

**UTILITIES**

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

CITY OF TOLEDO WATER DEPT.  
ATTN: MARK RILEY  
401 S. ERIE STREET  
TOLEDO, OHIO 43604  
419-936-2826  
mark.riley@toledo.oh.gov

ZAYO FIBER SOLUTIONS  
ATTN: DAVE GALUSKA  
4199 KINROSS LAKES PARKWAY  
RICHFIELD, OHIO 44286  
234-281-0025  
dave.galuska@zayo.com

TOLEDO EDISON  
ATTN: BRENT THRONE OR  
RANDALL SWOPE  
6099 ANGOLA ROAD  
HOLLAND, OHIO 43528  
bthrone@firstenergycorp.com  
rswope@firstenergycorp.com

REDFLEX TRAFFIC SYSTEMS  
5651 WEST TALAVI BLVD., SUITE 200  
GLENDALE, AZ 85306  
866-703-8097

BUCKEYE BROADBAND  
ATTN: MICHAEL SHEAHAN  
2700 OREGON ROAD  
NORTHWOOD, OHIO 43619  
419-724-3713  
msheahan@sharedsvcs.com

COLUMBIA GAS OF OHIO-TOLEDO  
ATTN: CLINT WELLS  
2901 W MANHATTAN BLVD.  
TOLEDO, OHIO 43611  
clintwells@nisource.com

ACD.NET / ACD TELECOM  
ATTN: SUSAN STEADMAN  
1800 N GRAND RIVER AVE.  
LANSING, MI 48906  
517-999-3279  
steadman@susanacd.net

AT&T OHIO  
ATTN: ROB FEY  
130 NORTH ERIE ST., ROOM 206  
TOLEDO, OHIO 43604  
419-508-0395 Cell  
rf1281@att.com

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.

**EXISTING PLANS AND TYPICAL SECTIONS**

EXISTING TYPICAL SECTIONS HAVE BEEN TAKEN FROM FIELD MEASUREMENTS, RECORDS, AND PAVEMENT CORES AND ARE BELIEVED TO REPRESENT THE EXISTING PAVEMENT, BUT THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THE SAME. FOR FURTHER INFORMATION IN REGARD TO THE TYPICAL SECTIONS, THE CONTRACTOR SHALL REFER TO THE PREVIOUS CONSTRUCTION PLANS WHICH CAN BE VIEWED AT THE DISTRICT 2 OFFICE IN BOWLING GREEN, OHIO.

**SURVEYING PARAMETERS**

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING  
ORTHOMETRIC HEIGHT DATUM: NAVD88  
GEOID: 12A

HORIZONTAL POSITIONING  
REFERENCE FRAME: NAD83(2011)  
ELLIPSOID: GRS80  
MAP PROJECTION: LAMBERT CONFORMAL CONIC  
COORDINATE SYSTEM: OHIO STATE PLANE - NORTH ZONE  
COMBINED SCALE FACTOR: 1.0000190131  
ORIGIN OF COORDINATE SYSTEM: 0,0  
UNITS ARE IN U.S. SURVEY FEET, USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE AND CERTIFY ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**CLEARING AND GRUBBING**

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

**ITEM 204 - PROOF ROLLING**

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO ADDRESS LOCATIONS REQUIRING PROOF ROLLING.

ITEM 204 - PROOF ROLLING 2 HOUR

**ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING**

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

- SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
- EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.  
  
IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
- COMPACT THE SUBGRADE ACCORDING TO 204.03.
- APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.  
  
PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.
- EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
- PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.
- FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

**MONUMENTS**

THE CONTRACTOR SHALL SET OR ADJUST TO GRADE THE MONUMENT BOXES AS DESCRIBED IN THE RIGHT OF WAY PLAN.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY AS DIRECTED BY THE ENGINEER:

623, PRIMARY CONTROL MONUMENT, TYPE B 1 EACH  
623, MONUMENT BOX ADJUSTED TO GRADE 3 EACH  
623, MONUMENT ASSEMBLY REMOVED AND RESET 1 EACH

**ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, AS PER PLAN**

ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN SHALL FOLLOW THE SPECIFICATIONS FOR THE 442 ITEM EXCEPT FOR SECTION 442.04 ASPHALT BINDER. THE BINDER SHALL BE PG70-22M FOR THE INTERMEDIATE COURSE AND A MAXIMUM OF 20% OF RAP BY DRY WEIGHT OF MIX CAN BE USED.

