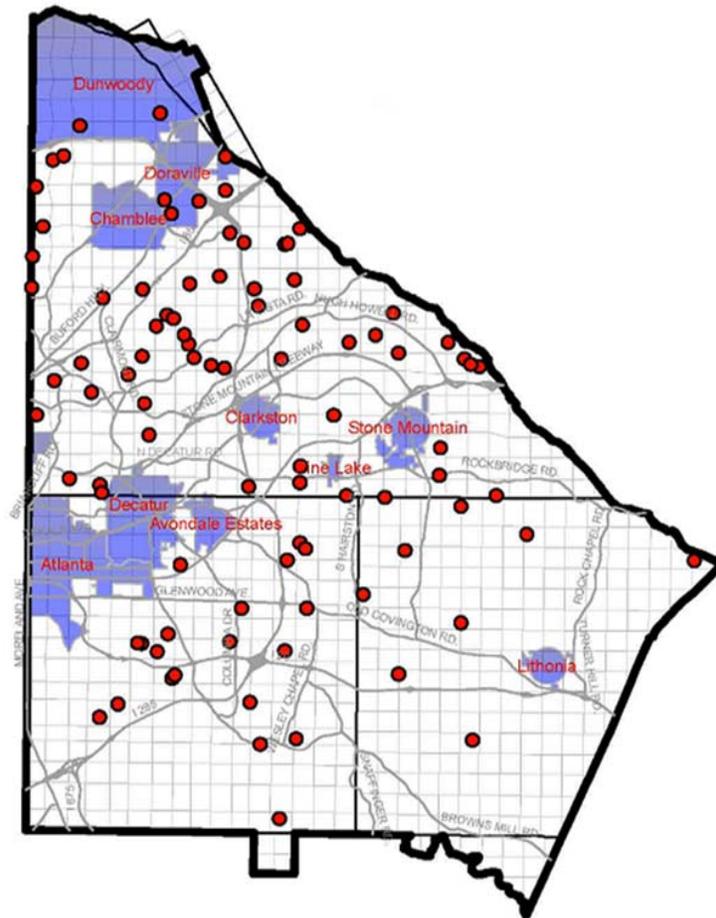


DRAFT ENVIRONMENTAL ASSESSMENT

PROPOSED UPGRADE OF CATCH BASIN LIDS

DEKALB COUNTY, GEORGIA



March 2010

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Photos 11 and 12 – 1802 East Clifton Road (New Style Catch Basin)

DRAFT ENVIRONMENTAL ASSESSMENT

PROPOSED UPGRADE OF CATCH BASIN LIDS DEKALB COUNTY, GEORGIA

1.0. **PURPOSE AND NEED FOR THE PROPOSED ACTION.** Numerous catch basins throughout DeKalb County have been identified as failed structures and are in need of repair. The damage to these structures ranges from broken lids to failed boxes. The lids could be broken due to age or as a result of being crushed by tires of heavy vehicles. The failed boxes are normally a result of rusted conveyance systems. The proposed action would replace failed boxes, which are typically catch basins with non standard lids, with Georgia Department of Transportation 1033 or 1034 lids along with additional repairs. The desired results of this action would allow for greater maintenance efficiency and productivity along with less gutter spread flow for the public.

2.0. **AUTHORITY.** The proposed action is being conducted under the authority of Section 219 of the Water Resources and Development Act (WRDA) of 1992, as amended, in subsection “ c (2) *Atlanta, Georgia. – A combined sewer overflow treatment facility for the City of Atlanta, Georgia.*” In 1996, this authority was “*modified to include watershed restoration and development in the regional Atlanta watershed, including Big Creek and Rock Creek*” and to provide “ (e) **AUTHORIZATION OF APPROPRIATIONS FOR CONSTRUCTION ASSISTANCE.** – *There are authorized to be appropriated for providing construction assistance under this section – (5) \$25,000,000 for the project described in subsection (c) (2).*”

3.0. **DESCRIPTION OF THE PROPOSED ACTION.**

3.1. **General.** The proposed action would replace failed boxes at 104 locations within DeKalb County with Georgia Department of Transportation 1033 or 1034 lids along with additional repairs to catch basins throughout DeKalb County. Figure 1 and Table 1 provides a map of the catch basin locations and a list of the street locations. Figure 2 shows the typical standard design for the catch basin structure. The proposed action addressed in this Environmental Assessment includes the construction work as well as the associated periodic maintenance required at each of the catch basins. The estimated construction time for each catch basin is 2-4 days, and there would be several concurrent sites under construction during the construction phase.

Figure 1 – Catch Basin Lid Repair Locations (104)

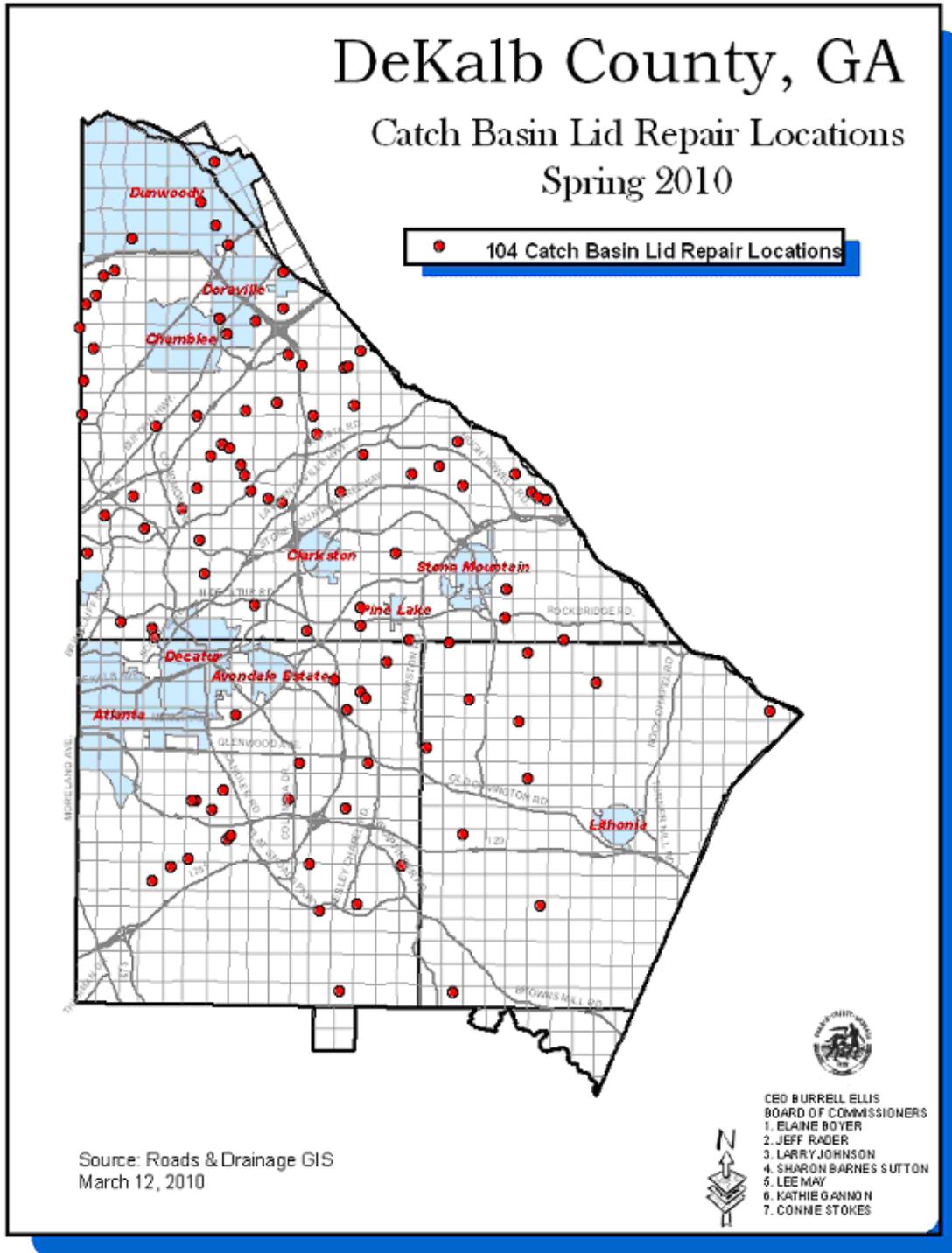


Table 1 – Proposed 104 Catch Basin Upgrade Locations

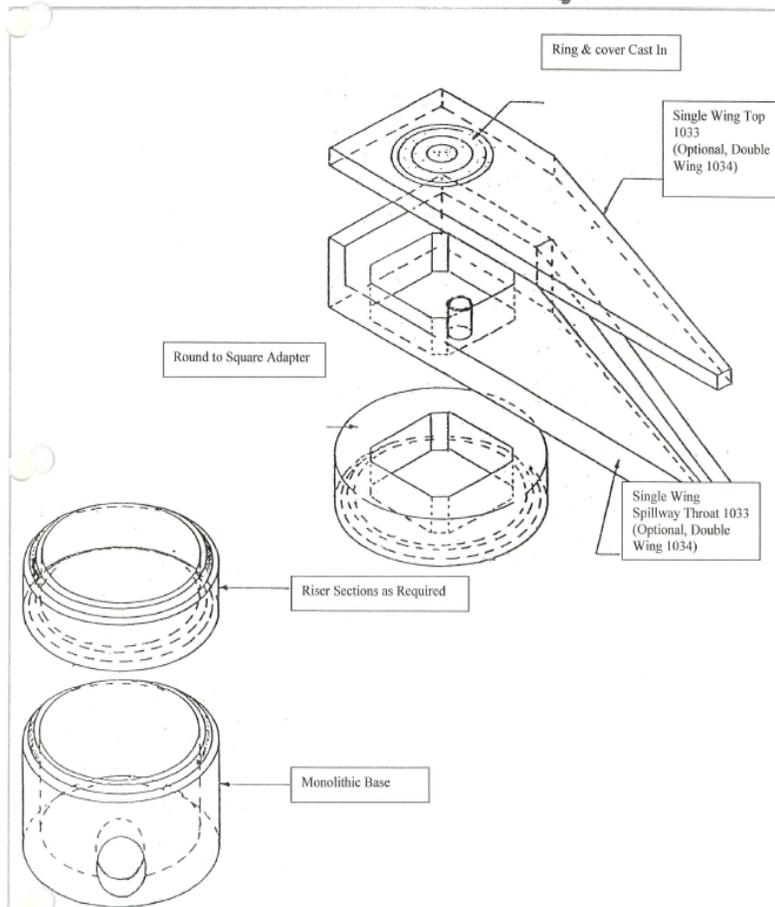
2010 Catch Basin Lid Repairs, DeKalb County, Georgia, Roads and Drainage Division with U.S. Army Corps of Engineers	
Catch Basin Repair Addresses	Landlot/Dist
Snapfinger Road @ Snapfinger Circle	15
1143 Mohican Trail	15/222
3632 Cherry Ridge Blvd	15/060
3376 Holly Hill Parkway	15/061
3174-3182 Cherry Valley Drive	15/084
2039 Sombrero Way	15/085
3499 Columbia Pkwy	15/091
Rider Trail	15/096
Aurie Dr	15/107
2647 Williamsburg Drive	15/119
2688 Cavalier Drive	15/120
3313 Casa Linda Court	15/135
2488 Whites Mill Lane	15/138
2327 Tilson Rd	15/139
2336 Tilson Circle	15/150
2609 Habersham Sr	15/151
1889 Selwyn Dr	15/163
3455 Springlake Drive	15/166
3958 West Hilda Circle	15/196
1410 Thomas Rd	15/201
Holcomb Road and Redan Road	15/220
1244 Mohican Trl	15/222
1165 Lullwater Road	15/242
1800 Canberra Drive	16/005
1217 Muirfield Drive	16/035
5246 Snapfinger Woods Drive	16/041
West Fairington and Buckingham Way	16/042
6265 Magnolia Ridge	16/065
Hunt Valley Drive	16/068
2023 Wellborn Road	16/070
6099 Lakeview Overlook	16/085
6665 Princeton Park Trail	16/130
8642 Misty Creek Circle	16/256
1817 Hummingbird Lane	18/004
1838 Coventry Road	18/004
Rockbridge Road @ Navarre Rd	18/010
3548 Rockbridge Road	18/011
4071 Rue Antoinette	18/014
Rowland Rd Btwn Allgood and Kings Troop	18/016
591 Rimrock Trail	18/016
Miners Creek Road	18/017
5072 North Woodbridge Trail	18/018
6335 Conisburgh Lane	18/023

