



# Public Notice

**US Army Corps  
of Engineers**  
Fort Worth District

Applicant: Flower Mound CBD, Ltd.

Permit Application No.: SWF-2008-00291

Date: March 30, 2009

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The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you would participate in this process.

## **Regulatory Program**

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

## **Section 10**

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

## **Section 404**

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

## **Contact**

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JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**SUBJECT:** Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States associated with the construction of The Riverwalk at Central Park, a proposed 115-acre mixed use development site located northwest of the intersection of Farm-to-Market Road 1171 and Morriss Road in the Town of Flower Mound, Denton County, Texas.

**APPLICANT:** Flower Mound CBD, Ltd.  
Attention: Cole McDowell  
800 Parker Square, Suite 260  
Flower Mound, Texas 75028

**APPLICATION NUMBER:** SWF-2008-00291

**DATE ISSUED:** March 30, 2009

**LOCATION:** The Riverwalk at Central Park mixed use development site would be located northwest of the intersection of Farm-to-Market Road 1171 and Morriss Road in the Town of Flower Mound, Denton County, Texas (Exhibits 1 through 6 of 23 dated November 12, 2008). The development site is bound by Farm-to-Market Road 1171 to the south and Morriss Road to the east. The proposed project would be located approximately at Universal Transverse Mercator coordinates 680701.52 East and 3657817.41 North (Zone 14) on the Lewisville West 7.5-minute U.S. Geological Survey quadrangle map in the U.S. Geological Survey Hydrologic Unit 12030103.

**OTHER AGENCY AUTHORIZATIONS:** State Water Quality Certification

**PROJECT DESCRIPTION:** The applicant proposes to discharge approximately 55,000 cubic yards of dredged and fill material into approximately 6.3 acres of waters of the United States in conjunction with the construction of a mixed use development. Total proposed impacts to waters of the U.S. include 0.26 acre (3,793 linear feet) of ephemeral stream, 5.56 acres of on-channel pond, and 0.48 acre of wetland habitat (see Table 2).

The Riverwalk at Central Park would be an approximately 3,950,000 square feet mixed use development consisting of the construction of multiple types of buildings ranging from retail stores to townhouses and their associated infrastructure including parking lots, green space, roadways, and storm water systems, which would necessitate modifications to waters of the U.S. The project would relocate the hydrology of portions of the waters of the U.S. on-site into an open channel system along the center of the project area.

The purpose of the project is to provide a mixed use commercial/residential development for the growing population of the Town of Flower Mound. The increasing population growth and employment potential

within the North Texas region warrants the need for additional housing with nearby and associated commercial development, particularly in the southern Denton County area. This project would create a unique environment for the Town of Flower Mound area in that residents could walk to shops and restaurants within close proximity of their homes.

Additionally, this project as proposed would provide the town with an additional estimated \$10 million in tax revenues.

Waters of the U.S. within the project area include: 4,000 linear feet (0.28 acres) of ephemeral streams, 8.01 acres of on-channel ponds, 0.35 acre of forested wetlands, 0.05 acre of herbaceous wetland, and 0.08 acre of herbaceous wetland fringe within the proposed project area (*Table 1* and Exhibit 7 of 23 dated November 12, 2008).

**Table 1: Waters of the U.S.**

Name	Classification	Average OHWM (Feet) <sup>1</sup>	Approximate Linear Length (Feet) <sup>2</sup>	Approximate Area (Acre) <sup>2</sup>
Stream 1	Ephemeral Stream	3	2,634	0.18
Stream 2	Ephemeral Stream	4	401	0.04
Stream 3	Ephemeral Stream	3	83	0.006
Stream 4	Ephemeral Stream	3	725	0.05
Stream 5	Ephemeral Stream	2	157	0.007
Pond 1	On-channel Pond	--	--	2.92
Pond 2	On-channel Pond	--	--	2.24
Pond 3	On-channel Pond	--	--	2.59
Pond 4	On-channel Pond	--	--	0.26
Wetland 1	Herbaceous Wetland Fringe	--	--	0.08
Wetland 2	Herbaceous Wetland	--	--	0.05
Wetland 3	Forested Wetland	--	--	0.35
<b>Totals</b>			<b>4,000</b>	<b>8.77</b>
<sup>1</sup> Represents an average width at the ordinary high water mark (OHWM). However, actual widths are used for all calculations. <sup>2</sup> The length and area of waters of the U.S. were measured in ArcMap, a geographic information system (GIS).				

Stream 1 flows northward into a culvert system under Euclid Lane and continues north into Pond 1. Stream 1 flows out of the north side of Pond 1 and continues north into Pond 2. Stream 1 flows out of Pond 2 and on into and out of Pond 3. Once flowing out of Pond 3, Stream 3 continues north into and out of Pond 4 and into Wetland 3. After flowing out of Wetland 3, Stream 1 continues flowing north to its confluence with Timber Creek outside of the project area. The dominant vegetation observed along the stream includes broadleaf woodoats (*Chasmanthium latifolium*), johnsongrass (*Sorghum halepense*), poison ivy (*Toxicodendron radicans*), and post oak (*Quercus stellata*). Stream 1 measures a total of 2,634 linear feet (0.18 acres) and has a width at the ordinary high water mark (OHWM) ranging from one to eight feet with an overall average of three feet within the project area.

Stream 2 branches off of Stream 1 and flows north and then east within the project boundary before re-entering Stream 1 downstream. The dominant vegetation observed along the stream includes broadleaf woodoats, greenbrier (*Smilax bona-nox*), poison ivy, eastern red cedar (*Juniperus virginiana*), and post oak. Stream 2 measures a total of 401 linear feet (0.04 acres) and has an average width at the OHWM of four feet within the project area.

Stream 3 originates near the confluence of Stream 1 and Stream 2 and travels northeast until its confluence with Stream 1 just within the northern boundary of the project site. The dominant vegetation observed along the stream includes broadleaf woodoats, greenbrier, poison ivy, sugar hackberry (*Celtis laevigata*), and post oak. Stream 3 measures a total of 83 linear feet (0.006 acres) and had an average width at the OHWM of three feet within the project area.

Stream 4 appears to originate within the project area. Stream 4 flows northeast until it exits the site on its way towards Timber Creek. The dominant vegetation observed along the stream includes grapevine (*Vitis aestivalis*), poison ivy, cedar elm (*Ulmus crassifolia*), and post oak. Stream 4 measures a total of 725 linear feet (0.05 acres) and has an average width at the OHWM of three feet within the project area.

Stream 5 originates within the northern portion of the project area. The dominant vegetation observed along the stream includes broadleaf woodoats, greenbrier, poison ivy, cedar elm, and post oak. Stream 5 measures a total of 157 linear feet (0.007 acres) and has an average width at the OHWM of two feet within the project area.

Pond 1 is an on-channel pond (on Stream 1) located in the southwestern corner of project. Pond 1 receives a large portion of its hydrology from Stream 1 which originates just south of Pond 1. Pond 1 is similar to that of Pond 2 (described below); however there is substantial residential development on the west side of the pond. Vegetation species located around the pond are similar to those associated with Pond 2. Pond 1 constitutes 2.92 acres of waters of the U.S. within the subject property.

Pond 2 is an on-channel pond (on Stream 1) located just north of Pond 1 in the center of the project area. A narrow wetland fringe of broadleaf cattail (*Typha latifolia*) is located throughout the perimeter shoreline. Since the fringe is relatively narrow (approximately four to six feet), it is included within the OHWM of the pond. Other species identified around the pond include sugar hackberry, black willow (*Salix nigra*), bushy bluestem (*Andropogon glomeratus*), and Devil's beggarstick (*Bidens frondosa*). Pond 2 constitutes 2.24 acres of waters of the U.S. within the subject property.

Pond 3 is an on-channel pond (on Stream 1) located just north of Pond 2 near the center of the proposed project area. At the time of the site visit, the pond had flooded its northernmost banks and its backwater had inundated Stream 1. A herbaceous wetland fringe (Wetland 1) is located along the northernmost shore line of Pond 3. This herbaceous wetland fringe is dominated by broadleaf cattail, and due to its width (i.e., 30 feet) it is excluded from the OHWM of Pond 3. In addition to the herbaceous wetland fringe, there is an herbaceous wetland (Wetland 2) located on the northwest corner of Pond 3. Pond 3 is similar to that of Pond 4; however it is substantially larger in size and water volume. Pond 3 constitutes 2.59 acres of waters of the U.S. within the subject property.

Pond 4 is an on-channel pond (on Stream 1) located in the north central portion of the project area. At the time of the site visit, the pond had flooded its banks and backwater had inundated Stream 1. There is a forested wetland (Wetland 3) located just north of the northern shoreline. Other species identified around the

pond include sugar hackberry, black willow, Devil's beggarstick, and bushy bluestem. Pond 1 constitutes 0.26 acre of waters of the U.S. within the subject property.

Wetland 1 is an herbaceous wetland fringe located long the northern shoreline of Pond 3. This herbaceous wetland fringe is dominated by broadleaf cattail, and due to its width (i.e., 30 feet) it is excluded from the OHWM of Pond 3. Wetland 1 constitutes 0.08 acres of waters of the U.S. within the subject property.

Wetland 2 is an herbaceous wetland located within the 100-year floodplain, adjacent to Pond 2 (on the northwest side). The dominant vegetation includes species such as smartweed (*Polygonum hydropiperoides*), broadleaf cattail, barnyardgrass (*Echinochloa crusgalli*), and bermudagrass (*Cynodon dactylon*). Wetland 2 constitutes 0.05 acres of waters of the U.S. within the subject property.

Wetland 3 is a forested wetland located within the 100-year floodplain, adjacent to Pond 1. The dominant vegetation includes species such as cedar elm, barnyardgrass (*Echinochloa crus-galli*), broadleaf woodoats, smartweed, and curly dock (*Rumex crispus*). Wetland 1 constitutes 0.35 acres of waters of the U.S. within the subject property.

#### Functional Assessment of Waters of the U.S.

The ephemeral streams provide water quality improvement functions, but this function is limited by the ephemeral nature of the streams. The streams only have flowing water during and shortly after significant rainfall events. Therefore the streams do not continually convey water downstream which also relates to their ability to provide surface water storage. The streams only provide short-term surface water storage during and shortly after significant rainfall events. Although the surface water storage is only short-term, they still have the ability to reduce downstream flood conditions. In addition, the herbaceous vegetation within the OHWM of the streams absorbs hydraulic energy entering the stream during significant rainfall events, which in turn reduces erosion. The streams are dominated by multiple plant species. This diversity in the plant community and the presence of an established riparian buffer allow for use of the streams as wildlife habitat. Furthermore, the presence of a diversified and established riparian buffer increases the ability of the streams to provide water quality improvements from runoff from adjacent properties. The majority of the water quality improvements the streams provide take place within the stream channel. As water flows through the vegetation within the streams, suspended sediment and nutrients are removed from the water and settle on the substrate of the streams, helping to prevent sediment and nutrient loading downstream.

The on-channel ponds also provide several beneficial functions. The ponds provide habitat for semi-aquatic species such as beavers and other wildlife such as waterfowl, fish, amphibians, turtles, and aquatic invertebrates. Also the ponds provide long-term surface water storage. The storage capacity of the ponds also allows for water to filter slowly down into the water table keeping the water table high during times of low rainfall. Replenishing the water table provides water to trees and other vegetation, which in turn provides habitat and forage to wildlife species adjacent to the ponds. The ponds allow particulates in the water to settle out which reduces transport of nutrients and pesticides downstream. Dissolved substances such as nutrients and pollutants are allowed to settle out of the water and become available to plant and animal life. Plants have the capacity to absorb pollutants and toxicants and remove them from the water, improving water quality. Although most nutrients in large ponds are autochthonous, collecting nutrients from surrounding areas is an important function. The ponds maintain nutrient stocks, and produce dissolved and partially decayed organic matter, which increases water quality.

