- **redesign of Alternatives 2/2A to avoid the WMATA (Riders' Fund) property,**
- **directional/yield signage in lieu of traffic signals,**
- **flyovers of the Foxhall/Canal Roads intersection,**
- **U-turns at Foxhall/Canal Roads**

None of these alternatives or concepts avoided 4(f) property. Most require more NPS property, within the Georgetown Historic District. The NCPC also suggested a single median break along Canal Road with no turning storage lanes, and prohibiting left turn exiting traffic in the morning peak hours. Although this alternative avoids new right-of-way, it could not permit safe movement of left turns into the University from Canal Road; thus, this Alternative does not fulfill the Purpose and Need for the Project.

9.2 DESCRIPTION OF SECTION 4(F) RESOURCES

Although there are many 4(f) resources in the immediate vicinity, as summarized above, construction of any of the five Build Alternatives would only impact a few of these resources. The following discussion addresses these resources and their general location within the study area.

9.2.1 Georgetown Historic District

The Proposed Action would be located entirely within the Georgetown Historic District, which is included on the National Register of Historic Places. The Georgetown Historic District is approximately one square mile in area. It is generally bounded by Reservoir Road and Whitehaven Parkway on the north, Rock Creek Park on the east, the Potomac River on the south, and Glover Archbold Park on the west (see Figure 9-1). The Georgetown Historic District was formed by the Old Georgetown Act on September 22, 1950. The Georgetown Historic District was listed on the District of Columbia Inventory on November 8, 1964, and on the National Register on May 28, 1967, as a Category II landmark.

There are numerous historic and archaeological sites within the Georgetown Historic District. North of M Street, the scale and details of the residential buildings along the narrow tree-shaded streets create the ambiance of 19th Century urban America. South of M Street, a number of large commercial redevelopment projects have greatly altered the historic character of the waterfront area. Property in the Georgetown Historic District is owned by numerous landowners, both public and private. Land uses are primarily residential, commercial and institutional.

Georgetown's history began early in the 1700s when a settlement developed around the tobacco inspection station of George Gordon. This town was at a strategic location, the Fall Line of the Potomac and the river's highest point of navigation. By the mid 1700s, it was a busy trading center and tobacco port. It was at Georgetown that George Washington met with Pierre L'Enfant to plan the new capital city that is now Washington.

The coming of steam navigation and the need for deeper harbors, along with competition from other ports, led to a decline in commercial activity at Georgetown. In an effort to halt this decline,

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waterway was planned to the Ohio Valley. Construction of the Chesapeake and Ohio Canal began in 1828. The Canal finally reached Cumberland, Maryland in 1850. The Canal was a great success, carrying coal and other commodities, until the flood of 1889. The Canal reopened in 1891, but, faced with competition from the railroads, it never again made a profit, and was finally closed in 1924.

Georgetown was annexed to the City of Washington in 1871. By the turn of the century, the development of streetcars, and the suburbs, they made possible led to the separation of places of work from places of residence. One of the suburban streetcar lines ran through the project area. It was incorporated in 1882 as the Washington and Great Falls Electric Railway Company. The line began at 36th and Prospect streets in Georgetown and ran along the Palisades. By September 1885 the line was completed as far as the Maryland/Washington, D.C. boundary. Eventually it went as far as Glen Echo Park and Cabin John in Maryland. The line eventually became a part of the Capital Transit Company. First Capital Transit, then D.C. Transit, operated all the street railways in the District from 1933 until January 1962, when buses replaced the last of the City's streetcars. Service on the line to Cabin John was abandoned on January 3, 1960. Part of the old streetcar right of way in the Project area apparently may still be owned by the successors to D.C. Transit.

9.2.2 National Park Service Property (Potomac Palisades)

The National Park Service (NPS) owns property adjacent to Canal Road's westbound lane, as shown in Figure 9-2. The property is a part of the Potomac Palisades Parkway, National Park Service Reservation 404, but it is separated from that park by Foxhall Road. This section of parkland is managed and maintained by the National Park Service as a part of Rock Creek Park. Access to this property is somewhat limited, and it is little used for recreation or other activities. Its principal function is to protect the scenic views along the banks of the Potomac River.

9.2.3 National Park Service Property (Chesapeake and Ohio Canal Historic Park)

The National Park Service owns property adjacent to Canal Road, as shown in Figure 9-2. Designated a National Historical Park in January 1971, the park includes the Chesapeake and Ohio Canal and towpath as well as adjacent land stretching 184 miles between Georgetown and Cumberland, Maryland.

The C&O Canal played an important role in the commercial development of Georgetown. Construction of the Canal began in 1828 and this section was completed by 1831. The C&O Canal represents one of the finest examples of America's canal building era in the first half of the nineteenth century. The Canal was listed on the D.C. Inventory of Historic Sites in November 1964, and listed on the National Register of Historic Places on October 15, 1966.

Operation of the Canal ended in the 1920's. In this area, the Canal has been rewatered and is utilized for living history programs, such as trips on a reconstructed canal barge. The towpath for the mules, located on the lower or Potomac River side of the Canal is used extensively for hiking and biking.

The Canal Wall, which is the structure north/east of the Canal serving to channel and support it, is south or west of the Project area. No Project Alternatives are anticipated to have any direct impact or change the structural integrity or bearing capacity of this structure.

9.2.4 Potomac Gorge

The Potomac Gorge is a scenic and historic area **that extends approximately 15 miles from Great Falls (upstream from the project area) to Georgetown. The portion of the Potomac Gorge near Georgetown** is designated on the D.C. Inventory of Historic Sites. It is bordered by the Georgetown Historic District on the east, and the Potomac River, including the Chesapeake and Ohio Canal Historic District, on the south. This historic area runs parallel to MacArthur Boulevard on the north.

Based on the location of the Potomac Gorge literally upstream of this Project, no direct impacts and no constructive use, and thus no 4(f) use, is considered to occur as a result of this Project.

9.2.5 National Park Service Property (George Washington Memorial Parkway)

The National Park Service holds title to the property and operates the facility known as the George Washington Memorial Parkway located south and west across the Potomac River, in Virginia. The facility is one of several such green-way corridors provided to and from the Nation's Capital. As a highway, it serves as a major route for commuter and recreational users. Adjacent bicycle and jogging paths are also heavily used.

Based on the location of the George Washington Memorial Parkway across the Potomac River, no 4(f) use is considered to occur as a result of the proposed Project Alternatives.

9.2.6 National Park Service Property (Glover Archbold Park)

The National Park Service is principal title holder of the area known as Glover Archbold Park. The Park is located west of the Georgetown University's western boundary, and extends northerly towards Reservoir Road. Originally intended as providing for yet another parkway for the Nation's Capital, the **use of the land was transformed** into a designation for park-like conditions without a roadway arterial facility.

Based on the location of the Glover Archbold Park, no 4(f) use is considered to occur as a result of the proposed Project Alternatives.

9.2.7 Georgetown University and Other Historic Structures

In addition to the properties proximate to the study area, there are historic landmarks and archeological resources located adjacent to the Project area. Several are located on the campus of Georgetown University, which sits entirely within the Georgetown Historic District. The locations for some of the notable, closest structures appear in Figure 9-2.

Based on their location, the historic resources of Georgetown University and other structures would incur no 4(f) use as a result of the proposed Project Alternatives.

9.2.8 Archeological Resources/Phase I Survey

The archaeological assessment for this 4(f) Statement found historic archaeological sites to be located within the Project area. There has been intensive commercial activity in the vicinity of the Project area over the last two centuries, and there is documentary evidence of eighteenth and nineteenth century habitations in the area. The Project area was part of the waterfront of Georgetown and contained buildings, yards, fences and roads in the first quarter of the nineteenth century. During construction of the Chesapeake and Ohio Canal, the area was utilized as a staging area for construction materials.

Prehistoric human activity, also, almost certainly occurred at and near the Project area. The Potomac River, the Fall Line, and the streams that flowed through the Project area would have provided corridors for the movement of prehistoric populations. The quartzite in the bedrock of the area would have been used as material for stone tools and weapons.

Historic maps and illustrations show that there was once a stream near what is now the Georgetown University entrance road. An early road in this location was known as Fowlers Road, since it lead to the Fowler farm, a property that is now part of the Georgetown campus.

Within the Project study area, archeological investigations revealed a potential National Register site. Based on the archeological investigations to date, it appears that data recovery from the site is fully possible. **For most of the studied Alternatives, a** determination of effect as a result of coordination with the District's State Historic Preservation Officer (SHPO) would be required if one of these Alternatives is selected. **However, the Preferred Alternative avoids the site, so no impact is expected. This means that for the Preferred Alternative, no 4(f) use of archeological resources under Section 4(f) would occur. A letter from the SHPO's office confirms this determination (see *Appendix G*).**

9.2.9 Summary of 4(f) Sites

As noted above, several potential 4(f) sites do not receive impacts **from any Alternative** as described for Section 4(f) use. Based on their lack of immediate proximity to the Project or the Project Alternatives, existing noise, and existing use, they've been dropped from consideration as 4(f) issues.

The sites considered in this final Section 4(f) statement are:

- Georgetown Historic District
- NPS Potomac Palisades
- C&O Canal Historic Park

9.3 IMPACTS ON THE SECTION 4(F) PROPERTIES AND RESOURCES

Following is a discussion of the impacts on the Section 4(f) properties for each of the Build Alternatives. As noted, Alternative 1, the No Build Alternative, would have no impact on any of the Section 4(f) properties.

9.3.1 Alternative 2 - At-Grade Intersection

National Park Service Lands - Alternative 2 would require the use of 0.39 hectares (0.97 acres) of National Park Service (NPS) property north of Canal Road. This would be in addition to the easement currently used for the existing entrance road. Parcels which would be affected are follows:

Lot Number	Square Meters	Square Feet
810	242	2,600
812	234	2,400
813	669	7,200
814	2,673	28,775
Res. 404	111	1,200
TOTAL	3,929	42,175

This right-of-way would be required to shift the westbound lanes and provide a deceleration lane and for a left-turn lane. In accordance with 16 USC 4601-22(b), Georgetown University will provide to the NPS replacement land equal in value to that required for construction of the Project. Additionally, a scenic easement from Georgetown University would be granted. This shall be an area of 1.01 hectare (2.5 acres), in accordance with the MOA signed by the Parties.

The use of this property would have negligible effect on the use or overall function of the NPS lands along Canal Road. This area is used only for landscaping and visual purposes. No active use park facilities are located here. The existing sidewalk would be replaced. **Two retaining walls are required. Along the northern edge of the reconstructed entrance drive, a wall approximately 35 meters (115 feet) in length and about 12 meters (40 feet) in height is required; this would be located on what now is Georgetown University property. North of the entrance along Canal Road, a wall approximately 15 meters (50 feet) in length and about 6 meters (20 feet) in height would be required; this would be located on what now is NPS property.**

Georgetown Historic District - All parcels identified above are located within the Georgetown Historic Site. This alternative would use 0.69 hectares (1.7 acres) of land within the Georgetown Historic District. It would not be located near the structures that contribute to the character of the Historic District.

