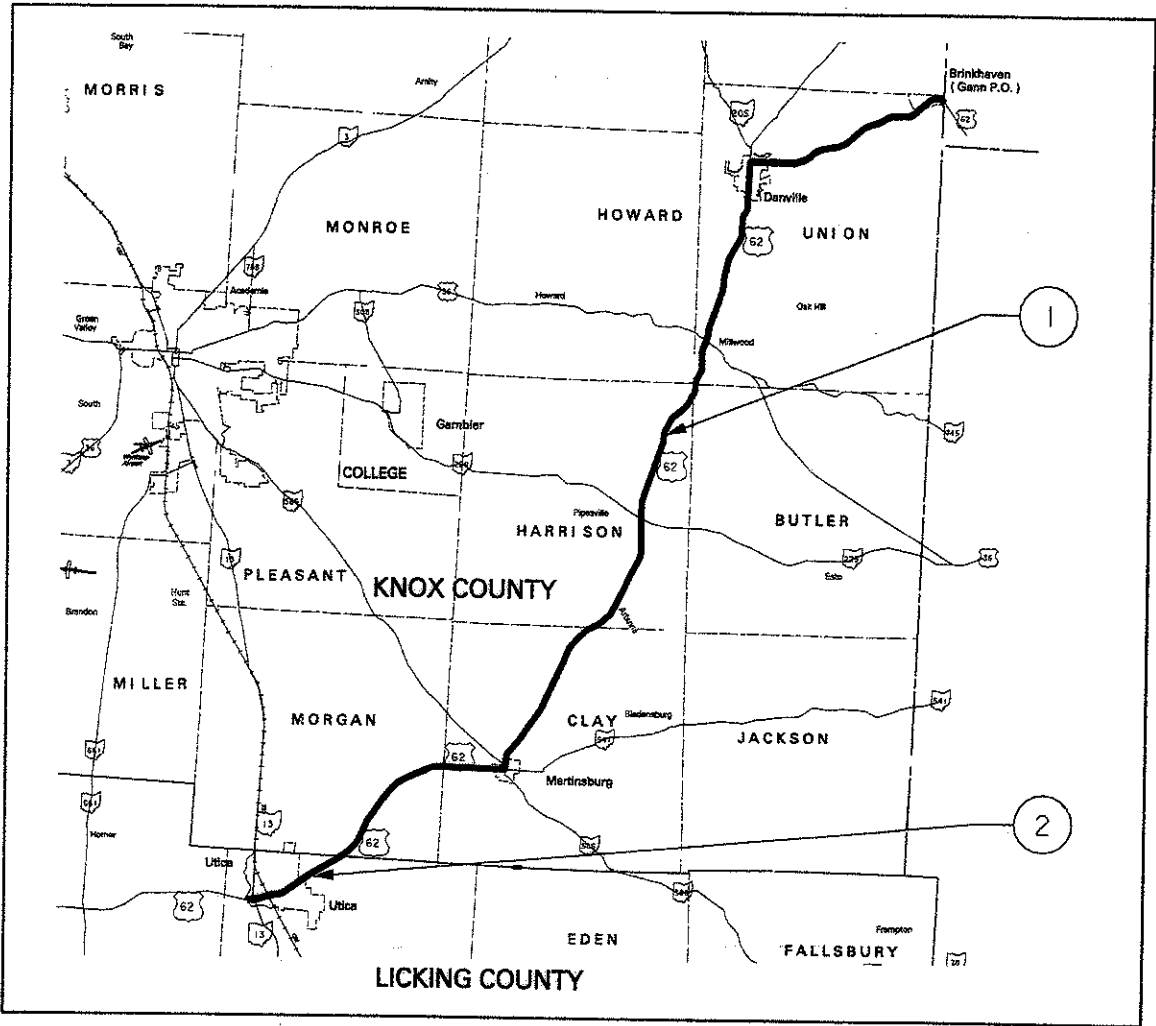


KNO - USR 62-0.00/18.48
030589 PID - 23942
Dist 5 12/3/2003
K062001.mts 7-7-03

LOCATION MAP



PORTION TO BE IMPROVED

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

ENGINEER'S SEAL
STATE OF OHIO
Charles L. Zipp
REGISTERED PROFESSIONAL ENGINEER
8/27/2003

DESIGN DESIGNATION	LOCATION 1	LOCATION 2
Current ADT (2003)	5700	4600
Design Year ADT (2015)	7300	6000
Design Hourly Volume (2015)	730	600
Directional Distribution	50%	50%
Trucks (24 Hour B&C)	6%	6%
Design Speed	55 mph	55 mph
Legal Speed	55 mph	35/55mph

OHIO DEPARTMENT OF TRANSPORTATION
KNO-62-0.00/LIC-62-18.48
KNOX/LICKING COUNTIES
MORGAN, CLAY, HARRISON, BUTLER,
UNION AND WASHINGTON TOWNSHIPS



PROJECT DESCRIPTION:
2 LANE ASPHALT CONCRETE
RESURFACING AND RELATED
WORK.

Project Earth Disturbed Area =
N/A (Maintenance Project)
Estimated Contractor Earth Disturbed Area =
N/A (Maintenance Project)
Notice of Intent Earth Disturbed Area =
N/A (Maintenance Project)

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	VILLAGE
				BEGIN	END		
1	KNO	US 62	(0.00-22.18)	0.00	22.87	*22.66	MARTINSBURG, DANVILLE, GANN
2	LIC	US 62	(18.48-19.61)	18.48	20.68	2.20	UTICA

* SLM EQUATION 4.28B=4.46A DEDUCT 0.18
* SLM EQUATION 14.92B=14.95A DEDUCT 0.03

INDEX OF SHEETS:

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SHOULDER TREATMENT 10
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CENTER/EDGE LINE SUB-SUMMARY 21
AUXILIARY MARKING SUB-SUMMARY 22-24
RPM LOCATION SUB-SUMMARY 25
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GENERAL SUMMARY 32,33

2002 SPECIFICATIONS

THE STANDARD 2002 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED *Christopher T. Ruff*
DATE 8/28/03 DISTRICT DEPUTY DIRECTOR

APPROVED *Jordan Proctor*
DATE 9-16-03 DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD DRAWINGS		STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-28-00	TC-65.10	10-19-01	832	2-12-03
BP-4.1	7-28-00	TC-65.11	10-19-01	833	2-12-03
		TC-65.12	10-19-01	857	7-19-02
MT-97.10	4-19-02	TC-71.10	4-19-02		
MT-97.11	4-19-02	TC-73.10	01-19-01	908	4-19-02
MT-99.20M	1-30-95				

PLAN PREPARED BY:
D5
Production

FEDERAL PROJECT NO. E036(170)
PID NO. 23942
CONSTRUCTION PROJECT NO.
TITLE SHEET
KNO-62-0.00
LIC-62-18.48
33

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA. BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE WORK AREA AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OWNERS AND VERIFY LOCATIONS:

GATHERCO INC.
P.O. BOX 218
ATHENS, OH. 45701
ATTN: DEAN HARRIS
PHONE: (740) 593-5016

ENERGY COOPERATIVE
LICKING RURAL ELECTRIFICATION, INC.
P.O. BOX 455
UTICA, OH. 43080-455
ATTN: STEVE WILLIAMS, ENG. SUPV.
PHONE: 1-800-542-1140 EXT. 1288

AEP (OHIO POWER CO)
850 TECH CENTER DRIVE
GAHANNA, OH. 43230-6605
ATTN: RICK ECKLE
PHONE: (614) 883-6829

SPRINT UNITED TELEPHONE
15 EAST GAMBIER STREET
MT. VERNON, OH. 43050
ATTN: MIKE WALTERS
PHONE: (740) 397-3715

ALLTEL OHIO, INC.
66 NORTH FOURTH ST.
P.O. BOX 3005
NEWARK, OH. 43058-3005
ATTN: CHARLIE WADE
PHONE: (740) 349-8827

COLUMBIA GAS TRANSMISSION
8462 STATE ROUTE 179
P.O. BOX 85
LAKEVILLE, OH. 44638
ATTN: JACK ROHRBAUGH, LAND AGENT
PHONE: (419) 827-1209

FEATHERING

FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1, 7-28-00

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL 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
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

ITEM 617, COMPACTED AGGREGATE, TYPE A, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO DIRECTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

MAINTENANCE OF TRAFFIC

PLACING OF THE ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE SHALL OCCUR AS CLOSE BEHIND THE PLANING OPERATION AS POSSIBLE, WHERE APPLICABLE, SUCH THAT TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANED SURFACE AT THE END OF THE WORK DAY.

K062003.mgn 7-24-03

GENERAL NOTES

KN0-62-0.00
LIC-62-18.48

2
33

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOC. 1	LOC. 2
OW-167 (NO EDGE LINES)	22	2
R-33 (DO NOT PASS)	64	2
R-34 (PASS WITH CARE)	53	
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	50	5
OC-8 (END ROAD CONSTRUCTION)	50	5
TOTAL	239	14

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

THE ROADWAY SURFACE SHALL BE PLANED AS DESCRIBED BELOW:

LOCATION 1:

FROM SLM 10.46 TO SLM 10.68, PLANE 1.25" IN DEPTH. FROM SLM 14.53 TO SLM 18.50, PLANE 1.0" IN DEPTH.

LOCATION 2:

FROM SLM 18.48 TO SLM 20.68, PLANE 2.0" IN DEPTH. THIS WORK SHALL BE AS DIRECTED BY THE ENGINEER. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPER-ELEVATIONS WHERE APPLICABLE. THIS MAY REQUIRE ADDITIONAL MILLING DEPTH DUE TO EXISTING GRADER PATCHES AND PAVEMENT REPAIR. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

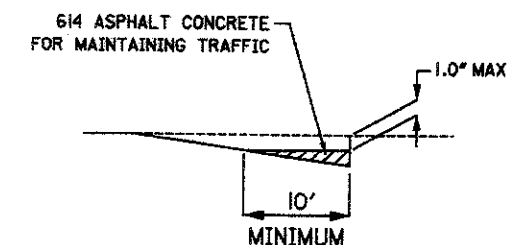
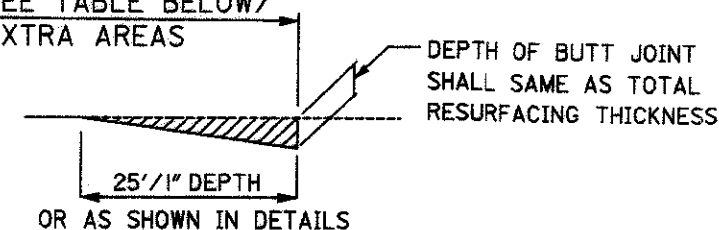
THE QUANTITIES FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN ARE SHOWN ON SHEETS 9, 10 AND 11 AND ARE CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

1000 TONS OF GRINDINGS FROM THE PLANING OPERATION SHALL BE DELIVERED TO THE OHIO DEPARTMENT OF TRANSPORTATION: KNOX COUNTY GARAGE LOCATED ON US 36 MT. VERNON, OHIO AND 1000 TONS SHALL BE DELIVERED TO THE MILLWOOD OUTPOST ON US 62 IN MILLWOOD. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

BUTT JOINT

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 MINIMIZED BY IMMEDIATELY PLACING THE PROPOSED 448 INTERMEDIATE COURSE TO WITHIN 1.0" OF EXISTING ROADWAY SURFACE OR BY PLACING WEDGE AS SHOWN. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 7-28-00.

SEE TABLE BELOW/
EXTRA AREAS



LOCATION	ROUTE	DESCRIPTION	SLM	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU.YD.
1	US 62	BRIDGE DECK	10.46	1.2
1	US 62	BRIDGE APPROACH	14.46	1.2
1	US 62	BRIDGE DECK	17.54	1.2
1	US 62	BRIDGE APPROACH	18.01	2.2
1	US 62	BRIDGE DECK	19.04	1.2
1	US 62	BRIDGE APPROACH	22.14	1.2
1		TOTAL		8.2
2	US 62	BRIDGE APPROACH	18.48	1.4

CONVERSION OF METRIC DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 IEEE/ASTM SI 10 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

RESIDENCE AND COMMERCIAL DRIVES

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 the pavement). 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. Concrete and asphalt drives shall have butt joints or as short a asphalt taper as possible (up to 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 a asphalt taper as possible (up to 4') 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. Except as noted under Item 202 Removal Misc.: Residence and Commercial Drives, any 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 I, PG 64-22

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22
LOCATION 1 - 71 CU.YD.
LOCATION 2 - 6 CU.YD.

QUANTITY CARRIED TO GENERAL SUMMARY

ITEM 202 REMOVAL MISC.: RESIDENCE AND COMMERCIAL DRIVES

This item shall cover the cost of grading, excavating, milling, material, labor, equipment, tools, and incidentals necessary to prepare the drives for paving. When a gravel drive with a asphalt apron cannot be paved over (for example, broken into small pieces) as determined by the Engineer, it must be completely removed before paving. Paving shall extend only 4' into this drive. The rest of the drive shall receive #57 limestone as directed by the Engineer. This item shall also cover all the costs necessary to prepare the drives for the #57 limestone. The quantities shown below have been carried to the General Summary for the purpose described above.

Item 202 Removal Misc.: Residence and Commercial Drives Location 1 - 100 Sq.Yd.

ITEM SPECIAL-MISC.: #57 LIMESTONE FOR DRIVES

This item shall be used only on drives where the existing asphalt apron is removed and the Engineer directs the contractor to extend the gravel drive to meet the new asphalt apron. This item shall cover all the cost for material, labor, equipment and incidentals to place the #57 Limestone. The quantity shown below has been carried to the General Summary for the purpose described above.

Item Special - Misc.: #57 Limestone for Drives Location 1 - 8 Ton

MAIL BOX TURN OUTS

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.I, 7-28-00.

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 INTERMEDIATE COURSE, TYPE I, PG 64-22 AND ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-22
LOCATION 1 - 44 CU.YD.
LOCATION 2 - 2 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG 64-22
LOCATION 1 - 44 CU.YD.
LOCATION 2 - 2 CU.YD.

QUANTITY CARRIED TO GENERAL SUMMARY

ITEM 202: RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR STORAGE. THE KNOX COUNTY MANAGER SHALL BE CONTACTED FOR INSTRUCTIONS ON WHERE TO DELIVER THE RAISED PAVEMENT MARKERS.

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE:
LOCATION 1 - 1252 EACH
LOCATION 2 - 71 EACH

SPOT LEVELING

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO RESTORE ROADWAY CROWN/PROFILE WHERE NO PLANING OCCURS. PLACING OF SPOT LEVELING MATERIAL SHALL TAKE PLACE PRIOR TO PLACING OF THE 1.0" INTERMEDIATE COURSE.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-22
LOCATION 1 - 50 CU.YD.

GENERAL NOTES

KNO-62-0.00
LIC-62-18.48

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO ANY PAVEMENT PLANING OPERATION. THERE MAY BE A NEED TO MAKE FURTHER REPAIRS IF MORE FAILURES ARE PRESENT AFTER PLANING AND/OR PAVING OF THE INTERMEDIATE COURSE. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUBBASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TRAFFIC CONTROL, TOOLS AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 2000 SQ.YD. LOCATION 1

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT

IN ORDER TO ASSURE A GOOD BOND AT THE LONGITUDINAL JOINT, A RUBBERIZED ASPHALT EMULSION (ITEM 407 TACK COAT AS PER 702.13) SHALL BE APPLIED TO THE FACE OF THE SURFACE COURSE OF ASPHALT PAVEMENT IMMEDIATELY BEFORE PLACING THE ADJACENT PAVEMENT. RUBBERIZED TACK SHALL HAVE 100% COVERAGE ON THE FACE OF THE TOP COURSE AND BE APPLIED AT THE RATE OF 0.25 GALLONS PER SQUARE YARD, AS DIRECTED BY THE ENGINEER. CARE SHALL BE TAKEN (AS PER SECTION 407.07) IN THE APPLICATION OF THE TACK SO AS TO AVOID PLACING EMULSION ON THE TOP SURFACE OF THE PAVEMENT. THE FOLLOWING QUANTITY OF ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL TO PERFORM THE ABOVE WORK.

