

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	BUCKS	4202	HBM	11 OF 23
NEW BRITAIN TOWNSHIP				
REVISION NUMBER	REVISIONS	DATE	BY	

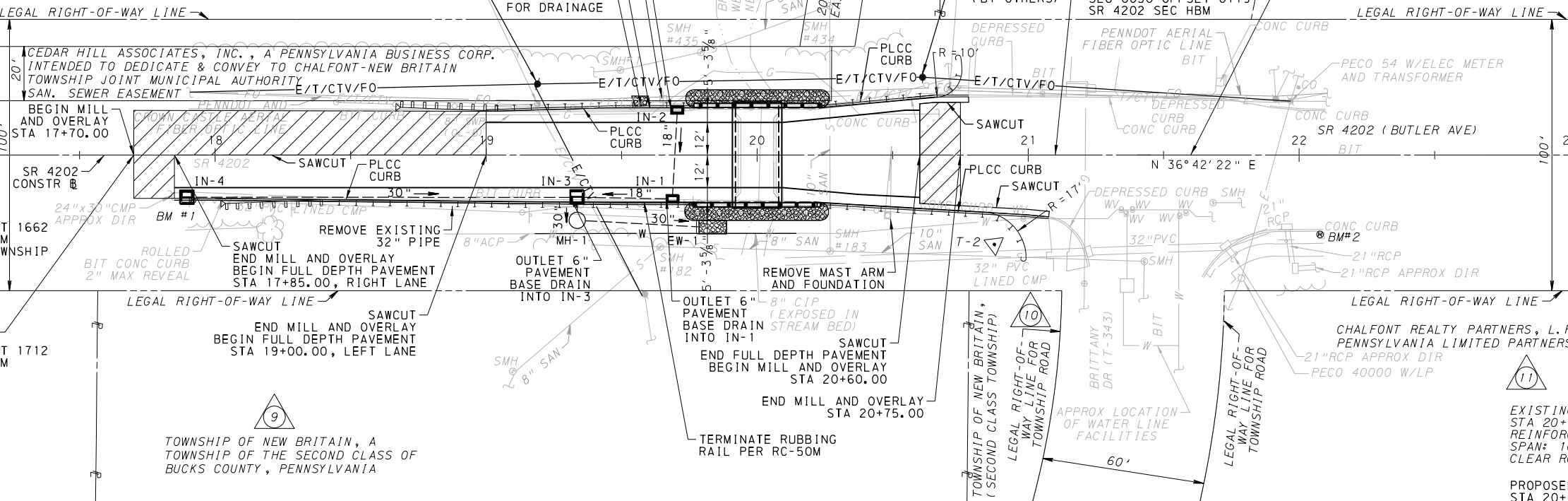
BM#1 - ELEV 297.93
16.63' RT STA 17+91.68 SR 4202
SURVEY & CONSTR
SQUARE CUT INTO CONCRETE INLET

ERIC HECK & KATHY A HECK,
HIS WIFE

BM#2 - ELEV 299.60
29.26' RT STA 22+07.70 SR 4202
SURVEY & CONSTR
X ENGRAVED IN SOUTHWEST ANCHOR
BOLT OF MAST ARM POLE

ELIZABETH MAY DINLOCKER, SPOUSE
OF HARRY WILLIAM DINLOCKER,
DECEASED, A ONE-THIRD INTEREST,
WILLIAM CHARLES DINLOCKER AND JOAN
MARIE DINLOCKER, A ONE-THIRD
INTEREST, AS TENANTS BY THE
ENTIRETIES AND ELIZABETH ANNE
DINLOCKER, A ONE-THIRD INTEREST