**PARTIAL AND FULL DEPTH PAVEMENT REPAIR**

PARTIAL OR FULL DEPTH PAVEMENT REPAIR SHALL BE PERFORMED ON THE EXISTING PAVEMENT AS DETAILED ON THIS SHEET. LOCATIONS FOR PAVEMENT REPAIRS SHALL BE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE:

251, PARTIAL DEPTH PAVEMENT REPAIR 710 SY

252, FULL DEPTH PAVEMENT SAWING, 150 FT

255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, 355 SY

203, EXCAVATION, 120 CY

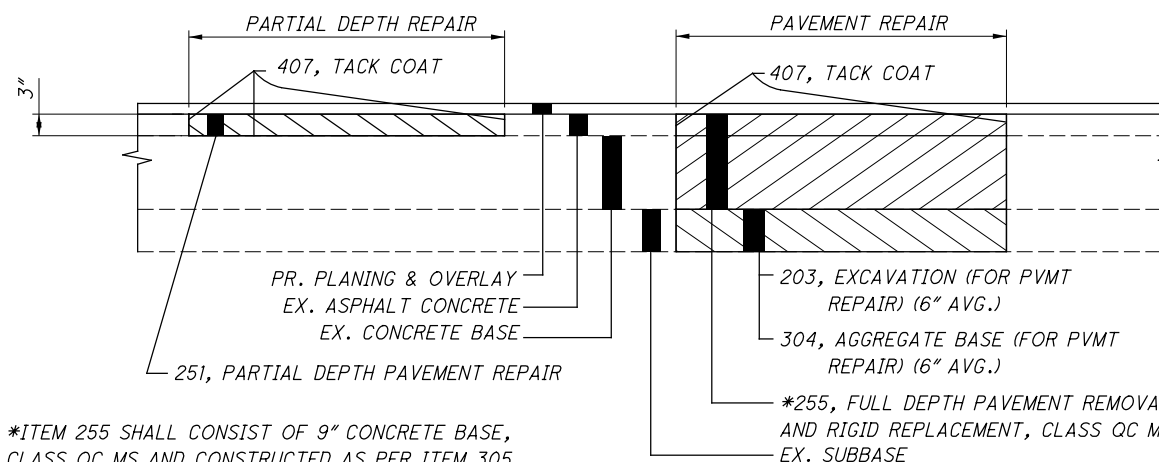
304, AGGREGATE BASE, 120 CY

**DRIVE AND ROADWAY RECONSTRUCTION**

DRIVES AND ROADWAYS SHALL BE RECONSTRUCTED AS DETAILED IN THE PLANS. IF FIELD CONDITIONS REQUIRE THAT MODIFICATIONS BE MADE TO WHAT IS SHOWN IN THE PLANS THE DRIVE OR ROADWAY MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER. THE FOLLOWING CONTINGENCY QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

ITEM 451, 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P 50 SY

ITEM 452, 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1P 100 SY



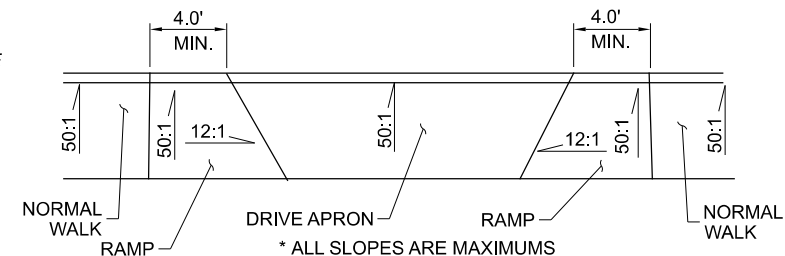
**PARTIAL AND FULL DEPTH PAVEMENT REPAIR**

**PART-WIDTH CONSTRUCTION**

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**SIDEWALK RAMPS AT DRIVES**

DUE TO THE SIDEWALK WIDTH AND PROXIMITY TO THE ROAD IT WILL BE NECESSARY TO RAMP THE SIDEWALK DOWN TO MEET DRIVE APRONS AT LOCATIONS WHERE THE WALK IS ADJACENT TO THE CURB. THE DETAILS OF THE RAMPING ARE SHOWN BELOW. PAYMENT FOR THE ABOVE WORK, INCLUDING LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 608 - 4" CONCRETE WALK.