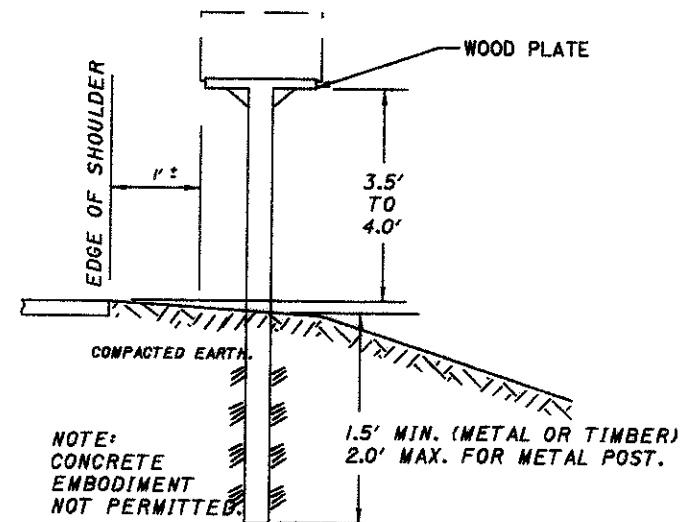
ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT
LOCATION 1 - 119645 FT.
LOCATION 2 - 11616 FT.

ITEM 408 PRIME COAT, AS PER PLAN

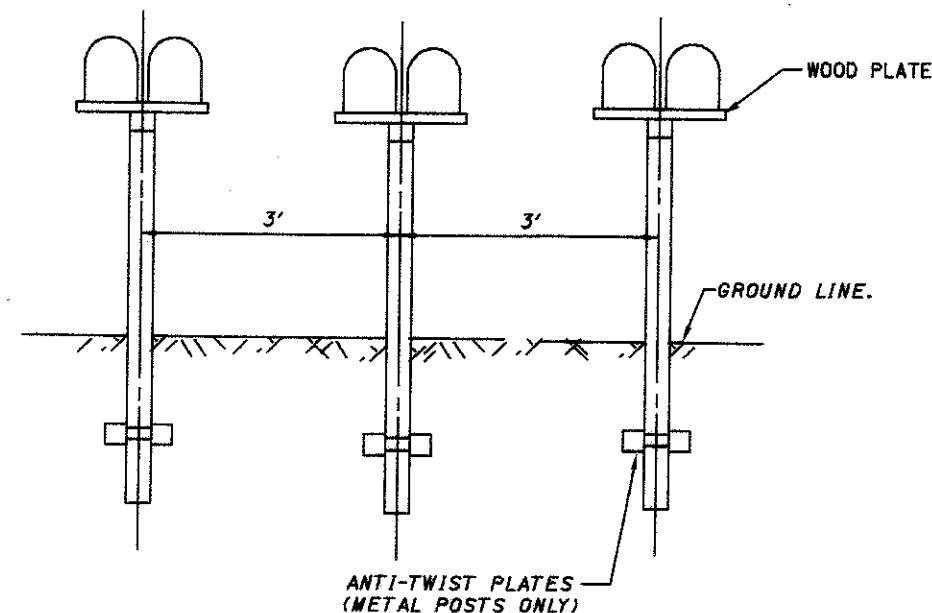
THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS. THE FOLLOWING QUANTITY OF PRIME COAT, AS PER PLAN SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN
LOCATION 1 - 157065' X 4' / 9 X 0.40 = 27923 GAL.
LOCATION 2 - 11616' X 4' / 9 X 0.40 = 2065 GAL.

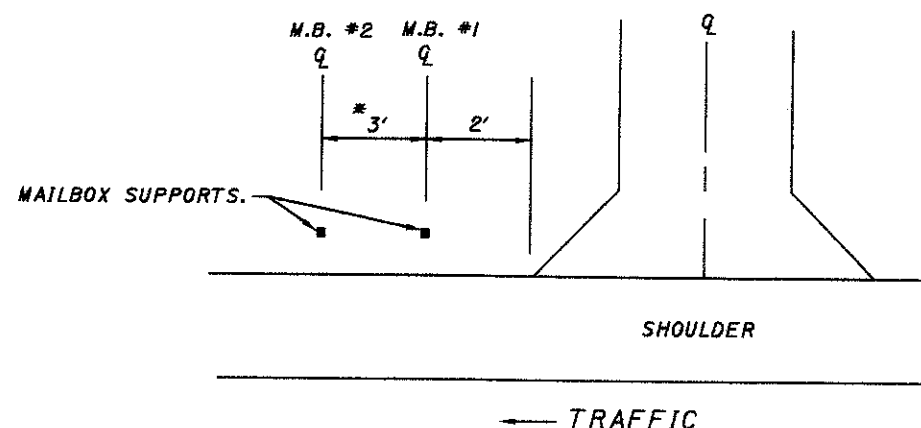
MAILBOX DETAILS



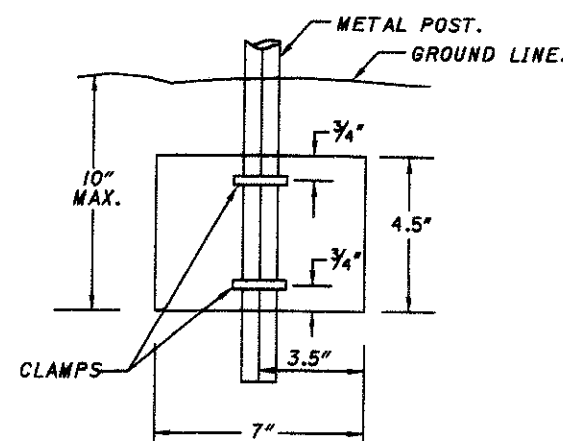
TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT



GROUP MAILBOX INSTALLATION



* ADD 3' FOR EACH ADDITIONAL MAILBOX.



ANTI-TWIST PLATE

ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATION SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER. THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING POSTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE AND DISPOSED OF IN ACCORDANCE WITH 202.02.

MATERIALS

WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4" DIAMETER ROUND. ALL WOOD INCLUDING POST AND PLATES SHALL CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2" I.D., AND CONFORM TO AASHTO M 181.

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

SETTING POSTS

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

MOUNTING BOXES

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

BASIS OF PAYMENT

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM SINGLE
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM DOUBLE

QUANTITY

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSE

SPECIAL MAILBOX SUPPORT SYSTEM SINGLE LOCATION 1- 4 EACH

SPECIAL MAILBOX SUPPORT SYSTEM DOUBLE LOCATION 1-2 EACH

RPM GENERAL NOTES

MATERIALS SUPPLIED BY THE DEPARTMENT

ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY RAISED PAVEMENT MARKING CASTINGS IN THE QUANTITIES SHOWN HEREIN TO THE CONTRACTOR. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED IN "INSTALLATION ONLY". THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ON SHEET 25

THE CONTRACTOR SHALL PICK UP THE SUPPLIED RAISED PAVEMENT MARKER MATERIALS AT THE
O.P.I.
315 PHILLIPI RD.
COLUMBUS, OHIO 45895

FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. THE RECYCLED RAISED PAVEMENT MARKER (RPM) AUTHORIZATION FORM (SS 1082) IS TO BE SIGNED BY THE DISTRICT CONSTRUCTION ENGINEER PRIOR TO PICK UP OF THE RPM'S. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM IN WRITING AT LEAST FIVE CALENDAR DAYS PRIOR TO PICK UP OF THE DEPARTMENT SUPPLIED MATERIALS. THE CONTRACTOR SHALL STORE THE RPM'S WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR THE MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

RETURN OF NON-PERFORMED RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT

RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT, THAT ARE NON-PERFORMED, SHALL BE CAREFULLY PACKED OR REPACKED IN THE BOXES SUPPLIED BY THE RAISED PAVEMENT MARKER RECYCLER. BOXES SHALL BE MARKED WITH THE RECYCLER'S PART OR CATALOG NUMBER, THE ODOT PROJECT NUMBER, THE STYLE OF THE CASTING, AND THE COLOR OF THE PRISMATIC RETRO-REFLECTOR. THE RECYCLER'S CATALOG OR PART NUMBERS MAY BE OBTAINED FOR THE OFFICE OF TRAFFIC ENGINEERING IN COLUMBUS, OHIO. CASTING STYLES SHALL NOT BE MIXED WITHIN A BOX. ANY BOXES NOT PROPERLY PACKED OR MARKED WILL NOT BE ACCEPTED AT THE RECYCLER'S WAREHOUSE.

THE BOXES SHALL BE PLACED ON SKIDS OR PALLETS WITH ONLY ONE STYLE (LOW PROFILE OR CONVENTIONAL, REFLECTORIZED OR NON-REFLECTORIZED) AND NO MORE THAN TWENTY-ONE BOXES (420 RPM'S) ON EACH SKID.

NON-PERFORMED MATERIALS SHALL BE RETURNED, TO A LOCATION SPECIFIED BY THE DISTRICT CONSTRUCTION ENGINEER, WITHIN THIRTY CALENDAR DAYS OF THE COMPLETION OF THE PROJECT.

THE ABOVE WORK INCLUDING ALL LABOR, EQUIPMENT, AND MATERIAL NEEDED TO PERFORM THE WORK, SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE PAY ITEM.

IF THE DEPARTMENT HAS TO REPACKAGE THE RPM'S CORRECTLY, THE CONTRACTOR WILL BE ASSESSED THE ACTUAL COST FOR REPACKAGING THE MATERIALS BY THE DEPARTMENT'S FORCES.

LOADING OF MATERIALS SUPPLIED BY THE DEPARTMENT OF THE RECYCLER'S WAREHOUSE

TRUCKS SHALL HAVE A LOADING HEIGHT OF 48 INCHES AND BE ABLE TO BACK UP FLUSH TO THE LOADING DOCK. TRUCKS SHALL NOT HAVE ANY OBSTRUCTIONS THAT PREVENT THE LOADING BY A STANDARD FORKLIFT OR LIFT TRUCK.

SEMI-TRUCKS OR 20 FOOT COMMERCIAL TRUCKS ARE THE MOST APPROPRIATE TRUCKS FOR LOADS IN EXCESS OF FOUR PALLETS (ONE PALLET=21 BOXES=2100 POUNDS).

STAKE BODY TRUCKS ARE APPROPRIATE TO LOAD LESS THAN FOUR PALLETS, PROVIDED THE TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT BY CHAINING OR STRAPPING DOWN AS NEEDED.

PICKUP TRUCKS ARE APPROPRIATE FOR LOADS OF APPROXIMATELY ONE PALLET, PROVIDED THE PICKUP TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT.

DUMP TRUCKS, TILT BED TRUCKS, AND NON COMMERCIAL MOVING VANS WILL NOT BE LOADED BY THE RECYCLER'S WAREHOUSE.

THE WAREHOUSE SUPERVISOR WILL REFUSE TO LOAD ANY TRUCK THAT IS UNSAFE TO LOAD OR UNSUITABLE FOR THE LOAD BEING PLACED ON THE TRUCK.

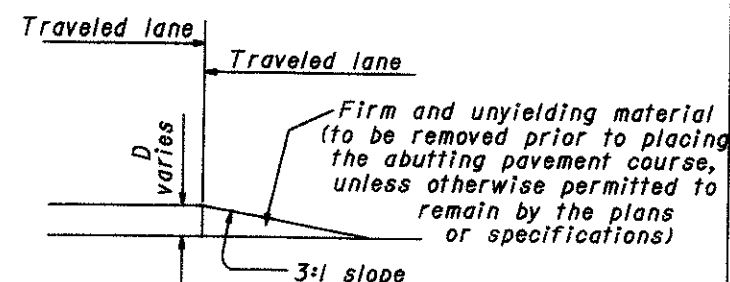
K062006.mgn 7-24-03

GENERAL NOTES

- It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.
- While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
- In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
- The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
- Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
- When drums are specified for a dropoff condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
- When OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes) and OWP-171 signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
- For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
- Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
- Pavement Repairs (or similar work):
 - Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
 - Lengths of 60 feet or less - repairs shall be effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT (MILLING OR RESURFACING)

- This treatment may be used when permitted for Condition I only.
- OW-171 and OWP-171 signs required.



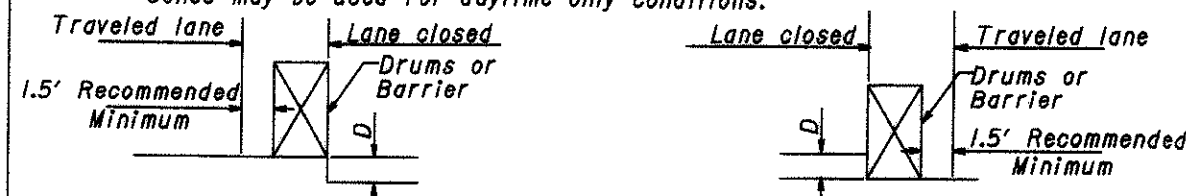
CONDITION I

DROPOFFS BETWEEN TRAVELED LANES

- These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D (In.)	Treatment
$\leq 1\frac{1}{2}$	Erect OW-171 and OWP-171 signs.
$> 1\frac{1}{2} - 3$	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
$> 3 - 5$	Lane closure utilizing drums as shown below.
> 5	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.



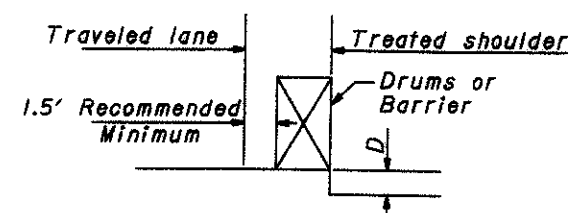
CONDITION II

DROPOFFS WITHIN GRADED SHOULDER AREA

- The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
- The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials, or concrete). For the purposes herein, its maximum width shall be considered to be twelve (12) feet.

D (In.)	Treatment
$\leq 1\frac{1}{2}$	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
$> 1\frac{1}{2} - 5$	1) If min. lane width requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
$> 5 - 12$ Daylight only	If min. lane width requirements can be met, maintain lanes utilizing drums as shown below.
$> 5 - 24$	1) If min. lane width requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

*Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

- This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
- OW-151 signs required.



KNO-62-0.00
LIC-62-18.48

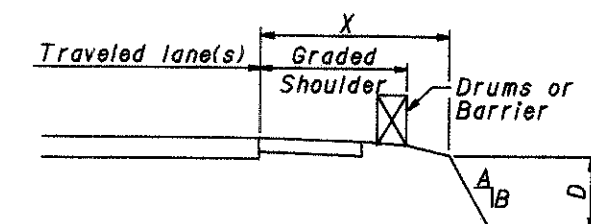
CONDITION III

DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

- See Note 2 under Condition II.
- Use Chart A or B below, as applicable.

CHART A

- USE FOR:
- Uncurbed Facilities.
 - Curbed Facilities, where:
 - Curbs are less than 6" in height.
 - Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

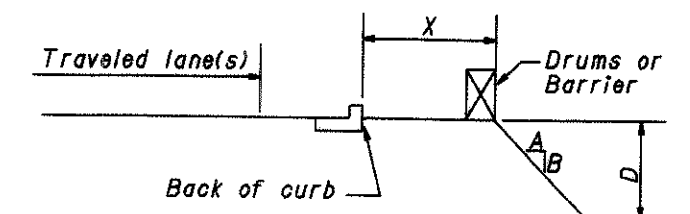


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	<3	Steeper than 3:1	None	None
4-12	>3-<12	Steeper than 3:1	Drums	Drums
4-12	>12	Steeper than 3:1	Drums	Barrier
>12-20	<12	Steeper than 3:1	None	None
>12-20	>12-<24	Steeper than 3:1	Drums	Drums
>12-20	>24	Steeper than 3:1	Drums	Barrier
>20-30	<24	Steeper than 3:1	None	Drums
>20-30	>24	Steeper than 3:1	Drums	Barrier
>30	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

- USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.



