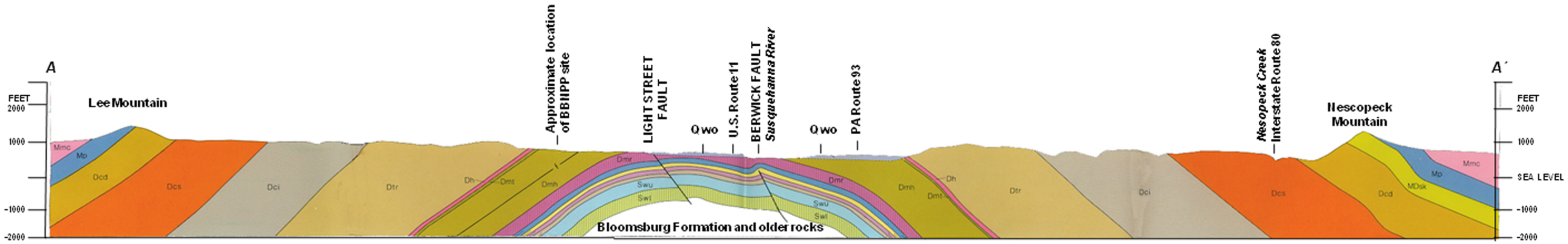
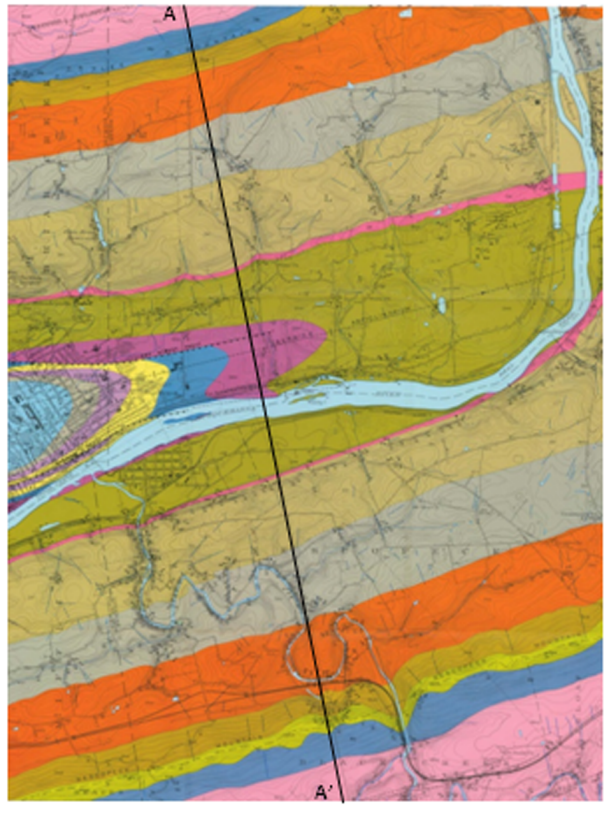
Figure 2.5-193 {Cross Section of Berwick Anticlinorium - Bedrock Geology of The Berwick Quadrangle}

CROSS SECTION



Location Map of Cross Section

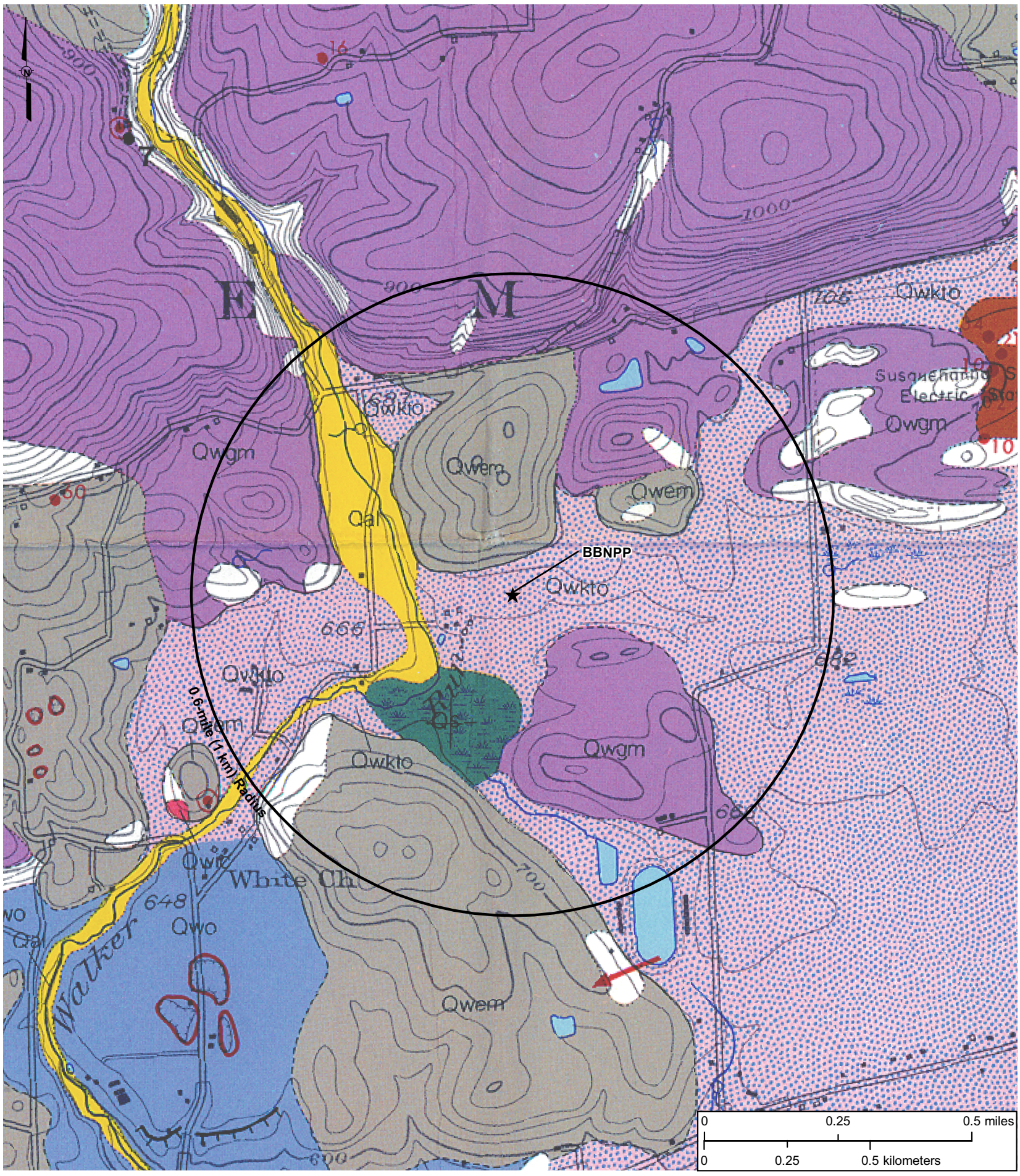


Legend

WOOD-FORDIAN OUTWASH Qwo	MAUCH CHUNK FORMATION Mmc	POCONO FORMATION Mp	SPECHTY KOPF FORMATION MDisk	CATSKILL FORMATION: DUNCANNON MEMBER Dcd	CATSKILL FORMATION: SHERMAN CREEK MEMBER Dcs	CATSKILL FORMATION: IRISH VALLEY MEMBER Dci	TRIMMERS ROCK FORMATION Dtr	HARRELL FORMATION Dh

MANHATANGO FORMATION: TULLY MEMBER Dmt / f Dmh	MARCELLUS FORMATION Dmr	ONONDAGE FORMATION Don	OLD PORT FORMATION Do	KEYSER FORMATION DSk	TONOLOWAY FORMATION Sto	WILLS CREEK FORMATION: UPPER MEMBER SWU / LOWER MEMBER Swi	

Figure 2.5-194 {Surficial Geologic Site Map 0.6 Mile (1 km)}



LEGEND:

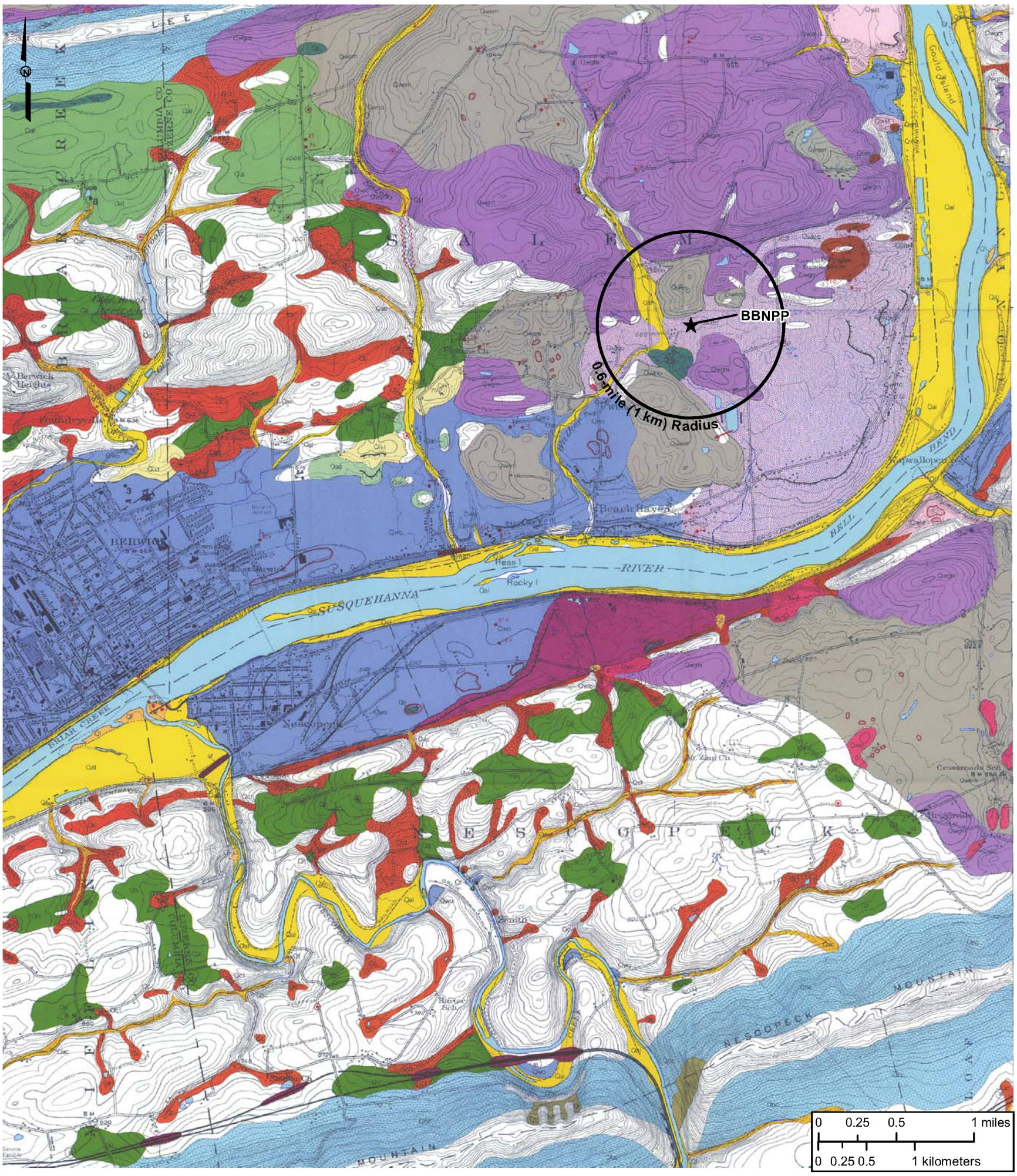
★ Proposed Center Point of Bell Bend NPP (BBNPP)

○ NPP Reactor 0.6-mile (1 km) Radius

ARTIFICIAL FILL af	ALLUVIUM Qal	ALLUVIAL FAN Qf	ALLUVIUM AND WOODFORDIAN OUTWASH, UNDIVIDED Qwoa	SWAMP DEPOSIT Qs	ALLUVIUM AND COLLUVIUM UNDIVIDED Qao	COLLUVIUM Qc	COLLUVIUM AND TILL, UNDIVIDED Qct	EOLIAN MANTLE Qem	TALUS Qt	BOULDER COLLUVIUM Qbc

WOOD-FORDIAN OUTWASH Qwo	WOOD-FORDIAN KAME TERRACE Qwkt	WOOD-FORDIAN KAME TERRACE AND OUTWASH, UNDIVIDED Qwkto	WOOD-FORDIAN FRONTAL KAME Qwfk	WOOD-FORDIAN ICE-CONTACT STRATIFIED DRIFT Qwic	WOOD-FORDIAN GROUND MORAINE Qwgm	WOOD-FORDIAN END MORAINE Qwem	ALTONIAN OUTWASH Qao	ALTONIAN TILL Qat	ILLINOIAN KAME TERRACE Qikt	ILLINOIAN TILL Qit

Figure 2.5-195 {Surficial Sediments Description}



LEGEND:

★ Proposed Center Point of Bell Bend NPP (BBNPP)

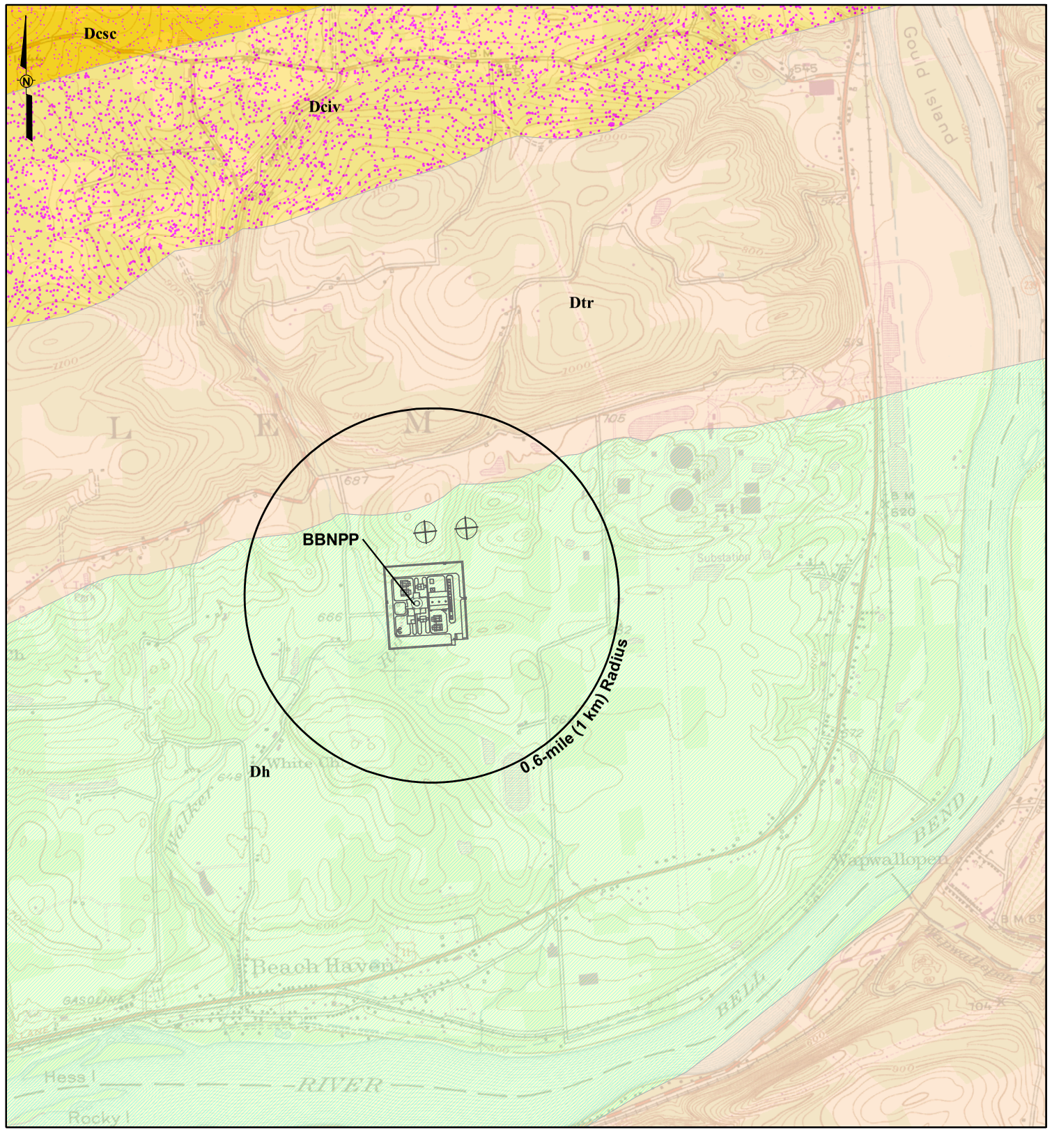
○ NPP Reactor 0.6-mile (1 km) Radius

ARTIFICIAL FILL af	ALLUVIUM Qal	ALLUVIAL FAN Qf	ALLUVIUM AND WOODFORDIAN OUTWASH, UNDIVIDED Qwoa	SWAMP DEPOSIT Qs	ALLUVIUM AND COLLUVIUM UNDIVIDED Qao	COLLUVIUM Qc	COLLUVIUM AND TILL, UNDIVIDED Qct	EOLIAN MANTLE Qem	TALUS Qt	BOULDER COLLUVIUM Qbc

WOOD-FORDIAN OUTWASH Qwo	WOOD-FORDIAN KAME TERRACE Qwkt	WOOD-FORDIAN KAME TERRACE AND OUTWASH, UNDIVIDED Qwkto	WOOD-FORDIAN FRONTAL KAME Qwfk	WOOD-FORDIAN ICE-CONTACT STRATIFIED DRIFT Qwic	WOOD-FORDIAN GROUND MORAINE Qwgm	WOOD-FORDIAN END MORAINE Qwem	ALTONIAN OUTWASH Qao	ALTONIAN TILL Qat	ILLINOIAN KAME TERRACE Qikt	ILLINOIAN TILL Qit

REFERENCE:

Figure 2.5-196 {Site Area Geologic Map 0.6-mile (1 km) Radius}



LEGEND

Unit Descriptions

Pennsylvanian

- Pl — Llewellyn Formation
- Pp — Pottsville Formation

Mississippian

- Mmc — Mauch Chunk Formation
- Mb — Burgoon Sandstone
- Mp — Pocono Formation
- MDhm — Huntley Mountain Formation
- MDsk — Spechty Kopf Formation

Devonian

- Dck — Catskill Formation

Catskill Formation Members:

- Deb — Buddys Run Member
- Ded — Duncannon Member
- Dccf — Clarks Ferry Member
- Dcsc — Sherman Creek Member
- Dcbs — Berry Run & Sawmill Run Members, undivided
- Dcp — Packerton Member
- Dclr — Long Run Member
- Dciv — Irish Valley Member

- Dtr — Trimmers Rock Formation
- Dh — Hamilton Group
- Doo — Onondaga & Old Port Formations, undivided
- DSkt — Keyser & Tonoloway Formations, undivided

Silurian

- Swc — Wills Creek Formation
- Sbm — Bloomsburg & Mifflintown Formations, undivided
- Sc — Clinton Group

Fault - Inferred

Fault

★ Center Point of Proposed Bell Bend NPP (BBNPP)