LIMIT OF WORK
STA 21+60.00
SEG 0030 OFFSET 0169
SR 4202 SEC HBM
NEW BRITAIN TOWNSHIP
BUCKS COUNTY



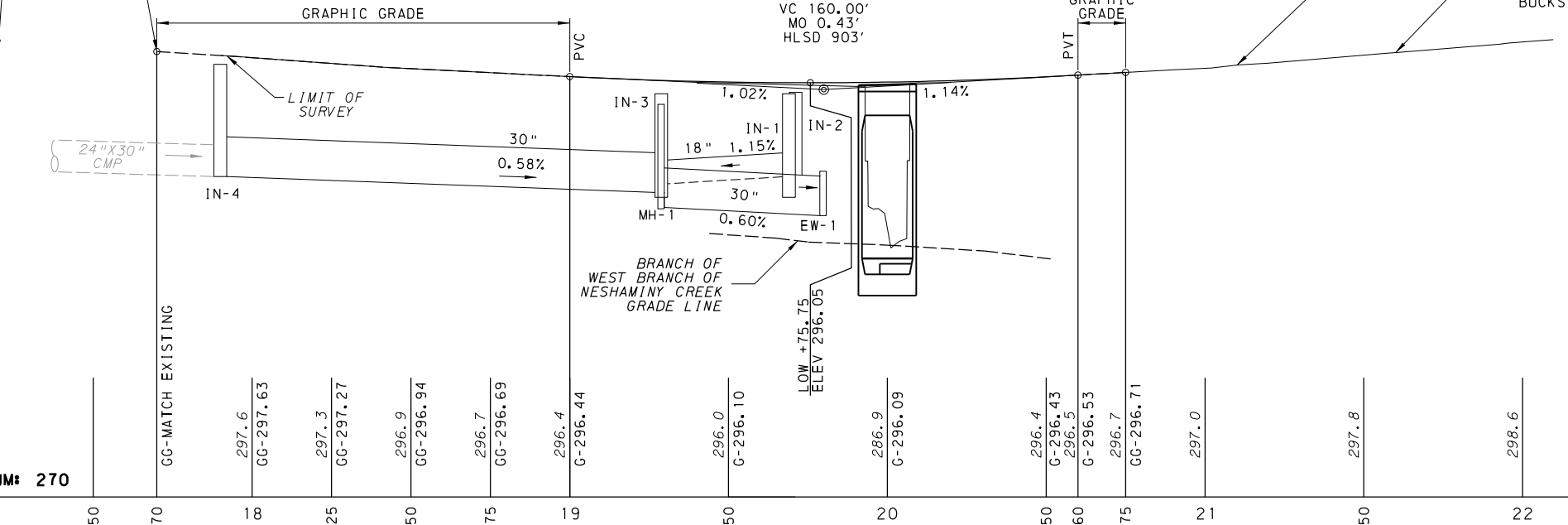
- IN-1
1 EA TYPE C CONCRETE TOP UNIT
1 EA STANDARD INLET BOX
STA 19+69 RT
TG=295.37
INV. IN= 289.45 (NW)
INV. OUT= 289.25 (SW)
 - IN-2
1 EA TYPE C CONCRETE TOP UNIT
1 EA STANDARD INLET BOX
STA 19+71 LT
TG= 295.37
INV. IN= 288.90 (NE)
INV. IN= 289.35 (SW)
INV. OUT= 288.60 (SE)
 - IN-3
1 EA TYPE C CONCRETE TOP UNIT
1 EA TYPE 4 INLET BOX
STA 19+34 RT
TG= 295.68
INV. IN= 288.90 (NE)
INV. IN= 289.35 (SW)
INV. OUT= 288.60 (SE)
 - IN-4
1 EA TYPE M TOP UNIT
1 EA TYPE 4 INLET BOX
STA 17+90 RT
TG= 297.13
INV. IN= 290.38 (SW)
INV. OUT= 290.15 (NE)
- EXISTING STRUCTURE TYPE:
STA 20+00.00
REINFORCED CONCRETE SLAB
SPAN: 16'-0"
CLEAR ROADWAY WIDTH: 34'-7"
- PROPOSED STRUCTURE TYPE:
STA 20+00.00
PRECAST CONCRETE BOX CULVERT
SPAN: 16'-0"
UNDER CLEARANCE: 8'-1 7/8"
SKEW: 90°00'00"
CLEAR ROADWAY WIDTH: 34'-7"
STRUCTURE: S-34344
- MH-1
TYPE 6 MANHOLE
STA 19+34 RT
RIM ELEV. = 295.60
INV. IN= 288.55 (NW)
INV. OUT= 288.40 (NE)
- EW-1
TYPE D ENDWALL
STA 19+80 RT
INV. OUT= 288.15 (NE)

