# GENERAL NOTES

# CALC. BY R.I.P. DATE 5-94 CHKD. BY D.J.W. DATE 5-94

LAK - 2 - 4.51

OHIO 4
FHWA 5
REGION

#### GENERAL

#### ROUNDING OF CORNERS SHOWN ON CROSS-SECTIONS

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS—SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

# UTILITIES

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

CLEVELAND ELECTRIC ILLUMINATING CO. P.O. BOX 5000 55 PUBLIC SQUARE CLEVELAND, OHIO 44101 PHONE: (216) 479-3452

LAKE COUNTY DEPARTMENT OF UTILITIES ADMINISTATION BUILDING 105 MAIN STREET PAINESVILLE, OHIO 44077 PHONE: (440) 357-2645

OSAIR INC. 8649 EAST AVENUE MENTOR, OHIO 44060 ATTN: JIM BUCHANAN PHONE: (440) 951-9633 CITY OF WILLOUGHBY ONE PUBLIC SQUARE WILLOUGHBY, OHIO 44094 PHONE: (440) 951-2800

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

#### 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.

#### ELEVATION DATUM

ALL ELEVATIONS ARE PROJECT RELATIVE

### WORK LIMITS

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

### ROADWAY

# CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE WORK LIMITS, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201 CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN SPECIFICATION 201 SHALL BE FOLLOWED AND ALL COSTS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 CLEARING AND GRUBBING.

### GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE, GRADE AND REINSTALL GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED ON THE PROJECT UNTIL SUCH TIME THAT THE ENGINEER IS ASSURED OF SAID COMPLIANCE.

# LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN ON THE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

#### PAVING UNDER GUARDRAIL

THE GUARDRAIL TO BE PAVED UNDER SHALL BE LIMITED TO THE NEW GUARDRAIL LOCATIONS AS SHOWN ON THE PLAN AND PROFILE SHEETS. THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING 203, LINEAR GRADING, AND PAVING UNDER THE GUARDRAIL USING 448, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE I, PG 64-22 (UNDER GUARDRAIL). ITEM 203, LINEAR GRADING. SHALL CONSIST OF EXCAVATING TOPSOIL AND PLACING GRANULAR MATERIAL AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 203.05.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTIBLE GRANULAR MATERIAL CONFORMING TO 203.02 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203, LINEAR GRADING.

2 STA OF ITEM 203-LINEAR GRADING HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A: 1) SET GUARDRAIL POSTS

2) PLACE ITEM 448

METHOD B: 1)

1) PLACE ITEM 448
2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)

) SET GUARDRAIL POSTS

PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE A BITUMINOUS CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG 64-22 (UNDER GUARDRAIL).

# <u>PAVEMENT</u>

ITEM 611 REINFORCED CONCRETE APPROACH SLAB (T=15), AS PER PLAN

THE REINFORCING STEEL FOR THE APPROACH SLABS OF THESE STRUCTURES SHALL BE EPOXY COATED IN ACCORDANCE WITH ITEM 509.

### CURBING ON APPROACH SLABS

THE SHAPE OF THE CURBING ON APPROACH SLABS SHALL BE TRANSMITTED FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE, WITHIN THE LIMITS OF THE APPROACH SLABS. MATERIALS, LABOR AND INSTALLATION SHALL BE INCLUDED FOR PAYMENT IN ITEM 611, REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN.

# SUBBASE/SUBGRADE FAILURES

IF, AFTER FULL DEPTH REMOVAL OF THE EXISTING PAVEMENT THE ENGINEER DETERMINES THAT THE SUBBASE OR SUBGRADE HAS FAILED OR IS PUMPING, HE SHALL DIRECT THE CONTRACTOR TO EXCAVATE THE UNSUITABLE MATERIAL AND REPLACE IT WITH ITEM 304 - AGGREGATE BASE GRADING A, AS NECESSARY.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED FORWARD TO THE GENERAL SUMMARY

TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 203-EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION 10 CU. YDS.

ITEM 203-EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION
ITEM 304-AGGREGATE BASE, GRADING A

10 CU. YDS.

### ITEM 407 - TACK COAT

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

#### ITEM 407 - TACK COAT FOR INTEMEDIATE 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 OF TACK COAT FOR INTERMEDIATE COURSE FOR ESTIMATING PURPOSES ONLY.

#### EROSION CONTROL

#### ITEM 659-SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR ITEM 659, SEEDING AND MULCHING, ARE BASED ON THESE LIMITS.

### WATERING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS PER 659.09:

659 WATER

1 M-GAL.

#### TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207 STRAW OR HAY BALES 207 TEMPORARY SEEDING AND MULCHING	100 EACH 131 SQ.YD
207 FILTER FABRIC FENCE	200 LIN.FT 33 SQ.YD
659 REPAIR SEEDING AND MULCHING 659 WATER	1 M-GA
659 COMMERCIAL FERTILIZER	0.01 TONS

THESE QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY.

### EROSION CONTROL

ITEM 659 IS PROVIDED IN THE PLANS FOR EROSION CONTROL. TURF OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE 659. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THIS ITEM SHALL MEET REQUIREMENT OF 108.04.

# DRAINAGE

# SANITARY FLOW INTO HIGHWAY DRAINAGE SYSTEMS

PLAN MAKES NO PROVISION FOR CONNECTING, NOR SHALL THE ENGINEER OR CONTRACTOR CONNECT, ANY EXISTING OR NEW DRAINAGE INTO THE HIGHWAY DRAINAGE SYSTEM WHEN SUCH DRAINS CARRY FLOW FROM ANY PLUMBING FIXTURES, INCLUDING FLOOR DRAINS AND SINK DRAINS, OR DRAINS FROM LIVESTOCK LOTS OR BARNS.

EXISTING PIPE CARRYING FLOW, WHICH COMES FROM THE CATEGORY OUTLINED ABOVE, SHALL BE PLUGGED WITH CLASS C CONCRETE AT THE RIGHT-OF-WAY LINE. PAYMENT FOR SAID PLUGGING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION.