ATTACHMENT 2

18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT BIDDING PLANS

CONSTRUCTION PLANS
FOR
THE 18W HANCOCK AND EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING
BERKS COUNTY, PENNSYLVANIA

NOVEMBER 13, 2020
REVISED JULY 30, 2021

VICINITY MAP
SCALE: 1" = 500'

0 500 1000

LOCATION MAP
SCALE: 1" = 2000'

0 2000' 4000'

PUBLIC UTILITY LIST:

COMPANY:	COMCAST
ADDRESS:	400 RIVERFRONT DRIVE READING, PA. 19602
CONTACT:	BARRY MARISON
EMAIL:	BARRY_MARISON@COMCAST.COM
COMPANY:	MET-ED
ADDRESS:	2800 POTTSVILLE PIKE READING, PA. 19612
CONTACT:	AL NERINO
EMAIL:	ANERINO@FIRSTENERGYCORP.COM
COMPANY:	READING AREA WATER AUTHORITY
ADDRESS:	1801 KUTZTOWN ROAD READING, PA. 19604
CONTACT:	ANTHONY STEINLE
EMAIL	ANTHONY.STEINLE@READINGAREAWATER.COM
COMPANY:	READING, CITY OF
ADDRESS:	503 NORTH 6TH STREET READING, PA. 19601
CONTACT:	CHRISTOPHER LOVELL
EMAIL:	CHRISTOPHER.LOVELL@READINGPA.GOV
COMPANY:	UGI UTILITIES INC. -LANCASTER
ADDRESS:	225 MORGANTOWN ROAD READING, PA. 19611
CONTACT:	ALEX GERDES
EMAIL:	AGERDES@UGI.COM
COMPANY:	VERIZON PENNSYLVANIA LLC
ADDRESS:	1050 VIRGINIA DRIVE FORT WASHINGTON, PA. 19034
CONTACT:	KEN WOJTON
EMAIL:	KENNETH.WOJTON@VERIZON.COM

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC.
1-800-242-1776
POCS SERIAL NUMBER
20203141376

DRAWING INDEX

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C400 C401	CROSS SECTIONS

CITY OF READING
PENNSYLVANIA

OWNER

CITY OF READING
815 WASHINGTON STREET
READING, PA 19601-3690
PHONE: 610.655.6427

ENGINEERING SERVICES PREPARED BY:

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC.
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
FAX: (717) 441-2218
www.navarrowright.com

N&W PROJECT NO. 2004SC118

C100

GENERAL NOTES

SURVEY NOTES:

1. SITE TOPOGRAPHY AND SURVEY INFORMATION SHOWN ON THIS PLAN IS BASED ON SURVEY PREPARED BY OTHERS UNDER PENNDOT CONTRACT (SPOTTS, STEVENS & MCCOY, INC.)
2. THE LEGAL RIGHT-OF-WAY ON E. WYOMISSING BLVD IS 100' BASED ON "BROOKLINE" PLANS OF THE 18TH WARD IN THE CITY OF READING PREPARED 1928 BY ROBERT H. SEIDEL, AND CITY ORDINANCE 21-1961 AND 36-1954.
3. THE LEGAL RIGHT-OF-WAY ON HANCOCK BLVD IS 100' BASED ON "BROOKLINE" PLANS OF THE 18TH WARD IN THE CITY OF READING PREPARED 1928 BY ROBERT H SEIDEL, AND CITY ORDINANCE 38-1928.
4. LOCATION OF SANITARY AND STORM MANHOLES, CURB INLETS, ELECTRIC AND LIGHT POLES AS SHOWN ARE FIELD LOCATED. ALL UNDERGROUND WATER, STORM, GAS AND SEWER SERVICES ARE APPROXIMATE AS SHOWN OR NOT KNOWN. ALL LOCATIONS MUST BE VERIFIED BY CONTRACTOR.
5. COORDINATES ARE BASED ON NORTH AMERICAN DATUM OF 1983 AND ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, OBTAINED BY A VIRTUAL REFERENCE SPATIAL SYSTEM.
6. ALL WORK SHALL BE PERFORMED WITHIN THE HANCOCK BLVD AND EAST WYOMISSING BLVD RIGHT-OF-WAYS AND BETWEEN THE LABELED WORK LIMITS.
7. SPEED LIMIT OF HANCOCK BLVD AND EAST WYOMISSING BLVD IS 25 MPH
8. ALL CURVE DATA IS BASED ON THE ARC DEFINITION UNLESS OTHERWISE INDICATED.
9. CONSTRUCT PROJECT IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SPECIFICATIONS, DATED 2020
10. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY BE SUBJECT TO EASMENTS AND OTHER RESTRICTIONS, EITHER RECORDED OR UNRECORDED. THE SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENT OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE OTHER THAN WHAT IS SHOWN ON THIS PLAN.
11. THE LOCATIONS OF UTILITIES AS SHOWN HEREON ARE BASED UPON ABOVEGROUND FEATURES, SURFACE MARKINGS AND FIELD OBSERVATIONS. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON AND ADDITIONAL BURIED UTILITIES AND STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES AND STRUCTURES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITY LINES PRIOR TO THE START OF ANY CONSTRUCTION. ACTIVITIES. A PA ONE CALL WAS PERFORMED, SERIAL NO. 20203141376.
12. THERE WERE NO WETLANDS OBSERVED ON THE U.S. FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY REFERENCE MAP DATED OCTOBER 1, 2020. A FIELD WETLAND DELINEATION WAS NOT PREFORMED.

DEMOLITION NOTES:

1. THE PURPOSE OF THE DEMOLITION PLAN IS TO GENERALLY IDENTIFY, TO THE EXTENT POSSIBLE, THOSE ITEMS NEEDED TO BE REMOVED IN ORDER TO CONSTRUCT FINAL IMPROVEMENTS. IT IS NOT THE INTENT OF THIS PLAN TO SHOW EVERY ITEM TO BE DEMOLISHED AS PART OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM AND DETERMINE ALL ABOVE AND BELOW GROUND DEMOLITION ITEMS NECESSARY TO COMPLETE THE PROJECT IN CONFORMANCE WITH THE PROPOSED IMPROVEMENTS AND CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL CONTACT THE PA ONE CALL SYSTEM (1-800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO ENSURE THAT THE DEMOLITION WORK IS STRICTLY CONFINED WITHIN THE LIMITS OF THE PROJECT SITE AND DEMOLITION ACTIVITIES CAN BE CONDUCTED WITHOUT HAZARD TO ADJACENT PROPERTIES OR TO THE PUBLIC.
4. THE CONTRACTOR IS NOT ENTITLED TO ANY ADDITIONAL COMPENSATION FROM THE OWNER FOR DAMAGE TO EXISTING UTILITIES, STRUCTURES OR APPURTENANCES THAT ARE NOT SPECIFIED FOR REMOVAL DURING THE CONSTRUCTION PERIOD OF THE PROJECT.
5. THE CONTRACTOR SHALL DISPOSE OF WASTE MATERIALS OBTAINED FROM THE DEMOLITION ACTIVITIES IN A LEGAL MANNER AND SHALL RECYCLE AS MUCH OF THE WASTE MATERIAL AS POSSIBLE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE CONTRACT SPECIFICATIONS. ALL MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET. SEQ. 271.1 AND 287.1 ET. SEQ. UNDER NO CIRCUMSTANCES SHALL ANY MATERIALS OR WASTES SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
6. CONTRACTOR SHALL MAINTAIN CITY STREETS FREE AND CLEAR OF DIRT AND DEBRIS RELATED TO DEMOLITION ACTIVITY AND CONTRACTOR'S VEHICLES.
7. ALL WORK SHALL BE PERFORMED IN STRICT CONFORMANCE WITH THE MOST CURRENT APPLICABLE EPA AND OSHA REGULATIONS AND MUST COMPLY WITH THE MOST CURRENT FEDERAL, STATE AND/OR LOCAL REGULATIONS AND CODES APPLICABLE TO SAID WORK.
8. TO MINIMIZE UNNECESSARY SPREAD OF DUST DURING PERFORMANCE OR EXTERIOR DEMOLITION WORK, THOROUGHLY MOISTEN SURFACES AND DEBRIS AS REQUIRED TO PREVENT AIRBORNE DUST PARTICLES. CONTROL SHALL BE OBTAINED FROM CONTRACTOR'S OWN SOURCE AND SHALL BE POTABLE WATER.
9. PROVIDE ADEQUATE PROTECTIVE MEASURES TO PROTECT PUBLIC PEDESTRIAN AND VEHICULAR TRAFFIC NEAR AND AROUND THE CONSTRUCTION OPERATIONS
10. ALL STORM SEWER INLETS ARE TO REMAIN AND SHALL BE PROTECTED UNLESS OTHERWISE NOTED.
11. ALL EXISTING AT-GRADE INLETS ARE TO BE PROTECTED AS SPECIFIED UNLESS OTHERWISE NOTED.
12. DIMENSIONS FOR CONSTRUCTION ON THESE DRAWINGS ARE APPROXIMATE. DO NOT SCALE DRAWING. VERIFY ALL DIMENSIONS IN THE FIELD.
13. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE STARTING ANY WORK AND SHALL NOTIFY THE INSPECTOR OF ANY DISCREPANCIES.
14. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES. THE CONTRACTOR SHALL GIVE ALL NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENTAL TAXES, FEES, AND COSTS; FILE NECESSARY PLANS AND OBTAIN APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS AND PUBLIC UTILITIES HAVING JURISDICTION, AND OBTAIN CERTIFICATES OF INSPECTION AS MAY BE REQUIRED.
15. THE CONTRACTOR, SUBCONTRACTORS AND ALL PERSONNEL EMPLOYED BY THE SAME ARE RESPONSIBLE FOR THE MEANS AND METHODS OF DEMOLITION AND CONSTRUCTION. THE CONTRACTOR IS ADDITIONALLY RESPONSIBLE FOR ALL SITE SAFETY ISSUES AND FOLLOWING ALL LOCAL CODES THAT MUST BE ADHERED TO DURING THE COURSE OF CONSTRUCTION INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION (OSHA) GUIDELINES.

GENERAL CONSTRUCTION NOTES:

1. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH REQUIREMENTS PROVIDED FOR IN PENNSYLVANIA'S UNDERGROUND UTILITY LINE PROTECTION ACT 287 (1974) AS AMENDED BY ACT 121 (2008).
2. REPRESENTATIVE: THE AUTHORIZED REPRESENTATIVE ACTING ON BEHALF OF THE CITY OF READING.
3. THE CONTRACTOR MUST COMPLY WITH ALL U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS AS REVISED 1995. (OSHA 2226) ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATION PUBLICATION 408/2016, LATEST REVISION, AND SHALL MEET OR EXCEED THE LOCAL MUNICIPALITY'S STANDARD SPECIFICATIONS FOR CONSTRUCTION.
4. ALL CONSTRUCTION DETAILED ITEMS WILL REQUIRE SHOP DRAWINGS TO BE SUBMITTED TO THE REPRESENTATIVE ALL SHOP DRAWINGS WILL BE REVIEWED FOR THOROUGHNESS, ACCURACY, AND COMPLIANCE WITH CONSTRUCTION SPECIFICATION. ALL CONSTRUCTION MATERIALS SHOULD BE SUPPLIED BY MANUFACTURERS LISTED IN PENNDOT PUBLICATION 35, BULLETIN 15.
5. THE CONTRACTOR MUST CONTACT THE CITY OF READING REPRESENTATIVE ALONG WITH ANY AFFECTED PROPERTY OWNERS TO REVIEW AND APPROVE THE TIME SCHEDULE PRIOR TO SCHEDULING ANY WORK.
6. THE EXISTING UTILITIES ARE BASED ON INFORMATION PROVIDED BY THE UTILITY COMPANIES VIA PLANS AND SITE MARKOUT. VERTICAL INFORMATION IS PROVIDED VIA RESPONDING USER'S PLAN AND IS APPROXIMATE. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE PENNSYLVANIA ONE CALL SYSTEM (PHONE: 1-800-242-1776) THREE WORKING DAYS IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL UTILITY MARKINGS WITHIN THE PROJECT LIMITS FOR THE DURATION OF THE PROJECT. IF UTILITY MARKINGS ARE OBLITERATED, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING PA ONE CALL FOR MARKOUT. THE ONE CALL SERIAL NUMBER FOR THIS PROJECT IS 20203141376.
8. CONTRACTOR WILL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY. NOTIFY THE REPRESENTATIVE OF WORK IF ANY DISCREPANCIES IN UTILITY LINE LOCATIONS ARE FOUND
9. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
10. NAVARRO & WRIGHT MAKES NO CLAIM AS TO THE ACCURACY OF THE UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING THE DEPTH OF THE EXISTING UTILITIES IN THE EVENT OF A UTILITY CONFLICT, THE REPRESENTATIVE SHALL BE NOTIFIED.
11. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO GRADE ADJUST/RELOCATE OR HAVE ADJUSTED OR RELOCATED BY THE APPROPRIATE UTILITY COMPANY, ALL MANHOLES, VALVE COVERS, ETC. WHICH FALL WITHIN THE PROJECT LIMITS.
12. ALL UTILITY RELOCATION PERMITS TAKE PRECEDENCE OVER THE UTILITY RELOCATION POSITIONS SHOWN ON THE PLANS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY BACKFILL AND AND COMPACTING ALL TRENCHES. NO TRENCHES ARE TO BE LEFT OPEN AFTER COMPLETION OF WORK FOR THE DAY. ALL CONSTRUCTION AREAS ARE TO BE KEPT IN A CONDITION THAT ALLOWS FOR SAFE MOVEMENT OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. ANY EXCESS MATERIAL FROM TRENCHING SHALL BE DELIVERED TO A LAWFUL SITE LOCATION BY THE CONTRACTOR AT THEIR OWN EXPENSE.
14. A PRE-CONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CITY OF READING, THE CONTRACTOR, REPRESENTATIVE AND ALL UTILITY COMPANIES TO CLARIFY AND COORDINATE ALL CONSTRUCTION DETAILS.
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE EXISTING TOPOGRAPHIC AND BASE SURVEY INFORMATION PROVIDED IN THESE PLANS. THE CONTRACTOR SHOULD CONTACT THE REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION IF THERE ARE ANY DIFFERENCES BETWEEN THE FIELD CONDITIONS AND BASE SURVEY SHOWN ON THE PLANS.
16. ANY DAMAGED OR SUBSTANDARD CURB WITHIN THE LIMITS OF WORK SHALL BE REPLACED AS NECESSARY.
17. SAWCUT LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DEEMED NECESSARY BY THE CITY OF READING REPRESENTATIVE.
18. NO UNSUITABLE MATERIAL IS TO BE USED IN ANY PORTION OF THE CURB CONSTRUCTION. REMOVE ANY SUBGRADE THAT CANNOT BE PROPERLY COMPACTED AND TREAT AS UNSUITABLE MATERIAL. UNDERCUTTING AND/OR STABILIZATION MAY BE REQUIRED. THE SUBGRADE MUST BE APPROVED BY THE CITY OF READING REPRESENTATIVE PRIOR TO PLACEMENT OF THE SUBBASE.
19. PEDESTRIANS MUST BE ACCOMMODATED AT ALL TIMES DURING CONSTRUCTION.
20. THE MAJORITY OF THE EXCAVATION FOR THIS PROJECT IS FOR THE CONSTRUCTION OF PAVEMENTS AND CURBS. RAINWATER FALLING ON THESE EXCAVATION SITES WILL BE CONTAINED IN THE EXCAVATION. DEWATERING OF THESE EXCAVATIONS WILL REQUIRE PUMPING AND FILTERING. HIGH VOLUME PUMPING SHALL BE DIRECTED THROUGH A DEWATERING FILTER CONSISTING OF A PERIMETER SILT FENCE SURROUNDED BY 12" HIGH BERM OF AASHTO #57 AGGREGATE AROUND THE BASE ON THE OUTSIDE OF THE SILT FENCE. LOW-VOLUME PUMPING SHALL BE FILTERED USING A BAG FILTER ON THE OUTLET HOSE. DIRECT THE EFFLUENT FROM EITHER TYPE OF FILTER INTO EXISTING DRAINAGE FACILITIES SUCH AS GUTTER LINES OR INLETS.
21. ALL WORK AND MATERIALS FOR EROSION AND SEDIMENT POLLUTION CONTROL TO CONFORM TO PA DEP E&S POLLUTION CONTROL MANUAL WHEN NOT SPECIFICALLY REFERENCE IN THE SPECIFICATIONS FOR THIS PROJECT.
22. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL FACILITIES FOR THIS PROJECT. INSPECT ALL EROSION CONTROL FACILITIES EMPLOYED ON THIS PROJECT AT LEAST ONCE A WEEK AND AFTER EACH STORM EVENT, AND REPAIR OR REPLACE AND FACILITY DAMAGED OR NON-FUNCTIONAL TO THE SATISFACTION OF THE ENGINEER. REMOVE AND DISPOSE OF ANY SILT FROM ANY LOCATION WHEN IT HAS ACCUMULATED TO A DEPTH OF SIX INCHES AGAINST OR NEAR ANY CONTROL DEVICE OR AS DIRECTED BY THE REPRESENTATIVE.
23. IN ALL AREAS THAT ARE TO RECEIVE PAVEMENT OR CURBING, SUBBASE OR AGGREGATE BASE COURSE MUST BE PLACED AS SOON AS PRACTICAL AFTER SUBGRADE IS ACHIEVED. THIS REQUIRES THAT PAVING COURSES FOLLOW THE STONE PLACEMENT VERY CLOSELY OR CONTAMINATION OF THE SUBBASE OR STONE MAY OCCUR REQUIRED REMOVAL AND REPLACEMENT OF THE CONTAMINATED MATERIAL. THE COVERING OF BASE EARTH WITH STONE IS CONSIDERED STABILIZATION OF SAME.
24. EMPLOY CONSTRUCTION METHODS AND MEANS THAT KEEP FLYING DUST TO A MINIMUM. PROVIDE FOR THE DISTRIBUTION OF WATER ON THE PROJECT FOR THE PURPOSE OF LIMITING DUST. THE MATERIALS AND METHODS USED FOR WATER LAYING ARE SUBJECT TO THE APPROVAL OF THE REPRESENTATIVE. PROVIDE FOR THE PROMPT REMOVAL FROM EXISTING PAVING OF ALL DIRT AND OTHER MATERIALS THAT HAVE SPILLED, WASHED UPON, OR OTHERWISE DEPOSITED THEREON BY HAULING AND OTHER OPERATIONS. PROVIDE A STEET SWEEPER TO PICK UP ANY TRACKING FROM CONSTRUCTION VEHICLES FOR THIS PROJECT.
25. ALL WASTE SITES AND TEMPORARY STOCKPILES REQUIRE PROTECTION AGAINST EROSION. PREPARE AND SUBMIT TO REPRESENTATIVE, A PLAN SHOWING THE PROPOSED SITES WITH PROPOSED METHODS OF EROSION PROTECTION DEPICTED THEREON AT LEAST 15 WORKING DAYS BEFORE BEGINNING WORK. ANY DELAYS CAUSED BY INADEQUACIES IN THE CONTRACTOR'S PLAN THAT CAUSE IT NOT TO BE APPROVABLE SHALL NOT REPRESENT A VALID REASON FOR A CLAIM BE GUIDED IN THE PREPARATION OF THE PLAN BY THE EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL PUBLISHED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION. SOIL OR AGGREGATE STOCKPILES WILL NOT BE ALLOWED WITHIN PUBLIC RIGHT-OF-WAY.
26. PROTECT ALL SOIL MATERIAL THAT HAS BEEN EXCAVATED AND IS BEING TEMPORARY KEPT ON THE SITE AGAINST EROSION. IF PRECIPITATION IS FORECAST, COVER ALL EXCAVATED MATERIAL THAT IS NOT CONTAINED IN A CUT OR CAN RUN OFF INTO THE MUNICIPAL DRAINAGE SYSTEM WITH TARPAULINS OR POLYETHYLENE SHEETING. COVER SOIL MATERIAL THAT IS STORED IN TRUCKS IN A LIKE MANNER IF PRECIPITATION IS FORECAST.
27. NO TRACKING OF MUD OR SEDIMENT SHALL BE PERMITTED ON TO PUBLIC ROADS AND OUTSIDE THE LIMITS OF CONSTRUCTION. REMOVE ANY SEDIMENT TRACKED ONTO PUBLIC ROADWAYS AND RETURN TO THE CONSTRUCTION SITE.
28. DETAILS OTHER THAN THOSE INDICATED ARE ON THE FOLLOWING STANDARD DETAILS FROM PENNDOT PUBLICATION 72M:

STANDARD DRAWING NUMBER	DRAWING DATE
RC-10M	JUN. 1, 2010
RC-11M	JUN. 1, 2013
RC-64M	JUN. 1, 2010
RC-67M	JUN. 1, 2013
RC-72M	FEB. 8, 2019
RC-75M	JUN. 1, 2010