The herbaceous wetlands provide short-term water storage and water quality improvements. The herbaceous

wetlands also provide additional wildlife habitat within and adjacent to one of the on-channel ponds. The wetlands also maintain a stock of nutrients within the wetlands, and produce dissolved and partially decayed organic matter. The nutrient stock retained by the wetlands allow nutrients to become available slowly and prevent high nutrient loads from causing eutrophication downstream. These nutrients are used to maintain plant populations and downstream aquatic life. The wetlands reduce transport of high nutrient loads and pesticides downstream by retaining sediment and attached pesticides, phosphate and other nutrients. The wetlands provide food and nesting cover for wildlife, including waterfowl and other wild game as well as spawning cover for fish species. All of these functions also increase water quality downstream.

The forested wetland is a small, depression forested wetland that collects runoff from the surrounding rangeland, along with periodic flooding from Pond 1. The wetland has a minimal surface water storage capacity. The water table helps maintain biodiversity and increases herbaceous and woody plant production. The forested wetland reduces nutrient loading and the infiltration of sediments downstream by creating a water retention zone. The wetland provides food and nesting cover for wildlife, potentially including waterfowl and other wild game. The forested wetland also filters pollutants and sediment, improving water quality downstream.

The proposed development activities would result in unavoidable impacts to 6.30 acres of waters of the U.S. (*Table 2* and Exhibits 8 through 10 of 23 dated November 12, 2008). These impacts could not be avoided due to the location of the proposed developments and surface constraints, including established roadways and existing residential development in the project vicinity. The impacts would be a result of the re-location of the hydrology of Stream 1 into a man-made channel running south to north through the proposed project area. Stream 2 and Stream 3 as well as Ponds 2 - 4 would be filled and graded to facilitate the construction of the man-made channel through the project site as well as lots for the mixed use development. Streams 4 and 5 would also be filled and graded to facilitate the construction of multifamily residences.

Pond 1 would be altered and expanded to facilitate the hydrology for the aforementioned man-made channel system. However, Pond 1 would not be completely impacted because portions of the existing pond are within the footprint of the proposed expanded Pond 1. Approximately 2.45 acres of the existing open water area would be preserved within the proposed expansion of Pond 1. The remaining 0.47 acres of Pond 1 would be filled/graded. Additionally, Wetland 1, Wetland 2, and Wetland 3 would be filled and graded to allow for lots along the man-made channel system.

Along with grading and/or filling to attain proper site geometry, grading and/or filling would occur to create the open channel system through the center of the property. Hydrology from all impacted waters of the U.S. would be conveyed through this channel once the site has been graded and/or filled to attain proper site geometry. This channel would also convey runoff from adjacent developments within the watershed. This runoff would be routed through existing storm water drainage systems as well as the proposed storm water drainage prior to entering the proposed man-made channel. This water would then be continually re-circulated within the system to keep water levels constant for the man-made channel system or "Riverwalk". Surface runoff that currently provides hydrology to the existing ephemeral Stream 1 would be diverted into the proposed open channel system.

Representative cross-sections for the proposed impacts are provided in Exhibits 11 through 23 of 23 dated November 12, 2008. These cross-sections show both the existing conditions (e.g. existing ground line) and proposed conditions (e.g. proposed elevation).

**Table 2: Proposed Impacts to Waters of the U.S.**

<b>Impact</b>	<b>Waters of the U.S.</b>	<b>Classification</b>	<b>Approximate Linear Length (Feet)<sup>1</sup></b>	<b>Approximate Area (Acres)<sup>1</sup></b>
Impact 1	Stream 1	Ephemeral Stream	410	0.03
Impact 2	Stream 1	Ephemeral Stream	145	0.01
	Pond 1	On-channel Pond	--	0.47
Impact 3	Stream 1	Ephemeral Stream	254	0.01
Impact 4	Pond 2	On-channel Pond	--	2.24
Impact 5	Stream 1	Ephemeral Stream	51	0.002
	Pond 3	On-channel Pond	--	2.59
Impact 6	Stream 1	Ephemeral Stream	72	0.002
	Wetland 1	Herbaceous Wetland Fringe	--	0.08
	Wetland 2	Herbaceous Wetland	--	0.05
	Pond 4	On-channel Pond	--	0.26
Impact 7	Stream 1	Ephemeral Stream	14	0.003
	Wetland 3	Forested Wetland	--	0.35
Impact 8	Stream 1	Ephemeral Stream	1,481	0.10
	Stream 2	Ephemeral Stream	401	0.04
	Stream 3	Ephemeral Stream	83	0.006
Impact 9	Stream 4	Ephemeral Stream	725	0.05
	Stream 5	Ephemeral Stream	157	0.007
<b>Totals</b>			<b>3,793</b>	<b>6.30</b>

<sup>1</sup>Lengths and areas were calculated using ArcMap, a geographic information system program (GIS).

During project planning, the applicant considered four alternatives in an effort to avoid and minimize adverse impacts to waters of the U.S. These alternatives included the Proposed Alternative, two Alternative Actions, and a No Action Alternative. A brief description of the alternatives analysis for the project is provided in *Table 3* with more details given in the following paragraphs.

**Table 3. Summary of Alternatives Analysis**

<b>Alternative</b>	<b>Type of Development</b>	<b>Size of Building(s) (square feet)</b>	<b>Impacts to Waters of the U.S. (acres)</b>	<b>Constructed Pond Area (approximate acres)</b>	<b>Constructed Channel Length (approximate linear feet)</b>
Proposed	Retail/Office Residential (Multi) Townhome(s)	1,700,000 1,800,000 450,000	6.30	2.98	3,100
Alternative 1	Retail/Office Residential (Multi) Townhome(s)	1,600,000 1,600,000 150,000	6.64	3.20	2,100
Alternative 2	Retail/Office Residential (Multi) Townhome(s)	2,650,000 3,200,000 37,000	7.06	3.60	2,100
No-Action	None	0	0.00	N/A	N/A

Proposed Alternative

The proposed alternative would include the construction of multiple types of buildings ranging from retail stores to townhouses and their associated infrastructure including parking lots, green space, roadways, and storm water systems, which would necessitate modifications to waters of the U.S. The combined area of all the building structures within the proposed development would amount to approximately 3,950,000 square feet.

This alternative would require the grading and/or filling of the majority of the waters of the U.S. within the project area. This is due to the location of the proposed building structures, waterway systems, the location of future and existing roads and access to these roads, and for the site to be financially feasible. This alternative would relocate the hydrology of the ephemeral streambed, on-channel ponds, forested wetland, herbaceous wetland fringe, and herbaceous wetland on-site into an open channel system along the center of the project area. The open channel would begin where water flows north out of Pond 1 and over a waterfall into the open channel. The size of Pond 1 would be increased; however, portions of the pond would be filled and graded to accommodate the construction of an internal road within the development.

This proposed open channel would flow underneath the proposed road crossing through a bridge structure. The open channel would continue north through the development, passing through two more overhead roadways via bridge structures. There would be drop structures associated with each of these crossings. The open channel would also be crossed by two pedestrian crosswalks. Upon traveling the length of the proposed development site, the open channel water system would flow over a final drop structure before entering into the proposed pond at the northern portion of the proposed site. After flowing out of the proposed northern pond, water would flow into the existing streambed and continue on to Timber Creek.

The proposed channel/pond system would be maintained at a constant pool elevation. A groundwater well has been proposed to help provide sufficient water volume to maintain these levels (i.e., make-up water). Additional water would be captured by means of rainwater harvesting within the proposed development. This

runoff would flow through a water treatment system before it is conveyed to the open channel water system and associated pond features. Finally, a circulation pump has been proposed to assist in regulating and maintaining flow through the open channel system. This pump would circulate water from the downstream pond structure back to the existing pond (Pond 1) at the origin of the water system. The combination of groundwater runoff captured on-site, upstream off-site runoff, and recirculation should provide adequate hydrology as well as acceptable water quality.

The focus of the Proposed Alternative is the Central Park located along the proposed open channel system. Central Park would be a park which residents and customers of the surrounding development would be able to utilize as well as citizens of the Town of Flower Mound. Alternating areas (i.e. open sides) along the open channel system would consist of turf grass lawns. Opposite sides would consist of sidewalks or walkways along the channel edge. Turf grass lawn areas would be incorporated along and around the proposed buildings, parking lots, and driveways.

Additional areas of open space have been incorporated into the Proposed Alternative. Open space would surround both of the proposed on-channel ponds, as well as between the existing residential development and the proposed commercial development to the north.

Multiple drop structures would be placed along the open channel water system. The drop structures are proposed to help maintain the existing grade of the stream and other impacted structures as well as contribute to the aesthetic aspects of the waterway. The drop structures as well as the proposed spillway and plunge pond would help maintain necessary hydraulic function within the system. In addition, these attributes would provide visual enhancement which further contributes to the overall goals of the mixed use development.

The size, storage capacity, location, and elevation of the proposed open channel, the expanded existing pond, and the created new pond were designed to convey peak discharges from the watershed at future, ultimate development conditions through the proposed development with minimal flooding impacts. The proposed drainage features were also designed such that the proposed development does not cause increased flooding downstream.

This alternative was selected as the preferred alternative because it would achieve the project goal of providing a financially feasible mixed use development while still maintaining the hydrologic and hydraulic functions of the waters of the U.S. on-site. This alternative would also provide the aesthetic enhancement needed to fit the theme of the project.

#### Alternative 1

This alternative would include the construction of multiple buildings and their associated infrastructure including parking lots, green space, interior roads, and storm water systems, which would necessitate modifications to waters of the U.S. The combined area of the proposed buildings within this alternative was estimated using the master plan maps. The total area was estimated to be approximately 3,350,000 square feet.

This alternative would also include the construction of the open channel system along the center of the project area as described in the Proposed Alternative. Impacts to waters of the U.S. would increase due to greater expansion of the on-channel pond (Pond 1) on the south end of the development. This expansion would result in an approximately 0.33 acre increase in impacts from the proposed alternative.

This alternative was not selected as the preferred alternative because of the increase in impacts to waters of the U.S.

#### Alternative 2

This alternative would include the construction of multiple buildings and their associated infrastructure including parking lots, green space, interior roads, and storm water systems, which would necessitate modifications to waters of the U.S. The estimated combined area of the buildings within this alternative was significantly greater than the proposed alternative (approximately 5,887,000 square feet), however there was a substantial loss in town home area.

This alternative would also include the construction of the open channel system along the center of the project area as described in the Proposed Alternative. Impacts to waters of the U.S. would increase due to expansion of the on-channel pond (Pond 1) on the south end of the development. This expansion would result in an approximately 0.75 acre increase in impacts from the proposed alternative.

This alternative was not selected as the preferred alternative because of the increase in impacts to waters of the U.S. as well as the loss of town home area. This loss of space does not achieve the goals of the proposed development.

#### No-Action Alternative

The no-action alternative would include no construction of any kind on the subject property. The no-action alternative would not result in any impacts to waters of the U.S. This alternative is not considered viable due to the fact that it would not allow for the development of the property, thereby not meeting the financial goals of the property owner. Although the alternative does eliminate impacts to waters of the U.S., it does not satisfy the overall project purpose.

Additionally, the No-Action Alternative would result in no tax revenue increase in the Town of Flower Mound. The project as outlined in the Proposed Alternative would provide the town with an additional estimated \$10 million in tax revenues.

To compensate for unavoidable impacts to waters of the U.S., the applicant is proposing to debit 23.9 credits from the Trinity River Mitigation Bank to compensate for lost functions of impacted waters of the U.S. Purchased mitigation bank credits would serve to enhance and preserve the Trinity River corridor pursuant to the management plan and mitigation banking instrument for the bank. This mitigation would compensate for impacts associated with this project. Trinity River Mitigation Bank was selected after an evaluation of the USGS Hydrologic Units (USGS HU). The waters of the U.S. that would be impacted by the proposed project flow into Timber Creek which is an intermittent stream (USGS HU 12030103). Timber Creek flows southeast into the Elm Fork of the Trinity River (USGS HU 12030103) which then flows south and into the main branch of the Trinity River (USGS HU 12030105). Trinity River Mitigation Bank is the nearest bank that provides direct benefits to waters flowing from the project area. Trinity River Mitigation Bank provides numerous functions within the immediate floodplain of the Trinity River.

The mitigation bank credits would serve to enhance, restore, and preserve the Trinity River corridor and in doing so provide functional replacement for the impacted waters of the U.S. The mitigation banking instrument for the bank uses ratios to determine the appropriate numbers of credits to be purchased for impacts. These credits are tied to enhancement, restoration, and preservation activities to waters of the U.S. within the bank.

**PUBLIC INTEREST REVIEW FACTORS:** This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including its cumulative effects. Among the factors addressed are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE in determining whether to issue, issue with modifications, or conditions, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**STATE WATER QUALITY CERTIFICATION:** This project would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two is above the threshold), and as such would not fulfill Tier I criteria for the project. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with USACE processing of this Department of the Army application, the TCEQ is reviewing this application under Section 401 of the Clean Water Act, and Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the USACE and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. **Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087.** The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of the work is made available for review in the TCEQ's Austin Office. The TCEQ may conduct a public meeting to consider all comments concerning water quality if requested in writing. A request for a public meeting must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requestor, or of persons represented by the requestor; and a brief description of how the application, if granted, would adversely affect such interest.

**ENDANGERED AND THREATENED SPECIES:** The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species list to determine if any may occur in the project area. The proposed project would be located in a county where the whooping crane (*Grus americana*), piping plover (*Charadrius melodus*), and interior least tern (*Sterna antillarum*) are known to

occur or may occur as migrants. Our initial review indicates that the proposed work would have no effect on federally-listed endangered or threatened species.

**NATIONAL REGISTER OF HISTORIC PLACES:** The USACE has reviewed the latest complete published version of the National Register of Historic Places and found no listed properties located in the project area. A cultural resources evaluation was conducted for the project area on February 11, 2008. Base on the findings of this evaluation, the area is considered to have a low potential for the presence of historic or prehistoric sites.

**FLOODPLAIN MANAGEMENT:** The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

**SOLICITATION OF COMMENTS:** The public notice is being distributed to all known interested persons in order to assist in developing information upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

**PUBLIC HEARING:** Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

**CLOSE OF COMMENT PERIOD:** All comments pertaining to this Public Notice must reach this office on or before April 28, 2009, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to ; Regulatory Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1740. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER  
FORT WORTH DISTRICT  
CORPS OF ENGINEERS



**Legend**

 Approximate Property Boundary

0 1.5 3 Miles

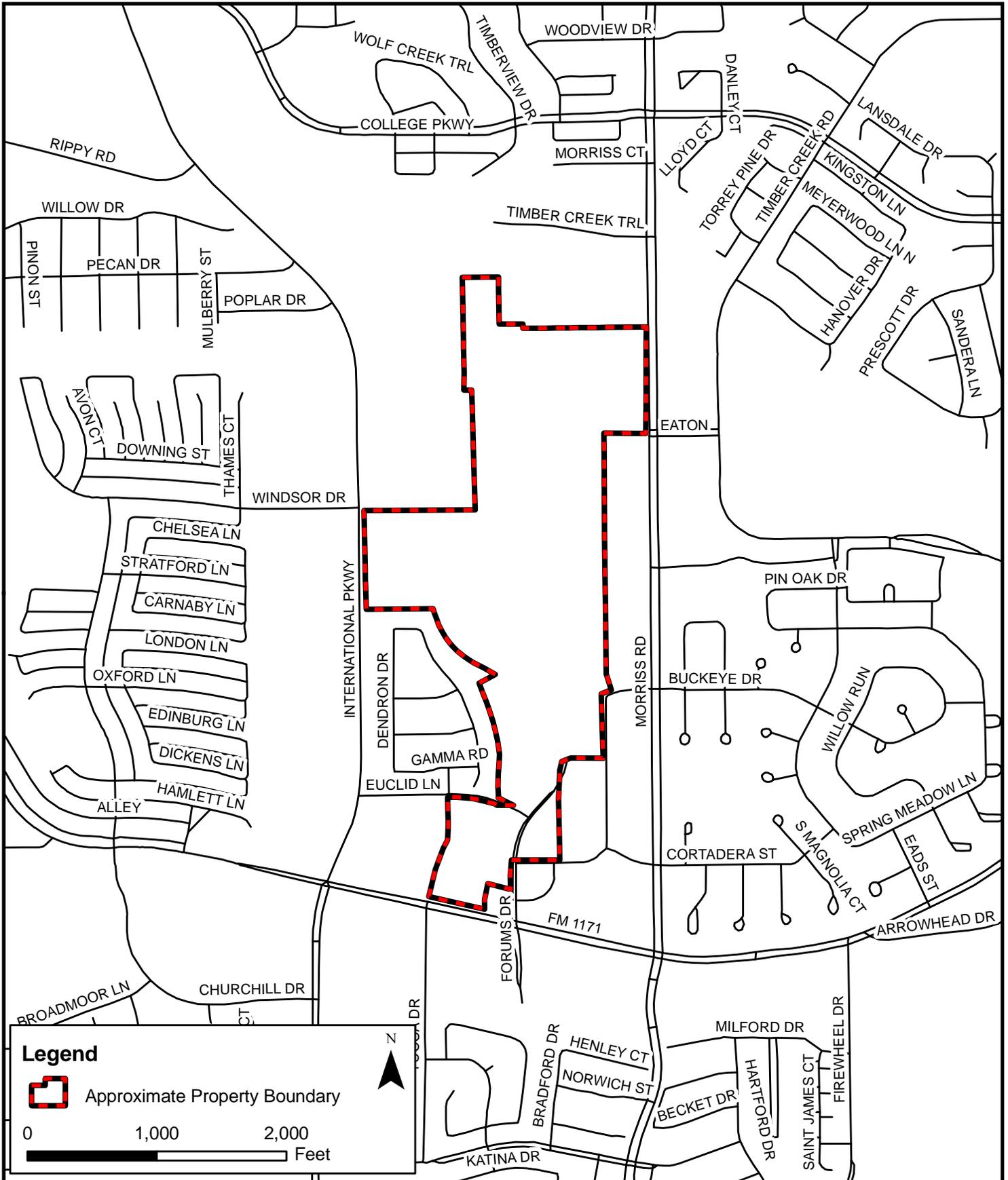




**Vicinity Map**  
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source:  
ESRI © Data (2006)

**Exhibit**  
**1 of 23**



**Legend**

 Approximate Property Boundary

0 1,000 2,000 Feet



**Local Area Map**

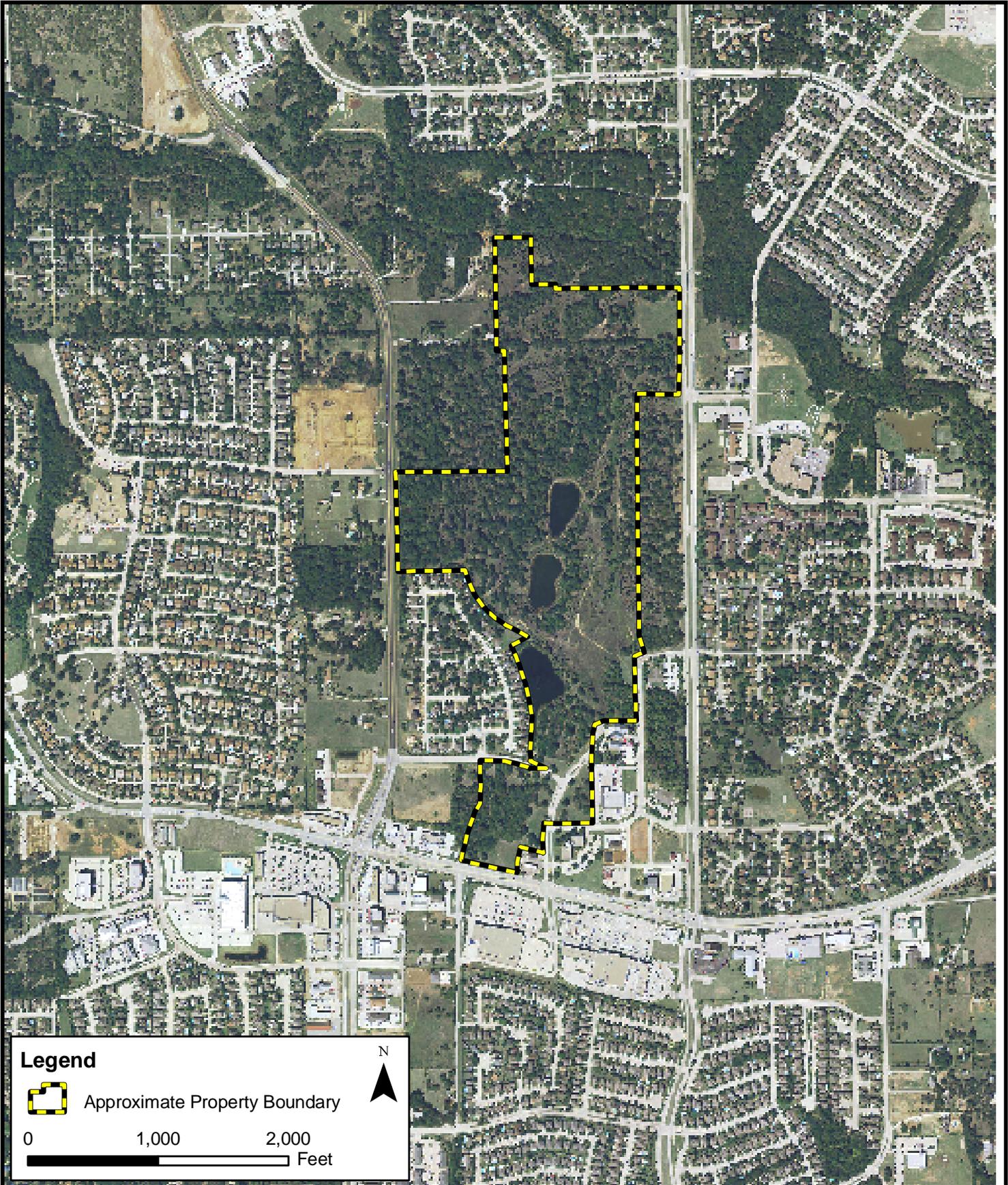
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source:  
Texas State Data  
Center (2000)

