

LONG RANGE TRANSPORTATION PLAN for the KAIBAB BAND of PAIUTE INDIANS



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Prepared For:
Kaibab Band of Paiute Indians
HC 65 Box 2
Fredonia, AZ 86022
Telephone: 928-643-7245



Prepared by:
 *High Road*
ENGINEERING, INC.
PO Box 97
St. George, Utah 84771
Telephone: 435.767.8481

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PART ONE

1.0 Introduction

This transportation study was prepared for the Kaibab Band of Paiute Indians (Tribe) and the Bureau of Indian Affairs (BIA) in accordance with the *Federal Lands Highway Office of Tribal Transportation Program Delivery Guide – 2019, A Guide for Tribes Having a Tribal Transportation Program Agreement with FHWA* revised June 4, 2019. The policy requires that Tribal, State, and Federal Government agencies carry out a transportation planning process for the Tribal Transportation Program deemed to be adequate to support their construction and improvement program in accordance with 23 U.S.C. § 202 – Tribal Transportation Program, 25 U.S.C. Indians, and under the guidance of 25 CFR Part 170.

1.1. Tribal Transportation Program

The Tribal Transportation Program (TTP) is the largest program in the Office of Federal Lands Highway. Established in code 23 U.S.C. § 202 to address the transportation needs of tribal governments throughout the United States, the program is to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, and Alaska Native Village communities. There is a total of 566 federally recognized tribes that share the funds under the TTP. A prime objective of the TTP is to contribute to the economic development, self-determination, and employment of Native Americans. Under the Fixing America's Surface Transportation Act (FAST Act), the program received \$495 million in fiscal year 2019 and is authorized to receive \$505 million in fiscal year 2020. Two percent (2%) of the available TTP funds are set aside for planning, an additional three percent (3%) are set aside for improving deficient bridges, and an additional two percent (2%) are set aside to address safety issues on Native lands. Safety funds are available through a competitive, discretionary program.

Tribal Transportation Facilities means public roads and transportation facilities that are located within, or provide access to, an Indian reservation, Indian trust land, or restricted Indian land which is not subject to fee title alienation without the approval of the Federal Government, or Indian and Alaska Native villages, groups, or communities in which Indians and Alaskan natives reside, whom the Secretary of Interior has determined are eligible for services generally available to Indians under Federal laws specifically applicable to Indians. This term includes all or part of the following systems:

Bureau of Indian Affairs Federal-Aid Roads - Existing public highways and proposed routes which qualify as Bureau of Indian Affairs (BIA) roads under the National Tribal Transportation Facility Inventory (NTTFI) pursuant to the provisions of Section 101(a) of 23 U.S.C. and for which the Bureau of Indian Affairs has or plans to obtain right-of-way.

Bureau of Indian Affairs Reservation Development Roads - Existing public highways and proposed routes for which the BIA has, or plans to obtain legal right-of-way and that serve the development needs of Indian Reservations and Alaskan Native Villages.

Other Bureau of Indian Affairs Branch Roads - Existing roads owned and maintained by other branches of the BIA (includes Forestry and Facility Management roads).

Highway Trust Fund Roads - Existing BIA routes or sections of routes which were constructed or improved with the use of Highway Trust Funds.

Tribal Roads – Existing and proposed public roads located on an Indian Reservation or Trust Land that are under the jurisdiction and are maintained by a Tribe, and for which the Tribe has or plans to obtain right-of-way.

County or Township Roads - Public roads whose rights-of-ways are under the jurisdiction of a County or Township.

State Highways - Public highways whose rights-of-way are under the jurisdiction of a State.

Other Federal Agency Roads - Public roads whose rights-of-way are under the jurisdiction of various Federal Agencies such as Bureau of Land Management, Forest Service, Corps of Engineers, Department of Defense, Bureau of Reclamation, or National Park Service.

National Tribal Transportation Facility Inventory (NTTFI) means, at a minimum, transportation facilities that are eligible for assistance under the Tribal Transportation Program (TTP) that an Indian Tribe has requested, including facilities that meet at least one of the following criteria:

- 1) Were included in the Bureau of Indian Affairs system inventory prior to October 1, 2004.
- 2) Are owned by an Indian Tribal government (“owned” means having the authority to finance, build, operate, or maintain the facility (see 23 U.S.C. 101(a)(20)).
- 3) Are owned by the Bureau of Indian Affairs (“owned” means having the authority to finance, build, operate, or maintain the facility (See 23 U.S.C. 101(a)(20)).
- 4) Were constructed or reconstructed with funds from the Highway Trust Fund under the Indian reservation roads program since 1983.
- 5) Are public roads or bridges within the exterior boundary of Indian Reservations, Alaska Native villages, and other recognized Indian communities (including communities in former Indian reservations in the State of Oklahoma) in which the majority of residents are American Indians or Alaska Natives.
- 6) Are public roads within or providing access to either:
 - a. An Indian reservation or Indian trust land or restricted Indian land that is not subject to fee title alienation without the approval of the Federal Government; or
 - b. An Indian or Alaska Native villages, groups, or communities whose residents include Indians and Alaska Natives whom the Secretary has determined are eligible for services generally available to Indians under Federal laws applicable to Indians.
- 7) Are primary access routes proposed by tribal governments, including roads

between villages, roads to landfills, roads to drinking water sources, roads to natural resources identified for economic development, and roads that provide access to intermodal terminals, such as airports, harbors, or boat landing.

1.2. Study Purpose and Scope

This Long-Range Transportation Plan (LRTP) was prepared by High Road Engineering to meet the Kaibab Band of Paiute Indians' goal of identifying and inventorying roads eligible for the NTTFI system in order to secure funding for needed transportation improvements. This study presents a plan to improve existing transportation facilities and develop new transportation opportunities within the Kaibab Paiute Indian Reservation and evaluate present and future transportation needs in and around Reservation lands. The LRTP will provide the Tribe a plan to establish a prioritized listing of road improvement/construction projects to meet current and projected transportation needs. While developing a Tribal Transportation Improvement Program (TTIP), for use by the Tribe and the BIA in implementing a short term (5 year) construction program.

Key focus areas of the LRTP are health, safety and economic development. The LRTP also Identifies road inventory updates to the Tribal Transportation Program (TTP), formerly known as the Indian Reservation Roads (IRR) Program, that assist in expanding the level and types of funding available for transportation projects. The program is jointly administered by the Federal Highway Administration's Office of Federal Lands Highway (FLH) and the Bureau of Indian Affairs (BIA) in accordance with a memorandum of understanding.

This study considers the potential transportation impacts of existing and planned tribal development projects to establish a prioritized list of transportation needs. The study includes the following tasks:

- Inventory TTP roads.
- Identify obvious hazards that exist on/along the TTP system.
- Identify and evaluate present and future transportation needs.
- Provide a 20-year transportation plan that defines those needs and is responsive to short- and long-term development projections.
- Develop a prioritized listing of recommended road improvements/construction projects for use by the Tribe and BIA in implementing a construction program to meet current and projected (20-year) transportation needs.

The objective of this study is to produce a LRTP for providing transportation facilities for vehicular traffic that will enable Tribal leaders to take advantage of desirable development opportunities, protect community resources and traditions, and enhance the use of the Tribe's land by its residents. Resulting in a program of transportation improvement/construction projects to meet current and projected (20-year) transportation needs. Furthermore,

develop a Tribal Transportation Improvement Program (TTIP) for the Tribe and the BIA to implement a short term (5 year) construction program.

This transportation plan is intended to be fiscally and developmentally sound and is intended to address the funding issues and eligibility restrictions associated with Highway Trust Fund (HTF) monies. Each Tribe is politically and geographically diverse, and each has its own goals and objectives for a transportation system. However, because the NTTFI system is composed of public roads, many of which fall under BIA's, State's, Counties and Cities' responsibility, several transportation issues common to all Tribes can be identified. These are:

- To provide safe and convenient public access within their boundaries.
- To provide access to new and old development.
- To complement surrounding public transportation facilities as part of the area-wide public transportation system.
- To assist in the economic development of the Tribe.
- To produce a plan for providing transportation facilities.

1.3. Description of The Study Period & Methodology

The Long-Range Transportation Plan and Road Inventory Update processes were conducted over a six-month period with regular coordination meetings, public outreach meetings, and formal reviews. The methodology of this study consists of three phases.

Phase 1 – Data Collection

The first phase began by making initial contacts with the Tribe, BIA Western Region Department of Transportation, and BIA Southern Paiute Agency to establish relationships and gather pertinent government furnished materials. Next, outreach was made to the Town of Moccasin, Mohave County and the Arizona Department of Transportation to notify these road owners of the Tribe's planning efforts and to collect the necessary road data and existing planning documents available.

As a part of Phase 1, the existing transportation system was evaluated to determine which routes and facilities should be updated. Authorization to access data from the Road Inventory Field Data System (RIFDS) for the Kaibab Indian Reservation was obtained from the BIA Department of Transportation (BIADOT). Physical characteristics and conditions of roadways were gathered by field reconnaissance. The data was recorded on standardized RIFDS Inspection Sheets for all BIA, Tribal, and non-BIA roads selected by the Tribe to be updated or added to the NTTFI System. A digital photograph was taken of each road section, and Strip Maps were created for each route showing all road sections.

Published traffic counts were used for current Average Daily Traffic (ADT) volumes on non-BIA roads. The traffic data is shown on the Data Sheets and Strip Maps; and input into RIFDS. ADT was carried over from previous year's road inventory and default ADT was determined for all sections with no data.

To complete the Phase 1 Data Collection, the Road Inventory Updates were submitted to the Tribe and the BIA Western Region Planning Office for review. Then the data was input into RIFDS and submitted for final approval by BIADOT. All Inspection Data Sheets, Strip Maps, Photographs and Traffic Counts were uploaded into the system to support the request to include each route.

Phase 2 – Selective Study and Analysis of Transportation Needs

The second phase involved community outreach and the development of system alternatives. A public meeting and online survey were conducted in July and August of 2020 to assess community attitudes regarding transportation needs and to solicit input on short- and long-term transportation needs. This phase performed the major analytical work tasks of the study, including an evaluation of road maintenance needs.

Phase 3 – Finalization of Study

The third phase of work included the preparation of the final transportation plan based on the review of the alternatives by Tribal Leaders and BIA Officials. This final phase also evaluates the social and economic factors associated with the priority list of road construction projects. Project descriptions and cost estimates were developed for each proposed road improvement in the 20-year plan. Projects were prioritized based on an objective ranking system which considers the Tribe's annual share of TTP construction funds, public safety, pavement management strategies, and Tribal Council input.

This phase of the study developed a 5-Year Tribal Transportation Improvement Program (TTIP). The TTIP identifies the costs of pre-construction engineering, construction, construction monitoring, and tribal administration for the short-term projects the Tribe will pursue under the Tribal Transportation Program. The TTIP also identifies the funding sources for improvements and must be financially constrained based upon the estimated annual tribal share of TTP funding or other known funding sources (grants, partnerships, etc.)

1.4. Organization of Study

The Long-Range Transportation Plan is organized into three parts as follows:

Part 1 - Introduction

The first part provides an introduction of the TTP and of this study. Topics familiarize the reader with terminology and provide context to the program and regional transportation.

Part 2 – Existing Conditions

The second part of the LRTP describes the background data, existing transportation system, updated road inventory and the existing traffic volumes. This section of the report

details the existing land use, socio-economic data, demographics, and physical characteristics of the study area. The existing roadway system is analyzed to understand the functional classifications, rights-of-ways, traffic control, drainage and bridges, street lighting conditions, and traffic accident history. The existing road system is summarized, and a table of road mileage by surface type is given. Maps are provided to graphically show the transportation network and depict the land ownership and uses.

Part 3 – The Transportation Plan

The third part of the study details the Tribe's goals and objectives for short-term development plans with long-term plans in mind. Based upon the future developments a recommended transportation plan is outlined. The road inventory data is summarized, and a comparison listing provides proposed update information. Each proposed improvement is described, and cost estimates are included. From the Tribe's prioritization of projects, a 5-Year TTIP is generated for programming purposes. This part of the plan describes a process for implementation and updating the LRTP, as well as procedures for developing roadways.

1.5. Regional Context

The Kaibab Paiute Indian Reservation is home to members of the Kaibab Band of Paiute Indians who are, in turn, members of the larger Southern Paiute Nation. The Kaibab Band of Paiute Indians is a federally recognized Indian Tribe organized under the Indian Reorganization Act of June 19, 1934. The Tribe has a tribal constitution and is governed by a seven-person Tribal Council. The reservation is adjacent to the Arizona-Utah border within the "Arizona Strip," the northernmost part of the state that is separated from the rest of Arizona by the Grand Canyon. (See Figure 1) Established by Executive Orders of June 11, 1913, and the July 17, 1917 the reservation is within the Tribe's aboriginal territory.

The reservation consists of 120,480 acres (about 189 square miles) of land in Mohave and Coconino counties: approximately 90% (108,432 acres) in Mohave County and 10% (12,048 acres) in Coconino County. The state line between Arizona and Utah serves as the northern boundary of the reservation. Census data records a 2018 population of 253 people residing on the reservation and Tribal data records a total tribal membership of 367, the majority of whom live in the surrounding area¹.

The Kaibab Paiute Reservation contains five villages: Kaibab, Juniper Estates, Red Hills, Steamboat, and Six Mile. All but Kaibab Village are solely residential areas. Kaibab Village contains residences as well as community services such as the fire department, senior's center, community center, library, and road maintenance yard.

Located within the reservation boundary, but not on tribal land, is the community of Moccasin, Arizona. This is the only non-tribal land within the reservation boundary. It was established in 1863 as Moccasin Ranch by a Mormon leader, Jonathan Heaton. A sign

¹ <https://www.census.gov/tribal/?aianihh=1720>

identifying the community notes that “many of his descendants still live in this peaceful valley.” Several residences and a church are located in Moccasin. A kindergarten–third grade school closed in 2009. It was attended by children from the reservation.

The majority of the reservation land use can be categorized as agricultural and open-range grazing. Most of the tribe’s commercial and institutional uses on the reservation occur along Pipe Springs Road (Mohave County Route [CR] 240), which is a paved road that extends from SR 389 to the community of Moccasin.

Add information about parcels in Fredonia and parcel south of the reservation...

Pipe Spring National Monument is located along Pipe Springs Road (CR 240), in the southern part of the reservation. The visitors’ center on the national monument grounds, which also serves as the tribal cultural center, is operated jointly by the Tribe and the National Park Service (NPS). A bookstore in the center is operated by the Zion Natural History Association. The main sources of livelihood and income for tribal members living on the reservation include employment with the tribal government, tribal enterprises and work in nearby Kanab and Fredonia. The Tribe also obtains revenues from land and road-use leases, primarily with utility and other service provider companies; and from compensation for the Tribe’s slot machine allocations to which they are entitled but which are used by other tribes in the state.

Regionally, the reservation is located between several major tourist attractions including the Grand Canyon National Park to the south; the Kaibab National Forest to the southeast; Lake Powell and the Glen Canyon National Recreation Area to the east; Zion National Park, Bryce Canyon National Park, Coral Pink Sand Dunes Utah State Park, and Cedar Breaks National Monument to the north; and the Lake Mead National Recreation Area to the west. Fredonia, Arizona, borders the reservation to the east, and Kanab, Utah, extends to the reservation’s northeastern boundary. According to 2010 decennial census data the population of Fredonia, AZ was 1,314 and Kanab, UT was 4,312². About 17 miles west of the reservation are Colorado City, Arizona, and Hilldale, Utah. The 2010 population of these communities was 4,821 and 2,726, respectively³.

Access to the reservation is from State Route 389 (SR 389). The highway traverses the reservation from west to east and connects Colorado City with Fredonia, and it is the main travel route between Las Vegas, Nevada, and Lake Powell in Arizona and Utah. SR 389 provides the only paved access road to the reservation. Other access is provided by roads that, for the most part, are gravel or dirt and extend southward 60-plus miles to the Grand Canyon or westward to connect with other gravel/dirt roads heading to the Grand Canyon or the states of Utah and Nevada.

The remoteness of the reservation is apparent when considering the distances that its residents must travel to the region’s major employment and retail/service centers in the Mohave and Coconino county seats of Kingman and Flagstaff, respectively—both of

²https://data.census.gov/cedsci/table?q=Kanab,%20Utah%20population&g=1600000US4939920&tid=DECENNIALSF12010.P1&layer=VT_2018_160_00_PY_D1

³<https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-cities-and-towns.html#tables>

which are over 200 miles from the reservation via a circuitous route necessary to circumnavigate the Grand Canyon. Serving residents' more immediate needs are a hospital, small airport, retail stores, service providers, and educational facilities in Kanab, Colorado City, and St. George, Utah. See **Figure 1 – Location Map** for reference.

1.6. Transportation Plan Summary

The transportation plan presented herein should be considered a flexible plan adaptable to the changing needs and conditions within the community. The Tribe should use the plan as the basis for programming and budgeting future roadway improvement funds while recognizing that such priorities and improvement needs will change over time. Thus, the priority list must be reviewed and modified as needed on an annual basis. The overall plan must also be updated every five to seven years, or when major changes in land use has developed.

The 2040 Transportation Plan recognizes the realistic need to provide better mobility in areas, as well as promoting increased opportunities for alternative modes of transportation. In order to develop the Transportation Plan by 2040, there are a large number of improvement projects that need to be implemented over the next 20 years. Based on forecasts, improvement projects were grouped into three time periods: short range (0 to 5 years), mid-range (6 to 10 years), and long range (11 to 20 years) based on their relative urgency for completion. Road priority projects are discussed in Section 3.1.2.

Current BIA road system mileage for the Kaibab Paiute Indian Reservation as approved by the Regional Director in 2012 consists of 148.4 miles. The mileage consists of 41.0 miles of BIA Roads, 53.0 miles of Tribal Roads, 32.5 miles of State Roads, and 21.9 miles of County Roads.

As a part of this Long-Range Transportation Plan project, only selected routes were updated, and several Tribal parking lots were added to the Road Inventory. The recommended road system revisions or additions consist of 5.1 miles. The mileage consists of 0.5 miles of BIA Roads, 4.6 miles of Tribal Roads. Specific information on recommended road system revisions is contained in Section 3.3.4.

1.7. Funding Allocations

On December 4, 2015, the President signed into law the Fixing America's Surface Transportation Act (FAST Act). The Act is a Five-Year authorization through fiscal year 2020. The surface transportation programs are funded at over \$2.425 billion for fiscal years 2016 through 2020. The two landmark bills that brought surface transportation into the 21st century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21) shaped the highway program to meet the Nation's changing transportation needs. The previous highway bill, Moving Ahead for Progress in the 21st Century (MAP-21) built on and refined many of the policies established in 1991 by creating a streamlined, performance-based, and

multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

MAP-21 created a unified program for Federal lands transportation facilities, Federal lands access transportation facilities, and tribal transportation facilities. The Indian Reservation Roads (IRR) program was **changed to the Tribal Transportation Program (TTP)** whose purpose is to improve access to and within Tribal lands. TTP funds can be used for transportation planning, research, engineering, and construction of highways, roads, parkways and transit facilities within Indian Reservations. This program generally continues the existing Indian Reservation Roads program, while adding new set asides for tribal bridge projects and tribal safety projects. It continues to provide set asides for program management and oversight and tribal transportation planning. A new statutory formula for distributing funds among tribes, based on tribal population, road mileage, and average funding under SAFETEA-LU, plus an equity provision, is to be phased in over a 4-year period.

The FAST Act continues improved delivery methods established under MAP-21 for the transportation program. TTP funding may be provided via a direct funding agreement with the Federal Highway Administration (FHWA) or the Bureau of Indian Affairs (BIA) (Government to Government Agreement). The Ely Shoshone Tribe currently administers their program under a Government to Government Agreement. Tribes also have the option to receive funding in accordance with the Indian Self-Determination and Education Assistance Act (Public Law 93-638). Program Agreements and Self-Determination Contracts are available to Tribal governments that have satisfactorily demonstrated financial stability and financial management to the Secretary of Interior.

Funds are allocated among Tribes using a new statutory formula based on tribal population, road mileage, and average tribal shares of the former Tribal Transportation Allocation Methodology (TTAM) formula. TTP funds shall only be expended on projects identified in a transportation improvement program approved by the Secretary of Interior. The greater amount of 25% of a Tribe's program funds or \$500,000 may now be used for the purpose of TTP system maintenance as defined in 25 CFR Part 170. Although the Bureau of Indian Affairs (BIA) will retain primary responsibility for TTP maintenance programs through the Department of Interior (DOI) appropriations. A total of \$15 million (3%) is set aside for projects replacing structurally deficient or functionally obsolete TTP bridges. The FAST Act requires the inspection of all public bridges, including tribal bridges, and the reporting of data into FHWA's National Bridge Inspection System. There is also \$10 million (2%) set aside for a Tribal Safety Program.

Federal Lands Access - The FAST Act authorizes \$270 million in fiscal year 2020 for projects that improve access to the Federal estate on infrastructure owned by States and local governments, including Tribal governments. Replacing and expanding the Forest Highways program, projects providing access to any Federal lands are eligible for this new comprehensive program. Funds are distributed by formula based on recreational

visitation, Federal land area, Federal public road mileage, and the number of Federal public bridges. Eighty percent of funds go to States with large areas of public land. States are required to provide a non-Federal match for program funds (which has not been the case historically for Federal lands highway funding). Programming decisions will be made locally using a tri-party model in each State comprised of representatives from FHWA, State DOT, and local government, in consultation with applicable Federal land management agencies. Tribes may apply for Federal Lands Access Program funding if the road or facility being proposed for funding is owned or operated by the Tribe and provides access to a Federally owned land (not a Tribal land). For example, a Tribally owned road (as opposed to a BIA-owned road) that provides access to a national park or national forest is eligible for the Federal Lands Access Program.

Tribal Transportation Provisions - Transfer of Highway and Transit Funds - Allows a State to transfer apportioned Highway Trust Funds to another Federal agency. The project can be administered by the Federal agency under its procedures. This makes it possible for States to transfer funds to the Bureau of Indian Affairs (BIA). The BIA could then administer projects under their procedures including contracting with an Indian Tribe under the Indian Self-Determination and Education Assistance Act (ISDEAA).

The Department of Interior, Bureau of Indian Affairs completed consultations and a final rule was published to update the Tribal Transportation Program regulations to comply with the current surface transportation authorization.⁴ The Final Rule establishes policies and procedures governing the Tribal Transportation Program (TTP). The program is jointly administered by the Bureau of Indian Affairs (BIA) and the Federal Highway Administration's (FHWA) Federal Lands Highway (FLH) Office.

1.8. Funding Distribution Formula

The Final Rule establishes a funding distribution methodology by a statutory formula. The formula calculates tribal shares using three different factors as percentages of national or regional totals. The funding formula factors are:

- 27% Ratio of Tribe's approved lane miles to the total approved lane miles
- 39% Ratio of Tribe's population to the total population
- 34% Equally divided among the BIA Regions for distribution of tribal shares as:
 - $\frac{1}{4}$ of 1% to tribes with population of 1 to 25
 - $\frac{3}{4}$ of 1% to tribes with population of 26 to 100
 - $3\frac{3}{4}$ to tribes with population of 101 to 1,000
 - 20% to tribes with population of 1,001 to 10,000
 - $74\frac{3}{4}$ to tribes with population of 10,001 to 60,000
 - $\frac{1}{2}$ of 1% to tribes with population over 60,001

Supplemental Funding is available to make Tribes "whole" at fiscal year 2011 funding levels. The Western Region saw a 69% increase with the new formula calculation.