Potomac Palisades – **The retaining walls for Alternative 2 would be located along the Potomac Palisades: the larger one would be on some property owned by Georgetown University, the lower wall on NPS property. The Palisades are a land form, and contained, in the Project location, within the boundaries of the Georgetown Historic District.**

C&O Canal Historic Park – Based on the location of the Canal and the Canal Park property, and the design of this Alternative to avoid direct taking or impact to the facility, no 4(f) use is considered to occur as a result of this Alternative.

Secondary Impacts - There is currently no right to access from adjacent properties to the National Park Service land in the Project area. For all Build Alternatives, **except Alternative 2A-Modified**, the one property possibly creating secondary impacts is **owned by WMATA and** referred to as the Lot 822[1]. If access occurs in the future, potential development, such as with the construction of townhouses, could generate secondary impacts. These include the addition of several hundred vehicle trips per day serving the new entrance. Visual impacts to the Potomac Palisades, which is intended to provide a scenic buffer, may occur with such development. The issue of whether there is access provided to this private parcel will be determined as a result of coordination of this 4(f) documentation.

9.3.2 Alternative 2A - At-Grade Intersection With Prospect Street Open

This Alternative is identical in design to Alternative 2. Operationally, however, it prohibits morning peak exiting eastbound traffic and keeps Prospect Street entrance open.

National Park Service Lands - Alternative 2A would require the use of 0.39 hectares (0.97 acres) of National Park Service (NPS) property north of Canal Road. This would be in addition to the easement currently used for the existing entrance road.

Parcels which would be affected are follows:

Lot Number	Square Meters	Square Feet
810	242	2,600
812	234	2,400
813	669	7,200
814	2,673	28,775
Res 404	111	1,200
TOTAL	3,929	42,175

[1] This property was originally part of the right-of-way for a trolley which ran from the District of Columbia to Glen Echo, and was owned by the D.C. Transit System, Inc., as the operating company for the trolley. It was acquired by a Court-appointed trustee on behalf of a group titled the Washington Metropolitan Area Riders' Fund (Riders' Fund) at a foreclosure sale. On May 31, 1996 this property was transferred by order of the U.S. District Court to the Washington Metropolitan Area Transit Authority (WMATA). WMATA is still investigating the issue of title.

This right-of-way would be required to shift the westbound lanes and provide a deceleration lane and for a left-turn lane. In accordance with 16 USC 4601-22(b), Georgetown University will provide to the NPS replacement land equal in value to that required for construction of the Project. Additionally, a scenic easement from Georgetown University would be granted. This shall be an area of 1.01 hectare (2.5 acres).

The use of this property would have negligible effect on the use or overall function of the NPS lands along Canal Road. This area is used only for landscaping and visual purposes. No active use park facilities are located here. The existing sidewalk would be replaced. **Two retaining walls are required. Along the northern edge of the reconstructed entrance drive, a wall approximately 35 meters (115 feet) in length and about 12 meters (40 feet) in height is required; this would be located on what now is Georgetown University property. North of the entrance along Canal Road, a wall approximately 15 meters (50 feet) in length and about 6 meters (20 feet) in height would be required; this would be located on what now is NPS property.**

Georgetown Historic District - All parcels identified above are located within the Georgetown Historic Site. This alternative would use 0.69 hectares (1.7 acres) of land within the Georgetown Historic District. Maintaining access for the Prospect Street entrance would not incur 4(f) use of any historic property.

Potomac Palisades – **The retaining walls for Alternative 2A would be located along the Potomac Palisades: the larger one would be on some property owned by Georgetown University, the lower wall on NPS property. The Palisades are a land form, and contained, in the Project location, within the boundaries of the Georgetown Historic District.**

C&O Canal Historic Park – Based on the location of the Canal and the Canal Park property, and the design of this Alternative to avoid direct taking or impact to the facility, no 4(f) use is considered to occur as a result of this Alternative.

Secondary Impacts - There is currently no right to access from adjacent properties to the National Park Service land in the Project area. For all Build Alternatives, **except Alternative 2A-Modified**, the one property possibly creating secondary impacts is owned by WMATA and referred to as Lot 822 (see footnote at Section 9.3.1). If access occurs in the future, potential development, such as with the construction of townhouses, could generate secondary impacts. These include the addition of several hundred vehicle trips per day serving the new entrance. Visual impacts to the Potomac Palisades, which is intended to provide a scenic buffer, may occur with such development. The issue of whether there is access provided to this private parcel will be determined as a result of coordination of this 4(f) documentation.

9.3.3 Alternative 3B - Westbound Canal Road Elevated

National Park Service Lands - Alternative 3B would require the use of 0.3 hectares (0.74 acres) of National Park Service property north of Canal Road, in addition to the easement used for the existing entrance road.

The following is a listing of the required park property:

Lot Number	Square Meters	Square Feet
810	641	6,900
812	406	4,375
813	669	7,200
814	1,022	11,000
Res 404	242	2,600
TOTAL	2,980	32,075

The use of this property would have negligible effect on the use or overall function of the National Park Service facilities. This area is used only for landscaping and visual purposes. No active use park facilities are located here. The existing sidewalk would be replaced.

This right-of-way would be required to shift the westbound lanes and provide a deceleration lane and for a left-turn lane. In accordance with 16 USC 4601-22(b), Georgetown University will provide to the NPS replacement land equal in value to that required for construction of the Project. Additionally, a scenic easement from Georgetown University would be granted. This shall be an area of 1.01 hectare (2.5 acres).

Two retaining walls are required. Along the northern edge of the reconstructed entrance, a wall approximately 150 meters (495 feet) in length is required; this would be located on what now is Georgetown University property. West of the entrance along Canal Road, a wall approximately 130 meters (430 feet) would be required.

Georgetown Historic District - All parcels identified above are located within the Georgetown Historic Site. This alternative would use 0.63 hectares (1.55 acres) of land within the Georgetown Historic District. It would not be located near the structures that contribute to the character of the Historic District.

Potomac Palisades **–The retaining walls for Alternative 3B would be located along the Potomac Palisades, on some property owned by Georgetown University and some owned by the NPS. The Palisades are a land form, and contained, in this location, within the boundaries of the Georgetown Historic District.**

C&O Canal Historic Park – Based on the location of the Canal and the Canal Park property, and the design of this Alternative to avoid direct taking or impact to the facility, no 4(f) use is considered to occur as a result of this Alternative.

Secondary Impacts -There is currently no right to access from adjacent properties to the National Park Service land in the Project area. For all Build Alternatives, **except Alternative 2A-Modified,** the one property possibly creating secondary impacts is referred to as the Riders' Fund (see footnote at Section 9.3.1). If access occurs in the future, potential development, such as with the

construction of townhouses, could generate secondary impacts. These include the addition of several hundred vehicle trips per day serving the new entrance. Visual impacts to the Potomac Palisades, which is intended to provide a scenic buffer, may occur with such development. The issue of whether there is access provided to this private parcel will be determined as a result of coordination of this 4(f) documentation

9.3.4 Alternative 3H - Canal Road Underpass

National Park Service Lands - Alternative 3H would require the use of 0.69 hectares (1.71 acres) of National Park Service property north of Canal Road, in addition to the easement used for the existing entrance road. This right of way would be required in order to shift the westbound lanes and provide room for construction of the on and off ramps.

Properties required for this Alternative are:

Lot Number	Square Meters	Square Feet
810	776	8,350
812	557	6,000
813	674	7,250
814	2,225	23,950
817	1,616	17,400
Res 404	1,073	11,550
TOTAL	6,921	74,500

The use of this property would have negligible effect on the use or overall function of the National Park Service facilities. This area is used only for landscaping and visual purposes. No active use park facilities are located here. The existing sidewalk would be replaced.

This right-of-way would be required to shift the **eastbound and** westbound lanes, and provide ramps for left-turns to and from eastbound Canal Road. In accordance with 16 USC 4601-22(b), Georgetown University will provide to the NPS replacement land equal in value to that required for construction of the Project. Additionally, a scenic easement from Georgetown University would be granted. This shall be an area of 1.01 hectare (2.5 acres).

Two retaining walls are required along the north side of the new entrance access/exit. East of the entrance a wall approximately 110 meters (360 feet) in length, and west of the entrance a wall approximately 235 meters (770 feet) would be required.

Georgetown Historic District - All parcels identified above are located within the Georgetown Historic Site. This alternative would use 0.1.13 hectares (2.78 acres) of land within the Georgetown Historic District. It would not be located near the structures that contribute to the character of the District.

Potomac Palisades –**The retaining walls for Alternative 3H would be located along the Potomac Palisades, on some property owned by Georgetown University and some by the NPS. The Palisades are a land form, and contained, in this location, within the boundaries of the Georgetown Historic District.**

C&O Canal Historic Park – Based on the location of the Canal and the Canal Park property, and the design of this Alternative to avoid direct taking or impact to the facility, no 4(f) use is considered to occur as a result of this Alternative.

Secondary Impacts - There is currently no right to access from adjacent properties to the National Park Service land in the Project area. For all Build Alternatives **except Alternative 2A-Modified,** the one property possibly creating secondary impacts is referred to as Lot 822 (see footnote at Section 9.3.1). If access occurs in the future, potential development, such as with the construction of townhouses, could generate secondary impacts. These include the addition of several hundred vehicle trips per day serving the new entrance. Visual impacts to the Potomac Palisades, which is intended to provide a scenic buffer, may occur with such development. The issue of whether there is access provided to this private parcel will be determined as a result of coordination of this 4(f) documentation

9.3.5 Alternative 2A-Modified - At-Grade Intersection – Preferred Alternative

This Alternative is a variation of Alternative 2A, with a considerably reduced construction footprint.

National Park Service Lands - **Alternative 2A-Modified would require the use of 0.21 hectares (0.51 acres) of National Park Service (NPS) property north of Canal Road. This would be in addition to the easement currently used for the existing entrance road.**

This right-of-way would be required to shift the westbound lanes and provide a deceleration lane and for a left-turn lane. In accordance with 16 USC 4601-22(b), Georgetown University will provide to the NPS replacement land equal in value to that required for construction of the Project. Additionally, a scenic easement from Georgetown University would be granted. This shall be an area of 1.01 hectare (2.5 acres).

Parcels north of Canal Road that would be affected are as follows:

Lot Number	Square Meters	Square Feet
810	0	0
812	0	0
813	669	7,200
814	1,377	14,825
Res. 404	0	0
TOTAL	2,046	22,025

The use of this property would have negligible effect on the use or overall function of the NPS lands along Canal Road. This area is used only for landscaping and visual purposes. No active use park facilities are located here. The existing sidewalk would be replaced. The retaining wall along the north side of the new entrance access/exit would be approximately 31 meters (100 feet) in length and approximately 3 meters (ten feet) in height at its highest.

Additionally, Alternative 2A-Modified would require use of 66 square meters (715 square feet) (0.006 hectares/0.016 acres) from the C&O Canal Historic Park. This use is a mitigation measure to other impacts, including those to other 4(f) resources. *Figure 9-3* illustrates the conditions (as of April 1998) at the specific construction area at the intersection of Canal Road and the Whitehurst Freeway. The Canal Road retaining wall would be rebuilt, as would the NPS service roadway.

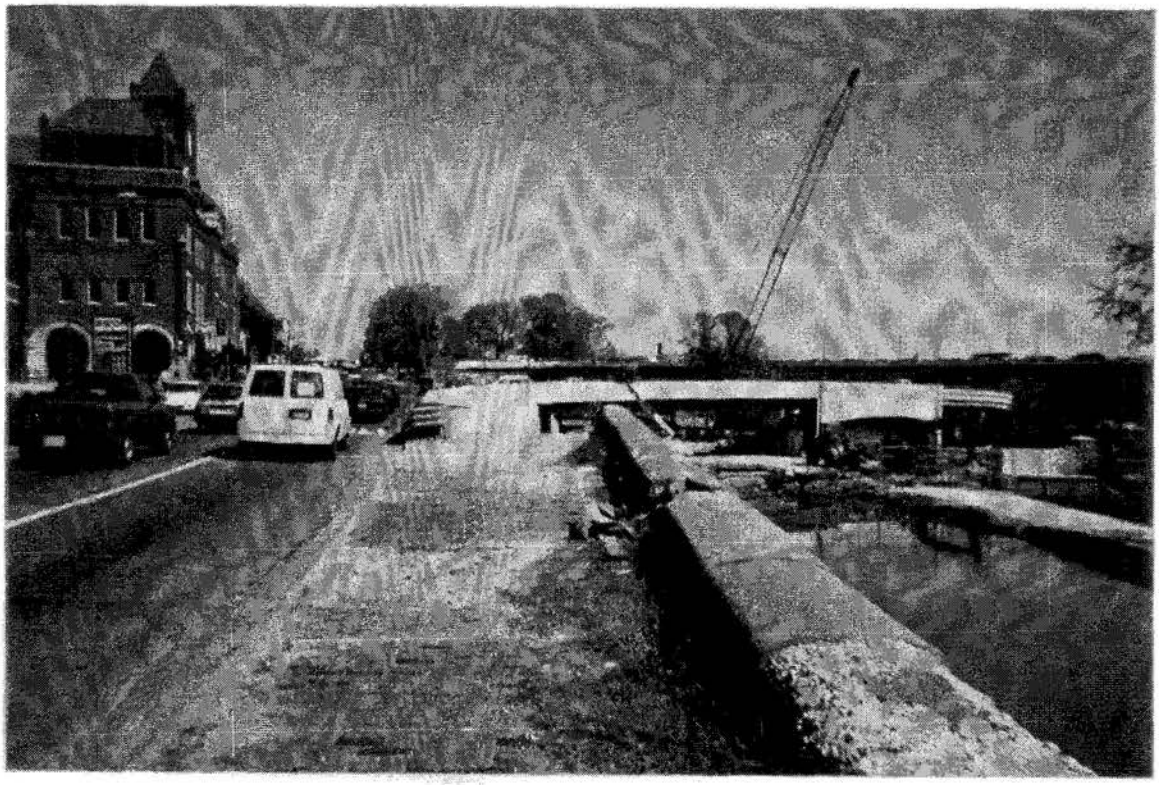
The total amount of right-of-way of NPS land required is 0.21 hectares (NPS property north of Canal Road) and 0.1 hectares (NPS property south of Canal Road) for a total of 0.22 hectares (0.53 acres).

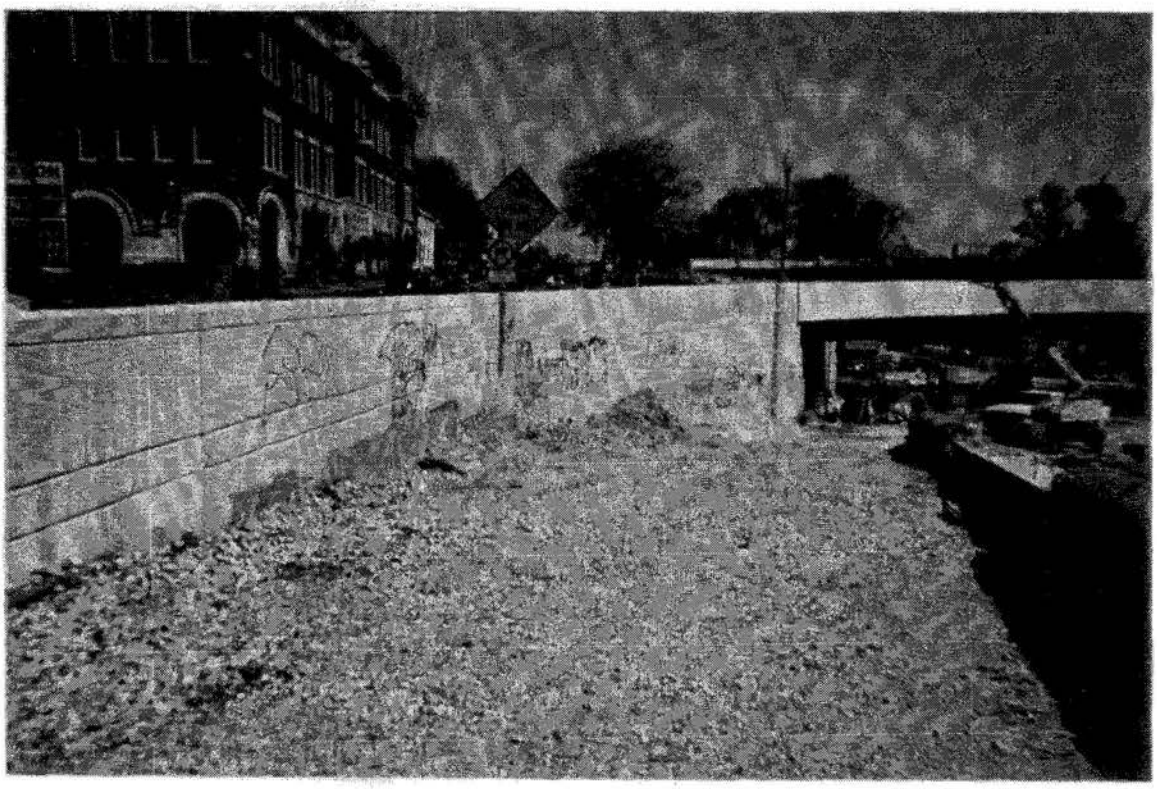
***Georgetown Historic District* - All but one of the parcels identified above are located within the Georgetown Historic District. This alternative would use 0.30 hectares (0.73 acres) of land within the Georgetown Historic District. The alternative would not be located near the structures that contribute to the character of the district. Maintaining access for the Prospect Street gate would not incur 4(f) use of any historic property.**

***Potomac Palisades* – The retaining wall along the north edge of the new entrance for Alternative 2A-Modified would be located along a low point of the Potomac Palisades, on some property owned by NPS. The Palisades are a land form, and contained, in this location, within the boundaries of the Georgetown Historic District.**

***C&O Canal Historic Park* – One parcel within the C&O Canal Historic Park is required in association with the mitigation measure included as part of Alternative 2A-Modified. This would use 0.006 hectares (0.016 acres) from an area south of Canal Road but north of the C&O Canal. The use of this land would not have an adverse impact on the historic character of the Historic District. It would not interfere with the structures that contribute to the character of the district. A Memorandum of Agreement among the NPS, SHPO, and others addresses the adverse impacts that can be mitigated and the measures to do so. The MOA on historic resources is located in Appendix G.**

***Secondary Impacts* - There is currently no right to access from adjacent properties to the National Park Service land in the Project area. Alternative 2A-Modified is the only Build Alternative which does not create the possibility of secondary impacts due to potential development of Lot 822 (the WMATA property, see footnote at Section 9.3.1).**





Views of C&O Canal
At Canal Road/Whitehurst Freeway

9.4 AVOIDANCE ALTERNATIVES

Alternatives that were studied that would avoid the use of 4(f) property include transportation systems management (TSM); transportation demand management (TDM); bicycle and pedestrian alternatives; and mass transit. (See Chapter 2.) These concepts included:

- **minor reconstruction, such as wider entrances or turning lanes;**
- **signal synchronization;**
- **increased use of the BZA-limited "spine" road connection between the two Georgetown University campuses (Main Academic and Medical Center);**
- **improving Metrobus and G.U.T.S. service;**
- **encouraging increased pedestrian and bicycle commuting;**
- **encouraging employee flex-time;**
- **satellite parking with shuttle service to and from the campus.**

During the alternatives analysis during the DEIS and FEIS stages of this project, it was determined that none of these alternatives alone or combined with one another would meet the requirements of the Congressional mandate.

Georgetown Historic District

Avoidance Alternatives were considered in order to avoid each Section 4(f) resource. The **five** Build Alternatives are located within the Georgetown Historic District. Since all of Georgetown University is located within the Historic District, it would not be possible to construct any improved access to the University that was not located within the Historic District. The No-Build Alternative, **the alternative of a single median break in Canal Road without left turn storage on Canal Road, and the TSM/TDM options, are** the only alternatives that avoid the NPS property located north of Canal Road. **The No Build Alternative, with a single median break and no storage, would result in an unsafe condition and unacceptable traffic impacts to Canal Road and is thus not a reasonable avoidance alternative. By not allowing left turns from eastbound Canal Road into the Georgetown University, this Alternative would not satisfy the Project Purpose and Need. None of these address the Project's Purpose and Need of substantially improving the Canal Road entrance and, therefore, are not considered reasonable avoidance alternatives.**

NPS Property, North of Canal Road

Alternatives to avoid the National Park Service property were also considered. However, as with the historic district, the location of the National Park Service property adjacent to Canal Road precluded the development of any avoidance alternative that would reconstruct the Canal Road entrance and avoid the park property. National Park Service property runs along the north side of the entire length of Canal Road from 37th Street west to Foxhall Road. The No-Build Alternative, **the alternative of a single median break in Canal Road without left turn storage on Canal**

Road, and TSM/TDM options, are the only alternatives that avoid the NPS property located north of Canal Road. **None of these address the Project Purpose and Need of substantially improving the Canal Road entrance and, therefore, are not considered reasonable avoidance alternatives.**

C&O Canal Park

Avoidance alternatives also were considered for the traffic mitigation measure associated with the Preferred Alternative. Field surveys indicate that the existing right-of-way width for Canal Road at the Whitehurst Freeway intersection is less than 50 feet. This is insufficient for five lanes with a median at this intersection. Therefore, widening Canal Road on the south side by approximately 6.5 feet is proposed.

Widening Canal Road on the north side at the Whitehurst Freeway intersection would require the taking of an existing apartment residence, and one business, as well as impact the sidewalk, and major underground utilities. There is the potential of hazardous materials remediation associated with the business. Furthermore, the north side of Canal Road at this intersection is contained within the Georgetown Historic District, and would therefore not avoid taking of Section 4(f) property. These impacts and the associated costs to acquire sufficient right-of-way north of Canal Road are considered extraordinary, and therefore not prudent and feasible to the proposed alternative.

The Preferred Alternative minimizes the impact to the C&O Canal Park and maintains the existing NPS access road entry to the Canal. The portion of the existing retaining wall to be reconstructed is 36 meters (120 feet) long and the width of encroachment on the C&O Canal is less than 2 meters (6.5 feet). The reconstruction of the retaining wall would end at the bridge abutment for the Whitehurst Freeway. *Figure 9-3* illustrates that this portion of the C&O Canal Historic Park is in an urbanized location.

9.5 SUMMARY OF SECTION 4(F) PROPERTIES AND RESOURCES TAKEN

The table below shows an estimate of the National Park Service land that would be needed for construction of each of the alternatives.

Alternative	Hectares	Acres
NO BUILD	0	0
Alternative 2	0.39	0.97
Alternative 2A	0.39	0.97
Alternative 3B	0.30	0.74
Alternative 3H	0.69	1.71
Alternative 2A-Modified	**0.22**	**0.53**

This land is in addition to the land that is now used, under an easement, for the existing entrance road. *The listing does not include Georgetown University property.*

9.6 MITIGATION MEASURES

Mitigation measures have been considered to lessen any negative impacts of the Project. The proposed Project would physically require National Park Service land, which is also located within the Georgetown Historic District. Additional NPS land from the C&O Canal Historic District is necessary and mitigation of these impacts are also proposed.

Each Build Alternative would require an easement to use property owned by the National Park Service north of Canal Road. This use would not affect the facilities or function of any parks in the area. However, as mitigation for using between **0.22** and 0.69 hectares (**0.53** and 1.71 acres) of National Park Service property, Georgetown University will furnish the National Park Service with an easement on an equal value of land owned by the University.

The Preferred Alternative, Alternative 2A-Modified, requires the least amount of land belonging to the National Park Service. Mitigation for use of the NPS land north of Canal Road will be an equal value exchange of property. Mitigation for the land south of Canal Road at the Whitehurst Freeway intersection will be an equal value exchange of property, include aesthetic treatments at the Whitehurst Freeway intersection, and include façade treatment of the reconstructed Canal Road retaining wall.

In a separate land exchange, Georgetown University will provide a scenic easement on 1.1 hectares (2.5 acres) of land as the local match for Federal funding for the project. This easement, in turn, will be transferred to the National Park Service. This scenic easement will protect the views from the C&O Canal National Historic Park and from Glover Archbold Park located to the west of the campus.

Each of the Build Alternatives for the reconstruction of the Canal Road entrance provides for bicycle and pedestrian access, which are suitable urban park activities and functions. **The Preferred Alternative, Alternative 2-A Modified, includes an "island" between westbound Canal Road and the new lanes for the entrance; the island will receive landscaping treatment in accordance with coordination among the Commission of Fine Arts, the SHPO, and NCPC.**

9.7 COORDINATION

Throughout the course of the environmental process, coordination has been conducted with the National Park Service. Correspondence is included in Appendix B. A Memorandum of Agreement (MOA) was executed in November of 1991 among the Federal Highway Administration; the Department of the Interior, National Park Service (NPS); Georgetown University; and the District of Columbia, Department of Public Works (DCDPW), for the design and construction of the proposed Project. This MOA appears in Appendix A. The National Park Service has been an active participant in the planning and design of the Project and the Alternatives.

A second MOA has been initiated in 1998 among the Federal Highway Administration; the NPS; the District of Columbia Historic Preservation Office (SHPO); the Advisory Council on Historic Preservation (ACHP), and the DCDPW. This MOA appears in Appendix G.

9.8 BASIS FOR CONCLUSION OF NO FEASIBLE AND PRUDENT ALTERNATIVE TO USE OF SECTION 4(F) LAND

This section is new to the FEIS.

There is a Congressional mandate to provide substantially improved access at the Project location (see *Appendix A*). The Project site is bounded by private properties and NPS property. The Project site is located in the Georgetown Historic District. Any improvements that would satisfy the Purpose and Need for the Project and also meet safety concerns cannot avoid impacts to the NPS property.

Numerous alternatives were considered prior to the DEIS and detailed in the DEIS. Subsequent to the DEIS, requests by Agencies and the public to study a variety of alternatives were also considered. Numerous additional studies were conducted, as described above and in Chapter 2 – Alternatives.

All alternatives except variations to Alternative 2A were determined to have greater safety or traffic impacts, as well as more impacts to Section 4(f) resources. The impacted resources included: the Glover-Archbold Park (e.g. frontage roads, jug-handle, traffic circle), the C&O Canal Historic Park (e.g. traffic circle at Foxhall), and, the Georgetown Historic District (Alternatives 2, 2A).

The Preferred Alternative, 2-A Modified, considerably reduces the footprint necessary for construction on NPS lands from any other alternative. This Alternative is the only one which satisfies the Purpose and Need for the Project and provides safe operating conditions for the public.

In conclusion, pursuant to 23 CFR 771.135(a)(2), there are unique problems or unusual factors involved in the use of Alternatives that avoid these properties, and the cost, social, economic and environmental impacts, or community disruption resulting from such Alternatives would reach extraordinary magnitudes.

9.9 MINIMIZATION OF HARM TO SECTION 4(F) PROPERTY

This section is new to the FEIS.

The Preferred Alternative, 2A-Modified, including the mitigation at the Whitehurst Freeway/Canal Road intersection, considerably reduces every impact from the Alternatives

presented in the DEIS. As a variation of one of the DEIS Alternatives, with its reduced design speeds, reduced property requirements, reduced construction footprint, reduced retaining wall magnitude, reduced costs, reduced Section 4(f) impacts, reduced construction impacts (no blasting), and enhanced traffic flow, Alternative 2A-Modified has minimized required use of Section 4(f) resources. It is the only Alternative which meets the Project Purpose and Need that results in the least harm on the Section 4(f) resources.

The National Park Service (NPS) provided comments on the Draft 4(f) Statement on August 2, 1995; this Final 4(f) Statement addresses their concerns. (See Appendix F-1 for the NPS November 1998 letter concurring on the proposed use of parklands.)

All of the Project's mitigation measures have been coordinated with the SHPO and the NPS. Careful consideration to the design details and landscaping for the reconstruction of the retaining walls at the Canal Road entrance and the Canal Road/Whitehurst Freeway intersection will be undertaken with the Project's cooperating Agencies, in accordance with the mitigation described in the historic resources MOA (See *Appendix G*).

The Whitehurst Freeway has undergone reconstruction during the past several months (1997/1998). The structures near and over the C&O Canal have all undergone rebuilding, and portions of the C&O Canal itself have been filled and drained during these ongoing construction activities. The NPS access road between Canal Road and the C&O Canal wall has been used for construction equipment access. Construction of the Preferred Alternative is expected to have no impact to the filling/draining of the canal. The NPS access road would be maintained to accommodate the proposed lane shifts on Canal Road.

It is therefore determined that the Preferred Alternative is a feasible and prudent alternative which causes the least harm on 4(f) resources, including mitigation, of all reasonable alternatives considered.

9.10 COORDINATION WITH DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE

This section is new to the FEIS.

As described above, coordination has occurred with the NPS on the Project, beginning with the 1991 MOA. The culmination of the planning stage coordination is the 1998 MOA. The C&O Canal Advisory Commission on September 12, 1998 was informed on the proposed project.

9.11 CONCLUSION

This section is new to the FEIS.

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the National Park Service and the proposed action includes all possible planning to minimize harm resulting from such use.

The Preferred Alternative provides the least harm to 4(f) resources, including mitigation, of all reasonable alternatives considered.

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Note: Additions from DEIS are highlighted in bold text.

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APPENDIX A

Project Documentation

A-1 Project Legislation

A-2 Memorandum of Agreement

APPENDIX A-1

Project Legislation

Excerpts from
Surface Transportation Uniform Relocation Assistance Act of 1987, and as amended

onstrating methods of accelerating project construction and resolving environmental concerns among Federal and State agencies.

(7) SAN BERNARDINO COUNTY, CALIFORNIA.—The Secretary shall carry out a demonstration project in the vicinity of the Ontario International Airport in San Bernardino County, California, for the purpose of demonstrating methods of improving highway access to an airport which is projected to incur a substantial increase in air service.

(8) ALTOONA, PENNSYLVANIA.—The Secretary shall carry out a highway project to close a gap of approximately 12 miles in a multilane limited access road connecting the city of Altoona to the borough of Tyrone in Blair County, Pennsylvania, for the purpose of demonstrating state of the art delineation technology. For comparison purposes, the highway section to be constructed shall connect a highway section constructed with current delineation technology and an older highway section constructed with traditional delineation technology. The project shall demonstrate the latest horizontal and vertical delineation techniques and utilize innovative techniques in highway delineation treatments to improve traffic control and highway safety. All delineation elements shall be designed to provide the optimum life-cycle costs, thereby maximizing the highway safety benefits and minimizing future maintenance costs. The Secretary shall provide necessary technical assistance in the design and construction of the project. Upon completion of the project, the highway shall be added to the Federal-aid primary system.

(9) LOUISIANA.—

(A) LAFAYETTE.—The Secretary is authorized to carry out a highway project to demonstrate the benefits to traffic flow and transportation of labor and materials by construction of a highway to provide limited continuous access between an interstate route and a highway on the Federal-aid primary system in Lafayette, Louisiana.

(B) SHREVEPORT.—The Secretary is authorized to carry out a highway project which will demonstrate methods of reducing traffic congestion in the central business district of Shreveport, Louisiana, improving access to such district, providing highway continuity, and satisfying national defense requirements by connecting an interstate route with another interstate route which serves as a bypass around such city.

(10) MIAMI, FLORIDA.—The Secretary is authorized to carry out a highway project which will demonstrate the most cost effective method of improving interstate motor vehicle access for passengers and cargo moving to and from the port of Miami, Florida.

(11) ARKANSAS-MISSOURI.—

(A) BELLA VISTA, ARKANSAS.—The Secretary is authorized to carry out a highway project in the State of Arkansas on a segment of a north-south highway on the Federal-aid primary system from the vicinity of the junction of Interstate Routes I-40 and I-540 to the boundary between the States of Arkansas and Missouri in the vicinity of Bella Vista, Arkansas, for the purpose of demonstrating methods of improving highway safety and of accelerating highway construction. Such project shall increase the number of lanes on such segment from 2 to 4.

(B) CARTHAGE, MISSOURI.—The Secretary is authorized to carry out a highway project on a segment of a north-south highway on the Federal-aid primary system from the vicinity of Carthage, Missouri, to the boundary between the States of Arkansas and Missouri in the vicinity of Noel, Missouri, for the purpose of demonstrating methods of improving highway safety and accelerating highway construction. Such project shall increase the number of lanes on such segment from 2 to 4.

(C) DESIGN FEATURES; TECHNICAL ASSISTANCE.—The projects authorized by subparagraphs (A) and (B) of this paragraph shall also demonstrate the latest high-type geometric design features and new advances in highway traffic control and safety hardware. All design elements, including the highway pavement, shall be designed to provide the best life-cycle costs, thereby minimizing future maintenance costs. The Secretary shall provide necessary technical assistance in the design and construction of such projects.

(12) SANFORD, FLORIDA.—The Secretary shall carry out a highway project to demonstrate methods of reducing costs and expediting construction of an interchange in the vicinity of Sanford, Florida, and the intersection of Route 46A and an interstate route by contracting with a private business to design and construct such project.

