

Indiana Department of Transportation

Broadband Access Policy



Approval and Implementation

The Indiana Department of Transportation's (INDOT) Broadband Access Policy (BAP) provides procedures pertaining to the placement of broadband facilities in the right-of-way to Indiana's state highway systems.

The BAP addresses the applicability, procedural, and state and federal guidelines responsible for permitting the installation of broadband facilities within state Right-of-Way. The Broadband Access Policy will assist INDOT employees, local public agencies, contractors, and those interested in utilizing state Right-of-Way for installation of broadband facilities.

The Broadband Corridors Initiative provided subject matter expertise, accountability, and authority on policy as it relates to their divisions.

This policy is effective_____

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Record of Revision

Date	Reviser	Description	Effective Date



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BROADBAND ACCESS POLICY

CHAPTER 1 INTRODUCTION

1.1 Purpose

INDOT's goal in managing the Right-of Way, as defined below, is to preserve the integrity, safe operation, and function of the state highway system. The manner in which broadband facilities occupy the Right-of-Way can affect the appearance, operation, construction, and maintenance of the highway and the safety of the traveling public; therefore, any occupancy by a broadband facility shall be authorized, and reasonably regulated and managed. The purpose of this Broadband Access Policy ("BAP") is to establish a framework for managing broadband facilities that are located, installed, maintained, repaired, removed, or relocated within the Right-of-Way of the state highway system.

INDOT reserves the right to address other types of facilities in accordance with this policy or other policies.

The BAP supersedes and replaces all previous policies or portions of policies pertaining to the accommodation of broadband facilities in the Right-of-Way of the state highway system, but does not supersede or replace the INDOT Broadband Permit Guidelines.

1.2 Prior Rights

The BAP is not intended to delineate whether or not prior rights exist; however, it does establish that, threats to safety notwithstanding, broadband facilities shall not be subject to removal or relocation due to any conflict with provisions of this policy if those facilities were operational prior to the enactment of the BAP. Furthermore, broadband facilities installed legally and by permit prior to the effective date of the BAP shall not be subject to access fees. Only those broadband facilities installed in the Broadband Corridor and those broadband facilities with an executed agreement prior to May 1, 2019, are subject to access fees. Broadband facilities on Right-of-Way must relocate those facilities at the owner's expense if they are in conflict with proposed highway improvement project(s). A broadband facility which has a real property interest (i.e. an easement) in the Right-of-Way will be accommodated via an agreement, as allowed under state and federal law.



Any broadband improvement may access the Right-of-Way, if properly permitted, in a manner consistent with the BAP.

INDOT's authority with respect to jurisdiction over Right-of-Way emanates from state and federal law. <u>See</u> 23 U.S.C. 156, CFR 23 710.403, 23 CFR 710.405, I.C. 8-23-2-4.1, I.C. 8-23-2-5-6, I.C. 8-23-5, and I.C. 8-1-32.5-14.

1.3 Responsibilities

Federal and state law mandate that INDOT manage the state highway system in a responsible, reasonable and cost effective manner. Federal, state, and local laws and regulations establish authority for developing and maintaining the BAP. The following laws are the legal authority for this policy.

1.3.1 Federal Authority

a. 23 CFR 701.403 b. 23 CFR 701.405

- c. 23 USC 156
- 1.3.2 State Authority
- a. IC 8-1-2-1.1
- b. I.C. 8-23-2-4.1
- c. I.C. 8-23-2-5-6
- d. I.C. 8-23-5
- e. I.C. 8-1-32.5-14
- f. I.C. 8-23-2-20

1.3.3. Other Requirements

The facility will comply with all other applicable requirements including but not limited to those specified in the following documents:

- INDOT Broadband Permit Guidelines.
- INDOT Standard Specifications.
- INDOT Standard Drawings.
- INDOT Permit General and Special Provisions.
- Indiana Manual on Uniform Traffic Control Devices <u>https://www.in.gov/dot/div/contracts/design/mutcd/2011rev3MUTCD.ht</u> <u>m.</u>
- INDOT Design Manual.
- Occupational Safety and Health Administration ("OSHA") Standards.
- All other relevant industry standards for the type of facilities being installed.
- All other relevant laws and regulations.



CHAPTER 2 PERMITS

2.1 Pre-existing facilities

Notwithstanding pre-existing facilities described in Section 1.2, it is INDOT's intention that this policy is applied to all wireline and wireless broadband facilities, and that all broadband facilities have equal access to, and are subject to equal requirements and regulations regarding the Right-of-Way, except for instances in which certain Right-of-Way is designated as a Broadband Corridor. Any broadband facility intended to occupy space in a designated Broadband Corridor shall be subject to the terms and conditions of a Broadband Corridor Agreement.

2.2. Requirements and Process

A broadband access permit must be issued by INDOT prior to the installation of any broadband facility in the Right-of-Way. The applicant must adhere to the requirements in the Broadband Permit Guidelines. INDOT will review the permit request to ensure compliance with all requirements. INDOT shall deny any permit request that does not comply with this policy, INDOT Broadband Permit Guidelines or other applicable requirements. INDOT may also deny a permit request if the applicant has a history of non-compliance with regulations, rules, standards, policies or any other applicable requirements. If INDOT approves the request, an electronic permit will be issued. The applicant will be electronically notified if the permit request is denied. A permit does not grant a property interest.

