## FOUNDATION AGGREGATE ILLINOIS DEPARTMENT OF TRANSPORTATION (CA8 OR CA9)

### SCOPE

1.1 THIS SPECIFICATION COVERS FOUNDATION AGGREGATE CONSISTING OF CRUSHED STONE OR GRAVEL FOR USE IN STABILIZING OR SUSTAINING POLES AND STRUCTURES.

AGGREGATE SUPPLIED UNDER THE SPECIFICATION SHALL COMPLY WITH ILLINOIS DEPARTMENT OF TRANSPORTATION SPECIFICATION, FOR GRADE CAB (OR GRADE CA9 COARSE AGGREGATE) LATEST REVISION.

3.1 <u>GRADATION</u> — THE AGGREGATE SHALL BE MIXED UNIFORMLY, SHALL BE WELL GRADED FROM THE MAXIMUM TO MINIMUM SIZE BETWEEN THE LIMITS SPECIFIED, AND WHEN TESTED WITH LABORATORY SIEVES (SQUARE OPENINGS), SHALL COMPORM TO THE GRADATION GIVEN IN THE FOLLOWING TABLE, WHICH SHOWS THE TOTAL PERCENTAGE PASSING EACH SIEVE.

	PERCEN	TAGE BY	WEIGHT	PASSIN	G SIEVE
	1"	1/2"	#4	#16	#200
CA8	97±3	55±10	10±5	3±3	
CA9	97±3	60±15	30±15	10±10	6±6

- 3.2 <u>DELETERIOUS SUBSTANCES</u> THE AGGREGATE SHALL CONSIST OF TOUGH, DURABLE PARTICLES, REASONABLY FREE FROM AN EXCESS OF SOFT AND UNSOUND MATERIAL AND OTHER OBJECTIONABLE MAITER.
- 3.3 OTHER PROPERTIES AGGREGATE SUPPLIED UNDER THIS SPECIFICATION SHALL BE CAPABLE OF FASSING THE REQUIREMENTS FOR SOUNDNESS, RESISTANCE TO ABRASION, FREEZING AND THAMING AND LACK OF EXCESSIVE REACTIVE MATERIALS AS LISTED IN ASTM SPECIFICATION C33. THESE TESTS WILL BE ORDERED UN AGGREGATE OF QUESTIONABLE QUALITY ONLY WHEN THE SIZE OF THE SQUARE OF THE AGGREGATE AND THE POSSIBILITY OF IDENTIFYING FUTURE DELIVERIES FROM THIS SQUARE JUSTIFY SUCH TESTS.

## 4. SAMPLING

4.1 SEPARATE SAMPLES SHALL BE TAKEN FROM DIFFERENT PARTS OF THE STOCK PILE. THIS SHOULD BE DONE TO OBTAIN A COMPOSITE SAMPLE REPRESENTING THE AVERAGE OF THE PILE. AFTER THOROUGHLY MIXING THE COMPOSITE SAMPLE, IT SHALL BE POURED THROUGH THE SAMPLE CUTTER TO REDUCE ITS SIZE TO THAT REQUIRED FOR THE TESTS. THE BALANCE SHALL BE DISCAPEDED.

5.1 THE PROPERTIES SPECIFIED IN THIS SPECIFICATION SHALL BE DETERMINED BY TESTS LISTED IN ASTM SPECIFICATION C33 OF LATEST ISSUE.

6.1 THIS MATERIAL WILL BE PURCHASED EITHER IN BULK OR WEATERPROOF BAGS. "50 LBS. BAGS".

7. SUPPLEMENTARY SPECIFICATIONS 7.1 ASTM SPECIFICATION C33-90 OR LATEST REVISION.

8.1 ALL PROVISIONS OF THE PURCHASE ORDER SHALL APPLY.

## 9. CONSTRUCTION INFORMATION

9.1 THE CONTRACTOR SHALL FURNISH ALL ITEMS ON THIS SPECIFICATION.

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THE CONTRACTOR SHARE FURNISH, INSTAIL, MEMOUR AND REPLACE FOR ALP DITTOR TYPE AND SIZE AT DISTOCRATION, SHOWN ON THE PLANS, OR AS DISTOCRAD BY THE EXCINIFUR, PROPOSED MY RESEARCH SECRET AND SHARE SHARE SHARE OF SHARE OF TAKES OF TAKES SHARE SHARE SHARE OF TAKES OF TAKES SHARE SHARE

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	ELECTRIC STANDARDS	(MATERIAL SPECIFICATION)	56270-900
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## COARSE AGGREGATE

1.1 THIS SPECIFICATION COVERS COARSE AGGREGATE CONSISTING OF CRUSHED STONE OR GRAVEL FOR USE IN CONCRETE.

NAPERVILLE PUBLIC

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2.1 COARSE AGGREGATE SUPPLIED UNDER THIS SPECIFICATION SHALL COMPLY WITH ASTM SPECIFICATION C33-90 OF LATEST REVISION.

## 3. PHYSICAL PROPERTIES

3.1 <u>GRADING</u> - THE COARSE AGGREGATE SHALL BE WELL GRADED BETWEEN THE FOLLOWING LIMITS:

SIZE NO.	NOMINAL SIZE	PERCENTAGE BY WEIGHT PASSING SIEVE						
		1"	3/4"	1/2"	3/8"	#4	#8	#16
8	3/8" TO #8	-	-	100	85 TO 100	10 TO 30	0 TO 10	0 TO 5
7 .	1/2" TO #4	-	100	90 TO 100	40 TO 70	0 TO 15	0 TO 5	_
67	3/4" TO #4	100	90 TO 100	-	20 TO 55	0 TO 10	0 TO 5	***

3.2 DELETERIOUS SUBSTANCES (CLASS 3S) - THE AMOUNT OF DELETERIOUS SUBSTANCES IN COARSE AGGREGATE SHALL NOT EXCEED THE FOLLOWING ITEM.