(13) SAN JOSE, CALIFORNIA.—The Secretary is authorized to carry out a demonstration project in the vicinity of San Jose and Santa Clara, California, for the purpose of demonstrating a unified method of reducing traffic congestion on a Federal-aid urban highway which is the result of the intersection of such highway with 2 other Federal-aid urban highways and a railroad crossing in a ¼-mile segment of such highway.

(14) DISTRICT OF COLUMBIA.—

(A) PROJECT DESCRIPTION.—The Secretary shall carry out a demonstration project in the vicinity of the C&O Canal in the District of Columbia for the purpose of substantially improving motor vehicle access at a major traffic generator without decreasing the efficiency of a Federal-aid primary highway. The Secretary shall enter into such arrangements as may be necessary to carry out such project with the Secretary of the Interior.

(B) LIMITATION.—No Federal assistance shall be provided to carry out the demonstration project under this paragraph until private sources dedicate at least 2.5 acres of land as a scenic easement for project purposes.

(15) COMPTON, CALIFORNIA.—The Secretary shall carry out a highway project for construction of a grade separation on a route on the Federal-aid urban system in Compton, California, for the purpose of demonstrating methods of relieving traffic congestion and enhancing economic development.

(16) MODESTO, CALIFORNIA.—The Secretary shall carry out a highway project to demonstrate methods by which construction of a grade separation for a railroad crossing of a highway on the Federal-aid primary system enhances urban redevelopment and

tion Assistance Act of 1982. The Committee intends that this project be carried out on Route 21 in Passaic County, New Jersey. The final report on the project should explain the time savings, give a description of the procedures used to accelerate design and construction, indicate how the techniques differed from those used on the project authorized by section 141 of the Federal-Aid Highway Act of 1976, and provide an analysis of the costs and benefits of the accelerated completion.

The Committee intends and expects the project to be completed within a construction schedule which will result in cost and time savings. In order to insure the immediate construction of this badly-needed project, this project need not comply with Federal-aid highway project procedures which have been established administratively. Also, in order to accomplish the objectives of the demonstration project, all procedures and regulations not founded on statutory requirements are subject to waiver if considered to be in the public interest. In line with the Council on Environmental Quality (CEQ) guidelines and in an effort to streamline the environmental processing, a short and concise EIS shall be developed with the assistance of Federal Highway Administration environmental specialists.

Paragraph (2) authorizes a highway project in Brick Township, New Jersey, to demonstrate methods of improving traffic operations and reducing accidents at a high volume rotary intersection and a highway project on a route connecting to another rotary intersection in Wall Township, New Jersey.

Paragraph (3) authorizes a highway project on Route 219 in the vicinity of Johnstown, Pennsylvania, to demonstrate methods by which such project enhances highway safety and economic development in an area of high unemployment. Additional authorizations are provided under subsection (d).

Paragraph (4) authorizes a highway project to demonstrate the economic growth and development benefits of widening and improving traffic signalization of a heavily traveled segment of the Federal-aid urban system connecting a community college and a large commercial center in the City of Fort Smith, Arkansas.

Paragraph (5) authorizes a project to demonstrate the economic and safety benefits of constructing a grade separation between a railroad line and a highway at 21st Street in Moorhead, Minnesota, and of reconstructing two deteriorated segments of Route 2, where it passes through Fosston and Bagley, Minnesota.

Paragraph (6) authorizes a project to demonstrate methods of improving traffic flow on State Highway 22 between Interstate Route 75 and U.S. Route 127 in Northern Kentucky.

Paragraph (7) authorizes a demonstration project in the vicinity of the Ontario International Airport in San Bernadino County, California, to demonstrate methods of improving highway access to an airport projected to incur a substantial increase in traffic.

Paragraph (8) authorizes a project to allow for the comparison of various advanced delineation techniques to close a gap on Route 220, which runs between Altoona and Tyrone Borough in Blair County, Pennsylvania.

Paragraph (9) authorizes preliminary engineering, design, and initial right-of-way acquisition and relocation activities for 3-mile

extension of limited access highways connecting to the northern and southern termini of I-49 in Lafayette and Shreveport, Louisiana.

Paragraph (10) authorizes preliminary engineering and design of a highway project to demonstrate the most cost-effective method of improving Interstate access for passengers and cargo moving to and from the Port of Miami, Florida.

Paragraph (11)(A) authorizes preliminary engineering, design, right-of-way acquisition, relocation activities and initial construction in connection with a project to demonstrate methods of improving highway safety and accelerating reconstruction of a two-lane segment of U.S. 71 between its junction with I-40 and I-540 in the vicinity of Fort Smith, Arkansas, and the boundary between the States of Arkansas and Missouri as a four-lane facility.

Paragraph (11)(B) authorizes preliminary engineering, design, right-of-way acquisition, relocation activities and initial construction in connection with a project to demonstrate methods of improving highway safety and accelerating reconstruction of a two-lane segment of U.S. 71 between the boundary between the States of Arkansas and Missouri and the vicinity of Carthage, Missouri, as a four-lane facility.

Paragraph (12) authorizes a highway project in the vicinity of Sanford, Florida, to demonstrate methods of reducing costs and expediting construction of an interchange in the vicinity of Route 46A and an Interstate route by contracting with a private business to design and construct the project.

Paragraph (13) authorizes a project in the vicinity of San Jose and Santa Clara, California, to demonstrate a unified method of reducing traffic congestion where a highway intersects with two other highways in a railroad crossing in a one-quarter-mile segment.

Paragraph (14) authorizes a demonstration project in the vicinity of the C&O Canal in the District of Columbia for the purpose of substantially improving vehicle access at a major traffic generator without decreasing the efficiency of a Federal-aid primary highway. Georgetown University would dedicate at least 2.5 acres of land as a scenic easement.

Paragraph (15) authorizes a highway grade separation project on a route on the Federal-aid urban system in the vicinity of Compton, California to demonstrate methods of relieving traffic congestion and enhancing economic development.

Paragraph (16) authorizes a highway project to demonstrate methods by which construction of a grade separation for a railroad crossing of a primary highway, enhances urban redevelopment and the effectiveness of a planned transportation center in Modesto, California.

Paragraph (17) authorizes the Secretary to provide for preliminary engineering, design, utility relocation, land acquisition and initial construction in connection with a highway project for construction of two additional lanes on a two-lane, 106-mile highway on the Federal-aid primary system which begins in the vicinity of Columbia, Missouri, and ends in the vicinity of Lancaster, Missouri. This project will demonstrate methods of improving highway

more of the following projects and conveyed to the State by the City of Irvine, the City of Tustin, and/or the County of Orange for the construction of the Barranca Parkway/State Route 133 interchange, the Tustin Ranch Road/Interstate Route 5 interchange, the Bake Parkway/Interstate Route 5 interchange, and the improvements to the confluence of Interstate Route 5 and Interstate Route 405 in Orange County, California, upon application by the State of California for reimbursement. The fair market value of the right of way shall be established as determined by the Secretary of Transportation in accordance with regulations and statutes governing the acquisition of rights of way for projects on the Federal Aid Primary and Interstate System.

SEC. 334. (a) INTERMODAL URBAN DEMONSTRATION PROJECT.—Funds appropriated in this Act for "Intermodal Urban Demonstration Project" shall remain available until expended.

(b) UMTA COMMUTER RAIL SERVICE.—Section 337 of Public Law 100-457 is amended to read as follows:

"Notwithstanding any other provision of law, when a commuter rail service has been suspended for safety reasons, and when a statewide or regional agency or instrumentality commits to restoring such service by the end of 1989, and when the improvements needed to restore such service are funded without Urban Mass Transportation Administration funding, the directional route miles of such service shall be included for the purpose of calculating the fiscal year 1990 section 9 apportionment, as well as the apportionment for subsequent years. If such service is not restored by the end of 1989, the money received as a result of the inclusion of the directional route miles shall be returned to the disbursing agency, the Urban Mass Transportation Administration.".

(c) STATEWIDE OPERATING ASSISTANCE.—Section 9(2XA).—In any case in which a statewide agency or instrumentality is responsible under State laws for the financing, construction and operation, directly by lease, contract or otherwise, of public transportation services, and when such statewide agency or instrumentality is the designated recipient of UMTA funds, and when the statewide agency or instrumentality provides service among two or more urbanized areas, the statewide agency or instrumentality shall be allowed to apply for operating assistance up to the combined total permissible amount of all urbanized areas in which it provides service, regardless of whether the amount for any particular urbanized area is exceeded. In doing so, UMTA shall not reduce the amount of operating assistance allowed for any other State, or local transit agency or instrumentality within the urbanized areas affected. This provision shall take effect with the fiscal year 1990 section 9 apportionment.

SEC. 335. PERMANENT PROHIBITION AGAINST SMOKING ON SCHEDULED AIRLINE FLIGHTS.—Section 404(dX1) of the Federal Aviation Act of 1958 (49 U.S.C. App. 1374(dX1)) is amended by deleting in subparagraph (A) of section 404(dX1) of the Federal Aviation Act of 1958 (49 U.S.C. App. 1374(dX1XA)) all after the words "any scheduled airline flight" and inserting in lieu thereof the following: "segment in air transportation or intrastate air transportation, which is—

(i) between any two points within Puerto Rico, the United States, Virgin Islands, the Distict of Columbia, or any State of Alaska and Hawaii) and any point in any other of such jurisdictions;

(ii) within the State of Alaska or within the State of Hawaii; or

(iii) scheduled for 6 hours or less in duration, and between any point described in clause (i) and any point in Alaska or Hawaii, or between any point in Alaska and any point in Hawaii.",

to take effect upon the commencement of the 96th day following the date of enactment of this Act, and by striking subparagraph (C).

Ha

Effective

SEC. 336. The segment of Michigan Highway 59 beginning at the intersection of such highway with Michigan Highway 53 in the vicinity of Utica and ending at the intersection of such highway with Gratiot Avenue in the vicinity of Mount Clemens shall be known and designated as the "James G. O'Hara Memorial Highway", and any reference in a law, map, regulation, document, record, or other paper of the United States to such segment shall be deemed to be a reference to the "James G. O'Hara Memorial Highway".

Michigan. Highways.

SEC. 337. Notwithstanding any other provision of law, not to exceed one-fourth of 1 per centum of funds apportioned in fiscal year 1990 or 1991 to a State under sections 104(b), 130, 144, and 152 of title 23, United States Code, shall be available to carry out section 140(b) of title 23, United States Code, upon a request by the State highway department.

SEC. 338. Notwithstanding any other provision of law, section 149(a)(14)(B) of Public Law 100-17 is amended by striking "at least".

101 Stat. 181.

SEC. 339. The Secretary shall conduct a thorough independent safety review of the New York Metropolitan Transportation Authority, including the New York City Transit Authority, the Long Island Railroad and Metro-North commuter railroads, using available funds or funds withheld from formula money allocated to the New York portion of the New York-Northeast New Jersey urbanized area. The Secretary shall submit a comprehensive plan, within thirty days after the date of enactment of this Act, for conducting such an investigation, including the cost and scope of the investigation and an expeditious schedule for completion of such an investigation.

Safety. New York. Railroads. New Jersey.