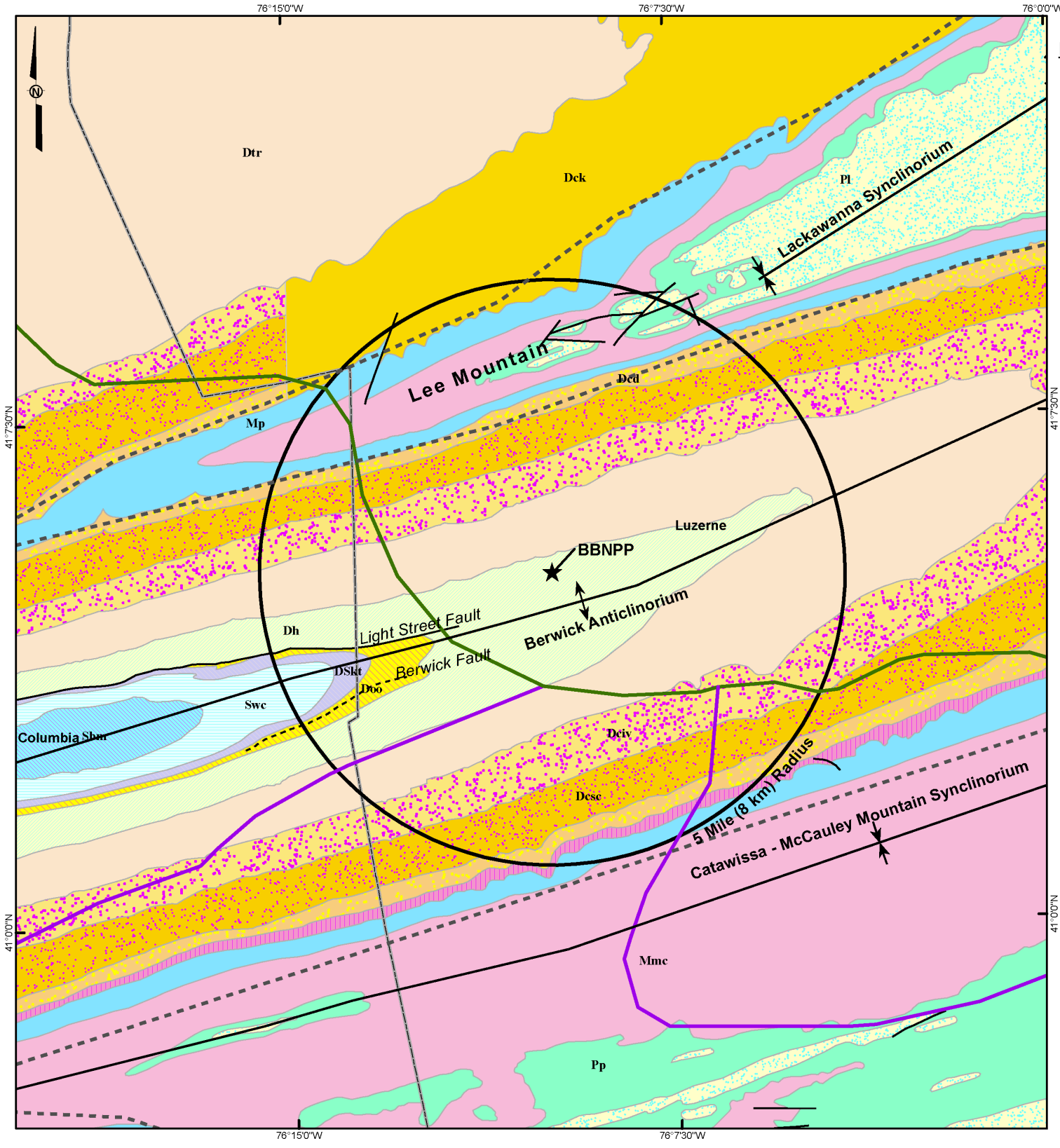
○ NPP Reactor 0.6-mile (1 km) Radius

0 0.25 0.5 1 miles

0 0.5 1 kilometers

REFERENCES:
- sk-12198-004-001, 2008.
- Berg, 1980.
- King, 1974.
- USGS, 1989.
- ESRI, 2007.

Figure 2.5-197 {Site Area Geologic Map 5-mile (8km) Radius}



LEGEND

Unit Descriptions

Pennsylvanian

- Pl — Llewellyn Formation
- Pp — Pottsville Formation

Mississippian

- Mmc — Mauch Chunk Formation
- Mb — Burgoon Sandstone
- Mp — Pocono Formation
- MDhm — Huntley Mountain Formation
- MDsk — Spechty Kopf Formation

Devonian

- Dck — Catskill Formation

Catskill Formation Members:

- Dcb — Buddys Run Member
- Dcd — Duncannon Member
- Dccf — Clarks Ferry Member
- Dcsc — Sherman Creek Member
- Dcbs — Berry Run & Sawmill Run Members, undivided
- Dcp — Packerton Member
- Dclr — Long Run Member
- Dciv — Irish Valley Member

- Dtr — Trimmers Rock Formation
- Dh — Hamilton Group
- Doo — Onondaga & Old Port Formations, undivided
- DSkt — Keyser & Tonoloway Formations, undivided

Silurian

- Swc — Wills Creek Formation
- Sbm — Bloomsburg & Mifflintown Formations, undivided
- Sc — Clinton Group

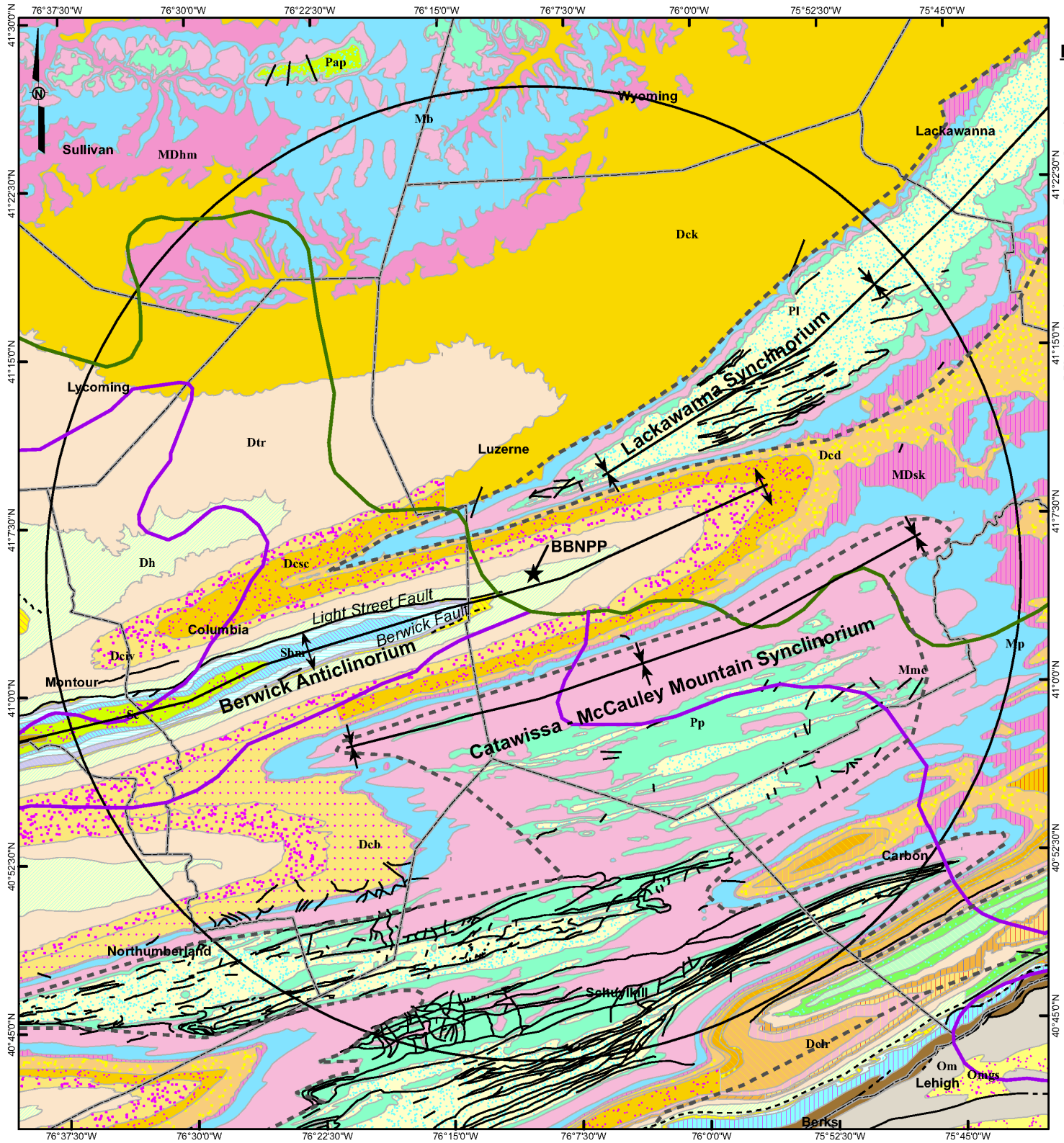
- Fault - Inferred
- Fault
- Pre-Wisconsinan Glacial Limit
- Wisconsinan Glacial Limit
- Anthracite Region
- Center Point of Proposed Bell Bend NPP (BBNPP)
- NPP Reactor 5-mile (8 km) Radius
- County Line