**Exhibit**

**2 of 23**





**Legend**



Approximate Property Boundary



0 1,000 2,000  
Feet

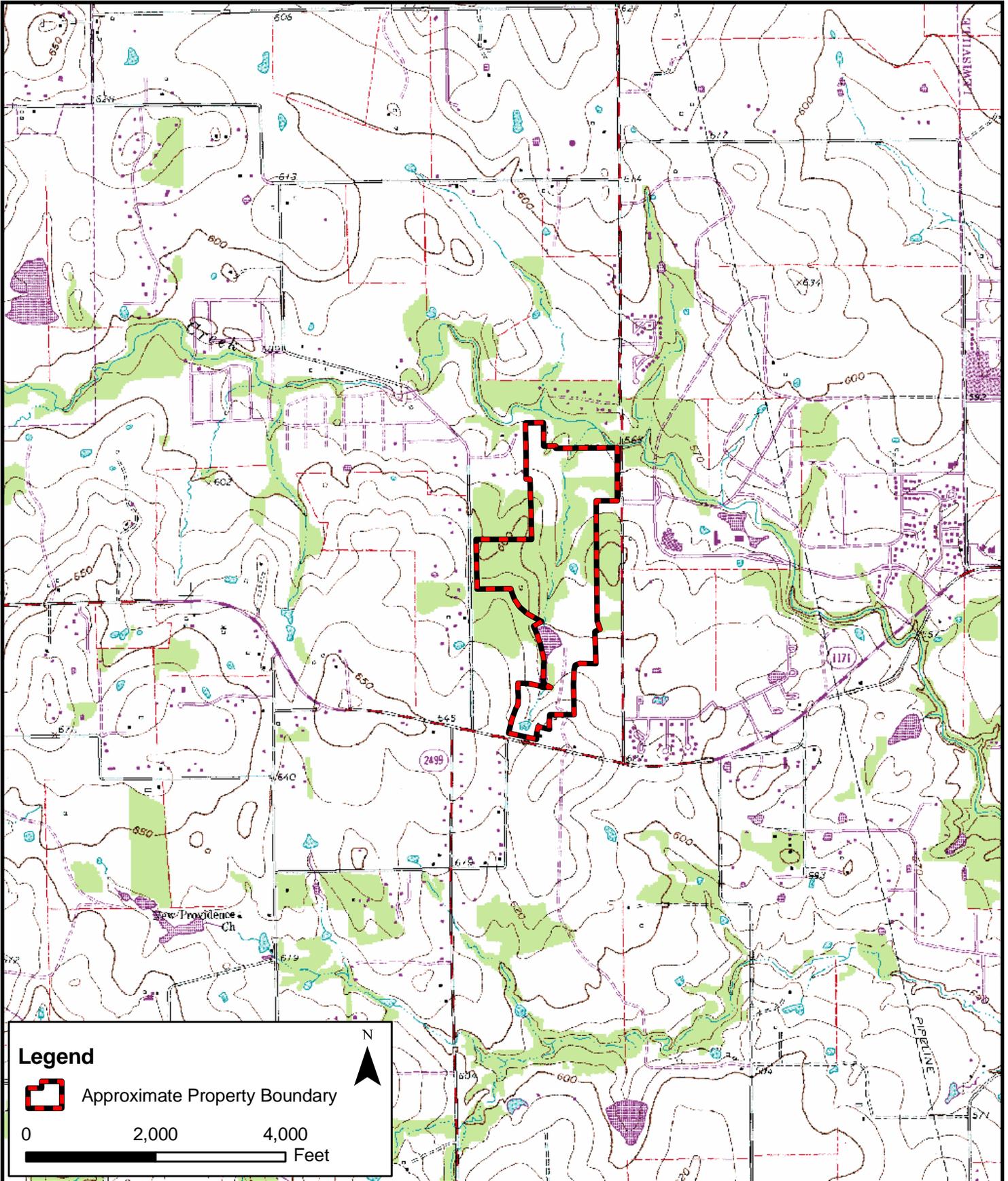


**2006 Aerial Photograph**  
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source:  
AEI Imagery (2006)

**Exhibit**

**3 of 23**



**Legend**

 Approximate Property Boundary

0      2,000      4,000  
Feet

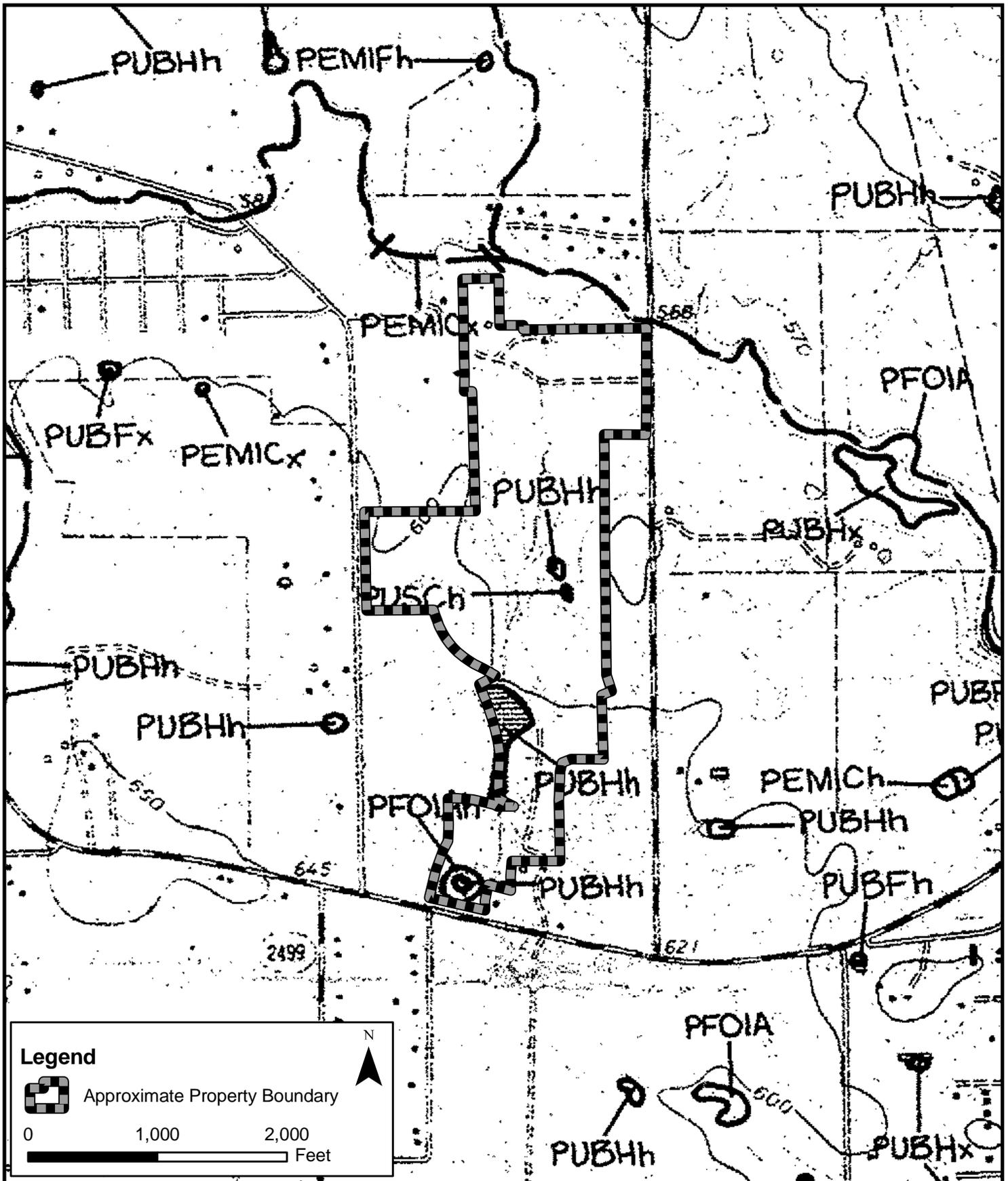
N



**USGS Topographic Map**  
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source: Texas Natural  
Resources Information System  
7.5 Minute Series-  
Lewisville West (1981)

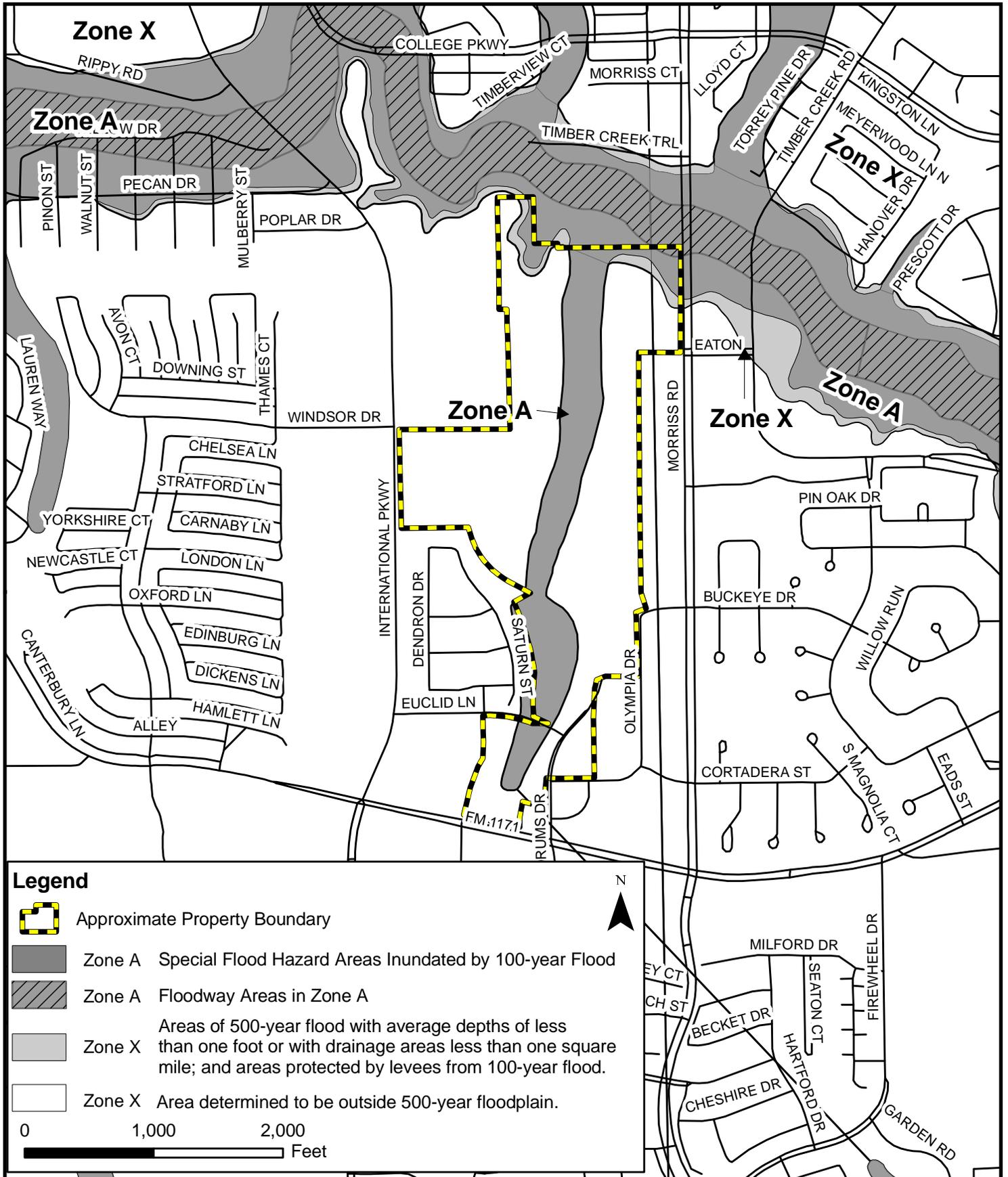
**Exhibit**  
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**National Wetlands Inventory Map**  
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source: U.S. Department of the Interior (1992)

**Exhibit**  
**5 of 23**



**Floodplain Insurance Rate Map**

The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008

Source:  
 Federal Emergency Management  
 Agency (1995)

**Exhibit**

**6 of 23**



**Legend**

Approximate Property Boundary

**Waters of the U.S.**

- Herbaceous Wetland Fringe
- On-Channel Pond
- Ephemeral Stream
- Herbaceous Wetland
- Forested Wetland