An entity wishing to install or relocate a broadband facility within the Right-of-Way will present a permit application to the appropriate INDOT district office. The permit application shall be submitted through the Electronic Permitting System ("EPS) at http://www.ai.org/indot/2727.htm. A nominal administrative fee and a performance or blanket bond will be required. The amount of the required bond Broadband Permit Guidelines at the can be found in https://www.in.gov/indot/files/Broadband%20Permit%20Guidance.pdf. An application is not considered complete until all required documentation has been provided to INDOT. Upon submission of a complete application, INDOT will respond in EPS within thirty (30) days of its receipt.

The owner of the broadband facility is responsible for obtaining any other applicable permits or authorizations required for the installation or relocation of its facilities. Recommended agencies to contact regarding other required permits include, but are not limited to, the U.S. Army Corps of Engineers, the Indiana Department of Natural Resources, the Indiana Department of Environmental Management, and local public agencies.



INDOT reserves the right to revoke any and all permits to do any work within the Right-of-Way if the permit requirements are not met. INDOT shall request As-Builts to verify the broadband facility is within the permitted location. Effective August 1, 2019, the permittee shall submit As-Builts with XYZ Coordinates ("As-Builts") within ninety (90) days of completion of construction. If the As-Builts are not provided within the mandatory timeframe, INDOT reserves the right to utilize the permittee's bond to obtain the As-Builts.

2.3 Change in Ownership

The owner of the broadband facility will notify the INDOT district office that issued the permit prior to a facility ownership change. Prior notification is necessary to ensure effective project coordination. The new owner must file a Transfer of Ownership and required documents in the Electronic Permitting System ("EPS") within ninety (90) days of the change in ownership to have all the obligations and privileges granted to it as did the former owner. The owner of the broadband facility with a change in legal status remains bound by the permit and its provisions.

2.4 Revocation

INDOT reserves the right to revoke the permit if the permit requirements are not met in accordance with the Broadband Permit Guidelines.

2.5. Broadband Corridor Agreement

Effective August 1, 2019, all installation of broadband facilities in the Right-of-Way designated by INDOT as a Broadband Corridor shall require a Broadband Corridor Agreement prior to the issuance of a permit.

CHAPTER 3 EXCEPTIONS

3.1 Policy

Deviations to this policy, either in whole or part, are considered exceptions. Exceptions to this policy may be allowed due to extreme hardships or unusual conditions as long as the exception doesn't violate state policy, or state and federal laws, rules and regulations.

INDOT will thoroughly and individually consider exceptions to the BAP on a caseby-case basis where it can be demonstrated that there are no reasonable and prudent alternatives to the strict compliance with this policy. Avoidance of the terms and conditions associated with a Broadband Corridor Agreement governing access to Designated Broadband Corridors shall not justify an exception to the BAP.



The INDOT Commissioner or its designated representative(s) has the authority to review and approve exceptions to this policy on a case by case basis. An approved exception will not set precedent for any subsequent request.

3.2 Process

To obtain a BAP exception, a broadband facility owner shall submit a permit request through EPS and attach a justification document to the permit request on company letter head, addressed to the district permit manager with a copy to the INDOT Director of Broadband Corridors. The justification document should describe the following:

- The specific provision being addressed in the BAP and desired revision.
- Any unusual conditions or hardships.
- The impacts allowed from the desired exception on traffic safety and highway operations.
- The impacts resulting from the alternative when the policy is followed and for the requested exception to the policy.
- How the facilities will be maintained and the impact of the desired exception on highway maintenance, including drainage, pavement preservations, and possible highway improvements.

3.2.1 Permit Denials

Applicant may seek a peer review of a permit denial for the broadband policy exception by the INDOT Broadband Review Committee. The applicant may request a reconsideration of the denial within thirty (30) days of receipt of the denial. Any additional information the applicant wishes to provide must be sent with the request for the peer review. The request must be sent electronically through electronic mail to the INDOT Director of Broadband Corridors. The INDOT Broadband Review Committee shall review the request for reconsideration within thirty (30) days of receipt of the request. Once a decision has been made, the applicant shall be notified by electronic mail and the decision will be uploaded into EPS.

CHAPTER 4 SERVICE LINES

Generally, it is in the public interest for transverse installations of broadband service lines to be located on the Right-of-Way, allowing for extension of broadband networks. INDOT may allow transverse installation of such service lines on Right-of-Way in accordance with this policy. In the event that they cross designated Broadband Corridor, transverse installations of broadband facilities are not subject to the terms and conditions of the Broadband Corridor Agreement. INDOT reserves the right to permit installations of both longitudinal and transverse runs of service lines when a public interest is demonstrated and approved in accordance with Chapter 3.1 of this policy. All work within Right-of-Way is subject to INDOT evaluation and approval.



CHAPTER 5 ACCESS CONTROL

5.1 INDOT Authority

INDOT has the authority to control and regulate access to all highways and interstates under its jurisdiction. Access control is used to limit the degree of interference with vehicular traffic from other vehicles or pedestrians which are entering, exiting or crossing the highway, and to ensure the safety of the motoring public.

The level of access control determines the type and extent of broadband facility installations that are allowed on Right-of-Way. The access control line may also be the same location as the Right-of-Way line.

5.2 Three Access Control Categories

Non-Limited Access. INDOT regulates the locations and details of access, but INDOT has not purchased access control rights from adjoining properties. This access is common to most highways with frequent driveways and intersections.

Partial-Limited Access. INDOT has declared or purchased access control rights from adjoining property owners. Access is controlled to give preference to vehicular traffic, but there may still be some intersecting streets at grade and some driveway connections. This access is common to many divided highways with some intersections and driveways.

Full-Limited Access. INDOT has declared or purchased access control rights from adjoining property owners. Access is controlled to give priority to mainline vehicular traffic by providing access to other vehicles and pedestrians only from selected public roads, by prohibiting crossings at grade and by prohibiting driveway connections. This access is common to interstate highways and some divided highways.

Access the INDOT Broadband Corridor Map



CHAPTER 6 GENERAL FACILITY LOCATION

6.1. Requirements

Broadband facilities shall be installed and relocated with due consideration for the safety, operation, maintenance and aesthetic characteristics of the highway and other users of the highway. Facilities shall be located to minimize relocation due to future highway improvements, to enable future installation of additional facilities on the highway, to enable facility maintenance, repair and upgrade with minimum hazards and minimum interference with highway traffic.

The location of above ground facilities within Right-of-Way will be in accordance with the Roadside Safety Chapter of the <u>INDOT Design Manual</u>. New or relocated above ground facility installations will be located outside the clear zone.

6.2. Longitudinal Installations

Longitudinal installations of broadband facilities, individual service connections and maintenance points will be located on a uniform alignment as near as possible to the Right-of-Way line to provide the maximum space for possible future highway construction or facility installations. Variance may be allowed on the distance from the facility to the Right-of-Way line in order to maintain a uniform alignment. Such variance often occurs where irregularly shaped portions of the Right-of-Way extend beyond the normal Right-of-Way limits. On highways with a frontage road, the preferred location for longitudinal installation is between the frontage road and the exterior Right-of-Way line.

Longitudinal installations of broadband facilities, individual service connections and maintenance points in the Right-of-Way are permitted subject to INDOT's Broadband Permit Guidelines and the terms and conditions of a Broadband Corridor Agreement. Placement of longitudinal fiber optic facilities within a designated Broadband Corridor require an executed Broadband Corridor Agreement prior to the issuance of a Broadband Access Permit. To the extent the BAP differs from the terms of a Broadband Corridor Agreement, the terms of the Broadband Corridor Agreement will control.

Longitudinal installations of underground lines shall not be placed under travel lanes, shoulders or in the median. On intersecting roadways, installation of wireline broadband facilities is discouraged from occupying infields of ramps and collectors where the roadway crosses Right-of-Way. Wireless-based broadband facilities and their associated fiber optic service lines are permitted to occupy infields per the terms and conditions of a Broadband Corridor Agreement.



6.3. Transverse Installations

Transverse installations of fiber optic broadband facilities within limited access Right-of-Way are specifically permitted in accordance with this BAP and INDOT's Broadband Permit Guidelines.

Transverse installations of broadband facilities will cross roadways at right angles or as nearly as practical to right angles. Reasonable latitude may be exercised for existing facilities which are otherwise qualified to remain in place. Where practical, aerial lines should not cross the roadway within 200 feet of a small structure, culvert, or bridge structure to aid in future construction projects.

Subject to INDOT's Broadband Permit Guidelines, facilities crossing full and partial limited access highways will have all supporting structures and above ground appurtenances located outside the access control line and preferably, outside the Right-of-Way line. Additionally, subject to INDOT's Broadband Permit Guidelines, access for installation, maintenance and relocation of facilities will be from outside the access control line and preferably, outside the faccess control line and preferably, outside the faccess control line and preferably, outside the access control line and preferably, outside the Right-of-Way line of the limited access roadway.

6.4. Conflicts

An existing broadband facility within the Right-of-Way of an existing or proposed highway improvement project may remain, provided it is in compliance with the BAP or a BAP exception is approved. An existing broadband facility that is in conflict with a proposed highway improvement project will be relocated at the owner's expense. INDOT may designate an alternate location, if one exists, but is not required to find an alternative location for relocation. Broadband facilities in conflict with a proposed highway improvement project shall not inhibit the highway improvement project in any manner and must relocate their facilities in an expeditious manner.

If INDOT has a highway improvement project, any interruptions in service as a result of the project is the sole responsibility of the facility owner. If the facility owner fails to relocate, any damage to the broadband facility as part of construction of the highway project will be solely at the owner's expense.

Locations that have a high potential to conflict with proposed construction, highway maintenance, roadway operations, highway safety or future highway improvements should be avoided. These include, but are not limited to, locations as follows:

- deep highway cut sections
- near footings of bridges or other highway structures
- diagonally across intersections
- cross-drains where flow of water, drift or stream bed load may be obstructed
- longitudinally in or under a ditch



- wet or rocky terrain where minimum depth of cover would be difficult to attain
- soft soils subject to excess settlement
- median installations

INDOT reserves the right to refuse access or deny permit requests based on potential conflict with these locations or any proposed construction, highway maintenance, roadway operations, highway safety or future highway improvements.