29. MATERIAL CERTIFICATIONS MUST BE PROVIDED BY AN APPROVED MANUFACTURER LISTED IN THE DEPARTMENT'S PUBLICATION 35, BULLETIN 15, FOR ALL MATERIALS AND STRUCTURES.
30. ROADS MAY NOT BE CLOSED OR OBSTRUCTED WITHOUT PRIOR CONSENT OF THE CITY OF READING POLICE DEPARTMENT. ALL WORK MUST BE STAGED, SCHEDULED AND COMPLETED SO AS TO CAUSE THE LEAST DISRUPTION TO VEHICULAR AND PEDESTRIAN TRAFFIC. A REQUEST FOR ROAD CLOSING MUST BE PROVIDED, IN WRITING, TO THE CITY OF READING POLICE DEPARTMENT, WITH A COPY TO THE DEPARTMENT OF PUBLIC WORKS, A MINIMUM OF 48 HOURS PRIOR TO ANY ROAD CLOSING. THE CHIEF OF POLICE MAY, IN HIS OR HER SOLE DISCRETION, GRANT OR DENY ANY REQUEST FOR ROAD CLOSING. IN THE EVENT OF A ROAD CLOSING, TRAFFIC CONTROL DEVICES MUST BE PROVIDED IN ACCORDANCE WITH PENNDOT PUB. 408 WHEREVER REQUIRED BY THE CITY OF READING OFFICIAL AND/OR CHIEF OF POLICE. WHEN TRAFFIC CONTROL DEVICES ARE REQUIRED, THE CITY OF READING OFFICIAL MAY, IN HIS OR HER SOLE DISCRETION, REQUIRE A PLAN SHOWING COMPLIANCE WITH PENNDOT PUB. 408.
31. CONTRACTOR WILL NOTIFY THE CITY OF READING OFFICE AT (977) 727-3234) A MINIMUM OF THREE WORKING DAYS PRIOR TO THE CLOSING OF A TRAVEL LANE.

SITE CONSTRUCTION NOTES:

1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY PROVIDERS IN COMPLIANCE WITH THE PA ONE CALL SYSTEM TO VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITY LINES PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. NAVARRO AND WRIGHT MAKES NO GUARANTEE AS TO THE PRECISE LOCATIONS OR DEPTHS OF ANY UNDERGROUND UTILITIES. IN ADDITION, THERE MAY BE OTHER ACTIVE OR ABANDONED UNDERGROUND UTILITY LINES AND STRUCTURES OF WHICH THE DESIGNER AND SURVEYOR HAVE NOT BEEN ADVISED. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DISTURBING ALL EXISTING UTILITY LINES WHETHER MAPPED, MARKED OR ENCOUNTERED DURING CONSTRUCTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. IT IS IMPERATIVE THAT SUCH UTILITY LOCATIONS, DEPTHS, SIZES AND MATERIAL TYPES BE VERIFIED THROUGH THE PA ONE CALL SYSTEM 1 (800) 242-1776 OR THROUGH THE INDIVIDUAL UTILITY INSTALLER OR PROVIDER. IF THERE ARE ANY CONFLICTS DUE TO EXISTING OR AS-BUILT SITE CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR FIELD ADJUSTMENT APPROVAL.
3. IN ADDITION, THERE MAY BE OTHER ACTIVE OR ABANDONED UNDERGROUND UTILITY LINES APPURTENANCES AND STRUCTURES OF WHICH THE DESIGNER AND SURVEYOR HAVE NOT BEEN ADVISED. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY IT IS IMPERATIVE THAT SUCH UTILITY LOCATIONS, DEPTHS, SIZES AND MATERIAL TYPES BE VERIFIED THROUGH THE PA ONE CALL SYSTEM AND A THOROUGH SITE RECONNAISSANCE WITHIN THE LIMIT OF DISTURBANCE FOR THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS WHICH MAY NOT BE SHOWN WITHIN THE CONSTRUCTION PLAN SET.
4. THE CONTRACTOR IS NOT ENTITLED FOR ANY ADDITIONAL COMPENSATION FROM THE OWNER FOR DAMAGE TO EXISTING UTILITIES, STRUCTURES OR APPURTENANCES DURING THE CONSTRUCTION PERIOD OF THE PROJECT.
5. THE CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE WILL BE PROVIDED ACROSS THE ENTIRE PROJECT AREA AND SURFACE RUNOFF WILL BE DIRECTED TO EXISTING AND PROPOSED DRAINAGE FACILITIES AND PATTERNS.
6. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY THAT ALL GRADES ALONG THE CARTWAY AND ALL RELATED IMPROVEMENTS ARE IN STRICT COMPLIANCE WITH THE CURRENT ADA ACCESSIBILITY STANDARDS AND REQUIREMENTS, AS AMENDED.
7. MAXIMUM CROSS SLOPE OF THE ISLANDS AND CARTWAY SHALL NOT EXCEED 2% THROUGHOUT THE ENTIRE PROJECT AREA.
8. THE CONTRACTOR SHALL ENSURE THAT ALL PROPOSED ISLANDS SHALL BE INSTALLED WITH A CLEAN EDGE, BACKFILLED AND COMPACTED AS NEEDED TO PROVIDE A SMOOTH AND CONTINUOUS FINISH.
9. THE PROPOSED USE AND RELATED IMPROVEMENTS WILL NOT REQUIRE PUBLIC WATER OR SEWER FACILITIES.
10. THE CONTRACTOR SHALL SAWCUT AND MILL A NOTCH 2" BACK AT THE LOCATION OF EACH PROPOSED EXPANSION OF ISLANDS AND INSTALL PAVEMENT RESTORATION. ALL PAVING JOINTS SHALL BE SEALED WITH PG-64 PER PENN DOT 408 SPECIFICATIONS.

LAYOUT NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL SAFEGUARD ALL UTILITIES THROUGHOUT THE DURATION OF THE PROJECT CONSTRUCTION.
3. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
4. THE CONTRACTOR SHALL NOTIFY THE BERKS COUNTY CONSERVATION DISTRICT AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION AND 72 HOURS PRIOR TO THE COMPLETION OF CONSTRUCTION.
5. THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL PROPERTY LINE STAKES OR MONUMENTS THROUGHOUT THE DURATION OF THE PROJECT CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING AND SHORING AS THE NEED REQUIRES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE CITY OF READING RELATIVE TO THE CONSTRUCTION PROPOSED ON THESE PLANS.

GRADING NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ANY AND ALL EXISTING UNDERGROUND UTILITIES IN THE VICINITY OF THE CONTRACTOR'S WORK. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF SUPPORT AND PROTECTION DURING EXCAVATION OPERATIONS WHEN IT IS INDICATED THAT THESE UTILITIES ARE TO REMAIN IN PLACE.
3. CONSULT THE PROFESSIONAL IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN AN AREA SHOULD UNCHARTED OR INCORRECTLY CHARTED EXISTING PIPE OR OTHER UTILITIES BE ENCOVERED. COOPERATE WITH THE DEPARTMENT OF GENERAL SERVICES AND THE UTILITY COMPANIES IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO THE SATISFACTION OF THE UTILITY OWNER.
4. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE DEPARTMENT OF GENERAL SERVICES OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE DEPARTMENT OF GENERAL SERVICES OR PROFESSIONAL. INTERRUPTIONS SHALL OCCUR ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICE HAS BEEN PROVIDED.
5. THE CONTRACTOR SHALL IMPLEMENT APPLICABLE EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION.
6. ALL GRADES ARE TO BE TAKEN AS CONSTANT BETWEEN ANY TWO ELEVATIONS SHOWN. CONTOURS AND SPOT ELEVATIONS ARE CONTROLS ONLY. ALL GRADES SHALL BE SMOOTH AND CONTINUOUS.
7. PROPOSED CONTOURS SHALL BE USED AS GRADE POINTS WHERE NO ELEVATIONS ARE SHOWN.
8. ALL DISTURBED AREAS AND AREAS WITH EXISTING EROSION PROBLEMS ARE TO BE DRESSED WITH TOP SOIL, SEEDED AND MULCHED.
9. THE CONTRACTOR SHALL COMPLY WITH ALL CITY, COUNTY, STATE AND FEDERAL REGULATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
6. PROPOSED ELEVATIONS ON PAVED SURFACES INDICATE FINISHED GRADES.
7. THE PA "ONE-CALL" SYSTEM, INC. (1-800-242-1776) HAS BEEN UTILIZED TO ESTABLISH EXISTING UTILITY LOCATIONS. THE PA ONE CALL NUMBER ASSIGNED TO THE PROJECT IS 20203141376. ALL CONTRACTORS ARE REQUIRED TO ESTABLISH EXISTING UTILITY LOCATIONS AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF ANY EARTHMOVING ACTIVITIES.
8. BACK FILLING AND SURFACE GRADING SHALL PROVIDE POSITIVE DRAINAGE TO BOULEVARD AT 2%.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC 1-800-242-1776
PAGS SERIAL NUMBER: 20203141376

DATE	REVISIONS	BY
7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	JLF

NAVARRO & WRIGHT CONSULTING ENGINEERS INC
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE (717) 441-2216
FAX (717) 441-2218
www.navarrowright.com