SEC. 340. The Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1609 et seq.), is amended by adding at the end of section 23 the following new subsection:

49 U[illegible] p. 1619.

"(h) SAFETY, FINANCIAL AND PROCUREMENT COMPLIANCE REVIEWS.—In addition to the purposes provided for under subsection (a), the funds made available under subsections (a) (1) through (5) may be used by the Secretary to contract with any person to provide safety, procurement, management and financial compliance reviews, and audits of any recipient of funds under any such subsection. Any contract entered into under this subsection shall not be subject to the requirements of subsection (d), (e), (f), or (g).".

SEC. 341. The Department of Transportation shall study the effect on consumers of State regulation of the rates, routes, and services of the express package industry and make recommendations to Congress.

SEC. 342. Notwithstanding any other provision of law, any lease agreement entered into between Union Pacific Railroad Company and School District numbered 25, Bannock County, State of Idaho,

Contracts. Railroads. Idaho.

APPENDIX A-2

Memorandum of Agreement

LAN/MOA/GEOTOWN/991
Agreement Number: DTFH71-91-A-00008
September 25, 1991

MEMORANDUM OF AGREEMENT

AMONG

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

AND

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION

AND

GEORGETOWN UNIVERSITY

AND

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF PUBLIC WORKS

FOR

DESIGN AND CONSTRUCTION

OF

GEORGETOWN UNIVERSITY SOUTH ACCESS
DEMONSTRATION PROJECT DE 0014(801)
DISTRICT OF COLUMBIA

THIS MEMORANDUM OF AGREEMENT (hereinafter referred to as "the Agreement") is among the DEPARTMENT OF TRANSPORTATION, through the FEDERAL HIGHWAY ADMINISTRATION (hereinafter referred to as "the FHWA"); the DEPARTMENT OF THE INTERIOR, through the NATIONAL PARK SERVICE, NATIONAL CAPITAL REGION (hereinafter referred to as "the NPS"); the GOVERNMENT OF THE DISTRICT OF COLUMBIA, (hereinafter referred to as "the District"); and "GEORGETOWN UNIVERSITY".

PURPOSE: The purpose of this Agreement is to establish the responsibilities and procedures under which work will be performed by the parties to the Agreement named above as necessary to implement Section 149(a)(14) of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Pub. L. 100-17; 101 Stat. 132, 183; April 2, 1987), as amended by Section 338 of the Department of Transportation and Related Agencies Appropriation Act of 1990 (Pub. L. 101-164; 103 Stat. 1069, 1099; November 21, 1989) (hereinafter referred to as "the Act"), which calls for "a demonstration project in the vicinity of the C&O Canal in the District of Columbia for the purpose of substantially improving motor vehicle access at a major traffic generator without decreasing the efficiency of a Federal-aid primary highway."

WHEREAS, the Act authorizes the Demonstration Project and provides further that "The Secretary [of Transportation] will enter into such arrangements as may be necessary to carry out such project with the Secretary of the Interior."

AND WHEREAS, the Act provides that the Demonstration Project is subject to Title 23, United States Code, which provides for the delegation of responsibility for construction of the Demonstration Project to the District;

AND WHEREAS, the Act provides that funds authorized for the Demonstration Project shall be available for the obligation of funds in the same manner as if such funds were apportioned under Chapter 1 of Title 23, United States Code, except that such funds will remain available until expended;

AND WHEREAS, under Title 23 of the United States Code, there is a requirement for a State or local matching of Federal funds of 20 percent for the completion of the Demonstration Project;

AND WHEREAS, the Act provides further that "No Federal assistance shall be provided to carry out the [Demonstration Project] until private sources dedicate 2.5 acres of land as a scenic easement for project purposes."

AND WHEREAS, a determination has been made by the FHWA that the dedication of 2.5 acres by Georgetown University as a permanent scenic easement for the Demonstration Project will, pursuant to the Act, satisfy the 20 percent State or local matching of Federal funds as required by Title 23, United States Code;

AND WHEREAS, the Demonstration Project will be completed in the vicinity of the existing Georgetown University entrance from Canal Road, located approximately 2,000 feet west of Key Bridge, which necessitates use of NPS lands;

AND WHEREAS, the NPS has the authority to exchange interests in land to allow the use of NPS land that is needed to complete the Demonstration Project when an authorized exchange in interests in land has taken place, and Georgetown is ready and willing to participate in such an exchange;

AND WHEREAS, the NPS and Georgetown have agreed in principle to exchange interests in land, pursuant to the authority of each;

AND WHEREAS, the District has agreed, subject to the requirements of the District of Columbia law, to transfer the 2.5 acre permanent scenic easement dedicated for the Demonstration Project by Georgetown University to the NPS;

AND WHEREAS, the FHWA, the NPS, the District, and Georgetown University have agreed to fully cooperate to complete the Demonstration Project as authorized by the Act.

NOW, THEREFORE, the FHWA, the NPS, Georgetown University, and the District do hereby agree as follows:

1. The FHWA will be the lead agency for the Demonstration Project, and shall be responsible for:

    a. allocating the Federal funding for the Demonstration Project;

    b. environmental clearances in accordance with all applicable laws, including the National Environmental Policy Act of 1969 (pub. L. No. 91-190; 83 Stat. 852; January 1, 1970; 42 U.S.C. 4321, et seq.);

    c. compliance with section 106 of the National Historic Preservation Act of 1966 (Oct. 15, 1966; 80 Stat. 915, 917; 16 U.S.C. 470f);

    d. review and approval of the design of the Demonstration Project by the National Capital Planning Commission, pursuant to the Act of June 6, 1924 (43 Stat. 463; 40 U.S.C. 71, et seq.), and the Commission of Fine Arts, pursuant to the Act of September 22, 1950 (64 Stat. 903);

    e. public involvement activities required by law;

    f. determination of right-of-way requirements, design, and construction of the Demonstration Project;

g. determination of acceptability of the work to meet all applicable standards; and

h. approval of and acceptance of the work.

All actions by the FHWA will be in accordance with the requirements of Title 23, United States Code.

2. In addition to the items listed above, the FHWA, through its District of Columbia Division Office (FHWA-DC), will be responsible for:

a. overall coordination of the Demonstration Project;

b. authorizing all phases of the work and obligating Federal funds. No Federal funds will be expended prior to the dedication by Georgetown University of the 2.5 acres of land as a permanent scenic easement for the Demonstration Project, and the exchange of interests in land between the NPS and Georgetown University, except for those actions, such as preliminary engineering, necessary to determine the land needed for the Demonstration Project;

c. monitoring and acceptance of the work performed by the District;

d. approval of the environmental documentation; and

e. for providing information for the Congressional reports.

3. In addition to the items listed above, the FHWA, through its Eastern Federal Lands Highway Division (FHWA-EFLHD), at the request of the District, will be responsible for:

a. development of the Demonstration Project, including public involvement and environmental documentation;

b. environmental permit applications;

c. right-of-way plans;

d. final design plans, specifications, and estimate (PS&E); and

e. construction administration of the Demonstration Project.
The FHWA will perform, or cause to be performed, the preliminary engineering and construction work outlined herein in accordance with standards, policies, and procedures prescribed in the Federal-Aid Highway Program Manual, Volume 6, Chapter 9, Section 13 (FHPM 6-9-13), except as modified by the parties in accordance with this Agreement. Procurement of engineering assistance and construction will be in accordance with the Federal Acquisition Regulations and the Transportation Acquisition Regulations. The

Division Engineer, FHWA-EFLHD, will be the Contracting Officer for the FHWA. The specifications will be the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects", current as of the date of advertisement.

4. The District agrees to be a cooperating agency in the Demonstration Project, *and*, as a cooperating agency, to assist the lead agency as requested in completing the Demonstration Project. The District will:

   a. Assume responsibility for providing the 20 percent State or local match, hereinafter referred to as the local match, and for all funding obligations and expenditures. The local match will be satisfied upon the Georgetown University's dedication for the Demonstration Project of 2.5 acres of land as a scenic easement. All dedications of land, easements, and/or air rights to or by the District are subject to the requirements of District of Columbia law.

   b. Participate in all phases of the Demonstration Project development, including, but not limited to:

      (1) selection of alternatives through the environmental process;

      (2) transferring, in accordance with Section 4(a), the scenic easement previously dedicated to the District by Georgetown University to the NPS;

      (3) acquiring right-of-way needed for the Demonstration Project using procedures applicable to the Federal-aid highway system and based on plans furnished by the FHWA;

      (4) preparation of agreements for utility adjustments and coordination of same with the construction phase; processing permit applications deemed necessary for the construction of the Demonstration Project; and

      (5) upon completion, for acceptance and maintenance of the transportation facility and the work of this Demonstration Project.

   c. The District will provide to the FHWA copies of the following documents as appropriate:

      (1) appropriate recorded deeds for lands or easements needed for the Demonstration Project;

      (2) NPS approval and acceptance of the scenic easements; and

      (3) recorded plats showing transfers of jurisdiction for the lands or easements needed for the Demonstration Project.

5. The NPS hereby agrees :

a. To be a cooperating agency for the Demonstration Project, and as a cooperating agency, to assist the lead agency as requested in completing the Demonstration Project.

b. To undertake efforts pursuant to authority provided in section 5(b) of the Act of July 15, 1968 (82 Stat. 354, 356; 16 U.S.C. 460l-22(b)) to complete an exchange of interests in land with Georgetown University to facilitate completion of the Demonstration Project by:

(1) obtaining an appraisal of the fair market value of the access easement across NPS land that the FHWA determines is needed for completion of the Demonstration Project;

(2) working with the Georgetown University to identify the area of land Georgetown University owns over which the Georgetown University will grant a scenic easement, or such other interests in lands as may be mutually agreed upon by the Georgetown University and the NPS, that is approximately equal in value to the access easement across NPS land to be provided for the Demonstration Project in the exchange; and

(3) upon mutual agreement between the Georgetown University and the NPS on the approximately equal value land interests to be exchanged, to prepare the necessary conveyance documents for execution.

c. Upon mutual agreement by Georgetown University and the NPS on the approximately equal value land interests to be exchanged, to execute and deliver to an escrow agent an access easement to the District of Columbia across NPS land needed for construction of the Demonstration Project.

d. To instruct the escrow agent to record the executed access easement in the land records of the District of Columbia upon completion by the FHWA, all prior to construction, of the requirements for:

(1) environmental reviews;

(2) the historic preservation review requirements of Section 106 of the National Historic Preservation Act of 1966; and

(3) review and approval of the Demonstration Project design by the National Capital Planning Commission and the Commission of Fine Arts.

e. Upon completion by the FHWA of the requirements in paragraph 5.d., and in accordance with NPS policies, to issue a NPS construction permit for construction of the Demonstration Project on NPS land. The construction permit will contain such terms and conditions as the NPS deems necessary to protect adjacent NPS property, and its natural and historic resources, from adverse impacts from construction of the Demonstration Project.

