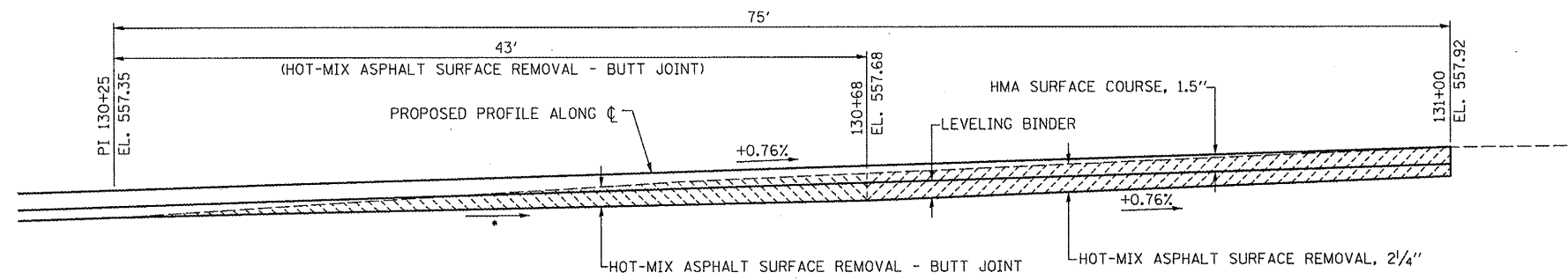


NOTES:

- A. CONTRACTOR SHALL PERFORM MILLING, IF REQUIRED AT A PARTICULAR SECTION, PRIOR TO SAWCUTTING EDGES OF PAVEMENT AND REMOVALS TO AVOID AN ELEVATION DIFFERENCE FOR MACHINE TREADS. SEE REMOVAL SCHEDULE.
- B. CONTRACTOR SHALL UTILIZE LOCAL GRADE CONTROL IN ORDER TO ESTABLISH DEPTH OF EXCAVATION FOR SUB-BASE GRANULAR MATERIAL AND HORIZONTAL CONTROLS TO ESTABLISH WIDTHS OF EXCAVATION AND PAVING.
- C. HMA WIDENING SHALL BE VARIABLE THICKNESS IN ORDER TO REMAIN FLUSH WITH MILLED SURFACES. QUANTITIES HEREIN REFLECT THIS.
- D. LEVELING BINDER'S DEPTH CONTROL SHALL BE BASED ON THE LOCAL GRADE CONTROLS AT EDGE OF PAVEMENT (EOP) OR AT CENTERLINE.

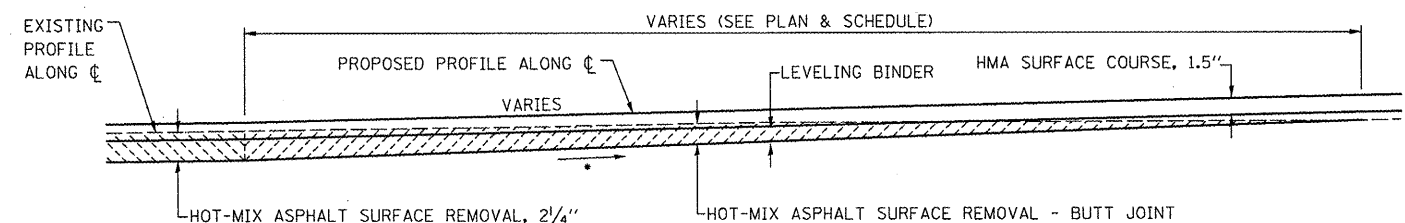
LEGEND

- ① REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- ② PAVEMENT REMOVAL
- ③ HOT-MIX ASPHALT SURFACE REMOVAL, 2.25" OR - BUTT JOINT
- ④ TOPSOIL REMOVAL, 6" (PART OF PAY ITEM. SEE EARTHWORK SCHEDULE)
- ⑤ EARTH EXCAVATION
- ⑥ EMBANKMENT (NOT A PAY ITEM. EARTH EXCAVATION OR FURNISHED EXCAVATION MATERIAL)
- ⑦ EMBANKMENT (NOT A PAY ITEM. TOPSOIL, EARTH EXCAV., OR FURNISHED EXCAVATION MATERIAL)
- ⑧ SUB-BASE GRANULAR MATERIAL TYPE C, 12"
- ⑨ BITUMINOUS MATERIALS (PRIME COAT)
- ⑩ AGGREGATE (PRIME COAT)
- ⑪ HOT-MIX ASPHALT BASE COURSE WIDENING
- ⑫ HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70
- ⑬ MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS
- ⑭ STRIP REFLECTIVE CRACK CONTROL TREATMENT
- ⑮ LEVELING BINDER (MACHINE METHOD), N70
- ⑯ HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70 (1.5")
- ⑰ SUB-BASE GRANULAR MATERIAL, TYPE C
- ⑱ HOT-MIX ASPHALT SHOULDERS, 8"
- ⑲ AGGREGATE SHOULDERS, TYPE B (8")
- ⑳ STONE DUMPED RIPRAP, CLASS A3 & FILTER FABRIC
- ㉑ TOPSOIL PLACEMENT, 4" (PART OF PAY ITEM. SEE EARTHWORK SCHEDULE)



BUTT JOINT DETAIL STA. 130+25 TO STA. 130+68
(NOT TO SCALE)

• BASED ON A 240:1 (0.416%) RATE OF CHANGE FROM EXISTING SURFACE



TYPICAL BUTT JOINT DETAIL
(NOT TO SCALE)