⁴ Federal Register/Vol. 81 No. 215/ Monday, November 7, 2016/Tribal Transportation Program; Final Rule: Codified at 25 Code of Federal Regulations ("CFR") Part 170

PART TWO

2.0 Existing Conditions

2.1. Physical Characteristics

The reservation's topography is characterized by relatively flat desert landforms that are bisected from the northeast to the southwest by the Vermilion Cliffs. These cliffs are the southernmost of a series that create succeeding plateaus between the Grand Canyon, Arizona, and Bryce Canyon, Utah. Just north of these cliffs are the Moccasin Mountains. Hydrologically, the reservation is characterized by a number of springs and intermittent streams, all but one of which carry water only after it rains. The exception is Kanab Creek, which is a perennial stream in the east. The springs, such as Pipe Springs and Steamboat Springs, are artesian in that they provide a continuous outflow of water from an underground aquifer via pressure up through fractures/joints in the layers of bedrock. The joints were probably caused by the Sevier Fault that runs across the reservation.

The elevation of Moccasin, located just south of the Vermilion Cliffs, is approximately 5,000 feet above mean sea level (msl). North of the cliffs, in the Moccasin Mountains, the average elevation is approximately 6,400 msl. The climate is typical of a high desert with partial grassland areas. More precisely, it receives the Köppen Climatic Designation of BSk, as it is a semiarid steppe having an average annual temperature under 64.4 degrees Fahrenheit. In July, the hottest month, daytime highs average 95 degrees and nighttime lows average 76 degrees. January, the coldest month, has daily highs averaging 34 degrees and nighttime lows averaging 20 degrees.

Precipitation amounts are relatively even throughout the year with the winter months receiving a slightly higher percentage than the summer months. The wettest month, August, receives an average of 1.42 inches of rain due to the sporadic thunderstorms that occur during the summer. The average annual total precipitation is 9.8 inches. The average seasonal snowfall is 10.6 inches, which is equivalent to about 1.06 inches of rain. The average relative humidity in mid-afternoon is about 30%.

2.2. Demographics and Development

Transportation systems have long been a vital and necessary part of society. Therefore, the evaluation of existing transportation network or projection of future transportation needs requires an understanding of existing land use, future land use, economic activity, and development trends.

2.2.1. Population and Housing Characteristics

According to tribal records, the Kaibab Paiute Tribe's current (Year 2020) enrollment is 367 members, of whom 224 live on the reservation. The majority of those living off the reservation reside in nearby Fredonia, or in Mohave or Coconino County or communities in southern Utah.

Residential development for tribal members on the reservation is concentrated in the following three areas of the reservation: 1) the area just south of the community of Moccasin, which includes Kaibab Village and the Juniper Estates Housing Area; 2) an area farther south of Moccasin that includes the Red Hills Housing Area; and 3) an area in the eastern part of the reservation, just west of Fredonia, Arizona, that includes Six Mile Village and the Steamboat Village housing areas.

2.2.2. Land Ownership

All 120,480 acres that make up the Kaibab Paiute Indian Reservation are held in trust by the United States Government for the benefit of the Kaibab Paiute Indian Tribe. The area occupied by Moccasin is held in fee and is the only non-tribal land within the reservation boundaries.

2.2.3. Existing Land Use

A windshield survey of existing land uses on the reservation was conducted by HRE in March of 2020. The *Existing Conditions Map* illustrates the generalized existing land uses and road conditions. The majority of the land on and surrounding the reservation is undeveloped and used for grazing and hunting.

Residential developments are located in the five villages on the reservation. Mohave CR 240, in the western part of the reservation, provides access to three of the villages: Kaibab, Juniper Estates, and Red Hills. Six Mile Road (IR 50) in the far eastern part of the reservation provides access to Steamboat and Six Mile villages.

The U.S. Department of Housing and Urban Development (HUD) and the BIA Housing Improvement Program (HIP) assist the tribe in the construction of new, low-cost housing, and the rehabilitation of substandard housing, respectively. In addition, “Mutual Help” homes provide some housing for tribal members. Mutual Help homes are financed by HUD, constructed by the tribal housing authority—usually by contract—and purchased by tribal members.

The Tribal Housing Department reports that the tribal residential areas contain a total of approximately 89 housing units, 12 of which are vacant, leaving a total of 77 occupied residences and an average household size of approximately 2.9 persons per household (pph). 30 of the total occupied housing units were built with U.S. Department of Housing and Urban Development (HUD) funds, 36 were Mutual Help units, and the remaining 23 units were privately financed. The Census My Tribal Area Tool 2018 data reports that the tribal residential areas contain a total of approximately 116 housing units, 21 of which are vacant, leaving a total of 95 occupied residences and an average household size of approximately 2.7 persons per household (pph). Table 2.1 presents the Tribal Housing Department’s data.

Table 2.1: Selected Characteristics—Resident Population and Housing in Tribal Villages

Residential Area	Location	Resident Population	Housing Units			
			HUD Units	Mutual Help Units	Privately Financed Units	Total Units
Kaibab Village	East of Pipe Springs Road, on IR 201, at the termination of CR 240	50	2	8	16	26 (5 of these are vacant)
Juniper Estates	East of Pipe Springs Road (CR 240) & south of Kaibab Village, on IR 101	50	7	10	1	18 (2 vacant)
Red Hills	East of Pipe Springs Road (CR 240), south of Juniper Estates and opposite Pipe Springs National Monument, on IR 301	46	10	8	3	21 (2 of these vacant)
Six Mile Village	Six Mile Road (IR 50) at IR 44 junction	2	0	0	2	2 (1 of these vacant)
Steamboat Village	Six Mile Road (IR 50), on IR 401, south of Six Mile Village	76	11	10	1	22 (2 of these vacant)
Scattered sites	Throughout reservation.	0	0	0	0	0
TOTAL		224	30	36	23	89 (12 of these vacant)

Sources: Tribal Housing Department, 2020.

The tribal Housing Department estimates that 5% of the total existing housing stock is substandard. Programs available for funding improvements to substandard housing include HUD grants through the Indian Housing Plan (IHP), which provides grants and other assistance to tribes for the development and operation of low-income housing; and the BIA’s HIP grants.

Commercial activity on the reservation includes the following:

- **Pipe Spring National Monument—Kaibab Band of Paiute Indians Visitor Center and Museum.** Pipe Spring National Monument is on Pipe Springs Road (CR 240), just north of SR 389. The Tribe leases administrative office space to National Park Service (NPS) and jointly operates the Visitor Center/Museum with NPS. The gift shop within the Visitor Center is leased to the Zion Natural History Association.
- **Chevron Convenience Store.** A gas station with four pumps, and a convenience store at the junction of SR 389 and CR 240 is a tribal enterprise.
- **Kaibab Paiute Campground and RV Park.** A 47-unit campground and park is a Tribal enterprise that is adjacent to CR 240 on Tribal route 725 which is open from early Spring until late Fall. The site features potable water, restrooms (vault type), showers, campsite grills, tables and fire rings.

- **Kaibab Range Units and Farm.** (See “Agriculture,” below.)
- **Hunting.** Hunting for mule deer, small game and potentially bighorn sheep are permitted on Moccasin Mesa from September through November. The issuance of hunting license, which are required, is a tribal enterprise.
- **Leases.** Tribal income is derived from land and road use leases to utility companies, National Park Service and others who have utility towers on Moccasin Mesa.
- **Gaming.** No gaming within Reservation. Compensation for slot machines allocated to the Kaibab Paiute Tribe but used by other tribes in the state.

The tribal Human Resource Department reports employment by tribal enterprises as shown on Table 2.2.

Table 2.2: Employment by Tribal Enterprises

Enterprise Name	Number of Employees	
	FT	S/PT
Pipe Spring National Monument – Kaibab Band of Paiute Indians Visitor Center and Museum	12	5
Chevron Convenience Store	5	4
Kaibab Farm	1	1
RV Park and Campground	3	2

Source: Tribal Human Resource Department.

* FT = Full time S = Seasonal PT = Part Time

Public Services and Institutional Facilities are located in various areas throughout the reservation. Located off of Pipe Springs Road (CR 240), just north of SR 389, is the Kaibab Headquarters building, which includes administrative offices and the Tribal Council chambers; the Wildlife, Fisheries and Parks Department; and the offices of housing, community health, cultural preservation, economic and community development, human resources, and social services. Within the Kaibab Village are the Kaibab Department of Public Works, the seniors’ food service kitchen, a new Senior Center building, a building housing a day care/Early Head Start center, the fire department, and road maintenance facility. The law enforcement and tribal court facility is located just south of the Red Hills housing area. The only public service/institutional facility in Moccasin is a Mormon Church. Children living on the Kaibab Paiute Reservation attend public schools in Fredonia and Colorado City.

The National Park Service operates the Pipe Spring National Monument on reservation land. Main attractions at the site are the Visitor Center/Kaibab Paiute Museum, and Winsor Castle/Fort. A bookstore operated by Zion Natural History Association leases space in the Visitor Center. The national monument is located about 0.4 mile north of SR 389 off of Pipe Springs Road (CR 240) and attracts about 37,000 visitors per year. NPS’s administrative offices are east of CR 240, near the RV Park, across from the national monument.

Recreational areas on the reservation include camping/hiking areas, an RV park & Campground with 47 units north of the Red Hills housing area, Moccasin Mesa hunting area, public parks in the Kaibab Village and Juniper Estates housing areas and a gymnasium in the library/multi-purpose building.

Agricultural land use includes farming and grazing activities. As a tribal enterprise, the tribe owns the Kaibab Farm, which has about 240 acres of alfalfa and a 10-acre pear and apple orchard. The alfalfa supplies feed for the local livestock. The tribal farm, located northeast of Moccasin, is irrigated using water from wells. Cattle grazing is the predominant land use on the reservation. Land available for grazing is divided into 19 range units for management purposes. There are three range units for grazing by the tribal cattle herd, and 16 additional range units for eight individual herds. The three tribal range units are Moccasin Mesa (27,341 acres) in the northwest part of the reservation, and Nagles Crossings 1 and 2 (6,491 acres and 6,191 acres, respectively) in the southeast part of the reservation.

2.2.4. Economic Conditions and Employment

The tribal members' main source of wage income includes employment with the following:

- Tribal administration and government agencies, including the housing department, social services, education, the tribal court, Wildlife, Fisheries and Parks Department, natural resources management, etc.
- Tribal enterprises (see Table 2.2, above)
- Businesses in off-reservation communities including Fredonia, Arizona, and Kanab, Utah.

The My Tribal Area tool from the Census Bureau, 2014-2018 American Community Survey 5-Year Estimates, recorded the unemployment rate on the reservation as 14.6%, compared with 4.8% for Arizona. Arizona's unemployment rate in November of 2018 was 4.8%, in Coconino County it was 8.3%, and 10.1% in Mohave County. The current (May 2020) tribal unemployment rate was not available. Distances to major employment centers, the few tribal enterprises, and the absence of privately owned businesses on the reservation contribute to limited employment opportunities on the reservation.

2.2.5. Land Use Control

Presently, the Tribe does not have a land use plan, zoning, or subdivision ordinances. Currently, the Tribal Council administers the use of all reservation lands.

2.2.6. Law Enforcement

Law enforcement is provided by two police officers, with support from the BIA police. The law enforcement offices are located on Pipe Springs Road (CR 240) just south of the Red Hills housing area. Pipe Springs Trail crosses over the Court/Police parking lot twice on the east side of CR 240. There are no jail facilities on the reservation. The Tribe uses jail facilities in Fredonia and Kanab.

2.3. Transportation System

This section presents data on current transportation conditions to identify needs of the system. The Tribal Transportation Program (TTP) addresses transportation needs of Tribes by providing funds for planning, designing, construction, and maintenance activities. The program is jointly administered by the FHWA’s Federal Lands Highway Office and the BIA in accordance with an interagency agreement. Roads are placed on the National Tribal Transportation Facility Inventory (NTTFI) in order to designate routes available for funds. The NTTFI includes information such as the route number, location, length, width, surface type, pavement ratings, class of road, adequacy of design standard, right-of-way status, construction needs, maintenance needs and more.

While emphasis is on the road system, public transit and other service routes such as parking lots, bridges, school bus and mail delivery routes are also addressed. There are different road ownerships that serve the reservation including State, County, BIA and Tribal roads officially in the NTTFI system. To understand how the transportation system functions on the Kaibab Paiute Indian Reservation an inventory of those elements comprising the existing system was conducted. Conducting this inventory was an integral step of the planning process in order to identify areas in need of improvement over the 20-year planning period. This inventory was based on available data compiled by the BIA, Tribe, State, and County data available through Geographic Information System (GIS) databases, and additional information compiled through supplemental field data collection efforts. This data includes traffic counts, accident history, bicycle and pedestrian routes, and route classification.

2.3.1. Existing Roadway System

2.3.1.1. Overview of Current System

Public roads serving the Reservation are constructed and maintained primarily by the BIA, Mohave County, the Kaibab Paiute Tribe, and the state of Arizona. The BIA Department of Transportation (BIA-DOT) *Present System* report dated FY 2020 records 41.0 miles of BIA roads, 53.0 miles of Tribal roads, and 54.4 miles of Other roads as “official” for the Kaibab Paiute Indian Reservation. Table 2.3 summarizes the existing road inventory surface types, ownership, and lengths (in miles) of **official** roads providing access to Reservation Lands. The current update year of the official routes is 2012. Selected characteristics of the existing NTTFI System roads are presented in Table 2.3.

Table 2.3: Selected Characteristics of Existing NTTFI System Roads

Ownership	Road Mileage by Surface Type				
	Trail	Earth	Gravel	Paved	Total Miles
1-BIA Road	0	31.4	0.4	6.0	37.8
2-Tribal Road	58.0	8.2	0	0.2	66.4
3-State Highway	0	0	0	32.5	32.5
5-County Road	0	7.7	0	4.0	11.7

TOTAL	58.0	47.3	0.4	42.7	148.4
Road as % of Total	39%	32%	0%	29%	100%

Source: IRR Program, Miles of Road by Organization Responsibility and Surface Type, Present System, FY 2020 Inventory, Dated 01-Aug-20

2.3.1.2. Road Maintenance

BIA System – The BIA is obligated by 25 CFR, Section 170 to maintain the BIA Road System to a safe and satisfactory condition based upon the availability of funds and the road's surface condition. Road maintenance funds are appropriated by Congress and allocated to the BIA separately from construction funds. Road maintenance funds are used to maintain an optimal level of road maintenance, at the least cost, based on the road condition.

BIA road engineers/managers work with Tribes in determining the level of maintenance to be performed within budgetary constraints and establish a road maintenance program for each Tribe. Maintenance priorities are frequently based on the need to provide community members safe access to and from homes and facilities. Emergency conditions have the highest priority for road maintenance funding. Other priorities are determined by roadway surface type and level of use. BIA policies and regulations state that road maintenance activities can include the preservation and repair of the road surface, blading roadway shoulders and ditches, clearing drainage structures, snow removal, and the installation/replacement of traffic control, directional and street signs. In practice, however, surface preservation and repair are frequently funded using construction funding, while maintenance funding covers regular, annual activities such as weed and snow removal. Funds for the maintenance of BIA roads on the Kaibab Paiute Indian Reservation are provided to the Tribe under a Public Law 93-638 (Indian Self-Determination and Education Assistance Act} Contract by the BIA's Southern Paiute Agency. The average annual amount received by the Tribe for road maintenance is \$18,000.

State System - Maintenance of the state roadways is carried out by the Arizona Department of Transportation (ADOT). ADOT monitors state highways annually in a Pavement Management System, in which the "health" of the pavement is assessed based on measured pavement distress. The distresses and other factors are summed, and a repair strategy is assigned. Prioritization of projects is based on the points assigned in the Pavement Management System evaluation, as well as the pavement age, traffic loading, and maintenance costs. Once pavement maintenance project priorities are determined, the projects are included in the 5-year Statewide Traffic Improvement Program (STIP) in a "Statewide Pavement Maintenance" category.

County System – Mohave and Coconino Counties have a 5-Year Asphalt Replacement Plan to carry out repair and maintenance of paved county roads. Resurfacing projects listed on this plan are accomplished as funding becomes available. The county's standard operating procedure for gravel or native dirt surface roads is to perform maintenance procedures at least once per year. The Town of Moccasin is responsible for the roads within Town limits that access Tribal lands.

2.3.1.3. Road Construction

BIA System - It is critical to note that transportation planning at the Tribal level is very important under the current highway legislation. Only projects in an FHWA-approved Tribal Transportation Improvement Plan (TTIP) are eligible for funding, and these projects are identified through the long-range transportation planning process. Public involvement is required in the development of the TTIP. As stated in 25 CFR 170.422, “the Tribe must publish a notice in the local and/or Tribal newspapers when the draft TTIP is complete. The notice must indicate where a copy can be obtained, a contact person for questions, where comments may be submitted, and the deadline for submitting comments.” The BIA WRO DOT is requiring a copy of the public notice be submitted with the TTIP each year it is updated. A Tribal Resolution is also required when the TTIP is updated (typically annually).

State System – Arizona has prepared a Statewide Transportation Plan to comply with legislative requirements and to guide intermodal transportation development in the state. Specific transportation improvement projects are set forth in the State Transportation Improvement Program (STIP). This report identifies and programs a list of projects on the statewide roadway system that are intended to provide interregional access to and through all areas of the state. The STIP, as defined by federal guidelines, is updated on an annual basis and focuses on federal and state projects of interest to be conducted over the next ten years. Development of the STIP is completed in cooperation with the Metropolitan Planning Organizations (MPOs) and local governmental entities. Tribal governments can also participate in the state planning process.

County System – The MPO in Mohave County is the Western Arizona Council of Governments (WACOG) consisting of X voting member agencies. The MPO in Coconino County is the Northern Arizona Council of Governments (NACOG) consisting of X voting member agencies. WACOG and NACOG receive regular funding annually. The member agencies provide input on road improvement needs, and the Technical Advisory Committee votes to authorize the available funds for projects. The Kaibab Band of Paiute Indians currently does not have a voting position in WACOG or NACOG; however, the Tribe is eligible to receive funding through these MPOs.

2.3.2. Functional Classification of Roadways

Roads are classified as to the functions they perform regarding the movement of traffic and access to property. Within the TTP system there are two types of road classifications: FHWA Functional Classifications and BIA Functional Classifications. Both the FHWA and BIA systems utilize functional classification as the basis for classifying their roads. Functional classification is used in planning and design, and to allocate federal funding.

2.3.2.1. FHWA Functional Classifications

Functional classification is the grouping of roads, streets and highways into integrated systems, each ranked by its relative importance and the function it is intended to serve, relative to mobility and land access. It also identifies the role each street or highway should play in channeling the flow of traffic through a rural and/or urban environment in a

logical and efficient manner. The four general functional classification categories are Freeways, Arterials, Collectors and Local Roads. At one extreme, the Freeway's function is to move through-traffic at high speed over long distances with limited access to adjacent property. At the other extreme, Local Roads classification function is to provide direct access to individual parcels. Definitions of these general functional classifications, along with desirable characteristics, are given below.

Freeways and Expressways primarily serve long distance travel between major communities. Freeways provide the greatest mobility, with strictly controlled access allowed only at interchanges. No direct property access is allowed. Expressways also serve regional traffic, and access is allowed primarily at major intersections, although interchanges can be built for particularly high-volume intersections. Occasionally direct property access is allowed when there is no other way to provide access.

Arterials carry relatively large volumes of traffic through the state and to major trip destinations such as employment or commercial centers. Arterials fall into two categories: principal and minor. Principal (Major) Arterials include United States and Interstate highways, and state highways that serve all urban areas with a population greater than 50,000. Minor Arterials are routes that provide interstate and inter-county service to cities and towns with populations of less than 25,000 and other traffic generators capable of attracting travel over long distances. Principal arterials usually have 4 traffic lanes (2 lanes in each direction), provide storage for left turns at most intersections, and are separated by a median or continuous left turn lane. Minor arterials may only have two traffic lanes and should include a storage lane for left turns at major intersections. A minimum right-of-way width of 60 to 100 feet is needed for roads with more than 4 lanes. However, right-of-way should be based on preferable dimensions of each roadway element.

Collectors generally serve travel of primarily intra-county and regional importance rather than statewide importance and have shorter travel distances than arterial. They also provide a balance between mobility and land access by customarily permitting access to all abutting properties. Like Arterials, there are two categories of collectors: major and minor. Major Collectors provide service to any county seat or community not served by an arterial road, and serves other traffic generators of intra-county importance such as: regional parks, consolidated schools, agricultural areas, shipping points, etc. Minor Collectors are spaced at intervals consistent with population density, collect traffic from local roads, and provide access to all developed areas within a reasonable distance of a major collector or higher classified road. A minimum right-of-way width of 80 to 100 feet is desirable for a collector.

Local Roads comprise the balance of the road network and carry low volume, low-speed traffic. The primary function of a local road is to provide access to individual parcels of property. Local roads usually serve residential areas and may also serve scattered business and industry sites that generate modest traffic. A minimum right-of-way of 60 to 80 feet is desirable for a local road.

2.3.2.2. ADOT Functional Classifications

The functional classification of roads has been used by state highway departments for many years for a variety of important highway functions such as: assigning jurisdictional responsibility, determining cost allocations, allocating funds to local units of government, and establishing appropriate design standards. Prior to the enactment of the *Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)*, it became apparent that the federally mandated functional classifications completed nearly 30 years ago, although routinely updated by the states, were no longer consistent among the states and needed to be reclassified before the establishment of a National Highway System (NHS). As a result, Congress included Section 1006 (c) in *ISTEA*, which required the states to reclassify roads and streets within the state, under the oversight of the Federal Highway Administration, by September 20, 1996.

The Arizona Department of Transportation (ADOT) has reclassified roads and streets within the state of Arizona. The only road included in this classification on the Kaibab Paiute Indian Reservation is State Route 389, which received a designation of Class 2 - Rural Minor Arterial.

2.3.2.3. BIA Functional Classifications

There are eleven BIA roadway functional classifications in the NTTFI, which are summarized in Table 2.4. Presently, there is no direct correlation between BIA functional classifications and FHWA functional classifications, which are used to determine if a road is eligible for federal highway funding through other transportation agencies. As a result, one of the objectives of this study is to review current BIA functionally classified tribal roadways on the Reservation to determine if they are BIA Class 2, 4 or 5 roadways that meet the criteria to be assigned FHWA functional classifications, and added to the State’s functional classification for FHWA approval.

A Tribal Transportation Plan must identify the classification for each road on the NTTFI system. Classifications for each road on the Kaibab Paiute Indian Tribe’s inventory are in the *Inventory Comparison Listing* in **Appendix B**. Proposed changes to the existing NTTFI inventory are described in Part Two, Inventory Update, herein.

Table 2.4: BIA Functional Classification Definitions

Class	Description
1	Major arterial roads providing an integrated network with characteristics for serving traffic between large population centers, generally without stub connections and having average daily traffic volumes of 10,000 vehicles per day or more with more than two lanes of traffic.
2	Rural minor arterial roads providing an integrated network having the characteristics for serving traffic between large population centers, generally without stub connections. May also link smaller towns and communities to major resort areas that attract travel over long distances and generally provide for relatively high overall travel speeds with minimum interference to through traffic movement. Generally, provide for at least inter-county or interstate service and are spaced at intervals consistent with population density. This class of road will have less than 10,000 vehicles per day.
3	Community/Residential streets that are located within communities serving residential areas.

