

## MEETING NOTES

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**Date:** September 13, 2013  
**Project:** GPTQ Engineering Services Subcommittee  
**Purpose:** General discussion meeting  
**Location:** GDOT 5<sup>th</sup> floor conference room  
**Time:** 11:00 AM

### Attending:

Lisa Myers	GDOT	<a href="mailto:lmyers@dot.ga.gov">lmyers@dot.ga.gov</a>
Michael Moseley	Atkins	<a href="mailto:Michael.Moseley@atkinsglobal.com">Michael.Moseley@atkinsglobal.com</a>
David Henry	Transystems	<a href="mailto:dbhenry@transystems.com">dbhenry@transystems.com</a>
Robert Lewis	HNTB	<a href="mailto:rtlewis@hntb.com">rtlewis@hntb.com</a>

### The following items were discussed:

1. The group generally discussed the cost estimating life cycle from planning level estimate, through major plan milestones, yearly and through to the PS&E submittal. The group discussed the importance of the Consultant PM understanding the ROW, UTIL and CST Phase budget during the life of the PE phase; and being aware of any changes that may impact those budgets.
2. The group briefly discussed the Revisions to Program Costs – Template found at <http://www.dot.ga.gov/doingbusiness/PoliciesManuals/roads/Pages/OtherResources.aspx>. Lisa reiterated the importance of yearly required updates to project cost estimates, and again at plan milestones. The template should be used when a project's cost changes.
3. The group discussed educational opportunities for the consultant community. Rob suggested the upcoming PM Roundtable that is being developed through the GPTQ Program Delivery committee. Lisa to follow up with Albert Shelby on the possibility of including a cost estimating topic in the PM Roundtable.
4. Lisa is on the Transportation Summit planning committee, and she mentioned that there will not be an estimating breakout session.
5. Engineering Services is compiling NPDES related comments to list of commonly seen FPR comments.

### Action Items:

1. **Lisa to follow up with Albert Shelby on the possibility of including a cost estimating topic in the PM Roundtable.** [COMPLETE – Albert doesn't anticipate this being incl in the discussions]
2. **Lisa to provide the group historic NPDES compiled general comments.** [COMPLETE]

Please contact Robert Lewis at [rtlewis@hntb.com](mailto:rtlewis@hntb.com) if changes or additions are necessary.

**The next meeting is scheduled for Friday, November 22, 2013 at 11 am in GDOT's 5<sup>th</sup> floor conference room.**

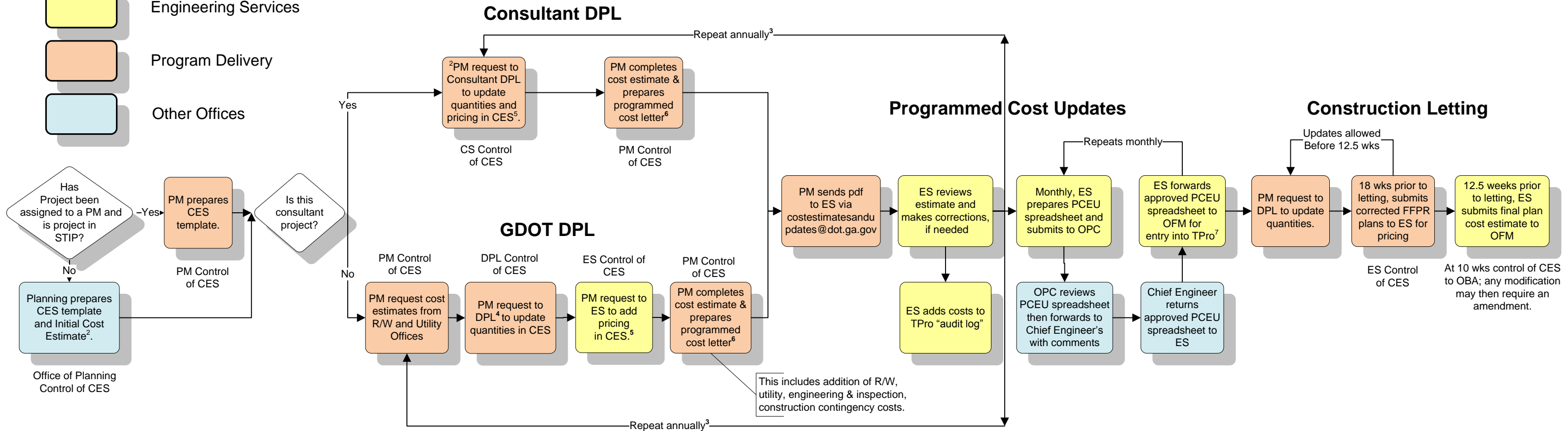
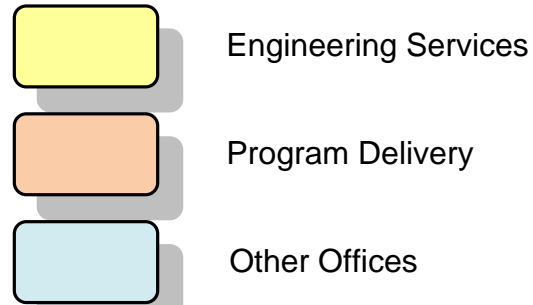
Attachment: Cost Estimating Process flowchart  
EPD Data Report