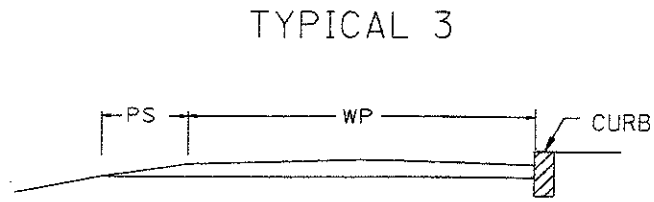
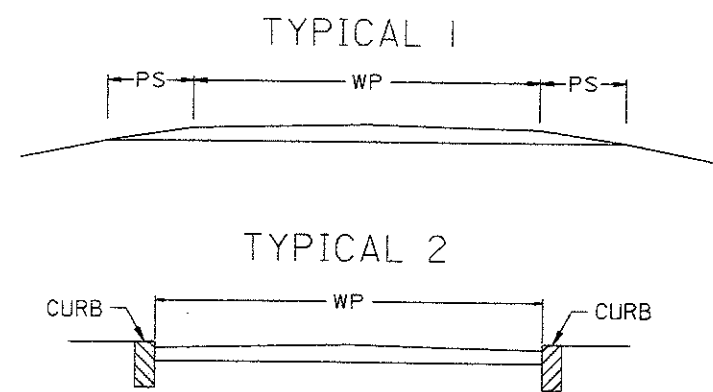
X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-10	<12	Any	None	Drums
0-10	>12	Any	Drums	Drums
>10	Any	Any	None	None

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF LOCATION AND DESIGN

DROPOFFS IN WORK ZONES

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED

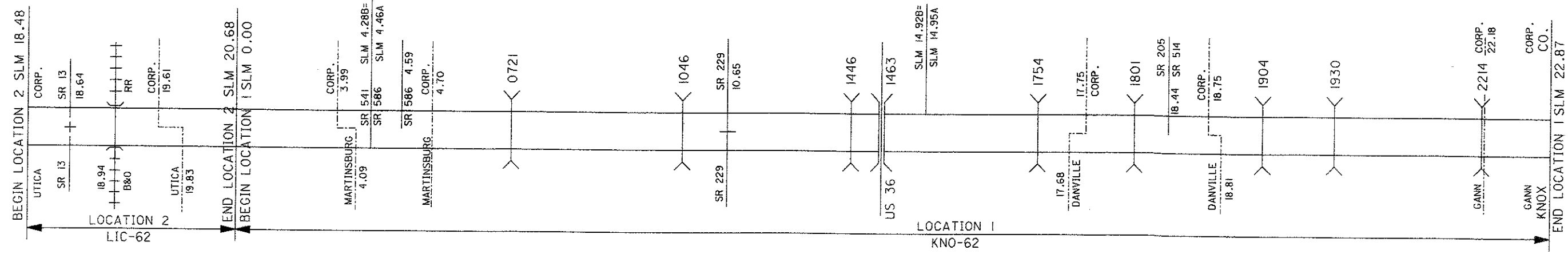
ASPHALT CONCRETE



BRIDGE DEDUCTIONS
BRIDGE LENGTH X PAVEMENT WIDTH
(APPROACH SLABS ADDED TO LENGTH FOR BUTT JOINTS)

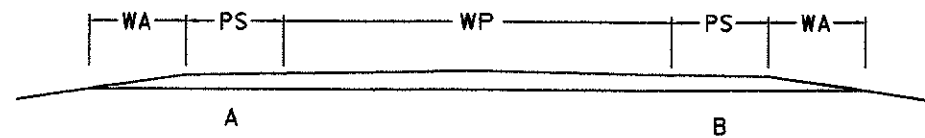
LOCATION 1
KNO-62-1046: (49' X 20') / 9 = 109 SQ.YD.
KNO-62-1446: (377' X 20') / 9 = 838 SQ.YD.
KNO-62-1754: (33' X 20') / 9 = 73 SQ.YD.
KNO-62-1801: (94' X 36') / 9 = 376 SQ.YD.
KNO-62-1904: (53' X 20') / 9 = 118 SQ.YD.
KNO-62-1930: (23' X 20') / 9 = 51 SQ.YD.
KNO-62-2214: (423' X 24') / 9 = 1128 SQ.YD.
2693 SQ.YD.

LOCATION 2
LIC-62-1894: (233' X 24') / 9 = 621 SQ.YD.

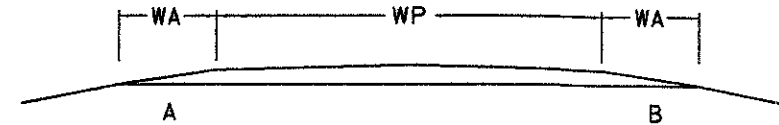


(1) BRIDGE LENGTH X PAVEMENT WIDTH										PAVEMENT DATA										* INCLUDES 1446 SQ.YD. FROM SHEET 19			
LOCATION	COUNTY	ROUTE	LOG POINT TO LOG POINT	LENGTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA	PROPOSED PAVEMENT								254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	614 WORK ZONE CENTER LINE, CLASS II				
				MILES	LIN. FT.					407		448 ASPHALT CONCRETE			857 ASPHALT CONCRETE								
										TACK COAT @ 0.075 gal./s.y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y.	THICK	INTERMEDIATE COURSE, TYPE I, PG 64-22	THICK	SURFACE COURSE, TYPE I, PG 64-22	THICK	WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2					THICK	WITH GILSONITE, SURFACE COURSE, TYPE I
									SQ. YDS.	GALS.	GALS.	INCHES	CU.YD.	INCHES	CU.YD.	INCHES	CU.YD.	INCHES	CU.YD.	SQ. YD.	MILE		
1	KNO	US 62	0.00-3.99	3.99	21067	24	1	448	56179	4213	2809	1.0	1560.5	1.0	1560.5						7.98		
			3.99-4.28B	0.29	1531	20	1	448	3402	255	170	1.0	94.5	1.0	94.5						0.58		
			4.46A-4.70	0.24	1267	20	1	448	2816	211	141	1.0	78.2	1.0	78.2						0.48		
			4.70-10.46	5.76	30413	20	1	448	67584	5069	3379	1.0	1877.3	1.0	1877.3						19.66		
			10.46-10.68	0.22	1162	20	1	448	2581	194				1.25	89.6					2581	0.44		
			10.68-14.53	3.85	20328	20	1	448	45173	3388	2259	1.0	1254.8	1.0	1254.8						7.70		
			14.53-14.92B	0.39	2059	20	1	448	4576	343	229		127.1		127.1					4576	0.78		
			14.95A-17.86	2.91	15365	20	1	448	34144	2561	1707	1.0	948.4	1.0	948.4					34144	5.82		
			17.86-18.20	0.34	1795	36	2	448	7180	539	359					1.5	299.2	1.5	299.2	7180	0.68		
			18.20-18.38	0.18	950	30	2	448	3167	238	158					1.5	132.0	1.5	132.0	3167	0.36		
			18.38-18.44	0.06	317	41	2	448	1444	108	72					1.5	60.2	1.5	60.2	1444	0.12		
			18.44-18.50	0.06	317	40	3	448	*2855	214	143					1.5	119.0	1.5	119.0	2855	0.12		
			18.50-18.75	0.25	1320	22	2	448	3227	242	161	1.0	89.6	1.0	89.6					3227	0.50		
			18.75-19.34	0.59	3115	20	1	448	6922	519	346	1.0	192.3	1.0	192.3						1.18		
			19.34-22.87	3.53	18638	24	1	448	49701	3728	2485	1.0	1380.6	1.0	1380.6						7.06		
			BRIDGE DEDUCTIONS (1)						(2693)	(202)	(135)		(64.4)		(64.4)		(15.7)		(15.7)	(1287)	(0.38)		
1	KNO	US 62	TOTALS							21620	14283		7538.9		7628.5		594.7		594.7	57887	53.08		
2	LIC	US 62	18.48-20.68	2.20	11616	24	1	448	30976	2323	1549	1.0	860.4	1.0	860.4					30976	4.40		
			BRIDGE DEDUCTIONS (1)						(621)	(47)	(31)		(17.2)		(17.2)					(621)	(0.08)		
2	LIC	US 62	TOTALS							2276	1518		843.2		843.2					30355	4.32		

TYPICAL 1



TYPICAL 2



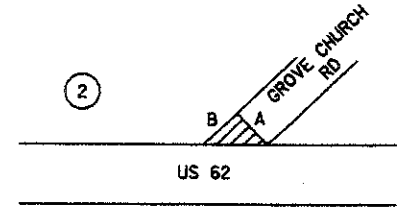
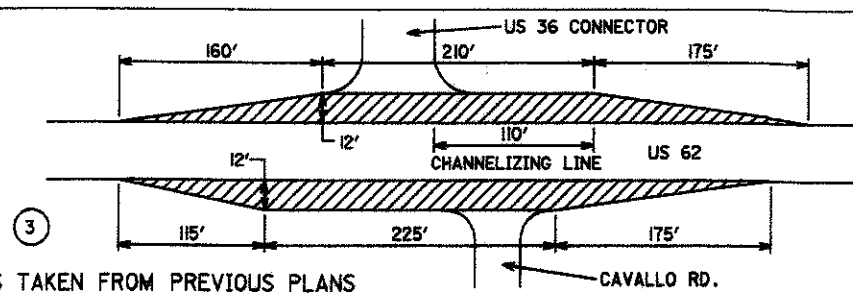
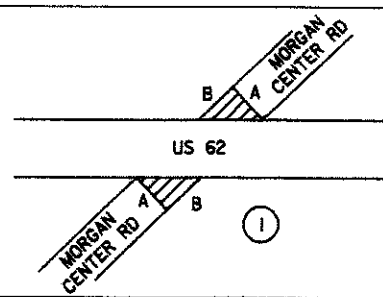
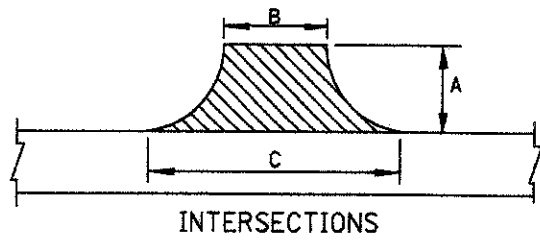
BRIDGE LENGTH X SHOULDER WIDTH (I)											PAVED SHOULDER DATA								* SLM 14.53 TO SLM 14.92B				
LOCATION	COUNTY	ROUTE	LOG POINT TO LOG POINT	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)				SHOULDER AREA	407		448 ASPHALT CONCRETE				254	617				* NOTES
				MILES	LIN.FT.		A	B	C	D		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	INTERMEDIATE COURSE, TYPE I, PG 64-22	THICK	SURFACE COURSE, TYPE I, PG64-22	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	COMPACTED AGGREGATE, TYPE A, AS PER PLAN 2' X 2.0" AVERAGE THICKNESS				
1	KNO	US 62	0.00-4.09	4.09	21595	1	4	4			SQ. YD.	GAL.	GAL.	INCH	CU. YD.	INCH	CU. YD.	SQ. YD.	CU. YD.				
			4.09-4.28B	0.19	1003	1	3	3			669	50	33	1.0	18.6	1.0	18.6		533				
			4.46A-7.19	10.46	55229	1	2	2			24546	1841	1227	1.0	681.8	1.0	681.8		1364				
			7.19-7.24	0.05	250	1	7	7			389	29	19	1.0	10.8	1.0	10.8		6				
			7.24-10.46	3.22	17002	1	2	2			7556	567	378	1.0	209.9	1.0	209.9		420				
			10.46-10.68	0.22	1162	1	2	2			516	39				1.25	17.9	516	29				
			10.68-14.92B	4.24	22387	1	2	2			9950	746	497	1.0	276.4	1.0	276.4	*915	553				
			14.95A-17.68	2.73	14414	1	2	2			6406	480	320	1.0	177.9	1.0	177.9	6406	356				
			17.68-17.86	0.18	950	1	2	2			422	32	21	1.0	11.7	1.0	11.7	422	23				
			18.50-18.75	0.25	1320	1	2	2			587	44	29	1.0	16.3	1.0	16.3		33				
			18.75-19.34	0.59	3115	1	2	2			1384	104	69	1.0	38.4	1.0	38.4		77				
			19.34-22.87	3.53	18638	2	2	2											460				
			BRIDGE DEDUCTIONS (I)								(457)	(34)	(23)		(12.7)		(12.7)		(25.4)				
1	KNO	US 62	TOTALS									5338	3530		1962.3		1980.2	8259	3854				
2	LIC	US 62	18.48-18.64	0.16	845	1	2	2			376	28	19	1.0	10.4	1.0	10.4	376					
			18.64-20.68	2.04	10771	1	3	3			7181	539	359	1.0	199.5	1.0	199.5	7181	266				
			BRIDGE DEDUCTIONS (I)								(155)	(12)	(8)		(4.3)		(4.3)	(155)	(9)				
2	LIC	US 62	TOTALS									555	370		205.6		205.6	7402	257				

QUANTITIES CARRIED TO GENERAL SUMMARY

SHOULDER TREATMENT

KNO-62-0.00
LIC-62-18.4810
33CALCULATED
LME
CHECKED
JC

K062001.MPS 8-6-03



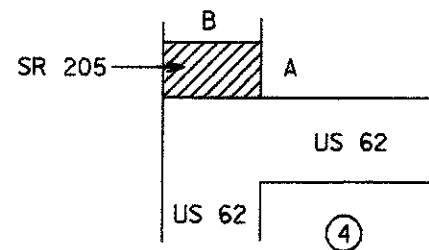
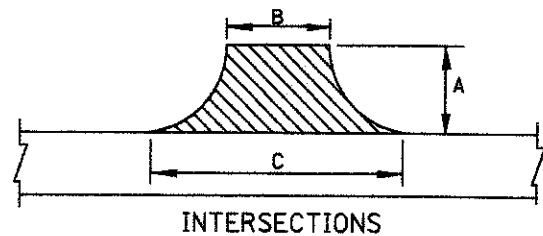
ALL AREAS TAKEN FROM PREVIOUS PLANS

LOCATION	COUNTY	ROUTE	LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ.YD.	407		448 ASPHALT CONCRETE				202 WEARING COURSE REMOVED SQ.YD.	254 PAVEMENT PLANING ASPHALT CONCRETE, AS PER PLAN SQ.YD.				
						A IN FEET	B IN FEET	C IN FEET		TACK COAT @ 0.075 gal./s.y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL.	THICK INCH	INTERMEDIATE COURSE, TYPE I, PG 64-22 CU.YD.	THICK INCH	SURFACE COURSE, TYPE I, PG 64-22 CU.YD.						
1	KNO	US 62		RT	MORGAN CENTER RD ①	26	85		123	9				2.0	6.8						
				LT	MORGAN CENTER RD ①	28	103		160	12				2.0	8.9						
				LT	CLUTTER RD	50	24	92	322	24				2.0	17.9						
				RT	CLUTTER RD	45	21	91	280	21				2.0	15.6						
				LT	WHITE OAK	35	14	48	121	9				2.0	6.7						
				LT	HOSS RD	53	22	77	292	22				2.0	16.2						
				LT	HOSS RD	27	23	64	131	10				2.0	7.3						
				LT	ARRINGTON RD	65	18	79	350	26				2.0	19.4						
				RT	WEST ST	20	15	33	53	4				2.0	2.9	53					
				LT	WEST ST	17	17	44	58	4				2.0	3.2	58					
				RT	PLEASANT ST	28	14	36	78	6				2.0	4.3	78					
				LT	PLEASANT ST	22	14	28	51	4				2.0	2.8	51					
				LT	ALLEY	10	10	20	17	1				2.0	0.9	17					
				LT	SR 586	31	24	54	134	10				2.0	7.4	134					
				RT	MECHANIC ST	22	10	29	48	4				2.0	2.7	48					
				RT	NORTH ST	21	12	28	47	4				2.0	2.6	47					
				LT	GROVE CHURCH RD ②	43	21		50	4				2.0	2.8						
				RT	DEAL RD	25	17	49	92	7				2.0	5.1						
				LT	DEAL RD	43	17	58	179	13				2.0	9.9						
				LT	BURTNETT RD	20	18	30	53	4				2.0	2.9						
				LT	CHADWICK RD	32	22	43	116	9				2.0	6.4						
				LT	HOPEWELL RD	29	18	46	106	8				2.0	5.9						
				RT	DENNIS CHURCH RD	33	18	51	127	10				2.0	7.1						
				RT	BILLMAN RD	32	18	61	140	11				2.0	7.8						
				LT	CHADWICK RD	26	16	44	87	6				2.0	4.8						
				RT	SR 229	150	18	150	1400	105				1.25	48.6	1400					
				LT	SR 229	100	22	150	956	72				1.25	33.2	956					
				RT	LEPLEY RD	21	21	62	97	7				2.0	5.4						
				LT	LEPLEY RD	24	17	46	84	6				2.0	4.7						
				LT	CAVES RD	32	20	65	151	11				2.0	8.4						
				RT	AUSTIN RD	20	18	30	53	4				2.0	2.9						
				RT	HAZEL DELL RD	45	24	105	323	24				2.0	17.9						
				LT	MILLWOOD RD	36	25	93	236	18				2.0	13.1						
				W	WIDENING ON US 62 @ US 36 ③				996	75	50	1.0	27.7	1.0	27.7		996				
				RT	CAVALLO RD	30	23	78	168	13				2.0	9.3						
				LT	BOESHART RD	25	18	60	108	8				2.0	6.0						
				RT	BOESHART RD	25	17	39	78	6				2.0	4.3						
				RT	FLAT RUN RD	73	21	128	604	45				2.0	33.6						
				LT	WASHINGTON ST	15	21	30	43	3				2.0	2.4	43					
				RT	WASHINGTON ST	20	22	37	63	5				2.0	3.5	63					
				RT	ALLEY	10	10	20	17	1				2.0	0.9	17					
1	KNO	US 62			TOTALS CARRIED TO NEXT SHEET					645	50		27.7		400.2	2965	996				

