



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

Public Notice

Applicant: City of Grand Prairie

Project No.: SWF-2019-00220

Date: February 10, 2020

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 will 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 proposed stabilization of bed and both banks of Cottonwood and Fish Creeks at seven separate and complete location.

APPLICANT: City of Grand Prairie
Mr. Chris Agnew, P.E., City Project Manager
206 West Church Street
Post Office Box 534045
Grand Prairie, Texas 75053

APPLICANT'S AGENT: Mr. Brian Jonescu
Halff Associates, Inc.
1201 North Bowser Road
Richardson, Texas 75081-2275

APPLICATION NUMBER: SWF-2019-00220, Cottonwood and Fish Creeks Stream Stability Project

DATE ISSUED: February 10, 2020

LOCATION: The proposed projects would be located along seven distinct locations in the Cottonwood and Fish Creeks in Dallas and Tarrant Counties, Texas. The proposed activity along Cottonwood Creek (CCMS-5 HB, CCMS-5, and CCMS-6) is located east of the intersection of Gramley Street and Southeast 5th Street in the City of Grand Prairie, Dallas County, Texas (Latitude 32.732162 North, Longitude -96.997231 West) on the Arlington Texas 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 120301020607. The proposed activity at the Fish Creek location called FISH-3 is located south of the intersection of Creekside Drive and Covington Court in the City of Grand Prairie, Tarrant County, Texas (Latitude 32.659870 North, Longitude -97.043690 West) on the Duncanville Texas 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 120301020606. The proposed activity at the Fish Creek location called FISH-6B and FISH-A is located southwest of the intersection of Matthew Road and Fish Creek in the City of Grand Prairie, Dallas County, Texas (Latitude 32.664996 North, Longitude -97.031465 West) on the Duncanville Texas 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 120301020606. The proposed activity at the Fish Creek location called FISH-8 is located north of the intersection of Bardin Road and Fish Creek in the City of Grand Prairie, Dallas County, Texas (Latitude 32.667793 North, Longitude -97.019664 West) on the Duncanville Texas 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 120301020606.

OTHER AGENCY AUTHORIZATIONS: State Water Quality Certification

PROJECT DESCRIPTION: The applicant proposes to discharge approximately 902.3 cubic yards of dredged and fill material into approximately 0.10-acre of waters of the United States in conjunction with the construction of erosion control features in Cottonwood and Fish Creeks. Total proposed impacts to waters of the U.S. include 205 linear feet (0.10 acres) of perennial streams. Fill material will be comprised of dry rock riprap and grouted rock riprap. The proposed project consists of seven discrete locations along Cottonwood Creek and Fish Creek. Three locations are located along Cottonwood Creek (CCMS-5 HB, CCMS-5, CCMS-6) and four are located along Fish Creek (FISH-3, FISH-6B, FISH-6A, and FISH-8). After a geomorphic stream assessment conducted by Freese and Nichols, these locations were determined to be the minimum necessary to stabilize stream reaches surrounding the project locations.

The seven locations and the proposed impacts are as follows:

- Site 1: CCMS-5 HB (Drawings C4.00 and C4.01) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Henry Branch, north of the confluence with Cottonwood Creek, for a distance of approximately 25 feet. The applicant proposes to place approximately 40 CY of 24" dry rock rip rap along the channel bottom, maintaining the pre-construction grade of the channel. The banks of the channel would be excavated, and grouted riprap would be placed at a 1.5:1 slope. Along the left bank (looking downstream), approximately 57 CY of grouted riprap would be placed. Along the right bank, approximately 43 CY of grouted riprap would be placed. Total amount of grouted material below the OHWM would be 50.1 CYs. Fill below the ordinary high water mark (OHWM; 0.007 acres) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawings C4.00 and C4.01).
- Site 2: CCMS-5 (Drawings C4.00 and C4.01) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Cottonwood Creek, east of the confluence with Henry Branch, for a distance of approximately 30 feet. The applicant proposes to place approximately 100 CY of 24" dry rock rip rap along the channel bottom. Along the banks of the channel 18" grouted riprap would be placed at a 2:1 slope. Along the left bank (looking downstream), approximately 68 CY of grouted riprap would be placed. Along the right bank (looking downstream), approximately 48 CY of grouted riprap would be placed. Total amount of grouted material below the OHWM would be 48.9 CYs. Fill below the OHWM (0.017-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawings C4.00 and C4.01).
- Site 3: CCMS-6 (Drawing C4.02) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Cottonwood Creek, west of the intersection of Belt Line Road and Cottonwood Creek, for a distance of approximately 30 feet. The applicant proposes to place approximately 100 CY of 24" dry rock rip rap along the channel bottom. The left bank (looking downstream) would be stabilized using 60 CY of grouted rock riprap placed at a 2:1 slope. The re-graded slope would follow closely to the pre-construction contour of the left bank. Along the right bank (looking downstream), approximately 45 CY of grouted rock riprap would be placed at a slope of 1:1. The right bank would be slightly excavated to accommodate the proposed grading and placement of the riprap. Total amount of grouted material below the OHWM would be 60 CYs. Fill