4	Rural major collector road is collector to rural local roads.
5	Rural local/stub road that is either a section line and/or stub type road, make connections within the grid of the TTP system. This class of road may serve areas around villages, into farming areas, to schools, tourist attractions, or various small enterprises. Also included are roads and motorized trails for administration of forests, grazing, mining, oil, recreation, or other use purposes.
6	City minor arterial streets that are located within communities and serve as access to major arterials.
7	City collector streets that are located within communities and serve as collectors to the city local streets.
8	Non-Road type path class encompasses all non-road projects such as paths, trails, walkways, or other designated types of routes for public use by foot traffic, bicycles, trail bikes, snowmobiles, all-terrain vehicles, or other uses to provide for the general access of non-vehicular traffic.
9	Transportation facilities such as public parking facilities adjacent to TTP routes and scenic byways, rest areas, and other scenic pullouts, ferry boat terminals, and transit terminals.
10	Airstrips that are within the boundaries of the TTP system grid and are open to the public. These airstrips are included for inventory and maintenance purposes only.
11	Overlapping Routes or previously inventoried section or sections of a route and is used to indicate that it is not to be used for accumulating needs data. This class is used for reporting and identification purposes only.

Table 2.5: Existing Road Ownership by Road Class

Ownership	Road Mileage by Class Code					
	Rural Minor Arterial (2)	Community/ Residential (3)	Rural Local (5)	Trail (8)	Parking Lots (9)	Total Miles
1-BIA Road		3.0	34.8			37.8
2-Tribal Road		0.7	19.2	46.4	0.1	66.4
3-State Highway	32.5					32.5
5-County Road			8.1	3.6		11.7
TOTAL	32.5	3.7	62.1	50.0	0.1	148.4

Source: IRR Program, Miles of Road by Class and Organization Responsibility, Present System, FY 2020 Inventory, Dated 31-Jul-20

2.3.3. Roadway Inventory

It is the desire of the Tribe and Bureau of Indian Affairs, Western Regional Office to perform a complete inventory of BIA Roads under its jurisdiction, and to perform a complete inventory on all other TTP roads, i.e. Federal, State, County, City, and Tribal roads. The primary objective of this inventory is to obtain current, accurate, uniform and verifiable data on all TTP roads for the purpose of updating the BIA Western Region Office road

inventory database, which provides valuable information for many roadway planning and management activities. The 2020 inventory will also be used to update the nationwide inventory database utilized by the BIA Division of Transportation (BIADOT) to compute Regional Office and Tribal allocations of TTP program funds (Highway Trust Funds) using the statutory formula under the FAST Act.

The minimum criterion used for inventory purposes to classify a road as an “improved road” was that it be a graded road with drainage improvements (i.e. side ditches and culverts at cross-drainages). The inventory provides information regarding the physical characteristics and condition of each road. Major categories include:

- Identification (including length, class, location, etc.)
- Traffic (existing and future)
- Roadway section (grades, curves, and sight distances)
- Roadway conditions (surface, drainage, utilities)
- Inventory status (including date of update)

Table 2.6 summarizes the updated road inventory surface types, ownership, and lengths (in miles) of all public roads on Tribal Lands. Since the prior 2012 inventory, existing roads have increased by 5.1 miles. A new shared use trail was constructed, and the Tribe’s parking lots are included with this update. A comparison table of the previous and updated road inventory detailing the ownership, length, classification and surface type of each road can be seen in the “Kaibab Band of Paiute Indians’ Road Inventory Comparison List” in **Appendix B**. All data sheets, road section photos, and strip maps are provided in the appendix.

Table 2.6: Summary of 2020 Updated Road Inventory Mileage

Ownership	Road Mileage by Surface Type				
	Trail	Earth	Gravel	Paved	Total
1-BIA Road	0	31.4	0.4	6.0	37.8
2-Tribal Road	58.0	8.7	2.9	0.8	70.4
3-State Highway	0	0	0	32.5	32.5
5-County Road	0	7.7	0	4.0	11.7
TOTAL MILES	58.0	47.8	3.3	43.3	152.4
Road as % of Total	38%	32%	2%	28%	100%

Source: High Road Engineering 2020 Road Inventory

2.3.4. Right-of-Way Status

The definition of a BIA System Road is a road “for which the BIA has, or plans to obtain legal right-of-way.” The right-of-way for roads to be entered into the NTTFI system for the Kaibab Paiute Indian Reservation are either currently owned by the BIA, State, or County, or such right-of-way is by consent of the Tribe.

2.3.5. Traffic Control

Traffic control within the reservation is provided by stop & yield signs; there are no signalized intersections.

2.3.6. Drainage Features and Bridges

Drainage features are primarily located along the following existing NTTFI system roads: Blue Knolls Road (IR 30), Back Road/Six Mile Road (IR 50), Juniper Village Road (IR 101), Pipe Springs Road (IR 201), Red Hills Road (IR 301), Steamboat Village Road (IR 401) and along State Route 389 (SR389). There are currently four (4) bridge sections on SR389 in the NTTFI system and it is recommended that Moccasin Wash Bridge on Route 40 (IR 40) be added to the NTTFI system.

2.3.7. Street Lighting

The primary benefit of streetlights are safety and security. Other advantages could be improved quality of life or aesthetics. The Tribe passed a Dark Sky Ordinance in 2016 and limits the number and type of streetlights in order to preserve the night sky. Currently, there are streetlights in Kaibab Village near the community park.

2.3.8. Postal Delivery Routes

The U.S. Postal Service delivers mail to private mailboxes throughout the reservation along all paved Village roads (see **Appendix A - Exhibit Maps**).

2.3.9. School Bus Routes

School bus transportation is provided by the Fredonia-Moccasin Unified District and Colorado City Unified School District for reservation children attending public schools in Fredonia and Colorado City. School buses travel on all of the paved roads on the reservation except for Juniper Village Road (IR 101) and Red Hills Road (IR 301). School children in these neighborhoods walk to the intersection of CR 240 to catch the bus.

2.3.10. Transit Routes

The Tribe operates an “on demand” transit service to its members. There is no fixed route transit system available for the Kaibab Indian Reservation. Assistance is available to any tribal member or resident on the reservation or to eligible patients regarding health care transportation and meal delivery to homebound tribal elders residing on the reservation. Transit services can be arranged through the Community Health Representative’s Office or through the Tribal Administration Office. Various tribal programs offer transit service assistance also such as for substance abuse treatments, diabetes care, youth activities, and cultural activities.

2.3.11. Pedestrian / Bicycle Facilities

Bicyclists and pedestrians can be grouped into at least three groups, and the appropriate facilities should be provided for each.

Group A – Skilled Cyclists

Skilled cyclists are experienced riders who usually prefer riding on roads, which for them often feel safer and more efficient than off-street paths. They are interested in using off street paths only if the paths allow for separation between bicyclists and pedestrians, are designed to allow for higher speeds, and offer a more direct route than the nearest alternative on-street route.

Group B – Less Skilled, Youthful, or Family Cyclists

These cyclists are uncomfortable in traffic. They may be cycling either for recreation or transportation, traveling at slower speeds, taking shorter trips, and may not be able to handle steeper grades. They may also require frequent rest stops.

Most parents discourage younger, less experienced cyclists from cycling on roads. When properly designed, bike paths can provide more appropriate routes for this group. Paths that are designed to bypass highways and busy streets and provide direct connections between parks, open space, schools, recreation centers, shopping, and other youth-oriented destinations are especially useful.

Family cyclists often have young children in trailers, in bike seats, or following on small bikes. Residential streets, bike lanes, or sidewalks often provide linkages to off-street bike paths. When these linkages are not feasible, these cyclists often drive to trail head parking to access a path.

Group C – Pedestrians

Walkers, joggers, skateboarders, in-line skaters and roller skaters are the “slower speed” users of sidewalks and paths. They generally can, and often do, change their speed and direction suddenly, leaving bicyclists insufficient time to react to avoid collisions.

Under the FAST Act, states have the option to fund Safe Routes to School (SRTS) projects and other transportation enhancements (like sidewalks) from a list of options for the Transportation Alternatives Program. The purpose of the Safe Routes To School option is to enable and encourage children to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development, and implementation of projects that will improve safety; and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

According to the *FHWA- Evaluation of Safety, Design, and Operation of Shared-Use Paths- Final Report 2006*, shared-use paths are paved, off-street travel ways designed to serve nonmotorized travelers. Whereas a trail is an unpaved lane or road serving motorized and nonmotorized users. Across the United States, bicyclists are typically the most common users of shared-use paths. In an urban setting shared-use paths are frequently used by pedestrians, skaters, skateboarders, handicap users and users of many other modes.⁵ There are no shared-use paths or crossings on the Reservation.

No sidewalks lead to pedestrians walking along the roadway where they feel unsafe, uncomfortable and limits their access. The benefits of having sidewalks and paved shoulders include safety, mobility and health.

There are two designated shared use trails that are tribal routes, namely Pipe Springs Trail (TR 240) and Red Hills Trail (TR 710). Both trail systems are gravel surfaces. There are no concrete sidewalks for pedestrian and bicycle safety along any routes.

⁵ <https://www.fhwa.dot.gov/publications/research/safety/pedbike/05137/05137.pdf>

2.3.12. Recreation, Tourism, and Trails

Recreation, Tourism, and Trails can be developed in every region connected to a variety of natural resources and made accessible for a wide diversity of users. It is the recommendation of this transportation plan that the Kaibab Band of Paiute Indians develop a recreation, tourism, and trails plan which will address the vision of the Tribe and set priorities for recreation, tourism, and trail development.

The most favorable locations for these facilities are often found along parkways, streams, and in park and recreation areas. The following categories are described as reasons to develop a recreation, tourism, and trail system within the Reservation.

Community wellness and recreation

To provide the public with motorized recreation and recreational trails that are safe, diverse, well-marked, and attractive options for traveling between and among community destinations and for enjoying outdoor fitness and recreation.

Transportation system expansion, enhancement, and diversification

To complement the existing network of roads with safe, accessible, intermodal options for movement within and across Reservation lands.

Tourism-focused economic development

To increase revenues and employment opportunities by expanding the number and diversity of recreational and interpretive opportunities for visitors to the Kaibab Paiute Indian Reservation.

The existing pedestrian and bicycle trail system is comprised of tribal non-road type paths of which the primary trail connects between the Convenience Store and Kaibab Village Park. The secondary trails either dead end or are short exits to adjacent facilities. BIA Class 8 routes include roads and motorized trails for the administration of forests, grazing, mining, oil, recreation, or other use purposes. The routes designated as Class 8 within the Reservation serve primarily as access to cattle grazing units, hunting grounds, and water point sources. The Reservation boundary is fenced, therefore connections to the surrounding regional tourism attractions or public lands is limited.

2.3.13. Regional Transportation

SR 389 links the Kaibab Paiute Reservation to Arizona SR 67 and US 89 to the east, US 89 and Utah SR 9 and SR 59 to the north, and Interstate 15 to the northwest. (SR 67 terminates at the North Rim of the Grand Canyon.) Large metropolitan areas closest to the reservation are Las Vegas, Nevada; Kingman and Flagstaff, Arizona, which are the Coconino and Mohave County Seats, respectively; and St. George, Utah. Las Vegas is approximately 192 miles southwest of the reservation; St. George is 74 miles northeast; and Kingman and Flagstaff are approximately 297 miles southwest and 213 miles southeast, respectively. Small, municipal airports operate in Colorado City, Arizona, St. George, Utah and Kanab, Utah. Major air travel must be undertaken from Las Vegas, NV or Salt Lake City, UT.

2.3.14. Motor Vehicle Accident Data

Information regarding traffic crashes on SR 389 was obtained from ADOT for the three-year period from 2016-2018. The compilation of data on the *Transportation System Map* in **Appendix A** shows the locations of vehicular crashes and their severity over the three years. 12 vehicles were involved in a total of 9 accidents within the reservation boundaries during that period. Of the 9 crashes, 1 involved a confirmed injury while 2 resulted in possible injuries. Table 2.7 provides crash data by mile post (MP) locations along SR 389. MPs 14 to 31 are the approximate west and east boundaries of the reservation.

Table 2.7: Traffic Crash Data for AZ State Route 389 (2016-2018)

Mile Post	Date	No. of Vehicles	Injury	Surface Condition	Crash Type	Violation
15	04 / 2016	1	None	Dry	Animal	None
18	06 / 2016	1	None	Dry	Rollover	None
23	05 / 2016	1	None	Dry	Rollover	Failed to Keep in Proper Lane
14	05 / 2017	2	Possible	Dry	Vehicle in Transport	Followed Too Closely
17	06 / 2017	2	None	Dry	Vehicle in Transport	Excessive Speed
20	01 / 2017	1	None	Dry	Ran Off Road	None
18	02 / 2018	1	Possible	Dry	Ran Off Road	Excessive Speed
22	10 / 2018	2	Minor	Dry	Vehicle in Transport	Followed Too Closely
28	12 / 2018	1	None	Dry	Vehicle in Transport	Other
TOTAL CRASHES= 9		No. of Vehicles= 12				

Source: Arizona Department of Transportation 2016-2018

2.3.15. Roadway Hazards

No hazardous road conditions were identified on the reservation roads that have been designed and constructed to adequate standards.

2.3.16. Existing Traffic Volumes

HRE performed traffic volume research through the Arizona Department of Transportation website to determine the annual average daily traffic (AADT) on State roads within the Kaibab Paiute Indian Reservation NTTFI System. The traffic volume data obtained from ADOT shows one mechanical counter within the Reservation on SR 389 milepost 23 with the location ID #101655. ADOT utilizes stationary 2-way traffic counters which collect data 365 days a year.

ADOT states that Average Annual Daily Traffic (AADT) – Is The total volume of vehicle traffic of a highway or road for a year divided by 365 days. This number represents traffic on a typical day of the year. The types of traffic data collected and reported include vehicle volumes, speeds, classifications and weights. This work is performed through the operation of a statewide network of permanent Automatic Traffic Recorders (ATR's) and manual collections of several hundred short-term data collection sites. The day-to-day field work of traffic data collection is a significant component of a traffic monitoring program. Data collected must also run through a series of qualitative analytical checks and reviews before being released. Afterwards, the Traffic Monitoring Group distributes and publishes traffic data to satisfy the business needs of other ADOT groups such as Roadway Design, Materials and Motor Carrier Enforcement.⁶ This data derived from the mechanical counters is presented in the AADT map in **Appendix C**.

⁶ <https://azdot.gov/planning/traffic-monitoring>

PART THREE

3.0 The Transportation Plan

This chapter provides details on the transportation needs of the Kaibab Paiute Tribe. The needs analysis was developed through consideration of public input, traffic volume analysis, crash data assessment, field review of road conditions, and future improvement plans.

3.1. Future Development Plans

Future development plans identified by the Tribe are incorporated into this report in the following sections. These plans, and the impacts that they will have on the existing roadway network, form the basis of recommended roadway system improvements. These are described in Section 3.2 and depicted on the *Existing and Future Conditions Maps* in **Appendix A**.

3.1.1. Tribal Goals and Objectives

The following goals, submitted by the Tribe, reflect the Tribe's identified Vision. In its vision statement, the Tribe created three major categories and identified goals associated with each, as follows:

Vision I. Creating a Healthy, Stable Economy, Promoting Tribal and Individual Self-Sufficiency

- Diverse, reliable employment opportunities responsive to economic conditions
- Self-sustaining agricultural environment
- Controlled, culturally sensitive tourism

Vision II. Enhancing Our Future Together as Kaibab Paiute People through Education, Cultural Values, Beliefs, and Identity

- Leveraging tribal awareness and involvement through communication
- Perpetuating Paiute identity in the 21st century
- Tribal-wide commitment to youth development

Vision III. Providing a Safe and Healthy Environment and Workplace with Cultural Values for All Ages

- Facilities and infrastructure meet tribal needs
- Programs and Facilities for healthy lifestyles
- Options for nurture, care, and involvement of the elderly

The type and degree of development projected by the target year 2040 on tribal land is based upon the information provided by tribal officials. This data is used to project traffic volumes that would likely be generated by the various land uses and, subsequently, to identify road and other transportation-related improvements that may be needed to handle that traffic. The Tribe has identified several specific objectives to meet selected goals identified in its vision statement, as follows:

Vision I

Goal: Diverse, reliable employment opportunities responsive to economic conditions

Objective: Improve RV Park

Goal: Controlled, culturally sensitive tourism

Objectives:

- Eagle's Nest, Moccasin Mountain—restaurant, gift shop, live entertainment, conference rooms, events
- Comprehensive resort area—motel, guided tours, bowling center, golf, horseback tours, cultural experience, employment
- Improve campground trails and shared use path along Pipe Springs Road

Vision II

Goal: Perpetuating Paiute identity in the 21st century

Objectives:

- Tribal arts and cultural center
- Historical home restoration project
- Improve childhood Head Start Building

Vision III

Goal: Facilities and infrastructure to meet tribal needs

Objectives:

- Wind-generated electricity
- Three apartments
- Employment, affordable housing
- Solar farm
- Water resources development
- Telecommunication Towers

Goal: Programs and facilities for healthy lifestyles

Objectives: Health clinic (separate facility)

Goal: Options for nurture, care, and involvement of elderly

Objectives: New Senior Center parking lot and programs

3.1.2. Short- and Long-Range Development Plans

Based on the identified vision, goals and objectives the Tribe has proposed the following short- and long-range development plans:

Short-range Plans

- Toward this goal of providing needed housing on the reservation, the Tribe will construct two duplexes, providing a total of four new residential units in Kaibab Village. Assuming the current trend of 2.9 persons per household, the new units would provide housing for approximately 12 people. The Tribe has identified the need for a total of 2 new residential units by 2025 (see the discussion in Section 3.1.3, below).

- Improvements to the Tribe’s RV Park and Campground on CR 240 include updating existing gravel roads to paved, improving the north parking lot from gravel to paved and adding new facilities and attractions. The Tribe is working towards adding tourist attractions and seasonal events to increase visitation.
- Negotiations with several consultants are underway regarding installation of a cell tower on the reservation and implementing a solar energy project.

Long-range Plans

- It is assumed that agriculture will remain a prominent land use on the reservation through the year 2040. The Tribe’s plans related to this use include increasing current crop yields, improving and expanding the orchard farm, and developing water resources on the reservation. The Tribe is also investigating the potential opportunities related to “natural beef” ranching.
- The Tribe proposes a major, new recreational development that would have a motel, bowling center, golf course, and RV campground. Activities would include horseback riding and other tours of the reservation, and cultural experiences focusing on the history and culture of the Kaibab Paiute people.
- To take advantage of the natural beauty and views from the mountaintop, the Tribe has expressed the intention of pursuing the *Eagle’s Nest, Moccasin Mountain* development of a restaurant and gift shop facility that would also feature conference rooms. Live entertainment and special events are proposed for the development.
- Construction of apartments and additional single-family housing is proposed to meet the Tribe’s identified need for 25 new residential units by 2030 (see Section 3.1.3).

3.1.3. Growth Assumptions for the Years 2025 and 2040

Based on population data gathered from the Tribe and the U.S. Census Bureau, a straight-line growth projection was made to forecast the reservation population for the years 2025, 2030, and 2040. The population and housing needs projections are provided in Table 3.1. Based on current tribal occupied housing units (77 units) and population data (224 residents), the housing occupancy rate is 2.9 persons per household (pph). The Tribal Housing Department needs to add 8 new housing units by 2025 but would require 33 total new housing units by 2040 based on the continuation of 2.9 pph and an annual growth rate factor of 1.75%. The reservation housing population would add 21 residents by 2025, an additional 22 residents by 2030 and an additional 50 residents by 2040. As noted in Section 3.1.2, the Tribe proposes to construct two duplexes in Kaibab Village (a total of 4 residential units) in the near future that still leaves a need for more residential housing units in the short-range.

Table 3.1: Projections—Resident Tribal-Member Population and Tribal Housing

Year	Census Data			Tribal Data*		Projections*		
	1990	2000	2018	2010	2020	2025	2030	2040
Population	165	196	253 (+/-88)	211	224	245	267	317

Annual % Growth Rate	--	1.88%	1.62%	-	0.62%	1.75%	1.75%	1.75%
Occupied Units				78	77			
Total Occupied Units Needed by Target Year						85	92	110
Number of New Units Needed						8	7	18

* The source of the Tribal Data was the Tribe's Housing Department and Projections Based On % Annual Growth Rate.

The Tribe has noted factors that could revise the housing need upward: There are a number of non-resident tribal members who have expressed a desire to move to the reservation when housing becomes available; and there is a desire for separate housing for seniors and single persons living on the reservation. The Tribe's intentions of providing some housing units for individuals (which would result in 1-pph units), and of encouraging reservation population growth by attracting non-resident tribal members onto the reservation as residents could result in the need for more housing units than projections indicate.

Although reservation population increases are projected, the total future population of the reservation will not be enough to noticeably affect traffic patterns. Therefore, population was not a major factor in the projections of future traffic within the reservation.

3.2. Projected Travel Demand

In its most basic form, travel demand is a measure of the number of people (or their vehicles) who travel to and from all the various possible locations within and outside of a given area. That travel must take place on a transportation system or network, in this case, a road network. Projection of travel demand has three components: trip generation, trip distribution, and trip assignment.

The type and degree of development projected for the year 2040 on the Reservation or in its vicinity is based on information provided by Tribal members, staff and other officials or agencies. The factors used in the generation of trips were determined from a review of the development plans identified in Section 3.1.2.

In developing a 20-Year Transportation Plan for the community, we have made assumptions based upon the awareness of the existing conditions and of the plans to meet current and future needs. Using these assumptions, we have projected the degree of development that is probable by the year 2040 given the population to be served and the economic resources available for implementing development plans.

The road network must accommodate existing as well as projected traffic volumes that can be determined through present and projected growth patterns.

3.2.1. Trip Generation

The most reliable way to estimate the traffic generated by a proposed development is to use the trip generation rates observed at an existing development of similar land use and building type. For this purpose, the accepted source document of trip generation Rates was used (Trip Generation, Tenth Edition, Institute of Transportation Engineers). The following table illustrates typical land use categories on Indian Reservations.

Table 3.2 - Trip Generation Rates
Typical Indian Reservation Land and Use Categories

Land Use Code	Land Use	Average Daily Traffic (ADT) Rate
110	General Light Industrial	4.96 trips/day/1000 square feet
210	Single Family Detached Housing	9.44 trips/day/dwelling unit
411	Public Park	0.78 trips/day/acre
416	Campground/RV Park	74 trips/day/acre
495	Recreational Community Center	28.82 trips/day/1000 square feet
537	Charter Elementary School	1.85 trips/day/student
520	Elementary School	1.89 trips/day/student
530	High School	2.03 trips/day/student
630	Health Clinic	38.16 trips/day/1000 square feet
730	Government Office Building	22.59 trips/day/1000 square feet
820	Shopping Center	37.75 trips/day/1000 square feet
851	Convenience Market	762.28 trips/day/1000 square feet
934	Fast Food Restaurant with Drive Thru Window	470.96 trips/day/1000 square feet

Source: Trip Generation Manual, 10th Edition, Institute of Transportation Engineers (ITE)

Trip generation calculations were performed for average weekday trips for the year 2040. This information is used to develop recommendations for road improvement programs. Future volumes, including programmed improvements, are analyzed against the capacities of existing roadways to develop road improvement projects. Table 3.3 shows the results of the trip generation calculation for the year 2040 for the proposed development on the Kaibab Paiute Indian Reservation in which specific information was provided, i.e. square footage, dwelling units.