LIMIT OF WORK
STA 17+20.00
SEG 0020 OFFSET 1662
SR 4202 SEC HBM
NEW BRITAIN TOWNSHIP
BUCKS COUNTY

STOP WORK
STA 21+10.00
SEG 0030 OFFSET 0119
SR 4202 SEC HBM

START OF WORK
STA 17+70.00
SEG 0020 OFFSET 1712
SR 4202 SEC HBM

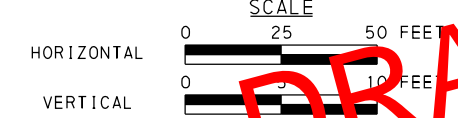
LIMIT OF WORK
STA 21+60.00
SEG 0030 OFFSET 0169
SR 4202 SEC HBM
NEW BRITAIN TOWNSHIP
BUCKS COUNTY



LEGEND:

- MILL & OVERLAY
- ROCK, CLASS R-4
RIPRAP PROTECTION (ROADWAY ITEM)
- ROCK, CLASS R-6 CHOKED WITH STREAMBED MATERIALS
SCOUR PROTECTION (STRUCTURE ITEM)
- G PECO ENERGY (GAS LINE)
- W AQUA PENNSYLVANIA INC
- S CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
- E PECO ENERGY (ELECTRIC AERIAL LINE)
- T VERIZON PENNSYLVANIA INC (AERIAL LINE)
- CTV COMCAST CABLE (AERIAL LINE)
- FO CROWN CASTLE (FIBER OPTIC AERIAL LINE)
- FO PENNDOT (FIBER OPTIC AERIAL LINE)
- REFER TO SPECIAL PROVISIONS FOR PENNDOT
UTILITY RELOCATION COORDINATION INFORMATION
- E PROPOSED ELECTRIC (AERIAL LINE)
- T PROPOSED TELEPHONE (AERIAL LINE)
- CTV PROPOSED CABLE TELEVISION (AERIAL LINE)
- FO PROPOSED FIBER OPTIC (AERIAL LINE)
- W PROPOSED WATER LINE

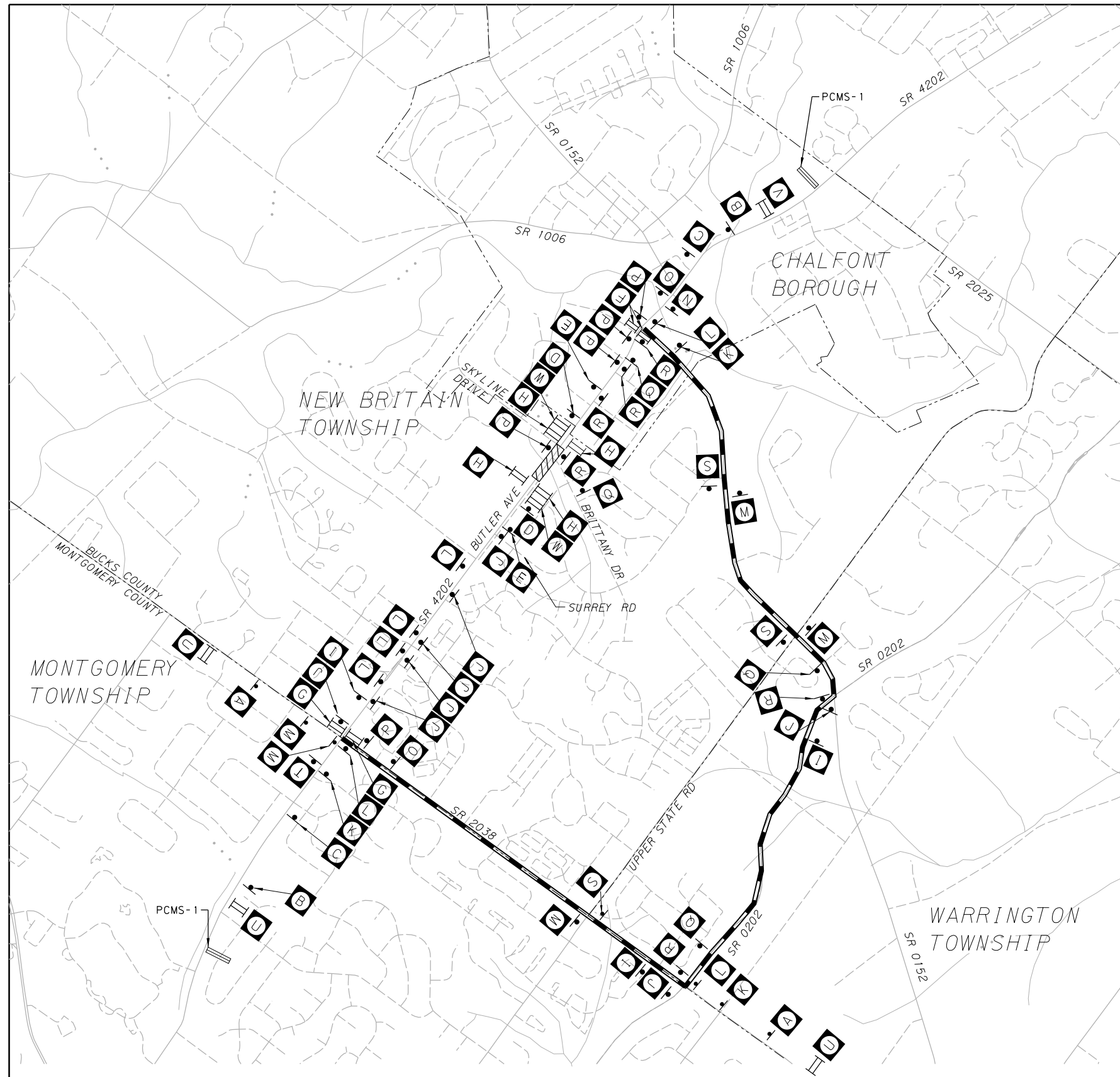
ALL UTILITY INFORMATION HEREON IS DEPICTED TO QUALITY LEVEL "D" (QL-D) UNLESS OTHERWISE NOTED.



