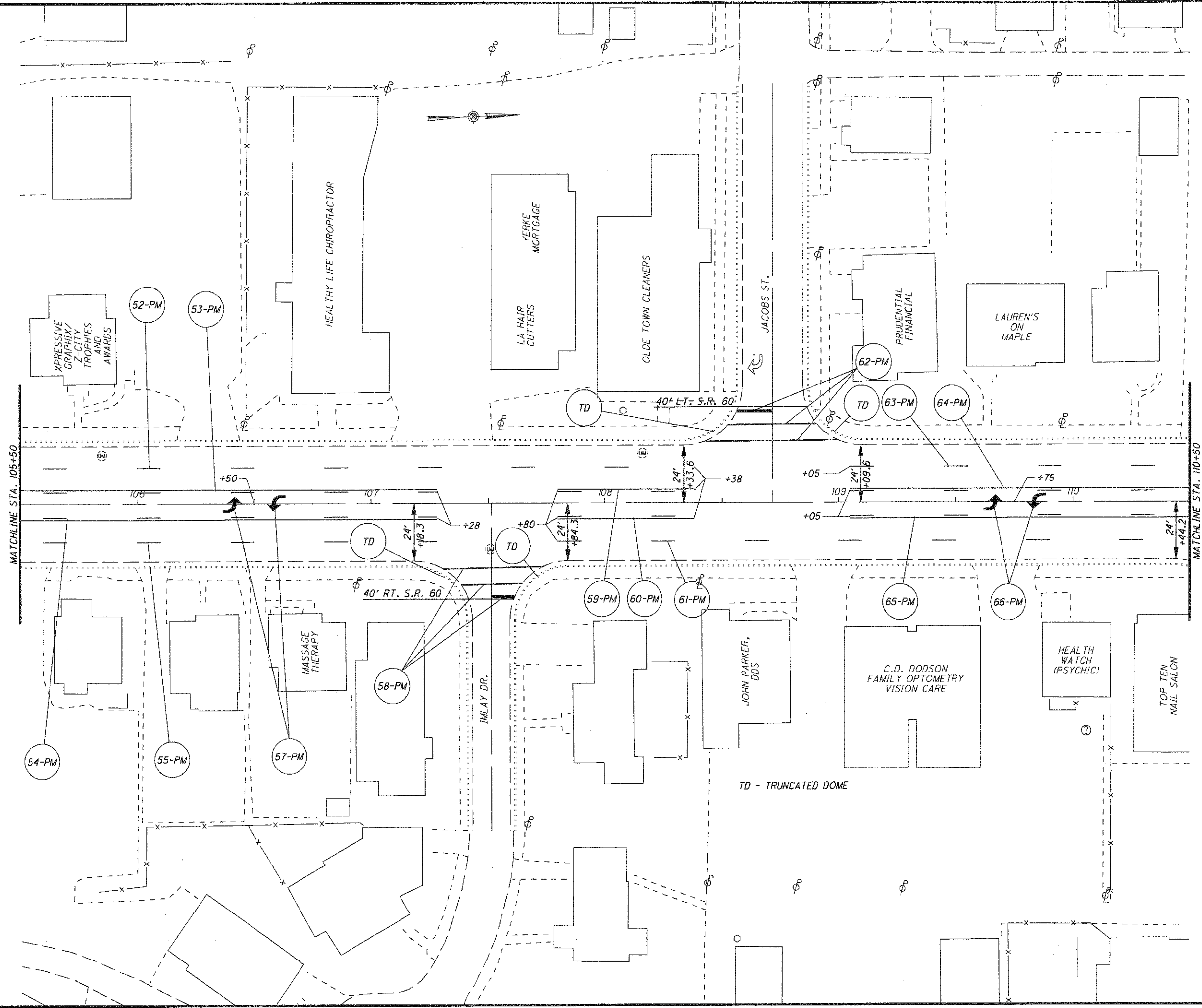
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STA. 85+50 TO STA. 90+50 (S.R. 60)

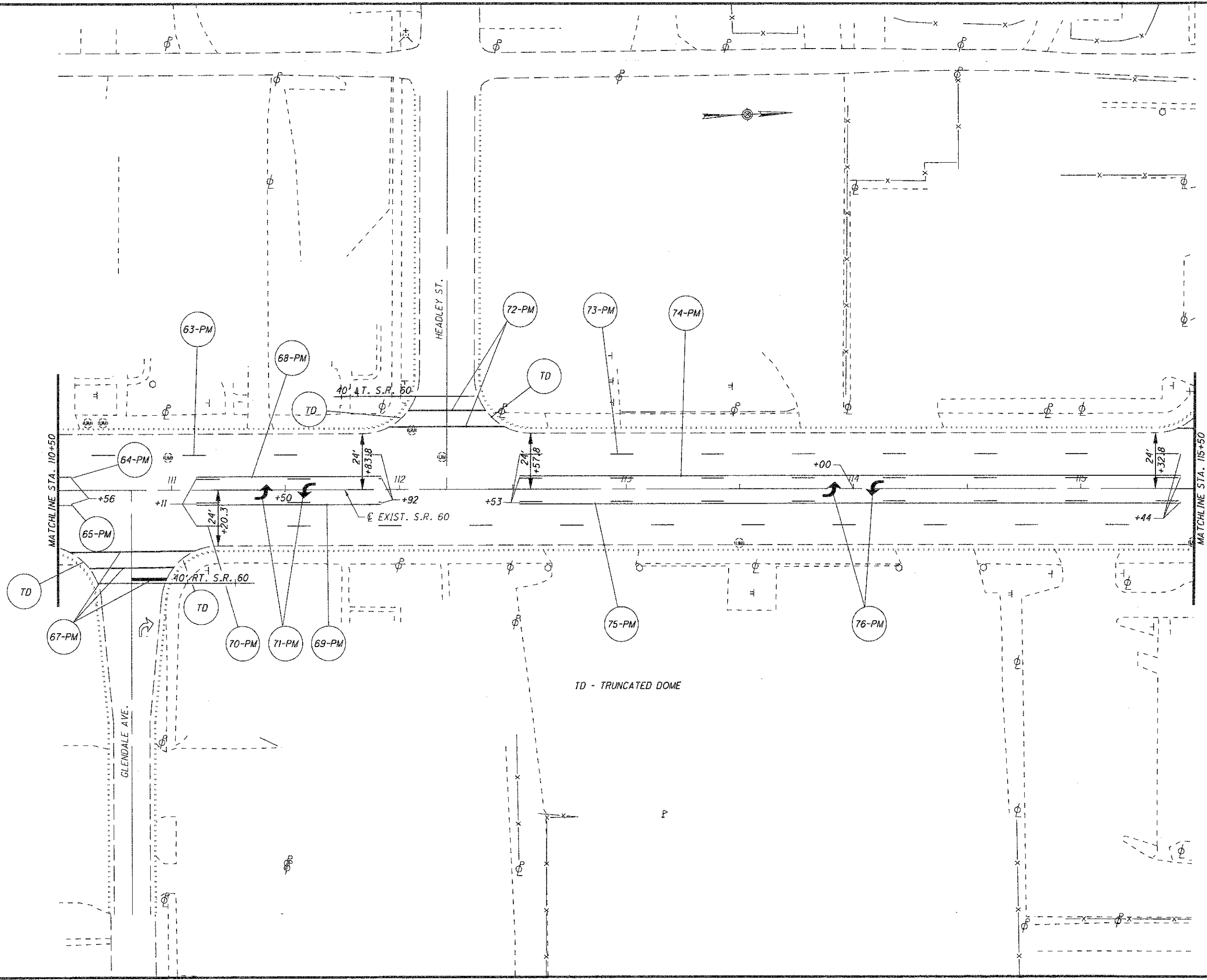
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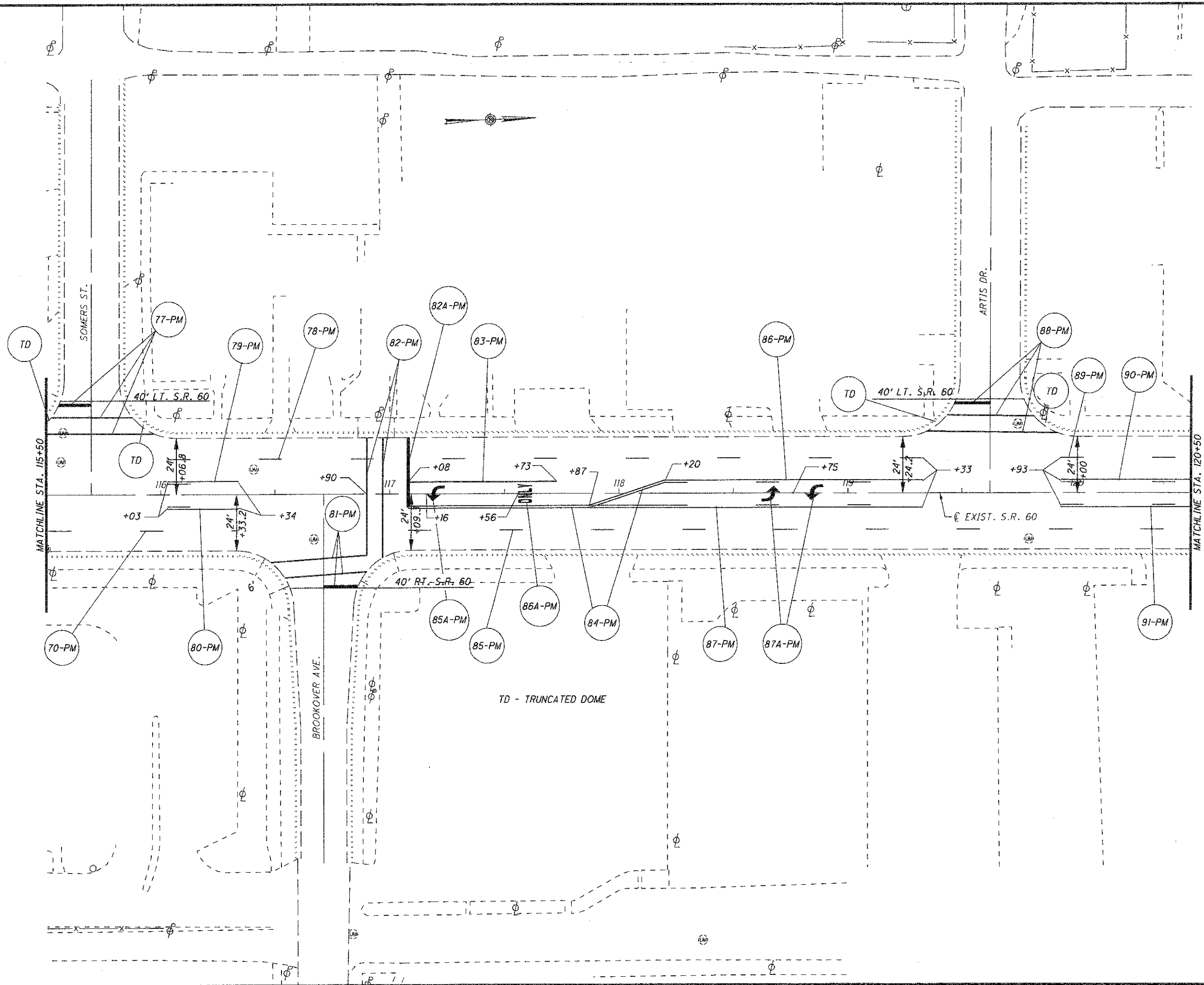
53-PM