CHAPTER 7 FACILITY DESIGN

Each broadband facility owner is responsible for its facility design including the preparation of work plan narratives, drawings, cost estimates and specifications. The drawing will be of sufficient detail and scale to show the proposed facility in relation to highway elements, including but not limited to, edge of pavement, edge of Right-of-Way, highway lighting, drainage structures and ditches, and other structures. Any relocation drawings will be on INDOT plans, show stations, offsets and elevations of the broadband facilities and comply with the other requirements listed in the INDOT Broadband Permit Guidelines.

All facilities will be installed and maintained in accordance with OSHA.

Facility installations and relocations will be designed to accommodate planned expansion of the facilities. In order to limit congestion within the Right-of-Way, a maximum of one vacant buried conduit will be permitted with each new installation unless additional conduit is approved by a BAP exception or a Broadband Corridor Agreement. Facilities will be designed to enable facility maintenance, repair and upgrade with minimum interference and hazard to highway traffic and other utilities.

Underground facilities crossing the Right-of-Way will be installed without disturbing the existing pavement structure or paved shoulders. Pipe or conduit crossing the Right-of-Way underground will be installed using trenchless technology in accordance with <u>INDOT Standard Specifications</u>.

Boring and directional drilling under Right-of-Way with access control will be from pits located at least 30 feet from the edge of pavement. Boring and directional drilling under Right-of-Way with no access control will be accomplished from pits located at least the total distance of 10 feet plus the depth of the pit without shoring from the edge of the pavement. Boring and directional drilling under interstate highways will be from pits located outside the access control fence unless by BAP exception or allowed by a Broadband Corridor Agreement. Boring and directional drilling pits may be located closer than the required distance when they are protected in accordance with the INDOT *Design Manual*.



INDOT reserves the right to use monitors for settling a bore over 6.0 inches in diameter.

Monitors are not required for directional drilling because the bore mud will provide the support after it solidifies.

All trenchless underground installations of pipes or conduits will be in accordance with the current <u>INDOT Standard Specifications</u> or the industry standard, whichever is more stringent. The diameter of the auger will not exceed the outside diameter of the pulled pipe by more than one inch. Installations with a diameter of six inches or less may be accomplished by either jacking, guided whip auger or auger with the pulled pipe method. Open pits will be clearly marked, protected by barriers and secured from intrusion by pedestrians. Pits used for trenchless underground installations will be located in an area and constructed in such a manner that will not affect highway structural footings or the highway. Shoring may be used to protect the highway.

If a permit holder finds it cannot install the broadband facility as per the original permit plans, the permit holder must notify and provide a revised drawing to the District Permit Manager and the modification must be included in the As-Builts.

Provided the design does not violate industry standards, INDOT encourages the installation of facilities in the same duct or same trench to minimize the impact on the Right-of-Way and reduce installation costs. One entity may be selected as the lead for the project to complete the design and construction.

CHAPTER 8 STRUCTURES

8.1 Highway Structures Guidance

Highway structures include, but are not limited to, bridges, small structures, culverts, drainage pipes, poles, gantries, cantilevers and signs. Attachment of a broadband facility to a highway structure is considered a BAP exception and will follow those procedures for approval and a proper permit.

In the event that facilities are allowed to attach to highway structures, they shall comply with the following:

- Lines will not be attached to highway structures where they interfere with traffic, routine maintenance operations, and the flow of water or degrade the appearance of the structure.
- Facilities will be carried in conduits or pipes of sufficient strength to protect the line.
- INDOT may include conduits in the design of a bridge provided that:



- The facility owner provides a written request providing the details of their requirements prior to the completion of the design of the highway improvement project.
- The facility owner agrees to pay all additional costs associated with the design and construction to accommodate their requirements.
- If the facility is permitted to use INDOT owned conduit, there shall be written approval via the terms and conditions of a Broadband Corridor Agreement. The facility owner will be responsible for the cost and maintenance. The facility will receive written approval to utilize INDOT owned conduit.

8.2 Structural Analysis

All BAP exceptions attaching facilities to an existing bridge must be accompanied by sufficient information including design details and calculations certified by a professional engineer to determine the effect of the added load on the structure. If the bridge does not have sufficient strength to carry the loads with an adequate margin of safety, the request will be denied. Where the request is to attach lines within or to a new structure, the facility owner will be responsible for any increase in the cost of the structure to support the extra loads of the facility, including any increase in the size or thickness of members necessary to contain lines or conduits installed within the structure.

Any time that an attachment must be relocated to accommodate highway work or safety, the facility owner must apply for a new permit and must relocate at the owner's sole expense. Prior existence is not a basis for reattachment.

CHAPTER 9 UNDERGROUND BROADBAND LINES

All underground broadband lines must meet applicable codes, industry standards, and the criteria herein and in INDOT"s Broadband Permit Guidelines. INDOT reserves the right to revoke any and all permits to do any work within the Right-of-Way if the permit provisions are not met. INDOT also reserves the right to request As-Builts to verify the facilities are within permitted location. Effective August 1, 2019, submission of As-Builts will be required.

9.1 Clearances

Vertical and horizontal clearances between an underground line and a highway structure, other highway appurtenances or line should be sufficient to allow maintenance of the line and the other items. All clearances must be in accordance with INDOT's Broadband Permit Guidelines.



9.2 Depth of Cover

The minimum depth of cover for longitudinally placed underground broadband lines is four (4) feet within the limited access broadband corridor right of way.

The minimum depth of cover for transversally placed underground broadband lines crossing an Interstate must be at ten(10) feet at the flow line of the ditch.

Existing underground broadband facitilites that are compliant with industry standards and specifications may be remain in place so long as there is no risk to safety or conflict with a highway use. The facility owner must provide As-Built plans indicating acutual depth of cover.

9.3 Pre-Existing Installation

Subject to INDOT's Broadband Permit Guidelines, in the event of a conflict with highway use, existing longitudinal lines may remain in place provided they comply with the following:

- The lines can be maintained without violating access control.
- The lines will not interfere with the proposed highway improvement project.
- The lines are of sufficient strength and durability to withstand the changed conditions and have adequate remaining service life to prevent maintenance, repair or replacement.
- Service access points are adjusted to be flush with the surface to accommodate any changes in grade.
- The lines comply with all other requirements of the BAP, as well as federal and state law.

9.4 Strength

All underground broadband facilities will provide sufficient strength to withstand internal design pressures. All underground broadband facilities will provide sufficient strength to withstand external design pressures including superimposed loads of soil, roadway, traffic, construction equipment, and other typical roadway pressures. All underground broadband facilities will be of satisfactory durability to withstand the conditions to which they may be subjected.



9.5 Crossings

Broadband facilities crossing under the Right-of-Way require conduit and shall comply with the requirements contained herein. The use of a conduit or other suitable protection will be considered for communication lines located near footings of bridges, highway structures or other locations where the integrity of the line may be at risk.

9.6 Manholes, Vaults, Pits, and Handholes

Manholes, vaults, pits and handholes shall not be placed in the pavement, shoulders or curbs of any roadway. They will be placed directly in line with the facilities and of the minimum width to accomplish their intended function. They will be installed so the top of the facility is flush with the ground surface. They will provide sufficient strength to withstand external design pressures including superimposed loads of soil, roadway, traffic, construction equipment, and other typical pressures. Manholes or structures below grade should be sealed in a way to prevent the inadvertent erosion of surrounding material.

CHAPTER 10 ABOVE GROUND BROADBAND FACILITIES

10.1 Type of Construction

Longitudinal facilities will be limited to single pole construction. Transverse lines will be limited to single pole construction or that type of construction used on the portion of the line adjacent to the Right-of-Way.

10.2 Vertical Clearances

The vertical clearance for overhead lines above the highway will be a minimum of 18 feet. If the overhead lines are at a signalized intersection where the signal is at 18 feet, then the overhead broadband facility needs to be at a level to maintain a safe line of sight. The vertical clearance of overhead lines relative to a highway structure will provide reasonable space for construction and maintenance activities. All vertical clearances must be in accordance with the INDOT Broadband Permit Guidelines.

10.3 Location

Poles and towers will be located in accordance with the Roadside Safety chapter of the <u>INDOT *Design Manual*</u> and INDOT's Broadband Permit Guidelines. Poles will not be permitted in the ditch line of any Right-of-Way. Above ground broadband facilities shall not be in the clear zone.



The number of guy wires placed within the Right-of-Way will be held to a minimum. Where possible, guy wires and guy poles placed inside the Right-of-Way will run parallel to overhead power lines. Where possible, guy wires and guy poles that are not in line with the pole line will be placed outside of the Right-of-Way. Guy wires and guy poles may be placed in other locations but in no case will they be located within the specified clear zone.

Poles for longitudinal installations will not be allowed in the roadway median. Poles for transverse crossings may be allowed in the roadway median where the cost of spanning an extreme width is excessive and where poles can be located in accordance with the other provisions of this policy.

Ground mounted appurtenances will be installed with a vegetation free area extending one foot beyond the appurtenance in all directions. The vegetation free area may be provided by an extension of the mounting pad, heavy duty plastic or similar material. The housing for ground mounted appurtenances will be an inconspicuous color.

CHAPTER 11 FACILITY CONSTRUCTION

11.1 Preservation, Restoration, Cleanup, Drainage, and Environmental Permits

Preservation. The broadband facility owner shall make every effort to minimize the areas disturbed by its work. The owner shall make reasonable efforts to minimize damage to crops and agricultural land. The owner is responsible for any cost of damage to crops or agricultural land caused by the installation, maintenance or relocation of a broadband facility

Restoration. The broadband facility owner shall restore in a timely manner areas disturbed by its own forces or its contractor to a condition equal to or better than the condition prior to work. Restoration of disturbed areas shall be in accordance with the requirements of the work plan, INDOT Standard Specifications, INDOT"s Broadband Permit Guildelines, and all provisions of the permit including General Provisions, Special Provisions and any Additional Special Provisions.