• BASED ON A 240:1 (0.416%) RATE OF CHANGE FROM EXISTING SURFACE

MIXTURE COMPOSITION TABLE

MIXTURE USE:	SURFACE	BINDER	LEVELING BINDER
APPLICATION:	HMA SURFACE COURSE, MIX "D", N70	HMA BINDER COURSE, IL-19.0, N70	LEVELING BINDER (MACHINE METHOD), N70
AIR VOIDS / Ndes:	4.0% AT Ndes 70	4.0% AT Ndes 70	4.0% AT Ndes 70
PG BINDER GRADE:	PG 64-22	PG 64-22	PG 64-22
MIXTURE COMPOSITION:	IL-9.5	IL-19.0	IL-9.5
FRICTION AGGREGATE:	MIXTURE D	-	-
RAP% (MAX.):	10%	15%	10%
MIXTURE WEIGHT:	112 LBS./SQ. YD./INCH	112 LBS./SQ. YD./INCH	112 LBS./SQ. YD./INCH

MIXTURE USE:	BASE COURSE WIDENING	SHOULDERS
APPLICATION:	HMA BASE COURSE WIDENING	HMA SHOULDERS, 8"
AIR VOIDS / Ndes:	4.0% AT Ndes 70	2.0% AT Ndes 30
PG BINDER GRADE:	PG 64-22	PG 58-22
MIXTURE COMPOSITION:	IL-19.0	-
FRICTION AGGREGATE:	-	-
RAP% (MAX.):	15%	30%
MIXTURE WEIGHT:	112 LBS./SQ. YD./INCH	112 LBS./SQ. YD./INCH

PAVEMENT DESIGN INFORMATION

ROADWAY:	S. FOURTH ST.	ROADWAY:	S. FOURTH ST.	ROADWAY:	SIDE STREETS
FEATURE:	WIDENING	FEATURE:	MILL/OVERLAY	FEATURE:	NEW CONSTRUCTION
IDOT BLRM CHAPTER 37 METHOD:	FULL-DEPTH, MECHANISTIC	IDOT BLRM CHAPTER 37 METHOD:	MODIFIED-AASHTO OL'S ON EXIST. RIGID COMPOSITE	IDOT BLRM CHAPTER 37 METHOD:	FULL-DEPTH, MECHANISTIC
DESIGN LIFE:	20 YEARS	DESIGN LIFE:	20 YEARS	DESIGN LIFE:	20 YEARS
MID-LIFE YEAR:	2020	MID-LIFE YEAR:	2020	MID-LIFE YEAR:	2020
ADT, MID-LIFE:	5,385	ADT, MID-LIFE:	5,385	ADT, MID-LIFE:	EST. 1,800
1/2PV IN DESIGN LANE:	88	1/2PV IN DESIGN LANE:	88	1/2PV IN DESIGN LANE:	88
1/2SU IN DESIGN LANE:	7	1/2SU IN DESIGN LANE:	7	1/2SU IN DESIGN LANE:	7
1/2MU IN DESIGN LANE:	5	1/2MU IN DESIGN LANE:	5	1/2MU IN DESIGN LANE:	5
CLASS:	II	CLASS:	II	CLASS:	II
ACTUAL TRAFFIC FACTOR:	1.47	TYPE OF OVERLAY:	FUNCTIONAL	ACTUAL TRAFFIC FACTOR:	1.47
MIN. TRAFFIC FACTOR:	N/A	ACTUAL TRAFFIC FACTOR:	2.05	MIN. TRAFFIC FACTOR:	N/A
SSR:	POOR	MIN. TRAFFIC FACTOR:	N/A	SSR:	POOR
IMPROVED SUBGRADE:	12" MIN.	SUBGRADE/IBV:	A-6, IBV=3	IMPROVED SUBGRADE:	12" MIN.
PG BINDER:	64-22	FIG. 37-8M SNC:	3.425	PG BINDER:	64-22
HMA MIXT. TEMP.:	82° F	EQN. CHECKED, 37-8.08(f):	37-8(3)	HMA MIXT. TEMP.:	82° F
HMA MICROSTRAIN:	9.5	Dc (in):	9	HMA MICROSTRAIN:	9.5
HMA E (ksi):	500	De (in):	N/A	HMA E (ksi):	500
† (inches):	11.25	Do (in):	2.71	† (inches):	8
NOTES:	UTILIZE AGGREGATE VS. LIME MODIF. FOR IMPROVED SUBGRADE - POSSIBLE INABILITY TO GET SCARIFICATION EQUIP. WITHIN NARROW WIDTH AND TO SPEED PLACEMENT. SHOULDERS TO BE 8" HMA DUE TO USE BY HEAVY TRUCKS & AGRICULTURAL VEHICLES.	NOTES:	AS SIGNIFICANT STRUCTURAL DEFICIENCIES ARE NOT EVIDENT (EXCEPT AT EDGES IN SOME SECTIONS AND THESE WILL BE REMOVED), THIS IS A FUNCTIONAL OVERLAY NOT REQUIRING A STRUCTURAL DESIGN. A CHECK OF ADEQUATE HMA THICKNESS USING EQN. 37-8(3) WAS MADE, HOWEVER, TO COMPARE WITH EXISTING 2"-4" HMA OVER 9" PCC (RESULTS ABOVE).	NOTES:	UTILIZE AGGREGATE VS. LIME MODIF. FOR IMPROVED SUBGRADE AS THIS IS WHAT IS PROPOSED ON S. FOURTH ST. PUBLISHED (BOWMAN'S 2006 ADT=325) NOT COUNTED ADT'S UTILIZED. ESTIMATED THAT DEMOULIN AND MONROE'S ADT LARGER THAN OTHER SIDE STREETS DUE TO FACTORY. USED THIS FOR ALL SIDE STREETS ALONG S. FOURTH ST.