**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

659, SOIL ANALYSIS TEST 1 EACH  
659, TOPSOIL 185 CU. YD.  
659, REPAIR SEEDING AND MULCHING 83 SQ. YD.  
659, INTER-SEEDING 83 SQ. YD.  
659, COMMERCIAL FERTILIZER 0.23 TON  
659, LIME 0.34 ACRES  
659, WATER 9 M. GAL.

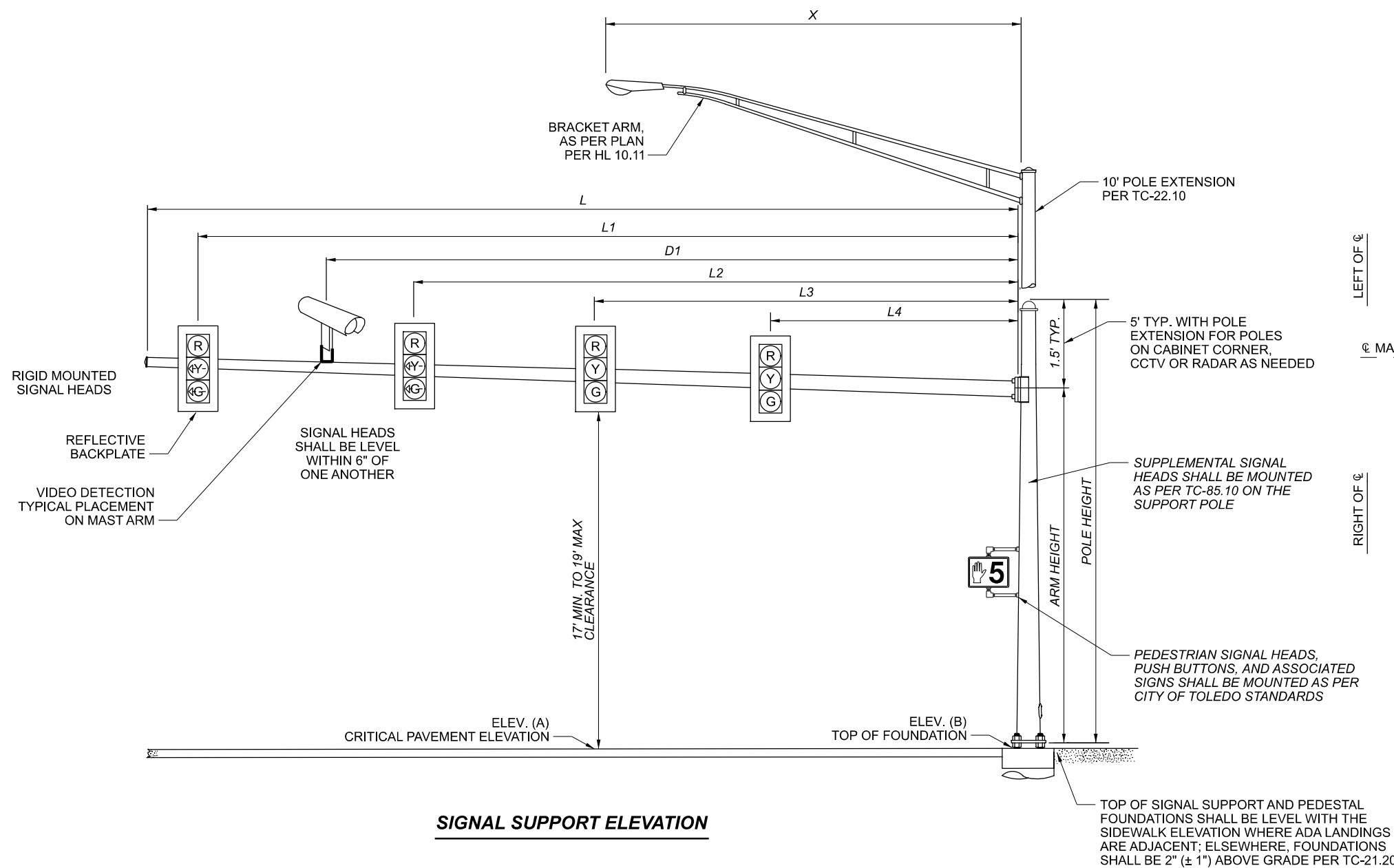
SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**PAVEMENT RESTORATION FOR PIPE AND CATCH BASIN INSTALLATIONS AND/OR REMOVALS**