DRAFT

SURVEY BOOK NO. 10,553

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	BUCKS	4202	HBM	13 OF 23
NEW BRITAIN TOWNSHIP				
REVISION NUMBER	REVISIONS			DATE BY



W20-2
W30-1-6
36"x36"

W20-2
W30-1-4
36"x36"

W20-2
W30-1-3
36"x36"

W20-3
W30-1-1
36"x36"

W20-3
W30-1-2
36"x36"

R11-3A
60"x30"

R11-3A
60"x30"

R11-2
48"x30"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-9SL
30"x24"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-9L
30"x24"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-9SR
30"x24"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-9R
30"x24"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-9S
30"x24"

24"x12"
M3-1
24"x12"
M4-3
30"x24"
M1-4
M4-8A
24"x18"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-9SL
30"x24"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-9L
30"x24"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-9SR
30"x24"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-9R
30"x24"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-9S
30"x24"

24"x12"
M3-3
24"x12"
M4-3
30"x24"
M1-4
M4-8A
24"x18"

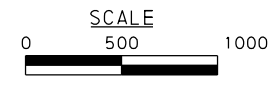
SPECIAL-1
60"x42"

SPECIAL-2
60"x42"

* APPROPRIATE DATE
THIS BRIDGE
TO BE CLOSED
FOR CONSTRUCTION
W23-101
96"x48"

- LEGEND**
- DETOUR ROUTE
 - STATE ROAD
 - OTHER ROAD
 - MUNICIPAL BOUNDARY
 - STREAM
 - WORK AREA
 - SIGN
 - TYPE III BARRICADE WITH SIGN
 - TYPE B FLASHING LIGHT (YELLOW)
 - PORTABLE CHANGEABLE MESSAGE SIGN (PCMS, SEE NEXT SHEET FOR RECOMMENDED MESSAGES)

- NOTES:**
1. OVERALL DETOUR LENGTH = 3.8 MILES
 2. INSTALL TYPE B YELLOW FLASHING LIGHTS ON TOP OF TYPE III BARRICADES AND WARNING SIGNS AS SHOWN.
 3. TYPE III BARRICADE RAILS TO BE TYPE III REFLECTIVITY IN RIGHT OR LEFT DIRECTION AS APPLICABLE.
 4. PLACE R11-2 SIGNS AND TYPE III BARRICADES ACROSS THE ENTIRE WIDTH OF THE ROADWAY.