EXTRA AREAS

KNO-62-0.00
LIC-62-18.48

33



EXTRA AREAS

ALL AREAS TAKEN FROM PREVIOUS PLANS

LOCATION	COUNTY	ROUTE	LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ.YD.	407		448 ASPHALT CONCRETE				202	254			
						A IN FEET	B IN FEET	C IN FEET		TACK COAT • 0.075 gal./s.y. GAL.	TACK COAT FOR INTERMEDIATE COURSE • 0.05 gal./s.y. GAL.	THICK INCH	INTERMEDIATE COURSE, TYPE I, PG 64-22 CU.YD.	THICK INCH	SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	WEARING COURSE REMOVED SQ.YD.	PAVEMENT PLANING ASPHALT CONCRETE, AS PER PLAN SQ.YD.			
					TOTALS FROM PREVIOUS SHEET					645	50		27.7		400.2	2965	996			
I	KNO	US 62	CONTINUED	LT	W ROSS ST	15	22	31	44	3				2.0	2.4	44				
				RT	E ROSS ST	15	38	50	73	5				2.0	4.1	73				
				LT	ORCHARD ST	15	24	40	53	4				2.0	2.9	53				
				LT	TILTON ST	15	32	39	59	4				2.0	3.3	59				
				LT	W RAMBO ST	20	35	47	91	7				2.0	5.1	91				
				RT	E RAMBO ST	20	24	35	66	5				2.0	3.7	66				
				LT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				RT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				LT	W CHURCH ST	20	20	33	59	4				2.0	3.3	59				
				RT	E CHURCH ST	20	20	30	56	4				2.0	3.1	56				
				LT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				LT	W WALNUT ST	20	22	32	60	5				2.0	3.3	60				
				RT	E WALNUT ST	20	21	35	62	5				2.0	3.4	62				
				LT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				RT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				LT	W SOUTH ST	15	22	31	44	3				2.0	2.4	44				
				RT	E SOUTH ST	15	21	32	44	3				2.0	2.4	44				
				LT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				RT	ALLEY	10	10	20	17	1				2.0	0.9	17				
				LT	SR 205 (4)	50	36		200	15				2.0	11.1	200				
				LT	CEDAR ST	15	22	30	43	3				2.0	2.4	43				
				RT	S CEDAR ST	15	33	36	58	4				2.0	3.2	58				
				LT	LINWOOD ST	20	19	42	68	5				2.0	3.8	68				
				RT	S LINWOOD ST	20	23	48	79	6				2.0	4.4	79				
				LT	BLACK RD	40	28	91	264	20				2.0	14.7					
				RT	HILLCREST DR	20	18	38	62	5				2.0	3.4					
				LT	BODY RD	30	22	61	138	10				2.0	7.7					
				RT	BUCKEYE RD	50	22	98	333	25				2.0	18.5					
				RT	MICKLEY RD	40	24	120	320	24				2.0	17.8					
				LT	MICKLEY RD	60	25	115	467	35				2.0	25.9					
				RT	MICKLEY RD	85	21	115	642	48				2.0	35.7					
				LT	PRITCHARD RD	45	31	120	378	28				2.0	21.0					
				LT	BRINKHAVEN RD	40	28	105	296	22				2.0	16.4					
				LT	MAIN ST	40	23	85	240	18				2.0	13.3					
				RT	HUNTER RD	40	19	80	220	17				2.0	12.2					
				LT	STATE ST	45	25	103	320	24				2.0	17.8					
				LT	STATE ST	40	26	90	258	19				2.0	14.3					
I	KNO	US 62			TOTALS CARRIED TO SUB-SUMMARY					1032	50		27.7		689.5	4243	996			

EXTRA AREAS

KNO-62-0.00
LIC-62-18.48

12
33

EXTRA AREAS

KN0-62-0.00
LIC-62-18.48

KNO-62-1046: BUTT JOINT AT BRIDGE DECK
KNO-62-1446: BUTT JOINT AT APPROACH SLABS
KNO-62-1754: BUTT JOINT AT BRIDGE DECK
KNO-62-1801: BUTT JOINT AT APPROACH SLABS
KNO-62-1904: BUTT JOINT AT BRIDGE DECK
KNO-62-1930: REMOVE 2.0" ASPHALT, PLACE WATERPROOFING AND 3.0" ASPHALT
KNO-62-2214: BUTT JOINT AT APPROACH SLABS

LIC-62-1894: BUTT JOINT AT APPROACH SLABS

[illegible]

BRIDGE DECK TREATMENT

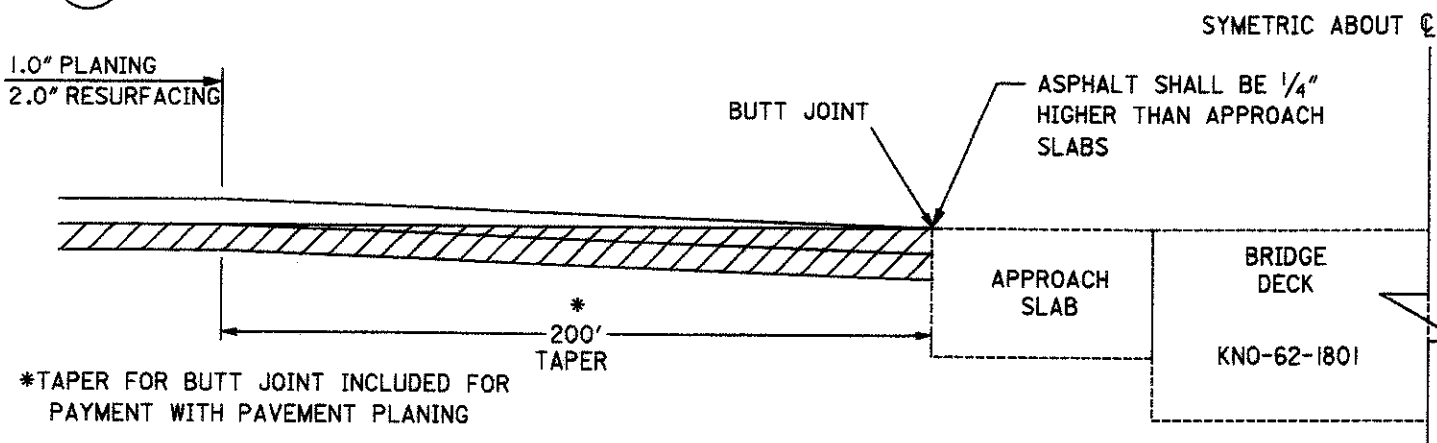
KN0-62-0.00
LIC-16-18.48

14
33

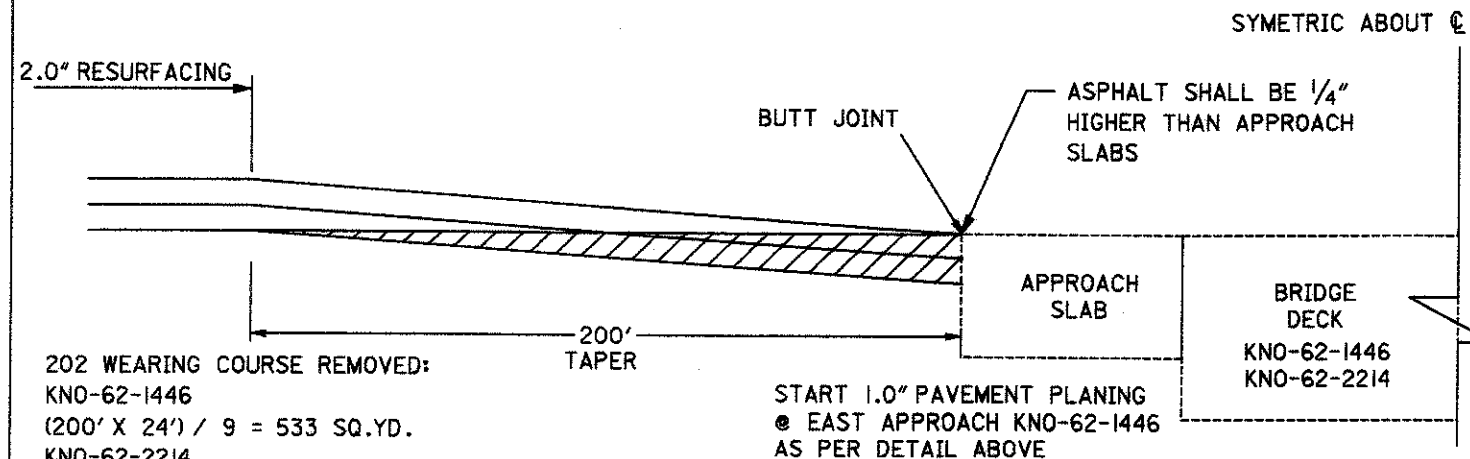
LME
CHECKED
JC

1

1.0" PLANING
2.0" RESURFACING



2.0" RESURFACING



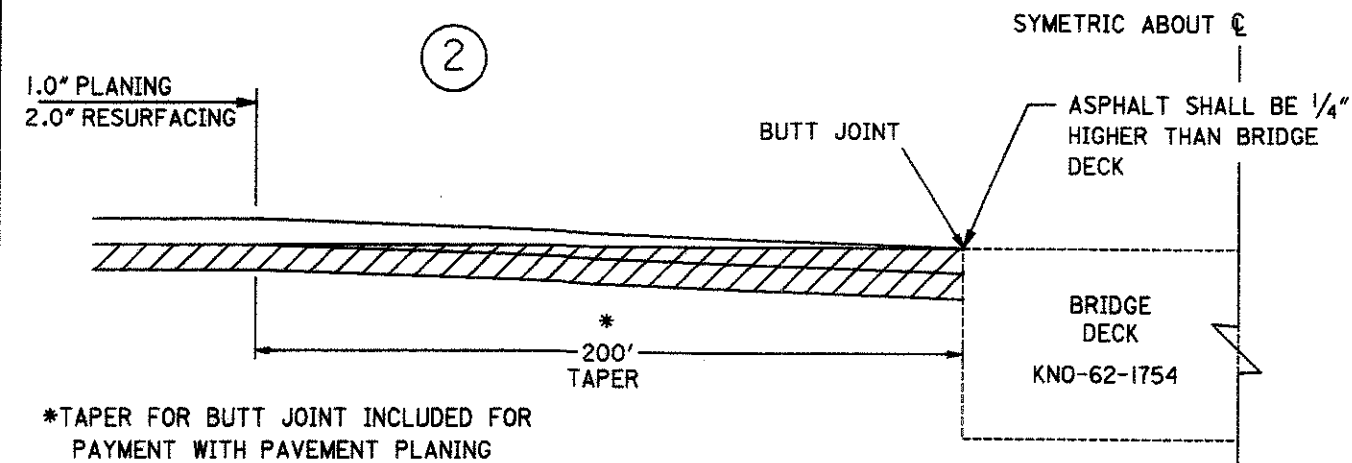
202 WEARING COURSE REMOVED:
KNO-62-1446
(200' X 24') / 9 = 533 SQ.YD.
KNO-62-2214
[2(200' X 24')] / 9 = 1067 SQ.YD.

TOTAL CARRIED TO SHEET 14

BUTT JOINT @ APPROACH SLABS

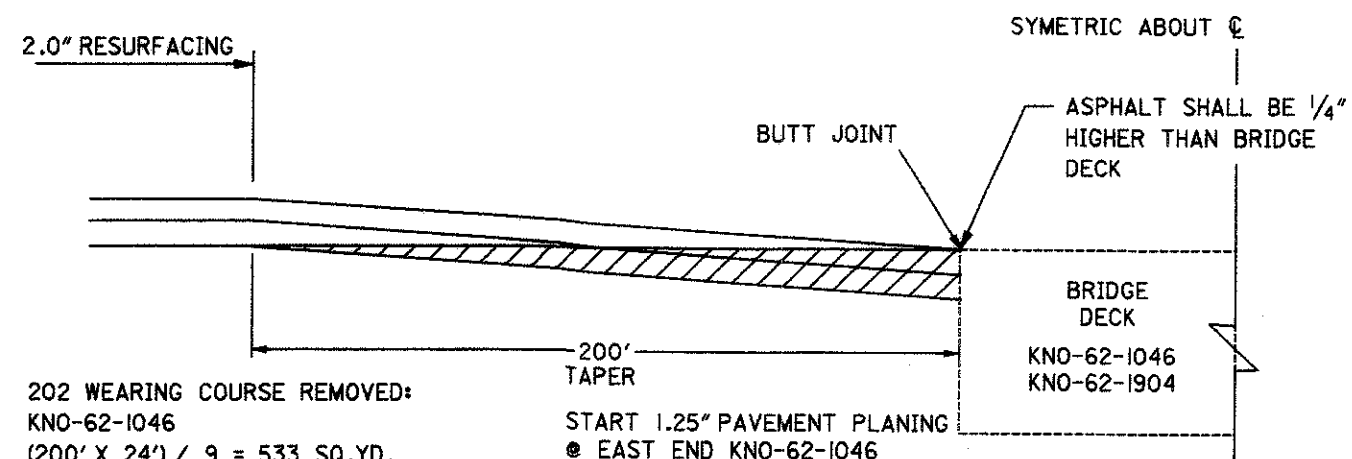
2

1.0" PLANING
2.0" RESURFACING



*TAPER FOR BUTT JOINT INCLUDED FOR
PAYMENT WITH PAVEMENT PLANING

2.0" RESURFACING



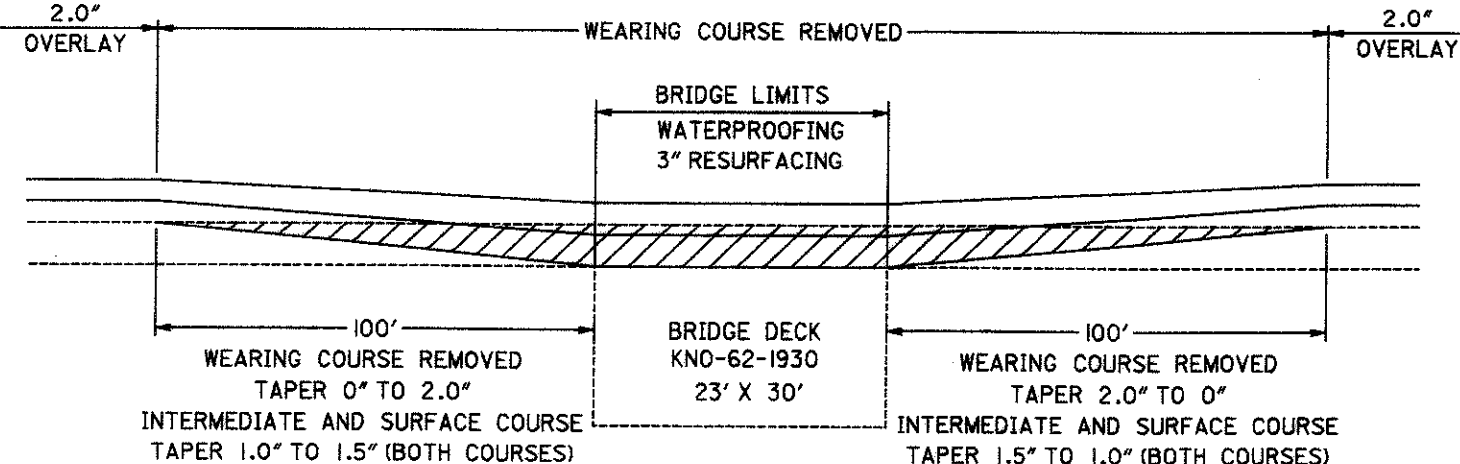
202 WEARING COURSE REMOVED:
KNO-62-1046
(200' X 24') / 9 = 533 SQ.YD.
KNO-62-1904
[2(200' X 24')] / 9 = 1067 SQ.YD.