cc: Erick Fry (URS), Greg Mayo (Stantec), Dan Cogan (CDMSmith), Scott Gero (AECOM), Joe Carpenter (GDOT)

# CES Cost Estimating Process (GDOT let projects only)

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## Color Coding GDOT Office



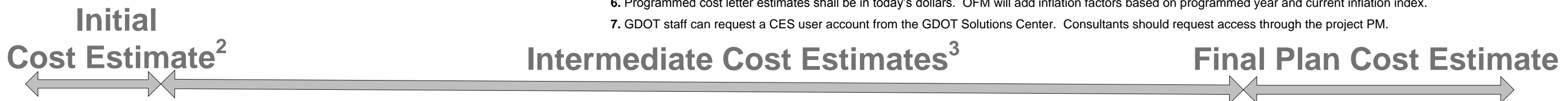
### List of Acronyms:

**AASHTO** = American Association of State Highway & Transportation Officials  
**CES** = AASHTO Trns\*port Cost Estimation System  
**CS** = consultant  
**DPL** = Design Phase Leader  
**FFPR** = Final Field Plan Review  
**OBA** = Office of Bidding Administration  
**ES** = Office Engineering Services  
**OFM** = Office of Financial Management

**OPC** = Office of Program Control  
**OPD** = Office of Program Delivery  
**PCEU** = Project Cost Estimate Update  
**Pdf** = portable document format  
**PFPR** = Preliminary Field Plan Review  
**PM** = project manager  
**STIP** = State Transportation Improvement Program  
**TPro** = GDOT project management system computer program

### Notes:

1. See GDOT Policy 3A-9 Project Programming & Cost Estimating Purpose for detailed guidance relating to cost estimates and the update of programmed costs.
2. The initial cost estimate should be prepared by the Office of Planning prior to addition of a project to the STIP.
3. An intermediate cost estimate shall be prepared: (1) at both Concept and PFPR milestones, (2) when there has been a 10% or more cost change or significant scope change since the last programmed cost letter, or (3) if 12 months has elapsed since the last programmed cost letter. A programmed cost letter must then be submitted for all intermediate cost estimates where either (2) and (3) noted above applies. A programmed cost letter shall also be submitted by October 1 where the current programmed cost letter is older than April 1 of the current year. Engineering Services shall notify the State Program Delivery Engineer of all programmed cost estimate updates. For FFPR, quantities must be updated in CES, but no cost estimate is required unless the second two cases above apply.
4. The DPL/ES will notify the PM (by e-mail) after completing entries into CES. Other offices will provide the DPL with a list of pay item numbers, descriptions, quantities, and units, as applicable. The DPL will also add appropriate quantities into the asphalt/and fuel indices spreadsheet and e-mail the spreadsheet to the PM.
5. Pricing includes the addition of unit costs and regional price factors as well as costs for lump sum items.
6. Programmed cost letter estimates shall be in today's dollars. OFM will add inflation factors based on programmed year and current inflation index.
7. GDOT staff can request a CES user account from the GDOT Solutions Center. Consultants should request access through the project PM.





