

PENNDOT ENGINEERING DISTRICT 5-0 LVTS PM-6 BRIDGE PREVENTATIVE MAINTENANCE (MPMS #109966)

NORTHAMPTON COUNTY, PA

10,000 5,000 0 10,000 20,000 30,000 Feet

LVTS PM-6 Bridge Preventative Maintenance (MPMS #109966) PROJECT INFORMATION

SR 3020 (Newburg Rd.) over SR 0033

BMS#: 48-3020-0120-1385

BRKEY: 28771

<u>Project Description</u>: Bridge preservation for a four span RC I-Beam bridge carrying SR 3020 over SR 0033 Lower Nazareth Township. Superstructure work includes concrete deck and barrier repairs, PPC overlay, replace/reseal deck joints, repair beam ends, and seal barrier joints. Substructure repairs include repairs to deteriorated concrete on piers and abutments. Roadway approaches will be milled/overlayed. Other roadway items include inlet repairs and curb installation at inlets. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 3020 is a minor collector road. The project is located in a rural setting with terrain varying from level to rolling. No pedestrian facilities are located near the bridge.

<u>Crash History</u>: There were five crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

Roadway Description: SR 3020 Segment 0120 Offset 1385

<u>Functional Classification</u>: Minor Collector (Urban)

Roadway Typology: Neighborhood Collector – Suburban Neighborhood

Design Criteria:

Current ADT: 7,476 (2021)
Design ADT: 8,049 (2041)
Posted Speed: 50 mph



<u>Photo #1</u>: SR 3020/BRKEY 28771 – View of bridge deck. Photo Date: 12/14/2020.



Photo #2: SR 3020/BRKEY 28771 – Elevation view of bridge. Photo Date: 12/14/2020.

SR 0022 over SR 2012 (25th St.) BMS#: 48-0022-0200-0000

BRKEY: 28481

<u>Project Description</u>: Bridge preservation for a single span steel plate girder bridge carrying SR 0022 over 25th Street in Wilson Borough and Palmer Township. Superstructure work includes concrete deck patching, PPC overlay, and joint replacements. Substructure work includes bearing replacements, concrete patching, weephole cleaning, and wingwall repairs. No roadway approach work is anticipated. Minor earth disturbance is anticipated around the wingwalls. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 0022 is a limited access freeway. The project is located in an urban setting with terrain varying from level to rolling. No pedestrian facilities are on the bridge. There are sidewalks along 25th Street under the bridge.

<u>Crash History</u>: There were five crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries. The crashes are likely due to the intersections at each end of the bridge.

Roadway Description: SR 0022 Segment 0200 Offset 0000

<u>Functional Classification</u>: Freeways/Interstates (Urban)

Roadway Typology: Limited Access Freeway – Urban Non-Interstate

Design Criteria:

Current ADT: 27,269 (2021) Design ADT: 29,359 (2041)

Posted Speed: 45 mph



Photo #1: SR 0022/BRKEY 28481 - View of bridge deck. Photo Date: 1/12/2021.



Photo #2: SR 0022/BRKEY 28481 - Elevation view of bridge. Photo Date: 1/12/2021.

SR 0022 over SR 0248 BMS#: 48-0022-0200-0304

BRKEY: 28482

<u>Project Description</u>: Bridge preservation for a single span steel plate girder bridge carrying SR 0022 over SR 0248 in Wilson Borough and Palmer Township. Superstructure work includes concrete deck patching, PPC overlay, joint replacements, and replacement of terminal section of concrete barrier. Substructure work includes bearing replacements, concrete patching, weephole cleaning, and wingwall repairs. No roadway approach work is anticipated. Minor earth disturbance is anticipated around the wingwalls. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 0022 is a limited access freeway. The project is located in an urban setting with terrain varying from level to rolling. No pedestrian facilities are on the bridge. There are sidewalks along SR 0248 under the bridge.

<u>Crash History</u>: There were six crashes in a five-year period from 2015 through 2019. One of them included a fatality.