1103 Hambrick Road	18/041
4102 Creek Stone Court	18/042
Kentucky Street	18/047
874 Gaylemont Cir	18/061
4037 Pin Oak Trail	18/067
5810 Stonehaven Drive	18/075
1138 Janes Lane	18/107
2615 Tanglewood Road	18/112
3225 Fern Drive	18/145
2138 Black Fox Drive	18/150
1288 Holley Lane	18/152
Sheridan Rd. @ Executive Park Dr.	18/153
1707 Childerlee Lane	18/157
1752 Crestine Court	18/162
1840 Frazier Road	18/162
1566 Moncrief Circle	18/163
1745 Samaria Trail	18/167
5826 Heritage Lane	18/175
6050 Windsong Way	18/176
6033 East Gate Court	18/176
5818 Musket Lane	18/180
1824 Mountain Shadow	18/182
4881 Forestglade Court	18/183
1939 Forge Street	18/184
2804 Woodland Park Dr	18/192
2050 Castleway Lane	18/192
2582 Circlewood Road	18/206
2212 Tristan Cir	18/206
2134 Heritage Drive	18/206
3608 Windy Court	18/211
2282 Deer Ridge Drive	18/216
3560 Midvale Road	18/229
2762 Drew Valley Road	18/236
1189 West Brookhaven	18/239
2560 Newhaven Drive	18/245
2631 Hawthorne Drive	18/247
2684 Smoketree Way	18/249
3935 Brown Road	18/252
2931 Mabry Lane	18/274
3272 Lynwood Drive	18/275
Peachtree RD & P'tree IND	18/278
3268 Chase Rd	18/284
3240 Henderson Mill Road	18/285
3060 Ranlo Drive	18/287
3076 Wanda Woods Dr	18/287
2772 Pleasantdale Rd	18/288
2602 McClave Drive	18/297
Evergreen Drive	18/303

1062 Bluffhaven Way	18/304
3666 Shallowford Road	18/310
3565 Cherokee Road	18/312
3590 Pin Oak Circle	18/313
3847 Brookawn Court	18/328
1234 Dunwoody Lane	18/330
4089 Navajo Trail	18/330
4570 Sharon Valley Court	18/335
Tilly Mill Road@ Halpern Park	18/336
3225 Darlington Oak Dr	18/338
1463 Rochelle Drive	18/345
4565 Dellrose Dr	6/310
2137 Morris Ave.	

Figure 2 – Diagram of Catch Basin Upgrade

*Catch Basins Upgraded to a
Precast Catch Basin System*



4.0. ALTERNATIVES TO THE PROPOSED ACTION.

4.1. **No Action.** The No Action alternative was considered and involves leaving the failed boxes and no repairs to be completed on the proposed catch basin sites. This alternative avoids the monetary costs associated with replacing and repairing each of the proposed catch basin sites. It would pose a safety hazard to leave these failed structures in the condition they are currently in. As shown in the Photos 1 and 2 (all photos located in the Appendix) the failed boxes and broken lids have left large openings. These openings have had to be secured and taped off to ensure the safety of the citizens living nearby. Also, the upgrade and repair of the catch basins would improve performance and would decrease the chance of flooding in the surrounding area.

5.0 AFFECTED ENVIRONMENT.

5.1. **General.** DeKalb County is in the northwestern part of Georgia and has a land area of 268.7 square miles. It is included in the five-county core of the Atlanta-Sandy Springs-Marietta, Georgia, metropolitan statistical area. It is bordered on the west by Fulton County and contains a portion of the City of Atlanta. DeKalb is primarily a suburban county. The proposed catch basin sights are all located in highly disturbed, suburban and urban areas. The general setting immediately around one of the catch basin sights would consist mainly of roadways, lawns, and open space.

5.2. **Climate.** The climate for the area is classified as Humid Subtropic and is characterized by short, mild winters and long, hot summers. Rainfall in this area of Georgia averages 50-plus inches of rain annually. This high annual rainfall and high percentage of developed impervious surface within DeKalb County contribute to the emphasis on the need to assure upgraded functional stormwater catch basins along the roadways within the county.

5.3. **Topography.** The topography of the area is generally characterized by rolling hills. Elevations range from 1,683 feet at the top of Stone Mountain to 640 feet in the southeastern part of the county.

5.4 **Soils.** In general, the upland soils found in this area are well drained with a loamy surface layer and clayey subsoil. The floodplain areas are loamy throughout and poorly to well-drained.

5.5. **Streams/Wetlands.** Surface water streams within DeKalb County are divided into those in the northern part of the county that flows into Peachtree and Nancy Creeks, and ultimately drain into the Chattahoochee River, and the southern part of the county that drains into the South River and ultimately into the Ocmulgee and Altamaha Rivers – with the Chattahoochee and Altamaha basins roughly separated by the CSX Railroad. The streetside catch basins capture the rainfall runoff and ultimately empty to a local surface water body (small stream).

There are several ponds and lakes located throughout the county, along with scattered riparian wetlands. These wetlands tend to be rather small and have been affected in their function and value by the high level of urban development within the county.