TRAFFIC CONTROL PLAN
SR 4202 DETOUR PLAN

DRAFT

5/14/2018 5:58:37 - s - tc - rcp03a.dgn

DISTRICT	COUNTY	ROUTE	SECTION	SHEET	
6-0	BUCKS	4202	HBM	14 OF 23	
NEW BRITAIN TOWNSHIP					
REVISION NUMBER	REVISIONS			DATE	BY

PCMS-1: RECOMMENDED MESSAGES AS FOLLOWS OR AS DIRECTED:

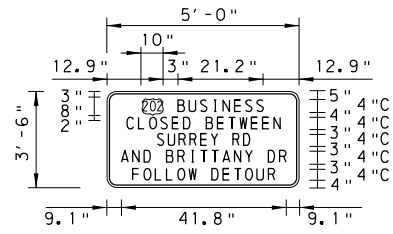
WHEN	SCREEN 1	SCREEN 2	SCREEN 3
30 DAYS PRIOR TO IMPLEMENTING DETOUR	BUS 202 BR TO BE CLOSED	AT BRITTANY DRIVE	<DATE>
DURING DETOUR	BUS 202 BRIDGE CLOSED	LOCAL BUSINESS OPEN	FOLLOW BUS 202 DETOUR

NOTE:
 THE LOCATION AND MESSAGE OF PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) IS AT THE DISCRETION OF THE DEPARTMENT REPRESENTATIVE. CONTRACTOR TO COORDINATE WITH THE DEPARTMENT REPRESENTATIVE AND LOCAL POLICE DEPARTMENTS TO DETERMINE THE EXACT LOCATION AND THE APPROPRIATE MESSAGE TO BE DISPLAYED ON EACH PCMS.

TABULATION OF LONG-TERM TRAFFIC CONTROL SIGNS AND DEVICES INCLUDED IN ITEM 0901-0003 (FOR INFORMATION ONLY)

STD. NO.	DESCRIPTION	SIZE ▲	SR 4202 QUANTITY
R11-2	ROAD CLOSED	48"X30"	4
R11-3A	ROAD CLOSED - LOCAL TRAFFIC ONLY	60"X30"	3
W20-2	ADVANCE DETOUR	36"X36"	6
W20-3	ROAD CLOSED	36"X36"	4
W23-101	THIS BRIDGE TO BE CLOSED FOR CONSTRUCTION	96"X48"	2
W30-1-1	DISTANCE (500 FT) PANEL	20"X6"	2
W30-1-2	DISTANCE (1000 FT) PANEL	20"X6"	2
W30-1-3	DISTANCE (1500 FT) PANEL	20"X6"	2
W30-1-4	DISTANCE (1/2 MILE) PANEL	20"X6"	2
W30-1-6	DISTANCE (AHEAD) PANEL	20"X6"	2
M1-4	US ROUTE MARKER (3 DIGITS)	30"X24"	48
M3-1	NORTH MARKER	24"X12"	27
M3-3	SOUTH MARKER	24"X12"	21
M4-3	BUSINESS MARKER	24"X12"	48
M4-8A	END DETOUR	24"X18"	2
M4-9L	DETOUR, LEFT	30"X24"	13
M4-9R	DETOUR, RIGHT	30"X24"	13
M4-9S	DETOUR, STRAIGHT	30"X24"	8
M4-9SL	LEFT ADVANCE DETOUR	30"X24"	5
M4-9SR	RIGHT ADVANCE DETOUR	30"X24"	7
M4-10L	DETOUR ARROW, LEFT	48"X18"	1
M4-10R	DETOUR ARROW, RIGHT	48"X18"	2
SPECIAL-1	202 BUSINESS CLOSED BETWEEN SURREY RD AND BRITTANY DR	60"X42"	3
SPECIAL-2	202 BUSINESS CLOSED BETWEEN BRITTANY DR AND SURREY RD	60"X42"	1

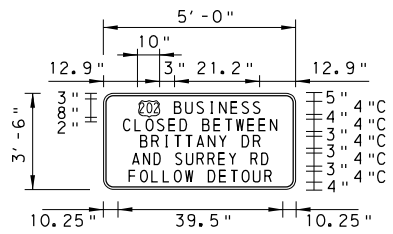
▲ THE SIZES SHOWN ARE MINIMUM REQUIREMENTS.