below the OHWM (0.019-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawing C4.02).

Site 4: FISH-3 (Drawings C6.00 and C6.01) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Fish Creek, south of the intersection of Creekside Drive and Covington Court, for a distance of approximately 30 feet. The applicant proposes to place approximately 110 CY of 24" dry rock rip rap along the channel bottom. Along the banks of the channel 18" grouted riprap would be placed at a 1.5:1 slope. Along the left bank (looking downstream), approximately 108 CY of grouted riprap would be placed. Along the right bank (looking downstream), approximately 73 CY of grouted riprap would be placed. Total amount of grouted material below the OHWM would be 46.7 CYs. Fill below the OHWM (0.02-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawings C6.00 and C6.01).

Site 5: FISH-6B (Drawings C6.02 and C6.03) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Fish Creek, west of the intersection of Matthew Road and Fish Creek, for a distance of approximately 30 feet. The applicant proposes to place approximately 65 CY of 24" dry rock rip rap along the channel bottom. Along the banks of the channel 18" grouted riprap would be placed at a 1.5:1 slope. Both banks would be excavated to accommodate for the placement of the riprap at this slope. Along the left bank (looking downstream), approximately 68 CY of grouted riprap would be placed. Along the right bank (looking downstream), approximately 88 CY of grouted riprap would be placed. Total amount of grouted material below the OHWM would be 60 CYs. Fill below the OHWM (0.014-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawings C6.02 and C6.03).

Site 6: FISH-6A (Drawings C6.02 and C6.03) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Fish Creek, west of the intersection of Matthew Road and Fish Creek and downstream of FISH-6B, for a distance of approximately 30 feet. The applicant proposes to place approximately 65 CY of 24" dry rock rip rap along the channel bottom. Along the banks of the channel 18" grouted riprap would be placed at a 1.5:1 slope. Along the left bank (looking downstream), approximately 85 CY of grouted riprap would be placed. The left bank would be excavated to accommodate the slope required for this streambank stabilization. Along the right bank (looking downstream), approximately 67 CY of grouted riprap would be placed, following the existing slope of the channel. Total amount of grouted material below the OHWM would be 30.6 CYs. Fill below the OHWM (0.012-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawings C6.02 and C6.03).

Site 7: FISH-8 (Drawing C6.04) – At this location, the applicant proposes to stabilize both banks and the channel bottom of Fish Creek, north of the intersection of West Bardin Road and Fish Creek, for a distance of approximately 30 feet. The applicant proposes to place approximately 65 CY of 24" dry rock rip rap along the channel bottom. Along the banks of the channel 18" grouted riprap would be placed at a 2:1 slope. Both banks would be excavated to accommodate for the placement of the riprap at this slope. Along the left bank (looking downstream), approximately 76 CY of grouted riprap would be placed. Along the right bank (looking downstream), approximately 79 CY of grouted

riprap would be placed. Total amount of grouted material below the OHWM would be 60 CYs. Fill below the OHWM (0.015-acre) would be to stabilize the channel bottom and would match existing channel bottom topography (Drawing C6.04).

Rock filter dams would be placed downstream of all proposed projects to prevent sedimentation of downstream ecosystems during construction. These would be removed after construction is completed. Given the small footprint of the activity at each project location, cumulative impacts would be negligible. Indirect impacts could occur from water quality disturbance during construction activities and sedimentation after construction is complete and after staging areas are restored to pre-existing contours.

INTRODUCTION: The applicant states the purpose of the proposed project is to conduct proactive measures to stabilize the existing in-stream environments of Cottonwood and Fish Creeks outside of the project areas. Applicant states “the Cottonwood and Fish Creek watersheds are heavily urbanized, with significant storm flows during high precipitation events. This has led to severe down-cutting of both streams, causing stream stability issues. A study conducted by Freese and Nichols determined the optimal locations for stream stabilization projects along both Cottonwood and Fish Creeks. The need of the project is simply proactive in nature to protect the remaining in-stream environment and associated riparian corridor as the channel continues to adjust to erosional forces aggravated by increased storm flow from urbanization. For the proposed project, the direct purpose is to stabilize targeted in-stream environments along Cottonwood and Fish Creeks with the minimal amount of fill, thereby reducing the potential need for larger and more impactful stream stability projects in the future should conditions continue to degrade unchecked”.

EXISTING CONDITIONS:

VEGETATION: Vegetation within the project area outside potentially jurisdictional areas consisted primarily of upland post oak forest and maintained urban grasslands. There are no special aquatic sites in any of the project locations.

SOILS: The United States Department of Agriculture (USDA) Soil Conservation Service Soil Survey for Tarrant and Dallas Counties were used to determine the soil types in the project review area. The Cottonwood Creek project area consisted of Trinity-Urban land complex, 0 to 4 percent slopes, occasionally flooded. The Fish Creek project area consisted of Frio silty clay, 0 to 1 percent slopes, frequently flooded. The Trinity-Urban land complex soil unit is not included on the NRCS National List of Hydric Soils for Tarrant County (NRCS, 2015). The Frio silty clay soil unit is included on the NRCS National List of Hydric Soils for Dallas County (NRCS, 2015).

HYDROLOGY: Halff verified the presence of both Cottonwood Creek and Fish Creek and surveyed the limits of the current OHWM. During Halff’s site visit and a review of historical imagery, water was observed to be flowing within both creeks year-round. Therefore, Cottonwood Creek and Fish Creek were determined to be perennial in nature. Both Cottonwood Creek and Fish Creek, relatively permanent waters, found within the study areas are tributaries to Mountain Lake Creek and ultimately the West Fork Trinity River (West Fork). The West Fork is considered a traditionally navigable water by the USACE-Fort Worth District. The project area is associated with the Upper Trinity Basin (HUC 120301), Lower West Fork Trinity Sub-basin (HUC 12030102) and Mountain Creek-Mountain Creek Lake Watershed (HUC 120301020).

ALTERNATIVES TO THE PROPOSED PROJECT: The applicant has prepared an alternative analysis, as described below. The USACE has not yet reviewed this alternative analysis. The applicant states “Projects whose primary consideration is the protection of infrastructure would not be water-dependent because alternatives could entail the relocation of the infrastructure. This is not the case for the proposed project which focuses strictly on trying to protect the condition of the remaining natural channel environment. Non-channel alternatives do not address the purpose and need. As this project is geographically limited to Cottonwood and Fish Creeks, no other suitable alternatives would meet the expressed purpose and need, and a rebuttal of alternatives is not required. An analysis of on-site build alternatives is provided below”:

No build alternative: Under the No Action Alternative, both Cottonwood and Fish Creeks Basin would remain in their current state. However, these locations would continue to erode causing further stream stability issues as predicted by existing models. By not constructing the proposed project future construction projects would potentially be needed to protect existing infrastructure. These future projects could potentially be more damaging to waters of the United States as these projects could include larger footprints. The No Action Alternative may be summarily rejected.

Alternative 1 – Bed and Bank Stabilization with Riprap: This alternative would address the project purpose and need as it pertains to streambank stabilization. This alternative could stabilize the banks at gentler grades than current conditions. Placement of material within the creek channels could be placed at existing grade and should not result in a loss of waters of the United States as defined by the USACE. Such an alternative could place grouted rock riprap within the stream channel, which could allow for in-stream vegetation. This alternative would allow for a single piece of equipment to perform all the construction with minimal impacts to adjacent riparian habitats at each location. This alternative was moved forward for further consideration by the applicant.

Alternative 2 – Bank Stabilization using Gabion Baskets: This alternative would address the project purpose and need. This alternative would require the use of larger construction equipment, leading to impacts to riparian forest communities due to the remote location of several of the locations. This alternative would require greater length of impacts to achieve the same benefit and potentially more fill below the ordinary high water mark of Cottonwood or Fish Creek as Alternative 1. This alternative is also not preferable due to existing infrastructure at project sites (e.g. sidewalks, existing pipelines, powerline easements, etc.) limiting the scale of proposed projects. This alternative would also cost significantly more due to more material needed, larger construction equipment needed, and time it would take to install the gabion baskets. This alternative was eliminated from further analysis by the applicant.

Alternative 3 – Riprap and Sheet Piling: This alternative would also address the project purpose and need. This alternative would require the use of larger construction equipment, leading to impacts to riparian forest communities due to the remote location of several of the locations. Similar to Alternative 2, greater length of impacts to Cottonwood and Fish Creeks would be required to achieve the same benefits as Alternative 1. This alternative would cost substantially more than Alternative 1 and Alternative 2 due to the large area of land clearing needed to construct this alternative and the significantly more the materials cost. For these reasons, this alternative was eliminated from further analysis by the applicant.

MITIGATION: The applicant has offered no compensatory mitigation to offset unavoidable adverse impacts to waters of the U.S. All project locations are separate and complete projects, do not exceed the 1/10-acre or 300-foot stream loss criteria that would require mitigation. Additionally, if all project locations are combined, the total impacts do not exceed the stream loss criteria described above. Moreover, none of the locations results in a substantial adverse impact that could otherwise require compensatory mitigation.

SHEETS:

1. Location Map, Figure 1
2. Cottonwood Creek, Vicinity Map, Figure 2
3. Fish Creek, Vicinity Map, Figure 2
4. Cottonwood and Fish Creeks, Typical Details, C0.03
5. Cottonwood Creek, Project Layout, C1.00
6. Fish Creek, Project Layout, C1.01
7. Fish Creek, Project Layout, C1.02
8. Cottonwood Creek, Survey and Erosion, C3.00
9. Fish Creek, Survey and Erosion Control, C3.01
10. Fish Creek Survey and Erosion Control, C3.02
11. Fish Creek, Survey and Erosion Control, C3.03
12. Cottonwood Creek, Plan and Profile, CCMS-5, C4.00
13. Cottonwood Creek, CCMS-5, Cross Section, C4.01
14. Cottonwood Creek, Plan and Profile, CCMS-6, C4.02
15. Fish Creek, Plan and Profile, Fish-3, C6.00
16. Fish Creek, Cross Section, Fish-3, C6.01
17. Fish Creek, Plan and Profile, Fish-6, C6.02
18. Fish Creek, Fish-6, Cross Section, C6.03
19. Fish Creek, Plan and Profile, Fish-8, C6.04

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 incorporates the requirements necessary to comply with the Texas Commission on Environmental Quality's (TCEQ) Tier I project criteria. Tier I projects are those that result in a direct impact of three acres or less of waters of the State or 1,500 linear feet of streams (or a combination of the two is below the threshold) for which the applicant has incorporated best management practices (BMPs) and other provisions designed to safeguard water quality. The USACE has received a completed checklist and signed statement fulfilling Tier I criteria for the project. Accordingly, a request for 401 certification is not necessary and there will be no additional TCEQ review.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species 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*), red knot (*Calidris canutus rufa*), golden cheeked warbler (*Dendroica chrysoparia*), least tern (*Sterna antillarum*), and piping plover (*Charadrius melodus*), are known to occur or may occur as migrants. The whooping crane, golden cheeked warbler and least tern are endangered species and the piping plover and red knot are threatened species. 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 to be in the project area. However, presently unknown scientific, archaeological, cultural or architectural data may be lost or destroyed by the proposed work under the requested permit.

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 fact 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 **March 12, 2020**, 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 Division, CESWF-DE-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Division 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. Comments may also be submitted electronically to Mr. John Derinzy by emailing John.W.Derinzy@usace.army.mil. Telephone inquiries should be directed to (817) 886-1742. 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