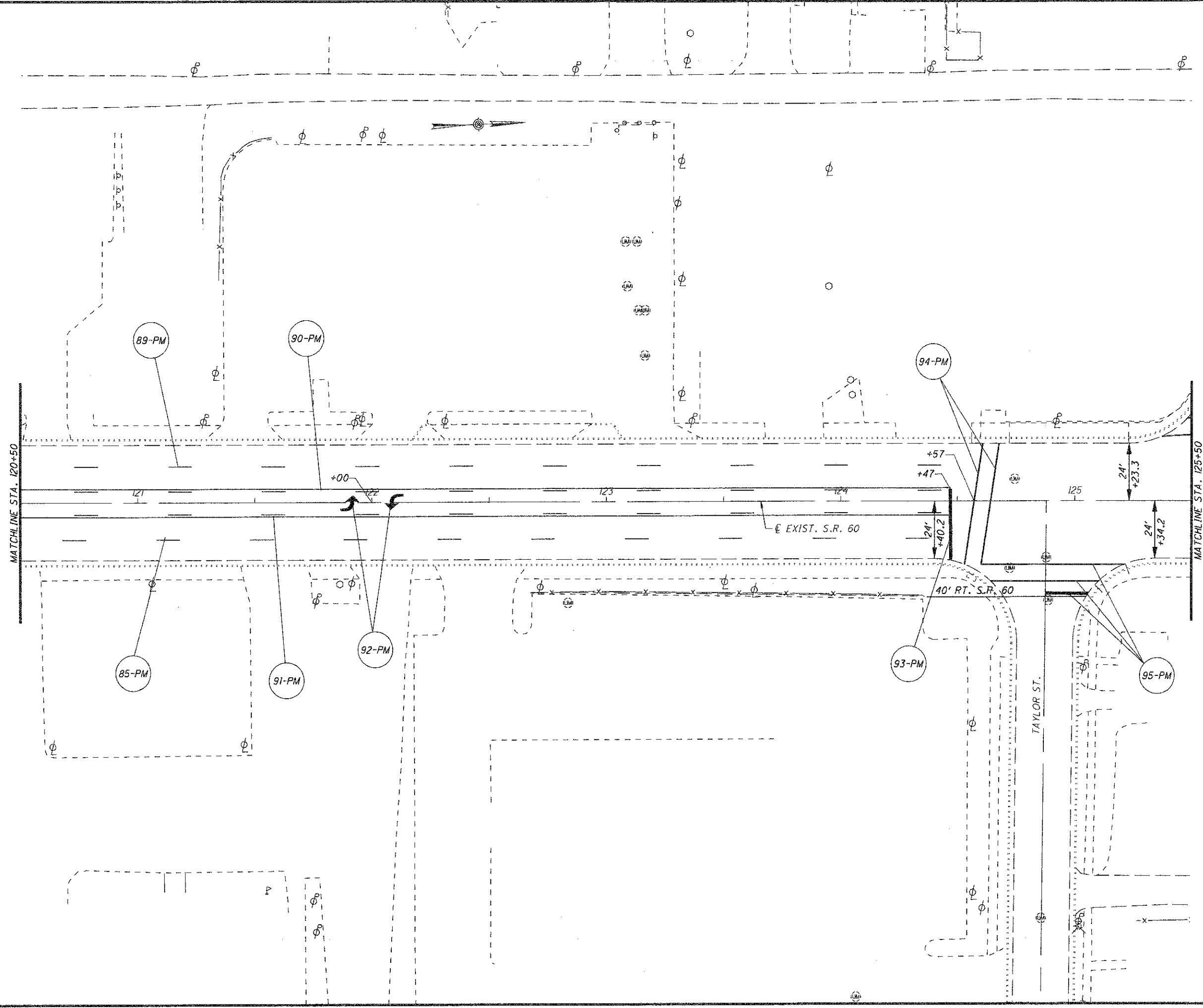


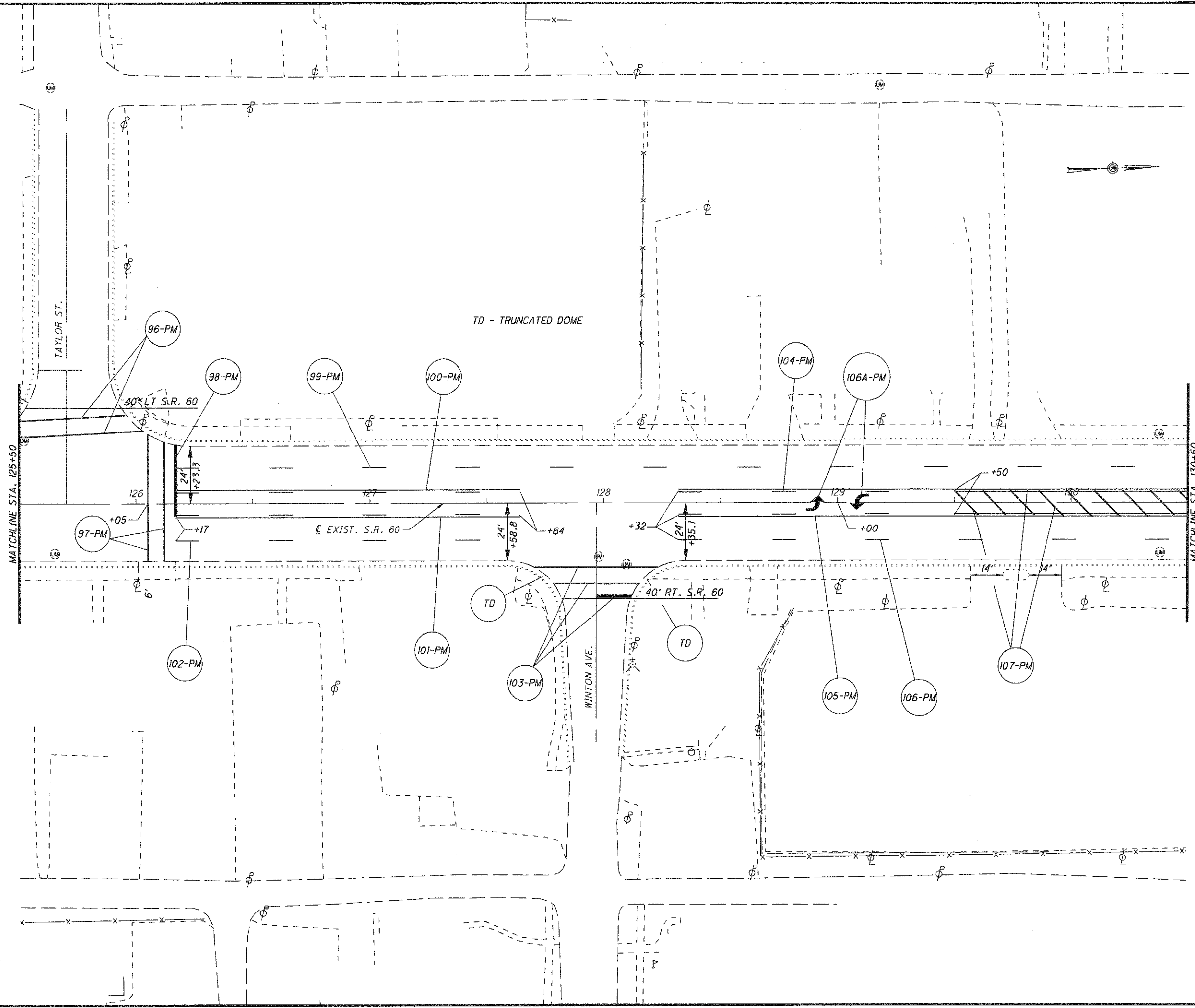


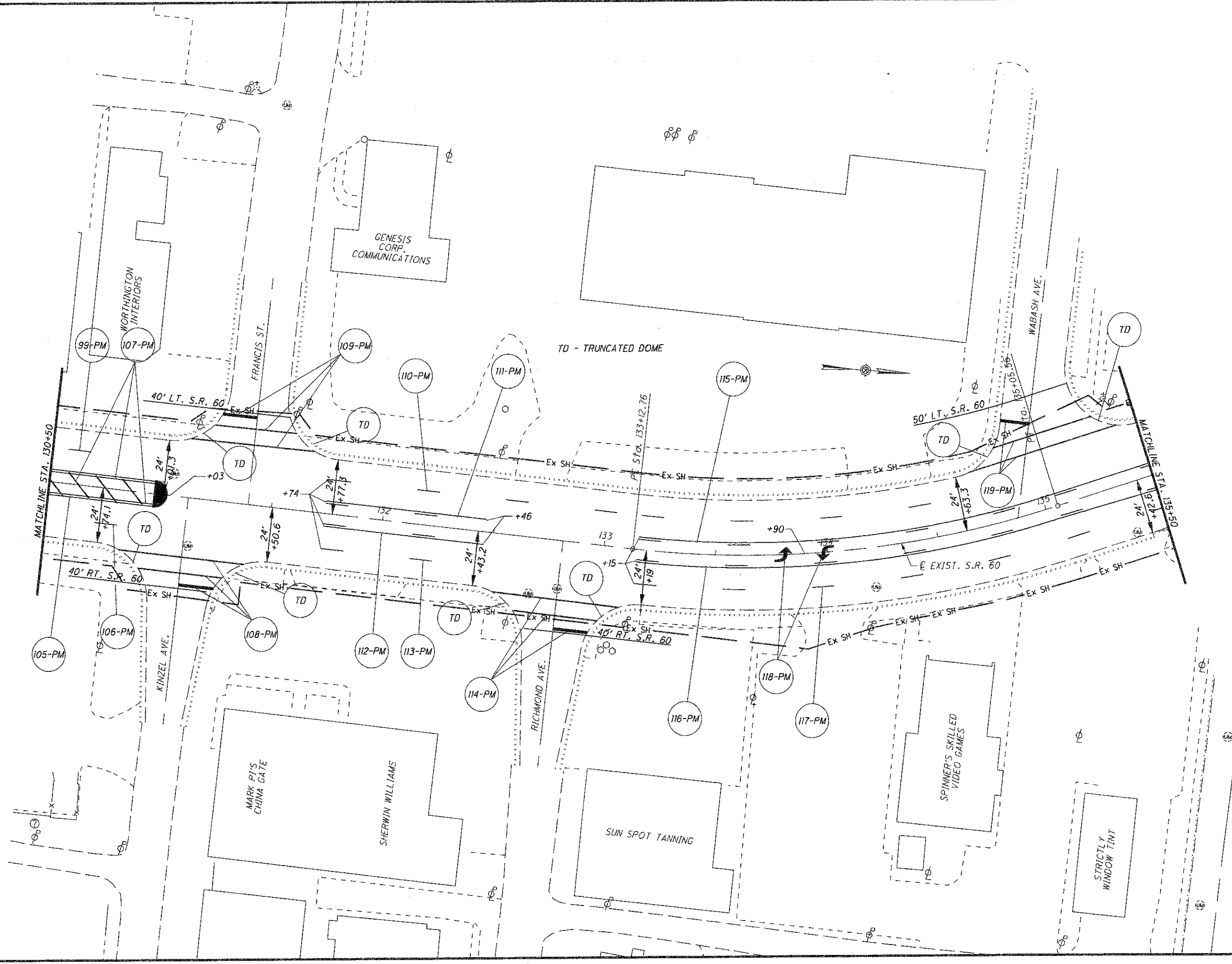


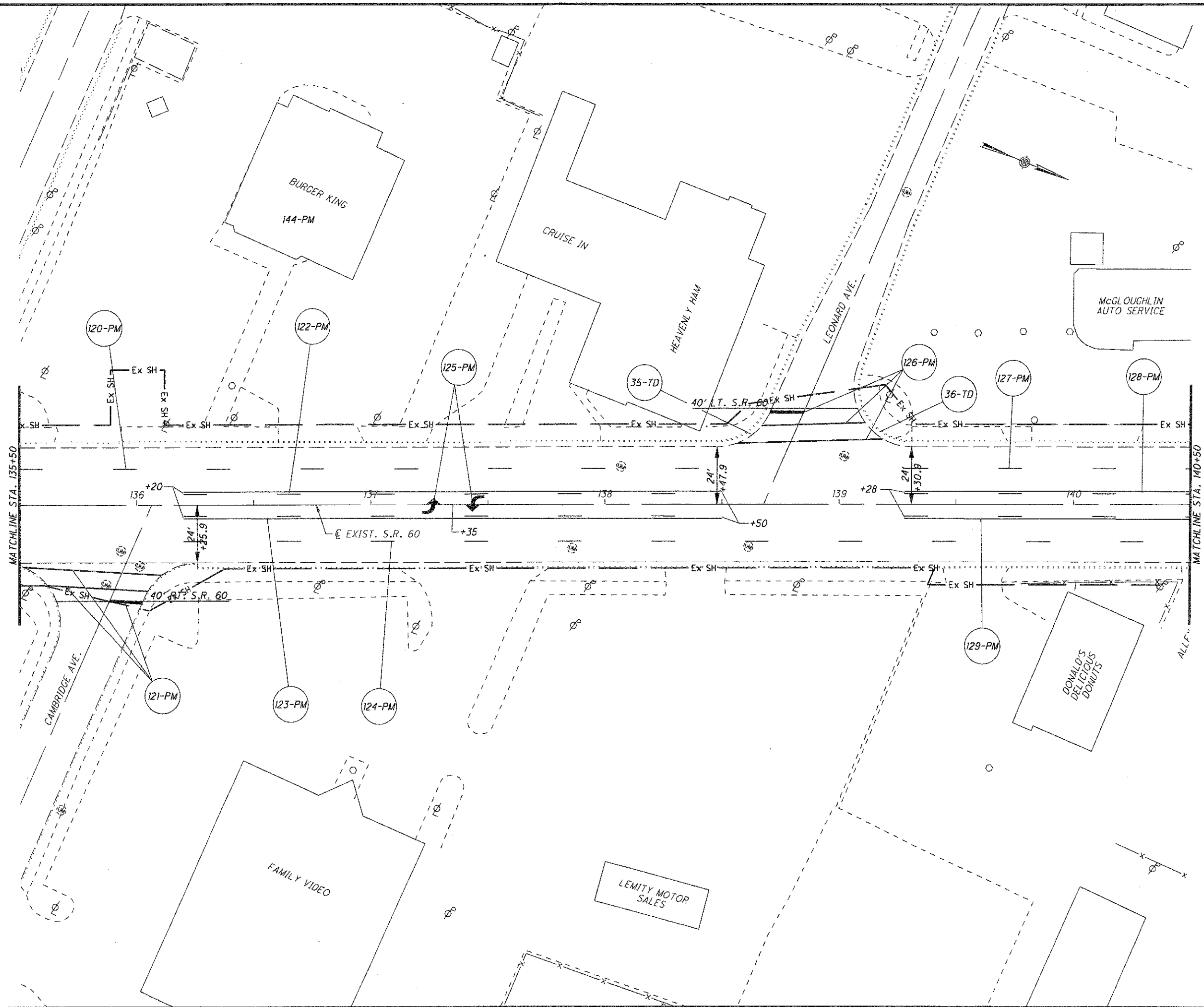




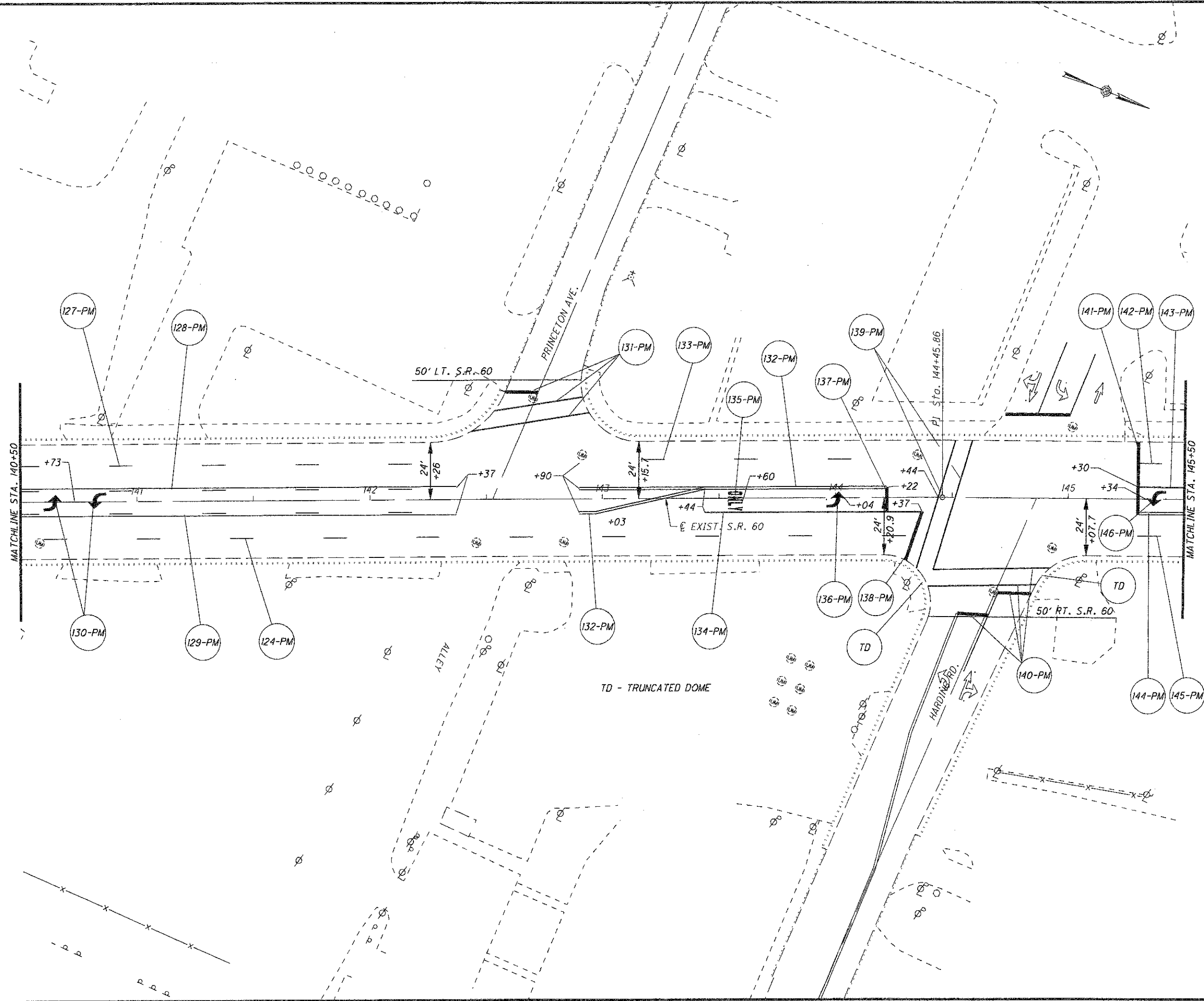


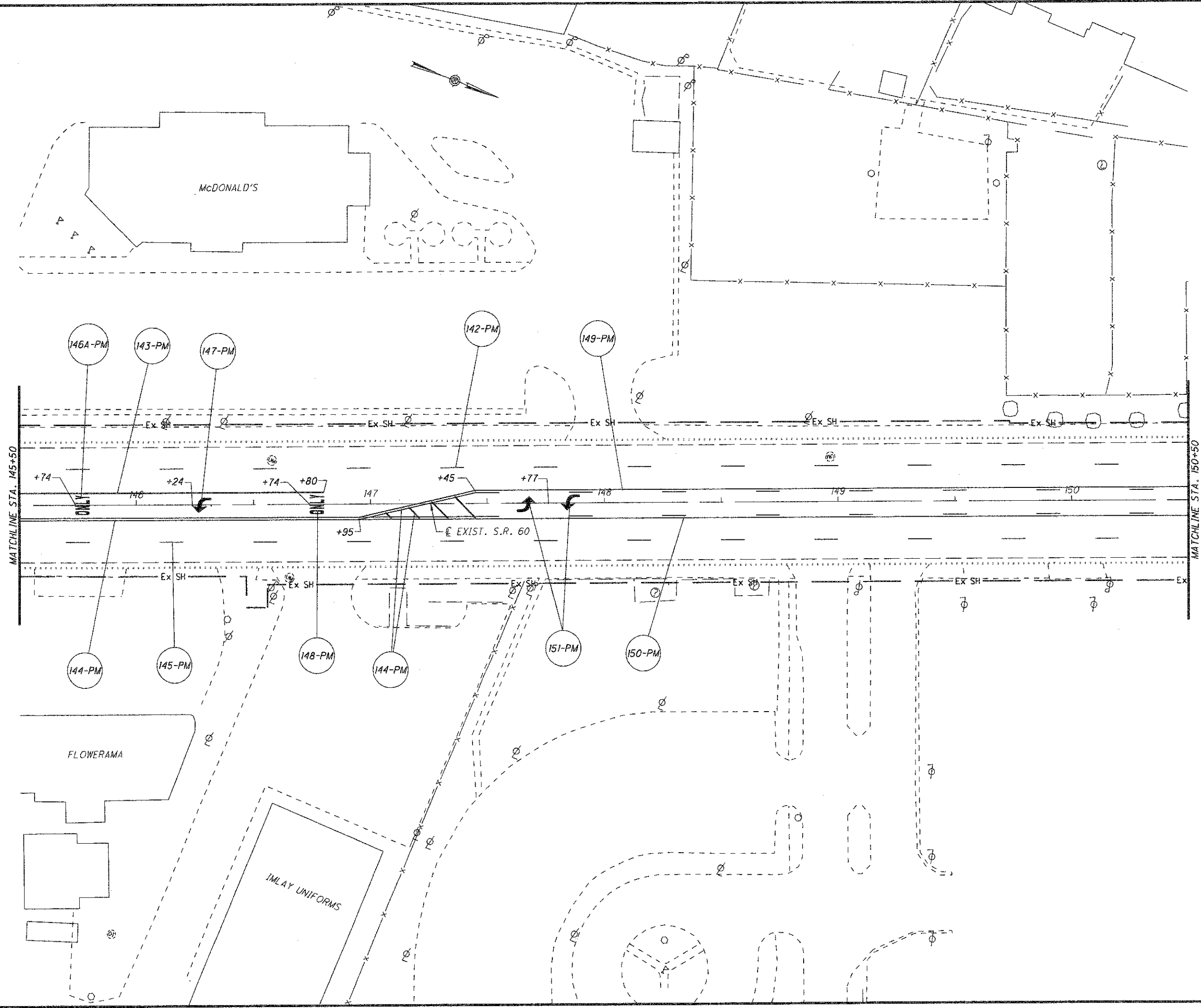


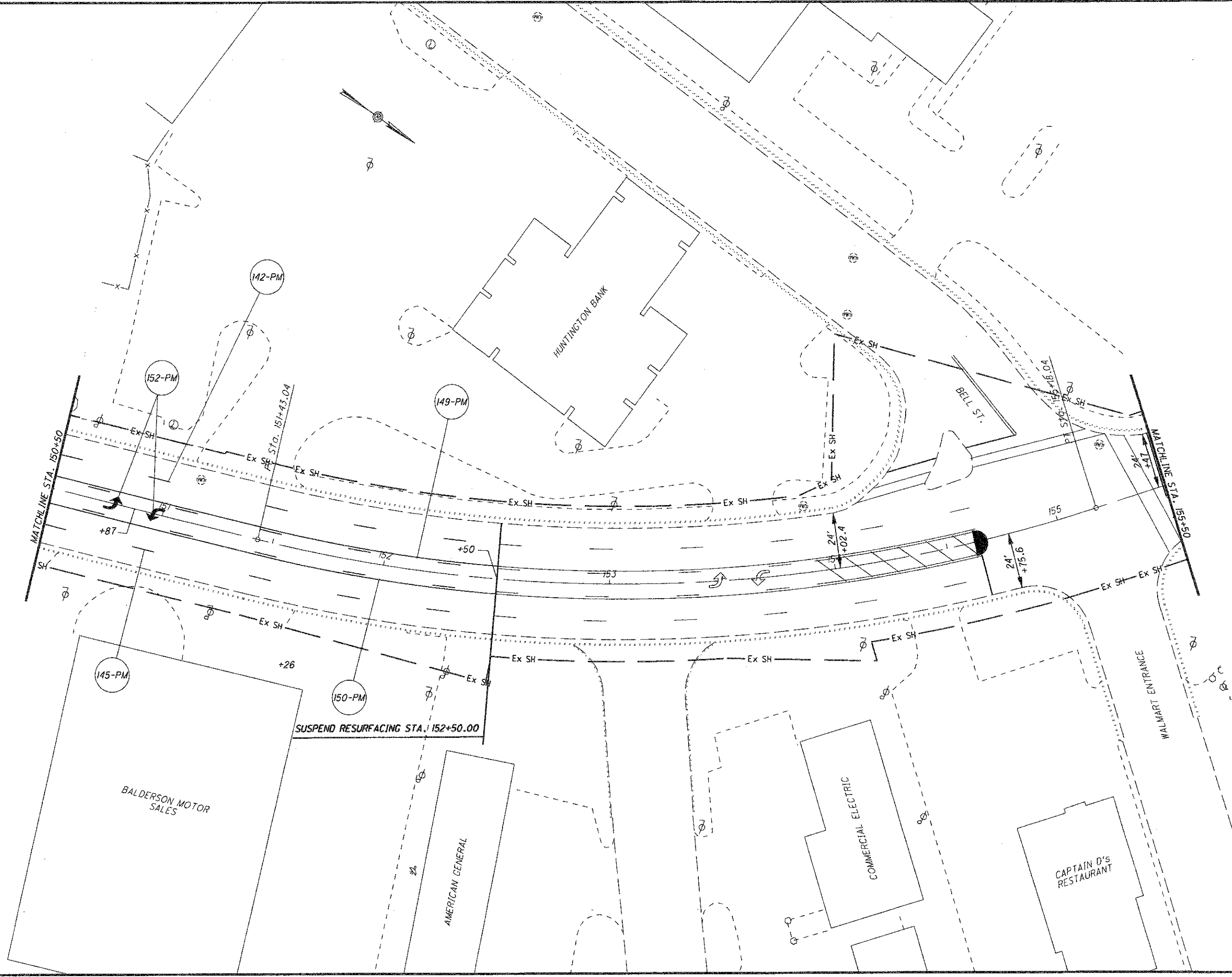


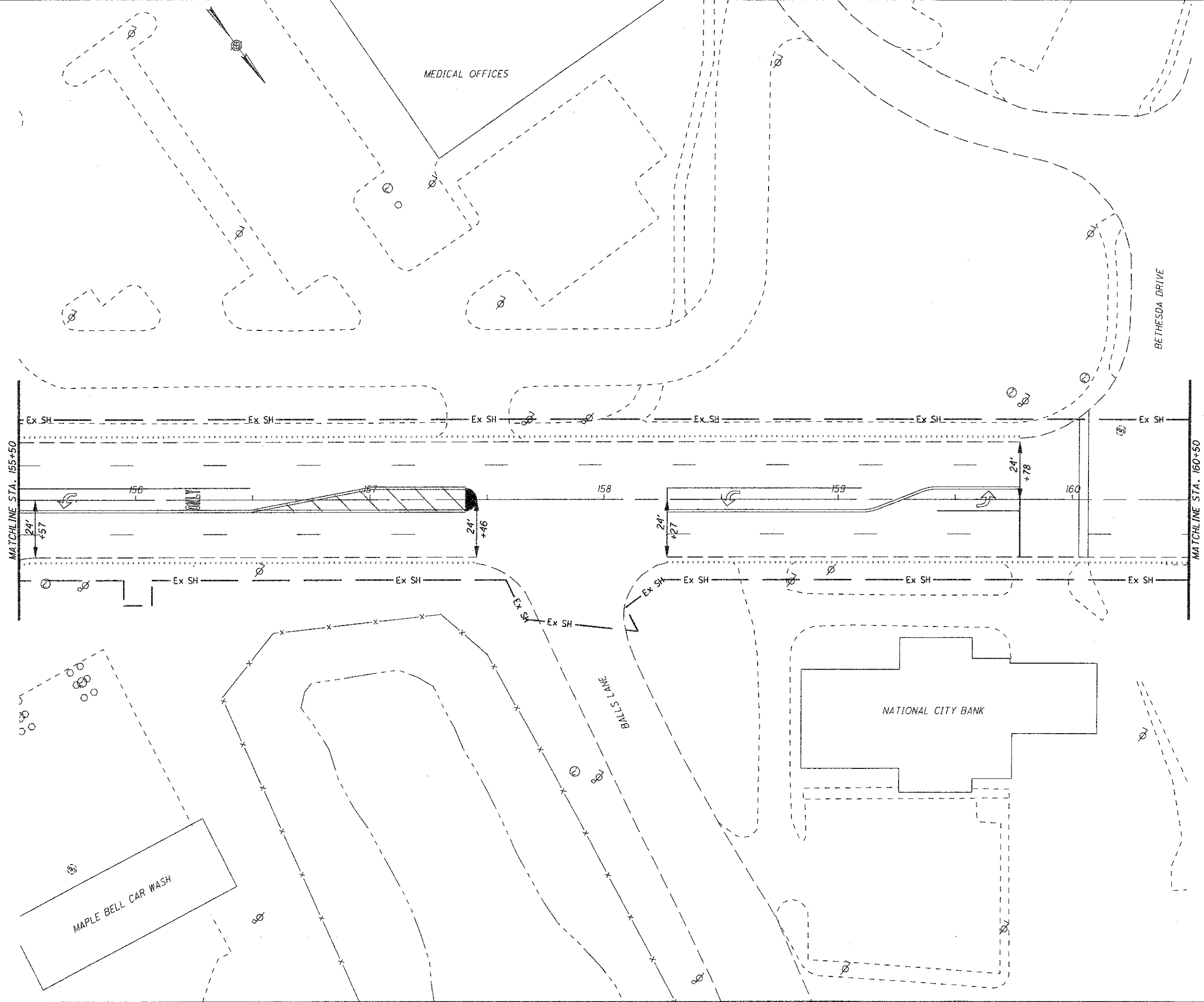


M060_PPP_027.DGN 11/06/08

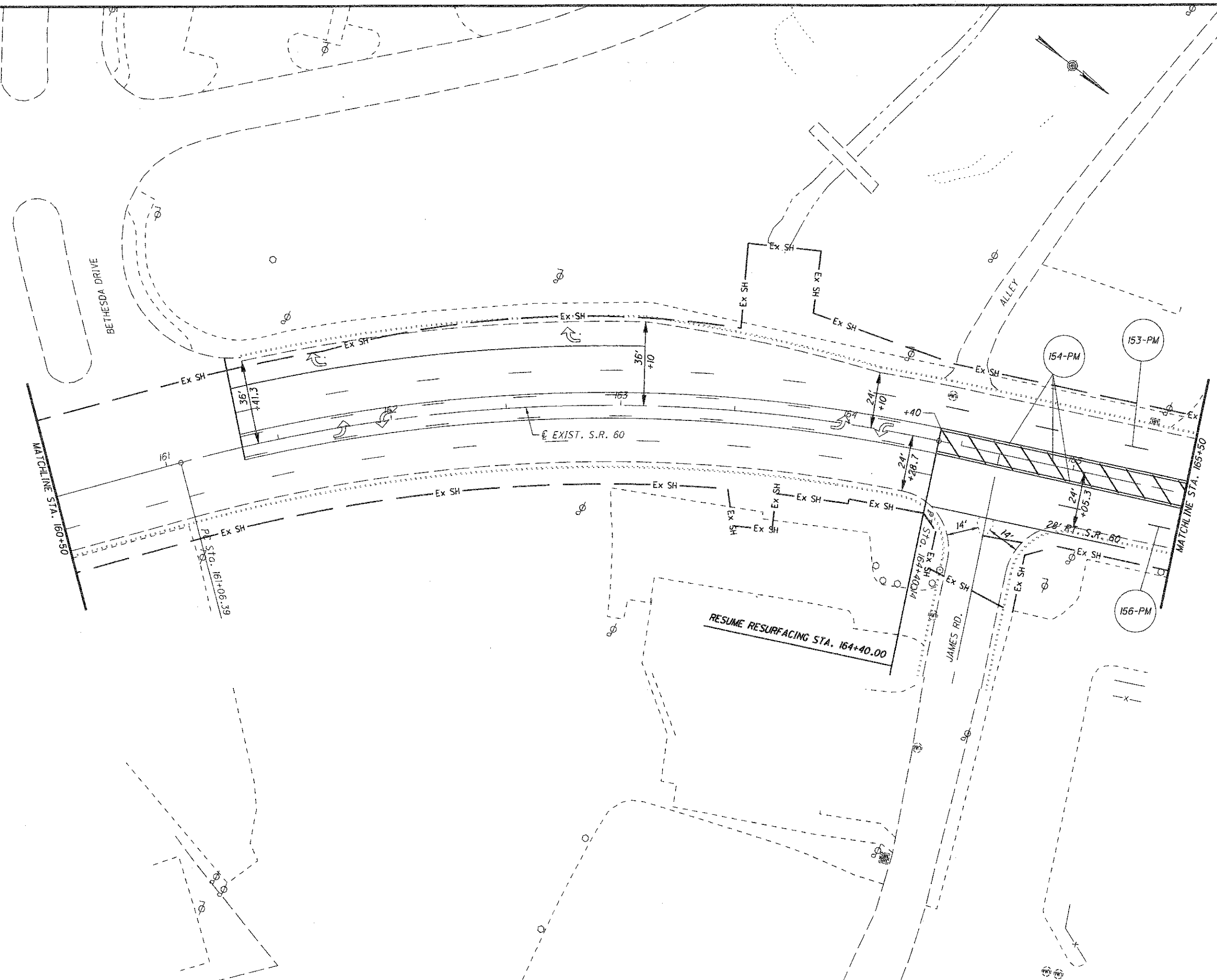


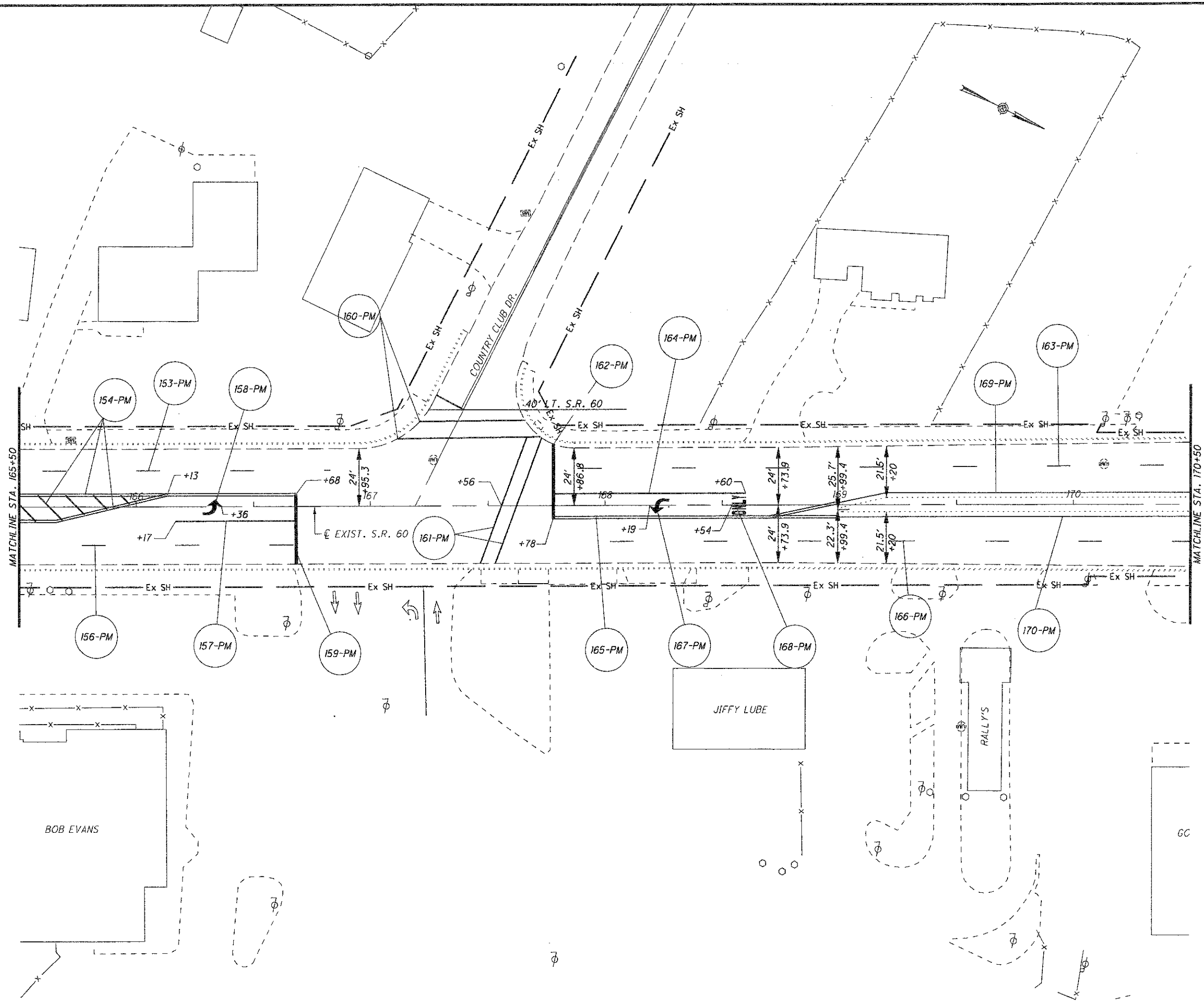


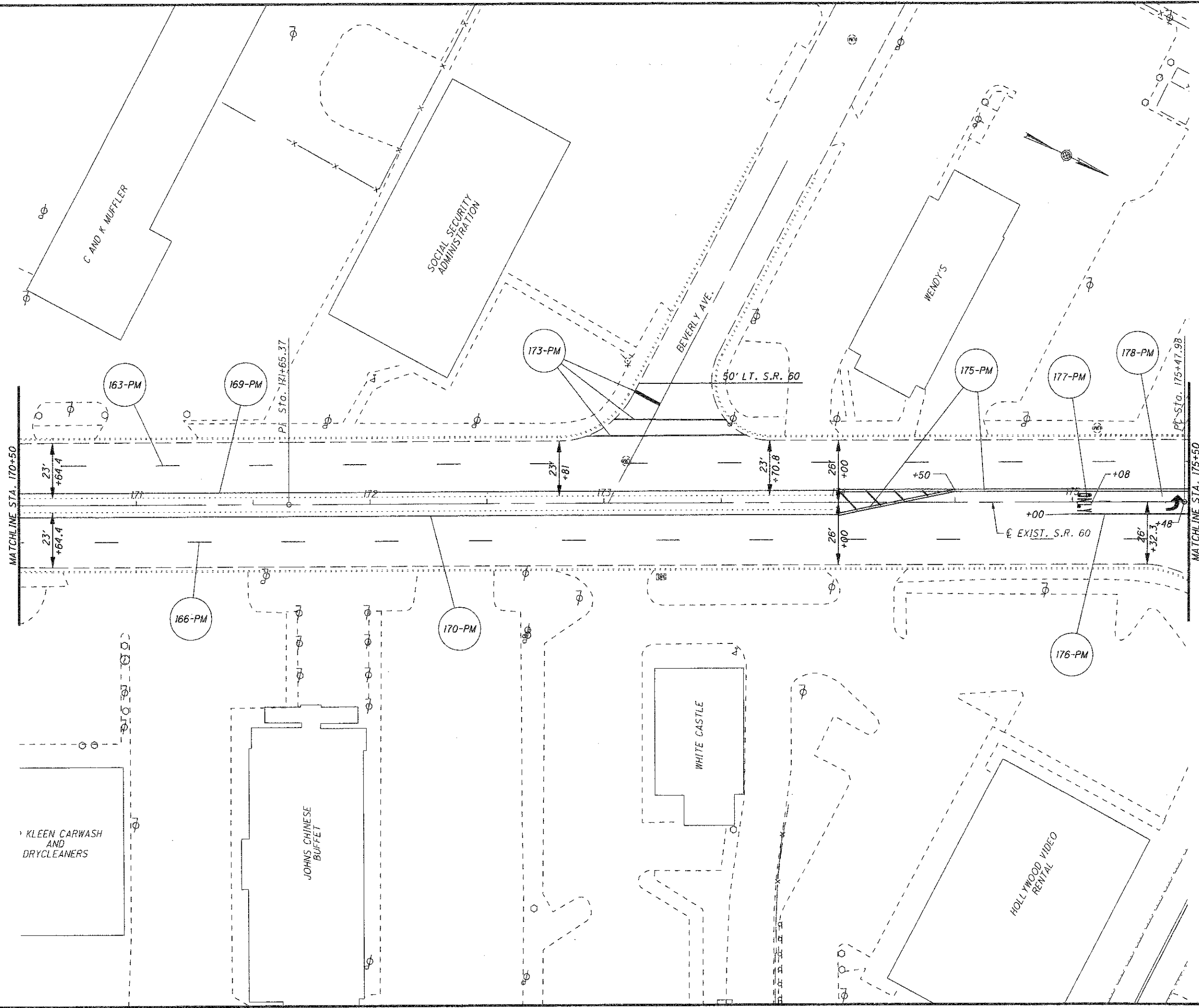