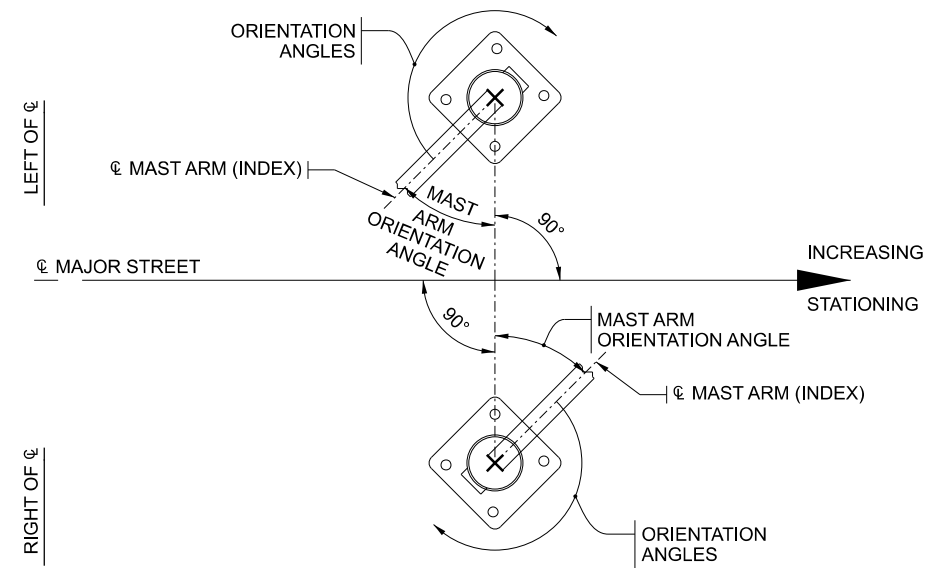
THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES AND CATCH BASINS.

255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, 115 SY





**SIGNAL SUPPORT ELEVATION**



**POLE ORIENTATION**

**MAST ARM TABLE**

SUPPORT NO.	STATION	OFFSET	ELEVATION		SIGNAL SUPPORT DETAILS												ORIENTATION ANGLES FROM MAST ARM									
			A (Pavt. Elev.)	B (Top of Found.)	DESIGN TYPE	DESIGN NO.	POLE HEIGHT	ARM HEIGHT	L	L1	L2	L3	L4	V1	S1	S2	X	MAST ARM A ANGLE	SUPPLEMENTAL VEHICULAR SIGNAL	PEDESTRIAN SIGNAL	PEDESTRIAN BUTTON	VIDEO DETECTION	ADVANCED RADAR DETECTION	BRACKET ARM	HANDHOLE	CABLE ENTRANCE 12" FROM TOP
			FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	DEG	DEG	DEG	DEG	DEG	DEG	DEG	DEG	
SP1-1	341+85.0	51.0' LT	604.4	604.3	81.21	13	33	19.5	56	53	43	32	20	48			30	0						0	180	
SP1-2	342+17.5	62.5' RT	604.3	604.3	81.21	13	33	19.5	58	54	44	33	22	49			30	90						0	180	
SP1-3	343+16.5	78.5' LT	604.4	604.4	81.21	13	33	19.5	58	54	44	34	23	49			30	90						0	180	
SP1-4	343+22.5	55.0' RT	604.6	604.3	81.21	14	33	19.5	68	64	54	43	31	59			30	0						0	180	