Spraying, Cutting and Trimming of Trees, Shrubs and/or Vegetation. A permit will be required for the trimming, cutting, spraying or removal of trees, shrubs or other vegetation located within the Right-of-Way. INDOT will authorize any work completed in writing and will be in accordance with <u>INDOT Standard Specifications</u> 200 Earthwork and INDOT's Broadband Permit Guidelines.



Drainage. The broadband facility owner will maintain existing drainage patterns during the installation, maintenance or removal of its facilities. Trenches and bore pits for underground facility installations will be backfilled in accordance with <u>INDOT Standard Specifications</u>. Outlets or under drains will be installed as needed to avoid entrapped water. Test holes will be back filled in accordance with INDOT specifications.

Environmental Permits. The broadband facility owner will obtain all required environmental permits to support the installation or relocation of its facilities. The owner or owner's sub-contractor(s) will implement erosion control, sediment control, and storm water management measures in accordance with 40 CFR Parts 122, 123, & 124, 327 IAC 15-5 and the *Indiana Storm Water Quality Manual*. The facility owner will implement such measures to protect all areas disturbed by work performed by its own forces or work performed by its contractor. The owner will implement such measures and after work operations until replacement vegetation is established or until the area is disturbed by another party.

11.2 Safety and Convenience

Control of Traffic. Traffic control for construction and maintenance operations will conform to the <u>Indiana Manual on Uniform Traffic Control Devices</u> (IMUTCD) or the INDOT <u>Work Zone Safety Handbook.</u> All construction and maintenance operations will be planned with due consideration to the safety of the public and maintaining traffic mobility. Any such work must be planned to minimize closure of intersecting streets, road approaches, traffic lanes, or other access points. On high volume highways, construction operations interfering with traffic should not be allowed during periods of peak traffic flow. In accordance with the Traffic Control-Plan Design chapter of the <u>INDOT Design Manual</u>, a traffic control plan must be prepared and submitted with the permit application. INDOT reserves the right to inspect traffic control operations for compliance with established standards.

Work Site Safety. The broadband facility owner will comply with the requirements of INDOT's Broadband Permit Guidelines and the <u>IMUTCD</u>. INDOT reserves the right to require construction or maintenance operations on Right-of-Way to be discontinued during periods of inclement weather or when soil conditions are such that the work would result in extensive damage to the Right-of-Way or create an unsafe traveling condition.

Maintenance and Repairs. The facility owner will maintain all facilities in good repair both structurally and aesthetically. Maintenance of facilities crossing limited access highways will be from city streets, county roads, service roads, and approved openings provided in limited access Right-of-Way fences unless such alternatives are not practical. Maintenance and repair does not include the installation or relocation of facilities.



11.3 Trenches and Backfill

The essential features for trench construction are restoration of the structural integrity of the roadbed or surrounding material after trenching; security of the pipe against deformation and breakage; and assurance against the trench becoming a drainage channel. The integrity of the pavement structure, shoulders and embankment are of primary concern.

Trenches and backfill will be in accordance with the <u>INDOT Standard</u> <u>Specifications</u> and the INDOT Broadband Permit Guidelines.

11.4 Underground Facilities Protection

Indiana 811 is the agency that coordinates the protection of underground utility facilities in accordance with <u>IC 8-1-26</u>. Broadband facility owners within the Rightof-way shall comply at all times with IC 8-1-26. Contact will be made with Indiana 811 two (2) days prior to any excavation or survey so that underground facilities may be located and marked. The location of each underground utility will be marked by the utility with paint, flags or other temporary surface markings color coded for each utility type.

The INDOT Director of Broadband Corridos must be contacted five (5) days prior to any excavation or survey to locate and mark underground facilities that will be placed in or near INDOT's ITS equipment, traffic signals, traffic lights or private service lines.

Underground broadband facilities shall include a readily identifiable and suitable marker(s) or sign immediately above any facility and where it crosses the Right-of-Way line. The markers or signs will be placed within close proximity to the facility. The markers indicate the facility type and facility contact information. Markers and signs will be:

- INDOT approved.
- Break-away and crashworthy.
- Placed at the right-of-way in transverse crossings.

11.5 Pavement Cuts

Open cutting of pavement on interstate highways is not allowed. Open cutting of pavement on all other highways is highly discouraged because it adversely affects the integrity of the pavement and may disrupt the flow of traffic. A broadband permit request seeking open cut installation must explain the reasons why the facilities require open cut installation. At the conclusion of the work, all cuts in the pavement will be repaired with like materials, to a similar or greater depth and to a condition equal to or better than the condition of the pavement prior to the work in accordance with INDOT Standard Specifications. INDOT will inspect all pavement cuts in the roadway to determine the extent of pavement repairs. The broadband



facility owner shall contact INDOT no later than 30 days following the pavement cut to allow for a timely inspection. The facility owner will submit its pavement design for the repair of the pavement when the permit is requested. The design for pavement repairs will be approved prior to a permit being issued. INDOT will conduct a compliance inspection within one year of the completion of the installation.