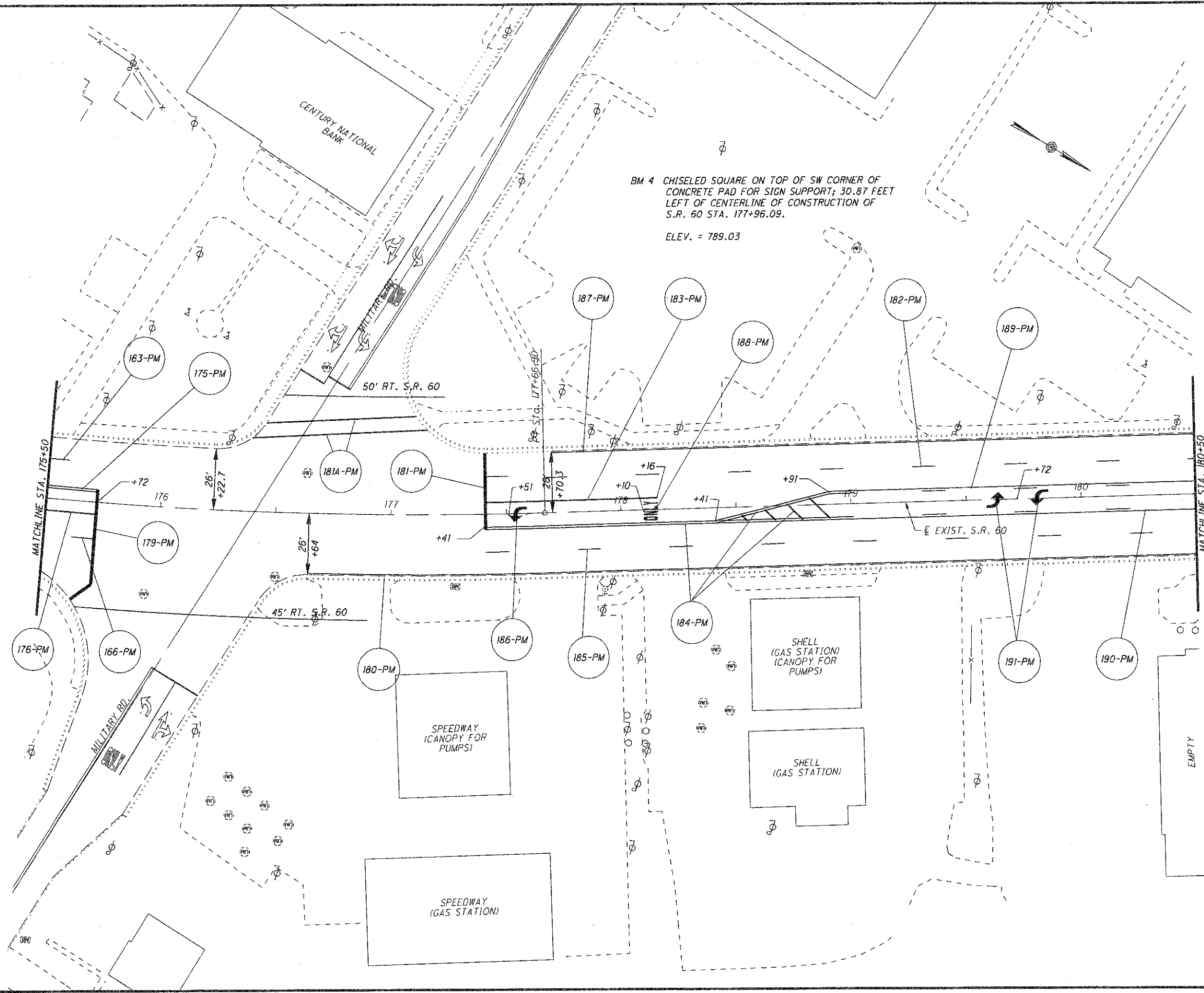


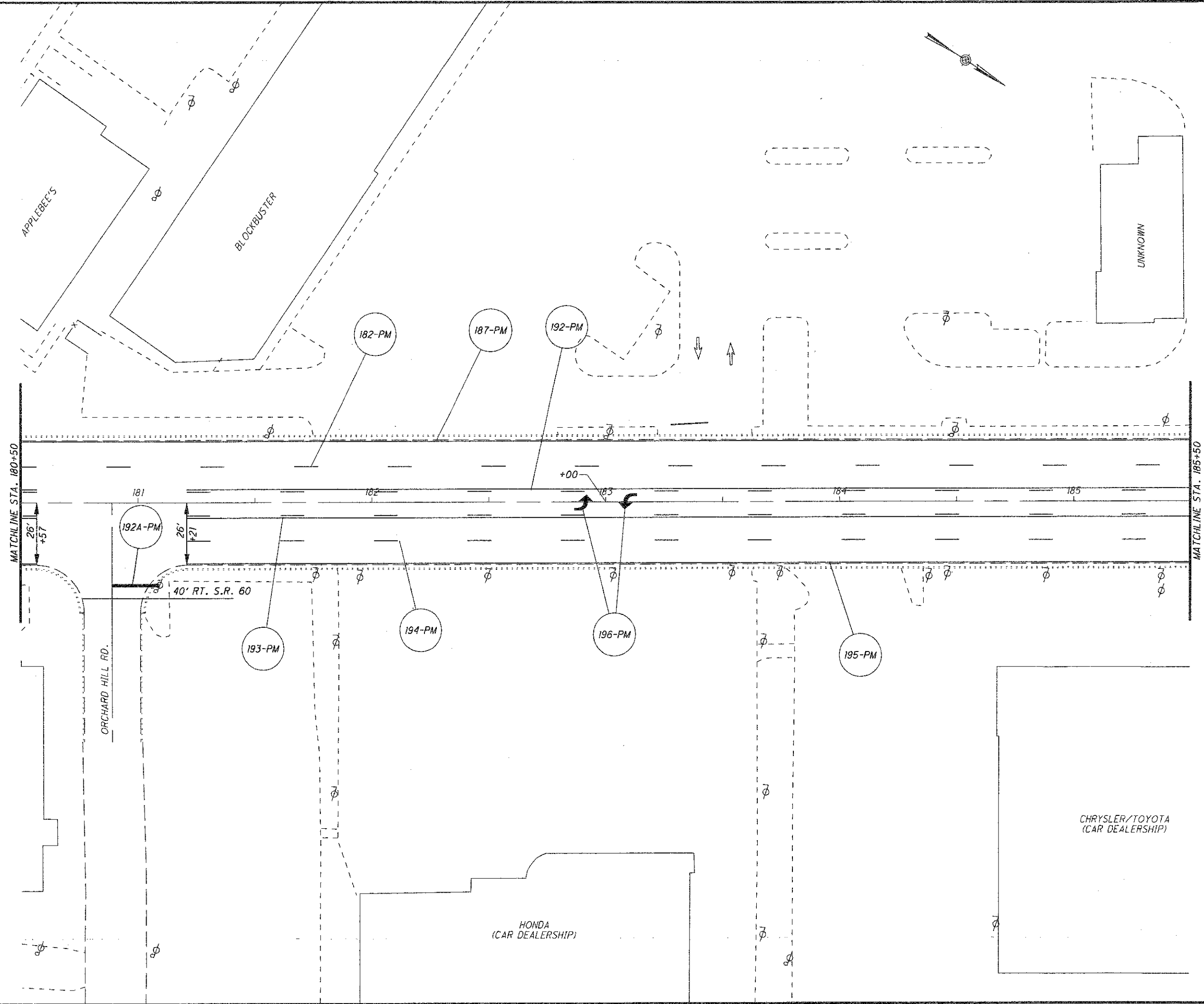
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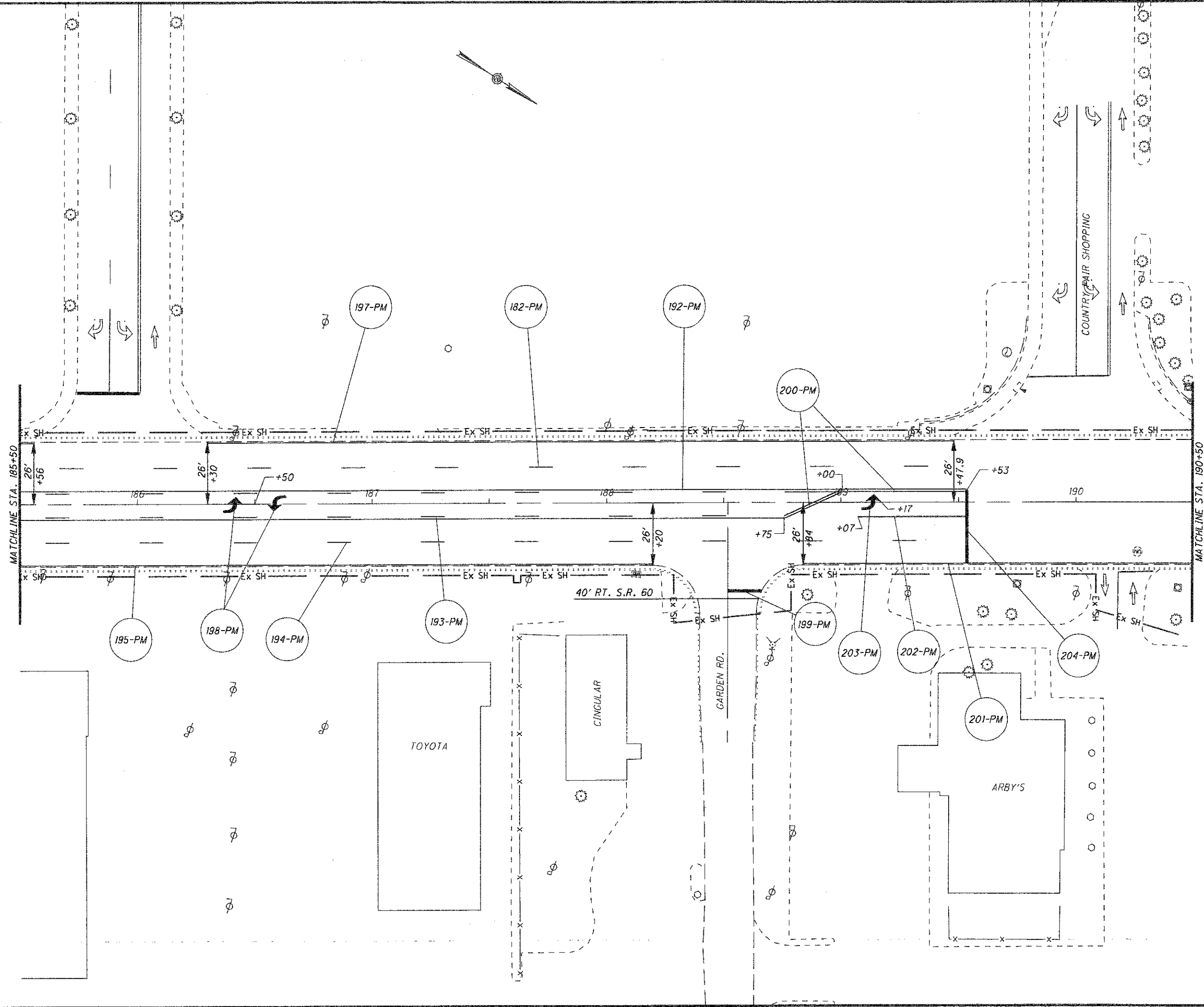


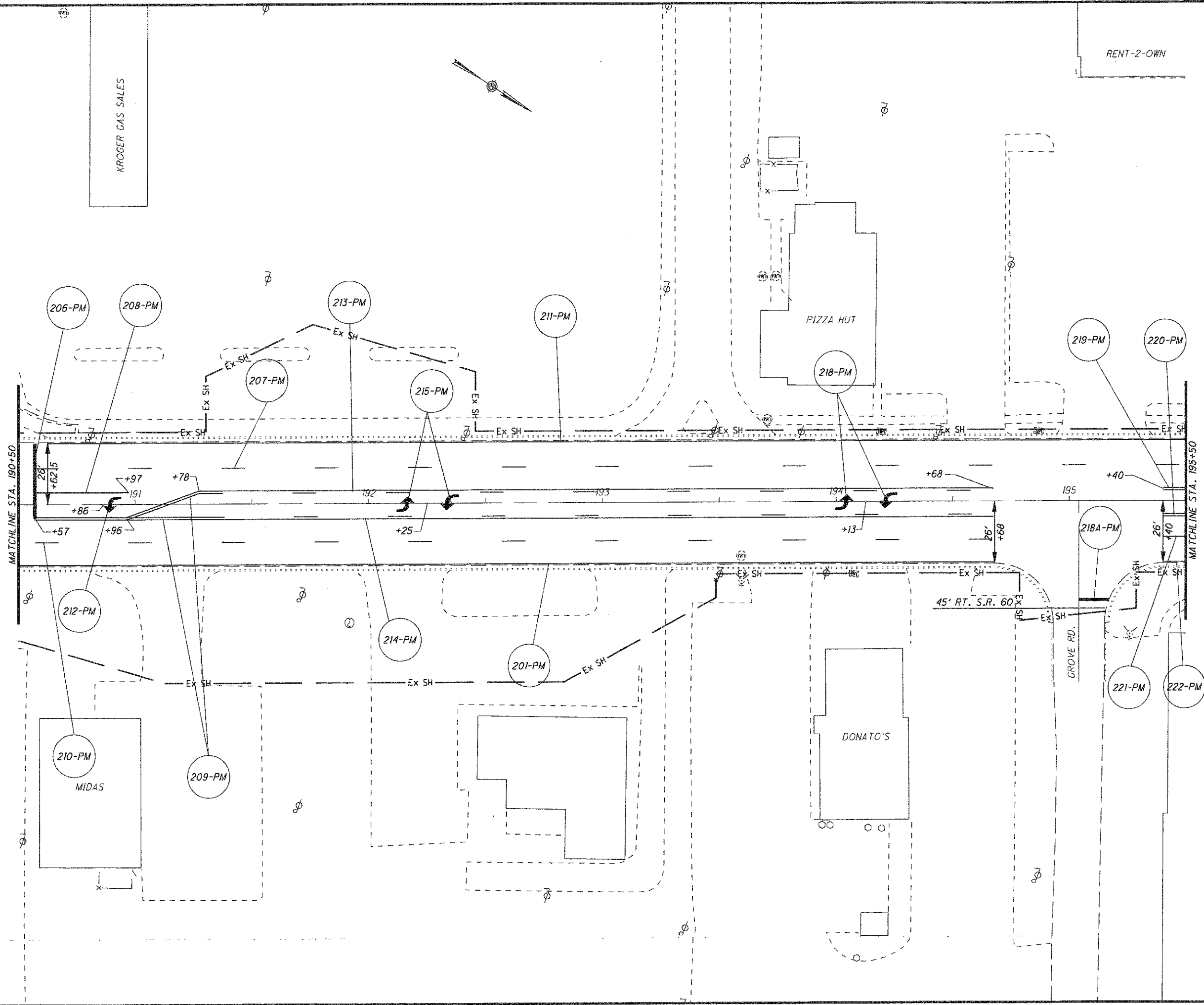


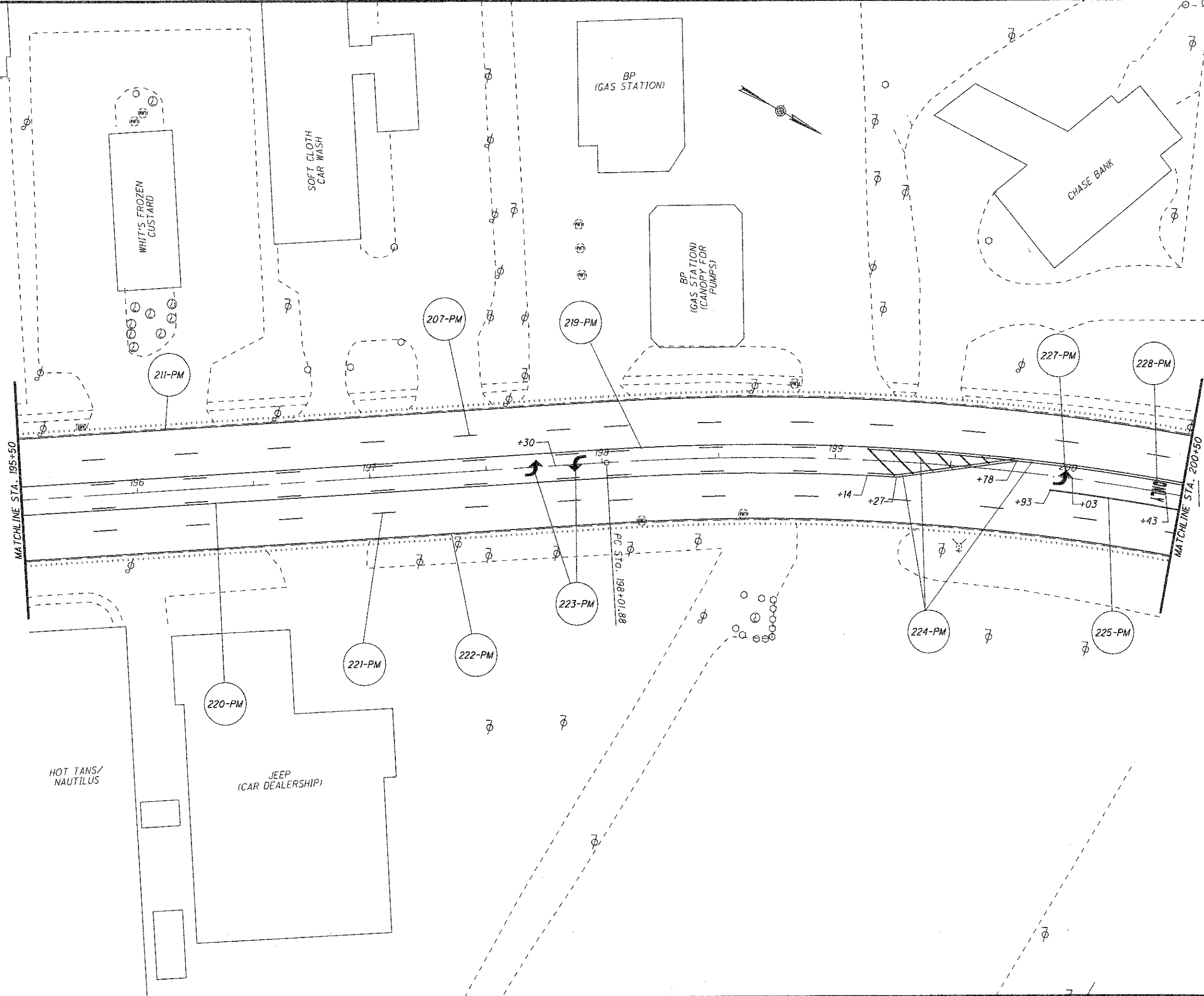






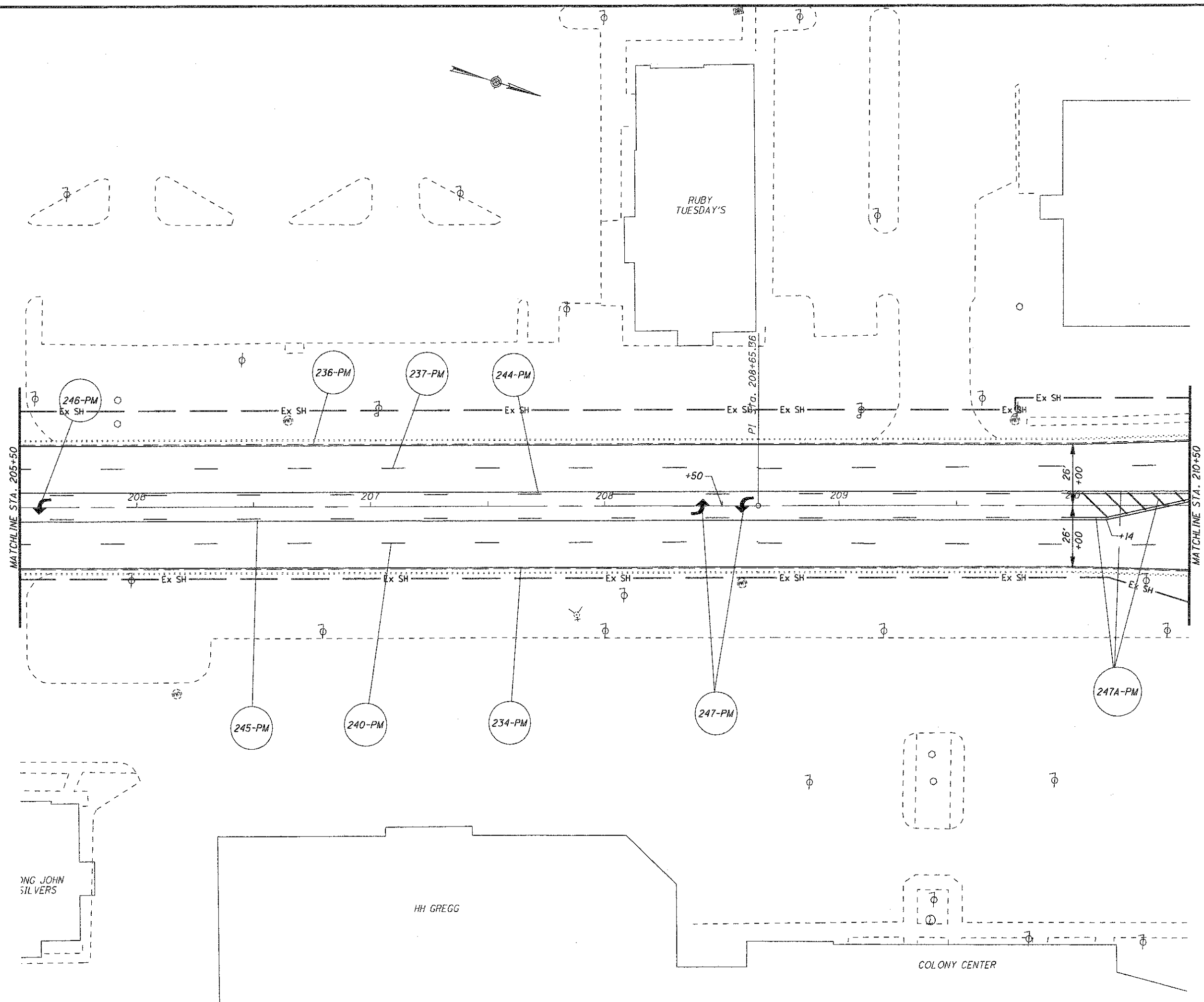




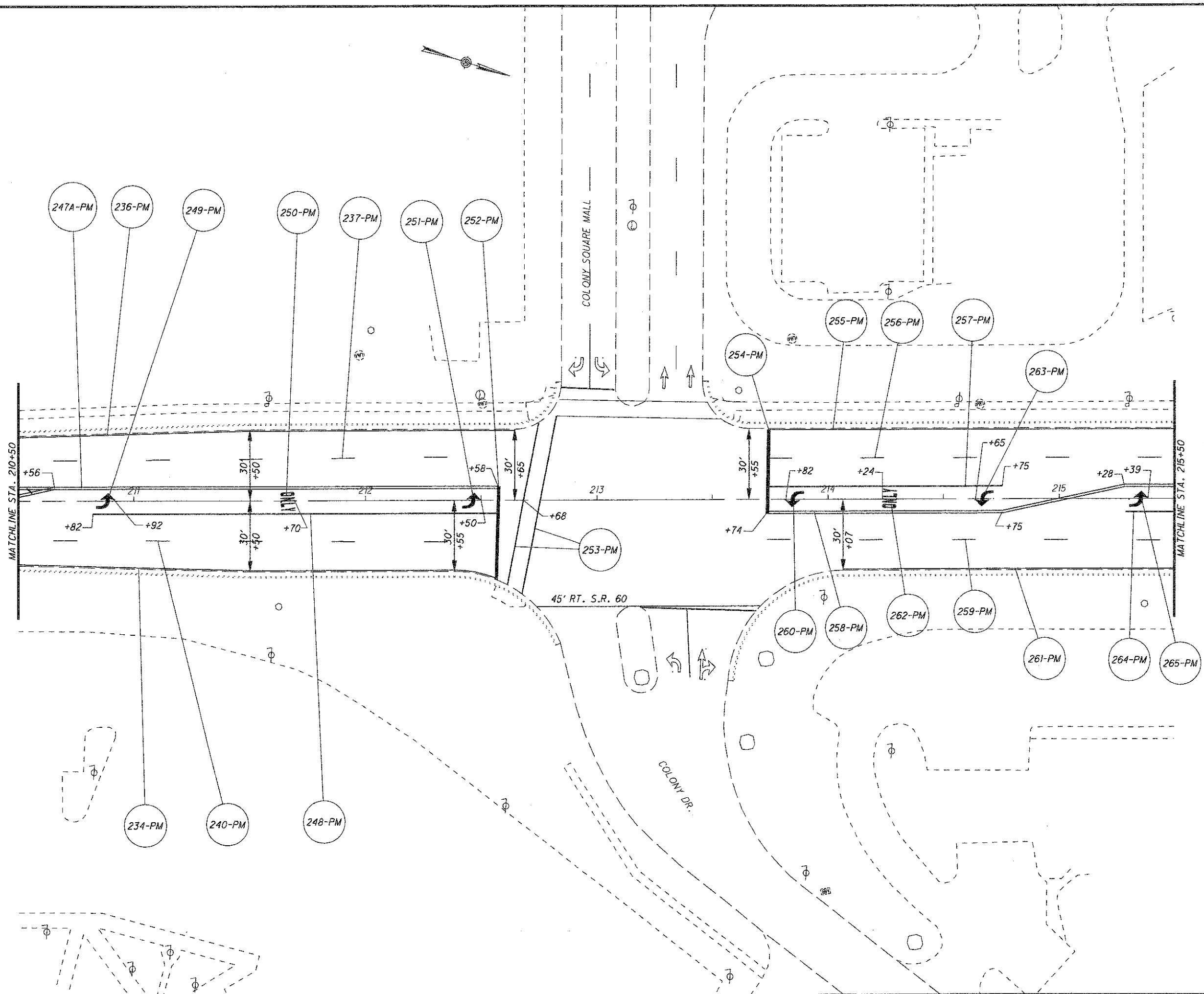


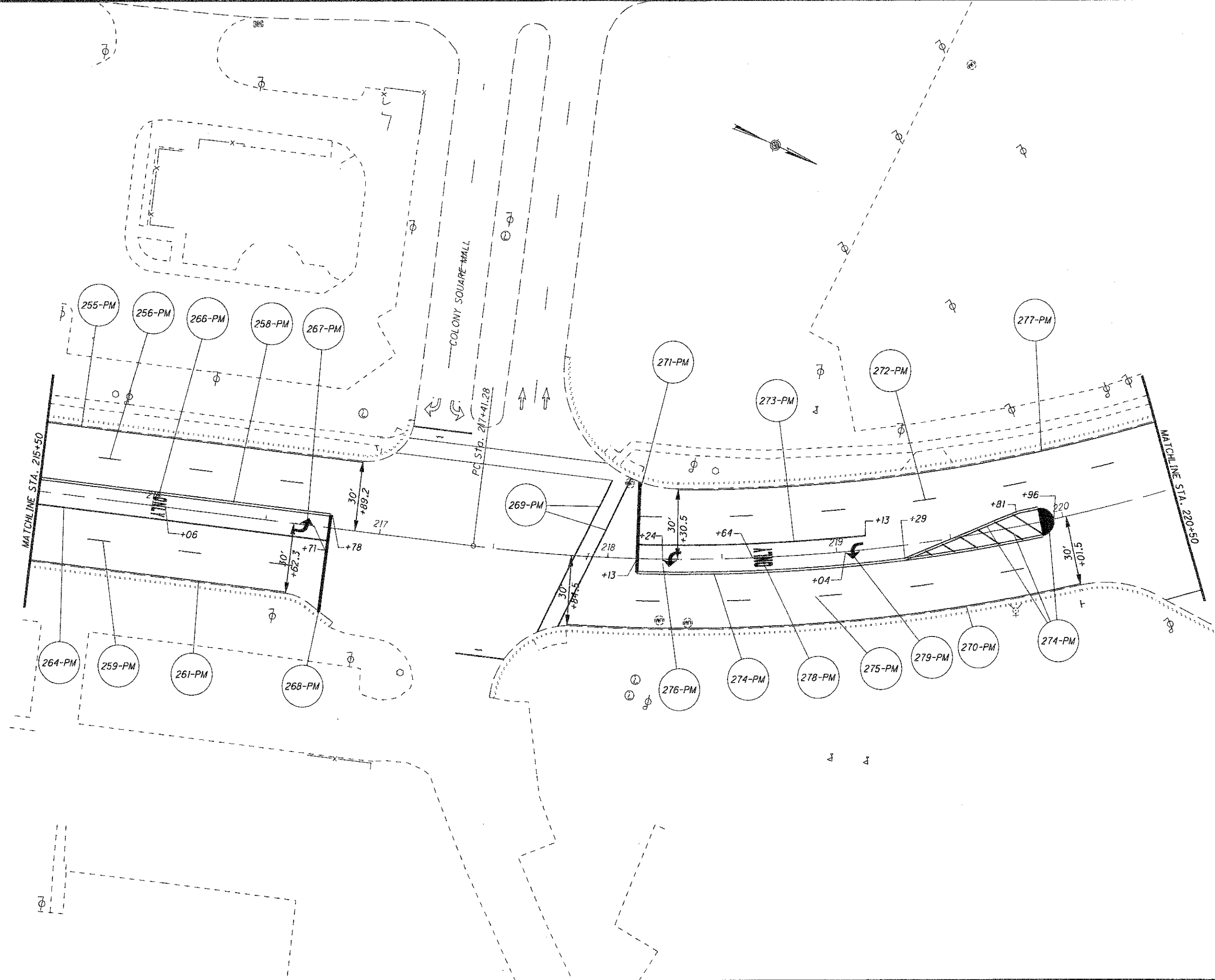


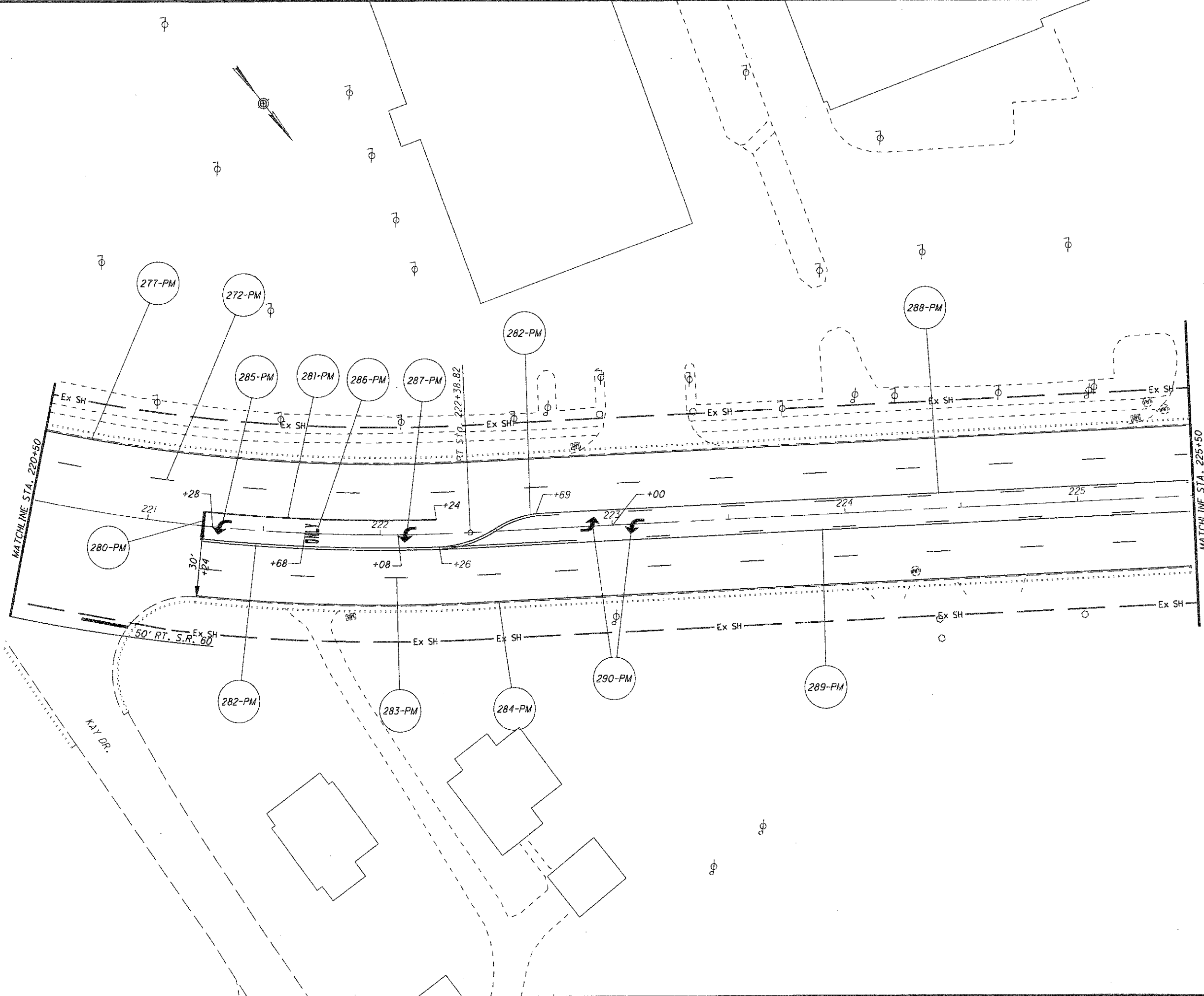
PLAN SHEET
STA. 200+50 TO STA. 205+50 (S.R. 60)