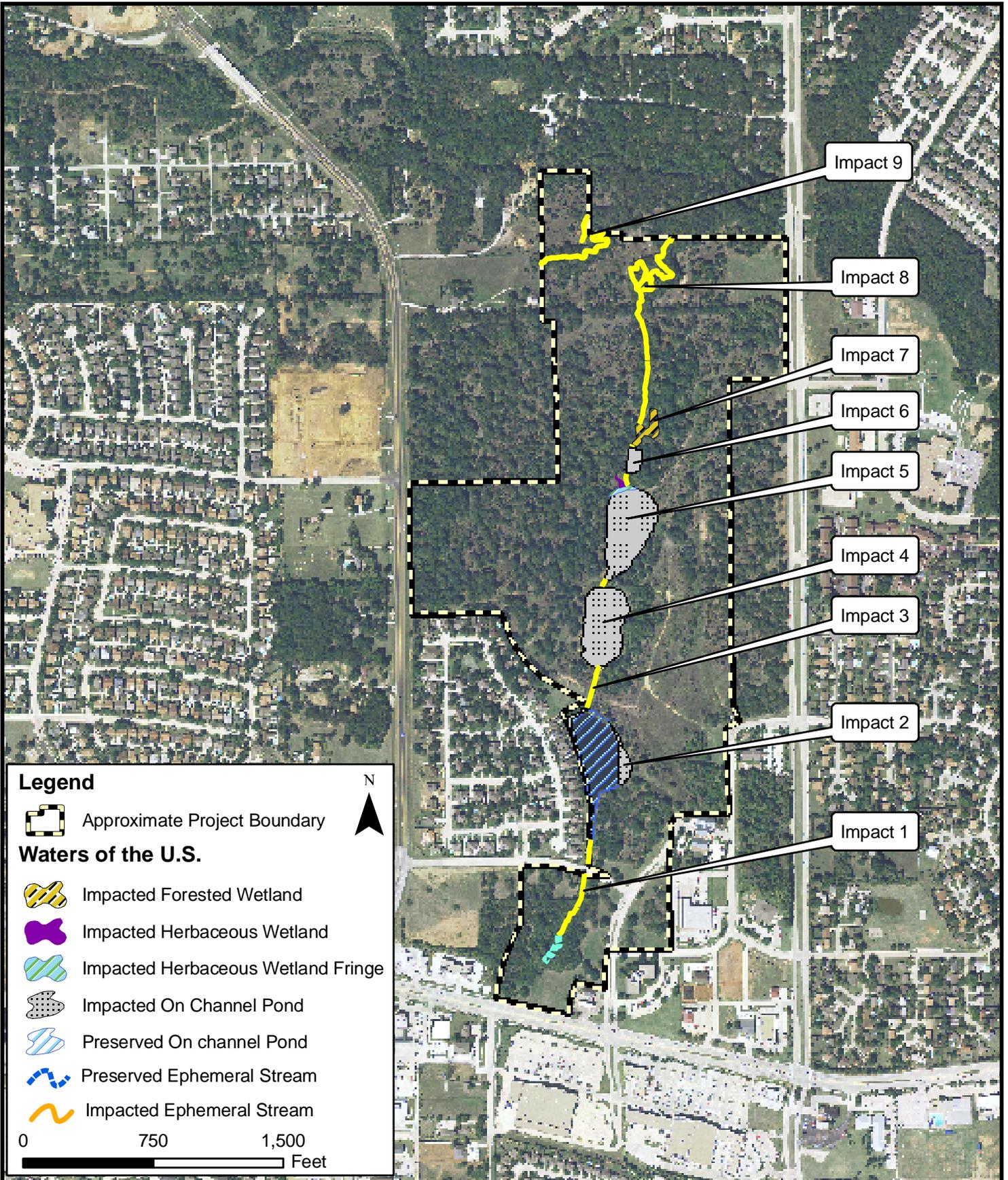
0                  600                  1,200  
Feet



**Waters of the U.S.**  
The Riverwalk at Central Park  
Flower Mound, Denton County, Texas  
USACE Project No. SWF-2008-00291  
November 12, 2008

Source: AEView (2006)

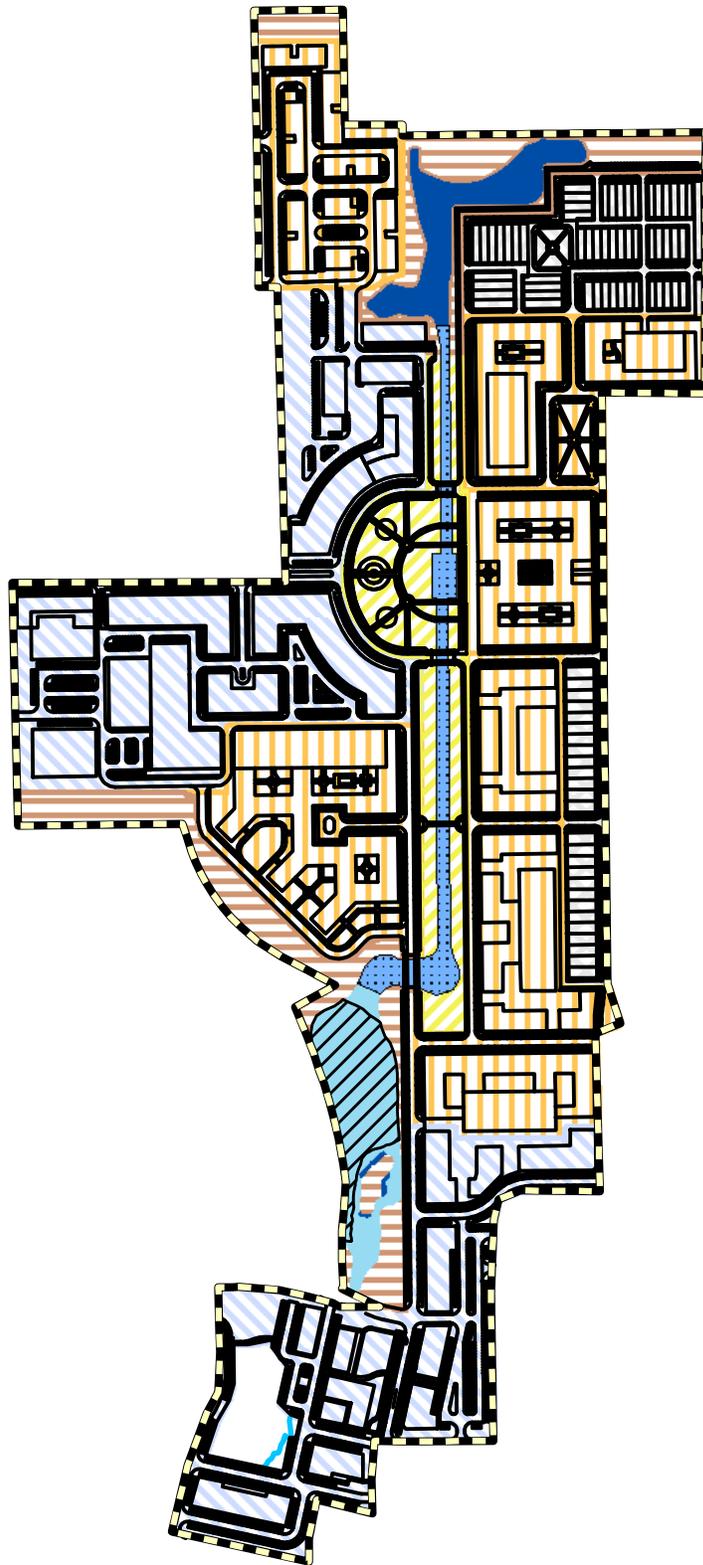
**Exhibit**  
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**Legend**

-  Approximate Project Boundary
-  N
- Waters of the U.S.**
-  Impacted Forested Wetland
-  Impacted Herbaceous Wetland
-  Impacted Herbaceous Wetland Fringe
-  Impacted On Channel Pond
-  Preserved On channel Pond
-  Preserved Ephemeral Stream
-  Impacted Ephemeral Stream

0 750 1,500 Feet



**Legend**

- Approximate Project Boundary

**Preserved Waters of the U.S.**

- Ephemeral Stream

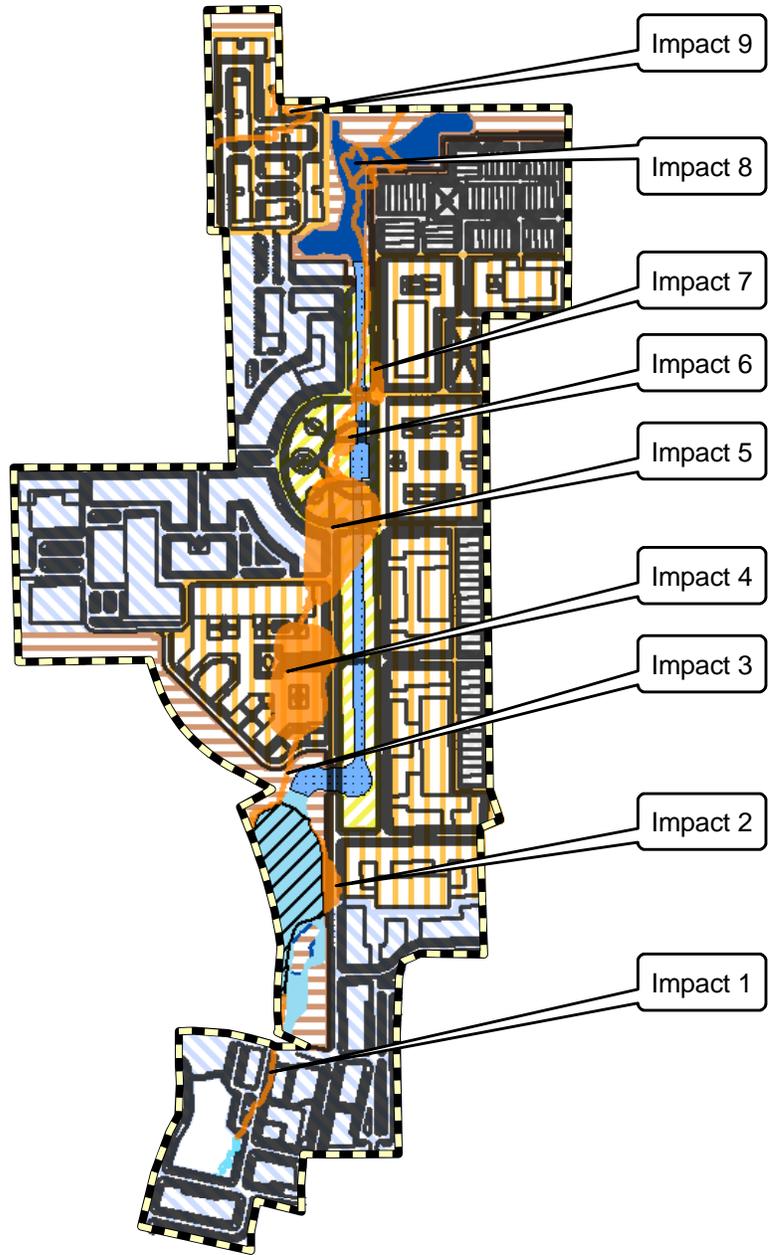
**Proposed Features**

- Channel
- North Pond
- South Pond

**Development Types**

- Open Space
- Residential - Multifamily
- Residential - Townhomes
- Retail/Office