Roadway Description: SR 0022 Segment 0200 Offset 0304

<u>Functional Classification</u>: Freeways/Interstates (Urban)

Roadway Typology: Limited Access Freeway – Urban Non-Interstate

Design Criteria:

Current ADT: 27,269 (2021) Design ADT: 29,359 (2041)

Posted Speed: 45 mph



Photo #1: SR 0022/BRKEY 28482 – Elevation view of bridge. Photo Date: 1/12/2021.



Photo #2: SR 0022/BRKEY 28482 - Elevation view of bridge. Photo Date: 1/12/2021.

SR 2028 (Bethman Rd.) over SR 0022

BMS#: 48-2028-0100-1273

BRKEY: 28744

<u>Project Description</u>: Bridge preservation for a single span concrete rigid frame bridge carrying SR 2028 over SR 0022 Bethlehem Township. Superstructure work includes deck repairs, joint repairs, and epoxy overlay. Substructure repairs include concrete patching. Roadway approaches will be milled/overlayed. Other roadway items include inlet repairs. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction. A 3.5 mile detour is anticipated for SR 2028 and will utilize SR 2028 (Green Pond Road), SR 2028 (South Greenwood Avenue), and SR 2020 (William Penn Highway).

<u>Project Setting & Distinct Project Features</u>: SR 2028 is a major collector road. The project is located in a rural setting with terrain varying from level to rolling. No pedestrian facilities are located near the bridge.

<u>Crash History</u>: There were two crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

<u>Roadway Description</u>: SR 2028 Segment 0100 Offset 1273 <u>Functional Classification</u>: Major Collector – Rural (Urban)

Roadway Typology: Community Collector – Rural

Design Criteria:

Current ADT: 2,856 (2021)
Design ADT: 3,075 (2041)
Posted Speed: 35/40 mph

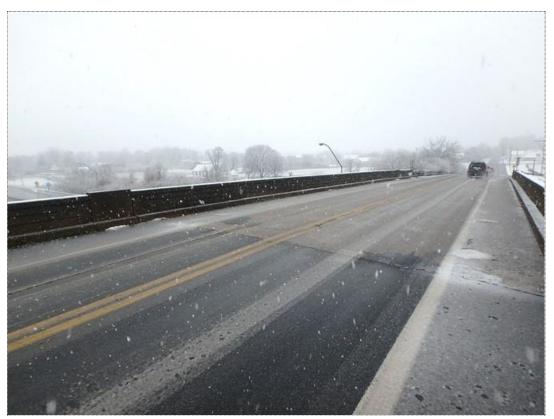


Photo #1: SR 2028/BRKEY 28744 - View of bridge deck. Photo Date: 12/14/2020.



Photo #2: SR 2028/BRKEY 28744 - Elevation view of bridge. Photo Date: 12/14/2020.

SR 3011 over Lehigh River (Fahy Bridge)

BMS#: 48-3011-0020-0336

BRKEY: 28761

<u>Project Description</u>: Bridge preservation for a four span steel rigid frame bridge carrying SR 3011 over Lehigh River, Lehigh Canal, and Norfolk Southern Railroad in the City of Bethlehem. Superstructure work includes steel repairs. No substructure repairs are anticipated. No roadway approach work is anticipated. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 3011 is a principal arterial road. The project is located in an urban setting with level terrain. A pedestrian sidewalk is attached to the bridge.

<u>Crash History</u>: There were eight crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

Roadway Description: SR 3011 Segment 0020/0021 Offset 1802 (NB)/1799 (SB)

<u>Functional Classification</u>: Principal Arterial (Urban) <u>Roadway Typology</u>: Regional Arterial – Urban Core

Design Criteria:

Current ADT: 10,890 (2021) Design ADT: 11,725 (2041)

Posted Speed: 35 mph



Photo #1: SR 3011/BRKEY 28761 - View of Pier 7 repair locations. Photo Date: 12/14/2020.



Photo #2: SR 3011/BRKEY 28761 - View of Pier 8 repair location. Photo Date: 12/14/2020.



Photo #3: SR 3011/BRKEY 28761 - View of Pier 9 repair location. Photo Date: 12/14/2020.



Photo #4: SR 3011/BRKEY 28761 - Review of Pier 9 repair location. Photo Date: 1/19/2021.