CONSTRUCTION PLANS FOR THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING, BERKS COUNTY, PENNSYLVANIA

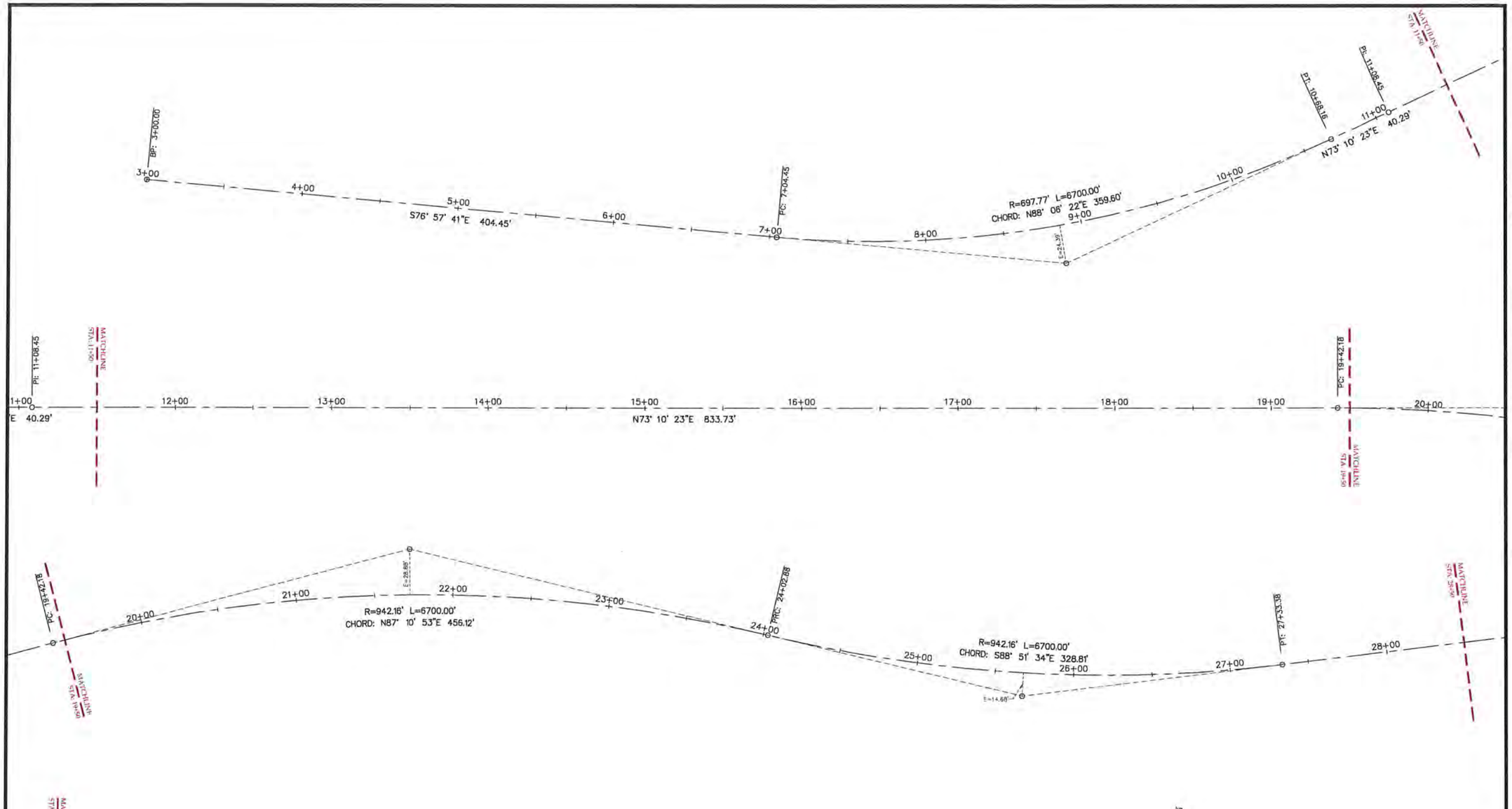
DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	AS NOTED
DATE:	11/13/2020

JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: NOTES & LEGEND

DRAWING NUMBER: C101

Thursday, July 29, 2021 11:42:48 AM
N:\2020\04SC118_City of Reading-18th Ward\Site Civil_Dwgs_SHEETS Phase 2\Sheet\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-C101-NOTES & LEGEND.dwg



CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL

PA 1 SYSTEM, INC.
1-800-242-1776

POCS SERIAL NUMBER
20203141376

NOTES:

1. REFER TO SHEET C102 FOR CENTERLINE GEOMETRY
2. REFER TO SHEET C101 FOR SURVEY AND CONSTRUCTION NOTES
3. ALL COORDINATES ARE BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE).
4. THE CURVE DATA ON THE PLAN HAS BEEN ROUNDED TO THE HUNDREDTH OF A FOOT.

EAST WYOMISSING BLVD/HANCOCK BLVD
CONSTRUCTION & R/W BASE LINE

STATION	DESCRIPTION	NORTHING	EASTING
3+00	BP	365306.6995	2468341.3143
7+04.45	PC	365215.4526	2468735.3391
10+68.16	PT	365227.3374	2469094.7443
11+08.45	PI	365239.0006	2469133.3092
19+42.18	PC	365480.3499	2469931.3420
24+02.88	PRC	365502.7792	2470386.9140
27+33.38	PT	365496.2344	2470715.6570
35+63.16	PC	365624.7351	2471535.4267

		BY
7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	JLF
DATE	REVISIONS	

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NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
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CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING
BERKS COUNTY
PENNSYLVANIA

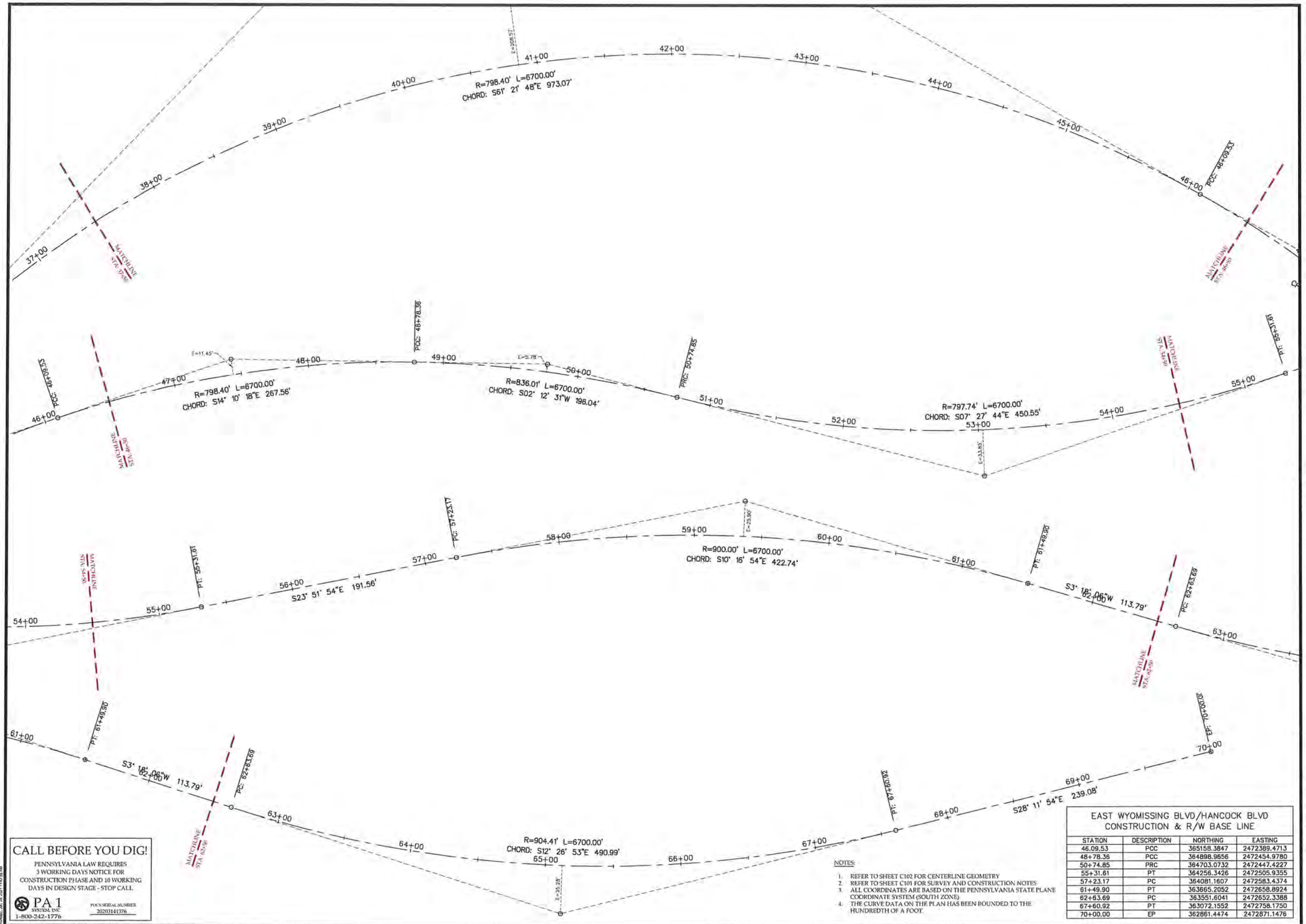
DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 30'
DATE:	11/13/2020

JOB NUMBER:
2004SC118

DRAWING DESCRIPTION:
CENTERLINE GEOMETRY SHEETS

DRAWING NUMBER:
C102

Thursday, Jul 29, 2021 11:42:53 AM
N:_2020\2004SC118_City of Reading \BK Trail\Site Civil_Dwgs_SHEETS\Phase 2 Sheets\Phase 2 Sheet en/xsd from observering 6.29.2021\2004SC118-C102 ALIGNMENT.dwg



CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL

PA 1 SYSTEM, INC 1-800-242-1776

POCS SERIAL NUMBER: 20203141376

EAST WYOMISSING BLVD/HANCOCK BLVD CONSTRUCTION & R/W BASE LINE

STATION	DESCRIPTION	NORTHING	EASTING
46.09.53	PCC	365158.3847	2472389.4713
48+78.36	PCC	364898.9656	2472454.9780
50+74.85	PRC	364703.0732	2472447.4227
55+31.61	PT	364256.3426	2472505.9355
57+23.17	PC	364081.1607	2472583.4374
61+49.90	PT	363665.2052	2472658.8924
62+63.69	PC	363551.6041	2472652.3388
67+60.92	PT	363072.1552	2472758.1750
70+00.00	EP	362861.4474	2472871.1476

NOTES:

1. REFER TO SHEET C102 FOR CENTERLINE GEOMETRY
2. REFER TO SHEET C101 FOR SURVEY AND CONSTRUCTION NOTES
3. ALL COORDINATES ARE BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SOUTH ZONE).
4. THE CURVE DATA ON THE PLAN HAS BEEN ROUNDED TO THE HUNDREDTH OF A FOOT.