5.6. **Flora.** The catch basins would be located along street curbs. The predominant flora around the catch basin locations would consist mainly of grassed lawns adjacent to the streets.

5.7. **Fauna.** Due to the fact that the catch basins are located along the curbs of streets it would not prove to be suitable habitat for species other than those that have adapted to urban settings such as raccoons, opossums, rabbits, gray squirrels, etc. These are highly disturbed areas and species populations are limited in the area immediately surrounding the project.

5.8. **Endangered and Threatened Species.** The U.S. Fish and Wildlife Service (FWS) have listed species as endangered or threatened in the DeKalb County area. Below is a listing of species as found on the FWS website

(http://www.fws.gov/athens/endangered/counties/dekalb_county.html).

The Bald Eagle is included in the following list, this species has since been delisted; however, it is still protected under the Bald and Golden Eagle Protection Act. The state of Georgia has also listed several species in the DeKalb County area as threatened or endangered, these species are listed below.

Table 2 – List of Federal and state Endangered and Threatened Species Within DeKalb County

Species	Federal Status	State Status	Habitat
Bird			
Bald eagle <i>Haliaeetus leucocephalus</i>	T	E	Inland waterways and estuarine areas in Georgia.
Fish			
Bluestripe shiner <i>Cyprinella callitaenia</i>	No Federal Status	T	Brownwater streams
Plant			
Bay star-vine <i>Schisandra glabra</i>	No Federal Status	T	Twining on subcanopy and understory trees/shrubs in rich alluvial woods
Black-spored quillwort <i>Isoetes melanospora</i>	E	E	Shallow pools on granite outcrops, where water collects after a rain. Pools are less than 1 foot deep and

			rock rimmed.
Flatrock onion <i>Allium speculae</i>	No Federal Status	T	Seepy edges of vegetation mats on outcrops of granitic rock
Granite rock stonecrop <i>Sedum pusillum</i>	No Federal Status	T	Granite outcrops among mosses in partial shade under red cedar trees
Indian olive <i>Nestronia umbellula</i>	No Federal Status	T	Dry open upland forests of mixed hardwood and pine
Piedmont barren strawberry <i>Waldsteinia lobata</i>	No Federal Status	T	Rocky acedific woods along streams with mountain laurel; rarely in drier upland oak-hickory-pine woods
Pool Sprite, Snorkelwort <i>Amphianthus pusillus</i>	T	T	Shallow pools on granite outcrops, where water collects after a rain. Pools are less than 1 foot deep and rock rimmed

Due to the urban, roadside setting for the catch basins, the Corps has determined that no suitable habitat exists for these species in the areas at and surrounding these catch basins.

5.9. Cultural Resources. Field reconnaissance investigations have shown that the catch basin areas have all been previously disturbed and are located in residential neighborhoods. The Corps has determined that no significant archeological sites are located within the proposed project areas.

5.10. Noise. The predominant ambient sounds in the vicinity of the site are those that are associated with moving traffic and other common urban noise sources.

5.11 Air Quality. Data taken from the EPA website (www.epa.gov) indicates that in 2008 there were 13 days that the air was classified as unhealthy for sensitive groups or unhealthy.

5.12 Water Quality. DeKalb County crosses two watersheds, the Upper Chattahoochee and Upper Ocmulgee. The 303(D) list of impaired waters for these watersheds list 4 impaired waters for the Upper Ocmulgee and 10 impaired waters for the Upper Chattahoochee.

5.13 Environmental Justice/Protection of Children. On February 11, 1994, the President issued Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*. The EO is designed to focus federal attention on the environmental and human health conditions in minority and low-income communities with the goal of achieving

environmental justice. The EO is also intended to promote nondiscrimination in federal programs substantially affecting human health and the environment. The EO states that federal activities, programs, and policies should not produce disproportionately high and adverse impacts on minority and low-income populations. Listed in the table below you will find some demographic characteristics of the DeKalb County area.