In an effort to eliminate frequent recurring issues related to discrepancies found by the Georgia Department of Natural Resources Environmental Protection Division (EPD) on GDOT project plans, a sampling of discrepancy results has been documented from letters received during the period between January 2011 and August 2013. During this period, GDOT received letters on 209 projects that included deficiencies in the NPDES permit requirements according to EPD and were based on information provided in the ES&PC plans and supporting documents submitted to them. Each letter reviewed was addressed to GDOT specifically noting the checklist item requiring immediate attention.

Findings

Out of the 51 checklist items listed on the EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST for INFRASTRUCTURE CONSTRUCTION PROJECTS it is clear that a few items are most frequently deficient on the majority of GDOT projects reviewed by EPD. In the last three years, the following six checklist items were noted on the majority of projects with multiple examples of each:

ITEM NO.	DESCRIPTION OF ITEM TO BE SHOWN ON ES&PC PLAN
11	Delineation of on-site wetlands and all state waters located within 200 feet of the project site.
12	Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state water and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.
13	Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
22	Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved.....
27	Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
46	Appendix B rationale for outfall sampling points where applicable.

Attached are tables for each of the calendar years listed for review and comparison. Please note that the tables are highlighted to help show patterns of all the most common deficiencies documented by the EPD. Therefore, some items not previously mentioned could also be areas of focus if the Department wants to try to eliminate some of them from future projects.



### Conclusions

Most of the items in the above list represent issues related to environmental resources which have to be interpreted and documented by subject matter experts before they are shown in the plans.

The following is a sampling of additional checklist items that are commonly discovered:

ITEM NO.	DESCRIPTION OF ITEM TO BE SHOWN ON ES&PC PLAN
4	Provide name, address, and phone number of primary permittee.
5	Note total and disturbed acreage of the project or phase under construction.
10	Delineation and acreage of contributing drainage basins on the project site.
37	Indication that non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation without first acquiring the necessary variances and permits.
38	Indication that the design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation.

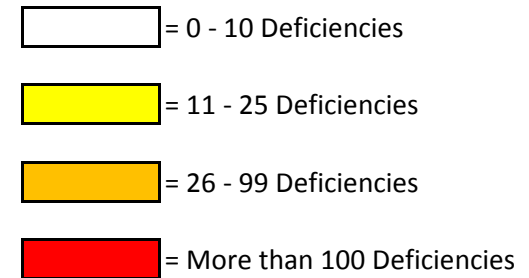
### Recommendations

Perhaps earlier or better coordination could eliminate some of the most common discrepancies, but some of the other items found to be neglected in the plans could be eliminated with some quality assurance from the design team.

## EPD Checklist Deficiencies for 2011

Checklist #	Deficiencies	Follow-up Items	Total Projects
1	3	1	2
2	3	0	3
3	7	0	7
4	11	4	11
5	10	1	9
6	9	1	9
7	0	0	0
8	0	0	0
9	0	0	0
10	13	1	13
11	74	8	21
12	138	15	36
13	169	23	60
14	26	5	26
15	1	0	1
16	4	0	4
17	47	7	29
18	43	9	25
19	2	1	2
20	13	1	13
21	11	0	11
22	133	16	54
23	36	4	19
24	2	0	2
25	1	0	1
26	0	0	0
27	76	14	38
28	0	0	0
29	27	9	22