BY	REVISIONS	DATE
JLF	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	7.30.2021

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC.
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
FAX: (717) 441-2218
www.navarrowright.com

CONSTRUCTION PLANS FOR THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING, BERKS COUNTY, PENNSYLVANIA

DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 30'
DATE:	11/13/2020

JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: CENTERLINE GEOMETRY SHEETS

DRAWING NUMBER: C103

Plotted: Jul 30, 2021 11:03 AM
N:_2020\2004SC118_City of Reading\1 BW Traffic\Civil_Dwgs_SHEETS\Phase 2 Sheets\Phase 2 Sheet revised from comments 6.29.2021\2004SC118 C103 ALIGNMENT.dwg

SCALE: 1" = 200'

0 200' 400'

BY	REVISIONS	DATE

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC.
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
FAX: (717) 441-2218
www.navarrowright.com

CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT-PHASE TWO
CITY OF READING BERKS COUNTY PENNSYLVANIA

DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 200'
DATE:	6/30/2021

JOB NUMBER:
2004SC118

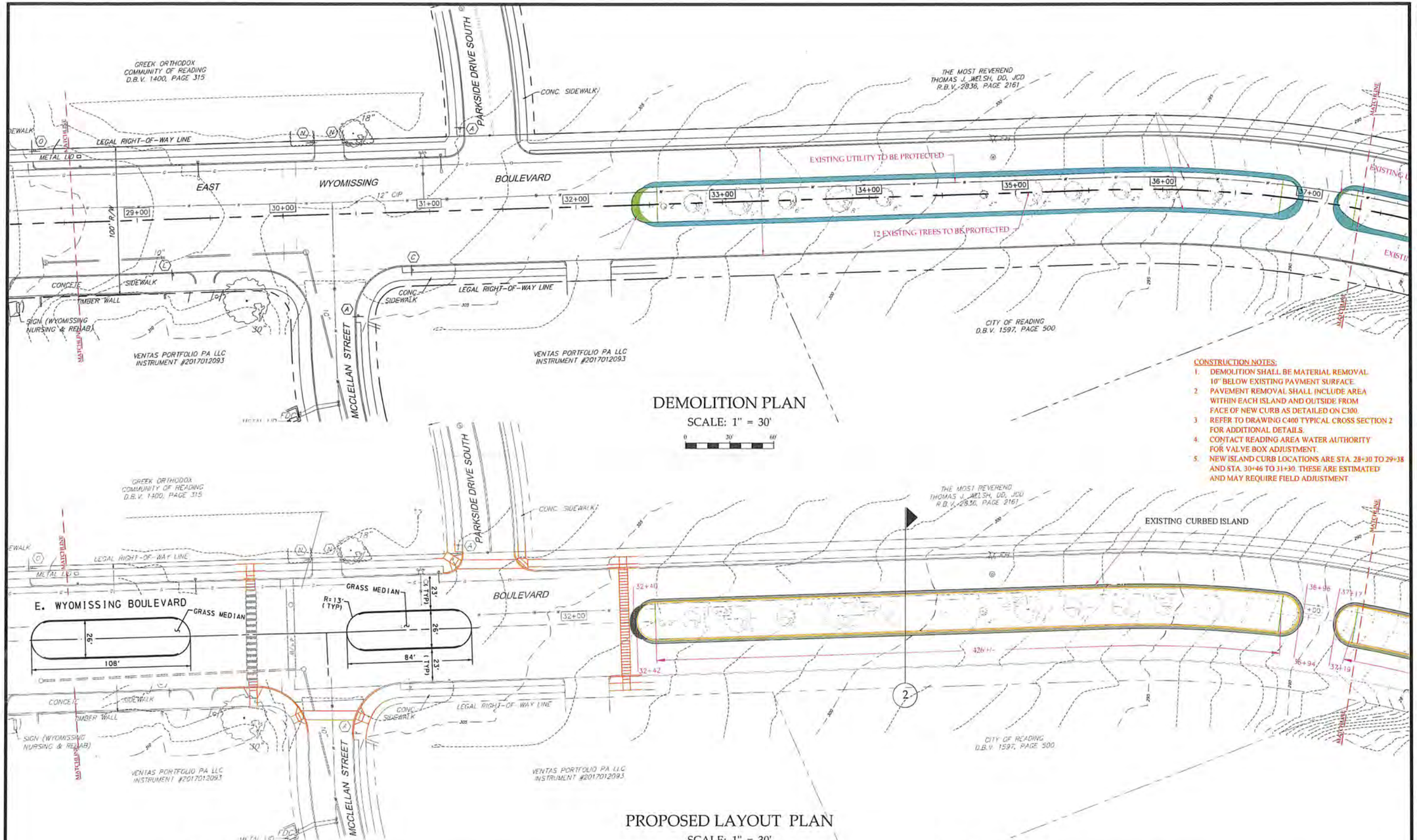
DRAWING DESCRIPTION:
PLAN SHEET INDEX

DRAWING NUMBER:
C200

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC
1-800-242-1776
POCS SERIAL NUMBER
20203141376

Tuesday, June 15, 2021 4:19:16 PM

N:_2020\2004SC118_City of Reading '18W Trail\Site Civil_Dwgs_SHEETS\Phase 2 Sheets\Phase 2 sheets revised 6.15.21\2004SC118-C200-SHEET INDEX_Phase 2_.dwg



DEMOLITION PLAN

SCALE: 1" = 30'

0 30' 60'

PROPOSED LAYOUT PLAN

SCALE: 1" = 30'

0 30' 60'

CONSTRUCTION NOTES:

1. DEMOLITION SHALL BE MATERIAL REMOVAL 10" BELOW EXISTING PAVMENT SURFACE.
2. PAVEMENT REMOVAL SHALL INCLUDE AREA WITHIN EACH ISLAND AND OUTSIDE FROM FACE OF NEW CURB AS DETAILED ON C300.
3. REFER TO DRAWING C400 TYPICAL CROSS SECTION 2 FOR ADDITIONAL DETAILS.
4. CONTACT READING AREA WATER AUTHORITY FOR VALVE BOX ADJUSTMENT.
5. NEW ISLAND CURB LOCATIONS ARE STA. 28+30 TO 29+38 AND STA. 30+46 TO 31+30. THESE ARE ESTIMATED AND MAY REQUIRE FIELD ADJUSTMENT.

EXISTING LEGEND

- PROPERTY LINE
- ROAD CENTER LINE
- ROAD R.O.W.
- SIDEWALK
- CONCRETE CURB
- SANITARY SEWER
- WATER
- GAS
- ELECTRIC POLE
- LIGHT
- UTILITY
- STREET SIGN
- INLET
- EXISTING DECIDUOUS TREES
- CONTOUR - MAJOR
- CONTOUR - MINOR

PROPOSED LEGEND

- PROPOSED BITUMINOUS PAVEMENT AREA TO BE RESTORED
- PROPOSED BITUMINOUS PAVEMENT AREA TO BE REMOVED
- DEMOLITION OF TURF AREA
- PROPOSED FULL DEPTH BITUMINOUS TO BE INSTALLED
- PROPOSED CONCRETE CURB
- PROPOSED RAMPS, CURBS AND CROSSINGS BY OTHERS UNDER PENNDOT CONTRACT (N.I.C.)
- N.I.C. NOT IN CONTRACT
- 72' TYPICAL CROSS SECTION
- INLET FILTER BAG (TEMP. DURING CONSTRUCTION)

NOTES:
1. REFER TO SHEET C102-C103 FOR CENTERLINE GEOMETRY.
2. REFER TO SHEET C101 FOR SURVEY AND CONSTRUCTION NOTES.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC. 1-800-242-1776
PACS SERIAL NUMBER 20203141376

BY	REVISIONS	DATE
JLF	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	7.30.2021

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC.
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
FAX: (717) 441-2218
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CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING BERKS COUNTY PENNSYLVANIA

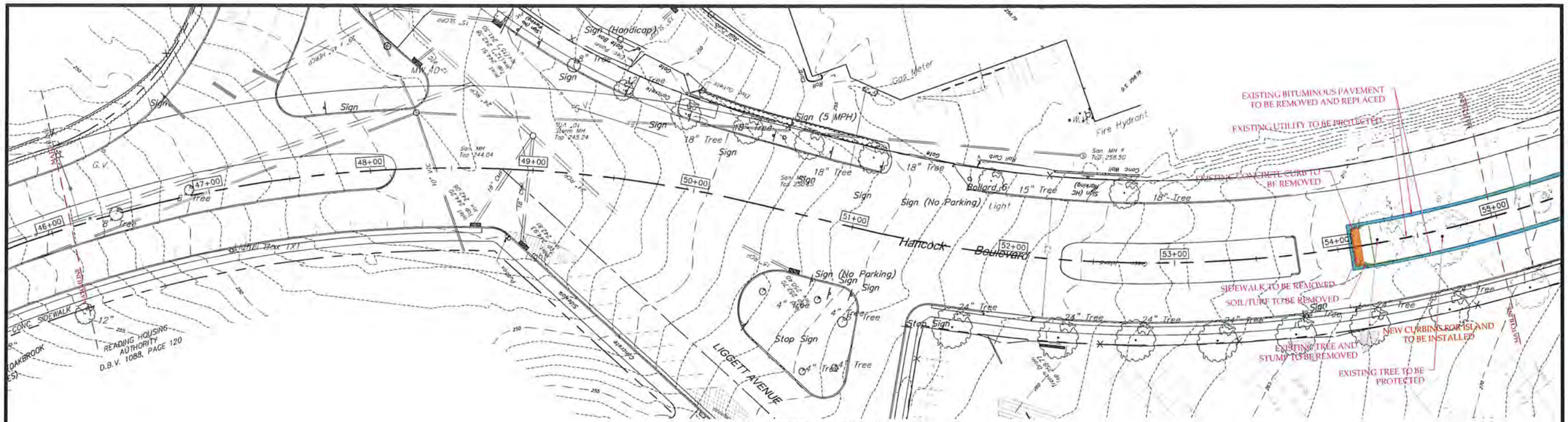
DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 30'
DATE:	11/13/2020

JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: DEMOLITION & PROPOSED PLAN

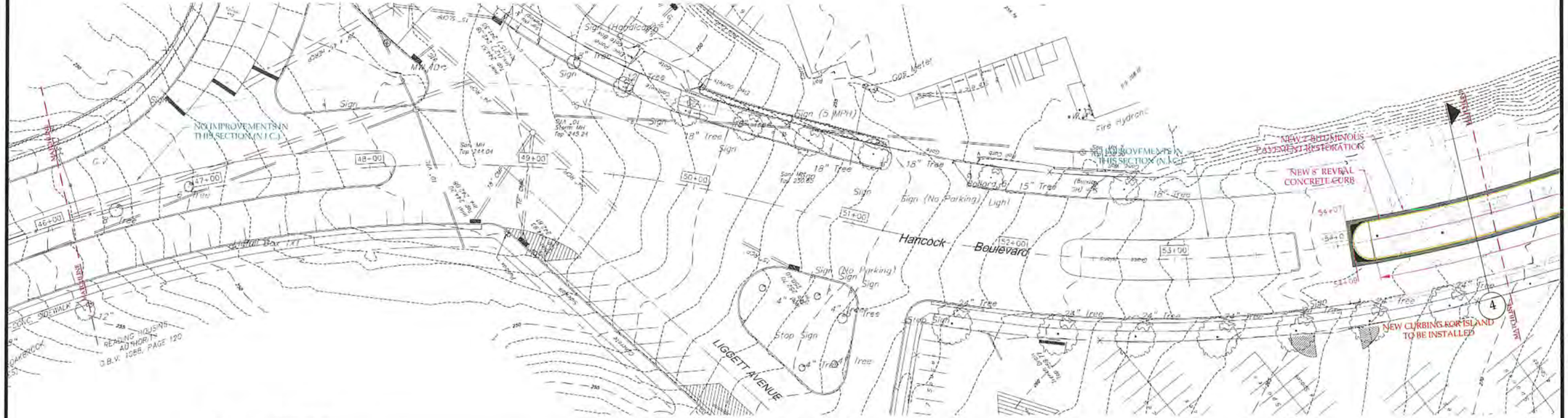
DRAWING NUMBER: C204

N:_2020\2004SC118_City of Reading - 18W Blvd\Site Civil_Dwgs_SHEETS Phase 2 Sheets\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-C201-DEMOLITION & PROPOSED2_.dwg