Table 3 – Demographic Characteristics of DeKalb County

Data Category	DeKalb County	Georgia
Population		
2000	666,036	8,186,812
2008	739,956	9,685,744
Percent change	11.10%	18.30%
Persons per square mile	2,484.60	141.4
Age		
Under 18	24.00%	26.30%
Over 65	8.60%	10.10%
Race		
White	40.20%	65.40%
Black	53.70%	30.00%
Native American	0.40%	0.40%
Asian	4.20%	2.90%
Pacific Islander	0.10%	0.10%
Two or more races	1.40%	1.30%
Hispanic	10.40%	8.00%
Language other than English spoken at home	17.40%	9.90%
Education		
High School Graduates	85.10%	78.60%
Four-college degree	36.30%	24.30%
Persons per household	2.62	2.65
Income		
Median household	\$54,708	\$50,834
Per capita	\$23,968	\$21,154
Persons below poverty	15.60%	14.70%

Source: U.S. Census Bureau: State and County Quick Facts. Last Revised 23 February 2010

On April 21, 1997, the President issued Executive Order (EO) 13045, *Protection of Children from Environmental Health Risks and Safety Risks*. To the extent permitted by law and appropriate, and consistent with the federal agencies' mission, federal agencies shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and shall ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. The existing environmental risks to children in DeKalb County are health hazards from large openings to storm drain systems due to failed boxes and broken lids.

6.0. ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION.

6.1 **General.** The impacts associated with the upgrade and repair of the proposed catch basin sights are discussed in the following paragraphs.

6.2. **Topography.**

6.2.1 **Proposed Action.** The upgrade and repair of the proposed catch basins would not include any significant excavation or fill, nor increase or alter the current flow regime of water. Therefore, the proposed action would not have any environmental consequences on the topography of the catch basin sites.

6.2.2 **No Action Alternative.** Under the no action alternative no effects to topography would occur and it would remain in its present state.

6.3 **Soils.**

6.3.1 **Proposed Action.** The catch basins are located along street curbs in previously disturbed locations, so it is not expected that activities to upgrade and repair would have any affect on soils. Minimal excavation and/or fill would be involved with the catch basin replacements. Implementing best management practices would ensure that the proposed action would only have minor and temporary impacts to the existing soils and erosion would be controlled and minimized.

6.3.2 **No Action Alternative.** Under the no action alternative no impacts to soils would occur and they would remain in their present state and only be affected by natural conditions.

6.4 **Streams/Wetlands.**

6.4.1 **Proposed Action.** The proposed action would have minimal and temporary impacts to streams and no effects on wetlands.

6.4.2 **No Action Alternative.** Under the no action alternative no impacts to streams or wetlands would occur.

6.5 **Flora.**

6.5.1 **Proposed Action.** All catch basin sites are along existing streets in previously disturbed areas, predominately grassed lawns adjacent to the streets. The proposed action would have minimal and temporary impacts to any local flora.

6.5.2 **No Action Alternative.** Under the no action alternative the condition of flora would remain in its present condition.

6.6 Fauna.

6.6.1 **Proposed Action.** Most wildlife in the vicinity of the site have adapted to the development of the area. A minor adverse impact to local fauna will occur during construction, but no long-term significant impacts are expected to occur due to the proposed action.

6.6.2 **No Action Alternative.** Under the no action alternative no impacts to wildlife species would occur.

6.7 Endangered and Threatened Species.

6.7.1 **Proposed Action.** There is no evidence of any endangered and threatened species at any of the proposed locations. Therefore, the proposed action would not adversely impact any endangered or threatened species or designated critical habitat.

6.7.2 **No Action Alternative.** Under the no action alternative no impacts to endangered or threatened species would occur.

6.8. Cultural Resources.

6.8.1 **Proposed Action.** Pursuant to the requirements contained in Section 106 of the National Historic Preservation Act, the Corps considered the effects of the proposed action on historic properties. Field reconnaissance investigations have shown that the stormwater and catch basin areas have all been previously disturbed and are in residential neighborhoods. Construction activities will consist of replacing existing old structures. Based on the above information, the Corps has determined that no significant archeological or historic sites are located within the proposed project areas; hence the proposed project activities would not adversely affect archeological or historic sites.

6.8.2 **No Action Alternative.** Under the no action alternative no impacts to cultural resources would occur.

6.9. Noise.

6.9.1 **Proposed Action.** Noise levels in the immediate vicinity of the proposed project would increase during the operation of vehicles and equipment. The construction noise levels at each site would be increased for only a few days at each site, with the noise generated during normal business hours. After the proposed project is complete, noise levels should decrease to the normal level currently found in the area. This temporary increase in noise would not have a significant adverse impact to the surrounding area.

6.9.2 **No Action Alternative.** Under the no action alternative, noise levels currently generated in the project area would remain the same.

6.10. **Air Quality.**

6.10.1 **Proposed Action.** The proposed activities would cause some temporary increases in exhaust and dust emissions from vehicles and equipment operation. Exhaust emission increases would be minor and not adversely impact the local air quality. The proposed action would not adversely impact air quality in the area.