6. Georgetown University agrees to:

a. Cooperate in the Demonstration Project and assist the lead agency as requested in completing the Demonstration Project.

b. Dedicate 2.5 acres of land to the District as a permanent scenic easement for the Demonstration Project, provided that the terms and conditions of the scenic easement will be reviewed and approved by the NPS. If the Demonstration Project is terminated, the 2.5 acres or portion thereof will revert to Georgetown University in accordance with the terms and conditions of paragraph 6.g. below.

c. Provide any Georgetown University land that is needed for construction of the Demonstration Project.

d. Work with the NPS to identify the area or areas of land Georgetown University owns over which Georgetown University will grant to the NPS a scenic easement, or such other interests in lands as may be mutually agreed upon by the Georgetown University and the NPS, that is approximately equal in value to the access easement across NPS land which would be provided for the Demonstration Project in the exchange.

e. Execute and deliver to an escrow agent, upon mutual agreement by the Georgetown University and the NPS on the equal value land interests to be exchanged, a scenic easement to the NPS over land Georgetown University owns, or such other interests in lands as may be mutually agreed upon by Georgetown University and the NPS, equal in value to the access easement across NPS land to be provided for the Demonstration Project pursuant to paragraph 5.c.

f. Instruct the escrow agent to record the executed scenic easement, or other interests in lands, in the land records of the District of Columbia, upon completion by the FHWA of the requirements in paragraph 5.d.

g. Dedicate such amount of 2.5 acre scenic easement, or other mutually agreed-upon compensation, to the District as needed to cover the 20 percent local match for Demonstration Project expenditures at the time of termination, if the Demonstration Project is terminated.

7. Demonstration Project scheduling and funding procedures will be as follows:

   a. All Federal funds will be allocated to the District in accordance with Federal-aid procedures.

   b. The FHWA, through the FHWA-EFLHD, will consolidate data and prepare and update at least annually by November 1, Demonstration Project schedules, cost estimates, and annual obligation plans, and will furnish copies to all parties of this Agreement. The consolidated schedules, cost estimates, and obligation plans will be based on individual schedules, cost estimates, and annual estimates of obligations as prepared by the District and the NPS for work to be performed by their agencies, and furnished to the FHWA-EFLHD.

      Should the annual November 1 update show that the total estimated cost exceeds the available funds, priorities for the work will be established in an effort to complete a usable Demonstration Project within the available funds. Concurrence in these priorities will be requested by the FHWA of all parties to this Agreement.

   c. Upon request of the District, the FHWA, through the FHWA-DC, will be responsible for authorizing all work to be performed for this Demonstration Project, and for processing the FHWA-37 Project Status Record through the Fiscal Management Information System pursuant to current regulations. A copy of all FHWA-37 transactions will be furnished to the FHWA-EFLHD. The authorized Federal funds representing the 80 percent Federal share are to be applied to the Demonstration Project, both for obligations and expenditures, in the same ratio as allocated pursuant to the Act.

   d. A Project Agreement, Form PR-2, will be prepared and executed between the District and the FHWA-DC for each phase of the work or individual authorizations. The FHWA will provide data to the FHWA-DC to complete the Form PR-2 for work to be accomplished. A copy of the executed Form PR-2 and any modifications will be furnished to the FHWA-EFLHD.

   e. The FHWA, through the FHWA-EFLHD, will establish a reimbursable account to capture its and NPS' charges.

   f. Reimbursement to the NPS for work it performs will be made by the FHWA pursuant to quarterly billings by the NPS to the FHWA.

   g. Reimbursement to the FHWA for work the NPS performs, and for work the FHWA performs through the FHWA-EFLHD, will be made by the District pursuant to quarterly billings by the FHWA for 100 percent of the total charges.

h. Reimbursement to the District for work it performs and for the billings from the FHWA will be through the FHWA-DC's current Federal-aid billing process.

i. The FHWA-DC will be responsible for coordinating actual annual obligations for its and the District's consideration in using the obligational authority as provided annually for the Federal discretionary funds provided in Section 149(d) of the Act. In the event the full amount of the obligational authority, as distributed annually for this Demonstration Project, is not needed in any given year, it may be utilized by the District, at its discretion, for other programs. Inasmuch as the obligational authority may not be carried forward to subsequent fiscal years, the District hereby agrees to provide a like amount of obligational authority in the year obligations are scheduled, or otherwise needed for this Demonstration Project, from its overall annual obligational authority.

j. The FHWA-DC, the District, and the FHWA will coordinate to maintain a current record of all fund obligations and expenditures and will furnish the status of funds upon request by any parties to this Agreement.

k. In addition, the fiscal records as outlined in paragraphs 8.j. and 8.b. above, respectively, will be distributed by the FHWA, through the FHWA-EFLHD, annually.

8. The FHWA, through the FHWA-EFLHD, will submit the final plans, specifications, and estimates (PS&E) to the District and the NPS for written approval, and to the FHWA-DC for approval and authorization for construction, prior to advertisement by the FHWA, through the FHWA-EFLHD.

9. The FHWA, through the FHWA-EFLHD, will submit the tabulation of bids to the District for written concurrence in award prior to the FHWA's award of any construction contracts.

10. All parties to this Agreement will be afforded the opportunity to inspect the work in progress (environmental evaluation, design, right-of-way acquisition, and construction) at any time, and to participate in field reviews, plans-in-hand inspections, bid openings, preconstruction conferences, and periodic and final construction inspections.

11. Following execution of this Agreement, all parties will designate a representative to be the point of contact for the administration and coordination of the Demonstration Project's day-to-day activities undertaken pursuant to this Agreement.

12. The parties shall meet as necessary, but at least quarterly, to review the status of the Demonstration Project and to provide management direction.

13. The FHWA, will be responsible for the administrative settlement or adjudication of claims arising under contracts executed to complete the Demonstration Project, utilizing Demonstration Project funds.

14. This Agreement becomes effective on the date of the last approving signature and will remain in effect until the Demonstration Project is completed.

15. This Agreement may be modified only by written consent of all of the parties.

16. Nothing in this Agreement shall be construed as binding any party to expend in any one fiscal year any sum in excess of appropriations made by Congress for the purpose of this Agreement for that fiscal year, or to involve any party in any contract or other obligation for the further expenditure of money in excess of such appropriations.

17. The parties shall not discriminate in the selection of employees or participants for any employment or other activities undertaken pursuant to this Agreement on the grounds of race, creed, color, sex, or national origin, and shall observe all the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 43 U.S.C. 2000(d) et seq.). The parties shall take positive action to ensure that all applicants for employment or participation in any activities pursuant to this Agreement shall be employed or involved without regard to race, creed, color, sex, or national origin.

18. No Member of, or Delegate to, or Resident Commissioner in, Congress shall be admitted to any share or part of this Agreement or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to any benefit from this Agreement if the benefit is to a corporation for its general benefit.

19. The parties will abide by the provisions of section 1913 (Lobbying with Appropriated Monies) of Title 18, United States Code, which state:

> No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this

shall not prevent officers or employees of the United States or of its departments or agencies from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for the efficient conduct of the public business.

Whoever being an officer or employee of the United States or of any department or agency thereof, violates or attempts to violate this section, shall be fined not more than $500 or imprisoned not more than one year, or both; and after notice and hearing by the superior officer vested with the power of removing him, shall be removed from office or employment.

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives on the dates written below:

GOVERNMENT OF THE
DISTRICT OF COLUMBIA

By: _____
Sharon Pratt Dixon

Title: Mayor

Date: NOV 18 1991

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION

By: _____
Robert G. Stanton
Acting

Title: Regional Director

Date: SEP 27 1991

GEORGETOWN UNIVERSITY

By: _____
George R. Lasnier

Title: Vice President and Assistant Treasurer

Date: 9-27-91

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
DISTRICT OF COLUMBIA DIVISION
OFFICE

By: _____
Arthur J. Hill

Title: Division Administrator

Date: 10/9/91

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION

By: _____
Gary L. Klinedinst

Title: Division Engineer

Date: 12/3/91

APPENDIX B

Agency Correspondence Prior to Draft Environmental Impact Statement

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
1825 Virginia Street
Annapolis, Maryland 21401
February 22, 1993

Ms. Betsy G. Davis
HDR Engineering, Inc.
Suite 300
5100 W. Kennedy Blvd.
Tampa, FL 33609

Re: Endangered Species
Georgetown University
Entrance Project

Dear Ms. Davis:

This responds to your January 11, 1993, request for information on the presence of species which are Federally listed or proposed for listing as endangered or threatened within the area affected by the cited project in Washington, D.C. We have reviewed the information you enclosed and are providing comments in accordance with Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 Consultation is required with the Fish and Wildlife Service. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

Thank you for your interest in endangered species. If you have any questions or need further assistance, please contact Andy Moser of our Endangered Species staff at (410) 269-5448.

Sincerely,

for John P. Wolflin
Supervisor
Chesapeake Bay Field Office

United States Department of the Interior

NATIONAL PARK SERVICE

NATIONAL CAPITAL REGION
1100 OHIO DRIVE, S. W.
WASHINGTON, D.C. 20242

TAKE PRIDE IN AMERICA

Date: 1/26/93

To: Ms. Betsy Davis, HDR Engineering Inc.

From: John Howard, National Park Service
National Capital Region

Subject: HDR Request for Resource Survey

Please find enclosed the initial survey of vegetative and wildlife resources within areas which may be affected by your proposed project. This information was provided by the C&O Canal National Historic Park which has jurisdiction over a portion of the land within your designated project zone. Again this is an initial survey, further site study will need to be performed to determine the level of vegetative impact, a minimum of three days during the green up period. The C & O Canal is a complex area which is not only considered a cultural and historic site, but due to its riverside location, an abundant habitat for a wide variety of plants.

We will forward the information from Rock Creek Park which administers the Glover Archbold portion of your project area as soon as we receive it.

SUMMARY OF NATURAL RESOURCE VALUES
C&O CANAL NATIONAL HISTORICAL PARK
GEORGETOWN UNIVERSITY CANAL ROAD ENTRANCE PROJECT AREA

For purposes of response to the request of natural resources in the study area, I am describing natural resources in the Park within the project area described, which would generally be the area from just upstream of Foundry Branch, the stream which flows through Glover-Archbold Park and joins the Potomac River in the C&O Canal National Historical Park, to Key Bridge.

There have been no recent inventories of flora and fauna specific to this area. Park lists of mammals, birds, reptiles, and amphibians, and vascular plants can be provided, if needed, but, as they have been compiled for many areas of the 184 mile long Park, they would not be overly representative of this area. A wide variety of plants and animals occur here; most are relatively common species. The occurrences of known rare species are described below and onthe attached enclosures.

From personal knowledge of this area, I would say that the forested area in the C&O Canal NHP here is primarily northern floodplain forest, dominated by such species as green ash, sycamore, American elm, eastern cottonwood, silver maple, and boxelder. Although highly fragmented and disturbed by human use, this forest has high value by virtue of its age, due to some protection from logging while the area was in the possession of the C&O Canal Company. It is an extension of the green ash/sycamore old growth forest listed for this Park (old Palisades Parkway) by the National Park Service survey on old-growth (Tyrrell, 1991). It is possible that parts of this forest have never been cut; regardless of whether or not this is the case, it was evaluated by Dr. L. K. Thomas, Research Ecologist, who responded to this survey for National Capital Region to have old-growth characteristics based on successional status, stand structural characteristics, and no evidence of past clearing. Therefore, this area is part of a larger forest which is fairly rare in the east.