DEMOLITION PLAN
(NO WORK IN PART OF SECTION)
SCALE: 1" = 30'

0 30' 60'



PROPOSED LAYOUT PLAN
(NO WORK IN PART OF SECTION)
SCALE: 1" = 30'

0 30' 60'

EXISTING LEGEND

- PROPERTY LINE
- ROAD CENTER LINE
- ROAD R.O.W.
- SIDEWALK
- CONCRETE CURB
- SANITARY SEWER
- WATER
- GAS
- ELECTRIC POLE
- LIGHT
- UTILITY
- STREET SIGN
- INLET
- EXISTING DECIDUOUS TREES
- CONTOUR - MAJOR
- CONTOUR - MINOR

PROPOSED LEGEND

- PROPOSED BITUMINOUS PAVEMENT AREA TO BE RESTORED
- PROPOSED BITUMINOUS PAVEMENT AREA TO BE REMOVED
- DEMOLITION OF TURF AREA
- PROPOSED FULL DEPTH BITUMINOUS TO BE INSTALLED
- EXISTING SIDEWALK TO BE REMOVED
- PROPOSED CONCRETE CURB
- PROPOSED RAMPS, CURBS AND CROSSINGS BY OTHERS UNDER PENNDOT CONTRACT (N.I.C.)
- N.I.C NOT IN CONTRACT
- (4) 72' TYPICAL CROSS SECTION
- INLET FILTER BAG (TEMP. DURING CONSTRUCTION)

NOTES:
1. REFER TO SHEET C102-C103 FOR CENTERLINE GEOMETRY.
2. REFER TO SHEET C101 FOR SURVEY AND CONSTRUCTION NOTES.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM INC 1-800-242-1776
TICKET SERIAL NUMBER 20203141376

BY	DATE	REVISIONS
JLF	7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE: (717) 441-2216
FAX: (717) 441-2218
www.navarrowright.com

CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING BERKS COUNTY PENNSYLVANIA

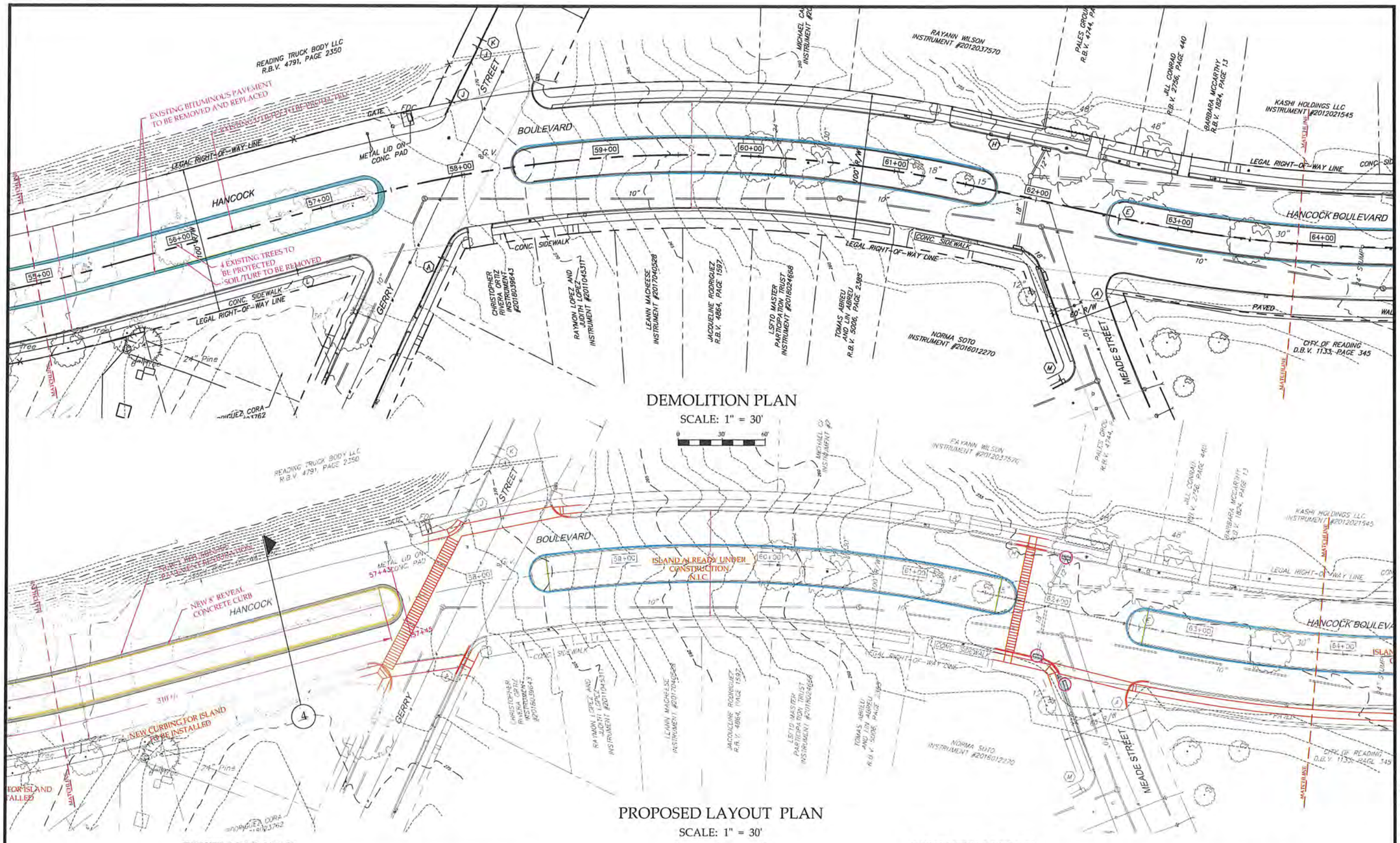
DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 30'
DATE:	11/13/2020

JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: DEMOLITION & PROPOSED PLAN

DRAWING NUMBER: C206

Thursday, July 29, 2021 11:41:19 AM
N:\2020\2004SC118_City of Reading * BK Tv\Site Civil_Dwgs_SHEETS Phase 2 Sheet\Phase 2 Sheet revised from comments 6 29 2021\2004SC118-C201-DEMOLITION & PROPOSED_.dwg



DEMOLITION PLAN

SCALE: 1" = 30'

PROPOSED LAYOUT PLAN

SCALE: 1" = 30'

EXISTING LEGEND

- PROPERTY LINE
- ROAD CENTER LINE
- ROAD R.O.W.
- SIDEWALK
- CONCRETE CURB
- SANITARY SEWER
- WATER
- GAS
- ELECTRIC POLE
- LIGHT
- UTILITY
- STREET SIGN
- INLET
- EXISTING DECIDUOUS TREES
- CONTOUR - MAJOR
- CONTOUR - MINOR

PROPOSED LEGEND

- PROPOSED BITUMINOUS PAVEMENT AREA TO BE RESTORED
- PROPOSED BITUMINOUS PAVEMENT AREA TO BE REMOVED
- CONCRETE CURB ALREADY UNDER CONSTRUCTION (NIC)
- PROPOSED CONCRETE CURB
- PROPOSED RAMPS, CURBS AND CROSSINGS BY OTHERS UNDER PENNDOT CONTRACT (N.I.C.)
- N.I.C NOT IN CONTRACT
- 4 72' TYPICAL CROSS SECTION
- INLET FILTER BAG (TEMP. DURING CONSTRUCTION)

NOTES:
1. REFER TO SHEET C102-C103 FOR CENTERLINE GEOMETRY.
2. REFER TO SHEET C101 FOR SURVEY AND CONSTRUCTION NOTES.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL.
PA 1 SYSTEMS, INC 1-800-242-1776
POCS SERIAL NUMBER 20203141376

7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	JLF
DATE	REVISIONS	BY

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CORPORATE OFFICE
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NEW CUMBERLAND, PA 17070
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www.navarrowright.com

CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING BERKS COUNTY PENNSYLVANIA

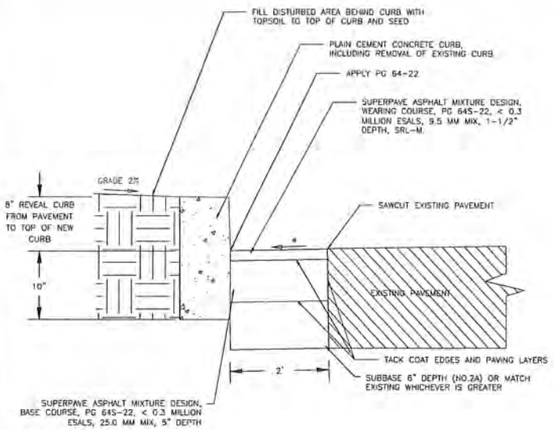
DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	1" = 30'
DATE:	11/13/2020

JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: DEMOLITION & PROPOSED PLAN

DRAWING NUMBER: C207

N:_2020\2004SC118 City of Reading - BW Traffic\Civil_Engr_SHEETS\Phase 2 Sheets\Phase 2 Sheet revised from comments 6.25.2021\2004SC118-C201-DEMOLITION & PROPOSED_.dwg



*NOTE:
MATCH ADJACENT WEARING COURSE SLOPE

NOTES:
1. FOR ALL CURBING, PROVIDE ½" THICK PREMOLDED EXPANSION JOINT SPACED NOT MORE THAN 30 FEET APART. SEAL ALL EXPOSED EXPANSION JOINTS WITH PENNDOT SPECIFIED SEALANT.