COLORS:
 BACKGROUND - ORANGE (REFLECTIVE)
 LEGEND - BLACK (NON-REFLECTIVE)
 RADIUS = 1.5"
 BORDER = 0.4"
 MARGIN = 0.4"

LINE 1 4" U.C. SERIES C	LINE 2 4" U.C. SERIES C	LINE 3 4" U.C. SERIES C	LINE 4 4" U.C. SERIES C	LINE 5 4" U.C. SERIES C
12.9	10.25	16.9	9.1	11.05
202-10.0	C-2.9	S-3.0	A-3.2	F-2.7
3.0	-2.7	U-3.0	N-3.0	O-3.2
B-3.0	-3.0	R-3.0	D-2.2	L-2.7
U-3.0	-3.0	R-3.0	B-3.0	L-2.7
S-3.0	-2.7	R-3.0	I-1.2	O-3.0
I-1.4	-2.2	Y-2.5	I-1.2	W-3.0
N-3.0	4.0	R-3.0	T-2.2	D-3.0
E-2.7	-3.0	R-3.0	T-2.2	D-2.5
S-2.9	-2.5	R-3.0	A-3.2	T-2.7
-2.2	-2.2	16.9	N-2.9	O-3.2
12.9	-3.7	60.0	Y-2.5	U-3.0
60.0	-2.7		4.0	R-2.2
	-2.7		D-3.0	11.05
	-2.2		R-2.2	60.0
	10.25		9.1	
	60.0		60.0	

SPECIAL-1 SIGN DETAIL
 NOT TO SCALE



COLORS:
 BACKGROUND - ORANGE (REFLECTIVE)
 LEGEND - BLACK (NON-REFLECTIVE)
 RADIUS = 1.5"
 BORDER = 0.4"
 MARGIN = 0.4"

LINE 1 4" U.C. SERIES C	LINE 2 4" U.C. SERIES C	LINE 3 4" U.C. SERIES C	LINE 4 4" U.C. SERIES C	LINE 5 4" U.C. SERIES C
12.9	10.25	15.3	10.7	11.05
202-10.0	C-2.9	B-3.0	A-3.2	F-2.7
3.0	-2.7	R-3.0	N-3.0	O-3.2
B-3.0	-3.0	I-1.2	D-2.2	L-2.7
U-3.0	-3.0	T-2.2	S-3.0	L-2.7
S-3.0	-2.7	A-3.2	U-3.0	O-3.0
I-1.4	-2.2	N-2.9	U-3.0	W-3.0
N-3.0	4.0	R-3.0	R-3.0	4.0
E-2.7	-3.0	Y-2.5	E-2.5	D-3.0
S-2.9	-2.5	D-3.0	Y-2.5	T-2.7
-2.2	-2.2	R-2.2	4.0	O-3.2
12.9	-3.7	15.3	R-3.0	U-3.0
60.0	-2.7	60.0	D-2.2	R-2.2
	-2.7		D-2.2	10.7
	-2.2		10.7	11.05
	10.25		60.0	60.0
	60.0		60.0	

SPECIAL-2 SIGN DETAIL
 NOT TO SCALE

LEGEND

- PROP CONTOURS
- EX CONTOURS
- G PECO ENERGY (GAS LINE)
- W AQUA PENNSYLVANIA INC
- S CHALFONT-NEW BRITAIN TOWNSHIP JOINT SEWAGE AUTHORITY
- E PECO ENERGY (ELECTRIC AERIAL LINE)
- T VERIZON PENNSYLVANIA INC (AERIAL LINE)
- CTV COMCAST CABLE (AERIAL LINE)
- FO SUNESYS (FIBER OPTIC AERIAL LINE)
- FO PENNDOT (FIBER OPTIC AERIAL LINE) - REFER TO SPECIAL PROVISIONS FOR PENNDOT UTILITY RELOCATION COORDINATION INFORMATION
- E PROPOSED ELECTRIC (AERIAL LINE)
- T PROPOSED TELEPHONE (AERIAL LINE)
- CTV PROPOSED CABLE TELEVISION (AERIAL LINE)
- FO PROPOSED FIBER OPTIC (AERIAL LINE)
- W PROPOSED WATER LINE
- EX INLET
- EX TREE
- EX LIGHT POLE
- EX WETLAND
- TEMPORARY ROLLED EROSION CONTROL PRODUCT
- SOIL BOUNDARY
- PROPOSED DRAINAGE DITCH
- MILL & OVERLAY
- RIGHT OF WAY
- LOD - LIMIT OF DISTURBANCE
- () INLET PROTECTION
- CD - TEMPORARY COFFER DAM
- FS - 18" COMPOST FILTER SOCK
- X - TEMPORARY PROTECTIVE FENCE
- ROCK FILTER
- ROCK, CLASS R-4 RIPRAP PROTECTION (ROADWAY ITEM)
- ROCK, CLASS R-6 CHOKED WITH STREAMBED MATERIALS SCOUR PROTECTION (STRUCTURE ITEM)
- EXISTING FEMA REGULATORY FLOODWAY
- EXISTING 100-YR FLOODPLAIN