0 0.5 1 2 miles

0 1 2 kilometers

REFERENCES:
- Berg, 1980.
- Harrison, 2004.
- King, 1974.
- ESRI, 2007.

Figure 2.5-198 {Site Area Geologic Map 25-mile (40km) Radius}



LEGEND

Unit Descriptions

Pennsylvanian
- Pl — Llewellyn Formation
- Pp — Pottsville Formation

Mississippian
- Mmc — Mauch Chunk Formation
- Mb — Burgoon Sandstone
- Mp — Pocono Formation
- MDhm — Huntley Mountain Formation
- MDsk — Spechty Kopf Formation

Devonian
- Dck — Catskill Formation

Catskill Formation Members:
- Dcb — Buddys Run Member
- Dcd — Duncannon Member
- Dccf — Clarks Ferry Member
- Dcsc — Sherman Creek Member
- Dcbs — Berry Run & Sawmill Run Members, undivided
- Dcp — Packerton Member
- Dclr — Long Run Member
- Dciv — Irish Valley Member
- Dtr — Trimmers Rock Formation
- Dh — Hamilton Group
- Doo — Onondaga & Old Port Formations, undivided
- DSkt — Keyser & Tonoloway Formations, undivided

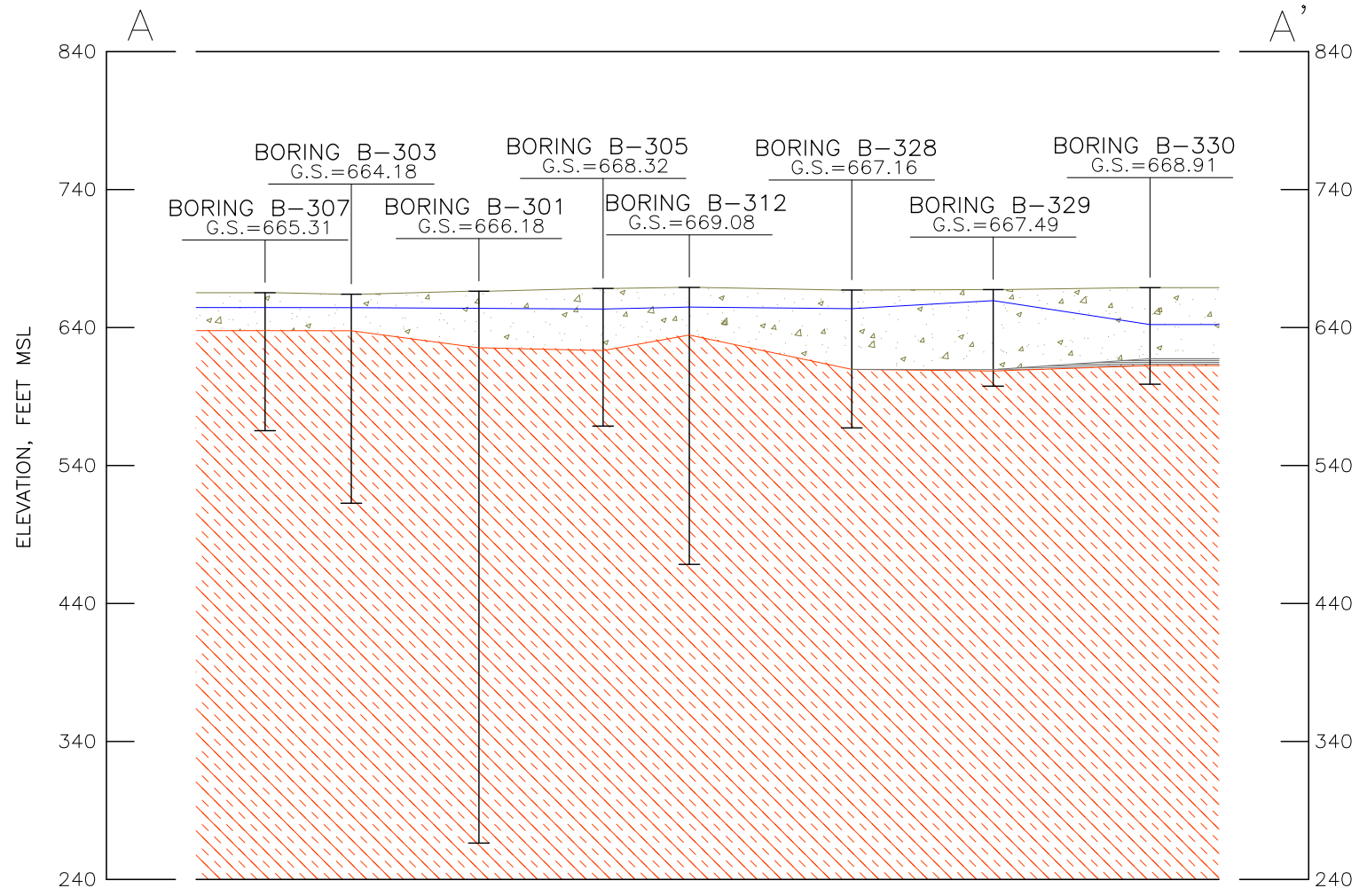
Silurian
- Swc — Wills Creek Formation
- Sbm — Bloomsburg & Mifflintown Formations, undivided
- Sc — Clinton Group

