Public Notice

US ARMY CORPS
OF ENGINEERS
St. Louis District
Gateway to Excellence

Reply To:
U.S. Army Corps of Engineers
Attn: CEMVS-OD-F
1222 Spruce Street
St. Louis, Missouri 63103-2833

Public Notice No.
P-2319

Public Notice Date:
March 19, 2013

Expiration Date:
April 8, 2013

File Number: MVS-2001-5890

Interested parties are hereby notified that an application has been received for a Department of the Army permit for certain work in waters of the United States, as described below and shown on the attached maps.

COMMENTS AND ADDITIONAL INFORMATION: Comments on the described work should reference the U.S. Army Corps of Engineers File Number shown above and must reach this office no later than the above expiration date of the Public Notice to become part of the record and be considered in the decision. Comments should be mailed to the following address:

U.S. Army Corps of Engineers
Regulatory Branch
1222 Spruce Street
St. Louis, Missouri 63103-2833
ATTN: Jennifer L. Brown

APPLICANT: City of Manchester, Attention: Edwin Blattner, 14318 Manchester Road, Manchester, Missouri 63011.

LOCATION: The proposed project is located within multiple tributaries within the city limits of Manchester. The tributaries all flow into either Grand Glaize Creek or Fishpot Creek. Grand Glaize Creek and Fishpot Creek are both primary tributaries to the Meramec River. The projects are located within Township 44 North, Range 5 East, St. Louis County, Missouri.

PROJECT DESCRIPTION: The applicant seeks authorization to conduct grading and filling operations in waters of the United States for stormwater improvements in existing residential subdivisions to improve water quality in these areas and to also reduce safety hazards. The project includes providing stabilization along multiple tributaries within the City of Manchester.

Where practicable, the channels will utilize bio-stabilization consisting of: vegetated biodegradable erosion control blankets, vegetated turf reinforcement mats, fabric encapsulated soil structures, native plantings, etc. In areas where hydraulic conditions require the utilization of (hard armor), materials that will be used include:
limestone aggregates and limestone boulder walls.

The Missouri Department of Natural Resources, St. Louis Metropolitan Sewer District, and the U.S. Army Corps of Engineers will review the construction plans and methods for each channel improvement, prior to implementation. In addition, the stream stabilization work is contingent upon the City of Manchester acquiring the necessary easement and permission from all affected property owners.

A permit for this project under the same file number was originally authorized for these channel activities on March 13, 2003. The permit was authorized for five years and reauthorized for an additional five years. The existing permit will expire on December 31, 2013 and only a small portion of the original projects were completed. Due to the extent of the project areas and funding, not all of the streams identified in the original report have been addressed. The applicant wishes to obtain a 10 year permit to complete additional channel activities. The applicant intends to use bio-stabilization methods, restore the proper channel gradation, and to restore the riparian corridor upon completion of the individual projects (See attachment). Compensatory Mitigation is not generally required for properly designed bio-stabilization restoration projects within urban watersheds.

**LOCATION MAPS AND DRAWINGS:** See attached. In addition, the project plans may be viewed in color and in more detail by visiting the Public Notice section of our website at http://www.mvs.usace.army.mil/ConOps/permits/pn.htm

**ADDITIONAL INFORMATION:** Additional information may be obtained by contacting Jennifer L. Brown, Project Manager, U.S. Army Corps of Engineers, at (314) 331-8579. Your inquiries may also be sent by electronic facsimile to (314) 331-8741 or by e-mail to Jennifer.L.Brown@usace.army.mil.

**AUTHORITY:** This permit will be processed under Section 404 of the Clean Water Act (33 U.S.C. 1344).

**WATER QUALITY CERTIFICATION:** The project plans have been submitted to the Missouri Department of Natural Resources, Water Protection Program for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification is requested as of the date of this Public Notice, and if issued, will express the Agency’s opinion that the proposed activities will not violate applicable water quality standards. Written comments concerning possible impacts to waters of Missouri should be addressed to: Water Protection Program, Post Office Box 176, Jefferson City, Missouri 65102-0176, with a copy provided to the Corps of Engineers.

**SECTION 404 (b)(1) EVALUATION:** The impact of the activity on the public interest will be evaluated in accordance with the Environmental Protection Agency guidelines pursuant to Section 404 (b)(1) of the Clean Water Act.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the applicant’s proposal. Any request for a public hearing shall state, with particularity, the reason for the hearing, and must be based on issues that would warrant additional public review.

**ENDANGERED SPECIES:** A preliminary determination, in compliance with the Endangered Species Act, as amended, has been made that the work that is proposed would not affect species designated as threatened or endangered, or adversely affect critical habitat. Therefore, no formal consultation request has been made to
the United States Department of Interior, Fish and Wildlife Service. In order to complete our evaluation, comments are solicited from the Fish and Wildlife Service and other interested agencies and individuals through this Public Notice.