EXISTING SOILS TABLE

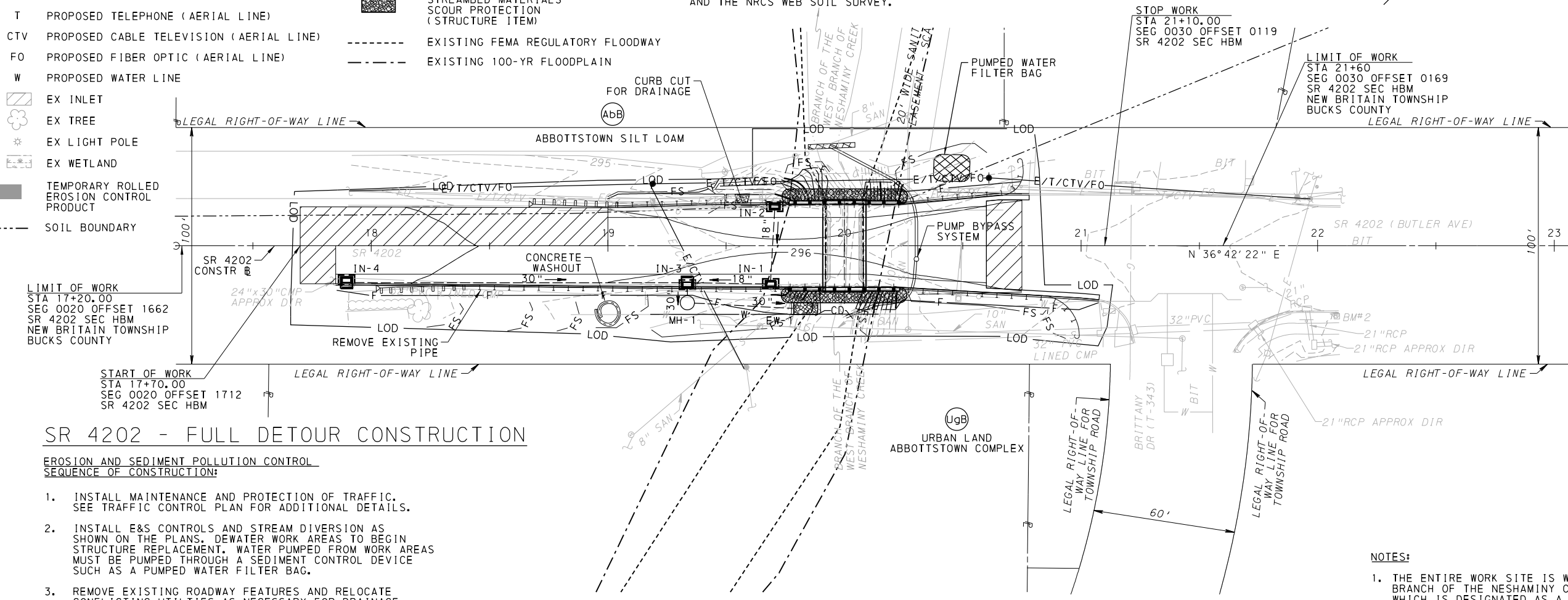
TYPE	NAME AND TEXTURE	HYDRO. GROUP	DEPTH TO WATER TABLE (IN.)	DEPTH TO BEDROCK (IN.)	SLOPE (%)	CONSTRUCTION LIMITATIONS
AbB	ABBOTTSTOWN SILT LOAM	D	6 - 18	40 - 60	3 - 8	CUTBANKS CAVE, CORROSIVE TO CONCRETE/STEEL, FLOODING, POOR FOR PIPING POOR SURFACE OF TOPSOIL, POOR EMBANKMENT MATERIAL
UgB	URBAN LAND- ABBOTTSTOWN COMPLEX	D	6 - 18	40 - 60	0 - 8	CUTBANKS CAVE, CORROSIVE TO CONCRETE/STEEL, FLOODING, POOR FOR PIPING POOR SURFACE OF TOPSOIL, POOR EMBANKMENT MATERIAL