6.10.2 **No Action Alternative.** Under the no action alternative the annual air emissions and the air quality in the area would not be affected and remain at current levels presently found in the area.

6.11. **Water Quality.**

6.11.1 **Proposed Action.** The proposed action would not affect water quality in the local area.

6.11.2 **No Action Alternative.** Under the no action alternative there would be no change in water quality in the area.

6.12. **Environmental Justice/Protection of Children.**

6.12.1 **Proposed Action.** The proposed catch basin repairs would not disproportionately affect minority or low-income populations. The proposed action would have beneficial impacts to the local community of DeKalb County by decreasing potential health hazards posed by the large openings that are currently there because of the broken lids. Beneficial impacts to children would be realized by the proposed action in ensuring the safety of children by protecting them from the potential hazard of falling into one of the large openings left by the failed boxes and broken lids. This should decrease the potential of possible health hazards to children in DeKalb County. Therefore, the proposed action would have a positive impact on the community and is compliant with both executive orders.

6.12.2 **No Action Alternative.** Under this alternative potential adverse impacts to children would continue. This alternative would not eliminate the safety hazards present from open manholes that could become a potential location for injury for children. Children living and playing in the area would continue to be exposed to these unsafe conditions.

6.13. **Cumulative Effects Summary.** Cumulative effects are the environmental impacts that result from the incremental impacts of the action when combined with other past, present, and reasonably foreseeable future actions, regardless of

what agency (federal or non-federal) or person undertakes the other actions. This section analyzes the proposed action as well as any connected, cumulative, and similar existing and potential actions occurring in the area surrounding the site.

The potential direct environmental and socioeconomic impacts associated with the proposed action are insignificant. The proposed upgrade and repair of catch basin lids would serve the area in a more efficient and environmentally beneficial manner. However, if not implemented, adverse conditions from failed boxes would continue to exist and potentially create a health hazard for residents. The proposed action is not the result of any planned or future development and is designed to accommodate existing structures and not induce future development. Therefore, no adverse cumulative effects are expected from the proposed action.

7.0 AGENCIES AND INDIVIDUALS CONSULTED.

7.1. The proposed action is being coordinated with the following agencies.

- a. U.S. Department of the Interior, Fish and Wildlife Service, Athens, Georgia
- b. Georgia State Historic Preservation Officer, Atlanta, Georgia
- c. Georgia Department of Natural Resources, Wildlife Resources Division, Atlanta, Georgia
- d. Georgia Department of Natural Resources, Environmental Protection Division, Atlanta, Georgia

A summary of that coordination will be included in the Final EA.

APPENDIX

Photo 1 – Broken Metal Catch Basin Lid



Photo 2 – Safe-Up Catch Basin



Photo 3 - Environmental Setting Around Catch Basin



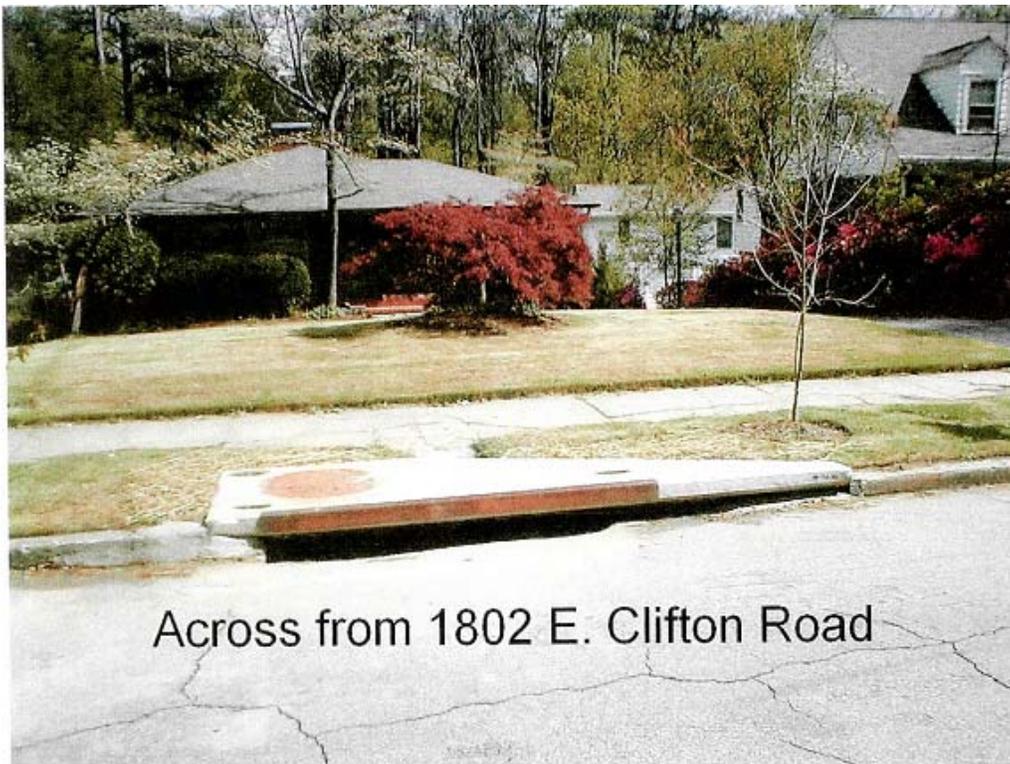
Photo 4 - Double Wing Catch Basin Lid - Broken into 3 pieces