SR 2012 over Lehigh River (Glendon Bridge)

BMS#: 48-2012-0160-0089

BRKEY: 28723

<u>Project Description</u>: Bridge preservation for a seven span steel girder bridge carrying SR 2012 over Lehigh River, Lehigh Drive, Norfolk Southern Railroad, and Lehigh Canal located in Wilson Borough. Superstructure work includes installation of beam catch at pier 6 in the vicinity of Lehigh Drive. No substructure repairs are anticipated. No roadway approach work is anticipated. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 2012 is a major collector road. The project is located in a rural setting with terrain varying from level to rolling. No pedestrian facilities are located near the bridge.

<u>Crash History</u>: There were three crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

Roadway Description: SR 2012 Segment 0160 Offset 0089

<u>Functional Classification</u>: Major Collector (Urban)

<u>Roadway Typology</u>: Community Collector – Suburban Corridor

Design Criteria:

Current ADT: 13,913 (2021) Design ADT: 14,980 (2041)

Posted Speed: 40 mph



 $\underline{Photo~\#1}$: SR 2012/BRKEY 28723 - View of work area (Pier 6) looking west toward Lehigh Drive. Photo Date: 2/12/2020.



 $\underline{Photo~\#2}$: SR 2012/BRKEY 28723 - View of work area (Pier 6) looking east toward Lehigh River. Photo Date: 2/12/2020.

SR 0145 over Lehigh River (Treichlers Bridge)

BMS#: 48-0145-0004-0000

BRKEY: 39624

<u>Project Description</u>: Bridge preservation for a nine span PS I-Beam/Box-Beam bridge carrying SR 0145 over Lehigh River and Norfolk Southern Railroad in North Whitehall and Lehigh Townships. Superstructure work includes joint repairs, crack repairs in beam ends, and resetting bearings at near abutment and pier 5. No substructure repairs are anticipated. No roadway approach work is anticipated. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 0145 is a principal arterial road. The project is located in a rural setting with terrain varying from level to rolling. No pedestrian facilities are located near the bridge.

<u>Crash History</u>: There were three crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

Roadway Description: SR 0145 Segment 0294 Offset 0940

Functional Classification: Principal Arterial (Urban)

Roadway Typology: Regional Arterial – Suburban Center

Design Criteria:

Current ADT: 14,124 (2021) Design ADT: 15,207 (2041)

Posted Speed: 35 mph



<u>Photo #1</u>: SR 0145/BRKEY 39624 - View of bridge deck. Photo Date: 8/5/2019.



Photo #2: SR 0145/BRKEY 39624 - Elevation view of bridge. Photo Date: 8/5/2019.

SR 2028 (Greenwood Ave.) over SR 0022

BMS#: 48-2028-0120-0850

BRKEY: 28745

<u>Project Description</u>: Bridge preservation for a single span concrete rigid frame bridge carrying SR 2028 over SR 0022 in Palmer Township. Superstructure work includes concrete patching on barrier and curbs, and sealing of open joints in barriers. Substructure repairs include installation of wingwall tie-backs and concrete patching. No roadway approach work is anticipated. Other work includes rebuilding inlets and replacing associated cross and slope pipes, and tree trimming next to abutments. No earth disturbance is anticipated. A Maintenance and Protection of Traffic Plan will be implemented during construction.

<u>Project Setting & Distinct Project Features</u>: SR 2028 is a major collector road. The project is located in a suburban setting with terrain varying from level to rolling. No pedestrian facilities are located near the bridge.

<u>Crash History</u>: There were two crashes in a five-year period from 2015 through 2019. None of them included fatalities or serious injuries.

Roadway Description: SR 2028 Segment 0120 Offset 0850

Functional Classification: Major Collector (Urban)

Roadway Typology: Community Collector – Suburban Corridor

Design Criteria:

Current ADT: 11,008 (2021) Design ADT: 11,851 (2041)

Posted Speed: 35 mph



Photo #1: SR 2028/BRKEY 28745 - View of bridge deck. Photo Date: 1/12/2021.



Photo #2: SR 2028/BRKEY 28745 – Elevation view of bridge. Photo Date: 1/12/2021.