TOTAL CARRIED TO SHEET 14

BUTT JOINT @ BRIDGE DECK

3

2.0" OVERLAY

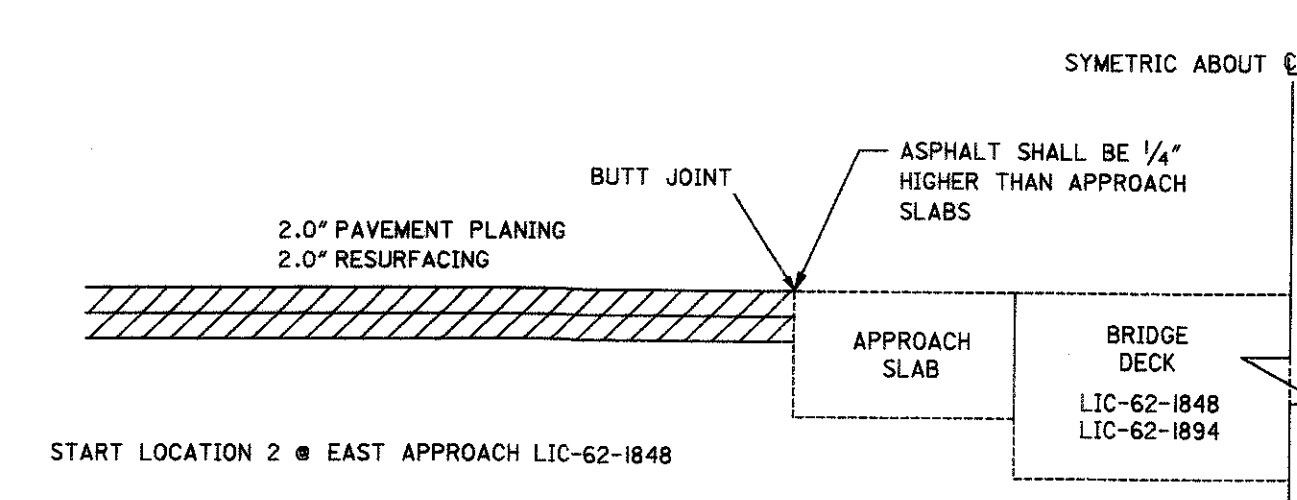


202 WEARING COURSE REMOVED:
[2(100' X 20') + (23' X 30')] / 9 = 521 SQ.YD.

TOTAL CARRIED TO SHEET 14

REMOVE 2.0" ASPHALT CONCRETE
PLACE SHEET TYPE 3 WATERPROOFING
AND 3.0" ASPHALT CONCRETE

4



START LOCATION 2 @ EAST APPROACH LIC-62-1848

BUTT JOINT @ APPROACH SLABS

BRIDGE DECK DETAILS

KNO-62-0.00
LIC-62-18.48

15
33

MARTINSBURG

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING CURB RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB

QUANTITIES

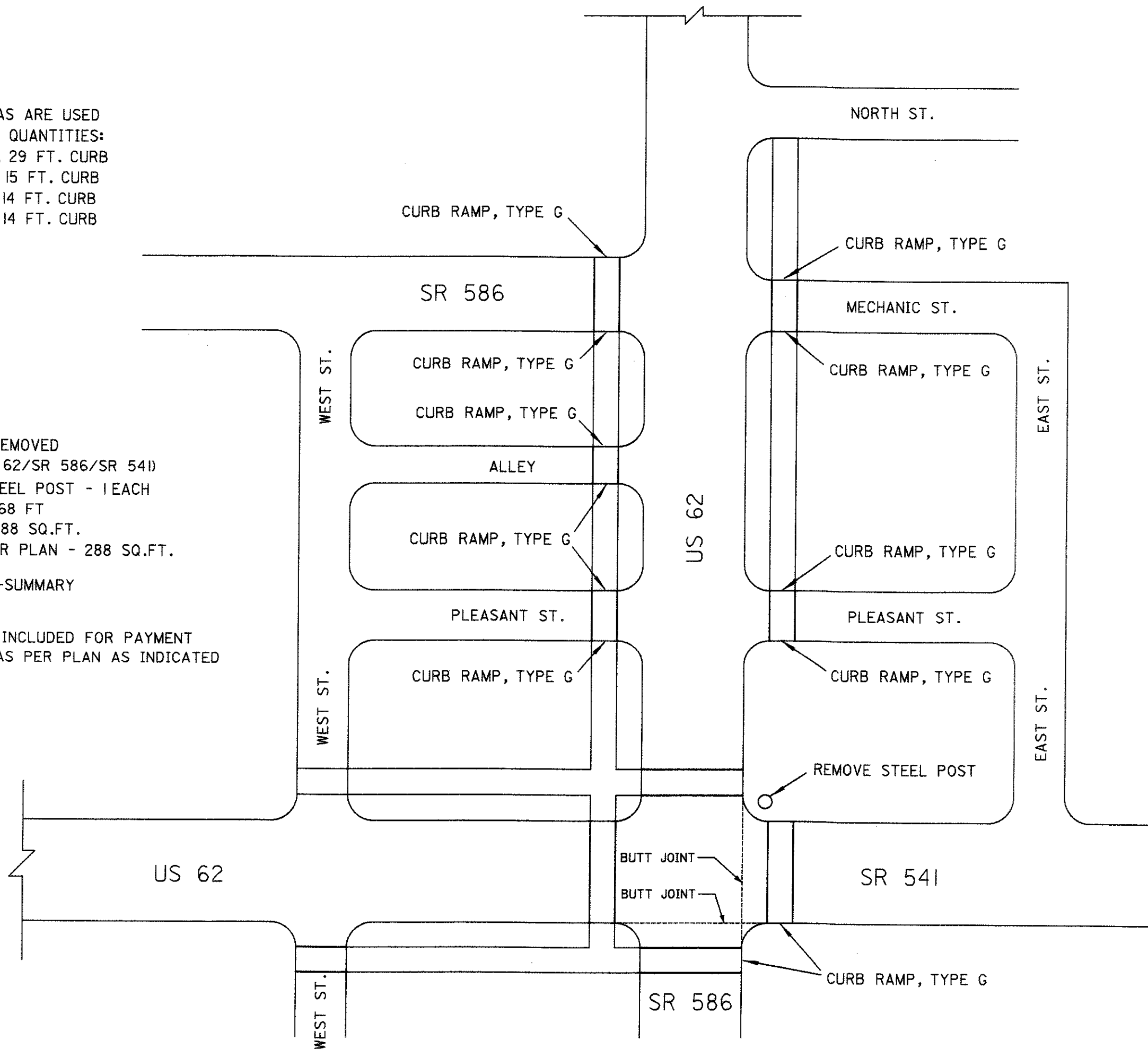
CURB RAMP, TYPE G = 12

LOCATION 1

ITEM 202 WEARING COURSE REMOVED
75 SQ.YD. (INTERSECTION US 62/SR 586/SR 541)
ITEM 202 REMOVAL MISC.: STEEL POST - 1 EACH
ITEM 202 CURB REMOVED - 168 FT
ITEM 202 WALK REMOVED - 288 SQ.FT.
ITEM 608 CURB RAMP, AS PER PLAN - 288 SQ.FT.

QUANTITIES CARRIED TO SUB-SUMMARY

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT
WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED
ON PLAN INSERT SHEET 28



DRAWING
NOT TO SCALE

CALCULATED
CHECKED

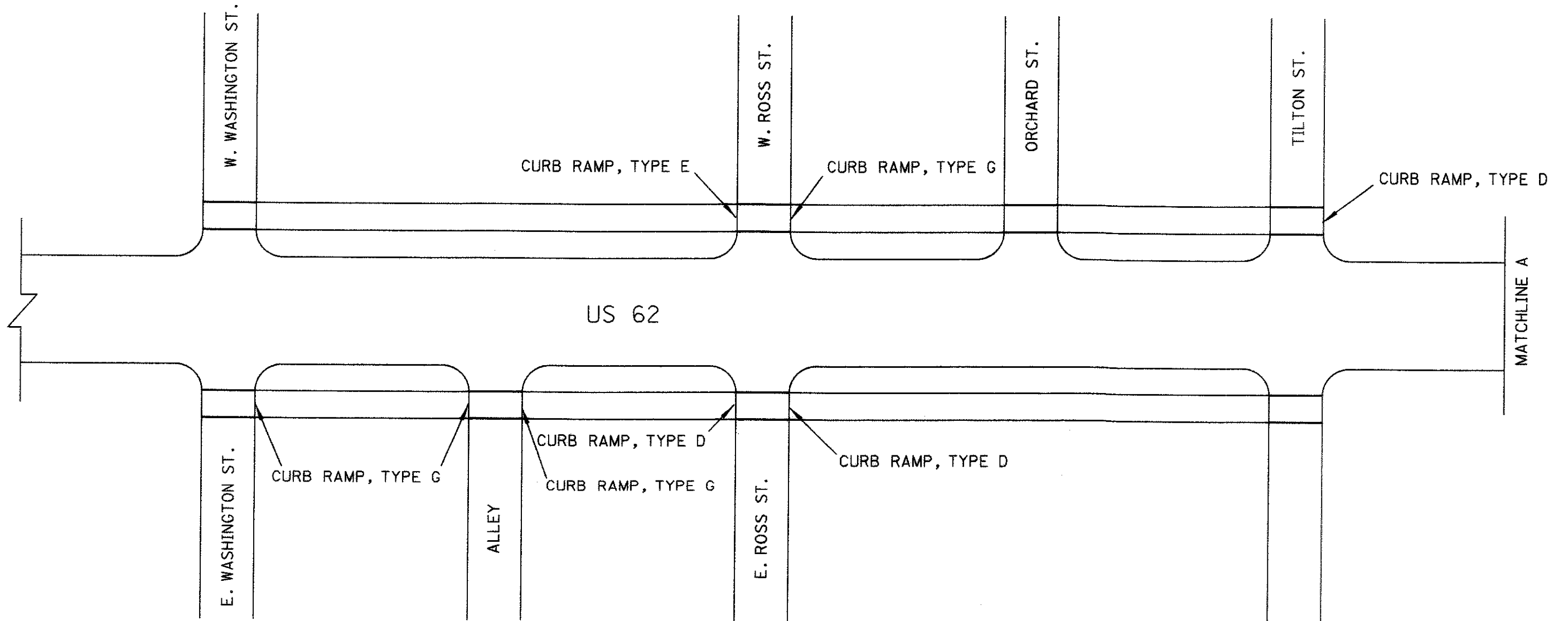
PLAN SHEET - MARTINSBURG

KNO-62-0.00
LIC-62-18.48

16
33

DANVILLE

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING CURB RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB



QUANTITIES

CURB RAMP, TYPE D = 3
CURB RAMP, TYPE E = 1
CURB RAMP, TYPE G = 4

LOCATION I

ITEM 202 CURB REMOVED - 115 FT
ITEM 202 WALK REMOVED - 330 SQ.FT.
ITEM 608 CURB RAMP, AS PER PLAN - 330 SQ.FT.

QUANTITIES CARRIED TO SUB-SUMMARY

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT
WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED
ON PLAN INSERT SHEET 28



DRAWING
NOT TO SCALE

CHECKED
DATE

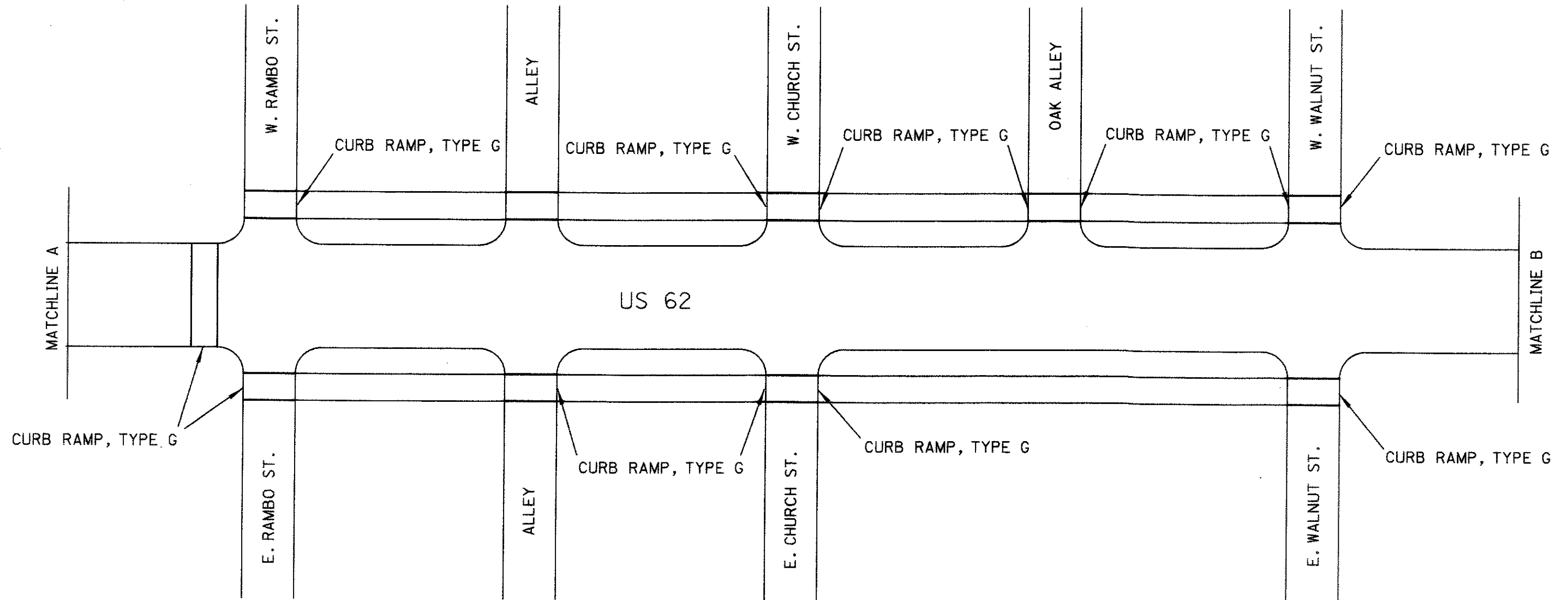
PLAN SHEET-DANVILLE

KNO-62-0.00
LIC-62-18.48

17
33

DANVILLE

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING CURB RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB



QUANTITIES

CURB RAMP, TYPE G = 13

LOCATION 1

ITEM 202 CURB REMOVED - 182 FT
ITEM 202 WALK REMOVED - 312 SQ.FT.
ITEM 608 CURB RAMP, AS PER PLAN - 312 SQ.FT.