Table 3.3 - Trip Generation by Village

Location	Qty	Unit	ADT Rate	Weekday Daily Trips
Route 101 Juniper Village				
Juniper Street	18	du	9.44	170
Juniper Street fully built out	27	du	9.44	255
Route 201 – Kaibab Village				
Kaibab Village Roads	31	du	9.44	293

Location	Qty	Unit	ADT Rate	Weekday Daily Trips
Kaibab Village Roads built out	56	du	9.44	529
Community Park	8	acres	0.78	6
Community Building	7.25	/1000 sf	8.16	59
Senior Center	6.4	/1000 sf	11.12	71
Head Start	6.15	/1000 sf	11.12	68
Maintenance Yard	7.5	/1000 sf	16.28	122
Route 301 - Red Hills Village				
Red Hills Street	21	du	9.44	198
Red Hills Street fully built out	27	du	9.44	255
Route 401 – Eagle Mountain Village				
Steamboat Street	22	du	9.44	208
Steamboat Street fully built out	29	du	9.44	274

*Intensity/Units are estimate numbers; ADT in vehicles per day, du=dwelling unit, sf=square feet

3.3. Analysis of Demand and Capacity

Demand

The highest demand for development is additional residential housing units. There is little to no area available for housing within the existing developed parcels and street networks. New infrastructure is necessary to build additional residential housing or any other proposed governmental office buildings or economic enterprises. The demand for housing exceeds all short and mid-range development plans. While there is land available for this purpose, the cost to develop the utility infrastructure is challenging. Any new areas developed will require new roadways and the associated utility infrastructure. All new roadways should consider the surrounding land use and trip generation projections for planning road capacity (number of lanes) and should include adequate facilities for pedestrians and bicyclists. The Tribe should also consider connectivity within each parcel as well as drainage corridors.

The secondary demand is for new health clinic space. Currently, a new health clinic is planned just north of the Tribal Headquarter building and will front Pipe Springs Road (CR 240).

Capacity

Roadway traffic operations are defined and categorized by the amount of delay experienced by an average driver. The operations are categorized by a grading system called level of service (LOS), which has a letter designation ranging from A (no delay) to F (severe congestion). The LOS definitions for each letter designation are given in Table 3.4 and are based on LOS definitions provided in the Highway Capacity Manual 2016 (HCM).

For a planning level analysis, the LOS is determined based on the ratio of traffic volume on the roadway to the capacity of the roadway. Daily volume thresholds for the LOS letter designations have been developed for the functionally classified study area roadways and are shown in Table 3.5. Roadway segments below the maximum daily volume threshold for LOS C likely do not currently need additional through capacity while roadway segments above the minimum daily volume threshold for LOS E likely do currently need additional through capacity. For roadway segments between the daily volume thresholds for LOS D, more detailed analysis should be conducted to evaluate roadway geometry, traffic control conditions, and number and spacing of driveways to determine if additional through capacity is needed.

Based on the daily volume thresholds in Table 3.5 and the daily volumes in Table 3.3 Trip Generation: Year 2040, all study area roadway segments for which current traffic volume data was available provide LOS C or better, and are not projected to experience capacity deficiencies within the next 20 years. Major new developments should be evaluated to determine specific access and circulation impacts to the roadways.

It should also be noted the development planned the Fredonia Parcel accessing SR 89A, roadway improvements could be required by the Arizona Department of Transportation. This could be additional turn lanes on the highway if the volumes warrant. Specific development plans should consider the required highway and traffic improvements during the planning phase.

Table 3.4 – Level of Service Definitions

Level of Service	Definition
A	Primarily free-flow operation; virtually no delay.
B	Reasonably unimpeded operation; the presence of other users in the traffic stream begins to be noticeable.
C	Stable operation; marks the beginning of the range in which the operation of individual users becomes significantly affected by others.
D	Somewhat stable operation; represents operating conditions near capacity. Small increases in flow may cause substantial increases in delay and decreases in travel speed.
E	Unstable operation and significant delay; represents operating at or almost at capacity level. All speeds are reduced to a low but relatively uniform value.
F	Severe congestion; represents operating conditions over capacity and extremely low travel speed.

Source: Highway Capacity Manual (2016)

Table 3.5 – Level of Service Daily Volume Thresholds

Functional Classification	Under Capacity (LOS A-C)	Near Capacity (LOS D)	At Capacity (LOS E)	Over Capacity (LOS F)
Rural Minor Arterial (4 lanes)	< 9,800	9,800 - 11,700	11,700 – 13,000	> 13,000

Rural Minor Collector (3 lanes)	< 5,500	5,500 - 6,700	6,700 – 7,400	> 7,400
Rural Local Street (2 lanes)	< 1,200	1,200 – 1,800	1,800 – 2,400	> 2,400

Source: Highway Capacity Manual Analysis Tool

3.4. Recommended Transportation Improvements

The Long-Range Transportation Plan for the Kaibab Paiute Indian Reservation outlines existing conditions, identifies transportation needs, and presents an integrated set of recommended roadway improvements for the Tribe. The plan also includes policies and related actions necessary to implement the plan and identifies the government agencies and private entities that have programmed funds to carry out the improvements.

Evaluation Criteria

The following criteria were used in evaluating the various roadway alternatives developed during the course of this study. The criteria are divided into four sections: Traffic Operations, Community Impacts, Economic Impacts, and Construction.

Traffic Operations

Traffic Operations – this is a measure of traffic operational characteristics. Objective measures include capacity, level of service, delay, and progression efficiency.

Network Completion – This measure assesses whether or not the project closes gaps in the transportation network.

Traffic Safety – Traffic safety is a measure of expected conflict points and improvement of existing problems.

Community Impacts

Displacement – This is a measure of the magnitude of displacement that would be necessary to construct the project.

Aesthetics – This measure assesses whether the project is visually pleasing.

Environmental Impact – This is a measure of each project’s impact on the environment, including noise, air quality and wetlands.

Community Support – This is a measure of how much opposition or support there may be for the project.

Economic Impacts

Local Access – This criterion measures the level of directness, convenience and availability of access to existing and future development. Emergency access is included in this measure.

Economic Development Opportunities – This criterion assesses the impact of the project on future development opportunities (i.e. does the project change or encourage the potential for access for future development?).

Construction

Ability to Phase – This measure assesses whether or not the project lends itself to being constructed in phases, or if it would have to be constructed as one project.

Constructability – This is a measure of how difficult it would be to construct the projects, looking at the need to relocate utilities, change drainage facilities, or alter a railroad crossing.

Relative Cost – This is a comparison of costs to obtain any necessary right-of-way and to construct improvement for the project.

Right-of-Way - This measure assesses the availability of right-of-way for the project and the potential costs associated with right-of-way acquisition.

3.4.1. Proposed Projects

Several proposed transportation improvement projects were identified during the course of this study. The locations of these projects are depicted on Map B, *NTTFI System and Proposed Transportation Projects*. The projects on this list may be revised, deleted, or expanded during the review period that commences with the submittal of this Draft Report. Once the project list is completed, the projects on that list must be ranked according to tribal priority. The prioritized list must then be approved by Tribal Resolution prior to its submittal to BIA as the final Transportation Improvement Program. The transportation projects proposed to date are described below and summarized on Table 3.6 *Proposed Projects and Responsible Agencies*. It should be noted they are not in priority order, but are listed by number identification herein and on Map B.

SHORT-RANGE PROJECTS

- Construct SR 389 and Pipe Springs Road (CR 240) Intersection.
- Construct Pipe Springs Shared Use Trail as a concrete surface.
- Reconstruct parking lot at the Tribal Court.
- Construct paved roads for Route 725 (RV Park).
- Construct parking lot for the Senior Center.

MID-RANGE PROJECTS

- Construct new road for residential housing development.
- Construct gravel road for Route 31 (to communication tower).
- Reconstruct parking lot for Tribal Headquarters.
- Reconstruct parking lot for the Kaibab Community Center.
- Reconstruct parking lot for the Gymnasium and Cry House.
- Purchase new road maintenance equipment.

- Construct gravel road for Route 24 (water tank road).

LONG-RANGE PROJECTS

- Construct gravel road for Route 30 (farm road).
- Develop a Transportation Plan for Tourism and Recreation.
- Construct gravel road for Route 50 as emergency route.

Project Descriptions for Short-Range Improvements

- 1. State Route 389 at Pipe Springs Road Intersection (CR 240) – (0.40 mile):** KBIR Safety No. 2 (KBIR SR389 (2)) project involves constructing turn lanes for left and right turns from SR 389 onto Pipe Springs Road. This project has been funded for Construction and nominal funding is required to bring a successful conclusion.
- 2. Pipe Springs Trail (CR 240) (T 240 2020 update) – (2.0 miles):** KBIR CR240 Safety No. 2 project will address safety concerns along CR 240 which is the busiest road on the Reservation. The existing surface is a typical small gravel pedestrian trail to be upgraded with an all-weather surface. The Trail begins near the main entrance at the Chevron Convenience Store adjacent to the Tribal Headquarters Building at the intersection of SR 389 and Pipe Springs Road.
- 3. Tribal Court Parking (T 726) – (0.1 miles):** KBIR 726 (1) consists of repaving and striping the Tribal Court/Police parking lot. The existing bituminous pavement is less than 2” thick. The project should consider providing for drainage and take precautions while working around Pipe Springs Trail, which crosses over the parking lot entrance twice.
- 4. RV Park Road (T 725- Sections 10-50) – (0.7 miles):** The KBIR 725 (1) project will pave over existing gravel roads in and around the RV Park and Campground area which is northeast of the National Park Service Pipe Spring National Monument. Activities consist of grading & drainage, road base material, paving and striping.
- 5. Senior Center Parking Lot (P 204) – (0.2 miles):** KBIR 204 (1) consists of paving and striping the Senior Center parking lot. The existing surface is earth. The project should consider providing for drainage and take precautions while working around the existing building and utilities.
- 6. Maintenance & Planning:** Effective planning can make a vision reality. Proper road maintenance leads to enhanced economic development, growth and social benefits. Maintenance is essential in order to protect the road over time, safeguard resources, ensure safety, and maintain mobility. Unmaintained roads can constrain mobility, increase vehicle operating costs and increase accident rates.

3.4.2. Government Agency Responsibilities

Since different government entities are responsible for different roads, the funding for the improvements previously described may fall within the jurisdiction of different agencies. Recommended improvements under the jurisdiction of the county or state are included in a state transportation planning process by which they are placed by priority in a five-year Transportation Improvement Program (TIP). Potential funding agencies are identified in Table 3.6 under the “Responsible Agency” column.

Table 3.6: Proposed Projects and Responsible Agencies

Project Number	Project Name	Improvement	Length (Miles)	Responsible Agency
1	RV Park Road	Pave	0.7	Tribe
2	Pipe Springs Trail	All weather surface	2	Tribe
3	SR 389 & Pipe Springs	Left and right turn lanes	0.4	BIA / ADOT
4	Tribal Court Parking	Pave and stripe	0.1	Tribe
5	Senior Center Parking	Pave and stripe	0.2	Tribe
Total			3.4	

3.4.3. 5-Year Tribal Transportation Improvement Program (TTIP)

A Tribal TIP is a multi-year, financially constrained, list of proposed transportation projects to be implemented within or providing access to Indian country during the next 3 to 5 years. It is developed from the Tribal priority list. The Tribal TIP is consistent with the Tribal Long-Range Transportation Plan and must contain all Tribal Transportation Program (TTP) funded projects. It may also contain information regarding other Federal, State, County, Municipal, and Tribal transportation projects initiated by or developed in cooperation with the Indian Tribal Government. The Tribal TIP forms are contained in **Appendix D**. Only those projects approved for funding by the sponsoring governmental entity may be included in the Tribal TIP. It is reviewed and updated as necessary. The only entity that can change the Tribal TIP is the Indian Tribal Government.

Examples of transportation projects include, but are not limited to: New road construction, road reconstruction/resurfacing, road sealing, bridge construction, transit facilities, bike/pedestrian enhancements, highway safety, etc.

The Tribal TIP identifies the implementation year of each project. The development of the Tribal TIP establishes Tribal priorities for TTP and other transportation projects. It is the Indian Tribal Government's voice in selecting the year in which projects are programmed. It is also a useful tool for keeping track of transportation projects programmed by other government agencies i.e., Federal Transit Administration (FTA), Federal Highway Administration, Federal Aviation Administration, etc. and coordinating them with TTP transportation projects. By developing a Tribal TIP, the Indian Tribal Government is taking a pro-active role in the transportation planning process and exercising its sovereignty in controlling the programming of transportation projects on Tribal land.

The TTP TIP is reviewed by the Regional BIA Office. It is a prioritized list (by year) of TTP funded projects, selected by Indian Tribal Governments through Tribal TIPs, or other Tribal actions, that are programmed for construction in the next 3-5 years. The TTP projects identified on the Tribal TIP must be included in the Region's TTP TIP without further action. The Bureau of Indian Affairs (BIA) Regional Office places the TTP information from Tribal TIPs into the Regional TTP TIP unchanged.

The Regional TTP TIP is included in the Statewide Transportation Improvement Program (STIP) developed by each State Transportation Agency without further action. If a TTP project lies within a metropolitan area, it must be included in the metropolitan area TIP without further action.

The BIA Regional Office updates the TTP TIP annually for each State in its service area. The process begins by providing the projected TTP funding amount to each Tribe. The BIA region/agency office receives a Tribal TIP or Tribal priority list from each Indian Tribal Government.

A BIA analysis of the Tribal priority list results in anticipated project costs and proposed scheduling of construction activity based on the Tribe's percent share of the region's TTP budget. The BIA reviews the programming of proposed projects with the Indian Tribal Government and agreed upon adjustments are made.

The BIA Regional Office then updates the region wide control schedule for its service area, to include TTP projects from Tribal TIPs and the selected projects from the Tribal priority list. The BIA Regional Office then produces a TTP TIP for each State in its service area from the area wide control schedule for signature by the Secretaries of Interior and Transportation or their designees. The revised area wide control schedule is provided to the BIA, Division of Transportation (BIADOT) for review and comment.

The timeframe for the annual update of the TTP TIPs for each State in a BIA Regional Office's service area should be coordinated with the State Transportation Agencies within its service area. This will ensure that approved TTP TIP updates are included with the STIPs when they are printed and distributed.

3.4.4. Proposed Revisions to BIA Road System

One of the objectives of this transportation study was to identify Reservation roads that should be added to or deleted from the National Tribal Transportation Program Facility Inventory (NTTFI) system or renumbered to more logically reflect their relationships with intersecting roads. The following sections identify the recommended changes to the NTTFI Kaibab Paiute Indian Reservation road system.

Listed below are recommended Road System Guidelines, intended to assist Tribes, Regional Directors, and Engineers in deciding which roads should be on the BIA Road System. These are not rules, as special circumstances may apply, but deviations from the guidelines should be accompanied by an explanation of the special circumstances.⁷

1. A road which is only for service to a single residence or land use is a private driveway, not a public road, and should not be on the BIA Road System. A road serving only three or less closely grouped residences or land uses should be considered a common private driveway.

⁷ April 4, 1994, Memorandum from the Deputy Commissioner of the Indian Affairs, recommending BIA Road System Guideline.

2. Roads primarily used for a single purpose should not be on the BIA Road System such as:
 - a. Logging roads for timber sale, administrative, or fire access only and which are not open to the public or used for such purposes as recreation, wood cutting, gathering, fishing, or hunting.
 - b. Agricultural roads to fields, pump houses, headgate, dams, along canals and which are not open for other purposes such as fishing, boating, hunting.
 - c. Administrative roads to power plants, sewage treatment plants, water towers which are not open to the public for other uses.
 - d. Tribal roads to a single purpose Tribal enterprise such as a fish hatchery, sawmill, manufacturing plant, cemetery, or other single use which are not open to the public.
3. The proportion of state and county road miles to BIA Road System road miles within a Reservation should be at least equal to the proportion of fee land to trust land within that particular Reservation. BIA should not participate in state or county road construction projects on a Reservation unless the local governments meet their own road construction responsibilities.
4. Where state/county road systems are substantially under guideline #3, efforts to correct the imbalance and/or secure state/county funding for BIA road construction projects should be documented, with copies to the Regional Office and Central Office Division of Transportation. This also applies to cases where the state/county established a road system but fails to meet construction needs on that system.
5. Use Class 11 trails to separate pedestrian (especially school) traffic, and bicycle traffic from vehicular traffic.
6. The following are to be considered when evaluating what is “vital to the economic development” of Indian Tribes.
 - a. Connects active center of population
 - b. Promotes development of natural resources
 - c. Contributes to industrial activity
 - d. Contributes to economic development
 - e. Provides jobs for the community
 - f. Contributes to law and order
 - g. Removes isolation
 - h. Provides access to education
 - i. Provides access to hospital facilities
 - j. Contributes to accident prevention
 - k. Provides access for emergency services

3.4.4.1. Mileage Corrections or Deletions

There were no mileage corrections in the 2020 Inventory Update. There are no roads, parking lots, bridges or any other transportation facilities to be deleted from the Kaibab Paiute Indian Reservation NTTFI system.

3.4.4.2. Roads to be Added or Revised

The “Kaibab Paiute Tribe Road Inventory Comparison List” found in **Appendix B** illustrates 4.0 net miles of roadway to be added to the NTTFI system of 148.4 existing miles for a total updated mileage of 152.4. The table contains specific information on each section to be added. The justification for adding these roads is the following:

These roads are important to the overall public transportation need of the Reservation as recommended by the Tribal Council. These are public roads for which the road owner has primary responsibility for maintenance and improvement. These are roads that are owned by an Indian Tribal government; or are community streets within Tribally owned property. They are primary access routes proposed by the Tribal government, including roads between land parcels. Parking facilities will serve Tribal buildings and service centers.

High Road Engineering collected all road mileage data in the field with a handheld Garmin GPS unit. All roads in the Tribe’s existing inventory system database were reviewed, as well as the roads and parking lots the Tribe requested to add to the NTTFI system. All road inventory data was gathered and reported on the U.S. Department of the Interior Bureau of Indian Affairs Department of Transportation Western Regional Office Inventory Data Sheets in the required format for input into the Road Inventory Field Data System (RIFDS). The proposed additions are:

Table 3.7: Proposed Revisions to the Kaibab Paiute Road System

Routes by Jurisdiction	Section	Revised
BIA Routes	#	(Miles)
0040 Moccasin Wash Road	010	0.1
0040 Moccasin Wash Road	020	0.2
0040 Moccasin Wash Road - Bridge	030	0.1
0040 Moccasin Wash Road	040	0.2
0040 Moccasin Wash Road	050	0.5
Total BIA Route Mileage Revisions		1.1

Table 3.8: Proposed Additions to the Kaibab Paiute Road System

Routes by Jurisdiction	Section	Class	Additions
Tribal Routes	#	Code	(Miles)
P201 Community Park Parking Lot	010	9	0.1
P201 Community Park Parking Lot	020	9	0.1
P201 Community Park Parking Lot	030	9	0.3
P202 Head Start Parking Lot	010	9	0.1
P203 Existing Senior Center Parking Lot	010	9	0.1
P204 New Senior Center Parking Lot	010	9	0.2
P240 Tribal Headquarters Parking Lot	010	9	0.3
P241 Gymnasium/Cry House Parking Lot	010	9	0.1

P725 NPS Administration Parking Lot	010	9	0.1
T240 Pipe Springs Trail	010	8	2.6
Total Tribal Route Mileage Additions			4.0

3.4.4.3. Bridges to be Added

One bridge is recommended for addition to the NTTFI system. The Moccasin Wash bridge is on Route 40 (Moccasin Wash Road), and is Section 30 in the 2020 Inventory Update. The bridge was constructed in 2015 and is a structural multi-plate corrugated steel 25-foot diameter culvert with concrete collared beveled end sections and 10-foot deep cut-off walls. As this is a new bridge, it will be added to the inventory system.

Table 3.9: Proposed Bridge Additions to the Kaibab Paiute Road System

Route 40	Number	Length (feet)	Surface Type	Condition
Section 30	0000H69617B040B	25	Gravel	Excellent

3.5. Plan Implementation and Updating

This transportation plan presents the results of a study completed in 2020. It reflects the current requirements for transportation facilities to satisfy the Community's needs and is based upon the existing conditions and anticipated future development within the Community and Tribal Priorities. The plan should not be thought of as a static document. It should be viewed as a dynamic document capable of being modified to meet changing social and economic development demands.

It is recommended that the Kaibab Band of Paiute Indians Tribal Council adopt this plan and use it as the basis for programming and budgeting road construction funds. The plan should be reviewed by the Tribe and BIA Western Regional office on an annual basis to keep up with changes in community development that may warrant a change in the project listing and/or a change in a project's priority. Changes in the project listing should be coordinated with and accomplished within the time frames established by the funding agency so as not to hamper the implementation of the Agency's road improvement program to the Community. The overall Community transportation plan should be reviewed and updated every five years, or when there are major changes in the Tribe's land use plan. Five-year updates are currently planned by the BIA.

A key component in the continuation of the transportation planning process is the annual coordination between the Tribe and the BIA Western Regional Office, regarding adjustments in road construction priorities and implementation schedules, road maintenance needs and priorities, and TTP program funding. Several means are available to facilitate this process. Some Tribes establish a transportation committee composed of Tribal members and key Tribal staff. This committee usually reports and makes recommendations to either the Tribal planning commission (if one exists) or directly to the Tribal Council. In other instances, the annual coordination function is

assigned to the Tribal planning commission, or if no such body exists, it is undertaken as a formal process directly by the Tribal Council. However the process is handled, it is recommended that: (1) it be an annual function with a formalized process, and (2) an official Tribal body (as discussed above) is assigned which has the responsibility to undertake this coordination.

3.6. Procedures for Development Roads

In the future, it is possible that roads will be constructed using funds from developers who will benefit from the road construction. Therefore, it is important that the Tribal Government establish policies and guidelines to monitor and control the construction of roads by developers. It is the recommendation of this study that the Tribe consider this approach to funding development roads. Should such an approach be acceptable, the Tribe should adopt a process for approving these roads to ensure that they will be constructed to an adequate standard and properly maintained. The essential elements of such a process are outlined below.

3.7. Design Standards

The first element in the process is to define what is expected. When a development project is submitted for review, it should only be given conditional approval subject to the roads and other infrastructure improvements being constructed to proper standards. Roads should be designed to meet minimum geometric and structural standards for the anticipated traffic volumes and classification of vehicles' loads. Roadway design standards should be adopted by the Tribe and available to potential developers. Standards currently used by the BIA, ADOT, and Mohave or Coconino Counties are readily available. These design standards could be adopted as is, or modified, as the Tribe would prefer for specific design items.

3.8. Plan Submittal and Review

The second element in the approval process is the submittal and review of construction documents (Plans and Specifications). The Tribe should employ an experienced Engineering Consultant to review proposals and ensure that the plans are in accordance with minimum design standards. The BIA should be asked to review and approve road construction documents from a developer if the Tribe anticipates it will request that the road be added to the BIA's road system for long-term maintenance. Plans and specifications should be approved for construction only when they are in conformance with minimum design standards based on anticipated traffic and loads.

3.9. Construction Monitoring

Another essential step in the process is the monitoring of the actual construction. The construction should be inspected periodically by a qualified representative of the Tribe to ensure that construction is proceeding in conformance with the approved plans. A final inspection should also be performed prior to accepting the responsibility for maintenance.

To ensure proper construction, most jurisdictions require that the developer post a performance bond. The bond is held until the roadway has been accepted and all conditions for release have been met.

3.10. Maintenance Funding

The process should also address a method for financing the long-term maintenance of these development roads. A desirable procedure would be to make those who benefit from the road responsible for the long-term maintenance. If a road is primarily for the benefit of the adjacent tenants, then the Tribe would need some form of revenue generated by the tenants. This could be in the form of an annual assessment or fee for the use of roads, and other non-revenue generating components of the infrastructure. This revenue would be very similar to an ad valorem tax assessed by most municipalities against the value of land. The funds received should be put in a sinking fund that would accumulate and be available for maintenance as needed.