- Fault - Inferred
- Fault
- Pre-Wisconsinan Glacial Limit
- Wisconsinan Glacial Limit
- Anthracite Region
- ★ Center Point of Proposed Bell Bend NPP (BBNPP)
- ○ NPP Reactor 25-mile (40 km) Radius
- County Line

0 2.5 5 10 miles
0 5 10 kilometers

REFERENCES:
- Berg, 1980.
- Harrison, 2004.
- King, 1974.
- ESRI, 2007.

Figure 2.5-199 {Geotechnical Site Cross Section A-A}



BORING B–307 T.D.=100.0'

BORING B–303 T.D.=151.5'

BORING B–301 T.D.=400.0'

BORING B–305 T.D.=99.7'

BORING B–312 T.D.=100.7'

BORING B–328 T.D.=99.9'

BORING B–329 T.D.=70.0'

BORING B–330 T.D.=70.0'

LEGEND:

GLACIO FLUVIAL DEPOSITS

WEATHERED SHALE/SILTSTONE (MAHANTANGO FORMATION)

SHALE/SILTSTONE (MAHANTANGO FORMATION)

APPROXIMATE WATERLINE

VERTICAL SCALE

100 0 100 FEET

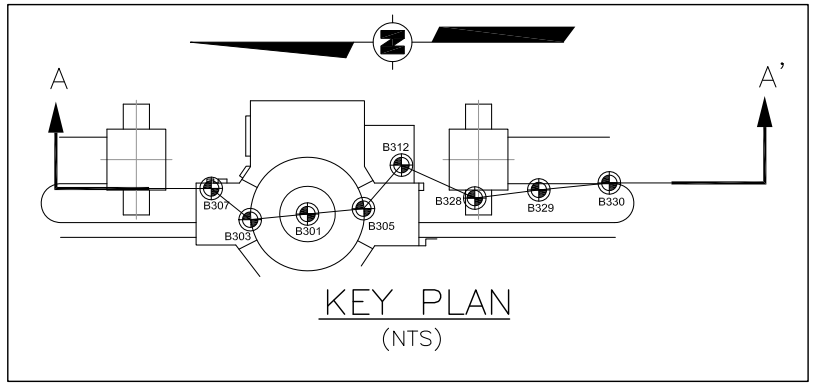
HORIZONTAL SCALE

200 0 200 FEET

GEOTECHNICAL SECTION A–A'

NOTES:

1. THE DEPTH AND THICKNESS OF SOIL AND ROCK STRATA INDICATED ON THE SUBSURFACE PROFILE WERE OBTAINED BY INTERPOLATING BETWEEN BORINGS. INFORMATION ON ACTUAL SOIL AND ROCK CONDITIONS EXIST ONLY AT BORING LOCATIONS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.
2. SOIL AND ROCK CLASSIFICATION MADE IN ACCORDANCE WITH ASTM D2487–06 AND ASTM D2488–06.
3. ALL DEPTHS ARE BELOW GROUND SURFACE.
4. SITE–MAHANTANGO BEDROCK AVERAGE ORIENTATION–STRIKE (N 20°E) DIP (70° SE).



KEY PLAN
(NTS)