QUANTITIES CARRIED TO SUB-SUMMARY

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT
WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED
ON PLAN INSERT SHEET 28



DRAWING
NOT TO SCALE

CALCULATED
CHECKED

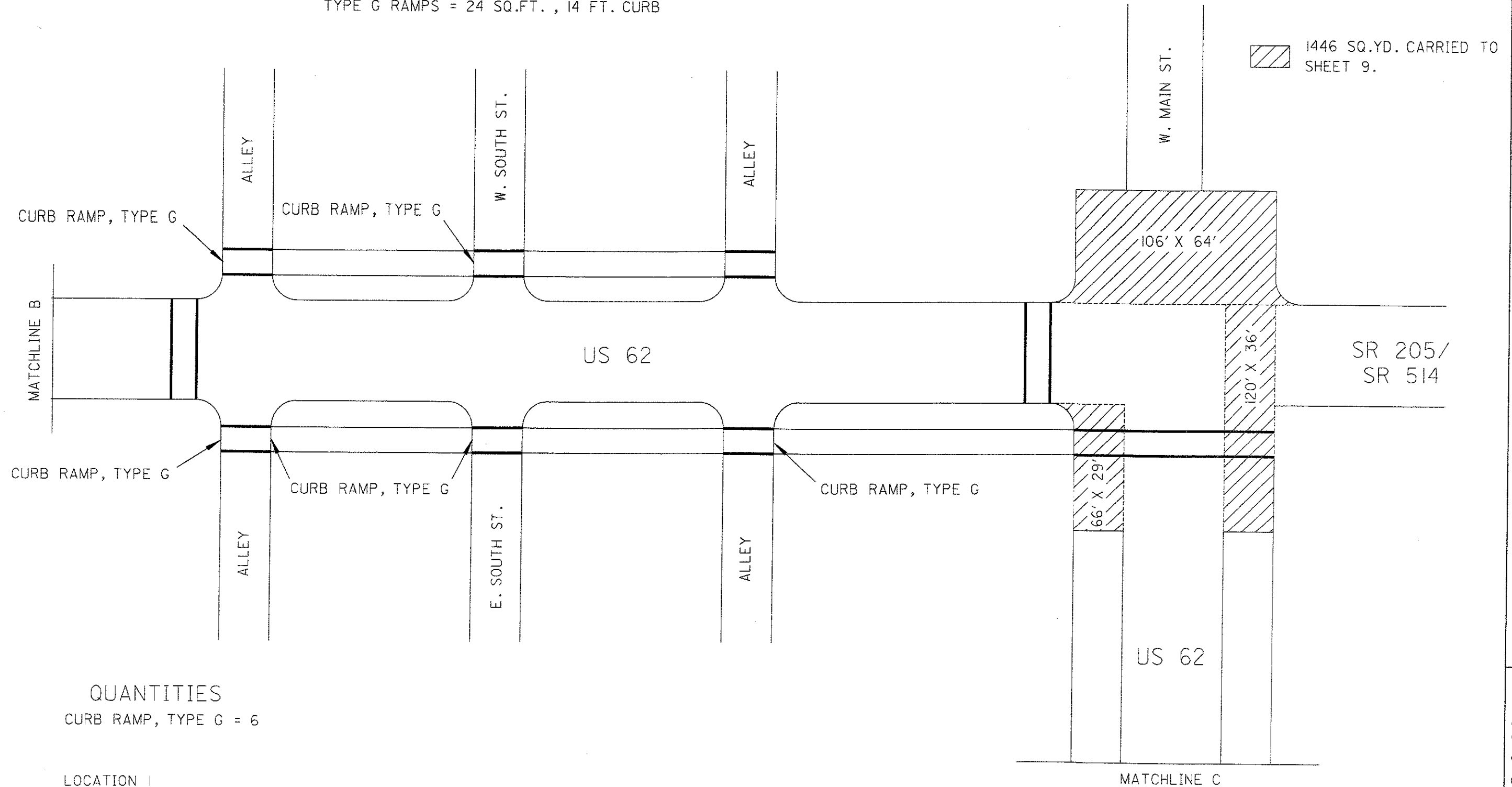
PLAN SHEET-DANVILLE

KN0-62-0.00
LIC-62-18.48

18
33

DANVILLE

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB



QUANTITIES

CURB RAMP, TYPE G = 6

LOCATION I

ITEM 202 CURB REMOVED - 84 FT
ITEM 202 WALK REMOVED - 144 SQ.FT.
ITEM 608 CURB RAMP, AS PER PLAN - 144 SQ.FT.

QUANTITIES CARRIED TO SUB-SUMMARY

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT
WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED
ON PLAN INSERT SHEET 28



DRAWING
NOT TO SCALE

CALCULATED
CHECKED

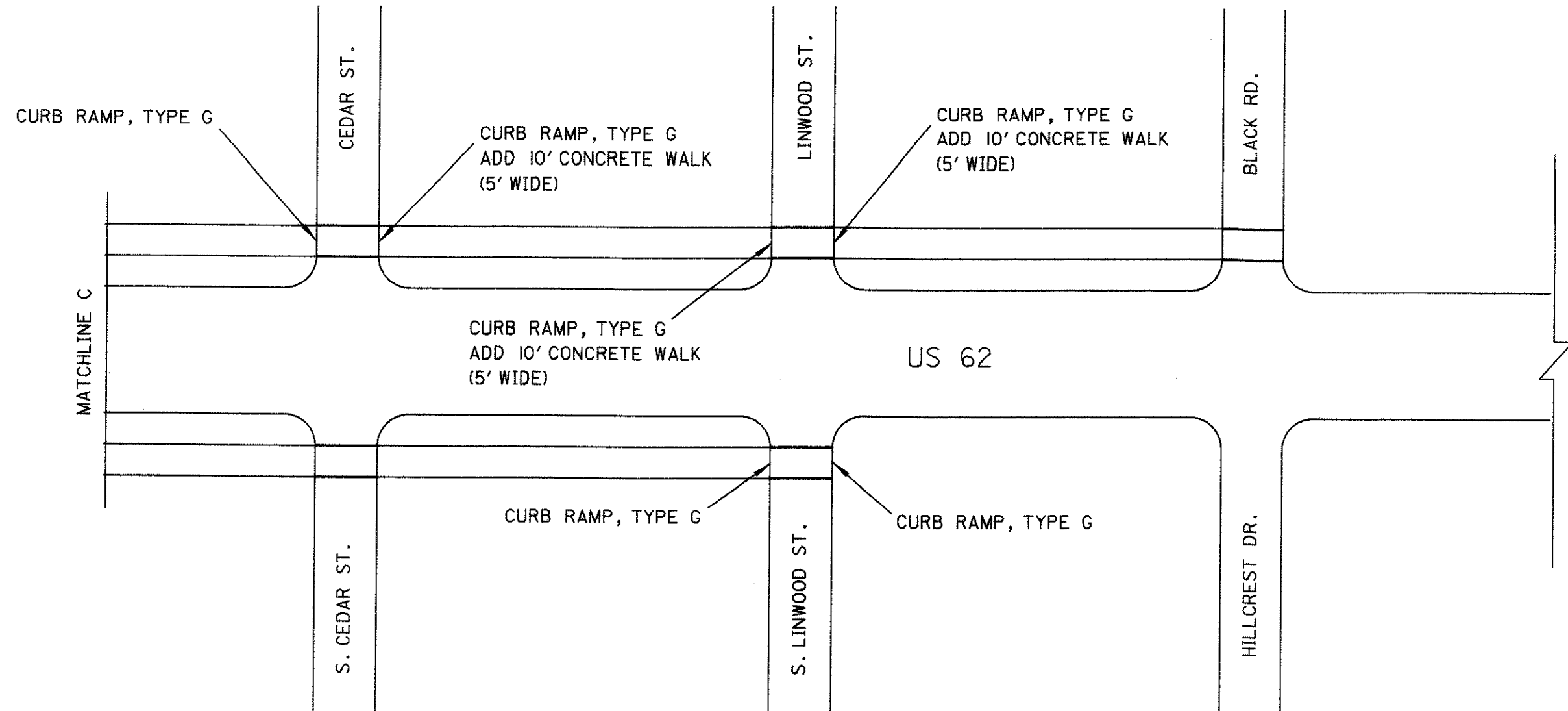
PLAN SHEET-DANVILLE

KN0-62-0.00
LIC-62-18.48

19
33

DANVILLE

THE FOLLOWING AVERAGE AREAS ARE USED
FOR CALCULATING RAMP QUANTITIES:
TYPE A RAMPS = 108 SQ.FT. , 29 FT. CURB
TYPE D RAMPS = 60 SQ.FT. , 15 FT. CURB
TYPE E RAMPS = 54 SQ.FT. , 14 FT. CURB
TYPE G RAMPS = 24 SQ.FT. , 14 FT. CURB



QUANTITIES

CURB RAMP, TYPE G = 6

LOCATION 1

ITEM 202 WALK REMOVED - 144 SQ.FT.
ITEM 608 CURB RAMP, AS PER PLAN - 144 SQ.FT.
ITEM 608 4" CONCRETE WALK - 150 SQ.FT.

QUANTITIES CARRIED TO SUB-SUMMARY

NOTE: NO CURB IN THIS SECTION

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT
WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED
ON PLAN INSERT SHEET 28



DRAWING
NOT TO SCALE

CALCULATED
CHECKED

PLAN SHEET-DANVILLE

KNO-62-0.00
LIC-62-18.48

20
33

ITEM 642 FAST DRY CENTER LINE SUB-SUMMARY

* QUANTITIES INCLUDE CENTER LINE AROUND OUTSIDE OF PAINTED ISLAND

LOCATION	COUNTY	ROUTE	S.L.M.		CENTER LINE QUANTITIES		PARTICIPATION TYPE				TOTAL CENTER LINE MILES	REMARKS
					TOTAL MILES	EQUIVALENT SOLID LINE	IRG	FG	RSG	NON FED STATE		
			FROM	TO								
1	KNO	US 62	0.00	4.28B	4.28	3.55					4.28	
			4.46A	14.92B	10.46	17.05					10.46	
			14.95A	22.87	7.92	11.09					7.92	
1	KNO	US 62	TOTALS CARRIED TO SUB-SUMMARY								22.66	
2	LIC	US 62	18.48	20.68	2.20	2.28					2.20	

TOTALS CARRIED TO SUB-SUMMARY

NOTE: KNO-62-18.44 TO 18.50 EDGE LINE LEFT SIDE ONLY

ITEM 642 FAST DRY EDGE LINE SUB-SUMMARY

LOCATION	COUNTY	ROUTE	S.L.M.		WHITE EDGE LINE QU.			YELLOW EDGE LINE QU.			PARTICIPATION TYPE				EDGE LINE TOTAL MILES	REMARKS
					TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE		
			FROM	TO												
1	KNO	US 62	0.00	4.28B	8.56	8.56									8.56	
			4.46A	14.92B	20.92	20.92									20.92	
			14.95A	17.86	5.82	5.82									5.82	
			18.44	22.87	8.80	8.80									8.80	
1	KNO	US 62	TOTALS	CARRIED	TO SUB-SUMMARY										44.10	
2	LIC	US 62	18.48	20.68	4.40	4.40									4.40	

TOTALS CARRIED TO SUB-SUMMARY

EDGE/CENTER LINE SUB-SUMMARY

KNO-62-0.00
LIC-62-18.48

ITEM 644 AUXILIARY PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES	WORD ON PAVEMENT ONLY			SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS		
						WHITE	YELLOW			24"	WHITE	72"	96"	72"	96"	COMBINATION		TURN									
														LT/TH	RT/TH	LT	RT	TH									
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EACH	FEET	SQ. FT.	FT.	FT.				
I	KNO	US 62	MORGAN CENTER RD		RT			8																		PLACE AS DIRECTED	
			MORGAN CENTER RD		LT			10																			PLACE AS DIRECTED
			CLUTTER RD		LT			25																			PLACE 23' FROM US 62 C
			CLUTTER RD		RT			22																			PLACE 21' FROM US 62 C
			WHITE OAK		LT			12																			PLACE 25' FROM US 62 C
			HOSS RD		LT			20																			PLACE 26' FROM US 62 C
			HOSS RD		LT			20																			PLACE 26' FROM US 62 C
			ARRINGTON RD		LT			20																			PLACE 27' FROM US 62 C
			WEST ST		RT			7	30																		PLACE AS DIRECTED
			WEST ST		LT			10	46																		PLACE AS DIRECTED
			ON US 62 AT SR 586/SR 541		C			14	82																		PLACE AS DIRECTED
			ON US 62 AFTER SR 586/541		C			12	44																		PLACE AS DIRECTED
			PLEASANT ST		RT			9	28																		PLACE AS DIRECTED
			PLEASANT ST		LT			10	28																		PLACE AS DIRECTED
			ALLEY		LT			10	20																		PLACE AS DIRECTED
			SR 586		LT			17	48																		PLACE AS DIRECTED
			MECHANIC ST		RT			6	24																		PLACE AS DIRECTED
			NORTH ST		RT			7																			PLACE AS DIRECTED
			GROVE CHURCH RD		LT			21																			PLACE AS DIRECTED
			DEAL RD		RT			10																			PLACE 27' FROM US 62 C
			DEAL RD		LT			12																			PLACE 38' FROM US 62 C
			BURTNETT RD		LT			12																			PLACE AS DIRECTED
			CHADWICK RD		LT			12																			PLACE AS DIRECTED
			HOPEWELL RD		LT			12																			PLACE 21' FROM US 62 C
			DENNIS CHURCH RD		RT			12																			PLACE 24' FROM US 62 C
			BILLMAN RD		RT			18																			PLACE 25' FROM US 62 C
			CHADWICK RD		LT			10																			PLACE 25' FROM US 62 C
			SR 229		RT			20																			PLACE 21' FROM US 62 C
			SR 229		LT			21																			PLACE 19' FROM US 62 C
			LEPLEY RD		RT			13																			PLACE 23' FROM US 62 C
			LEPLEY RD		LT			15																			PLACE 21' FROM US 62 C
			CAVES RD		LT			21																			PLACE 24' FROM US 62 C
			AUSTIN RD		RT			12																			PLACE AS DIRECTED
			HAZEL DELL RD		RT			22																			PLACE 25' FROM US 62 C
			MILLWOOD RD		LT			20																			PLACE 29' FROM US 62 C
			CAVALLO RD		RT			23																			PLACE AS DIRECTED
			ON US 62 AT CONNECTOR RD.								I						I				110						PLACE AS DIRECTED
			BOESHART RD		LT			20																			

K062001.tas 8-14-03

AUXILIARY PAVEMENT MARKING

KNO-62-0.00
LIC-62-18.48

ITEM 644 AUXILIARY PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS			
						WHITE	YELLOW			24"	WHITE	72"	96"	72"	96"	COMBINATION		TURN									
														LT/TH	RT/TH	LT	RT	TH									
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EACH	FEET	SQ. FT.	FT.	FT.				
I	KNO	US 62	TOTALS FROM PREVIOUS SHEET					595	452		I						I			110							
			ALLEY		RT			8	24																PLACE AS DIRECTED		
			W ROSS ST		LT			7	28																PLACE AS DIRECTED		
			E ROSS ST		RT			17	76																PLACE AS DIRECTED		
			ORCHARD ST		LT			15	64																PLACE AS DIRECTED		
			TILTON ST		LT			16	64																PLACE AS DIRECTED		
			ON US 62 @ SLM 18.12±									I													PLACE AS DIRECTED		
			ON US 62 BEFORE RAMBO ST						72																PLACE AS DIRECTED		
			W RAMBO ST		LT			17	70																PLACE AS DIRECTED		
			E RAMBO ST		RT			12	48																PLACE AS DIRECTED		
			ON US 62 AFTER RAMBO ST						60																PLACE AS DIRECTED		
			ON US 62 @ SLM 18.24±									I													PLACE AS DIRECTED		
			ALLEY		LT			7	30																PLACE AS DIRECTED		
			ALLEY		RT			6	28																PLACE AS DIRECTED		
			W CHURCH ST		LT			10	46																PLACE AS DIRECTED		
			E CHURCH ST		RT			10	46																PLACE AS DIRECTED		
			ALLEY		LT			6	30																PLACE AS DIRECTED		
			W WALNUT ST		LT			11	44																PLACE AS DIRECTED		
			E WALNUT ST		RT			11	50																PLACE AS DIRECTED		
			ALLEY		LT			12	30																PLACE AS DIRECTED		
			ALLEY		RT			12	30																PLACE AS DIRECTED		
			W SOUTH ST		LT			11	48																PLACE AS DIRECTED		
			E SOUTH ST		RT			10	48																PLACE AS DIRECTED		
			ALLEY		LT			8	30																PLACE AS DIRECTED		
			ALLEY		RT			8	30																PLACE AS DIRECTED		
			ON US 62 BEFORE W. MAIN ST						94																PLACE AS DIRECTED		
			W. MAIN ST		LT			15	60																PLACE AS DIRECTED		
			SR 205		LT			16	94																PLACE AS DIRECTED		
			ON US 62 AFTER SR 205						218																PLACE AS DIRECTED		
			CEDAR ST		LT			12	48																PLACE AS DIRECTED		
			S CEDAR ST		RT			16	66																PLACE AS DIRECTED		
			LINWOOD ST		LT			10	40																PLACE AS DIRECTED		
			S LINWOOD ST		RT			10	58																PLACE AS DIRECTED		
			BLACK RD		LT			22																	PLACE AS DIRECTED		
			HILLCREST DR		RT			10																	PLACE 20' FROM US 62 ☺		
			BODY RD		LT			19																	PLACE 23' FROM US 62 ☺		
			BUCKEYE RD		RT			28																	PLACE 25' FROM US 62 ☺		
			MICKLEY RD		RT			32																	PLACE 22' FROM US 62 ☺		
			MICKLEY RD		LT			24																	PLACE 21' FROM US 62 ☺		
			MICKLEY RD		RT			27																	PLACE 18' FROM US 62 ☺		
			PRITCHARD RD		LT			29																	PLACE 21' FROM US 62 ☺		
			BRINKHAVEN RD		LT			40																	PLACE 18' FROM US 62 ☺		
I	KNO	US 62	TOTALS CARRIED TO NEXT SHEET					1119	2126		I	2					I			110							