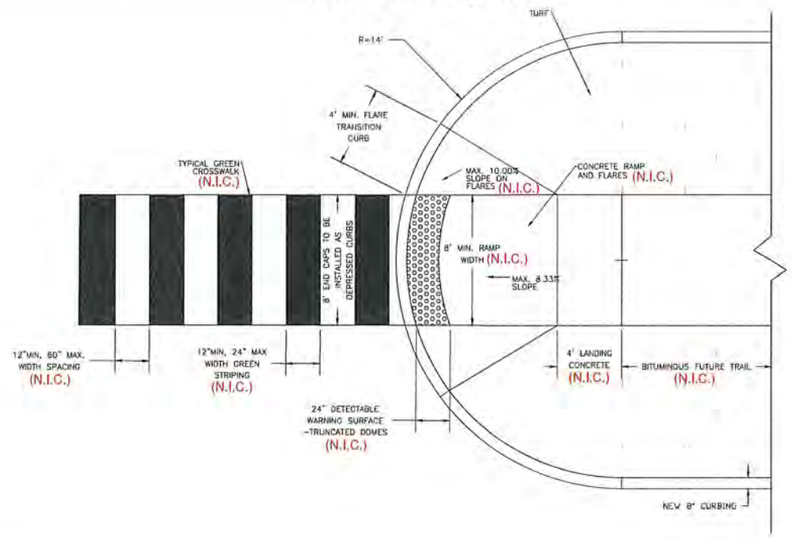
2. GRADE SLOPE OF FILL IN ISLANDS AT 2% DRAINING TOWARDS THE BOULEVARD AND FILL TO THE TOP OF THE CURB.

3. FINE GRADE TOPSOIL AND USE A KENTUCKY BLUEGRASS/RYEGRASS SEED MIX.

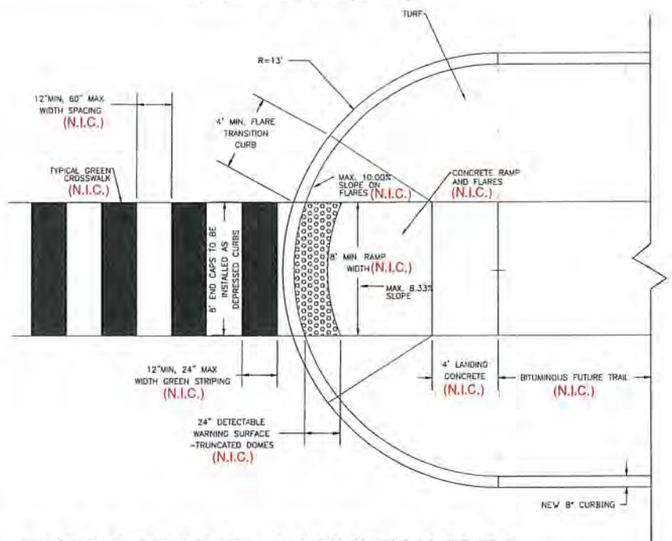
TYPICAL CURB AND ROAD CROSS SECTION

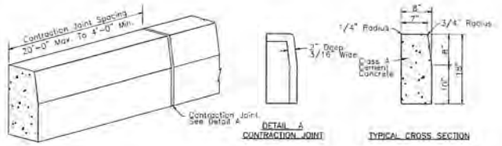
NOT TO SCALE

RAMP PLAN 1 (TYP.)



RAMP PLAN 2 (TYP.)

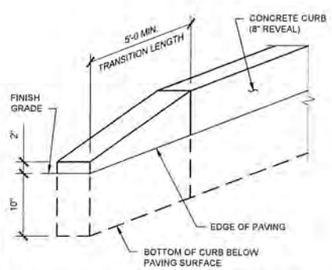




PROVIDE ½" THICK PREMOLDED EXPANSION JOINT SPACED NOT MORE THAN 30 FEET APART. SEAL ALL EXPOSED EXPANSION JOINTS WITH PENNDOT SPECIFIED SEALANT

PLAIN CEMENT CONCRETE CURB

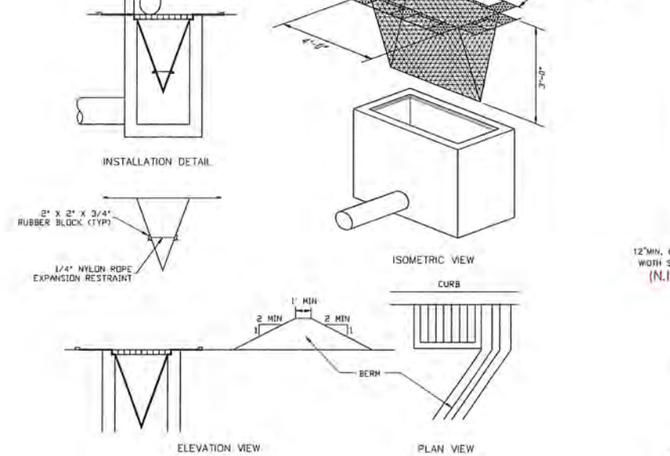
NOT TO SCALE



CONCRETE CURB TAPER

NOT TO SCALE

NOTE
1. SEE CONCRETE CURB DETAIL.



MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FOLLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

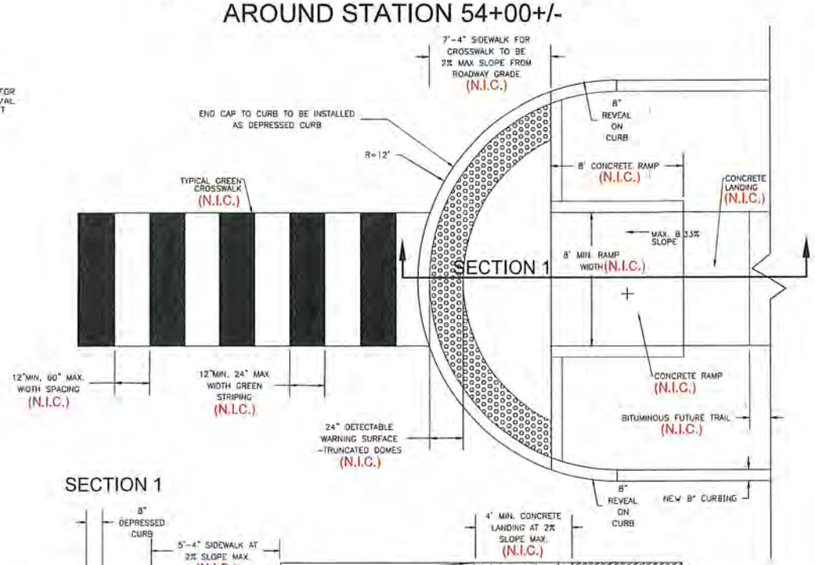
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15

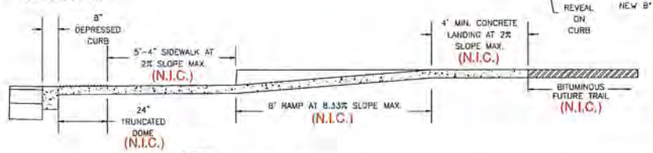
FILTER BAG INLET PROTECTION - CURBED ROADWAY

NOT TO SCALE

RAMP PLAN 3 WITH CROSSWALK (TYP.) AROUND STATION 54+00+/-



SECTION 1



NOTES:
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676, 694, AND 695.

2. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT OR SIDEWALK WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.

3. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL. PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING SIDE FLARES.

4. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS, REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.

5. INSTALL DUMMY JOINTS WHERE RAMPS, RAMP LANDINGS, AND FLARES ABUT.

6. CONSTRUCT DEPRESSED CURB SLOPE TO MATCH ROADWAY PROFILE AND HAVE A FLUSH CONNECTION. DO NOT EXCEED 3.00% PER 1'-0" CROSS SLOPE RATE OF CHANGE WHEN TRANSITIONING TO ROADWAY PROFILE.

STANDARD ISLAND END CAP DETAILS

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM INC
1-800-242-1776
DOCS SERIAL NUMBER 20203141376

BY	ILF
REVISIONS	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021
DATE	7.30.2021

NAVARRO & WRIGHT CONSULTING ENGINEERS, INC
CORPORATE OFFICE
151 RENO AVENUE
NEW CUMBERLAND, PA 17070
PHONE (717) 441-2216
FAX (717) 441-2218
www.navarrowright.com

CONSTRUCTION PLANS FOR THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING BERKS COUNTY PENNSYLVANIA

DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	AS NOTED
DATE:	11/13/2020

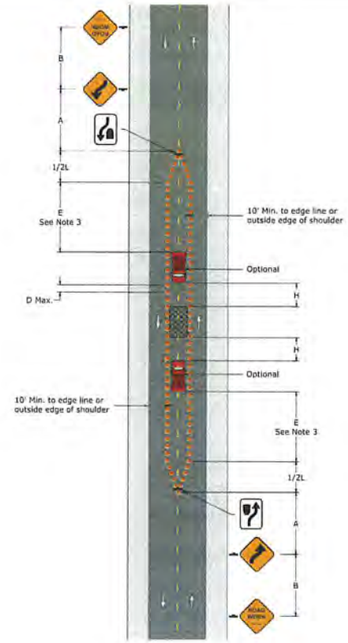
JOB NUMBER: 2004SC118

DRAWING DESCRIPTION: CONSTRUCTION DETAILS

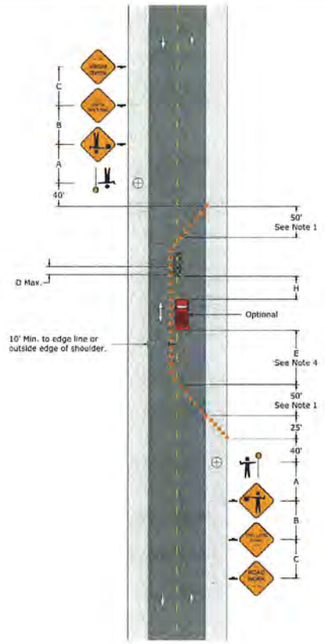
DRAWING NUMBER: C300

Thursday, July 29, 2021 11:44:16 AM
N:_2020\2004SC118_City of Reading * 3W Trails\Site Civil_Dwgs_SHEETS\Phase 2 Sheets\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-C300-DETAILS_.dwg

PATA 104 (Old PATA 9a S)
Work Space In Center Of Roadway



PATA 106 (Old PATA 9c)
Work Along Roadway Centerline



PATA 105 (Old PATA 9b) - Notes

1. Left turns may be prohibited as required by geometric conditions. When the No Left Turn (R3-2) sign is used on undivided streets, one sign should be placed at the near right-hand corner and one at the far left-hand corner. On divided streets the No Left Turn (R3-2) sign should be placed on both the near side and the far side ends of the medians. Refer to Publication 236 for additional guidance.