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

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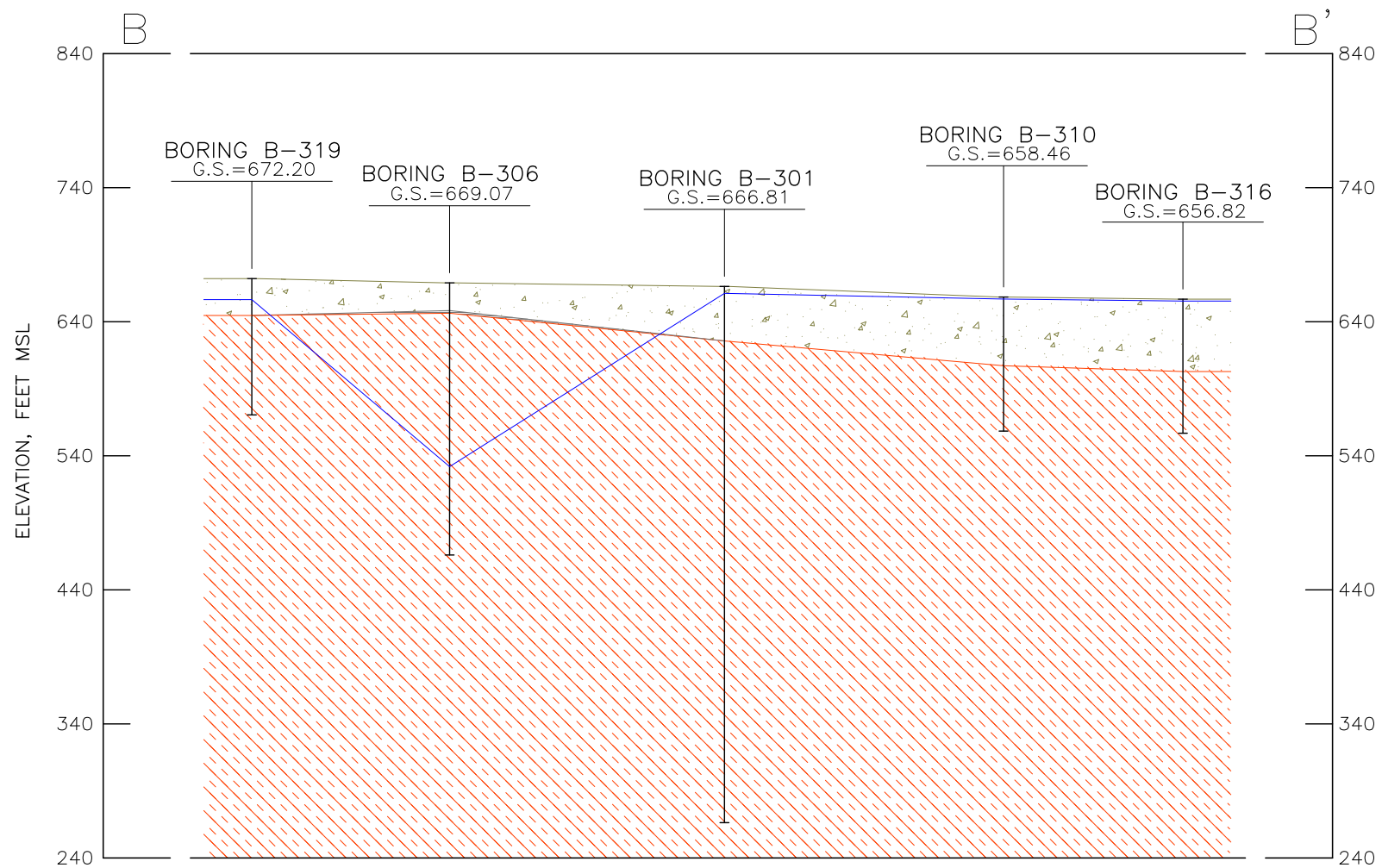
Figure 2.5-200 {Geotechnical Site Cross Section B-B}



BORING B–319 T.D.=101.7'

BORING B–306 T.D.=203.0'

BORING B–301 T.D.=400.0'

BORING B–310 T.D.=100.0'

BORING B–316 T.D.=100.0'

LEGEND:

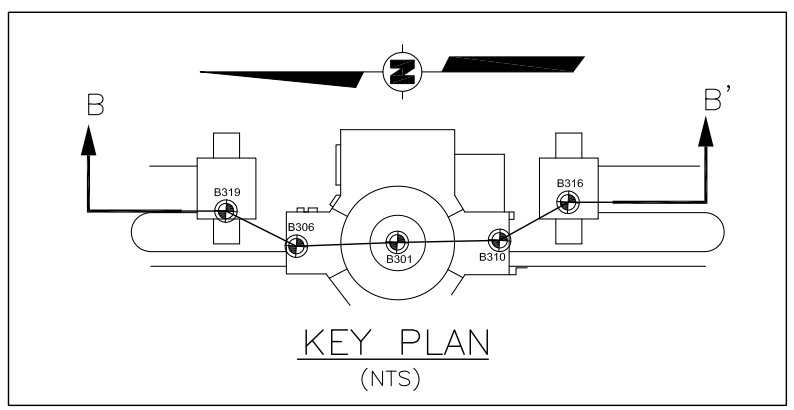
GLACIO FLUVIAL DEPOSITS

WEATHERED SHALE/SILTSTONE (MAHANTANGO FORMATION)

SHALE/SILTSTONE (MAHANTANGO FORMATION)

APPROXIMATE WATERLINE

GEOTECHNICAL SECTION B–B'



KEY PLAN
(NTS)

VERTICAL SCALE
100 0 100 FEET

HORIZONTAL SCALE
200 0 200 FEET

NOTES:

1. THE DEPTH AND THICKNESS OF SOIL AND ROCK STRATA INDICATED ON THE SUBSURFACE PROFILE WERE OBTAINED BY INTERPOLATING BETWEEN BORINGS. INFORMATION ON ACTUAL SOIL AND ROCK CONDITIONS EXIST ONLY AT BORING LOCATIONS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.
2. USGS FIELD CLASSIFICATION USED.
3. SOIL AND ROCK CLASSIFICATION MADE IN ACCORDANCE WITH ASTM D2487–06 AND ASTM D2488–06.
4. SITE–MAHANTANGO BEDROCK AVERAGE ORIENTATION–STRIKE (N 20°E) DIP (70° SE).

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.

THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

CAD FILE: 073891B19.dwg