**CULTURAL RESOURCES:** The St. Louis District will evaluate information provided by the State Historic Preservation Officer and the public in response to this public notice and we may require a reconnaissance survey of the project area.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that may reasonably be expected to accrue from the described activity must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the activity described, will be considered including the cumulative effects. Among factors considered are: conservation; economics; aesthetics; general environmental concerns; wetlands; historic properties; fish and wildlife values; flood hazards; flood plain values; land use; navigation; shoreline erosion and accretion; recreation; water supply and conservation; water quality; energy needs; safety; food and fiber production; mineral needs; consideration of property ownership; and in general the needs and welfare of the people.

**SOLICITATION OF COMMENTS:** The U.S. Army Corps of Engineers 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 the proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition 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 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.

![Signature]

DANNY D. MCCLENDON
Chief, Regulatory Branch

Attachments

**NOTICE TO POSTMASTERS:**
It is requested that this notice be conspicuously and continually placed for 21 days from the date of this issuance of this notice.
VICINITY MAP - CITY OF MANCHESTER
ST. LOUIS COUNTY, MISSOURI

PRIMARY WATERSHED - MERAMEC RIVER
SECONDARY WATERSHED - GRAND GLAIZE CREEK

EXHIBIT LEGEND

--- CITY LIMITS (approx)
NOTE:
ADDITIONAL NATIVE PLANTINGS & TREE STOCK WILL BE PLANTED BEYOND THE IMPROVED CREEK CHANNEL UP TO THE CONSTRUCTION LIMITS LINE ALONG THE CHANNEL CORRIDOR.

EXIST.
GRADE.
CREEK SIDE SLOPE
VARIES (3:1 MAX).

IN SOME AREAS, 3:1 MAX SIDE SLOPE WILL EXTEND ABOVE "CHANNEL DEPTH" TO BE TO EXISTING GRADE. IN THESE LOCATIONS, A PREPARED SEED AND SOIL BED w/ TEMPORARY ECM PROTECTION IS REQUIRED.

PREPARED SEED AND SOIL BED, 2-3" THICK.

NATIVE PLANTINGS & LIVE STAKES
ABOVE "HALF-FULL" FLOW LEVEL.

EXIST
GRADE.

FABRIC ENCAPSULATED SOIL STRUCTURE w/
SPRINT PLANTINGS AND 48" FENCE
(ONLY USED WHERE EXISTING GRADE WOULD REQUIRE EXCESSIVE DISTURBANCE TO ACHIEVE 3:1 SIDE SLOPE)

HIGH PERFORMANCE TURF REINFORCEMENT MAT,
(HPRM-PYRAMID OR EQUIVALENT)
STAPLE TO GRADE. "SOIL FILL" TO TOP w/
SEED AND SOIL MIXTURE.

USE SELECT FILL IN LOCATIONS WHERE EXISTING GRADE IS LOWER than THE BOTTOM OF THE CHANNEL LIVING SYSTEM. TYPICAL ALLLOCATIONS.

GENERALIZED PROPOSED CROSS SECTION
(BIO-STABILIZATION METHOD)

NOTE:
ADDITIONAL NATIVE PLANTINGS & TREE STOCK WILL BE PLANTED BEYOND THE IMPROVED CREEK CHANNEL UP TO THE CONSTRUCTION LIMITS LINE ALONG THE CHANNEL CORRIDOR.

EXIST.
GRADE.
CREEK SIDE SLOPE
VARIES (3:1 MAX).

IN SOME AREAS, 3:1 MAX SIDE SLOPE WILL EXTEND ABOVE "CHANNEL DEPTH" TO BE TO EXISTING GRADE. IN THESE LOCATIONS, A PREPARED SEED AND SOIL BED w/ TEMPORARY ECM PROTECTION IS REQUIRED.

DRI-STACKED LIMESTONE (16"+1)
BOULDER BALL w/ 48" FENCE, DRAINAGE ROCK IN UNIT CORES EXTENDING 12" (MIN.) BEHIND WALL AND FILTER FABRIC (1")
(ONLY USED WHERE EXISTING GRADE WOULD REQUIRE EXCESSIVE DISTURBANCE TO ACHIEVE 3:1 SIDE SLOPE)

USE CHANNEL LINING AGGREGATE IN LOCATIONS WHERE EXISTING GRADE IS LOWER than THE BOTTOM OF THE CHANNEL LIVING SYSTEM. TYPICAL ALLLOCATIONS.

GENERALIZED PROPOSED CROSS SECTION
(HARD ARMOR METHOD)

GENERALIZED PROPOSED CREEK CROSS SECTIONS
February 4, 2013
CITY OF MANCHESTER – USACE ENGR 4345 PERMIT
Page 7 of 8

Below map exhibit reflects the Proposed Channel Improvements data shown in above table as provided in 2001 by the City of Manchester, Missouri for the previously issued USACE permit P-2319.

Map exhibit below is an excerpt referenced from "Open Channel Stormwater Study" dated July 2001 by Metropolitan Engineering and Surveying.