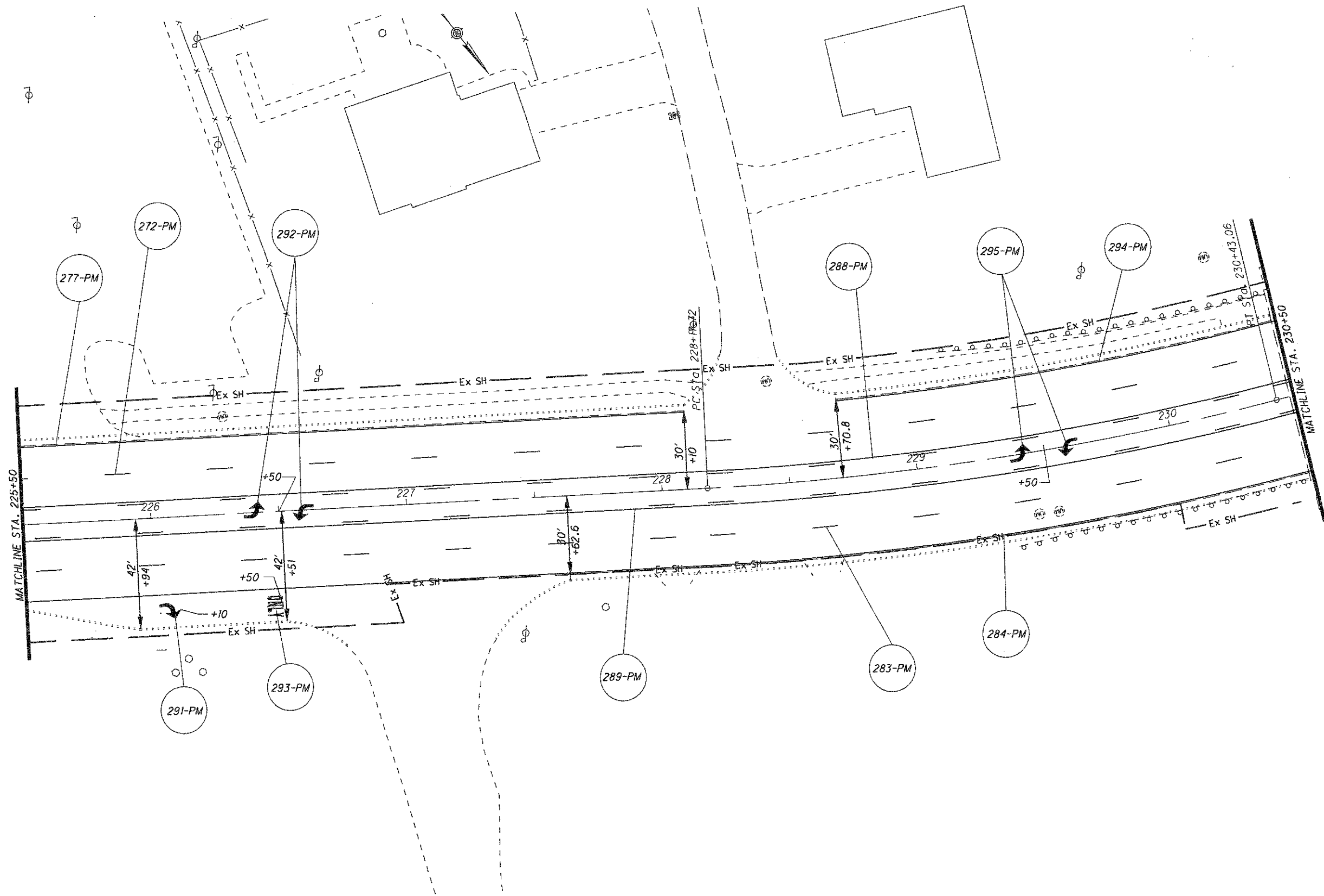
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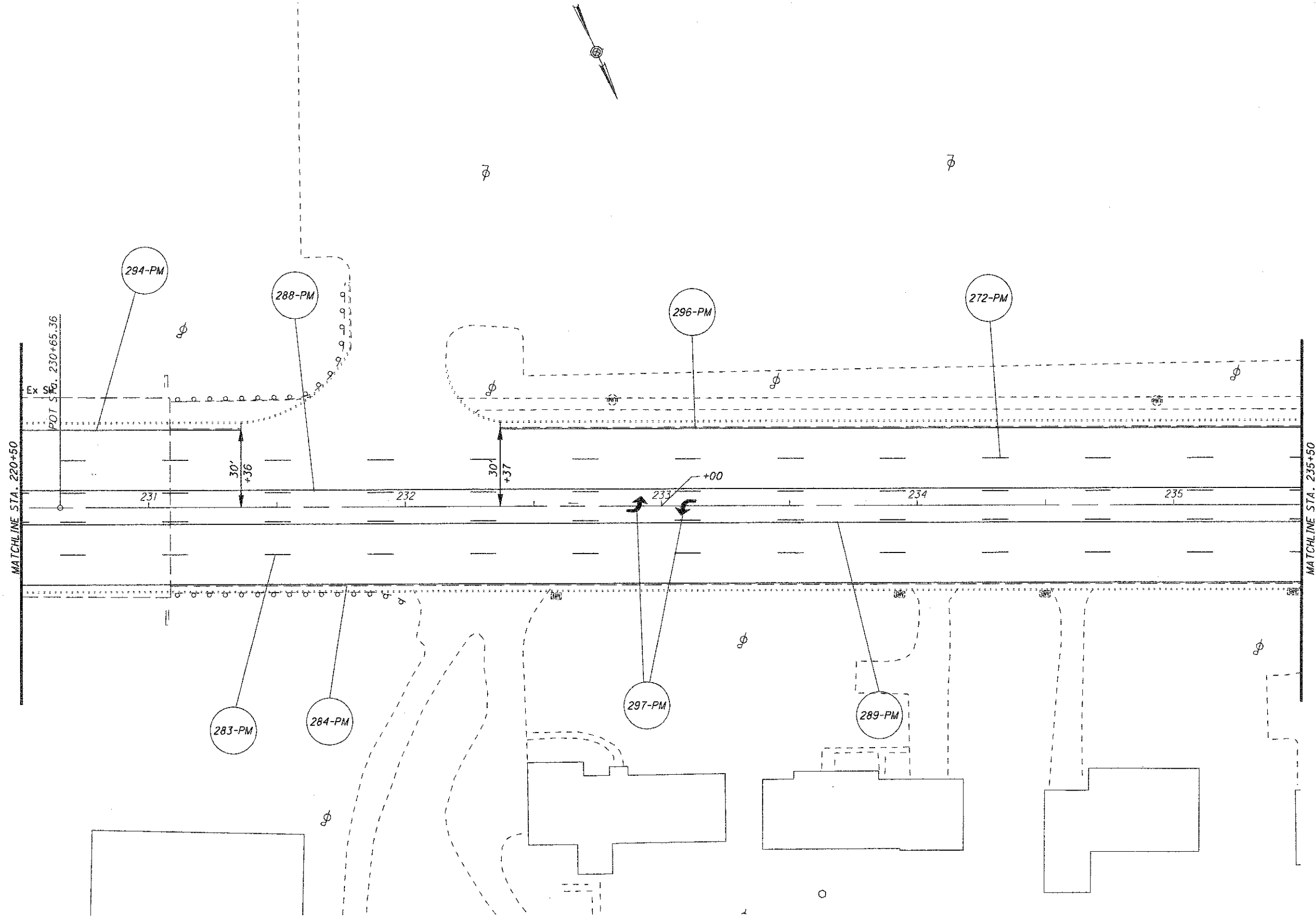


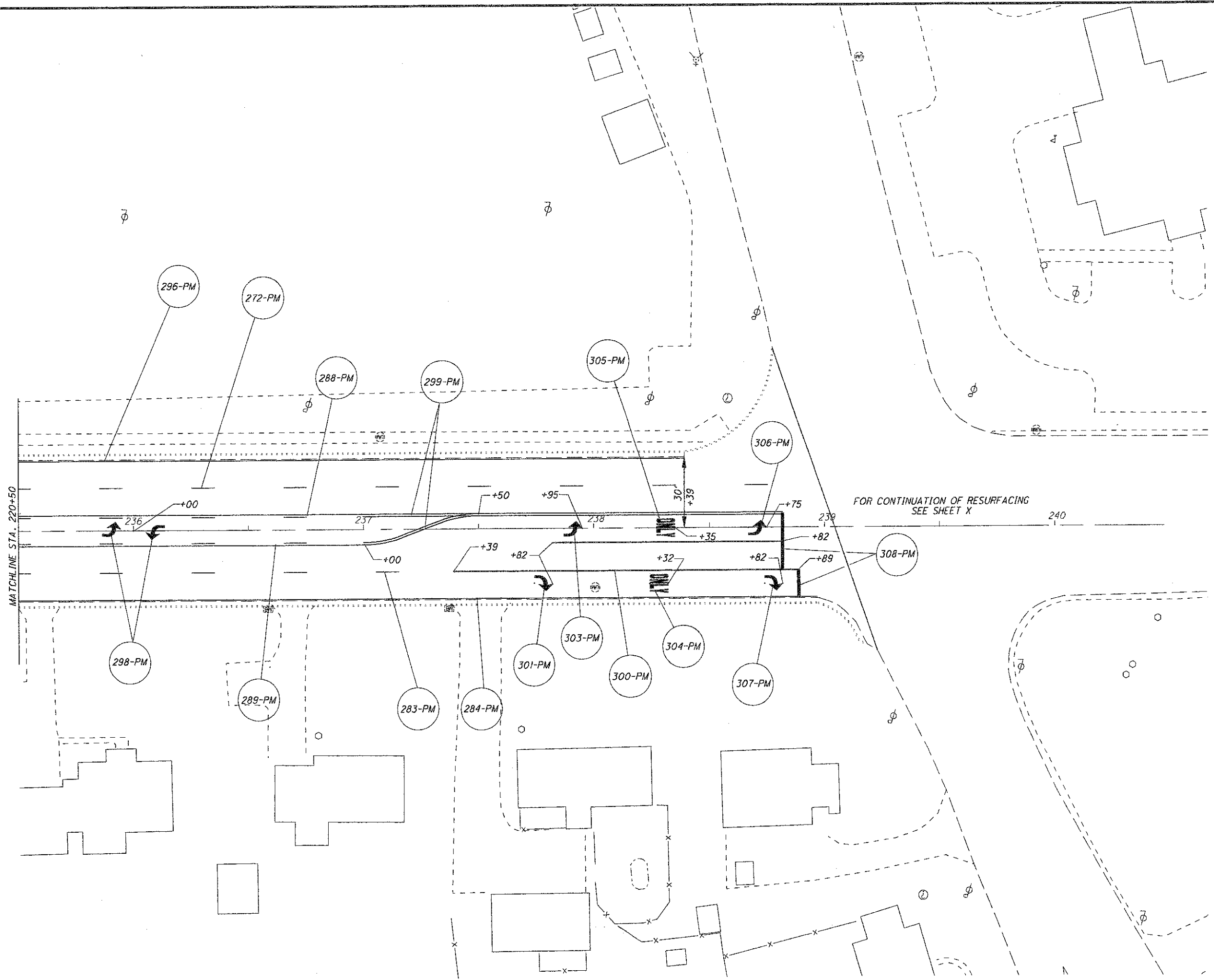




60 121	MUS-60-17.93	PLAN SHEET	STA. 220+50 TO STA. 225+50 (S.R. 60)	CALCULATED	0 20 40 HORIZONTAL SCALE IN FEET
				CHECKED	







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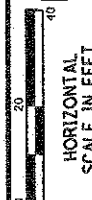
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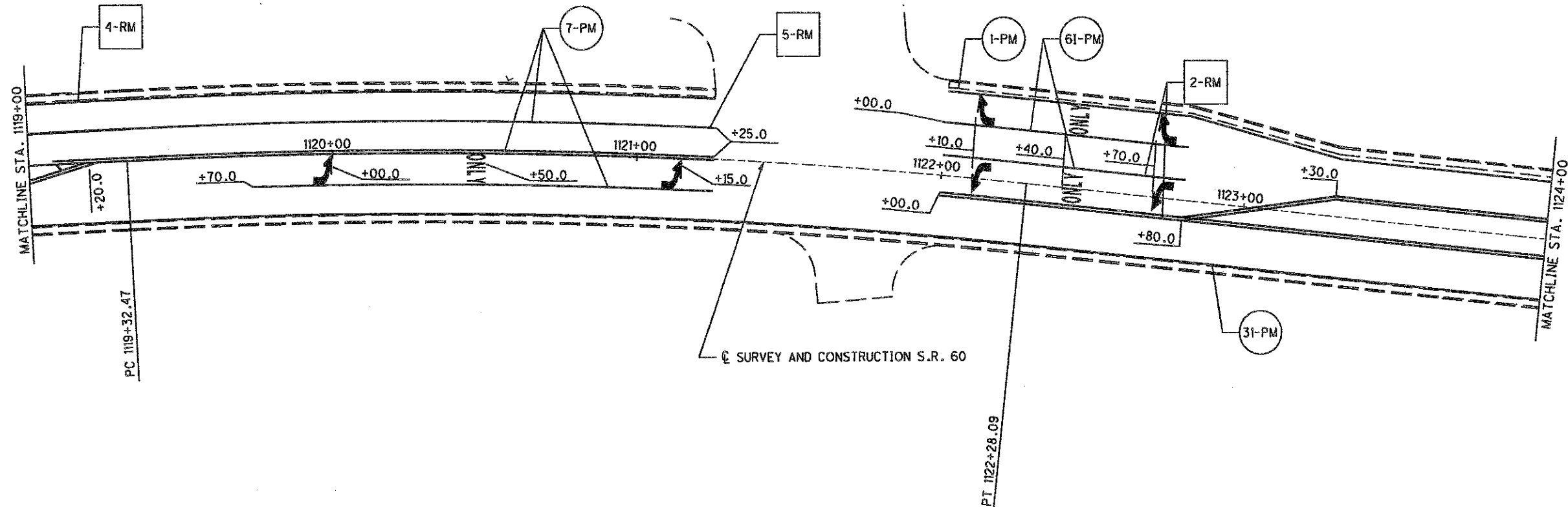


64
121

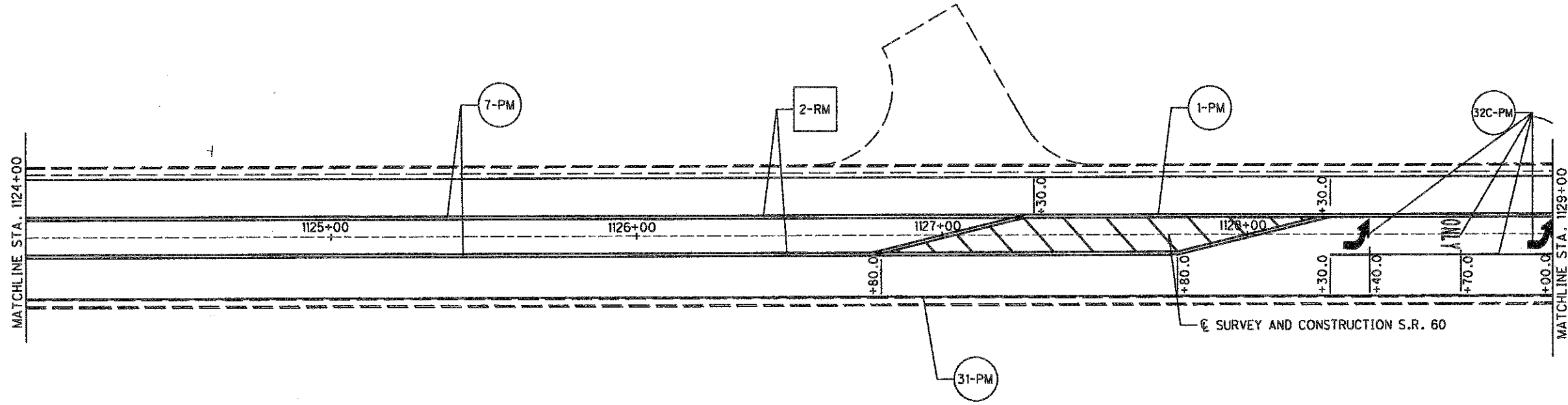
TRAFFIC CONTROL SHEET
STA. 1116+63.39 TO STA. 1119+00

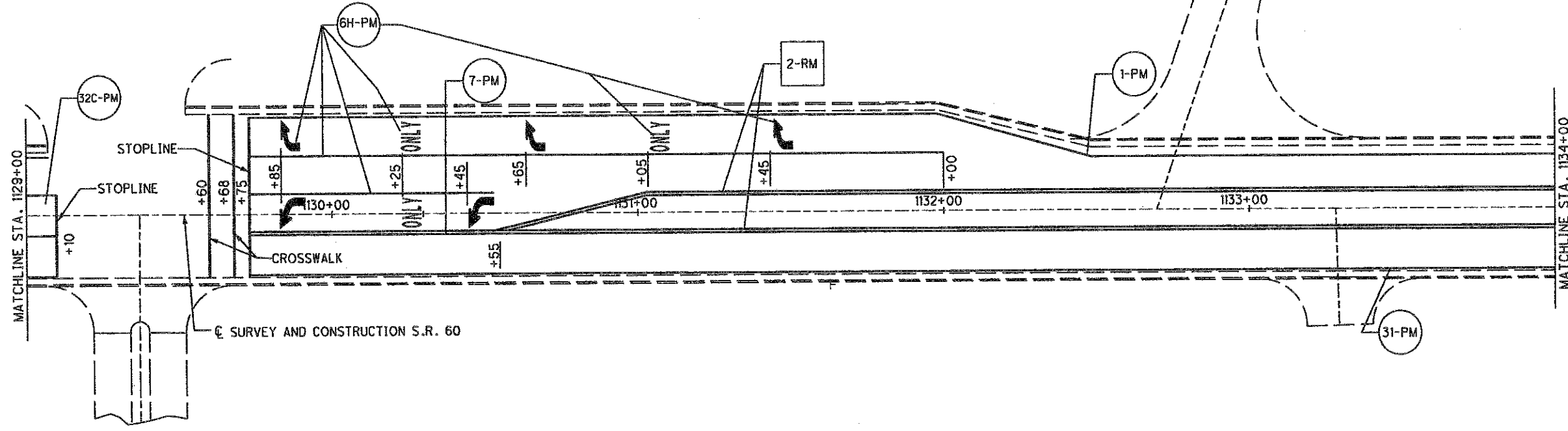
CALCULATED	CHECKED
SAB	BFB
12/18/97	12/19/97

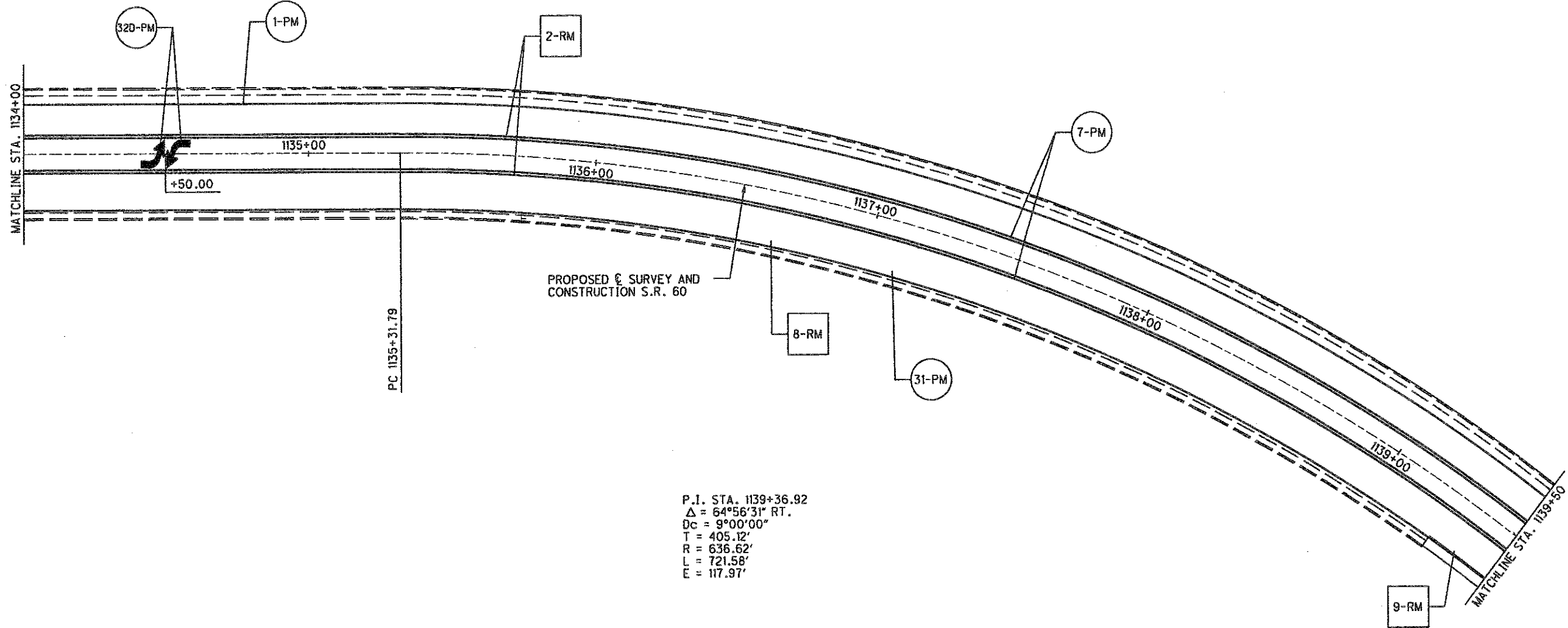


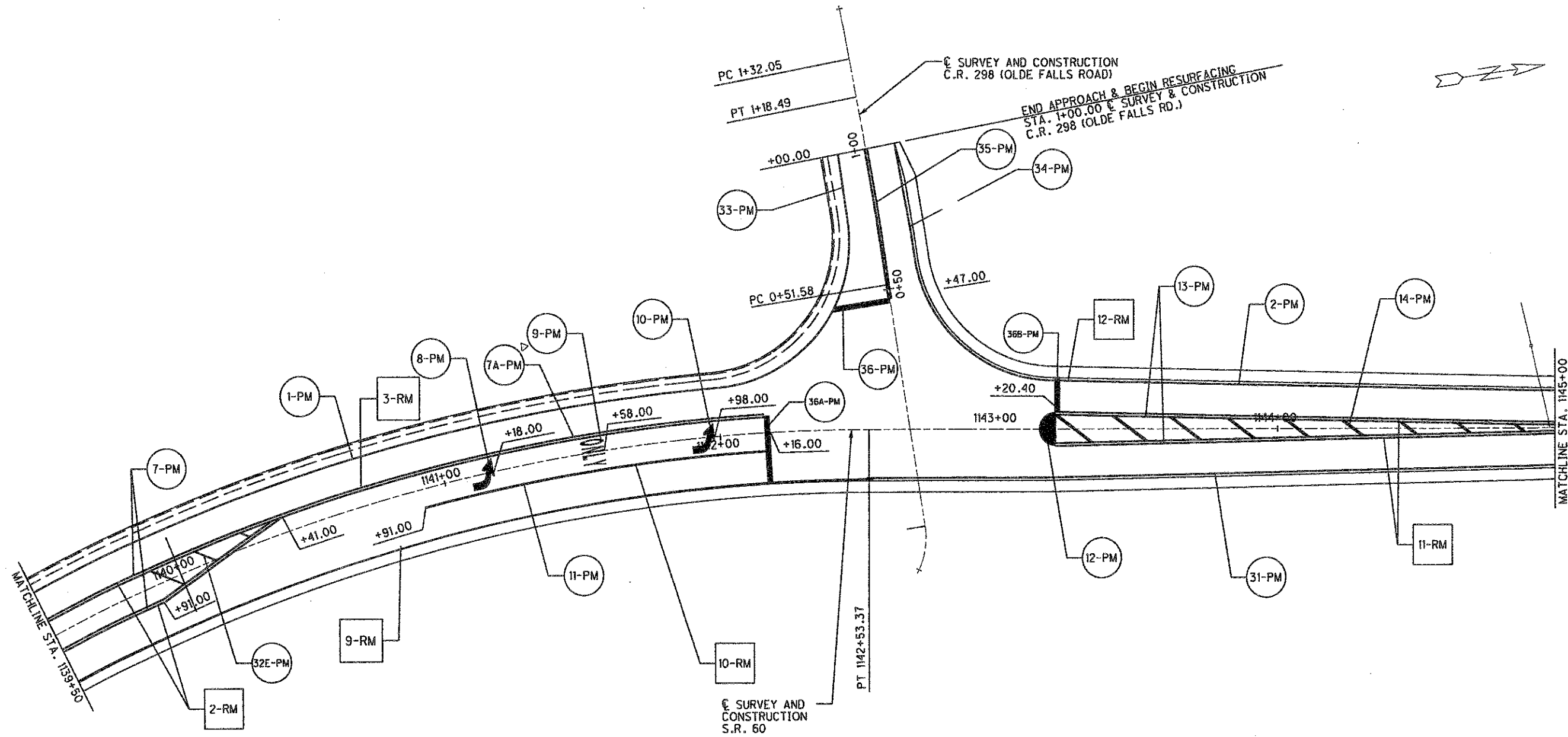


P.I. STA. 1120+80.58
 $\Delta = 8^{\circ}52'07''$ RT.
 $D_c = 3^{\circ}00'00''$
 $T = 148.12'$
 $R = 1,909.86'$
 $L = 295.62'$
 $E = 5.73'$

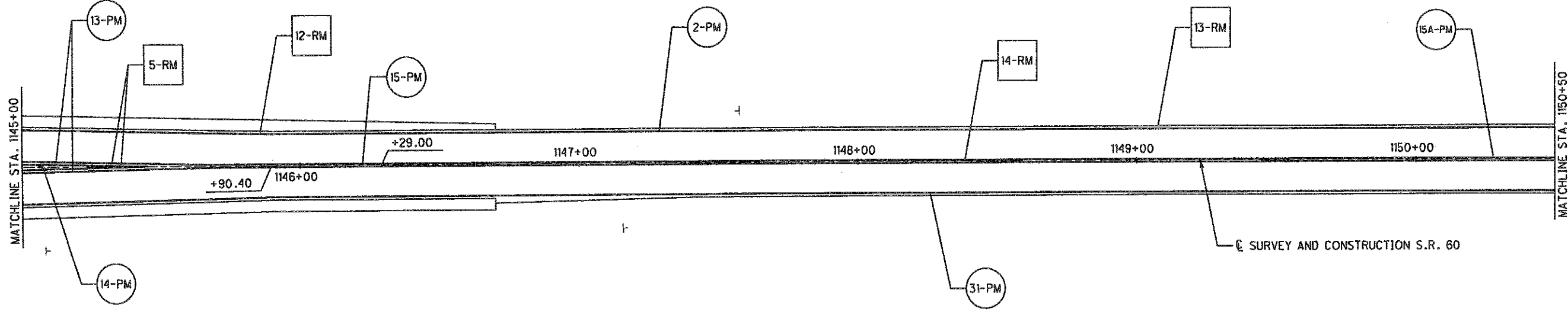


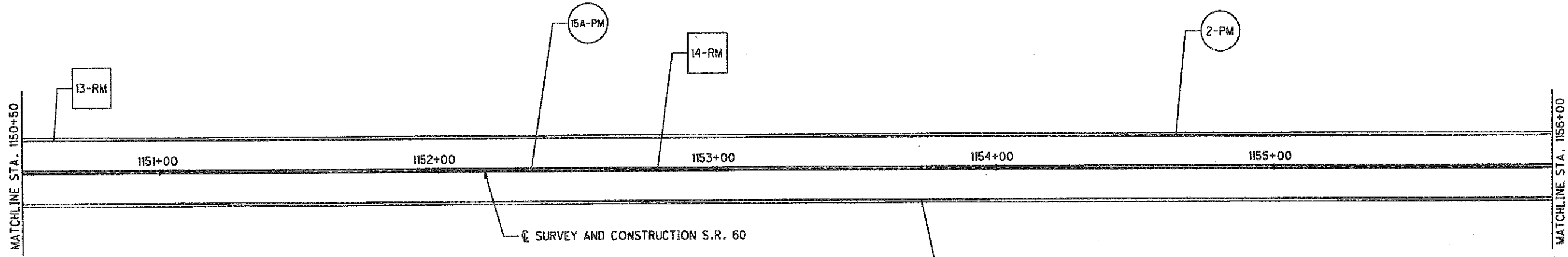


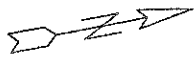
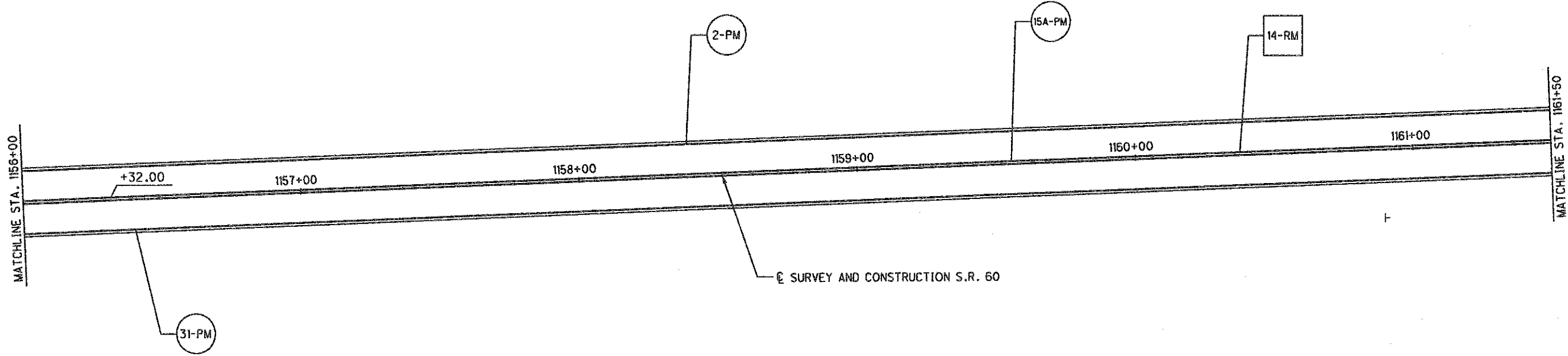