0                  600                  1,200  
 Feet

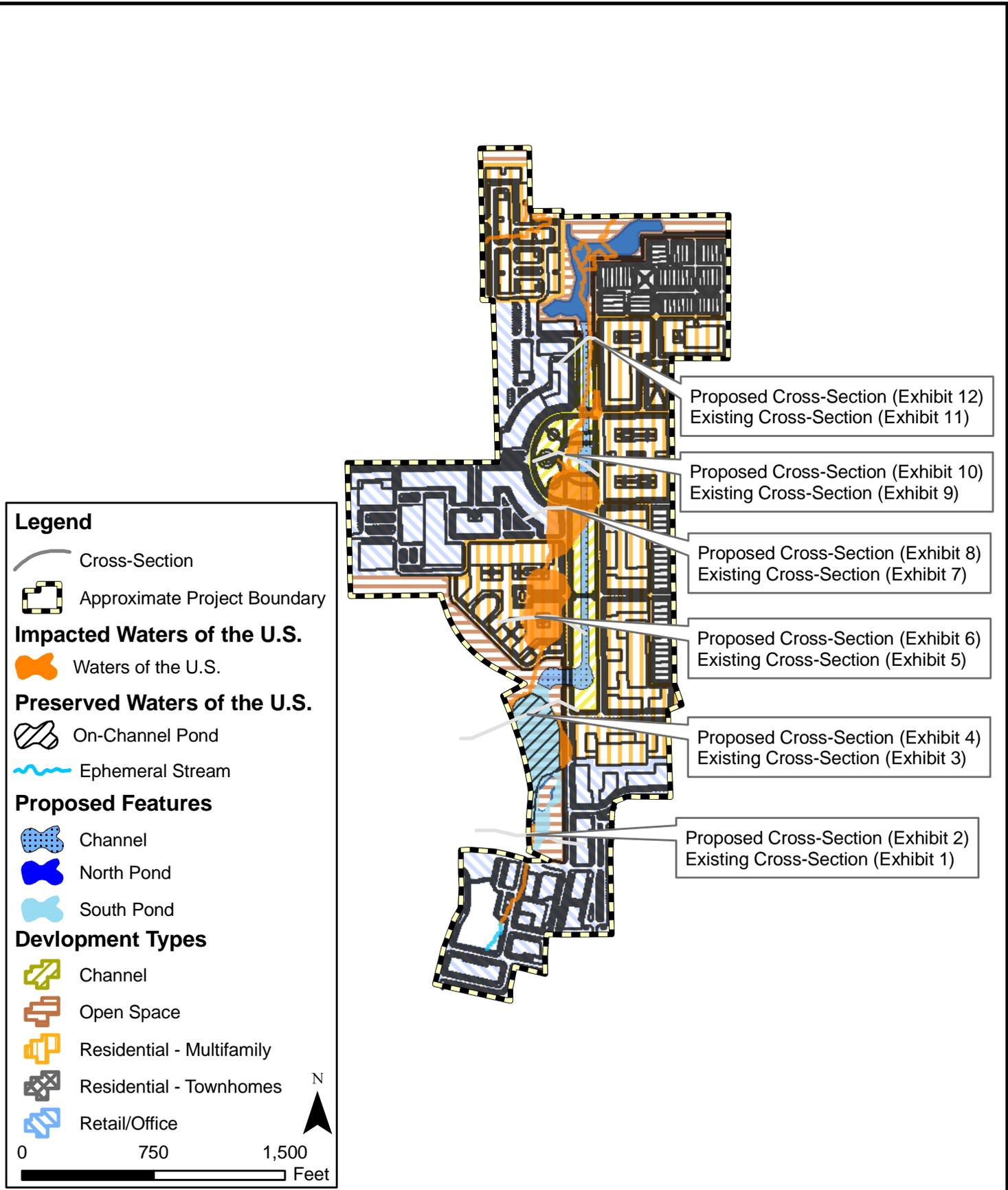


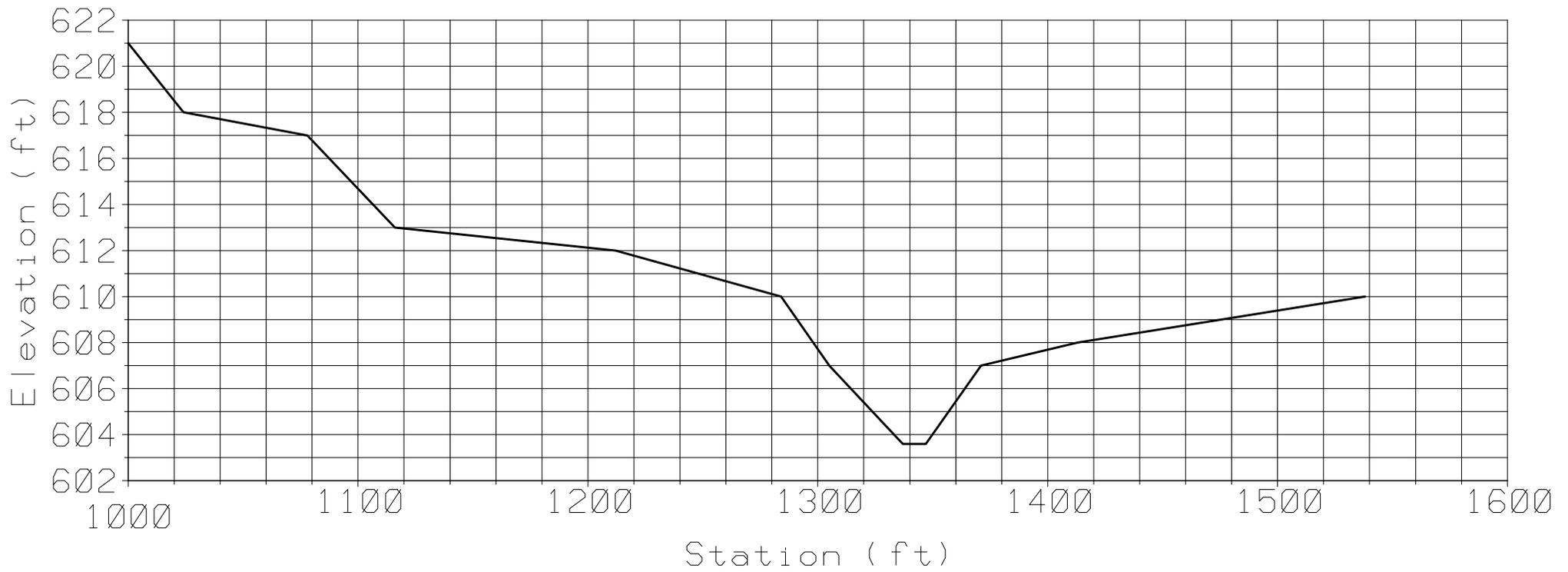
**Legend**

- Approximate Project Boundary
- Impacted Waters of the U.S.**
- Waters of the U.S.
- Preserved Waters of the U.S.**
- On-Channel Pond
- Ephemeral Stream
- Proposed Features**
- Channel
- North Pond
- South Pond
- Development Types**
- Channel
- Open Space
- Residential - Multifamily
- Residential - Townhomes
- Retail/Office

0 750 1,500 Feet

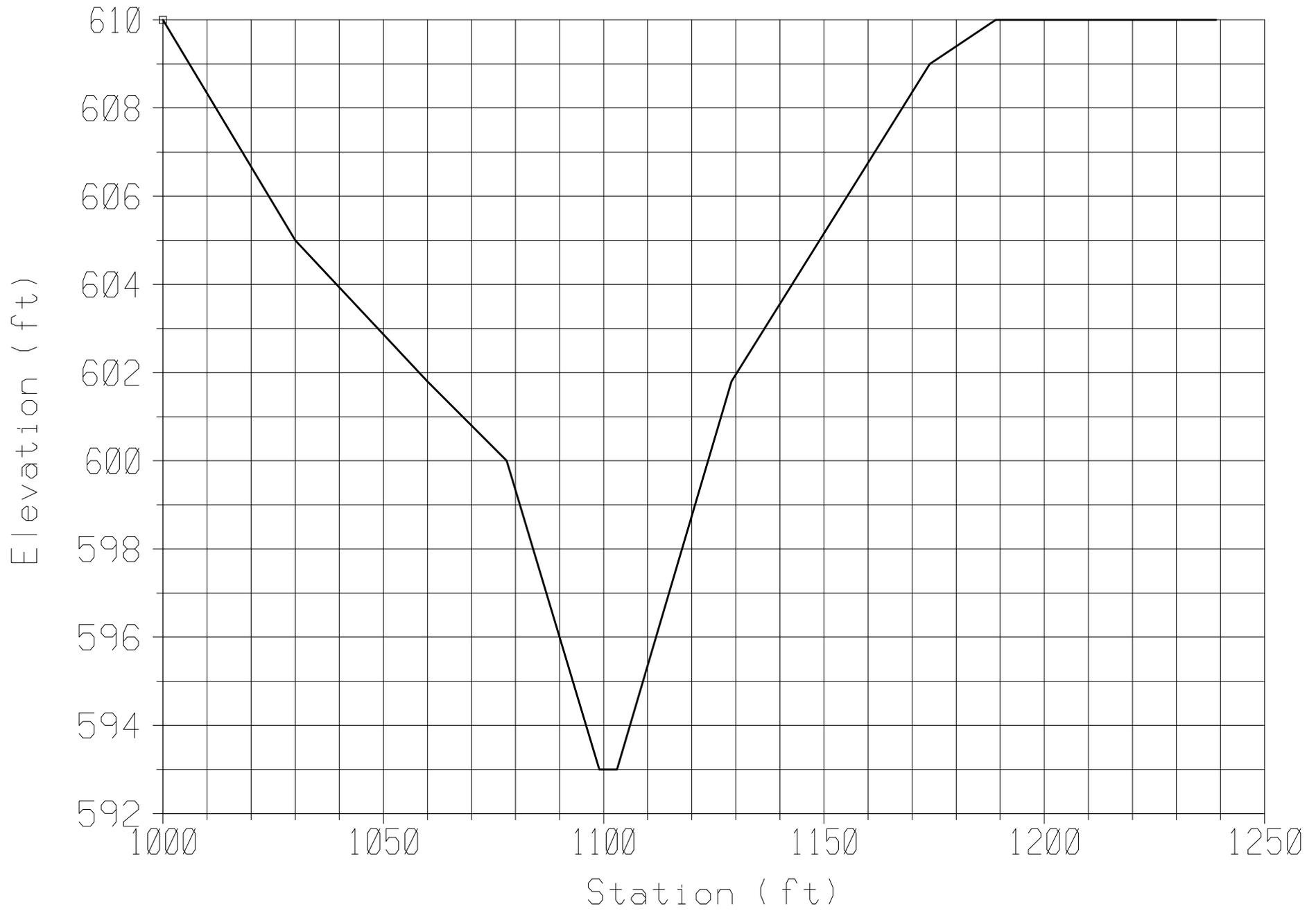
N





Cross-Section of Existing Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008

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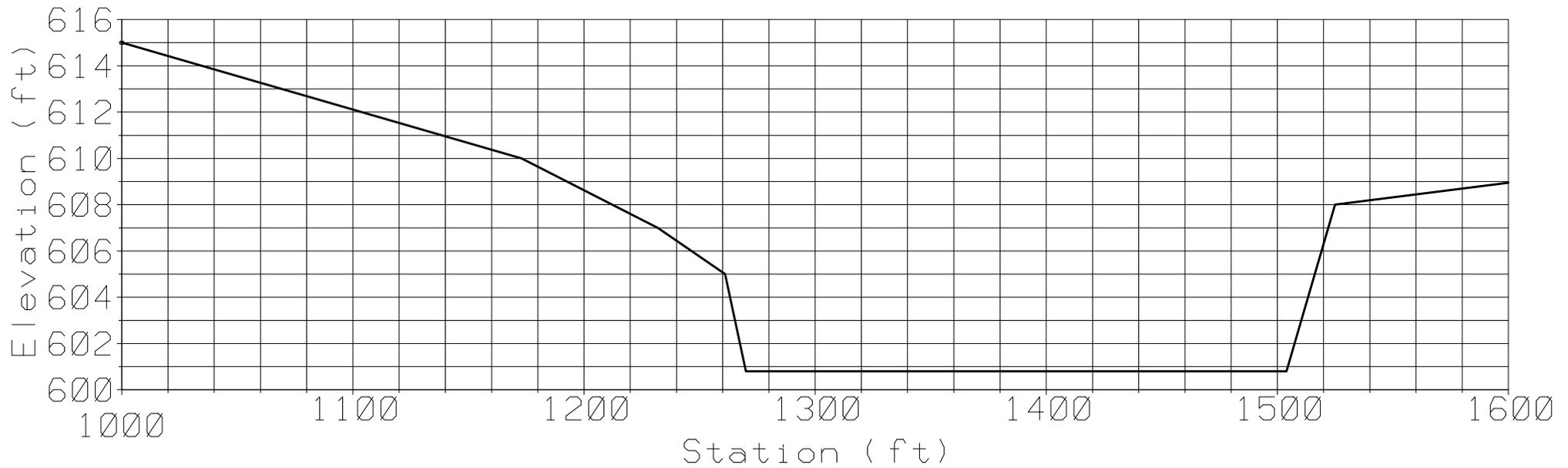