11.6 Road Closures

A facility owner that requires a road closure to install, service or relocate its facility must obtain a permit prior to starting its work. The owner will coordinate with the District Permit Manager to determine an acceptable plan to address impacts to school buses and emergency vehicles, including ambulances, fire and law enforcement. The owner will provide notice of the location and schedule for the proposed road closure to all impacted state and local agencies, including schools, hospitals, fire departments and law enforcement offices at least ninety (90) days prior to the date of the planned road closure.

11.7 Emergency Repairs

Emergency repairs may be performed within the Right-of-Way when physical conditions or time constraints prevent applying for and obtaining a permit. The facility owner will notify the District Permit Manager or INDOT Traffic Management Center as soon as possible about its plan of action for the emergency repairs prior to beginning any work within the Right-of-Way. The entity making the repairs will make arrangements for the control and protection of traffic or pedestrians affected by the proposed operations in accordance with INDOT's Broadband Permit Guidelines. The facility owner will submit a permit application within seven working days of the work to cover the emergency repairs.

11.8 Abandoned Facilities

Abandoned facilities within the Right-of-Way become the property of INDOT.

11.9 Inspections

INDOT reserves the right to inspect all broadband installations within Right-of-Way. If any violations or deficiencies are observed, INDOT will provide notice of such violations or deficiencies to the facility owner. The owner will establish with INDOT a reasonable timeframe for corrective action if such is necessary. The cost of subsequent inspections shall be charged to the facility owner.

11.10 Records

INDOT reserves the right to request information from the broadband facility owner to help minimize relocation efforts. The owner will adequately protect and maintain records and documents of its facilities located in Right-of-Way. Records will cover



active facilities and inactive facilities. Records will include the facility type, function, size, configuration, material, location, elevation and any special features such as encasement, manholes and valves. Records will include all service lines which enter or cross the Right-of-Way. Additionally, records shall include As-Builts for facilities for which a permit is sought on or after January 1, 2019. The facility owner will provide complete, concise, and accurate copies of these records at no cost within 30 days of a request.

CHAPTER 12 MAINTENANCE AND REVIEW

The INDOT Broadband Corridors Director, in cooperation with INDOT districts and other applicable divisions, will oversee all maintenance of the BAP. The BAP shall be reviewed every 12-24 months and updates made as needed.



GLOSSARY

The following definitions apply to the Broadband Access Policy:

<u>Access Control</u>. The regulation of public access to and from properties abutting the highway facilities. The three basic types are non-limited access, partial limited access and full limited access.

Applicant. An applicant is a person or entity applying for a permit under this policy.

<u>Appurtenances</u>. A physical component of a broadband facility or road system instrumental to the operation of the system.

Backfill. Replacement of excavation with suitable material compacted as specified.

BAP. Broadband Access Policy. https://www.in.gov/indot/2727.htm

<u>Bonding</u>. A method to help ensure that the job a contractor or facility owner has been hired to do is performed satisfactorily and that the state is protected against losses from theft or damage done by the facility owner or contractor.

<u>Broadband.</u> As provided in I.C. 8-1-2-1.1, the transmission or communication through Internet Protocol enabled retail services by a person or an entity that: (1) transmits communications through Internet Protocol enabled retail services, including: voice, data, video, or any combination of voice, data, and video communications; or (2) provides the necessary software, hardware, transmission service, or transmission path for communications described in subdivision (1); is not a public utility solely by reason of engaging in any activity described in subdivisions (1) through (2) at speeds that meet or exceed the FCC definition of high speed.

<u>Broadband Review Committee</u>. The committee consists of the Director of Innovation, a professional engineer and a district permits representative.

<u>Broadband Corridor</u>. A program to manage the location, installation, and maintenance of communications infrastructure used for the provision of broadband services within highway rights – of –way of limited access highways. The broadband corridors will consist of the following which includesbut may not be limited to the interstates, toll roads, tollways, toll bridges, U.S. 30 and U.S. 31. The broadband corridor program shall not apply to the placement of communications infrastructure that laterally crosses a roadway. https://www.in.gov/indot/3685.htm

CFR. Code of Federal Regulations. <u>https://www.ecfr.gov/cgi-bin/ECFR?page=browse</u>

Boring. Boring is the process of making a hole below the ground by drilling.



<u>Clear Zone</u>. The clear zone is the portion of the road side within the Right-of-Way that is free of non-traversable hazards and fixed objects. The INDOT *Design Manual* is the guide for establishing the clear zone for various types of highways and operating conditions.

Conduit. A conduit is a pipe that encloses a fiber optic line.

<u>Depth of Cover</u>. Depth of cover is the distance between the top of an underground facility including conduit to the surface of the ground or pavement. (The INDOT Design Manual references depth of cover from top of pipe to bottom of pavement. The broadband facility owner should be told the depth of pavement at each conflict in order for them to understand clearances and true depth of cover.)

District. A district is one of the six administrative subdivisions of INDOT.

<u>Electronic Permitting System (EPS)</u>. The electronic online system used to record activity related to an INDOT permit including plan submittals, correspondence and payment activity.

<u>Facility</u>. Any privately, municipally, publicly or cooperatively owned systems for supplying broadband services, directly or indirectly, to the public.