P.I. STA. 1139+36.92
 $\Delta = 64^{\circ}56'31''$ RT.
 $Dc = 9^{\circ}00'00''$
 $T = 405.12'$
 $R = 636.62'$
 $L = 721.58'$
 $E = 117.97'$



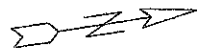




MATCHLINE STA. 1161+50



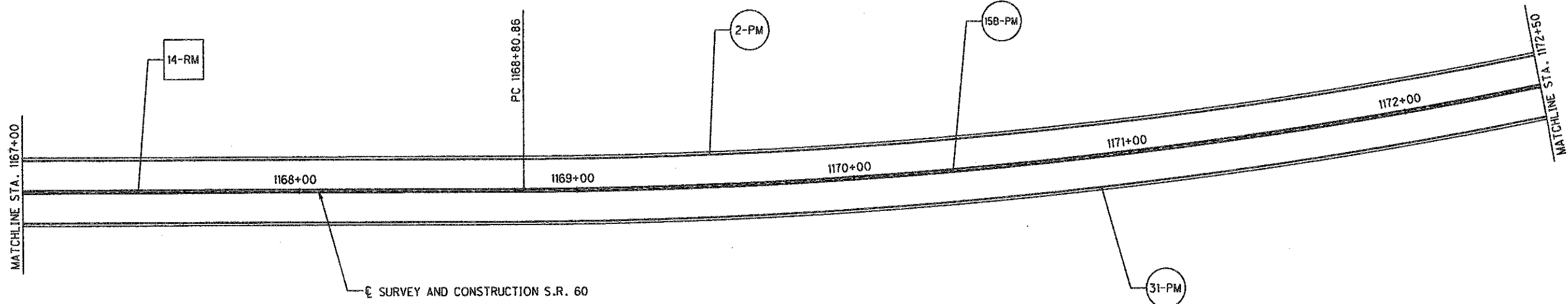
MATCHLINE STA. 1167+00



MUS-60-17.93

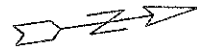
TRAFFIC CONTROL SHEET
STA. 1161+50 TO STA. 1167+00

CHECKED
SAB
9-10-97
DESIGNED
BFB
9-10-97
HORIZONTAL
SCALE IN FEET
0 20 40

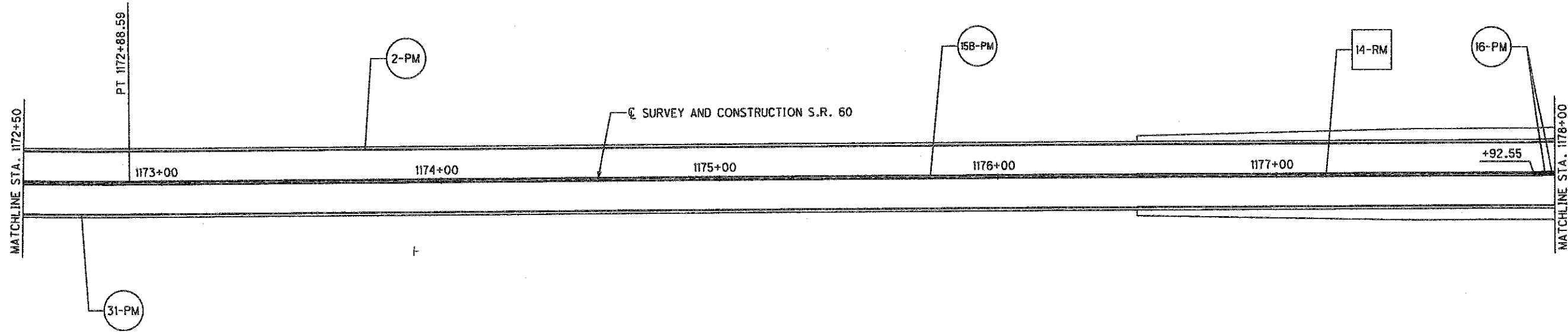


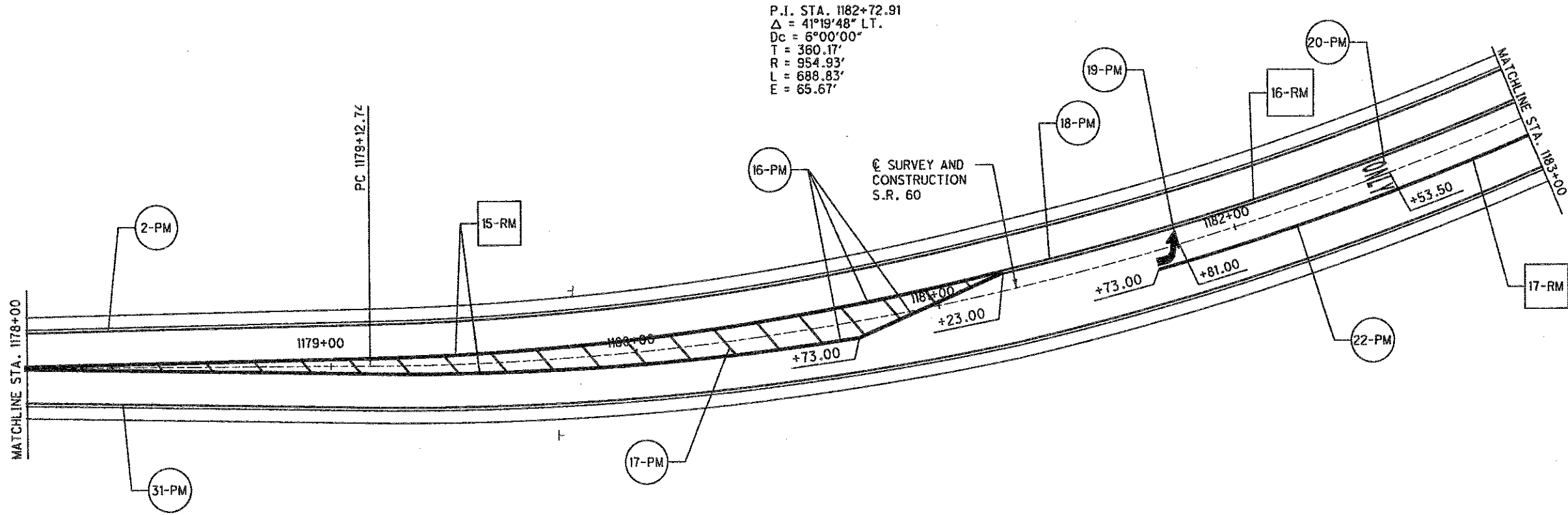
P.I. STA. 1170+85.51
 $\Delta = 12^{\circ}13'54''$ LT.
 $Dc = 3^{\circ}00'00''$
 $T = 204.64'$
 $R = 1,909.86'$
 $L = 407.72'$
 $E = 10.93'$

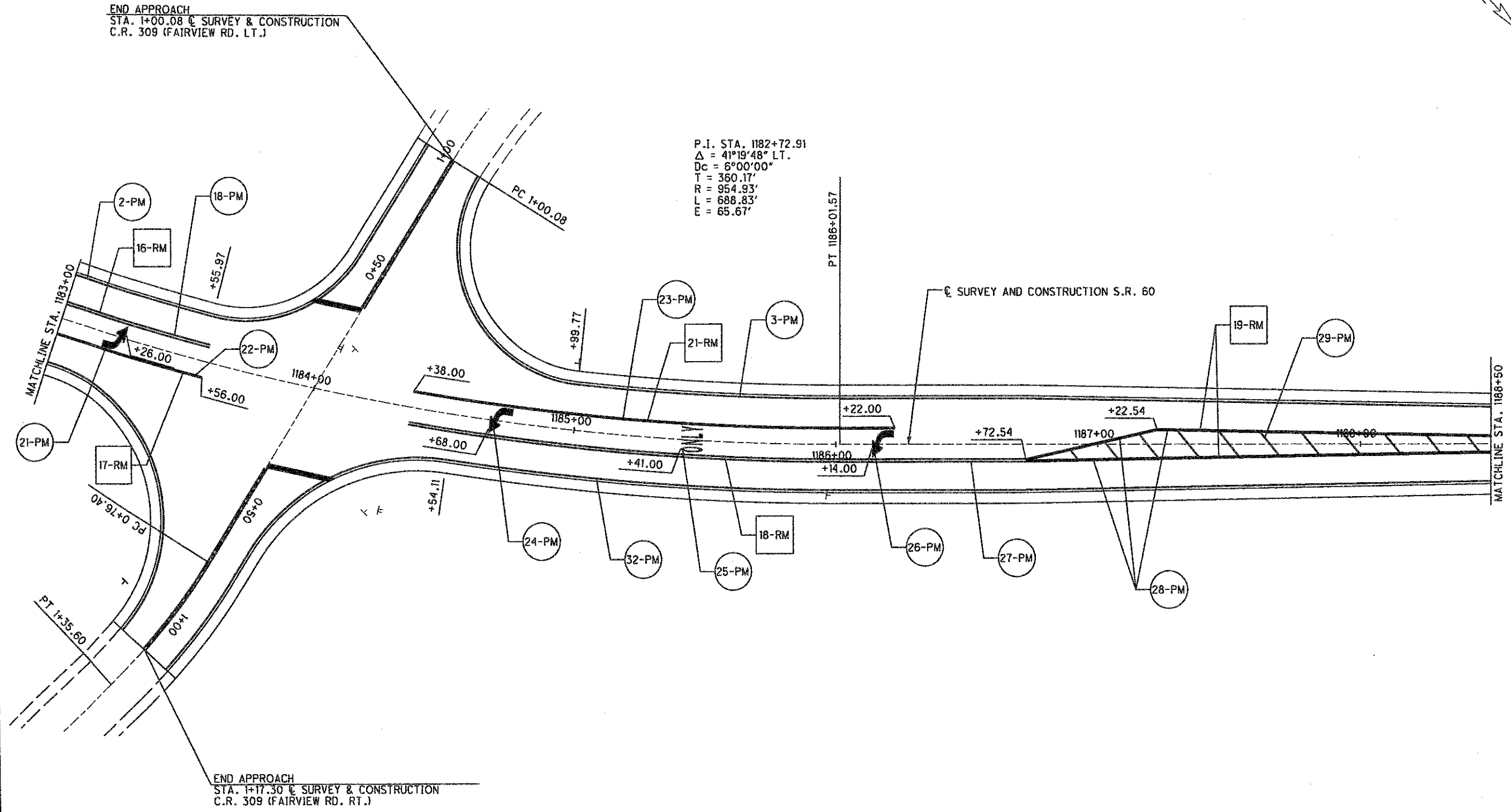
31-PM

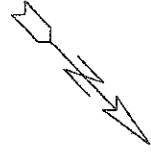
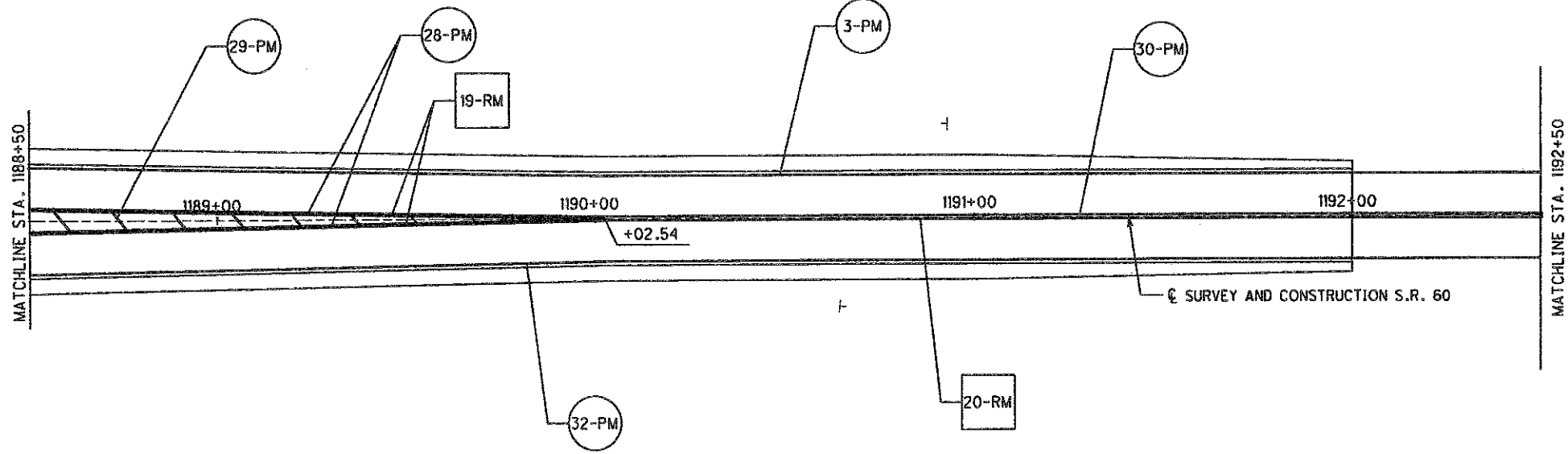


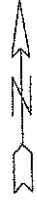
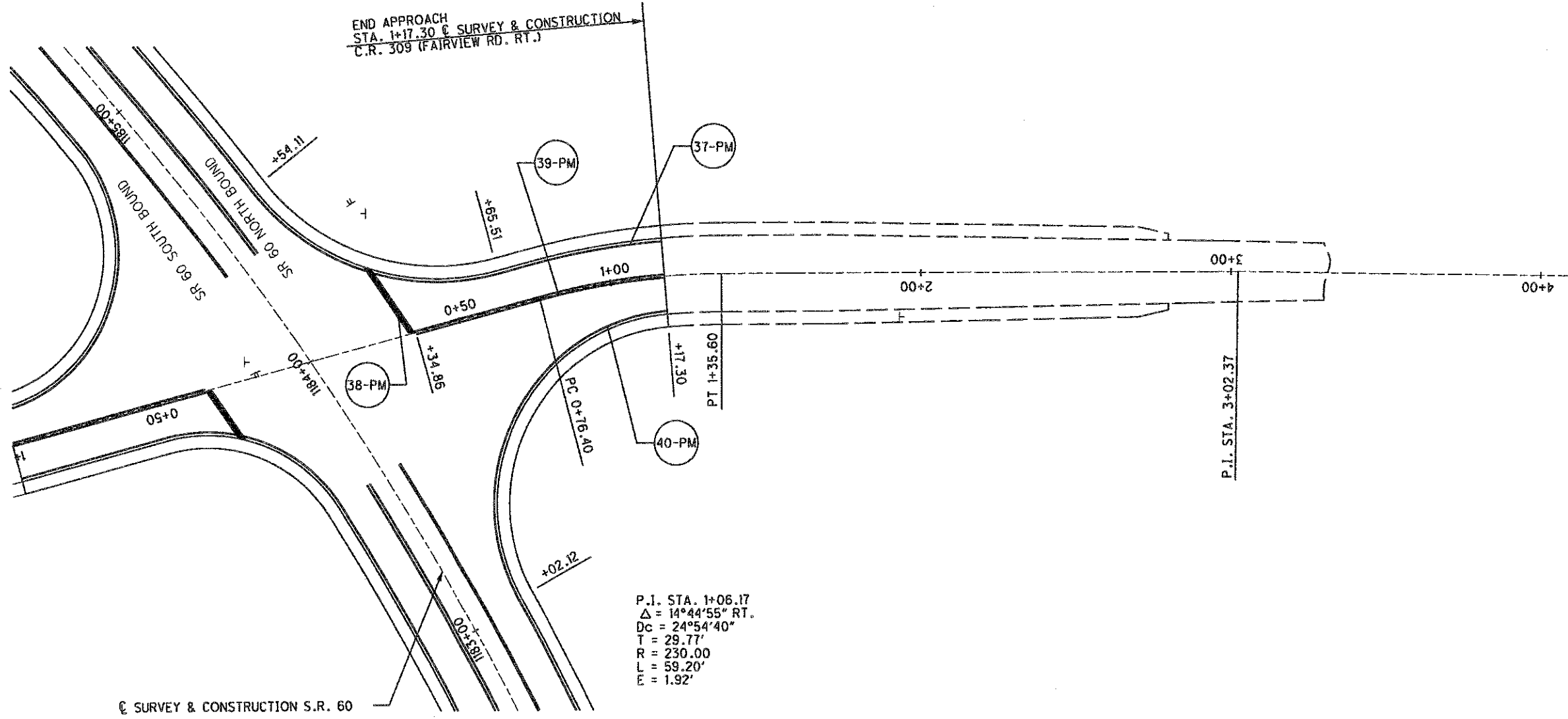
P.I. STA. 1170+85.51
 $\Delta = 12^{\circ}13'54''$ LT.
Dc = $3^{\circ}00'00''$
T = 204.64'
R = 1,909.86'
L = 407.72'
E = 10.93'

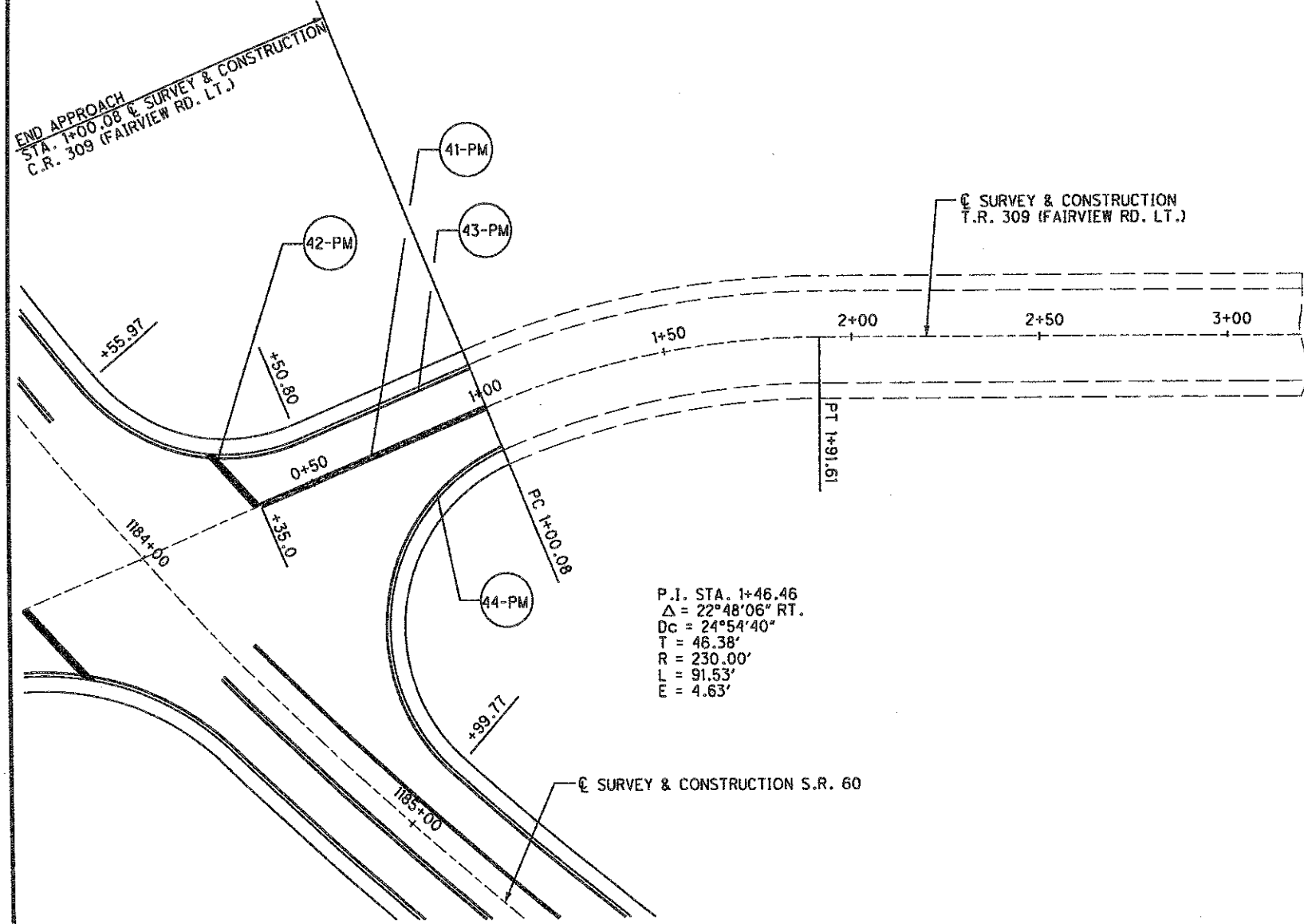


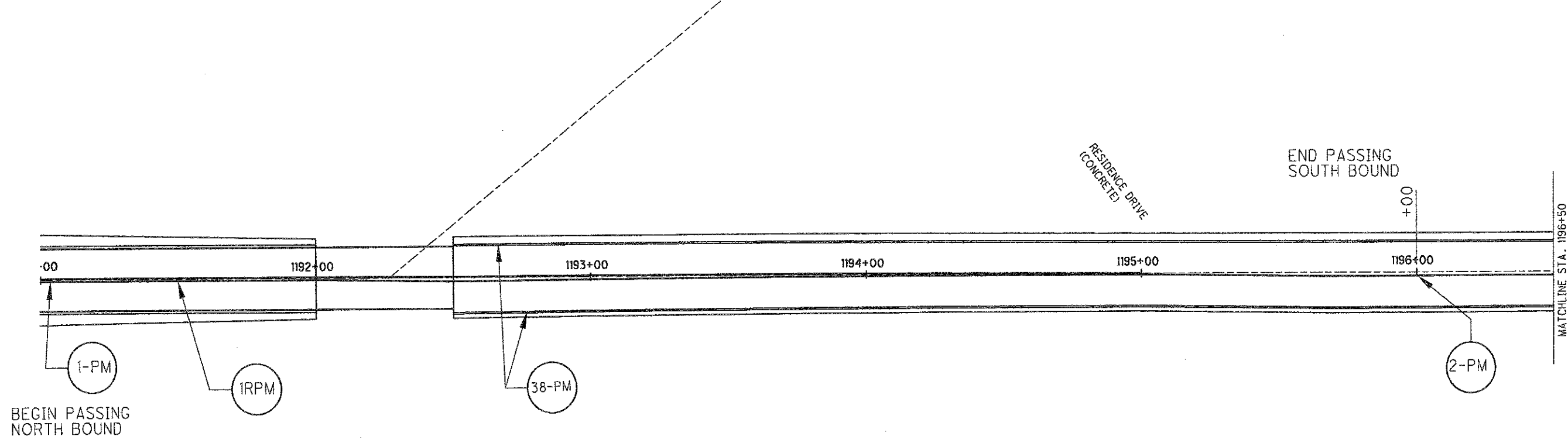


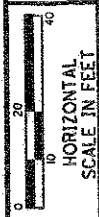
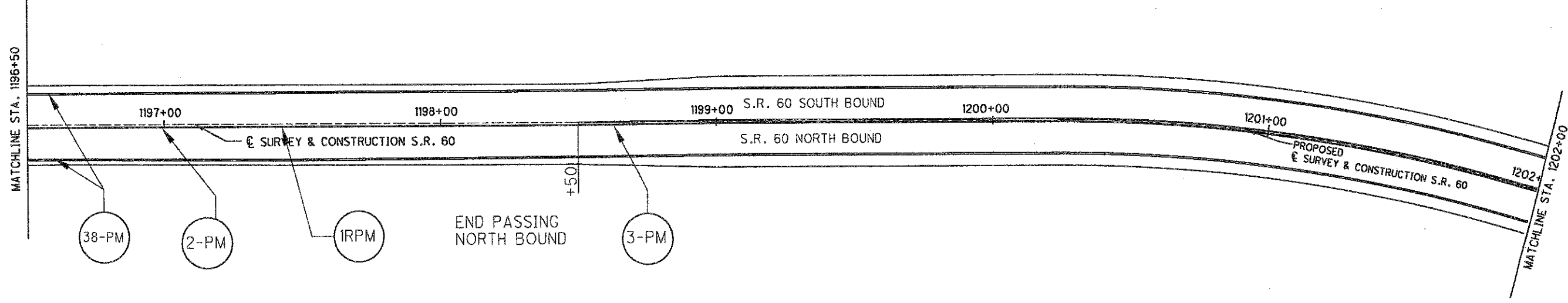








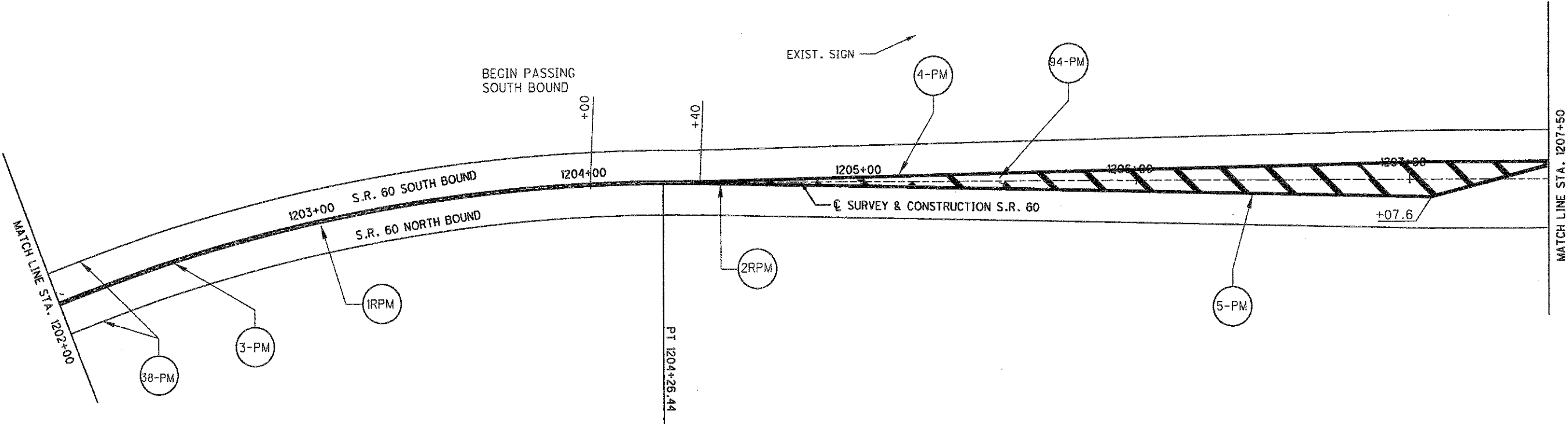


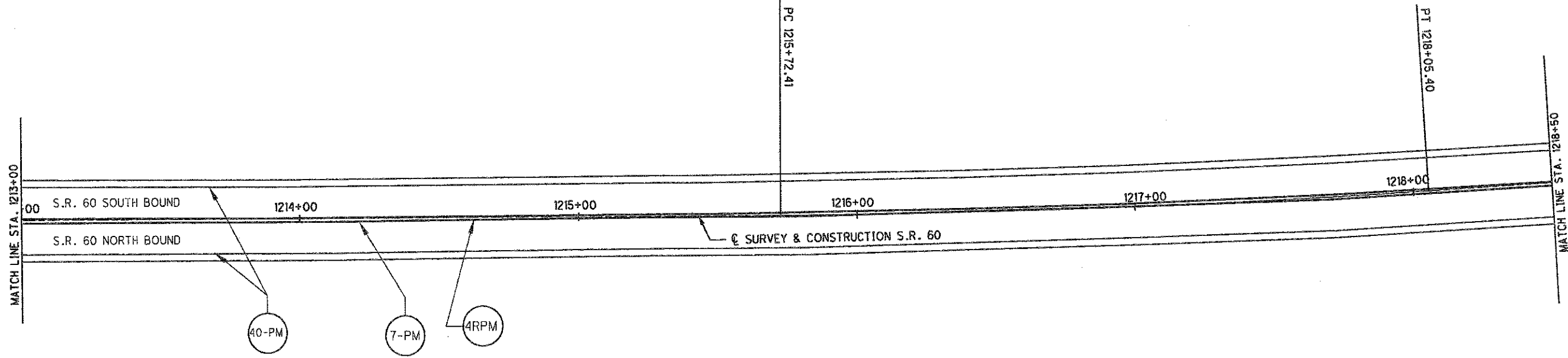


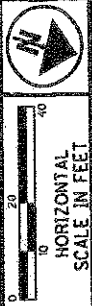
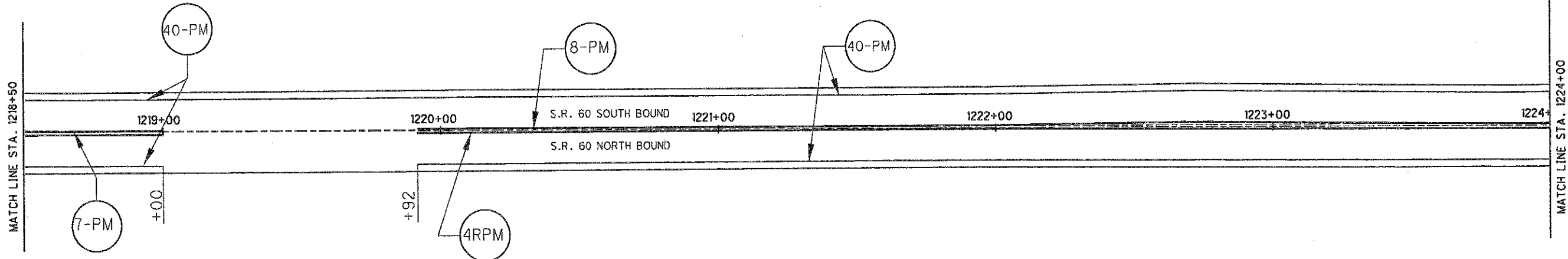
CALCULATED
SAB
6/15/98
CHECKED
BFB

TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1196+50 TO STA. 1202+00

MUS-60-17.93



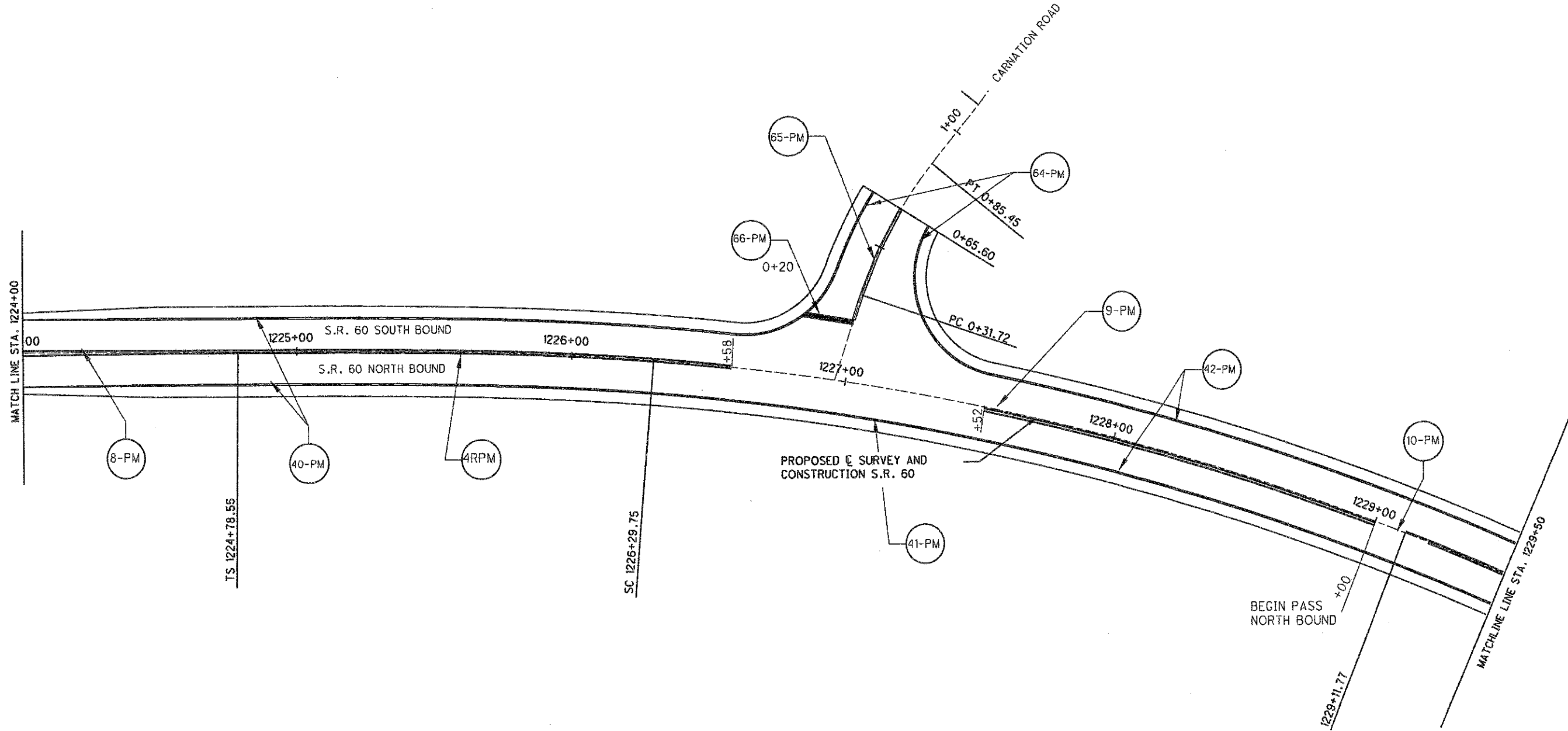


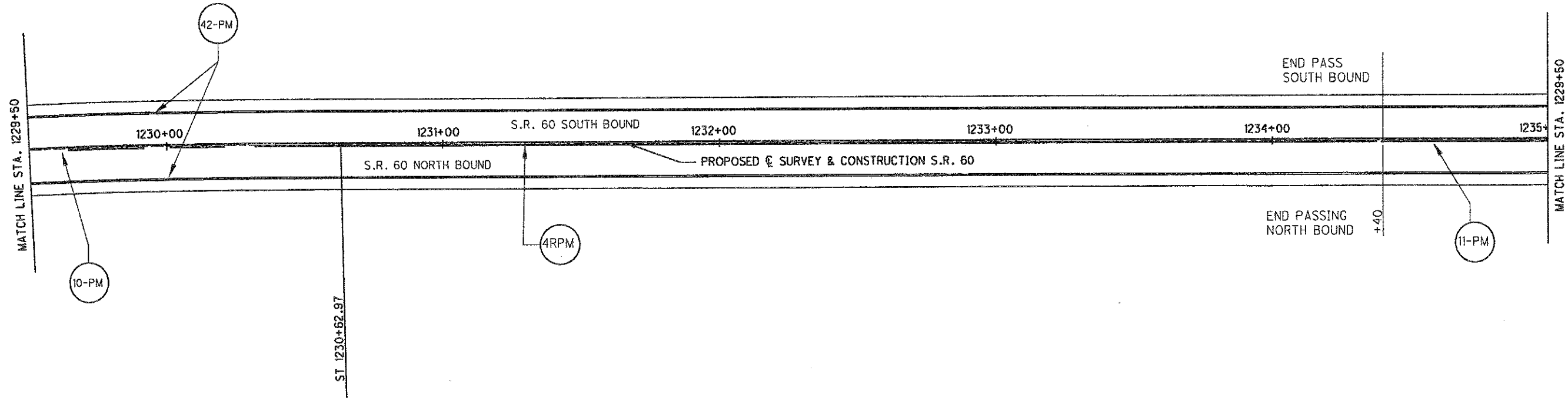


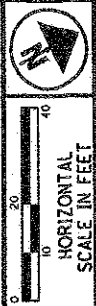
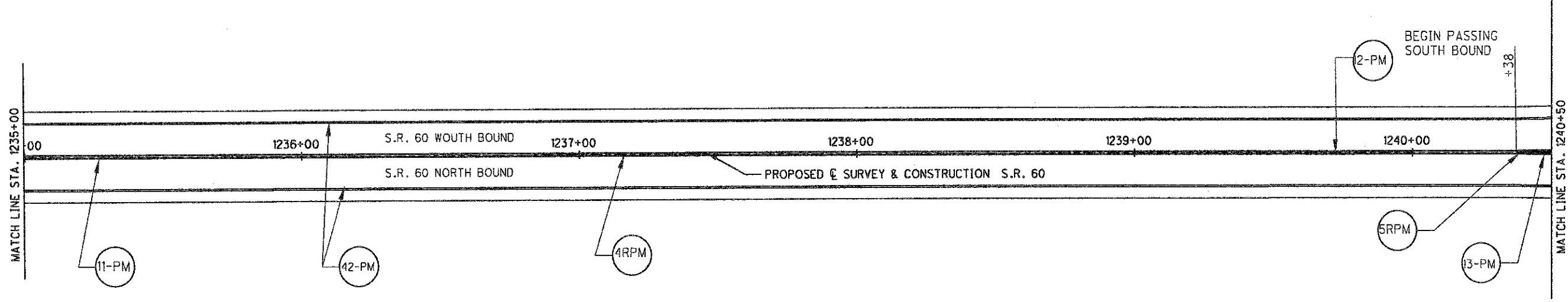
CALCULATED
SAB
6/17/98
CHECKED
BFB

TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1218+50 TO STA. 1224+00

MUS-60-17.93



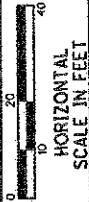
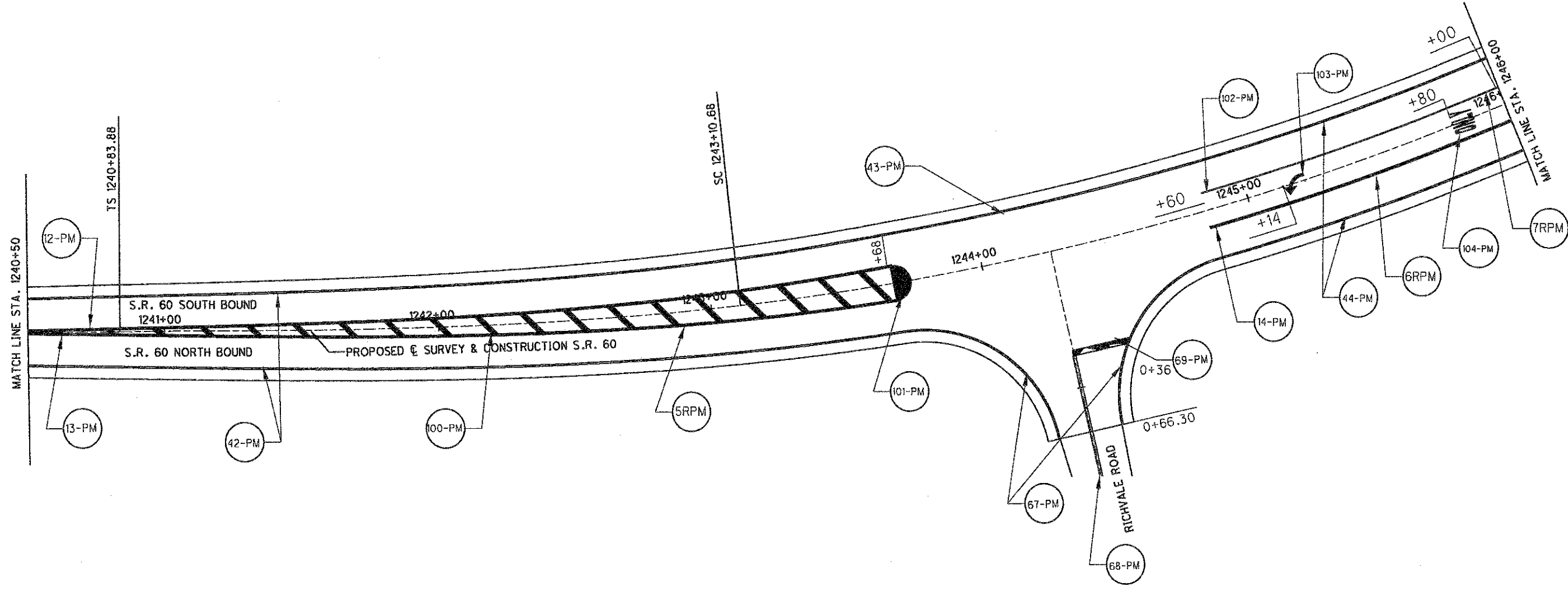




CALCULATED
SAB
6/17/98
CHECKED
BFB

TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1235+00 TO STA. 1240+50

MUS-60-17.93

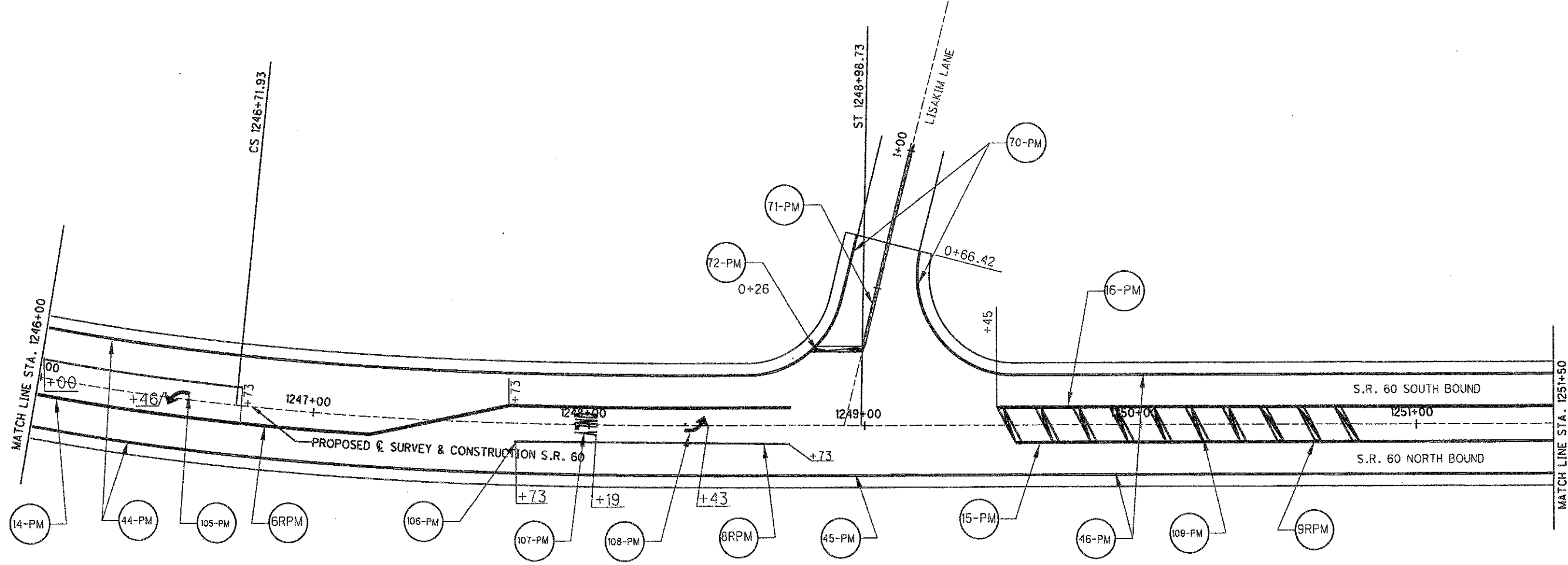


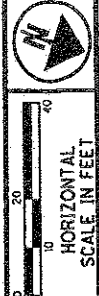
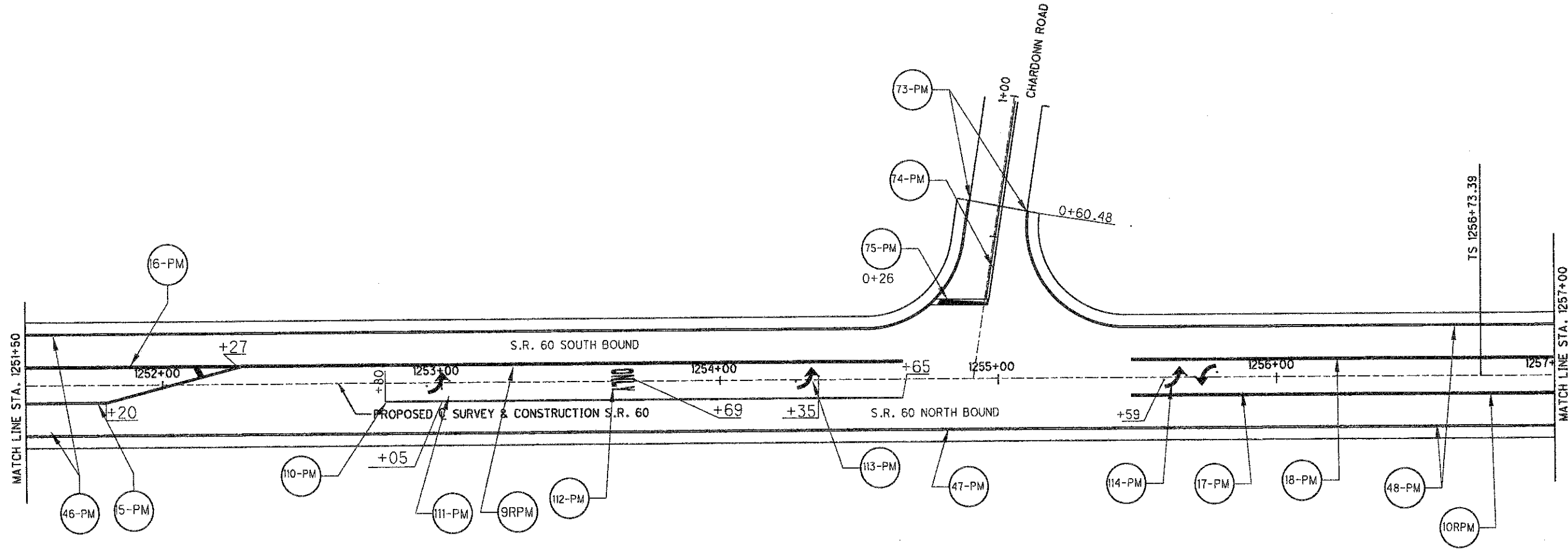
CALCULATED
8/17/98
CHECKED
BFB

TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1240+50 TO STA. 1246+00

MUS-60-17.93

90
121

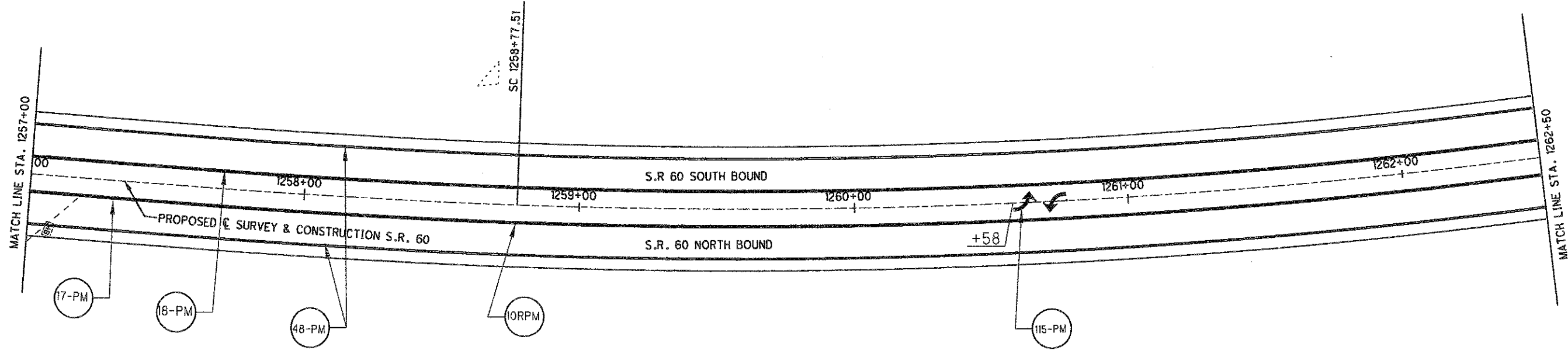


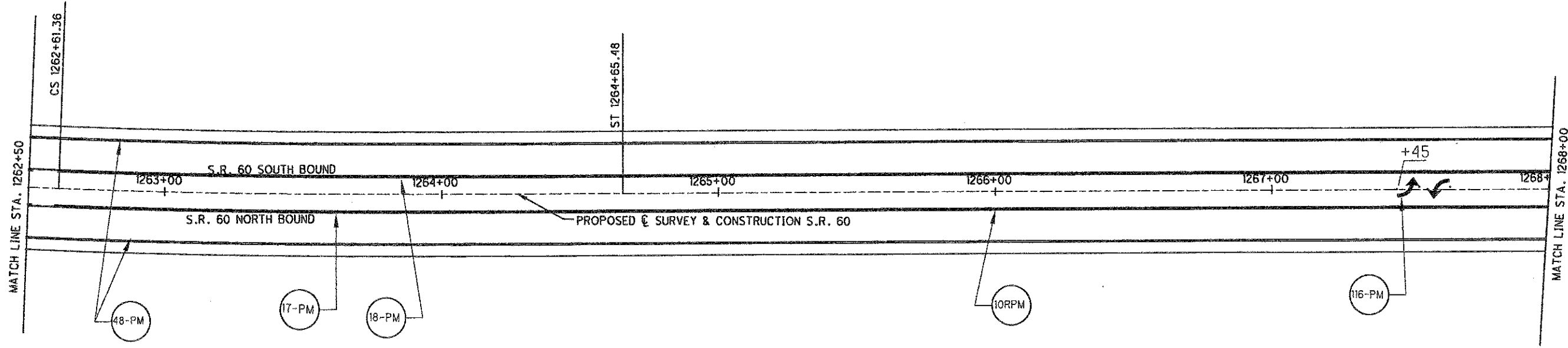


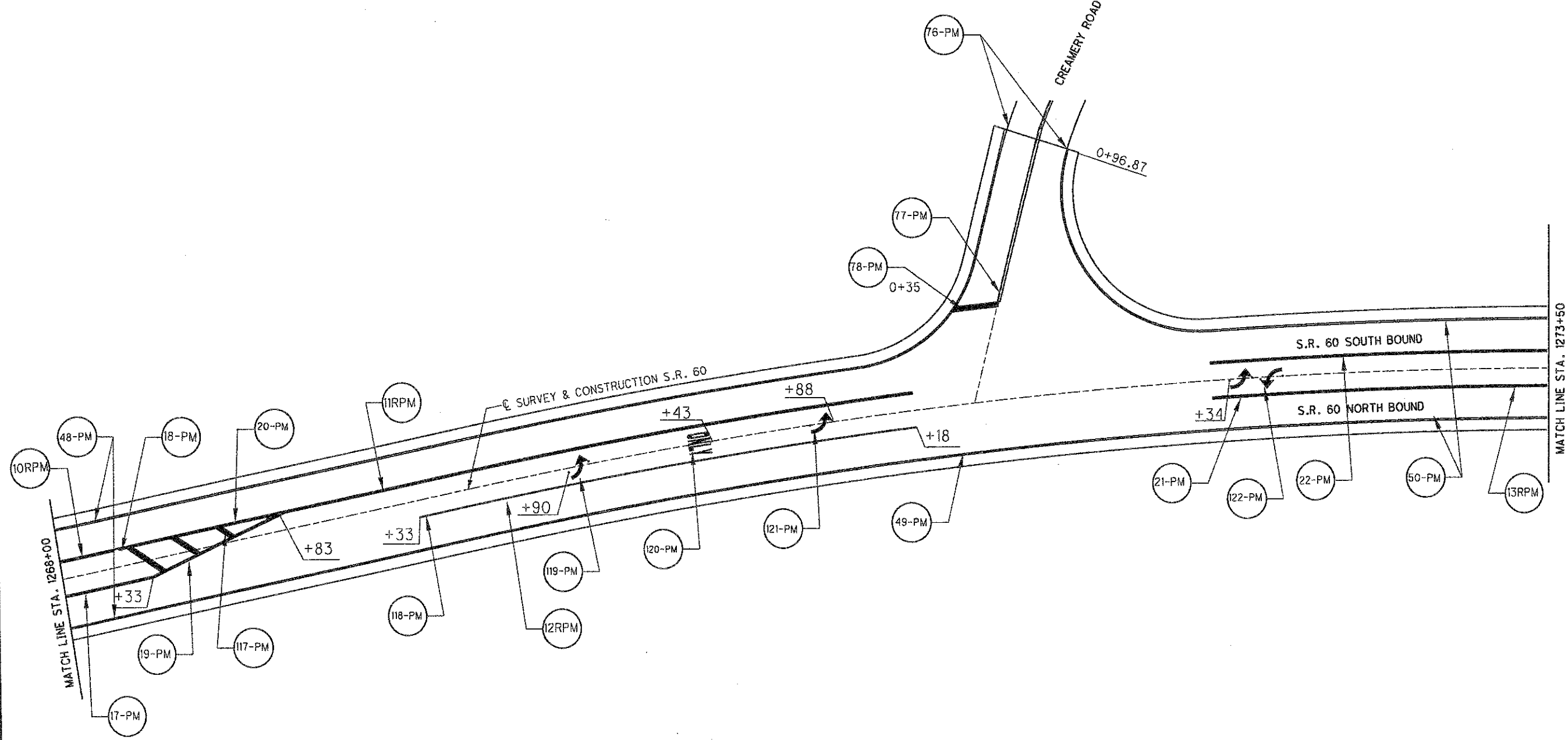
CALCULATED
SAB
8/17/98
CHECKED
BFB

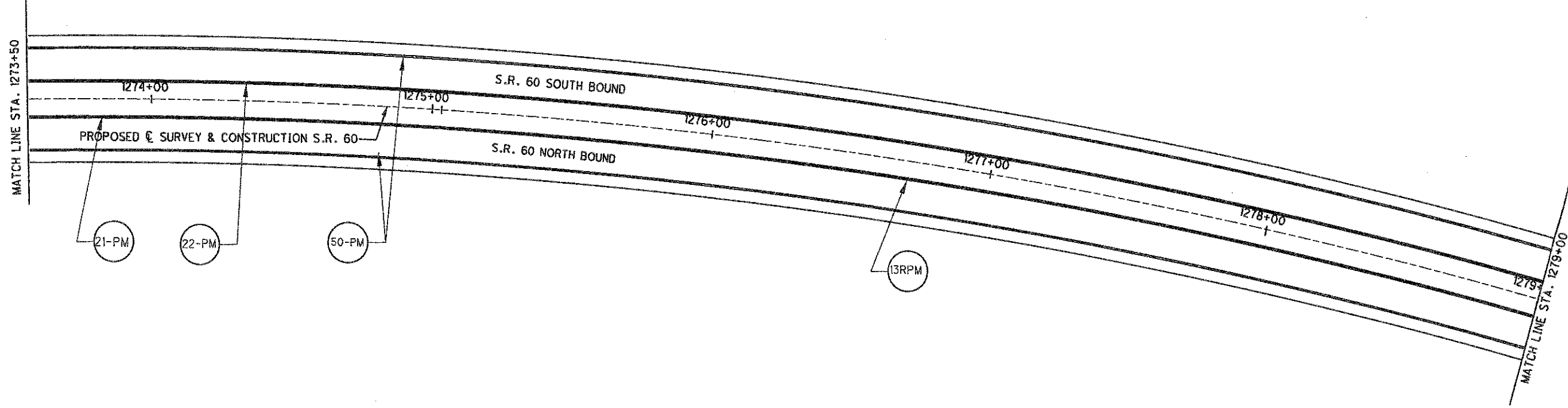
TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1251+50 TO STA. 1257+00