K062002.tds 8-14-03

AUXILIARY PAVEMENT MARKING

KNO-62-0.00

LIC-62-18.48

23

33

ITEM 644 AUXILIARY PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES	WORD ON PAVEMENT ONLY		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS
						WHITE	YELLOW			72"	96"	72"	96"	COMBINATION		TURN						WH	YEL	
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	LT/TH	RT/TH	LT	RT	TH	EACH	FEET	SQ. FT.	FT.	FT.	
1	KNO	US 62	TOTALS FROM PREVIOUS SHEET					1119	2126		1	2							110					
			MAIN ST		LT			26																PLACE 22' FROM US 62 C
			HUNTER RD		RT			21																PLACE 20' FROM US 62 C
			STATE ST		LT			36																PLACE 20' FROM US 62 C
			STATE ST		LT			27																PLACE 20' FROM US 62 C
1	KNO	US 62	TOTALS TO SUB-SUMMARY					1229	2126		1	2							110					
2	LIC	US 62	ON US 62 @ SR 13		C			22																PLACE 28' FROM SR 13 C
			ON US 62 @ SR 13		C			24																PLACE 22' FROM SR 13 C
			WELLS AVE.		LT			19																PLACE 24' FROM US 62 C
			WELLS AVE.		RT			21																PLACE 24' FROM US 62 C
			MILL ST.		LT			39																PLACE 22' FROM US 62 C
			UTICA RD.		LT			37																PLACE 25' FROM US 62 C
			UTICA RD.		RT			30																PLACE 22' FROM US 62 C
2	LIC	US 62	TOTALS TO SUB-SUMMARY					192																

K062002.tas 8-14-03

AUXILIARY PAVEMENT MARKING

KNO-62-0.00
LIC-62-18.48

CALC. BY SAB
DATE 07-02-02
CHKD. BY _____
DATE _____

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	RPM	ITEM QUANTITIES			PRISMATIC RETRO-REFLECTOR	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
	COUNTY	ROUTE	S.L.M. MILES				INSTALLATION ONLY				ONE-WAY		TWO-WAY			
							RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		WHITE	YELLOW	YELLOW/ YELLOW	WHITE/ RED		
1	KNO	US 62	0.00	4.09	GAP		270						270			LIC. CO. TO MARTINSBURG WEST CORP
1	KNO	US 62	4.70	4.90	I2		29						29			PC 4.79 PT 4.81 L=106' DEG 26
1	KNO	US 62	4.90	7.40	GAP		165						165			
1	KNO	US 62	7.40	7.44	II		5						5			PC 7.40 PT 7.44 L=211' DEG 5
1	KNO	US 62	7.44	12.43	GAP		329						329			
1	KNO	US 62	12.43	12.48	II		7						7			PC 12.43 PT 12.48 L=264' DEG 5
1	KNO	US 62	12.48	12.78	GAP		20						20			
1	KNO	US 62	12.69	12.91	I2		34						34			PC 12.78 PT 12.82 L=211' DEG 19
1	KNO	US 62	12.91	17.29	GAP		289						289			
1	KNO	US 62	17.29	17.40	II		14						14			PC 17.29 PT 17.40 L=581' DEG 5
1	KNO	US 62	17.40	17.45	GAP		3						3			
1	KNO	US 62	17.45	17.51	II		8						8			PC 17.45 PT 17.51 L=317' DEG 7
1	KNO	US 62	17.51	17.68	GAP		11						11			SLM TO DANVILLE W. CORP.
1	KNO	US 62	18.75	19.45	GAP		46						46			DANVILLE E. CORP. TO SLM
1	KNO	US 62	19.45	19.64	II		25						25			PC 19.45 PT 19.64 L=1003' DEG 5
1	KNO	US 62	19.64	22.87	GAP		213						213			END HOLMES COUNTY
1	TOTALS	CARRIED TO	SUB-SUMMARY				1468						1468			
2	LIC	US 62	19.61	20.68	GAP		71						71			UTICA E. CORP. TO KNOX COUNTY

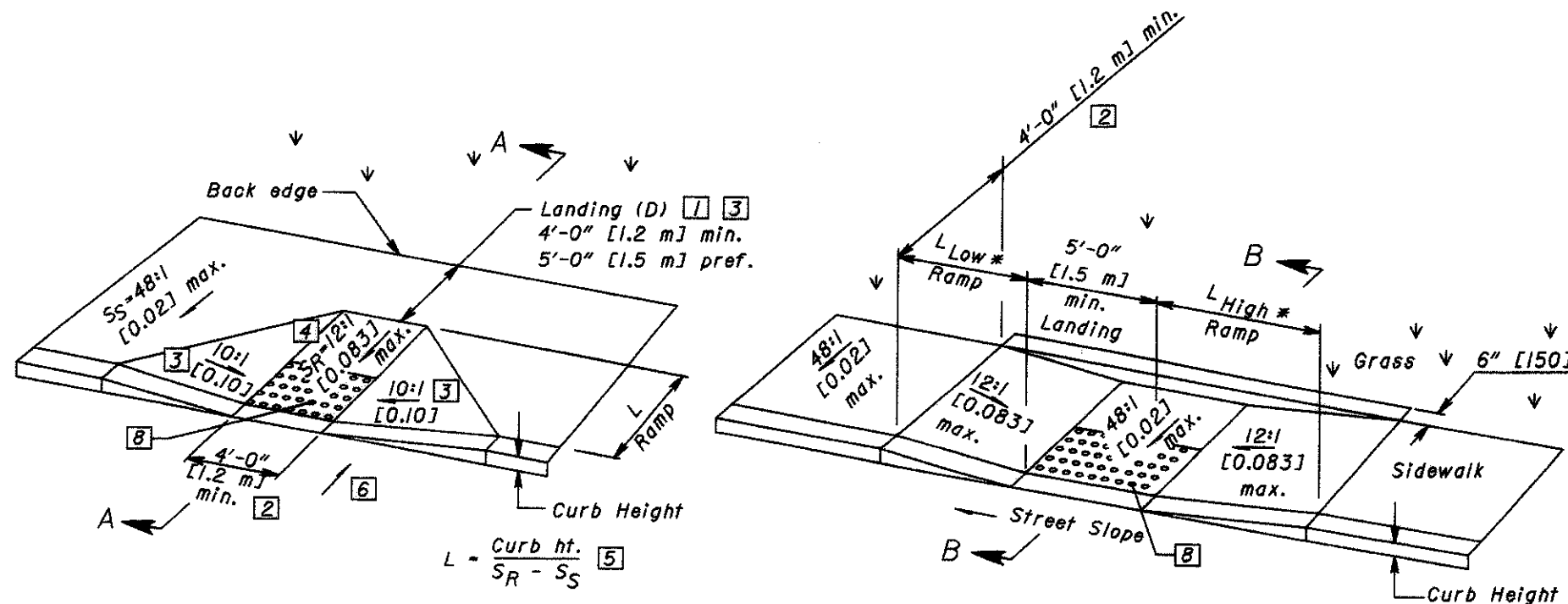
K062001.TRM 8-25-03

RPM LOCATION SUB-SUMMARY

KNO-62-0.00
LIC-62-18.48

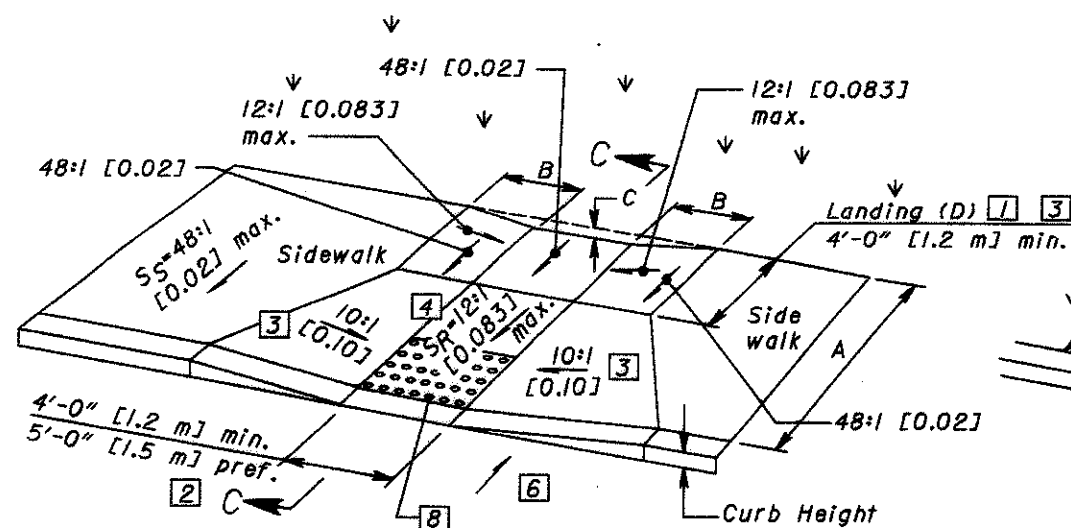
25
33

CALCULATED
LINE
CHECKED
JC



See Sht. 3/3 for SECTION A-A
PERPENDICULAR CURB RAMP DETAIL

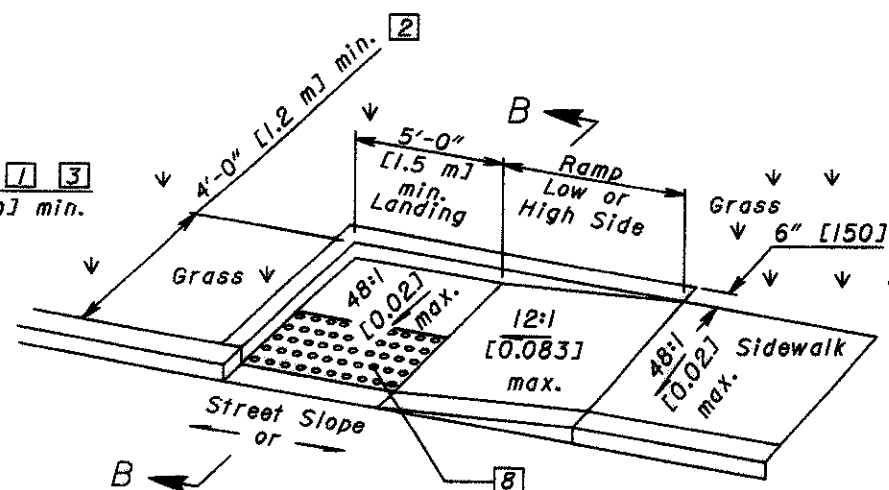
See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL
(DOUBLE)



See Sht. 3/3 for SECTION C-C
COMBINED CURB RAMP DETAIL

$$B = C / 0.083$$

$$C = [\text{Curb ht.} + A(S_S)] - [(A-D)S_R + D(0.02)]$$



See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL
(SINGLE)

Street Slope	Ramp Length @ 1"/ft [0.083]	
	LOW SIDE*	HIGH SIDE*
0.01	5'-5" [1.6 m]	6'-10" [2.1 m]
0.02	4'-10" [1.5 m]	7'-11" [2.4 m]
0.03	4'-5" [1.3 m]	9'-5" [2.9 m]
0.04	4'-1" [1.2 m]	11'-8" [3.6 m]
0.05	3'-9" [1.1 m]	15'-2" [4.6 m]

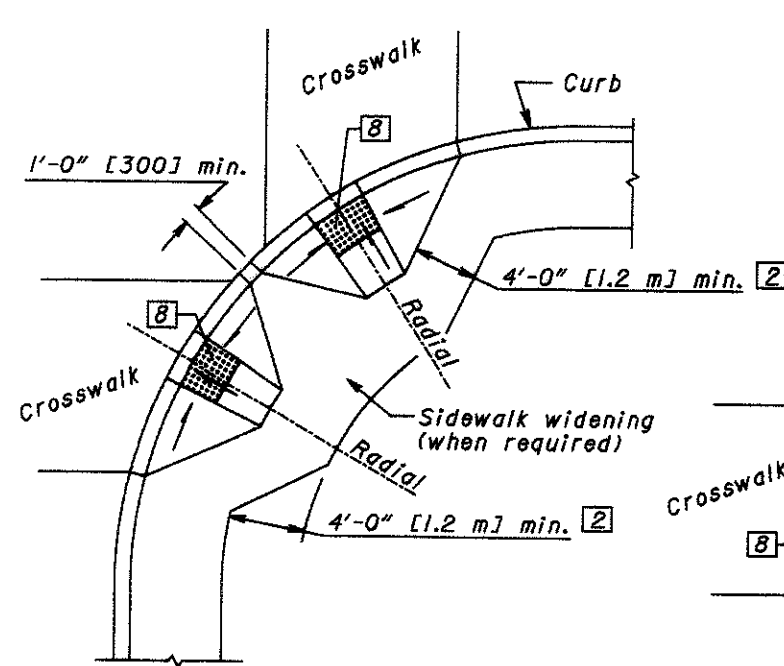
* Measured along the back of a 6" [150] high curb.

$$L_{HIGH} = \frac{\text{Curb ht.}}{0.083 - \text{Street Slope}} \quad [7]$$

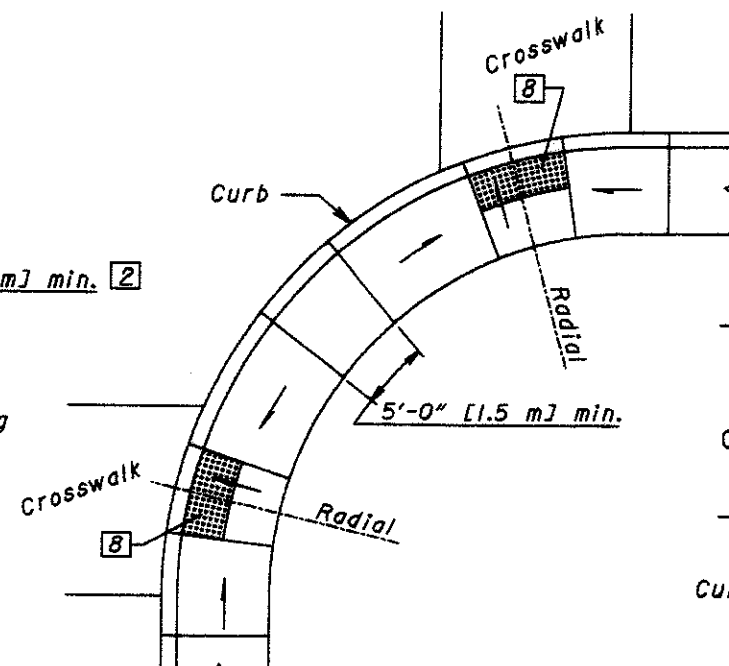
$$L_{LOW} = \frac{\text{Curb ht.}}{0.083 + \text{Street Slope}} \quad [7]$$

LEGEND

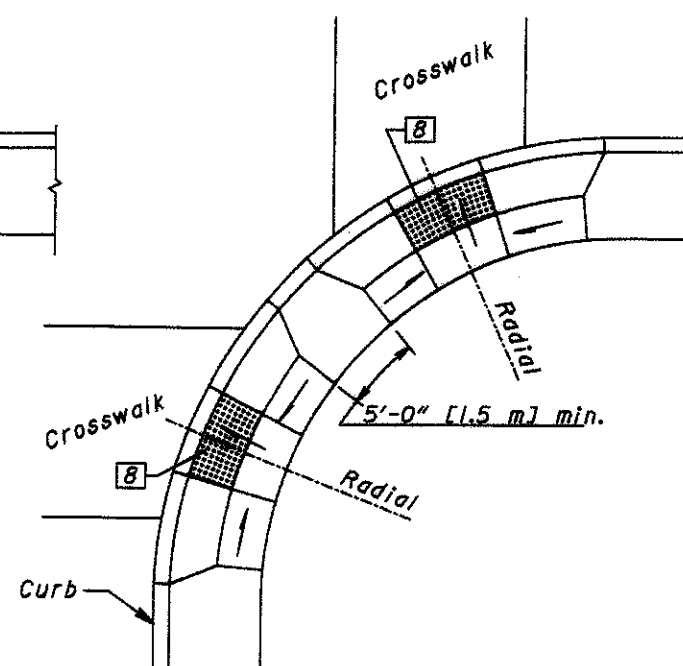
- May be reduced to 3'-0" [915] in existing sidewalks if the landing is unconstrained along the back edge.
- May be reduced to 3'-4" [1.02 m] in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- Where landing width (D) has been reduced to 3'-0" [915] the flared sides shall have a maximum slope of 12:1 [0.083].
Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheel chair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.
- The slope of the ramp toward the curb is preferred to be 12:1 [0.083] or flatter related to the horizontal, but the maximum slope shall be 12:1 [0.083] relative to the existing or proposed walk slope.
In existing sidewalks, where the maximum ramp slope (S_R) is not feasible, it may be reduced as follows:
A) 10:1 [0.10] for a max. rise of 6" [150],
B) 8:1 [0.125] for a max. rise of 3" [75],
C) 6:1 [0.167] over a max. run of 2'-0" [610] for historic areas where a flatter slope is not feasible.
- The minimum length of a perpendicular ramp is 6' [2.0 m] from the back of a 6" [150] curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.
- Gutter counter slopes at the foot of perpendicular curb ramps should not exceed 20:1 [0.05] over a distance of 2'-0" [610] from the curb.
- Dimensions derived by equation are nominal. Construct ramps to meet required slopes and existing conditions.
- Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" [610] from the back of the curb by the width of the ramp. See NOTES on sheet 3.