ITEM	MAXIMUM PERMISSIBLE PERCENTAGE BY WEIGHT OF TOTAL SAMPLE	
CLAY LUMPS AND FRIABLE PARTICLES	5.0	
SUM OF CLAY LUMPS, FRIABLE PARTICLES AND CHERT	7.0	
COAL AND IGNITE	0.5	
MATERIAL FINER THAN #200 SIEVE	1.0	

- 3.3 OTHER PROPERTIES COARSE AGGREGATE SUPPLIED UNDER THIS SPECIFICATION SHALL BE CAPABLE OF PASSING THE REQUIREMENTS FOR SOUNDESS, RESISTANCE TO ABRASION, FREEZING AND THAMING AND LACK OF EXCESSIVE REACTIVE MATERIALS AS LISTED IN ASTM SPECIFICATION CO.S. THIS SET ISSIN WILL BE THE PROPERTY OF COURS OF THE AGGREGATE OF OURSTONABLE OF THE AGGREGATE AND THE POSSIBILITY OF IDENTIFYING FUTURE DELIVERIES FROM THIS SOURCE JUSTIFY SUCH TEST
- 3.4 WEIGHT THE QUANTITY IS IN TONS, UNIT OF ISSUE IS POUNDS. THE WEIGHT SHOULD BE DETERMINED AS LOADED IN THE HAULING UNIT. INCLUDING ANY NATURAL MOISTURE PRESENT. DO NOT ADD WATER.

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NAPERVILLE PUBLIC

UTILITIES DEPARTMENT
ELECTRIC STANDARDS

## SAMPLING

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4.1 SEPARATE SAMPLES SHALL BE TAKEN FROM DIFFERENT PARTS OF THE STOCK PILE. THIS SHOULD BE DONE TO OBTAIN A COMPOSITE SAMPLE REPRESENTING THE AVERAGE OF THE PILE. AFTER THOROUGHLY MIXING THE COMPOSITE SAMPLE, IT SHALL BE POURED INTO A PILE AND QUARTERISD IN FOUR EQUAL PARTS. OPPOSITE QUARTERS SHALL BE DISCARCED, AND THE QUARTERISM REPEATED UNTIL THE DESIRED SAMPLE REMAINS.

## 5. TESTING

5.1 THE PROPERTIES SPECIFIED IN THIS SPECIFICATION SHALL BE DETERMINED BY TESTS LISTED IN ASTM SPECIFICATION C33 OF LATEST REVISION.

5.2 ALL TEST RESULTS AND SAMPLES SHALL BE DELIVERED TO THE DEPARTMENT OF PUBLIC UTILITIES (ELECTRIC) 1392 AURORA AV, NAPERVILLE, IL. 60566.

## 6. SUPPLEMENTARY SPECIFICATIONS

6.1 ASTM SPECIFICATION C33-90 OR LATEST REVISION.

## ESTIMATED WEIGHT

7.1 WEIGHT PER CUBIC FOOT.

# COARSE AGGREGATE - 90 LBS. - 95 LBS. LOOSE 130 LBS. DRY COMPACTED 140 LBS. WET COMPACTED OPTIMUM MOISTURE

NOTE: THE ABOVE WEIGHTS ARE FOR ESTIMATING PURPOSES ONLY. FOR EXACT WEIGHTS USE LABORATORY TEST RESULTS.

COARSE AGGREGATE

(MATERIAL SPECIFICATION)

## 8. ACCEPTANCE

NAPERVILLE PUBLIC

UTILITIES DEPARTMENT
ELECTRIC STANDARDS

8.1 ALL PROVISIONS OF THE PURCHASE ORDER SHALL APPLY.

# CONSTRUCTION INFORMATION.

9.1 THE CONTRACTOR SHALL FURNISH ALL ITEMS ON THIS SPECIFICATION.

## INSTRUCTION FOR INSTALLING, REMOVAL AND REPLACEMENT OF BITUMINOUS PAVEMENT (TYPE-II)

INSTRUCTION FOR

INSTALLING AND

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NAPERVILLE PUBLIC	INSTRUCTION FOR INSTALLING,	DATE: 05-01-05
UTILITIES DEPARTMENT	REMOVAL AND REPLACEMENT	Page 1 of 1
ELECTRIC STANDARDS	OF BITUMINOUS PAVEMENT (TYPE II)	56270-930

F.A. RTE.	SECTIO	N	COUN	TY	TOTAL SHEETS	SHEET NO.
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FED. ROAD	DIST. NO.	ILLINOIS	S FED.	AID	PROJECT	Ī
CONTRACT	83827		***************************************			

CITY OF NAPERVILLE/DEPARTMENT OF PUBLIC U	TILITIES - ELE	CTRIC
CALL J.U.L.I.E. 48 HRS. PRIOR TO CON	ISTRUCTION	
E FERSON ST. BRIDGE DUCTBANK INSTALLATION	MAP NO.:	CAD FILE: 0054679001D25.DWG
DETAILS	DRAWN BY: JK, PM	PROJECT NO.: EU13-04-06

PROJECT TITLE PROJECT DESC WORK REQUEST NO. COMPLETED BY: 54679 SCALE ENGINEER PSM NTS SHEET 25 OF 30