MUS-60-17.93





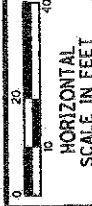


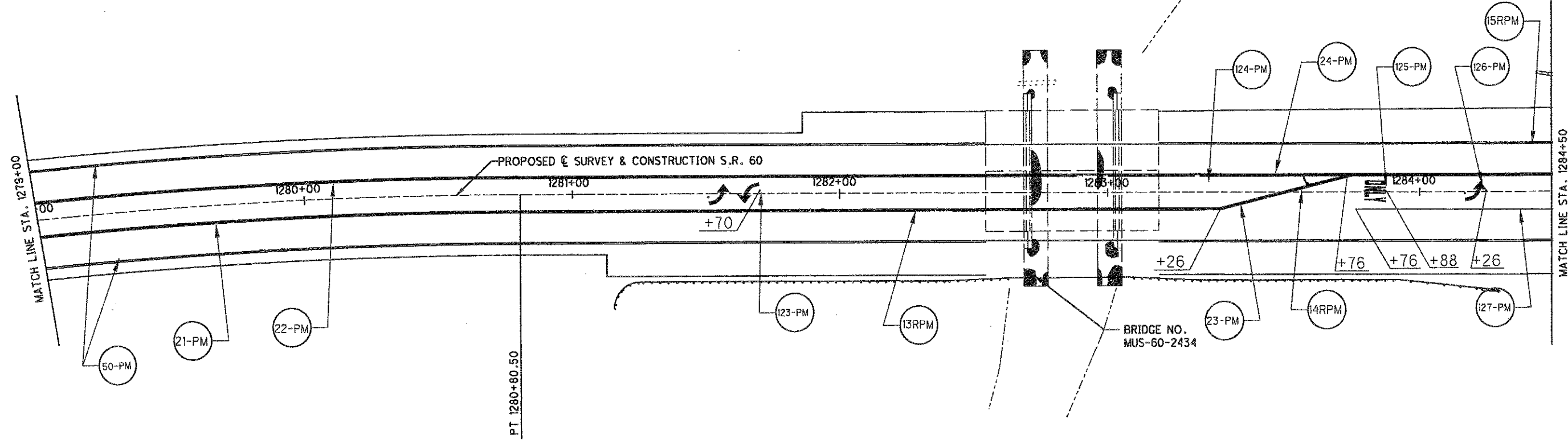


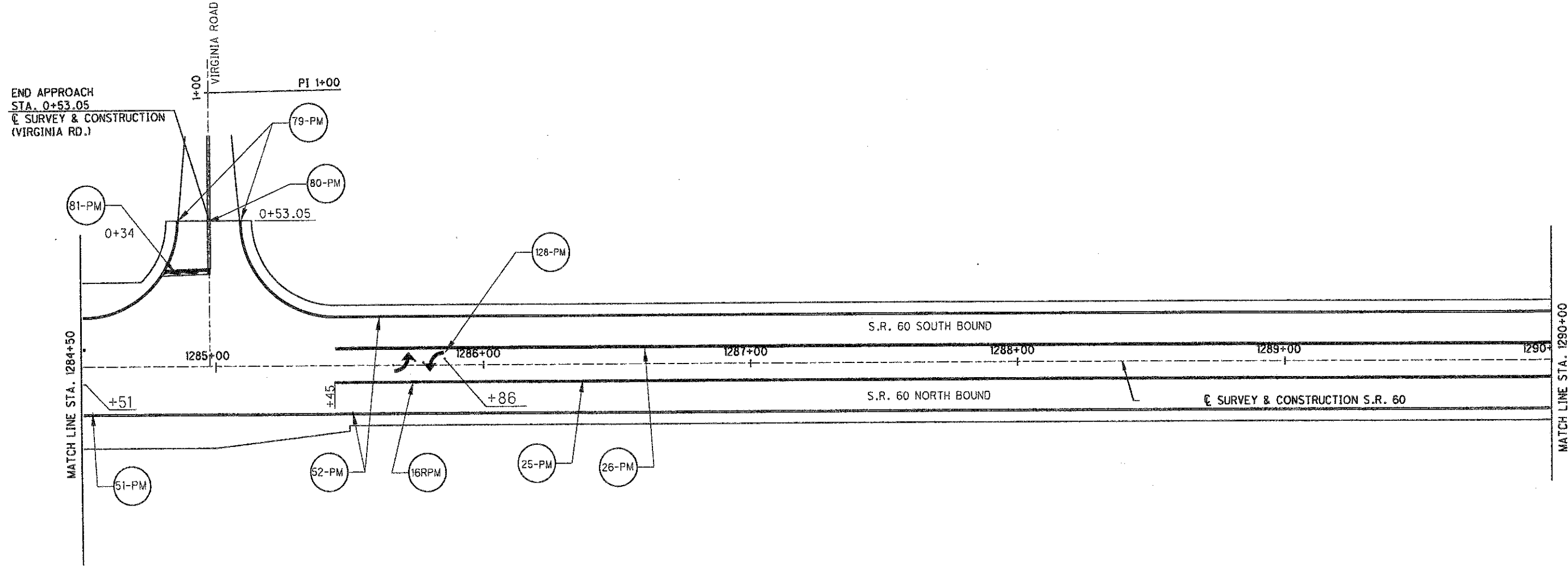
TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1273+50 TO STA. 1279+00

MUS-60-17.93

CHECKED	DATE
9/17/98	9/18

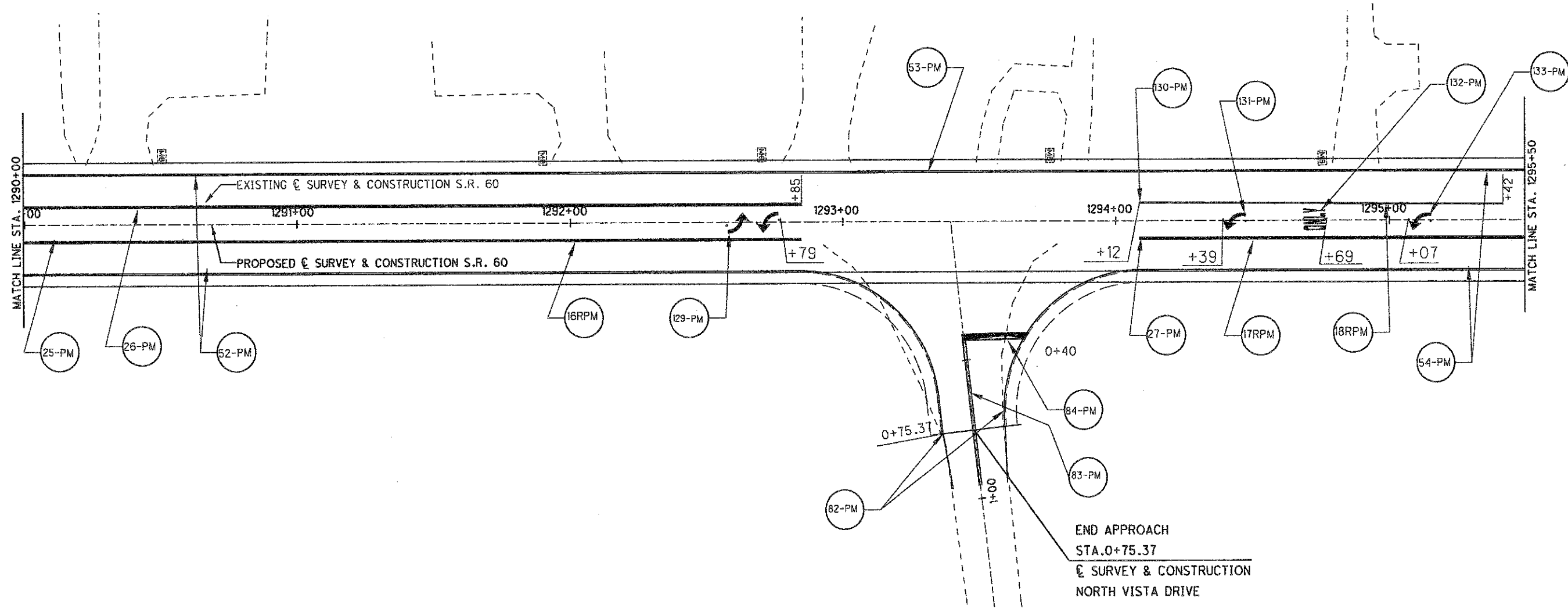


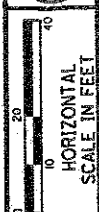




CHECKED	DATE
BFB	8/17/98

TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1284+50 TO STA. 1290+00



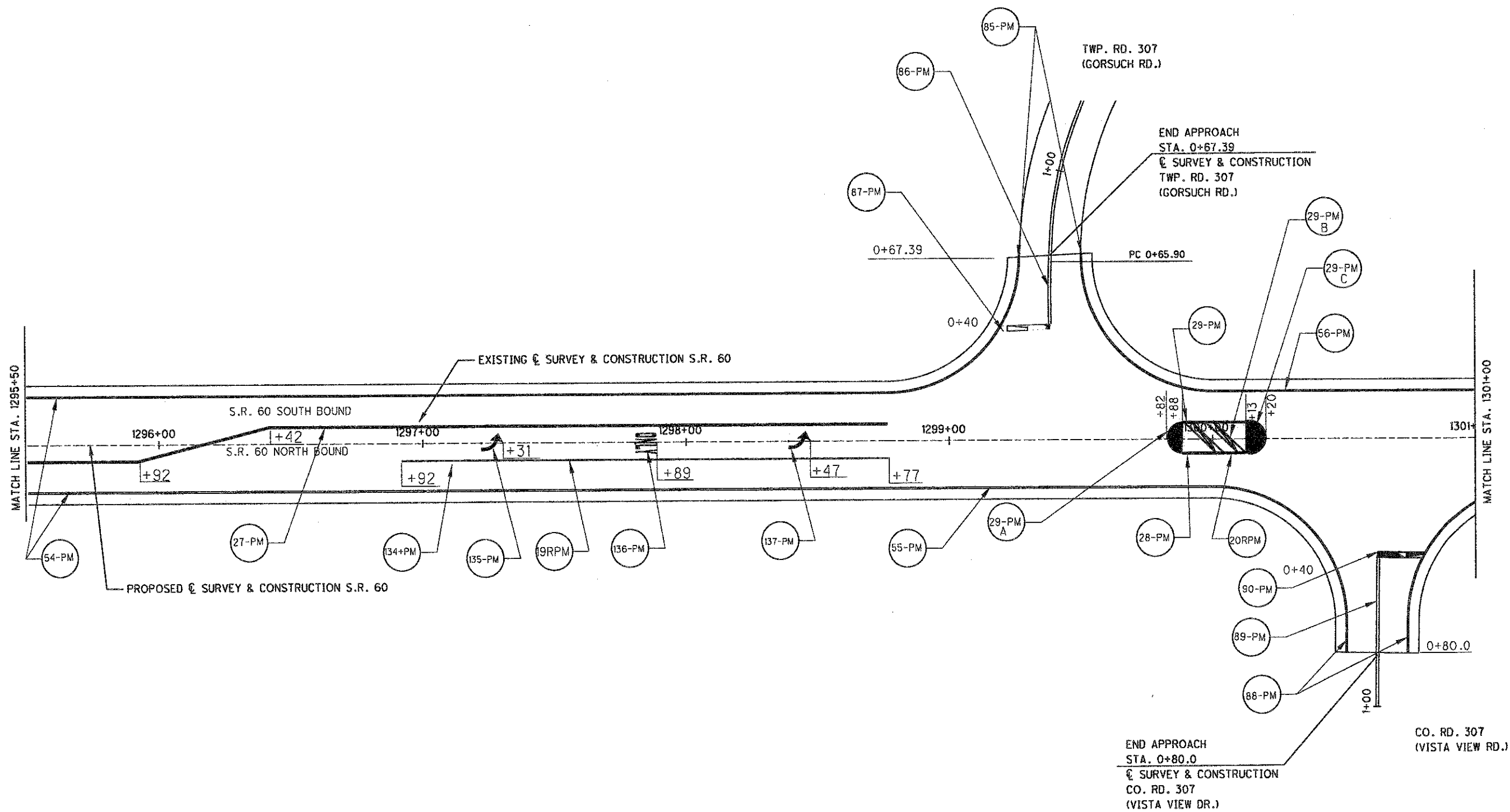


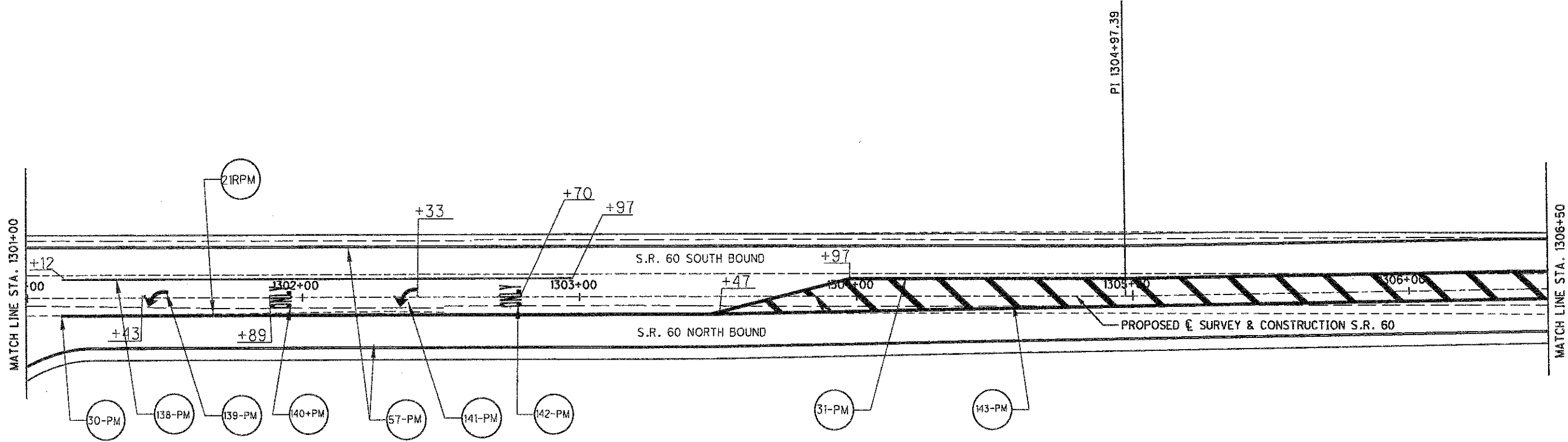
CALCULATED
5/9
6/17/98
CHECKED
D/FB

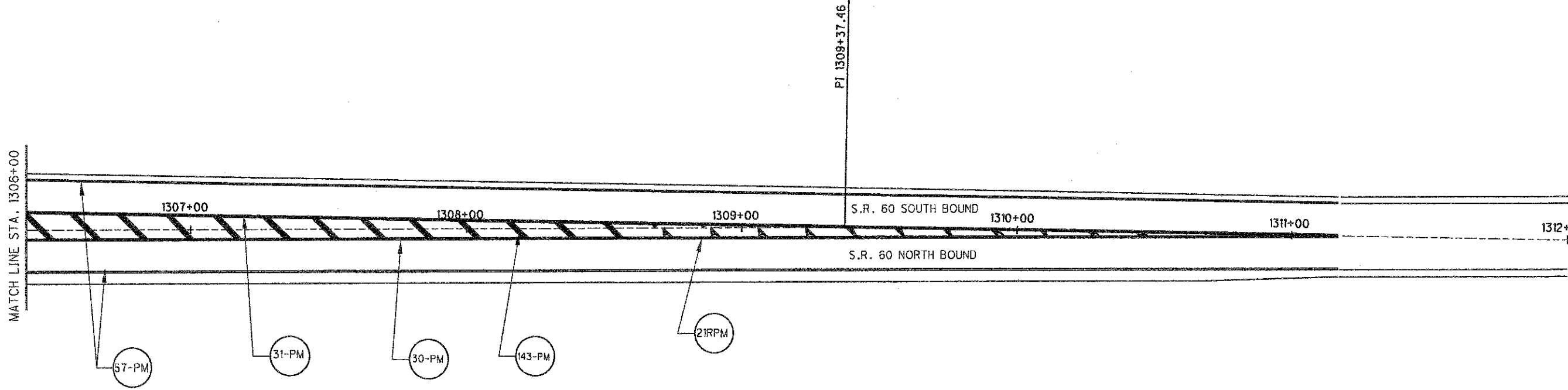
TRAFFIC CONTROL SHEET PAVEMENT MARKING
STA. 1295+50 TO STA. 1301+00

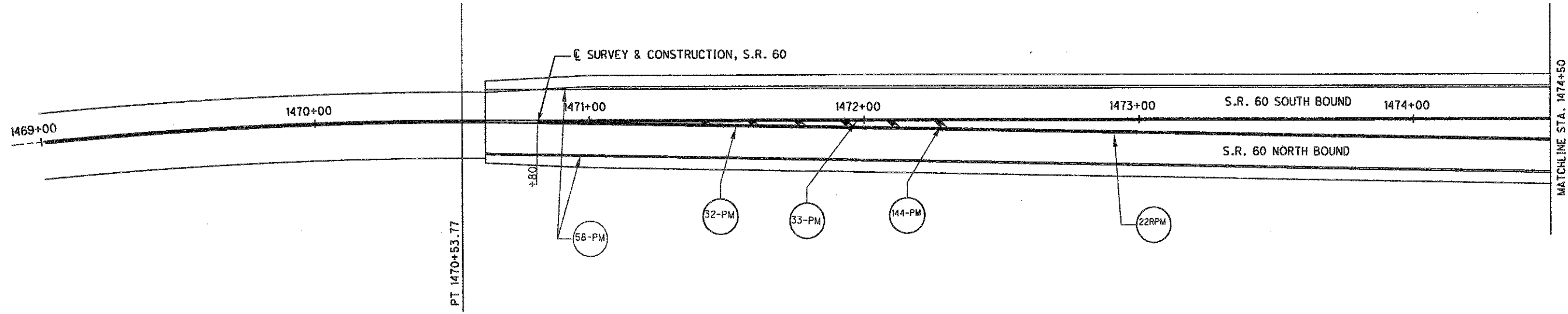
MUS-60-17.93

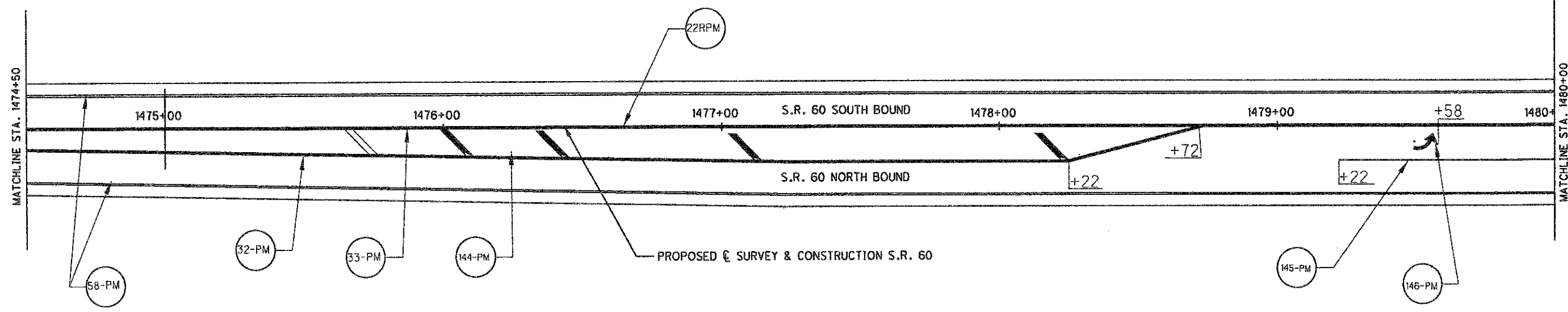
100
121

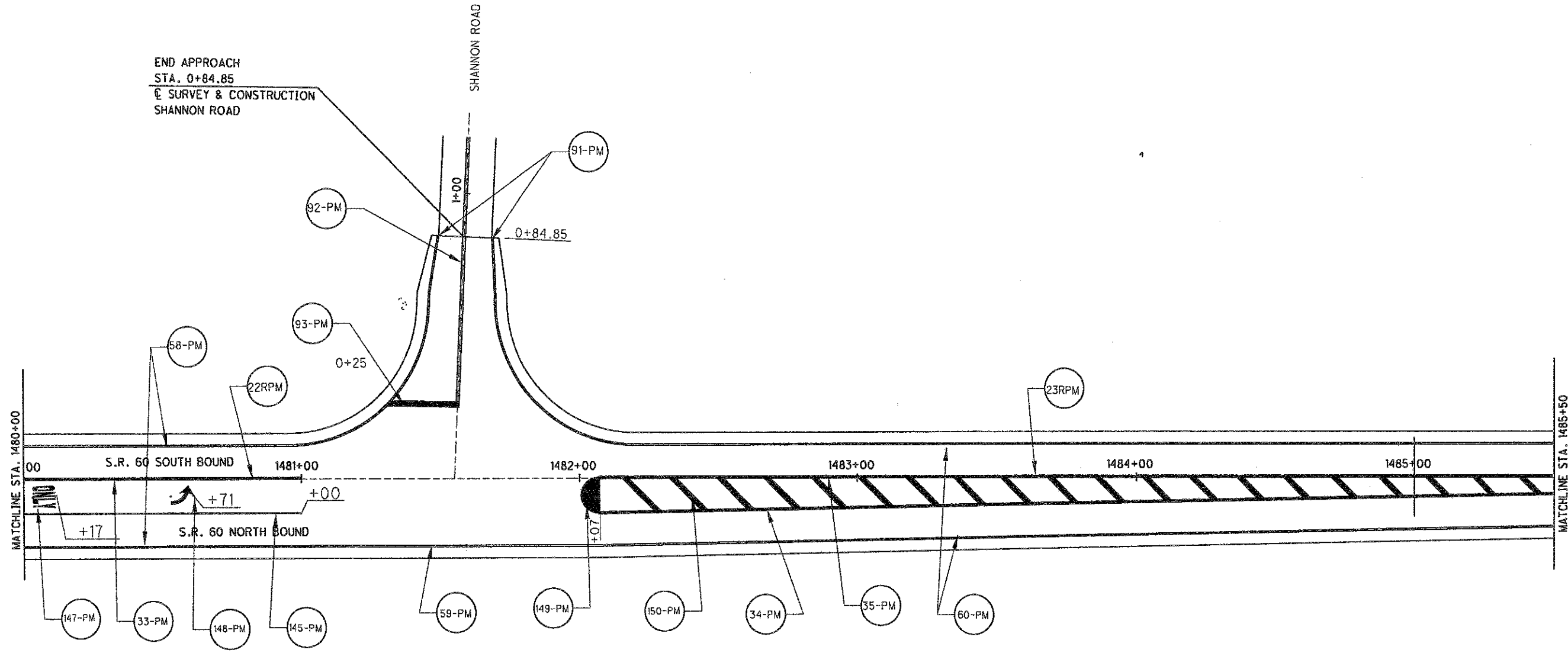


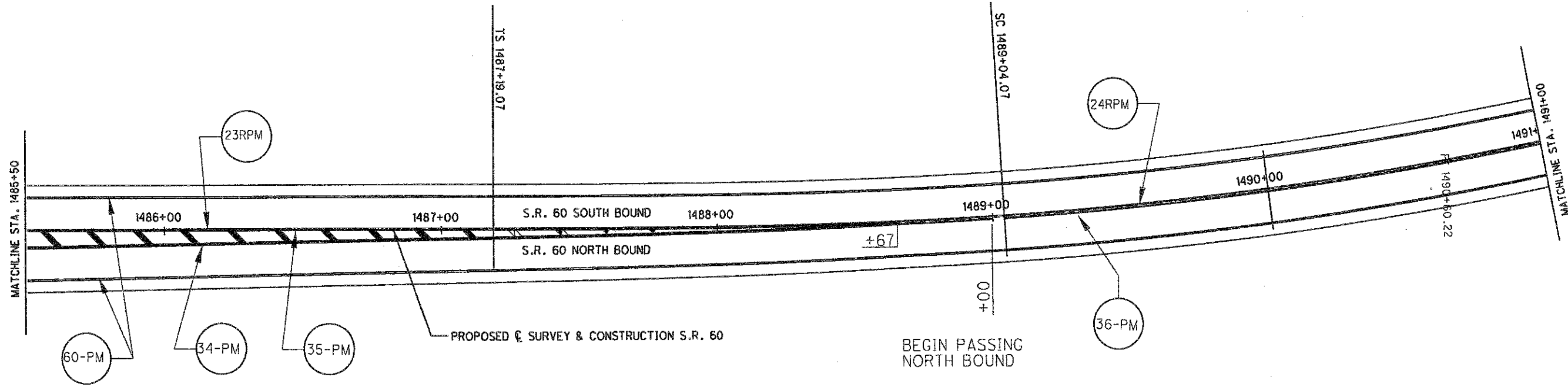


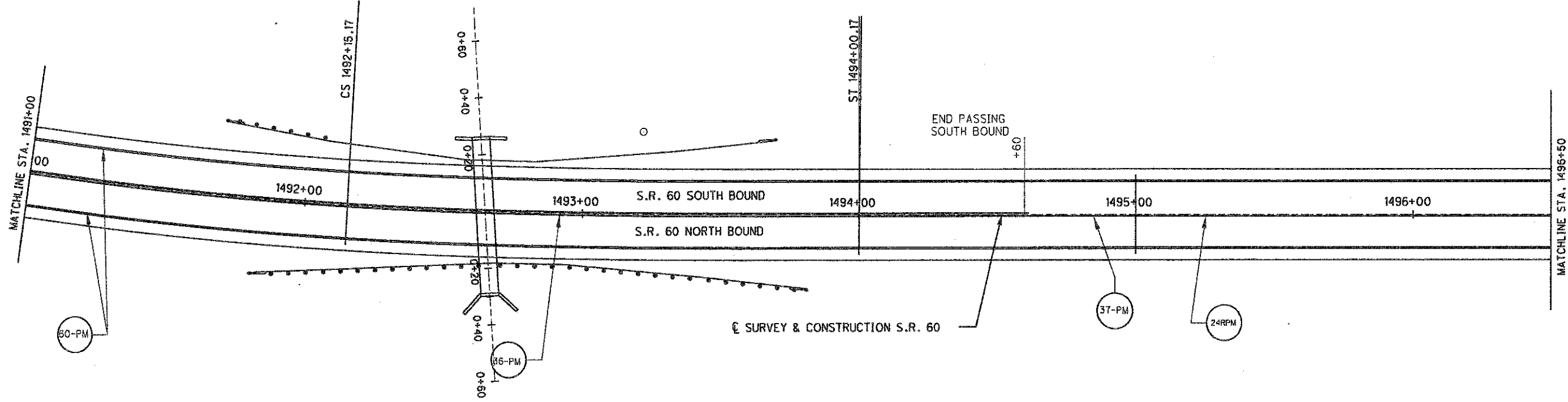












SR60 PART 1 PM SUM.DGN

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644															621				TOTALS
			FROM	TO		EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE (DOUBLE SOLID)	CENTER LINE (SOLID DASH)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE		LANE ARROW	WORD ON PAVEMENT, 72"								
						MI	MI	MI	MI	MI	FT	FT	FT	FT		EACH	EACH		EACH	EACH	EACH				
	41-PM		91+00		℄											1									
	42-PM	VAN HORN AVENUE			RT							16	92												
	43-PM		92+61	93+05	LT					0.008															
	44-PM		92+61	93+05	RT					0.008															
	45-PM		92+61	96+05	RT			0.065																	
	46-PM	FAIRMONT AVENUE			LT							16	95												
	47-PM		93+64	96+05	LT			0.046																	
	48-PM		93+64	96+05	LT					0.046															
	49-PM		93+64	96+05	RT					0.046															
	50-PM		94+10		℄											1									
	51-PM		95+85		℄											1									
	52-PM		104+00	108+38	LT			0.083																	
	53-PM		104+00	107+28	LT					0.062															
	54-PM		104+00	107+28	RT					0.062															
	55-PM		104+00	107+28	RT			0.062																	
	56-PM		104+75		℄											1									
	57-PM		106+50		℄											1									
	58-PM	IMLAY DRIVE			RT							10	69												
	59-PM		107+80	108+38	LT					0.011															
	60-PM		107+80	108+38	RT					0.011															
	61-PM		107+80	110+50	RT			0.051																	
	62-PM	JACOBS STREET			LT							16	95												
	63-PM		109+05	111+84	LT			0.053																	
	64-PM		109+05	110+56	LT					0.029															
	65-PM		109+05	110+56	RT					0.029															
	66-PM		109+75		℄											1									
	67-PM	GLENDALE AVENUE			RT							16	92												
	68-PM		111+11	111+92	LT					0.015															
	69-PM		111+11	111+92	RT					0.015															
	70-PM		111+11	116+34	RT			0.100																	
	71-PM		111+50		℄											1									
	72-PM	HEADLEY STREET			LT							13	85												
	73-PM		112+53	115+44	LT			0.055																	
	74-PM		112+53	115+44	LT					0.055															
	75-PM		112+53	115+44	RT					0.055															
	76-PM		114+00		℄											1									
	77-PM	SOMERS STREET			LT							15	90												
	78-PM		116+03	119+33	LT			0.063				15													
	79-PM		116+03	116+34	LT					0.006															
	80-PM		116+03	116+34	RT					0.006															
	81-PM	BROOKOVER AVENUE			RT							15	78												
	82-PM		116+90		RT/LT								102												
	82A-PM		117+08		RT/LT							30													
	83-PM		117+08	117+73	LT						65														
	84-PM		117+08	118+20	RT/LT					0.028															
	85-PM		117+08	124+47	RT			0.140																	
	85A-PM		117+56		℄											1									
	86-PM		118+20	119+33	LT					0.022															
	86A-PM		117+56		℄												1								
TOTALS CARRIED TO SHEET 115								0.718		0.514		65.0	162.0	798.0			9.0	1.0							

CALCULATED
C.Y.
CHECKED

PAVEMENT MARKING SUBSUMMARY

MUS-60-17.93

110
121

PAVEMENT MARKING SUBSUMMARY

MUS-60-17.93

110
121

CALCULATED
C.Y.
CHECKED

[illegible]