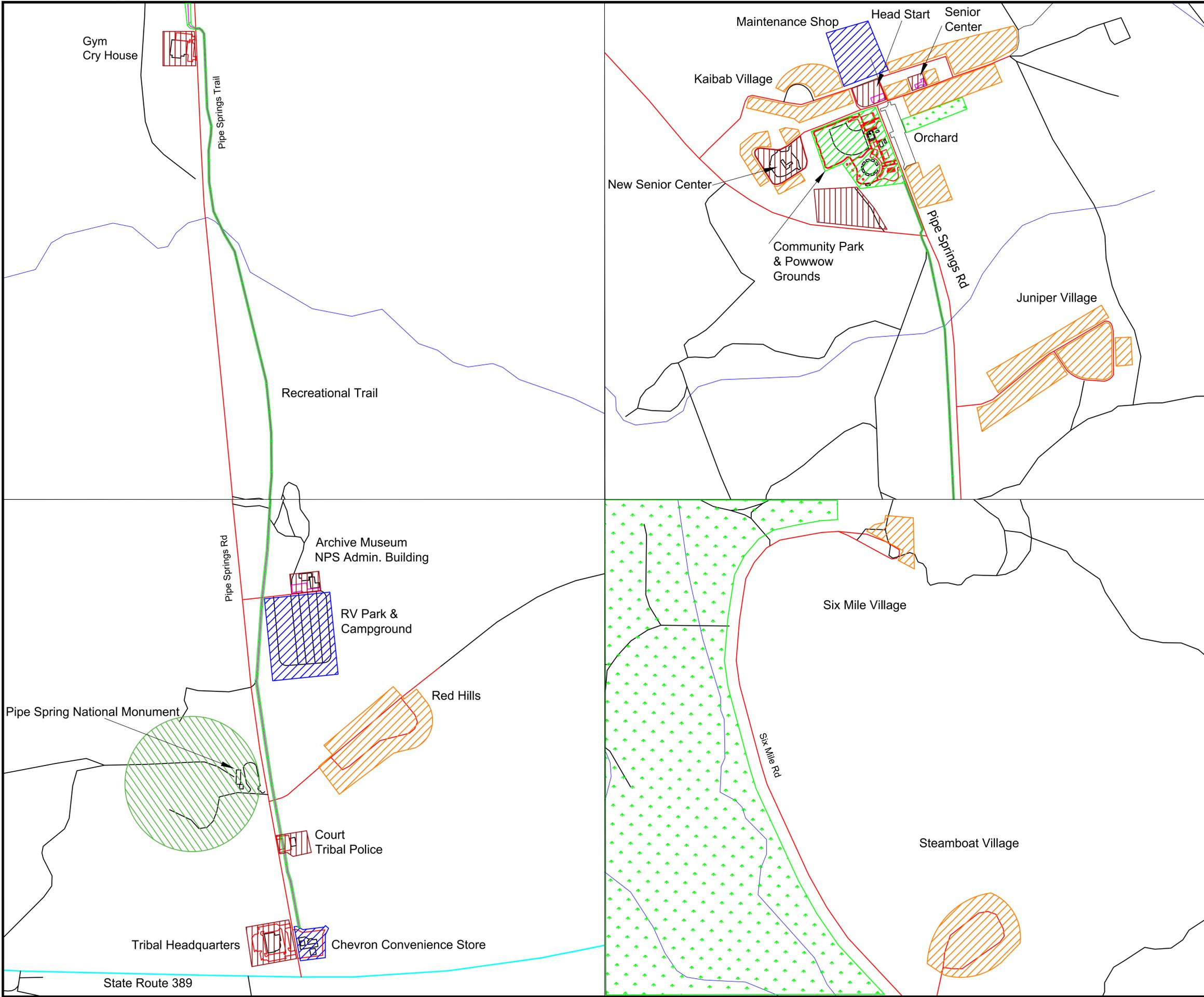
The BIA is obligated by CFR 25, Part 170, to maintain the BIA Road System to a safe and satisfactory standard based on the availability of funds and the road's as-built condition. Road maintenance funds are appropriated by Congress and allocated to the BIA separately from the Federal Highway Trust Funds (HTF) used for initial construction. Road maintenance funds are used to provide an optimal level of road maintenance based on the road condition and the availability of funds. Road maintenance activities include: the preservation and repair of the road surface, blading roadway shoulders and ditches, clearing drainage structures, snow removal and the installation/replacement of traffic control, directional and street signs.

Typically, the Agency Road Engineers/Managers work with the Tribes in establishing a road maintenance program to determine the type and level of maintenance to be performed on BIA roads within each Reservation based on Agency's road maintenance budget. Maintenance priorities are frequently determined by weather and/or road conditions which inhibit access to and from communities to employment centers, community services and health facilities. Emergency road conditions have highest priority. Other priorities are determined based on surface type and use.

If roadways funded and constructed with HTF are not properly maintained, then future HTF road construction funds can be withheld. This situation might occur if maintenance funding is limited such that adequate repairs and upkeep of the roadway are not possible.

Tribes are allowed to spend their TTP construction funds on eligible road maintenance activities if the project is on an approved transportation improvement program (TIP). Tribes may spend up to 25% of funds received or \$500,000, whichever is greater.

APPENDIX A



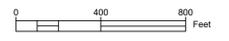
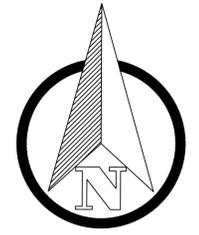
LEGEND

Land Use

-  Residential
-  Commercial
-  Recreational
-  Institutional / Public Service
-  Reservation Boundary
-  Park Service
-  Open Space
-  Agriculture

Surface Type

-  Paved
-  Gravel
-  Earth
-  Paved Highway



PO Box 97
St. George, UT 84771
Phone 435.767.8481
Web www.highroadengineering.com



Long-Range Transportation Plan
Kaibab Paiute Indian Tribe
Mohave County, Arizona
Existing Conditions Map

REV.	DATE	DESCRIPTION	BY

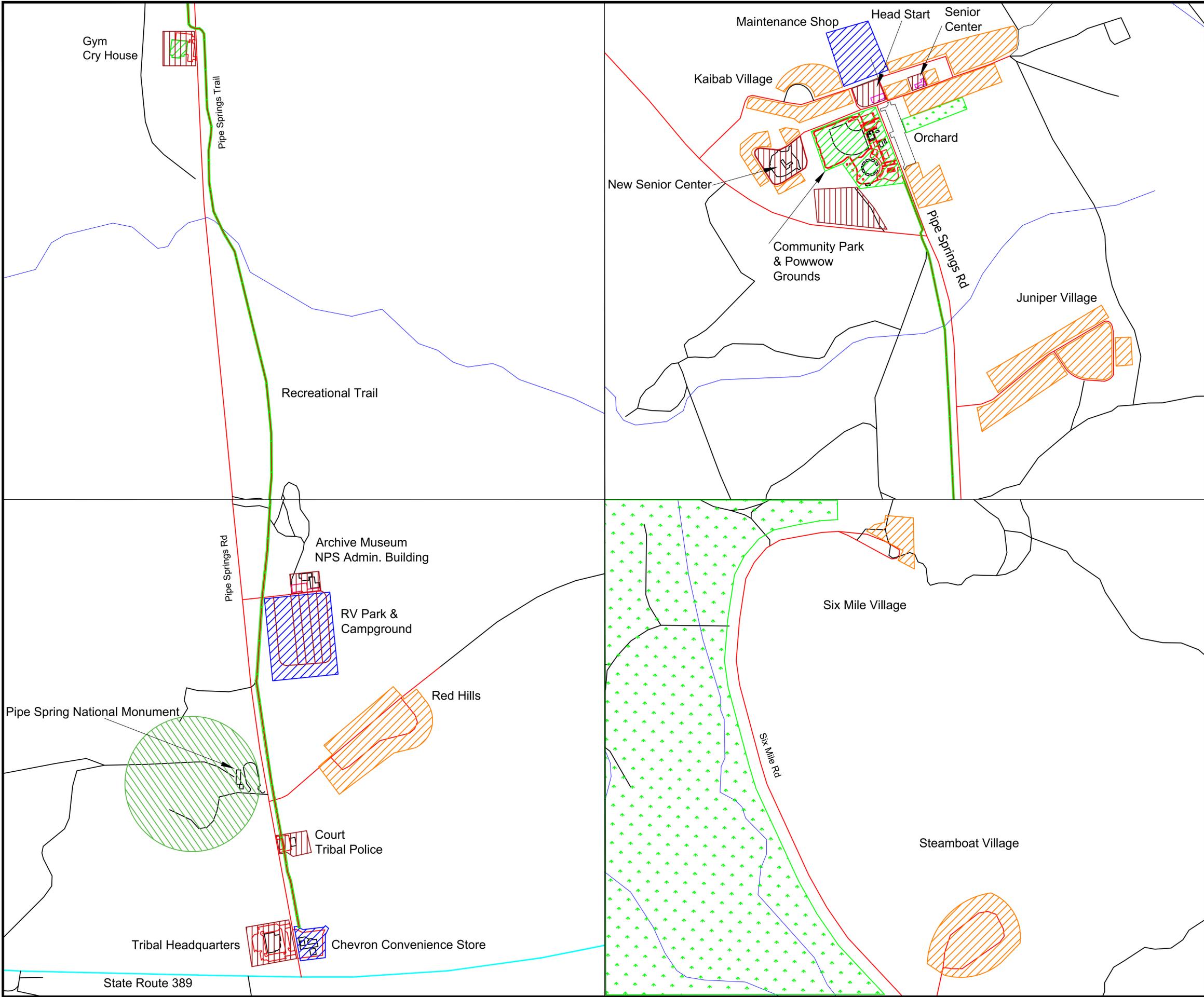
DATE MAY 2020
PROJECT NO.

SHEET NO.
2
OF 4 SHEETS

Kaibab Indian Tribe

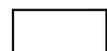
May 2020

E. Whitlock



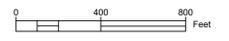
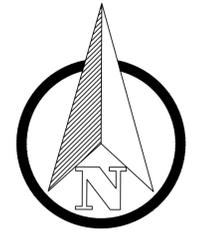
LEGEND

Land Use

-  Residential
-  Commercial
-  Recreational
-  Institutional / Public Service
-  Reservation Boundary
-  Park Service
-  Open Space
-  Agriculture

Surface Type

-  Paved
-  Gravel
-  Earth
-  Paved Highway



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Long-Range Transportation Plan
Kaibab Paiute Indian Tribe
Mohave County, Arizona
Future Conditions Map

REV.	DATE	DESCRIPTION	BY

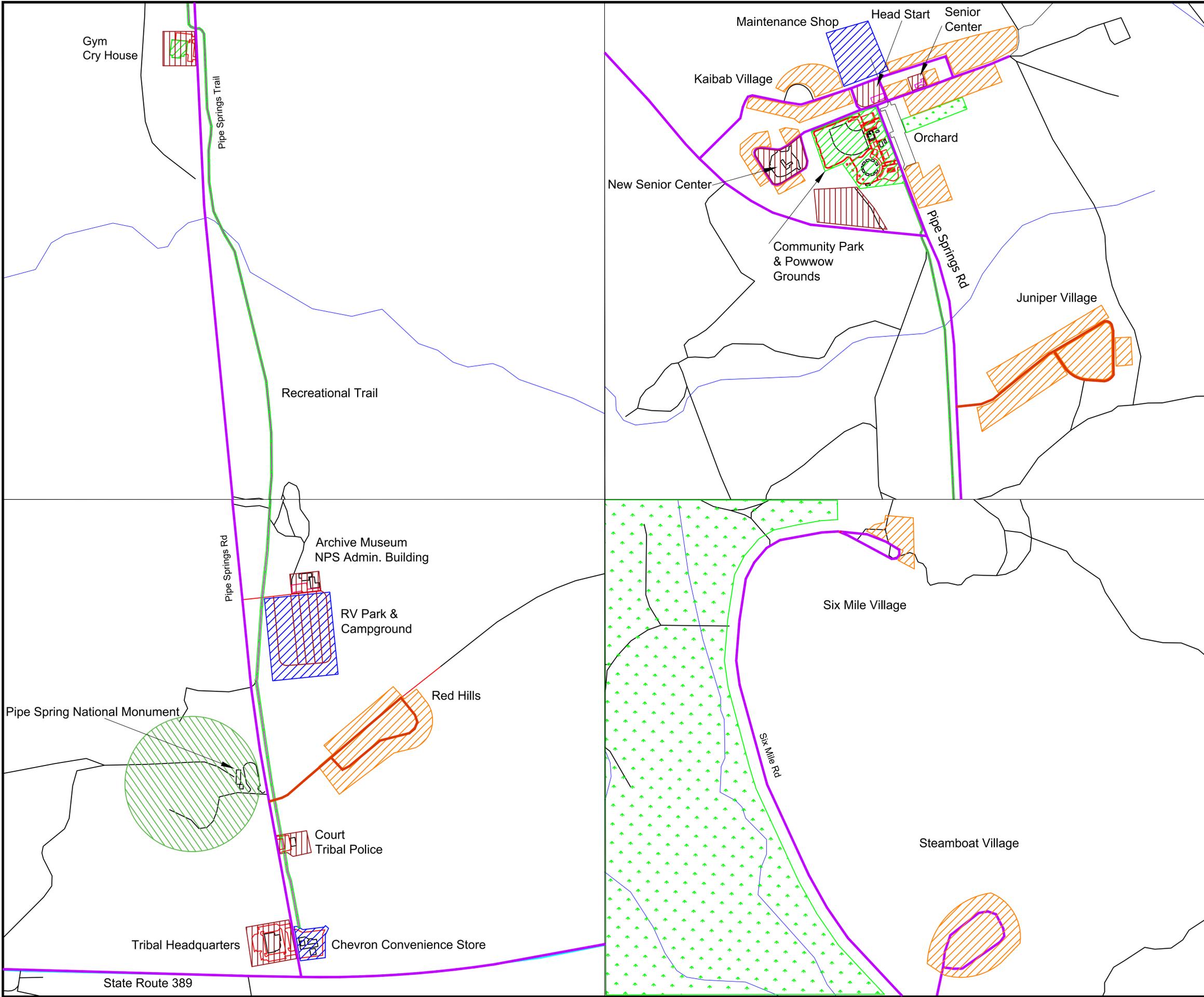
DATE MAY 2020
PROJECT NO.

SHEET NO.
3
OF 4 SHEETS

Kaibab Indian Tribe

May 2020

E. Whitlock



LEGEND

Route Services

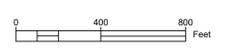
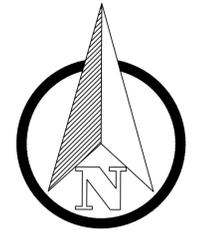
-  School Bus & Mail Route
-  Mail Route

Land Use

-  Residential
-  Commercial
-  Recreational
-  Institutional / Public Service
-  Reservation Boundary
-  Park Service
-  Open Space
-  Agriculture

Surface Type

-  Paved
-  Gravel
-  Earth
-  Paved Highway



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St. George, UT 84771
Phone 435.767.8481
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Long-Range Transportation Plan
Kaibab Paiute Indian Tribe
Mohave County, Arizona
School Bus & Mail Routes Map

REV.	DATE	DESCRIPTION	BY

DATE MAY 2020
PROJECT NO.

SHEET NO.
4
OF 4 SHEETS

Kaibab Indian Tribe

May 2020

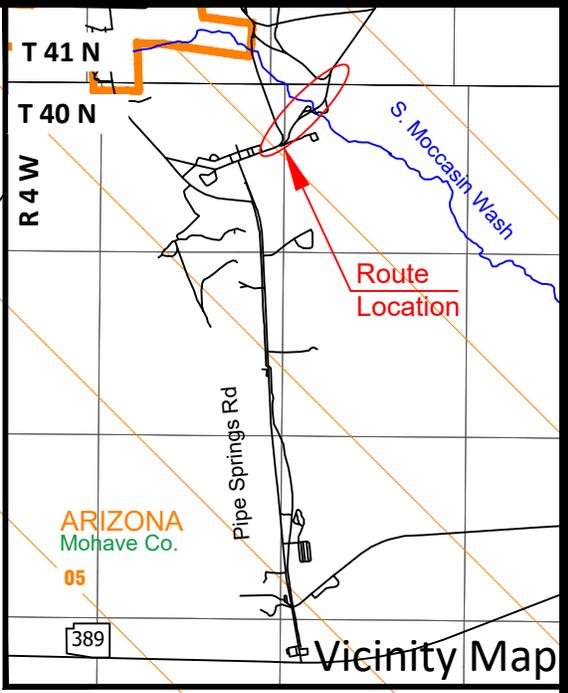
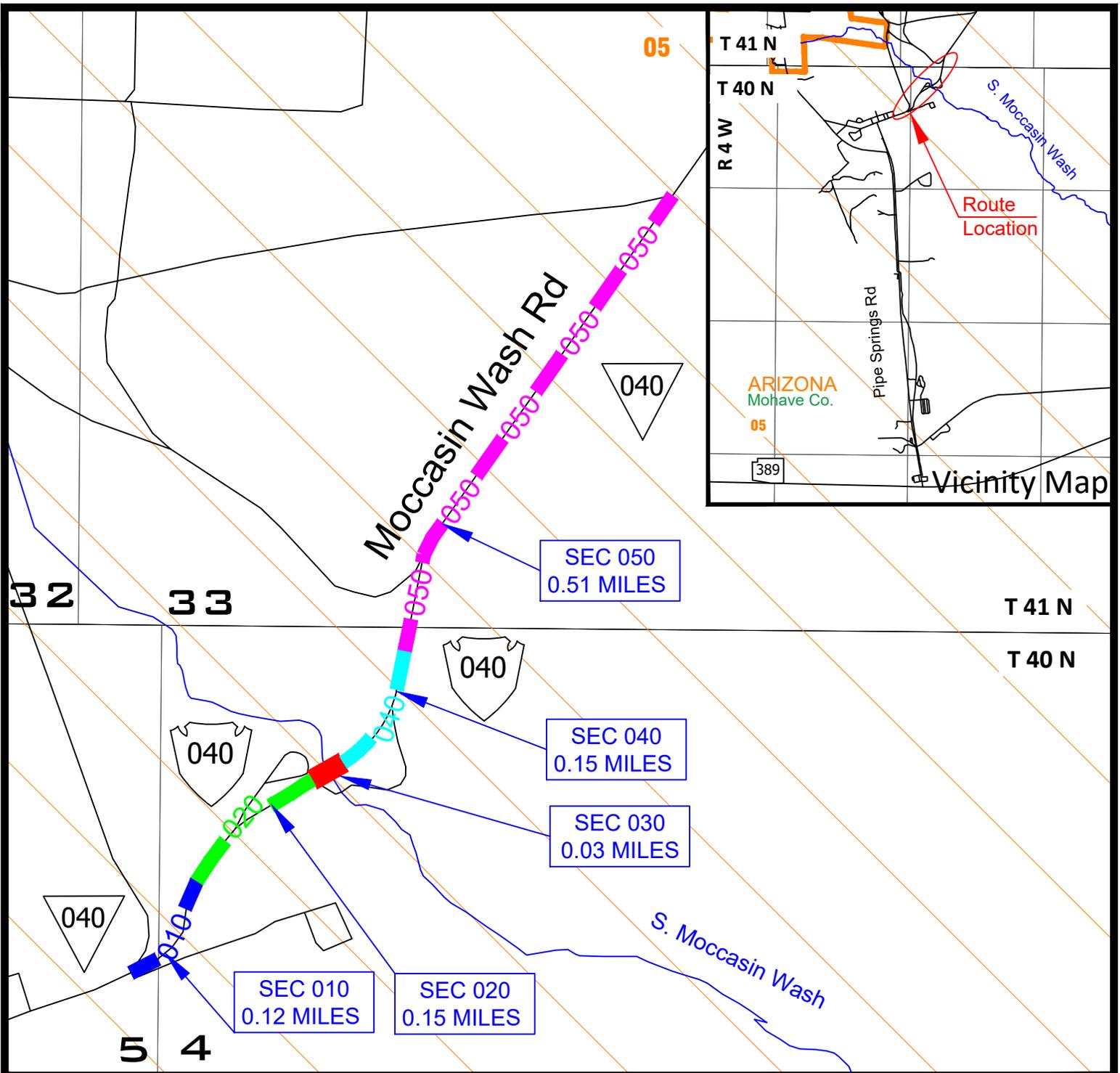
E. Whitlock

APPENDIX B

ATTACHMENT A

Kaibab Band of Paiute Indians Road Inventory Comparison List

2020 Inventory Update		Existing D.O.T. (2012) Inventory		2020 Inventory	Existing D.O.T.	2020 Inventory	Existing D.O.T.	2020 Inventory	Existing D.O.T.	2020 Inventory	Existing D.O.T.	
Route	Section	Route	Section	Class	Length (mi.)	Surface Type	Const. Need	2020 Section Name				
0040	10	40	10	5	5	0.1	1.1	1	1	2	2	Moccasin Wash Rd
0040	20			5		0.2		3		1		Moccasin Wash Rd
0040	30			5		0.1		Bridge		1		Moccasin Wash Bridge
0040	40			5		0.2		3		1		Moccasin Wash Rd
0040	50			5		0.5		1		2		Moccasin Wash Rd
	Subtotal					1.1	1.1					
P201	10			9		0.1		4		2		
P201	20			9		0.1		4		2		Community Park
P201	30			9		0.3		1		2		Community Park
	Subtotal					0.5						Community Park
P202	10			9		0.1		3		2		
	Subtotal					0.1						Head Start Building
P203	10			9		0.1		3		2		
	Subtotal					0.1						Existing Senior Center
P204	10			9		0.2		1		2		
	Subtotal					0.2						New Senior Center
P240	10			9		0.3		4		2		
	Subtotal					0.3						Tribal Headquarters
P241	10			9		0.1		4		2		
	Subtotal					0.1						Gymnasium
P725	10			9		0.1		3		2		
	Subtotal					0.1						NPS Admin. Building
T240	10			8		2.6		3		2		
	Subtotal					2.6						Pipe Springs Trail
	Above Total					5.1	1.1					
Existing mileage in system							1.1					
To be added						4.0						
Mileage to be deleted						0.0						
Total Miles in 2020 Update						5.1						

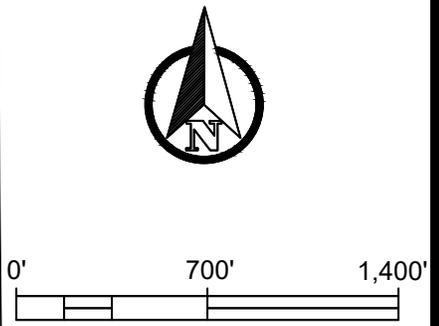


Route: 040
Sections: 010-050

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.96 miles total
Functional Class:
5-Rural/Local
Location:
Congressional Dist. 01
Mohave Co., AZ
S 4,5, T 40 N, R 4 W
S 33, T 41 N,
R 4 W

Map Legend	
	STATE ROUTE
	BIA ROUTE
	BIA ROUTE
	COUNTY ROUTE
	INDIAN RESERVATION LANDS
	ROADS
	ROAD SECTION
	RIVER
	SECTION, TOWNSHIP & RANGE
	SECTION NUMBER
	CONGRESSIONAL DISTRICT



FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number 0040 Road Name Moccasin Wash Rd	Section Number Inventory Date	50 3/1/2020			
1	Region		H Western	From Section 40 to end of road					
2	Area / Agency		H69 Southern Paiute						
3	Reservation		617 Kaibab						
4	Route Number		0040						
5	Section Number		50						
6	Road Name	Moccasin Wash Rd	Rd						
7	State		04 AZ						
8	Ownership		2 Tribe						
9	Federal Aid Code		1 Local Roads						
10	Functional Class		5 Rural local/stub						
11	Terrain Type		1 Flat						
12	Construction Need Code		2 Need of others						
13	Surface Type		1 Earth						
14	Shoulder Type		No Shoulder						
15	Length of Section (Miles)		0.5						
16	Surface Width (Feet)		12						
17	Shoulder Width (Feet)		0						
18	Bridge Number								
19	Bridge Condition								
20	Bridge Length (Feet)								
21	ADT Year						Photo Looking North	Date:	3/1/2020
22	Existing ADT						Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>			
24	Surface Condition Index (SCI)		0	0040	50	Moccasin Wash Rd			
25	Roadbed Condition		2 Bladed Unimproved Road	<u>County</u>	<u>Township / Range</u>				
26	Level of Maintenance		2 Graded Earth Road	Mohave Co.	T40N, R4W				
27	Snow & Ice Control		0 NONE		Section 4				
28	Right-of-Way Status		0 NONE	<u>Update Year</u>	T41N, R4W				
29	Right-of-Way Width (Feet)			2020	Section 33				
30	Additional Incidental Percent			<u>Comments</u>					
31	Road Narrative			Moccasin Wash Rd					
32	County		015 Mohave						
33	Congressional District		01						
34	Owner Number								
35	Drainage Condition		2 Short Period Problems						
36	Shoulder Condition		0 No Shoulders						
37	No of RR Crossings								
38	Type of RR Crossings								
39	ROW Utility Code		0 None						
40	ROW Cost								
41	Beginning Latitude		36.902935						
42	Ending Latitude		36.909327						
43	Beginning Longitude		-112.733434						
44	Ending Longitude		-112.728953						
45	BIA Atlas Map Number								
46	Grade Deficiencies								
47	Site Deficiencies								
48	No of Sharp Curves								
49	No of Stopping Sight Dist. Restrictions								
50	Safety Study								
51	Road Category		A General Roads						
52	Year of Construction Change								
58	Regional Coordinator:		Paul Bonar						
59	Inventory Taker:		Elisabeth Whitlock						

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number 0040 Road Name Moccasin Wash Rd	Section Number Inventory Date	40 3/1/2020
1	Region		H Western	From Section 30 Moccasin Wash Bridge to Section 50		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		0040			
5	Section Number		40			
6	Road Name	Moccasin Wash Rd	Rd			
7	State		04 AZ			
8	Ownership		1 BIA			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		5 Rural local/stub			
11	Terrain Type		1 Flat			
12	Construction Need Code		1 BIA			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.2			
16	Surface Width (Feet)		24			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)	95	Very Good	0040	40	Moccasin Wash Rd
25	Roadbed Condition		5 No Improvements Needed	<u>County</u>	<u>Township / Range</u>	
26	Level of Maintenance		3 Gravel Surfaced Road	Mohave Co.	T40N, R4W	
27	Snow & Ice Control		1 Slight		Section 4	
28	Right-of-Way Status		3 Recorded ROW	<u>Update Year</u>		
29	Right-of-Way Width (Feet)		80	2020		
30	Additional Incidental Percent			<u>Comments</u>		
31	Road Narrative			Moccasin Wash Rd		
32	County	015	Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		3 Excellent			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude	36.901535				
42	Ending Latitude	36.902935				
43	Beginning Longitude	-112.734362				
44	Ending Longitude	-112.733434				
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General Roads			
52	Year of Construction Change		2013			
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking North

Date: 3/1/2020

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number 0040 Road Name Moccasin Wash	Section Number Inventory Date	30 3/1/2020
1	Region		H Western	Bridge above Moccasin Wash on Moccasin Wash Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		0040			
5	Section Number		30			
6	Road Name	Moccasin Wash	Road			
7	State		04 AZ			
8	Ownership		1 BIA			
9	Federal Aid Code					
10	Functional Class		5 Bridge			
11	Terrain Type					
12	Construction Need Code		1 BIA			
13	Surface Type					
14	Shoulder Type					
15	Length of Section (Miles)					
16	Surface Width (Feet)					
17	Shoulder Width (Feet)					
18	Bridge Number	0000H69617B040B				
19	Bridge Condition		9 Excellent			
20	Bridge Length (Feet)		176 Feet			
21	ADT Year					
22	Existing ADT					
23	Percent Trucks					
24	Surface Condition Index (SCI)					
25	Roadbed Condition					
26	Level of Maintenance					
27	Snow & Ice Control					
28	Right-of-Way Status		3 Recorded			
29	Right-of-Way Width (Feet)		200			
30	Additional Incidental Percent					
31	Road Narrative					
32	County		015 Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition					
36	Shoulder Condition					
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code					
40	ROW Cost					
41	Beginning Latitude		36.901188			
42	Ending Latitude		36.901535			
43	Beginning Longitude		-112.735033			
44	Ending Longitude		-112.734362			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		2013			
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking North

Date: 3/1/2020

Kaibab Indian Reservation

<u>Route</u>	<u>Section</u>	<u>Road Name</u>
0040	30	Moccasin Wash Rd

<u>County</u>	<u>Township / Range</u>
Mohave Co.	T40N, R4W Section 04

Update Year
2020

Comments
Moccasin Wash Bridge

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number 0040 Road Name Moccasin Wash Rd	Section Number Inventory Date	20 3/1/2020
1	Region		H Western	From Section 10 to Moccasin Wash Bridge		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		0040			
5	Section Number		20			
6	Road Name	Moccasin Wash Rd	Rd			
7	State		04 AZ			
8	Ownership		1 BIA			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		5 Rural local/stub			
11	Terrain Type		1 Flat			
12	Construction Need Code		1 BIA			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.2			
16	Surface Width (Feet)		24			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking South	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)	95	Very Good	0040	20	Moccasin Wash Rd
25	Roadbed Condition		5 No Improvements Needed	<u>County</u>	<u>Township / Range</u>	
26	Level of Maintenance		3 Gravel Surfaced Road	Mohave Co.	T40N, R4W	
27	Snow & Ice Control		1 Slight		Section 4	
28	Right-of-Way Status		3 Recorded ROW	<u>Update Year</u>		
29	Right-of-Way Width (Feet)		80	2020		
30	Additional Incidental Percent			<u>Comments</u>		
31	Road Narrative			Moccasin Wash Rd		
32	County	015	Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		3 Excellent			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude	36.899724				
42	Ending Latitude	36.901188				
43	Beginning Longitude	-112.737026				
44	Ending Longitude	-112.735033				
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General Roads			
52	Year of Construction Change		2013			
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking South

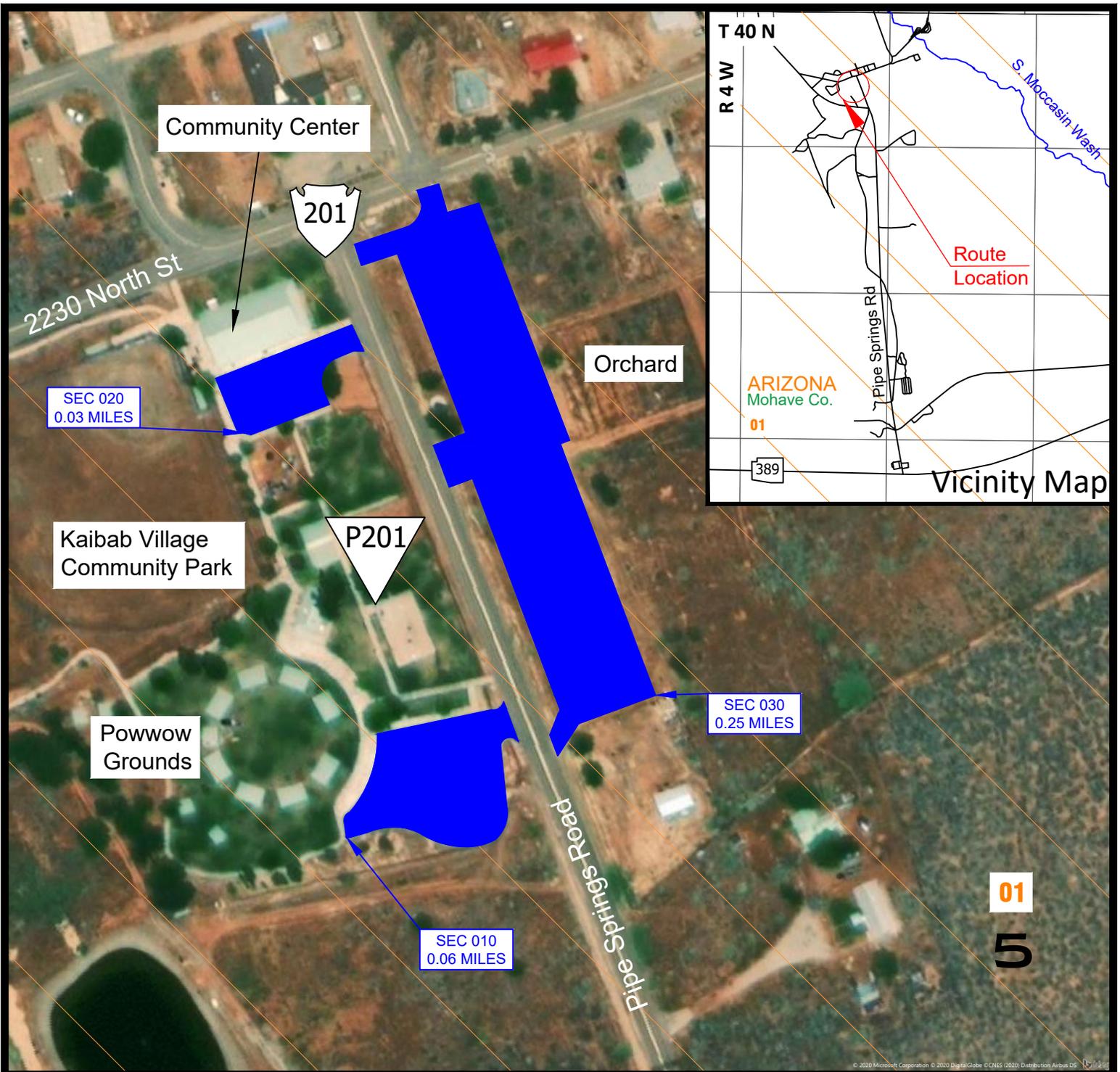
Date: 3/1/2020

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number 0040 Road Name Moccasin Wash Rd	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From 2230 N. St to Section 20		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		0040			
5	Section Number		10			
6	Road Name	Moccasin Wash Rd	Rd			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		5 Rural local/stub			
11	Terrain Type		1 Flat			
12	Construction Need Code		2 Need of others			
13	Surface Type		1 Earth			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		12			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		0	0040	10	Moccasin Wash Rd
25	Roadbed Condition		2 Bladed Unimproved Road	<u>County</u>	<u>Township / Range</u>	
26	Level of Maintenance		2 Graded Earth Road	Mohave Co.	T40N, R4W	
27	Snow & Ice Control		0 NONE		Section 4,5	
28	Right-of-Way Status		0 NONE	<u>Update Year</u>		
29	Right-of-Way Width (Feet)			2020		
30	Additional Incidental Percent			<u>Comments</u>		
31	Road Narrative			Moccasin Wash Rd		
32	County		015 Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		2 Short Period Problems			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude		36.898329			
42	Ending Latitude		36.899724			
43	Beginning Longitude		-112.738666			
44	Ending Longitude		-112.737026			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General Roads			
52	Year of Construction Change					
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking North

Date: 3/1/2020

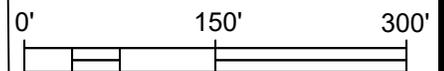


Route: P-201
Section: 010-030

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.34 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 05, T 40 N, R 4 W

Map Legend			
	STATE ROUTE		ROADS
	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	INDIAN RESERVATION LANDS		SECTION, TOWNSHIP & RANGE
	PARKING LOTS		SECTION NUMBER
			CONGRESSIONAL DISTRICT



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FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P201 Road Name Pipe Springs Rd	Section Number Inventory Date	30 3/1/2020
1	Region		H Western	From Pipe Springs Rd to 2230 N. St		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P201			
5	Section Number		30			
6	Road Name	Pipe Springs Rd				
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		1 Earth			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.3			
16	Surface Width (Feet)		160 Double w/ Aisles			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P201	30	Pipe Springs I
25	Roadbed Condition		Parking			
26	Level of Maintenance		2 Graded Earth Road	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 05	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		62124 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	East of Community Park		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude		36.895797			
42	Ending Latitude		36.897329			
43	Beginning Longitude		-112.741096			
44	Ending Longitude		-112.741815			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change					
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking North Date: 3/1/2020

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P201 Road Name Pipe Springs Rd	Section Number Inventory Date	20 3/1/2020
1	Region		H Western	At the second entrance to community park, west of Pipe Springs Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P201			
5	Section Number		20			
6	Road Name	Pipe Springs Rd				
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		4 Bituminous<2"			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		19 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking West	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P201	20	Pipe Springs I
25	Roadbed Condition		Parking			
26	Level of Maintenance		4 Paved Roads	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 05	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		8894 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	Parking lot adjacent to Community Building, at Comm		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		3 Both			
40	ROW Cost					
41	Beginning Latitude		36.896899			
42	Ending Latitude		36.896687			
43	Beginning Longitude		-112.742067			
44	Ending Longitude		-112.742547			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		1985			
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking West Date: 3/1/2020

Kaibab Indian Reservation

Route	Section	Road Name
P201	20	Pipe Springs I

County	Township / Range
Mohave Co.	T40N, R4W
	Section 05

Update Year
2020

Comments
Parking lot adjacent to Community Building, at Comm

FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P201 Road Name Pipe Springs Rd	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	At the first entrance to community park, west of Pipe Springs Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P201			
5	Section Number		10			
6	Road Name		Pipe Springs Rd			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of other			
13	Surface Type		4 Bituminous<2"			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		22 Double w/ Aisles			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year					
22	Existing ADT					
23	Percent Trucks					
24	Surface Condition Index (SCI)		Parking			
25	Roadbed Condition		Parking			
26	Level of Maintenance		4 Paved Roads			
27	Snow & Ice Control		1 Slight			
28	Right-of-Way Status		1 Tribal Consent			
29	Right-of-Way Width (Feet)					
30	Additional Incidental Percent					
31	Road Narrative		19242 Sq. Ft. Parking Area			
32	County		015 Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		3 Both			
40	ROW Cost					
41	Beginning Latitude		36.895764			
42	Ending Latitude		36.895451			
43	Beginning Longitude		-112.741487			
44	Ending Longitude		-112.742099			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		1985			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			

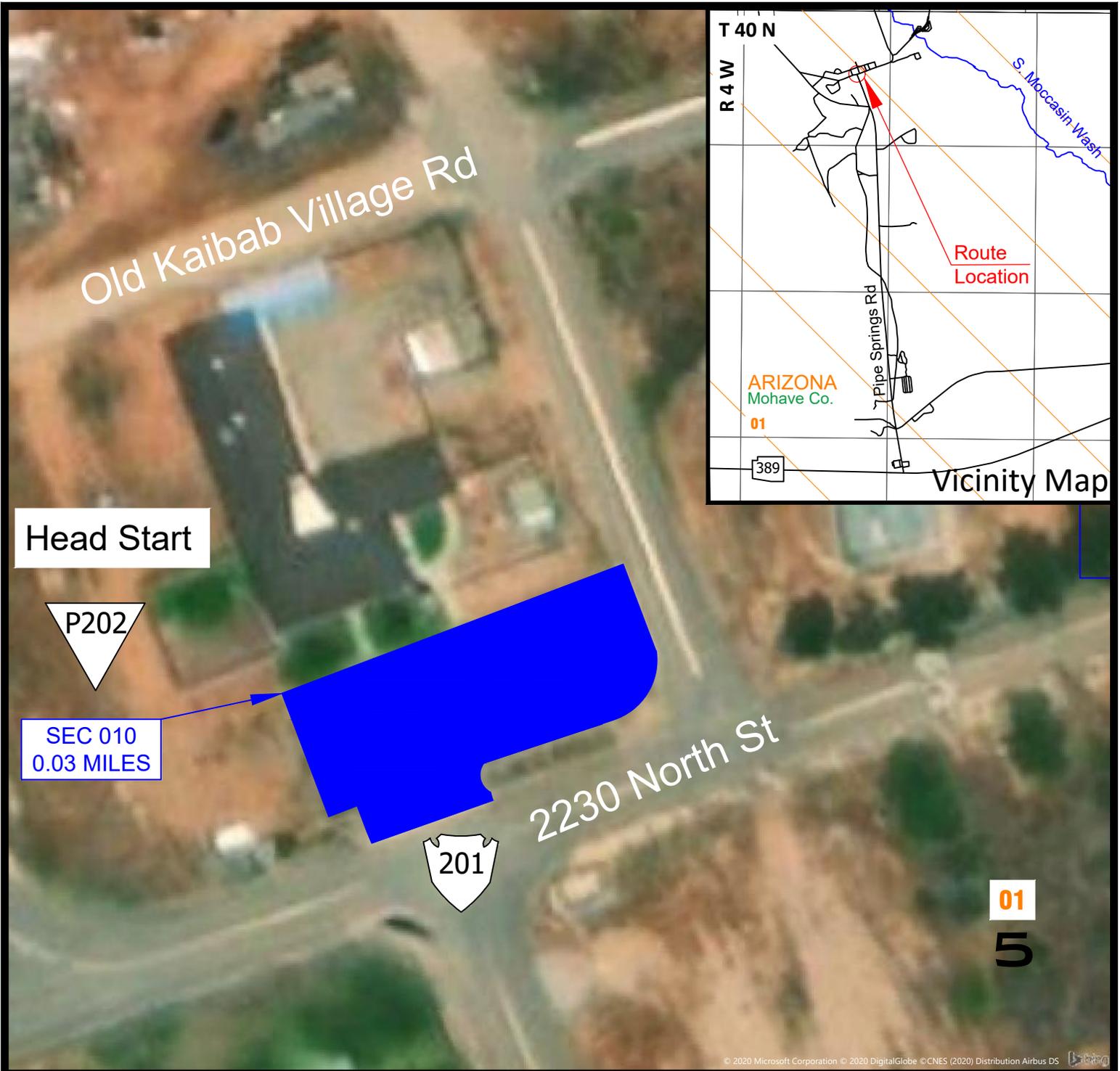


Photo Looking Northeast Date: 3/1/2020
Kaibab Indian Reservation
Route P201 Section 10 Road Name Pipe Springs Rd

County Mohave Co. Township / Range T40N, R4W Section 05

Update Year 2020

Comments Parking lot adjacent to Powwow grounds, at Communi

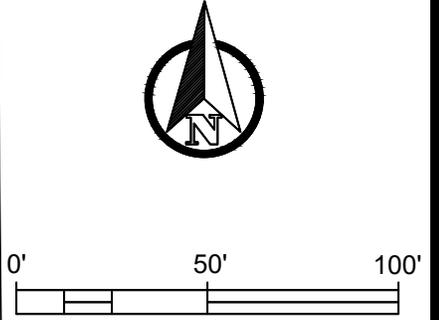


Route: P-202
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.03 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 05, T 40 N, R 4 W

Map Legend			
	STATE ROUTE		ROADS
	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	INDIAN RESERVATION LANDS		SECTION, TOWNSHIP & RANGE
	PARKING LOTS		SECTION NUMBER
			CONGRESSIONAL DISTRICT



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FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P202 Road Name 2230 N. St	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From 2230 N. St to 2230 N. St		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P202			
5	Section Number		10			
6	Road Name		2230 N. St			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		21 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking East	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P202	10	2230 N. St
25	Roadbed Condition		Parking			
26	Level of Maintenance		3 Gravel Surfaced Road	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 05	
29	Right-of-Way Width (Feet)			<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		7060 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	Head Start Building, northeast of Community Park		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		2 Above Ground			
40	ROW Cost					
41	Beginning Latitude		36.897306			
42	Ending Latitude		36.897505			
43	Beginning Longitude		-112.742217			
44	Ending Longitude		-112.741955			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		1985			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking East

Date: 3/1/2020

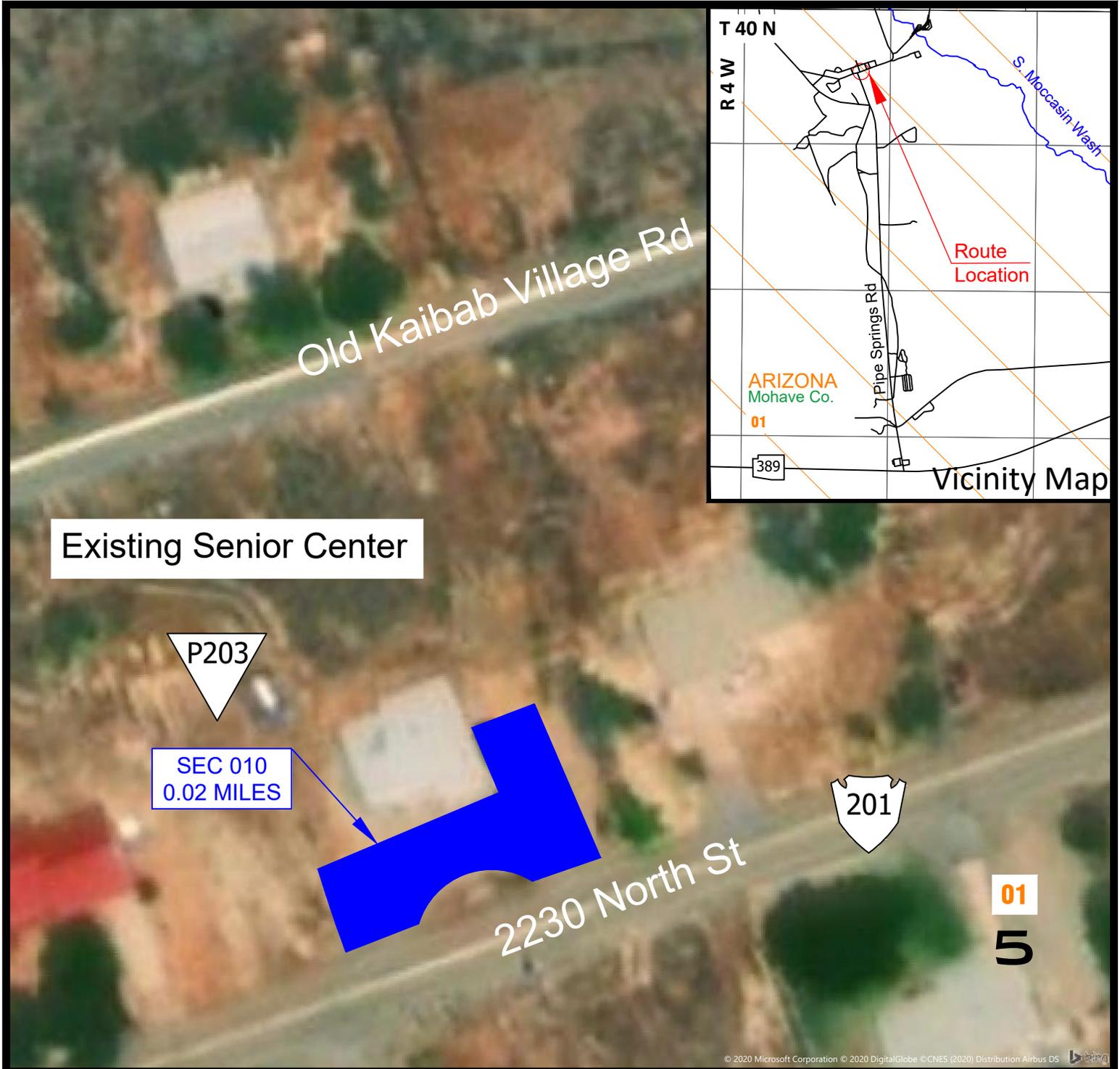
Kaibab Indian Reservation

<u>Route</u>	<u>Section</u>	<u>Road Name</u>
P202	10	2230 N. St

<u>County</u>	<u>Township / Range</u>
Mohave Co.	T40N, R4W
	Section 05

Update Year
2020

Comments
Head Start Building, northeast of Community Park



Route: P-203
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.02 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 05, T 40 N, R 4 W