Checklist #	Deficiencies	Follow-up Items	Total Projects
30	0	0	0
31	0	0	0
32	2	0	2
33	3	0	3
34	2	0	2
35	7	1	7
36	9	0	9
37	11	1	11
38	1	0	1
39	0	0	0
40	0	0	0
41	0	0	0
42	1	0	1
43	0	0	0
44	16	0	16
45	0	0	0
46	117	13	41
47	0	0	0
48	0	0	0
49	0	0	0
50	18	1	18
51	1	0	1

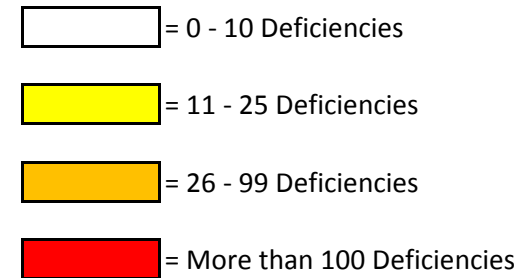


70 Projects were documented for deficiencies in 2011.

## EPD Checklist Deficiencies for 2012

Checklist #	Deficiencies	Follow-up Items	Total Projects
1	5	0	5
2	7	1	7
3	2	1	2
4	40	2	40
5	19	1	15
6	4	0	4
7	1	0	1
8	2	0	2
9	0	0	0
10	23	2	22
11	183	10	36
12	234	17	53
13	304	37	75
14	21	5	20
15	0	0	0
16	2	0	2
17	17	4	14
18	28	5	18
19	12	0	8
20	21	1	21
21	19	5	17
22	162	20	68
23	30	3	19
24	0	0	0
25	1	0	1
26	0	0	0
27	113	24	61
28	1	0	1
29	28	8	19

Checklist #	Deficiencies	Follow-up Items	Total Projects
30	0	0	0
31	0	0	0
32	0	0	0
33	4	1	4
34	4	1	4
35	14	3	14
36	11	0	11
37	20	5	17
38	12	2	12
39	2	0	2
40	0	0	0
41	0	0	0
42	0	0	0
43	1	0	1
44	17	1	17
45	0	0	0
46	250	15	59
47	0	0	0
48	0	0	0
49	0	0	0
50	10	1	10
51	8	0	4

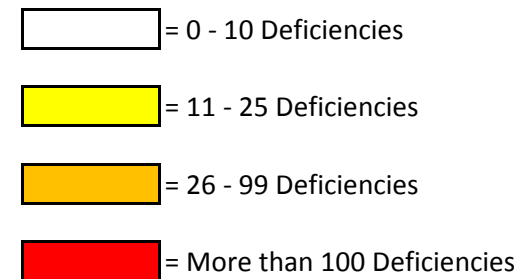


83 Projects were documented for deficiencies in 2012.

## EPD Checklist Deficiencies for 2013

Checklist #	Deficiencies	Follow-up Items	Total Projects
1	3	0	3
2	1	0	1
3	2	0	2
4	14	1	14
5	12	0	12
6	3	0	3
7	4	0	4
8	1	0	1
9	0	0	0
10	44	10	40
11	96	9	19
12	175	16	42
13	273	27	53
14	19	4	19
15	0	0	0
16	3	0	3
17	22	4	14
18	25	4	18
19	29	9	28
20	11	2	11
21	16	2	11
22	106	14	46
23	15	1	12
24	0	0	0
25	0	0	0
26	0	0	0
27	101	18	40
28	0	0	0
29	32	7	25

Checklist #	Deficiencies	Follow-up Items	Total Projects
30	0	0	0
31	0	0	0
32	1	0	1
33	2	0	2
34	2	0	2
35	5	1	5
36	7	1	7
37	14	0	14
38	30	4	30
39	0	0	0
40	0	0	0
41	0	0	0
42	1	0	1
43	2	1	2
44	30	3	30
45	2	1	2
46	220	15	40
47	0	0	0
48	0	0	0
49	0	0	0
50	9	1	9
51	0	0	0



Note: This year's data is incomplete. Information gathered from only 56 projects from January to August 2013 was documented and used in this analysis.