SR60 PART1 PM SUM.DGN

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644												621				TOTALS
			FROM	TO		EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE (DOUBLE SOLID)	CENTER LINE (SOLID DASH)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE	LANE ARROW	WORD ON PAVEMENT, 72"	EACH	EACH	EACH			
						MI	MI	MI	MI	MI	FT	FT	FT	FT	FT	EACH	EACH	EACH				
	130-PM		3		℄										1							
	131-PM	PRINCETON AVENUE			LT						15	91										
	132-PM		142+90	144+22	RT/LT				0.035													
	133-PM		143+16	144+44	LT			0.024														
	134-PM		143+44	144+37	RT						93											
	135-PM		143+60		℄											1						
	136-PM		144+04		℄										1							
	137-PM		144+22		RT/LT						10											
	138-PM		144+37		RT						22											
	139-PM		144+44		RT/LT							113										
	140-PM	HARDING ROAD			RT						28	98										
	141-PM		145+30		RT/LT						31											
	142-PM		145+30	152+50	LT			0.136														
	143-PM		145+30	146+80	LT						150											
	144-PM		145+30	147+45	RT/LT				0.050					33								
	145-PM		145+30	152+50	RT			0.136														
	146-PM		145+34		℄										1							
	146A-PM		145+74		℄											1						
	147-PM		146+24		℄										1							
	148-PM		146+74		℄											1						
	149-PM		147+45	152+50	LT					0.096												
	150-PM		147+45	152+50	RT					0.096												
	151-PM		147+77		℄										1							
	152-PM		150+87		℄										1							
	153-PM		164+40	166+95	LT			0.048						206								
	154-PM		164+40	166+68	RT/LT				0.077													
	155-PM	NOT USED																				
	156-PM		165+00	166+68	RT			0.032														
	157-PM		166+17	166+68	RT						51											
	158-PM		166+36		℄										1							
	159-PM		166+68		RT/LT						29											
	160-PM	COUNTRY CLUB DRIVE			LT							106										
	161-PM		167+56		RT/LT							112										
	162-PM		167+78		RT/LT						32											
	163-PM		167+78	175+72	LT			0.150														
	164-PM		167+78	168+60	LT						82											
	165-PM		167+78	169+00	RT/LT				0.023													
	166-PM		167+78	175+72	RT			0.150														
	167-PM		168+19		℄										1							
	168-PM		168+54		℄											1						
	169-PM		169+00	174+00	LT	0.095																
	170-PM		169+00	174+00	RT	0.095																
	171-PM	NOT USED																				
	172-PM	NOT USED																				
	173-PM	BEVERLY AVENUE			LT						12	117										
	174-PM	NOT USED											31									
	175-PM		174+00	175+72	RT/LT				0.042													
	176-PM		175+00	175+72	RT						72											
	177-PM		175+08		℄											1						
	178-PM		175+48		℄										1							
TOTALS CARRIED TO SHEET 115						0.190		0.676	0.419	.192	448.0	179.0	637.0	270.0		9:0	5:0					

PAVEMENT MARKING SUBSUMMARY

MUS-60-17.93

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PAVEMENT MARKING SUBSUMMARY

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CALCULATED
C.Y.
CHECKED

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644																CALCULATED C.Y. CHECKED	PAVEMENT MARKING SUBSUMMARY	MUS-60-17.93
			FROM	TO		EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE (DOUBLE SOLID)	CENTER LINE (SOLID DASH)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE		LANE ARROW	WORD ON PAVEMENT, 72"							
						MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT		EACH	EACH		EACH	EACH	EACH			
	179-PM		175+72									52												
	180-PM		176+64	180+57	RT		0.074																	
	181-PM		177+41		RT/LT							33												
	182-PM		177+41	189+48	LT			0.029																
	183-PM		177+41	178+16	LT						75													
	184-PM		177+41	178+91	RT/LT				0.038					33										
	185-PM		177+41	180+57	RT			0.060																
	186-PM		177+51		℄										1									
	187-PM		177+70	185+56	LT		0.149										1							
	188-PM		178+10		℄																			
	189-PM		178+91	180+57	LT					0.032														
	190-PM		178+91	180+57	RT					0.032														
	191-PM		179+72		℄										1									
	192-PM		181+21	188+75	LT					0.143														
	192A-PM	ORCHARD HILL ROAD			RT							20												
	193-PM		181+21	188+75	RT					0.143														
	194-PM		181+21	189+53	RT			0.158																
	195-PM		181+21	188+20	RT		0.132																	
	196-PM		183+00		℄										1									
	197-PM		186+30	189+48	LT		0.060																	
	198-PM		186+50		℄										1									
	199-PM	GARDEN ROAD			RT							15												
	200-PM		188+75	189+53	RT/LT				0.020															
	201-PM		188+84	194+68	RT		0.111																	
	202-PM		189+07	189+53	RT						46													
	203-PM		189+17		℄										1									
	204-PM		189+53		RT/LT							31												
	205-PM	NOT USED																						
	206-PM		190+57									32												
	207-PM		190+57	200+92	LT			0.196																
	208-PM		190+57	190+97	LT						40													
	209-PM		190+57	191+78	RT/LT				0.020															
	210-PM		190+50	194+68	RT			0.079																
	211-PM		190+62	200+79	LT		0.193																	
	212-PM		190+86		℄										1									
	213-PM		191+78	194+68	LT					0.055														
	214-PM		191+78	194+68	RT					0.055														
	215-PM		192+25		℄										1									
	216-PM	NOT USED																						
	217-PM	NOT USED																						
	218-PM		194+13		℄										1									
	218A-PM	GROVE ROAD			RT							13												
	219-PM		195+40	199+14	LT					0.071														
	220-PM		195+40	199+14	RT					0.071														
	221-PM		195+40	200+92	RT			0.105																
	222-PM		195+40	200+92	RT		0.105																	
	223-PM		197+30												1									
	224-PM		199+14	200+92	RT/LT				0.046					65.0										
	225-PM		199+93	200+92	RT						99													
TOTALS CARRIED TO SHEET 115						0.824		0.627	0.726		260.0	196.0		98.0		9:0	1:0							

SR60 PART 1 PM SUM.DGN

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644															621				CALCULATED C.Y. CHECKED
			FROM	TO		EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE (DOUBLE SOLID)	CENTER LINE (SOLID DASH)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE		LANE ARROW	WORD ON PAVEMENT, 72"		EACH	EACH	EACH				
						MI	MI	MI	MI	MI	FT	FT	FT	FT		EACH	EACH		EACH	EACH	EACH				
	226-PM	NOT USED			℄												1								
	227-PM		200+03		℄																				
	228-PM		200+43		℄													1							
	229-PM		200+83		℄												1								
	230-PM		200+92		RT/LT							31													
	231-PM	BRANDYWINE BLVD.			LT								124												
	232-PM	BRANDYWINE BLVD			RT								94												
	233-PM		201+70		RT/LT								112												
	234-PM		201+83	212+58	RT		0.204																		
	235-PM		201+85		RT/LT							32													
	236-PM		201+85	212+65	LT		0.205																		
	237-PM		201+85	212+58	LT			0.203																	
	238-PM		201+85	203+76	LT						191														
	239-PM		201+85	204+43	LT				0.062					67											
	240-PM		201+85	212+58	RT			0.203																	
	241-PM		201+93		℄												1								
	242-PM		202+72		℄													1							
	243-PM		203+50		℄												1								
	244-PM		204+43	210+00	LT					0.105															
	245-PM		204+43	210+00	RT					0.105															
	246-PM		205+45		℄												1								
	247-PM		208+50		℄												1								
	247A-PM		210+00	212+58	RT/LT				0.063					57											
	248-PM		210+82	212+58	RT						176														
	249-PM		210+92		℄												1								
	250-PM		211+70		℄													1							
	251-PM		212+50		℄												1								
	252-PM		212+58		RT/LT							40													
	253-PM		212+68		RT/LT								147												
	254-PM		213+74		RT/LT							36													
	255-PM		213+74	216+89	LT		0.060																		
	256-PM		213+74	216+78	LT			0.058																	
	257-PM		213+74	214+75	LT						99														
	258-PM		213+74	216+78	RT/LT				0.058																
	259-PM		213+74	216+78	RT			0.058																	
	260-PM		213+82		℄												1								
	261-PM		214+07	216+62	RT		0.048																		
	262-PM		214+24		℄													1							
	263-PM		214+65		℄												1								
	264-PM		215+28	216+78	RT						150														
	265-PM		215+39		℄												1								
	266-PM		216+06		℄																				
	267-PM		216+71		℄												1								
	268-PM		216+78		RT/LT							42													
	269-PM		217+85		RT/LT								143												
	270-PM		217+85	220+01	RT		0.041																		
	271-PM		218+13		RT/LT							39													
	272-PM		218+13	238+39	LT			0.384																	
	273-PM		218+13	219+13	LT						100														
TOTALS CARRIED TO SHEET 115							0.558	0.906	0.183	0.210	716.0	220.0	620.0	124.0			12.0	5.0							

PAVEMENT MARKING SUBSUMMARY

MUS-60-17.93

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SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	644												621			TOTALS
			FROM	TO		EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE (DOUBLE SOLID)	CENTER LINE (SOLID DASH)	CHANNELIZING LINE	STOP LINE	CROSSWALK LINE	TRANSVERSE/DIAGONAL LINE	ISLAND MARKING	LANE ARROW	WORD ON PAVEMENT, 72"				
						MI	MI	MI	MI	MI	FT	FT	FT	FT	SO-FT	EACH	EACH		EACH	EACH	
	274-PM		218+13	219+96	RT/LT				0.047					62	58						
	275-PM		218+13	220+01	RT			0.036													
	276-PM		218+24		C										1						
	277-PM		218+13	228+10	LT		0.189														
	278-PM		218+64		C											1					
	279-PM		219+04												1						
	280-PM		221+24		RT/LT						12										
	281-PM		221+24	222+24	LT					100											
	282-PM		221+24	222+69	RT/LT				0.038												
	283-PM		221+24	237+39	RT			0.306													
	284-PM		221+24	238+89	RT		0.334														
	285-PM		221+28		C										1						
	286-PM		221+71		C											1					
	287-PM		221+68		C										1						
	288-PM		222+69	237+00	LT				0.271												
	289-PM		222+69	237+00	RT				0.271												
	290-PM		223+00		C										1						
	291-PM		226+10		RT										1						
	292-PM		226+50		C										1						
	293-PM		226+50		RT											1					
	294-PM		228+71	231+36	LT		0.050								1						
	295-PM		229+50		C																
	296-PM		232+37	238+39	LT		0.114								1						
	297-PM		233+00		C																
	298-PM		236+00		C										1						
	299-PM		237+00	238+82	RT/LT				0.034												
	300-PM		237+39	238+89						150											
	301-PM		237+82		RT										1						
	302-PM		237+82	238+82	RT					100											
	303-PM		237+95		C										1						
	304-PM		238+32		RT												1				
	305-PM		288+35		C												1				
	306-PM		238+75		C										1						
	307-PM		238+82		RT										1						
	308-PM		238+82	238+89	RT/LT						36										
							0.687		0.119	0.542											
TOTALS THIS SHEET						0.687	0.342		0.661		350.0	48.0		62.0	58.0	14.0	5.0				
TOTALS FROM SHEET 109							.574		.524		260	192	542	162		7	2				
TOTALS FROM SHEET 110							.718		.514		65	162	798	173		9	1				
TOTALS FROM SHEET 111							.594		.673			201	1217		58	5					
TOTALS FROM SHEET 112						.190	.676		.419		448	179	637	270		9	5				
TOTALS FROM SHEET 113						.824	.627		.726		260	196		98		9	1				
TOTALS FROM SHEET 114						.558	1.089		.210		716	220	620	124		12	5				

ITEM 644														
MARK	STATION TO STATION Q SURVEY AND CONSTRUCTION	EDGE LINE	LANE LINE	CENTER LINE	CHANNELIZING LINE	STOP LINE 24"	TRANSVERSE LINE (YELLOW)	ISLAND MARKING	LANE ARROW		WORD ON PAVEMENT, 72 IN. "ONLY"	WORD ON PAVEMENT, 96 IN. "ONLY"	CROSSWALK LINE	DOTTED LINE, 4"
	S.R. 60	MILE	MILE	MILE	FT.	FT.	FT.	SQ. FT.	EACH		EACH	EACH	FT.	FT.
	BRANDYWINE & RICHEY RD.	0.050			130	80								
1-PM	1115+92.00 - 1142+00.60	0.494												
2-PM	1143+20.40 - 1183+55.97	0.764												
3-PM	1184+99.77 - 1192+50.00	0.142												
4-PM	1115+92.00 - 1121+25.00				756				2		1			
5-PM	1115+92.00 - 1117+11.02				223									
5A-PM	1115+92.00 - 1119+13.39													322
6-PM	1115+92.00 - 1118+65.00			0.052										
6A-PM	1115+92.00 - 1116+64.00		0.014											
6B-PM	1115+92.00					40								
6C-PM	1116+02.00								2					
6D-PM	1116+52.00										2			
6E-PM	1117+02.00								2					
6F-PM	1117+55.00								2		1			
6G-PM	1118+05.00													
6H-PM	1129+60.00 - 1132+00.00				305	40			5			3	80	
6I-PM	1122+00.00 - 1122+80.00				160				4		2			
7-PM	1118+65.00 - 1139+91.00			0.805	155									
7A-PM	1139+91.00 - 1142+16.00			0.052										
8-PM	1141+18.00								1					
9-PM	1141+53.00											1		
10-PM	1141+98.00								1					
11-PM	1140+91.00 - 1142+16.00				125									
12-PM	1143+20.40							57						
13-PM	1143+20.40 - 1145+90.40			0.102										
14-PM	1143+20.40 - 1145+90.40						95							
15-PM	1145+90.40 - 1146+29.00			0.007										
15A-PM	1146+29.00 - 1164+45.00			0.344										
15B-PM	1164+45.00 - 1177+92.55			0.255										
16-PM	1177+92.55 - 1181+22.55			0.125										
17-PM	1177+92.55 - 1181+22.55						150							
18-PM	1181+22.55 - 1183+56.00			0.044										
19-PM	1181+81.00								1					
20-PM	1182+53.50											1		
21-PM	1183+26.00								1					
22-PM	1181+73.00 - 1183+56.00				183									
23-PM	1184+38.00 - 1186+22.00				184									
24-PM	1184+68.00								1					
25-PM	1185+41.00											1		
26-PM	1186+14.00								1					
27-PM	1184+38.00 - 1186+72.54			0.044										
28-PM	1186+72.54 - 1190+02.54			0.125										
29-PM	1186+72.54 - 1190+02.54						150							
30-PM	1190+02.54 - 1193+12.00			0.059										
31-PM	1115+92.00 - 1183+02.12	1.271												
32-PM	1184+54.11 - 1192+50.00	0.151												
32A-PM	1117+61.02 - 1118+11.02						23							
32B-PM	(NOT USED)													
32C-PM	1128+30.00 - 1129+10.00				80	24			2			1		
32D-PM	1134+50.00								2					
32E-PM	1139+91.00 - 1140+41.00						23							
	CO. RD. 298(OLDE FALLS RD.)													
33-PM	RADIUS - 1+00.00	0.020												
34-PM	RADIUS - 1+00.00	0.020												
35-PM	0+46.52 - 1+00.00			0.010										
36-PM	0+47.00					20								
36A-PM	1142+16.00 (S.R. 60)					24								
36B-PM	1143+20.40 (S.R. 60)					12								
	CO. RD. 309(FAIRVIEW RD. RT.)													
37-PM	RADIUS - 1+17.30	0.027												
38-PM	0+34.86					26								
39-PM	0+34.86 - 1+17.30			0.016										
40-PM	RADIUS - 1+17.30	0.025												
	TWP. RD. 309(FAIRVIEW RD. LT.)													
41-PM	RADIUS - 1+00.00	0.022												
42-PM	0+35.00					20								
43-PM	0+35.00 - 1+00.00			0.012										
44-PM	RADIUS - 1+00.00	0.020												
TOTALS (CARRIED TO GENERAL SUMMARY)		3.006	0.014	3.222	2,301	276	441	57	27		6	7	80	322

SHEETS	MARK	STATION TO STATION C SURVEY AND CONSTRUCTION S.R. 60	SPACING C/C FEET	ITEM 621			ITEM 621
				2-WAY YELLOW/ YELLOW EACH	2-WAY WHITE/ RED EACH	1-WAY WHITE EACH	RAISED PAVEMENT MARKER REMOVED EACH
	1-RM	1116+63.39 - 1117+61.02	80	3			
	2-RM	1117+61.02 - 1130+51.79	80	36			
		1130+51.79 - 1135+31.79	40	24			
		1135+31.79 - 1140+41.00	20	54			
	3-RM	1140+41.00 - 1142+16.00	20	10			
	4-RM	1115+92.00 - 1119+92.00	40			11	
	5-RM	1119+92.00 - 1123+92.00	80			5	
	6-RM	1115+92.00 - 1111+11.02	40		7		
	7-RM	1115+92.00 - 1117+11.02	40		4		
	7A-RM	1115+92.00 - 1116+63.39	40		3		
	8-RM	1134+16.00 - 1138+16.00	80			5	
	9-RM	1138+16.00 - 1142+16.00	40			11	
	10-RM	1140+91.00 - 1142+16.00	40		5		
	11-RM	1143+20.40 - 1145+90.40	40	16			
	12-RM	1143+20.40 - 1147+20.40	40			11	
	13-RM	1147+20.40 - 1151+20.40	80			5	
	14-RM	1145+90.40 - 1148+00.40	40	7			
		1148+00.40 - 1177+92.55	80	39			
	15-RM	1177+92.55 - 1181+23.00	80	12			
	16-RM	1181+23.00 - 1186+56.00	80	4			
	17-RM	1181+73.00 - 1183+56.00	40		6		
	18-RM	1184+38.00 - 1186+72.54	80	4			
	19-RM	1186+72.54 - 1190+02.54	80	12			
	20-RM	1190+02.54 - 1193+12.00	80	5			
	21-RM	1184+38.00 - 1186+22.00	40		6		
SUB-TOTALS				226	31	48	
TOTAL (CARRIED TO GENERAL SUMMARY)					305		305

ITEM 644															
LOCATION	MARK	STATION TO STATION Q SURVEY AND CONSTRUCTION	EDGE LINE (WHITE) MILE	CENTERLINE (DASH) MILE	CENTER LINE (DOUBLE SOLID) MILE	CENTER LINE (SOLID DASH) MILE	CHANNELIZING LINE FT.	STOP LINE 24" FT.	TRANSVERSE LINE (YELLOW) FT.	ISLAND MARKING SQ. FT.	LANE ARROW EACH	LANE ARROW EACH	WORD ON PAVEMENT, 72 IN. "ONLY" EACH	WORD ON PAVEMENT, 96 IN. "ONLY" EACH	DOTTED LINE, 4" FT.
SR 60	1PM	1190+50 - 1196+00				0.10									
SR 60	2PM	1196+00 - 1198+50		0.05											
SR 60	3PM	1198+50 - 1204+00				0.11									
SR 60	4PM	1204+00 - 1208+83			0.09										
SR 60	5PM	1204+37.6 - 1207+56.6			0.06										
SR 60	6PM	1209+55 - 1212+28.25			0.05										
SR 60	7PM	1209+55 - 1219+00			0.18										
SR 60	8PM	1219+92 - 1226+58			0.13										
SR 60	9PM	1227+52 - 1229+00			0.03										
SR 60	10PM	1229+00 - 1234+40				0.10									
SR 60	11PM	1234+40 - 1240+38				0.11									
SR 60	12PM	1240+38 - 1243+68			0.06										
SR 60	13PM	1240+38 - 1243+68			0.06										
SR 60	14PM	1244+60 - 1248+73			0.08										
SR 60	15PM	1249+48 - 1255+27			0.11										
SR 60	16PM	1249+48 - 1254+65			0.10										
SR 60	17PM	1255+52 - 1268+33				0.24									
SR 60	18PM	1255+52 - 1268+33				0.24									
SR 60	19PM	1268+33 - 1268+83			0.01										
SR 60	20PM	1268+33 - 1271+18			0.05										
SR 60	21PM	1272+27 - 1283+26				0.21									
SR 60	22PM	1272+27 - 1283+26				0.21									
SR 60	23PM	1283+26 - 1283+76			0.01										
SR 60	24PM	1283+26 - 1284+51			0.02										
SR 60	25PM	1285+45 - 1292+85				0.14									
SR 60	26PM	1285+45 - 1292+85				0.14									
SR 60	27PM	1294+12 - 1298+77			0.09										
SR 60	28PM	1299+85 - 1300+13			0.01										
SR 60	29PM	1299+85 - 1300+13			0.01										
SR 60	30PM	1301+12 - 1311+17			0.19										
SR 60	31PM	1303+47 - 1311+17			0.15										
SR 60	-	1311+17 - 1470+62.29	6.04		4.76	0.57									
SR 60	32PM	1470+62.29 - 1478+72			0.15										
SR 60	33PM	1470+80 - 1481+00			0.19										
SR 60	34PM	1482+07 - 1489+00			0.13										
SR 60	35PM	1482+07 - 1489+00			0.13										
SR 60	36PM	1489+00 - 1494+60				0.11									
SR 60	37PM	1494+60 - 1500+50		0.11											
SR 60	38PM	1192+22.4 - 1208+62 RT & LT	0.62												
SR 60	39PM	1208+62 - 1209+74 RT	0.02												
SR 60	40PM	1209+74 - 1226+58 RT & LT	0.64												
SR 60	41PM	1226+58 - 1227+52 RT	0.02												
SR 60	42PM	1227+52 - 1243+68 RT & LT	0.62												
SR 60	43PM	1243+68 - 1244+60 LT	0.02												
SR 60	44PM	1244+60 - 1248+73 RT & LT	0.16												
SR 60	45PM	1248+73 - 1249+48 RT	0.01												
SR 60	46PM	1249+48 - 1254+65 RT & LT	0.20												
SR 60	47PM	1254+65 - 1255+52 RT	0.02												
SR 60	48PM	1255+52 - 1271+18 RT & LT	0.59												
SR 60	49PM	1271+18 - 1272+27 RT	0.02												
SR 60	50PM	1272+27 - 1284+51 RT & LT	0.46												
SR 60	51PM	1284+51 - 1285+45 RT	0.02												
SR 60	52PM	1285+45 - 1292+85 RT & LT	0.28												
SR 60	53PM	1292+85 - 1294+12 LT	0.02												
SR 60	54PM	1294+12 - 1298+77 RT & LT	0.18												
SR 60	55PM	1298+77 - 1300+43 RT	0.03												
SR 60	56PM	1299+85 - 1301+12 LT	0.02												
SR 60	57PM	1301+12 - 1311+17 RT & LT	0.38												
SR 60	58PM	1470+62.29 - 1481+00 RT & LT	0.39												
SR 60	59PM	1481+00 - 1482+07 RT	0.02												
SR 60	60PM	1482+07 - 1500+50 RT & LT	0.70												
ASH MEADOWS BLVD	61PM	RADIUS - 0+90	0.03												
ASH MEADOWS BLVD	62PM	0+25						34							
ASH MEADOWS BLVD	63PM	RADIUS - 0+65	0.02												
CARNATION RD	64PM	RADIUS - 0+65	0.02												
CARNATION RD	65PM	0+22 - 0+65			0.01										
CARNATION RD	66PM	0+20						20							
SUB-TOTALS				0.16	6.86	2.28									
TOTALS CARRIED TO GENERAL SUMMARY			11.55		9.30			54							

PAVEMENT MARKING QUANTITIES

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ITEM 644													
LOCATION	MARK	STATION TO STATION E SURVEY AND CONSTRUCTION	EDGE LINE (WHITE) MILE	CENTERLINE DASH MILE	CENTER LINE (DOUBLE SOLID) MILE	CENTER LINE (SOLID DASH) MILE	CHANNELIZING LINE FT.	STOP LINE 24" FT.	TRANSVERSE LINE (YELLOW) FT.	ISLAND MARKING SQ. FT.	LANE ARROW EACH	WORD ON PAVEMENT, 96 IN. "ONLY" EACH	
RICHVALE RD	67PM	RADIUS - 0+65.60 RT & LT	0.01		0.01			22					
	68PM	0+38 - 0+65.60											
	69PM	0.36											
LISAKIM LA	70PM	RADIUS - 0+66.42	0.01		0.01			20					
	71PM	0+28 - 0+66.42											
	72PM	0+26											
CHARDONN RD	73PM	RADIUS - 0+68.48	0.01		0.01			22					
	74PM	0+28 - 0+68.48											
	75PM	0+26											
CREAMERY RD	76PM	RADIUS - 0+96.87	0.02		0.01			20					
	77PM	0+37 - 0+96.87											
	78PM	0+35											
VIRGINIA RD	79PM	RADIUS - 0+53.05	0.01		0.01			20					
	80PM	0+36 - 0+53.05											
	81PM	0+34											
NORTH VISTA DR	82PM	RADIUS - 0+95.37	0.04		0.01			25					
	83PM	0+42 - 0+95.37											
	84PM	0+40											
GORSUCH RD	85PM	RADIUS - 0+67.39	0.01		0.01			20					
	86PM	0+42 - 0+67.39											
	87PM	0+40											
VISTA VIEW DR	88PM	RADIUS - 0+80	0.01		0.01			20					
	89PM	0+42 - 0+80											
	90PM	0+40											
SHANNON RD	91PM	RADIUS - 0+84.85	0.02		0.01			26					
	92PM	0+27 - 0+84.85											
	93PM	0+25											
SR60	29PM,A	1299+82								56			
SR60	29PM,B	1299+88 - 1300+13							34				
SR60	29PM,C	1300+20								78			
SR60	94PM	1204+37.6 - 1207+57.6					75		157				
SR60	95PM	1208+08 - 1208+83									1		
SR60	96PM	1208+35											
SR60	97PM	1208+70								73			
SR60	98PM	1209+55											
SR60	99PM	1209+55 - 1212+25							136				
SR60	100PM	1240+38 - 1243+68							164				
SR60	101PM	1243+68					213						
SR60	102PM	1244+60 - 1246+73									1		
SR60	103PM	1245+14										1	
SR60	104PM	1245+80											
SR60	105PM	1246+46					100						
SR60	106PM	1247+73 - 1248+73										1	
SR60	107PM	1248+19											
SR60	108PM	1248+43											
SR60	109PM	1249+48 - 1252+27							252				
SR60	110PM	1252+80 - 1254+65					185						
SR60	111PM	1253+05									1		
SR60	112PM	1253+69										1	
SR60	113PM	1254+35									1		
SR60	114PM	1255+59									2		
SR60	115PM	1260+58									2		
SR60	116PM	1267+45									2		
SR60	117PM	1268+33 - 1268+83							35				
SR60	118PM	1269+33 - 1271+18					185						
SR60	119PM	1269+90									1		
SUB TOTALS					0.09								
TOTALS CARRIED TO GENERAL SUMMARY			0.14		0.09		758	195	778	274	13	4	

[illegible]

PAVEMENT MARKING QUANTITIES

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LOCATION SUB-SUMMARY

DETAIL	
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO WAY LEFT TURN LANE

DETAIL	
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

LOCATION NUMBER	LOCATION	DETAIL	ITEM QUANTITIES	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
	STATION		INSTALLATION ONLY	ONE-WAY		TWO-WAY			
			RPM	WHITE	YELLOW	WHITE/ WHITE	YELLOW/ YELLOW	WHITE/ RED	
1RPM	1192+22-1204+40	GAP	15				15		
2RPM	1204+40-1208+83	10	15				12	3	
3RPM	1209+55-1212+25	REMARKS	7				7		80' SPACING
4RPM	1212+25-1240+38	GAP	35				35		
5RPM	1240+38-1243+68	REMARKS	9				9		80' SPACING
6RPM	1244+60-1248+73	REMARKS	11				11		40' SPACING CL
7RPM	1244+60-1246+73	REMARKS	6					6	40' SPACING CHANNEL
8RPM	1247+63-1248+73	REMARKS	3					3	40' SPACING CHANNEL
9RPM	1249+48-1254+65	10	16				11	5	
10RPM	1255+52-1268+33	19	32				32		
11RPM	1268+33-1271+18	REMARKS	7				7		80' SPACING CL
12RPM	1269+33-1271+18	REMARKS	5					5	40' SPACING CHANNEL
13RPM	1272+27-1283+26	19	28				28		
14RPM	1283+26-1284+51	REMARKS	6				6		80' SPACING CL
15RPM	1283+76-1284+51	REMARKS	3					3	40' SPACING CHANNEL
16RPM	1285+45-1292-85	19	20				20		
17RPM	1294-12-1298+77	REMARKS	12				12		40' SPACING CL
18RPM	1294+12-1295+42	REMARKS	3					3	40' SPACING CHANNEL
19RPM	1296+92-1298+77	REMARKS	5					5	40' SPACING CHANNEL
20RPM	1299+88-1280+13	19	2				2		
21RPM	1301+12-1311+17	10	29				24	5	
-	1311+17 - 1470+62	REMARKS	211				211		80' SPACING CL
22RPM	1470+62-1481+00	10	30				25	5	
23RPM	1482+07-1489+00	REMARKS	18				18		40' SPACING CL
24RPM	1489+00-1500+50	GAP	15				15		
TOTAL			543				500	43	

ITEM 621 RAISED PAVEMENT MARKER REMOVED
543 EACH

ITEM 621 RAISED PAVEMENT MARKER
543 EACH

TOTALS CARRIED TO GENERAL SUMMARY