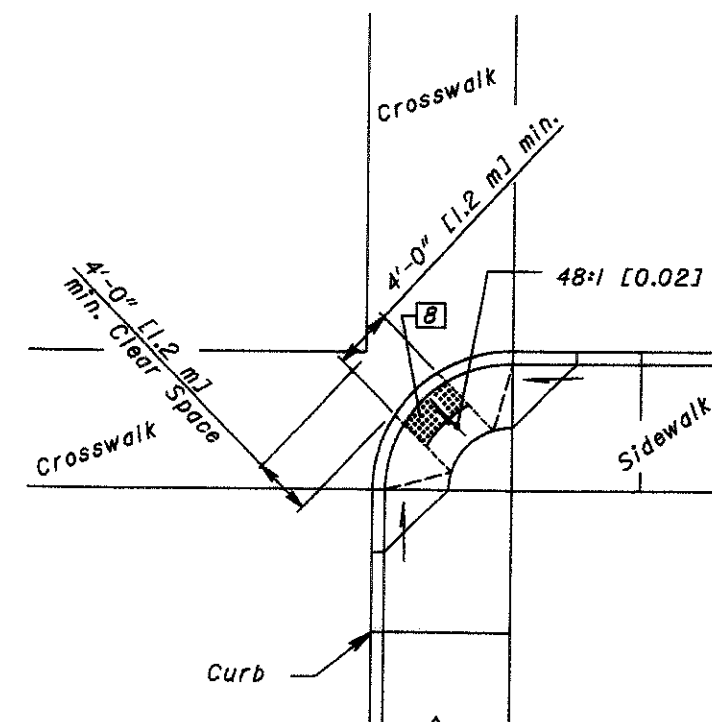
DESIGN A
PERPENDICULAR RAMP



DESIGN B
PARALLEL RAMP



DESIGN C
COMBINATION RAMP



DESIGN D
DIAGONAL RAMP

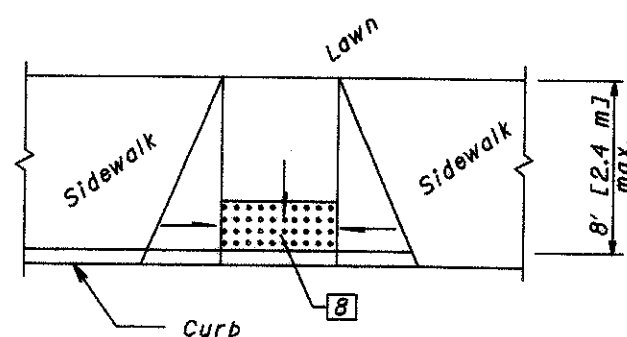
CORNER CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3
for additional requirements.)

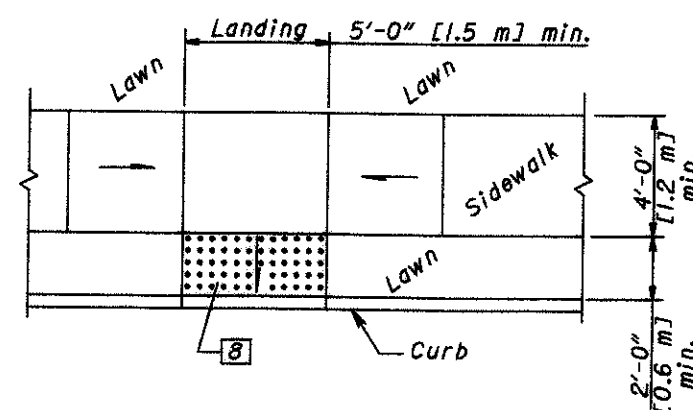
For LEGEND, See sheet 1.

Use in existing walks only and when
site constraints prohibit other designs.
The diagonal ramp may be perpendicular,
parallel or combination.

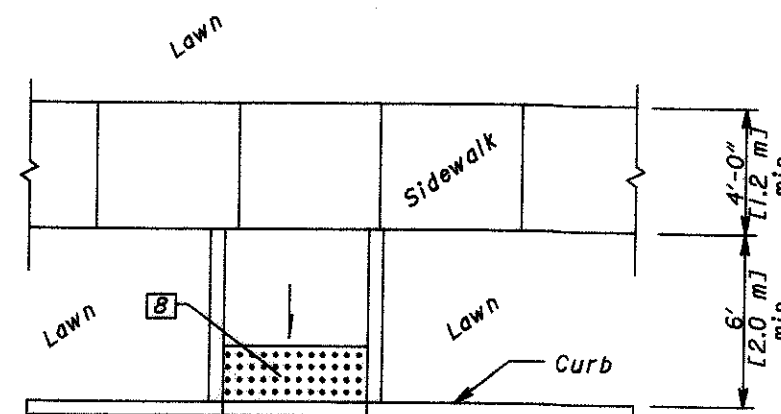
Avoid using where curb radii are
less than 20'-0" [6.0 m].



DESIGN E
PERPENDICULAR RAMP



DESIGN F
PARALLEL RAMP



DESIGN G
PERPENDICULAR RAMPS
w/o FLARES

MID BLOCK CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3
for additional requirements.)

NOTES

SURFACE TEXTURE: Texture of concrete surfaces shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

TRUNCATED DOMES: Install detectable warnings (truncated domes) for a distance of 24" [610] from the back of the curb for the entire width of the ramp opening as shown on details on Sheet 1.

Pavers will meet ASTM C 902 Class SX, Type I, or C 936, or C 1272 Type R.

Acceptable manufacturers and products are:

- 1) Whitacre-Greer Fireproofing Company,
1400 S. Mahoning Ave, Alliance, OH, 44601, (800) WG PAVER
ADA Paver, 4"x8"x2-1/4", Clear Red (Rustic) #30.

- 2) Hanover Architectural Products,
240 Bender Rd., Hanover, PA. 17331, (717) 637-0500
Detectable Warning Paver, 12"x12"x2", or 24"x24"x2",
Red or Quarry Red.

- 3) Endicott Clay Products,
PO Box 17, Fairbury, NE, 68352, (402) 729-5804
Handicap Detectable Warning Paver,
4"x8"x2-1/4", Red Blend.

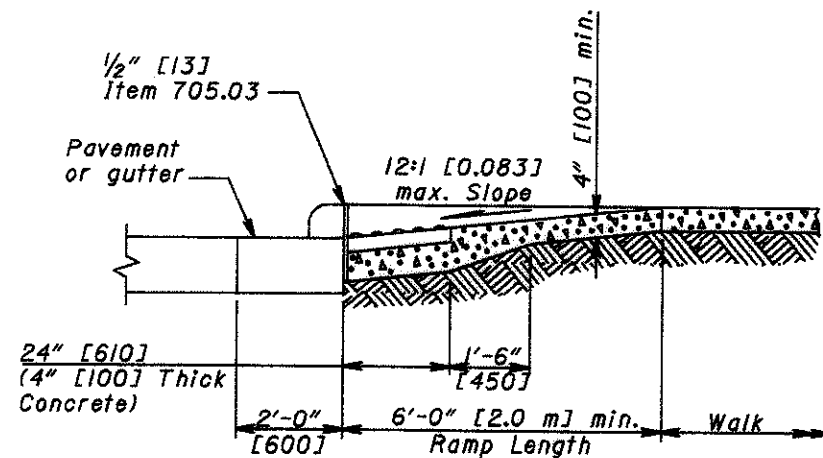
Pavers will be laid on top of a 4" [100] unreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum 1/2" [13] thick bed of latex modified cement mortar. Mortar joints to a width not greater than 5/32" [4] and not less than 1/16" [1.5]. Pavers shall not be directly touching each other unless they have spacing bars.

Mortared joints are to be flush with top surface and struck so as to give a smooth surface. Pavers shall be laid such that joints are level with adjoining joints so as to provide a smooth transition from brick to brick and brick to concrete surface.

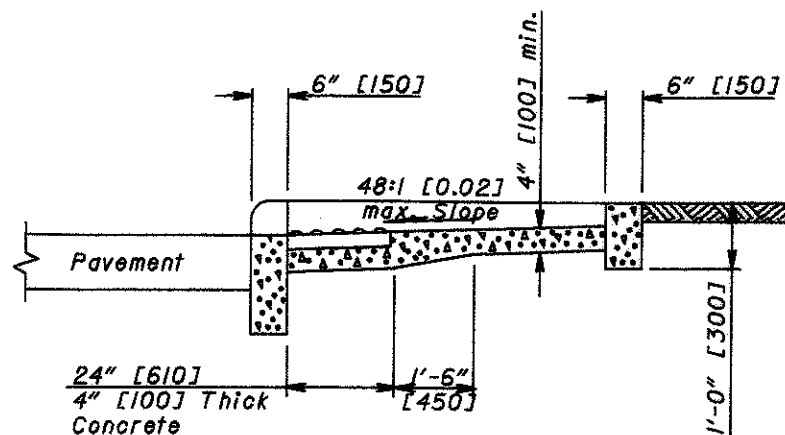
The surface of any two adjacent units should not differ by more than 1/8" [3] in height. Bricks shall be placed in a running bond pattern. Face of all brick shall be clean of cement and protected so as to avoid chipping during construction.

EXPANSION JOINTS: shall be provided in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. A 1/2" [13] Item 705.03 expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

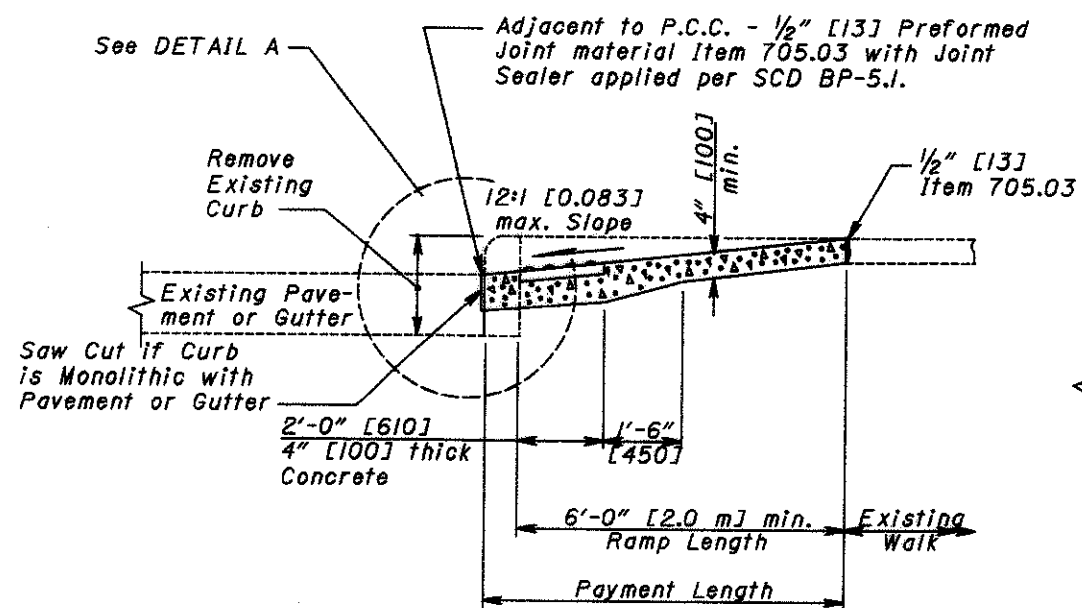
PAYMENT: Walk and curb, Items 608 and 609, shall be measured through the curb ramp area paid for under their respective Items. Item 608 - Curb Ramp, As Per Plan, Each constructed in new curb and walk shall include the cost of any additional materials and installation (including truncated domes), grading, forming and finishing. Item 608 - Curb Ramp, As Per Plan, Square Foot [Meter], constructed in existing curb and walk shall include the cost of furnishing and installing all materials (including truncated domes), grading, forming, and finishing of the curb and walk of the curb ramp. Removal of existing curb and walk shall be paid for under Item 202.



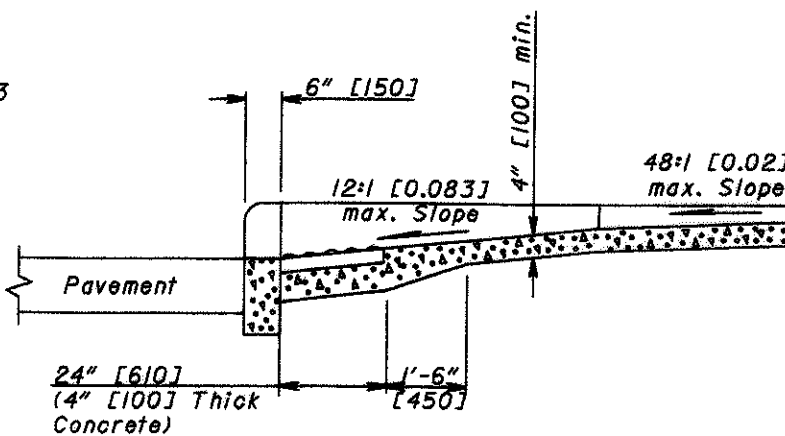
SECTION A-A
NORMAL DETAIL
See Sheet 1 of 3.
(Gutter shown)



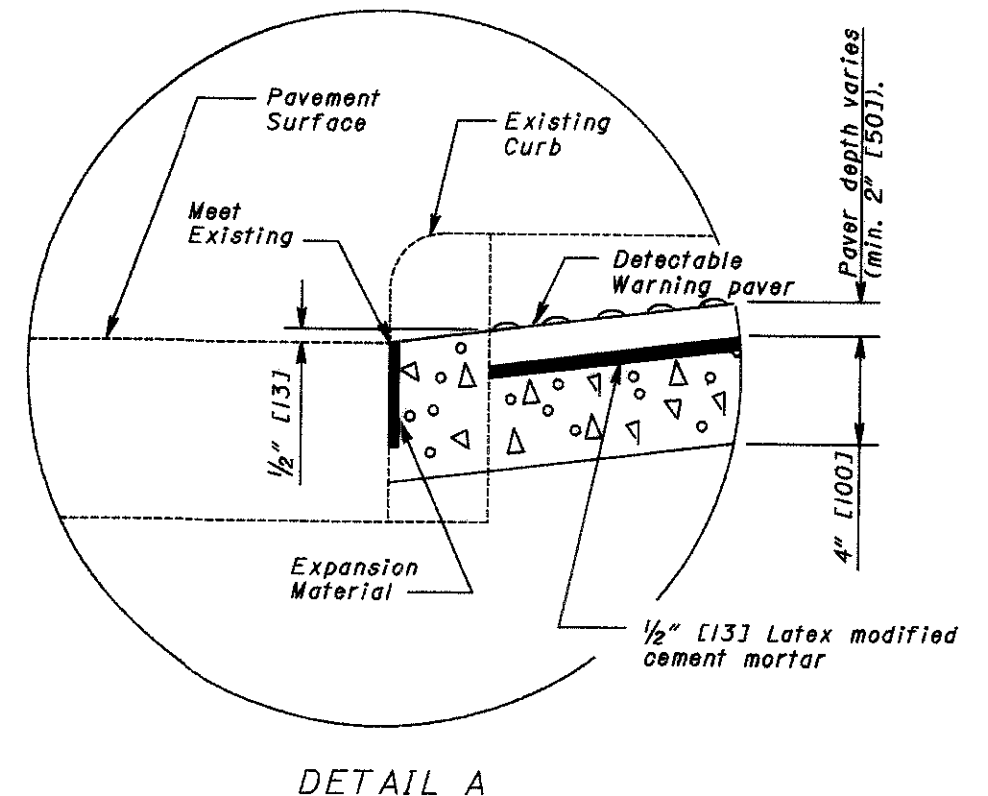
SECTION B-B
See Sheet 1 of 3.



SECTION A-A
EXISTING WALK DETAIL
See Sheet 1 of 3.



SECTION C-C
See Sheet 1 of 3.



DETAIL A

LOCATION SUB-SUMMARY

31 33	KN0-62-0-00 LIC-62-18.48	LOCATION SUB-SUMMARY	CALCULATED LME CHECKED JC	

GENERAL SUMMARY