

**HOT-MIX ASPHALT AND HOT-MIX ASPHALT BASE COURSE**

HMA SURFACE COURSE, SUPERPAVE, MIX "D", N50 SHALL NOT BE PLACED UNTIL ALL EARTH EXCAVATION, TOPSOIL PLACEMENT, AGGREGATE BASE COURSE, AND HMA BASE COURSE HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.

BASE COURSE SHALL NOT BE PLACED ADJACENT TO CURB AND GUTTER UNTIL THE CURB AND GUTTER HAS BEEN BACKFILLED TO THE SATISFACTION OF THE ENGINEER.

THE UNIT PRICES FOR ITEMS USED TO CONSTRUCT TEMPORARY PAVEMENT OR ACCESS ROADS SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIAL REQUIRED TO PLACE, REMOVE, AND DISPOSE OF THE TEMPORARY PAVEMENT OR ACCESS ROAD.

**TEMPORARY FENCE**

TEMPORARY FENCE LOCATIONS (FOR MAINTENANCE OF TRAFFIC) HAVE BEEN SUMMARIZED IN THE TEMPORARY FENCE SPECIAL PROVISION. THE ENGINEER MAY ADJUST TEMPORARY FENCE LOCATIONS AS NEEDED.

**LANDSCAPE PLANTING**

CONTRACTOR SHALL USE THE LANDSCAPE PLANTING DETAIL INCLUDED IN THE PLAN SET WHEN PERFORMING LANDSCAPE PLANTING. TOPSOIL FURNISH AND PLACE, 24" AND COMPOST FURNISH AND PLACE, 2" IS REQUIRED TO BE USED AS SHOWN IN THE DETAIL AND IS CONSIDERED INCIDENTAL TO THE ITEM BEING PLANTED

**STAKING**

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT SOME QUANTITIES ARE GIVEN IN BOTH SUMMARY FORM AND ON THE PLAN SHEETS. CARE SHALL BE TAKEN TO AVOID DUPLICATION OF QUANTITIES.

**LIGHTING**

LUMINAIRES, LIGHT POLES, COMBINATION POLES, MAST ARMS AND LIGHTING RELATED MATERIALS WILL BE PROVIDED TO THE CONTRACTOR BY THE CITY OF WHEATON AND INSTALLED AT THE LOCATIONS AS DETAILED IN THE PLANS.

**GEOTECHNICAL REPORT**

IN ANY EVENT, IN ORDER TO HELP MINIMIZE THE AMOUNT OF POTENTIAL SETTLEMENT IT IS RECOMMENDED THAT ALL OF THE FILL USED TO CONSTRUCT THE ROADWAY BE COMPACTED TO A MINIMUM OF 95 PERCENT BASED ON LABORATORY DESIGNATION AASHTO T-99. IN AREAS OUTSIDE OF THE REINFORCED ZONE OF THE MSE WALLS WHERE IN EXCESS OF 10 FEET OF FILL IS EXPECTED CONSIDERATION SHOULD BE GIVEN TO USE GRANULAR FILL BELOW A DEPTH OF 10 FEET FROM FINISHED GRADE. IN ADDITION, IN ORDER TO HELP MINIMIZE THE BUILD-UP OF HYDROSTATIC FORCES NEXT TO THE RETAINING WALLS IT IS IMPERATIVE THAT A FREE DRAINING LAYER OF CRUSHED STONE BE PROVIDED NEXT TO THE PROPOSED RETAINING WALLS.

THE FILL SHOULD BE PLACED IN 8 TO 10-INCH MAXIMUM THICKNESS LIFTS. ITS MOISTURE CONTENT SHOULD BE WITHIN 3 PERCENT OF THE OPTIMUM AS DETERMINED BY LABORATORY DESIGNATION AASHTO T-99. IF THE SOIL IS TOO DRY IT WILL HAVE AN APPARENT STABILITY WHICH WILL BE LOST IF IT LATER BECOMES WET. IF THE SOIL IS TOO WET PROPER COMPACTION CANNOT BE ACHIEVED.

PRIOR TO THE PLACEMENT OF THE ENGINEERED FILL, IT IS RECOMMENDED THAT ALL POTENTIALLY UNSTABLE SOILS BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED WITH PGES AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY PGES NOT NEEDED AT THE TIME OF CONSTRUCTION SHOULD BE DELETED FROM THE CONTRACT WITH NO EXTRA COMPENSATION TO THE CONTRACTOR.

NEW FILL SHOULD CONSIST OF APPROVED GRANULAR MATERIALS OR INORGANIC SILTY CLAYS OF MEDIUM PLASTICITY. IT IS RECOMMENDED THAT COMPACTION BE TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST (AASHTO T-99). THE FILL SHOULD BE PLACED IN MAXIMUM 8 TO 10-INCH LIFTS (LOOSE MEASURE) FOR EITHER COHESIVE OR GRANULAR SOILS. EACH LIFT TO BE COMPACTED TO THE SPECIFIED DENSITY PRIOR TO THE PLACEMENT OF ADDITIONAL FILL.