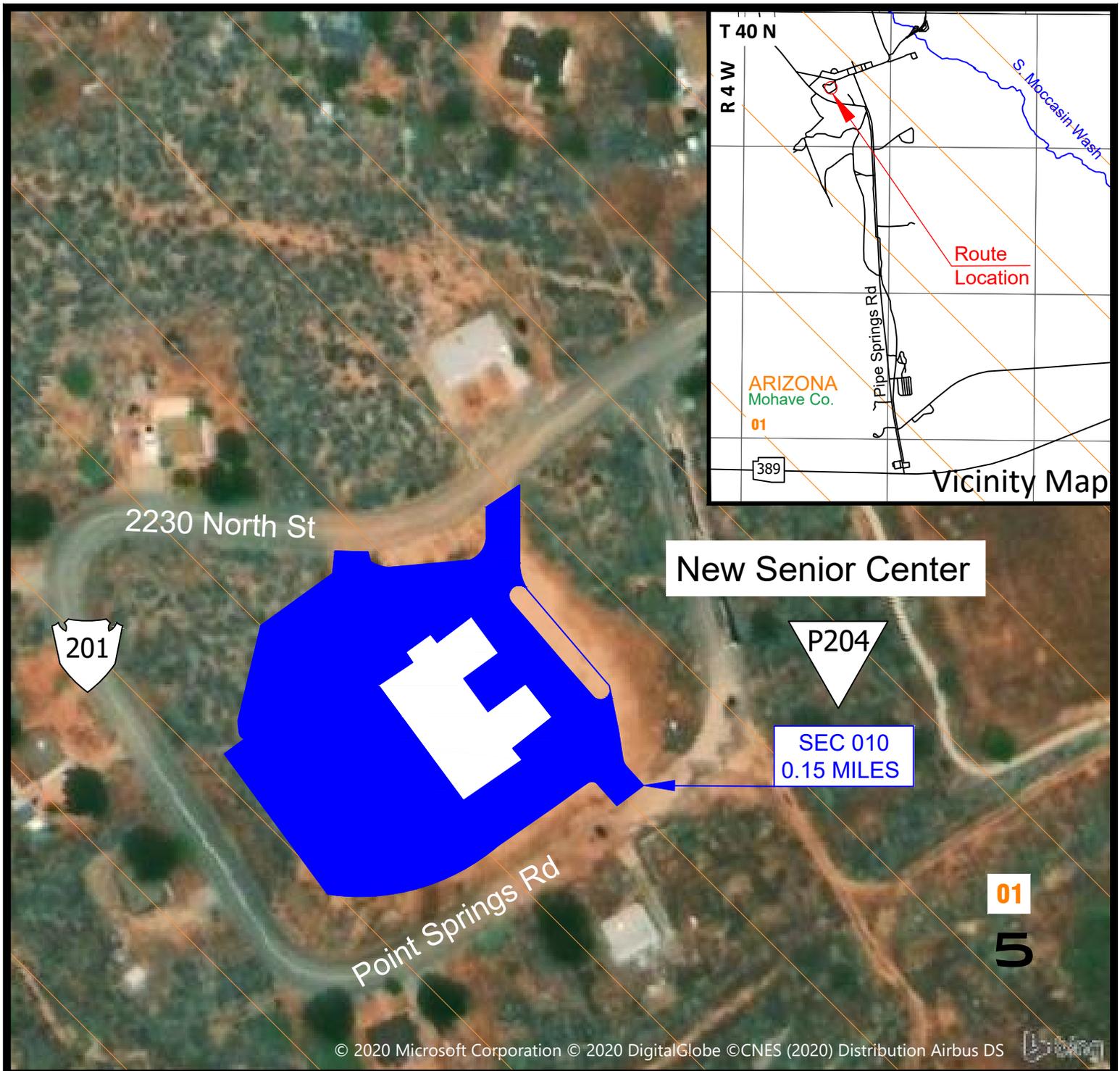
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	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	INDIAN RESERVATION LANDS		SECTION, TOWNSHIP & RANGE
	PARKING LOTS		SECTION NUMBER
			CONGRESSIONAL DISTRICT



FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P203 Road Name 2230 N. St	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From 2230 N. St to 2230 N. St		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P203			
5	Section Number		10			
6	Road Name		2230 N. St			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		7 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking East	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P203	10	2230 N. St
25	Roadbed Condition		Parking			
26	Level of Maintenance		3 Gravel Surfaced Road	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 05	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		3489 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	Existing Senior Center, East of Head Start parking lot		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude		36.897685			
42	Ending Latitude		36.897754			
43	Beginning Longitude		-112.740948			
44	Ending Longitude		-112.740709			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		1985			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking East Date: 3/1/2020



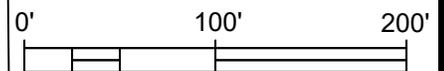
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Route: P-204
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.15 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 05, T 40 N, R 4 W

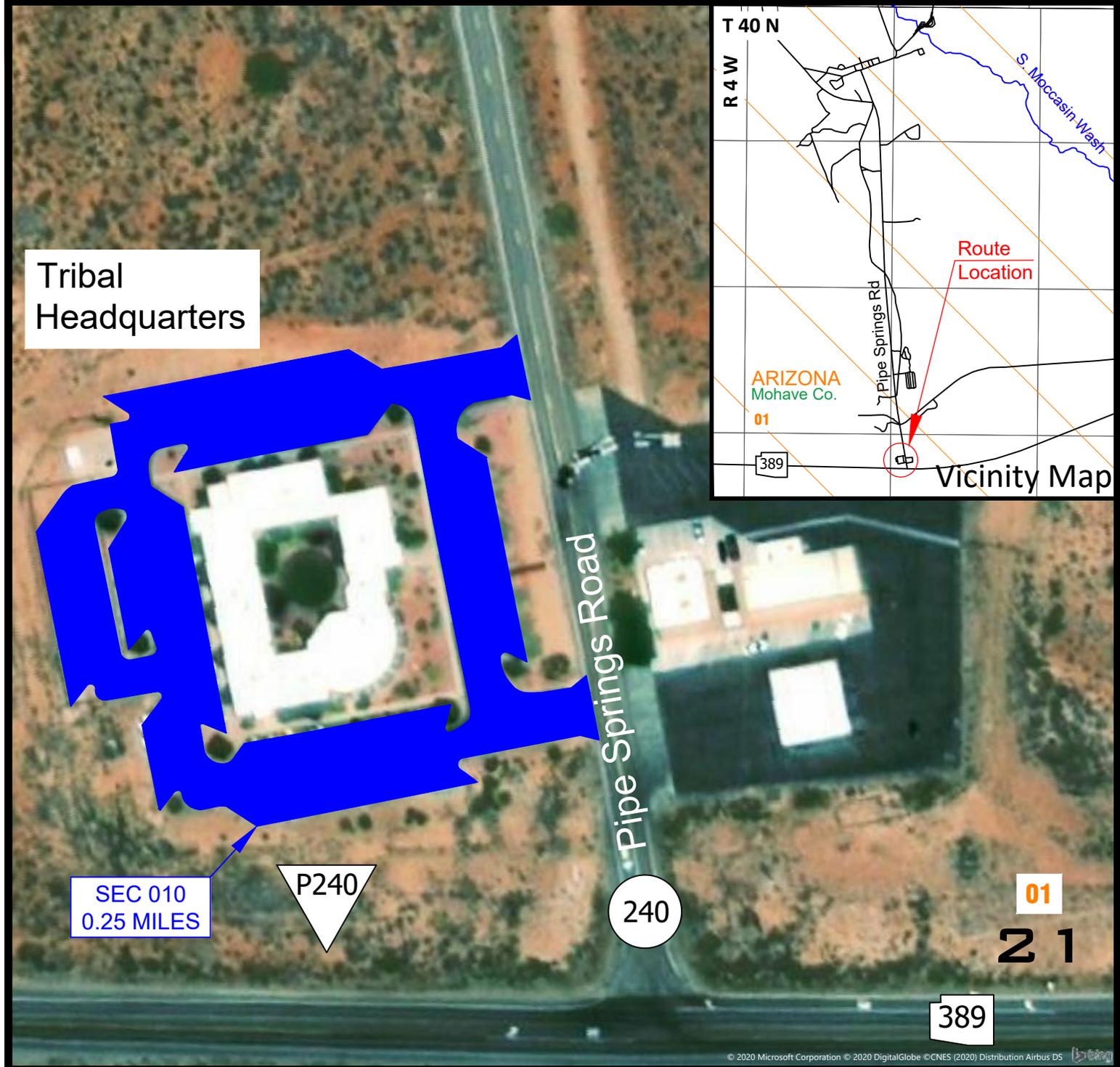
Map Legend			
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	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	INDIAN RESERVATION LANDS		SECTION, TOWNSHIP & RANGE
	PARKING LOTS		SECTION NUMBER
			CONGRESSIONAL DISTRICT



FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P204 Road Name 2230 N. St	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From 2230 N. St to Point Springs Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P204			
5	Section Number		10			
6	Road Name		2230 N. St			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of other			
13	Surface Type		1 Earth			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.2			
16	Surface Width (Feet)		70 Double w/ Aisles			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking East	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P204	10	2230 N. St
25	Roadbed Condition		Parking			
26	Level of Maintenance		2 Graded Earth Road	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 05	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		50496 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	New Senior Center, west of Community Park		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude		36.896113			
42	Ending Latitude		36.895597			
43	Beginning Longitude		-112.745220			
44	Ending Longitude		-112.744642			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change					
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking East Date: 3/1/2020



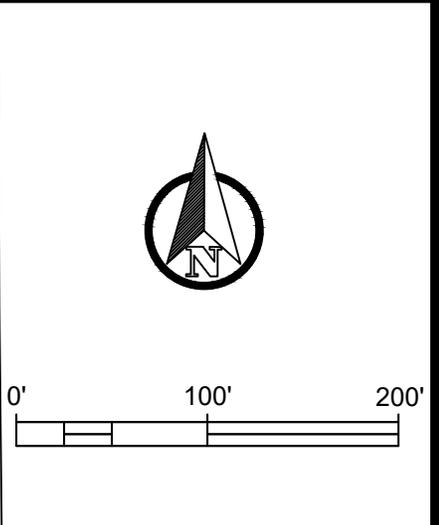
Route: P-240
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.25 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 21, T 40 N, R 4 W

Map Legend

	STATE ROUTE		ROADS
	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	COUNTY ROUTE		SECTION, TOWNSHIP & RANGE
	INDIAN RESERVATION LANDS		SECTION NUMBER
	PARKING LOTS		CONGRESSIONAL DISTRICT



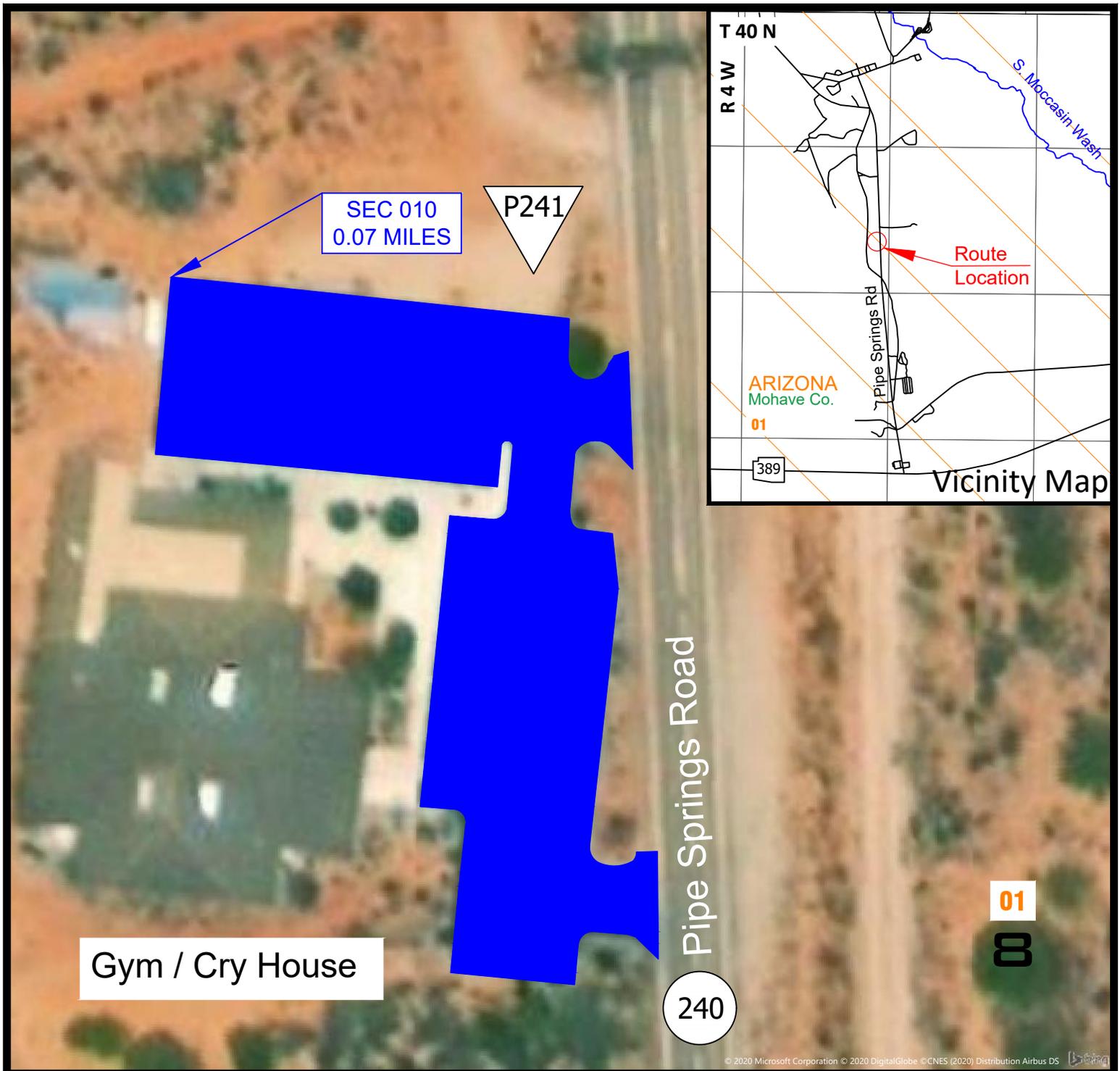
FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P240 Road Name Pipe Springs Rd	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From Pipe Springs Rd to Pipe Springs Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P240			
5	Section Number		10			
6	Road Name	Pipe Springs Rd				
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of other			
13	Surface Type		4 Bituminous<2"			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.3			
16	Surface Width (Feet)		95 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P240	10	Pipe Springs Rd
25	Roadbed Condition		Parking			
26	Level of Maintenance		4 Paved Roads	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 21	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		55616 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	Tribal Headquarters, North of SR 389 and Pipe Spring		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		1 Underground			
40	ROW Cost					
41	Beginning Latitude		36.858238			
42	Ending Latitude		36.858294			
43	Beginning Longitude		-112.735686			
44	Ending Longitude		-112.736968			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		C Administrative			
52	Year of Construction Change		1985			
58	Regional Coordinator:	Paul Bonar				
59	Inventory Taker:	Elisabeth Whitlock				



Photo Looking North Date: 3/1/2020

Kaibab Indian Reservation

<u>Route</u>	<u>Section</u>	<u>Road Name</u>
P240	10	Pipe Springs Rd
<u>County</u>	<u>Township / Range</u>	
Mohave Co.	T40N, R4W	
	Section 21	
<u>Update Year</u>		
2020		
<u>Comments</u>		
Tribal Headquarters, North of SR 389 and Pipe Spring		

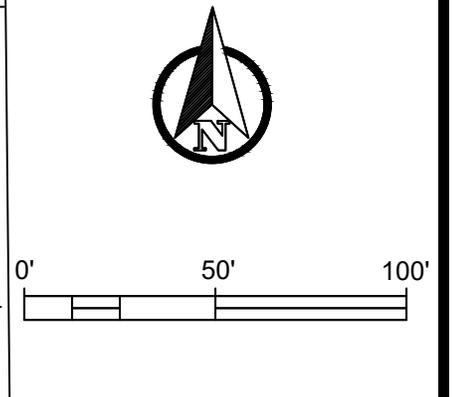


Route: P-241
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.07 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 08, T 40 N, R 4 W

Map Legend			
	STATE ROUTE		ROADS
	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	COUNTY ROUTE		SECTION, TOWNSHIP & RANGE
	INDIAN RESERVATION LANDS		SECTION NUMBER
			CONGRESSIONAL DISTRICT
			PARKING LOTS

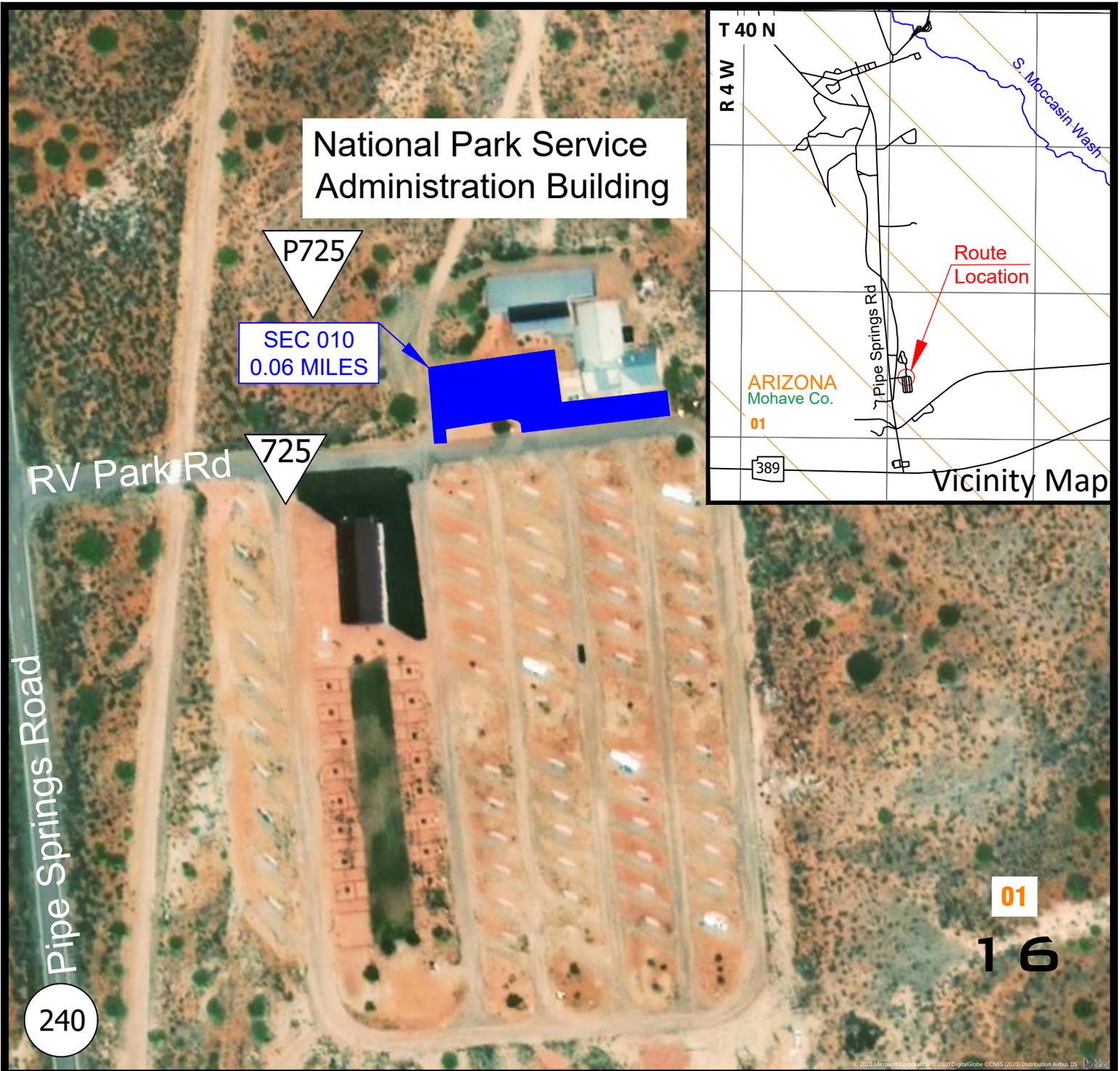


FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P241 Road Name Pipe Springs Rd	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From Pipe Springs Rd to Pipe Springs Rd		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P241			
5	Section Number		10			
6	Road Name		Pipe Springs Rd			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		4 Bituminous<2"			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		54 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P241	10	Pipe Springs I
25	Roadbed Condition		Parking			
26	Level of Maintenance		4 Paved Roads	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 08	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		20311 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	Gym, northwest of Park Service Admin. Building		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		1 Underground			
40	ROW Cost					
41	Beginning Latitude		36.880257			
42	Ending Latitude		36.880800			
43	Beginning Longitude		-112.739012			
44	Ending Longitude		-112.739634			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		1985			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking North Date: 3/1/2020

Kaibab Indian Reservation
Route P241 Section 10 Road Name Pipe Springs I
County Mohave Co. Township / Range T40N, R4W
Update Year 2020
Comments Gym, northwest of Park Service Admin. Building



Route: P-725
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
0.06 miles total
Functional Class:
9-Transportation
Location:
Congressional Dist. 01
Mohave Co., AZ
S 16, T 40 N, R 4 W