2. Right Reverse Curve (W1-4R) sign shall only be used when lane shifts onto shoulder.

3. Refer to PATA 008 for reverse curve/turn signing.

Signs

W20-1 W1-4R R4-7 R3-2

Sign Spacing Chart

Condition	Distance A Feet	Distance B Feet	Distance C Feet	Distance F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed	W	L	1/2L	1/3L	Min. Channelizing Devices Per Taper Type (Length) L	1/2L	1/3L	50'	D	E	H
MPH	Feet	Feet	Feet	Feet					Feet	Feet	Feet
25	10	105	55	35							
	11	115	60	40	6	6	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	6	6	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	6	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

PATA 107 (Old PATA 10a) - Notes

1. Each flagger shall be clearly visible to traffic for a minimum distance of E and shall be in constant communication with all other flaggers.

2. For operations of 15 minutes or less:
   a. The Road Work (W20-1), One Lane Road (W20-4), and Flagger Symbol (W20-7) signs are not required.
   b. All channelizing devices may be eliminated if a shadow vehicle is present.

3. The buffer space shall be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.

4. When a shadow vehicle is not used, distance E is measured from end of taper to beginning of work space.

Signs

W20-1 W20-4 W20-7

Sign Spacing Chart

Condition	Distance A Feet	Distance B Feet	Distance C Feet	Distance F Feet
Urban 35 MPH or less	100	100	100	100
Urban Greater than 35 MPH	350	350	350	350
Rural	500	500	500	500

When multiple distance plaques are used on advance warning signs, they shall all be of the same series type.
Example: either all "AHEAD" or XXX FEET.

Taper Length Formulas

S	L
40 MPH or less	$L = \frac{WS^2}{60}$
45 MPH or more	L = WS

S = Regulatory Speed Limit
W = Width of Offset
L = Length

Distance and Spacing Quick Reference Chart

Speed	W	L	1/2L	1/3L	Min. Channelizing Devices Per Taper Type (Length) L	1/2L	1/3L	50'	D	E	H
MPH	Feet	Feet	Feet	Feet					Feet	Feet	Feet
25	10	105	55	35							
	11	115	60	40	6	5	6	6	50	155	150
	12	125	65	45							
30	10	150	75	50	6						
	11	165	85	55	7	6	6	6	60	200	150
	12	180	90	60	7						
35	10	205	105	70	7						
	11	225	115	75	8	6	6	6	70	250	150
	12	245	125	85	8						
40	10	270	135	90	8						
	11	295	150	100	9	6	5	5	80	305	150
	12	320	160	110	9						
45	10	450	225	150	11	6					
	11	495	250	165	12	7	6	6	90	360	150
	12	540	270	180	13	7					
50	10	500	250	170	11	6					
	11	550	275	185	12	7	5	6	100	425	250
	12	600	300	200	13	7					
55	10	550	275	185	11	6					
	11	605	305	205	12	7	6	6	110	495	250
	12	660	330	220	13	7					

Note: Channelizing devices used in taper shall be equally spaced at ½ D Max.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC.
1-800-242-1776
PA1CS SERIAL NUMBER
20203141376

BY	DATE	REVISIONS
JLF	7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021

NAVARRO & WRIGHT CONSULTING ENGINEERS INC
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CONSTRUCTION PLANS
FOR
THE 18W HANCOCK & EAST WYOMISSING BOULEVARDS ISLANDS PROJECT
CITY OF READING
BERKS COUNTY
PENNSYLVANIA

DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	AS NOTED
DATE:	11/13/2020

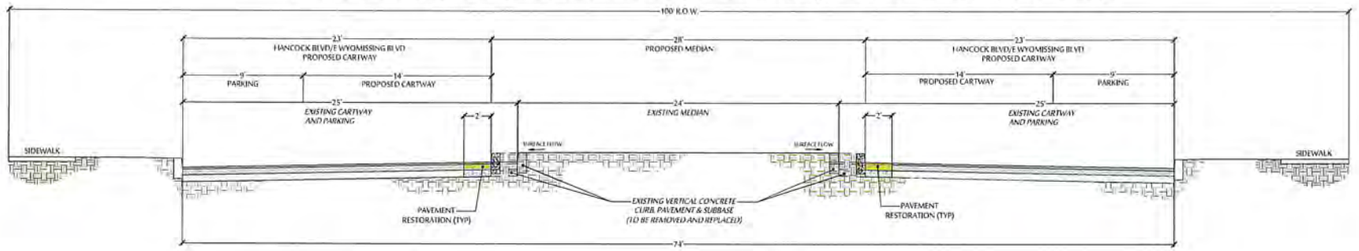
JOB NUMBER:
2004SC118

DRAWING DESCRIPTION:
CONSTRUCTION DETAILS

DRAWING NUMBER:
C301

Thursday, July 29, 2021 11:44:48 AM
N:_2020\2004SC118_City of Reading - EW Trf\Eds Civil_Dwgs_SHEETS-Phase 2 Sheets\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-C300-DETAILS_.dwg

74' WEST CROSS SECTION STATION 3+55+/- TO STATION 30+50+/-



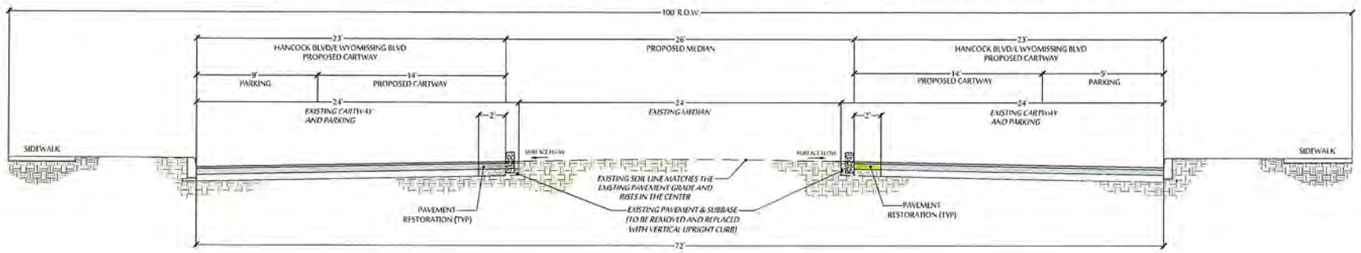
TYPICAL CROSS SECTION
E. WYOMMISING BOULEVARD
SCALE: 1" = 5'-0"

N.I.C.

1

0 5' 10' 15'

72' EAST CROSS SECTION STATION 28+00+/- TO STATION 38+00+/-



TYPICAL CROSS SECTION
E. WYOMMISING BOULEVARD
SCALE: 1" = 5'-0"

2

0 5' 10' 15'

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
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PA 1 SYSTEM, INC.
1-800-242-1776
PA SERIAL NUMBER
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CONSTRUCTION PLANS
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BOULEVARDS ISLANDS PROJECT
CITY OF READING BERKS COUNTY
PENNSYLVANIA

DRAWN BY:	JLF
CHECKED BY:	CWB
SCALE:	AS NOTED
DATE:	11/13/2020

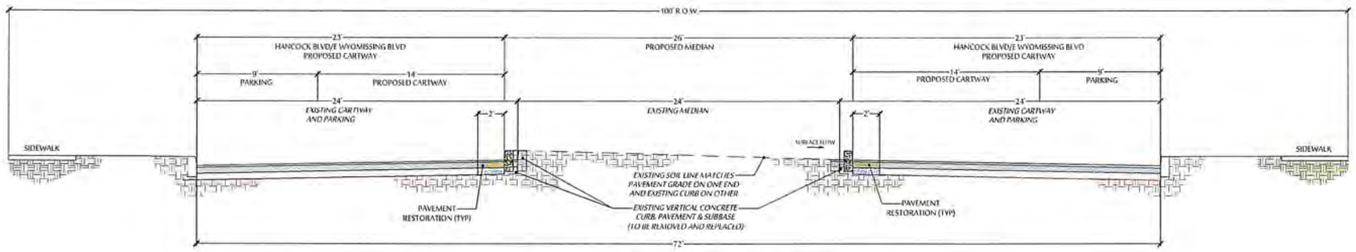
JOB NUMBER:
2004SC118

DRAWING DESCRIPTION:
CROSS SECTIONS

DRAWING NUMBER:
C400

Thursday, July 29, 2021 11:44:53 AM
N:_2020\2004SC118_City of Reading - SW Tri Plex Civil_Engr_SHEETS Phase 2 Sheet\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-C400-CROSS SECTIONS_.dwg

72' EAST CROSS SECTION STATION 38+00+/- TO STATION 54+00+/-

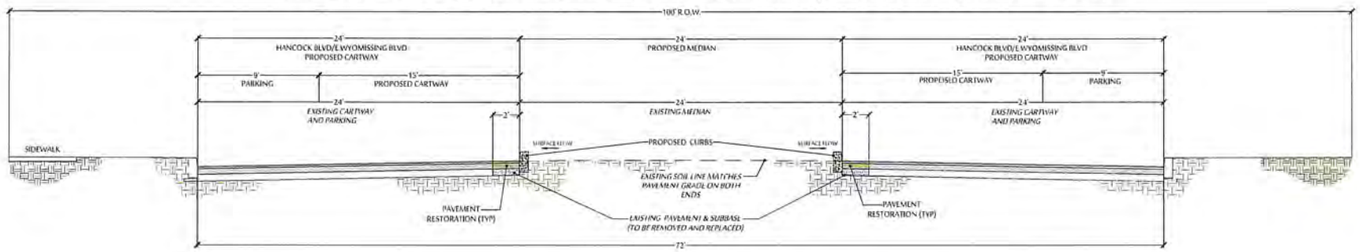


TYPICAL CROSS SECTION
E. WYOMMISING BOULEVARD
N.I.C. SCALE: 1" = 5'-0"

3

0 5' 10' 15'

72' EAST CROSS SECTION STATION 54+00+/- TO STATION 57+50+/-



TYPICAL CROSS SECTION
HANCOCK BOULEVARD
SCALE: 1" = 5'-0"

4

0 5' 10' 15'

CALL BEFORE YOU DIG!
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DAYS IN DESIGN STAGE - STOP CALL
PA 1 SYSTEM, INC.
1-800-242-1776
PA ONE SERIAL NUMBER
20203141376

DATE	REVISIONS	BY
7.30.2021	REVISIONS TO PLANS PER CLIENTS COMMENTS DATED 6.29.2021	JLF

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CITY OF READING BERKS COUNTY
PENNSYLVANIA

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CHECKED BY:	CWB
SCALE:	AS NOTED
DATE:	11/13/2020

JOB NUMBER:
2004SC118

DRAWING DESCRIPTION:
CROSS SECTIONS

DRAWING NUMBER:
C401

N:_2020\2004SC118_City of Reading 18W TrnAbtg Civil_Dwgs_SHEETS\Phase 2 Sheets\Phase 2 Sheet revised from comments 6.29.2021\2004SC118-CA09 CROSS SECTIONS_.dwg