Cross-Section of Proposed Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008



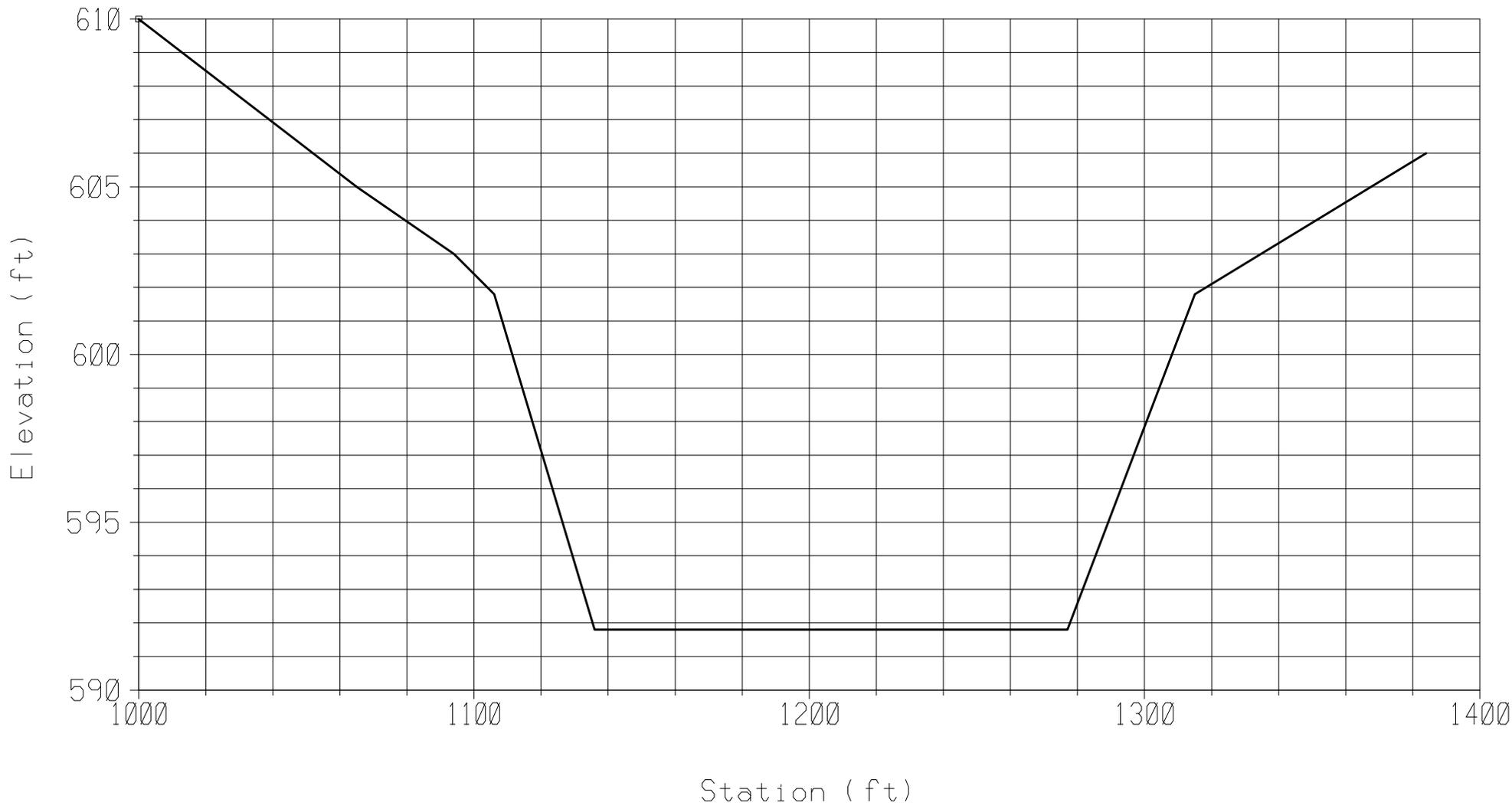
Exhibit

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Cross-Section of Existing Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
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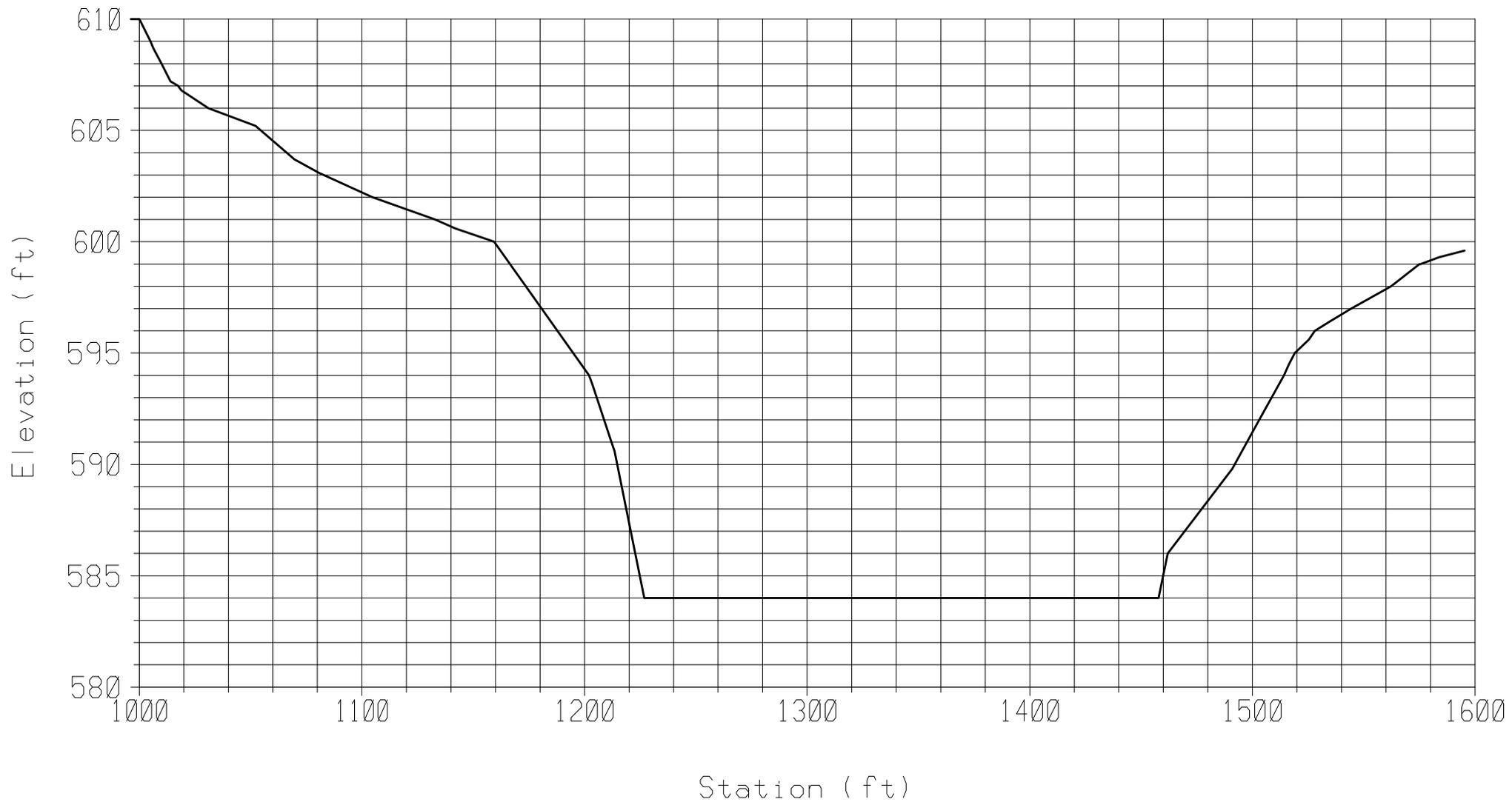
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Cross-Section of Proposed Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008



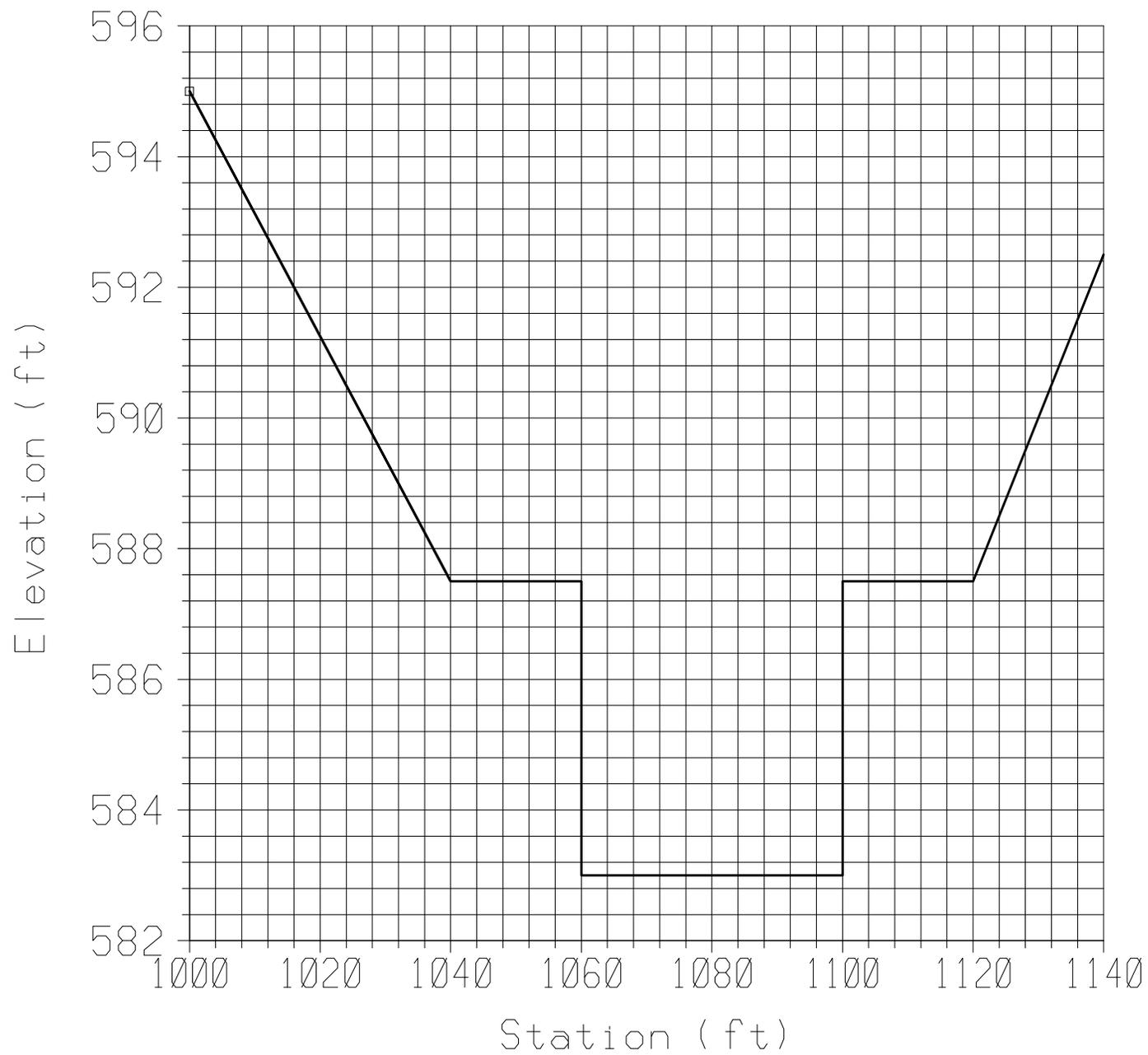
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Cross-Section of Existing Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008