HYDRIC SOILS:

NO HYDRIC SOILS ARE PRESENT WITHIN THE PROJECT LIMIT OF DISTURBANCE BASED ON SITE INVESTIGATION AND THE NRCS WEB SOIL SURVEY.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	BUCKS	4202	HBM	23 OF 23

NEW BRITAIN TOWNSHIP			
REVISION NUMBER	REVISIONS	DATE	BY



SR 4202 - FULL DETOUR CONSTRUCTION

EROSION AND SEDIMENT POLLUTION CONTROL SEQUENCE OF CONSTRUCTION:

- INSTALL MAINTENANCE AND PROTECTION OF TRAFFIC. SEE TRAFFIC CONTROL PLAN FOR ADDITIONAL DETAILS.
- INSTALL E&S CONTROLS AND STREAM DIVERSION AS SHOWN ON THE PLANS. DEWATER WORK AREAS TO BEGIN STRUCTURE REPLACEMENT. WATER PUMPED FROM WORK AREAS MUST BE PUMPED THROUGH A SEDIMENT CONTROL DEVICE SUCH AS A PUMPED WATER FILTER BAG.
- REMOVE EXISTING ROADWAY FEATURES AND RELOCATE CONFLICTING UTILITIES AS NECESSARY FOR DRAINAGE AND STRUCTURE REMOVAL.
- REMOVE EXISTING PIPE FROM INLET AT STATION 17+90 RT TO OUTFALL AT STATION 19+85 RT. INSTALL PROPOSED DRAINAGE SYSTEM AT EW-1 FROM DOWNSTREAM TO UPSTREAM. INSTALL OUTLET PROTECTION AT EW-1. CONNECT EX 24"x30" CMP PIPE TO IN-4.
- REMOVE EXISTING STRUCTURE AFTER STREAM HAS BEEN DIVERTED.
- INSTALL NEW CULVERT. REMOVE STREAM DIVERSION ONCE ALL WORK IN THE STREAM IS COMPLETE.
- RECONSTRUCT ROADWAY FEATURES IMPACTED DURING STRUCTURE REMOVAL AND CONSTRUCTION.
- STABILIZE ALL DISTURBED AREAS. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR INSPECTOR SHALL CONTACT THE BUCKS COUNTY CONSERVATION DISTRICT AND/OR PADEP FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
- REMOVE MAINTENANCE AND PROTECTION OF TRAFFIC AS PROJECT PERMITS.

TOTAL LIMIT OF DISTURBANCE = 0.54 ACRES



NOTES:

- THE ENTIRE WORK SITE IS WITHIN THE WEST BRANCH OF THE NESHAMINY CREEK WATERSHED WHICH IS DESIGNATED AS A WWF-MF (WARM WATER FISHERY, MIGRATORY FISHERY) WATERWAY. THERE ARE NO STREAM RESTRICTIONS FOR THIS WORK.
- TEMPORARY STAGING OUTSIDE OF THE LIMIT OF DISTURBANCE WHICH WILL BE USED FOR STOCKPILING OF MATERIAL OR EQUIPMENT REQUIRE APPROVAL BY THE DEPARTMENT IN WRITING AND SHALL BE PROTECTED WITH A GEOTEXTILE LINER (CLASS 4, TYPE A) AND A 2'-6" MINIMUM LAYER OF CLEAN FILL AT NO ADDITIONAL COST TO THE DEPARTMENT.
- ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL" DOCUMENT NUMBER 258-2182-773.
- THREE WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE PA ONE CALL SYSTEM, INC. PHONE NUMBER: 1-800-242-1776 SERIAL NUMBER: 20163352418

EROSION AND SEDIMENT POLLUTION CONTROL PLAN