MOISTURE CONTROL IS IMPORTANT IN THE COMPACTION OF MOST SOIL TYPES, AND IT IS RECOMMENDED THAT THE WATER CONTENT OF NEW FILL BE WITHIN 3 PERCENT OF OPTIMUM MOISTURE AS ESTABLISHED BY ITS LABORATORY COMPACTION CURVE. IF THE SOIL IS COMPACTED TOO DRY, IT WILL HAVE AN APPARENT STABILITY WHICH WILL BE LOST IF IT LATER BECOMES SATURATED. IF THE SOIL IS TOO WET, THE CONTRACTOR WILL NOT BE ABLE TO ACHIEVE PROPER COMPACTION.

**ROADWAY EXCAVATION**

ALL EXISTING CULVERTS, STORM SEWERS, OR DRAINAGE STRUCTURES MARKED FOR REMOVAL ON THE PLANS OR DESIGNATED IN THE FIELD BY THE ENGINEER TO BE REMOVED SHALL BE REMOVED AND ANY EXCAVATION SHALL BE BACKFILLED WITH A GRANULAR MATERIAL MEETING THE SPECIFICATIONS FOR FA-1 OR FA-2. THE COST OF ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES FOR STORM SEWER OR PIPE CULVERT.

THE CONTRACTOR SHALL NOT CROSS COMPLETED BASE COURSE OR EXISTING PAVEMENT, NOT SCHEDULED TO BE REMOVED, WITH LOADED SCRAPERS OR TRACK EQUIPMENT.

ALL EXISTING DOMESTIC BUFFALO BOXES ARE TO BE ADJUSTED BY THE CONTRACTOR. THE COST OF THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "EARTH EXCAVATION".

A SHRINKAGE FACTOR OF 15% HAS BEEN USED. PERMANENT REMOVAL OF WASTE IS INCLUDED IN THE CONTRACT UNIT PRICE FOR "EARTH EXCAVATION".

PLANTER REMOVAL IS INCLUDED IN THE CONTRACT UNIT PRICE FOR "EARTH EXCAVATION".

REFER TO NOTES ON TYPICAL SECTION SHEETS FOR SLOPE BENCHING REQUIREMENTS. SLOPE BENCHING WILL BE CONSIDERED INCIDENTAL TO "EARTH EXCAVATION" WHICH WILL INCLUDE ALL LABOR AND MATERIALS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

A MAJORITY OF THE SOILS TO BE EXCAVATED FOR THE NEW MSE WALLS WILL CONSIST OF BROWN OR GRAY CLAY HAVING MODERATE MOISTURE CONTENTS AND STRENGTH VALUES INDICATIVE OF A TOUGH TO HARD CONDITION. THESE MATERIALS ARE SUITABLE AS A BORROW SOURCE FOR NEW EARTH EMBANKMENT OVER VARIOUS AREAS OF THE PROJECT. BURIED LAYERS OF BLACK ORGANIC TOPSOIL WAS ENCOUNTERED IN SEVERAL BORINGS AND SHOULD BE CONSIDERED AS AN UNSUITABLE MATERIAL FOR NEW ROADWAY EMBANKMENT. INTERMEDIATE "LOAMY" TYPE SOILS WHICH WERE GIVEN A CLASSIFICATION OF A-4 ARE CONSIDERED FROST SUSCEPTIBLE AND SHOULD BE RESTRICTED FROM THE TOP 2.0 FEET OF EMBANKMENT. CLAY WITH MODERATELY HIGH MOISTURE CONTENTS (23-26%) REQUIRES MOISTURE REDUCTION BY 3 TO 6 PERCENTAGE POINTS TO PROPERLY CONDITION THESE SOILS FOR EARTH EMBANKMENT. CONDITIONING THE SOIL FOR EARTH EMBANKMENT SHALL BE INCIDENTAL TO EARTH EXCAVATION.

THE COST FOR EXCAVATION AND EARTHWORK FOR THE JACKING AND RECEIVING PITS IS INCLUDED IN THE CONTRACT UNIT PRICES FOR "EARTH EXCAVATION".