[Map Image]
<table>
<thead>
<tr>
<th>Studied Channel Location with Proposed Improvements</th>
<th>Channel Footage Affected by Improvements</th>
<th>Channel Acreage Affected by Improvements</th>
<th>Gabions Baskets Proposed in 2001 ****</th>
<th>FESS or DSLBW Proposed Currently ****(1)</th>
<th>Potential Proposed use of VTRM System Currently ****(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0020 - A0024</td>
<td>382</td>
<td>0.26</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>A0020 - A0027</td>
<td>230</td>
<td>0.13</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>D0003</td>
<td>122</td>
<td>0.11</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>J0013</td>
<td>217</td>
<td>0.11</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>A0006 - A0007</td>
<td>155</td>
<td>0.09</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>A0009 - A0017</td>
<td>715</td>
<td>0.55</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>B0029 - B0033</td>
<td>302</td>
<td>0.15</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>B0040</td>
<td>77</td>
<td>0.01</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>C0001 - C0002</td>
<td>112</td>
<td>0.06</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>A0018 - A0020</td>
<td>265</td>
<td>0.21</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>B0068 - B0070</td>
<td>217</td>
<td>0.09</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>D0001</td>
<td>50</td>
<td>0.02</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>H0007 - H0008</td>
<td>150</td>
<td>0.00 (+)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>A0004 - A0005</td>
<td>173</td>
<td>0.10</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>A0009</td>
<td>25</td>
<td>0.02</td>
<td>Yes</td>
<td>Built 2011</td>
<td>Built 2011</td>
</tr>
<tr>
<td>B0014 - B0017</td>
<td>284</td>
<td>0.19</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0021 - B0023</td>
<td>149</td>
<td>0.10</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0023 - B0025</td>
<td>314</td>
<td>0.16</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>B0046</td>
<td>N/A-(util. relocate)</td>
<td>N/A-(util. relocate)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B0048</td>
<td>N/A-(util. relocate)</td>
<td>N/A-(util. relocate)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B0050</td>
<td>N/A-(util. relocate)</td>
<td>N/A-(util. relocate)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B0052</td>
<td>109</td>
<td>0.07</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0079 - B0080</td>
<td>131</td>
<td>0.07</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>B0093</td>
<td>N/A-(util. relocate)</td>
<td>N/A-(util. relocate)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B0098</td>
<td>50</td>
<td>0.02</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>B00106</td>
<td>N/A-(util. relocate)</td>
<td>N/A-(util. relocate)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>B0109 - B0112</td>
<td>253</td>
<td>0.10</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0113 - B0115</td>
<td>254</td>
<td>0.18</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>C0006 - C0010</td>
<td>380</td>
<td>0.20</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>D0005</td>
<td>92</td>
<td>0.09</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>D0006 - D0007</td>
<td>85</td>
<td>0.05</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>E0006 - E0009</td>
<td>325</td>
<td>0.27</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>G0003</td>
<td>91</td>
<td>0.00 (+)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0144 - B0145</td>
<td>191</td>
<td>0.08</td>
<td>No</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>F0001 - F0004</td>
<td>53</td>
<td>0.12</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B0062</td>
<td>Not in Project</td>
<td>Not in Project</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**** - Indicates additional information added to the original 20001 Table provided for USACE permit P-2319 for the purposes of this new USACE permit request.

****(1) - Indicates Proposed use of fabric encapsulated soil structures (FESS) or dry-stacked, limestone boulder walls (DSLBW) verses original 2001 proposed Gabion baskets.

****(2) - Indicates Potential Proposed use of vegetated turf reinforcement mats (VTRM) verses original 2001 proposed Gabion baskets or Rip Rap Creek Flowline lining system. Potentially 16 projects converted to Bio-stabilization method.
OUR PUBLIC NOTICES ARE NOW AVAILABLE ON THE WORLD WIDE WEB AT OUR ST. LOUIS DISTRICT HOME PAGE (http://www.mvs.usace.army.mil/ConOps/permits/pn.htm). If you have any trouble, please call Danny McClendon at (314) 331-8574 or by e-mail to: Danny.D.McClendon@usace.army.mil

WE ARE ATTEMPTING TO REDUCE OUR PUBLIC NOTICE MAILING COSTS: CHECK OUR WEB PAGE THEN CONTACT US TO HAVE YOUR NAMED REMOVED FROM OUR MAILING LIST, please call Jaynie Doerr at (314) 331-8581, or by email to: Jaynie.G.Doerr@usace.army.mil, or mail this cover-sheet to the St. Louis District, OD-F, 1222 Spruce Street, St. Louis, MO 63103-2833, ATTN: Regulatory Branch, indicating that your name or company named be removed. Changes to our mailing list may take a few weeks to take effect.

US ARMY ENGINEER DISTRICT, ST. LOUIS
ATTN: CEMVS-OD-F
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833