Photo 5 - Broken Standard Right Wing Catch Basin Lid



Photo 6 - Upgraded Catch Basin - Frontal View



Across from 1802 E. Clifton Road

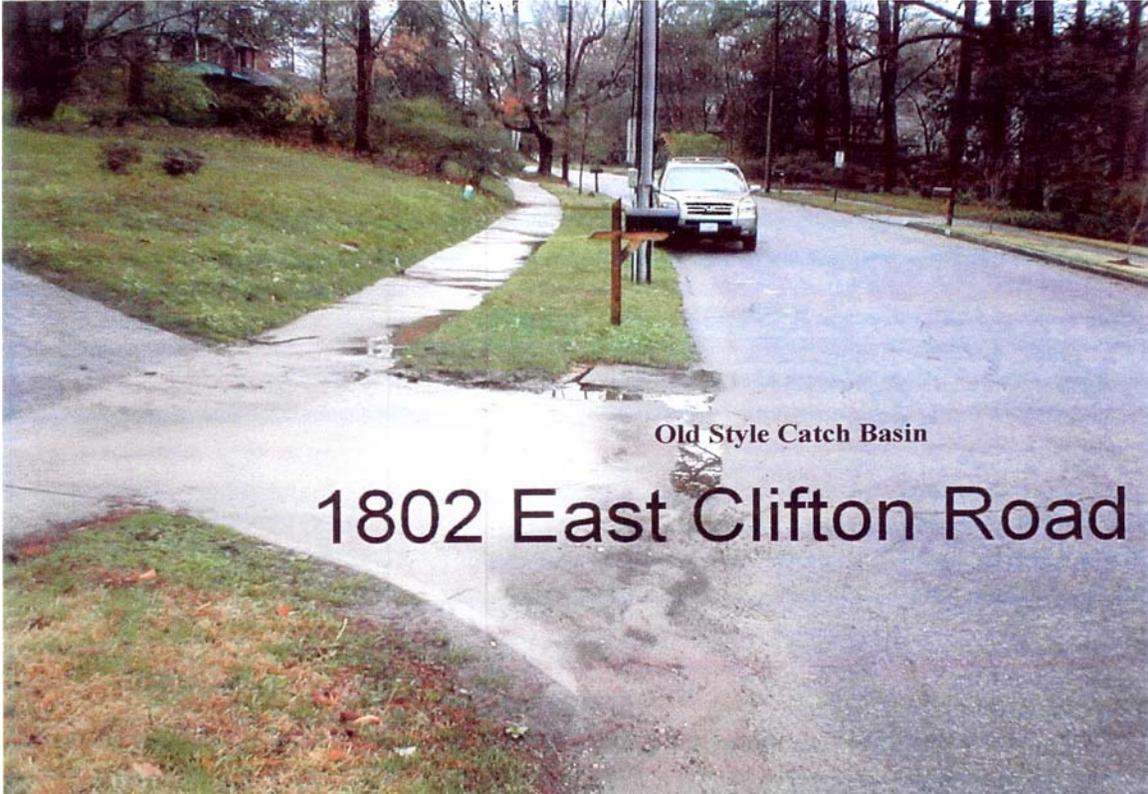
Photo 7 - Upgraded Catch Basin - Rear View



Photo 8 - New Design Catch Basin



Photos 9 and 10 – 1802 East Clifton Road (Old Style Catch Basin)



Old Style Catch Basin

1802 East Clifton Road



Old Style Catch Basin

Metal 4'x4' lid @ D/W needs raised

Photos 11 and 12 – 1802 East Clifton Road (New Style Catch Basin)