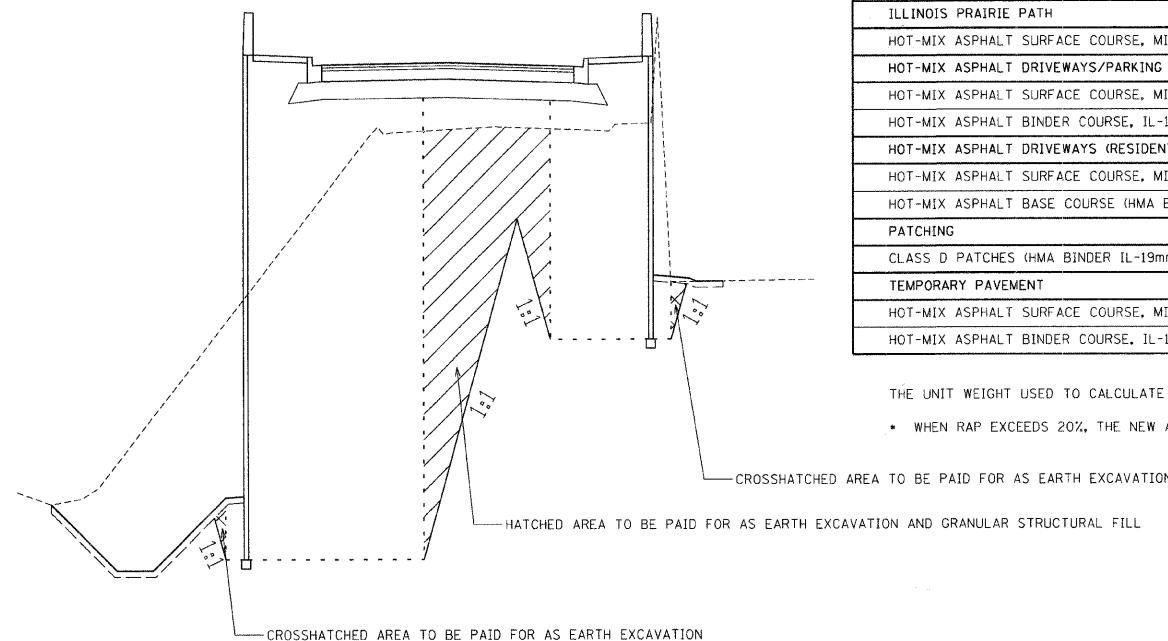
ROAD	UNADJUSTED EARTH EXCAVATION (CU YD)	ADJUSTED EARTH EXCAVATION (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE (CU YD)
MANCHESTER ROAD	21346	18144	1034	17110
FRONT STREET	1604	1364	3103	-1739
WESTERN AVENUE	571	486	2370	-1885
GABLES BOULEVARD	363	308	222	86
ILLINOIS PRAIRIE PATH	1061	902	588	314
WESLEY STREET	1327	1128	3657	-2529
TOTAL	26308	22332	10974	11358

THE ADJUSTED EARTH EXCAVATION VALUES UTILIZE A SHRINKAGE FACTOR OF 15%

MIXTURE TYPE	AC TYPE	AIR VOIDS	THICKNESS
<b>FULL DEPTH PAVEMENT</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	PG 64-22	4% @ 70 Gyr.	2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	PG 64-22 *	4% @ 70 Gyr.	9"
<b>ILLINOIS PRAIRIE PATH</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	PG 64-22	4% @ 50 Gyr.	2"
HOT-MIX ASPHALT DRIVEWAYS/PARKING LOT (COMMERCIAL)			
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	PG 64-22	4% @ 50 Gyr.	2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	PG 64-22 *	4% @ 50 Gyr.	2 1/4"
HOT-MIX ASPHALT DRIVEWAYS (RESIDENTIAL)			
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	PG 64-22	4% @ 50 Gyr.	2"
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19mm)	PG 64-22 *	4% @ 50 Gyr.	4"
<b>PATCHING</b>			
CLASS D PATCHES (HMA BINDER IL-19mm)	PG 64-22 *	4% @ 70 Gyr.	9"-12"
<b>TEMPORARY PAVEMENT</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	PG 64-22 *	4% @ 50 Gyr.	1 1/2"
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	PG 64-22 *	4% @ 50 Gyr.	2 1/4"

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SO YD/IN

\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22



**ADDITIONAL EARTHWORK DETAIL**

ADDITIONAL EARTHWORK IS REQUIRED TO CONSTRUCT MSE WALLS WHICH ARE NOT DISPLAYED IN THE CROSS SECTION SHEETS. THIS ADDITIONAL QUANTITY IS DETAILED ABOVE AND IS AS FOLLOWS:  
 EARTH EXCAVATION - 3856 CU YD  
 GRANULAR FILL - 3488 CU YD  
 THESE QUANTITIES HAVE BEEN INCLUDED IN THE SCHEDULE AND SUMMARY OF QUANTITIES

REVISIONS	
NAME	DATE

CITY OF WHEATON  
 MANCHESTER ROAD / WESLEY STREET  
 OVER UNION PACIFIC RAILROAD  
 GENERAL NOTES

SCALE: VERT. N.T.S. DRAWN BY DWW  
 HORIZ. N.T.S. CHECKED BY JLC  
 DATE 6/4/2008