No known rare or endangered animals occur year-round in the Park at this site, although bald eagles have been observed along the river in this area in winter. The Park database compiled from U.S. National Museum collections records along the Potomac show 12 occurrences of 10 rare plant species recorded from within or immediately adjacent to the study area. These include 6 species protected in Maryland as state endangered, 2 species considered highly rare (5 or fewer populations statewide), and 2 state "watchlist" species (believed presently secure, but uncommon and possibly vulnerable). Although the study area is in the District of Columbia, which has no rare and endangered species ranking, these rankings are considered to be equally, if not more, applicable to the District, and the Park would manage them as state endangered species in this area.

Enclosed is a list of these species. Note that the dates of last record are from 1878 to 1890. Some of the species may no longer be extant, but we also do not know of any systematic surveys of this area since these collections. In particular, Short's Rockcress (Arabis shortii, = A. perstellata) occurs along small rocky streams near Great Falls, and has clearly occurred in the study area in the past, and, although Park staff have not looked for it here, there appears to be suitable habitat along Foundry Branch in both Parks. Should the project contemplate any ground or vegetation disturbance near Foundry Branch, which might change microclimates or increase exotic plant abundances, I would recommend that a botanist make a thorough investigation of the adjacent Park land to locate possible occurrences that need to be avoided. The fact that 10 species now considered rare or endangered have historically occurred in this small area, and that there have been no known recent systematic searches since these rankings were established gives a strong reason for this. About 1-2 days of field searches around May 1 and another 1-2 days in early to mid-June would probably be sufficient. Flowering periods are given to alert any investigator when the plants might most easily be found, but should not be interpreted to infer that they are not vulnerable to disturbance at any time of year. Ms. Peggy Fleming, who has done much field work in Rock Creek Park should be consulted to see if she has seen these or other rare species in the area in the past.

Finally, although I am not familiar with their location within Glover-Archbold Park, Dr. Thomas also documented some upland old-growth stands there for the old-growth survey (Tyrrell). He should be consulted to determine whether the proposed project may create impacts.

Literature Cited:

Tyrrell, Lucy E. 1991. Old-Growth Forests on National Park Lands: NPS Views and Information. Great Lakes Cooperative Park Studies Unit, University of Wisconsin-Madison, Madison, WI; 54 pp.

Chris Lea

Chris Lea
Resource Management Specialist
C&O Canal NHP, Palisades District

enclosures (2)
pc: Dr. Thomas, Center for Urban Ecology
Bob Ford, Rock Creek Park

HISTORICALLY KNOWN RARE AND ENDANGERED PLANTS
C&O CANAL NATIONAL HISTORICAL PARK
CANAL ROAD ENTRANCE PROJECT STUDY AREA
(KEY BRIDGE TO FOUNDRY BRANCH)

Explanation of status listed under "NHP" (rarity or protected ranking assigned by Maryland Department of Natural resources, Natural heritage Program or protected status under Code of Maryland Regulations (COMAR 08.03.08). (These rankings are regarded by the National Park Service to be applicable to the species for management within the District of Columbia):

EN: Endangered in Maryland.
EE: Endangered Extirpated in Maryland; historically present, with no known existing populations.
HR: Highly Rare; five or fewer populations in state.
WL: Watchlist; uncommon and thought to be secure; may become rare in state in forseeable future.

ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
478	SAGITTARIA RIGIDA	SESSILE-FRUITED ARROWHEAD	ALISMATACEAE	EN	JUL-OCT
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
348	ARABIS SHORTII	SHORT'S ROCKCRESS	BRASSICACEAE	EN	APR-MAY
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
448	CAREX AGGREGATA	AGGREGATE SEDGE	CYPERACEAE	EE	MAY-JUN
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
383	EUPHORBIA OBTUSATA	BLUNT-LEAVED SPURGE	EUPHORBIACEAE	EN	MAY_JUL
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
414	QUERCUS MACROCARPA	BUR OAK	FAGACEAE	HR	APR-MAY
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
1049	SCUTELLARIA PARVULA	SMALL SKULLCAP	LAMIACEAE	EE	MAY-JUL
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
1050	SCUTELLARIA SERRATA	SHOWY SKULLCAP	LAMIACEAE	WL	MAY-JUN
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
573	POLYGONUM AMPHIBIUM	WATER SMARTWEED	POLYGONACEAE	HR	JUN-SEP
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
241	GEUM VERNUM	SPRING AVENS	ROSACEAE	WL	APR-JUN
ecord#	SCI_NAME	COM_NAME	FAMILY	NHP	FLOWERS
446	VERONICA SCUTELLATA	MARSH SPEEDWELL	SCROPHULARIACEAE	EN	MAY-SEP

RARE AND ENDANGERED PLANT OCCURRENCES
C&O CANAL NATIONAL HISTORICAL PARK
CANAL ROAD ENTRANCE PROJECT STUDY AREA
(KEY BRIDGE TO FOUNDRY BRANCH)

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
22	Alismataceae	Sagittaria	rigida	04 Oct 1878	Above georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
23	Alismataceae	Sagittaria	rigida	-- -- ----	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
114	Brassicaceae	Arabis	perstellata (= shortii)	28 Apr 1889	Potomac banks, west of aqueduct bridge, georgetown (= west of present Key Bridge)

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
170	Cyperaceae	Carex	aggregata	-- -- 1879	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
221	Euphorbiaceae	Euphorbia	obtusata	01 May 1881	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
268	Fagaceae	Quercus	macrocarpa	-- Oct 1898	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
326	Lamiaceae	Scutellaria	parvula	-- -- ----	Near georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
327	Lamiaceae	Scutellaria	serrata	29 May 1877	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
446	Polygonaceae	Polygonum	amphibium	11 May 1890	Potomac flats, below outlet loc *

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
496	Rosaceae	Geum	vernum	-- -- 1879	Georgetown

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
860	Scrophulariaceae	Veronica	scutellata	-4 Aug 1879	Flats between outlet lock * and e

record#	FAMILY	GENUS	SPECIES	COLL_DATE	LOCALITY
861	Scrophulariaceae	Veronica	scutellata	- - ---	Outlet lock *

*-outlet lock was historically located near Foundry Branch; not at present outlet of C&O Canal

JAN 19 1994

Refer to: HPC-15

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Ms. Laura Henley Dean
Archeologist
Historic Preservation Division
Department of Consumer and Regulatory Affairs
614 H Street, N.W., Room 305
Washington, D.C. 20001

Dear Ms. Dean:

The Federal Highway Administration (FHWA), in cooperation with the National Park Service, and the Government of the District of Columbia is in the process of preparing a highway demonstration project to improve the access to Georgetown University from Canal Road in the District of Columbia. As part of this effort, the Eastern Federal Lands Highway Division of the FHWA is preparing a draft Environmental Impact Statement for the project.

A meeting was held in your office on December 1, 1993, to discuss the preliminary archeological assessment for this project, which was prepared for our consultant HDR Engineering, Inc., by Elizabeth Anderson Comer/Archaeology. Enclosed is the field trip report prepared by our office for this meeting and the Final Preliminary Archaeological Assessment for Georgetown University Entrance Road, dated February 20, 1993. This assessment addresses your comments from the December 1, 1993, meeting. As discussed during this meeting, it is our understanding that, with the incorporation of your comments, the investigation plan proposed in the assessment is acceptable to you.

With submission of this report, we are requesting the initiation of formal consultation with your office for this project. If you have any additional comments regarding the assessment, please provide them to us by February 18, 1994.

By copy of this letter, we are transmitting one copy of the final assessment to the Regional Director, National Capital Region of the National Park Service for review and comment by February 18, 1994.

If you have any questions, please contact Mr. Jim Sinnette, Environmental Planning Engineer, at (703) 285-0085.

Sincerely yours,

for Gary L. Klinedinst
Division Engineer

Enclosures

cc:
Mr. Robert G. Stanton, Regional Director, National Capital Region, National Park Service, Washington, D.C., w/enclosures

Mr. Robert D. Bush, Executive Director, Advisory Council on Historic Preservation, Washington, D.C.

Mr. Arthur J. Hill, Division Administrator, FHWA, Washington D.C., w/ enclosures

Federal Highway Administration
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GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS
BUILDING AND LAND REGULATION ADMINISTRATION

February 2, 1994

Gary L. Klinedinst
Division Engineer
U.S. Department of Transportation
Federal Highway Administration
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, Virginia 20166-6511

Subject: Georgetown University - Canal Road Entrance Project DE-0014(801)

Dear Mr. Klinedinst:

At the time of our December meeting, I had only completed a cursory review of the "Draft Preliminary Archaeological Assessment of the Georgetown University Entrance Road, Washington, D.C. Project DE0014(801)" prepared by Elizabeth Anderson Comer. I appreciate having the opportunity to give this report greater attention.

Overall, this document presents a concise preliminary review of the potential for archeological resources, and provides an explicit statement of the relationship between the assessment and Section 106 compliance responsibilities. Closer inspection has not changed my opinion of the adequacy of this preliminary archeological assessment submitted by Elizabeth Comer.

My brief review of this document is presented below, but there are three major concerns that should be considered. First, I agree with Dr. Stephen Potter's recommendation that all discussion of the village of Tohoga be eliminated from the final version of this report. Unfortunately, occasional mention of this village has crept

into prehistoric overviews of Georgetown. It should be noted, however, that it is expressly omitted from the most thorough and recent published summary of Washington's prehistory prepared by Robert Humphrey and Elizabeth Chambers.

Second, I received one version of the "final" report in which Figure 24 (the second of two figures so numbered) shows the area of archeological potential, including the location of major surface archeological features (foundations). In a second copy of the "final" report that I later received, Figure 24 does not include this information. Obviously, it is important to ensure that all copies of the report present consistent information.

Lastly, the label of the first figure numbered as "24" incorrectly implies that its features show "(archeological) sites in the vicinity of the project area." In point of fact, these features mark D.C. Landmark and National Register designated sites, almost all of which are buildings.

My remaining comments are as follows:

1. In my opinion, given the potential complexity of features and the history of recent disturbance, STPs alone will not be adequate to assess integrity or significance, especially along the easternmost slope in the area of archeological potential.
2. It would be very useful if pertinent figures, such as Figure 4, could delineate the boundaries of the project area. Other figures should clearly show specified features. For example, Fowler's Road should be marked on Figures 9 and 10.
3. Stylistically, a summary list of known archeological sites from the immediate region (about a mile square surrounding the project area) would probably be more informative if presented as part of the prehistoric and historic narratives. In addition, an illustration showing the location of these known sites would accomplish what I think was intended by Figure 24. Also, a narrative statement of previous work in or near the project area as part of the report text in the pertinent section would be more suitable than as a rather dissociated section that exclusively focuses on this material.
4. I would take a more conservative position arguing that ceramics demonstrate a more sedentary population, not one that is necessarily agricultural.
5. On page 14, the discussion implies that the District of Columbia was "carved" solely from Montgomery County. On the same page, capitalization of "River Road" suggests that this might be the thoroughfare of the same name in existence today.
6. What is the likelihood that the land could have been tenanted or leased, and, therefore, occupied in the 18th century (page 15)?
7. Can the buildings on the Boschke map be related to any of the various lots of the subdivision ?