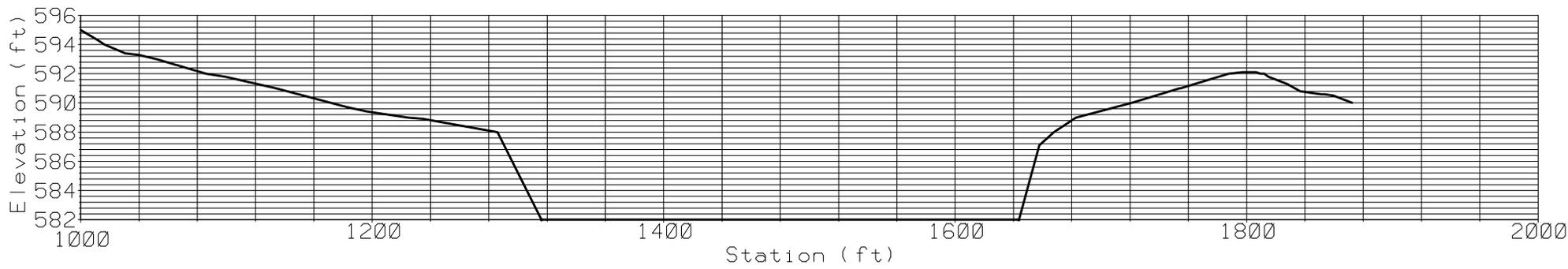


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Cross-Section of Proposed Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
 November 12, 2008

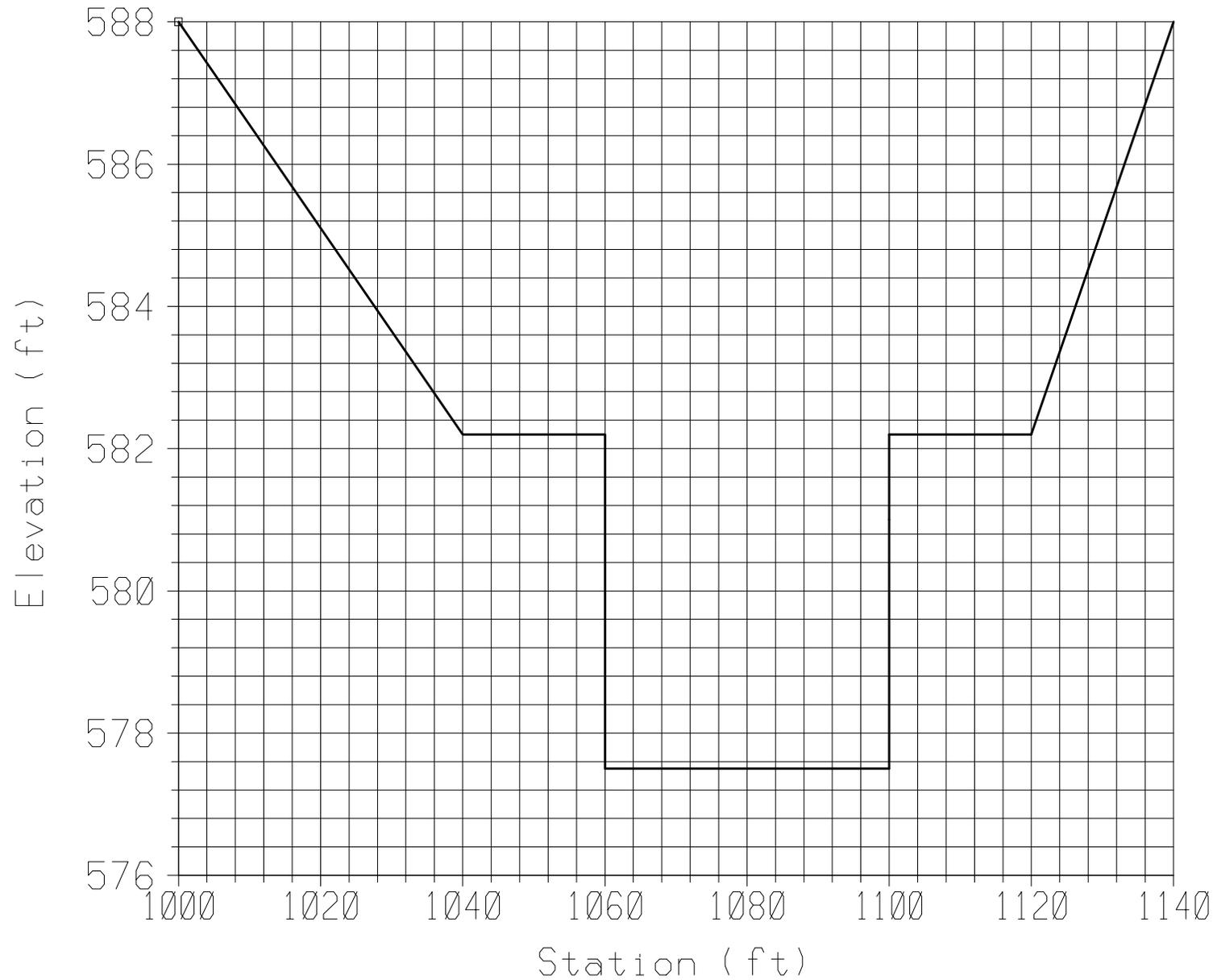
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Cross-Section of Existing Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
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 November 12, 2008

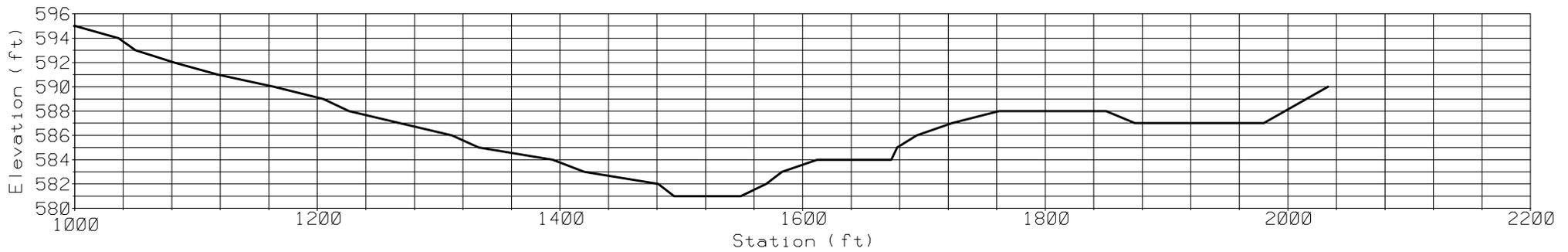


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Cross-Section of Proposed Conditions  
 The Riverwalk at Central Park  
 Flower Mound, Denton County, Texas  
 USACE Project No. SWF-2008-00291  
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Cross-Section of Existing Conditions  
 The Riverwalk at Central Park  
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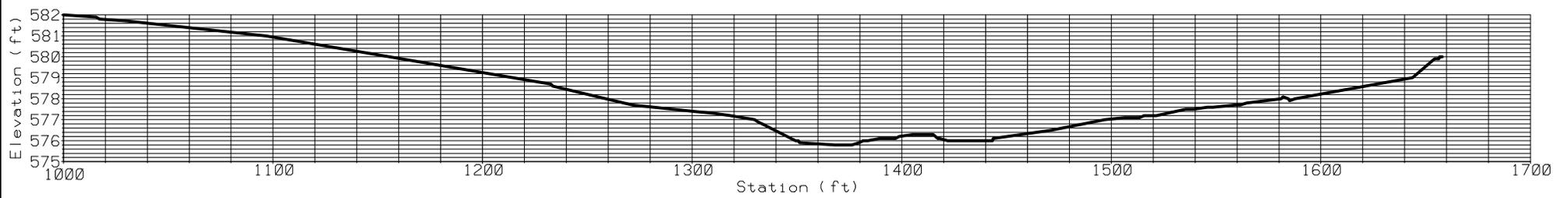


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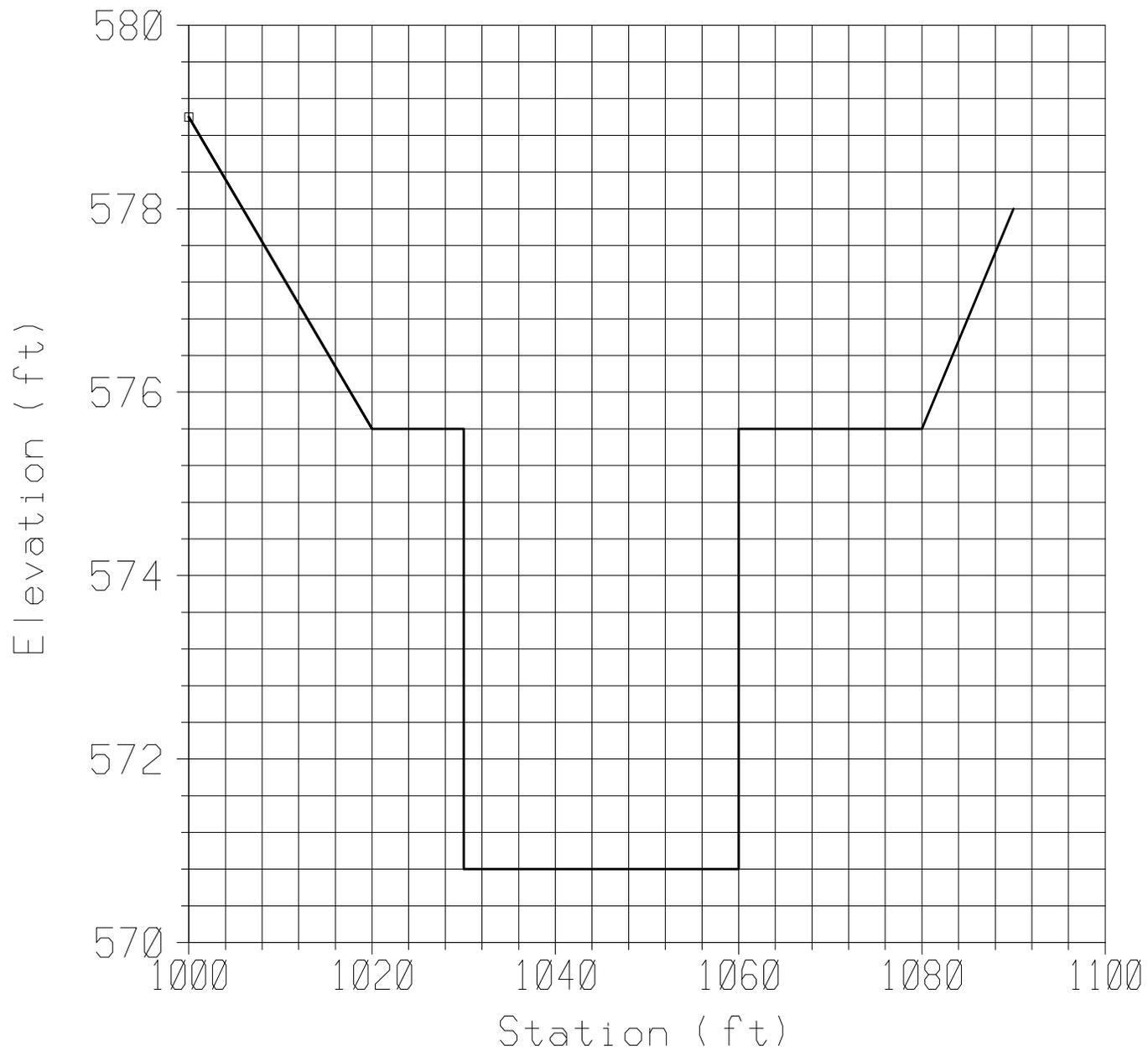
Cross-Section of Proposed Conditions  
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Cross-Section of Existing Conditions  
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 November 12, 2008

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Cross-Section of Proposed Conditions  
 The Riverwalk at Central Park  
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 November 12, 2008

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