<u>Facility Relocation.</u> Any activity involving a facility that is needed for a roadway improvement project including, but not limited to, abandoning, altering, deactivating, installing, maintaining, modifying, moving, removing, or supporting.

FHWA. Federal Highway Administration https://www.fhwa.dot.gov/reports/utilguid/

<u>Frontage Road</u>. A frontage road is a local street or road auxiliary to and located along side of a highway used for access control, and to provide service to adjacent areas.

<u>Handhole</u>. An underground enclosure in which HDPE conduit enters into the enclosure and includes an access point for fiber optic cable, splice case or a fiber optic slack loop to place, extend or repair a fiber optic cable. Handholes vary in size and capacity but must be in accordance with Standard Plate 8117 which are in full compliance with Article 314.40 of NEC and meet and conform to ANSI Standards.

<u>Highway</u>. Highway, street, or road means a public way for purposes of vehicular traffic, including the entire area within the Right-of-Way.

<u>IMUTCD</u>. Indiana Manual on Uniform Traffic Control Devices. https://www.in.gov/dot/div/contracts/design/mutcd/2011rev3MUTCD.htm

INDOT. Indiana Department of Transportation. www.in.gov/indot



<u>Limited Access Highway</u>. As defined by IC 8-23-5.10 to be any roadway that is under the jurisdiction and control of the department and that is one of the following: An interterstate, a toll road, tollway or tollbridge, U.S. 30 or U.S. 31. Previously defined as or typically referred as a highway or street designed for through traffic, over, from, or to which owners or occupiers of abutting land or other persons have either no right or easement, or a limited right or easement of direct access, light, air or view because their property abuts upon the limited access facility or for any other reason. The highways or streets may be parkways from which trucks, buses, or other commercial vehicles are excluded, or freeways open to use by all customary forms of highway or street traffic.

Longitudinal Installation. Extending lengthwise in a parallel direction.

<u>Manhole</u>. A manhole is an opening in an underground system where a worker(s) may enter for the purpose of working on the facilities.

<u>Median</u>. A median is the portion of a divided highway separating the traveled way for traffic in opposite directions.

Manual on Uniform Traffic Control Devices (Federal). https://mutcd.fhwa.dot.gov/

OSHA. Occupational Safety and Health Administration. https://www.osha.gov/

Occupancy. The presence of broadband facilities within the Right-of-Way.

<u>Pavement Structure</u>. The combination of the sub-base, base course and surface course placed on a sub-grade to support the traffic load and distribute it to the road bed.

<u>Pits</u>. A boring pit is an excavation of specific size to house a boring machine and tracks. The equipment must be laid on the correct grade and line in order to ensure the bore is drilled correctly.

<u>Permit</u>. Written formal acceptance by INDOT of the facility owner's plan to construct, maintain, repair or remove its facilities on the Right-of-Way.

<u>Receiving Bore Pit.</u> A receiving pit is an excavated pit, an opening located at the exit of the cutterhead or casing, which is the destination point for a pipe jacking or microtunneling operation. The receiving pit is used to remove the equipment and spoil from the microtunneling process when the bore is complete. Receiving pits are minor excavations compared to digging open trenches along the full length of pipe installation

<u>Right-of-Way.</u> State-owned or controlled land, property, or interest acquired for or devoted to transportation purposes.

<u>Road</u>. A public way for purposes of vehicular traffic, including the entire area within the Right-of-Way.

<u>Roadway</u>. The paved portion of the highway used by vehicular traffic, including the shoulders.



<u>Roadside</u>. The area abutting the roadway within the Right-of-Way. Roadside includes areas between roadways of a divided highway.

Service Line. A facility that supplies a service to an individual customer from a main line.

<u>Shoulder</u>. The portion of the roadway adjacent to the traveled way for the accommodation of stopped vehicles, emergency use, and lateral support of the pavement structure.

<u>State Highway System</u>. Encompasses all highways under state jurisdiction including interstates, U.S. routes, and state routes. This system includes local roads or state park roads when an improvement project is under state administration.

<u>Structure.</u> A functional unit including the foundation thereof for which the component parts and the method of assembly or construction were determined by the laws of structure mechanics to support predetermined loads.

<u>Sub-grade</u>. The prepared earth surface upon which the pavement structure and shoulders are constructed.

<u>Traffic Control Plan</u>. Describes the traffic control devices and other measures that will be used to promote the safe and controlled movement of vehicular traffic around the worksite and the safety of the facility owner's or owner's contractor's work force.

Transverse Installation. Extending across or in a cross direction (not parallel).

<u>Traveled Way</u>. That portion of the roadway for the movement of vehicles excluding shoulders and auxiliary lanes.

<u>Trenchless Technology</u>. A group of construction methods for underground facility installation, replacement, renovation, inspection, location, and leak detection, with minimum excavation from the ground surface.

<u>Vaults</u>. Primarliy consider smaller handholes primarily used for residential or space constrained installations. Vaultgs provide the most cost-effective thermoplastic enclosures which meet the industry standards for strength, reliability and environmental concerns. High Density Polyethylene (HDPE) Thermoplastic vaults provide a solid base and light-weight material alternative to traditional polymer concrete enclosures

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