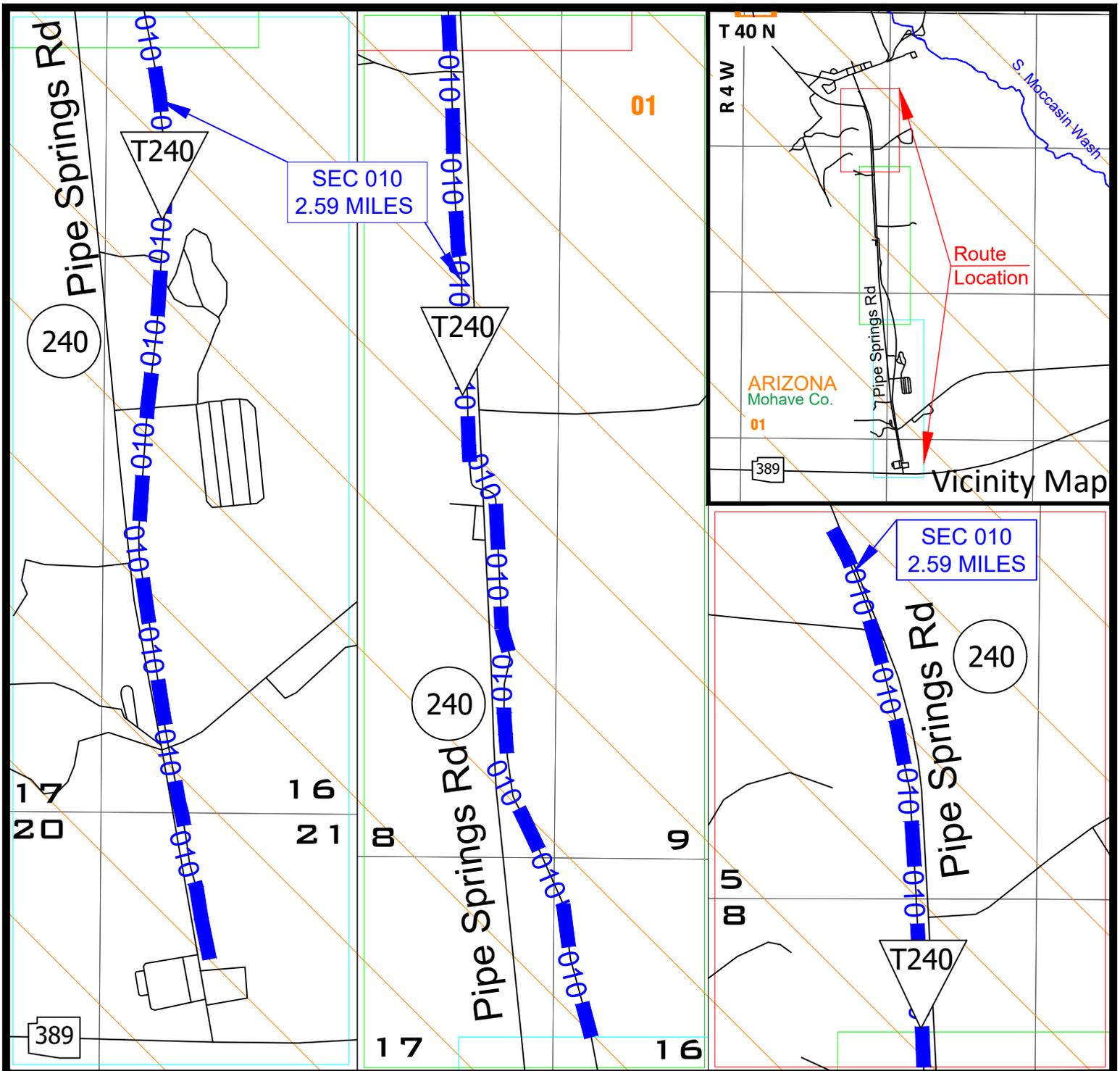
Map Legend			
	STATE ROUTE		ROADS
	BIA ROUTE		ROAD SECTION
	TRIBAL PARKING		RIVER
	TRIBAL ROUTE		SECTION, TOWNSHIP & RANGE
	COUNTY ROUTE	20	SECTION NUMBER
	INDIAN RESERVATION LANDS	01	CONGRESSIONAL DISTRICT
	PARKING LOTS		



FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number P725 Road Name RV Park Rd	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From RV Park Road to RV Park Road		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		P725			
5	Section Number		10			
6	Road Name		RV Park Rd			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		9 Trans. Facility			
11	Terrain Type		Public Parking			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		0.1			
16	Surface Width (Feet)		28 Parking w/ Aisle			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)		Parking	P725	10	RV Park Rd
25	Roadbed Condition		Parking			
26	Level of Maintenance		3 Gravel Surfaced Road	<u>County</u>	<u>Township / Range</u>	
27	Snow & Ice Control		1 Slight	Mohave Co.	T40N, R4W	
28	Right-of-Way Status		1 Tribal Consent		Section 16	
29	Right-of-Way Width (Feet)		0	<u>Update Year</u>		
30	Additional Incidental Percent			2020		
31	Road Narrative		13373 Sq. Ft. Parking Area	<u>Comments</u>		
32	County		015 Mohave	NPS rented Building, Adjacent to Kaibab RV Park		
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		0 Parking			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		0 None			
40	ROW Cost					
41	Beginning Latitude		36.867162			
42	Ending Latitude		36.867409			
43	Beginning Longitude		-112.735882			
44	Ending Longitude		-112.735437			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		C Administrative			
52	Year of Construction Change		1985			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking North Date: 3/1/2020

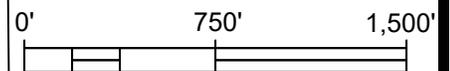


Route: T-240
Section: 010

Kaibab Indian Reservation
Mohave County, Arizona
Western Region – Southern Paiute Agency

Length:
2.59 miles total
Functional Class:
8-Trail
Location:
Congressional Dist. 01
Mohave Co., AZ
S 5,8,16,17,21, T 40 N,
R 4 W

Map Legend			
	STATE ROUTE		ROADS
	TRIBAL ROUTE		ROAD SECTION
	COUNTY ROUTE		RIVER
	INDIAN RESERVATION LANDS		SECTION, TOWNSHIP & RANGE
	SECTION NUMBER		CONGRESSIONAL DISTRICT



FIELD	FIELD DESCRIPTION	INPUT CODE	DESCRIPTION	Route Number T240 Road Name Pipe Springs Trail	Section Number Inventory Date	10 3/1/2020
1	Region		H Western	From Kaibab Convenience Store to Kaibab Community Park		
2	Area / Agency		H69 Southern Paiute			
3	Reservation		617 Kaibab			
4	Route Number		T240			
5	Section Number		10			
6	Road Name		Pipe Springs Trail			
7	State		04 AZ			
8	Ownership		2 Tribe			
9	Federal Aid Code		1 Local Roads			
10	Functional Class		8 Non-Road type patf			
11	Terrain Type		2 Rolling			
12	Construction Need Code		2 Const. need of othe			
13	Surface Type		3 Gravel			
14	Shoulder Type		No Shoulder			
15	Length of Section (Miles)		2.6			
16	Surface Width (Feet)		10			
17	Shoulder Width (Feet)		0			
18	Bridge Number					
19	Bridge Condition					
20	Bridge Length (Feet)					
21	ADT Year			Photo Looking North	Date:	3/1/2020
22	Existing ADT			Kaibab Indian Reservation		
23	Percent Trucks			<u>Route</u>	<u>Section</u>	<u>Road Name</u>
24	Surface Condition Index (SCI)			T240	10	Pipe Springs
25	Roadbed Condition			<u>County</u>	<u>Township / Range</u>	
26	Level of Maintenance		3 Gravel Surfaced Road	Mohave Co.	T40N, R4W	
27	Snow & Ice Control		1 Slight		Section 5,8,16,17,21	
28	Right-of-Way Status		3 Recorded ROW	<u>Update Year</u>		
29	Right-of-Way Width (Feet)		30	2020		
30	Additional Incidental Percent			<u>Comments</u>		
31	Road Narrative			Recreational Trail, runs north along Pipe Springs Rd		
32	County		015 Mohave			
33	Congressional District		01			
34	Owner Number					
35	Drainage Condition		2 Short Period Problems			
36	Shoulder Condition		0 No Shoulders			
37	No of RR Crossings					
38	Type of RR Crossings					
39	ROW Utility Code		3 Both			
40	ROW Cost					
41	Beginning Latitude		36.858849			
42	Ending Latitude		36.895212			
43	Beginning Longitude		-112.735572			
44	Ending Longitude		-112.742545			
45	BIA Atlas Map Number					
46	Grade Deficiencies					
47	Site Deficiencies					
48	No of Sharp Curves					
49	No of Stopping Sight Dist. Restrictions					
50	Safety Study					
51	Road Category		A General			
52	Year of Construction Change		2014			
58	Regional Coordinator:		Paul Bonar			
59	Inventory Taker:		Elisabeth Whitlock			



Photo Looking North

Date: 3/1/2020

Kaibab Indian Reservation

<u>Route</u>	<u>Section</u>	<u>Road Name</u>
T240	10	Pipe Springs

<u>County</u>	<u>Township / Range</u>
Mohave Co.	T40N, R4W
	Section 5,8,16,17,21

Update Year
2020

Comments
Recreational Trail, runs north along Pipe Springs Rd

APPENDIX C

APPENDIX D

**Kaibab Band of Paiute Indians
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)
FOR FISCAL YEARS 2020 - 2024**

STATE 04 - Arizona BIA REGION H - Western BIA AGENCY H69 - So. Paiute F.O. RESERVATION H69617 - Kaibab

**Total Funding
Allocated
to Project**

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals							
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024	
H69300	KBIR 725 (1)	T 725	RV Park Road Sections 10-50	015-Mohave	0.7 mi	Preconstruction Engineering PS&E in FY20 Const FY22 Pave existing gravel roads	TTP (6K1)		\$50,000.00						\$50,000.00
							PE CON CE Z								
Total								\$0.00	\$50,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$50,000.00	

\$50,000.00

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals							
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024	
H69S3100	KBIR CR240 Safety No. 2	CR 240	Pipe Springs Rd Trail	015-Mohave	2.0 mi	Preconstruction Engineering and Construction	TTP (6K1)			\$50,000.00					\$50,000.00
							PE CON CE Z			\$130,323.00	\$215,793.00	\$207,315.00	\$214,000.00	\$767,431.00	
Total								\$0.00	\$0.00	\$192,823.00	\$215,793.00	\$207,315.00	\$214,000.00	\$829,931.00	

\$829,931.00

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals								
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024		
H69SA700	KBIR Safety No. 2 (KBIR SR389 (2))	SR 389	State Route 389 and Pipe Springs Road	015-Mohave	0.4 mi	Preconstruction Engineering and Construction	TTP (6K1)		\$96,000.00	\$20,000.00					\$0.00	
							PE CON CE Z									
							6K1 Total		\$96,000.00	\$20,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,000.00	
							TTP Safety (657)		\$80,000.00	\$661,000.00					\$0.00	
							PE CON CE Z		\$105,000.00	\$18,000.00					\$0.00	
657 Total								\$864,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Project Total								\$960,000.00	\$20,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,000.00		

\$980,000.00

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals							
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024	
H69R2100	KBIR 726 (1)	T 726	Tribal Court Parking Lot	015-Mohave	0.1 mi	Preconstruction Engineering and Construction	TTP (6K1)		\$25,500.00	\$127,823.00					\$0.00
							PE CON CE Z		\$56,421.00	\$12,800.00				\$12,800.00	
							6K1 Total		\$9,000.00	\$3,250.00				\$3,250.00	
							TTP Safety (657)		\$80,000.00	\$661,000.00				\$0.00	
657 Total								\$864,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Total								\$90,921.00	\$127,823.00	\$16,050.00	\$0.00	\$0.00	\$0.00	\$143,873.00	

\$234,794.00

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals							
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024	
H69RM617	KBIR Road Maint	N/A	N/A	015-Mohave	N/A	Maintenance	TTP (6K1)		\$59,290.00	\$15,000.00	\$15,000.00	\$15,000.00	\$30,000.00	\$30,000.00	\$105,000.00
							CE RM		\$59,290.00	\$15,000.00	\$15,000.00	\$15,000.00	\$30,000.00	\$30,000.00	\$105,000.00
Total								\$59,290.00	\$15,000.00	\$15,000.00	\$15,000.00	\$30,000.00	\$30,000.00	\$105,000.00	

\$164,290.00

Project I.D.	Project Name	Route No.	Route Name	County	Project Length	Project Type	Funding Source	Project Totals							
								PRIOR YEARS	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2020-FY 2024	
H69884	KBIR Planning	N/A	N/A	015-Mohave	N/A	Planning	TTP TTP (66K)	PE		\$5,056.00	\$5,056.00	\$5,056.00	\$5,056.00	\$5,056.00	\$25,280.00
							PE	\$0.00	\$47,970.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$167,970.00	
Proj Total								\$0.00	\$53,026.00	\$35,056.00	\$35,056.00	\$35,056.00	\$35,056.00	\$193,250.00	

\$193,250.00

DENOTES PROJECT FUNDS TO BE OBLIGATED IN FY 2020

DENOTES FUNDS FOR BIA WRO 2ND LEVEL REVIEW

TTP Construction Funds (6K1) Total	\$246,211.00	\$260,793.00	\$253,873.00	\$260,793.00	\$267,315.00	\$274,000.00	\$1,296,774.00
TTP Safety Funds (657) Total	\$864,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TTP Trans Png Funds (66K) Total	\$0.00	\$5,056.00	\$5,056.00	\$5,056.00	\$5,056.00	\$5,056.00	\$25,280.00

NOTE: PE = Preconstruction Engineering (Activity Codes 03, 04, 05, 06, 07 & 08)

CON = Construction (Activity Codes: 09, 10, 11, 12 & 13)

CE = Construction Engineering (Activity Code 14)

Z = Tribal Project Management (Activity 17)

Grand Total Available Funds	\$1,110,211.00	\$265,849.00	\$258,929.00	\$265,849.00	\$272,371.00	\$279,056.00	\$1,322,054.00
Retained Services to BIA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Grand Total to Tribe	\$1,110,211.00	\$265,849.00	\$258,929.00	\$265,849.00	\$272,371.00	\$279,056.00	\$1,322,054.00

APPENDIX E

RESOLUTION OF THE GOVERNING BODY OF THE
KAIBAB BAND OF PAIUTE INDIANS

K- -20

APPROVAL OF THE 2020 LONG RANGE TRANSPORTATION PLAN (LRTP)
AND ROAD INVENTORY UPDATES

WHEREAS, the Kaibab Band of Paiute Indians is an Indian Tribe as defined under the Indian Reorganization Act of June 18, 1934 as amended and operates and functions in accordance with the terms and conditions of the Kaibab Ordinances and Resolutions; and

WHEREAS, the Tribal Council is the recognized governing body responsible and authorized by the Constitution to exercise all the powers possessed by the Band; and

WHEREAS, The Department of the Interior, Bureau of Indian Affairs - Division of Transportation (BIA-DOT) requires that Tribes have a comprehensive Long-Range Transportation Plan to support the use of federal funding for multi-modal improvement projects to meet Tribal transportation needs; and

WHEREAS, A Long-Range Transportation Plan for the Kaibab Band of Paiute Indians has been prepared by High Road Engineering, Inc. and identifies Tribal priorities for the construction and improvement of transportation facilities that serve the community; and

WHEREAS, A Road Inventory Update was also performed by High Road Engineering, Inc. that calls for the addition of existing roads to the Bureau of Indian Affairs (BIA) National Tribal Transportation Facility Inventory (NTTFI) System; and the overall updating of route sections; and

WHEREAS, Proposed changes to the NTTFI System are identified in Attachment “A” – Kaibab Band of Paiute Indians Road Inventory Comparison List.

NOW THEREFORE BE IT RESOLVED THAT, that the Tribal Council hereby approves and adopts the Long-Range Transportation Plan for the Kaibab Band of Paiute Indians, dated August 2020, containing an updated priority list of transportation improvement projects and a Road Inventory Update identified in Attachment “A”, which includes BIA road classification changes, construction need changes, route number and section changes, BIA, Tribal and Non-BIA National Tribal Transportation Facility Inventory System additions and deletions.

BE IT FURTHER RESOLVED, that the Tribal Council hereby consents to granting a right-of-way to the BIA for routes over Tribal land identified in the road inventory update as BIA-owned roads, subject to the submission and approval of the appropriate right-of-way documents.

BE IT FINALLY RESOLVED, that the Tribe hereby authorizes the Bureau of Indian Affairs -

Western Regional Office to take the necessary action needed to update BIA-DOT's NTTFI System database to incorporate changes and additions contained in the road inventory update.

CERTIFICATION

I hereby certify that the foregoing resolution was regularly adopted by the Kaibab Paiute Tribal Council on _____ at a special meeting at which a quorum was present with a vote of _____ in Favor, _____ Opposed, _____ Abstaining, _____ Absent. Pursuant to the authority vested in the Kaibab Paiute Tribal Council by Section 1 (a) of Article VI of the Tribal Constitution and By-Laws ratified by the Tribe on June 20, 1987 and approved by the Secretary of the Interior on July 14, 1987, pursuant to Section 16 of the Act of June 18, 1934.

Attest:

Ona Segundo, Chairperson
Kaibab Band of Paiute Indians

Nicole McCarty, Tribal Council Secretary
Kaibab Band of Paiute Indians

Kaibab Band of Paiute Indians Community Survey



Civil Engineering & Consulting

PO Box 97
St. George, Utah 84771
435.767.8481

You can contact the Transportation Coordinator, Elisabeth Whitlock at any time with comments or input to the LRTP ewhitlock@highroadengineering.com

Or leave comments at the front desk of Tribal Headquarters

- Are there road improvements needed?
- Which roads are the priority?
- Do you feel safe driving, biking, or walking on the roads?
- Need a ride?

2020 Long Range Transportation Plan (LRTP) Community Survey of Tribal Transportation Needs & Concerns

The Transportation Department wants to know what you think! We are currently updating the LRTP and need to know the Community's transportation priorities.

Please fill out a simple questionnaire by going to the link below so the Department can better plan for your safety concerns and provide transportation facilities and programs that meet your needs.

www.surveymonkey.com/r/DGRL8PZ

A virtual public meeting will be held on August 18, 2020 at 2:00 pm for discussion and comments. The meeting will be held to review the LRTP, better understand the Community's transportation priorities, and have discussions about future transportation improvements.

Dial-in number (US): (602) 580-9562 Access code: 5470862#
Join the online meeting: <https://join.freeconferencecall.com/ewhitlock>

A draft copy of the 2020 Long Range Transportation Plan is on the Tribe's website for your convenience @ www.kaibabpaiute-nsn.gov

Comments will be collected through August 31, 2020. A hard copy of the LRTP is available for review and a copy of the Survey can be picked up from Tribal Headquarters if you do not have online access.

Kaibab Band of Paiute Indians

Tribal Transportation Needs & Concerns

2020 Long-Range Transportation Plan (LRTP)

The main questions revolve around safety and your transportation needs. The LRTP is on the Tribe's website for your convenience, or a hard copy is available at Tribal Headquarters for viewing.

1. Do you currently use any tribal transit services? Yes or No

2. Do you think you would use transit services more often if services were expanded? Yes or No

3. For what purposes do you need or want to travel outside of the Reservation?
 - a. Shopping
 - b. Doctor visits
 - c. Job
 - d. Visit family
 - e. School
 - f. Other business
 - g. Other

4. While driving and/or walking within the Reservation, do you feel safe near the traffic? Yes or No or Somewhat

5. In your opinion, do the school bus stops offer a safe route for kids to and from the current pickup/drop-off locations?

6. Please rank these projects from the attached map in order of priority.

Overall Rank	Project Name	Improvement	Length (feet)
	A - Cemetery Road	Spray Asphalt Seal Coat	500'
	B - Six Mile Road IR 50	Erosion Control	
	C - Pipe Springs Pedestrian Path	Concrete Sidewalk and Asphalt Trail	10,160'
	D - Kaibab Water Tanks	Grade & Gravel	2,640'

	E - Court Building	Pave Parking Lot	200X100'
	F - Tower Road IR 31	Grade & Gravel	52,800'
	G - Farm Road IR 30	Grade & Gravel	7,280'
	H - IR 50	Clean Culverts and Drainage Improvements	15,840'
	I - Rouch Road IR 710	Place Two Culverts	
	J - IR 70	Extend Culvert	
	K - IR 21	Bridge over Kanab Creek	1000'
	I – Senior Center Parking Lot	New building parking lot	

7. Which road has the most maintenance issues? i.e. potholes, cracking, drainage issues, etc.

None

Road Name and cross streets

8. Which road has the most safety issues? i.e. bad signage, blind spots, slips and falls, distracted driving, etc.

None

Road Name and cross streets

9. Please rank the Tribe's short-term transportation priorities over the next 5 years in order of importance.

_____ Pedestrian facilities with amenities (foot trails, bikeways, multi-use trail, paved trails)

_____ New Paved Roads

_____ Maintenance

_____ Safety

_____ None of the above

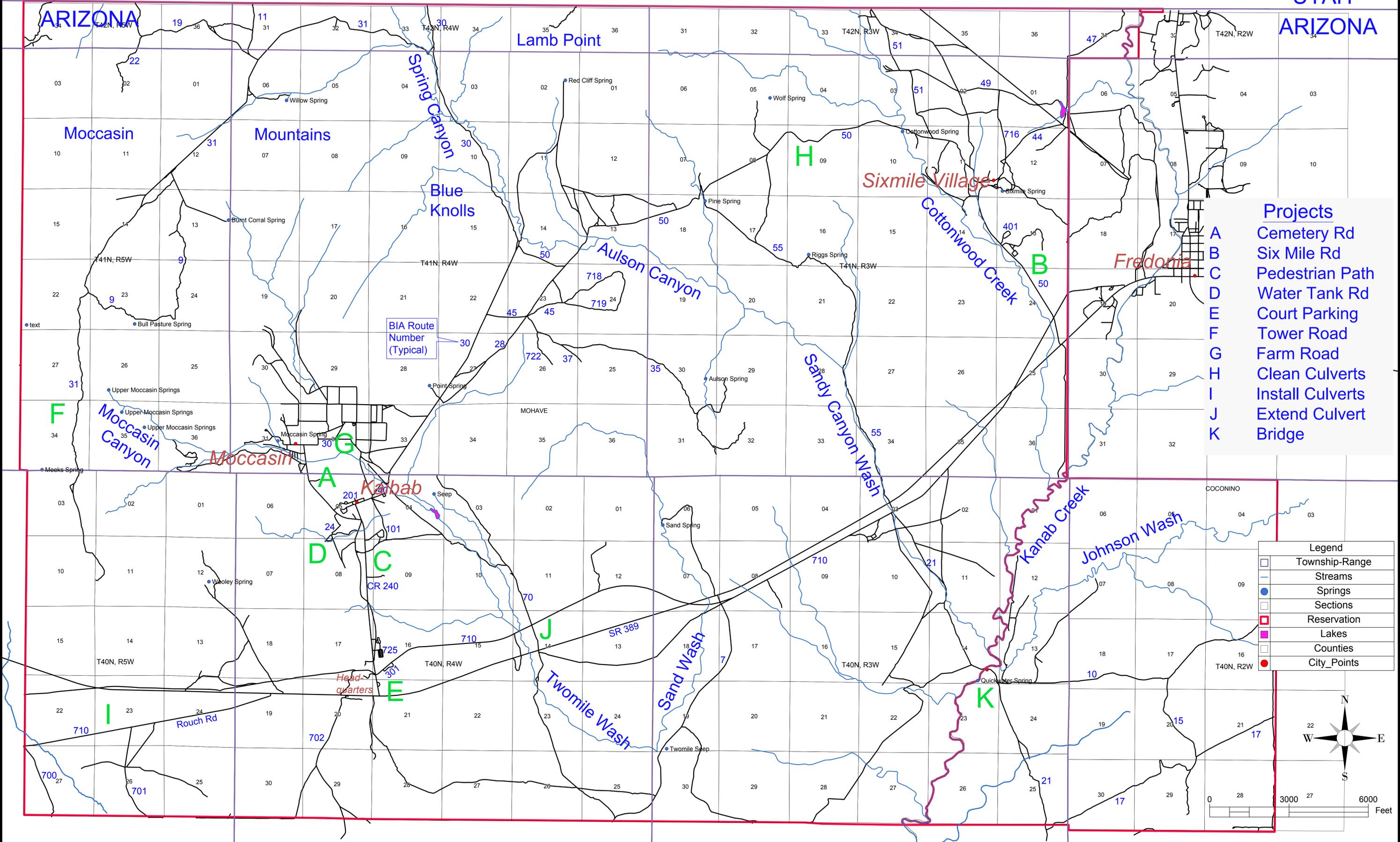
UTAH

KAIBAB INDIAN RESERVATION

UTAH

ARIZONA

ARIZONA



- Projects**
- A Cemetery Rd
 - B Six Mile Rd
 - C Pedestrian Path
 - D Water Tank Rd
 - E Court Parking
 - F Tower Road
 - G Farm Road
 - H Clean Culverts
 - I Install Culverts
 - J Extend Culvert
 - K Bridge

BIA Route
Number
(Typical)

Legend	
	Township-Range
	Streams
	Springs
	Sections
	Reservation
	Lakes
	Counties
	City_Points

